



OILFIELD RESEARCH LABORATORIES

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

April 15, 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 Hartzler Lease, Well No. 4, Woodson County, Kansas, and submitted to our laboratory on April 1, 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/tem

3 c to Yates Center, Ks

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GENERAL INFORMATION & SUMMARY

Company Susmio Oil Company Lease Hartzler Well No. 4
 Location 2335' WEL & 1370' NSL
 Section 28 Twp. 25S Rge. 25E County Woodson State Kansas
15E

Elevation, Feet	
Name of Sand	Squirrel
Top of Core	1163.0
Bottom of Core	1182.3
Top of Sand	1163.0
Bottom of Sand	1174.6
Total Feet of Permeable Sand	6.2

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 1	1.6	1.6
35 - 60	2.0	3.6
80 & Above	2.6	6.2

Average Permeability Millidarcys	48.9
Average Percent Porosity	14.6
Average Percent Oil Saturation	34.8
Average Percent Water Saturation	50.0
Average Oil Content, Bbls./A. Ft.	441.
Total Oil Content, Bbls./Acre	5,114.

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LOG

Name Susmio Oil Company Lease Hartzler Well No. 4

Depth Interval,
Feet

Description

1163.0 - 1167.6

Dark brown sandstone.

1167.6 - 1174.6

Grayish brown very shaly sandstone.

1174.6 - 1182.3

Gray shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE I-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	1163.5	18.9	63	17	80	924	35.	1.0	1.0	924	35.00
2	1164.5	19.3	42	26	68	629	54.	1.0	2.0	629	54.00
3	1165.5	20.0	52	21	73	807	80.	1.0	3.0	807	80.00
4	1166.5	19.6	50	21	71	760	84.	1.0	4.0	760	84.00
5	1167.5	20.0	46	24	70	714	83.	0.6	4.6	428	49.80
6	1168.7	11.5	29	69	98	259	Imp.	1.4	6.0	363	0.00
7	1169.5	14.5	34	53	87	383	0.27	1.0	7.0	383	0.27
8	1170.5	10.3	12	86	98	96	Imp.	1.0	8.0	96	0.00
9	1171.5	9.7	30	63	93	226	Imp.	1.0	9.0	226	0.00
10	1172.5	10.1	17	80	97	133	Imp.	1.0	10.0	133	0.00
11	1173.7	9.7	10	82	92	75	Imp.	1.0	11.0	75	0.00
12	1174.5	14.5	43	33	76	484	0.49	0.6	11.6	290	0.29

Company Susmio Oil Company

Lease Hartzler

Well No. 4

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	Well No.				
Susmio Oil Company	Hartzler	4				
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.			
1163.0 - 1167.6	4.6	65.8	302.80			
1167.6 - 1174.6	1.6	0.35	0.56			
1163.0 - 1174.6	6.2	48.9	303.36			
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbbl./Acre
1163.0 - 1167.6	4.6	19.5	51.0	21.6	771	3,548
1167.6 - 1174.6	7.0	11.3	24.2	68.6	224	1,566
1163.0 - 1174.6	11.6	14.6	34.8	50.0	441	5,114