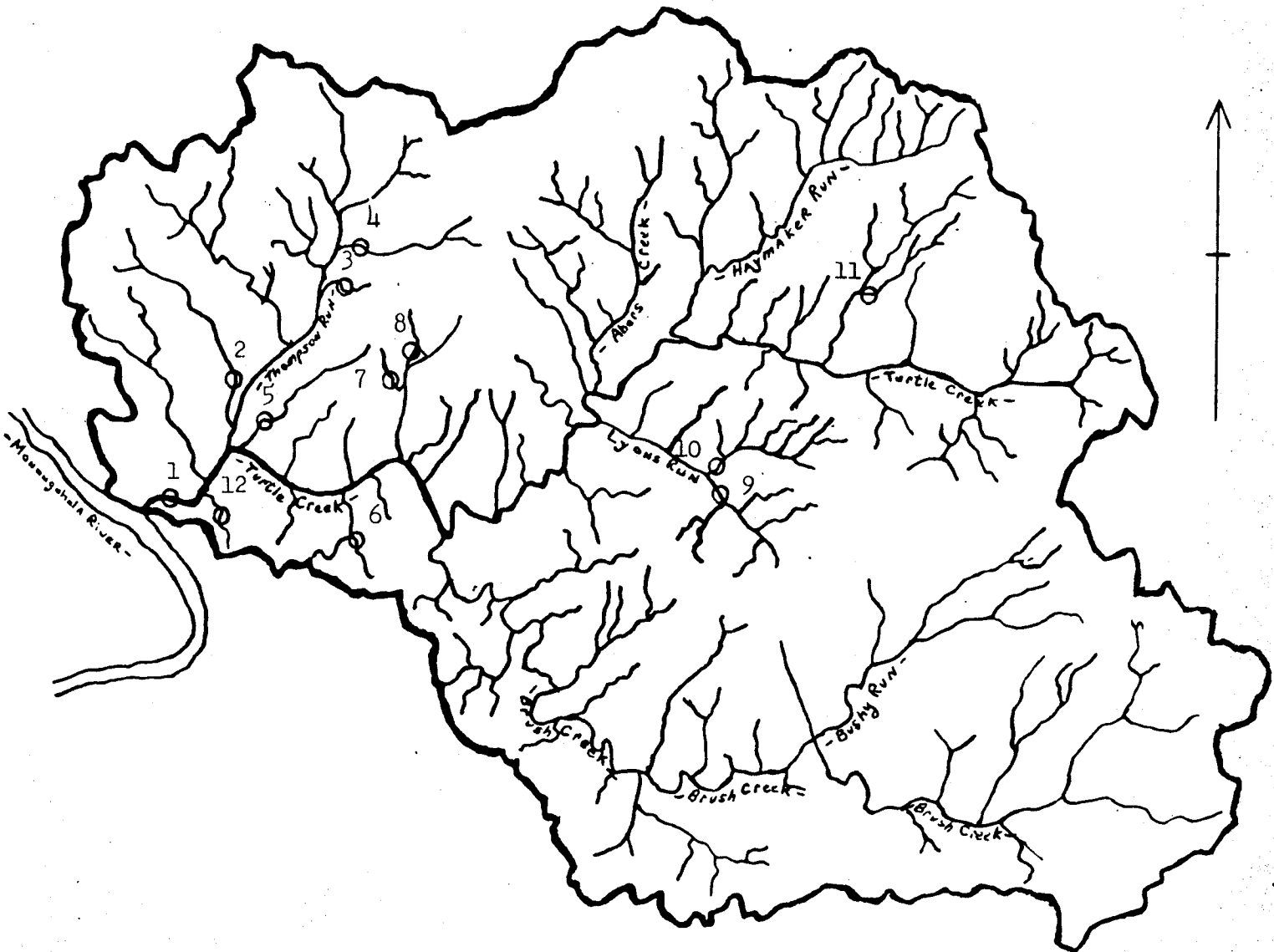


WATER QUALITY DATA

WATER QUALITY
STREAM SAMPLING POINTS



SAMPLING POINTS

- | | |
|------------------------------|--------------------------------|
| #1 Turtle Creek (at mouth) | #7 Tributary of Dirty Camp Run |
| #2 Saw Mill Run | #8 Sugar Camp Run |
| #3 Tributary of Thompson Run | #9 Byers Run |
| #4 Boundary Run | #10 Lyons Run |
| #5 Lynn Avenue Run | #11 Steels Run |
| #6 Wall Run | #12 Coal Run |

WATER QUALITY DATA

Sample Point	pH			
	July, 1973	Aug. 1973	Sept. 1973	AVERAGE
1	6.7	4.7	6.1	5.8
2	4.6	4.6	6.1	5.1
3	4.5	4.5	5.1	4.7
4	4.9	3.5	6.4	4.9
5	4.4	4.3	5.7	4.8
6	4.5	4.6	4.9	4.7
7	6.0	6.6	6.6	6.4
8	4.8	5.9	5.6	5.4
9	6.8	7.0	6.9	6.9
10	4.5	4.5	4.4	4.5
11	4.6	4.4	4.7	4.6
12	3.4	3.1	3.7	3.4

WATER QUALITY DATA

Sample Point	Acidity (milligrams per liter)			
	July, 1973	Aug. 1973	Sept. 1973	AVERAGE
1	0	14	0	4.7
2	110	56	0	55.3
3	170	82	40	97.3
4	38	40	0	26.0
5	190	120	20	110.0
6	110	48	32	63.3
7	18	0	0	6.0
8	30	8	10	16.0
9	0	0	0	0
10	58	50	70	59.3
11	100	76	60	78.7
12	340	320	190	283.3

WATER QUALITY DATA				
Sample Point	Alkalinity (milligrams per liter)			
	July, 1973	Aug. 1973	Sept. 1973	AVERAGE
1	2	0	16	6.0
2	0	0	16	5.3
3	0	0	0	0
4	0	0	2	0.7
5	0	0	0	0
6	0	0	0	0
7	0	2	10	4.0
8	0	0	0	0
9	32	10	40	27.3
10	0	0	0	0
11	0	0	0	0
12	0	0	0	0

WATER QUALITY DATA

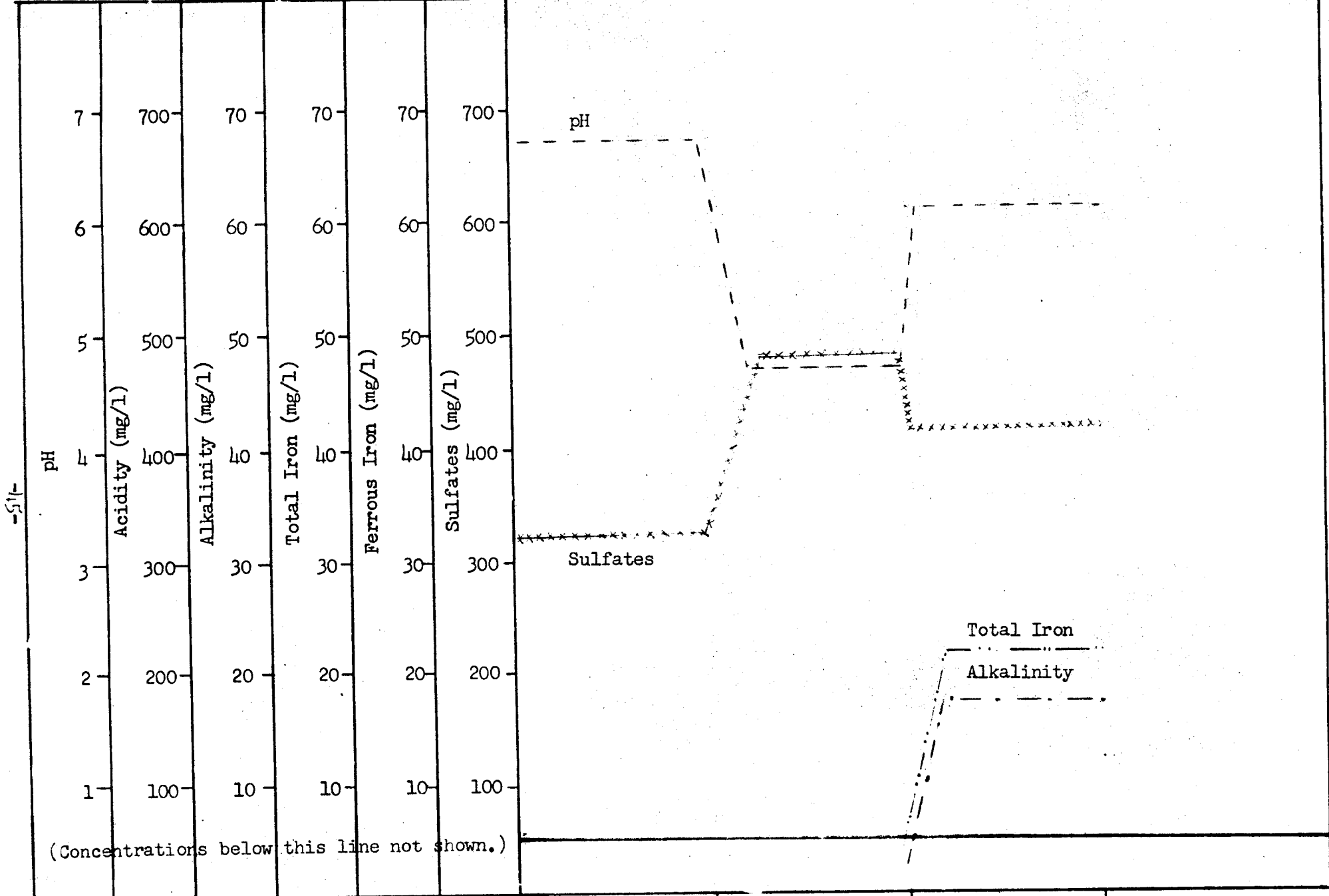
Sample Points	Total Iron (milligrams per liter)			
	July, 1973	Aug. 1973	Sept. 1973	AVERAGE
1	2.0	3.6	22.0	9.20
2	2.0	1.1	1.0	1.37
3	8.8	6.0	4.2	6.33
4	0.4	0.3	0.2	0.30
5	3.8	1.7	0.2	1.90
6	4.9	0.2	0.2	1.76
7	0.5	0.2	0.1	0.26
8	0.6	0.3	0.1	0.33
9	0.5	0.2	0.1	0.26
10	0.6	0.2	0.1	0.30
11	0.8	0.5	0.3	0.53
12	34.0	28.0	18.0	26.66

WATER QUALITY DATA

Sample Point	Ferrous Iron (milligrams per liter)			
	July, 1973	Aug. 1973	Sept. 1973	AVERAGE
1	0.5	0.7	1.9	1.03
2	0.7	0.5	0.6	0.60
3	3.3	3.4	2.4	3.03
4	0.4	0.3	0.2	0.30
5	0.9	0.5	0.2	0.53
6	1.2	0.2	0.2	0.53
7	0.5	0.2	0.1	0.26
8	0.5	0.3	0.1	0.30
9	0.5	0.2	0.1	0.26
10	0.5	0.2	0.1	0.26
11	0.5	0.5	0.3	0.43
12	24.0	20.0	11.0	18.33

