

OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS - PHONE HE1-2650

January 22, 1968

110-25-10E

N & B Enterprises
Box 229
Chanute, Kansas 66720

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary cores taken from the Schornick Lease, Well No. 3, Woodson County, Kansas, and submitted to our laboratory on January 17th and 18th, 1968.

These cores were sampled and the samples sealed in plastic bags by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:bjc

5 c. - Chanute, Kansas

Schornick 3

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company N & B Enterprises Lease Schornick Well No. 3

Location 220' NSL and 660' EWL, W/2, NW/4

Section 16 Twp. 25S Rge. 16E County Woodson State Kansas

Name of Sand	Upper Squirrel
Top of Core	868.0
Bottom of Core	888.8
Top of Sand (Cored)	868.0
Bottom of Sand	887.8
Total Feet of Permeable Sand	19.8
Total Feet of Floodable Sand	

Distribution of Permeable Sand:
Permeability Range
Millidarcys

	Feet	Cum. Ft.
0 - 5	3.6	3.6
5 - 10	4.6	8.2
10 - 15	6.4	14.6
15 - 20	2.6	17.2
20 & above	2.6	19.8

Average Permeability Millidarcys	13.0
Average Percent Porosity	18.2
Average Percent Oil Saturation	49.9
Average Percent Water Saturation	30.2
Average Oil Content, Bbls./A. Ft.	707.
Total Oil Content, Bbls./Acre	14,010.
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 N & B Enterprises Lease Schornick Well No. 3

Depth Interval, Feet	Description
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UPPER SQUIRREL

868.0 - 870.0 - Brown shaly sandstone.

870.0 - 878.0 - Brown sandstone.

878.0 - 886.2 - Brown slightly laminated shaly sandstone.

886.2 - 887.8 - Dark brown sandstone.

887.8 - 888.8 - Sandy shale.

LOWER SQUIRREL

914.0 - 915.0 - Brown shaly sandstone.

915.0 - 915.9 - Dark brown sandstone.

915.9 - 917.5 - Brown shaly sandstone.

917.5 - 923.3 - Dark brown sandstone with very few shale laminations.

923.3 - 924.6 - Gray and brown shaly sandstone.

924.6 - 932.5 - Sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company N & B Enterprises Lease Schornick Well No. 3

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.		
						<u>UPPER SAND</u>					
1	868.1	15.7	28	51	79	341	3.5	0.6	0.6	204	2.10
2	869.1	13.0	41	51	92	413	0.43	1.4	2.0	578	0.60
3	870.1	17.6	46	31	77	628	3.4	0.6	2.6	377	2.04
4	871.1	18.2	54	28	82	763	5.4	1.0	3.6	763	5.40
5	872.1	18.4	50	25	75	714	10.	1.0	4.6	714	10.00
6	873.1	18.0	51	28	79	712	7.6	1.0	5.6	712	7.60
7	874.1	17.7	53	29	82	728	12.	1.0	6.6	728	12.00
8	875.1	19.6	49	27	76	745	15.	1.0	7.6	745	15.00
9	876.1	18.6	56	24	80	808	12.	1.0	8.6	808	12.00
10	877.1	17.3	48	31	79	644	13.	1.4	10.0	902	18.20
11	878.1	17.4	42	34	76	567	8.2	0.6	10.6	340	4.92
12	879.1	16.9	55	35	90	721	4.3	1.0	11.6	721	4.30
13	880.1	19.9	47	24	71	726	8.3	1.0	12.6	726	8.30
14	881.1	19.0	48	25	73	708	15.	1.0	13.6	708	15.00
15	882.1	17.8	49	29	78	677	21.	1.0	14.6	677	21.00
16	883.1	18.9	51	29	80	748	11.	1.0	15.6	748	11.00
17	884.1	19.3	59	28	87	884	9.6	1.0	16.6	884	9.60
18	885.1	18.3	55	28	83	781	16.	1.0	17.6	781	16.00
19	886.1	20.5	53	24	77	843	19.	0.6	18.2	506	11.40
20	887.1	21.1	53	21	74	868	44.	1.6	19.8	1388	70.40

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company N & B Enterprises Lease Schornick Well No. 3

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.		
						<u>LOWER SAND</u>					
21	914.1	14.4	34	52	86	380	Imp.	1.0	1.0	380	0.00
22	915.1	16.0	57	17	74	708	31.	0.9	1.9	638	27.90
23	916.1	16.8	51	43	94	665	0.68	0.7	2.6	465	0.48
24	917.1	19.7	49	24	73	749	22.	0.9	3.5	674	19.80
25	918.1	21.3	49	17	66	810	61.	1.1	4.6	891	67.10
26	919.1	20.8	50	18	68	807	49.	1.0	5.6	807	49.00
27	920.1	22.2	59	17	76	1016	62.	1.0	6.6	1016	62.00
28	921.1	19.5	59	15	74	893	50.	1.0	7.6	893	50.00
29	922.1	15.3	48	42	90	570	38.	1.0	8.6	570	38.00
30	923.1	20.4	64	18	82	1013	53.	0.7	9.3	710	37.10

