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magnitude of floods yukon territory

May 1978

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Inland Waters Directorate
Pacific and Yukon Region
Vancouver, B.C.



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magnitude of floods yukon territory

Planning and Studies Section
Water Survey of Canada
Vancouver, May 1978

ID 299

MAGNITUDE OF FLOODS - YUKON TERRITORY

P R E F A C E

This report is a compilation of annual peak flows at 52 stream gauging stations in the Yukon Territory and in northern British Columbia. As an aid to forecasting the probability of occurrence of high flows, the historical annual peak flows have been plotted on log-extremal probability paper. At the back of the report is a table giving the 50-year and 100-year flood estimates obtained by fitting four probability distributions to those stations with at least 10 years of record. The distributions used are: Gumbel I, log-normal, three parameter log-normal and log-Pearson III. The log-Pearson III distribution has been fitted by both the method of moments and by the method of maximum likelihood. Unless otherwise noted, the other distributions have been fitted by the method of maximum likelihood only. Also at the back of the report, there is: a summary of the period of record of each station, a summary of the highest peak flow and corresponding runoff intensity at each station and a map showing the location of the stream gauging stations.

Source of data: Most of the data were obtained from listings of streamflows and station descriptions that were produced from the magnetic tape files maintained by the Water Survey of Canada. These listings provide the latest, revised version of data originally published in the Surface Water Data papers. Data for 1977, not yet published, has also been included.

Selection of streams: Because of the scarcity of data in the Yukon Territory, every stream gauging station there with at least one year of record has been included. Also included, are three stations in northern British Columbia which measure drainage coming principally from the Yukon Territory.

Compilation of data: One flow is given for each year of record of a stream. This flow is the highest daily mean flow of the year; it is not the instantaneous peak flow. Where incomplete records were used, the records of neighbouring streams indicated that the partial record period coincided with the time of highest flow.

The flows of some streams have been modified either by storage dams or by diversions. Brief notes about known modifications are given below the tables of flows.

Accuracy of the data: The flows are not all of equal quality. First, no distinction has been made between those flows obtained by daily staff gauge readings and those obtained by continuous recorders. Second, the highest peak flows are necessarily estimates that are obtained by extending the upper end of a rating curve. Of course, some rating curves are better defined than others.

The drainage areas have been redetermined since the last publication of this report. There have been several revisions.

Calculations: The mean flow and the standard deviation given below the tables of flows are the arithmetic mean and the unbiased standard deviation respectively. The plotting positions are determined by the Weibull formula: $T = (N+1)/M$. The three parameter log-normal probability distribution estimates are presented on the frequency plots.

A note of caution: Because of the scarcity of data in the Yukon Territory, stations with very short records have been included in this report. However, the user is cautioned not to infer from the uniform format used for data presentation, that the short record stations can be used with the same assurance as the longer record stations in predicting the probability of high flows.

ÉTENDUE DES CRUES - TERRITOIRE DU YUKON

P R É F A C E

Ce compte rendu est une compilation des débits de pointe annuels pour 52 stations de jaugeage du Territoire du Yukon aussi bien que la Colombie-Britannique du nord. Pour prédire la probabilité de rencontrer le débit de pointe maximum de ces rivières, on a déterminé ceci à l'aide des observations annuelles et chronologiques des crues s'imposant sur papier log-extremal de probabilité. Au dos de ce compte rendu une table donne les estimations des crues pendant les périodes de 50 ans et de 100 ans, obtenues par établir quatre distributions de probabilité pour celles stations-là ayant observations portant sur une période de 10 ans au moins. Les distributions utilisées sont: Gumbel I, log-normale, log-normale à trois paramètres et log-Pearson III. La distribution de log-Pearson III a été établie par la méthode des moments et par la méthode de probabilité maximal. À moins de noter autrement, les autres distributions ont été établies seulement par la méthode de probabilité maximal. Aussi au dos de ce compte rendu, il y a un sommaire de la période des relevés pour chaque station, un sommaire du débit de pointe le plus élevé et l'intensité de l'écoulement correspondant à chaque station et une carte qui donne l'emplacement des stations de jaugeage.

Source des données: La plupart des données sont obtenues d'après listes des débits des courants et par les descriptions des stations, produit par la collection des rubans magnétiques, maintenue par la Division des relevés hydrologiques du Canada. Ces listes pourvoient la version la plus récente et revisée des données, publiée originairement et intitulée Données sur les eaux de surface. Les données pour 1977, non encore publiées sont compris aussi.

La sélection des cours d'eau: À cause de la rareté des données dedans le Territoire du Yukon, chaque station de jaugeage là-haut ayant un an des relevés de l'écoulement, au moins, est compris. Aussi compris sont trois stations de jaugeage dans Colombie-Britannique du nord, que mesurent l'écoulement viennent principalement du Territoire du Yukon.

La compilation des données: Un débit seul (le plus haut de la moyenne du débit quotidien) sert pour chaque an de recueillir des données; ce n'est pas le débit maximal instantané. Quand on a utilisé relevés imparfaits, les relevés des courants voisins montraient que la période d'enregistrement, en partie, s'accordait avec le temps du débit maximal. Les barrages et les diversions pourvoient un effet modifiant sur les débits de quelques courants. Il y a quelques notes breves au sujet des modifications spécifiques - sous les tables des débits.

L'exactitude de données: Tous débits ne nous donnent une qualité égale. D'abord, aucune distinction n'est fait entre débits obtenus par interprétations quotidiennes par les jaugeages manuels et ceux obtenus par enregistreur continu. Deuxième les débits de pointe maximale, sont de nécessité, les données estimatives, déterminées par extrapolation. Bien sûr, quelles telles courbes soient plus définissables que les autres.

Les superficies des bassins versant ont été déterminée de nouveau depuis la dernière publication de ce compte rendu. Les révisions avaient été fait à plusieurs reprises.

Les calculs: La moyenne du débit et la déviation normale (au-dessous des tables des débits) sont, respectivement, la moyenne arithmétique et la déviation normale sans biais. L'emplacement des points du graphique s'établit par la formule Weibull: $T = (N+1)/M$. Les évaluations de la distribution de probabilité (log-normal à trois paramètres) se présentent sur le graphique.

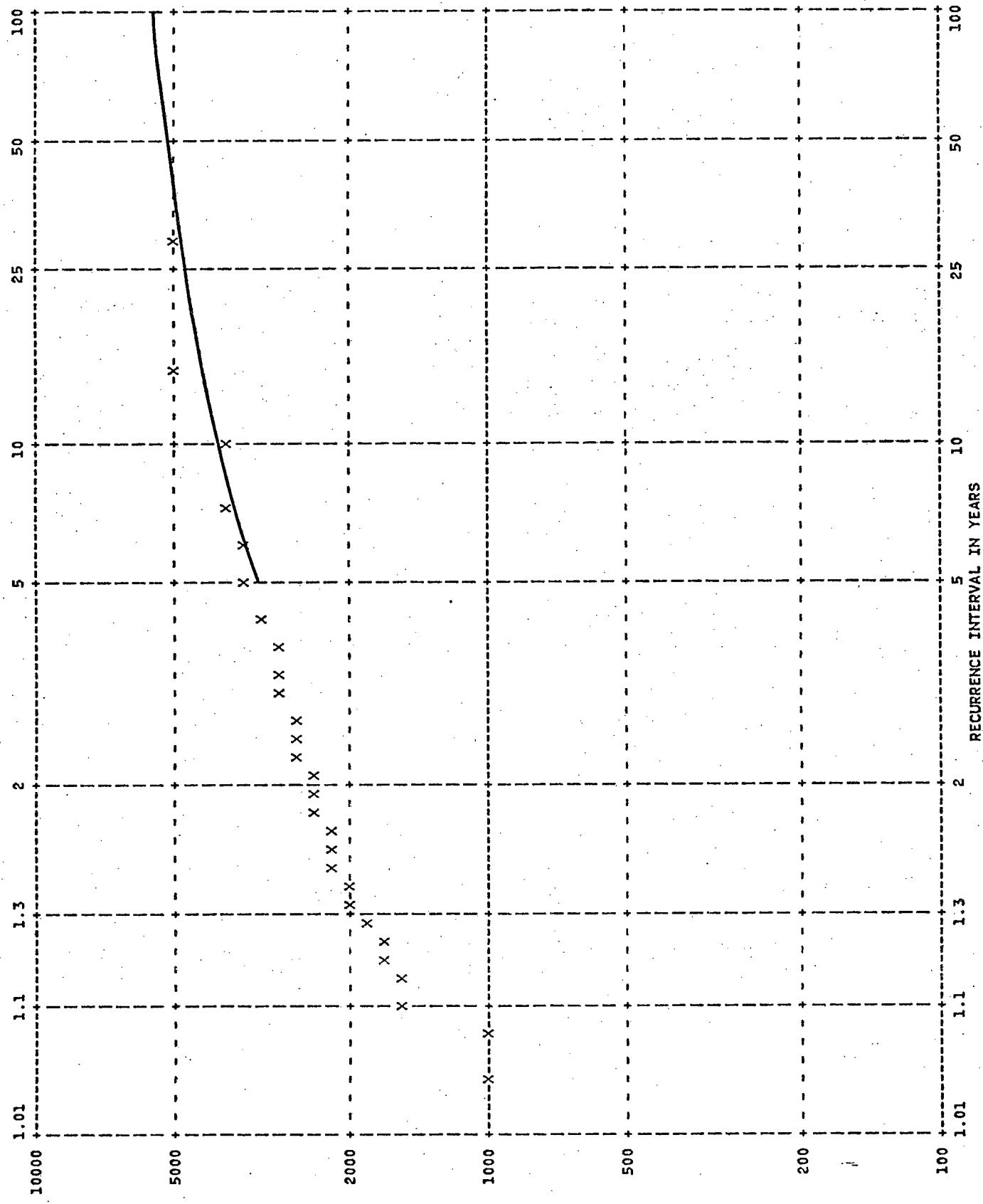
Avis: A cause des données insuffisantes du Yukon, il a fallu comprendre même les stations de jaugeage tiennent des relevés très brefs dans ce compte rendu. Néanmoins, on verra la nécessité de prendre garde à ne pas inférer du format uniforme de la présentation des données, que les stations tiennent tels relevés de durée breve puissent pourvoir la même assurance de prédire la probabilité des débits maximales autant que les stations tiennent relevés pendant longtemps.

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AISHIHK RIVER NEAR WHITEHORSE - STATION NO. 08AA001

1



MAXIMUM DAILY MEAN FLOWS

2

STATION NO. 08AA001
 AISHIHIK RIVER NEAR WHITEHORSE

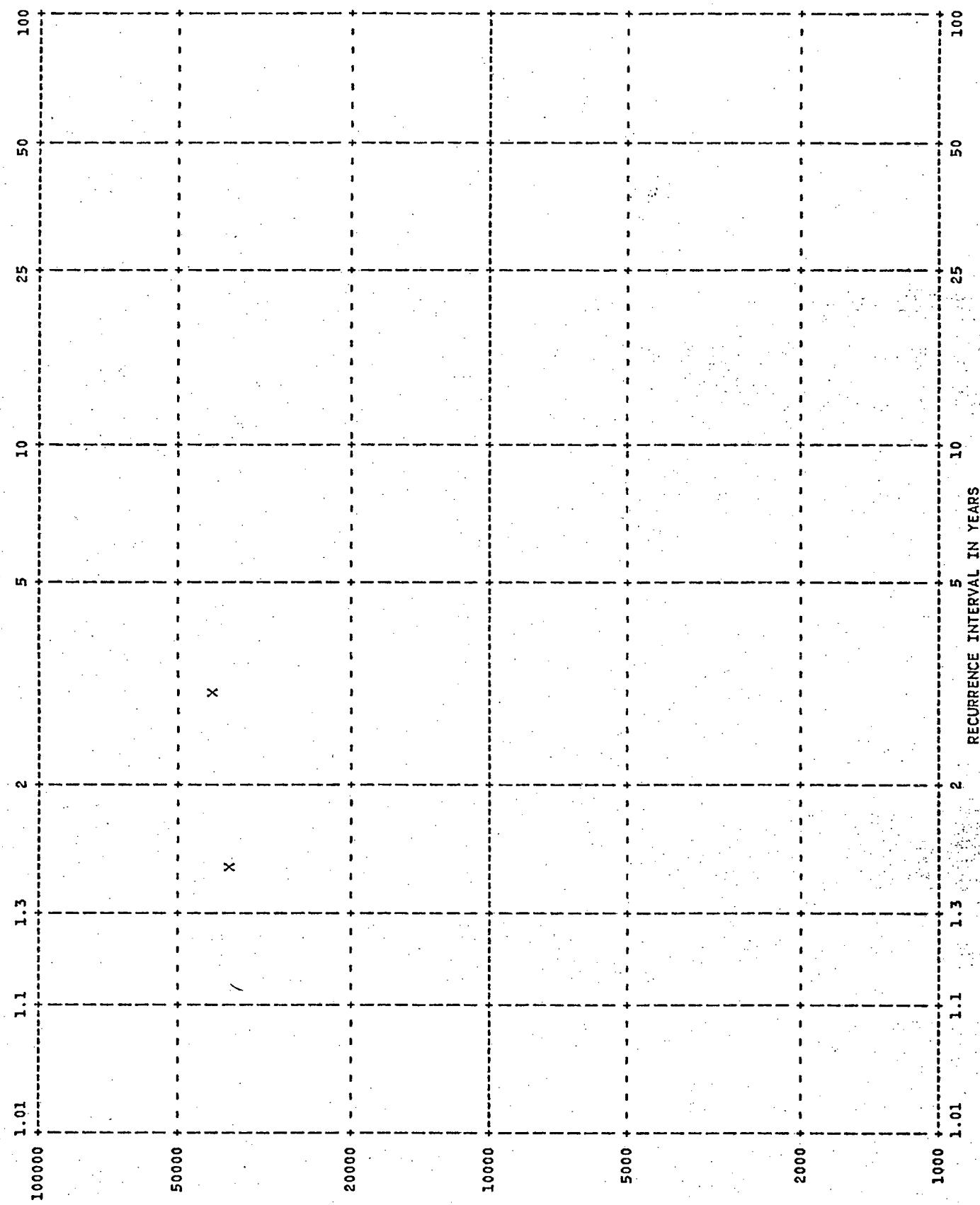
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
10 Jun 1950	2080	1	29.0	5050	1962
3 Jul 1951	2480	2	14.5	4850	1968
16 Jun 1952	1570	3	9.7	3940	1964
24 May 1953	1500	4	7.3	3690	1967
10 Jul 1954	2820	5	5.8	3520	1976
22 Jun 1955	2160	6	4.83	3320	1966
29 Jun 1956	2340	7	4.14	3100	1963
4 Jun 1957	2610	8	3.63	2900	1972
24 May 1958	979	9	3.22	2840	1975
12 Jun 1959	2100	10	2.90	2820	1954
25 May 1960	2240	11	2.64	2620	1977
27 Jun 1961	2560	12	2.42	2610	1957
20 Jun 1962	5050	13	2.23	2560	1961
11 Jul 1963	3100	14	2.07	2480	1951
4 Jun 1964	3940	15	1.93	2450	1969
31 May 1965	1640	16	1.81	2340	1956
20 Jun 1966	3320	17	1.71	2260	1973
31 May 1967	3690	18	1.61	2240	1960
22 May 1968	4850	19	1.53	2160	1955
25 May 1969	2450	20	1.45	2100	1959
8 Jun 1970	1010	21	1.38	2080	1950
10 Jun 1971	1790	22	1.32	1790	1971
31 May 1972	2900	23	1.26	1660	1974
21 Jun 1973	2260	24	1.21	1640	1965
1 Jun 1974	1660	25	1.160	1570	1952
15 Sep 1975	2840	26	1.115	1500	1953
12 Jul 1976	3520	27	1.074	1010	1970
3 Jun 1977	2620	28	1.036	979	1958

MEAN ANNUAL FLOOD: 2570 CFS

DRAINAGE AREA: 1660 SQ MI

STANDARD DEVIATION: 996 CFS

REMARKS: Flow regulated since September 1974



MAXIMUM DAILY MEAN FLOWS

4

STATION NO. 08AB001
ALSEK RIVER ABOVE BATES RIVER

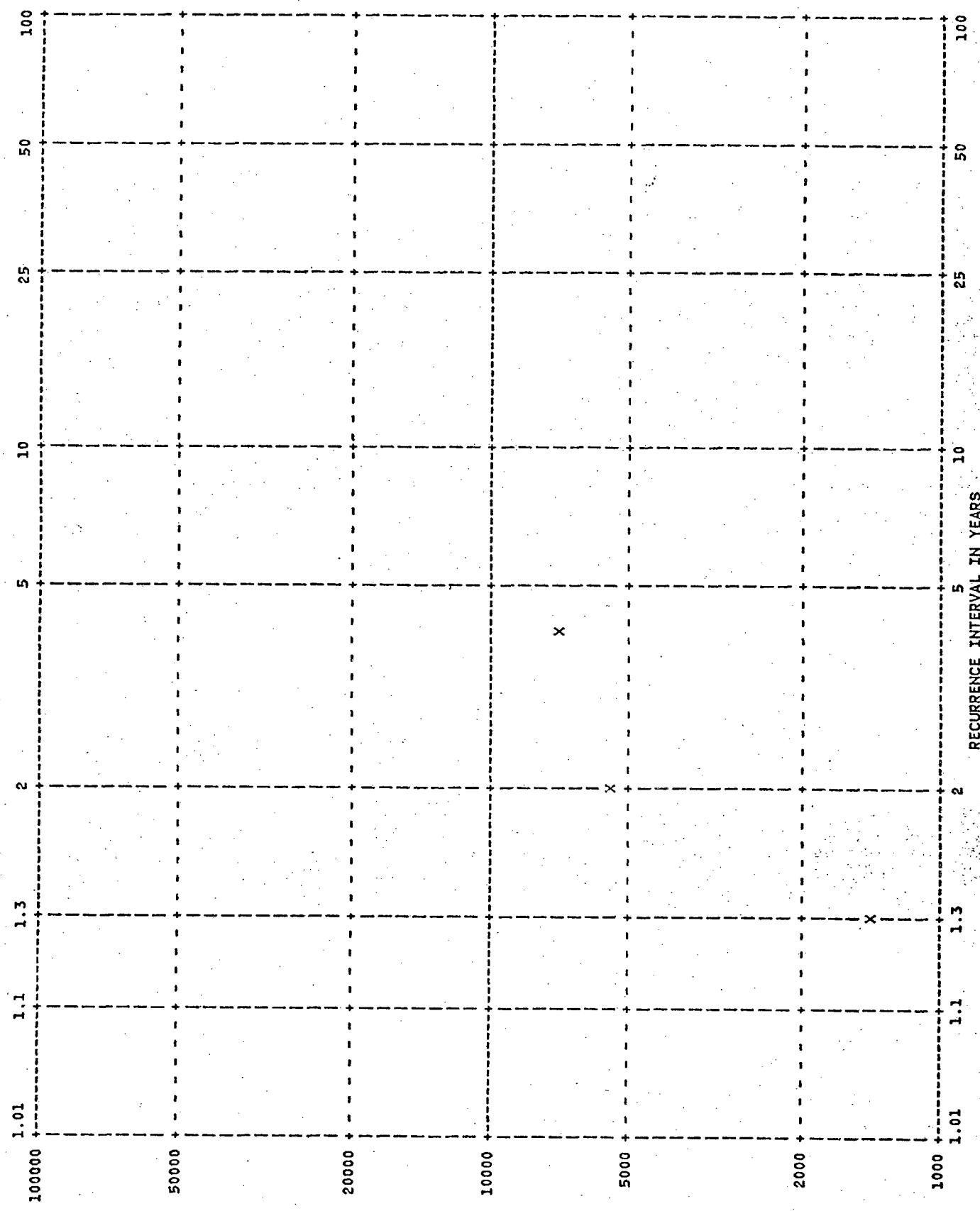
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
13 Jul 1975	39900	1	3.00	39900	1975
22 Aug 1977	37400	2	1.50	37400	1977

MEAN ANNUAL FLOOD: 38700 CFS

DRAINAGE AREA: 6250 SQ MI

BIG CREEK NEAR THE MOUTH - STATION NO. 09AH003

5



MAXIMUM DAILY MEAN FLOWS

6

STATION NO. 09AH003
BIG CREEK NEAR THE MOUTH

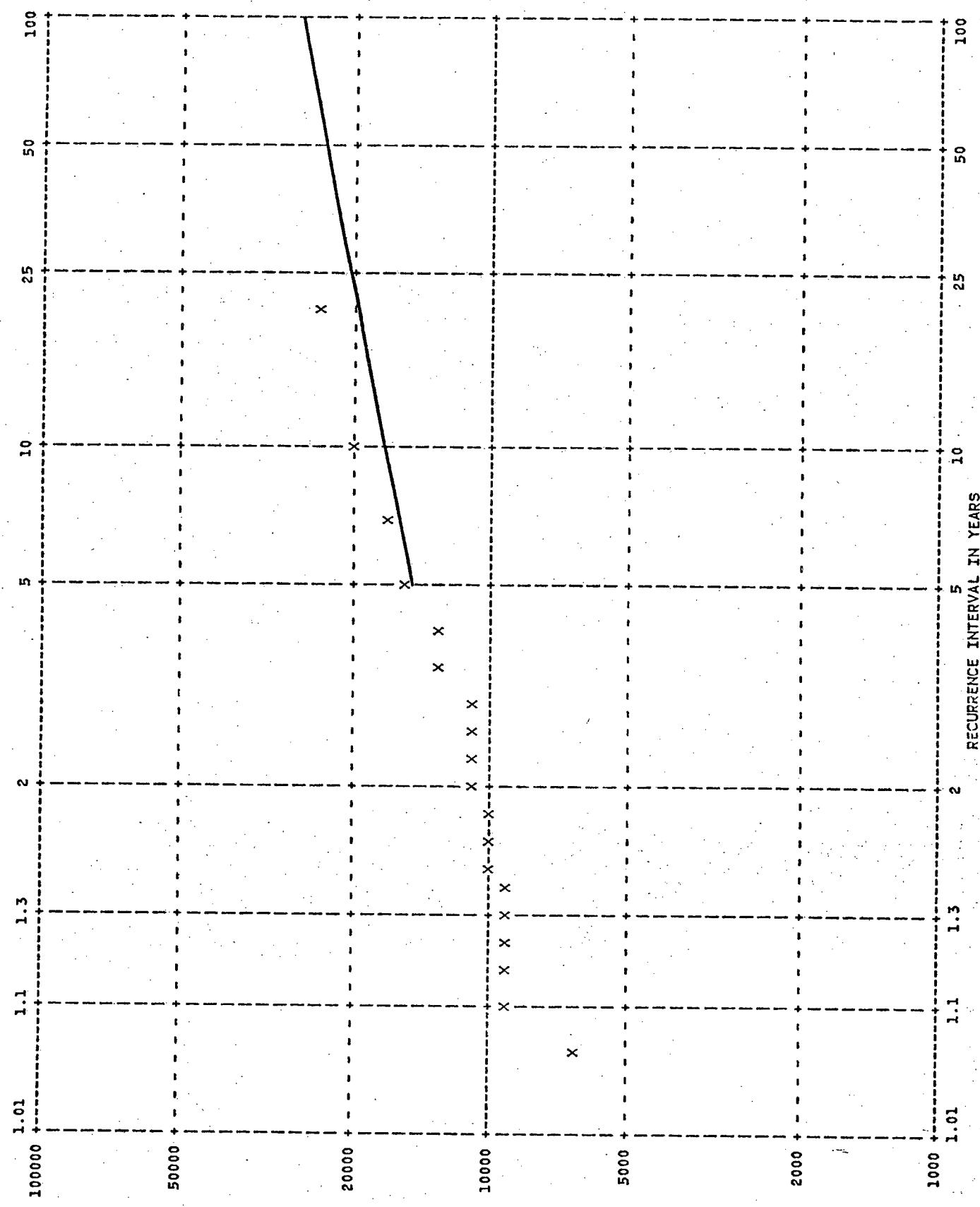
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
11 May 1975	5200	1	4.00	7260	1976
15 Jul 1976	7260	2	2.00	5200	1975
4 Jul 1977	1440	3	1.33	1440	1977

MEAN ANNUAL FLOOD: 4630 CFS

DRAINAGE AREA: 674 SQ MI

BIG SALMON RIVER NEAR CARMACKS - STATION NO. 09AG001

7



MAXIMUM DAILY MEAN FLOWS

8

STATION NO. 09AG001
 BIG SALMON RIVER NEAR CARMACKS

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
1 Jul 1953	9110	1	20.0	23700	1962
4 Jul 1955	9330	2	10.0	19500	1964
20 Jun 1956	6490	3	6.7	16300	1972
23 May 1957	10600	4	5.0	16100	1967
23 Jun 1962	23700	5	4.00	13500	1970
11 Jun 1964	19500	6	3.33	12700	1971
31 May 1965	8780	7	2.86	11100	1969
12 Jun 1966	10900	8	2.50	11100	1975
23 Jun 1967	16100	9	2.22	10900	1966
22 May 1968	9580	10	2.00	10600	1957
11 Jun 1969	11100	11	1.82	10400	1973
22 Jul 1970	13500	12	1.67	9910	1976
21 Jun 1971	12700	13	1.54	9580	1968
31 May 1972	16300	14	1.43	9380	1974
15 Jun 1973	10400	15	1.33	9330	1955
6 Jun 1974	9380	16	1.25	9330	1977
20 Jun 1975	11100	17	1.176	9110	1953
2 Jul 1976	9910	18	1.111	8780	1965
14 Jun 1977	9330	19	1.053	6490	1956

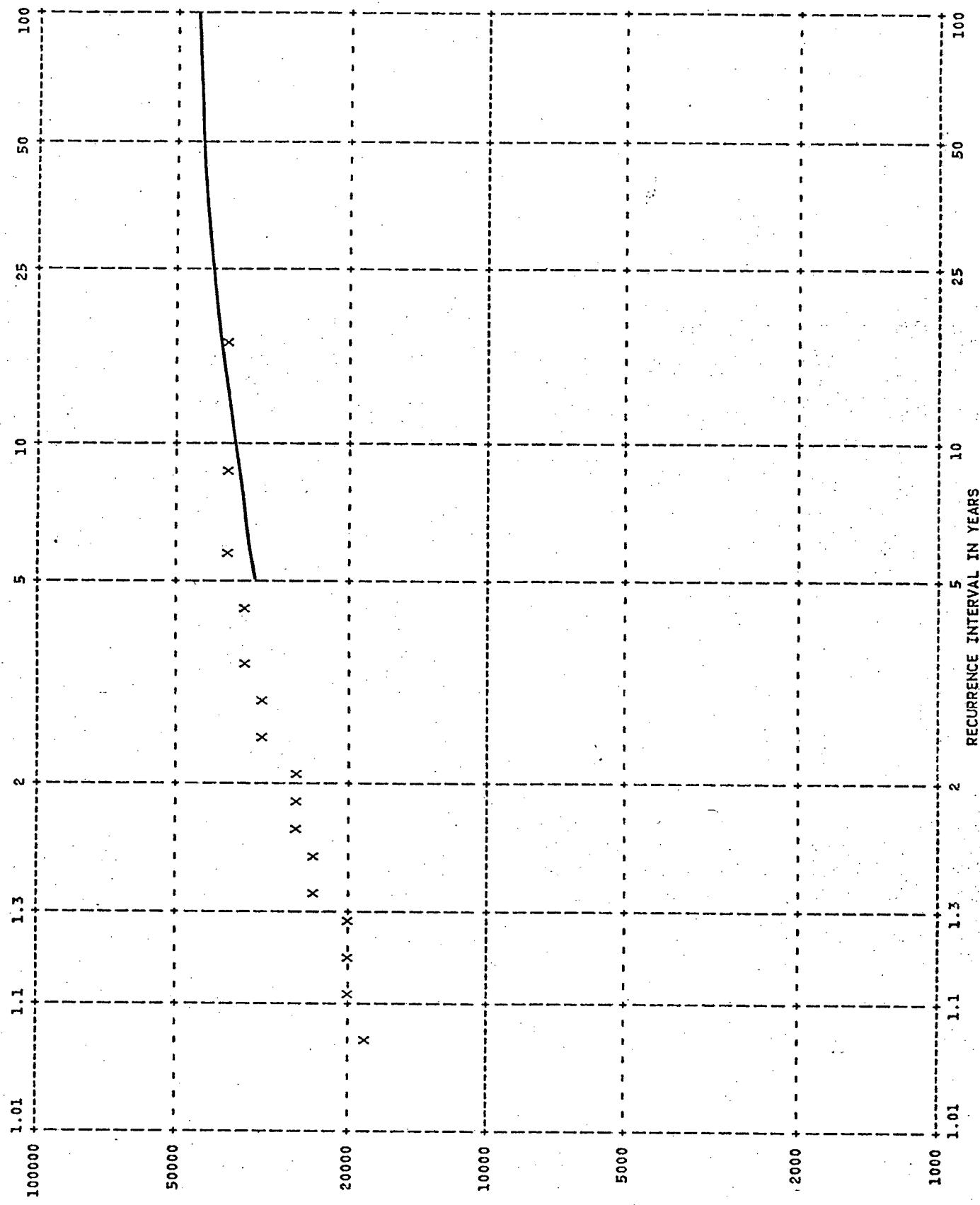
MEAN ANNUAL FLOOD: 12000 CFS

DRAINAGE AREA: 2610 SQ MI

STANDARD DEVIATION: 4210 CFS

COAL RIVER AT THE MOUTH - STATION NO. 10BC001

9



MAXIMUM DAILY MEAN FLOWS

10

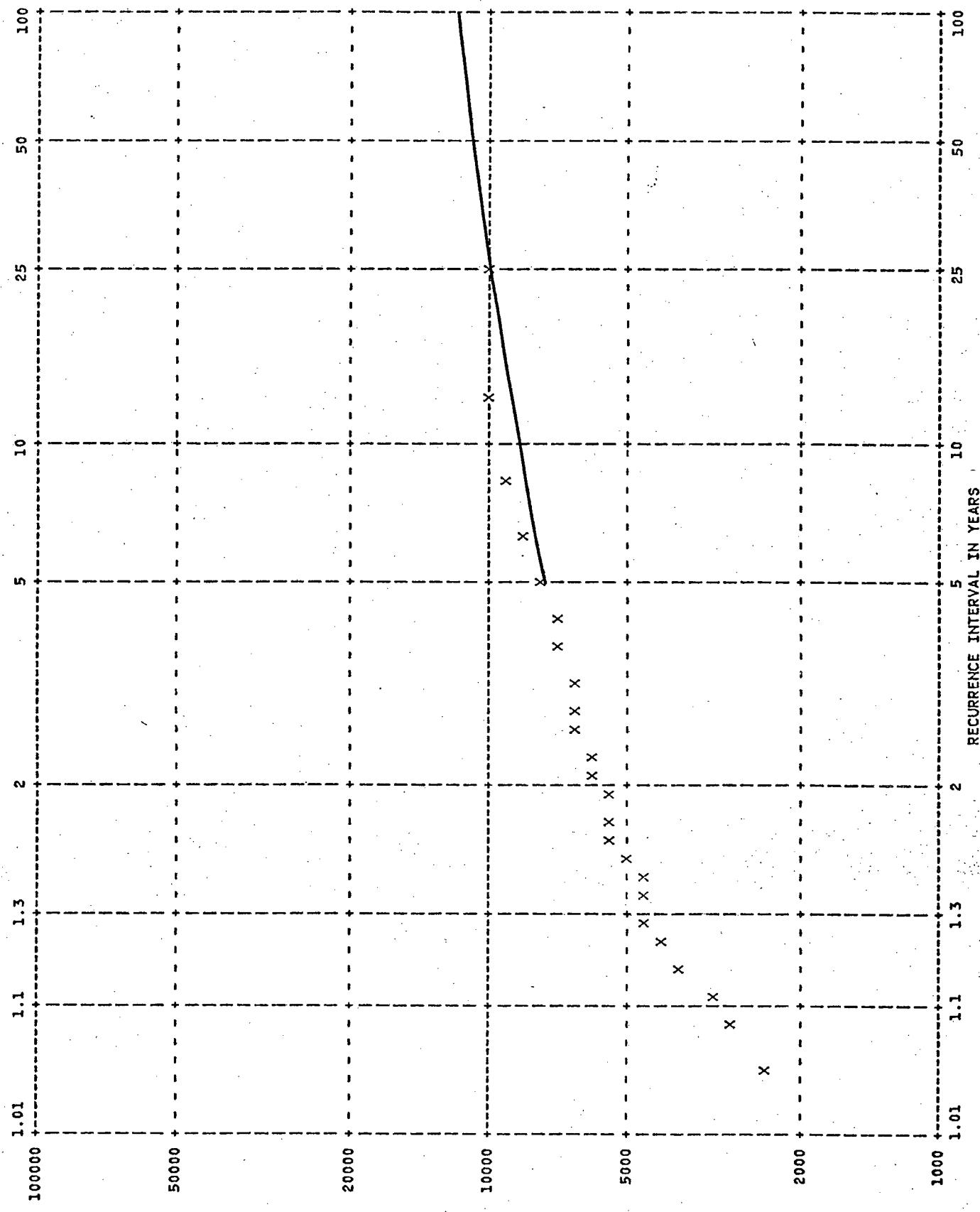
STATION NO. 10BC001
COAL RIVER AT THE MOUTH

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
17 Jun 1962	23900	1	17.0	36900	1972
21 Jun 1963	27200	2	8.5	36300	1964
4 Jun 1964	36300	3	5.7	36300	1971
30 May 1965	19900	4	4.25	36000	1968
13 May 1966	19500	5	3.40	33600	1976
31 May 1967	23900	6	2.83	30900	1974
14 Jul 1968	36000	7	2.43	30900	1975
26 May 1969	18300	8	2.13	27200	1963
5 Jun 1970	19500	9	1.89	27100	1973
6 Jun 1971	36300	10	1.70	25900	1977
30 May 1972	36900	11	1.55	23900	1962
10 Jun 1973	27100	12	1.42	23900	1967
24 Jun 1974	30900	13	1.31	19900	1965
4 Jun 1975	30900	14	1.21	19500	1966
11 Jun 1976	33600	15	1.133	19500	1970
26 May 1977	25900	16	1.063	18300	1969

