OILFIELD RESEARCH LABORATORIES

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

June 12, 1981

Ponderay International, Inc.
Drawer "D"
Chanute, Kansas 66720

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Wiltse Lease, Well No. 2-C, located in Wilson County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and was submitted to our laboratory on June 6, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

5 c to Chanute, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Ponderay International, Inc. Lease Wiltse Well No. 2-C

Location

Section 22 Twp. 28S Rge. 16E County Wilson State Kansas

Elevation, Feet	
Name of Sand	Lower Bartlesville
Top of Core	976.0
Bottom of Core	1008.3
Top of Sand	976.0
Bottom of Sand	1008.3
Total Feet of Permeable Sand	25.0

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 1	6.2	6.2
1 - 4	6.3	12.5
4 - 8	0.7	13.2
8 - 16	2.2	15.4
16 - 32	6.5	21.9
32 - 44	3.1	25.0

Average Permeability Millidarcys	13.4
Average Percent Porosity	14.2
Average Percent Oil Saturation	28.0
Average Percent Water Saturation	50.4
Average Oil Content, Bbls./A. Ft.	338.
Total Oil Content, Bbls./Acre	10,070.

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LOG

Name Ponderay International, Inc. Lease Wiltse Well No. 2-C

Depth Interval, Feet	Description
976.0 - 988.3	Gray and light brown laminated shale and sandstone.
988.3 - 989.6	Dark brown sandstone.
989.6 - 991.5	Gray and light brown laminated shale and sandstone.
991.5 - 994.0	Brown slightly calcareous sandstone.
994.0 - 994.3	Gray shale.
994.3 - 994.8	Brown slightly calcareous sandstone.
994.8 - 995.5	Gray shale.
995.5 - 996.2	Grayish light brown shaly sandstone.
996.2 - 1002.0	Brown sandstone containing a vertical fracture.
1002.0 - 1003.0	Drilled up. (No core).
1003.0 - 1003.8	Grayish light brown shaly sandstone.
1003.8 - 1005.5	Grayish light brown sandstone containing a vertical fracture.
1005.5 - 1006.6	Gray and light brown laminated shale and sandstone.
1006.6 - 1007.1	Light brown sandstone.
1007.1 - 1008.3	Gray and light brown shale and sandstone containing a vertical fracture.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Ponderay International, Inc. Lease Wiltse Well No. 2-C

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	976.6	8.2	8	73	81	51	Imp.	1.0	1.0	51	0.00
2	977.5	7.4	12	66	78	69	2.6	1.0	2.0	69	2.60
3	978.5	11.7	9	78	87	82	Imp.	1.0	3.0	82	0.00
4	979.5	10.4	11	72	83	89	2.2	1.0	4.0	89	2.20
5	980.5	10.1	8	80	88	63	Imp.	1.0	5.0	63	0.00
6	981.4	8.2	12	60	72	76	0.81	1.0	6.0	76	0.81
7	982.6	13.6	11	62	73	116	0.25	1.0	7.0	116	0.25
8	983.4	14.8	47	33	80	540	2.7	1.0	8.0	540	2.70
9	984.6	7.2	35	47	82	196	Imp.	1.0	9.0	196	0.00
10	985.6	16.4	10	57	67	127	1.5	1.0	10.0	127	1.50
11	986.5	11.6	27	52	79	243	0.64	1.0	11.0	243	0.64
12	987.7	12.6	15	74	89	147	0.70	1.3	12.3	191	0.91
13	988.5	17.4	43	44	87	580	12.	0.7	13.0	406	8.40
14	989.5	18.3	40	46	86	568	42.	0.6	13.6	341	25.20
15	990.5	8.8	15	44	59	102	0.22	1.9	15.5	194	0.42
16	991.6	15.9	21	67	88	259	11.	0.5	16.0	130	5.50
17	992.6	17.7	40	44	88	549	27.	1.0	17.0	549	27.00
18	993.5	18.4	58	22	80	828	22.	1.0	18.0	828	22.00
19	994.5	18.0	44	22	66	614	31.	0.5	18.5	307	15.50
20	995.6	17.0	39	39	78	514	6.6	0.7	19.2	360	4.62
21	996.4	18.8	39	31	70	569	40.	0.8	20.0	455	32.00
22	997.4	18.4	35	36	71	500	14.	1.0	21.0	500	14.00
23	998.4	17.5	44	33	77	597	23.	1.0	22.0	597	23.00
24	999.5	17.2	44	36	80	587	27.	1.0	23.0	587	27.00
25	1000.6	17.9	50	19	69	694	20.	1.0	24.0	694	20.00
26	1001.4	18.1	32	40	72	449	23.	1.0	25.0	449	23.00
27	1003.4	12.5	32	64	96	310	Imp.	0.8	25.8	248	0.00
28	1004.4	19.6	33	52	85	502	43.	0.7	26.5	351	30.10
29	1005.4	17.9	26	54	80	361	37.	1.0	27.5	361	37.00
30	1006.5	14.9	34	48	82	393	3.3	1.1	28.6	432	3.63
31	1007.8	15.7	30	52	82	365	3.6	1.2	29.8	438	4.32

