

OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

December 2, 1981

Brecheisen Oil Company
Box 40
Garnett, Kansas 66032

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Kellstadt Lease, Well No. 381-I, located in Anderson County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and was submitted to our laboratory on November 28, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

A handwritten signature in black ink, appearing to read "Sanford A. Michel". The signature is fluid and cursive, written over the printed name below it.

Sanford A. Michel

SAM/kas

5 c to Garnett, Kansas

- REGISTERED ENGINEERS -

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

Oilfield Research Laboratories
GENERAL INFORMATION & SUMMARY

Company Brecheisen Oil Company Lease Kellstadt Well No. 381-I
 Location SW, NW, NE
 Section 34 Twp. 21S Rge. 19E County Anderson State Kansas

Elevation, Feet

Name of Sand..... Squirrel

Top of Core 842.0

Bottom of Core 859.0

Top of Sand 842.0

Bottom of Sand 859.0

Total Feet of Permeable Sand 15.8

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 2	6.3	6.3
2 - 4	3.0	9.3
4 - 6	3.5	12.8
6 - 9	2.0	14.8
20 - 23	1.0	15.8

Average Permeability Millidarcys 4.3

Average Percent Porosity 15.6

Average Percent Oil Saturation 41.0

Average Percent Water Saturation..... 40.0

Average Oil Content, Bbls./A. Ft. 492.

Total Oil Content, Bbls./Acre 7,780.

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Name Brecheisen Oil Company Lease Kellstadt Well No. 381-I

<u>Depth Interval, Feet</u>	<u>Description</u>
842.0 - 843.0	Brown sandstone with fine shale partings.
843.0 - 845.5	Brown sandstone with fine shale and fine micaceous partings.
845.5 - 847.3	Gray and brown laminated shale and sandstone.
847.3 - 849.5	Grayish brown shaly sandstone.
849.5 - 850.0	Gray and brown laminated shale and sandstone.
850.0 - 859.0	Grayish brown shaly sandstone.

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Brecheisen Oil Company Lease Kellstadt Well No. 381-I

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			Ft.	Cum. Ft.		
1	842.6	25.0	36	50	698	22.	1.0	1.0	698	22.00
2	843.7	17.2	40	38	534	5.8	1.0	2.0	534	5.80
3	844.6	17.9	37	38	514	5.6	1.0	3.0	514	5.60
4	845.3	17.5	36	29	489	6.0	0.5	3.5	245	3.00
5	846.4	14.2	42	40	463	0.63	1.0	4.5	463	0.63
6	847.1	14.2	25	48	275	0.87	0.8	5.3	220	0.70
7	848.2	12.1	27	65	254	1.0	1.0	6.3	254	1.00
8	849.7	17.2	40	29	534	6.3	0.5	6.8	267	3.15
9	851.3	12.4	53	44	510	0.63	1.5	8.3	765	0.95
10	852.2	17.2	43	27	574	4.7	1.5	9.8	861	7.05
11	853.7	15.3	68	14	807	3.4	1.0	10.8	807	3.40
12	854.6	14.8	53	28	609	2.2	1.0	11.8	609	2.20
13	855.9	17.7	23	38	316	8.3	1.0	12.8	316	8.30
14	856.9	10.7	34	62	282	2.8	1.0	13.8	282	2.80
15	857.9	14.9	46	39	532	1.0	1.0	14.8	532	1.00
16	858.5	13.3	40	46	413	0.31	1.0	15.8	413	0.31

