• 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

September 17, 1962

Bailey Operating Company
4048 Main
Kansas City, Missouri

Gentlemen:

Enclosed herewith are the results of tests run on the Cable Tool core taken from your Lease, located in Miami County, Kansas, and submitted to our laboratory on September 11, 1962.

This core was sampled after being received in the laboratory.

Because of the laminated nature of the sand, it was not possible to obtain permeability samples for the entire core.

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 Bailey Operating Co. Lease _____ Well No. _____

Location _____

Section 12 Twp. 19S Rge. 24E County Miami State Kansas

Name of Sand	Peru
Top of Core	133.3
Bottom of Core	156.8
Top of Sand (Tested)	133.5
Bottom of Sand (Tested)	153.5
Total Feet of Permeable Sand (Tested)	7.0
Total Feet of Floodable Sand	

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	1.0	1.0
10 - 50	3.0	4.0
50 - 100	2.0	6.0
100 & above	1.0	7.0

Average Permeability Millidarcys	45.2
Average Percent Porosity	13.7
Average Percent Oil Saturation	35.0
Average Percent Water Saturation	41.9
Average Oil Content, Bbls./A. Ft.	361.
Total Oil Content, Bbls./Acre	
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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Company Bailey Operating Co. Lease _____ Well No. _____

Depth Interval, Feet	Description
133.3 - 142.1	Light brown and gray shaly sandstone.
142.1 - 145.4	Brownish gray limestone.
145.4 - 154.6	Brown, slightly shaly sandstone.
154.6 - 156.8	Shaly limestone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Bailey Operating Co. Lease _____ Well No. _____

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	134.0	18.0	14	51	65	195	4.1	1.0	1.0	195	4.10
2	136.0	4.1	47	46	93	150	Imp.	1.0	2.0	150	0.00
3	138.0	14.9	33	24	57	381	-	1.0	3.0	381	-
4	139.0	18.8	40	13	53	583	32.	1.0	4.0	583	32.00
5	141.0	16.4	39	35	74	496	68.	1.0	5.0	496	68.00
6	143.8	4.3	22	33	55	73	Imp.	1.0	6.0	73	0.00
7	147.0	15.9	16	76	92	197	-	1.0	7.0	197	-
8	149.0	15.6	16	77	93	194	56.	1.0	8.0	194	56.00
9	150.5	16.9	59	34	93	772	23.	1.0	9.0	772	23.00
10	152.0	10.0	63	30	93	489	111.	1.0	10.0	489	111.00
11	153.0	15.4	37	41	78	441	22.	1.0	11.0	441	22.00
								Total	-------	3,971	

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Bailey Operating Co. Lease _____ Well No. _____

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
133.3 - 141.5	3.0	34.7	104.10
143.3 - 153.5	4.0	53.0	212.00
133.3 - 153.5	7.0	45.2	316.10

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
133.3 - 141.5	5.0	14.4	34.6	33.8	361	1,805
143.3 - 153.5	6.0	13.0	35.5	48.5	361	2,166
133.3 - 153.5	11.0	13.7	35.0	41.9	361	3,971