

N & B ENTERPRISE

CORE ANALYSIS REPORT

HORSCH LEASE

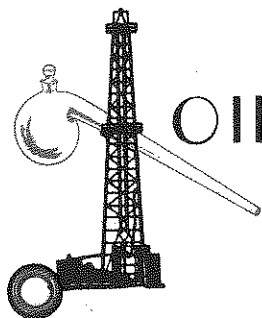
WELL NO. 1

WOODSON COUNTY, KANSAS

OILFIELD RESEARCH LABORATORIES

536 N. HIGHLAND

CHANUTE, KANSAS



OILFIELD RESEARCH LABORATORIES

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

September 25, 1968

N. & B Enterprises
Box 229
Chanute, Kansas 66720

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Horsch Lease, Well No. 1, Woodson County, Kansas, and submitted to our laboratory on September 21, 1968.

This core is from a virgin territory and was sampled and submitted to our laboratory by the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:dp

5 c. - Chanute, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company	<u>N & B Enterprises</u>		Lease	<u>Horsch</u>		Well No.	<u>1</u>
Location	<u>660' FNL & 220' FEL, NW SE</u>						
Section	<u>8</u>	Twp.	<u>25S</u>	Rge.	<u>16E</u>	County	<u>Woodson</u>
						State	<u>Kansas</u>
Name of Sand	-						Squirrel
Top of Core	-						937.0
Bottom of Core	-						950.0
Top of Sand	- (Received) -						937.3
Bottom of Sand	- (Received) -						950.0
Total Feet of Permeable Sand	-						10.5
Total Feet of Floodable Sand	-						
Distribution of Permeable Sand:	Permeability Range		Feet		Cum. Ft.		
	Millidarcys						
	0 - 5		2.0		2.0		
	5 - 10		3.0		5.0		
	10 - 50		3.5		8.5		
	50 & above		2.0		10.5		
Average Permeability Millidarcys	-						26.4
Average Percent Porosity	-						19.4
Average Percent Oil Saturation	-						57.5
Average Percent Water Saturation	-						22.7
Average Oil Content, Bbls./A. Ft.	-						884.
Total Oil Content, Bbls./Acre	-						9,283.
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 N & B Enterprises Lease Hersch Well No. 1

<u>Depth Interval, Feet</u>	<u>Description</u>
937.0 - 937.3	Dark laminated shaly sandstone.
937.3 - 937.8	Brown fine grained sandstone.
937.8 - 938.3	Dark laminated shaly sandstone.
938.3 - 938.8	Dark fine grained sandstone.
938.8 - 939.3	Dark laminated shaly sandstone.
939.3 - 939.8	Dark fine grained sandstone.
939.8 - 940.0	Dark laminated shaly sandstone.
940.0 - 941.0	Dark fine grained micaceous sandstone.
941.0 - 942.0	Shale.
942.0 - 948.0	Dark fine grained micaceous sandstone.
948.0 - 950.0	Dark fine grained micaceous shaly sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company N & B Enterprises Lease Horsch Well No. 1

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	937.5	19.2	54	14	68	804	48	0.5	0.5	402	24.00
2	938.5	19.6	56	18	74	852	38	0.5	1.0	426	19.00
3	939.5	18.5	48	28	76	689	12	0.5	1.5	344	6.00
4	940.5	19.9	56	16	72	864	52	1.0	2.5	864	52.00
5	942.5	20.5	68	19	87	1,092	7.9	1.0	3.5	1,082	7.90
6	943.5	21.2	60	17	77	987	101	1.0	4.5	987	101.00
7	944.5	19.9	60	18	78	926	18	1.0	5.5	926	18.00
8	945.5	20.6	66	19	85	1,054	6.3	1.0	6.5	1,054	6.30
9	946.5	20.0	64	15	79	996	28	1.0	7.5	996	28.00
10	947.5	19.0	59	27	86	870	8.0	1.0	8.5	870	8.00
11	948.5	15.3	36	46	82	428	3.3	1.0	9.5	428	3.30
12	949.5	18.5	56	31	87	804	4.2	1.0	10.5	804	4.20

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company N & B Enterprises Lease Hersch Well No. 1

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
937.3 - 944.0	4.5	46.7	209.90
944.0 - 950.0	6.0	11.3	67.80
937.3 - 950.0	10.5	26.4	277.70

