

# OILFIELD RESEARCH LABORATORIES

• REGISTERED ENGINEERS •

818 EAST 52TH  
OKMULBEE, OKLAHOMA  
PHONE 1488

Chanute, Kansas

506 N. HIGHLAND  
CHANUTE, KANSAS  
PHONE 728

December 27, 1958

Best Scanned Copy

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

Gentlemen:

Enclosed herewith are the results of tests run on the 3<sup>rd</sup> Rotary core taken from the Reece Lease, Well No. 13-G, Wilson County, Kansas, and submitted to our laboratory on December 19, 1958.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

*Carl L. McKrea*  
Carl L. McKrea

CLM:es

1 c. to Schermerhorn Oil Corporation  
Earlton, Kansas

W # 6  
L # 2  
F # 1

# OILFIELD RESEARCH LABORATORIES

818 EAST 62TH  
OKMULSCHE, OKLAHOMA  
PHONE 1-488

RESERVOIR ENGINEERS

Chanute, Kansas

826 N. HIGHLAND  
CHANUTE, KANSAS  
PHONE 728

February 3, 1959

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

Attn: Mr. Jim Sherman

Gentlemen:

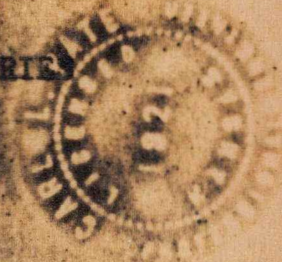
The calculated water-flood oil recovery for Beede-A, Well No. 138, is 1,525 per acre or an average of 234 barrels per acre foot. In calculating this recovery, the following factors and assumptions were used:

Original formation volume factor	1.27
Present formation volume factor	1.22
Irreducible water saturation, percent	28.0
Primary oil recovery, percent	6.0
Present oil saturation, percent	62.6
Oil saturation at abandonment, percent	35.0
Percent porosity	28.0
Net feet pay sand	6.5
Performance factor (permeability distribution & sweep efficiency)	0.56

Very truly yours,

OILFIELD RESEARCH LABORATORIES

*Carl L. Pate*  
Carl L. Pate



CLP:cm

cc- Earlton, Kansas

# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company Schermerhorn Oil Corporation, Lease Reece Well No. 13-G

Location 2040' South of North Line, 2770' West of East Line

Section 20 Twp. 28S Rge. 17E County Wilson State Kansas

Name of Sand	-	Bartlesville
Top of Core	-	897.0
Bottom of Core	-	925.0
Top of Sand	-	907.0
Bottom of Sand	-	?
Total Feet of Permeable Sand	-	9.8
Total Feet of Floodable Sand	-	6.5
Distribution of Permeable Sand:		
Permeability Range Millidarcys	Feet	Cum. Ft.

Effective	-	
Average Permeability Millidarcys	-	0.245
Average Percent Porosity	-	16.3
Average Percent Oil Saturation	-	41.2
Average Percent Water Saturation	-	42.8
Average Oil Content, Bbls./A. Ft.	-	536.
Total Oil Content, Bbls./Acre	-	13,609.
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, Centipoise @	-	
A. P. I. Gravity, degrees @ 60 °F	-	
Elevation, Feet	-	885.1

(Assumed Datum)

## OILFIELD RESEARCH LABORATORIES

LOGCompany Schermerhorn Oil Corporation Lease Reese Well No. 13-GDepth Interval, Description  
Feet

897.0 - 907.0 - Laminated sandstone and shale.  
907.0 - 907.3 - Brown shaley sandstone.  
907.3 - 909.0 - Laminated shaley sandstone.  
909.0 - 915.8 - Brown laminated shaley sandstone.  
915.8 - 917.2 - Laminated sandstone and shale.  
917.2 - 922.0 - Dark brown slightly shaley sandstone.  
922.0 - 922.3 - Brown shaley sandstone.  
922.3 - 923.3 - Dark brown sandstone.  
923.3 - 925.0 - Dark conglomeratic sandstone.

Oilfield Research Laboratories  
RESULTS OF PERMEABILITY TESTS  
TABLE I

Company Schermerhorn Oil Corporation Lease Block "A" Well No. 0-13

Sample No.	Depth Feet	Permeability Millidarcys	Foot of Core		Permeability Capacity Ft. x Md.
			Ft.	Core Ft.	
1	907.5	1.4			
2	908.5	0.99			
3	909.5	26.			
4	910.5	1.0			
5	911.5	13.			
6	912.5	25.			
7	913.5	0.71			
8	914.5	188.			
9	915.5	0.54			
10	917.5	32.			
11	918.5	23.			
12	919.5	32.			
13	920.5	21.			
14	921.5	6.8			
15	922.5	37.			
16	923.5	0.98			
17	924.5	14.			

