

OILFIELD RESEARCH LABORATORIES

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December 2, 1958

Schermerhorn Oil Corporation
P. O. Box 287
Tulsa, Oklahoma

Gentlemen:

Enclosed herewith are the results of tests run on the 2 11/16" Rotary core taken from the Wiggans Lease, Well No. 21-G, Wilson County, Kansas, and submitted to our laboratory on November 26, 1958.

In calculating the recovery for the area represented by this core, the following factors and assumptions were employed:

Original formation volume factor	1.07
Present formation volume factor	1.03
Irreducible water saturation, percent	33.0
Primary oil recovery	None
Present oil saturation, percent	64.5
Oil saturation at abandonment, percent	28.0
Net feet of floodable pay sand	10.8
Percent porosity	20.7
Performance factor (permeability distribution & sweep efficiency)	0.50

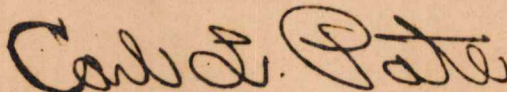
The principle drawback, shown by the analysis of this core, is the wide variation in permeability.

This core was sampled and the samples were sealed in cans by a representative of our laboratory.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES



Carl L. Pate

CLP:cs

1 c. to Schermerhorn Oil Corporation
Earlton, Kansas

well #4
L #1
F #1

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LOGCompany Schermerhorn Oil Corporation Lease Wiggans Well No. 21-G

<u>Depth Interval,</u>	<u>Description</u>
<u>Feet</u>	

946.0 - 947.3	- Laminated sandy shale.
947.3 - 954.5	- Brown fine grained laminated micaceous shaley sandstone.
954.5 - 961.0	- Dark brown fine grained slightly laminated micaceous slightly shaley sandstone.
961.0 - 961.5	- Brown fine grained laminated micaceous shaley sandstone.
961.5 - 971.0	- Dark brown fine grained slightly laminated micaceous slightly shaley sandstone.
971.0 - 971.9	- Dark fine grained micaceous carbonaceous sandstone.
971.9 - 978.0	- Shale.

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RESULTS OF PERMEABILITY TESTS
TABLE I

Company Schermerhorn Oil Corporation Lease Wiggins "D" Well No. G-21

Sample No.	Depth Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.
			Ft.	Cum. Ft.	
1	947.7	22.			
2	948.3	1.1			
3	949.5	50.			
4	950.5	1.7			
5	951.4	11.			
6	952.7	13.			
7	953.4	6.4			
8	954.5	12.			
9	955.5	56.			
10	956.5	47.			
11	957.5	12.			
12	958.5	137.			
13	959.5	36.			
14	960.5	18.			
15	961.5	2.7			
16	962.5	2.8			
17	963.5	24.			
18	964.5	0.39			
19	965.5	1.2			
20	966.5	14.			
21	967.5	21.			
22	968.5	35.			
23	969.5	32.			
24	970.5	7.0			
25	971.5	Imp.			
	23.8				

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Schermerhorn Oil Corporation Lease Wiggins Well No. 21-G

Effective

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	947.4	11.9	31	59	90	286	0.300	0.4	0.4	114	
2	948.1	14.9	30	48	78	347	Imp.	0.9	1.3	312	
3	949.1	17.0	38	34	72	501	1.30	1.0	2.3	501	
4	950.1	16.9	24	44	68	315	1.72	1.0	3.3	315	
5	951.1	20.6	44	32	76	703	Imp.	1.0	4.3	703	
6	952.1	19.8	43	35	78	660	Imp.	1.0	5.3	660	
7	953.1	14.6	36	48	84	407	Imp.	1.0	6.3	407	
8	954.1	13.8	43	49	92	460	0.500	0.9	7.2	414	
9	955.1	17.6	40	33	73	546	2.36	1.1	8.3	601	
10	956.1	21.2	46	25	71	756	1.08	1.0	9.3	756	
11	957.1	20.0	38	35	73	590	0.406	1.0	10.3	590	
12	958.1	21.3	39	29	68	644	16.66	1.0	11.3	644	
13	959.1	21.1	39	26	65	639	0.575	1.0	12.3	639	
14	960.1	21.5	35	26	61	584	0.300	1.4	13.7	817	
15	961.1	17.5	34	38	72	462	Imp.	0.5	14.2	231	
16	962.1	20.8	34	36	70	548	0.025	1.1	15.3	603	
17	963.1	22.0	44	27	71	750	0.484	1.0	16.3	750	
18	964.1	22.1	32	39	71	548	0.010	1.0	17.3	548	
19	965.1	22.0	46	32	78	785	Imp.	1.0	18.3	785	
20	966.1	23.8	29	37	66	535	4.67	1.0	19.3	535	
21	967.1	19.7	38	38	76	581	0.446	1.0	20.3	581	
22	968.1	21.4	41	30	71	680	0.025	1.0	21.3	680	
23	969.1	21.9	44	31	75	748	0.020	1.0	22.3	748	
24	970.1	24.0	42	29	71	782	0.998	1.4	23.7	1,094	
25	971.1	24.2	38	30	68	714	0.193	0.9	24.6	642	
								Total	- - -	14,670	

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Schermerhorn Oil Corporation Lease Wiggans Well No. 21-G

Depth Interval, Feet	Feet of Core Analyzed	Effective Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
947.3 - 950.6	2.4	1.31	
953.6 - 964.6	10.5	2.16	
965.6 - 971.9	6.3	1.07	
947.3 - 971.9	19.2	1.70	

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 Bbls./Acre
947.3 - 950.6	3.3	15.8	30.8	43.9	377	1,242
950.6 - 965.6	15.0	19.9	39.6	33.5	609	9,148
965.6 - 971.9	6.3	22.6	38.9	32.3	680	4,280
947.3 - 971.9	24.6	20.1	38.1	34.6	594	14,670