APPENDIX III

SAMPLING STATION DATA SHEETS

These sheets indicate the chemical analysis of the sampling stations for the one-year period they were monitored on a monthly basis. The samples were analyzed to determine the pH, acidity, alkalinity, iron, ferrous and sulfate which are expressed in milligrams per liter. Flow in gallons per minute is included when known from the drainage outlets. The pollution load is also included and reported in pounds per day, the acidity was calculated during the period of 3/17/72 to 9/25/72 when the analysis was done by the Cold Acidity Method.

SAMPLING STATION DATA CHARTS

These charts graphically illustrate the results of the water samples at critical locations.

PRECIPITATION CHART

Graphically shown, is the monthly precipitation during the course of this study. Also shown, is the average monthly precipitation as compiled over a ten-year period.

1	Laboratory Analysis Results												
SAMPLING	Date	Flow	Ph	Acidi		A lkali		Iron '	rotal	Ferrou	s	Sulfa	te
STATION DATA	Dave	GPM		MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD
SHEETS	11-3-71	1.414	6.9			48	بنـ83	.1	2	0	0	100	1,690
•	12-8-71	19.029	6.4		<u> </u>	<u>h2</u>	9,589	.9_	205	0	0	70	15,981
	1-18-72	NER	7.6			24		.3		0		եր	
omenton No. 1	2-17-72	6,777	7.0			20	1,626	•7	57	0	0	34	2,765
STATION NO. 1 ELEV. 1173 6.9 Miles to	3-17-72	3.501	7.8	2.0	811	23	966	•29	12	.16	7	24	1,008
	4-19-72	16.785	6.5	9.0	1,809	15	3,015	.21	42	.12	24	. 6 <u>2</u>	12,488
Station No. 9	5-18-72	2.154	7.1	3.0	77	31.	800	2.12	55	.35	9	39	1,008
	6-16-72	2.211	7.4	2.0	54	141	1.184	1.23	33	.08	2	58	1,562
·	7-20-72	1,436	7.7	5.0	86	38	654	1.40	24	.08	1	38.5	<u>663</u>
	8-22-72	408	6.8	9.0	. 43	53	254	. 26	1	.08	1	140	685
	9-25-72	2,872	6.6	10.0	3710	29	998	.63	22	.06	2	128	4,403
	10-26-72	2.211	6.5.	2.0	54	31	834	.18	5	.02	1	37	996
•	Average	5.351	7.0	5.3	318	33	1,885	.69	142	.12	4	65	3 ,932
	11_3_71	987_	7.0 -			48	566	.1	1	0	0	95	1,125
	12-8-71	25.447	6.5			46	1 14,044	1.2	366	0	0	<u>iı2</u>	12,825
STATION NO. 2	1-18-72	NFR	7.6			20_		.4		0		1,2	
ELEV. 1153	2-17-72	NFR	6.9			24		.7		0		30	
1.1 Miles to	3-17-72	6,642	6.0	6.0	478	24	1,913	.29	23	.10	88	33	2,630
Station No. 1	4-19-72	20.151	6.8	8.0	1.934	10	2,418	. 55	133	.16	39	5 5	13,300
	5-18-72	5,430	7.4	2.0	130	29	1,888	36	23	.08	5	hir	2,861
	6-16-72	3,770	7.6	4.0	181	47	2,124	1.23	56	.02	1	92	4,162
	7-20-72	3,424	6.8	5.0	205	35	1,435	•55	23	.12	5	59	_
	8-22-72	332	7.7	6.0	24	53	211	.26	1	.06	1	160	637
	9-25-72	3,142	6.5	12	452	28	1,056	.26	10	.06	2	124	4,675
•	10-26-72	4,264	5.6	0	0	34.	1,737	•27	1/4	.10	5	48	2,456
	Average	7,359	6.9	6,1	486	33	2,739		65	•09	6	69	4,710

Acidity - Analyzed by the cold method from March to September 1972; other dates by the hot method.

NFR - No Flow Recorded.

				Ia	boratory	inalvsis	Results	3					
SAMPLING	Date	Flow	Ph	Aci	dity	Alkal	inity	Iron	Potal	Ferr	ous	Sulfa	te
STATION DATA SHEETS		GPM		MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD
	11-3-71	NF											
	12-8-71	NF											
nc 6#	1-18-72	NFR	6.3			120		35		20		940	
STATION NO. 3	2-17-72	NFR_	5.8			1)10		21.0		6.5		950	
ELEV. 1137	3-17-72	NFR	6.4	103		125		6.3		6.1		830	
2.4 Miles to	4-19-72	NFR	5.6	<u>1</u> 145		46		.36		.33		810	
Station No. 1	5 -18- 72	NFR	6.5	83		194		10.9		.65		1,080	
	6-16-72	NFR	6.4	122		- 1///		30.8		1.55		520	
	7-20-72	NFR	6.3	119		104		24.0		4.45	-	800	7
	8-22-72	NFR	6.5	140		188		45.5		3.85		930	
	9-25-72	NFR	6.2	138		172		39.5		5.2		1,200	
	10-26-72	NFR	5.7	0		73		30.8		.16		730	
The towns	Average	[6.2	121	<u> </u>	131		24.4		4.88		879	
	11-3-71	NF											
	12-8-71	NF											
uMb Ju	1-18-72	NFR	6.3			56		30		22.5		2,250	
STATION NO. 4	2-17-7 2	NF											
ELEV. 1140	3 -17- 72	NFR	6.3	110		85		6.1		4.88		850	
2.4 Miles to	4-19-72	812	4.0	1.86	1,804	0	0	.80	8	.08	1	720	7.016
Station No. 1	5-18-72	98	5.8	64	70	32	35	15.8	17	.63	1	830	976
	6-16-72	NF		`.									
	7-20- 72	315	6.1	187	707	83	314	29.5	112	8.95	34_	640	2.419
	8-22-72	NF			· ·		 -						
	9-25-72	NF							•				
	10-26-72	NF_											
Anidian Andr	Average	J:08	5.7	137	860	51	116	16.4	46	7.41	12	1,058	3,470

Acidity - Analyzed by the cold method from March to September 1972; other dates by the hot method. NF - No Flow.

NFR - No Flow Recorded.

