

OILFIELD RESEARCH LABORATORIES

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

February 24, 1981

L & B Leasing, Inc.
P. O. Box 153
Hutchinson, Kansas 67501

Gentlemen:

Enclosed herewith is the report of the analysis of the rotary core taken from the McGuire Lease, Well No. 9, located in Miami County, Kansas and submitted to our laboratory on December 28, 1980.

Your business is greatly appreciated.

Very truly yours,

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Sanford A. Michel

SAM/kas

5 c to Hutchinson, Kansas

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GENERAL INFORMATION & SUMMARY

Company	L & B Leasing, Inc.	Lease	McGuire	Well No.	9
Location	1320' EWL & 660' SNL - N $\frac{1}{2}$ - SE $\frac{1}{4}$				
Section	12	Twp	18S	Rge	22E
County	Miami			State	Kansas
Elevation, Feet	-				
Name of Sand	-				Peru
Top of Core	-				292.0
Bottom of Core	-				307.0
Top of Sand	-(Tested)				293.5
Bottom of Sand	-(Tested)				305.5
Total Feet of Permeable Sand	-				3.0
Total Feet of Floodable Sand	-				0.0
Distribution of Permeable Sand:					
Permeability Range Millidarcys	Feet		Cum. Ft.		
0 - 1	1.0		1.0		
2 & Above	2.0		3.0		
					3.3
Average Permeability Millidarcys	-				16.8
Average Percent Porosity	-				27.4
Average Percent Oil Saturation	-				59.2
Average Percent Water Saturation	-				360.
Average Oil Content, Bbls./A. Ft.	-				1,798.
Total Oil Content, Bbls./Acre	-				0.
Average Percent Oil Recovery by Laboratory Flooding Tests	-				0.
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	-				0.
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	-				0.
Total Calculated Oil Recovery, Bbls./Acre	-				0.

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The core was sampled and the samples sealed in plastic bags by a representative of the client.

Since the core did not respond to flooding susceptibility tests, no calculated recovery is given.

FORMATION CORED

The detailed log of the formation cored is as follows:

<u>Depth Interval, Feet</u>	<u>Description</u>
292.0 - 307.0	Light brown and gray laminated sandstone and shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company L & B Leasing, Inc. Lease McGuire Well No. 9

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	294.1	18.3	37	51	88	525	Imp.	1.0	1.0	525	0.00
2	297.4	15.3	34	57	91	404	2.4	1.0	2.0	404	2.40
3	300.2	20.2	25	51	76	392	6.9	1.0	3.0	392	6.90
4	301.4	15.7	19	62	81	231	0.55	1.0	4.0	231	0.55
5	305.1	14.4	22	75	97	246	Imp.	1.0	5.0	246	0.00

SUMMARY OF PERMEABILITY & SATURATION TESTS

Company L & B Leasing, Inc. Lease McGuire Well No. 9

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
293.5 - 305.5	3.0	3.3	9.85

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.
293.5 - 305.5	5.0	16.8	27.4	59.2	360

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RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company L & B Leasing, Inc. Lease McGuire Well No. 9

Sample No.	Depth, Feet	Effective Porosity Percent	Original Oil Saturation		Oil Recovery		Residual Saturation		Volume of Water Recovered cc*	Effective Permeability Millidarcys**	Initial Fluid Production Pressure Lbs./Sq./In.
			%	Bbbs./A. Ft.	%	Bbbs./A. Ft.	% Oil	% Water			
1	294.1	18.8	36	525	0	0	36	52	0	Imp.	-
2	297.4	15.2	34	401	0	0	34	59	0	Imp.	-
3	300.2	19.8	26	399	0	0	26	54	0	Imp.	-
4	301.4	15.8	19	234	0	0	19	63	0	Imp.	-
5	305.1	14.0	23	250	0	0	23	74	0	Imp.	-

