● CORE ANALYSIS ● WATER REPRESSURING ENGINEERING ● WATER ANALYSIS ● FLOODING WATER TREATMENT ● SURVEYING

OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

700 NORTH MISSION
OKMULGEE, OKLAHOMA
PHONE: 4444

Chanute, Kansas

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: HE 1-2650

August 25, 1962

J. E. Newton
238 South Elm Avenue
Webster Groves 19, Missouri

Dear Sir:

Enclosed herewith are the results of tests run on the Rotary core taken from the Harry Rigney, Jr. Lease, Well No. 1-W, Miami County, Kansas, and submitted to our laboratory on August 22, 1962.

This core laid out for at least 24 hours before being brought to the laboratory. It was sampled after having been 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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Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company J. E. Newton Lease Harry Rigney, Jr. Well No. 1-W

Location 630' East of West line & 10' North of South line N½ SW¼

Section 12 Twp. 17S Rge. 24E County Miami State Kansas

Name of Sand	Peru
Top of Core	437.8
Bottom of Core	447.4
Top of Sand (Tested)	437.8
Bottom of Sand (Tested)	447.4
Total Feet of Permeable Sand (Effective)	8.5
Total Feet of Floodable Sand	

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 5	2.4	2.4
5 - 10	2.6	5.0
10 - 15	1.1	6.1
15 - 20	1.0	7.1
20 & above	1.4	8.5

Average Permeability Millidarcys (Effective)	9.19
Average Percent Porosity	19.6
Average Percent Oil Saturation	50.9
Average Percent Water Saturation	13.4
Average Oil Content, Bbls./A. Ft.	769.
Total Oil Content, Bbls./Acre	7,228.
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 J.E. Newton Lease Harry Rigney, Jr. Well No. 1-W

Depth Interval, Feet	Description
437.8 - 439.0	Light brown, laminated, slightly shaly sandstone.
439.0 - 442.8	Brown, laminated, slightly shaly sandstone.
442.8 - 443.0	Gray sandy limestone.
443.0 - 447.4	Brown, laminated, slightly shaly sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company J.E. Newton Lease Harry Rigney, Jr. Well No. 1-W

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	437.9	18.9	38	13	51	556	10.20	0.6	0.6	334	6.120
2	438.9	22.8	34	13	47	601	9.90	0.6	1.2	361	5.940
3	439.9	18.6	46	15	61	663	1.41	1.4	2.6	926	1.972
4	440.9	22.1	47	12	59	805	15.40	1.0	3.6	805	15.400
5	441.9	17.4	49	16	65	660	21.42	1.4	5.0	924	30.000
6	443.1	19.9	54	13	67	833	14.63	0.5	5.5	417	7.320
7	443.9	18.1	58	11	69	813	Imp.	0.9	6.4	731	0.00
8	444.9	21.6	59	13	72	989	5.60	1.0	7.4	989	5.600
9	445.9	17.7	67	16	83	920	0.606	1.0	8.4	920	0.606
10	446.9	21.2	50	9	59	821	5.04	1.0	9.4	821	5.040
								Total	-------	7,228	

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company J.E. Newton Lease Harry Rigney, Jr. Well No. 1-W

Depth Interval, Feet	Feet of Core Analyzed	(Effective) Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
437.8 - 443.5	5.5	12.13	66.752
443.5 - 447.4	3.0	3.75	11.246
437.8 - 447.4	8.5	9.19	77.998

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
437.8 - 443.5	5.5	19.5	45.5	14.1	685	3,767
443.5 - 447.4	3.9	19.7	58.6	12.3	888	3,461
437.8 - 447.4	9.4	19.6	50.9	13.4	769	7,228