

OILFIELD RESEARCH LABORATORIES

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

November 24, 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. 2-I-81, located in Anderson County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and submitted to our laboratory on November 23, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/mkf

5 c to Garnett, Ks.

- 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. 2-I-81
 Location _____
 Section 34 Twp. 21S Rge. 19E County Anderson State Kansas

Elevation, Feet
 Name of Sand SQUIRREL
 Top of Core 836.0
 Bottom of Core 855.6
 Top of Sand 836.0
 Bottom of Sand 855.6
 Total Feet of Permeable Sand 18.6

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 1	5.0	5.0
1 - 4	4.8	9.8
7 - 10	3.9	13.7
10 - 19	4.9	18.6

Average Permeability Millidarcys 6.1
 Average Percent Porosity 15.9
 Average Percent Oil Saturation 35.5
 Average Percent Water Saturation 45.1
 Average Oil Content, Bbls./A. Ft. 443.
 Total Oil Content, Bbls./Acre 8,692.

OILFIELD RESEARCH LABORATORIES

LOG

Name Brecheisen Oil Company Lease Kellstadt Well No. 2-I-81

<u>Depth Interval, Feet</u>	<u>Description</u>
836.0 - 838.0	Alternate layers gray shale and brown sandstone.
838.0 - 840.6	Brown sandstone with shale partings.
840.6 - 852.2	Grayish light brown shaly sandstone.
852.2 - 852.5	Brown sandstone.
852.5 - 855.6	Grayish light brown shaly sandstone.

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Brecheisen Oil Company

Lease Kellstadt

Well No. 2-I-81

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	836.6	17.0	36	43	79	475	17.	1.0	1.0	475	17.00
2	837.5	19.5	38	44	82	575	15.	1.0	2.0	575	15.00
3	838.4	18.0	35	49	84	489	18.	1.0	3.0	489	18.00
4	839.6	19.0	40	33	73	590	11.	1.0	4.0	590	11.00
5	840.5	18.2	39	44	83	551	11.	0.6	4.6	331	6.60
6	841.6	17.5	34	45	79	462	7.7	1.6	6.2	739	12.32
7	842.6	14.6	37	59	96	419	0.39	1.0	7.2	419	0.39
8	843.4	13.7	35	55	90	372	0.19	1.0	8.2	372	0.19
9	844.6	12.7	24	70	94	237	Imp.	1.0	9.2	237	0.00
10	845.6	18.3	51	29	80	724	8.3	1.0	10.2	724	8.30
11	846.6	13.0	37	46	83	373	0.48	1.0	11.2	373	0.48
12	847.6	14.6	35	50	85	396	1.4	1.0	12.2	396	1.40
13	848.3	16.5	29	38	67	371	2.8	1.0	13.2	371	2.80
14	849.4	14.2	43	49	92	474	0.69	1.0	14.2	474	0.69
15	850.7	15.1	38	35	73	445	1.4	1.0	15.2	445	1.40
16	851.6	14.1	32	45	77	350	1.7	1.0	16.2	350	1.70
17	852.4	17.6	30	32	62	410	10.	0.3	16.5	123	3.00
18	853.7	16.9	35	33	68	459	7.8	1.3	17.8	597	10.14
19	854.7	13.7	28	51	79	298	0.56	1.0	18.8	298	0.56
20	855.4	15.3	33	47	80	392	2.0	0.8	19.6	314	1.60

