

# OILFIELD RESEARCH LABORATORIES

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

September 2, 1966

Gilbert Fouts  
Downtowner Motel  
Ft. Scott, Kansas

Dear Sir:

Enclosed herewith are the results of tests run on the Rotary core taken from the Alfred Keith Lease, Well No. 1, Bourbon County, Kansas, and submitted to our laboratory on August 31, 1966.

This core was sampled and the samples sealed in cans by a representative of Oilfield Research Laboratories. The well was drilled in virgin territory.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

*Benjamin R. Pearman*  
Benjamin R. Pearman

BRP:rf

6 c.

# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company Gilbert Fouts Lease Alfred Keith Well No. 1

Location NW SW

Section 1 Twp. 24<sup>S</sup> Rge. 25E County Bourbon State Kansas

Name of Sand	Tucker
Top of Core	173.7
Bottom of Core	212.0
Top of Sand	181.0
Bottom of Sand	212.0
Total Feet of Permeable Sand	20.2
Total Feet of Floodable Sand	-

**Distribution of Permeable Sand:**  
Permeability Range  
Millidarcys

	Feet	Cum. Ft.
2 - 100	6.8	6.8
100 - 200	4.7	11.5
200 - 300	4.0	15.5
300 - 500	3.0	18.5
500 & above	1.7	20.2

Average Permeability Millidarcys	204.0
Average Percent Porosity	23.0
Average Percent Oil Saturation	20.4
Average Percent Water Saturation	65.6
Average Oil Content, Bbls./A. Ft.	358.
Total Oil Content, Bbls./Acre	7,249.
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 Gilbert Fouts Lease Alfred Keith Well No. 1

<u>Depth Interval,</u>	<u>Description</u>
<u>Feet</u>	<u></u>

173.7 - 181.0 - Sandy shale.

181.0 - 182.0 - Light brown, shaly sandstone.

182.0 - 183.0 - Sandy shale.

183.0 - 184.5 - Laminated shaly sandstone.

184.5 - 188.5 - Slightly shaly sandstone.

188.5 - 188.7 - Coal.

188.7 - 192.8 - Sandy shale.

192.8 - 210.3 - Grayish light brown sandstone.

210.3 - 212.0 - Light brown, slightly laminated, slightly shaly sandstone.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Gilbert Fouts

