

OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

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April 21, 1962

Mendenhall Drilling Company
Box 650
Emporia, Kansas

Gentlemen:

Attached hereto are the results of tests run on the Rotary core taken from the Leedy Lease, Well No. 2, Chautauqua County, Kansas, and submitted to our laboratory on April 18, 1962.

This core was sampled after being received in the laboratory.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman
Benjamin R. Pearman

BRP:rf

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GENERAL INFORMATION & SUMMARY

Company Mendenhall Drilling Co. Lease Leedy Well No. 2

Location SW NE NW

Section 10 Twp. 34S Rge. 8E County Chautauqua State Kansas

Name of Sand	Layton
Top of Core	1305.0
Bottom of Core	1312.5
Top of Sand	1305.0
Bottom of Sand	1312.5
Total Feet of Permeable Sand	6.8
Total Feet of Floodable Sand	

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 100	2.0	2.0
100 - 1000	2.9	4.9
1000 & above	1.9	6.8

Average Permeability Millidarcys	576.9
Average Percent Porosity	16.7
Average Percent Oil Saturation	16.1
Average Percent Water Saturation	59.5
Average Oil Content, Bbls./A. Ft.	195.0
Total Oil Content, Bbls./Acre	1,461.0
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	

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LOG

Company Mendenhall Drilling Co. Lease Leedy Well No. 2

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
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1305.0 - 1306.0	- Light brown, slightly calcareous sandstone.
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1306.0 - 1308.5	- Gray, laminated, shaly sandstone.
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1308.5 - 1309.2	- Gray limestone.
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1309.2 - 1312.5	- Gray sandstone.
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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Mendenhall Drilling Company Lease Leedy Well No. 2

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	1305.1	20.0	37	29	66	930.	1.0	1.0	574	930.00
2	1306.1	12.3	13	80	93	11.	0.6	1.6	74	6.60
3	1307.1	7.7	23	50	73	191.	1.0	2.6	137	191.00
4	1308.1	19.4	4	77	81	126.	0.9	3.5	54	113.40
5	1309.1	8.3	25	57	82	Imp.	0.7	4.2	113	0.00
6	1310.1	19.2	8	68	76	29.	1.4	5.6	167	40.60
7	1311.1	21.1	11	60	71	1,390.	1.9	7.5	342	2640.00
							Total	-----	1,461	

Offfield Research Laboratories **SUMMARY OF PERMEABILITY & SATURATION TESTS**

TABLE III

Company Mendenhall Drilling Co. Lease Leedy Well No. 2

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, millidarcys	Permeability Capacity Ft. x Md.
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1305.0 - 1312.5	6.8	576.9	3921.60
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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
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1305.0 - 1312.5	7.5	16.7	16.1	59.5	195	1,461
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