

OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

July 3, 1981

Millbit Oil Company
c/o John Rubow
108 North Highland
Chanute, Kansas 66720

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Martin-Bittenbender Lease, Well No. 1, located in Woodson County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and was submitted to our laboratory on July 1, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

5 c to Chanute, Kansas

- REGISTERED ENGINEERS -

CORE ANALYSIS - WATER ANALYSIS - REPRESSURING ENGINEERING - SURVEYING & MAPPING - PROPERTY EVALUATION & OPERATION

Oilfield Research Laboratories
GENERAL INFORMATION & SUMMARY

Martin-Bittenbender

Company Millbit Oil Company Lease Well No. 1

Location S $\frac{1}{2}$

Section 9 Twp. 26S Rge. 17E County Woodson State Kansas

Elevation, Feet

Name of Sand..... Bartlesville

Top of Core 987.0

Bottom of Core 1002.5

Top of Sand 987.0

Bottom of Sand 1002.5

Total Feet of Permeable Sand 11.2

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 6

6.8

6.8

6 - 20

2.2

9.0

35 - 40

2.2

11.2

Average Permeability Millidarcys 11.9

Average Percent Porosity 16.9

Average Percent Oil Saturation 33.4

Average Percent Water Saturation..... 52.8

Average Oil Content, Bbls./A. Ft. 447.

Total Oil Content, Bbls./Acre..... 6,934.

OILFIELD RESEARCH LABORATORIES

LOGName Millbit Oil Company Lease Martin-Bittenbender Well No. 1

<u>Depth Interval, Feet</u>	<u>Description</u>
987.0 - 989.2	Black slightly calcareous slightly carbonaceous sandstone.
989.2 - 997.0	Grayish brown slightly calcareous conglomeratic shaly sandstone.
997.0 - 999.2	Grayish black slightly calcareous slightly carbonaceous conglomeratic sandstone.
999.2 - 1002.5	Grayish black slightly calcareous slightly carbonaceous conglomeratic shaly sandstone.

Oilfield Research Laboratories
RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Millbit Oil Company Lease Martin-Bittenbender Well No. 1

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.		
1	987.4	18.6	42	32	74	606	39.	1.0	1.0	606	39.00
2	988.4	19.0	35	42	77	516	39.	1.2	2.2	619	46.80
3	989.5	18.6	41	37	78	592	2.2	0.8	3.0	474	1.76
4	990.4	17.5	23	70	93	312	0.42	1.0	4.0	312	0.42
5	991.6	17.8	25	71	96	345	5.0	1.0	5.0	345	5.00
6	992.5	9.2	18	73	91	128	Imp.	1.0	6.0	128	0.00
7	993.6	16.2	41	44	85	515	2.4	1.0	7.0	515	2.40
8	994.4	8.5	37	56	93	244	Imp.	1.0	8.0	244	0.00
9	995.7	9.3	21	73	94	152	Imp.	1.0	9.0	152	0.00
10	996.6	22.2	38	53	91	655	3.6	1.0	10.0	655	3.60
11	997.4	21.8	45	35	80	761	19.	1.0	11.0	761	19.00
12	998.4	21.4	34	45	79	564	9.4	1.2	12.2	677	11.28
13	999.4	20.3	18	75	93	284	4.1	1.0	13.2	284	4.10
14	1000.4	14.5	46	40	86	518	Imp.	1.3	14.5	673	0.00
15	1001.7	18.0	35	51	86	489	0.32	1.0	15.5	489	0.32