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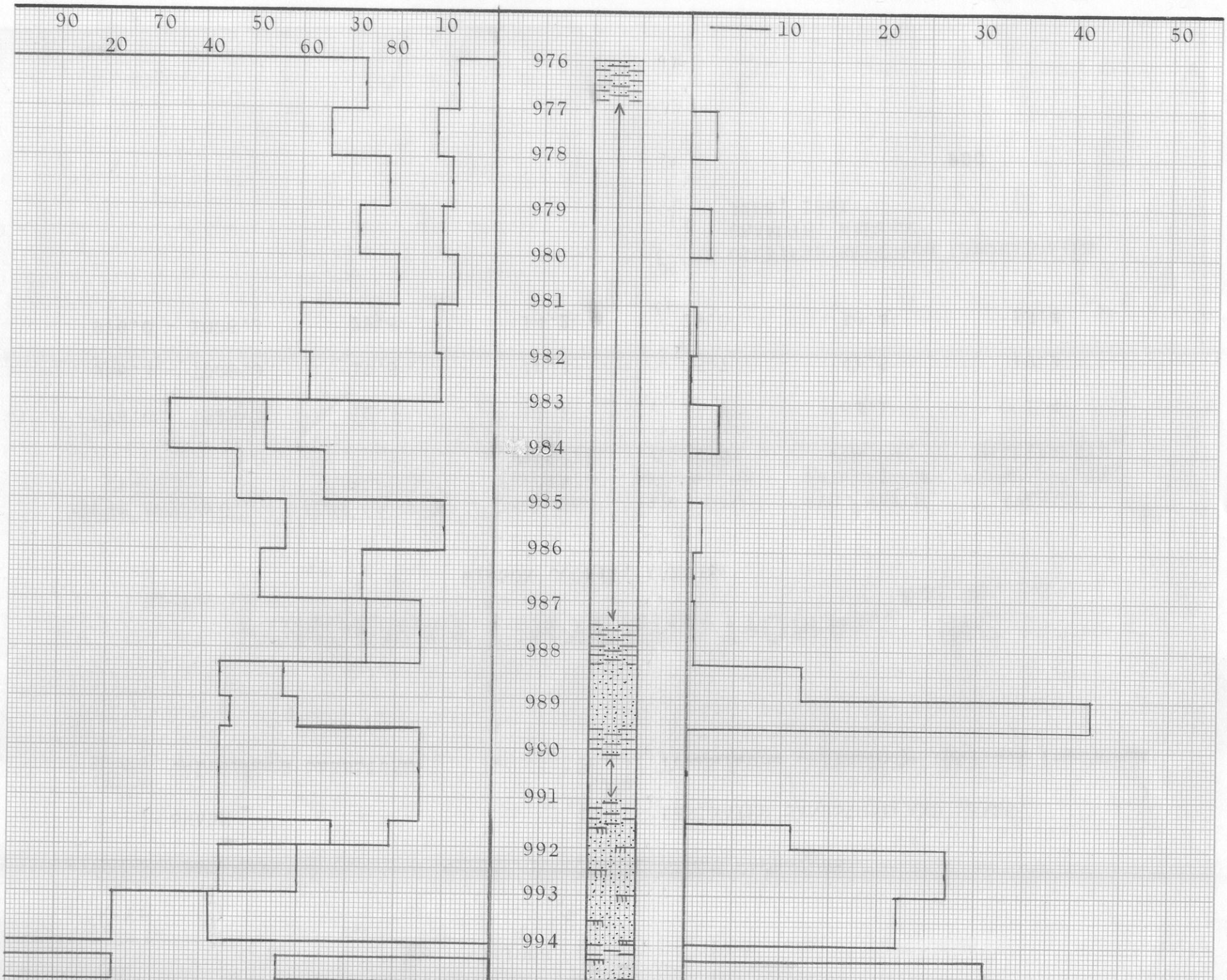
SUMMARY OF PERMEABILITY & SATURATION TESTS