Alfred Keith

Lease

Well No. 1

Company

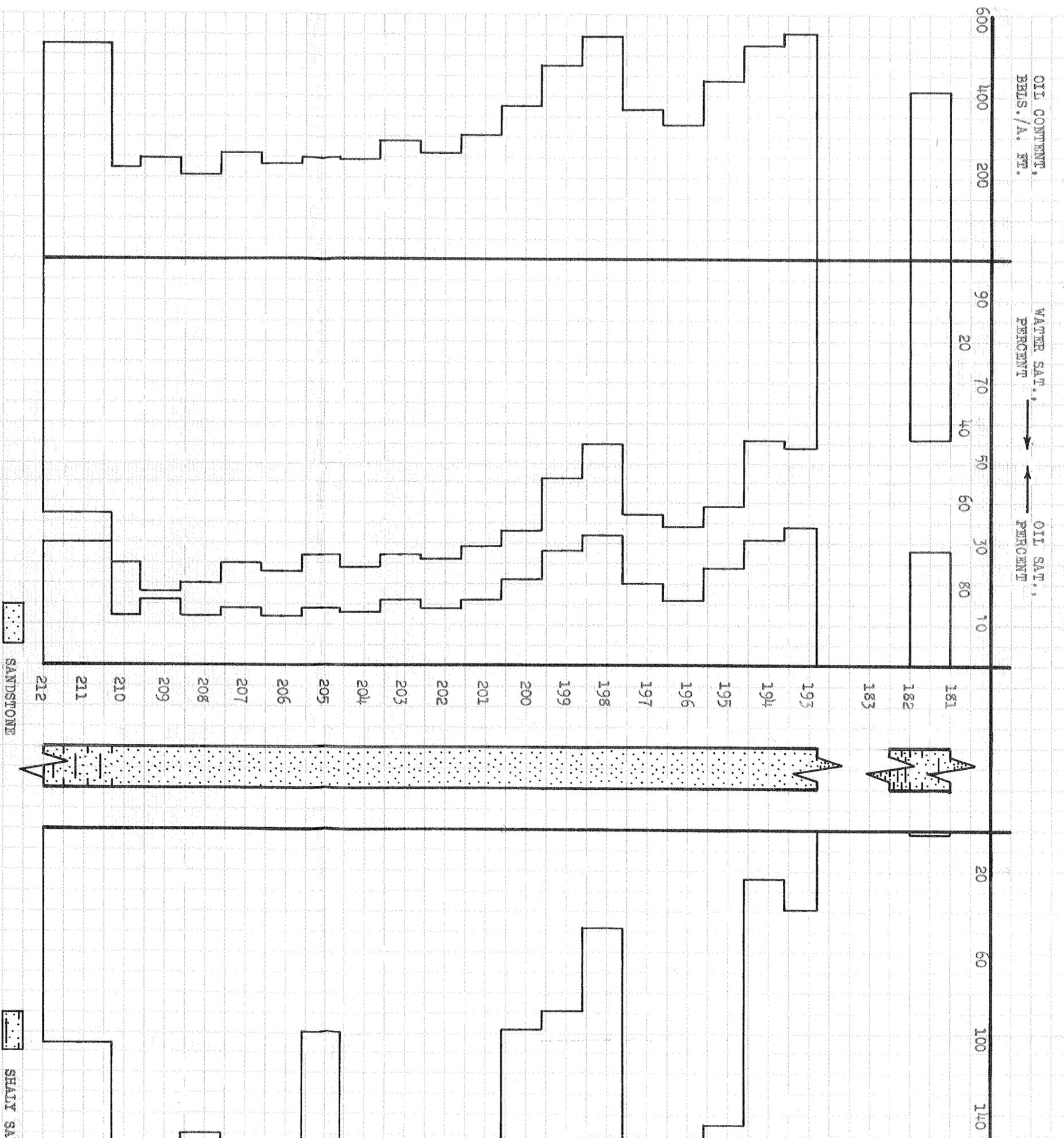
Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation		Oil Content Bbbs. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water			Ft.	Cum. Ft.		
1	181.5	18.9	28	44	410	2.0	1.0	1.0	410	2.00
2	193.1	21.0	34	46	553	39.	0.8	1.8	442	31.20
3	194.1	21.8	31	44	524	24.	1.0	2.8	524	24.00
4	195.1	23.6	24	61	439	145.	1.0	3.8	439	145.00
5	196.1	26.6	16	66	330	228.	1.0	4.8	330	228.00
6	197.1	23.7	20	63	368	230.	1.0	5.8	368	230.00
7	198.1	21.9	32	45	544	48.	1.0	6.8	544	48.00
8	199.1	22.0	28	54	477	89.	1.0	7.8	477	89.00
9	200.1	23.0	21	67	375	98.	1.0	8.8	375	98.00
10	201.1	24.5	16	71	304	156.	1.0	9.8	304	156.00
11	202.1	24.0	14	74	260	406.	1.0	10.8	260	406.00
12	203.1	23.4	16	73	290	253.	1.0	11.8	290	253.00
13	204.1	24.0	13	76	242	266.	1.0	12.8	242	266.00
14	205.1	23.0	14	73	250	99.	1.0	13.8	250	99.00
15	206.1	25.0	12	77	232	314.	1.0	14.8	232	314.00
16	207.1	24.0	14	75	260	370.	1.0	15.8	260	370.00
17	208.1	22.5	12	80	209	150.	1.0	16.8	209	150.00
18	209.1	20.0	16	82	248	643.	1.0	17.8	248	643.00
19	210.1	25.1	12	75	224	556.	0.7	18.5	157	389.20
20	211.1	22.5	30	63	523	105.	1.7	20.2	888	178.50
							Total	-----	7,249	

# Oilfield Research Laboratories

## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease		Well No.		
Gilbert Fouts	Alfred Keith		1		
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
181.0 - 201.6	8.8	101.9	895.20		
201.6 - 212.0	11.4	283.4	3,224.70		
181.0 - 212.0	20.2	204.0	4,119.90		
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
181.0 - 201.6	8.8	22.6	25.8	54.6	444
201.6 - 212.0	11.4	23.4	16.3	73.7	293
181.0 - 212.0	20.2	23.0	20.4	65.5	358
					3,909
					3,340
					7,249



OIL CONTENT,  
BBLS./A. FT.