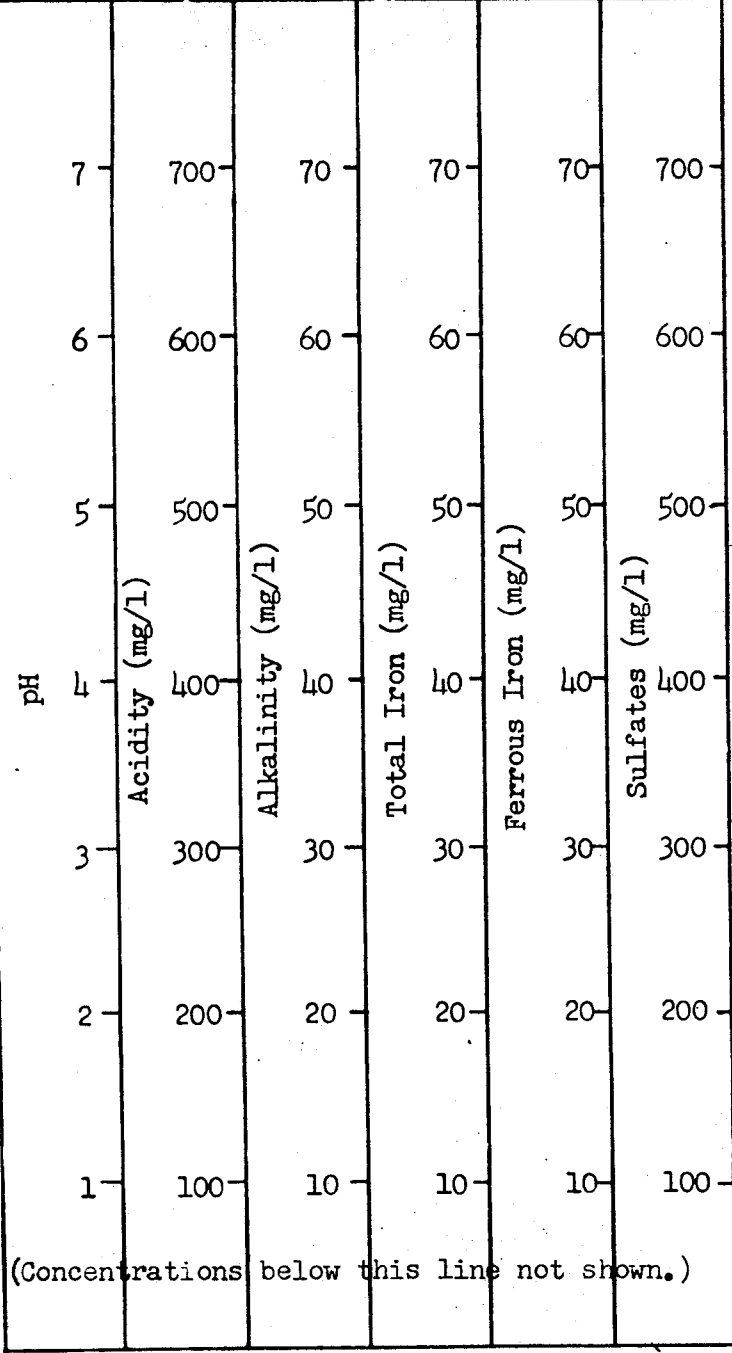
WATER QUALITY DATA

Sample Point	Sulfates (milligrams per liter)			
	July, 1973	Aug. 1973	Sept. 1973	AVERAGE
1	320	490	410	407
2	480	480	410	457
3	740	700	660	700
4	590	770	620	660
5	500	510	360	457
6	480	490	270	413
7	390	380	350	373
8	270	210	200	237
9	300	140	320	253
10	150	220	330	233
11	390	360	410	387
12	760	730	660	717

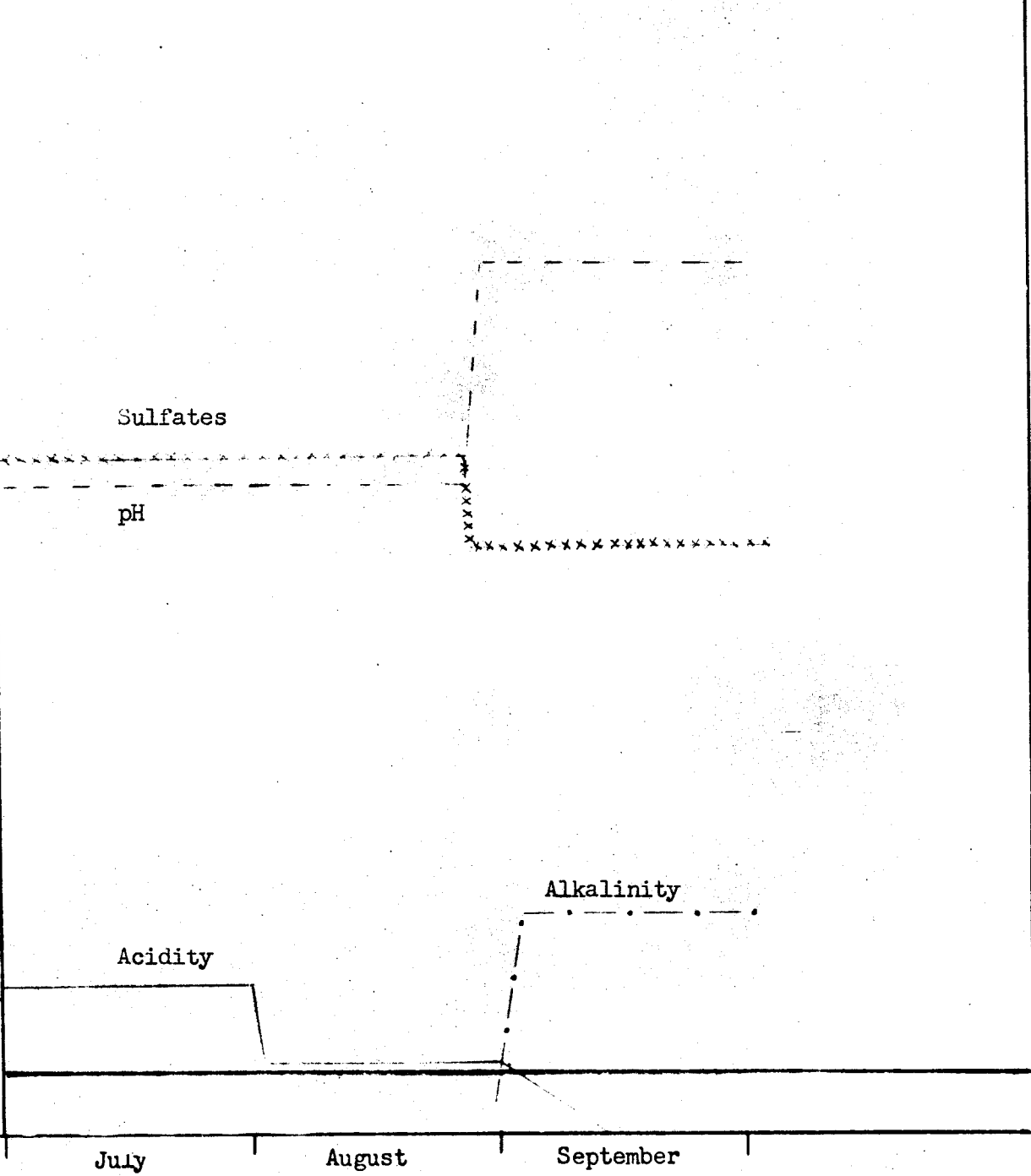


1973
 WATER QUALITY DIAGRAM
 SAMPLE POINT #1

-97-

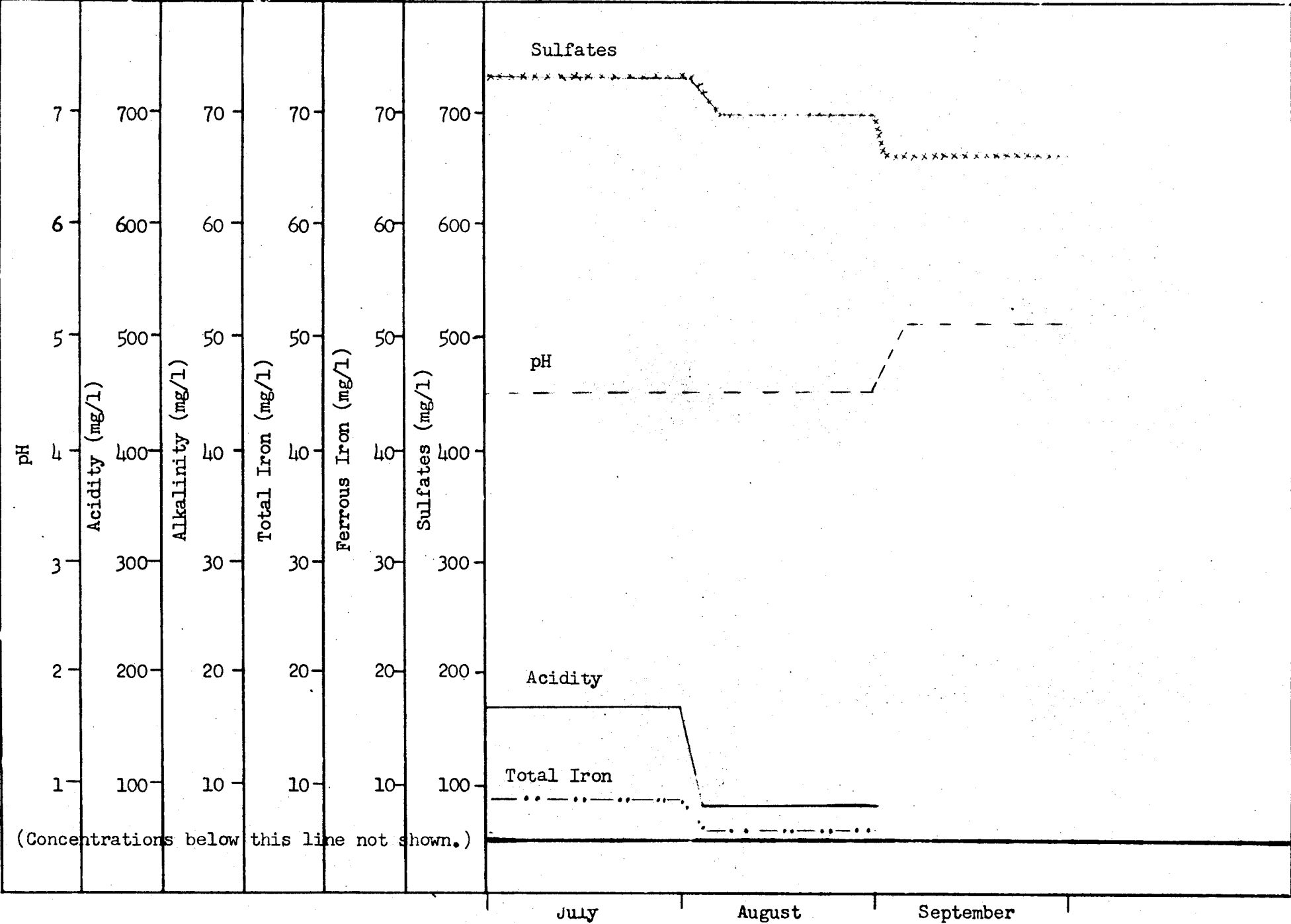


(Concentrations below this line not shown.)



