

OILFIELD RESEARCH LABORATORIES

613 EAST SIXTH
OKMULGEE, OKLAHOMA
PHONE: 1486

- REGISTERED ENGINEERS -
Chanute, Kansas

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: 726

May 26, 1959

25-28-19E

Mr. James R. Fleming
Box 74
Erie, Kansas

Dear Sir:

Enclosed herewith are the results of tests run on the 2 3/16" Rotary core taken from the John Heady Lease, Well No. 1, Neosho County, Kansas, and submitted to our laboratory by you on May 13, 1959.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. McElrea
Carl L. McElrea

CLM:cs

5 c.

JOHN HEADY 1

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company James R. Fleming Lease John Heady Well No. 1

Location _____

Section 25 Twp. 28S Rge. 19E County Neosho State Kansas

Name of Sand	Bartlesville
Top of Core	516.0
Bottom of Core	(Received) 522.0
Top of Sand	?
Good	
Bottom of Sand	520.2
Total Feet of Permeable Sand	4.2
Total Feet of Floodable Sand	-

Distribution of Permeable Sand:
Permeability Range
Millidarcys

	Feet	Cum. Ft.
0 - 15	1.4	1.4
15 & over	2.8	4.2

Average Permeability Millidarcys	14.4
Average Percent Porosity	17.9
Average Percent Oil Saturation	43.0
Average Percent Water Saturation	28.9
Average Oil Content, Bbls./A. Ft.	596.
Total Oil Content, Bbls./Acre	2,863.
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	

OILFIELD RESEARCH LABORATORIES

LOG

Company James R. Fleming Lease John Heady Well No. 1

Depth Interval, Description
Feet

516.0 - 520.2 - Brown fine grained micaceous sandstone.

520.2 - 520.8 - Brown fine grained micaceous carbonaceous sandstone.

520.8 - 522.0 - Gray sandy shale.

Oilfield Research Laboratories
RESULTS OF PERMEABILITY TESTS
TABLE I

Company James R. Fleming Lease John Heady Well No. 1

Sample No.	Depth Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.
			Ft.	Cum. Ft.	
1	516.6	25.	1.1	1.1	27.50
2	517.6	19.	0.8	1.9	15.20
3	518.3	16.	0.9	2.8	14.40
4	519.9	4.0	0.8	3.6	3.20
5	520.6	0.57	0.6	4.2	0.34

Oilfield Research Laboratories

RESULTS OF SATURATION TESTS

TABLE II

Company James R. Fleming Lease John Heady Well No. 1

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.	
1	516.4	20.2	38	26	64	595	0.9	0.9	535
3	517.4	16.8	43	33	76	560	0.9	1.8	504
4	518.1	16.8	41	32	73	534	1.2	3.0	641
6	519.7	18.1	41	26	67	575	1.2	4.2	690
7	520.4	18.3	58	27	85	822	0.6	4.8	493
							Total-	- - - - -	-2,863

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company James R. Fleming Lease John Heady Well No. 1

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
516.0 - 520.8	4.2	14.4	60.64

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
516.0 - 520.8	4.8	17.9	43.0	28.9	596	2,863