MEAN ANNUAL FLOOD: 27900 CFS

DRAINAGE AREA: 3550 SQ MI

STANDARD DEVIATION: 6700 CFS



MAXIMUM DAILY MEAN FLOWS

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STATION NO. 08AA003
 DEZADEASH RIVER AT HAINES JUNCTION

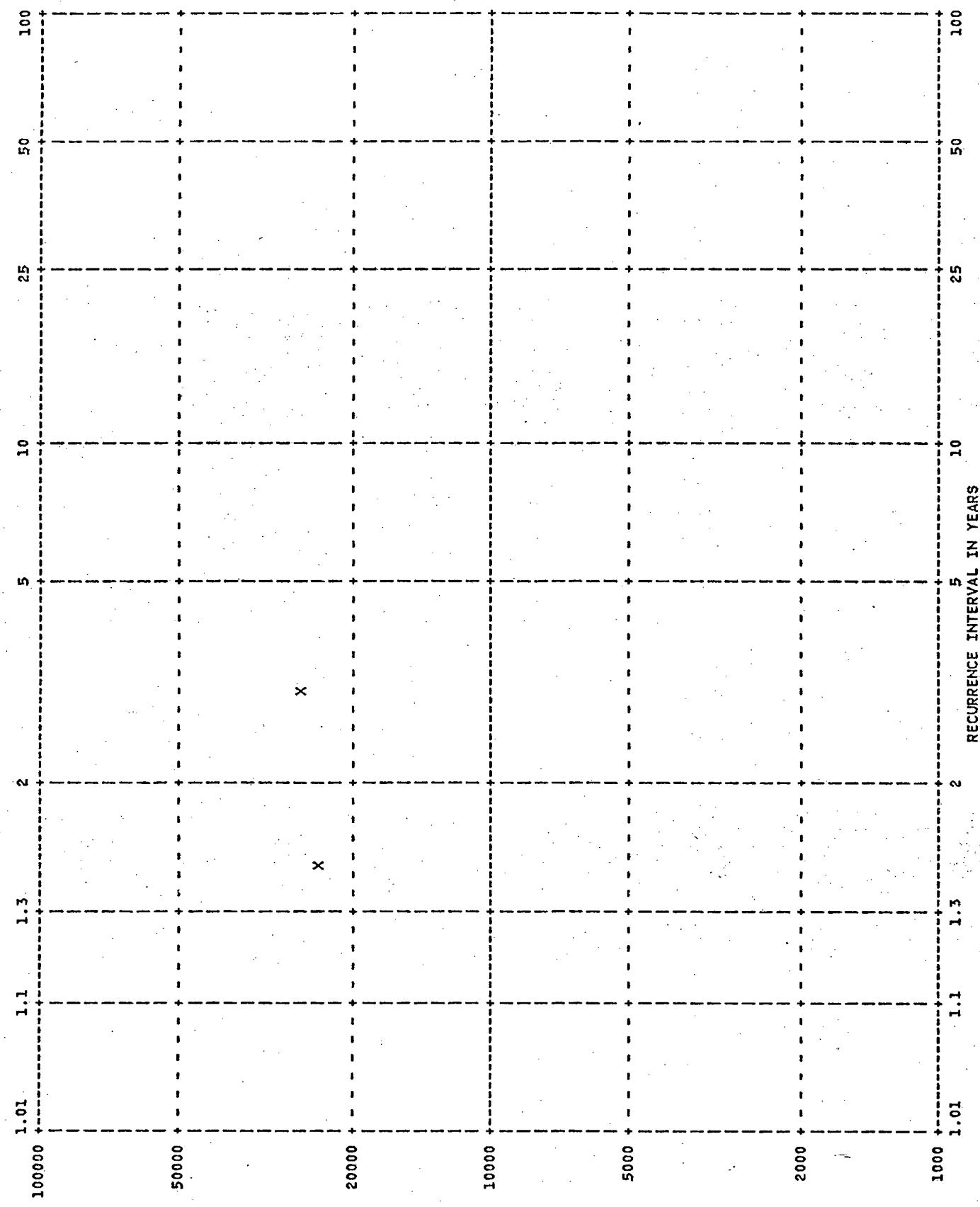
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
16 Jul 1953	4700	1	25.0	10100	1961
7 Jun 1954	5800	2	12.5	9720	1962
26 Jun 1955	6500	3	8.3	9200	1968
29 Jun 1956	4420	4	6.3	8350	1964
13 Jun 1957	7420	5	5.0	7420	1957
7 Jun 1958	2500	6	4.17	7030	1966
24 Jun 1959	5540	7	3.57	6720	1972
31 May 1960	4980	8	3.13	6500	1955
28 Jun 1961	10100	9	2.78	6450	1976
21 Jun 1962	9720	10	2.50	6370	1963
7 Jul 1963	6370	11	2.27	5850	1977
8 Jun 1964	8350	12	2.08	5800	1954
8 Jul 1965	3910	13	1.92	5570	1967
21 Jun 1966	7030	14	1.79	5540	1959
6 Jun 1967	5570	15	1.67	5230	1971
23 May 1968	9200	16	1.56	4980	1960
25 May 1969	4330	17	1.47	4700	1953
17 Jun 1970	2860	18	1.39	4420	1956
29 Jun 1971	5230	19	1.32	4330	1969
31 May 1972	6720	20	1.25	4220	1973
21 Jun 1973	4220	21	1.190	3910	1965
24 Jun 1974	3240	22	1.136	3240	1974
12 Jul 1976	6450	23	1.087	2860	1970
3 Jun 1977	5850	24	1.042	2500	1958

MEAN ANNUAL FLOOD: 5880 CFS

DRAINAGE AREA: 3280 SQ MI

STANDARD DEVIATION: 2050 CFS

REMARKS: Flow regulated since September 1974



MAXIMUM DAILY MEAN FLOWS

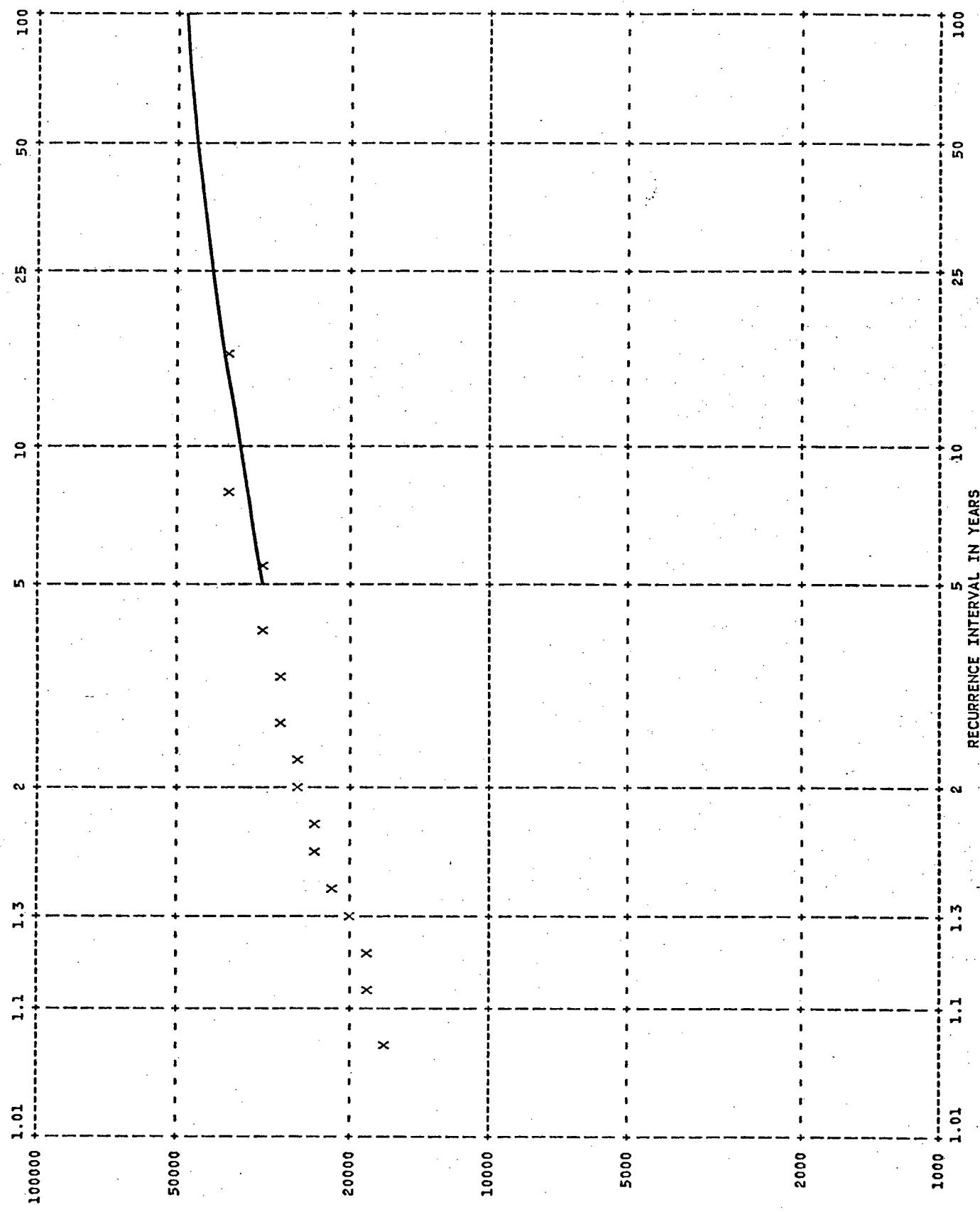
14

STATION NO. 10MD001
FIRTH RIVER NEAR THE MOUTH

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
29 May 1975	27300	1	3.00	27300	1975
26 May 1976	24700	2	1.50	24700	1976

MEAN ANNUAL FLOOD: 26000 CFS

DRAINAGE AREA: 2240 SQ MI



MAXIMUM DAILY MEAN FLOWS

16

STATION NO. 10A3001
 FRANCES RIVER NEAR WATSON LAKE

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
24 Jun 1963	30100	1	16.0	38800	1964
12 Jun 1964	38800	2	8.0	37300	1972
12 Jun 1965	17000	3	5.3	32700	1976
19 Jun 1966	23100	4	4.00	30300	1971
7 Jun 1967	28900	5	3.20	30100	1963
14 Jul 1968	21000	6	2.67	28900	1967
15 Jun 1969	18700	7	2.29	27600	1973
8 Jun 1970	19000	8	2.00	27400	1975
13 Jun 1971	30300	9	1.78	23700	1974
2 Jun 1972	37300	10	1.60	23600	1977
17 Jun 1973	27600	11	1.45	23100	1966
23 Jun 1974	23700	12	1.33	21000	1968
6 Jun 1975	27400	13	1.23	19000	1970
4 Jul 1976	32700	14	1.143	18700	1969
5 Jun 1977	23600	15	1.067	17000	1965

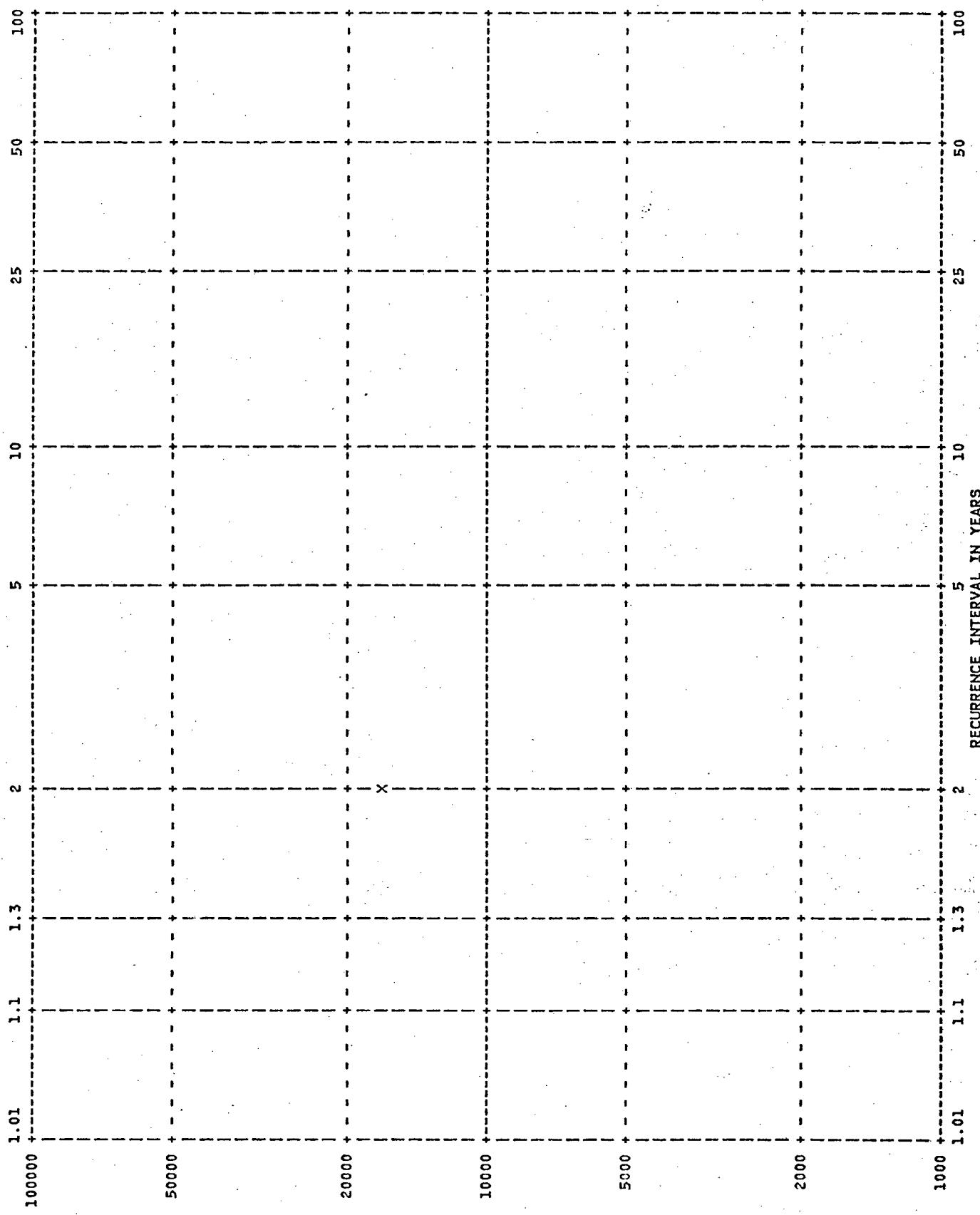
MEAN ANNUAL FLOOD: 26600 CFS

DRAINAGE AREA: 4950 SQ MI

STANDARD DEVIATION: 6580 CFS

HESS RIVER ABOVE EMERALD CREEK - STATION NO. 09DA001

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MAXIMUM DAILY MEAN FLOWS

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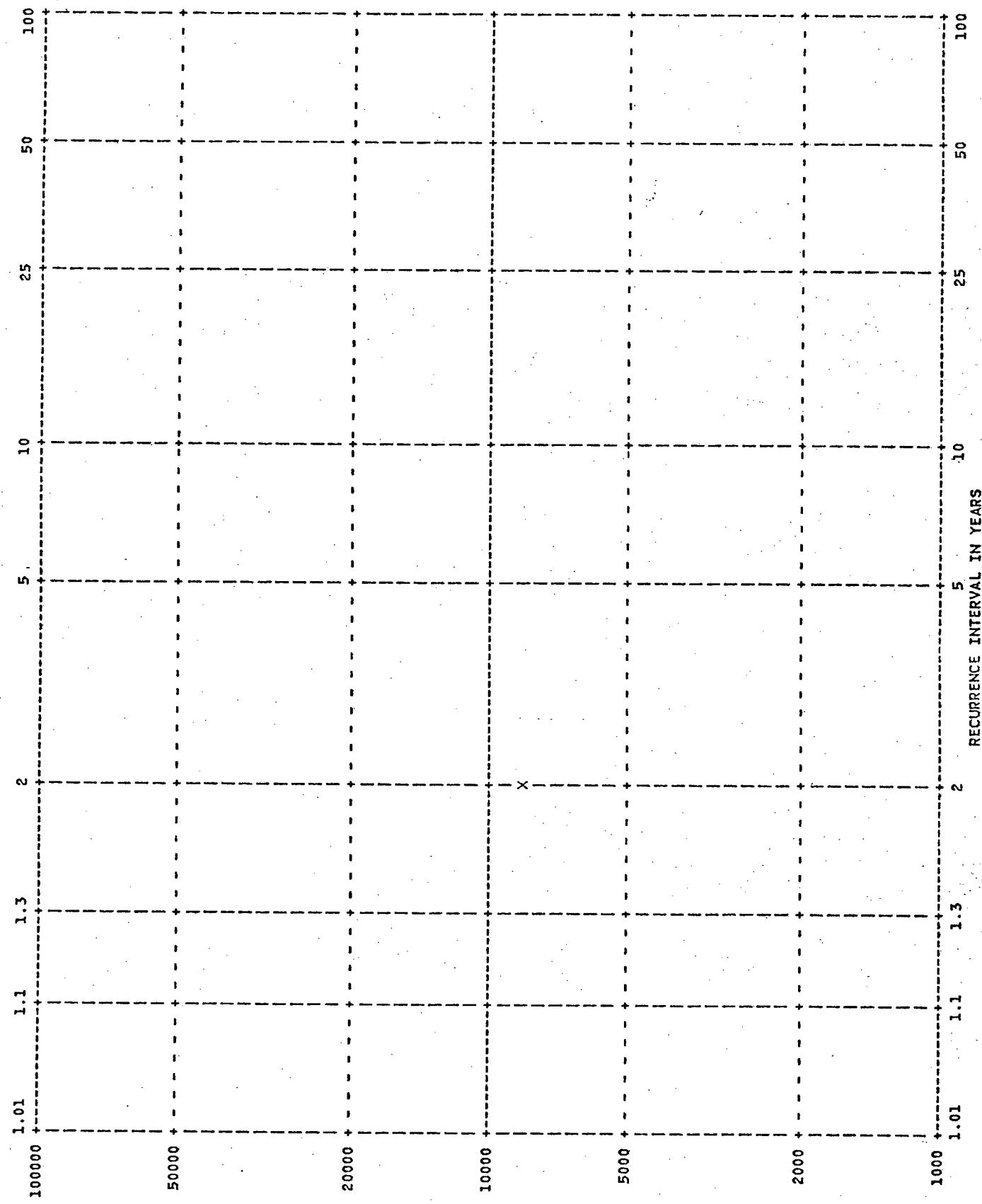
STATION NO. 09DA001
HESS RIVER ABOVE EMERALD CREEK

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
30 May 1977	17400	1	2.00	17400	1977

DRAINAGE AREA: 1870 SQ MI

HYLAND RIVER AT MILE 67.4 NAHANNI RANGE ROAD - STATION NO. 10AD002

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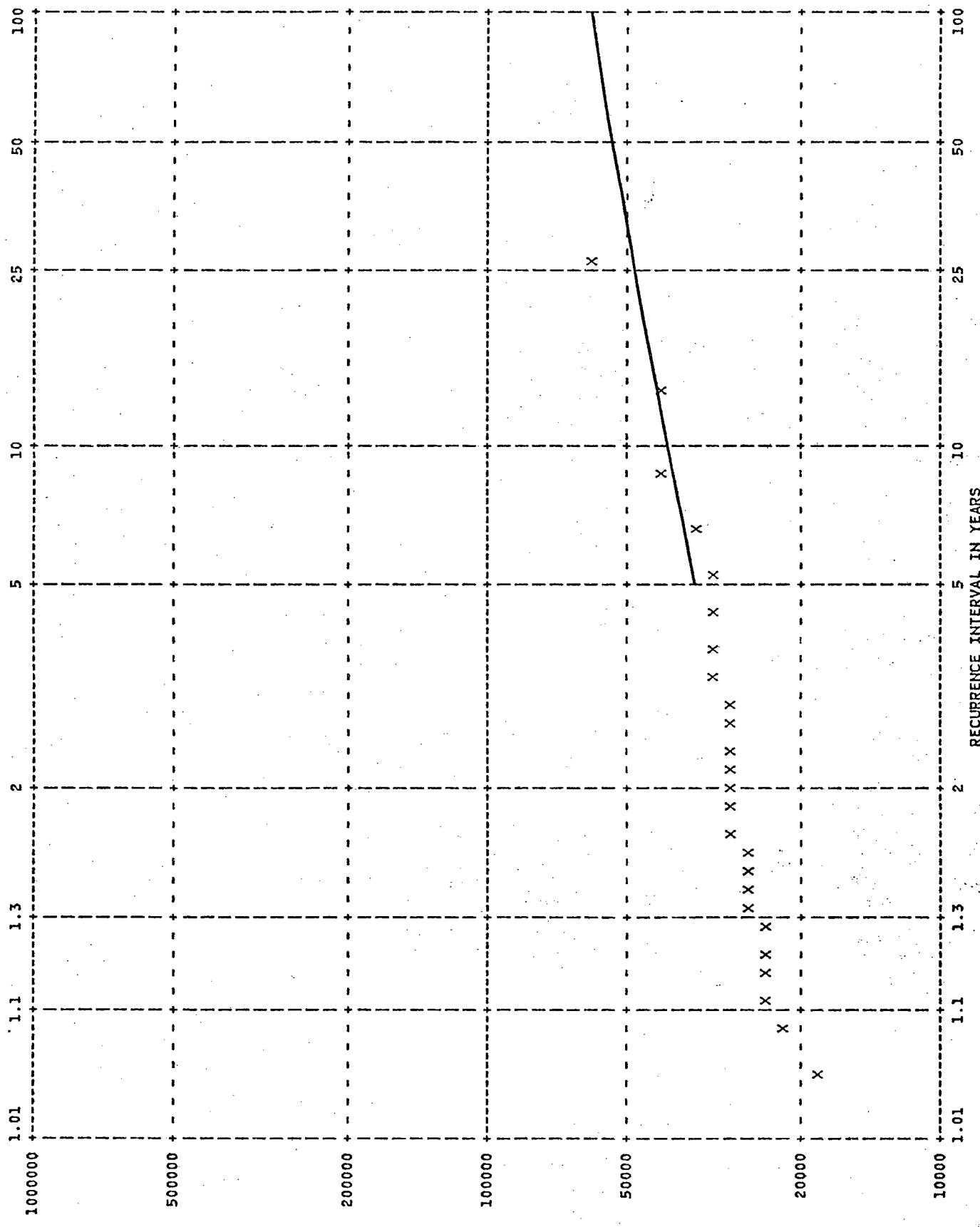
MAXIMUM DAILY MEAN FLOWS

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STATION NO. 10AD002
HYLAND RIVER AT MILE 67.4 NAHANNI RANGE ROAD

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
21 Jun 1977	8700	1	2.00	8700	1977

DRAINAGE AREA: 211 SQ MI



MAXIMUM DAILY MEAN FLOWS

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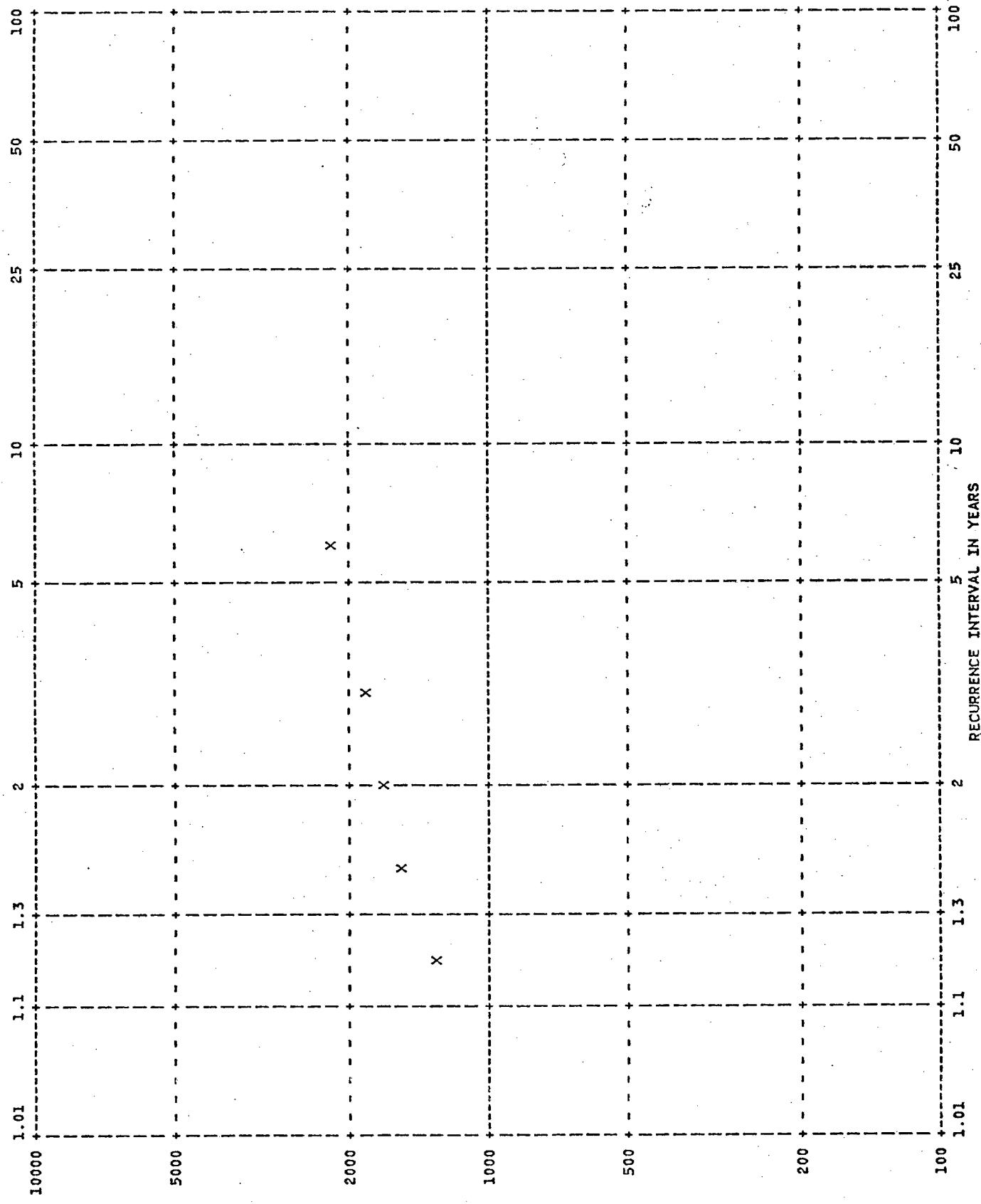
STATION NO. 10AD001
HYLAND RIVER NEAR LOWER POST

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
31 May 1947	29400	1	26.0	59800	1961
1 Jul 1952	29300	2	13.0	42400	1972
22 May 1953	29000	3	8.7	41000	1964
30 May 1954	26900	4	6.5	33300	1955
28 Jun 1955	33300	5	5.2	33000	1976
8 Jun 1956	28500	6	4.33	31800	1975
9 Jun 1958	19200	7	3.71	31700	1962
17 Jun 1959	28300	8	3.25	30500	1971
21 Jun 1960	26500	9	2.89	30100	1963
10 Jun 1961	59800	10	2.60	29400	1947
1 Jun 1962	31700	11	2.36	29300	1952
24 Jun 1963	30100	12	2.17	29000	1953
11 Jun 1964	41000	13	2.00	28500	1956
19 Jun 1966	23200	14	1.86	28300	1959
21 Jun 1967	24500	15	1.73	28100	1974
14 Jul 1968	26500	16	1.63	27400	1970
12 Jun 1969	24100	17	1.53	26900	1954
6 Jun 1970	27400	18	1.44	26500	1960
13 Jun 1971	30500	19	1.37	26500	1968
2 Jun 1972	42400	20	1.30	24900	1973
10 Jun 1973	24900	21	1.24	24500	1967
24 Jun 1974	28100	22	1.182	24100	1969
5 Jun 1975	31800	23	1.130	23200	1966
11 Jun 1976	33000	24	1.083	23000	1977
4 Jun 1977	23000	25	1.040	19200	1958

MEAN ANNUAL FLOOD: 30100 CFS

DRAINAGE AREA: 3650 SQ MI

STANDARD DEVIATION: 8020 CFS



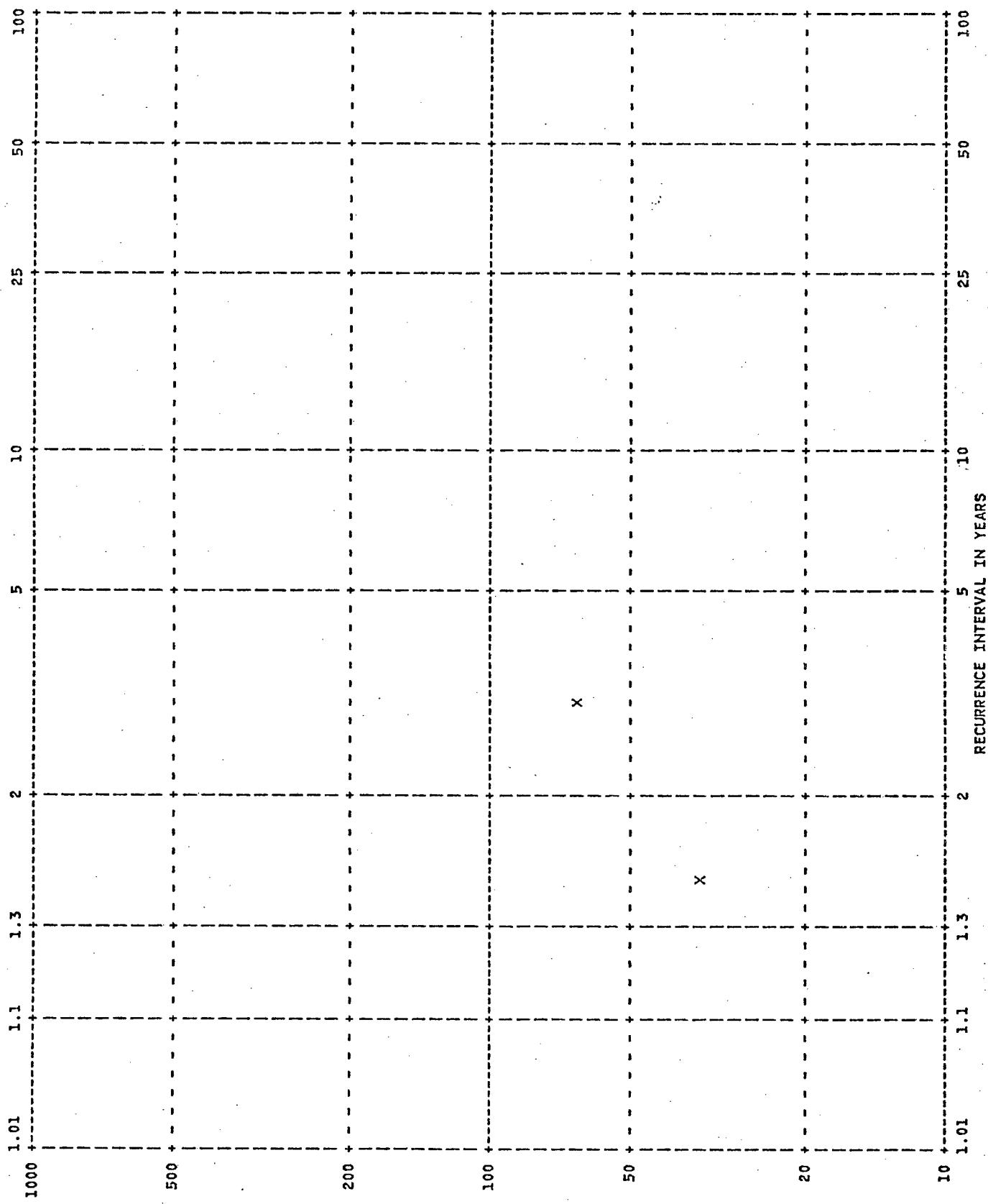
STATION NO. 08AA004
 KATHLEEN RIVER NEAR HAINES JUNCTION

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
30 Jun 1960	1360	1	6.0	2300	1964
1 Jul 1961	1690	2	3.00	1910	1962
26 Jun 1962	1910	3	2.00	1690	1961
10 Jul 1963	1570	4	1.50	1570	1963
20 Jun 1964	2300	5	1.20	1360	1960