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SUMMARY OF PERMEABILITY & SATURATION TESTS

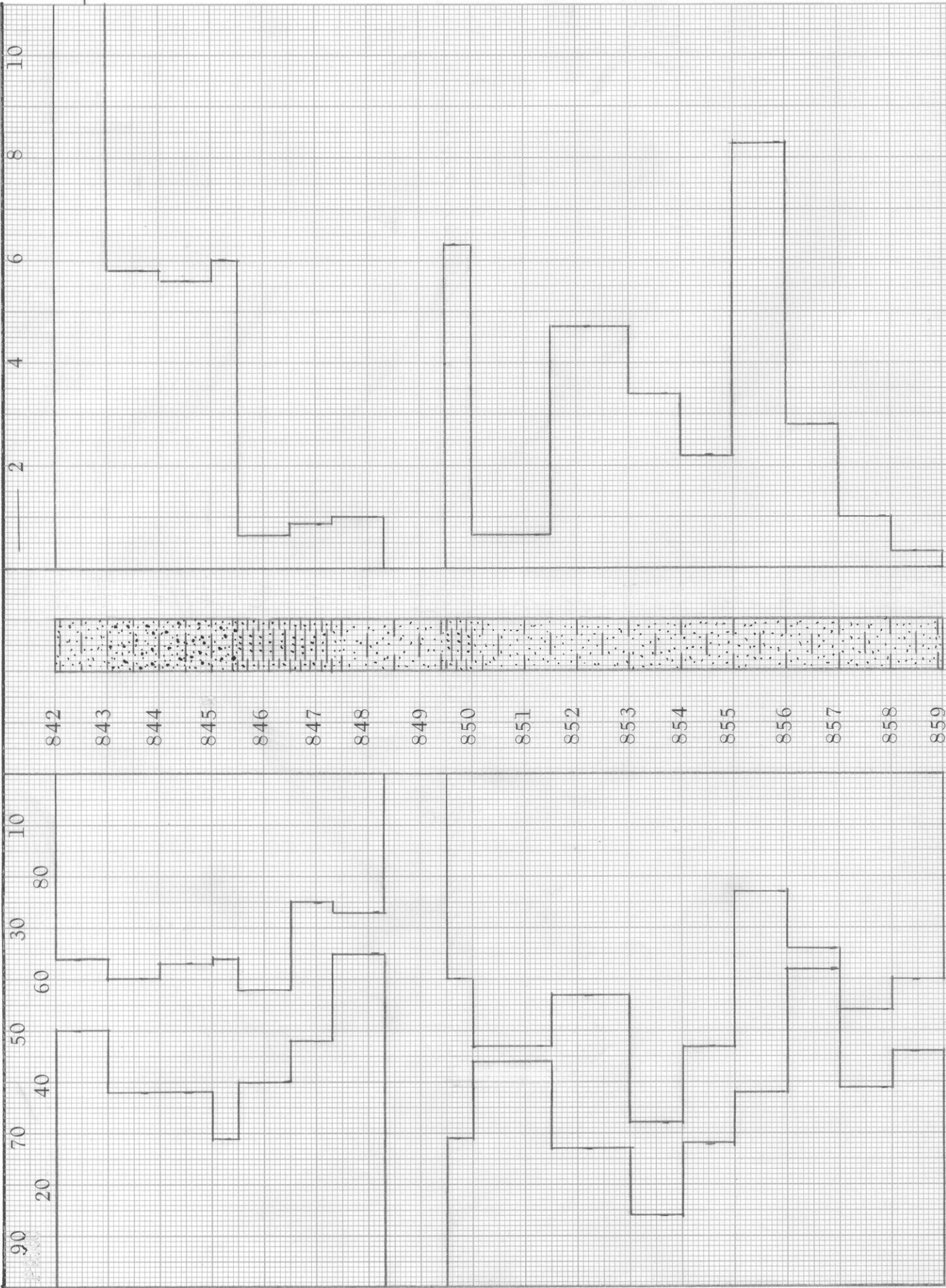
TABLE III

Company	Brecheisen Oil Company	Lease	Kellstadt	Well No.	381-I
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	
	842.0 - 859.0	15.8	4.3	67.89	
	Depth Interval, Feet	Feet of Core Analyzed	Average Percent Oil Saturation	Average Percent Water Saturation	Total Oil Content Bbls./Acre
	842.0 - 859.0	15.8	41.0	40.0	7,780
			Average Percent Porosity		
			15.6		

PERMEABILITY, IN MILLIDARCYS

WATER SAT., PERCENT

OIL SAT., PERCENT



SANDSTONE WITH SHALE PARTINGS

KEY:

857
858
859

KEY:



SHALY SANDSTONE



SANDSTONE WITH SHALE PARTINGS



MICACEOUS SANDSTONE WITH SHALE PARTINGS



LAMINATED SANDSTONE AND SHALE

BRECHEISEN OIL COMPANY

KELLSTADT LEASE

WELL NO. 381-I

ANDERSON COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE	
					PERMEABILITY, MILLIDARCS	PERMEABILITY, MILLIDARCS
842.0 - 859.0	15.8	15.6	41.0	40.0	4.3	4.3

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 CHANUTE, KANSAS
 DECEMBER, 1981
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