

# OILFIELD RESEARCH LABORATORIES

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

October 29, 1980

Susmio Oil Company  
P. O. Box 233  
Yates Center, Kansas 66783

Gentlemen:

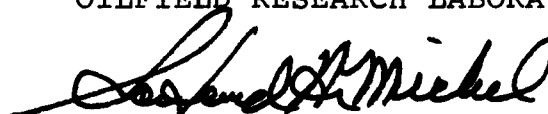
Enclosed herewith are the results of tests run on the rotary core taken from the E. E. Light Lease, Well No. 6-B, located in Woodson County, Kansas and submitted to our laboratory on September 24, 1980.

The core was sampled by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

  
Sanford A. Michel

SAM/ks

3 c to Yates Center, Kansas

- REGISTERED ENGINEERS -

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

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## GENERAL INFORMATION & SUMMARY

Company Susmio Oil Company Lease E. E. Light Well No. 6-B  
 Location 220' NSL & 220' EWL - NE $\frac{1}{4}$   
 Section 17 Twp. 25S Rge. 16E County Woodson State Kansas

Elevation, Feet . . . . .	-
Name of Sand . . . . .	Squirrel
Top of Core . . . . .	924.0
Bottom of Core . . . . .	938.2
Top of Sand . . . . .	924.3
Bottom of Sand . . . . .	937.6
Total Feet of Permeable Sand . . . . .	7.9

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	3.0	3.0
10 - 20	2.0	5.0
20 & Above	2.9	7.9

Average Permeability Millidarcys . . . . .	17.3
Average Percent Porosity . . . . .	16.2
Average Percent Oil Saturation . . . . .	43.4
Average Percent Water Saturation . . . . .	29.6
Average Oil Content, Bbls./A. Fl. . . . .	579.
Total Oil Content, Bbls./Acre . . . . .	6,081.

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LOGName Susmio Oil Company Lease E. E. Light Well No. 6-B

<u>Depth Interval, Feet</u>	<u>Description</u>
924.0 - 924.3	Gray shale.
924.3 - 925.1	Hard grayish brown calcareous fossiliferous conglomeratic shaly sandstone.
925.1 - 925.9	Grayish brown shaly sandstone.
925.9 - 930.8	Dark brown slightly calcareous sandstone.
930.8 - 932.3	Brown and gray laminated slightly calcareous sandstone and shale.
932.3 - 932.9	Gray sandy shale.
932.9 - 933.6	Brown shaly sandstone.
933.6 - 935.1	Grayish brown very shaly sandstone.
935.1 - 937.3	Gray sandy shale.
937.3 - 937.6	Grayish brown very shaly sandstone.
937.6 - 938.2	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Susmio Oil Company Lease E. E. Light Well No. 6-B

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	924.5	4.4	35	60	95	120	Imp.	0.8	0.8	96	0.00
2	925.5	14.4	44	32	76	492	1.2	0.8	1.6	394	0.96
3	926.5	19.1	57	13	70	845	20.	1.0	2.6	845	20.00
4	927.8	20.0	67	10	77	1040	46.	1.0	3.6	1040	46.00
5	928.5	17.8	59	16	75	815	19.	1.0	4.6	815	19.00
6	929.5	18.9	69	3	72	1012	18.	1.0	5.6	1012	18.00
7	930.5	19.5	48	18	66	726	25.	0.9	6.5	653	22.50
8	931.5	17.5	40	31	71	543	5.9	1.5	8.0	815	8.85
9	933.5	15.3	20	43	63	237	2.3	0.7	8.7	166	1.61
10	934.5	13.6	11	59	70	116	Imp.	1.5	10.2	174	0.00
11	937.5	14.5	21	46	67	236	Imp.	0.3	10.5	71	0.00

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## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	E. F. Light	Well No.			
Susmio Oil Company			6-B			
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.			
924.3 - 937.6	10.5	17.3	136.2			
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre	
924.3 - 937.6	10.5	16.2	43.4	29.6	579	6,081