1973
WATER QUALITY DIAGRAM
SAMPLE POINT #2

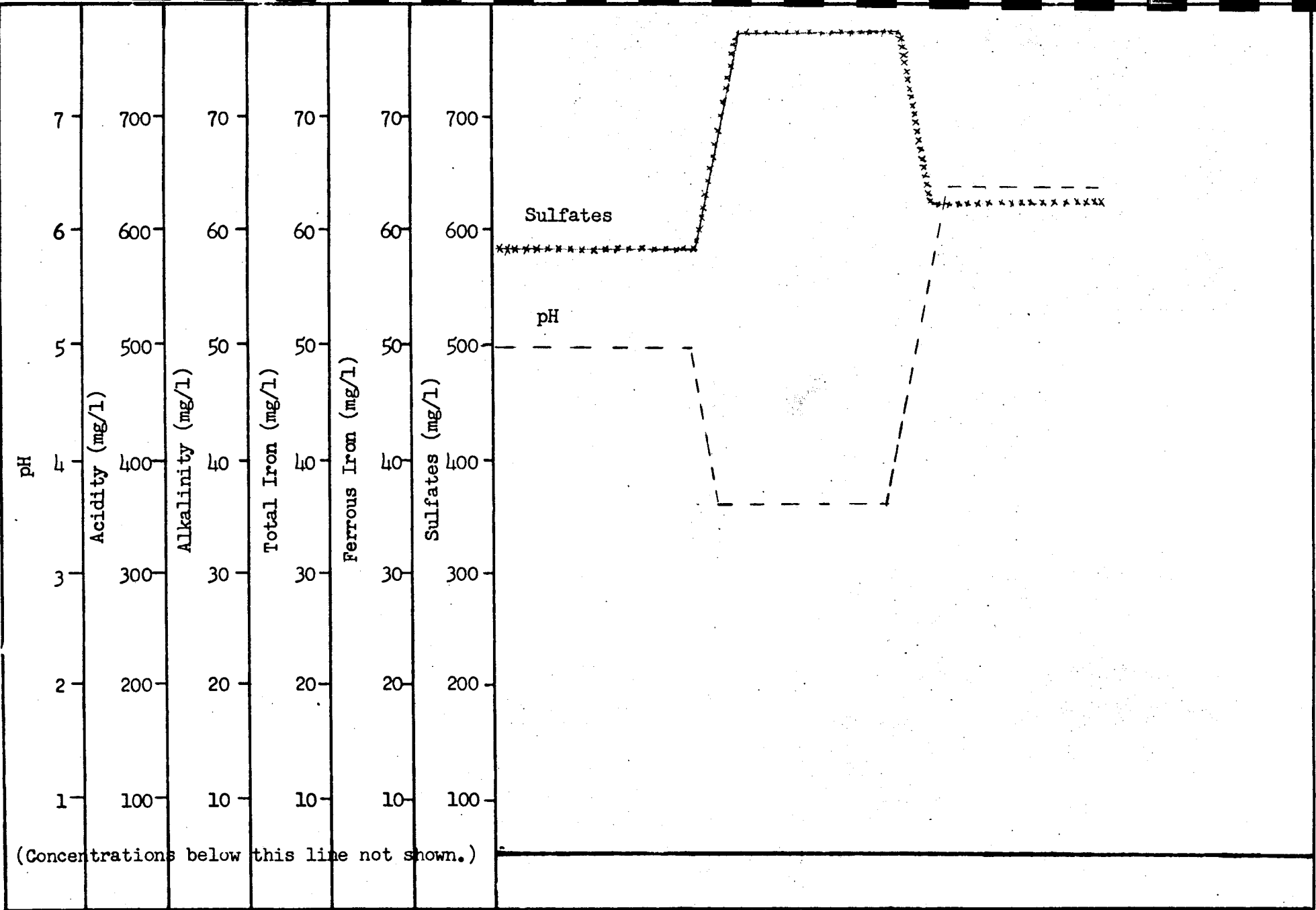
-17-



(Concentrations below this line not shown.)

1973
WATER QUALITY DIAGRAM
SAMPLE POINT #3

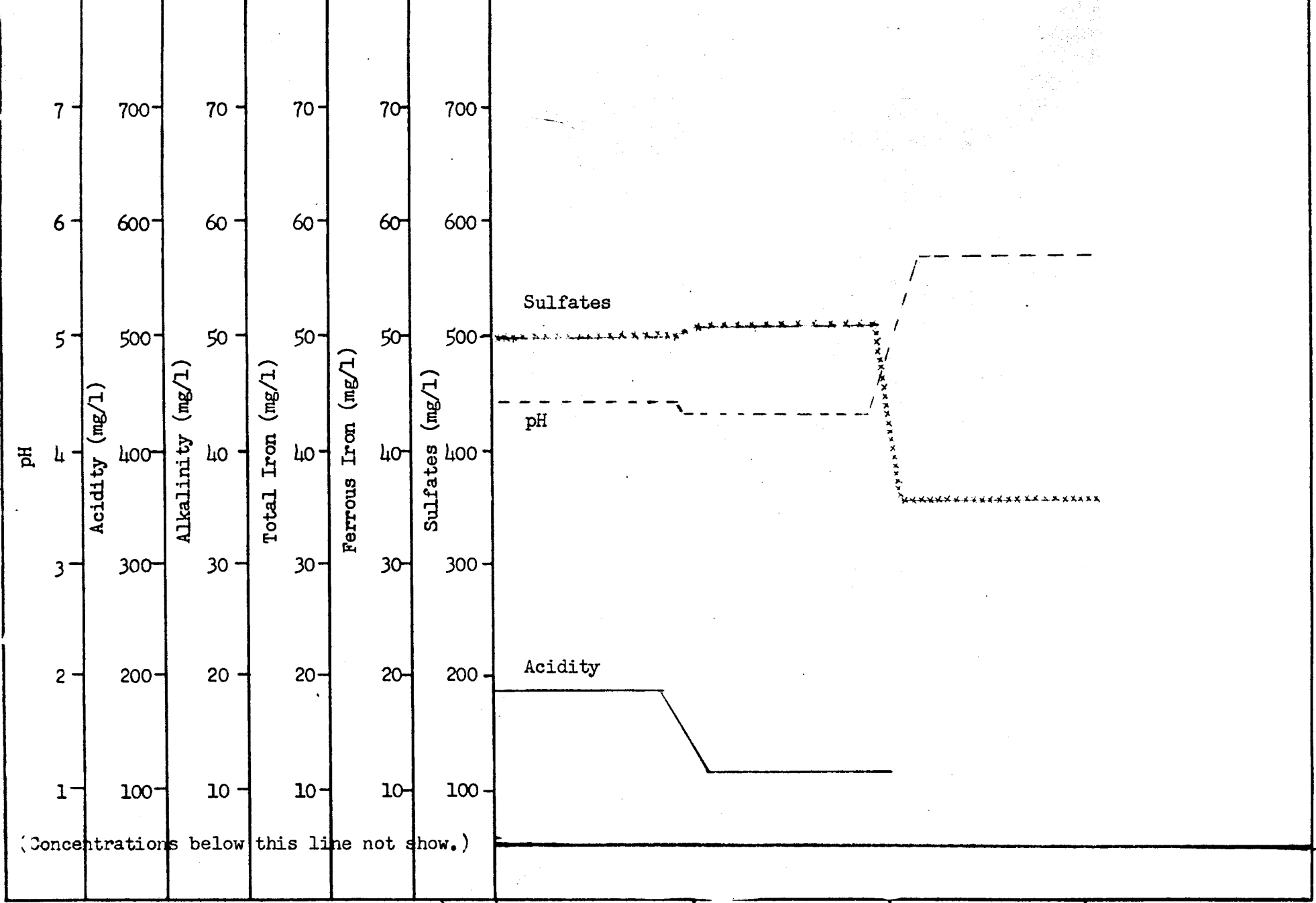
-87-



(Concentrations below this line not shown.)