**Oilfield Research Laboratories**  
**RESULTS OF PERMEABILITY AND POROSITY TESTS**  
**TABLE I A**

Company Schermerhorn Oil Corporation Lease Reece Well No. 11-2

Effective

Sample No.	Depth, Feet	Permeability MMDarcy	Feet of Core		Permeability Capacity Ft. x Md.	Percent Porosity
			Ft.	Cum. Ft.		
1	897.1	Imp.	0.6	0.6		
2	898.1	Imp.	1.0	1.6		
3	899.1	Imp.	1.0	2.6		
4	900.1	Imp.	1.0	3.6		
5	901.1	Imp.	1.0	4.6		
6	902.1	Imp.	1.0	5.6		
7	903.1	Imp.	1.0	6.6		
8	904.1	Imp.	1.0	7.6		
9	905.1	Imp.	1.0	8.6		
10	906.1	Imp.	1.4	10.0		
11	907.1	0.059	0.3	10.3		
12	908.1	Imp.	1.6	12.0		
13	909.1	Imp.	0.6	12.6		
14	910.1	0.010	1.0	13.6		
15	911.1	0.025	1.0	14.6		
16	912.1	0.030	1.0	15.6		
17	913.1	Imp.	1.0	16.6		
18	914.1	Imp.	1.0	17.6		
19	915.1	Imp.	1.2	18.8		
20	916.1	Imp.	0.8	19.6		
21	917.1	Imp.	0.6	20.2		
22	918.1	0.197	1.4	21.6		
23	919.1	0.410	1.0	22.6		
24	920.1	Imp.	1.0	23.6		
25	921.1	0.393	1.4	25.0		
26	922.1	Imp.	0.3	25.3		
27	923.1	0.397	1.0	26.3		
28	924.1	0.400	1.7	28.0		

Oilfield Research Laboratories

RESULTS OF SATURATION TESTS

TABLE II.

Company Schermerhorn Oil Corporation Lease Reece Well No. 13-G

Sat. No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbls./A. Ft.	Feet of Core		Total Oil Content Bbls./Acre
			Oil	Water	Total		Ft.	Cum. Ft.	
5	901.1	10.5	16	68	84	130	1.0	1.0	130
6	902.1	14.4	16	50	68	201	1.0	2.0	201
7	903.1	18.1	29	36	65	407	1.0	3.0	407
8	904.1	14.1	26	55	81	284	1.0	4.0	284
9	905.1	10.4	17	74	91	137	1.0	5.0	137
10	906.1	10.4	32	62	94	258	1.4	6.4	361
11	907.1	20.5	40	36	76	636	0.3	6.7	191
12	908.1	15.8	45	48	93	552	1.7	8.4	938
13	909.1	14.3	39	49	88	433	0.6	9.0	260
14	910.1	18.8	39	31	70	569	1.0	10.0	569
15	911.1	20.3	47	29	76	740	1.0	11.0	740
16	912.1	15.6	52	37	89	629	1.0	12.0	629
17	913.1	15.8	44	40	84	640	1.0	13.0	640
18	914.1	16.1	49	36	85	612	1.0	14.0	612
19	915.1	14.8	43	49	92	494	1.2	15.2	593
20	916.1	8.9	14	72	86	97	0.8	16.0	78
21	917.1	11.4	33	61	94	292	0.6	16.6	175
> 22	918.1	23.4	52	26	78	945	1.4	18.0	1,322
> 23	919.1	21.1	63	25	88	1,031	1.0	19.0	1,031
> 24	920.1	20.7	45	30	75	723	1.0	20.0	723
> 25	921.1	19.5	47	31	78	712	1.4	21.4	997
> 26	922.1	16.5	61	34	95	781	0.3	21.7	234
> 27	923.1	20.6	71	23	94	1,145	1.0	22.7	1,145
> 28	924.1	16.7	55	35	90	713	1.7	24.4	1,212
							Total-	- - - -	13,609

Oilfield Report  
 SUMMARY OF PERMEABILITY MEASUREMENTS  
 TABLE 1

Company Schermerhorn Oil Corporation      Lease Reece      Well No. 13-G

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Effective Permeability Capacity Ft. x Md.
907.0 - 912.6	3.3	0.025	
917.2 - 925.0	6.5	0.356	
907.0 - 925.0	9.8	0.245	

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
900.6 - 917.2	16.6	14.6	34.7	49.3	418	6,945
917.2 - 925.0	7.8	20.0	55.1	29.1	854	6,664
900.6 - 925.0	24.4	16.3	41.2	42.8	536	13,609