



OILFIELD RESEARCH LABORATORIES

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

January 2, 1968

21-25-16E

TEC Drilling Company, Inc.
P. O. Box 693
El Dorado, Kansas 67042

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Yohon Lease, Well No. 1, Woodson County, Kansas, and submitted to our laboratory on December 28, 1967.

This core is from a virgin territory and was sampled and the samples sealed in tin cans by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

Yohon 1

CLP:bjc

5 c. - El Dorado, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company TEC Drilling Company, Inc. Lease Yohon Well No. 1

Location NW, NW, NW

Section 21 Twp. 25S Rge. 16E County Woodson State Kansas

Name of Sand	Upper Squirrel
Top of Core	872.0
Bottom of Core	890.0
Top of Sand	887.0
Bottom of Sand	890.0

Total Feet of Permeable ^{Formation} Sand 11.5

Total Feet of Floodable Sand

Distribution of Permeable ^{Formation} Sand:	Feet	Cum. Ft.
Permeability Range Millidarcys		

0 - 1	2.0	2.0
1 - 2	4.6	6.6
2 & above	4.9	11.5

Average Permeability Millidarcys 2.1

Average Percent Porosity 14.8

Average Percent Oil Saturation 41.1

Average Percent Water Saturation 47.8

Average Oil Content, Bbls./A. Ft. 484

Total Oil Content, Bbls./Acre 5,562

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 TEC Drilling Company, Inc. Lease Yohon Well No. 1

Depth Interval, Description
Feet

UPPER SQUIRREL

872.0 - 875.0 - Gray calcareous sandy shale.
875.0 - 878.5 - Gray sandy shale.
878.5 - 887.0 - Gray and brown laminated sandy shale.
887.0 - 890.0 - Brown laminated shaly sandstone.

LOWER SQUIRREL

920.0 - 921.8 - Sandy shale.
921.8 - 922.5 - Hard gray calcareous sandstone.
922.5 - 922.9 - Brown shaly sandstone.
922.9 - 924.4 - Dark brown sandstone.
924.4 - 928.8 - Brown laminated shaly sandstone.
928.8 - 929.7 - Dark brown sandstone.
929.7 - 933.5 - Carbonaceous silty shaly sandstone.
933.5 - 939.0 - Sandy shale.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company TEC Drilling Company, Inc. Lease Yohon Well No. 1

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbbs. / 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	879.5	12.9	29	67	96	290	3.7	1.5	1.5	435	5.55
2	880.6	11.7	22	72	94	200	0.67	1.0	2.5	200	0.67
3	881.5	13.5	41	55	96	430	2.6	1.0	3.5	430	2.60
4	882.6	14.1	39	47	86	427	3.5	1.1	4.6	470	3.85
5	883.6	15.1	44	50	94	516	0.37	1.0	5.6	516	0.37
6	884.8	16.3	40	36	76	506	1.4	1.1	6.7	556	1.54
7	885.8	14.4	48	46	94	536	1.4	1.0	7.7	536	1.40
8	886.8	15.1	40	49	89	469	1.8	0.8	8.5	375	1.44
9	887.8	15.7	50	35	85	609	2.6	1.3	9.8	792	3.38
10	888.8	17.9	53	30	83	736	1.7	1.7	11.5	1252	2.89
						<u>LOWER SAND</u>					
11	923.1	17.1	51	10	61	678	61.	0.7	12.2	475	42.70
12	924.1	19.6	62	9	71	945	78.	0.8	13.0	756	62.40
13	925.1	21.2	62	14	76	1021	4.3	1.2	14.2	1225	5.16
14	926.1	17.3	50	29	79	673	19.	1.0	15.2	673	19.00
15	927.1	17.5	61	25	86	830	4.0	1.0	16.2	830	4.00
16	928.1	18.0	63	24	87	881	6.0	1.2	17.4	1057	7.20
17	929.1	20.4	59	14	73	935	103.	0.9	18.3	842	92.70