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
937.3 - 944.0	4.5	20.0	58.4	18.2	934	4,205
944.0 - 950.0	6.0	18.9	56.8	26.0	846	5,078
937.3 - 950.0	10.5	19.4	57.5	22.7	884	9,283

OIL CONTENT,
BBLs./A. FT.WATER SAT.,
PERCENTOIL SAT.,
PERCENT

AIR PERMEABILITY, IN MILLIDARCYs

1,000 800 600 400 200

90 20 70 40 50 60 30 80 10

10 20 30 40 50 60 70

937

938

939

940

941

942

943

944

945

946

947

948

949

950

KEY:



SANDSTONE



SHALY SANDSTONE



SHALE

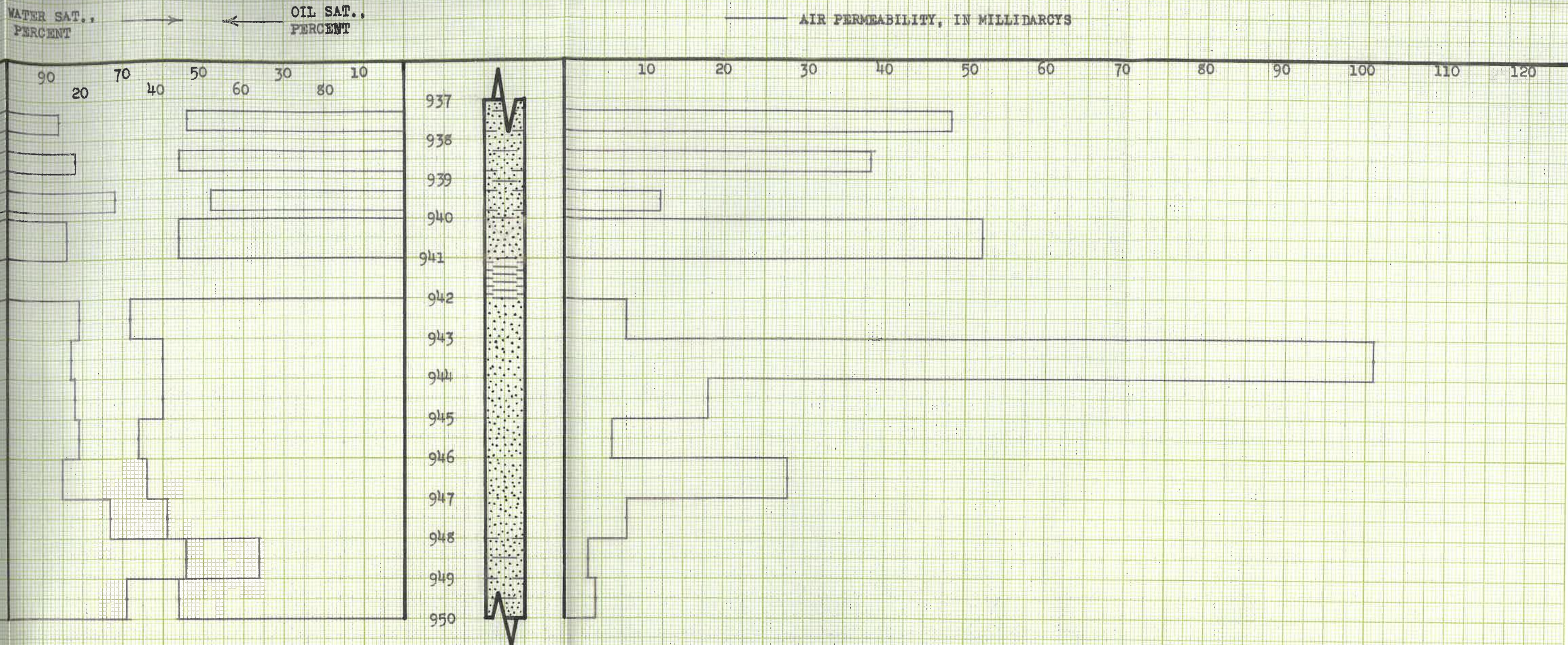
N. 8 B. ENTERPRISES

HORSCH LEASE

WOODSON COUNTY, KANSAS

WELL NO. 1

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBLs./A. FT.	TOTAL OIL CONTENT BBLs./A.	AVG. AIR PERMEABILITY MILLIDARCYs
937.3 - 944.0	4.5	20.0	58.4	18.2	934	4,205	46.7
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CHANUTE, KANSAS
SEPTEMBER, 1968.