

OILFIELD RESEARCH LABORATORIES

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- REGISTERED ENGINEERS -
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March 27, 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 Boots Lease, Garnett Extension, Well No. E-6, Anderson County, Kansas, and submitted to our laboratory on March 23, 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
Carl L. McElrea

CLM:cs

1 c. to Mr. C. W. Stumhoffer

Boots E-6 4-21-19E



Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company	Home-Stake Production Co.	Lease	Boots	Well No.	E-6
Location	930' E. of W. Line & 10' N. of S. Line, S $\frac{1}{2}$, NW $\frac{1}{4}$				
Section	4	Twp.	21S	Rge.	19E
County	Anderson			State	Kansas
Name of Sand	-				Squirrel
Top of Core	-				760.0
Bottom of Core	-				785.0
Good Top of Sand	-				767.8
Bottom of Sand	-				774.5
Total Feet of Permeable Sand	-				6.3
Total Feet of Floodable Sand	-				-
Distribution of Permeable Sand:					
Permeability Range Millidarcys	Feet	Cum. Ft.			
0 - 4	1.8	1.8			
4 - 8	2.1	3.9			
8 & above	2.4	6.3			
Average Permeability Millidarcys	-				9.2
Average Percent Porosity	-				16.4
Average Percent Oil Saturation	-				37.7
Average Percent Water Saturation	-				47.5
Average Oil Content, Bbls./A. Ft.	-				509.
Total Oil Content, Bbls./Acre	-				4,227.
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	-				1021.

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LOG

Company Home-Stake Production Co. Lease Boots Well No. E-6

Depth Interval, Description
Feet

760.0 - 763.3 - Dark gray shale.

763.3 - 765.8 - Gray shaley sandstone.

765.8 - 767.8 - Brownish gray shaley sandstone.

767.8 - 772.2 - Brown laminated shaley sandstone.

772.2 - 772.6 - Laminated sandstone and shale.

772.6 - 774.5 - Dark laminated shaley carbonaceous sandstone.

774.5 - 785.0 - Gray sandy shale.

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RESULTS OF PERMEABILITY TESTS
TABLE I

Company Home-Stake Production Co. Lease Boots Well No. E-6

Sample No.	Depth Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.
			Ft.	Cum. Ft.	
1	765.9	Imp.	0.4	0.4	0.00
2	766.4	Imp.	0.4	0.8	0.00
3	766.9	Imp.	0.5	1.3	0.00
4	767.4	Imp.	0.7	2.0	0.00
5	767.9	1.9	0.4	2.4	0.76
6	768.4	17.	0.4	2.8	6.80
7	768.9	22.	0.5	3.3	11.00
8	769.4	28.	0.5	3.8	14.00
9	769.9	7.2	0.5	4.3	3.60
10	770.4	4.9	0.5	4.8	2.45
11	770.9	13.	0.5	5.3	6.50
12	771.4	3.6	0.5	5.8	1.80
13	771.9	4.9	0.6	6.4	2.94
14	772.9	8.7	0.5	6.9	4.35
15	773.4	2.3	0.5	7.4	1.15
16	773.9	4.0	0.5	7.9	2.00
17	774.4	2.2	0.4	8.3	0.88

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RESULTS OF SATURATION TESTS

TABLE X

Company Home-Stake Production Co. Lease Boots Well No E-6

Sat. No.	Depth, Feet	Effective Porosity Percent	Percent Saturation		Oil Content Bbls./A. Ft.	Feet of Core		Total Oil Content Bbls./Acre
			Oil	Water		Total	Core Ft.	
1	766.1	9.9	14	76	107	0.8	0.8	86
2	767.1	11.3	18	76	158	1.2	2.0	187
3	768.1	16.6	39	42	502	0.8	2.8	402
4	769.1	17.8	46	29	636	1.0	3.8	636
5	770.1	18.9	39	40	572	1.0	4.8	572
6	771.1	19.7	51	36	779	1.0	5.8	779
7	772.1	18.3	51	39	724	0.6	6.4	434
8	773.1	18.8	40	40	584	1.0	7.4	584
9	774.1	16.6	47	45	605	0.9	8.3	545
Total								4,227

