Fooshee W-3 4-21-19E

OILFIELD RESEARCH LABORATORIES

613 East Sixth
Okmulgee, Oklahoma
Phone: 1486

- Registered Engineers -
Chanute, Kansas

526 N. Highland
Chanute, Kansas
Phone: 728

February 23, 1959

Home-Stake Production Company
Philtower Building
Tulsa 3, Oklahoma

Attn: Mr. Dave Davies

Gentlemen:

Enclosed herewith are the results of tests run on the 2 11/16" Rotary core taken from the Fooshee Lease, Garnett Extension, Well No. W-3, Anderson County, Kansas, and submitted to our laboratory on February 16, 1959.

This core was sampled and the samples sealed in cans by a representative of our laboratory.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. McElrea

CLM:cs

1 c. to Mr. C. W. Stumhoffer

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Home-Stake Production Co. Lease Fooshee Well No. W-3

Location 2170' W. of E. Line & 1640' S. of N. Line, NE¼

Section 4 Twp. 21S Rge. 19E County Anderson State Kansas

Name of Sand	Squirrel
Top of Core	775.0
Bottom of Core	828.0
Top of Sand	790.7
Bottom of Sand	827.0
Total Feet of Permeable Sand (Analyzed)	5.7
Total Feet of Floodable Sand (Analyzed)	3.5

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.

Effective Average Permeability Millidarcys	0.383
Average Percent Porosity	17.5
Average Percent Oil Saturation	28.3
Average Percent Water Saturation	53.7
Average Oil Content, Bbls./A. Ft.	391.
Total Oil Content, Bbls./Acre	13,444.
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	1052.

OILFIELD RESEARCH LABORATORIES

LOG

Company Home-Stake Production Co. Lease Fooshee Well No. W-3

Depth Interval, Feet	Description
775.0 - 775.5	Coal.
775.5 - 788.0	Shale.
788.0 - 789.0	Laminated shale and coal.
789.0 - 790.7	Sandy shale.
790.7 - 792.5	Light brown shaley sandstone.
792.5 - 794.4	Laminated sandstone and shale.
794.4 - 798.3	Brown shaley sandstone.
798.3 - 801.6	Laminated sandstone and shale.
801.6 - 803.5	Brown shaley sandstone.
803.5 - 805.0	Brown laminated shaley sandstone.
805.0 - 810.0	Laminated sandstone and shale.
810.0 - 811.0	Loss.
811.0 - 813.2	Laminated sandstone and shale.
813.2 - 819.2	Brown shaley sandstone.
819.2 - 819.7	Sandy limestone.
819.7 - 821.5	Brown shaley sandstone.
821.5 - 821.9	Sandy limestone.
821.9 - 827.0	Grayish brown shaley sandstone.
827.0 - 827.6	Shale.
827.6 - 828.0	Loss.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Home-Stake Production Co. Lease Fooshee Well No. W-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.		
2	791.1	20.7	22	43	65	354	0.393	0.9	0.9	318	
3	792.1	18.6	23	50	73	332	Imp.	0.9	1.8	299	
4	793.1	16.7	45	47	92	584		1.1	2.9	642	
5	794.1	14.3	15	72	87	167		0.8	3.7	134	
6	795.1	19.5	35	40	75	515	0.295	1.2	4.9	618	
7	796.1	20.0	34	39	73	528	0.295	1.0	5.9	528	
8	797.1	18.4	28	44	72	400	Imp.	1.0	6.9	400	
9	798.1	19.2	28	49	77	418	0.600	0.7	7.6	293	
10	799.1	17.1	30	53	83	398		1.3	8.9	517	
11	800.1	15.5	18	65	83	217		1.0	9.9	217	
12	801.1	14.4	16	72	88	179		1.0	10.9	179	
13	802.1	18.3	28	40	68	398	0.500	1.0	11.9	398	
14	803.1	19.3	29	45	73	420	0.287	0.9	12.8	378	
15	804.1	18.9	26	51	77	382	Imp.	1.5	14.3	573	
16	805.1	16.5	50	34	84	641		0.6	14.9	385	
17	806.1	14.1	18	67	85	197	Imp.	1.0	15.9	197	
18	807.1	17.6	40	52	92	546	Imp.	1.0	16.9	546	
19	808.1	17.1	33	49	82	438		1.0	17.9	438	
20	809.1	14.8	18	79	97	207	Imp.	1.4	19.3	290	
21	811.1	16.2	31	63	94	390		0.7	19.9	234	
22	812.1	14.3	13	82	95	144		1.0	20.9	144	
23	813.1	19.9	33	48	81	510		0.6	21.5	306	
24	814.1	19.5	41	43	84	621		1.4	22.9	870	
25	815.1	19.9	32	43	75	495		1.0	23.9	495	
26	816.1	20.1	30	44	74	468		1.0	24.9	468	
27	817.1	17.5	28	50	78	381		1.0	25.9	381	

