

OILFIELD RESEARCH LABORATORIES

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

December 28, 1979

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. 12-C, Woodson County, Kansas, and submitted to our laboratory on December 11, 1979.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman
Benjamin R. Pearman

BRP/tem
3 c to Yates Center, Kansas

- REGISTERED ENGINEERS -

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

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Susmio Oil Company Lease E.E. Light Well No. 12-C

Location 660' FWL & 660' SNL N $\frac{1}{2}$ NE

Section 8 Twp. 25S Rge. 16E County Woodson State Kansas

Name of Sand	Squirrel
Top of Core	951.0
Bottom of Core	966.0
Top of Sand	951.0
Bottom of Sand	965.0
Total Feet of Permeable Sand	12.4
Total Feet of Floodable Sand	

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 12	5.3	5.3
25 - 35	2.0	7.3
70 - 90	2.0	9.3
155 - 160	1.4	10.7
310 & Above	1.7	12.4

Average Permeability Millidarcys	87.6
Average Percent Porosity	19.2
Average Percent Oil Saturation	52.0
Average Percent Water Saturation	24.8
Average Oil Content, Bbls./A. Ft.	786.
Total Oil Content, Bbls./Acre	10,528.
Average Percent Oil Recovery by Laboratory Flooding Tests	
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	
Total Calculated Oil Recovery, Bbls./Acre	
Packer Setting, Feet	
Viscosity, Centipoises @	
A. P. I. Gravity, degrees @ 60 °F	
Elevation, Feet	

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LOGName Susmio Oil Company Lease E.E. Light Well No. 12-C

<u>Depth Interval, Feet</u>	<u>Description</u>
951.0 - 952.6	Gray and brown laminated shale and sandstone, 30% sandstone.
952.6 - 953.6	Brown shaly sandstone.
953.6 - 956.3	Brown sandstone containing thin widely scattered shale streaks.
956.3 - 956.9	Gray and light brown laminated shale and sandstone.
956.9 - 962.3	Brown sandstone containing thin widely scattered shale partings.
962.3 - 963.3	Gray and brown laminated shale and sandstone.
963.3 - 965.0	Brown laminated shaly sandstone.
965.0 - 966.0	Gray laminated sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Susmio Oil Company Lease E.E. Light Well No. 12-C

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	951.5	17.2	54	17	71	721	29.	1.0	1.0	721	29.00
2	952.5	14.7	46	42	88	525	2.6	0.6	1.6	315	1.56
3	953.5	15.2	46	39	85	542	10.	1.0	2.6	542	10.00
4	954.5	23.0	62	10	72	1106	31.	1.0	3.6	1106	31.00
5	955.3	15.7	36	49	85	439	89.	1.0	4.6	439	89.00
6	956.2	16.8	48	35	83	626	314.	0.7	5.3	438	219.80
7	957.4	19.3	55	21	76	824	158.	1.4	6.7	1154	211.20
8	958.5	24.5	54	12	66	1026	73.	1.0	7.7	1026	73.00
9	959.5	22.9	62	14	76	1102	10.	1.0	8.7	1102	10.00
10	960.5	19.2	53	16	69	790	0.30	1.0	9.7	790	0.30
11	961.5	20.6	57	19	76	911	399.	1.0	10.7	911	399.00
12	962.4	18.8	49	27	76	715	Imp.	1.0	11.7	715	0.00
13	963.5	16.4	53	34	87	674	0.89	0.7	12.4	472	0.63
14	964.5	21.4	48	26	74	797	1.2	1.0	13.4	797	1.20

