

# OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS - PHONE HE1-2650

December 22, 1966

C. C. Garr  
509 East 1st Street  
Newton, Kansas

Dear Sir:

Enclosed herewith are the results of tests run on the Cable Tool core taken from the Beckley Lease, Well No. 12, Montgomery County, Kansas, and submitted to our laboratory on December 20, 1966.

This core was sampled and the samples sealed in jars by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman

BRP:rf

- 3 c. - Newton, Kansas
- 1 c. - Jim Jordan
- ~~1 c. - Giles Overton~~

30-31-17E

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1007

# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company C. C. Garr Lease Beckley Well No. 12

Location \_\_\_\_\_

Section 30 Twp. 31S Rge. 17E County Montgomery State Kansas

Name of Sand	Bartlesville
Top of Core	833.0
Bottom of Core	862.0
Top of <sup>Pay</sup> Sand	841.5
Bottom of <sup>Pay</sup> Sand	860.8
Total Feet of Permeable Sand	17.3
Total Feet of Floodable Sand	

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

	Feet	Cum. Ft.
0 - 5	10.3	10.3
5 - 10	4.0	14.3
10 - 15	3.0	17.3

Average Permeability Millidarcys	5.4
Average Percent Porosity	15.4
Average Percent Oil Saturation	36.8
Average Percent Water Saturation	49.0
Average Oil Content, Bbls./A. Ft.	443.
Total Oil Content, Bbls./Acre	10,378.
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	

-LOG-Company C. C. Garr Lease Beckley Well No. 12Depth Interval, Description  
Feet

833.0 - 836.2 - Gray sandy shale.

836.2 - 841.5 - Brownish gray, sandy limestone.

841.5 - 860.8 - Brown shaly sandstone.

860.8 - 862.0 - Gray and brown, laminated, sandy shale.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company C. C. Garr Lease Beckley Well No. 12

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation		Oil Content Bbbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water			Ft.	Cum. Ft.		
1	838.0	7.9	31	61	190	Imp.	1.0	1.0	190	0.00
2	839.0	8.8	30	66	204	Imp.	1.0	2.0	204	0.00
3	840.0	8.3	25	68	161	Imp.	1.0	3.0	161	0.00
4	841.0	11.1	32	65	275	Imp.	1.0	4.0	275	0.00
5	842.0	15.2	34	44	401	1.3	1.0	5.0	401	1.30
6	843.0	16.4	34	37	431	3.8	1.0	6.0	431	3.80
7	844.0	14.2	31	49	341	6.1	1.0	7.0	341	6.10
8	845.0	14.7	22	47	251	3.2	1.0	8.0	251	3.20
9	846.0	18.0	31	46	432	1.7	1.0	9.0	432	1.70
10	847.0	15.0	35	51	406	1.1	1.0	10.0	406	1.10
11	848.0	13.1	51	43	518	Imp.	1.0	11.0	518	0.00
12	849.0	20.8	34	46	548	5.0	1.0	12.0	548	5.00
13	850.0	17.0	44	54	579	5.9	1.0	13.0	579	5.90
14	851.0	16.8	36	44	468	1.4	1.0	14.0	468	1.40
15	852.0	12.0	57	40	530	Imp.	1.0	15.0	530	0.00
16	853.0	13.8	46	42	492	0.93	1.0	16.0	492	0.93
17	854.0	17.5	42	43	570	11.	1.0	17.0	570	11.00
18	855.0	19.7	34	46	519	15.	1.0	18.0	519	15.00
19	856.0	19.9	32	48	494	8.3	1.0	19.0	494	8.30
20	857.0	20.0	43	43	666	7.1	1.0	20.0	666	7.10
21	858.0	15.9	42	56	517	11.	1.0	21.0	517	11.00
22	859.0	17.9	38	47	527	4.4	1.0	22.0	527	4.40
23	860.0	19.8	43	42	660	4.9	1.3	23.3	858	6.37
Total									10,378	