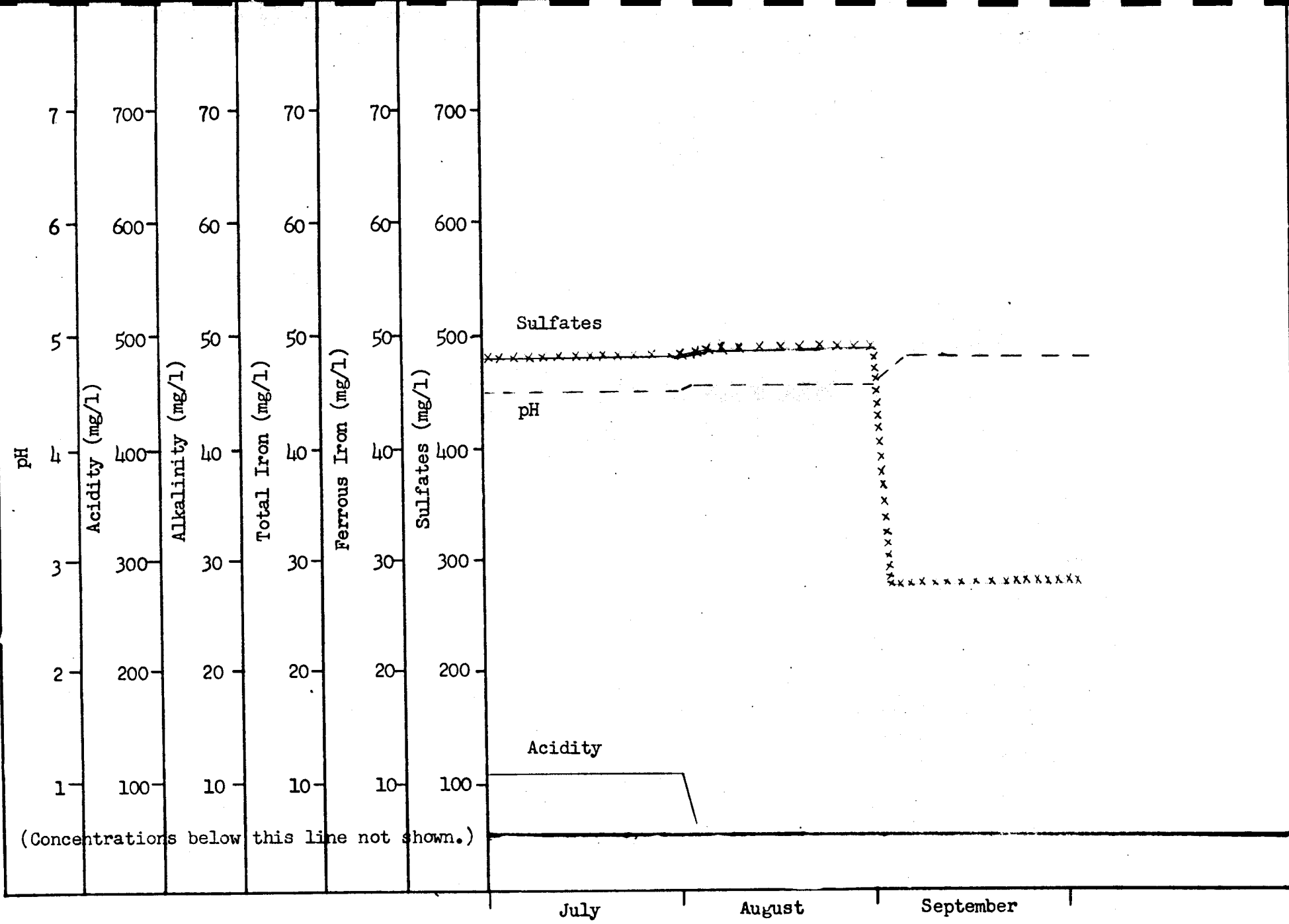
July August September

1973
WATER QUALITY DIAGRAM
SAMPLE POINT #4

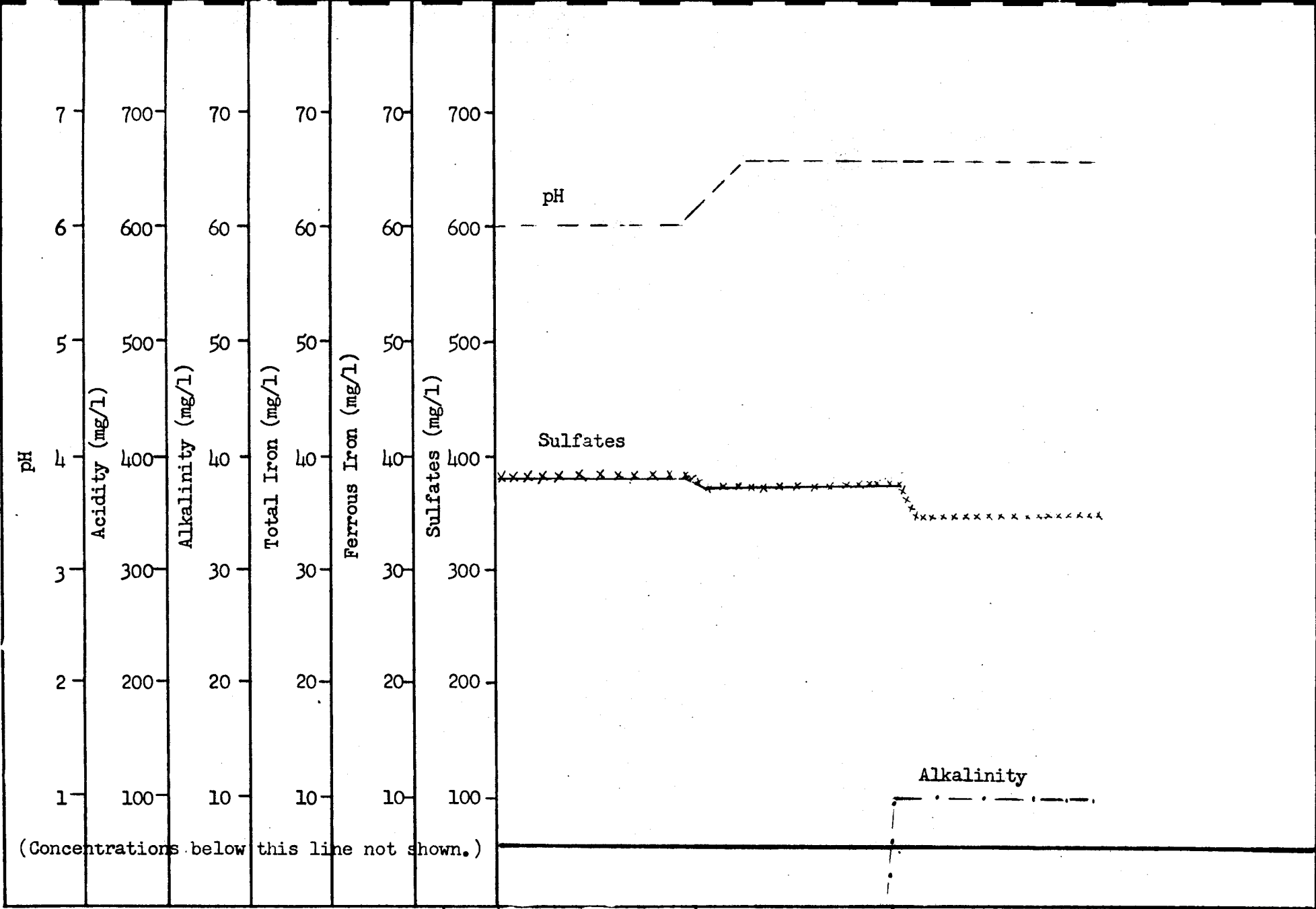


1973
 WATER QUALITY DIAGRAM
 SAMPLE POINT #5

-05-



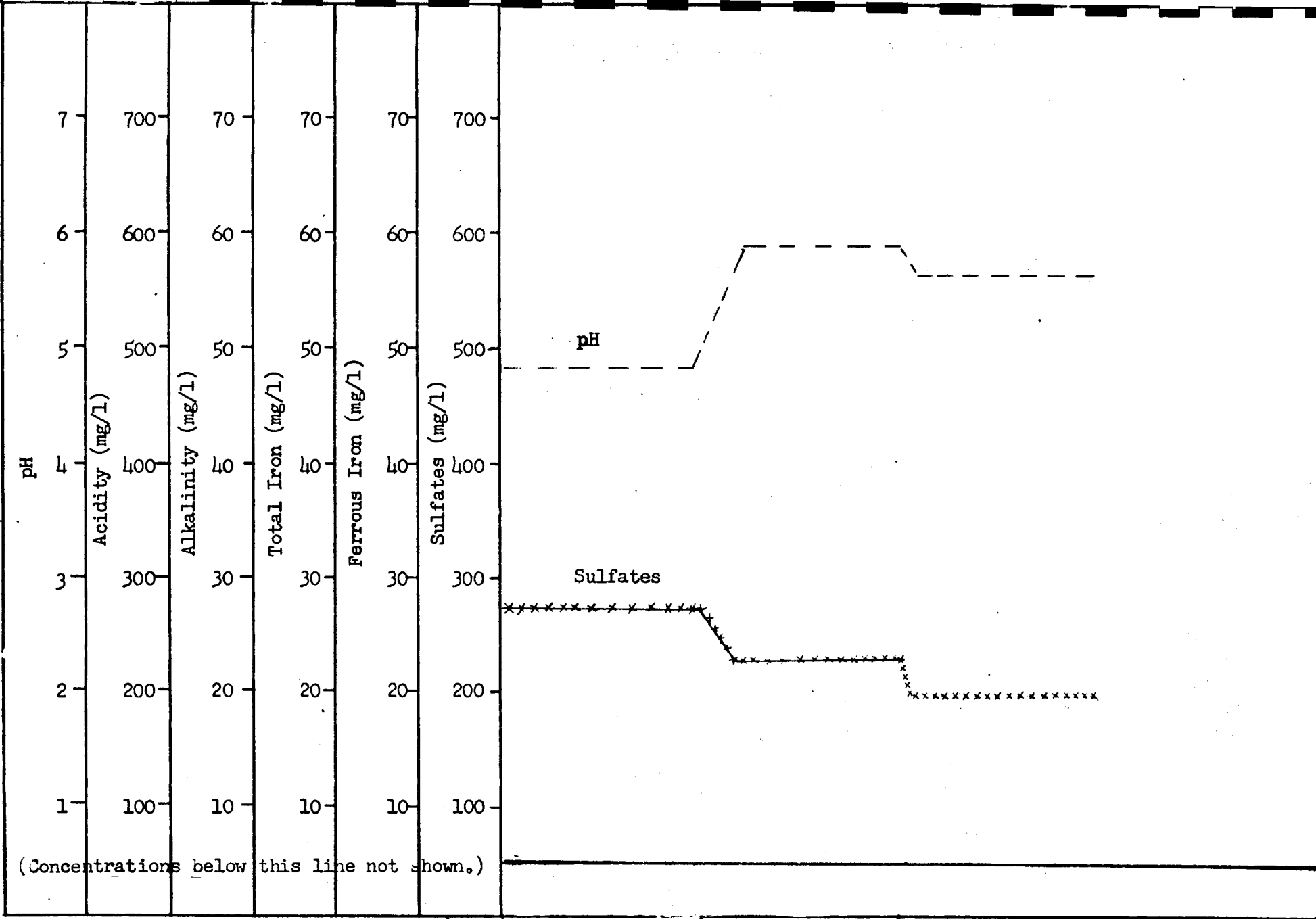
1973
WATER QUALITY DIAGRAM
SAMPLE POINT #6



(Concentrations below this line not shown.)

July August September

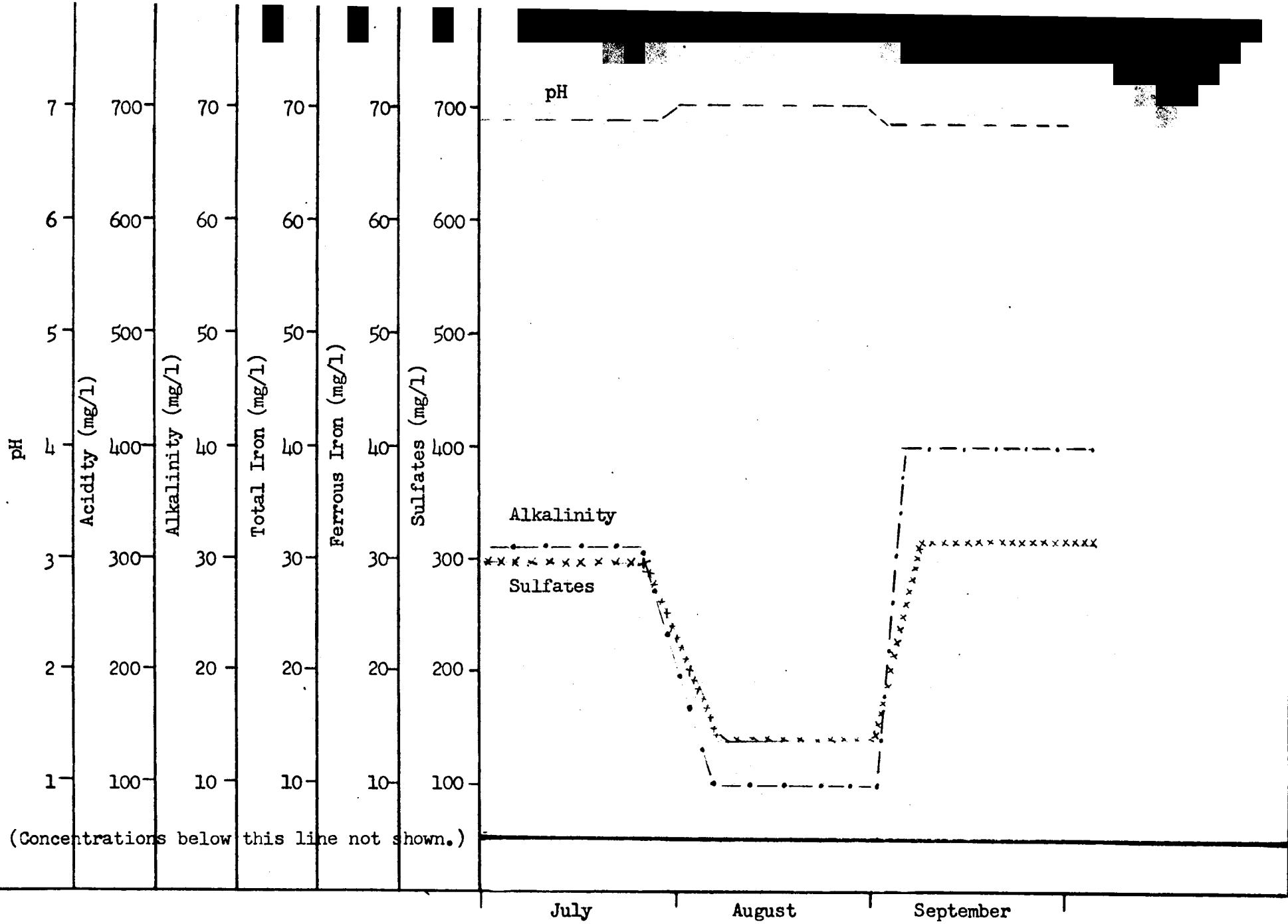
1973
WATER QUALITY DIAGRAM
SAMPLE POINT #7