Oilfield Research Laboratories

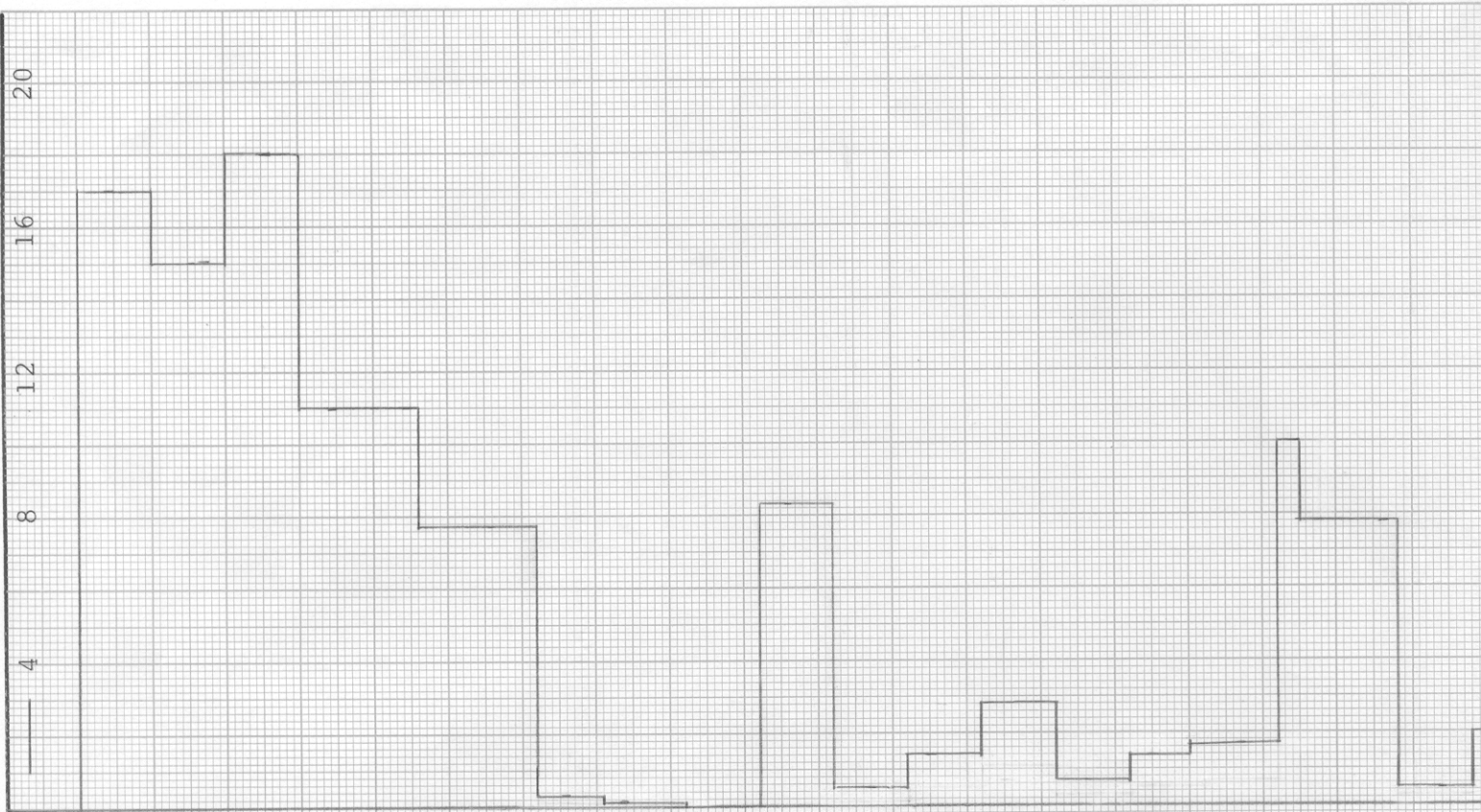
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

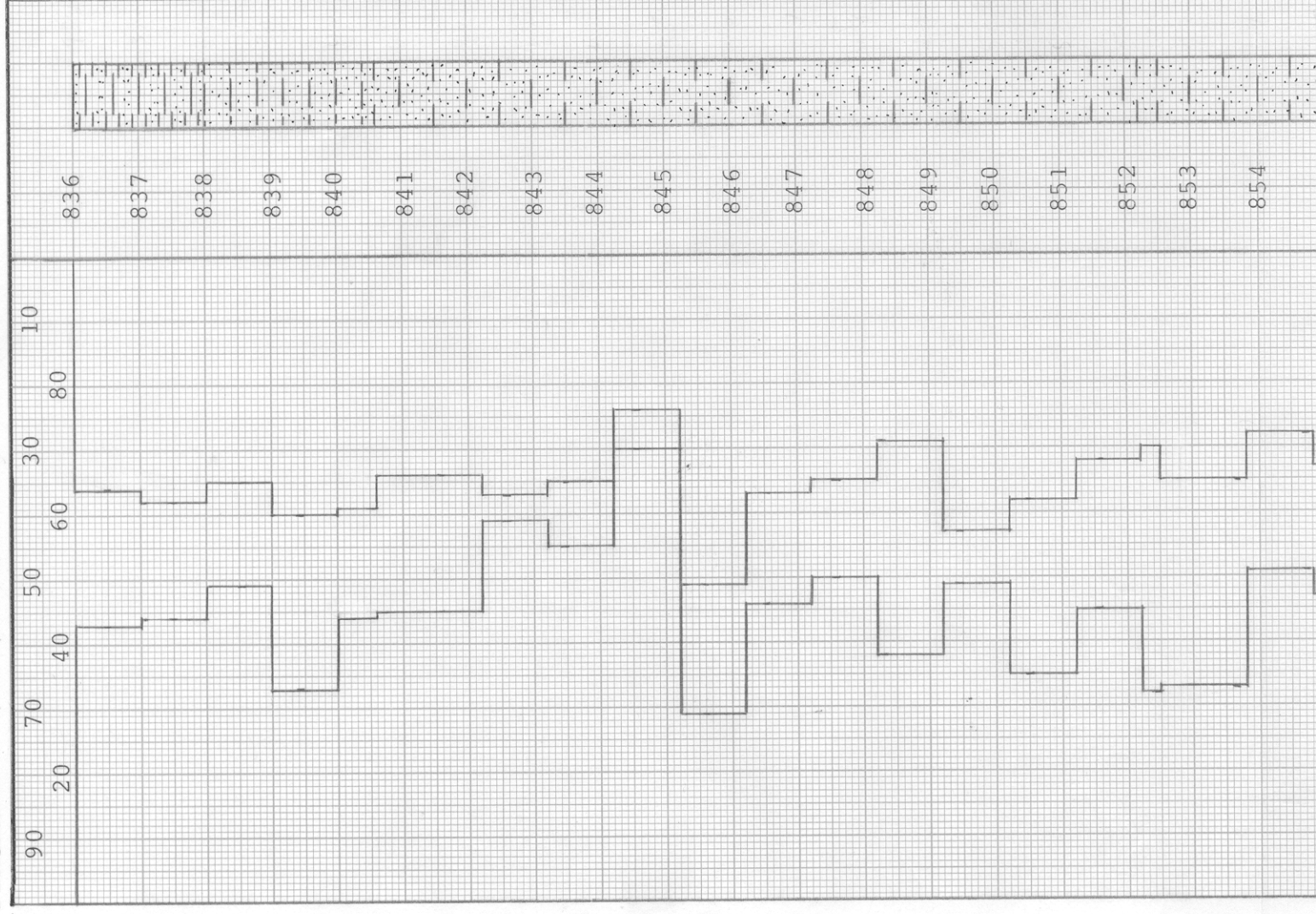
Company Brecheisen Oil Company Lease Kellstadt Well No. 2-I-81