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

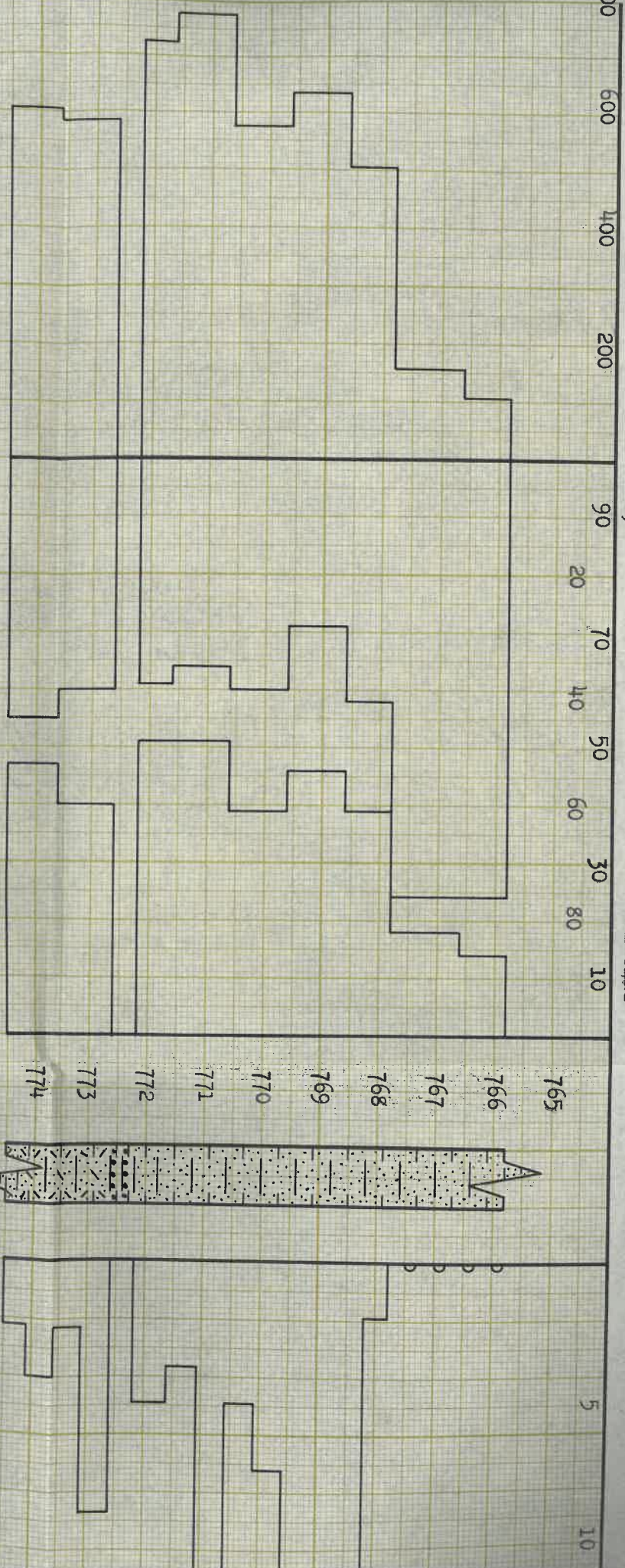
Company	Lease	Boots	Well No.	E-6
Home-Stake Production Co.				
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
	767.8 - 774.5	6.3	9.2	58.23
	Depth Interval, Feet	Feet of Core Analyzed	Average Percent Oil Saturation	Average Oil Content Bbl./A. Ft.
	765.8 - 774.5	8.3	37.7	509
			Average Percent Water Saturation	Total Oil Content Bbls./Acre
			47.5	4,227

OIL CONTENT,
BBL.S./A. FT.

WATER SAT.,
PERCENT

OIL SAT.,
PERCENT

800 600 400 200 90 20 70 40 50 60 30 80 10 5 10



KEY:

SHALEY SANDSTONE
SHALEY CARBONACEOUS SANDSTONE

LAMINATED SANDSTONE AND SHALE
SANDY SHALE

HOME-STAKE PRODUCTION COMPANY

ANDERSON COUNTY, KANSAS

WELL NO.

DEPTH INTERVAL,
FEET

FEET OF CORE
ANALYZED

AVERAGE
POROSITY,
PERCENT

AVG. OIL
SATURATION
PERCENT

AVG. WATER
SATURATION
PERCENT

AVG. OIL
CONTENT
BBL.S./A. FT.