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Home-Stake Production Co. Lease Fooshee Well No. W-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.		
28	818.1	19.1	32	43	75	475		1.0	26.9	475	
29	819.1	17.6	26	51	77	356		0.6	37.5	214	
30	820.1	19.1	32	54	86	474		0.9	28.4	426	
31	821.1	18.2	32	54	86	452		0.9	29.3	407	
32	822.1	18.2	28	58	86	396		0.7	30.0	277	
33	823.1	18.0	21	58	79	294		1.0	31.0	294	
34	824.1	20.2	25	60	85	392		1.0	32.0	392	
35	825.1	14.1	33	51	84	361		1.0	33.0	361	
36	826.1	13.4	24	59	83	250		1.4	34.4	350	
								Total - - -		13,444	

Oilfield Research Laboratories

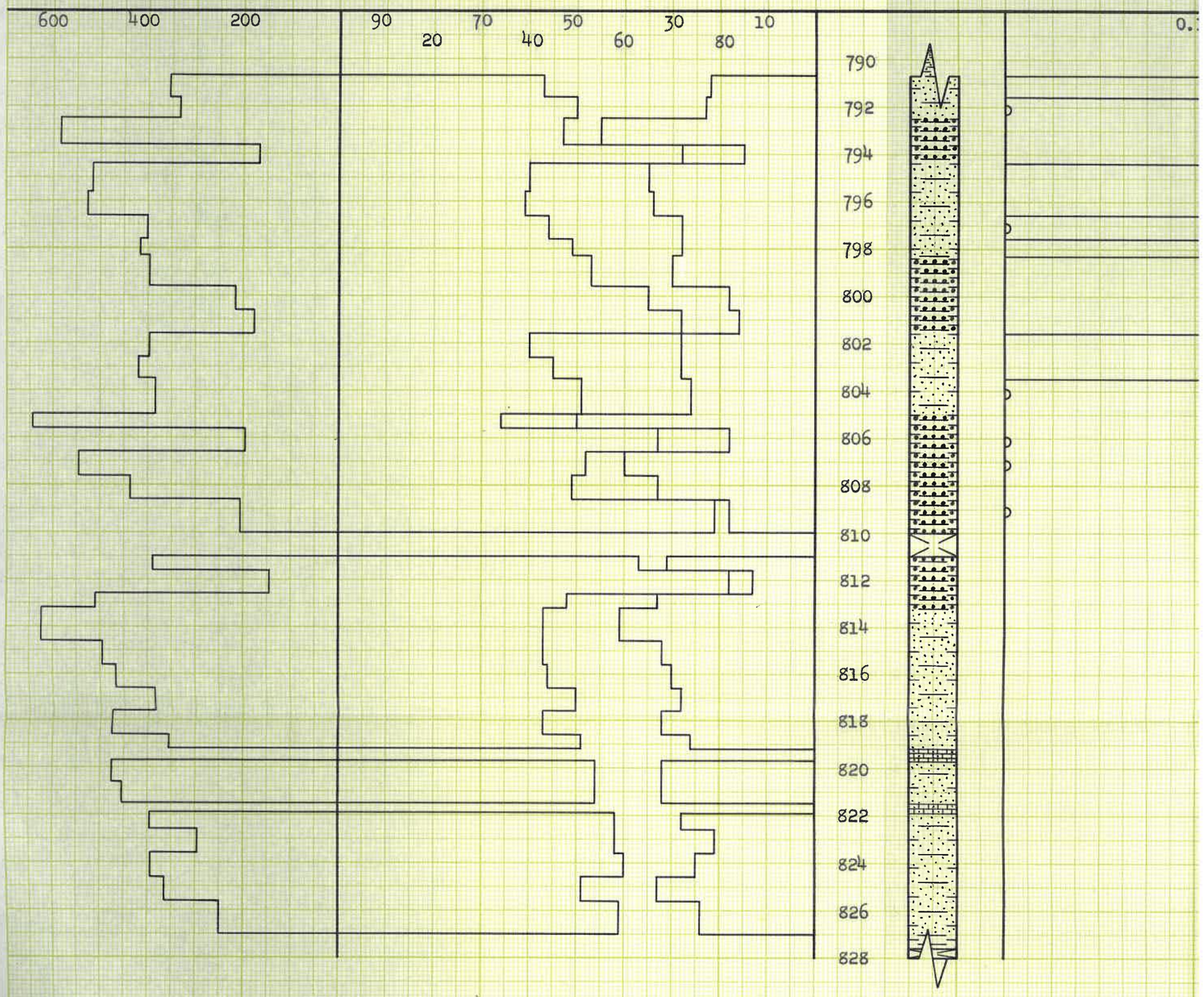
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Home-Stake Production Co. Lease Fooshee Well No. W-3