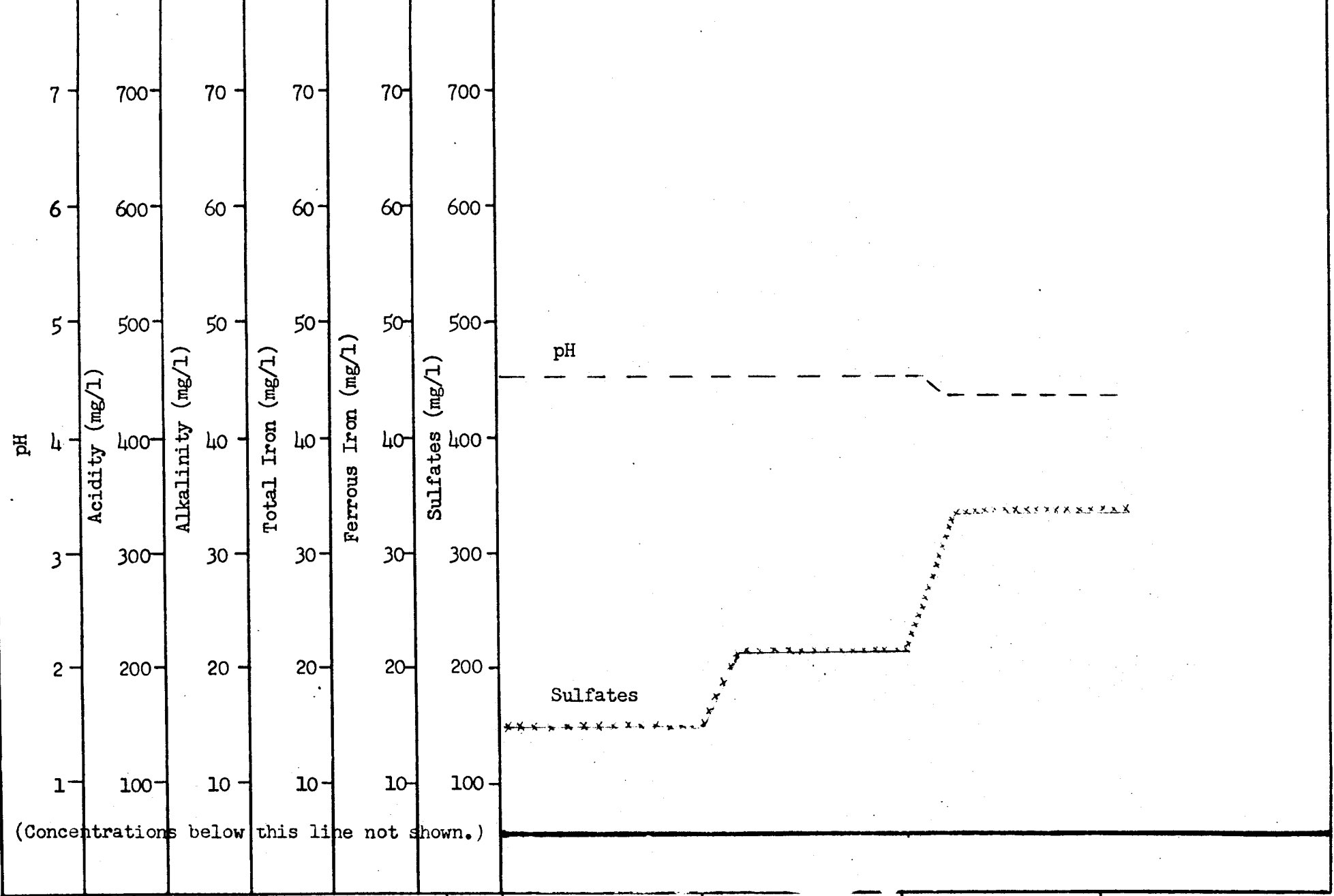
(Concentrations below this line not shown.)

July August September

1973
WATER QUALITY DIAGRAM
SAMPLE POINT #8

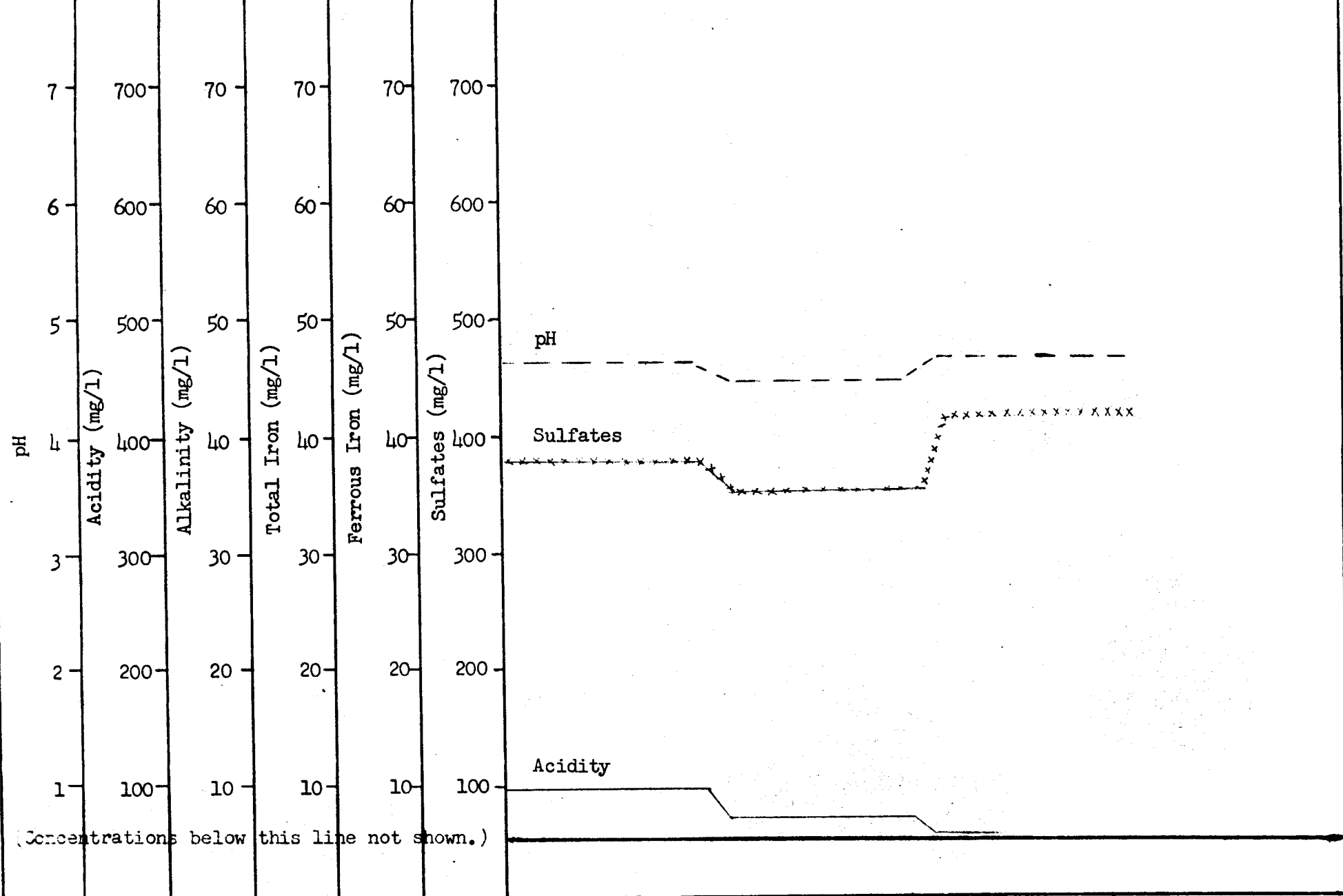


1973
WATER QUALITY DIAGRAM
SAMPLE POINT #9



July August September

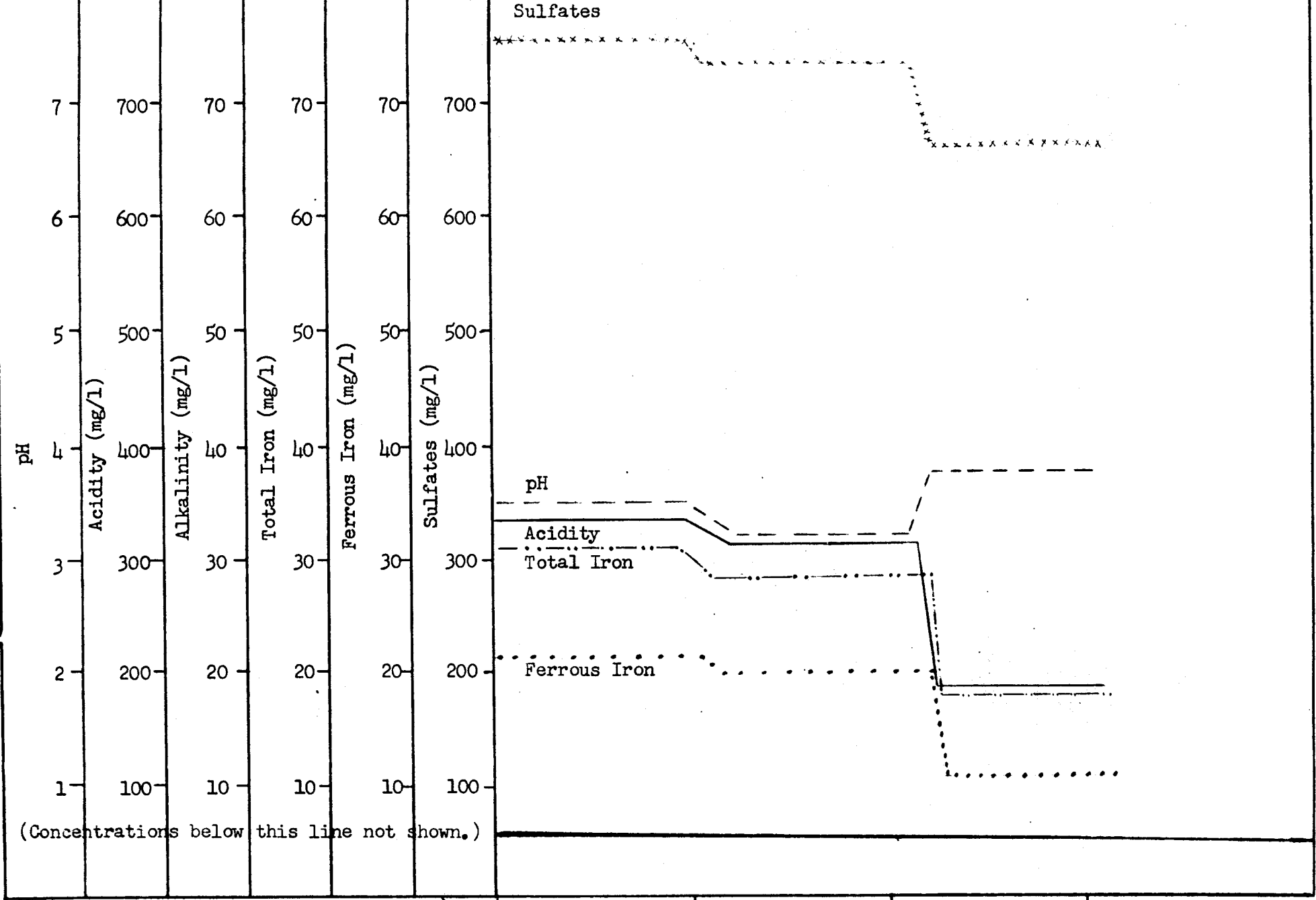
1973
WATER QUALITY DIAGRAM
SAMPLE POINT #10