				Lak	oratory	Analysis	Results						
SAMPLING	Date	Flow	Ph	Acidi	tv	Alka	inity	Iron 7	[otal	Ferr	nis	Sulfa	te
STATION NO. 5 ELEV. 1133 2.4 Miles to Station No. 1 STATION NO. 6 ELEV. 1124 2.5 Miles to Station No. 1		GPM		MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD
	11-3-71	1,179	6.3		<u> </u>	250	3,525	12	169	.1	1	1,000	<u>11، 11،8</u>
-	12-8-71	1,279	6.3			290	4.437	13.5	207	1.7	26	650	9,976
"C 7"	1-18-72	2.154	6.4		·	74	1,909	30	774	18	464	1,850	17.819
STATION NO. 5	2-17-72	2.033	5.8			126	3,062	0.بلد	340	7.0	170	775	18,907
ELEV. 1133 2.4 Miles to	3-17-72	NFR	6.5	60		29		5.0		•5	800	800	
	4 -19- 72	2,073	5.5	3 148	3,670	710	992	• 24	6	.10	2	970	2ل ، 1 30
	5-18-72	1,829	6.0	115	2,519	78	1,708	16.3	357	.42	9	820	17,997
	6-16-72	1.759	6.4	718	2,490	124	2,616	22.2	1,68	3.2	58	1:00	8,44,3
	7-20-72	2.1.06	6.2	153	60رار ال	10հ	2,995	27.8	801	-90	26	6 9 0	19.922
	8-22-72	1.000	6.1	188	2,350	110	1,375	32.8	410	13.5	169	930	11,651
	9-25-72	2.15/1	6.0	767	4.309	135	3.483	29.5	761	14.2	366	<u>, 130</u>	11,115
	10-26-72	1.530	5.8	0	0	122	2,233	10.9	199	•03	11	550	10,098
	Average	1,767	6.1	135	2,917	12/1	2,576	17.8	408	4.97	117	822	17.655
	11-3-71	3,007	6.5			170	6,120	12	432	.1	h	550	23,455
	12-8-71	31.597	6.6			40	15,160	3.6	1,364	.2	76	105	39.812
	1-18-72	NFR	6.6			116		1.0		2		390	
STATION NO. 6	2-17-72	13.374	6.1			42	5,720	6.5	1,040	.3	μŝ	260	41,727
ELEV. 1124	3-17-72	12,522	6.7	18	2,700	214	3,600	•59	89	. 48	72	114	21,638
	4-19-72	40,706	6.8	29_	14,152	17	830	•39	190	•13	53	17 6	85,971
Station No. 1	5-18-72	8,078	6.3	կկ	4,264	57	5,523	8.6	833	<u>•5</u> 5	<i>5</i> 3	490	47,499
	6-16-72	6,642	6.6	5 9	4,702	89	7, 093	15.3	1,219	•08	6	295	23,513
	7-20-72	7,257	6.3	55	4,785	72	6,264	15.8	1,375	•94	82	420	36,575
	8-22-72	2 , 738	6.1	109	3 , 575	108	3,542	25.8	846	• 2lı	ŝ	560	21,685
	9-25-72	8,034	6.1	60	5,784	72	6 , 941	16.0	1, 542	.08	Ê	345	33,261
	10-26-72	7.248	5.8	0	0	49	4,258	16.3	1,416	•02	2	255	22,179
· -	Average	12.837	6.4	53	5,709	69	5,914	10.9	941	.42	3ô	3459	36,120

Acidity - Analyzed by the cold method from March to September 1972; other dates by the hot method. NF - No Flow.

NFR - No Flow Recorded.

			Laboratory Analysis Results										
SAMPLING	Date	Flow	Ph	Acid	ity	Alka	linity	Iron	Total	Ferr	ous	Sulfa	ite
STATION DATA SHEETS		GPM		MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPL	MG/L	PPD
	11-3-71	80	6.4			178	171	2.4	2	.1	1	340	326
	12-8-71	- 96	6.3			154	169	.1	1	0	0	340	392
"В 6"	1-18-72	NER	6.8	<u>-</u>		128		. 6		0		235	
STATION NO. 7 ELEV. 1122 4.9 Miles to Station No. 1	2-17-72	21/1	6.4			158	390	.1	1	0	0	380	976
	3_17_72	2)10	6.5	1,2	115	122	342	.18	1	.06	1	205	590
	1-19-72	300	6.1	49	176	92	331	-24	1	.08	1	188	677
	5_18_72	240	6.9	36	101	112	314	.26	1	.06	1	256	737
	6-16-72	216	6.8	76	190	152	380	.09	1	.02	1	295	765
	7-20-72	240	6.5	8.2	23.	122	342	.23	1	.06	1	370	1.066
	8-22-72	240	6.2	107	300	136	381	-18	1	•06	1	370	1,066
	9-25-72	240	6.2	97	272	1/1/4	403	.16	1	.06	1	326	912
	10-26-72	222	5.8	0	0	115	299	. 2h	1	.06	1	91	242
	Average	21.2	6.h	59.	168	134	320	.40	1	.04	1	283	704
	11-3-71	5.161	7.2			94	5,819	1.3	80	0	0	280	17,341
	12-8-71	53.993	6.8			20	12,958	3 . 6	2,332	.1	65	95	61,552
· !	1-18-72	nfr	7.2			36		4.25		.1		250	
STATION NO. 8	2 -17- 72	17,630	6.8			141	9,310	3.5	741	.2	42	210	44,448
ELEV. 1091	3-17-72	18.535	6.1	26	5.782	12	2.669	.96	21/1	.55	122	66	Ju 680
5.4 Miles to	4-19-72	58,568	6.0	13	9,136	25	17,570	•39	274	. 06	42	128	89.960
Station No.1	5-18-72	10,996	7.0	8	1,055	53	6 , 991	3.06	404	.18	2i;	430	56.739
	6-16-72	13.477	7.5	4	647	64	10,349	4.36	705	•03	5	25 6	41.401
	7 -20- 72	13,823	6.7	10	1,658	67	11,109	71-71	730	•10	17	400	66,350
	8-22-72	3.994	6.8	15	719	101	4,838	5.9	283	.13	ć	780	37,384
	9-25-72	10,457	6.9	15	1.881	69	8 , 653	3,6	45 1 .	•02	3	306	38,398
	10-26-72	9,515	6.0	0	0	63	7,182	3,16	360	•06	7	194	22,151
	Average	19,651	6.8	13		54	2,983	3.2	59 8	.13	30	283	582وبليا

Acidity - Analyzed by the cold method from March to September 1972; other dates by the hot method.

NF - No Flow.

NFR - No Flow Recorded.

					Laborat	tory Analy	rsis Res	ults		-	_		
SAMPLING	Date	Flow	Ph	Acid	ity	Alkal	inity	Iron	Total	Fer	rous	Sulf	ate
STATION DATA SHEETS	Dave	GPM	1	MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPJ
	11-3-71	NFR	7.3			82		1.1		0		220	
	12-8-71	nfr	6.8			20		3.8		•2	<u> </u>	60	
	1-18-72	NFR	7.3			30		2.75		.1		175	<u> </u>
STATION NO. 9	2-17-72	NFR	6.6		1	22		2.7		.1		175	<u> </u>
ELEV. 1069	3-17-72	NFR	7.4	7		36		.85		-35		59	
5.4 Miles to	4-19-72	NFR	7.4	10		22	T	•55		•03		69	
Station No. 1		NFR	7.1	4		.37	·	2.36		.06		184	<u> </u>
	5 <u>-18</u> -72 6-16-72	NFR	7.6	3		43		.88		.02		194	
		NFR	7.0	7		53		.93		.10		256	_
	7 <u>-20-7</u> 2 8 <u>-22</u> -72	NFR	6.7	13	1	93		.41		.03		680	
	9-25-72	NFR	7.1	8		51		4.24		.10		290	
		NFR.	6.1	0	 	48	 	.96		•03		2 52	T
	10-26-72 Average	Nen	7.0	7	 	45		1.79		.09		218	
	11-3-71	NFR	6.9			40	İ	.9		0		105	
	12-8-71	NFR	6.8			24		2.2		.1		70	
		NFR	7.5			30	1	.3		0		105	
	1-18-72	NFR	7.0		 	36		•4		0		105	
₫ ≸	2 -17- 72	NFR	6.0	14	† · · · · · · · · · · · · · · · · · · ·	15		•2		.16		50	
STATION NO. 10	3-17-72		7.4	7.0	 -	21		.39		.06		65	
ELEV. 1101) ₁₌₁₉₌₇₂	NFR		6	 	25		.36		.08		50	
4.3 Miles to Station No. 1	5 - 18 - 72	NFR	7.2	2		29	1	1.13		.02	†	74	
Station No. 1	6=16=72	NFR	7.12			1	†	.51		.12	T	66	
	7-20-72	NFR NFR	7.3 6.7	9 14	†	92 74	+	•29		.06		194	1
	8-22-72		-	8		42	 	.27	<u> </u>	.03		116	
	9-25-72	NFR	7.1			46	 	5.3	<u> </u>	.08		252	
	10-26-72	NFR	6.4	0	-	_	+	1.02	<u> </u>	.06		105	
	Average		7.0	9	<u>i</u>	40		1,02	<u> </u>		<u> </u>		

Acidity - Analyzed by the cold method from March to September 1972; other dates by the hot method.