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## SUMMARY OF PERMEABILITY & SATURATION TESTS

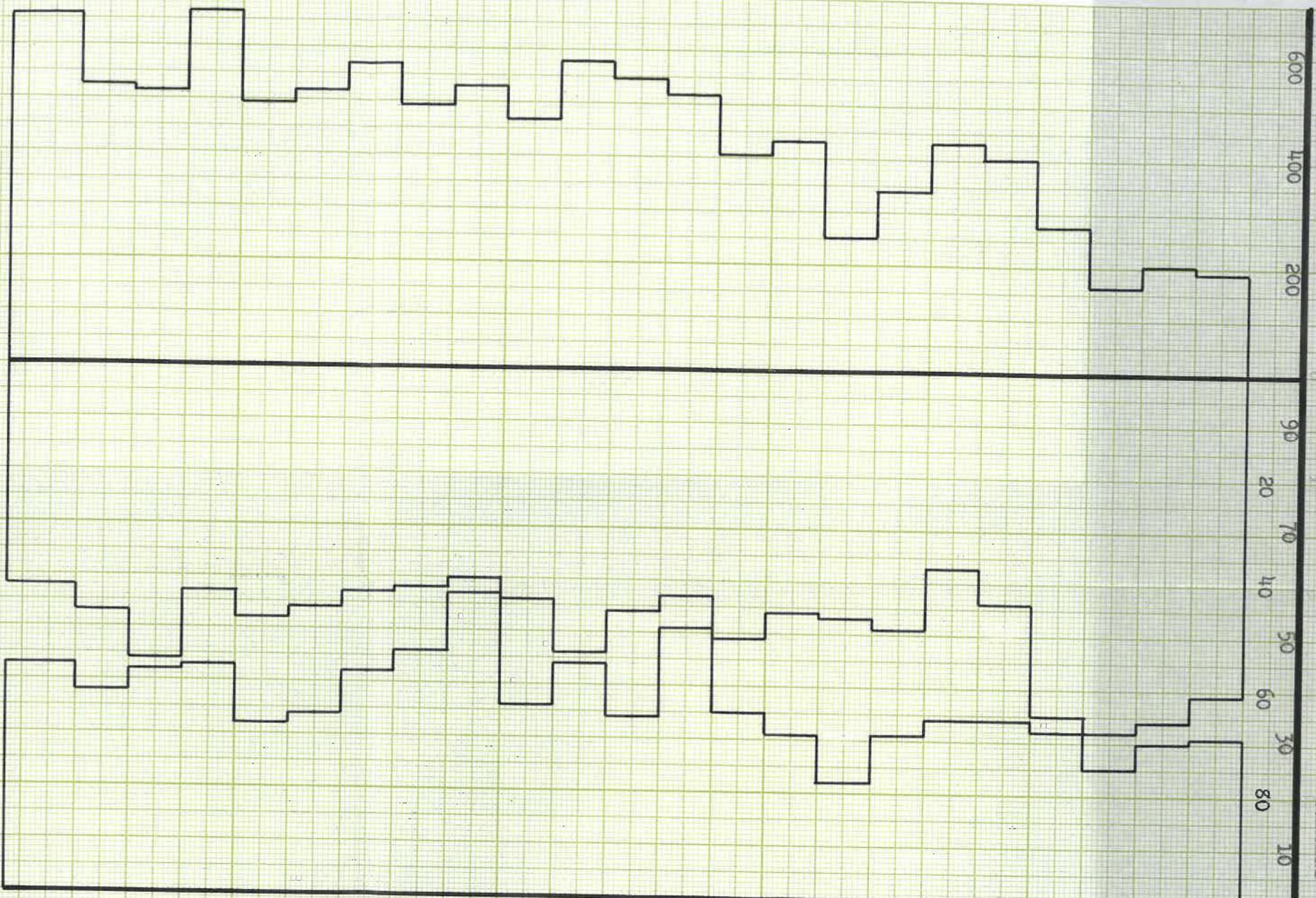
TABLE III

Company	C. C. GARR	Lease	Beckley	Well No.	
				12	
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Total Oil Content Bbls./Acre	
837.5 - 841.5	0.0	0.0	0.0	830	
841.5 - 849.5	7.0	3.2	22.20	3,328	
849.5 - 860.8	10.3	6.9	71.40	6,220	
837.5 - 860.8	17.3	5.4	93.60	10,378	
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.
837.5 - 841.5	4.0	9.0	28.5	65.0	208
841.5 - 849.5	8.0	15.9	34.0	45.4	416
849.5 - 860.8	11.3	17.4	41.5	45.8	550
837.5 - 860.8	23.3	15.4	36.8	49.0	443

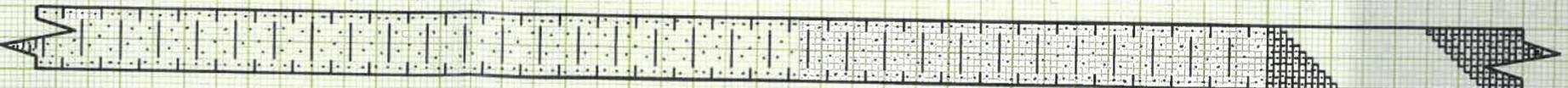
OIL CONTENT,  
IBLS./A. FT.