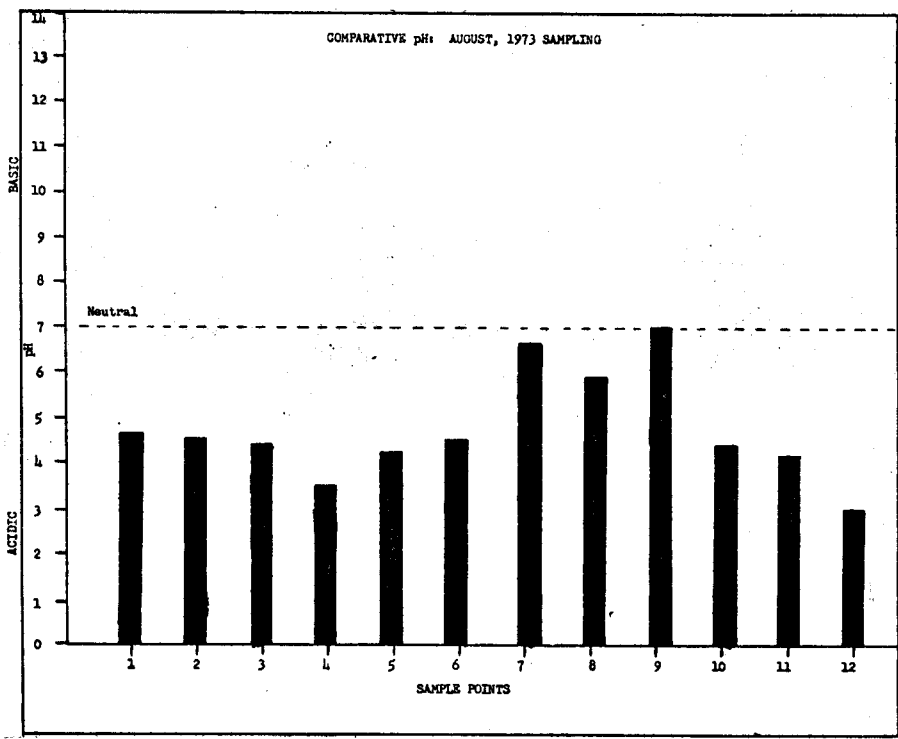
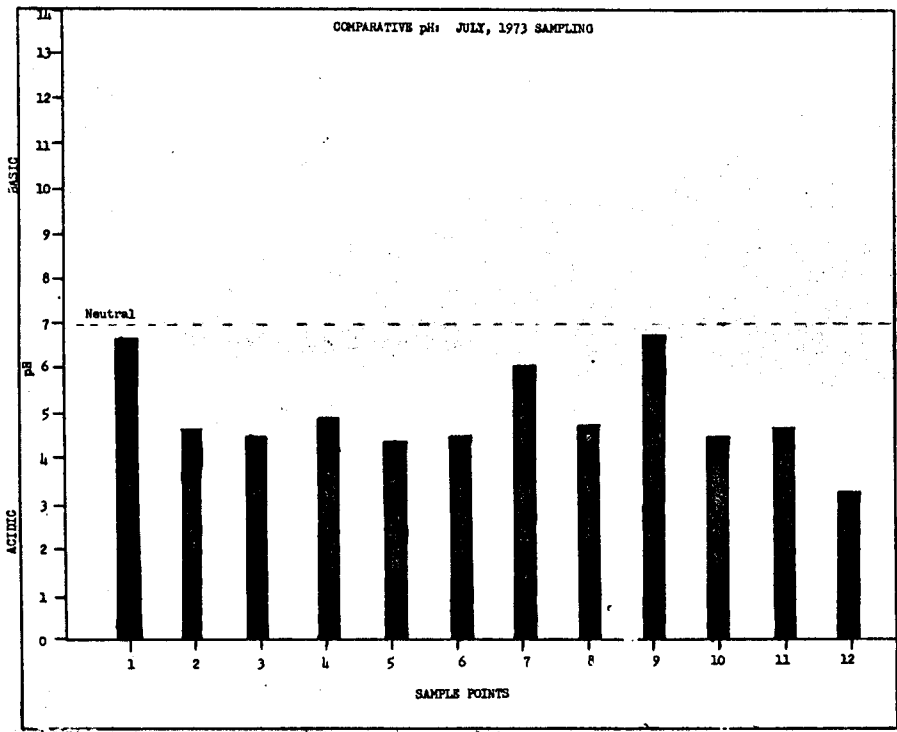
July August September

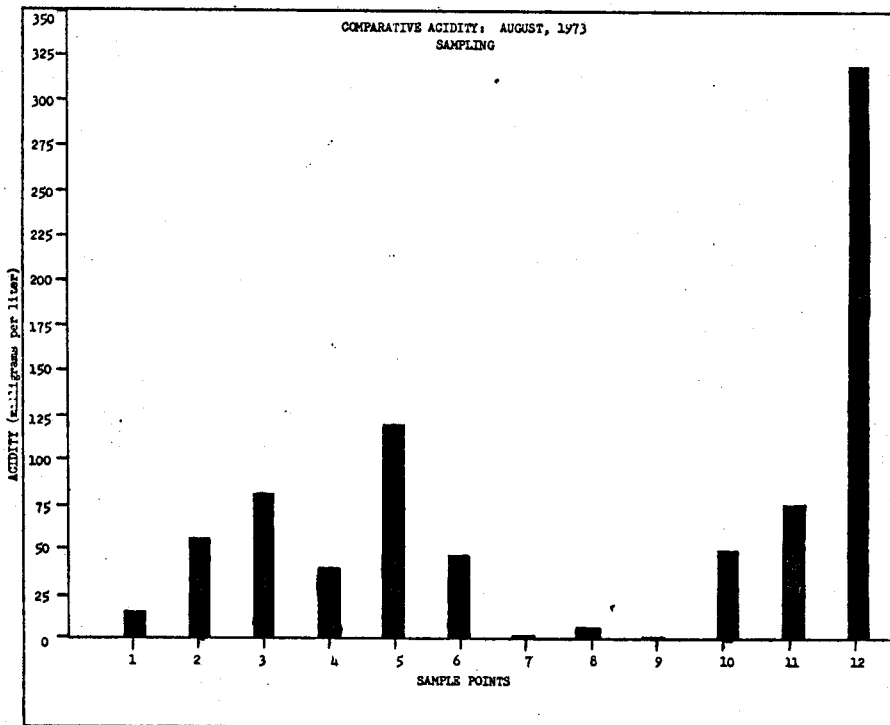
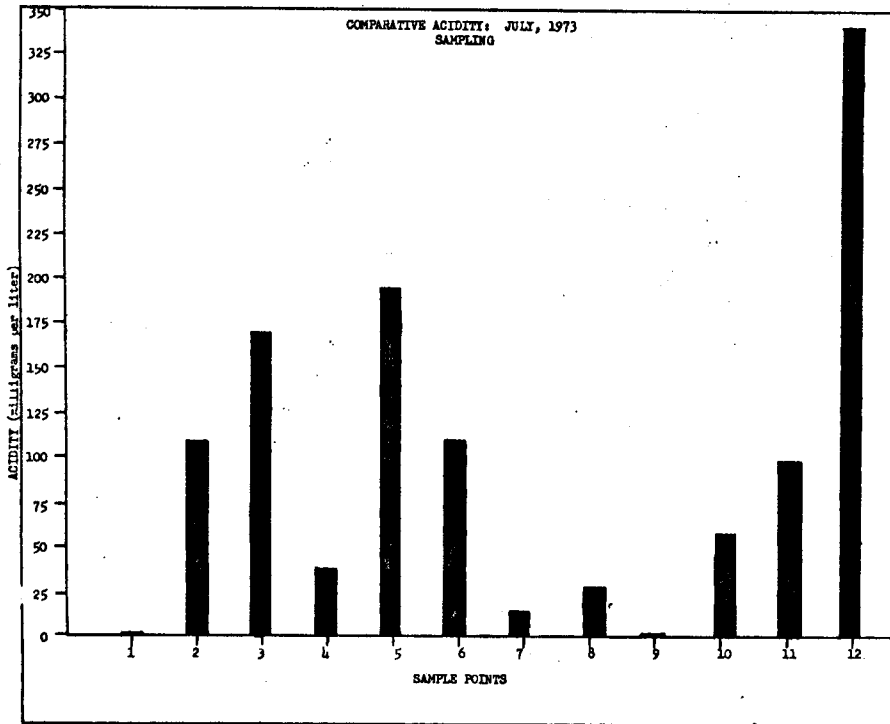
1973
WATER QUALITY DIAGRAM
SAMPLE POINT #11

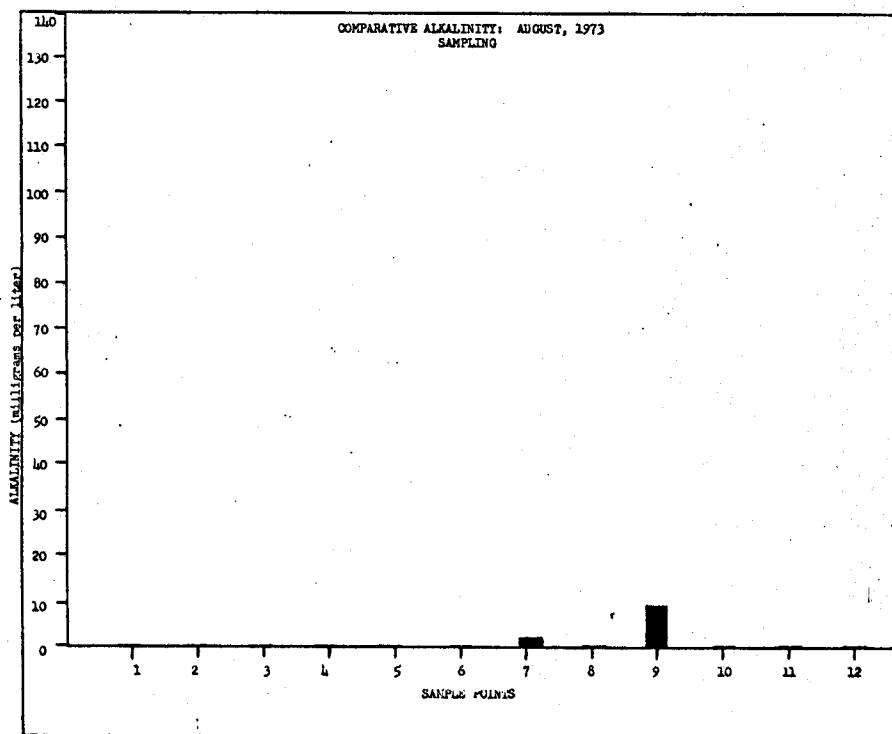
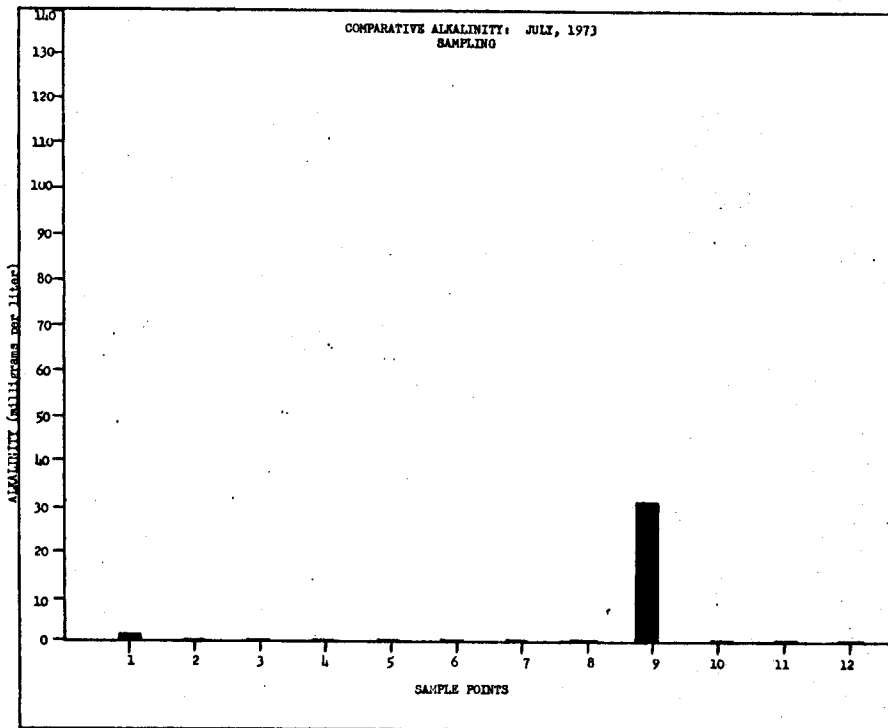
-95-