NF - No Flow.

NFR - No Flow Recorded.

. 1			Laboratory Analysis Results											
SAMPLING	Date	Flow	Ph	Acid	itv	Alka	linity	Iron	Total	Ferro	us	Sulfa	te	
STATION DATA SHEETS		GPM		MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPD	
·	11-3-71	NFR	6.9			50		50		.1		210		
	12-8-71	NF									_		<u> </u>	
11B 311	1-18-72	NFR	6.5			96		1		0		310		
STATION NO. 11	2 -17- 72	NFR	6.2			122		.8				390		
ELEV. 1141	3-17-72	NFR	6.3	50		125		_63		20		225		
	4-19-72	NFR	5.9	72		121		.32		.06	<u> </u>	23		
	5 -1 8 - 72	NFR	6.4	. 80		116		1.18	<u> </u>	.10		390		
· ·	6 -1 6 - 72	NF			<u> </u>		<u> </u>						<u></u>	
	7-20-72	NFR	6.3	93		10/		1.58		-12		390	<u> </u>	
	8-22-72	NE					<u> </u>				·	<u> </u>		
·	9-25-72	NF				<u> </u>	<u> </u>				·····			
·	10-26-72	nfr	5.7	0		701		26		12		150		
	Average	NFR	6.3	74		104		6.8		.09	<u> </u>	261		
	11-3-71	NF								·				
	12-8-71	NF												
	1=18=72	NF			<u> </u>	<u> </u>	1							
"B 2"	2-17-72	NFR	6.7	<u> </u>		911		6		0		110		
STATION NO. 12	3-17-72	NFR	6.9	35		95	<u> </u>	. 24		.10		911		
ELEV. 1187	4-19-72	NF R	6.1	13	,	107	<u> </u>	•32		.13		90	<u></u>	
<u> </u>	5-18-72	NFR	6.7	49		175	,	•52		.08		176		
	6-16-72	NFR	6.8	90	<u> </u>	194		.27	·	.03		252		
·	7-20-72	NFR	6.9	52		188		.58		.08	<u> </u>	230		
	8-22-72	NFR	6.4	99		223		.26		-02		336		
	9-25-72	NFR	6.4	80		198		•29	,	.03		252		
]	10-26- 72	nfr	5.9	0	<u> </u>	153		18		02		266		
	Average		6.5	60		159		.36		.05	·	201		

Acidity - Analyzed by the cold method from March to September 1972; other dates by the hot method.

 $[\]mathbf{N}\mathbf{F}$

⁻ No Flow.
- No Flow Recorded. NFR

					Laborate	ry Analy	sis Resu	lts					
SAMPLING STATION DATA	Date	Flow	Ph	Acid		1 -	linity		Total	Fer	rous	Sulfa	te
SHEETS	Dave	GPM	1	MG/L	PPD	MG/L	PPD	MG/L	PPD	MG/L	PPL	MG/L	PPD
"B 4" STATION NO. 13 ELEV. 1175 The Opening Was Buried by the Spoil of a Stri Mine and Never Located in Field.	0												
	11-3-71	NF	 			<u> </u>				 			
	12-8	NF	┼─	 		<u> </u>		 		+			
"B 5"	1-18	NF	 	<u> </u>						1	-	350_	
STATION NO. 14	2 -1 7	NFR	5-7	<u> </u>	 	10		8.0		3	 	20€	
ELEV. 1196	3-17	NFR	6.3	100		15		-5i-		.08	 	1i ₄ 8	
Samples Collected from	<u>lı=19</u>	NFR	5.7	<u>1.9</u>	 -	38		6.1		.40		255	1
Pool of Water.	5-18	NFR	5.6	51		16		0.1		•40			
Flow was not	6-16	NF	 	 		†				<u> </u>			
Great Enough to Measure.	7-20	NF NF	+	 	-		-	1					
	8-22	NF	1	 	 	†		 					
	9-25 10-26	NF	 			1							
	Average	NE	5.8	67		20		3.7		.26		21/1	

Acidity - Analyzed by the cold method from March to September 1972; other dates by the hot method.

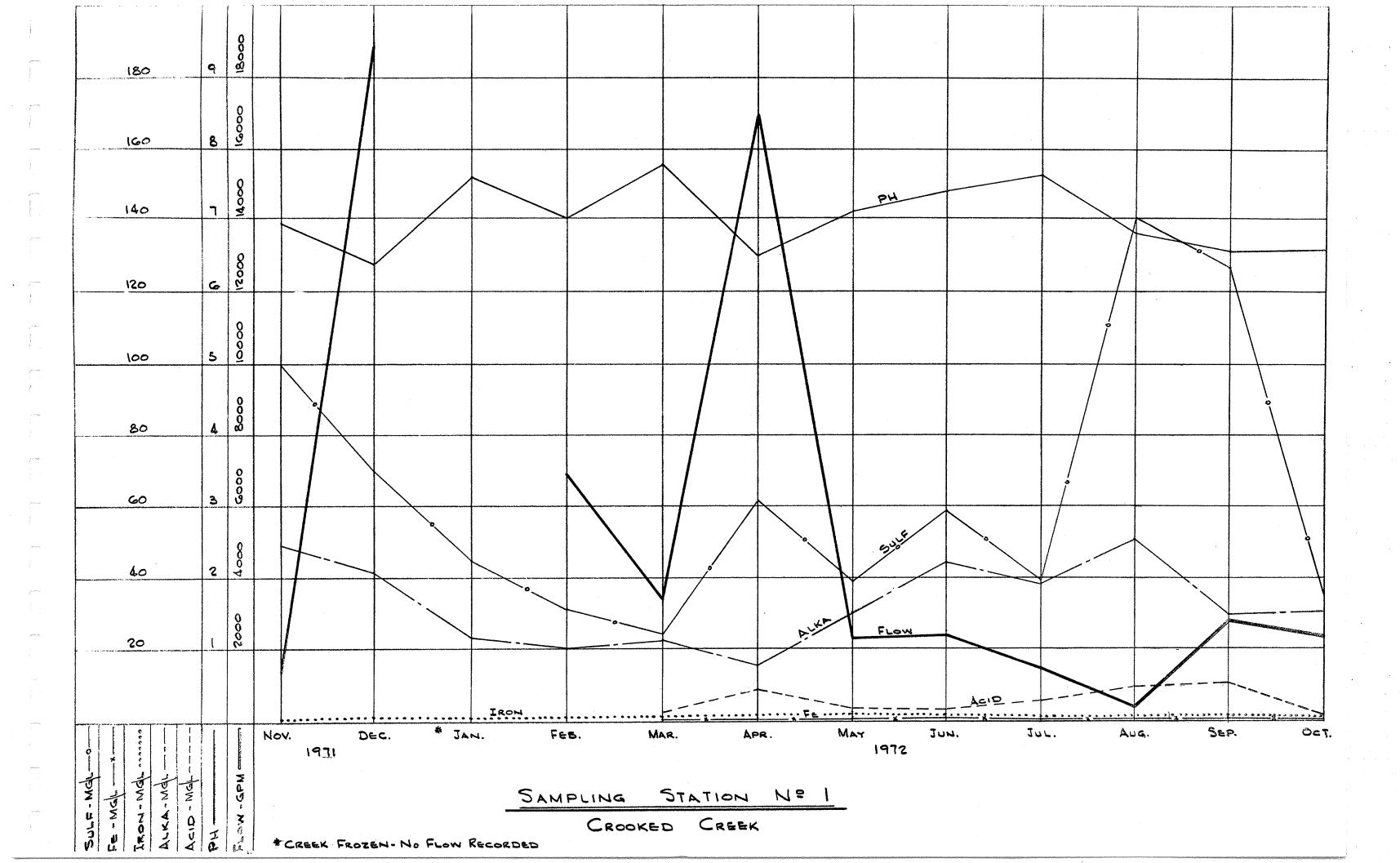
NFR - No Flow Recorded.

