

OILFIELD RESEARCH LABORATORIES

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

June 2, 1980

TECH American Kansas, Inc.
Box 467
Moran, Kansas 66755

Gentlemen:

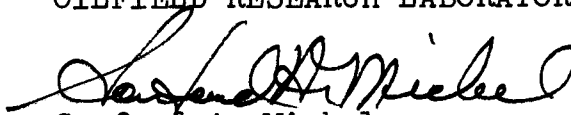
Enclosed herewith are the results of tests run on the rotary core taken from the Keith Lease, Well No. 22, Wilson County, Kansas, and submitted to our laboratory on May 15, 1980.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES



Sanford A. Michel

SAM/tem

5 c to Moran, Kansas

Oilfield Research Laboratories
GENERAL INFORMATION & SUMMARY

Company TECH American Kansas, Inc. Lease Keith Well No. 22
 Location —
 Section 14 Twp. 28S Rge. 15E County Wilson State Kansas

Elevation, Feet

Name of Sand

Bartlesville

Top of Core

988.0

Bottom of Core

1017.2

Top of Sand

991.2

Bottom of Sand

1015.5

Total Feet of Permeable Sand

18.4

Distribution of Permeable Sand:
 Permeability Range
 Millidarcys

Feet

Cum. Ft.

0 - 4

5.9

5.9

4 - 8

4.0

9.9

8 - 16

1.4

11.3

16 - 24

5.3

16.6

24 & Above

1.8

18.4

Average Permeability Millidarcys

10.8

Average Percent Porosity

14.1

Average Percent Oil Saturation

41.4

Average Percent Water Saturation

37.5

Average Oil Content, Bbls./A. Ft.

469.

Total Oil Content, Bbls./Acre

10,503.

OILFIELD RESEARCH LABORATORIES

LOGName TECH American Kansas, Inc. Lease Keith Well No. 22

<u>Depth Interval, Feet</u>	<u>Description</u>
988.0 - 989.6	Gray sandy shale.
989.6 - 989.9	Coal.
989.9 - 991.2	Gray sandy shale.
991.2 - 991.6	Grayish brown shaly sandstone.
991.6 - 992.8	Gray sandy shale.
992.8 - 993.9	Grayish brown shaly sandstone.
993.9 - 994.6	Gray sandy shale.
994.6 - 995.1	Brown shaly sandstone.
995.1 - 996.7	Brown shaly slightly calcareous sandstone.
996.7 - 997.7	Grayish brown shaly sandstone.
997.7 - 998.6	Brown shaly sandstone.
998.6 - 999.0	Gray sandy shale.
999.0 - 1001.3	Brown sandstone.
1001.3 - 1002.2	Brown shaly sandstone.
1002.2 - 1003.3	Brown sandstone.
1003.3 - 1003.8	Brown shaly sandstone.
1003.8 - 1004.6	Brown slightly calcareous sandstone.
1004.6 - 1006.2	Grayish brown shaly sandstone.
1006.2 - 1008.7	Brown sandstone.
1008.7 - 1010.0	Brown shaly sandstone.
1010.0 - 1015.5	Gray slightly carbonaceous shaly sandstone.
1015.5 - 1017.2	Gray sandy shale.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