MEAN ANNUAL FLOOD: 1770 CFS

DRAINAGE AREA: 248 SQ MI

STANDARD DEVIATION: 359 CFS



MAXIMUM DAILY MEAN FLOWS

26

STATION NO. 10AB003
KING CREEK AT MILE 13 NAHANNI RANGE ROAD

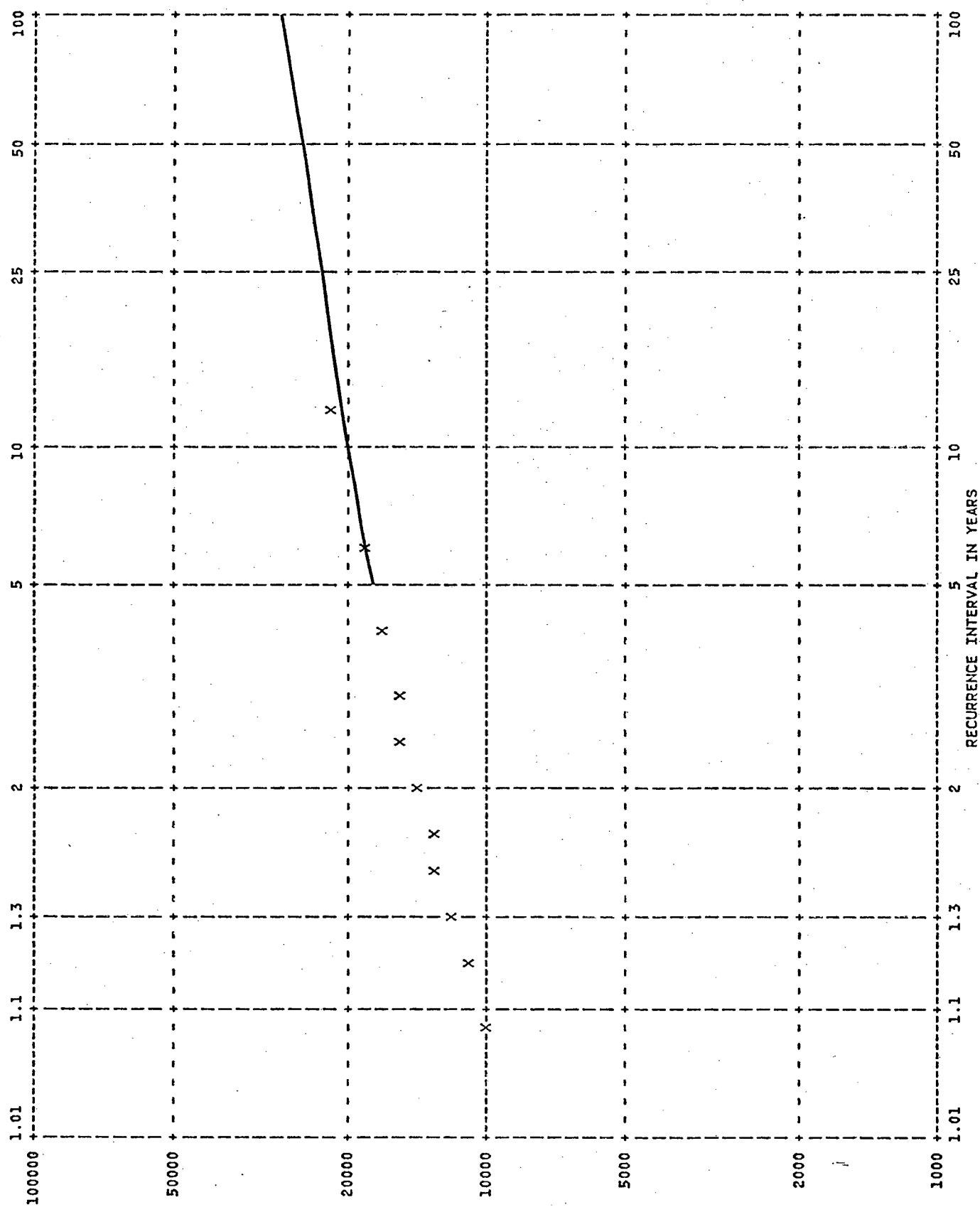
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
3 Jul 1976	63.8	1	3.00	63.8	1976
25 May 1977	33.5	2	1.50	33.5	1977

MEAN ANNUAL FLOOD:

48.6 CFS

DRAINAGE AREA:

5.3 SQ MI



MAXIMUM DAILY MEAN FLOWS

28

STATION NO. 09EA003
 KLONDIKE RIVER ABOVE BONANZA CREEK

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
9 Jun 1966	15300	1	12.0	22600	1972
2 Jun 1967	14500	2	6.0	19200	1975
21 May 1968	12600	3	4.00	16800	1971
11 Jun 1969	10100	4	3.00	15300	1966
25 Jun 1970	12100	5	2.40	15000	1977
11 Jun 1971	16300	6	2.00	14500	1967
29 May 1972	22600	7	1.71	13200	1976
24 May 1974	11200	8	1.50	12600	1968
13 May 1975	19200	9	1.33	12100	1970
19 Jun 1976	13200	10	1.20	11200	1974
9 Jun 1977	15000	11	1.091	10100	1969

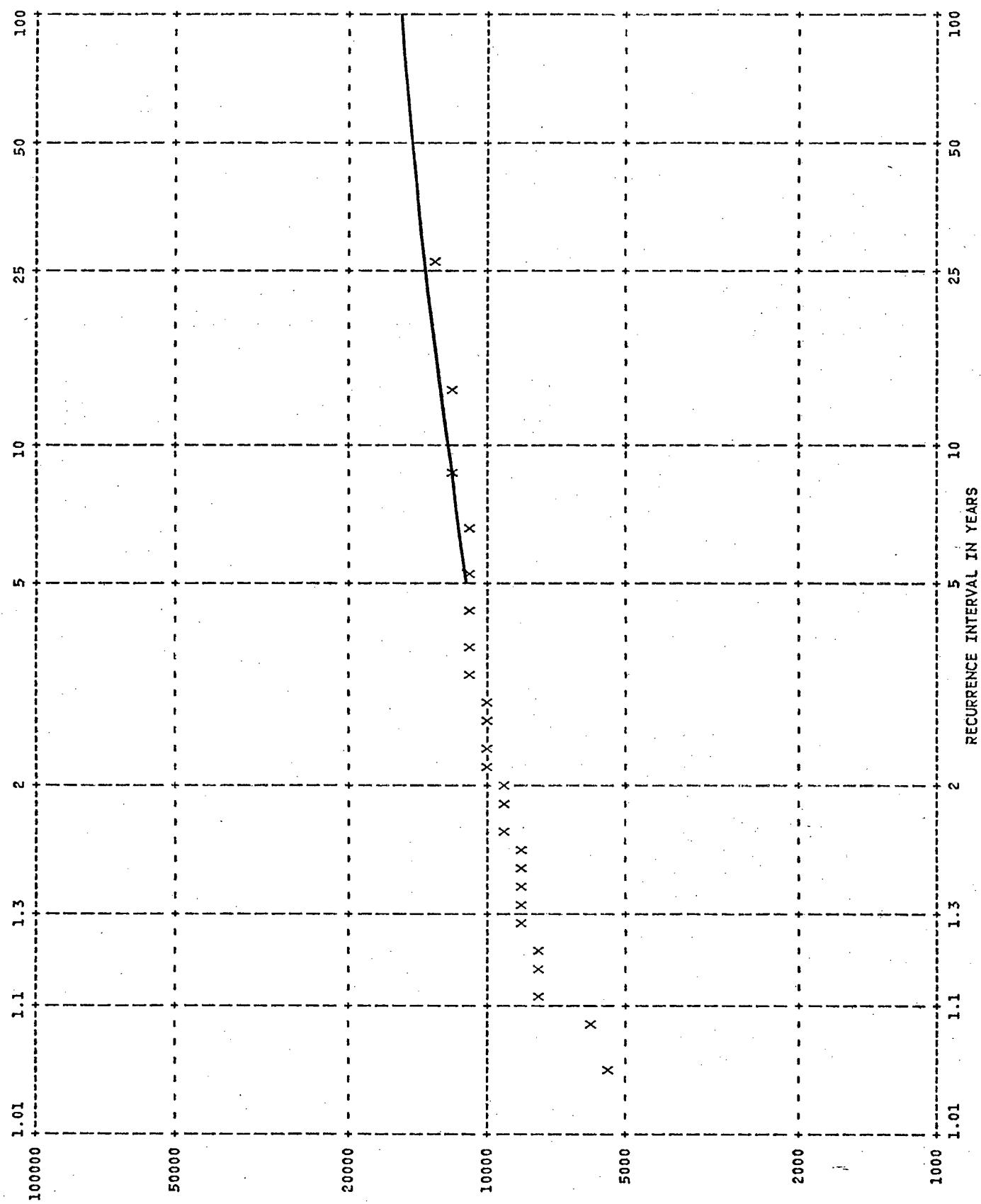
MEAN ANNUAL FLOOD: 14800 CFS

DRAINAGE AREA: 3010 SQ MI

STANDARD DEVIATION: 3660 CFS

KLUANE RIVER AT OUTLET OF KLUANE LAKE - STATION NO. 09CA002

29



MAXIMUM DAILY MEAN FLOWS

30

STATION NO. 09CA002
 KLUANE RIVER AT OUTLET OF KLUANE LAKE

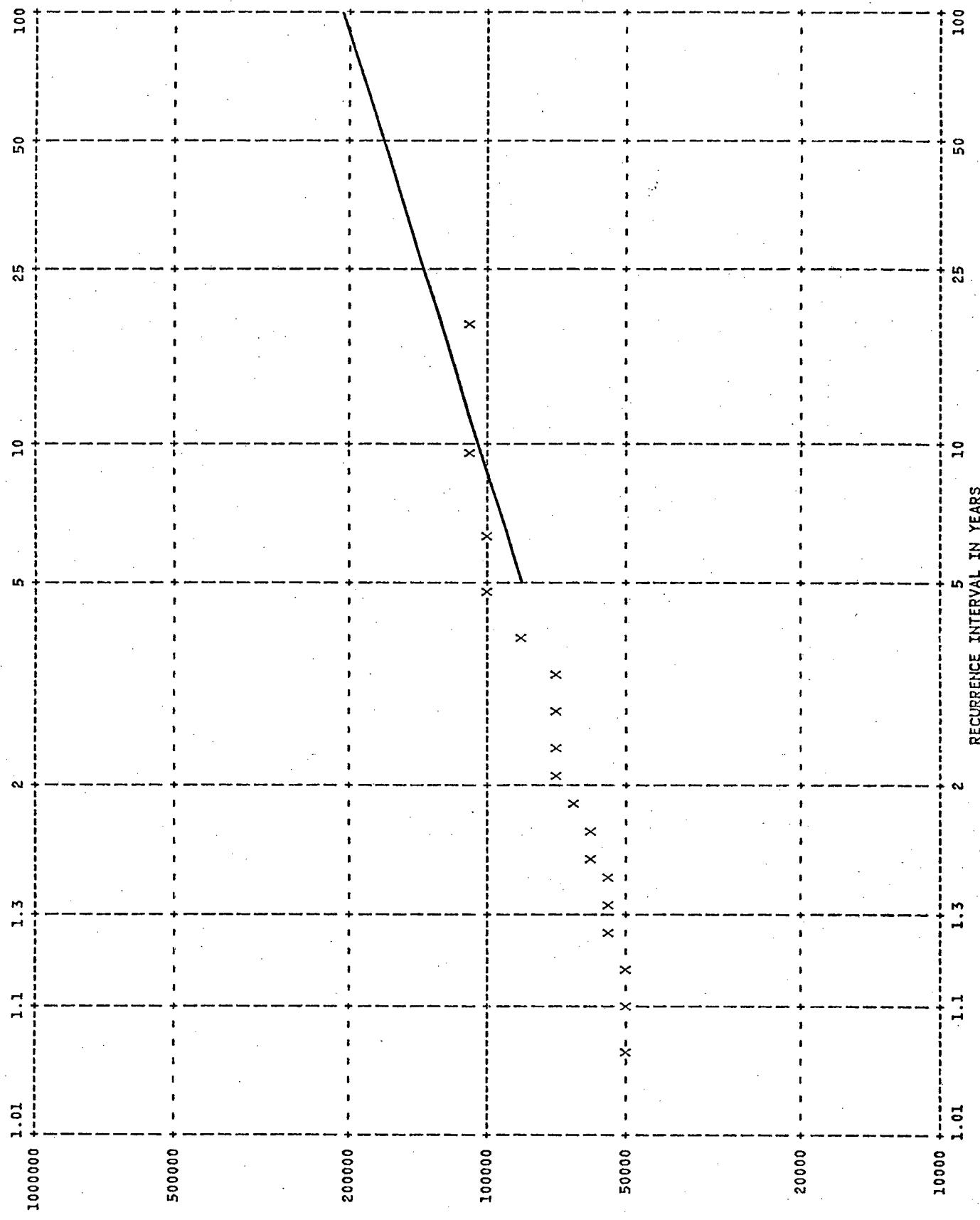
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
7 Jul 1953	5730	1	26.0	13500	1971
14 Aug 1954	9500	2	13.0	11700	1957
13 Aug 1955	8560	3	8.7	11600	1966
16 Aug 1956	10000	4	6.5	11100	1962
18 Aug 1957	11700	5	5.2	11100	1972
15 Jul 1958	6610	6	4.33	11000	1963
26 Aug 1959	8090	7	3.71	10700	1969
21 Aug 1960	9720	8	3.25	10600	1974
12 Aug 1961	8290	9	2.89	10400	1964
16 Aug 1962	11100	10	2.60	10000	1956
23 Aug 1963	11000	11	2.36	9720	1960
8 Aug 1964	10400	12	2.17	9630	1975
25 Aug 1965	7690	13	2.00	9500	1954
30 Jul 1966	11600	14	1.86	9270	1976
26 Jun 1967	7380	15	1.73	9250	1977
15 Jul 1968	7800	16	1.63	8670	1973
8 Aug 1969	10700	17	1.53	8610	1958
30 Jul 1970	5310	18	1.44	8560	1955
14 Aug 1971	13500	19	1.37	8290	1961
10 Aug 1972	11100	20	1.30	8090	1959
14 Aug 1973	8670	21	1.24	7800	1968
19 Aug 1974	10600	22	1.182	7690	1965
11 Aug 1975	9630	23	1.130	7380	1967
10 Aug 1976	9270	24	1.083	5730	1953
24 Aug 1977	9250	25	1.040	5310	1970

MEAN ANNUAL FLOOD: 9410 CFS

DRAINAGE AREA: 1910 SQ MI

STANDARD DEVIATION: 1880 CFS

REMARKS: Drainage area is approximate.



MAXIMUM DAILY MEAN FLOWS

32

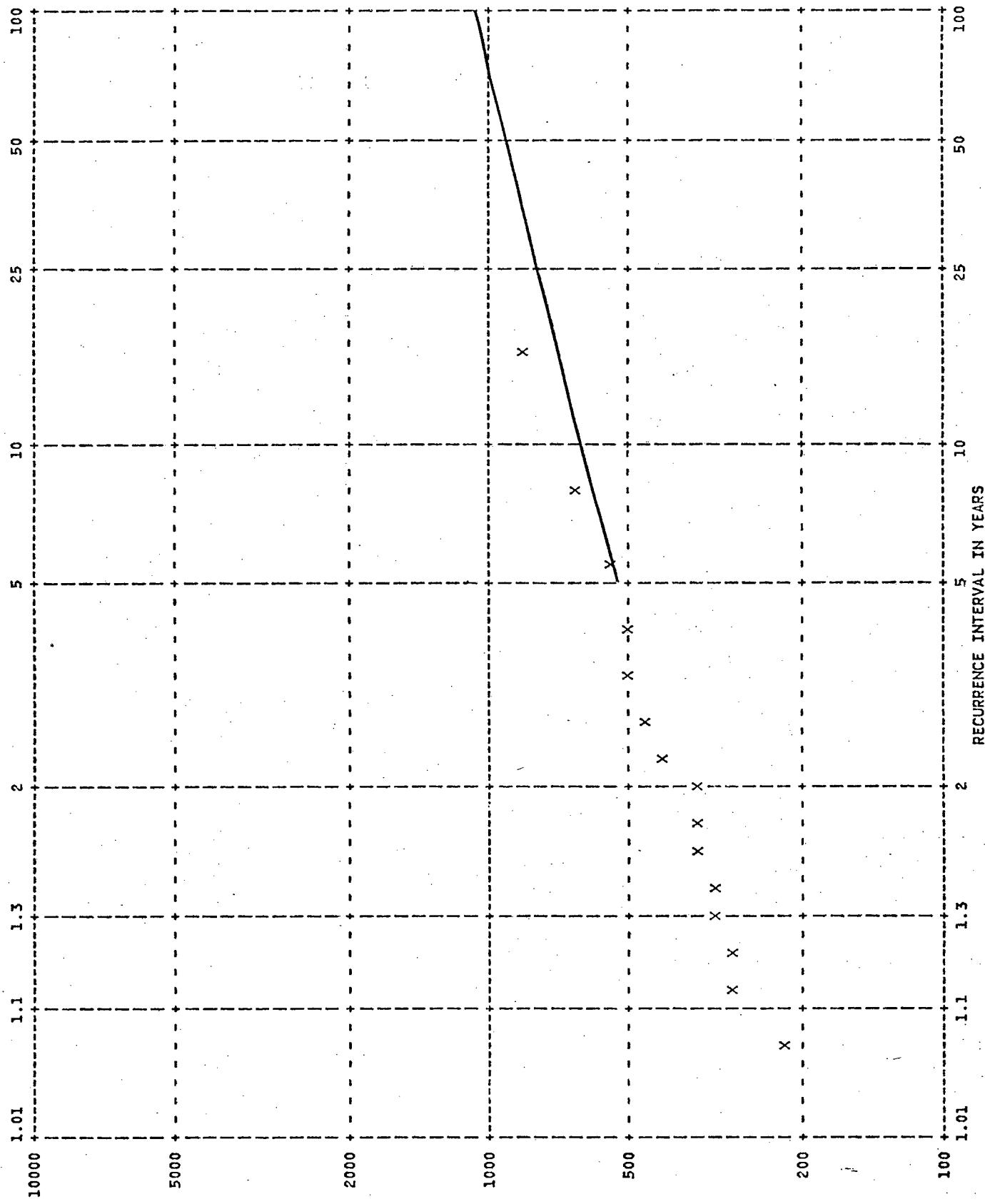
STATION NO. 10AA001
 LIARD RIVER AT UPPER CROSSING

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
30 Jun 1960	56600	1	19.0	108000	1972
12 Jun 1961	107000	2	9.5	107000	1961
23 Jun 1962	98700	3	6.3	104000	1964
25 Jun 1963	66200	4	4.75	98700	1962
11 Jun 1964	104000	5	3.80	80700	1971
1 Jun 1965	52200	6	3.17	72300	1976
19 Jun 1966	53500	7	2.71	70000	1967
7 Jun 1967	70000	8	2.38	68000	1977
13 Jun 1968	54400	9	2.11	67400	1973
12 Jun 1969	47400	10	1.90	66200	1963
6 Jun 1970	51400	11	1.73	56800	1975
13 Jun 1971	80700	12	1.58	56600	1960
2 Jun 1972	108000	13	1.46	54400	1968
17 Jun 1973	67400	14	1.36	53500	1966
24 Jun 1974	49100	15	1.27	52200	1965
4 Jun 1975	58800	16	1.188	51400	1970
12 Jun 1976	72300	17	1.118	49100	1974
5 Jun 1977	68000	18	1.056	47400	1969

MEAN ANNUAL FLOOD: 70300 CFS

DRAINAGE AREA: 12900 SQ MI

STANDARD DEVIATION: 20800 CFS



MAXIMUM DAILY MEAN FLOWS

34

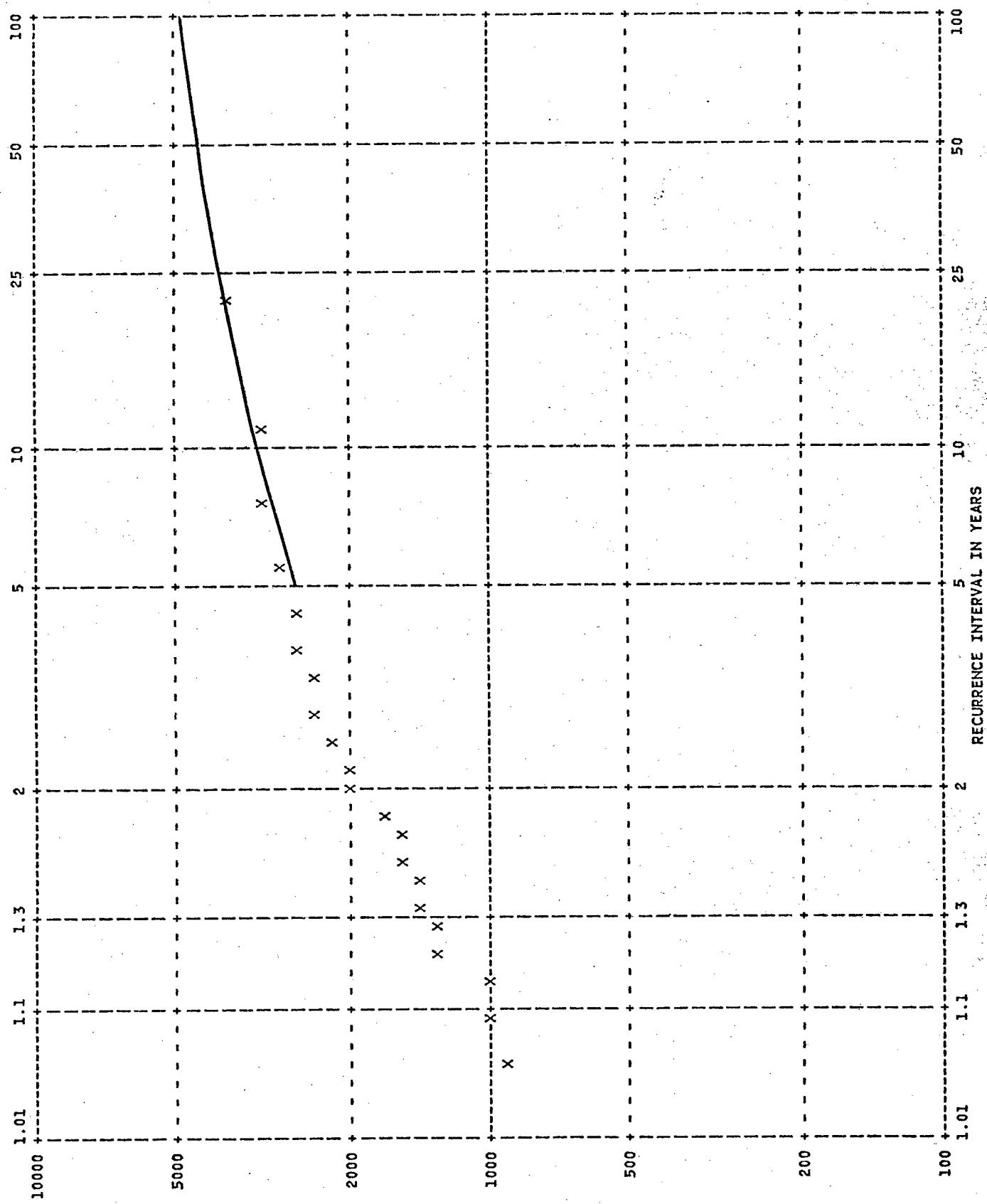
STATION NO. 09AA007
LUBBOCK RIVER NEAR ATLIN

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
13 May 1960	347	1	16.0	833	1972
7 Jun 1964	654	2	8.0	654	1964
30 May 1965	503	3	5.3	531	1967
21 May 1966	298	4	4.00	503	1965
20 May 1967	531	5	3.20	473	1976
1 Jun 1968	231	6	2.67	449	1974
29 May 1969	323	7	2.29	395	1977
22 May 1970	287	8	2.00	348	1971
27 May 1971	348	9	1.78	347	1960
4 Jun 1972	833	10	1.60	333	1975
17 May 1973	322	11	1.45	323	1969
31 May 1974	449	12	1.33	322	1973
19 May 1975	333	13	1.23	298	1966
14 May 1976	473	14	1.143	287	1970
9 Jun 1977	395	15	1.067	231	1968

MEAN ANNUAL FLOOD: 422 CFS

DRAINAGE AREA: 684 SQ MI

STANDARD DEVIATION: 159 CFS



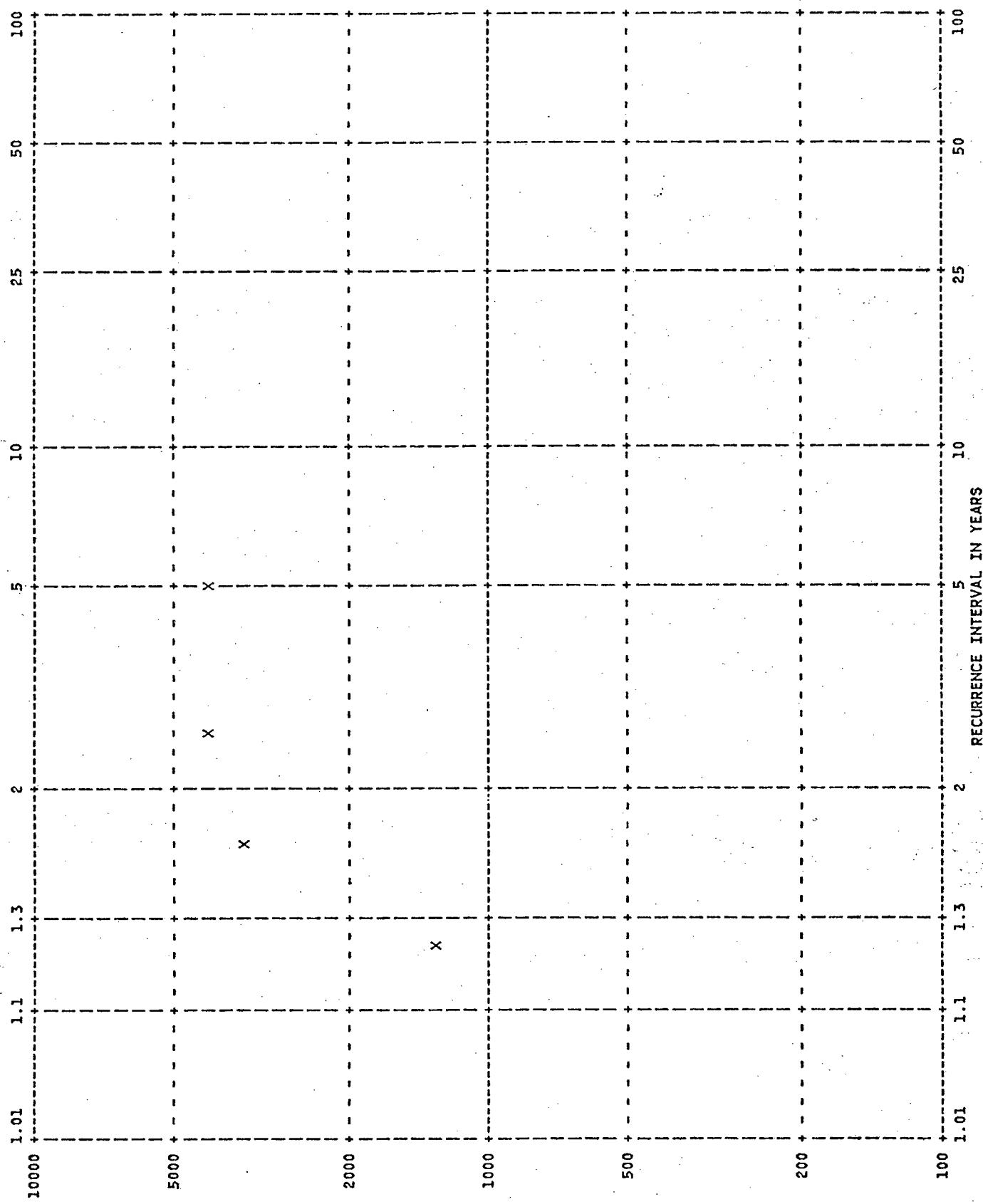
STATION NO. 09AB008
M:CLINTOCK RIVER NEAR WHITEHORSE

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
21 May 1956	990	1	22.0	3680	1972
22 May 1957	3260	2	11.0	3260	1957
24 May 1958	1010	3	7.3	3120	1964
29 May 1959	1340	4	5.5	2910	1967
27 May 1960	1390	5	4.40	2670	1962
17 Jun 1962	2670	6	3.67	2620	1974
23 May 1963	2440	7	3.14	2440	1963
8 Jun 1964	3120	8	2.75	2330	1968
31 May 1965	1360	9	2.44	2180	1976
6 Jun 1966	1990	10	2.20	2100	1969
31 May 1967	2910	11	2.00	1990	1966
23 May 1968	2330	12	1.83	1690	1975
25 May 1969	2100	13	1.69	1570	1973
23 May 1970	914	14	1.57	1560	1971
10 Jun 1971	1560	15	1.47	1440	1977
1 Jun 1972	3680	16	1.38	1390	1960
11 Jun 1973	1570	17	1.29	1360	1965
26 May 1974	2620	18	1.22	1340	1959
3 Jun 1975	1690	19	1.158	1010	1958
5 Jun 1976	2180	20	1.100	990	1956
3 Jun 1977	1440	21	1.048	914	1970

MEAN ANNUAL FLOOD: 2030 CFS

DRAINAGE AREA: 655 SQ MI

STANDARD DEVIATION: 801 CFS



MAXIMUM DAILY MEAN FLOWS

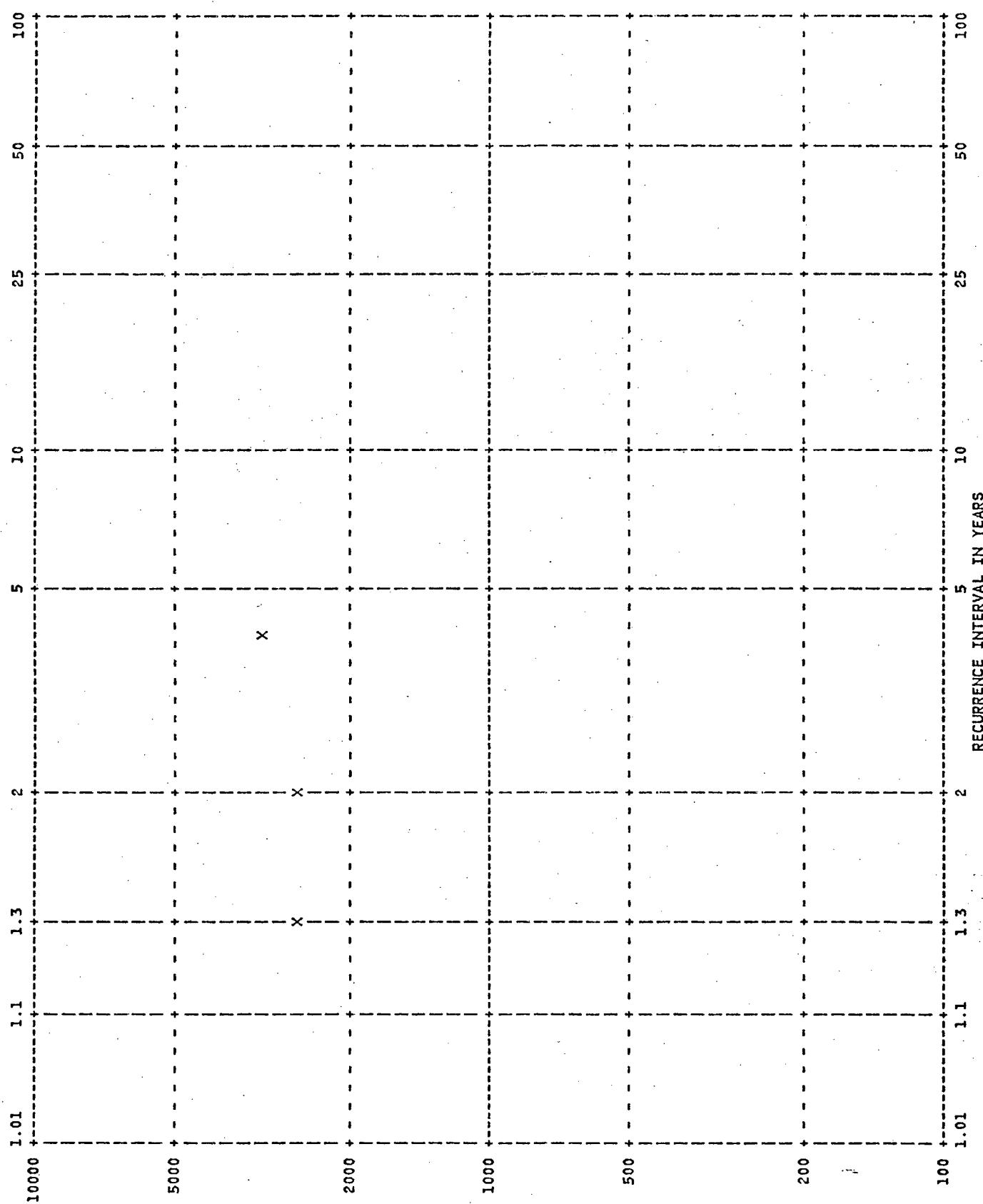
38

STATION NO. 09DC001
MAYO RIVER NEAR MAYO

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
27 May 1946	3500	1	5.0	4260	1949
26 May 1947	4020	2	2.50	4020	1947
6 Jun 1949	4260	3	1.67	3500	1946
21 Jun 1950	1330	4	1.25	1330	1950