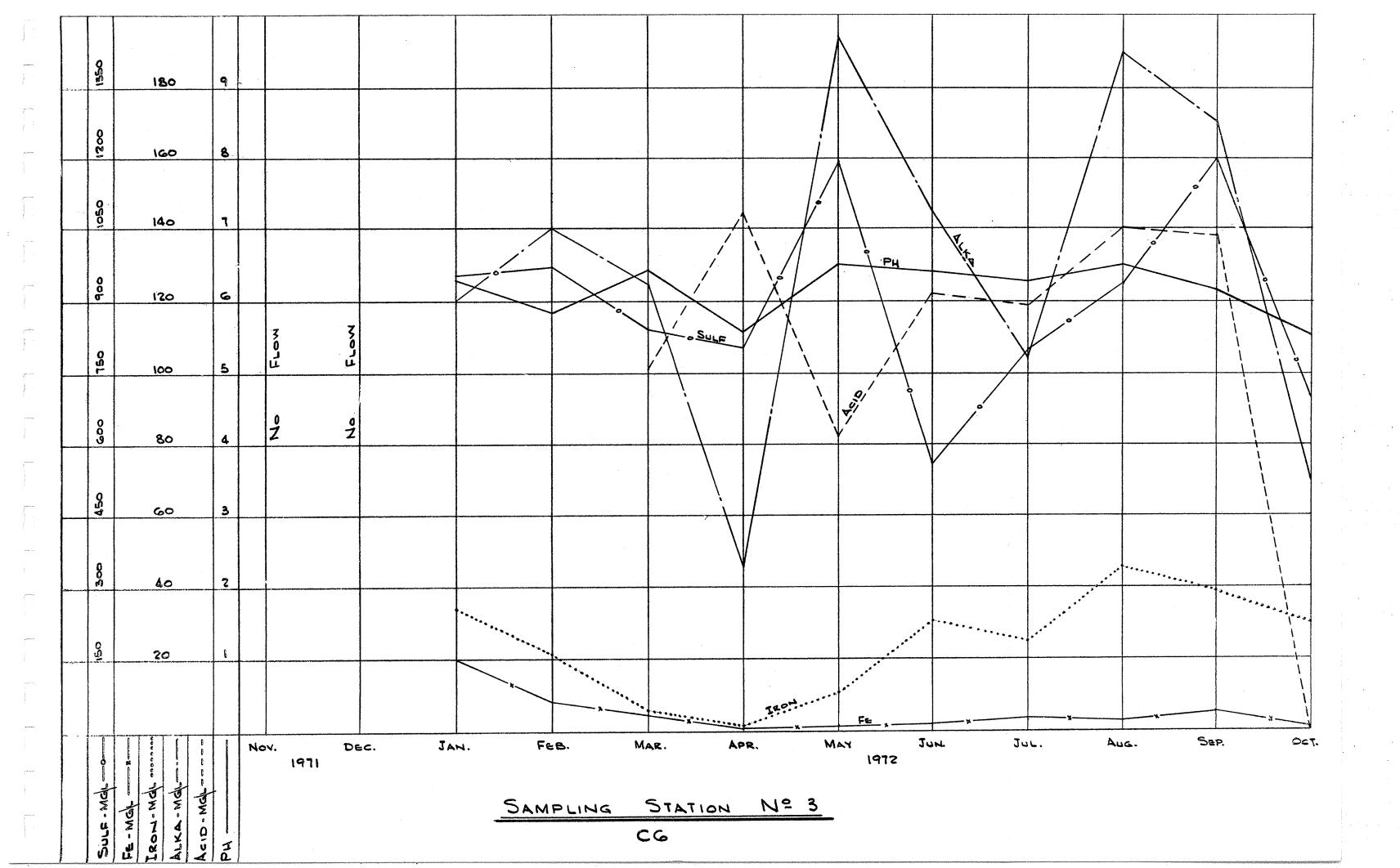
NF - No Flow.