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	991.5	8.5	25	70	95	165	Imp.	0.4	0.4	66	0.00
2	993.5	8.7	14	80	94	95	Imp.	1.1	1.5	105	0.00
3	994.7	14.5	43	33	76	484	11.	0.5	2.0	242	5.50
4	995.5	15.0	49	28	77	570	3.2	1.0	3.0	570	3.20
5	996.5	13.0	36	36	72	363	7.0	0.6	3.6	218	4.20
6	997.5	11.5	37	42	79	330	3.3	1.0	4.6	330	3.30
7	998.5	18.6	43	25	68	621	1.7	0.9	5.5	559	1.53
8	999.5	9.3	28	56	84	202	22.	1.7	7.2	343	37.40
9	1000.7	16.4	44	25	69	560	18.	1.0	8.2	560	18.00
10	1001.6	19.2	44	30	74	655	9.4	0.9	9.1	590	8.46
11	1002.5	17.4	35	30	65	473	16.	1.1	10.2	520	17.60
12	1003.5	15.9	55	24	79	678	7.5	0.5	10.7	339	3.75
13	1004.5	13.9	59	28	87	636	19.	0.8	11.5	509	15.20
14	1005.5	13.8	52	37	89	557	4.3	1.6	13.1	891	6.88
15	1006.5	17.6	49	32	81	669	25.	1.0	14.1	669	25.00
16	1007.5	17.4	50	25	75	675	30.	0.8	14.9	540	24.00
17	1008.5	16.9	49	22	71	642	17.	0.7	15.6	449	11.90
18	1009.5	14.7	48	33	81	547	6.8	1.3	16.9	711	8.84
19	1010.5	15.6	44	26	70	533	0.76	1.0	17.9	533	0.76
20	1011.5	14.1	41	29	70	449	0.35	1.0	18.9	449	0.35
21	1012.3	14.1	44	31	75	481	3.6	1.0	19.9	481	3.60
22	1013.5	12.8	35	44	79	348	Imp.	1.0	20.9	348	0.00
23	1014.5	10.4	37	57	94	299	Imp.	1.0	21.9	299	0.00
24	1015.2	12.0	39	46	85	363	Imp.	0.5	22.4	182	0.00