Depth Interval, Feet	Feet of Core Analyzed	Effective Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
790.7 - 803.5	5.7	0.383	

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
790.7 - 805.0	14.3	17.9	27.3	51.8	384	5,494
805.0 - 827.0	20.1	17.3	29.0	55.1	395	7,950
790.7 - 827.0	34.4	17.5	28.3	53.7	391	13,444



KEY:

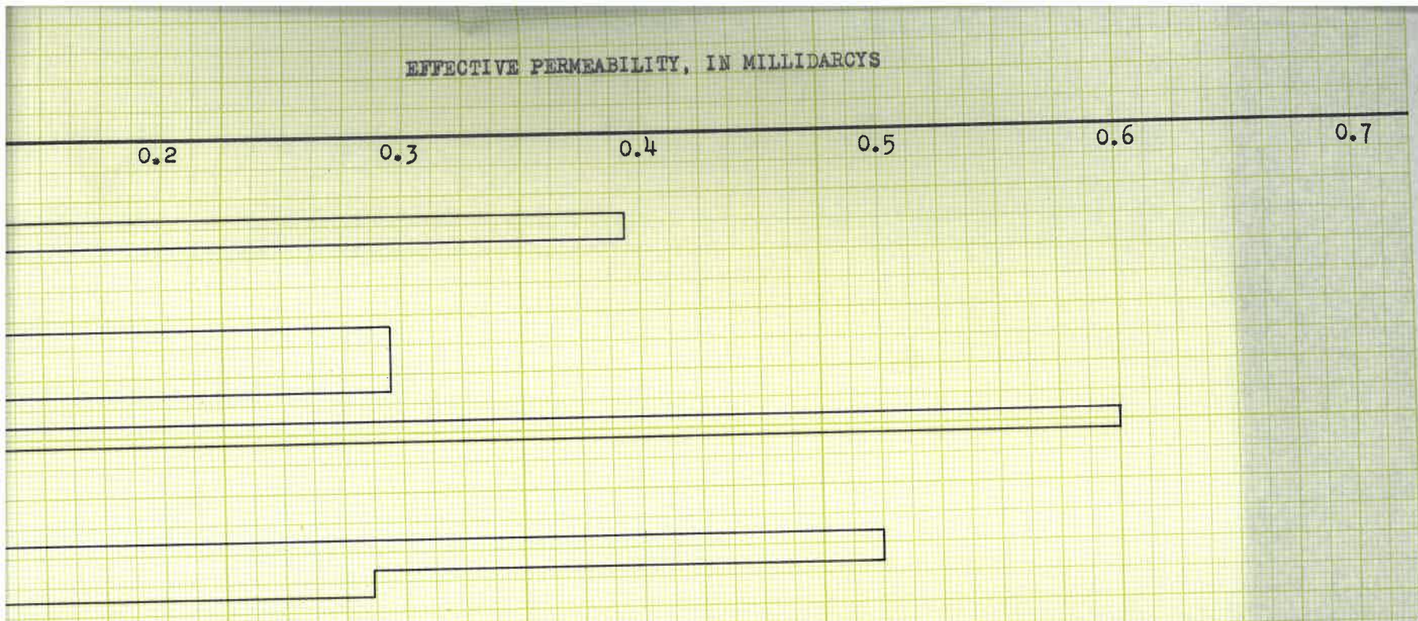
- SHALEY SANDSTONE
- LAMINATED SANDSTONE AND SHALE
- SANDY SHALE
- SHALE
- SANDY LIMESTONE