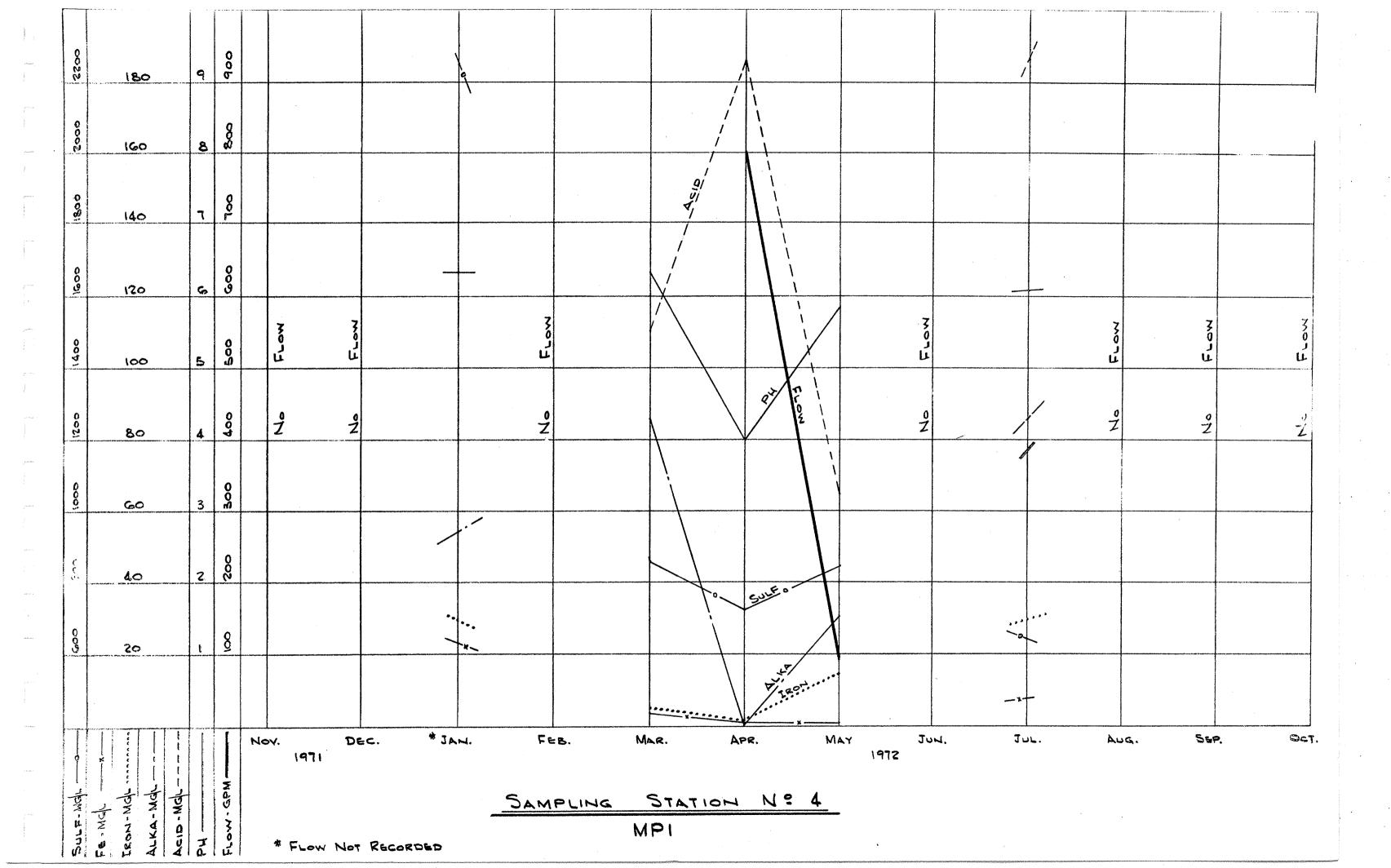
					Labora	tory Anal	rsis Rest	ults					
SAMPLING	Date	Flow	Ph	Aciai			linity		Total	Ferr	ous	Sulfate	
STATION DATA SHEETS	Date	GPM		MG/L	PPD	MG/L	PPD	MG/L	PPD	NG/L	PPD	MG/L	PPD
	11-7-71	NF										-	
•	12-8-71	NF										<u> </u>	
"MP 5"	1-18-72	NF					<u> </u>						ļ
STATION NO. 15	2 -17-7 2	NFR	4.0	4	.			-4		0		2 <u>ի</u>	<u> </u>
ELEV. 1215	7-17-72	NFR	4.4	314		0		.36		•29		39	
Samples	h-19-72	NFR	4.2	27	<u> </u>	0		•29		.03		47	
Collected from Pool of Water. Flow was not Great Enough	5-18-72	NFR	3.8	23		0		8.5	ļ	.48		56	
	6-16-72	NF	ļ					: 	ļ			<u> </u>	-
	7-20-72	NF	<u> </u>		<u> </u>	<u> </u>							
to Measure.	8-22-72	NF	İ		ļ	<u> </u>			<u></u>		<u> </u>		
	9-25-72	NF	<u> </u>		.			<u>.</u>	 				
	1026-72	NF			<u> </u>								
	Average		4.1	22	<u> </u>	0		2.38		•20		41.5	
	9-22-71	NEE	1.4	27/1	<u> </u>			205		154		1,350	<u> </u>
	2-17-72	NF R	1.5	360		<u> </u>	<u> </u>	110		3.4		2,000	
"MP 6"	3-17-72	NFR	3.0	675			ļ	315		15.75		3,150	
STATION NO. 16	J ₁ =19=72	NFR	3.3	580	<u> </u>	0	ļ	123		1.82		1,600	
ELEV. 1357	5-18-72	NFR	2.8	516		0	ļ	96		10.95		2,300	
No Flow	6-16-72	NFR	3.4	668		0		195		67.0		880	
Readings Taken From this	7-20-72	NFR	3.2	640		0		135		23.2	-	410	
Borehole Due	8-22-72	NFR	3.7	713		0	<u> </u>	247		82.0		1.230	
To Discharge	9-25-72	NFR_								<u> </u>			
200 Feet Below	10-26-72	NFR					<u> </u>						
Surface.			<u> </u>					<u> </u>				 	
j													
	Average		3.2	553		0		179	<u>.</u>			1,615	<u> </u>

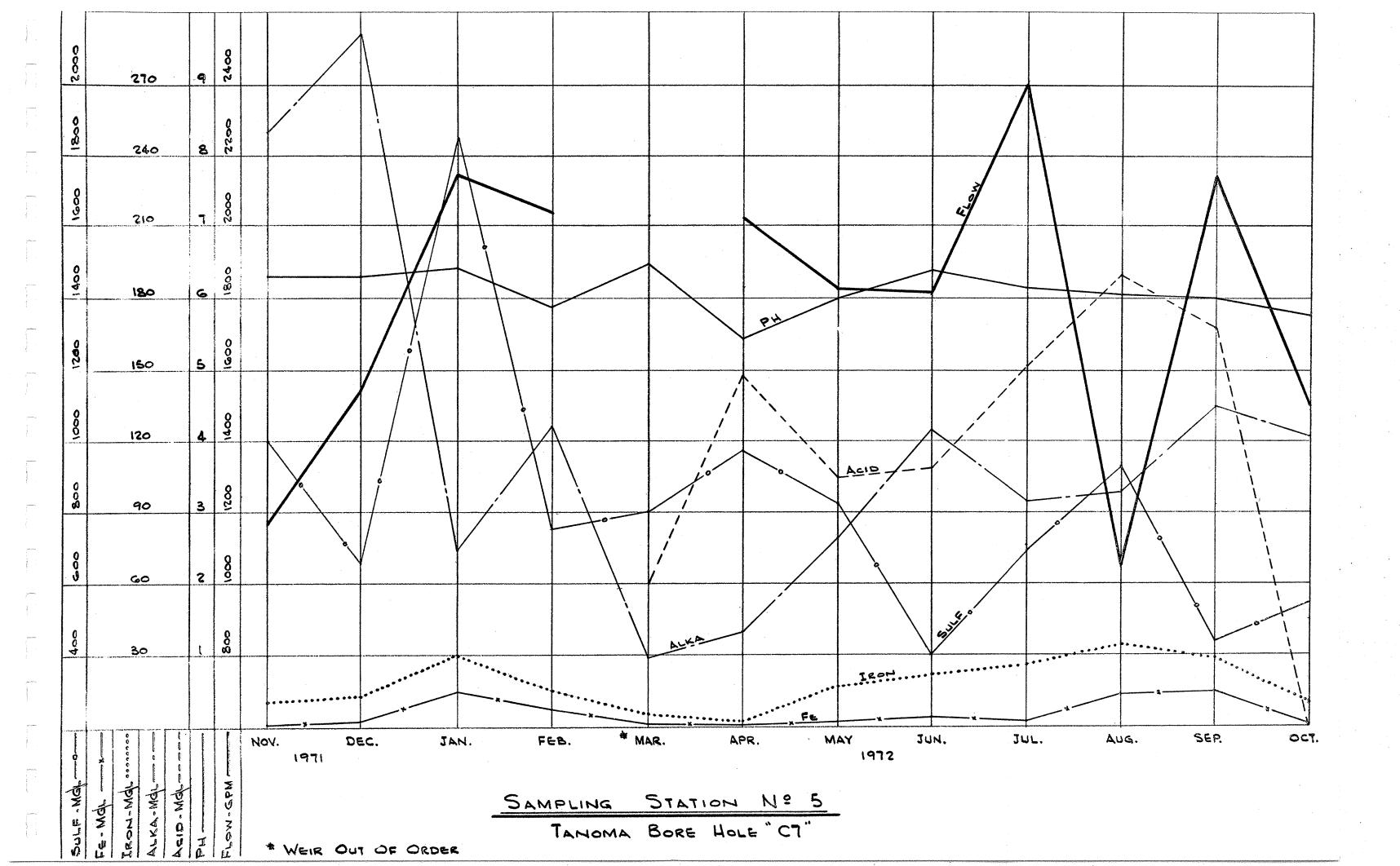
Acidity - Analyzed by the cold method from March to September 1972; other dates by the hot method. NF - No Flow.