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

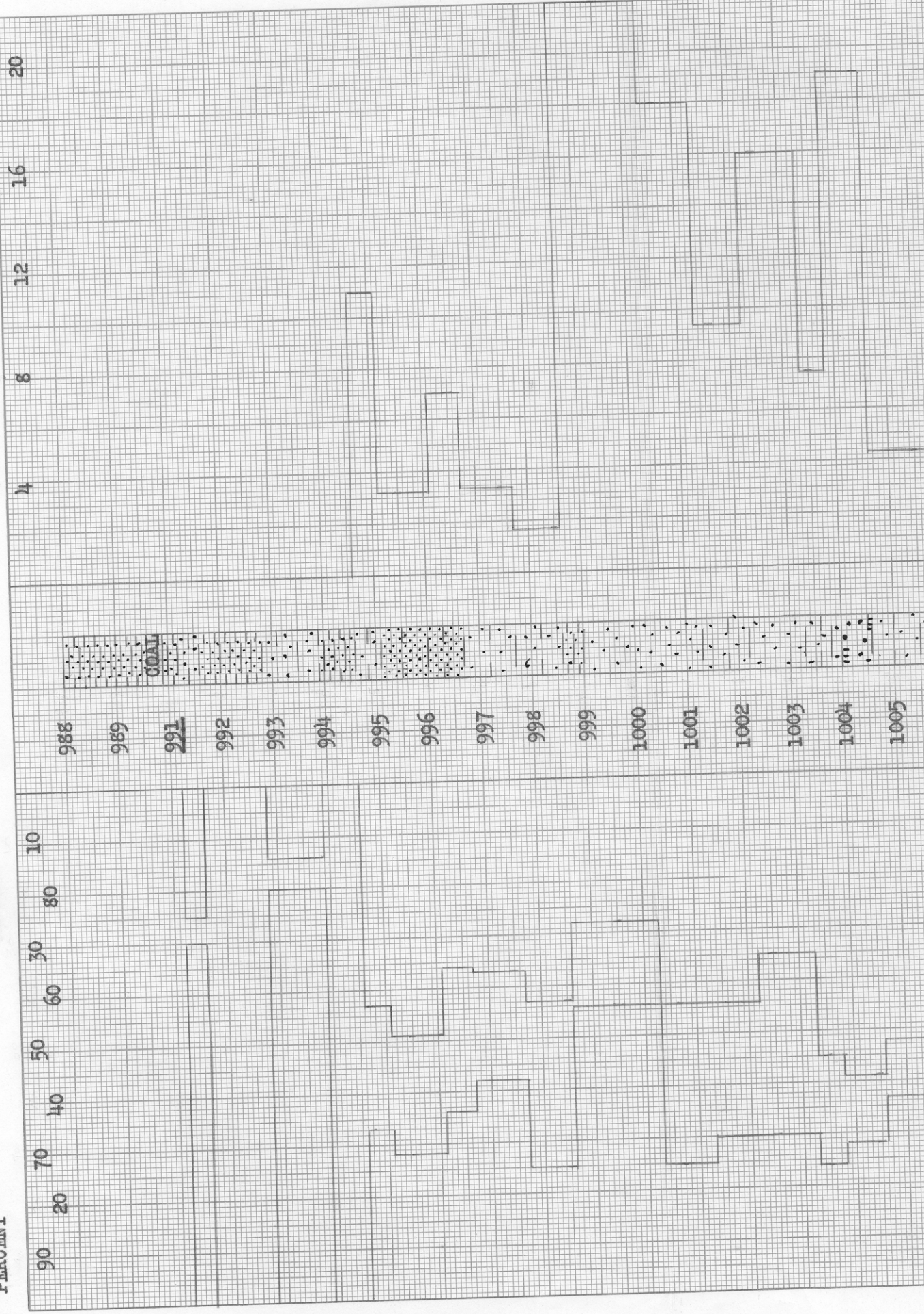
TABLE III

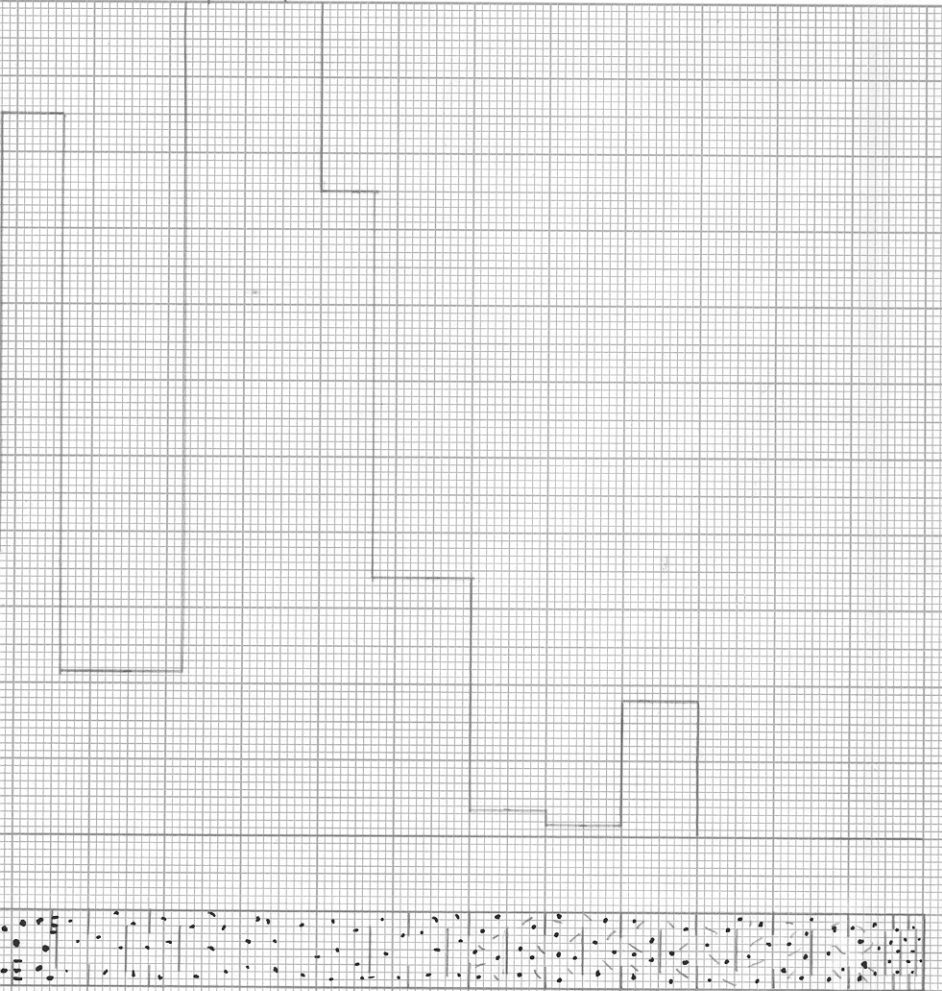
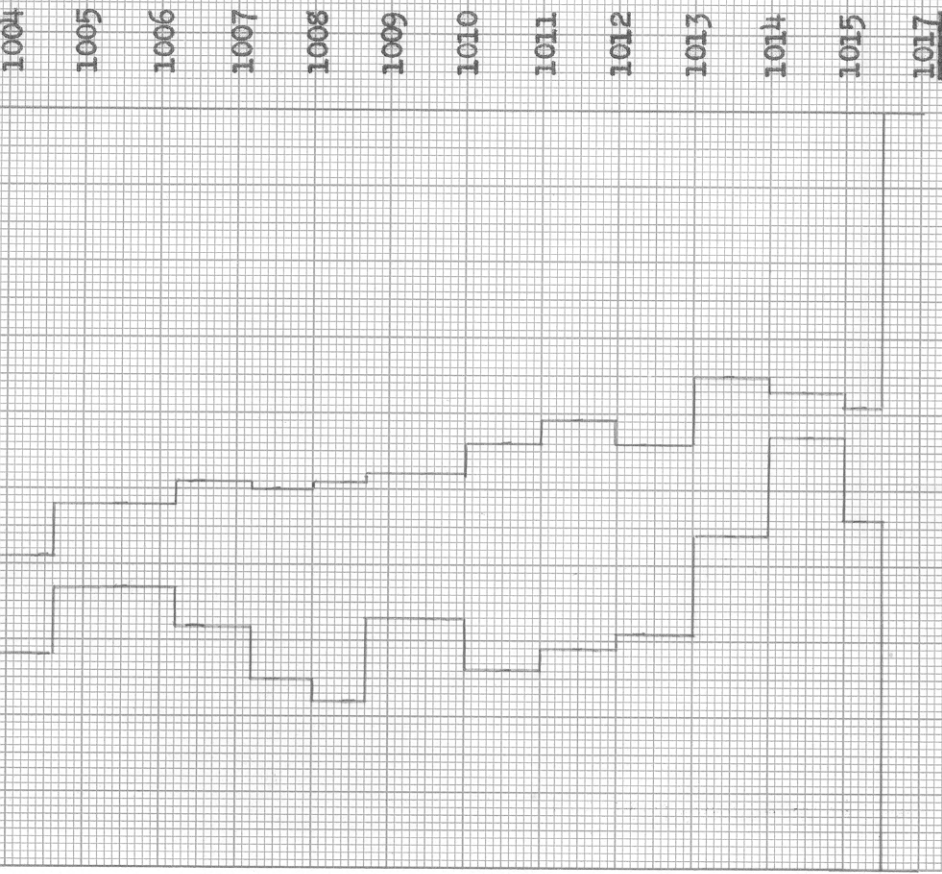
Company	TECH American Kansas, Incorporated	Lease	Keith	Well No.	22
Depth Interval, Feet	Feet of Core Analysed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
991.2 - 1015.5	18.4	10.8	199.47		
Depth Interval, Feet	Feet of Core Analysed	Average Percent Porosity	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbbl./Acre
991.2 - 1015.5	22.4	14.1	41.4	37.5	469
					10,503

PERMEABILITY, IN MILLIDARCYS

OIL SAT.,
PERCENT

WATER SAT.,
PERCENT





KEY:

SANDSTONE

SHALY SANDSTONE

SHALY CARBONACEOUS SANDSTONE

• • •

CALCAREOUS SANDSTONE

SHALY CALCAREOUS SANDSTONE

SANDY SHALE



COAT

TECH AMERICAN KANSAS, INC.

WELL NO. 22

KEITH LEASE

WILSON COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYS
-------------------------	--------------------------	--------------------------------	-----------------------------------	-------------------------------------	---

991.2 - 1015.5	22.4	14.1	41.4	37.5	10.8
----------------	------	------	------	------	------

OILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
MAY, 1980.
HR