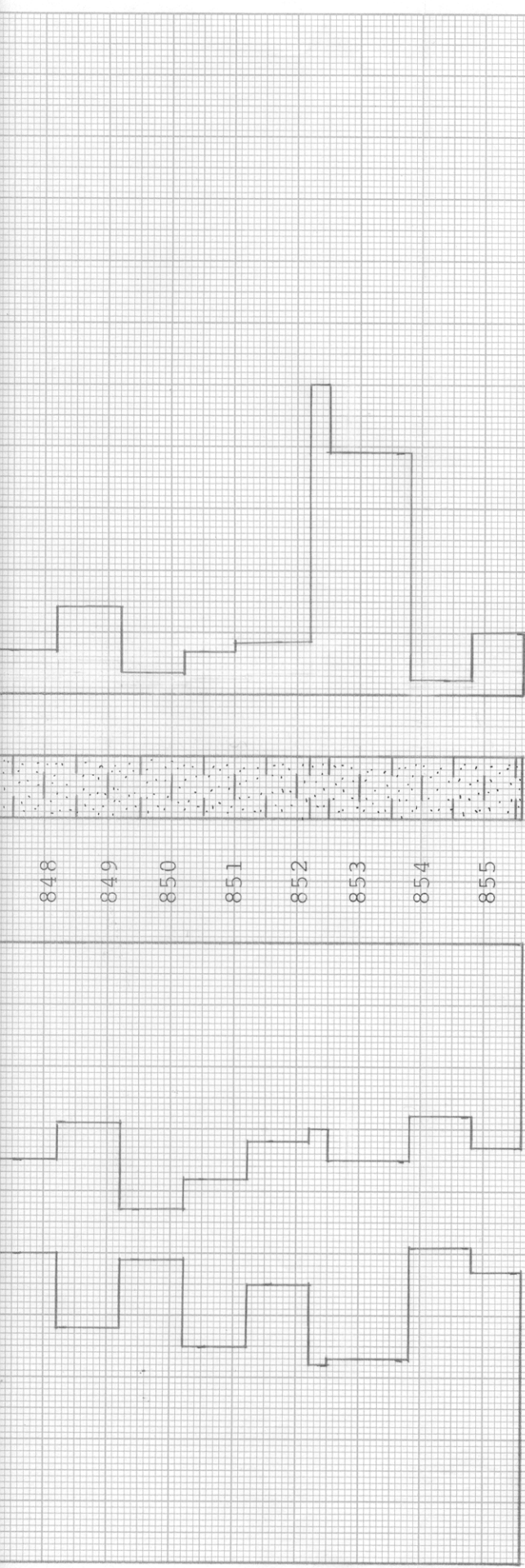
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
836.0 - 855.6	18.6	6.1	112.57	35.5	45.1	443	8,692
836.0 - 855.6	19.6			15.9			

PERMEABILITY, IN MILLIDARCYS



WATER SAT., PERCENT ←
OIL SAT., PERCENT →





KEY:



SANDSTONE



SHALY SANDSTONE



SANDSTONE WITH SHALE PARTINGS



ALTERNATE LAYERS OF SANDSTONE AND SHALE

BRECHEISEN OIL COMPANY

KELLSTADT LEASE

ANDERSON COUNTY, KANSAS

WELL NO. 2-I-81

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYS
836.0 - 855.6	19.6	15.9	35.5	45.1	6.1

OILFIELD RESEARCH LABORATORIES
 CHANUTE, KANSAS
 NOVEMBER, 1981

PDC