

OILFIELD RESEARCH LABORATORIES

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

700 NORTH MISSION - OKMULGEE, OKLAHOMA - PHONE SK6-4444

Chanute, Kansas

May 18, 1965

33-30-16E

Fred E. Wood & Associates
Suite 204, 200 Sixteenth Street
Denver, Colorado

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Wolfe Lease, Well No. 40-AEJ, Wilson County, Kansas, and submitted to our laboratory on May 13, 1965.

This core was sampled and the samples sealed in plastic bags by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

John L. Pate
John L. Pate

JLP:rf

4 c. - Denver, Colorado
1 c. - A.W. Bailey

WCHC 40-AEJ

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Fred E. Wood & Associates Lease Wolfe Well No. 40-AEJ

Location NE $\frac{1}{4}$ (NE $\frac{1}{4}$)

Section 33 Twp. 30S Rge. 16E County Wilson State Kansas

Name of Sand - - - - - Bartlesville

Top of Core - - - - - 779.0

Bottom of Core - - - - - 791.6

Top of Sand - - - - - 779.0

Bottom of Sand - - - - - 791.2

Total Feet of Permeable Sand - - - - - 10.6

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 1	1.6	1.6
1 & above	9.0	10.6

Average Permeability Millidarcys - - - - - 4.1

Average Percent Porosity - - - - - 15.6

Average Percent Oil Saturation - - - - - 40.0

Average Percent Water Saturation - - - - - 32.4

Average Oil Content, Bbls./A. Ft. - - - - - 485.

Total Oil Content, Bbls./Acre - - - - - 5,911.

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 - - - - - 40.

Elevation, Feet - - - - -

-LOG-

Company Fred E. Wood & Associates Lease Wolfe Well No. 40-AEJ

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

779.0 - 780.5	- Brown, fine grained, slightly shaly sandstone.
---------------	--

780.5 - 781.5	- Light brown, fine grained sandstone.
---------------	--

781.5 - 782.6	- Brown, fine grained, slightly shaly sandstone.
---------------	--

782.6 - 789.6	- Dark brown, fine grained sandstone.
---------------	---------------------------------------

789.6 - 791.2	- Brown, fine grained, shaly sandstone.
---------------	---

791.2 - 791.4	- Gray shale.
---------------	---------------

791.4 - 791.6	- Coal.
---------------	---------

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Fred E. Wood & Associates Lease Wolfe Well No. 40-AEJ

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			Ft.	Cum. Ft.		
1	779.1	15.0	23	35	267	0.22	0.6	0.6	160	0.13
2	780.1	12.5	43	30	417	7.6	0.9	1.5	376	6.84
3	781.1	14.8	36	34	413	0.43	1.0	2.5	413	0.43
4	782.1	15.5	25	37	300	2.3	1.1	3.6	330	2.53
5	783.1	17.4	31	36	418	7.8	1.0	4.6	418	7.80
6	784.1	17.6	41	29	559	1.3	1.0	5.6	559	1.30
7	785.1	16.0	40	38	496	2.2	1.0	6.6	496	2.20
8	786.1	16.4	34	38	432	8.2	1.0	7.6	432	8.20
9	787.1	16.8	45	27	585	7.2	1.0	8.6	585	7.20
10	788.1	15.5	58	19	697	4.6	1.0	9.6	697	4.60
11	789.1	16.1	56	31	698	2.6	1.0	10.6	698	2.60
12	790.1	14.5	61	36	685	Imp.	1.0	11.6	685	0.00
13	791.1	13.4	10	31	104	Imp.	0.6	12.2	62	0.00
							Total	-----	5,911	

OIL CONTENT
BBLS./A. FT.