MEAN ANNUAL FLOOD: 3280 CFS

DRAINAGE AREA: 873 SQ MI



MAXIMUM DAILY MEAN FLOWS

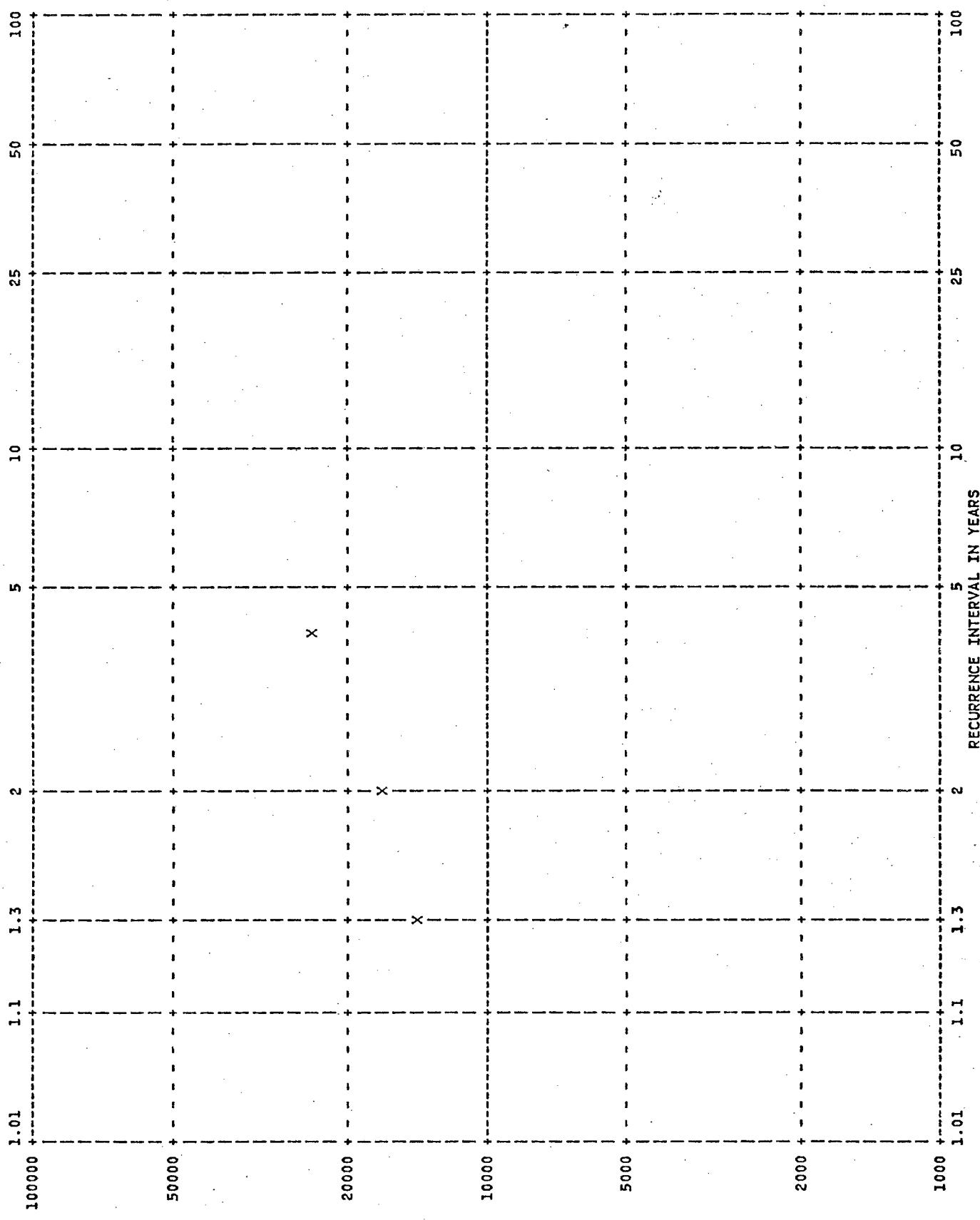
40

STATION NO. 09EA004
NORTH KLONDIKE RIVER NEAR THE MOUTH

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
4 Jun 1975	3030	1	4.00	3030	1975
19 Jun 1976	2700	2	2.00	2750	1977
3 Jun 1977	2750	3	1.33	2700	1976

MEAN ANNUAL FLOOD: 2830 CFS

DRAINAGE AREA: 423 SQ MI



MAXIMUM DAILY MEAN FLOWS

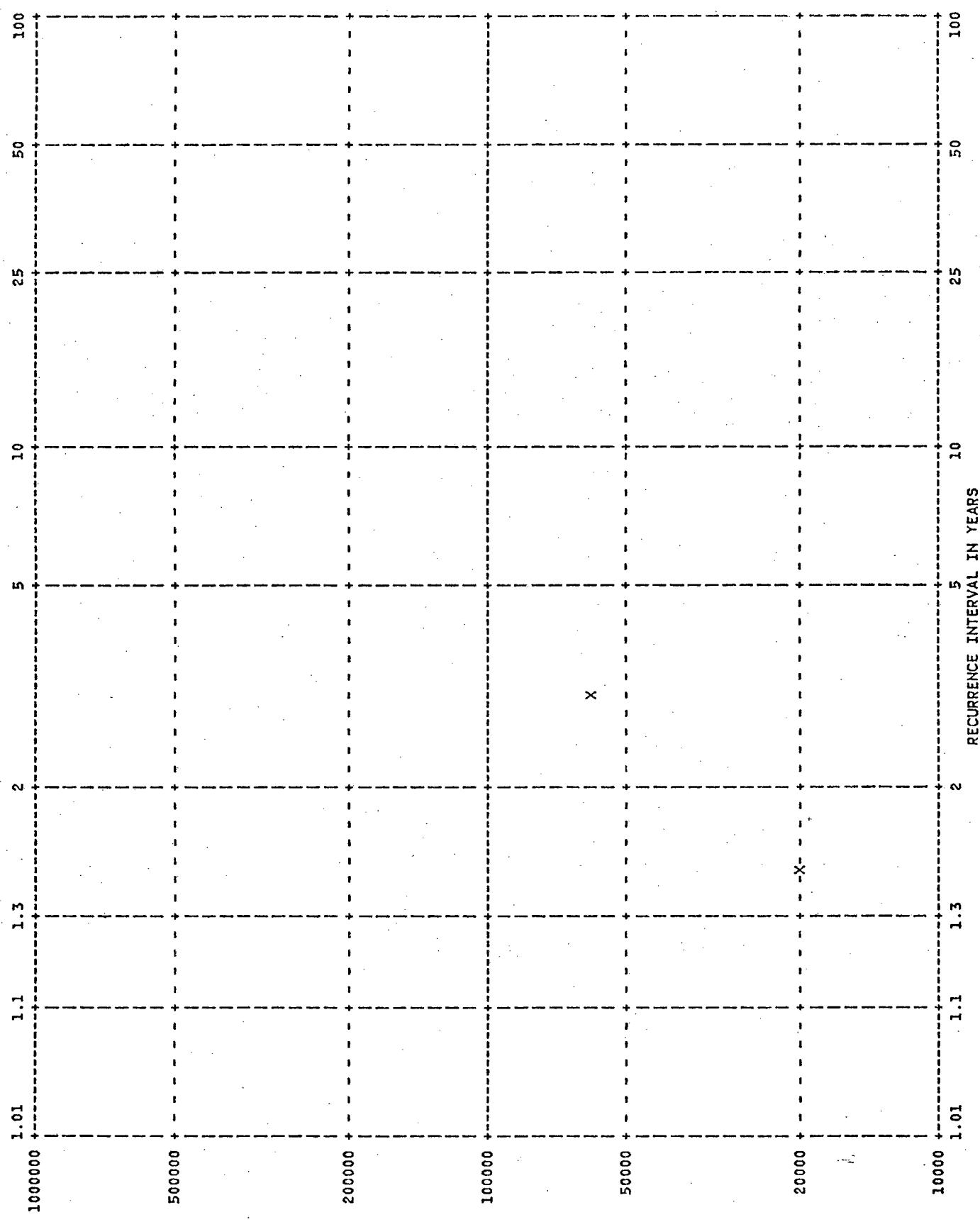
42

STATION NO. 10MA002
OGILVIE RIVER AT MILE 123 DEMPSTER HIGHWAY

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
31 May 1975	23400	1	4.00	23400	1975
19 Jun 1976	14500	2	2.00	16500	1977
20 May 1977	16500	3	1.33	14500	1976

MEAN ANNUAL FLOOD: 18100 CFS

DRAINAGE AREA: 2090 SQ MI



MAXIMUM DAILY MEAN FLOWS

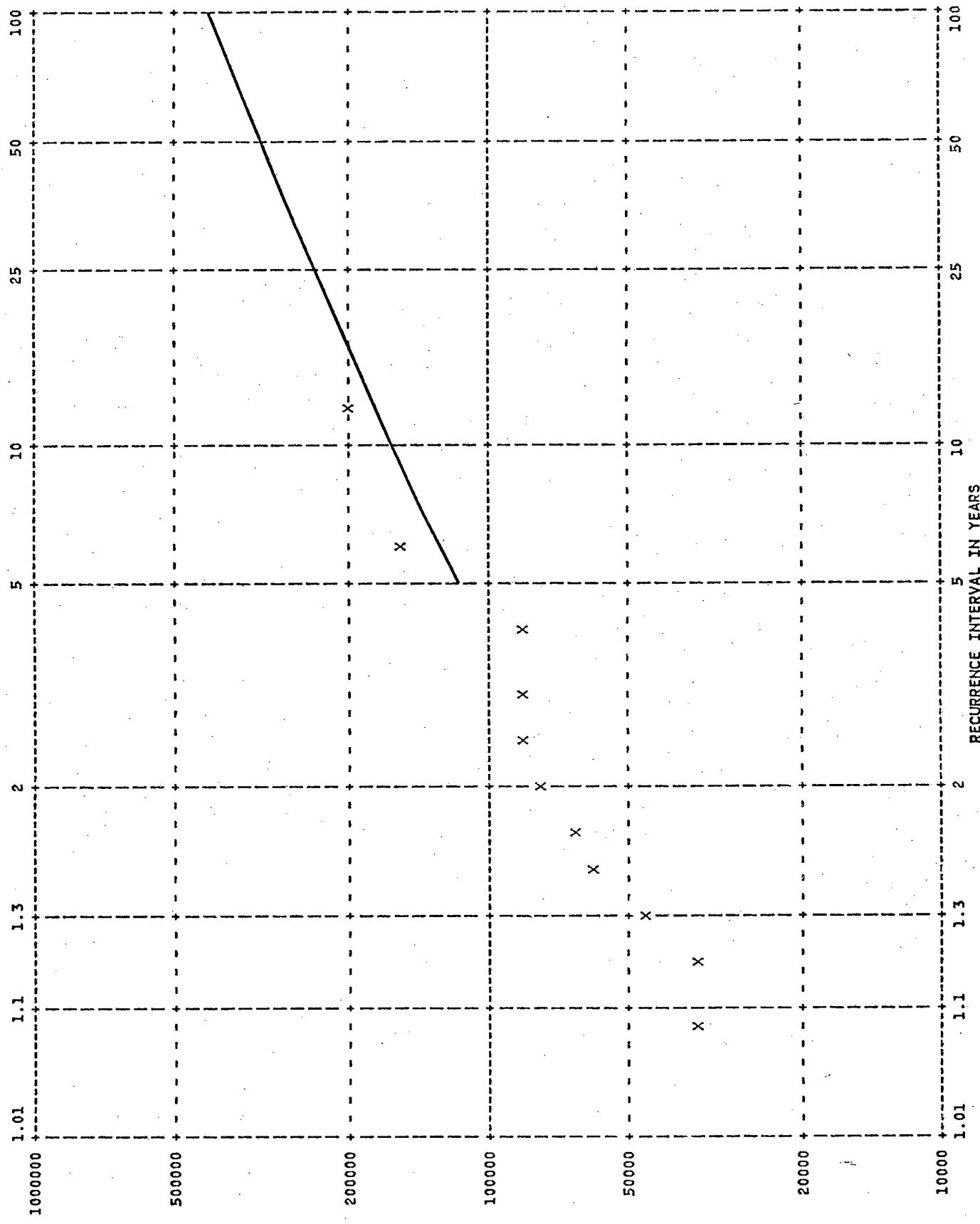
44

STATION NO. 09FC001
OLD CROW RIVER NEAR THE MOUTH

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
6 Jun 1976	20100	1	3.00	59700	1977
4 Jun 1977	59700	2	1.50	20100	1976

MEAN ANNUAL FLOOD: 39900 CFS

DRAINAGE AREA: 5370 SQ MI



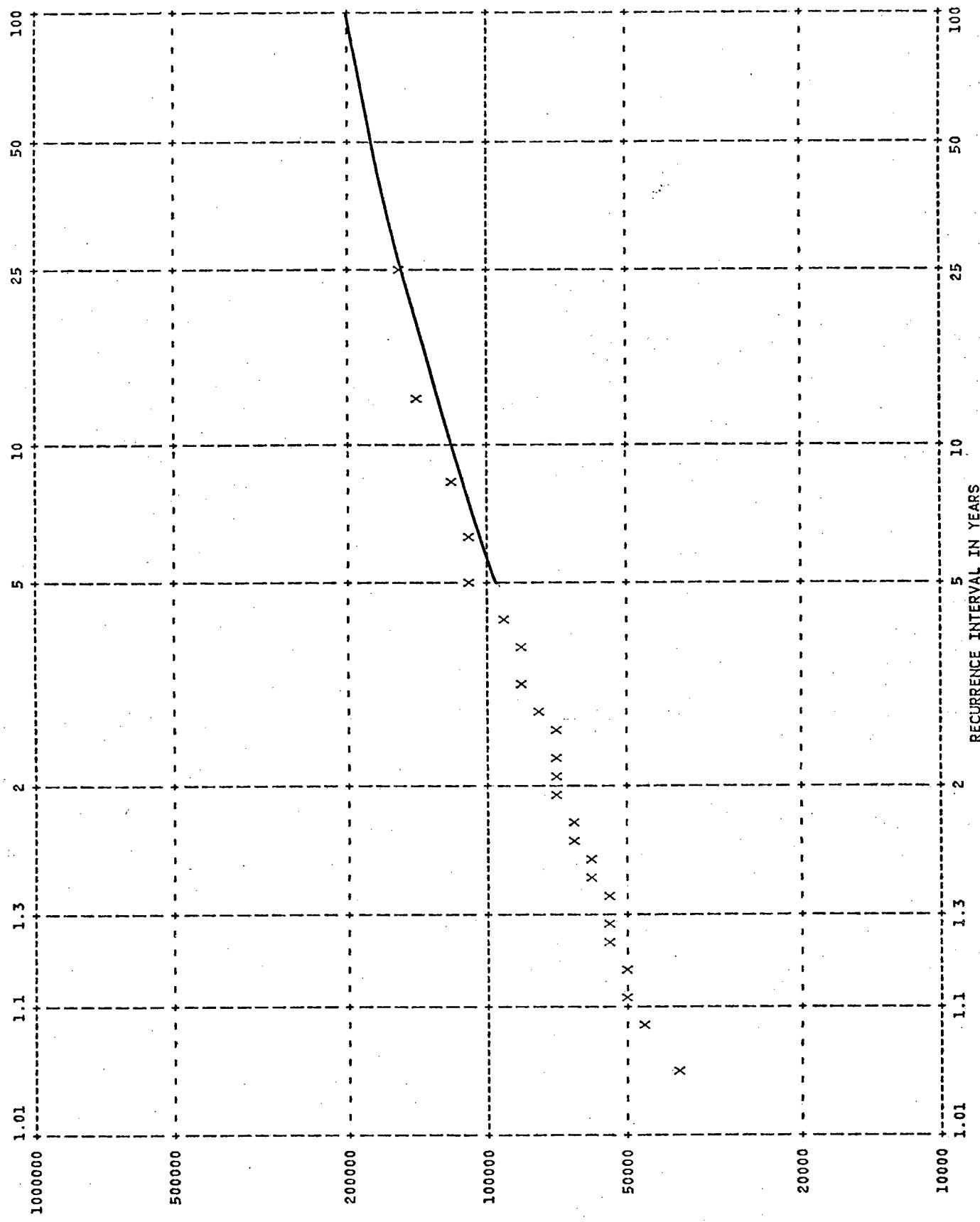
STATION NO. 10MA001
PEEL RIVER ABOVE CANYON CREEK

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
22 May 1963	77300	1	12.0	202000	1964
4 Jun 1964	202000	2	6.0	149000	1971
6 Jul 1965	82400	3	4.00	85400	1972
24 May 1969	45000	4	3.00	83000	1975
27 May 1970	65500	5	2.40	82400	1965
21 May 1971	149000	6	2.00	77300	1963
30 May 1972	85400	7	1.71	65500	1970
30 May 1974	35000	8	1.50	60000	1977
31 May 1975	83000	9	1.33	45000	1969
20 Jun 1976	35800	10	1.20	35800	1976
21 May 1977	60000	11	1.091	35000	1974

MEAN ANNUAL FLOOD: 83700 CFS

DRAINAGE AREA: 9940 SQ MI

STANDARD DEVIATION: 50400 CFS



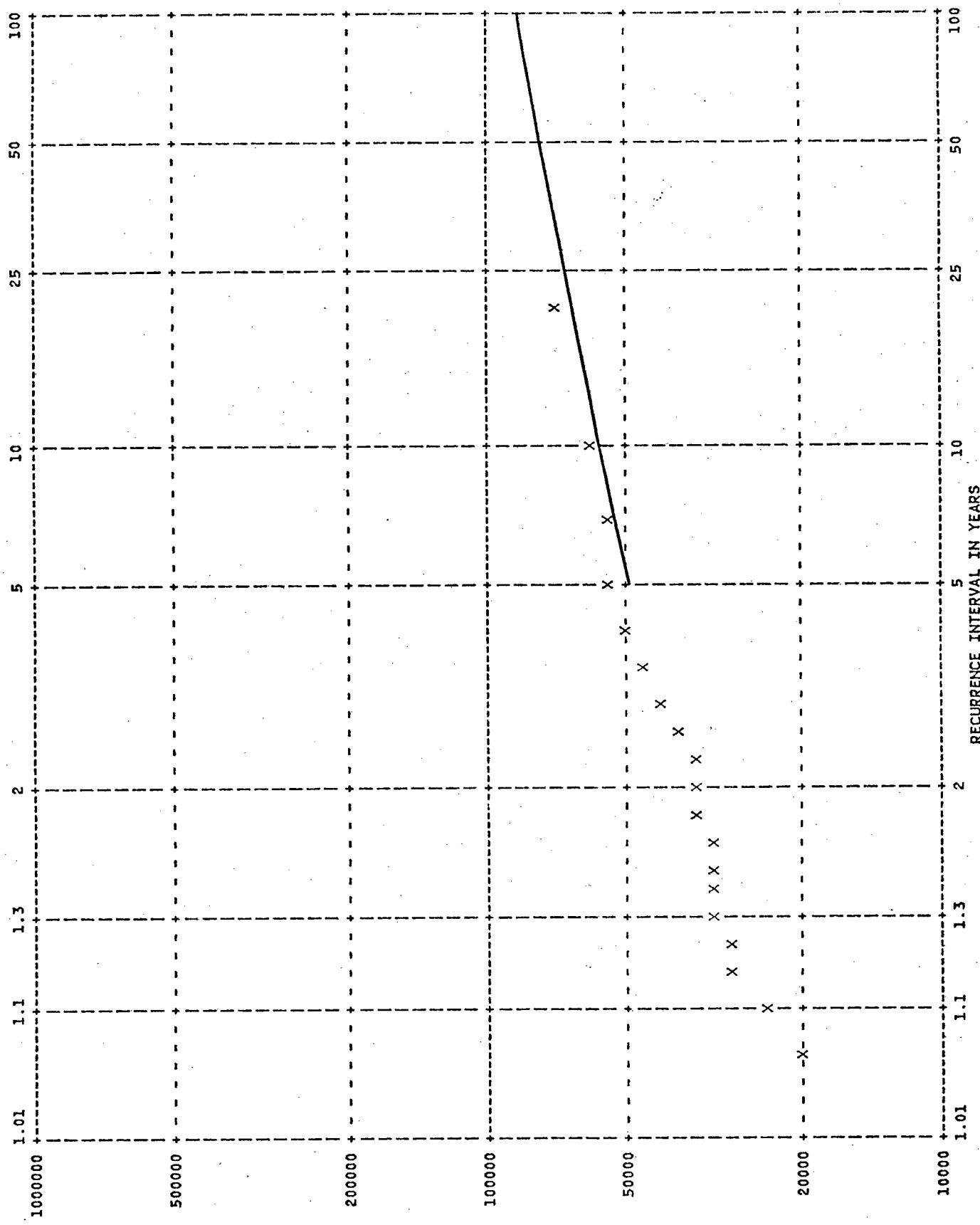
STATION NO. 09BC001
PELLY RIVER AT PELLY CROSSING

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
21 May 1953	38800	1	25.0	152000	1957
30 May 1954	55300	2	12.5	146000	1964
28 Jun 1955	52100	3	8.3	121000	1972
25 May 1956	61400	4	6.3	105000	1962
28 May 1957	152000	5	5.0	105000	1967
27 May 1958	54600	6	4.17	91300	1975
22 Jun 1960	43400	7	3.57	86800	1963
13 Jun 1961	86100	8	3.13	86100	1961
21 Jun 1962	105000	9	2.78	79700	1970
27 May 1963	86800	10	2.50	72000	1971
11 Jun 1964	146000	11	2.27	70000	1977
3 Jun 1965	61700	12	2.08	69400	1968
13 Jun 1966	59000	13	1.92	68200	1973
5 Jun 1967	105000	14	1.79	63100	1974
25 May 1968	69400	15	1.67	61700	1965
13 Jun 1969	48500	16	1.56	61400	1956
10 Jun 1970	79700	17	1.47	59000	1966
15 Jun 1971	72000	18	1.39	55300	1954
4 Jun 1972	121000	19	1.32	54600	1958
20 May 1973	68200	20	1.25	52100	1955
29 May 1974	63100	21	1.190	50000	1976
7 Jun 1975	91300	22	1.136	48500	1969
7 Jun 1976	50000	23	1.087	43400	1960
31 May 1977	70000	24	1.042	38800	1953

MEAN ANNUAL FLOOD: 76700 CFS

DRAINAGE AREA: 18900 SQ MI

STANDARD DEVIATION: 30400 CFS



MAXIMUM DAILY MEAN FLOWS

50

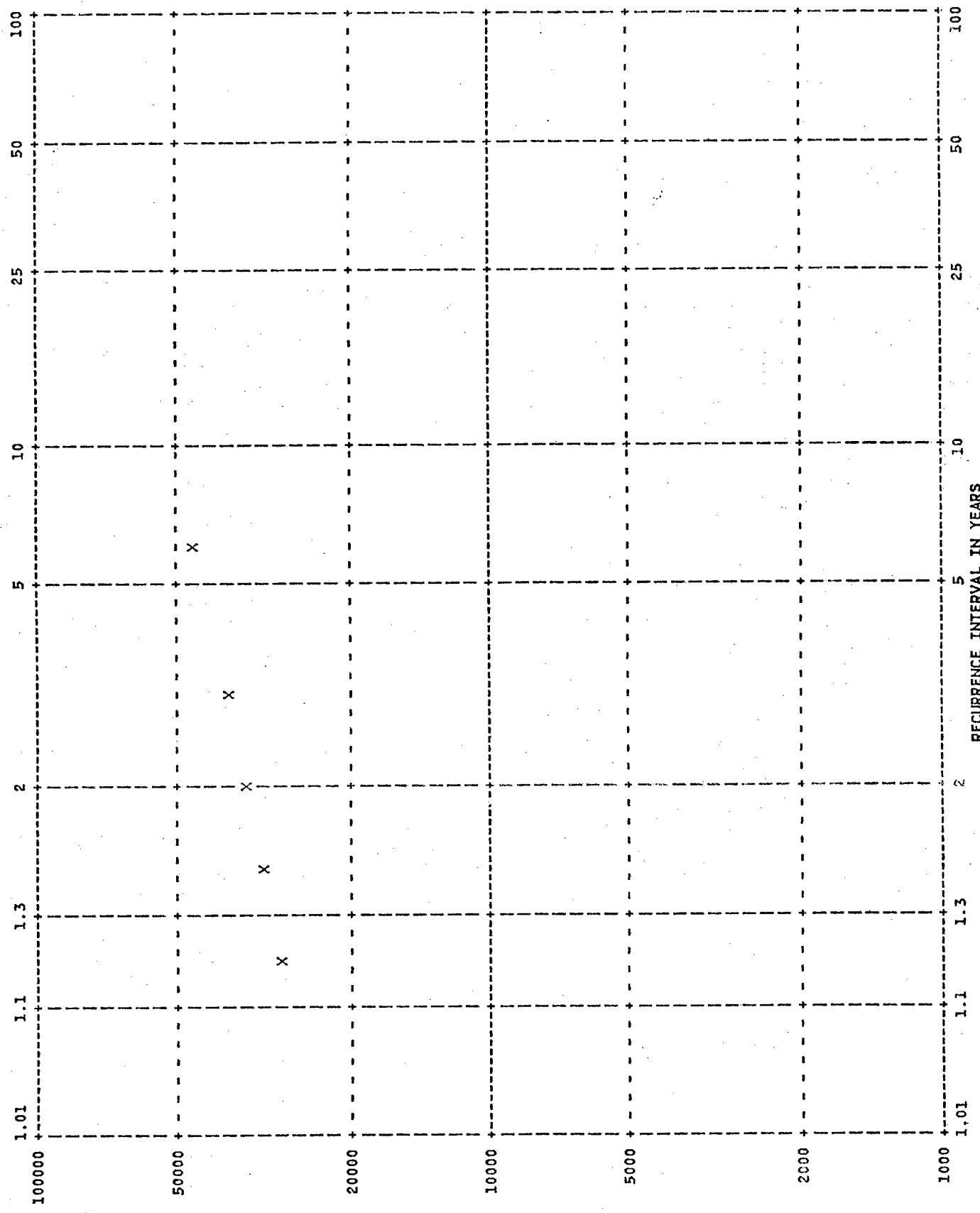
STATION NO. 09BC002
PELLY RIVER AT ROSS RIVER

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
3 Jul 1955	37600	1	20.0	71000	1964
10 Jun 1956	35600	2	10.0	60800	1972
26 May 1957	43200	3	6.7	55800	1962
27 May 1958	20800	4	5.0	52700	1961
21 Jun 1960	24900	5	4.00	50900	1967
11 Jun 1961	52700	6	3.33	43200	1957
18 Jun 1962	55800	7	2.86	42300	1963
25 May 1963	42300	8	2.50	37600	1955
7 Jun 1964	71000	9	2.22	36100	1970
2 Jun 1965	33000	10	2.00	35600	1956
16 Jun 1966	29900	11	1.82	33700	1968
2 Jun 1967	50900	12	1.67	33000	1965
23 May 1968	33700	13	1.54	32800	1974
15 Jul 1969	30700	14	1.43	32100	1971
7 Jun 1970	36100	15	1.33	30700	1969
12 Jun 1971	32100	16	1.25	29900	1966
1 Jun 1972	60800	17	1.176	29900	1973
19 May 1973	29900	18	1.111	24900	1960
27 May 1974	32800	19	1.053	20800	1958

MEAN ANNUAL FLOOD: 39700 CFS

DRAINAGE AREA: 7130 SQ MI

STANDARD DEVIATION: 13100 CFS



MAXIMUM DAILY MEAN FLOWS

52

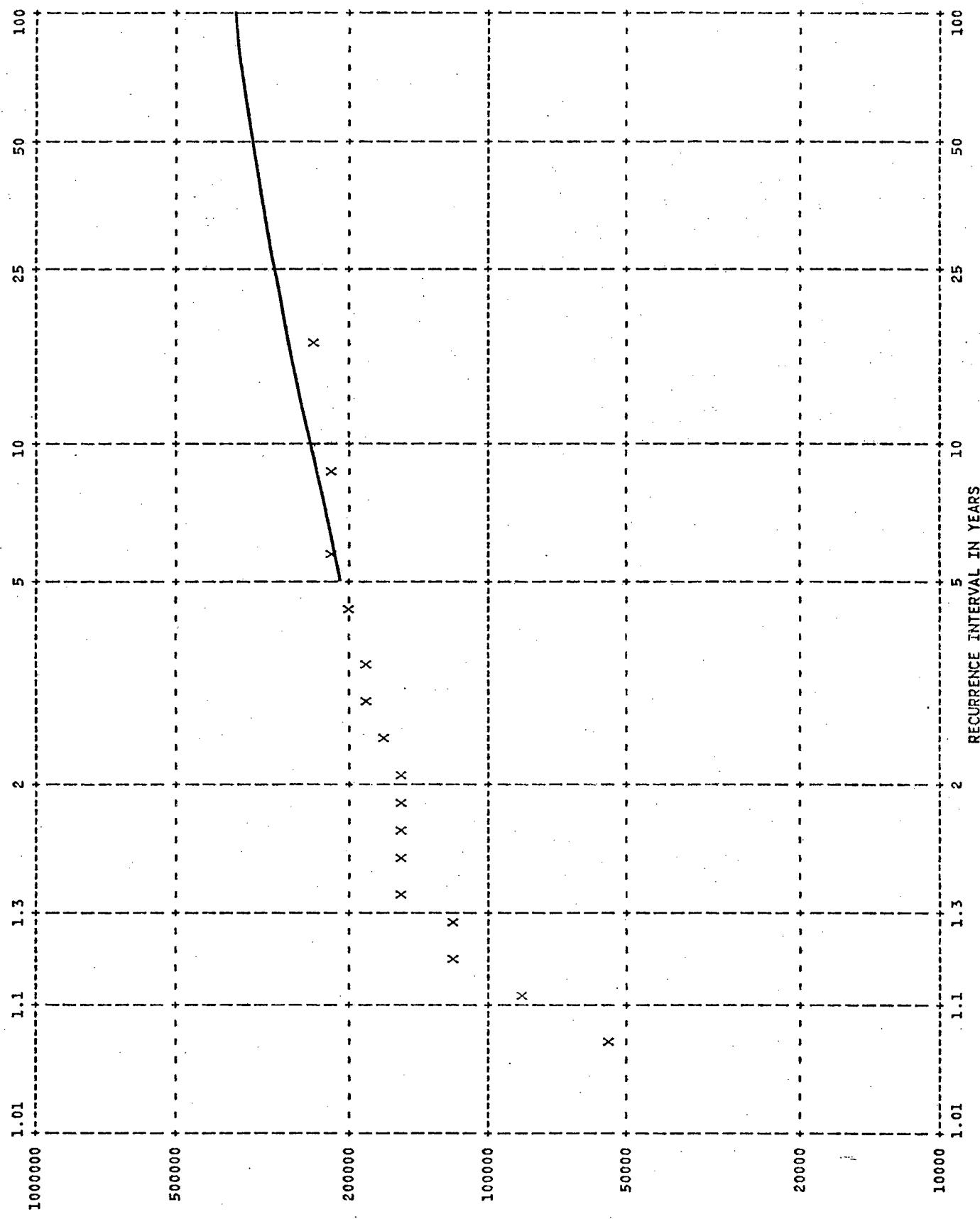
STATION NO. 09BC004
 PELLY RIVER BELOW VANGORDA CREEK

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
13 Jun 1973	31400	1	6.0	46800	1975
28 May 1974	34000	2	3.00	38400	1977
6 Jun 1975	46800	3	2.00	34000	1974
11 Jun 1976	28200	4	1.50	31400	1973
28 May 1977	38400	5	1.20	28200	1976

MEAN ANNUAL FLOOD: 35800 CFS

DRAINAGE AREA: 8540 SQ MI

STANDARD DEVIATION: 7210 CFS



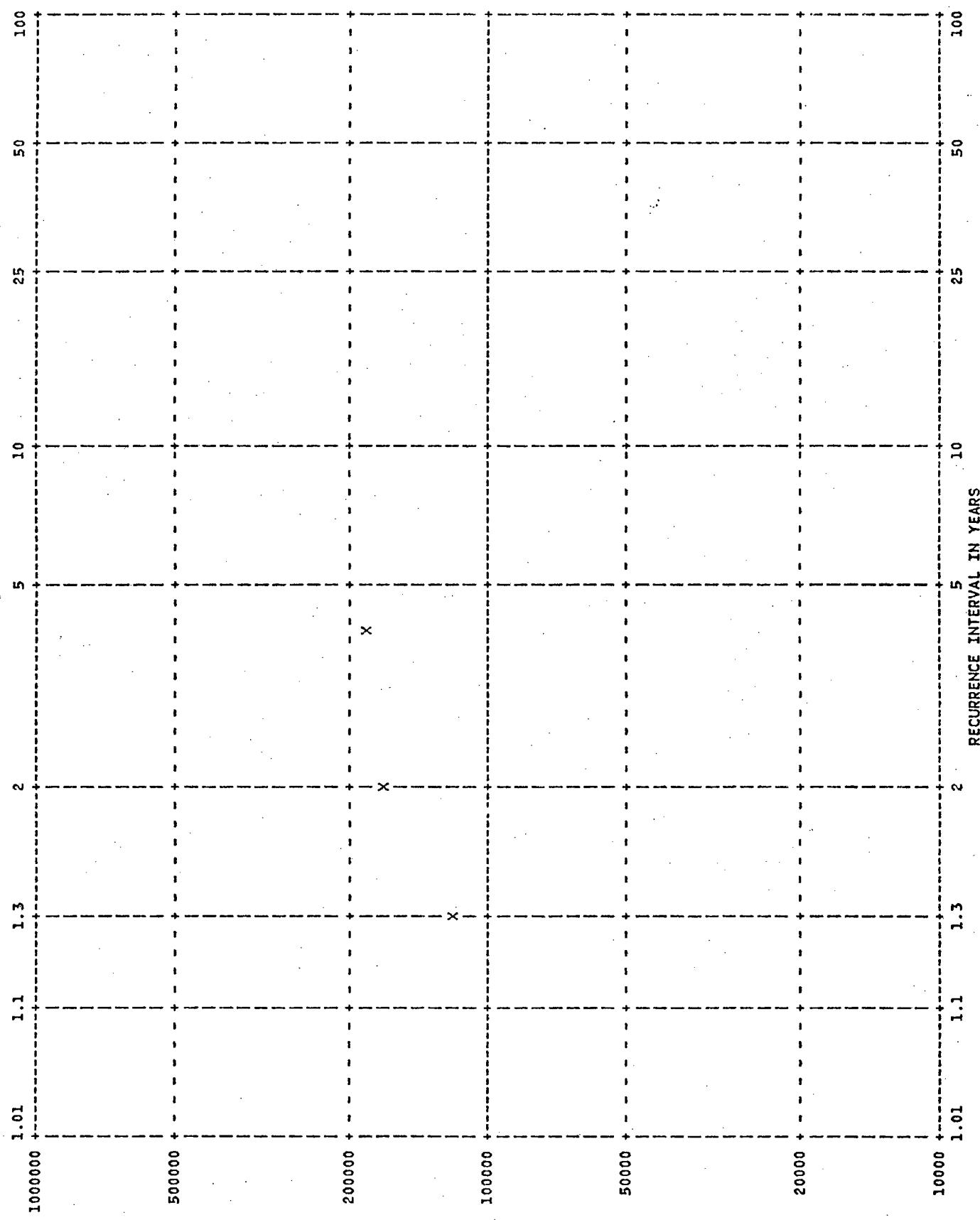
STATION NO. 09FD001
PORCUPINE RIVER AT OLD CROW

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
28 May 1962	168000	1	17.0	237000	1964
18 May 1963	194000	2	8.5	218000	1971
4 Jun 1964	237000	3	5.7	217000	1977
25 May 1965	178000	4	4.25	201000	1973
17 May 1966	159000	5	3.40	194000	1963
5 Jun 1967	158000	6	2.83	178000	1965
2 Jun 1968	158000	7	2.43	168000	1962
7 Aug 1969	55800	8	2.13	159000	1966
28 May 1970	85000	9	1.89	158000	1967
22 May 1971	218000	10	1.70	158000	1968
1 Jun 1972	121000	11	1.55	157000	1976
23 May 1973	201000	12	1.42	156000	1975
25 May 1974	120000	13	1.31	121000	1972
29 May 1975	156000	14	1.21	120000	1974
11 May 1976	157000	15	1.133	85000	1970
20 May 1977	217000	16	1.063	55800	1969