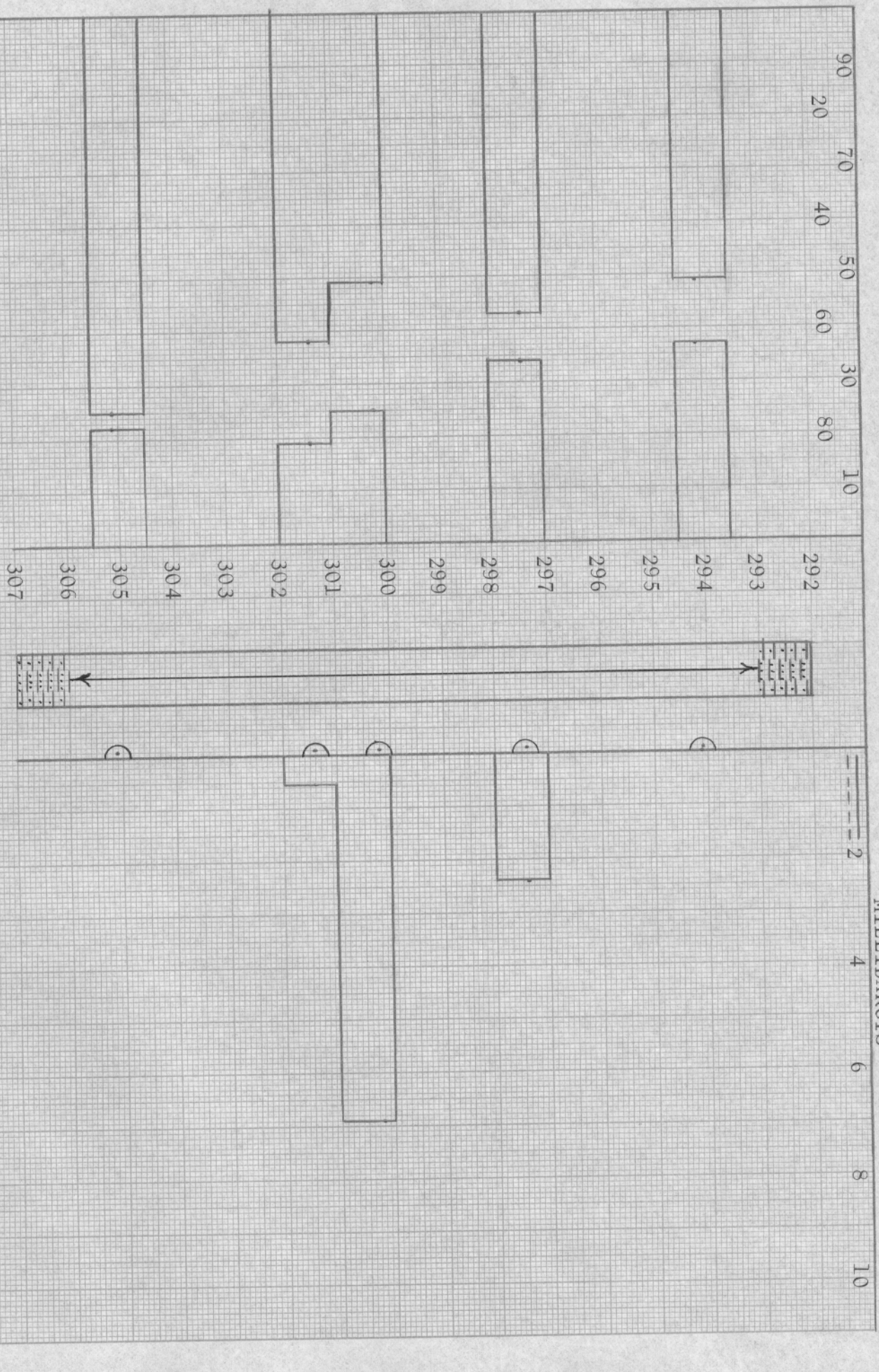
Notes: cc—cubic centimeter.

*—Volume of water recovered at the time of maximum oil recovery.

**—Determined by passing water through sample which still contains residual oil.

WATER SAT., PERCENT $\longleftrightarrow$ OIL SAT., PERCENT

PERMEABILITY, IN MILLIDARCS
 --- EFFECTIVE PERMEABILITY TO WATER, IN MILLIDARCS



KEY:

LAMINATED SANDSTONE AND SHALE

IMPERMEABLE TO WATER

L & B LEASING, INC.

McGUIRE LEASE

WELL NO. 9

MIAMI COUNTY, KANSAS

DEPTH INTERVAL FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYs	CALCULATED OIL RECOVERY BBLs. / ACRE
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293.5 - 305.5	5.0	16.8	27.4	59.2	3.3	-----
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CHANUTE, KANSAS
FEBRUARY, 1981