

GEORGE A. HOFFMAN

CORE ANALYSIS REPORT

NELSON LEASE

WELL NO. 5

ALLEN COUNTY, KANSAS



OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

May 23, 1973

Mr. George A. Hoffman
Box 537
Henderson, Kentucky 42420

Dear Sir:

Enclosed herewith are the results of tests run on the Rotary core samples taken from the Nelson Lease, Well No. 5, Allen County, Kansas, and submitted to our laboratory on May 21, 1973.

This core is from a virgin territory and was sampled and the samples sealed in plastic bags by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate



CLP:bl

3 c. to Henderson, Kentucky

1 c. to Chanute, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company George A. Hoffman Lease Nelson Well No. 5

Location NW

Section 28 Twp. 26S Rge. 21E County Allen State Kansas

Name of Sand	- - - - -	Bartlesville
Top of Core	(Received) - - - - -	659.0
Bottom of Core	(Received) - - - - -	674.0
Top of Sand	(Received) - - - - -	659.0
Bottom of Sand	(Received) - - - - -	674.0
Total Feet of Permeable Sand	- - - - -	15.0
Total Feet of Floodable Sand	- - - - -	

Distribution of Permeable Sand:

Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 3	4.0	4.0
3 - 25	4.0	8.0
25 - 50	5.0	13.0
50 & above	2.0	15.0

Average Permeability Millidarcys	- - - - -	41.0
Average Percent Porosity	- - - - -	18.1
Average Percent Oil Saturation	- - - - -	39.6
Average Percent Water Saturation	- - - - -	44.2
Average Oil Content, Bbls./A. Ft.	- - - - -	552.
Total Oil Content, Bbls./Acre	- - - - -	8,293.
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 George A. Hoffman Lease Nelson Well No. 5

Depth Interval, Feet	Description
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659.0 - 662.0	- Brown laminated shaly sandstone.
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662.0 - 665.0	- Brown slightly laminated shaly sandstone.
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665.0 - 667.0	- Brown sandstone.
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667.0 - 673.0	- Brown slightly shaly sandstone.
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673.0 - 674.0	- Brown sandstone.
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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company George A. Hoffman Lease Nelson Well No. 5

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	659.5	18.2	31	45	76	438	2.4	1.0	1.0	438	2.40
2	660.5	16.3	44	48	92	457	1.7	1.0	2.0	457	1.70
3	661.5	14.6	30	59	89	340	0.65	1.0	3.0	340	0.65
4	662.5	18.4	42	41	83	600	20.	1.0	4.0	600	20.00
5	663.5	21.2	39	39	78	641	45.	1.0	5.0	641	45.00
6	664.5	17.4	40	48	88	542	22.	1.0	6.0	542	22.00
7	665.5	19.5	49	33	82	743	113.	1.0	7.0	743	113.00
8	666.5	20.5	41	43	84	652	25.	1.0	8.0	652	25.00
9	667.5	18.3	51	43	94	725	32.	1.0	9.0	725	32.00
10	668.5	16.0	36	53	89	447	36.	1.0	10.0	447	36.00
11	669.5	17.3	43	48	91	577	2.8	1.0	11.0	577	2.80
12	670.5	16.9	30	43	73	394	10.	1.0	12.0	394	10.00
13	671.5	19.0	38	41	79	560	30.	1.0	13.0	560	30.00
14	672.5	17.8	41	43	84	567	21.	1.0	14.0	567	21.00
15	673.5	19.6	40	37	77	610	260.	1.0	15.0	610	260.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company George A. Hoffman Lease Nelson Well No. 5

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
659.0 - 662.0	3.0	1.6	4.75
662.0 - 674.0	12.0	51.	616.80
659.0 - 674.0	15.0	41.	621.55

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
659.0 - 662.0	3.0	16.3	35.0	50.7	412	1,235
662.0 - 674.0	12.0	18.4	40.8	42.7	588	7,058
659.0 - 674.0	15.0	18.1	39.6	44.2	552	8,293