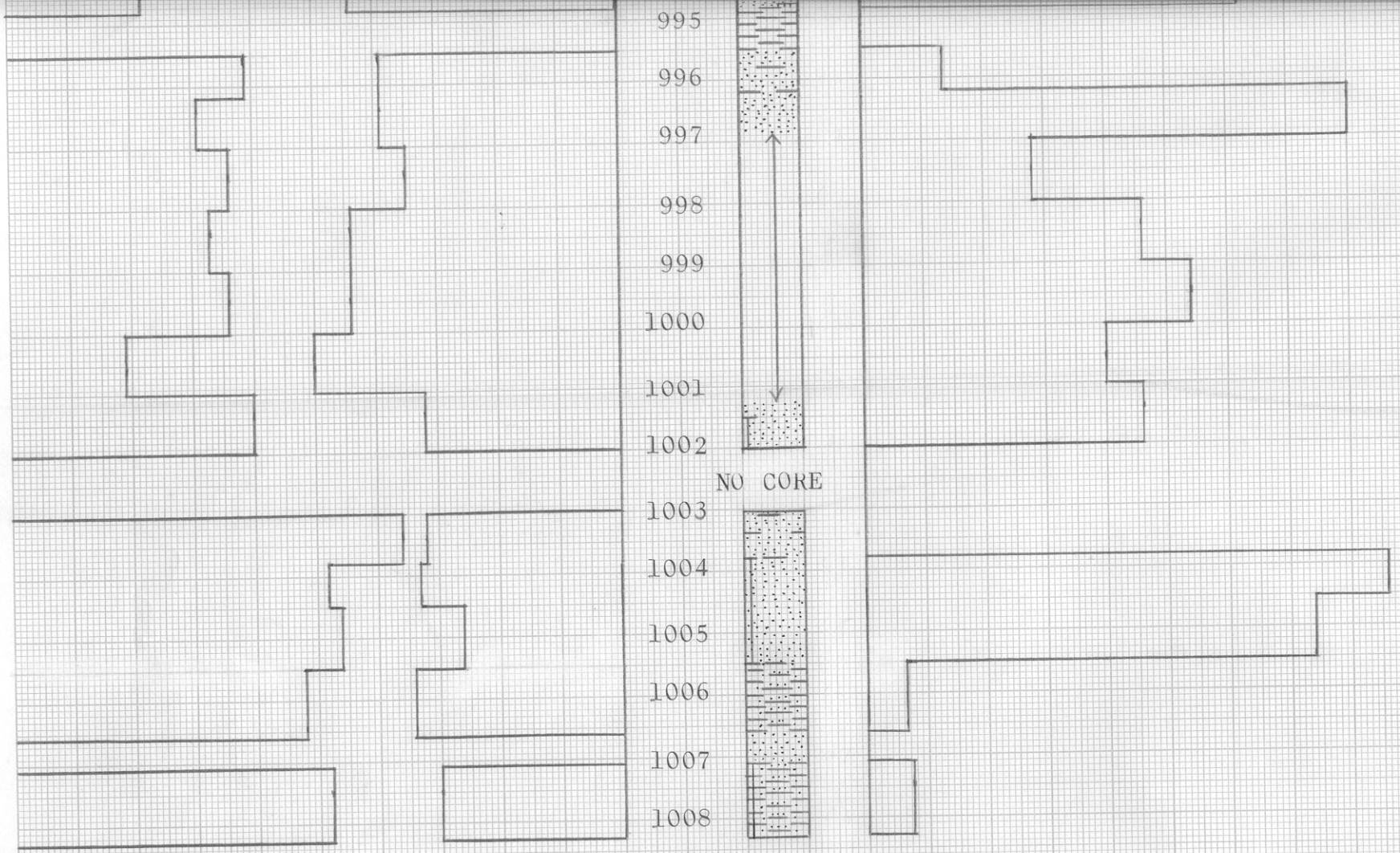
TABLE III

Company Ponderay International, Inc. Lease Wilste Well No. 2-C

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
976.0 - 988.3	8.3	1.4	11.61
988.3 - 1008.3	16.7	19.3	322.69
976.0 - 1008.3	25.0	13.4	334.30

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
976.0 - 988.3	12.3	11.1	17.0	63.1	150	1,843
988.3 - 1008.3	17.5	16.3	35.7	41.5	470	8,227
976.0 - 1008.3	29.8	14.2	28.0	50.4	338	10,070


WATER SAT., PERCENT
OIL SAT., PERCENT
PERMEABILITY, IN MILLIDARCYS
90
70
50
30
10
20
40
60
80
10
20
30
40
50
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994



KEY:

SANDSTONE

SHALE

CALCAREOUS SANDSTONE

SHALY SANDSTONE

LAMINATED SANDSTONE AND SHALE

FORMATIONS CONTAINING VERTICAL FRACTURES

PONDERAY INTERNATIONAL, INC.

WILTSE LEASE

WELL NO. 2-C

WILSON COUNTY, KANSAS

PONDERAY INTERNATIONAL, INC.

WILTSE LEASE

WILSON COUNTY, KANSAS

WELL NO. 2-C

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYS
976.0 - 988.3	12.3	11.1	17.0	63.1	1.4
988.3 - 1008.3	17.5	16.3	35.7	41.5	19.3
976.0 - 1008.3	29.8	14.2	28.0	50.4	13.4

OILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
JUNE, 1981

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