

OILFIELD RESEARCH LABORATORIES

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

May 21, 1974

Mr. George A. Hoffman
Box 483
Chanute, Kansas 66720

Dear Mr. Hoffman:

Enclosed herewith are the results of tests run on the Rotary core taken from the Nelson Lease, Well No. H-6, Allen County, Kansas, and submitted to our laboratory on May 16, 1974.

This core 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
4 c to Chanute, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company George A. Hoffman Lease Nelson Well No. H-6

Location _____

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

Name of Sand - - - - -	Bartlesville
Top of Core - - - - -	662.0
Bottom of Core - - - - -	693.0
Top of Sand - (Received) - - - - -	662.0
Bottom of ^{Better} / _{Sand} - - - - -	685.0
Total Feet of Permeable Sand - - - - -	29.0
Total Feet of Floodable Sand - - - - -	

Distribution of Permeable Sand:
Permeability Range
Millidarcys

	Feet	Cum. Ft.
0 - 5	9.0	9.0
5 - 10	2.0	11.0
10 - 20	4.0	15.0
20 - 30	4.0	19.0
30 - 50	7.0	26.0
50 & above	3.0	29.0

Average Permeability Millidarcys - - - - -	22.9
Average Percent Porosity - - - - -	18.0
Average Percent Oil Saturation - - - - -	30.1
Average Percent Water Saturation - - - - -	50.1
Average Oil Content, Bbls./A. Ft. - - - - -	428.
Total Oil Content, Bbls./Acre - - - - -	12,401.
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 George A. Hoffman Lease Nelson Well No. H-6

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
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662.0 - 676.0	- Brown slightly shaly sandstone.
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676.0 - 679.0	- Brown laminated shaly sandstone.
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679.0 - 681.0	- Brown sandstone.
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681.0 - 683.0	- Core not received.
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683.0 - 685.0	- Brown sandstone.
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685.0 - 693.0	- Brown shaly sandstone.
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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company George A. Hoffman Lease Nelson Well No. H-6

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	662.5	18.2	21	59	80	297	26.	1.0	1.0	297	26.00
2	663.5	18.8	24	55	79	350	6.5	1.0	2.0	350	6.50
3	664.5	18.3	44	49	93	625	3.2	1.0	3.0	625	3.20
4	665.5	18.2	26	45	71	367	35.	1.0	4.0	367	35.00
5	666.5	16.0	30	66	96	372	36.	1.0	5.0	372	36.00
6	667.5	20.8	42	41	83	678	18.	1.0	6.0	678	18.00
7	668.5	19.0	42	39	81	619	14.	1.0	7.0	619	14.00
8	669.5	18.2	41	42	83	579	8.7	1.0	8.0	579	8.70
9	670.5	20.7	35	38	73	562	40.	1.0	9.0	562	40.00
10	671.5	20.7	31	40	71	498	48.	1.0	10.0	498	48.00
11	672.5	18.7	37	42	79	537	20.	1.0	11.0	537	20.00
12	673.5	19.7	28	39	67	428	54.	1.0	12.0	428	54.00
13	674.5	19.2	33	40	73	492	14.	1.0	13.0	492	14.00
14	675.5	18.7	44	39	83	638	38.	1.0	14.0	638	38.00
15	676.5	19.5	23	47	70	348	3.7	1.0	15.0	348	3.70
16	677.5	20.8	36	43	79	581	92.	1.0	16.0	581	92.00
17	678.5	20.4	33	36	69	522	2.2	1.0	17.0	522	2.20
18	679.5	20.4	27	44	71	428	55.	1.0	18.0	428	55.00
19	680.5	17.9	26	50	76	361	42.	1.0	19.0	361	42.00
20	683.5	17.1	33	52	85	438	23.	1.0	20.0	438	23.00
21	684.5	17.2	24	57	81	320	31.	1.0	21.0	320	31.00
22	685.5	14.1	22	63	85	241	4.0	1.0	22.0	241	4.00
23	686.5	17.3	32	58	90	430	3.9	1.0	23.0	430	3.90
24	687.5	16.1	24	64	88	300	2.8	1.0	24.0	300	2.80

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company George A. Hoffman Lease Nelson Well No. H-6

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.		
25	688.5	14.9	19	67	86	220	3.3	1.0	25.0	220	3.30
26	689.5	14.5	20	71	91	225	0.75	1.0	26.0	225	0.75
27	690.5	16.6	27	53	80	348	4.7	1.0	27.0	348	4.70
28	691.5	15.8	27	47	74	331	23.	1.0	28.0	331	23.00
29	692.5	14.9	23	68	91	266	12.	1.0	29.0	266	12.00