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SUMMARY OF PERMEABILITY & SATURATION TESTS

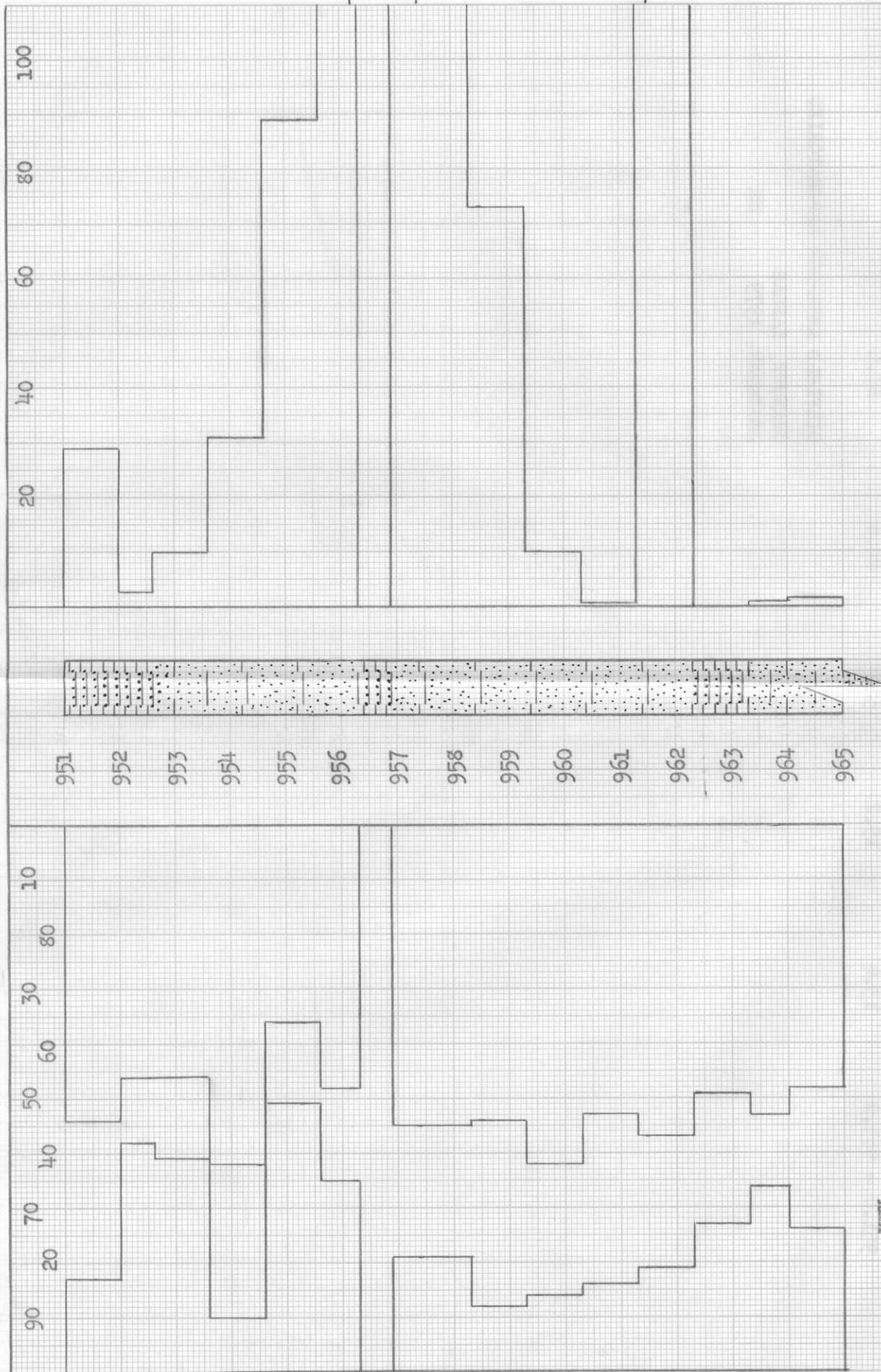
TABLE III

Company	Susmio Oil Company	Lease	E.E. Light	Well No.	12-C	
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
	951.0 - 965.0	12.4	87.6	1085.69		
	Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Total Oil Content Bbls./Acre
	951.0 - 965.0	13.4	19.2	52.0	24.8	786
						10,528

WATER SAT., PERCENT →

← PERMEABILITY, IN MILLIDARCS

OIL SAT., PERCENT



KEY:

SANDSTONE CONTAINING SHALE STREAKS

SHALY SANDSTONE

LAMINATED SANDSTONE AND SHALE

SANDY SHALE

PERMEABILITY, IN MILLIDARCS

SUSMIO OIL COMPANY

WELL NO. 12-50

WOODSON COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCS

951.0 - 965.0	13.4	19.2	52.	24.8	87.6
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CHANUTE, KANSAS

DECEMBER, 1979

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