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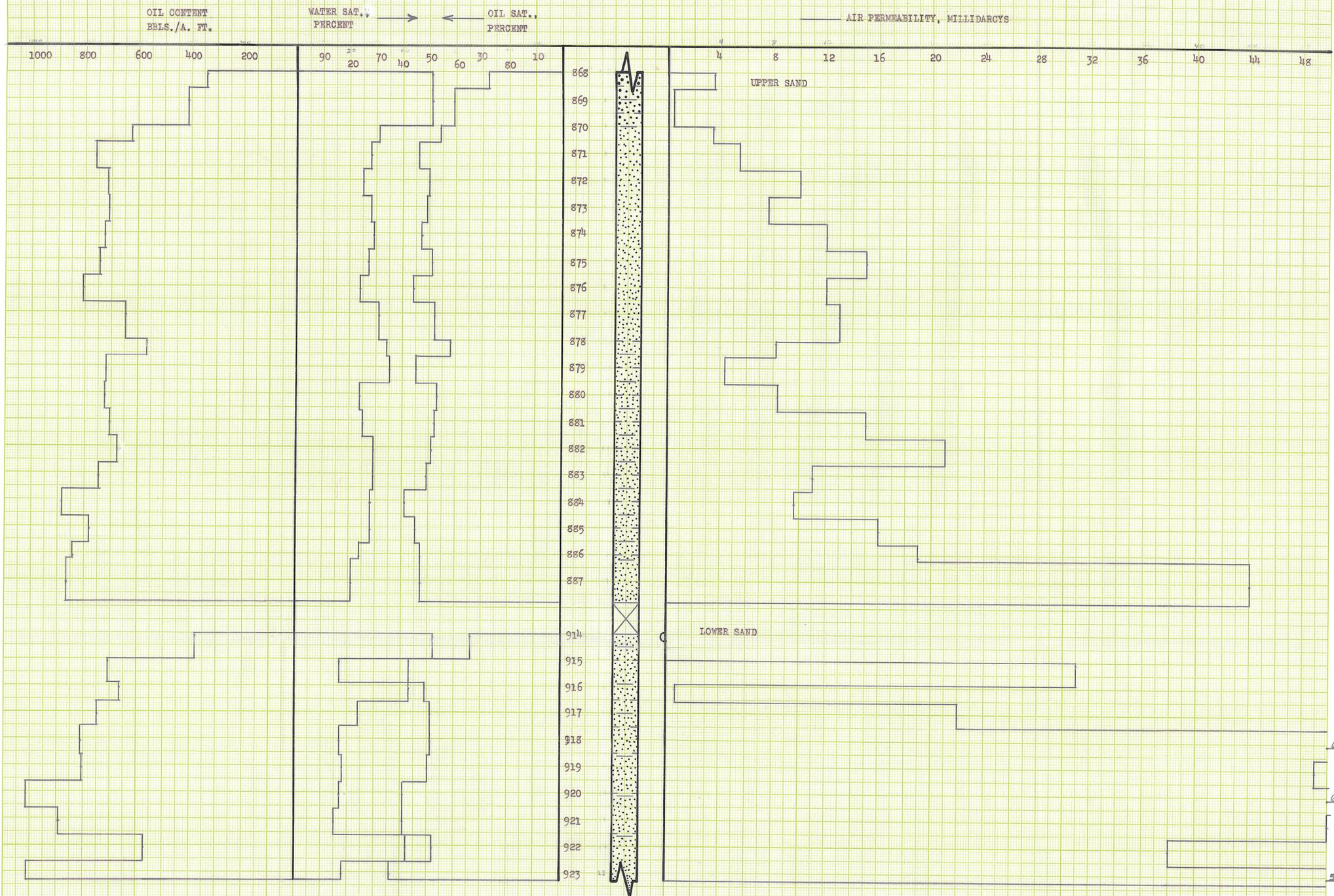
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company N & B Enterprises Lease Schornick Well No. 3

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
<u>UPPER SQUIRREL SAND</u>			
868.0 - 873.6	5.6	5.0	27.74
873.6 - 887.8	14.2	16.1	229.12
868.0 - 887.8	19.8	13.0	256.86
<u>LOWER SQUIRREL SAND</u>			
914.0 - 923.3	8.3	42.3	351.38

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
<u>UPPER SQUIRREL SAND</u>						
868.0 - 873.6	5.6	16.7	45.9	36.0	598.	3,348.
873.6 - 887.8	14.2	18.8	51.5	27.5	751.	10,662.
868.0 - 887.8	19.8	18.2	49.9	30.2	707.	14,010.
<u>LOWER SQUIRREL SAND</u>						
914.0 - 923.3	9.3	18.7	51.6	26.1	758.	7,044.



KEY:
 SANDSTONE
 SANDSTONE CONTAINING VERY FEW SHALE LAMINATIONS

SHALY SANDSTONE
 IMPERMEABLE TO AIR

N. & B. ENTERPRISES

SCHORNICK LEASE WELL NO. 3
 WOODSON COUNTY, KANSAS

DEPTH INTERVAL FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBL./A. FT.	TOTAL OIL CONTENT BBL./ACRE	AVG. AIR PERMEABILITY MILLIDARCS
UPPER SAND							
868.0 - 873.6	5.6	16.7	45.9	36.0	598	3,348	5.0
873.6 - 887.8	14.2	18.8	51.5	27.5	751	10,662	16.1
868.0 - 887.8	19.8	18.2	49.9	30.2	707	14,010	13.0
LOWER SAND							
914.0 - 923.3	9.3	18.7	51.6	26.1	758	7,044	42.3

OILFIELD RESEARCH LABORATORIES
 CHANUTE, KANSAS
 JANUARY, 1966

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STANDARD CROSS SECTION
 MILLIMETER

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