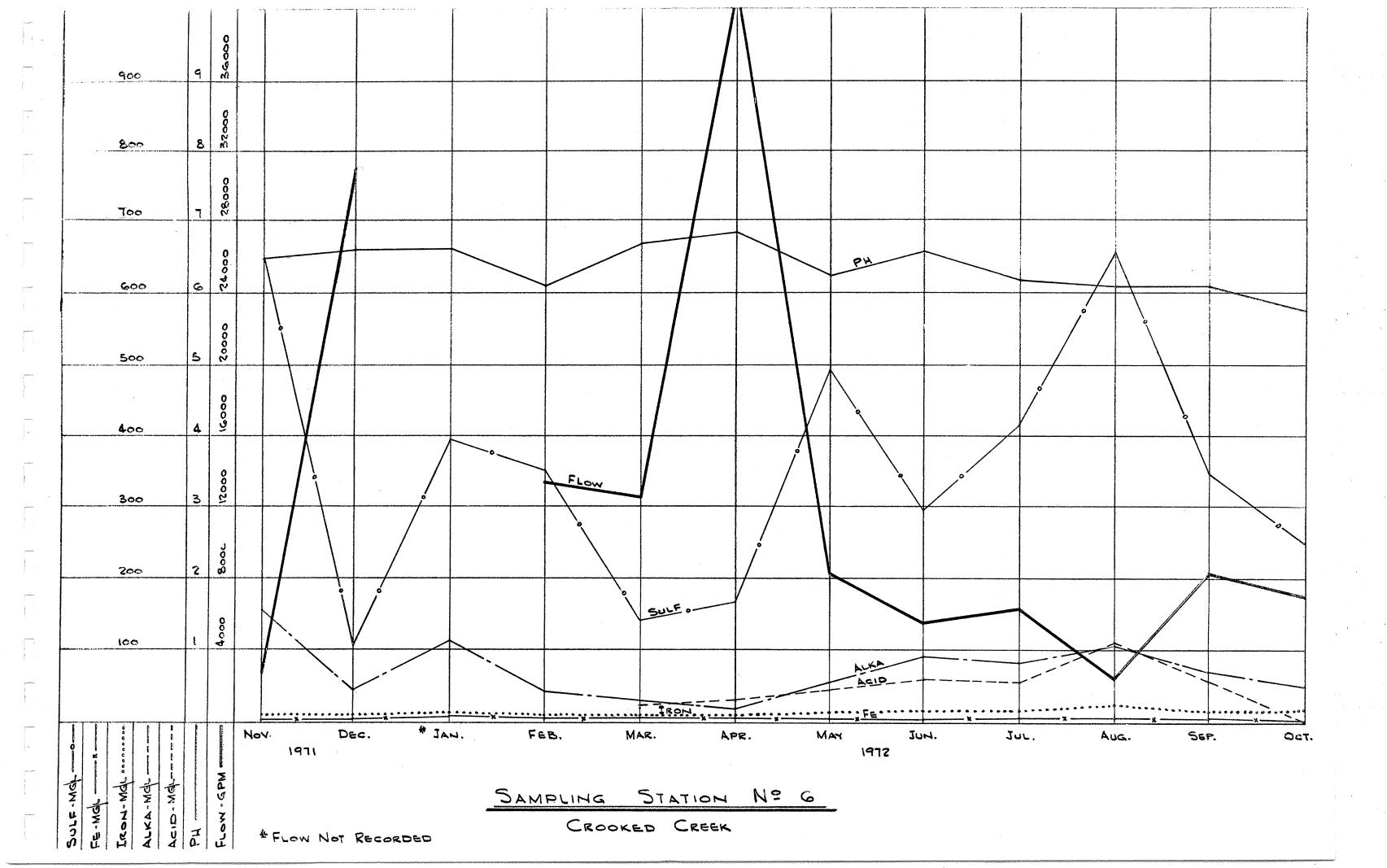
NFR - No Flow Recorded.