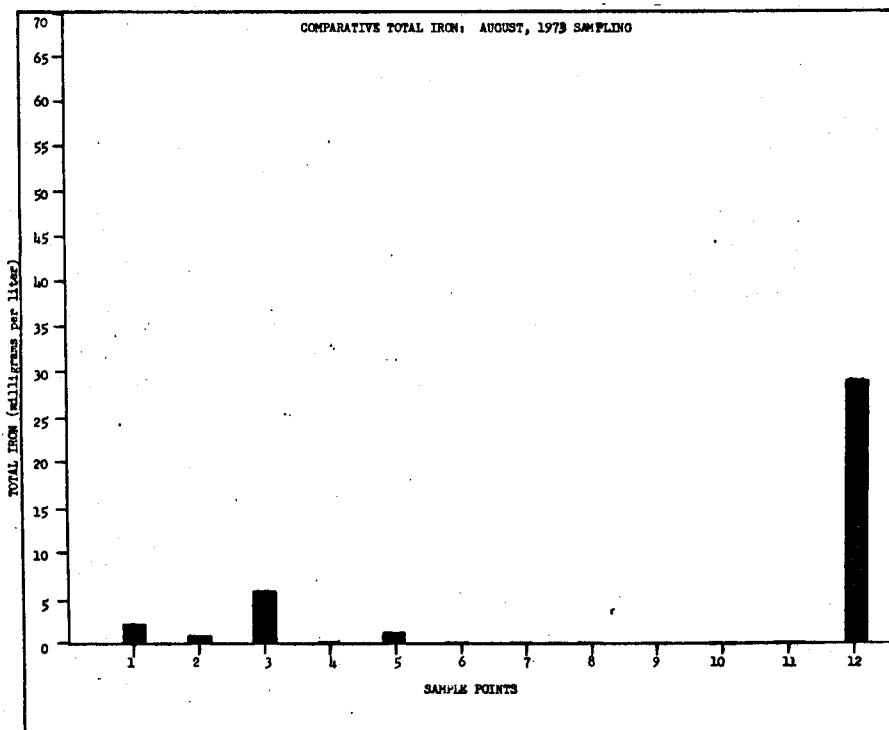
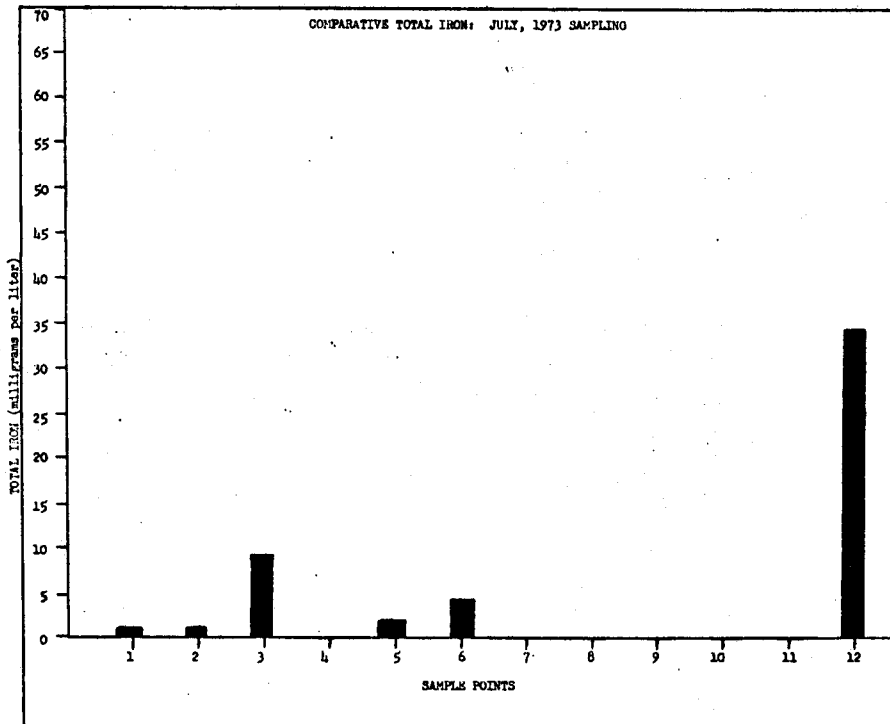


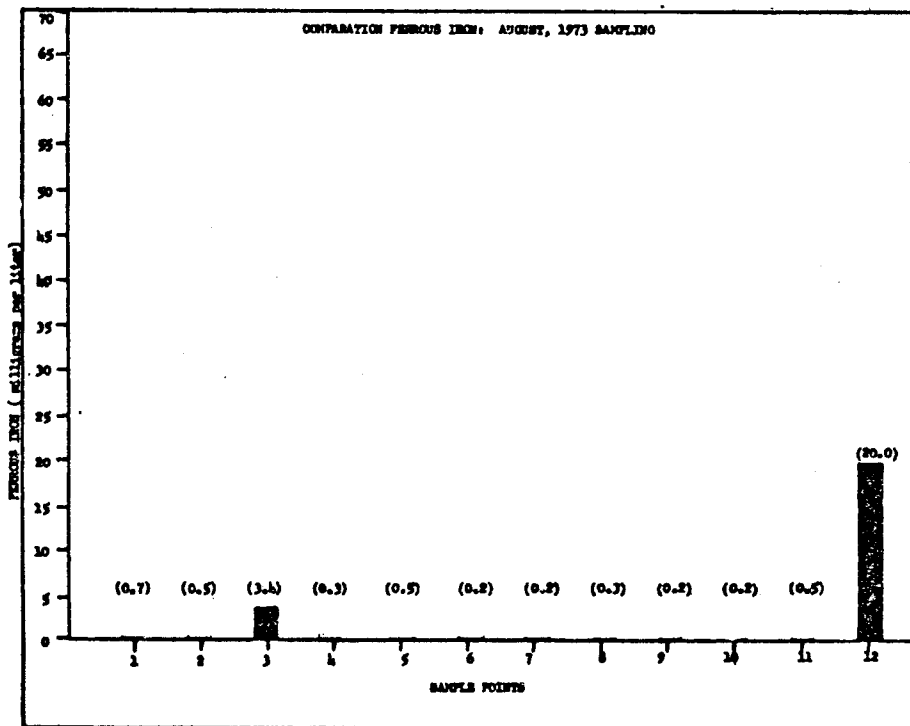
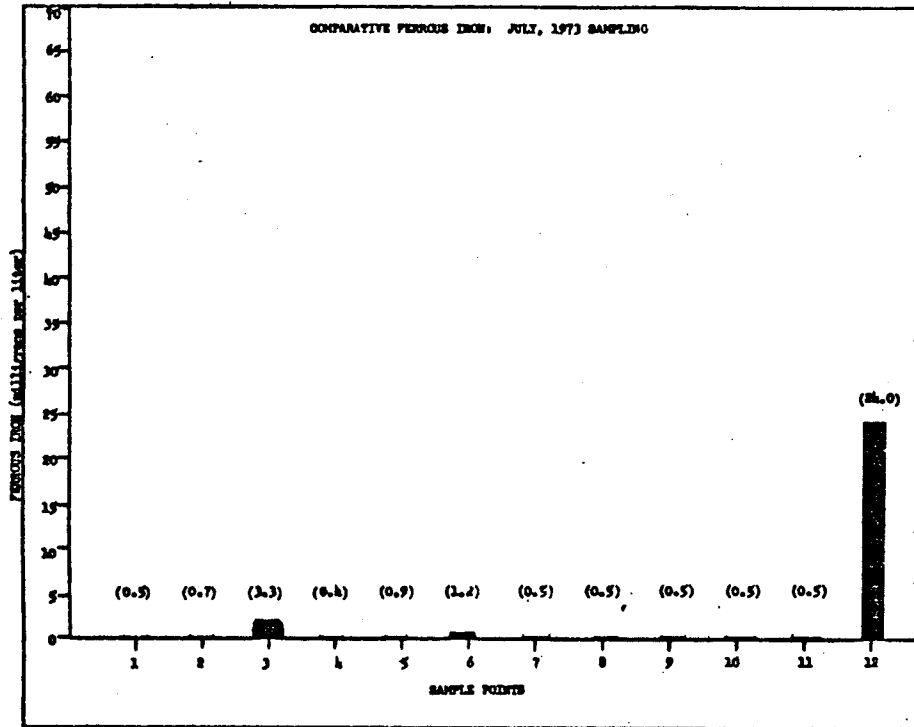
1973
WATER QUALITY DIAGRAM
SAMPLE POINT #12

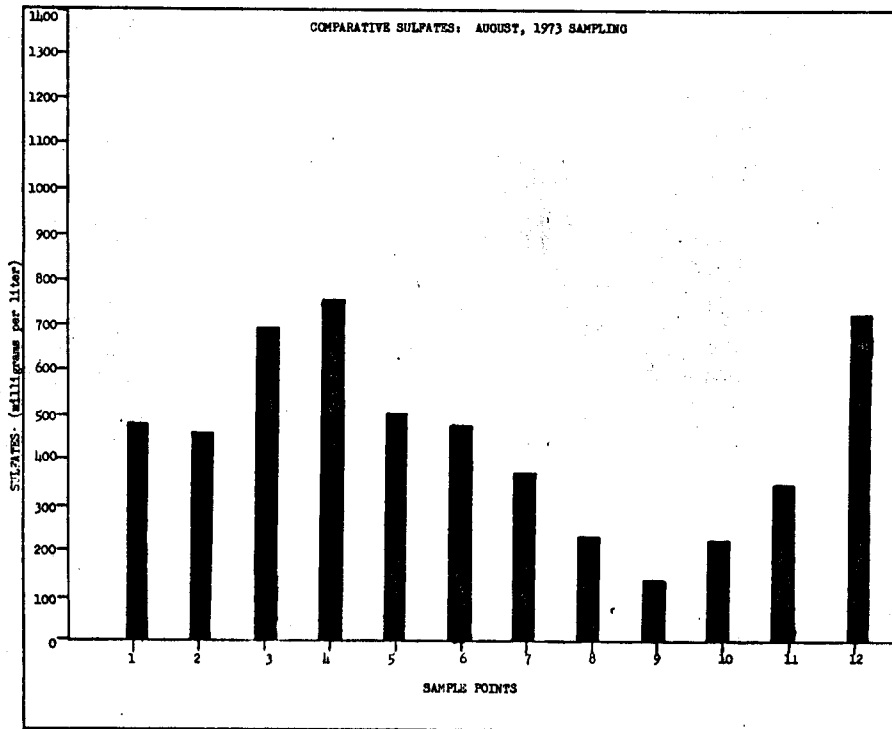
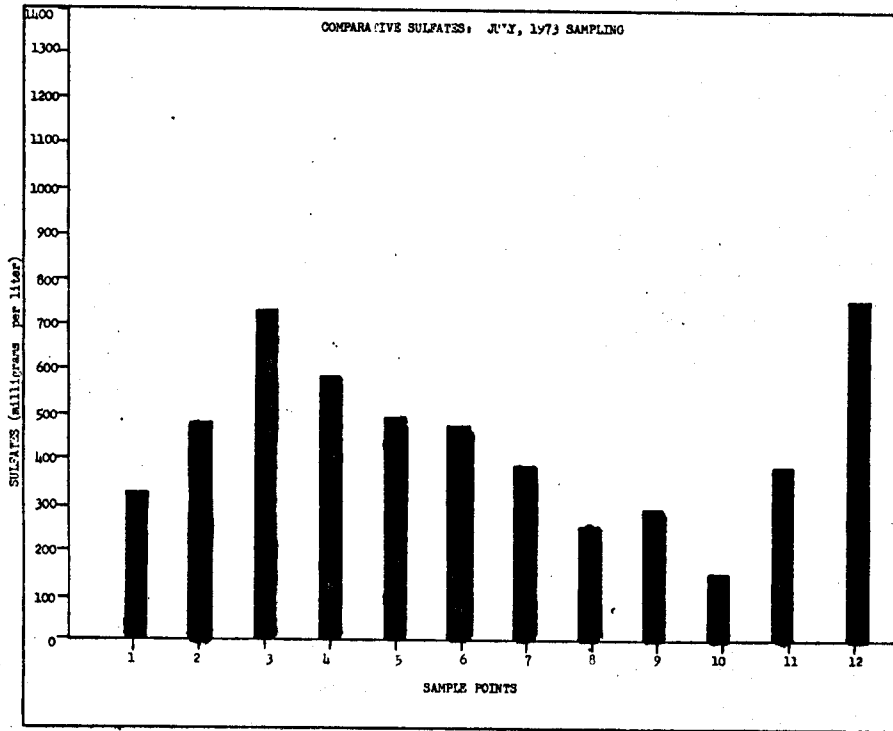