HOME-STAKE PROD

FOOSHEE LEASE

ANDERSON COU

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY, PERCENT	AVG. OIL SATURATION PERCENT
790.7 – 805.0	14.3	17.9	27.3
805.0 – 827.0	20.1	17.3	29.0
790.7 – 827.0	34.4	17.5	28.3



LOSS

IMPERMEABLE TO WATER

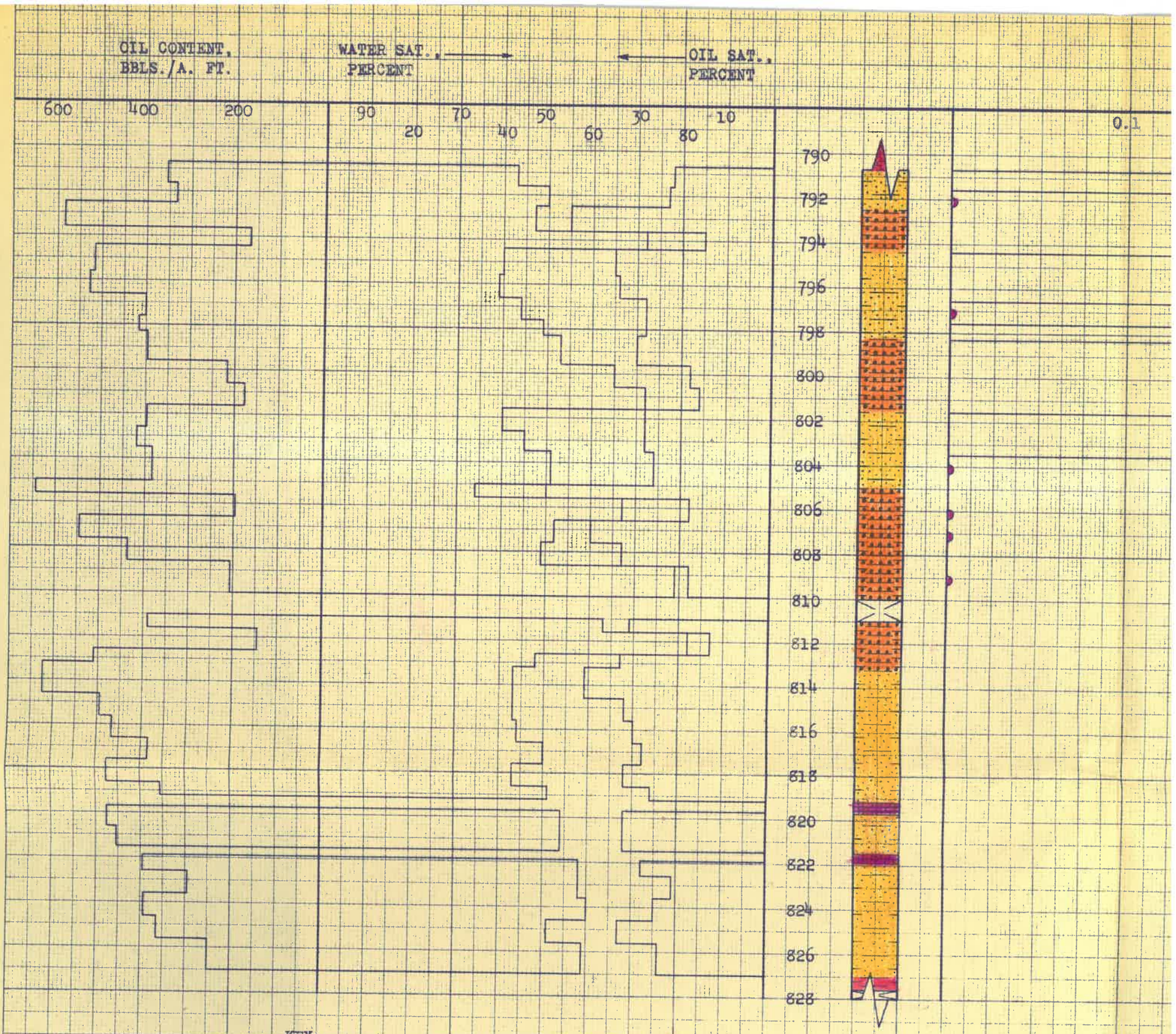
UCTION COMPANY

WELL NO. W-3

Y, KANSAS

AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBLS./A.FT.	TOTAL OIL CONTENT BBLS./ACRE	AVG. EFFECTIVE PERMEABILITY, MILLIDARCYS
51.8	384	5,494	0.383
55.1	395	7,950	Imp.
53.7	391	13,444	0.383

OILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
FEBRUARY, 1959



HOME-STAKE PRODU

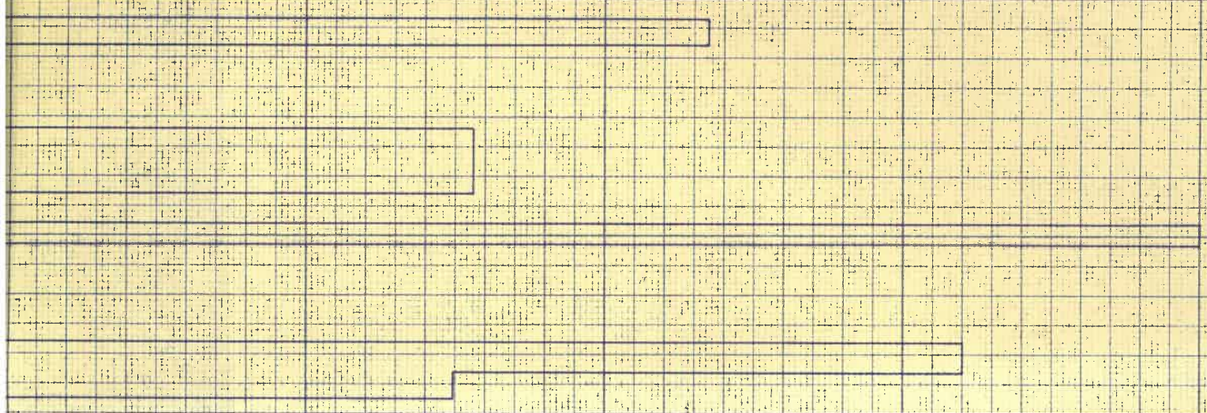
FOOSHEE LEASE

ANDERSON COUNTY,

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY, PERCENT	AVG. OIL SATURATION PERCENT	AVG. SAT PE
790.7 - 805.0	14.3	17.9	27.3	
805.0 - 827.0	20.1	17.3	29.0	
790.7 - 827.0	34.4	17.5	28.3	

EFFECTIVE PERMEABILITY, IN MILLIDARCYS

.1 0.2 0.3 0.4 0.5 0.6 0.7



LOSS

IMPERMEABLE TO WATER

DUCTION COMPANY

WELL NO. W-3

UNTY, KANSAS

AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBLS./A.FT.	TOTAL OIL CONTENT BBLS./ACRE	AVG. EFFECTIVE PERMEABILITY, MILLIDARCYS
51.8	384	5,494	0.383
56.1	395	7,950	Imp.
53.7	391	13,444	0.383

OILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
FEBRUARY, 1959