MEAN ANNUAL FLOOD: 161000 CFS

DRAINAGE AREA: 21400 SQ MI

STANDARD DEVIATION: 48600 CFS



MAXIMUM DAILY MEAN FLOWS

56

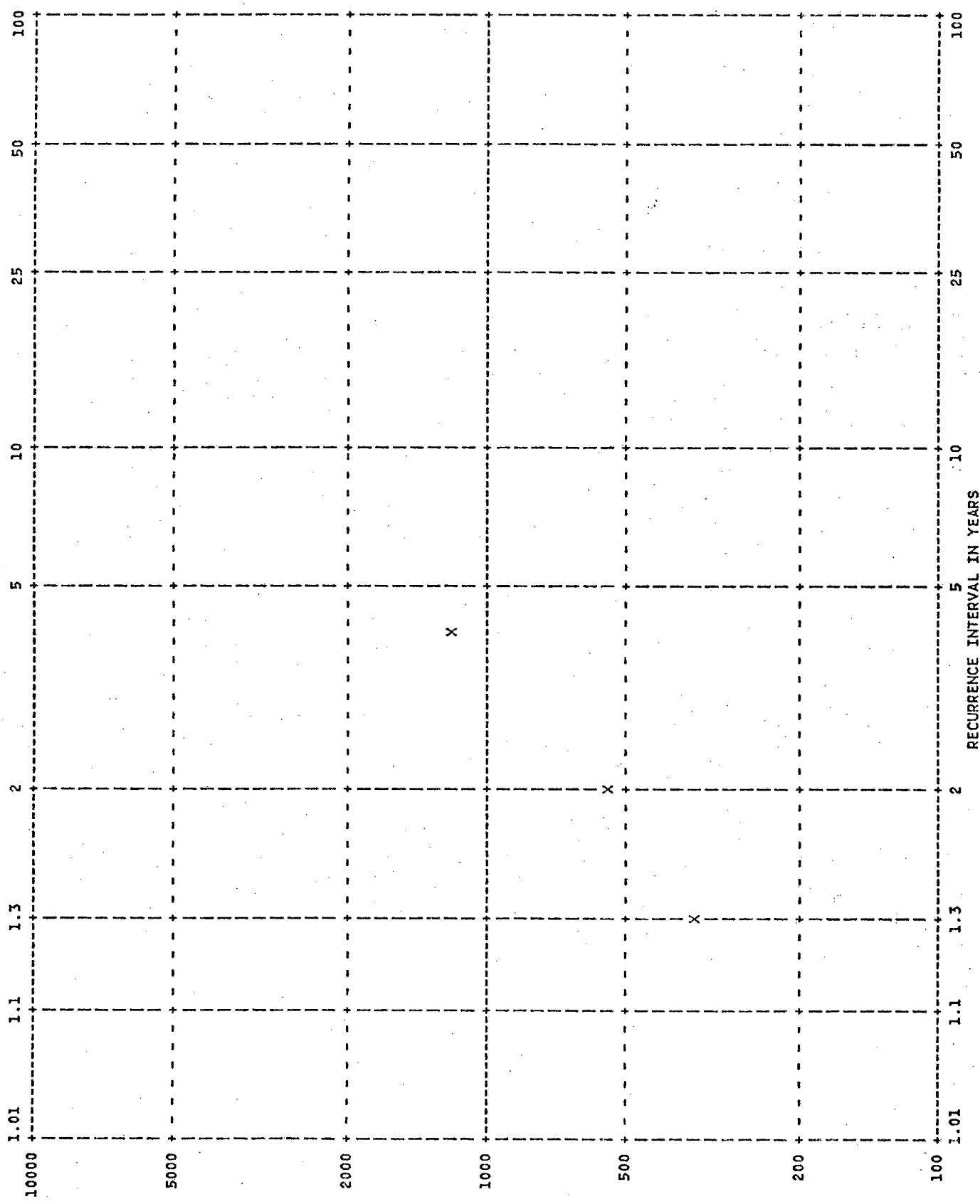
STATION NO. 09FB001
 PORCUPINE RIVER BELOW BELL RIVER

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
6 Jun 1964	174000	1	4.00	180000	1977
28 May 1975	124000	2	2.00	174000	1964
19 May 1977	180000	3	1.33	124000	1975

MEAN ANNUAL FLOOD: 159000 CFS

DRAINAGE AREA: 13900 SQ MI

REMARKS: Miscellaneous measurement 6 June 1964



MAXIMUM DAILY MEAN FLOWS

58

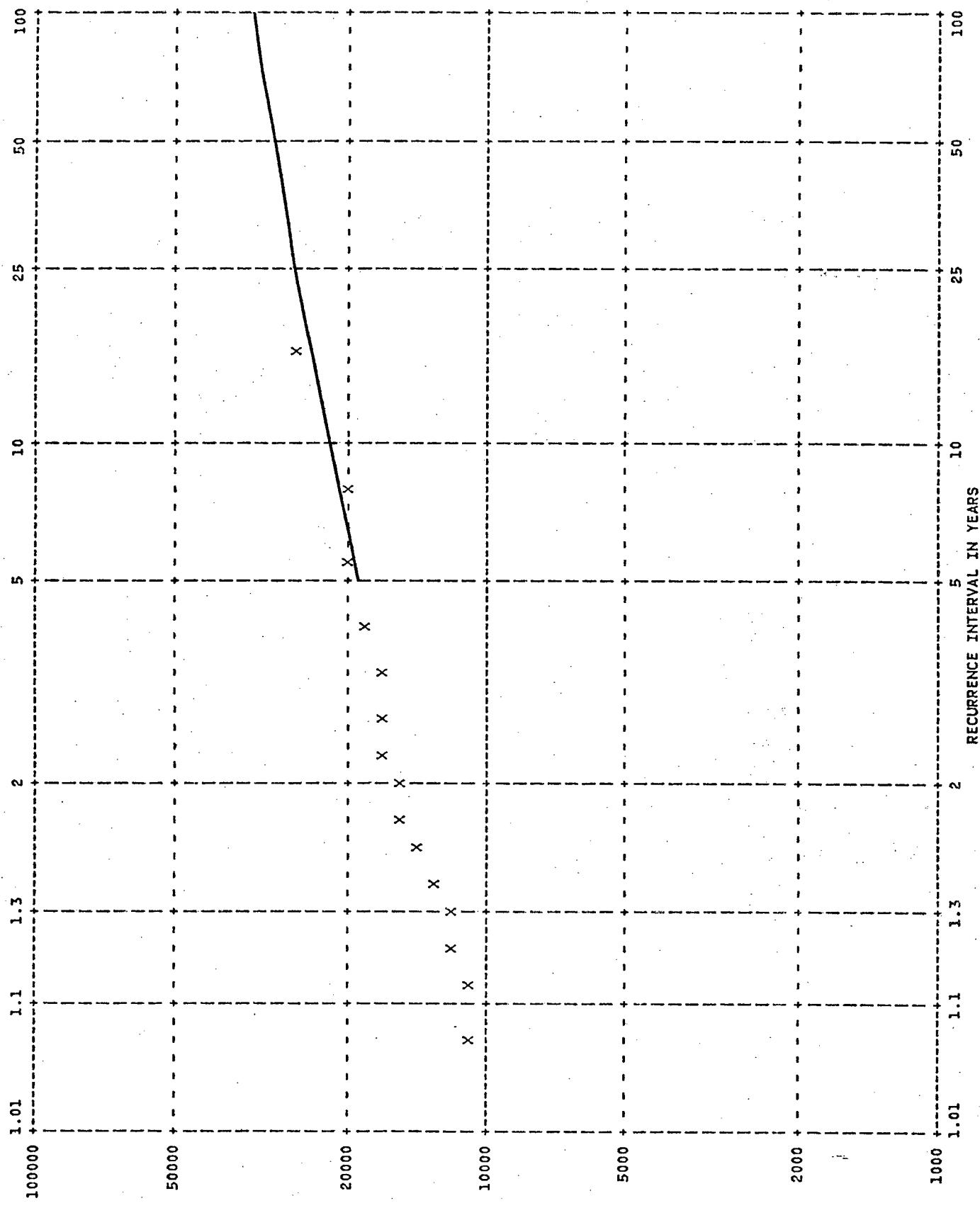
STATION NO. 09BC003
 ROSE CREEK BELOW FARO CREEK

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
31 May 1967	1150	1	4.00	1150	1967
6 Jul 1968	548	2	2.00	548	1968
10 Jun 1969	354	3	1.33	354	1969

MEAN ANNUAL FLOOD: 684 CFS

DRAINAGE AREA: 80.5 SQ MI

REMARKS: Flow regulated and diverted since 1968



MAXIMUM DAILY MEAN FLOWS

60

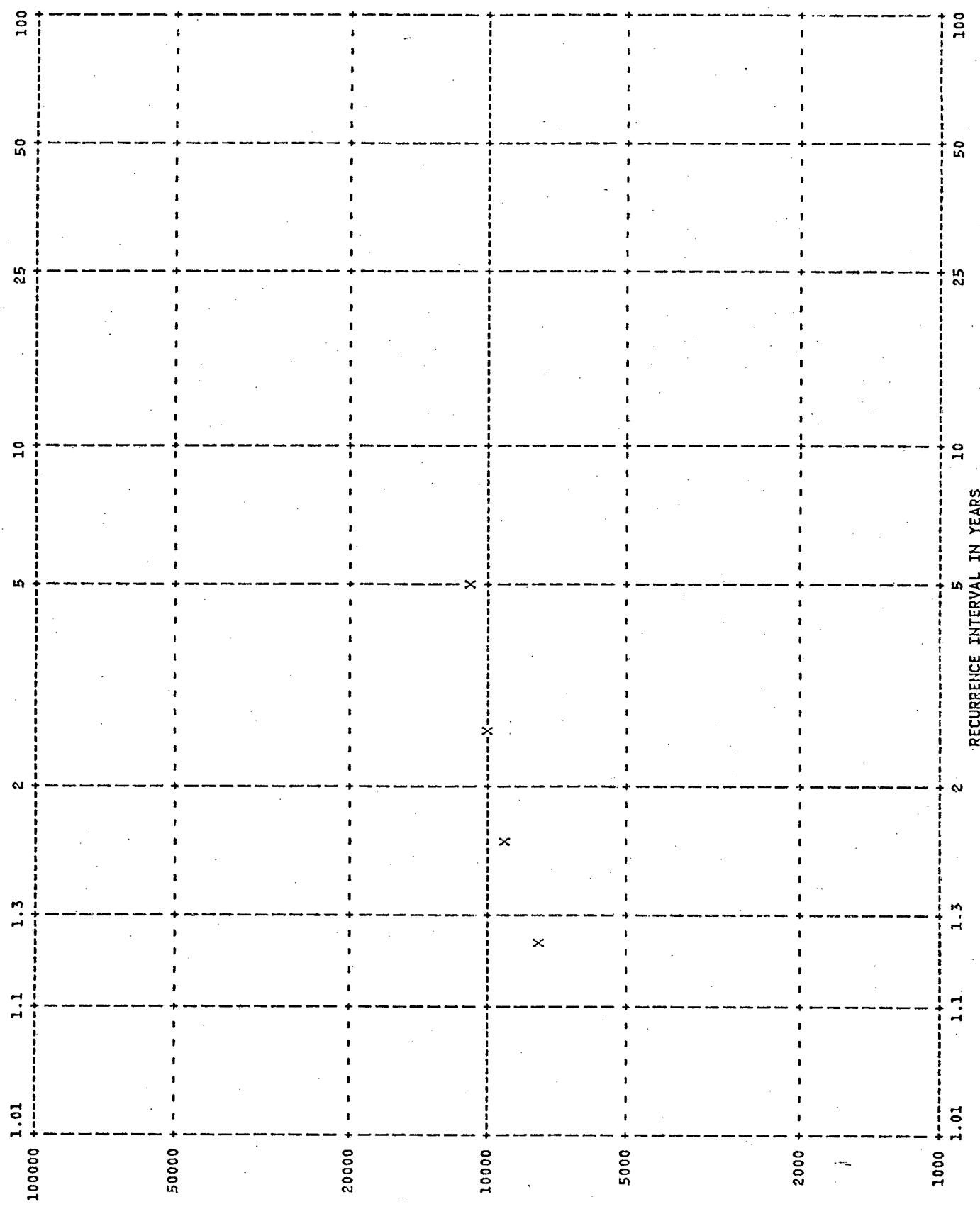
STATION NO. 09BAC01
ROSS RIVER AT ROSS RIVER

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
18 Jun 1962	20800	1	16.0	26200	1972
25 May 1963	17200	2	8.0	20800	1962
3 Jun 1965	12100	3	5.3	19900	1975
16 Jun 1966	11300	4	4.00	18000	1967
5 Jun 1967	18000	5	3.20	17600	1970
23 May 1968	15600	6	2.67	17200	1963
15 Jul 1969	11600	7	2.29	16300	1977
7 Jun 1970	17600	8	2.00	15600	1968
13 Jun 1971	13700	9	1.78	15200	1974
1 Jun 1972	26200	10	1.60	13700	1971
18 May 1973	13200	11	1.45	13200	1973
5 Jun 1974	15200	12	1.33	12100	1965
5 Jun 1975	19900	13	1.23	11600	1969
25 May 1976	10500	14	1.143	11300	1966
28 May 1977	16300	15	1.067	10500	1976

MEAN ANNUAL FLOOD: 15900 CFS

DRAINAGE AREA: 2790 SQ MI

STANDARD DEVIATION: 4240 CFS



MAXIMUM DAILY MEAN FLOWS

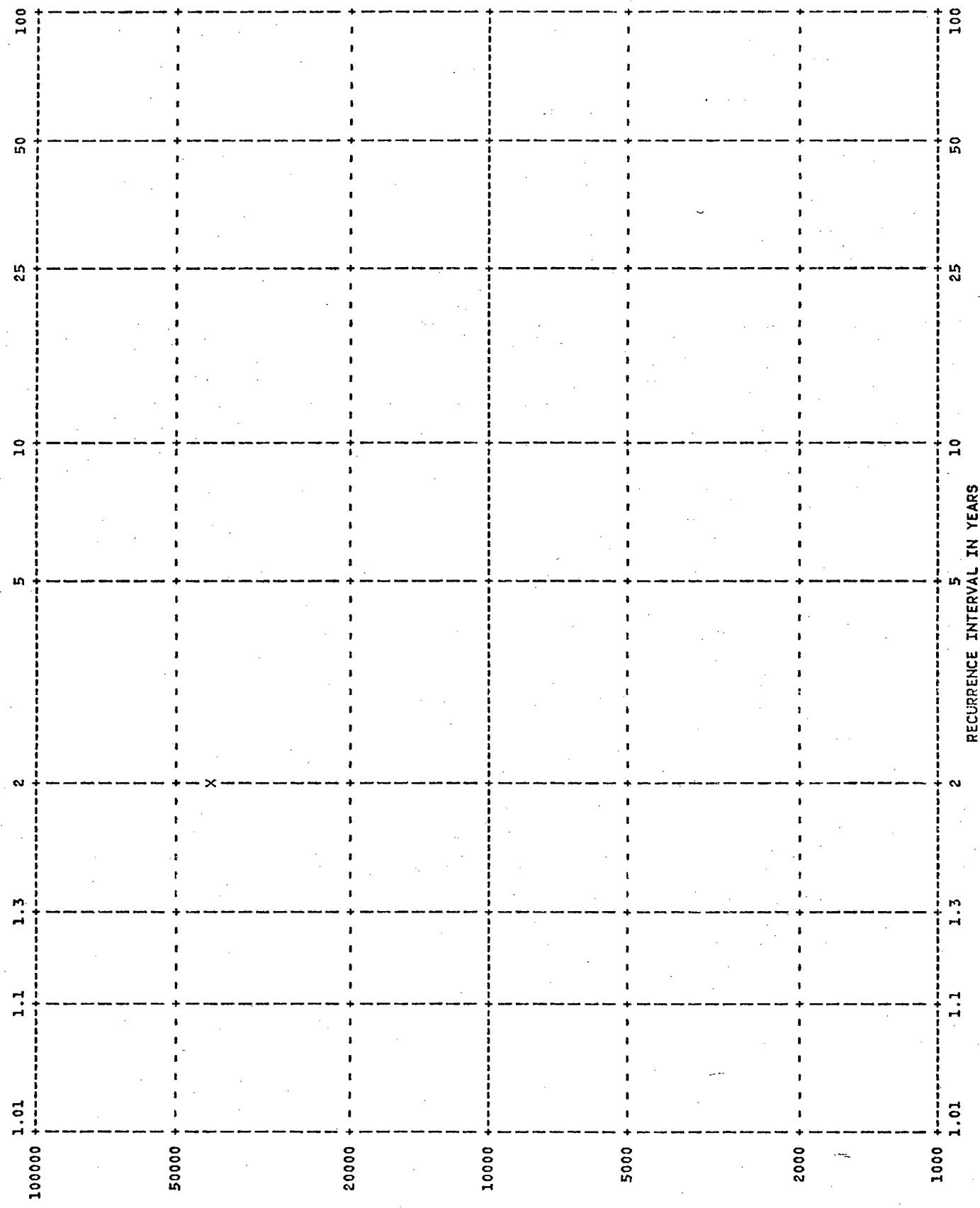
62

STATION NO. 10MB001
SNAKE RIVER ABOVE IRON CREEK

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
7 Jun 1964	11400	1	5.0	11400	1964
10 Jun 1965	7780	2	2.50	10400	1966
13 Jun 1966	10400	3	1.67	9560	1967
15 Aug 1967	9560	4	1.25	7780	1965

MEAN ANNUAL FLOOD: 9790 CFS

DRAINAGE AREA: 1070 SQ MI



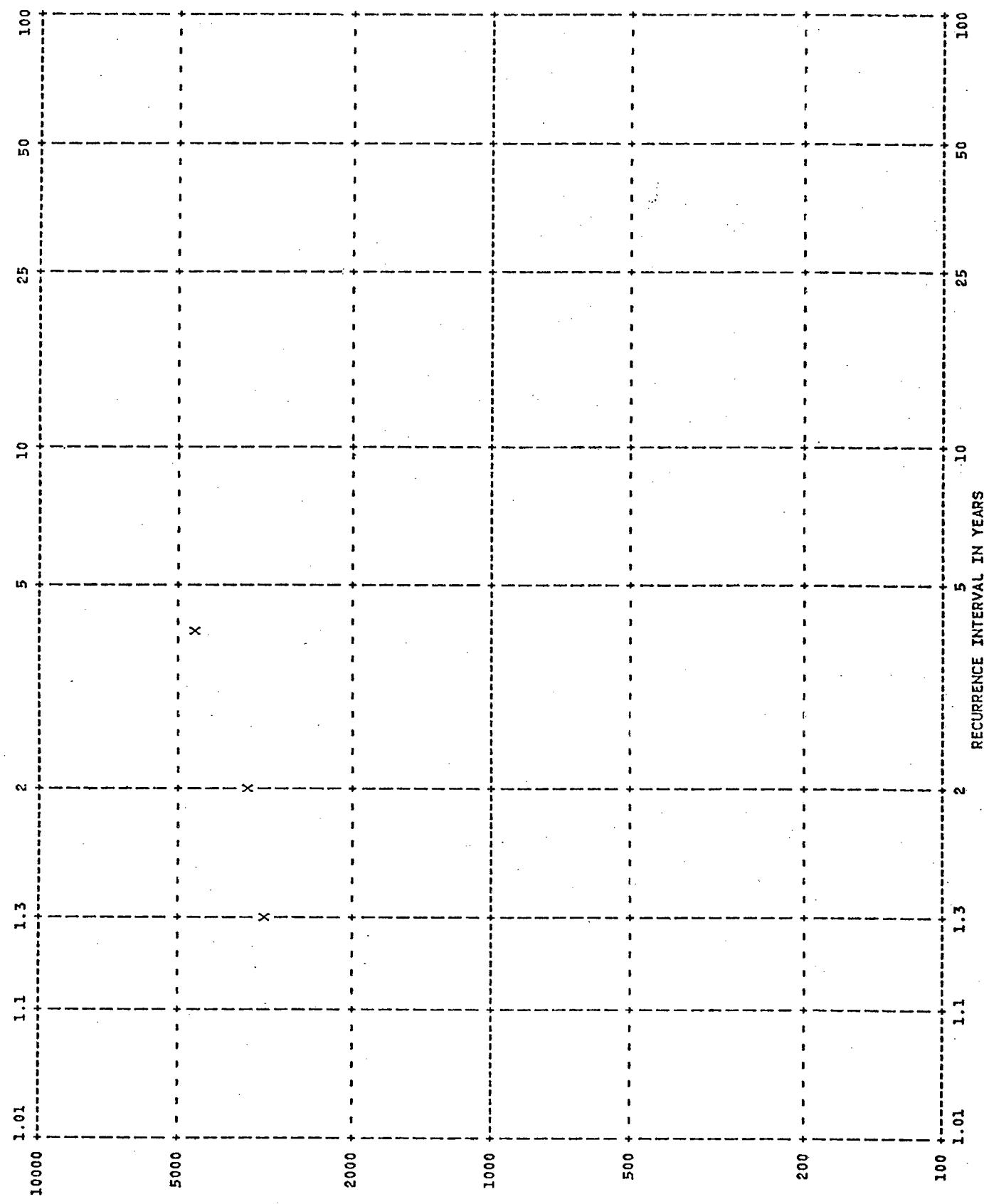
MAXIMUM DAILY MEAN FLOWS

64

STATION NO. 10MB003
SNAKE RIVER NEAR THE MOUTH

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
19 May 1977	40600	1	2.00	40600	1977

DRAINAGE AREA: 3440 SQ MI



MAXIMUM DAILY MEAN FLOWS

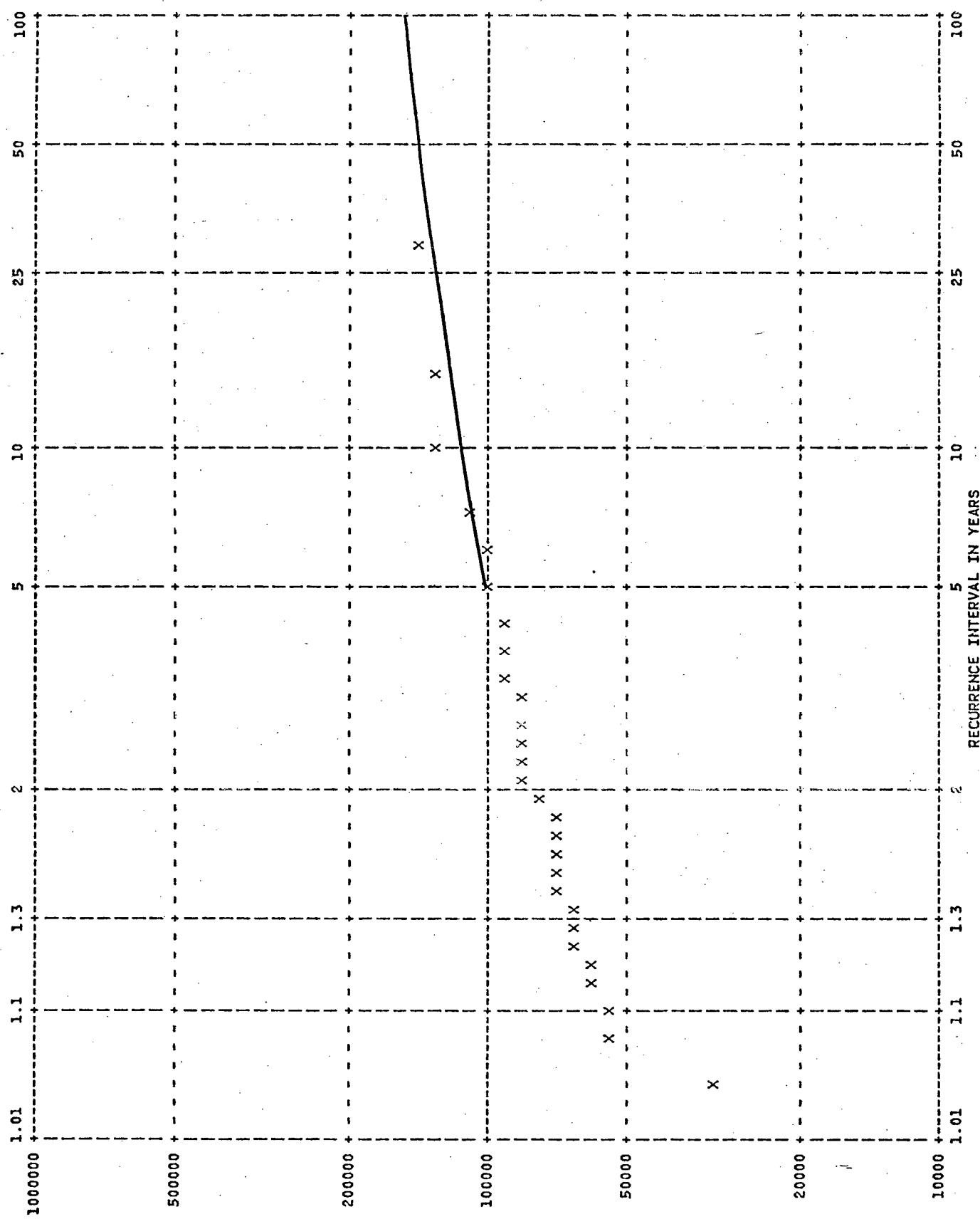
66

STATION NO. 09BB001
SOUTH MACMILLAN RIVER AT MILE 249 CANOL ROAD

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
4 Jun 1975	4590	1	4.00	4590	1975
12 Jul 1976	3290	2	2.00	3610	1977
31 May 1977	3610	3	1.33	3290	1976

MEAN ANNUAL FLOOD: 3830 CFS

DRAINAGE AREA: 385 SQ MI



MAXIMUM DAILY MEAN FLOWS

68

STATION NO. 09DC002
STEWART RIVER AT MAYO

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
25 Jun 1949	87000	1	29.0	145000	1964
23 Jun 1950	53400	2	14.5	130000	1957
3 Jul 1951	32200	3	9.7	130000	1961
28 May 1953	70700	4	7.3	110000	1975
30 May 1954	68200	5	5.8	101000	1972
2 Jul 1955	94600	6	4.83	96400	1962
23 Jun 1956	68800	7	4.14	95000	1970
26 May 1957	130000	8	3.63	94600	1955
9 Jun 1958	63800	9	3.22	93000	1959
24 May 1959	93000	10	2.90	87000	1949
30 Jul 1960	81600	11	2.64	86500	1971
11 Jun 1961	130000	12	2.42	85300	1967
26 Jun 1962	96400	13	2.23	82600	1977
25 May 1963	78500	14	2.07	81600	1960
10 Jun 1964	145000	15	1.93	78500	1963
3 Jun 1965	60000	16	1.81	71200	1966
17 Jun 1966	71200	17	1.71	70700	1953
4 Jun 1967	65300	18	1.61	68300	1956
14 Jun 1968	67800	19	1.53	68200	1954
13 Jun 1969	64800	20	1.45	67800	1968
7 Jun 1970	95000	21	1.38	66100	1973
14 Jun 1971	86500	22	1.32	64800	1969
2 Jun 1972	101000	23	1.26	63800	1958
12 Jun 1973	66100	24	1.21	60000	1965
26 May 1974	52900	25	1.160	57700	1976
7 Jun 1975	110000	26	1.115	53400	1950
6 May 1976	57700	27	1.074	52900	1974
2 Jun 1977	82600	28	1.036	32200	1951

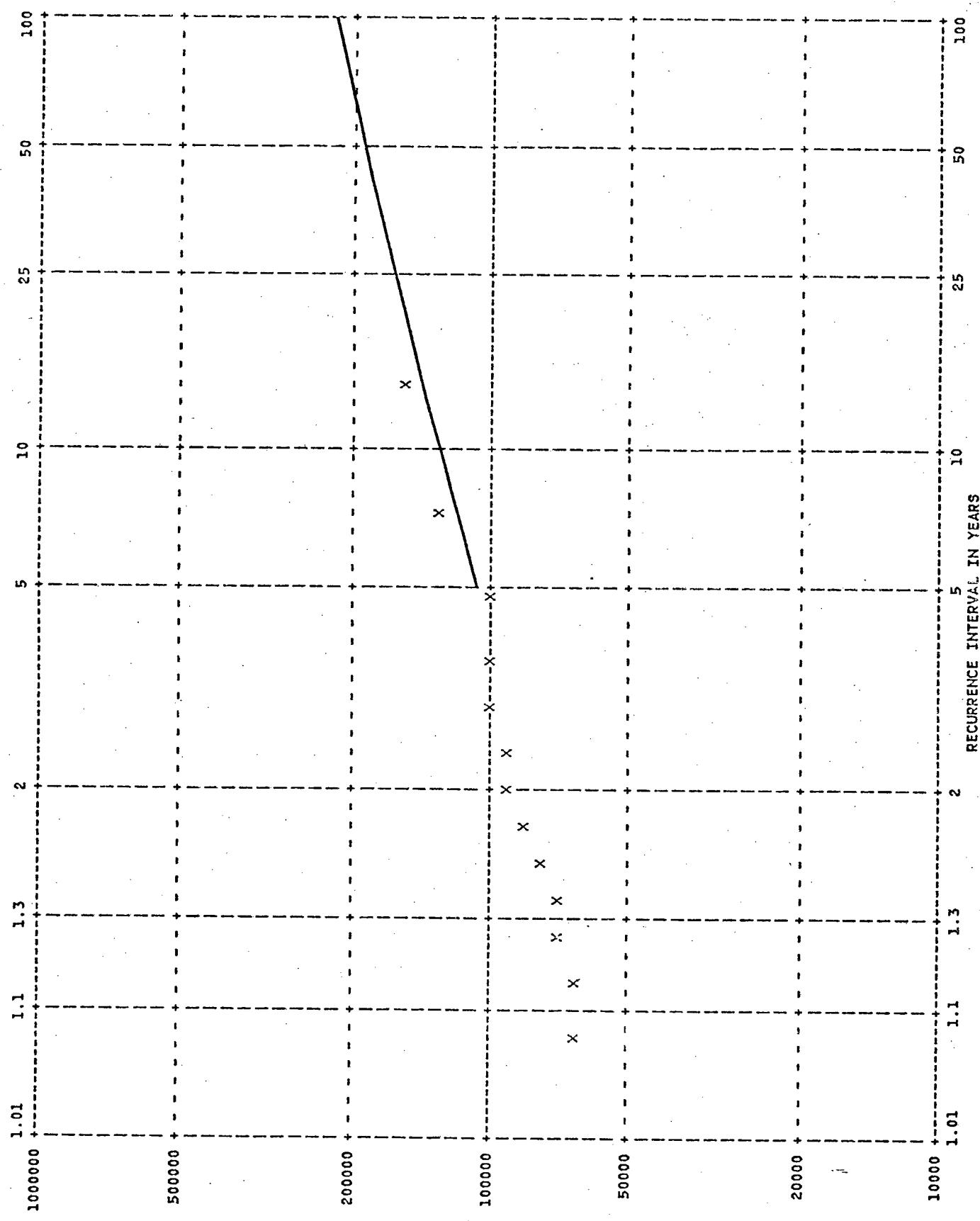
MEAN ANNUAL FLCOD: 81900 CFS

DRAINAGE AREA: 12200 SQ MI

STANDARD DEVIATION: 25400 CFS

STEWART RIVER AT STEWART CROSSING - STATION NO. 0900002

69



STATION NO. 0900002
STEWART RIVER AT STEWART CROSSING

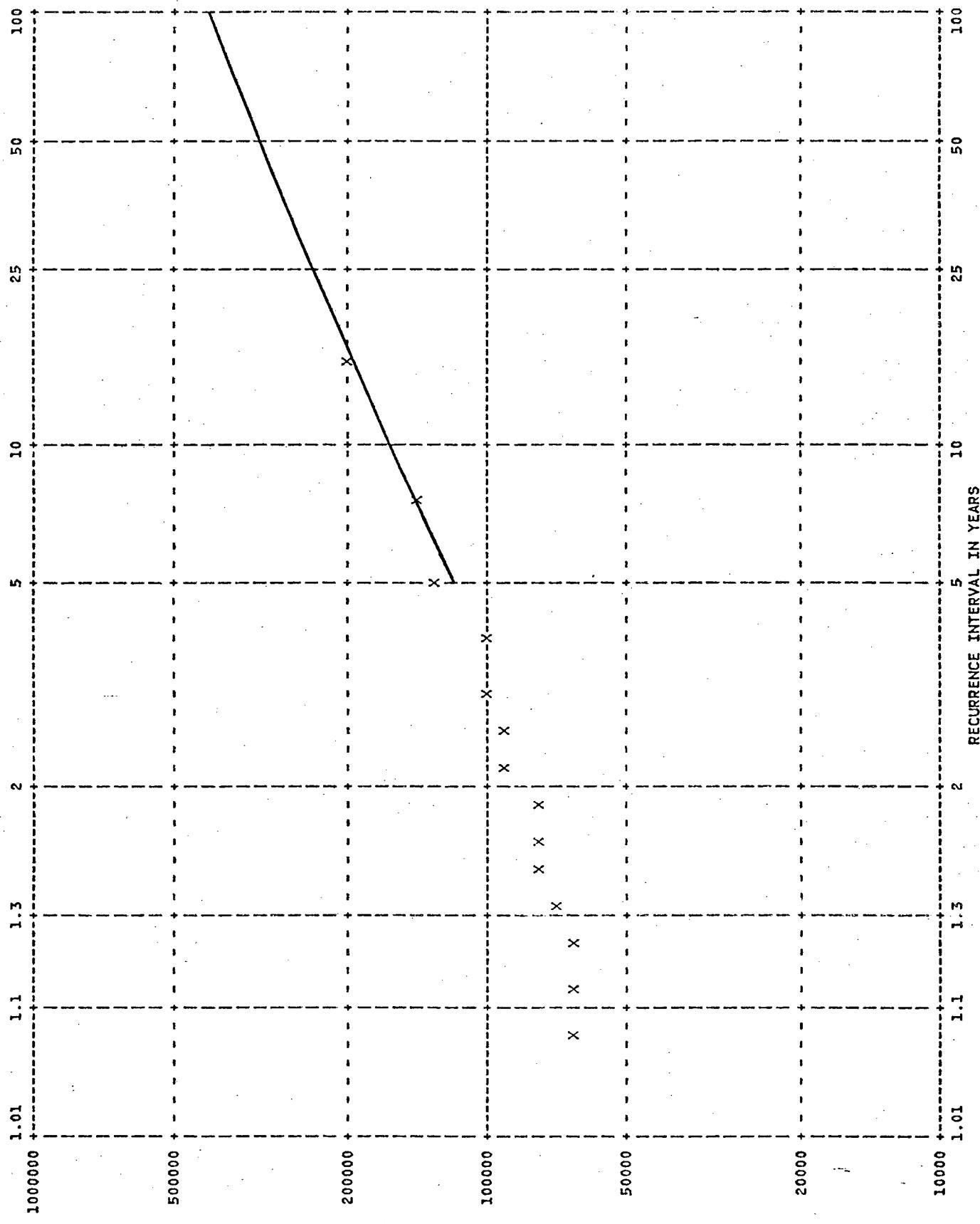
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
12 Jun 1961	133000	1	14.0	152000	1964
26 Jun 1962	100000	2	7.0	133000	1961
25 May 1963	83700	3	4.67	103000	1972
11 Jun 1964	152000	4	3.50	100000	1962
3 Jun 1965	61700	5	2.80	93400	1970
17 Jun 1966	78000	6	2.33	91300	1967
4 Jun 1967	91300	7	2.00	91200	1971
15 Jun 1968	67800	8	1.75	83700	1963
13 Jun 1969	66100	9	1.56	78000	1966
8 Jun 1970	98400	10	1.40	70500	1973
15 Jun 1971	91200	11	1.27	67800	1968
2 Jun 1972	103000	12	1.167	66100	1969
12 Jun 1973	70500	13	1.077	61700	1965