WATER SAT.
PERCENT

OIL SAT.
PERCENT



SANDSTONE
SHALY SANDSTONE

SH
CO

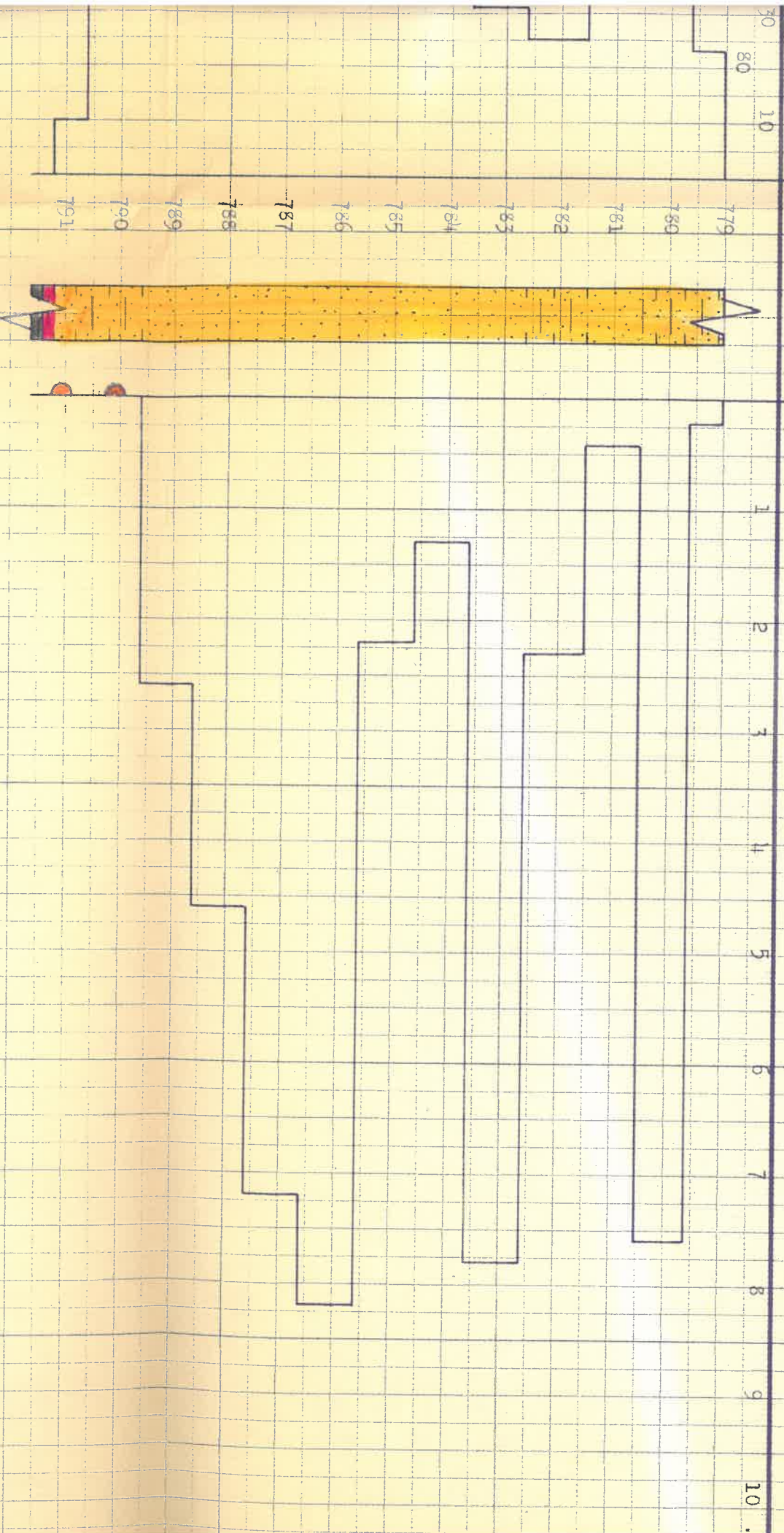
FRED E. WOOD &

WOLFE LEASE

WILSON COUNTY, KANSAS

OIL SAT.
PERCENT

AIR PERMEABILITY, IN MILLIDARCY



SHALE
COAL

PERMEABLE TO AIR

E. WOOD & ASSOCIATES

WILSON COUNTY, KANSAS

WELL NO. W-2-AB1

AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBL/S. FT.	TOTAL OIL CONTENT BBL/ACRE	AVG. AIR PERMEABILITY, MILLIDARCY	CALCULATED OIL RECOVERY, BBL/ACRE
-----------------------------	-------------------------------	-----------------------------	----------------------------	-----------------------------------	-----------------------------------

40.0

32.4

4.5

5,911

4.1

OILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
MAY, 1965