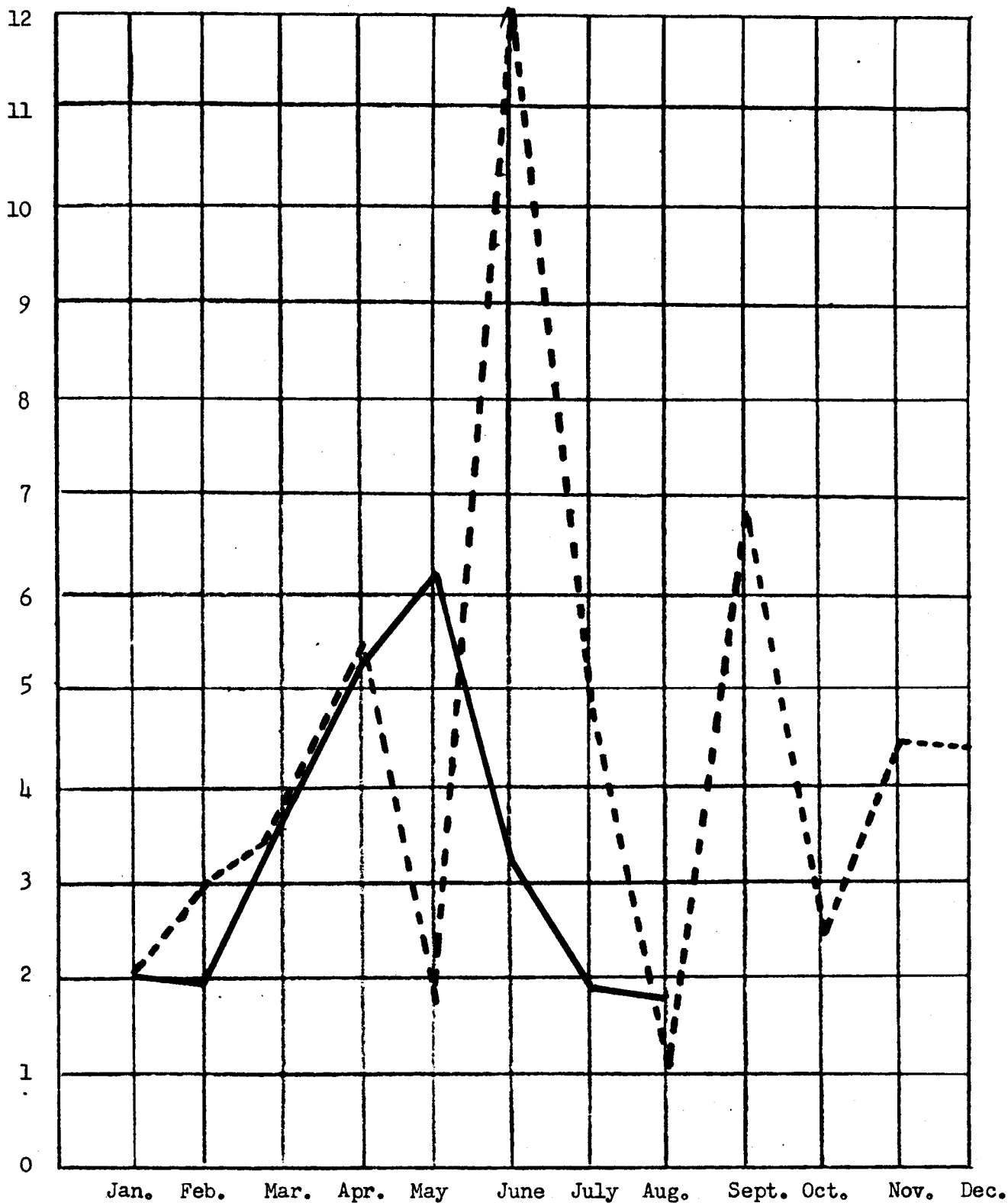


TOTAL MONTHLY PRECIPITATION DATA *
(in inches)

<u>Month/Year</u>	<u>Irwin, Pa. Station</u>	<u>Wilmerding, Pa. Station</u>
January, 1972	3.43	2.12
February, 1972	2.91	3.00
March, 1972	3.77	3.51
April, 1972	5.26	5.44
May, 1972	3.19	1.91
June, 1972	10.78	12.53
July, 1972	4.79	4.97
August, 1972	1.08	1.13
September, 1972	7.39	6.82
October, 1972	1.90	2.43
November, 1972	4.87	4.32
December, 1972	5.39	4.28
January, 1973	2.26	2.00
February, 1973	2.15	1.91
March, 1973	5.51	3.74
April, 1973	6.13	5.35
May, 1973	4.64	6.21
June, 1973	5.42	3.27
July, 1973	2.25	1.92
August, 1973	2.24	1.82

* Source: "Maintenance Manual
Turtle Creek Flood Protection
Project: Stream Gage and
Precipitation Stations", U.S.
Army Corps of Engineers, Pgh.
Division

MONTHLY PRECIPITATION DATA - WILMERDING, PA. STATION *

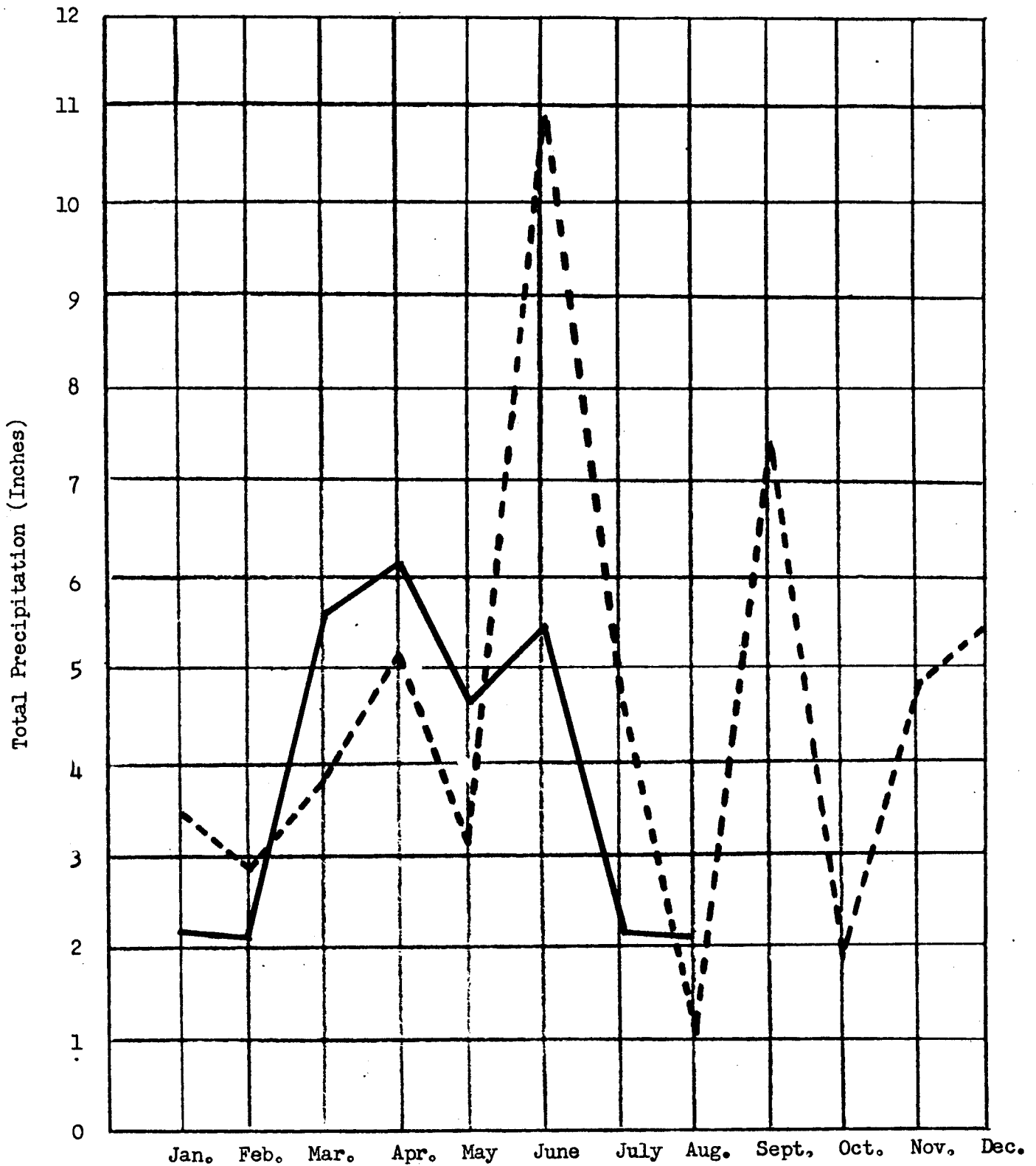


Legend:

----- = 1972
 _____ = 1973

*Source: "Maintenance Manual, Turtle Creek Flood Protection Project Stream Gage and Precipitation Stations", U.S. Army Corps of Engineers, Pgh. Division

MONTHLY PRECIPITATION DATA - IRWIN, PA. STATION*



Legend:
 - - - - - = 1972
 _____ = 1973

*Source: "Maintenance Manual Turtle Creek Flood Protection Project, Stream Gage & Precipitation Stations," U.S. Army Corps of Engineers Pgh. Division.

Stream Acid Load Data			
Sample Point:	First Measurement July, 1973		
	Acid Conc. mg/l	Flow GPM	Acid Load lbs/day
1	(2)	509,388	--
2	110	*	--
3	170	258	526
4	38	538	245
5	190	300	684
6	110	78	103
7	18	*	--
8	30	92	33
9	(32)	125	(48)
10	58	306	213
11	100	173	208
12	340	315	1285

* = no flow measurement taken
 () = readings indicating net alkalinity

	Stream Acid Load Data		
Sample Point:	Second Measurement August, 1973		
	Acid Conc. mg/l	Flow GPM	Acid Load lbs/day
1	14	432,194	72,608
2	56	200(est)	134
3	82	313	308
4	40	760	365
5	120	210	302
6	48	25(est)	14
7	(2)	25(est)	(1)
8	8	60	6
9	(10)	71	(9)
10	50	179	107
11	76	125(est)	114
12	320	215	826

() = readings indicating net alkalinity