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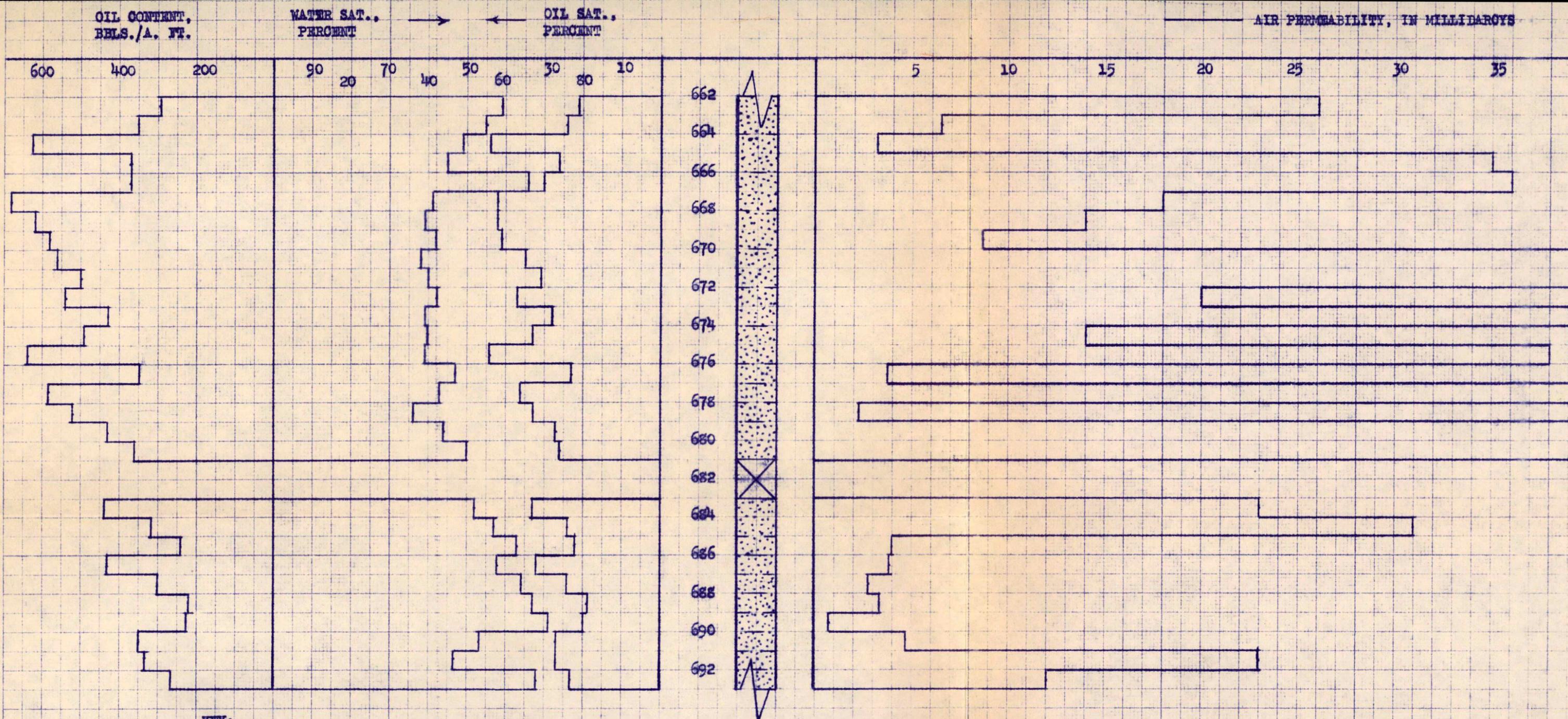
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company George A. Hoffman Lease Nelson Well No. H-6

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
662.0 - 670.0	8.0	18.4	147.40
670.0 - 685.0	13.0	35.6	462.90
685.0 - 693.0	8.0	6.8	54.45
662.0 - 693.0	29.0	22.9	664.75

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
662.0 - 670.0	8.0	18.4	33.7	49.5	486	3,887
670.0 - 685.0	13.0	19.3	31.5	43.6	473	6,153
685.0 - 693.0	8.0	15.5	24.2	61.4	295	2,361
662.0 - 693.0	29.0	18.0	30.1	50.1	428	12,401



KEY:
 SANDSTONE

 SHALY SANDSTONE



GEORGE A. HOFFMAN
 NELSON LEASE
 ALLEN COUNTY, KANSAS
 WELL NO. H-6

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBL./A. FT.	TOTAL OIL CONTENT BBL./ACRE	AVG. AIR PERMEABILITY, MILLIDARCS
662.0 - 670.0	8.0	18.4	33.7	49.5	486	3,887	18.4
670.0 - 685.0	13.0	19.3	31.5	43.6	473	6,153	35.6
685.0 - 693.0	8.0	15.5	24.2	61.4	295	2,361	6.8
662.0 - 693.0	29.0	18.0	30.1	50.1	428	12,401	22.9