Oilfield Research Laboratories

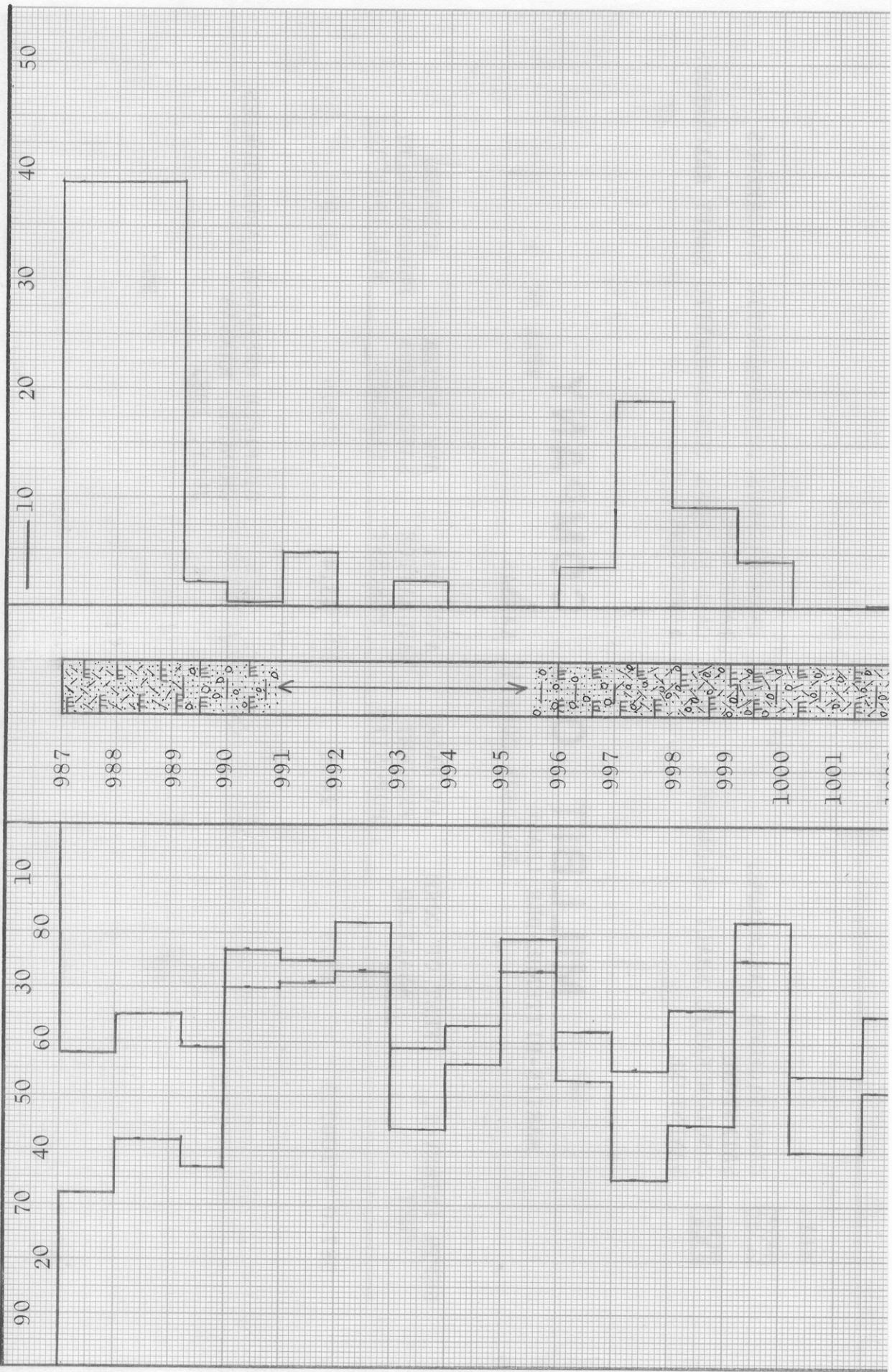
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Well No.	
Millbit Oil Company		Martin-Bittenbender		1	
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
987.0 - 1002.5	11.2	11.9	133.68		
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
987.0 - 1002.5	15.5	16.9	33.4	52.8	6,934
				447	

WATER SAT., PERCENT —————><————— OIL SAT., PERCENT

————— PERMEABILITY, IN MILLIDARCYS



KEY:



CARBONACEOUS CALCAREOUS
SANDSTONE

CARBONACEOUS CONGLOMERATIC CALCAREOUS
SANDSTONE



CONGLOMERATIC SHALY CALCAREOUS
SANDSTONE

CARBONACEOUS CONGLOMERATIC SHALY CALCAREOUS
SANDSTONE

MILLBIT OIL COMPANY

MARTIN-BITTENBENDER LEASE

WELL NO. 1

WOODSON COUNTY, KANSAS

DEPTH INTERVAL,
FEET

FEET OF CORE
ANALYZED

AVERAGE
PERCENT

AVG. OIL
SATURATION

AVG. WATER
SATURATION

AVERAGE
PERMEABILITY,
MILLIDARCS

POROSITY

PERCENT

PERCENT

MILLIDARCS

987.0 - 1002.5

15.5

16.9

33.4

52.8

11.9

OILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
JULY, 1981

PDC