WATER SAT.,  
PERCENT

OIL SAT.,  
PERCENT



838  
839  
840  
841  
842  
843  
844  
845  
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847  
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849  
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SHALY SANDSTONE

SANDY LIMESTONE

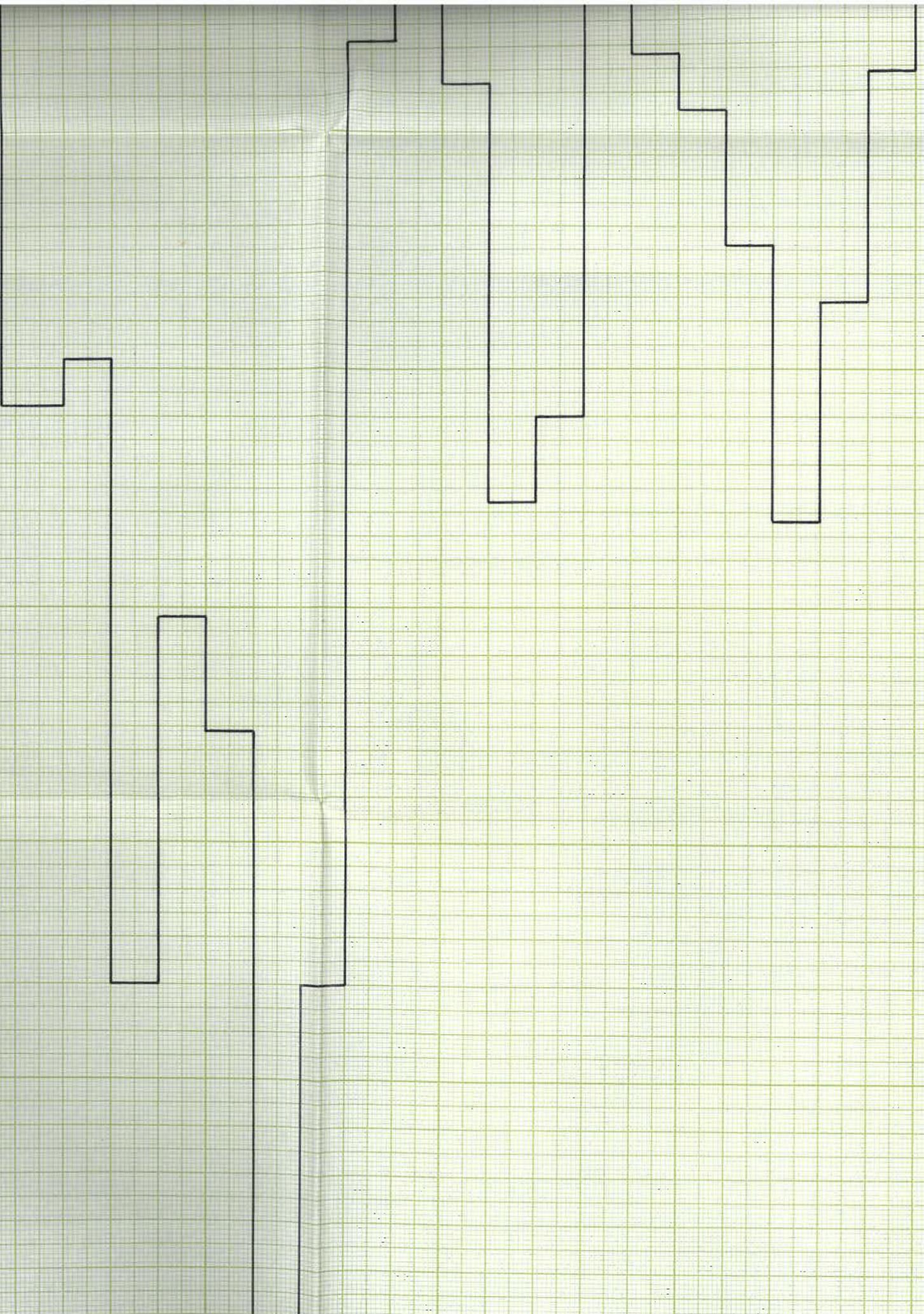
DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY, PERCENT	AVG. OIL SATURATION PERCENT	AVG. SAT PI
837.5 - 841.5	4.0	9.0	28.5	
841.5 - 849.5	8.0	15.9	34.0	
849.5 - 860.8	11.3	17.4	41.5	
837.5 - 860.8	23.3	15.4	36.8	

C. C. GA

BECKETT LEASE  
MONTGOMERY COUNTY,

AIR PERMEABILITY IN MILLIDARCYs

1 2 3 4 5 6 7 8 9 10 11 12 13 14



 SANDY SHALE

 IMPERMEABLE TO AIR

# C. C. GARR

COILEY LEASE WELL NO. 12  
 MONTGOMERY COUNTY, KANSAS

DEPTH	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BHLS./A. FT.	TOTAL OIL CONTENT BHLS./ACRE	AVG. AIR PERMEABILITY, MILLIDARCYs
0	28.5	65.0	208	830	0.0
3	34.0	45.4	416	3,328	3.2
6	41.5	45.8	550	6,220	6.9
14	36.8	49.0	443	10,378	5.4