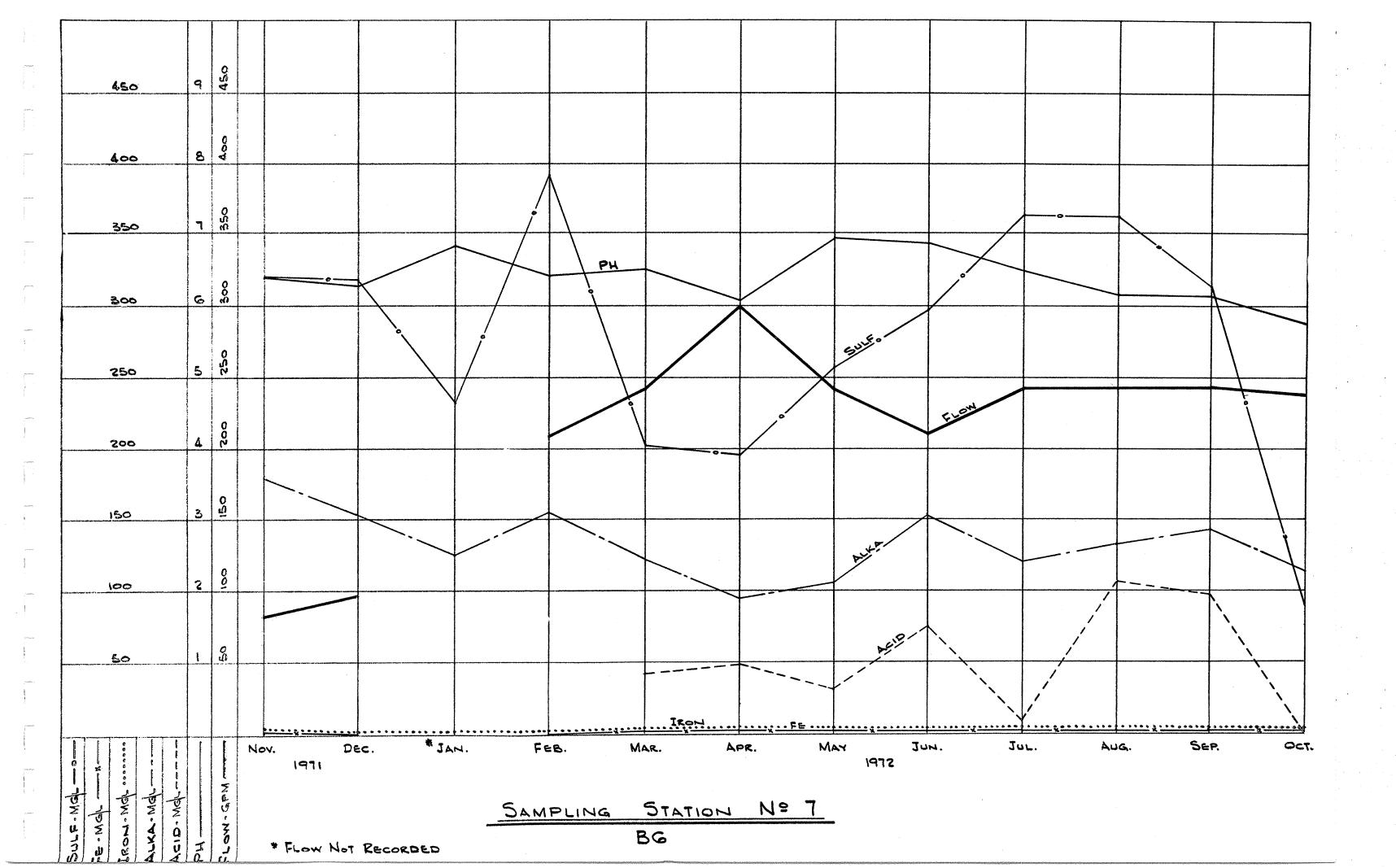


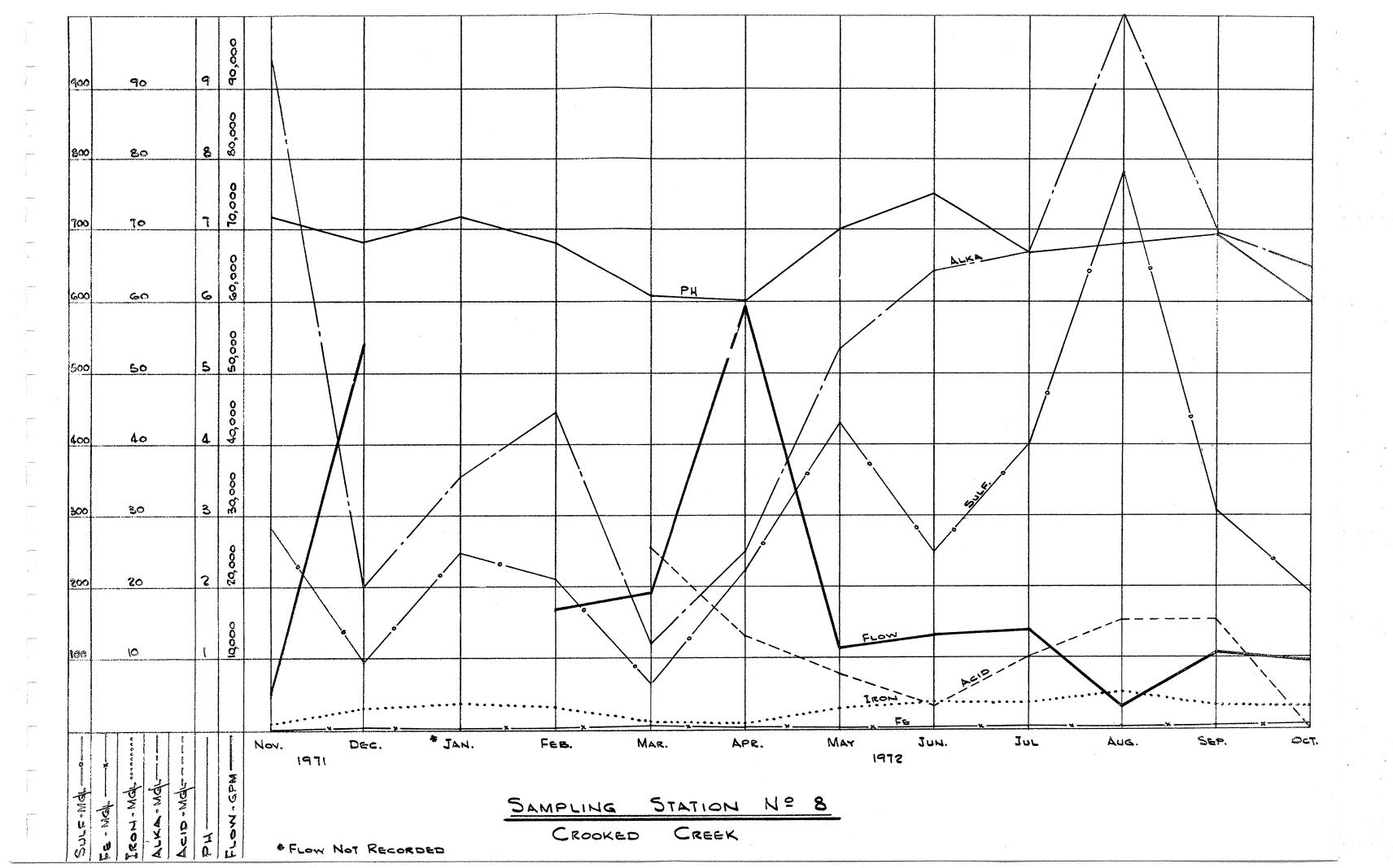


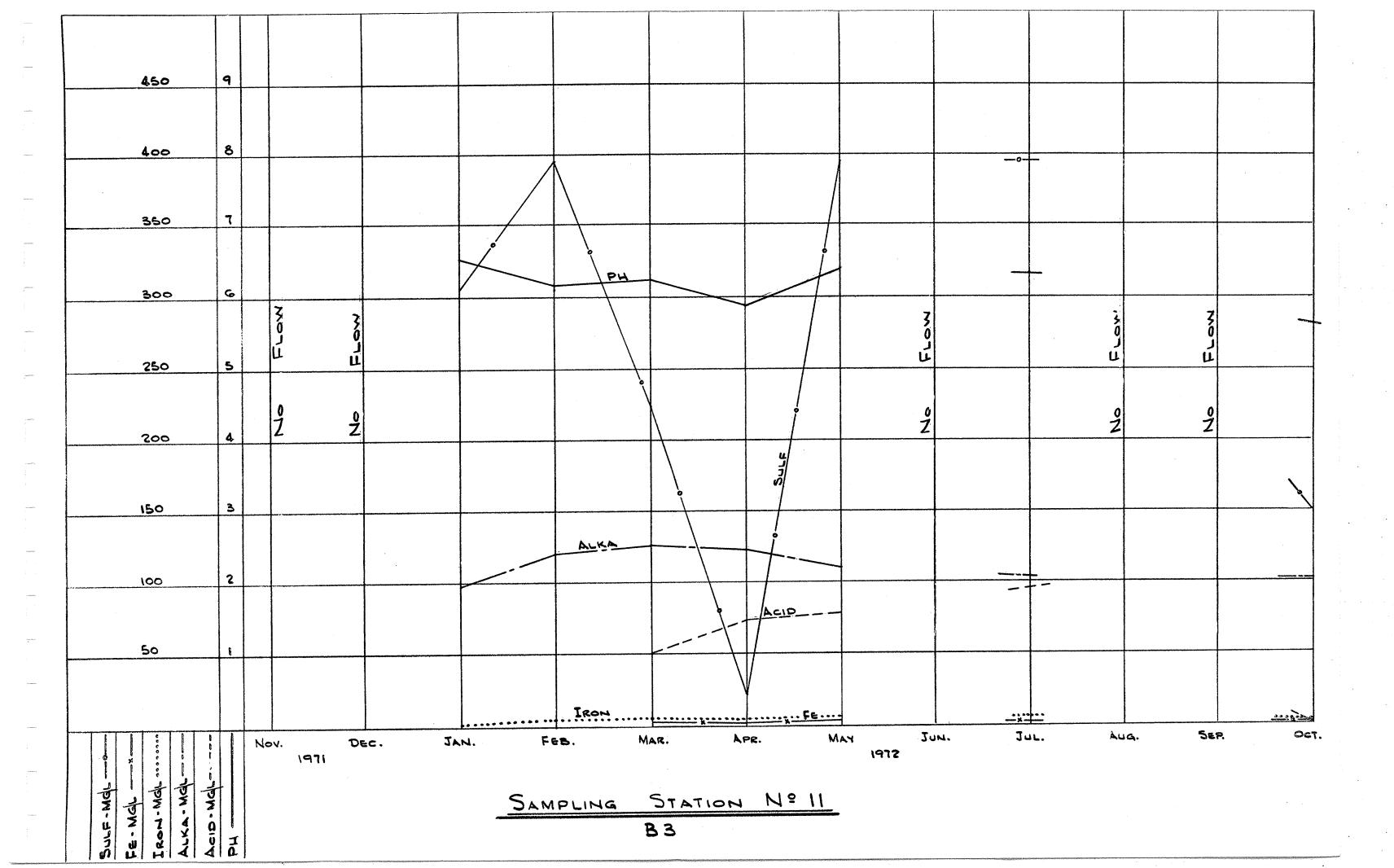