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

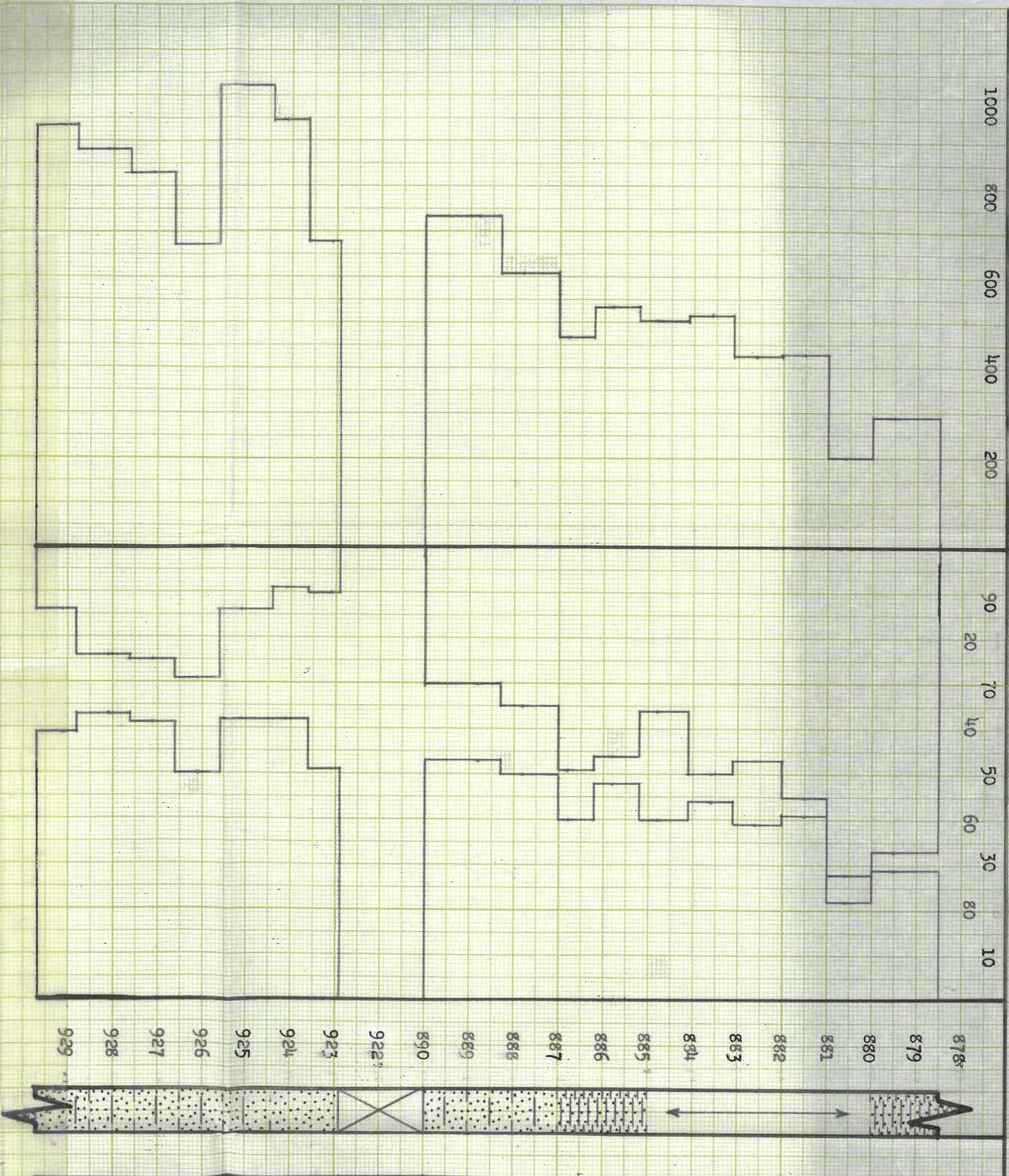
TABLE III

Company	Lease	Yohon	Well No.
TEC Drilling Company, Inc.			1
<u>UPPER SAND</u>			
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
878.5 - 890.0	11.5	2.1	23.69
<u>LOWER SAND</u>			
922.9 - 929.7	6.8	34.1	233.16
<u>UPPER SAND</u>			
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Water Saturation
878.5 - 890.0	11.5	14.8	47.8
<u>LOWER SAND</u>			
922.9 - 929.7	6.8	18.8	18.6
			Average Oil Content Bbl./A. Ft.
			Total Oil Content Bbls./Acre
			484.
			5,562.
			862.
			5,858.

OIL CONTENT
RBLS./A. PP.