MEAN ANNUAL FLOOD: 92100 CFS

DRAINAGE AREA: 13500 SQ MI

STANDARD DEVIATION: 26500 CFS

REMARKS: Storage since 1951 (Mayo Lake Dam and Power Plant)



MAXIMUM DAILY MEAN FLOWS

72

STATION NO. 09DD003
STEWART RIVER AT THE MOUTH

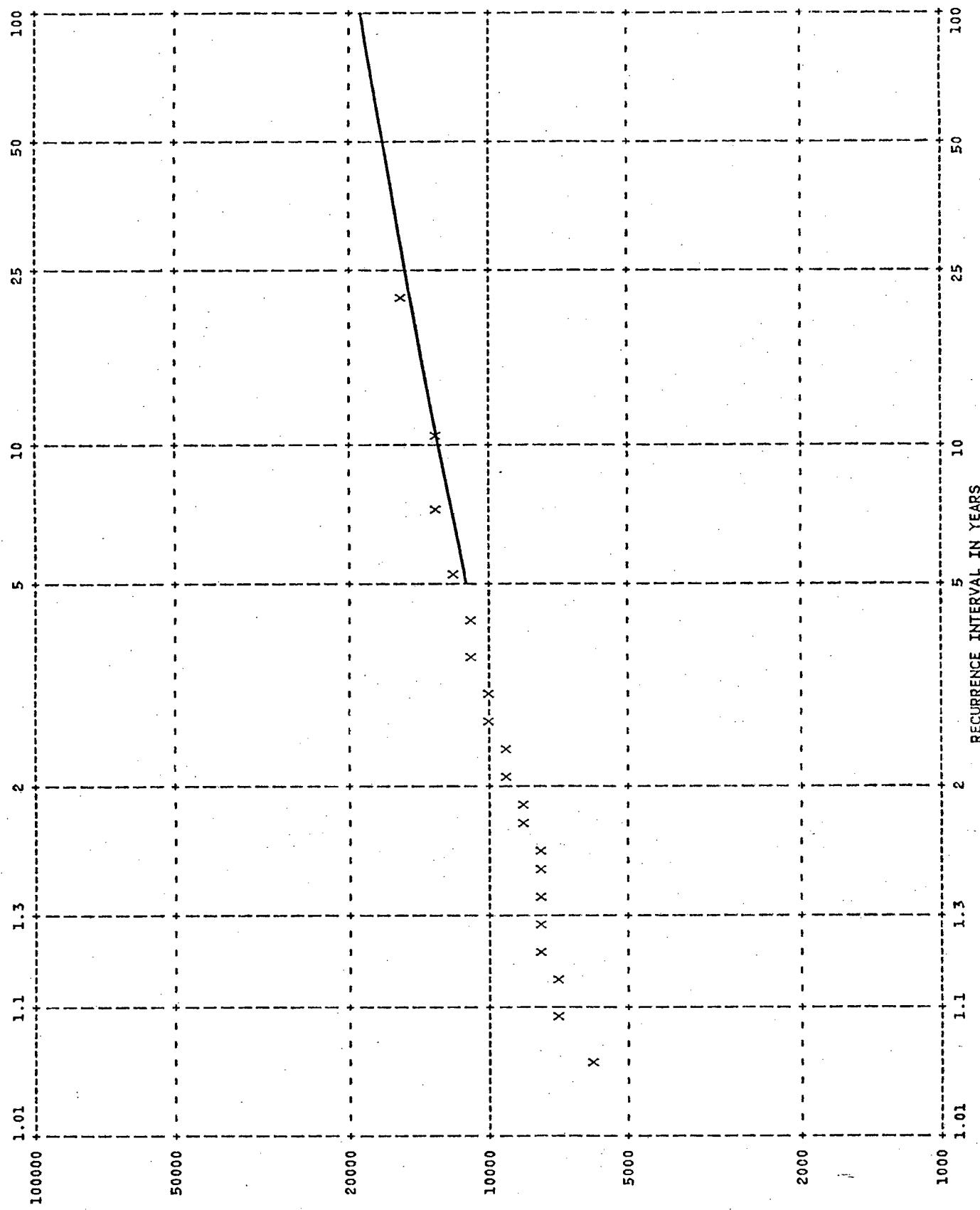
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
12 Jun 1964	198000	1	15.0	198000	1964
3 Jun 1965	68300	2	7.5	140000	1975
18 Jun 1966	79000	3	5.0	126000	1972
4 Jun 1967	100000	4	3.75	104000	1970
29 May 1968	78000	5	3.00	100000	1967
14 Jun 1969	66200	6	2.50	95400	1971
9 Jun 1970	104000	7	2.14	90800	1977
16 Jun 1971	95400	8	1.88	79000	1966
3 Jun 1972	126000	9	1.67	78100	1973
20 May 1973	78100	10	1.50	78000	1968
27 May 1974	62900	11	1.36	68300	1965
8 Jun 1975	140000	12	1.25	66200	1969
7 May 1976	62000	13	1.154	62900	1974
4 Jun 1977	90800	14	1.071	62000	1976

MEAN ANNUAL FLOOD: 96300 CFS

DRAINAGE AREA: 19700 SQ MI

STANDARD DEVIATION: 37400 CFS

REMARKS: Storage since 1951 (Mayo Lake Dam and Power Plant)



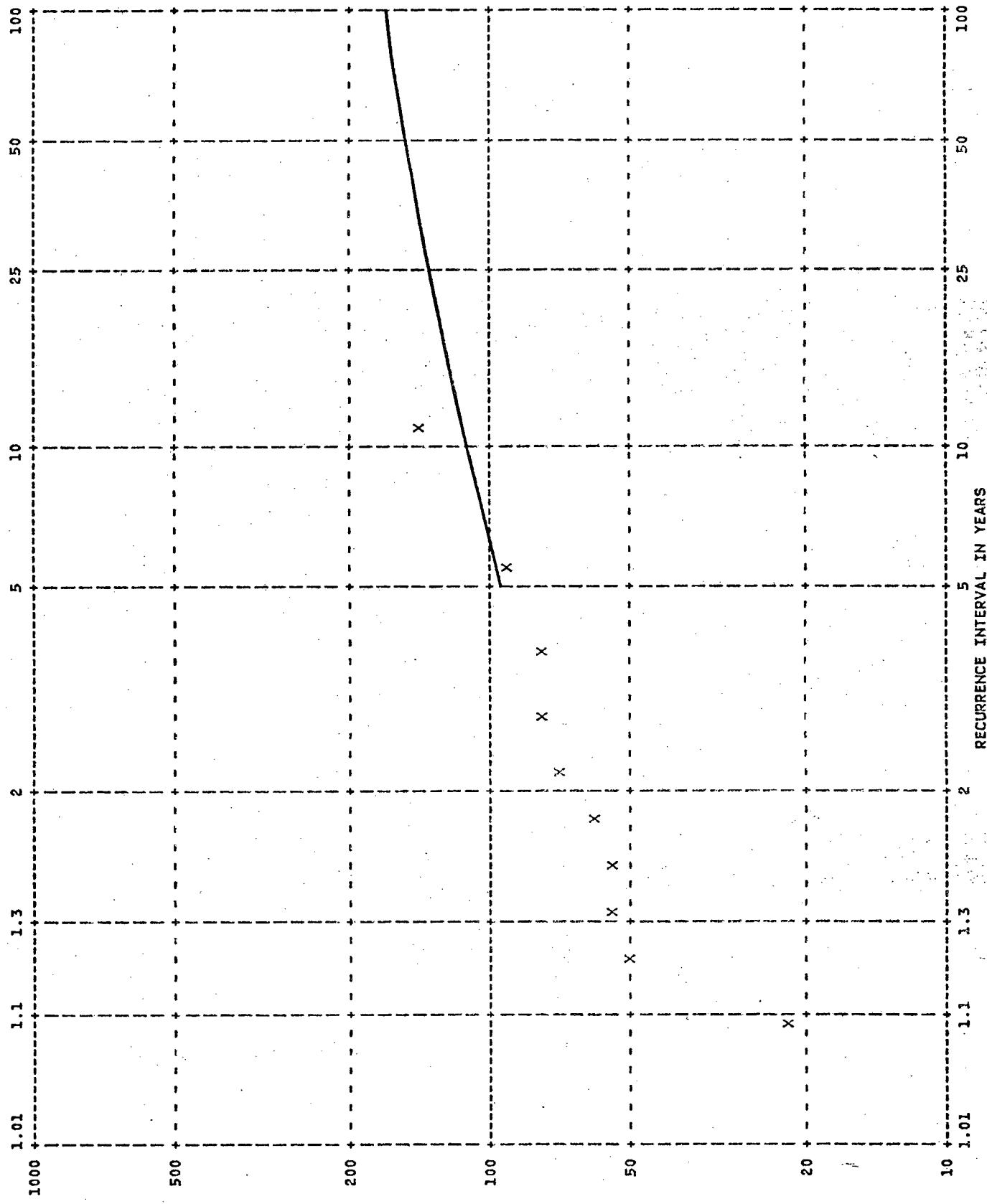
STATION NO. 09AE003
SWIFT RIVER NEAR SWIFT RIVER

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
1 Jun 1958	6140	1	21.0	15200	1964
23 Jun 1959	7550	2	10.5	13500	1972
21 Jun 1960	6850	3	7.0	13000	1962
9 Jun 1961	12000	4	5.3	12000	1961
17 Jun 1962	13000	5	4.20	10800	1967
24 Jun 1963	7920	6	3.50	10500	1976
11 Jun 1964	15200	7	3.00	10200	1973
2 Jun 1965	7360	8	2.63	9830	1970
12 Jun 1966	8750	9	2.33	9520	1971
7 Jun 1967	10800	10	2.10	9050	1977
13 Jun 1968	7300	11	1.91	8750	1966
26 May 1969	8180	12	1.75	8180	1969
1 Oct 1970	9830	13	1.62	7920	1963
21 Jun 1971	9520	14	1.50	7850	1975
1 Jun 1972	13500	15	1.40	7550	1959
16 Jun 1973	10200	16	1.31	7520	1974
24 Jun 1974	7520	17	1.24	7360	1965
1 Jul 1975	7850	18	1.167	7300	1968
2 Jul 1976	10500	19	1.105	6850	1960
15 Jun 1977	9050	20	1.050	6140	1958

MEAN ANNUAL FLOOD: 9450 CFS

DRAINAGE AREA: 1280 SQ MI

STANDARD DEVIATION: 2440 CFS



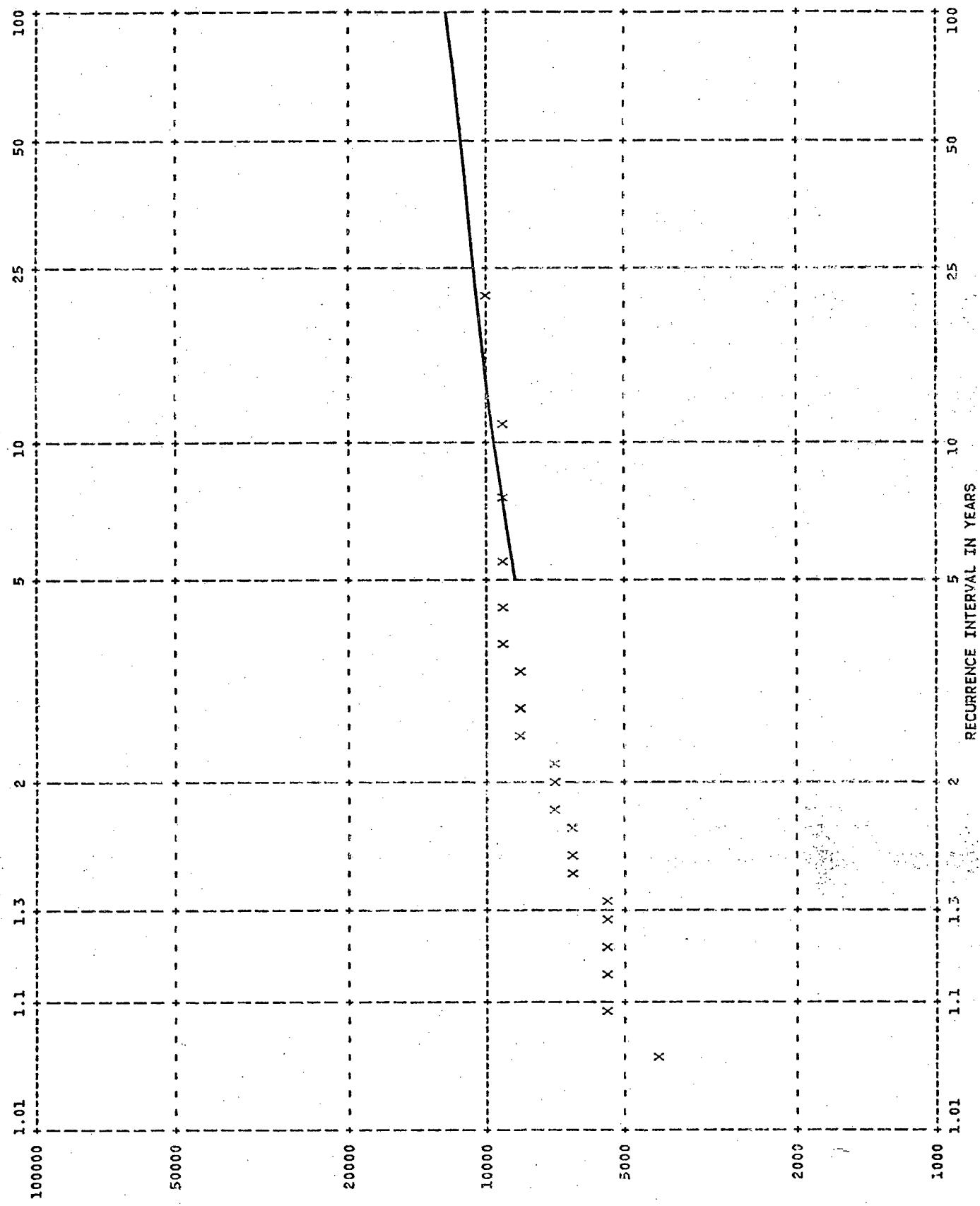
STATION NO. 09AA011
TAGISH CREEK NEAR CARCROSS

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
21 May 1957	144	1	11.0	144	1957
21 May 1958	22.9	2	5.5	89.0	1959
23 May 1959	89.0	3	3.67	79.4	1969
19 May 1961	55.0	4	2.75	76.0	1970
5 Jun 1962	54.0	5	2.20	68.3	1968
4 Jun 1966	50.0	6	1.83	59.6	1967
30 May 1967	59.6	7	1.57	55.0	1961
22 May 1968	68.3	8	1.38	54.0	1962
25 May 1969	79.4	9	1.22	50.0	1966
14 May 1970	76.0	10	1.100	22.9	1958

MEAN ANNUAL FLOOD: 69.8 CFS

DRAINAGE AREA: 30.0 SQ MI

STANDARD DEVIATION: 31.9 CFS



MAXIMUM DAILY MEAN FLOWS

78

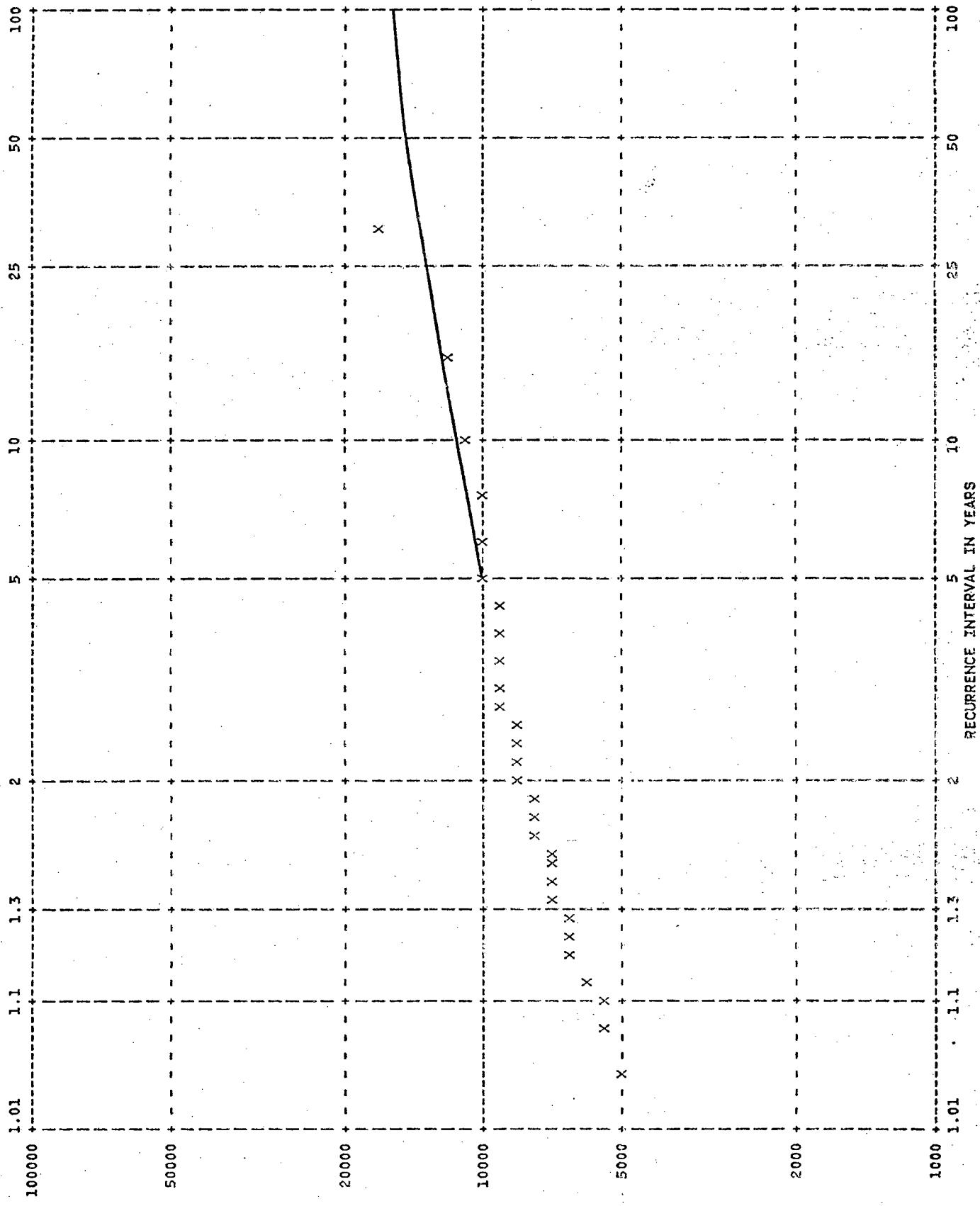
STATION NO. 09AC004
 TAKHINI RIVER AT OUTLET OF KUSAWA LAKE

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
4 Jul 1953	9330	1	22.0	9850	1964
12 Aug 1954	5520	2	11.0	9330	1953
23 Jul 1956	5600	3	7.3	9200	1962
10 Jul 1958	5500	4	5.5	8920	1959
29 Jun 1959	8920	5	4.40	8910	1975
16 Aug 1960	6350	6	3.67	8880	1963
22 Jun 1962	9200	7	3.14	8490	1969
17 Jul 1963	8830	8	2.75	8210	1967
21 Jun 1964	9850	9	2.44	8020	1971
18 Jul 1965	6570	10	2.20	7330	1977
27 Jul 1966	7210	11	2.00	7210	1966
28 Jun 1967	8210	12	1.83	6850	1976
22 Jun 1969	8490	13	1.69	6570	1965
5 Aug 1970	4190	14	1.57	6350	1960
5 Aug 1971	8020	15	1.47	6340	1972
14 Jul 1972	6340	16	1.38	5600	1956
31 Jul 1973	5370	17	1.29	5520	1954
9 Aug 1974	5430	18	1.22	5500	1958
15 Jul 1975	8910	19	1.158	5430	1974
14 Jul 1976	6850	20	1.100	5370	1973
21 Jul 1977	7330	21	1.048	4190	1970

MEAN ANNUAL FLOOD: 7240 CFS

DRAINAGE AREA: 1570 SQ MI

STANDARD DEVIATION: 1630 CFS



MAXIMUM DAILY MEAN FLOWS

80

STATION NO. 09AC001
 TAKHINI RIVER NEAR WHITEHORSE

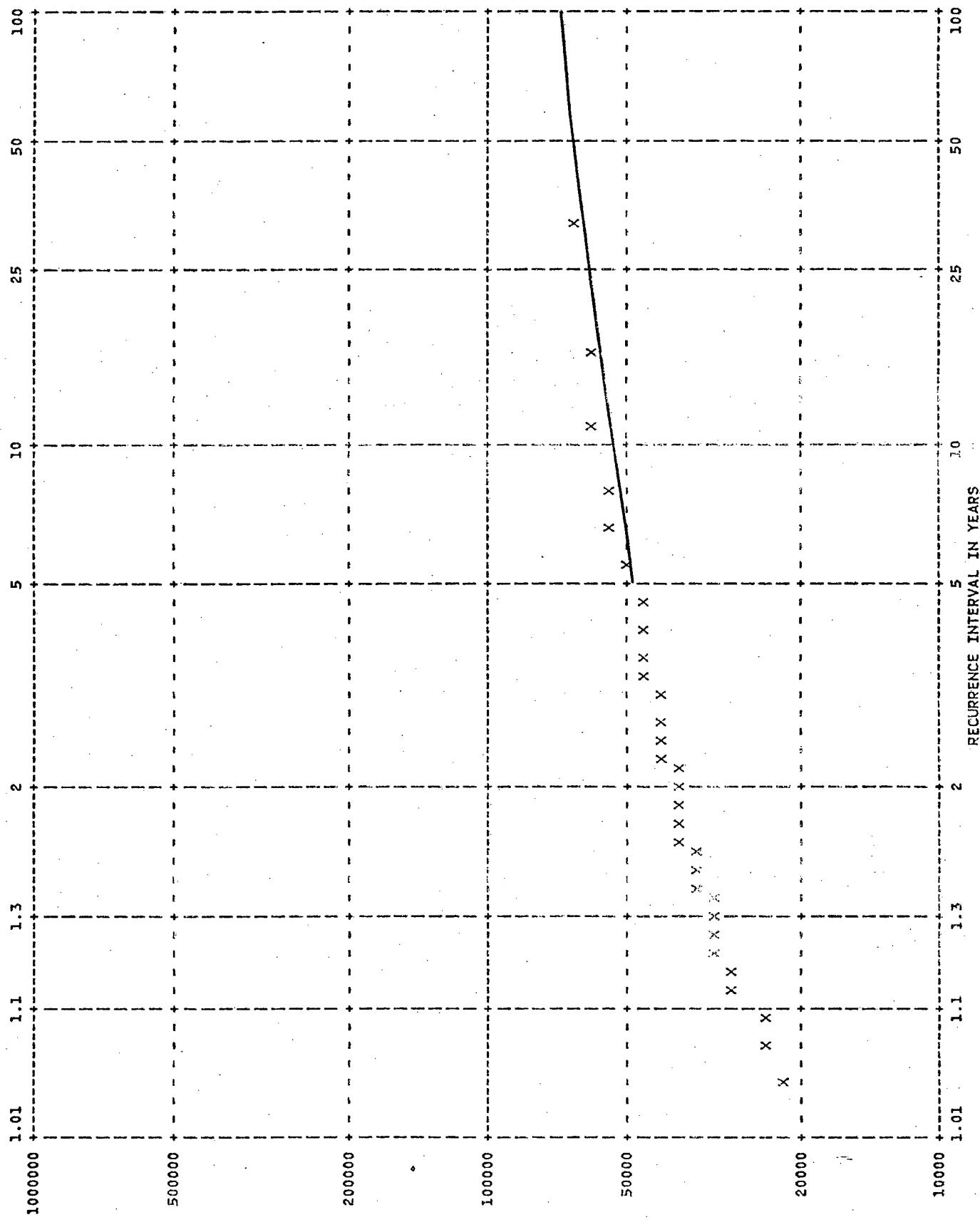
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
2 Sep 1949	17200	1	30.0	17200	1949
22 Jun 1950	9210	2	15.0	12100	1953
21 Jul 1951	6390	3	10.0	10500	1962
28 Jul 1952	7540	4	7.5	10200	1975
4 Jul 1953	12100	5	6.0	9940	1964
22 Jul 1954	5570	6	5.0	9600	1957
14 Jul 1955	8390	7	4.29	9460	1959
28 Jul 1956	6490	8	3.75	9210	1950
28 Jun 1957	9600	9	3.33	9150	1971
11 Jul 1958	5600	10	3.00	9110	1961
29 Jun 1959	9460	11	2.73	9000	1963
18 Aug 1960	6980	12	2.50	8700	1967
3 Jul 1961	9110	13	2.31	8690	1969
22 Jun 1962	10500	14	2.14	8670	1977
17 Jul 1963	9000	15	2.00	8390	1955
22 Jun 1964	9940	16	1.88	7960	1974
18 Jul 1965	7170	17	1.76	7770	1976
27 Jul 1966	7330	18	1.67	7540	1952
27 Jun 1967	8700	19	1.58	7330	1966
8 Jul 1968	6210	20	1.50	7170	1965
22 Jun 1969	8690	21	1.43	7060	1972
5 Aug 1970	4850	22	1.36	6980	1960
5 Aug 1971	9150	23	1.30	6490	1956
10 Aug 1972	7060	24	1.25	6390	1951
27 Jul 1973	6020	25	1.20	6210	1968
7 Aug 1974	7960	26	1.154	6020	1973
14 Jul 1975	10200	27	1.111	5600	1958
14 Jul 1976	7770	28	1.071	5570	1954
20 Jul 1977	8670	29	1.034	4850	1970

MEAN ANNUAL FLOOD: 8370 CFS

DRAINAGE AREA: 2700 SQ MI

STANDARD DEVIATION: 2390 CFS

REMARKS: Flow diverted since 1948 (Porter Creek Power Plant)



MAXIMUM DAILY MEAN FLOWS

82

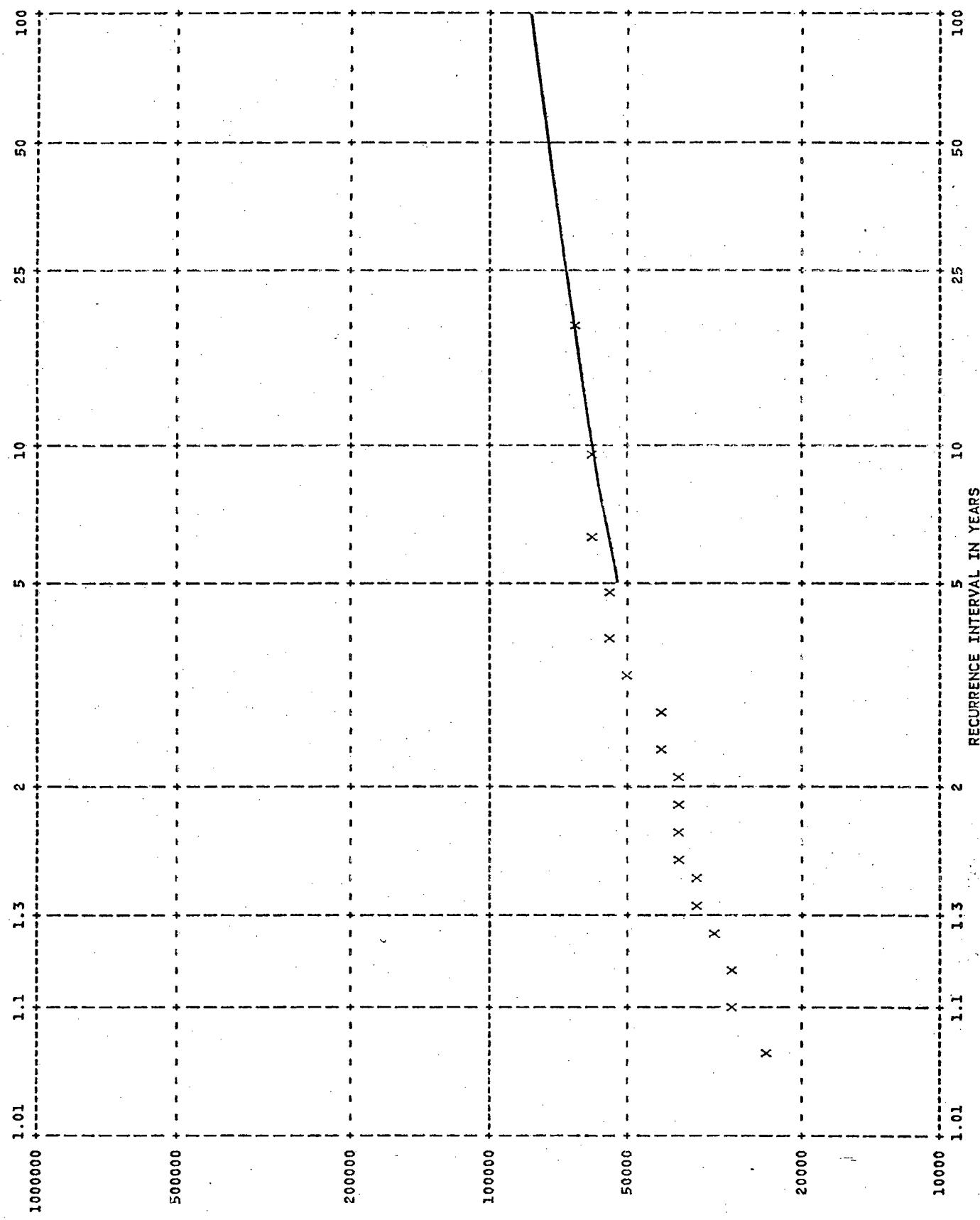
STATION NO. 09AE001
TESLIN RIVER NEAR TESLIN

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
15 Jun 1944	34400	1	32.0	65000	1962
4 Jun 1948	48500	2	16.0	60500	1964
27 Jun 1949	39800	3	10.7	58700	1961
21 Jun 1950	23000	4	8.0	53300	1972
15 Jun 1951	34000	5	6.4	52500	1957
5 Jul 1952	43500	6	5.3	48500	1948
2 Jun 1953	24400	7	4.57	46500	1967
13 Jun 1954	40000	8	4.00	45400	1976
7 Jul 1955	40700	9	3.56	43500	1952
21 Jun 1956	28600	10	3.20	43300	1977
13 Jun 1957	52500	11	2.91	41000	1971
11 Jun 1958	24400	12	2.67	40700	1955
19 Jun 1959	37900	13	2.46	40000	1954
29 Jun 1960	38600	14	2.29	39800	1949
15 Jun 1961	58700	15	2.13	38600	1960
28 Jun 1962	65000	16	2.00	37900	1959
27 Jun 1963	36900	17	1.88	37400	1973
19 Jun 1964	60500	18	1.78	36900	1963
14 Jun 1965	30900	19	1.68	36700	1975
22 Jun 1966	34800	20	1.60	34800	1966
23 Jun 1967	46500	21	1.52	34400	1944
17 Jun 1968	30500	22	1.45	34000	1951
19 Jun 1969	33000	23	1.39	33000	1969
13 Jun 1970	28200	24	1.33	31800	1974
27 Jun 1971	41000	25	1.28	30900	1965
22 Jun 1972	53300	26	1.23	30500	1968
24 Jun 1973	37400	27	1.185	28600	1956
3 Jul 1974	31800	28	1.143	28200	1970
7 Jul 1975	36700	29	1.103	24400	1953
3 Jul 1976	45400	30	1.067	24400	1958
20 Jun 1977	43300	31	1.032	23000	1950