WATER SAT.,  
PERCENT

OIL SAT.,  
PERCENT

600 400 200 90 20 70 40 50 60 30 80 10 20 60 100 140

SANDSTONE

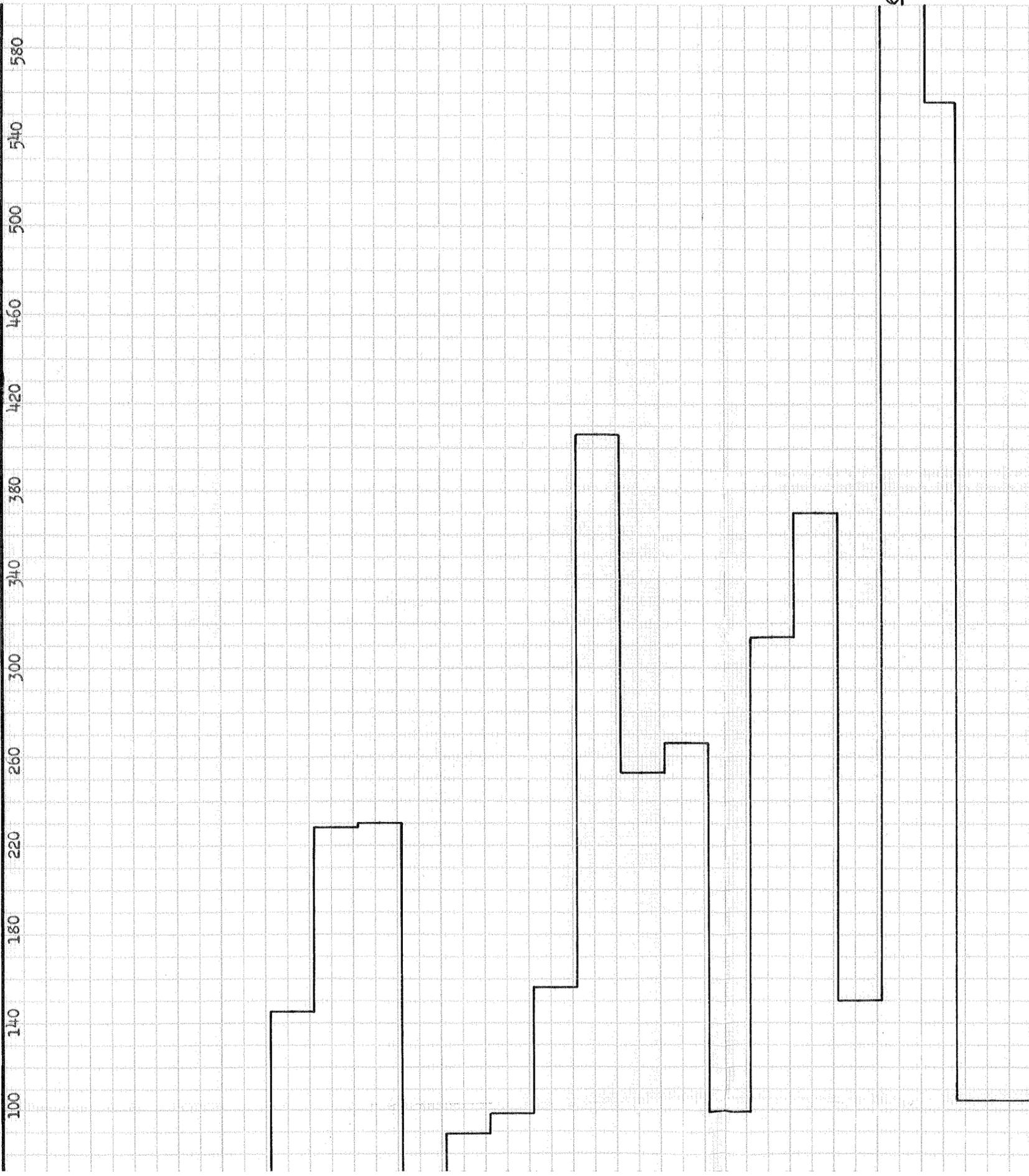
SHALY SANDSTONE

# GILBERT FOU

ALFRED KEITH LEASE  
BOURBON COUNTY, KANS.

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY, PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT
181.0 - 201.6	8.8	22.6	25.8	54.6
201.6 - 212.0	11.4	23.4	16.3	73.7
181.0 - 212.0	20.2	23.0	20.4	65.5

AIR PERMEABILITY, IN MILLIDARCS



SHALY SANDSTONE

SANDY SHALE

# ERT FOUTS

LEASE WELL NO. 1  
CURBON COUNTY, KANSAS

OIL SATURATION CENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBL./A. FT.	TOTAL OIL CONTENT BBL./ACRE	AVG. AIR PERMEABILITY, MILLIDARCS
5.8	54.6	444	3,909	101.9
6.3	73.7	293	3,340	283.4
0.4	65.5	358	7,249	204.0

OILFIELD RESEARCH LABORATORIES  
CHANUTE, KANSAS  
SEPTEMBER, 1966

643