

OILFIELD RESEARCH LABORATORIES

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

December 3, 1980

Hillenburg Oil Company
P. O. Box 94
Bronson, Kansas 66716

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Ermel "B" Lease, Well No. 19, located in Bourbon County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and submitted to our laboratory on November 21, 1980.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

S. A. Michel
Sanford A. Michel *AM*

SAM/kas

5 c to Bronson, Kansas

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GENERAL INFORMATION & SUMMARY

Company Hillenburg Oil Co. Lease Ermel "B" Well No. 19
 Location -
 Section 28 Twp. 24S Rge. 22E County Bourbon State Kansas

Elevation, Feet -
 Name of Sand Bartlesville
 Top of Core 557.0
 Bottom of Core 568.5
 Top of Sand 557.0
 Bottom of Sand (Tested) 566.8
 Total Feet of Permeable Sand 9.8

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 50	5.7	5.7
50 - 100	1.3	7.0
100 & Above	2.8	9.8

Average Permeability Millidarcys 57.4
 Average Percent Porosity 18.1
 Average Percent Oil Saturation 35.4
 Average Percent Water Saturation 36.2
 Average Oil Content, Bbls./A. Ft. 501.
 Total Oil Content, Bbls./Acre 4,908.

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LOGName Hillenburg Oil Co. Lease Ermel "B" Well No. 19

<u>Depth Interval, Feet</u>	<u>Description</u>
557.0 - 558.1	Light brown and gray laminated sandstone and shale.
558.1 - 562.9	Brown sandstone.
562.9 - 563.9	Light brown and gray laminated sandstone and shale.
563.9 - 566.2	Brown sandstone.
566.2 - 566.8	Brown shaly sandstone.
566.8 - 567.8	Gray laminated sandstone and shale.
567.8 - 568.5	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Hillenburg Oil Co. Lease Erme 1 "B" Well No. 19

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	Total			Ft.	Cum. Ft.		
1	557.5	18.4	23	42	65	328	14.	1.1	1.1	361	15.40
2	558.5	19.2	34	37	71	506	32.	1.0	2.1	506	32.00
3	559.5	18.5	37	28	65	531	127.	1.0	3.1	531	127.00
4	560.5	17.1	37	39	76	491	46.	1.0	4.1	491	46.00
5	561.5	18.5	43	36	79	617	108.	1.0	5.1	617	108.00
6	562.7	20.5	42	28	70	668	110.	0.8	5.9	534	88.00
7	563.5	15.1	26	46	72	305	33.	1.0	6.9	305	33.00
8	564.5	19.1	41	29	70	608	43.	1.0	7.9	608	43.00
9	565.5	17.7	37	35	72	508	50.	1.3	9.2	660	65.00
10	566.5	17.1	37	42	79	491	8.3	0.6	9.8	295	4.98

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

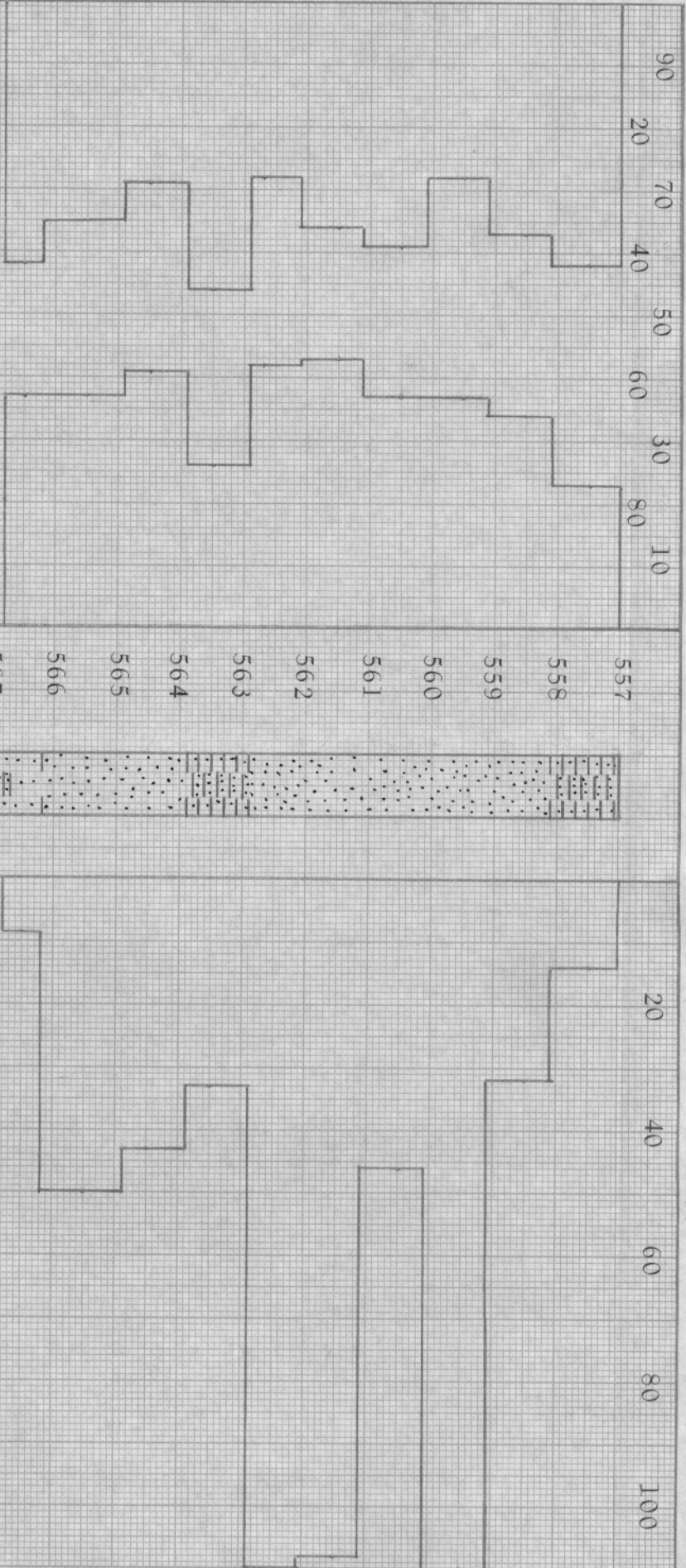
Company Hillenburg Oil Co. Lease Ernel "B" Well No. 19

Depth Interval, Feet	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
557.0 - 566.8	557.0 - 566.8	9.8	57.4	562.38	18.1	35.4	36.2	501	4,908

WATER SAT., ———→
PERCENT

————→ OIL SAT.,
PERCENT

————→ PERMEABILITY, IN MILLIDARCY



KEY :

- LAMINATED SANDSTONE & SHALE
- SANDSTONE
- SANDY SHALE
- SHALY SANDSTONE



LAMINATED SANDSTONE & SHALE



SANDSTONE



SHALY SANDSTONE



SANDY SHALE

HILLENBURG OIL COMPANY

ERMEL "B" LEASE

BOURBON COUNTY, KANSAS

WELL NO. 19

DEPTH INTERVAL, FEET	FEET OF COKE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY MILLIDARCYs
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557.0 - 566.8	9.8	18.1	35.4	36.2	57.4
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CHANUTE, KANSAS
DECEMBER, 1980

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