MEAN ANNUAL FLOOD: 39500 CFS

DRAINAGE AREA: 11700 SQ MI

STANDARD DEVIATION: 10600 CFS



MAXIMUM DAILY MEAN FLOWS

84

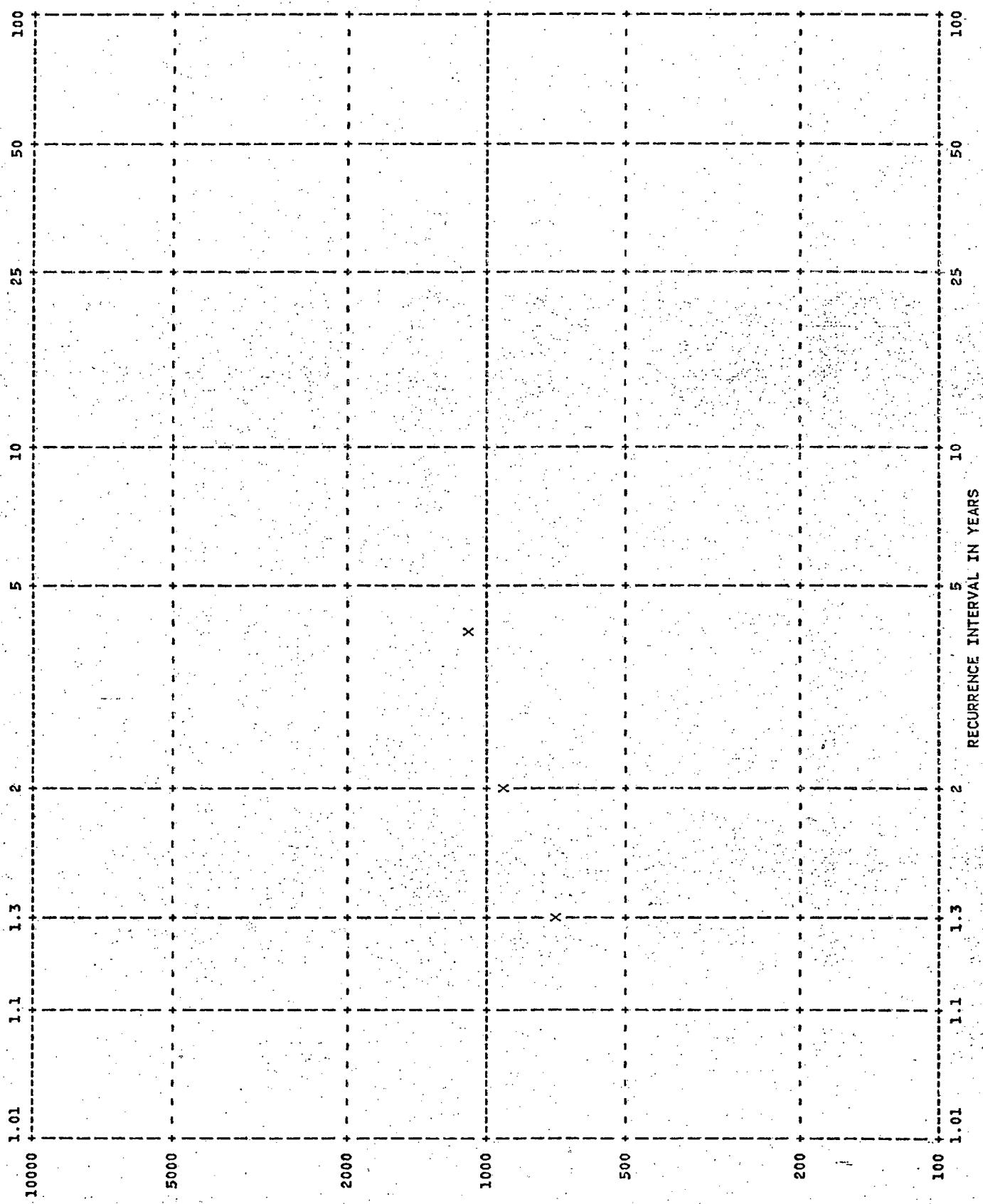
STATION NO. 09AF001
TESLIN RIVER NEAR WHITEHORSE

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
20 Jun 1956	29800	1	19.0	65400	1962
13 Jun 1957	51900	2	9.5	60700	1964
12 Jun 1958	25000	3	6.3	56800	1961
20 Jun 1959	37900	4	4.75	54300	1972
29 Jun 1960	38500	5	3.80	51900	1957
18 Jun 1961	56800	6	3.17	50600	1967
28 Jun 1962	65400	7	2.71	42800	1971
28 Jun 1963	41100	8	2.38	41100	1963
20 Jun 1964	60700	9	2.11	39400	1973
17 Jun 1965	33500	10	1.90	38500	1960
20 Jun 1966	37400	11	1.73	37900	1959
23 Jun 1967	50600	12	1.58	37400	1966
19 Jun 1968	32300	13	1.46	35700	1969
16 Jun 1969	35700	14	1.36	33500	1965
15 Jun 1970	30200	15	1.27	32300	1968
25 Jun 1971	42800	16	1.188	30200	1970
24 Jun 1972	54300	17	1.118	29800	1956
25 Jun 1973	39400	18	1.056	25000	1958

MEAN ANNUAL FLOOD: 42400 CFS

DRAINAGE AREA: 14100 SQ MI

STANDARD DEVIATION: 11600 CFS



MAXIMUM DAILY MEAN FLOWS

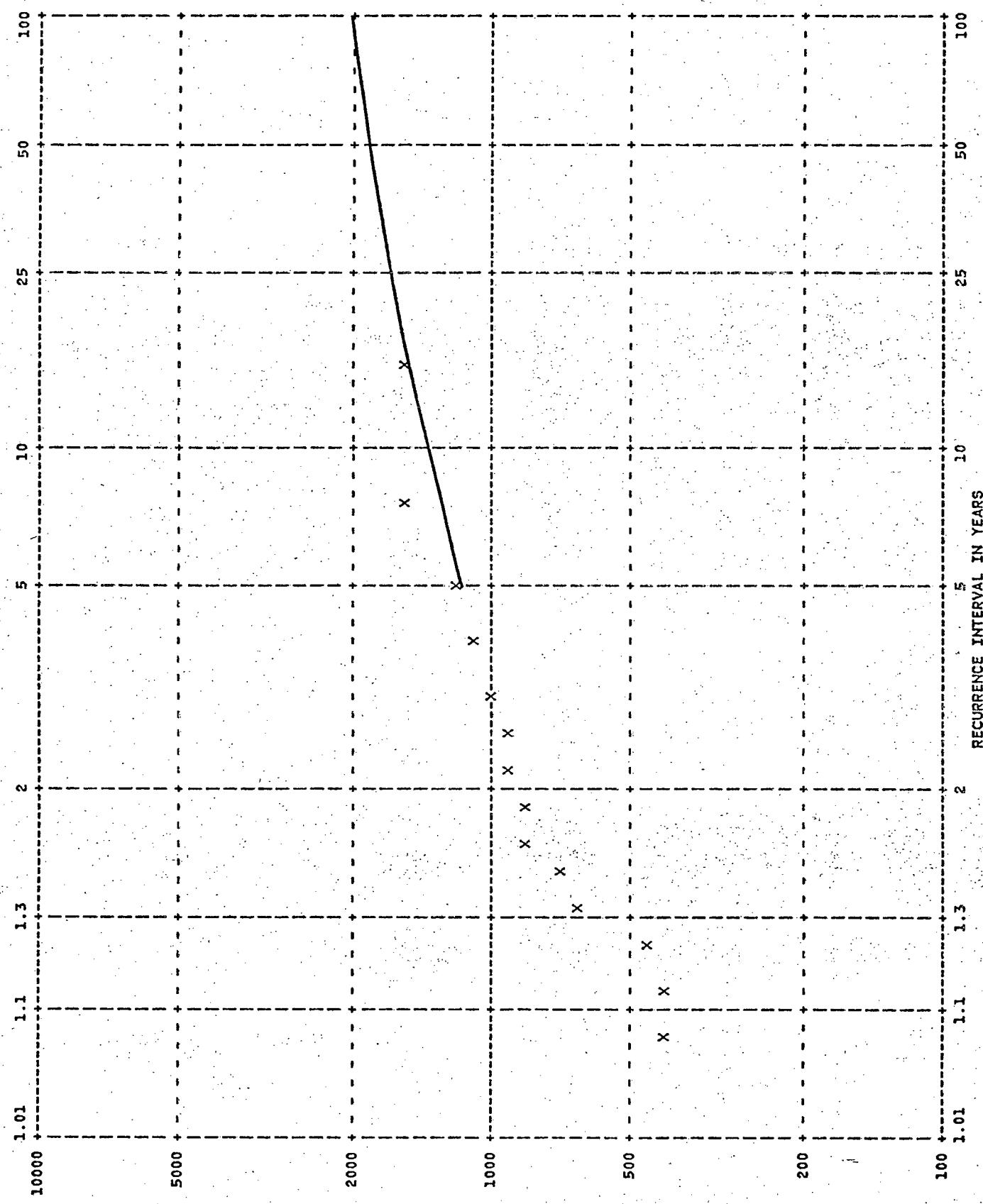
86

STATION NO. 10AA002
 TOM CREEK AT MILE 21.7 ROBERT CAMPBELL HIGHWAY

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
9 May 1975	680	1	4.00	1080	1976
3 May 1976	1080	2	2.00	894	1977
26 May 1977	894	3	1.33	680	1975

MEAN ANNUAL FLOOD: 885 CFS

DRAINAGE AREA: 168 SQ MI



STATION NO. 09AA009
WATSON RIVER NEAR CARCROSS

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
13 May 1956	656	1	15.0	1550	1971
8 Jun 1957	824	2	7.5	1510	1968
4 Jun 1958	443	3	5.0	1210	1972
17 Jun 1959	1120	4	3.75	1120	1959
28 Jun 1960	848	5	3.00	985	1969
12 Jun 1961	410	6	2.50	950	1973
12 Jun 1966	682	7	2.14	917	1967
20 Jun 1967	917	8	1.88	848	1960
24 May 1968	1510	9	1.67	824	1957
12 Jun 1969	985	10	1.50	682	1966
6 Jul 1970	399	11	1.36	656	1956
26 Jun 1971	1550	12	1.25	443	1958
15 Jun 1972	1210	13	1.154	410	1961
10 Jul 1973	950	14	1.071	399	1970

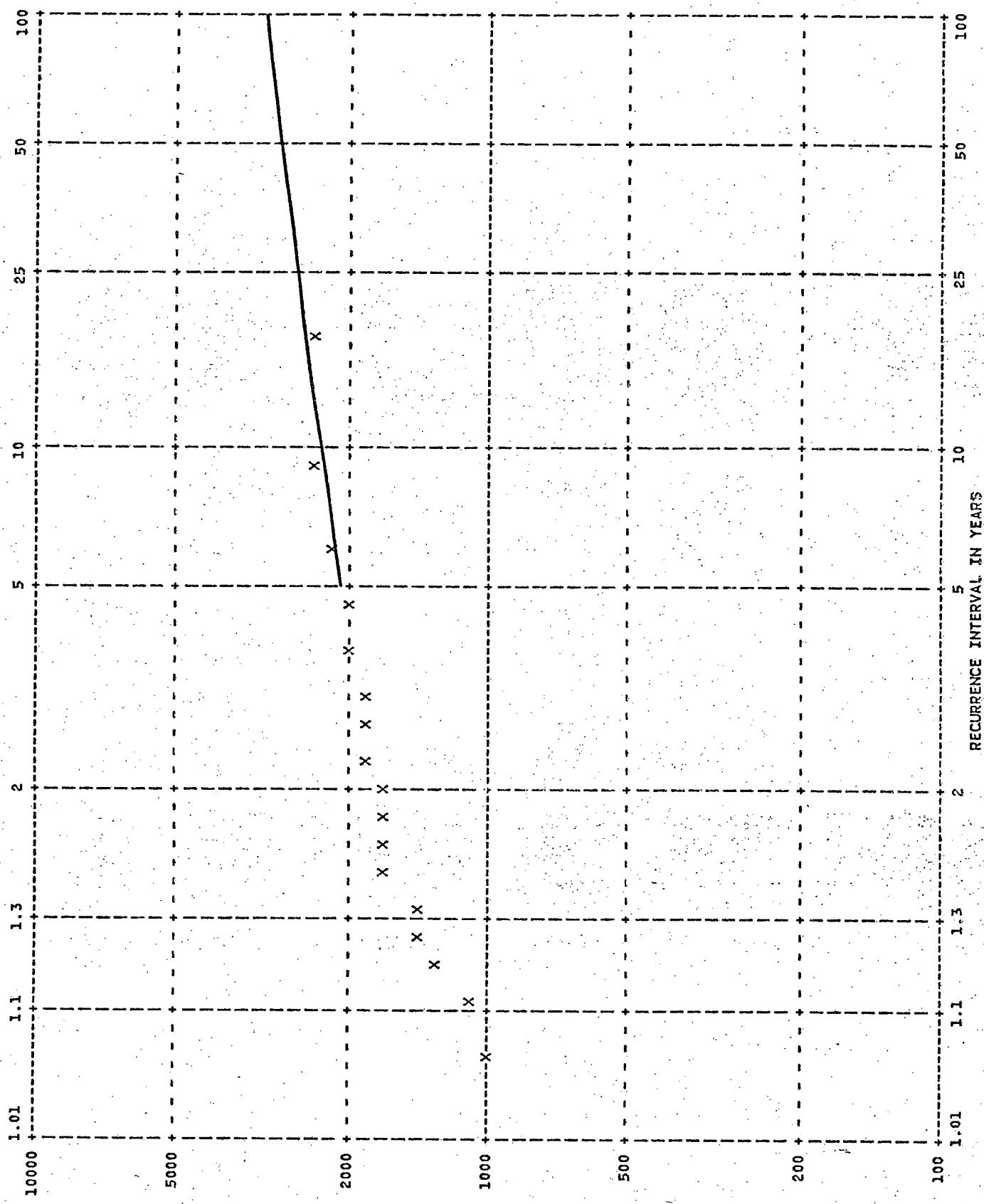
MEAN ANNUAL FLOOD: 893 CFS

DRAINAGE AREA: 444 SQ MI

STANDARD DEVIATION: 368 CFS

WHEATON RIVER NEAR CARCROSS - STATION NO. 09AA012

89



MAXIMUM DAILY MEAN FLOWS

90

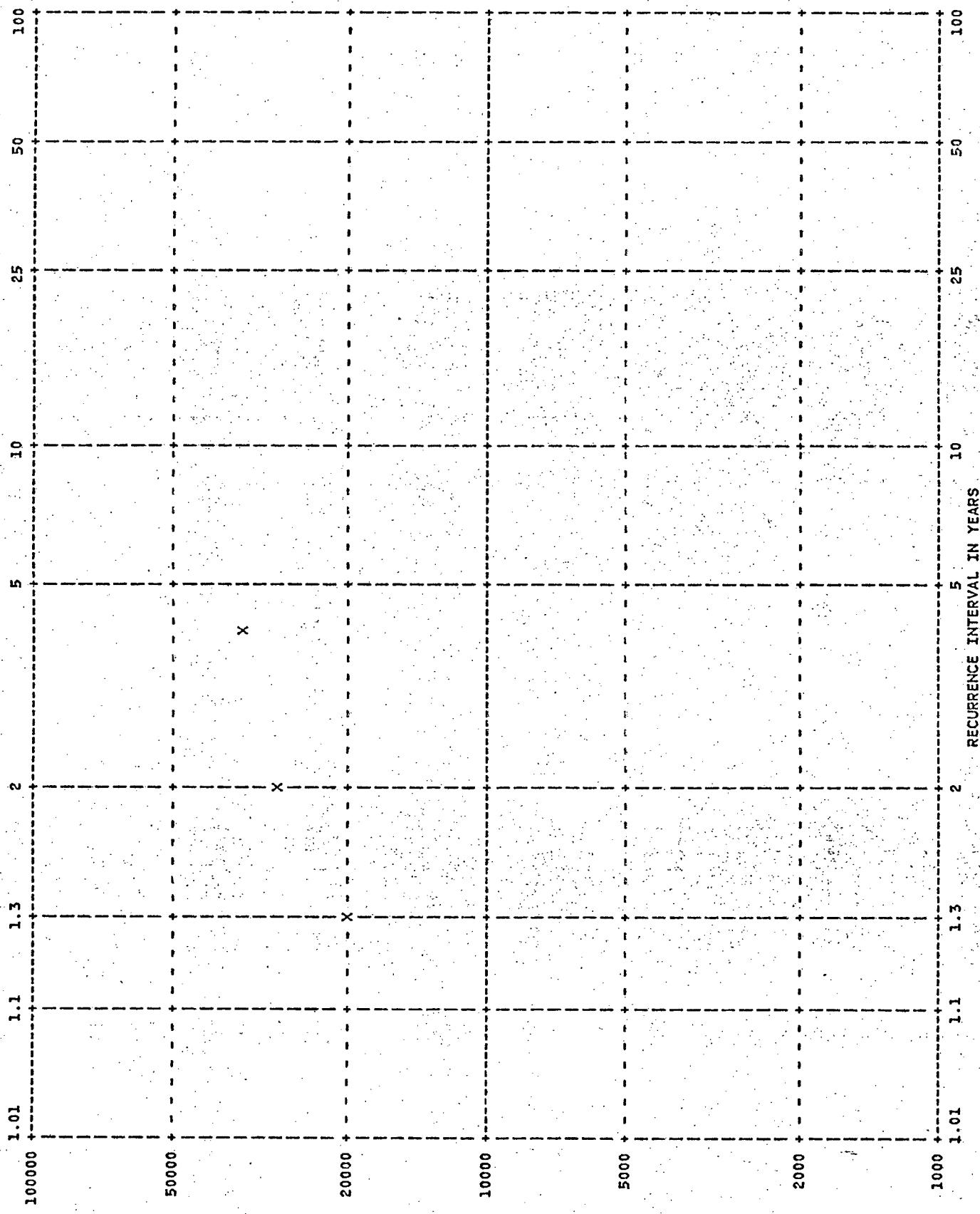
STATION NO. 09AA012
WHEATON RIVER NEAR CARCROSS

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
8 Jun 1958	1050	1	18.0	2420	1964
27 Jun 1960	1700	2	9.0	2350	1971
8 Jun 1961	1430	3	6.0	2300	1969
6 Jul 1963	1780	4	4.50	2060	1976
10 Jun 1964	2420	5	3.60	2030	1975
2 Jul 1965	1360	6	3.00	1870	1967
11 Jun 1966	1630	7	2.57	1780	1963
21 Jun 1967	1870	8	2.25	1780	1972
23 May 1968	1750	9	2.00	1750	1968
15 Jun 1969	2300	10	1.80	1700	1960
27 Jul 1970	992	11	1.64	1680	1973
25 Jun 1971	2350	12	1.50	1630	1966
14 Jun 1972	1780	13	1.38	1470	1974
9 Jul 1973	1680	14	1.29	1430	1961
1 Jul 1974	1470	15	1.20	1360	1965
1 Jul 1975	2030	16	1.125	1050	1958
27 Jun 1976	2060	17	1.059	992	1970

MEAN ANNUAL FLOOD: 1740 CFS

DRAINAGE AREA: 337 SQ MI

STANDARD DEVIATION: 412 CFS



MAXIMUM DAILY MEAN FLOWS

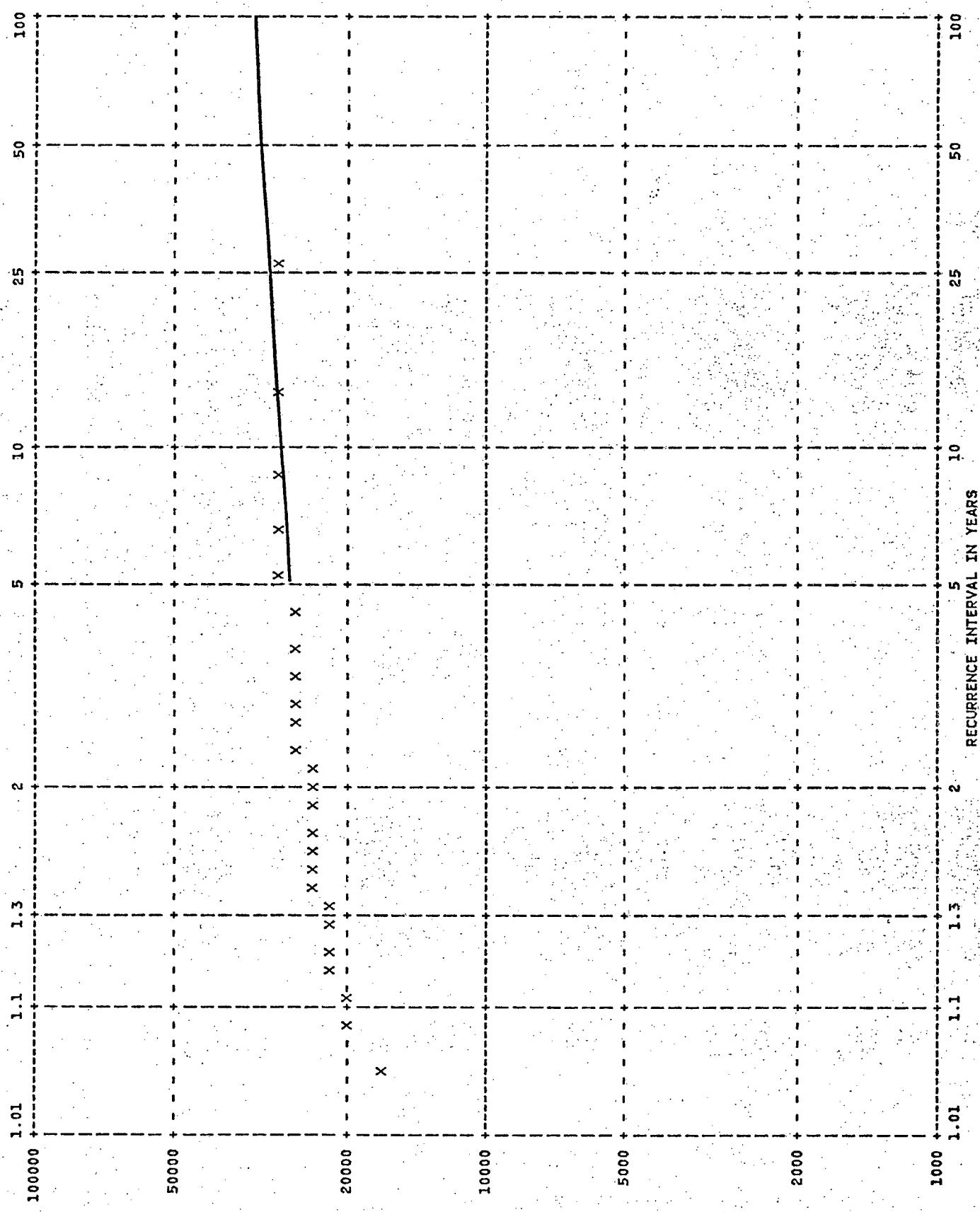
92

STATION NO. 09CB001
 WHITE RIVER AT MILE 1169.2 ALASKA HIGHWAY

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
13 Jul 1975	28300	1	4.00	34000	1976
2 Aug 1976	34000	2	2.00	28300	1975
22 Aug 1977	21100	3	1.33	21100	1977

MEAN ANNUAL FLOOD: 27800 CFS

DRAINAGE AREA: 2410 SQ MI



STATION NO. 09AB009
YUKON RIVER ABOVE FRANK CREEK

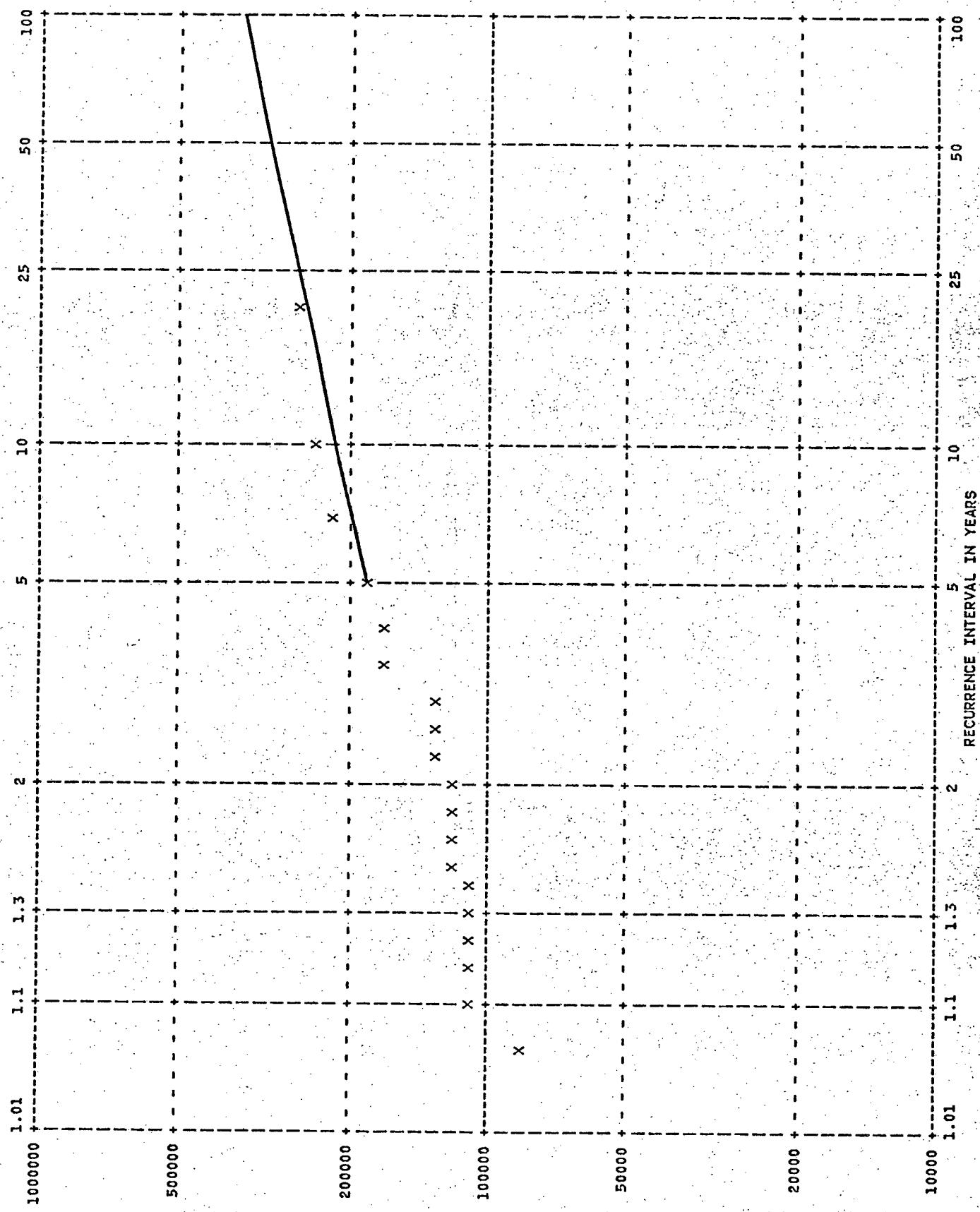
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
14 Aug 1953	29000	1	26.0	29100	1961
20 Aug 1954	23300	2	13.0	29000	1953
12 Aug 1955	24700	3	8.7	28900	1971
3 Sep 1956	21300	4	6.5	28200	1957
5 Jul 1957	28200	5	5.2	28000	1977
15 Aug 1958	21400	6	4.33	27000	1975
14 Jul 1959	26000	7	3.71	26500	1964
24 Aug 1960	25500	8	3.25	26000	1959
29 Aug 1961	29100	9	2.89	26000	1962
8 Aug 1962	26000	10	2.60	26000	1963
26 Aug 1963	26000	11	2.36	25500	1960
13 Aug 1964	26500	12	2.17	24700	1955
16 Aug 1965	20900	13	2.00	24400	1972
9 Aug 1966	22700	14	1.86	24100	1967
28 Sep 1967	24100	15	1.73	23600	1969
21 Aug 1968	23200	16	1.63	23300	1954
16 Jul 1969	23600	17	1.53	23300	1976
19 Aug 1970	17300	18	1.44	23200	1968
22 Aug 1971	28900	19	1.37	22700	1966
27 Aug 1972	24400	20	1.30	22700	1974
11 Aug 1973	20000	21	1.24	21400	1958
12 Sep 1974	22700	22	1.182	21300	1956
1 Aug 1975	27000	23	1.130	20900	1965
16 Aug 1976	23300	24	1.083	20000	1973
30 Aug 1977	28000	25	1.040	17300	1970

MEAN ANNUAL FLOOD: 24500 CFS

DRAINAGE AREA: 12000 SQ MI

STANDARD DEVIATION: 3040 CFS

REMARKS: Storage since 1926 (Marsh Lake Dam)
 Pondage since 1958 (Whitehorse Rapids Power Plant)



MAXIMUM DAILY MEAN FLOWS

96

STATION NO. 09CD001
YUKON RIVER ABOVE WHITE RIVER

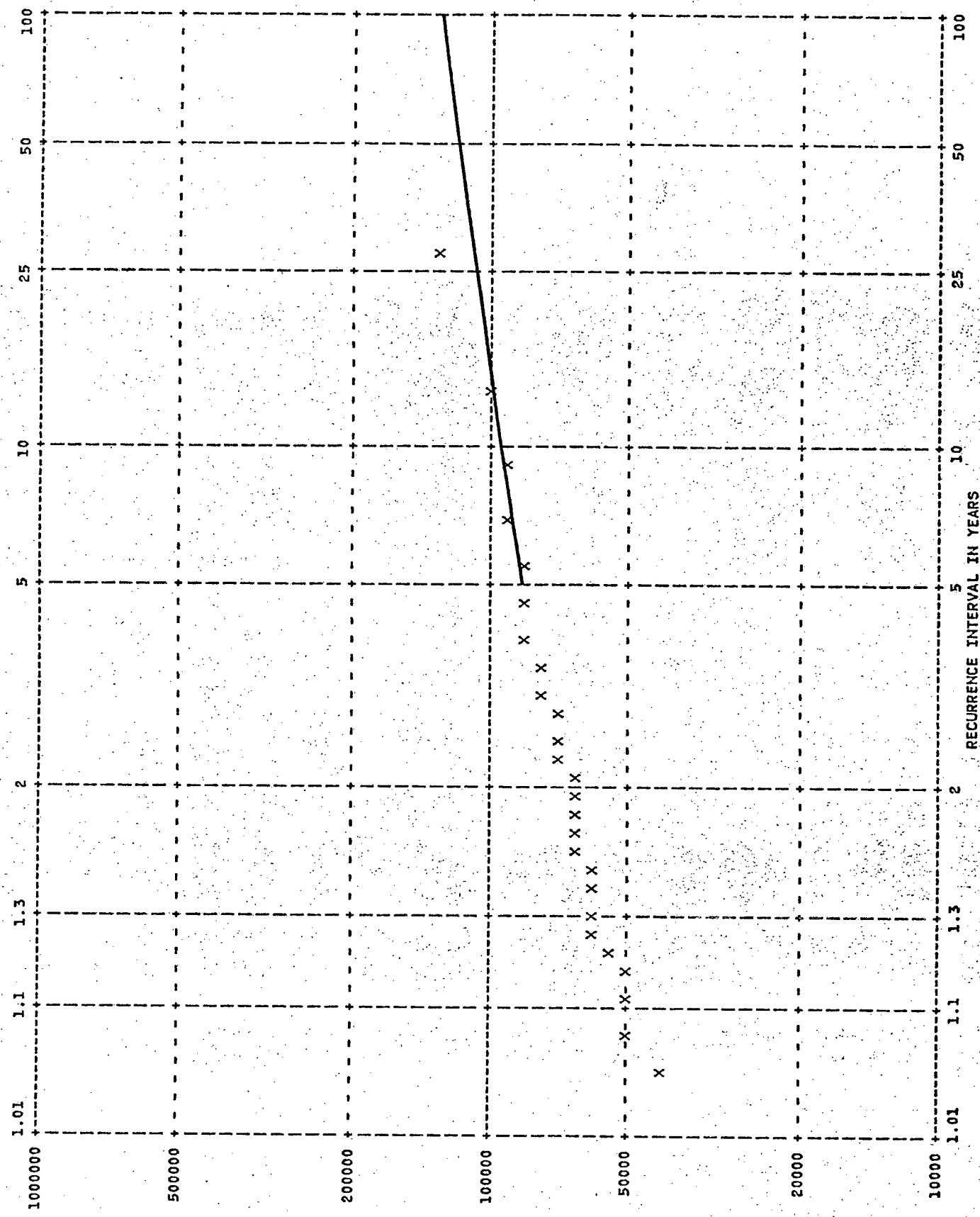
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
27 May 1957	186000	1	20.0	272000	1962
13 Jun 1958	83000	2	10.0	242000	1964
17 Jun 1959	118000	3	6.7	231000	1972
31 Jul 1960	109000	4	5.0	186000	1957
14 Jun 1961	176000	5	4.00	176000	1961
25 Jun 1962	272000	6	3.33	173000	1967
13 Jun 1964	242000	7	2.86	136000	1976
20 Jun 1966	120000	8	2.50	134000	1975
6 Jun 1967	173000	9	2.22	125000	1970
29 May 1968	114000	10	2.00	121000	1971
13 Jun 1969	108000	11	1.82	120000	1966
11 Jun 1970	125000	12	1.67	118000	1959
14 Jun 1971	121000	13	1.54	115000	1973
3 Jun 1972	231000	14	1.43	114000	1968
21 Jun 1973	115000	15	1.33	114000	1977
4 Jun 1974	108000	16	1.25	109000	1960
6 Jun 1975	134000	17	1.176	108000	1969
16 Jul 1976	136000	18	1.111	108000	1974
6 Jun 1977	114000	19	1.053	83000	1958

MEAN ANNUAL FLOOD: 147000 CFS

DRAINAGE AREA: 57800 SQ MI

STANDARD DEVIATION: 52500 CFS

REMARKS: Storage since 1926 (Marsh Lake Dam)
Pondage since 1958 (Whitehorse Rapids Power Plant)