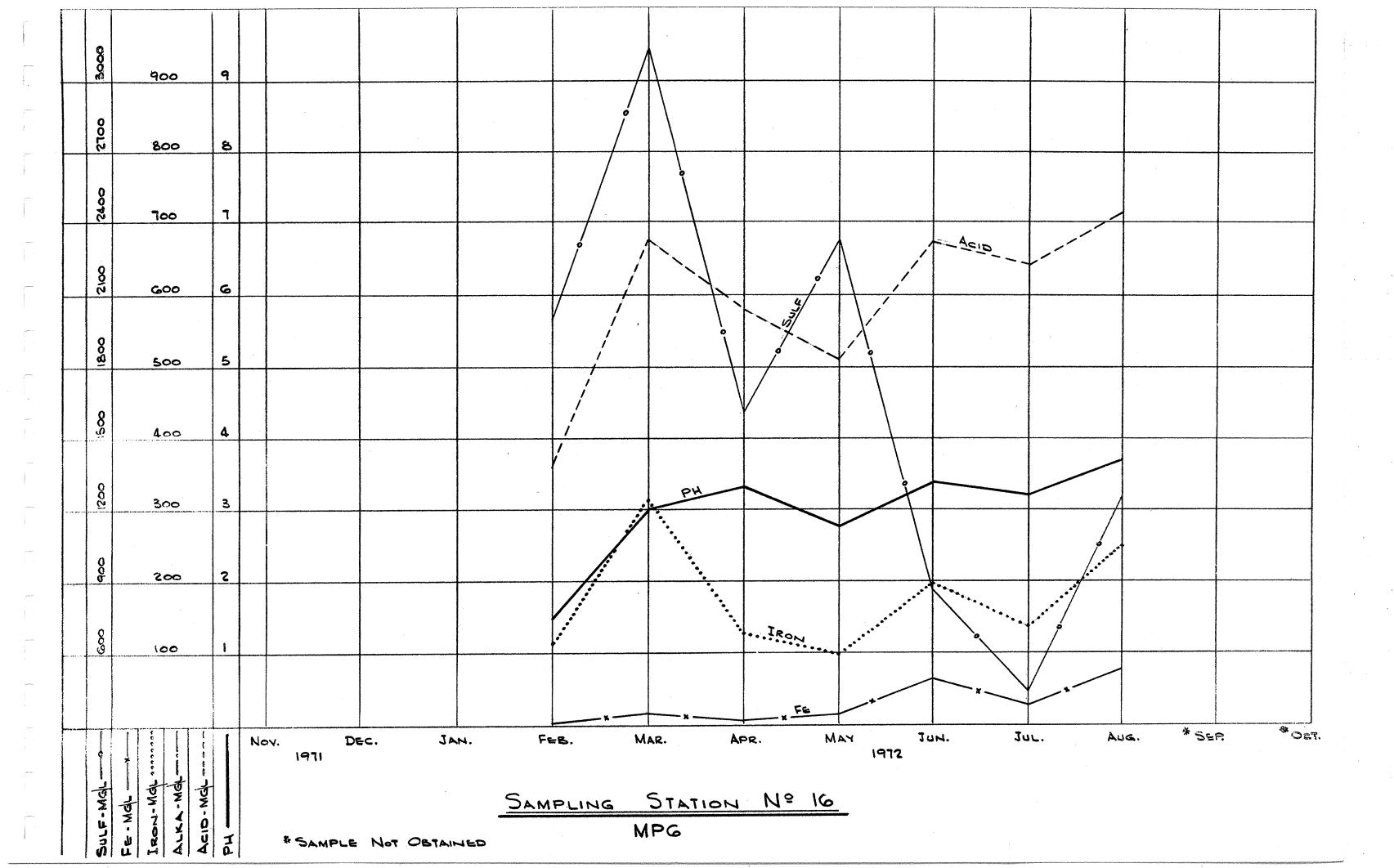


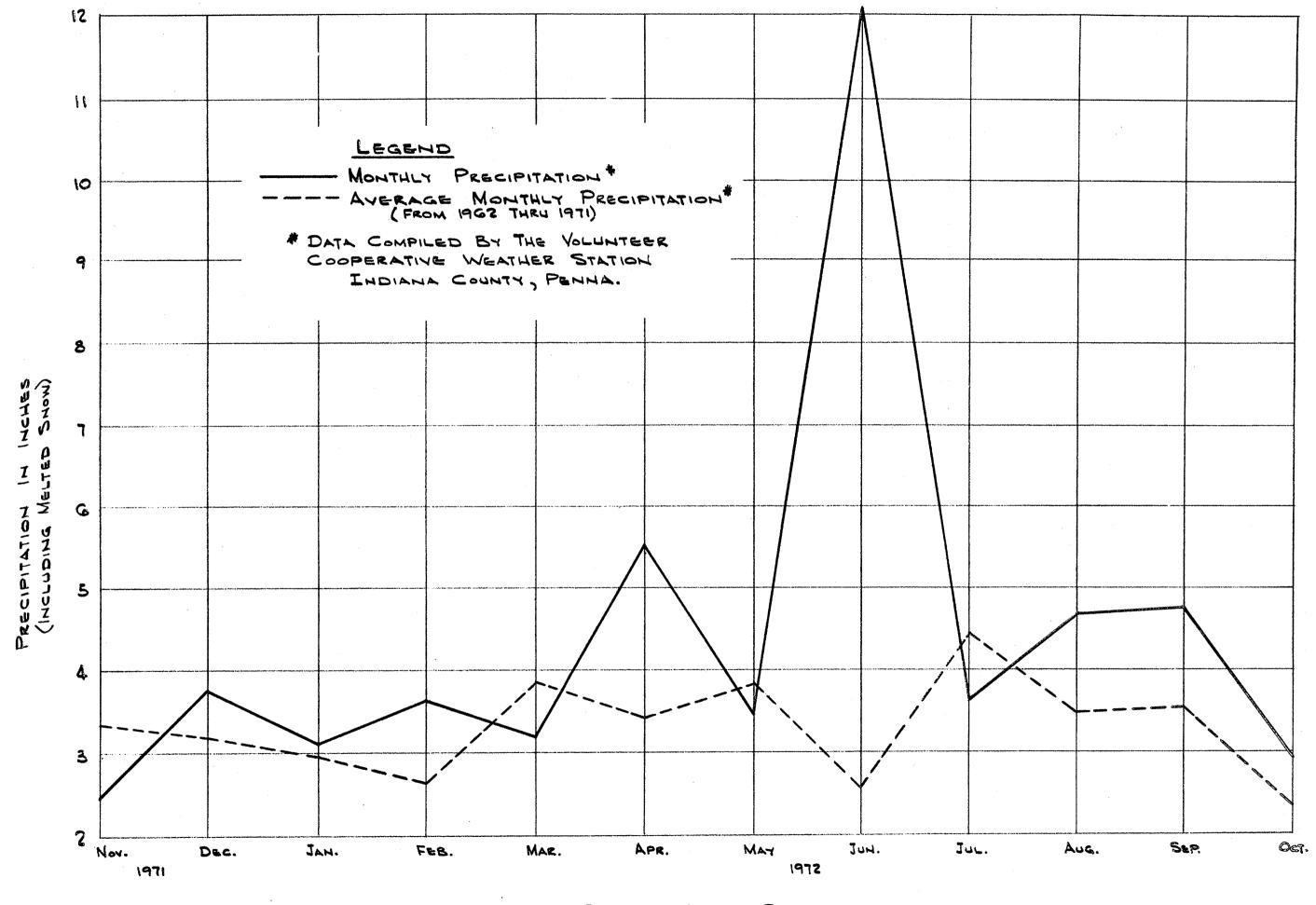












MONTHLY PRECIPITATION DATA