WATER SAT.,
PERCENT

OIL SAT.,
PERCENT



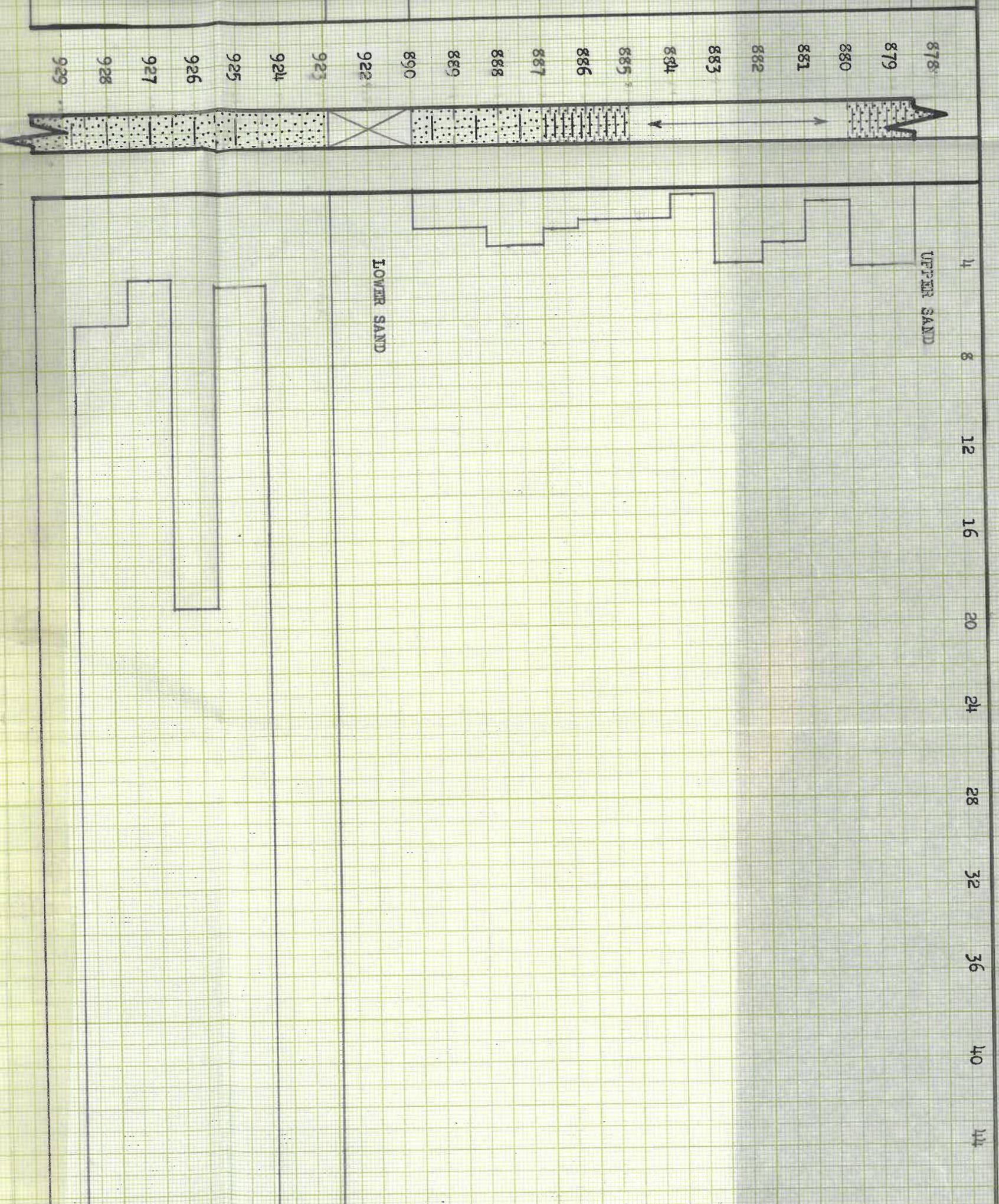
KEY:
 BREAK
 SANDSTONE
 SHALY SANDSTONE

DEPTH INTERVAL FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AV CC BRI
878.5 - 890.0	11.5	14.8	41.1	47.8	UPPER SAND
922.9 - 929.7	6.8	18.8	58.8	18.6	LOWER SAND

TEC DRILLING CO.

YOHON LEASE
WOODSON COUNTY, KANSAS

AIR PERMEABILITY, MILLIDARCYs



ILLING COMPANY, INC.
 HON LEASE WELL NO. 1
 WOODSON COUNTY, KANSAS

CARBONACEOUS SANDSTONE
 SANDY SHALE

DEPTH	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT	TOTAL OIL CONTENT	AVG. AIR PERMEABILITY
		BBS./A.FT.	BBS./ACRE	MILLIDARCYs
UPPER SAND	47.8	484	5,562	2.1
LOWER SAND	18.6	862	5,858	34.1

OILFIELD RESEARCH LABORATORIES
 CHANDLER, KANSAS
 JANUARY, 1968