MAXIMUM DAILY MEAN FLOWS

98

STATION NO. 09AH001
YUKON RIVER AT CARMACKS

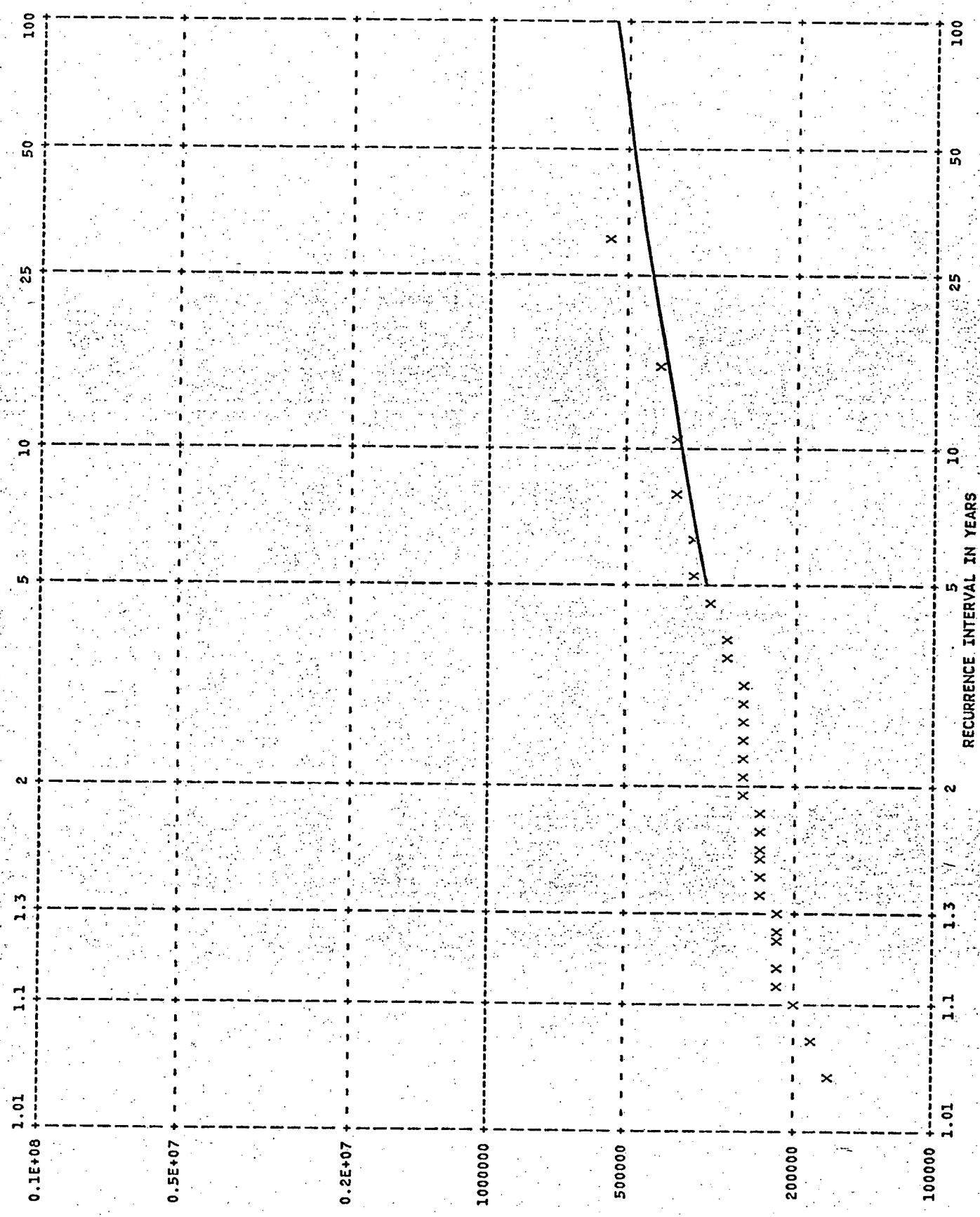
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
2 Jul 1952	77700	1	27.0	127000	1962
5 Sep 1953	55800	2	13.5	102000	1964
15 Jun 1954	60000	3	9.0	91600	1961
8 Jul 1955	62400	4	6.8	88700	1957
12 Jun 1956	47700	5	5.4	86600	1967
16 Jun 1957	88700	6	4.50	85000	1972
14 Jun 1958	40500	7	3.86	84100	1963
2 Jul 1959	65000	8	3.38	79400	1976
30 Jun 1960	66400	9	3.00	77700	1952
21 Jun 1961	91600	10	2.70	71400	1975
24 Jun 1962	127000	11	2.45	70700	1977
13 Jul 1963	84100	12	2.25	69000	1971
23 Jun 1964	102000	13	2.08	66400	1960
7 Jul 1965	51400	14	1.93	65000	1959
18 Jun 1966	60400	15	1.80	63500	1973
23 Jun 1967	86600	16	1.69	62400	1955
7 Jul 1968	58400	17	1.59	62100	1969
16 Jun 1969	62100	18	1.50	61100	1974
22 Jul 1970	48700	19	1.42	60400	1966
22 Jun 1971	69000	20	1.35	60000	1954
26 Jun 1972	85000	21	1.29	58400	1963
2 Jul 1973	63500	22	1.23	55800	1953
7 Aug 1974	61100	23	1.174	51400	1965
20 Jul 1975	71400	24	1.125	48700	1970
2 Jul 1976	79400	25	1.080	47700	1956
21 Jun 1977	70700	26	1.038	40500	1958

MEAN ANNUAL FLOOD: 70600 CFS

DRAINAGE AREA: 33600 SQ MI

STANDARD DEVIATION: 18900 CFS

REMARKS: Storage since 1926 (Marsh Lake Dam)
Pondage since 1958 (Whitehorse Rapids Power Plant)



MAXIMUM DAILY MEAN FLOWS

100

STATION NO. 09EB001
YUKON RIVER AT DAWSON

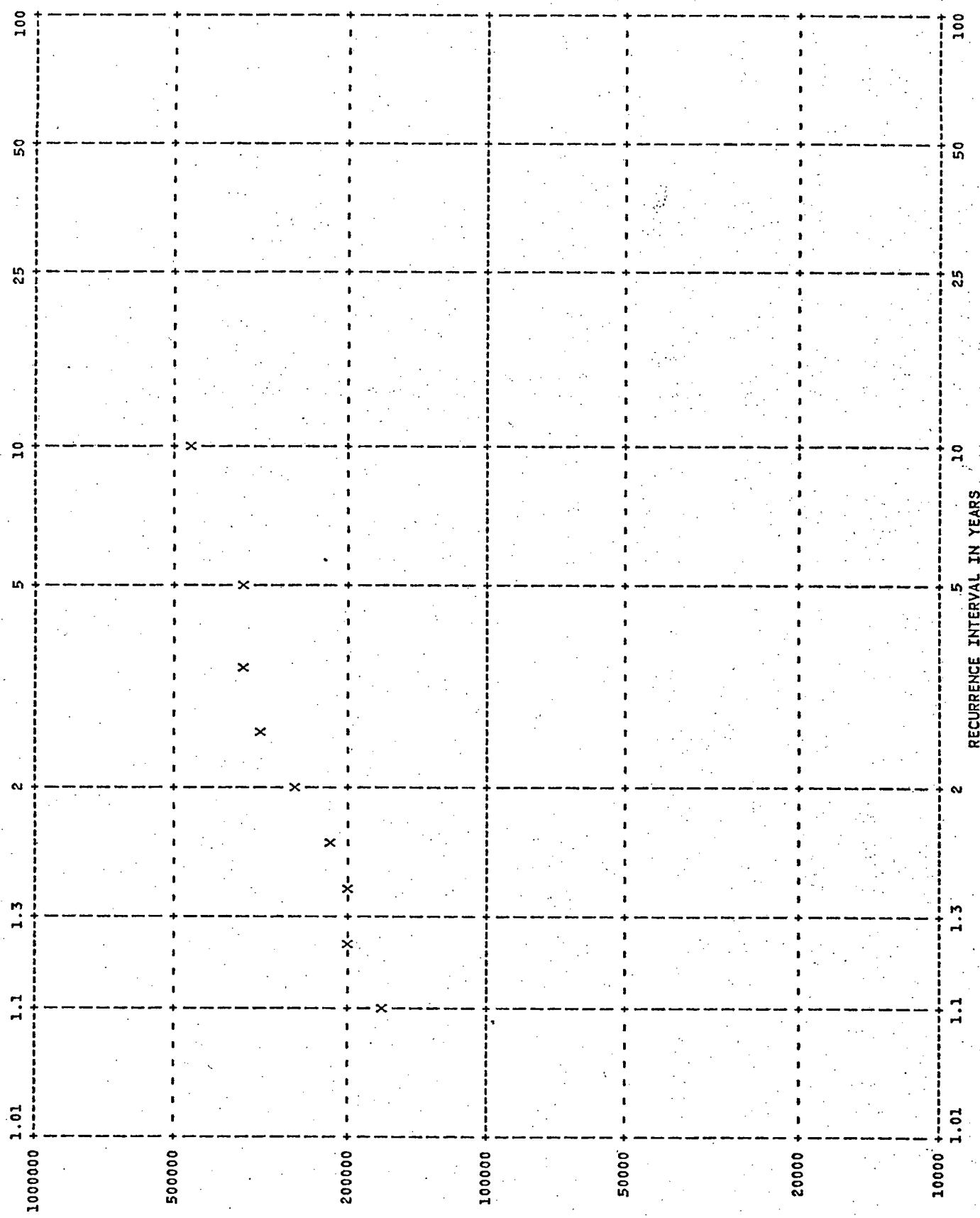
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENT INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
22 May 1945	235000	1	31.0	526000	1964
31 May 1946	259000	2	15.5	426000	1972
2 Jun 1947	279000	3	10.3	386000	1962
2 Jun 1948	255000	4	7.8	376000	1957
27 Jun 1949	260000	5	6.2	357000	1961
13 May 1950	215000	6	5.2	347000	1967
3 Jun 1951	164000	7	4.43	321000	1975
3 Jul 1952	217000	8	3.88	279000	1947
3 Jul 1956	191000	9	3.44	279000	1963
28 May 1957	376000	10	3.10	276000	1959
13 Jun 1958	209000	11	2.82	269000	1971
21 May 1959	276000	12	2.58	266000	1976
1 Aug 1960	230000	13	2.38	260000	1949
13 Jun 1961	357000	14	2.21	259000	1946
18 Jun 1962	386000	15	2.07	257000	1968
14 Jul 1963	279000	16	1.94	255000	1948
11 Jun 1964	526000	17	1.82	250000	1977
3 Jun 1965	233000	18	1.72	247000	1966
21 Jun 1966	247000	19	1.63	246000	1970
6 Jun 1967	347000	20	1.55	240000	1973
26 May 1968	257000	21	1.48	235000	1945
15 Jun 1969	216000	22	1.41	233000	1965
9 Jun 1970	246000	23	1.35	230000	1960
16 Jun 1971	269000	24	1.29	219000	1974
3 Jun 1972	426000	25	1.24	217000	1952
24 Jun 1973	240000	26	1.192	216000	1969
5 Jun 1974	219000	27	1.148	215000	1950
6 Jun 1975	321000	28	1.107	209000	1958
17 Jul 1976	266000	29	1.069	191000	1956
4 Jun 1977	250000	30	1.033	164000	1951

MEAN ANNUAL FLOOD: 275000 CFS

DRAINAGE AREA: 102000 SQ MI

STANDARD DEVIATION: 76500 CFS

REMARKS: Storage since 1926 (Marsh Lake Dam)
Storage since 1951 (Mayo Lake Dam and Power Plant)
Pondage since 1958 (Whitehorse Rapids Power Plant)



MAXIMUM DAILY MEAN FLOWS

102

STATION NO. 09EB002
 YUKON RIVER AT STEWART RIVER

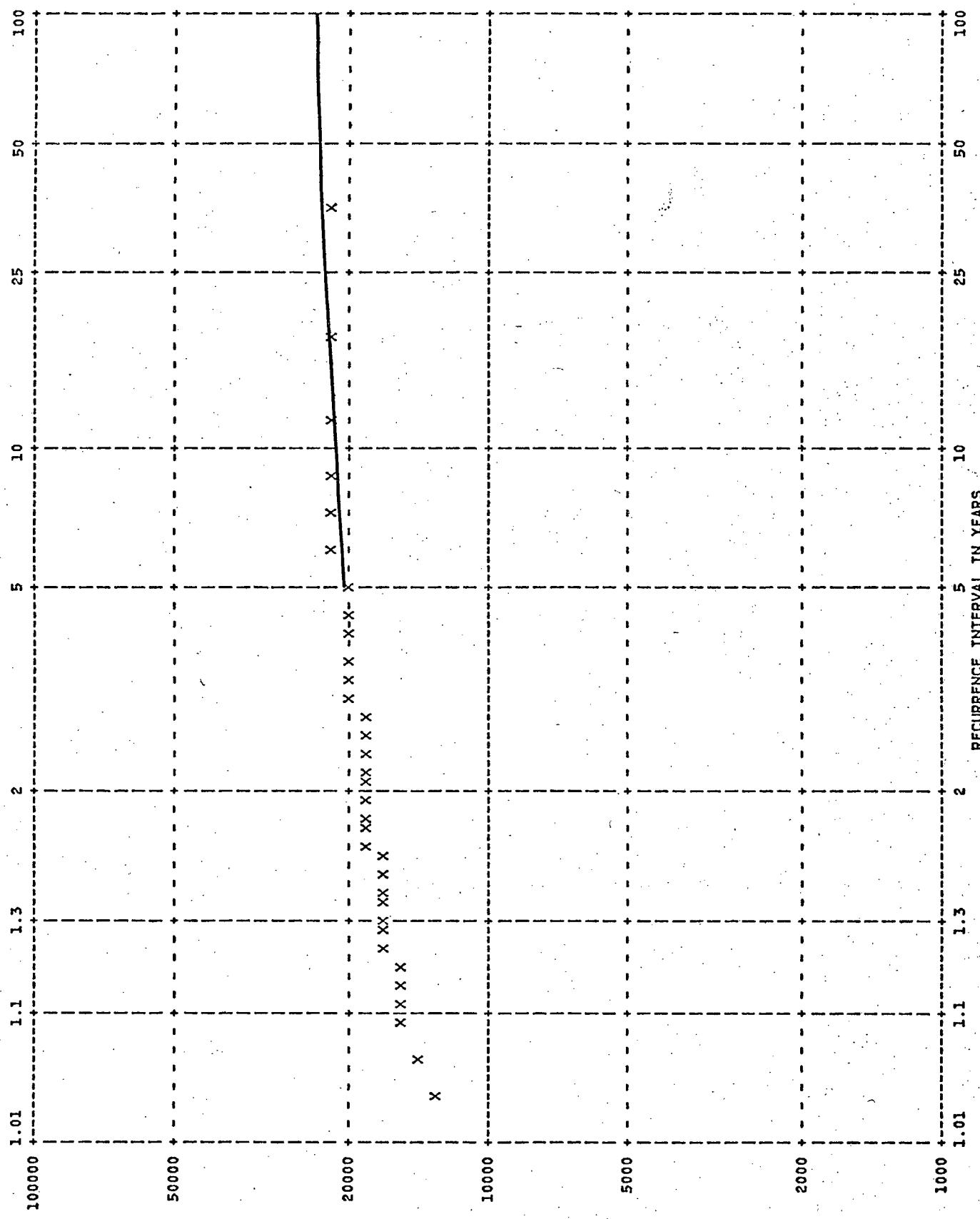
DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
27 May 1957	350000	1	10.0	470000	1964
11 Jun 1958	164000	2	5.0	359000	1962
25 May 1959	223000	3	3.33	350000	1957
31 Jul 1960	206000	4	2.50	317000	1961
13 Jun 1961	317000	5	2.00	265000	1963
18 Jun 1962	359000	6	1.67	223000	1959
14 Jul 1963	265000	7	1.43	206000	1960
12 Jun 1964	470000	8	1.25	199000	1965
4 Jun 1965	199000	9	1.111	164000	1958

MEAN ANNUAL FLOOD: 284000 CFS

DRAINAGE AREA: 97100 SQ MI

STANDARD DEVIATION: 98400 CFS

REMARKS: Storage since 1926 (Marsh Lake Dam)
 Storage since 1951 (Mayo Lake Dam and Power Plant)
 Pondage since 1958 (Whitehorse Rapids Power Plant)



STATION NO. 09AB001
YUKON RIVER AT WHITEHORSE

DATE	MAXIMUM DAILY FLOW IN CFS	RANK	RECURRENCE INTERVAL IN YEARS	MAXIMUM DAILY FLOW IN CFS	YEAR
17 Jul 1944	22300	1	35.0	22800	1953
13 Aug 1945	17000	2	17.5	22300	1944
20 Jul 1946	18300	3	11.7	22200	1961
31 Jul 1947	16700	4	8.8	21900	1977
19 Aug 1948	19600	5	7.0	21600	1971
21 Aug 1949	16500	6	5.8	21500	1963
31 Aug 1950	17800	7	5.0	20900	1964
16 Aug 1951	17200	8	4.38	20700	1957
27 Aug 1952	19500	9	3.89	19900	1975
9 Aug 1953	22800	10	3.50	19700	1960
13 Aug 1954	18300	11	3.18	19600	1948
8 Aug 1955	18400	12	2.92	19500	1952
29 Aug 1956	15700	13	2.69	19100	1959
20 Aug 1957	20700	14	2.50	19000	1962
13 Aug 1958	17400	15	2.33	18900	1972
5 Jul 1959	19100	16	2.19	18600	1967
16 Aug 1960	19700	17	2.06	18400	1955
25 Aug 1961	22200	18	1.94	18300	1946
27 Aug 1962	19000	19	1.84	18300	1954
20 Sep 1963	21500	20	1.75	17900	1969
28 Aug 1964	20900	21	1.67	17800	1950
2 Aug 1965	16100	22	1.59	17400	1958
1 Aug 1966	16200	23	1.52	17200	1951
25 Sep 1967	18600	24	1.46	17100	1968
23 Aug 1968	17100	25	1.40	17100	1976
20 Jul 1969	17900	26	1.35	17000	1945
18 Aug 1970	13300	27	1.30	16700	1947
23 Aug 1971	21600	28	1.25	16500	1949
25 Aug 1972	18900	29	1.21	16200	1966
12 Aug 1973	14700	30	1.167	16100	1965
10 Sep 1974	15900	31	1.129	15900	1974
22 Jul 1975	19900	32	1.094	15700	1956
11 Aug 1976	17100	33	1.061	14700	1973
26 Aug 1977	21900	34	1.029	13300	1970

MEAN ANNUAL FLOOD: 18500 CFS

DRAINAGE AREA: 7500 SQ MI

STANDARD DEVIATION: 2320 CFS

REMARKS: Storage since 1926 (Marsh Lake Dam)
Pondage since 1958 (Whitehorse Rapids Power Plant)

EXTREME MAXIMUM DAILY FLOWS

STATION NUMBER	STATION NAME	DRAINAGE AREA IN SQ MI	DATE	MAXIMUM DAILY FLOW IN CFS	MAXIMUM RUNOFF IN CFS/SQ MI
08AA001	AISHIHIK RIVER NEAR WHITEHORSE		1660	20 Jun 1962	5050 3.0
08AB001	ALSEK RIVER ABOVE BATES RIVER		6250	13 Jul 1975	39900 6.4
09AH003	BIG CREEK NEAR THE MOUTH		674	15 Jul 1976	7260 10.8
09AG001	BIG SALMON RIVER NEAR CARMACKS		2610	23 Jun 1962	23700 9.1
10BC001	COAL RIVER AT THE MOUTH		3550	30 May 1972	36900 10.4
08AA003	DEADEASH RIVER AT HAINES JUNCTION		3280	28 Jun 1961	10100 3.1
10MD001	FIRTH RIVER NEAR THE MOUTH		2240	29 May 1975	27300 12.2
10AB001	FRANCES RIVER NEAR WATSON LAKE		4950	12 Jun 1964	38800 7.8
09DA001	HESS RIVER ABOVE EMERALD CREEK		1870	30 May 1977	17400 9.3
10AD002	HYLAND RIVER AT MILE 67.4 NAHANNI RANGE ROAD		211	21 Jun 1977	8700 41.2
10AD001	HYLAND RIVER NEAR LOWER POST		3650	10 Jun 1961	59800 16.4
08AA004	KATHLEEN RIVER NEAR HAINES JUNCTION		248	20 Jun 1964	2300 9.3
10AB003	KING CREEK AT MILE 13 NAHANNI RANGE ROAD		5.3	3 Jul 1976	63.8 12.0
09EA003	KLONDIKE RIVER ABOVE BONANZA CREEK		3010	29 May 1972	22600 7.5
09CA002	KLUANE RIVER AT OUTLET OF KLUANE LAKE		1910	14 Aug 1971	13500 7.1
10AA001	LIARD RIVER AT UPPER CROSSING		12900	2 Jun 1972	108000 8.4
09AA007	LUBBOCK RIVER NEAR ATLIN		684	4 Jun 1972	833 1.2
09AB008	MICLINTOCK RIVER NEAR WHITEHORSE		655	1 Jun 1972	3680 5.6
09DC001	MAYO RIVER NEAR MAYO		873	6 Jun 1949	4260 4.9
09EA004	NORTH KLONDIKE RIVER NEAR THE MOUTH		423	4 Jun 1975	3030 7.2
10MA002	OGLILIVE RIVER AT MILE 123 DEMPSTER HIGHWAY		2090	31 May 1975	23400 11.2
09FC001	OLD CROW RIVER NEAR THE MOUTH		5370	4 Jun 1977	59700 11.1
10MA001	PEEL RIVER ABOVE CANYON CREEK		9940	4 Jun 1964	202000 20.3
09BC001	PELLY RIVER AT PELLY CROSSING		18900	28 May 1957	152000 8.0
09BC002	PELLY RIVER AT ROSS RIVER		7130	7 Jun 1964	71000 10.0
09BC004	PELLY RIVER BELOW VANGORDA CREEK		8540	6 Jun 1975	46800 5.5
09FD001	PORCUPINE RIVER AT OLD CROW		21400	4 Jun 1964	237000 11.1
09FB001	PORCUPINE RIVER BELOW BELL RIVER		13900	19 May 1977	180000 12.9
09BC003	ROSE CREEK BELOW FARO CREEK		80.5	31 May 1967	1150 14.3
09BA001	ROSS RIVER AT ROSS RIVER		2790	1 Jun 1972	26200 9.4
10MB001	SNAKE RIVER ABOVE IRON CREEK		1070	7 Jun 1964	11400 10.7
10MB003	SNAKE RIVER NEAR THE MOUTH		3440	19 May 1977	40600 11.8
09BB001	SOUTH MACMILLAN RIVER AT MILE 249 CANOL ROAD		305	4 Jun 1975	4590 11.9
09DC002	STEWART RIVER AT MAYO		12200	10 Jun 1964	145000 11.9
09DD002	STEWART RIVER AT STEWART CROSSING		13500	11 Jun 1964	152000 11.3
09DD003	STEWART RIVER AT THE MOUTH		19700	12 Jun 1964	198000 10.1
09AE003	SWIFT RIVER NEAR SWIFT RIVER		1280	11 Jun 1964	15200 11.9
09AA011	TAGISH CREEK NEAR CARCROSS		30.0	21 May 1957	144 4.8
09AC004	TAKHINI RIVER AT OUTLET OF KUSAWA LAKE		1570	21 Jun 1964	9350 6.3
09AC001	TAKHINI RIVER NEAR WHITEHORSE		2700	2 Sep 1949	172000 6.4
09AE001	TESLIN RIVER NEAR TESLIN		11700	28 Jun 1962	65000 5.6
09AF001	TESLIN RIVER NEAR WHITEHORSE		14100	28 Jun 1962	65400 4.6
10AA002	TOM CREEK AT MILE 21.7 ROBERT CAMPBELL HIGHWAY		168	3 May 1976	10800 6.4
09AA009	WATSON RIVER NEAR CARCROSS		444	26 Jun 1971	1550 3.5
09AA012	WHEATON RIVER NEAR CARCROSS		337	10 Jun 1964	2420 7.2
09CB001	WHITE RIVER AT MILE 1169.2 ALASKA HIGHWAY		2410	2 Aug 1976	34000 14.1
09AB009	YUKON RIVER ABOVE FRANK CREEK		12000	29 Aug 1961	29000 2.4
09CD001	YUKON RIVER ABOVE WHITE RIVER		57800	25 Jun 1962	272000 4.7
09AH001	YUKON RIVER AT CARMACKS		33600	24 Jun 1962	127000 3.8
09EB001	YUKON RIVER AT DAWSON		102000	11 Jun 1964	526000 5.2
09EB002	YUKON RIVER AT STEWART RIVER		97100	12 Jun 1964	470000 4.8
09AB001	YUKON RIVER AT WHITEHORSE		7500	9 Aug 1953	22800 3.0

PERIOD OF RECORD OF MAXIMUM DAILY FLOWS

STATION NUMBER	NO. OF YEARS OF RECORD	1 9 0	1 9 1	1 9 2	1 9 3	1 9 4	1 9 5	1 9 6	1 9 7
08AA001	28								
08AB001	2								
09AH003	3								
09AG001	19								
10BC001	16								
08AA003	24								
10MD001	2								
10AB001	15								
09DA001	1								
10AD002	1								
10AD001	25								
08AA004	5								
10AB003	2								
09EA003	11								
09CA002	25								
10AA001	18								
09AA007	15								
09AB008	21								
09DC001	4								
09EA004	3								
10MA002	3								
09FC001	2								
10MA001	11								
09BC001	24								
09BC002	19								
09BC004	5								
09FD001	16								
09FB001	3								
09BC003	3								
09BA001	15								
10MB001	4								
10MB003	1								
09BB001	3								
09DC002	28								
09DD002	13								
09DD003	14								
09AE003	20								
09AE001	31								
09AF001	18								
10AA002	3								
09AA009	14								
09AA012	17								
09AC001	3								
09CB001	25								
09CD001	19								
09AH001	26								
09EB001	30								
09EB002	9								

FLOOD ESTIMATES FROM PROBABILITY DISTRIBUTIONS

Station Number	River	Return Period in years	Parameter			Max. Likelihood Moments	Log Pearson III by the method of:
			Gumbel I	Lognormal	Three Parameter Lognormal		
08AA001	Aishihik	50	5260	5420	5080	-----	5020
		100	5830	6040	5560	-----	5450
09AG001	Big Salmon	50	20900	21600	23500	23200	24500
		100	22800	23500	26400	26100	28100
10BC001	Coal	50	47100	45200	41700	-----	43700
		100	51200	48300	43500	46200	46200
08AA003	Dezadeash	50	11600	11700	10900	10400	10900
		100	12800	12900	11800	11100	11700
10AB001	Frances	50	44700	43200	43600	42800	42800
		100	48500	46200	46800	45700	45700
10AD001	Hyland	50	46600	46600	52900*	48800	53600
		100	50100	49600	59200*	53200	60800
09EA003	Klondike	50	23600	23400	25900	25400	24800
		100	25500	25000	28700	28200	27000
09CA002	Kluane	50	15800	14300	-----	13000	12900
		100	17200	15200	-----	13400	13200
10AA001	Liard	50	118000	120000	168000	-----	130000
		100	128000	129000	205000	-----	145000
09AA007	Lubbock	50	765	801	916	901	898
		100	838	878	1050	1040	1030
09AB008	M'Clintock	50	4170	4350	4350	3780	4210
		100	4620	4870	4870	4030	4650
10MA001	Peel	50	186000	221000	315000	251000	251000
		100	208000	256000	402000	-----	305000

* Fitted by the method of moments.
 ---- Cannot be fitted.

FLOOD ESTIMATES FROM PROBABILITY DISTRIBUTIONS

Station Number	River	Return Period in years	Three Parameter			Log Pearson III by the method of:	
			Gumbel I	Lognormal	Parameter	Max.	Likelihood
09BC001	Pelly	50	145000 159000	151000 167000	173000 200000	173000	166000 191000
09BC002	Pelly	100	71400 78100	72100 78500	76300 84700	75300 83800	75700 84000
09FD001	Porcupine	50	333000 368000	328000 363000	----- -----	----- -----	----- -----
09BA001	Ross	50	26500 28700	26100 28000	29200 32500	29300 32900	27300 29700
09DC002	Stewart	50	154000 169000	150000 163000	143000* 154000*	141000 151000	140000 149000
09DD002	Stewart	50	153000 166000	154000 166000	192000 223000	203000 243000	167000 186000
09DD003	Stewart	100	170000 186000	181000 198000	313000 411000	----- -----	213000 251000
09AE003	Swift	50	15300 16600	15200 16200	17000 18900	16900 18900	16100 17700
09AA011	Tagish	50	150 167	168 191	150 166	145 159	143 154
09AC004	Takhini	50	12200 13200	11500 12200	----- -----	----- -----	10900 11400
09AC001	Takhini	50	14100 15300	13800 14800	14500 15800	14400 15700	14800 16300
09AE001	Teslin	50	67900 73900	65600 70500	64800* 69300*	66600 72100	66200 71400

* Fitted by the method of moments.

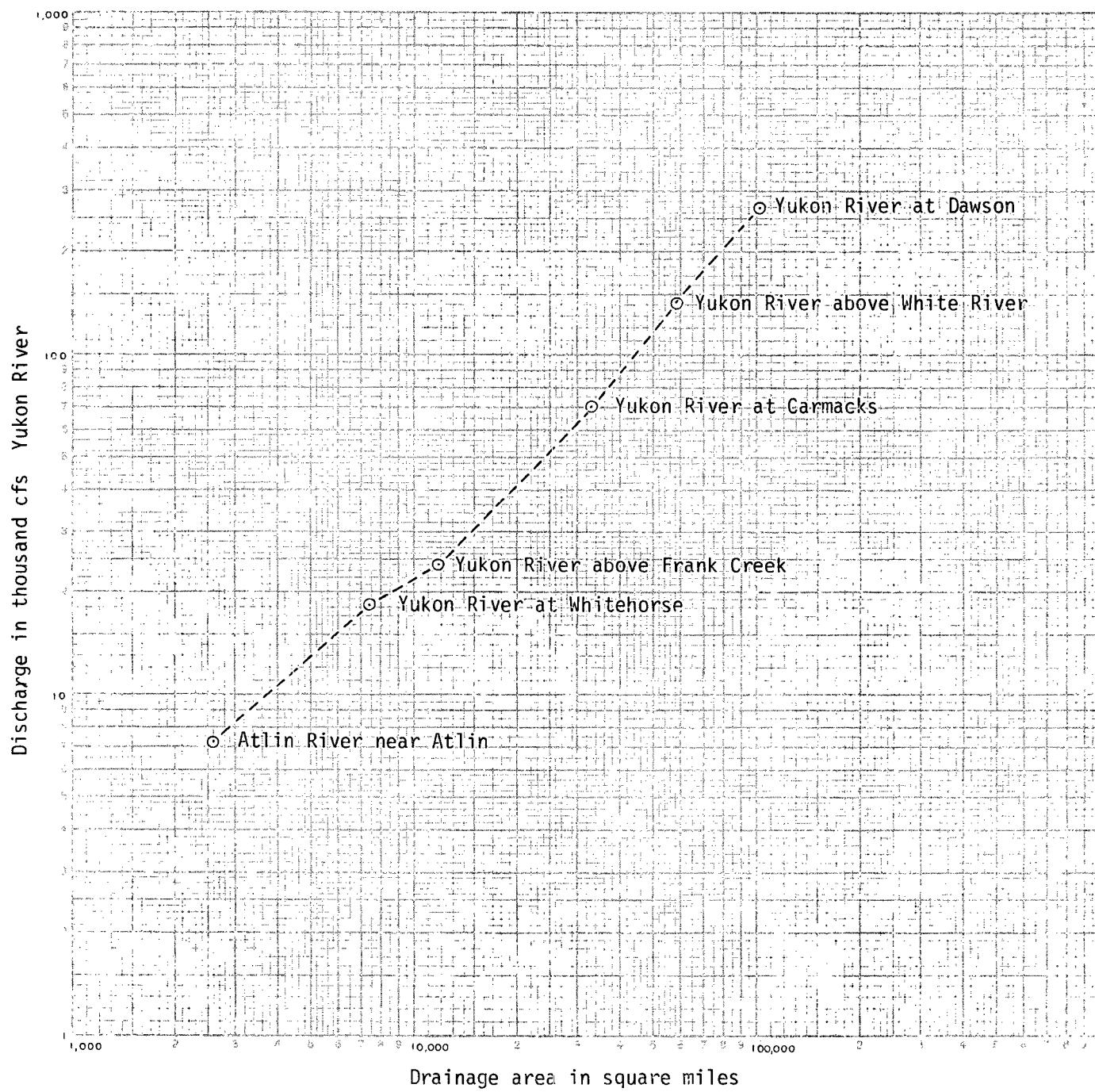
---- Cannot be fitted.

FLOOD ESTIMATES FROM PROBABILITY DISTRIBUTIONS

Station Number	River	Return Period in years	Three Parameter Lognormal			Log Pearson III by the method of:		
			Gumbel I	Lognormal	Parameter Lognormal	Max.	Likelihood	Moments
09AF001	Teslin	50	72600	71300	74800	73400	72500	
		100	79000	76700	81700	80100	78600	
09AA009	Watson	50	1900	2040	1840	-----	1860	
		100	2120	2300	2010	-----	2030	
09AA012	Wheaton	50	3060	2850	-----	2440	2590	
		100	3330	3060	-----	2490	2690	
09AB009	Yukon	50	35100	31700	-----	-----	30200	
		100	37200	32800	-----	-----	30800	
09CD001	Yukon	50	256000	269000	307000	303000	306000	
		100	280000	293000	352000	350000	353000	
09AH001	Yukon	50	119000	115000	119000*	119000	120000	
		100	129000	124000	129000*	129000	130000	
09EB001	Yukon	50	444000	444000	477000	472000	493000	
		100	480000	475000	524000	519000	551000	
09AB001	Yukon	50	26000	23900	23300*	23100	23400	
		100	27500	24700	24000*	23600	24100	

* Fitted by the method of moments.
---- Cannot be fitted.

MEAN ANNUAL FLOOD
MAIN STEM SITES ON THE YUKON RIVER
(Not corrected for storage)



ENVELOPE CURVE OF EXTREME FLOODS IN THE YUKON TERRITORY

