



# OILFIELD RESEARCH LABORATORIES

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

July 9, 1981

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

Gentlemen:

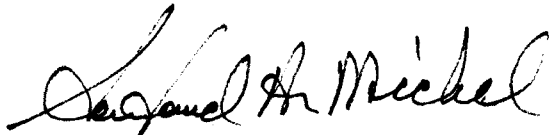
Enclosed herewith are the results of tests run on the rotary core taken from the Hartzler Lease, Well No. 5, located in Woodson County, Kansas.

The core was sampled by Oilfield Research Laboratories and received in our laboratory on July 7, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES



Sanford A. Michel

SAM/mkf

3 c to Yates Center, Ks.

# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company Susmio Oil Company Lease Hartzler Well No. 5

Location \_\_\_\_\_

Section 28 Twp. 25S Rge. 15E County Woodson State Kansas

Elevation, Feet .....

Name of Sand.....

Squirrel

Top of Core .....

1166.0

Bottom of Core .....

1175.0

Top of Sand .....

1169.0

Bottom of Sand .....

1175.0

Total Feet of Permeable Sand .....

5.1

**Distribution of Permeable Sand:**  
Permeability Range  
Millidarcys

Feet

Cum. Ft.

0 - 25

1.1

1.1

60 - 70

2.0

3.1

90 - 116

2.0

5.1

Average Permeability Millidarcys .....

71.1

Average Percent Porosity .....

18.4

Average Percent Oil Saturation .....

54.1

Average Percent Water Saturation .....

27.1

Average Oil Content, Bbls./A. Ft. ....

820.

Total Oil Content, Bbls./Acre .....

4,918.

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LOG

Name Susmio Oil Company Lease Hartzler Well No. 5

Depth Interval,  
Feet

Description

1166.0 - 1169.0

Gray shale.

1169.0 - 1169.9

Light grayish very light brown very shaly sandstone.

1169.9 - 1175.0

Very dark brown slightly calcareous sandstone.

## RESULTS OF SATURATION &amp; PERMEABILITY TESTS

TABLE 1-B

Company		Susmio Oil Company		Lease		Hartzler		Well No.			
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	1169.5	10.0	7	91	98	54	Imp.	0.9	0.9	49	0.00
2	1170.6	17.5	72	18	90	978	24.	1.1	2.0	1076	26.40
3	1171.6	19.4	64	21	85	963	67.	1.0	3.0	963	67.00
4	1172.6	20.2	72	10	82	1128	60.	1.0	4.0	1128	60.00
5	1173.5	21.3	57	11	68	942	94.	1.0	5.0	942	94.00
6	1174.4	21.3	46	19	65	760	115.	1.0	6.0	760	115.00

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## SUMMARY OF PERMEABILITY & SATURATION TESTS

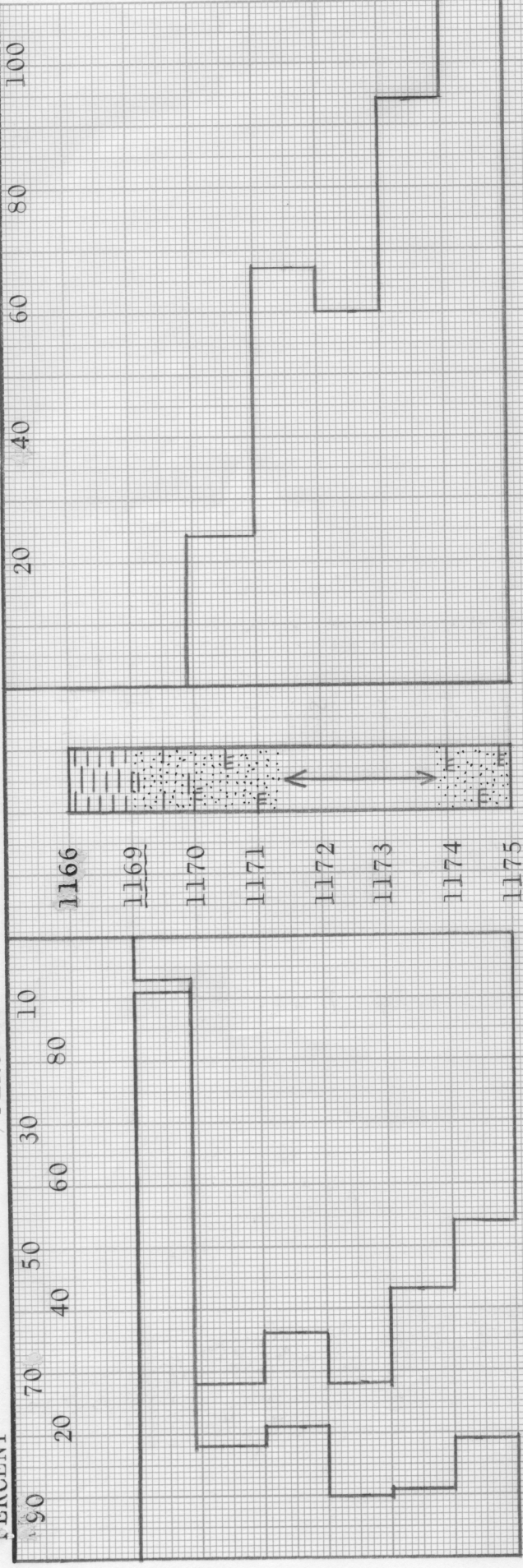
TABLE III

Company	Lease	Hartzler	Well No.
Susmio Oil Company			5
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
1169.0 - 1175.0	5.1	71.1	362.40
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Saturation	Average Oil Content Bbl./A. Ft.
1169.0 - 1175.0	6.0	18.4	54.1
		27.1	820
			Total Oil Content Bbls./Acre
			4,918

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

PERMEABILITY, IN MILLIDARCS

115 →



KEY:



SHALE

SHALY SANDSTONE

CALCAREOUS SANDSTONE

# SUSMIO OIL COMPANY

HARTZLER LEASE

WOODSON COUNTY, KANSAS

WELL NO. 5

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCS
1169.0 - 1175.0	6.0	18.4	54.1	27.1	71.1