TOTAL OIL
CONTENT
BBL.S./ACRE

765.8 - 774.5

8.3

16.4

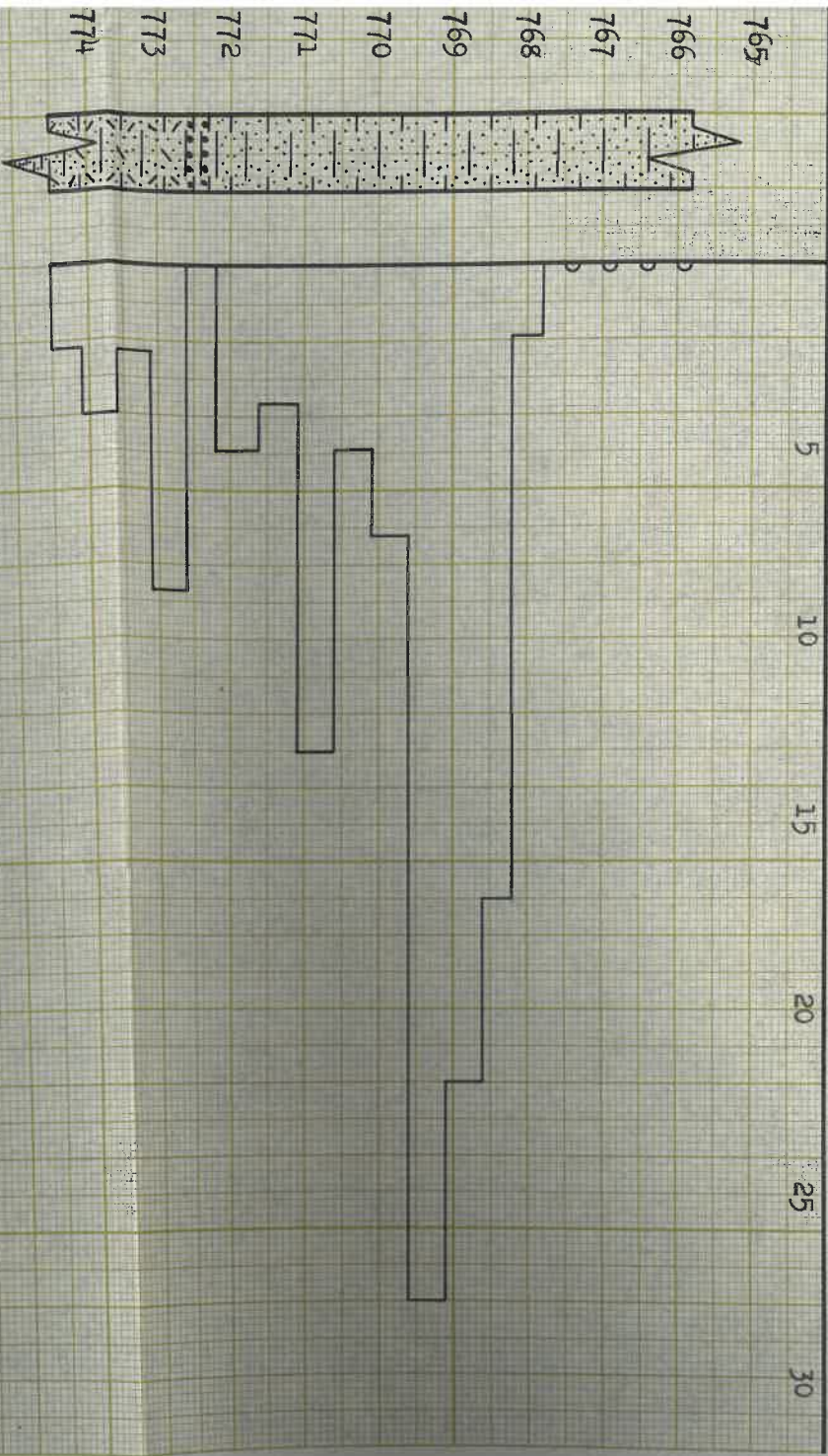
37.7

47.5

509

4,227

AIR PERMEABILITY, IN MILLIDARCYs



STONE AND SHALE

○ IMPERMEABLE TO AIR

DUCTION COMPANY

SON COUNTY, KANSAS

WELL NO. 9B-6

IN	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBLs./A. FT	TOTAL OIL CONTENT BBLs./ACRE	AVG. AIR PERMEABILITY, MILLIDARCYs
	47.5	509	4,227	9.2

OILFIELD RESEARCH LABORATORIES
 CHANUTE, KANSAS
 MARCH, 1959