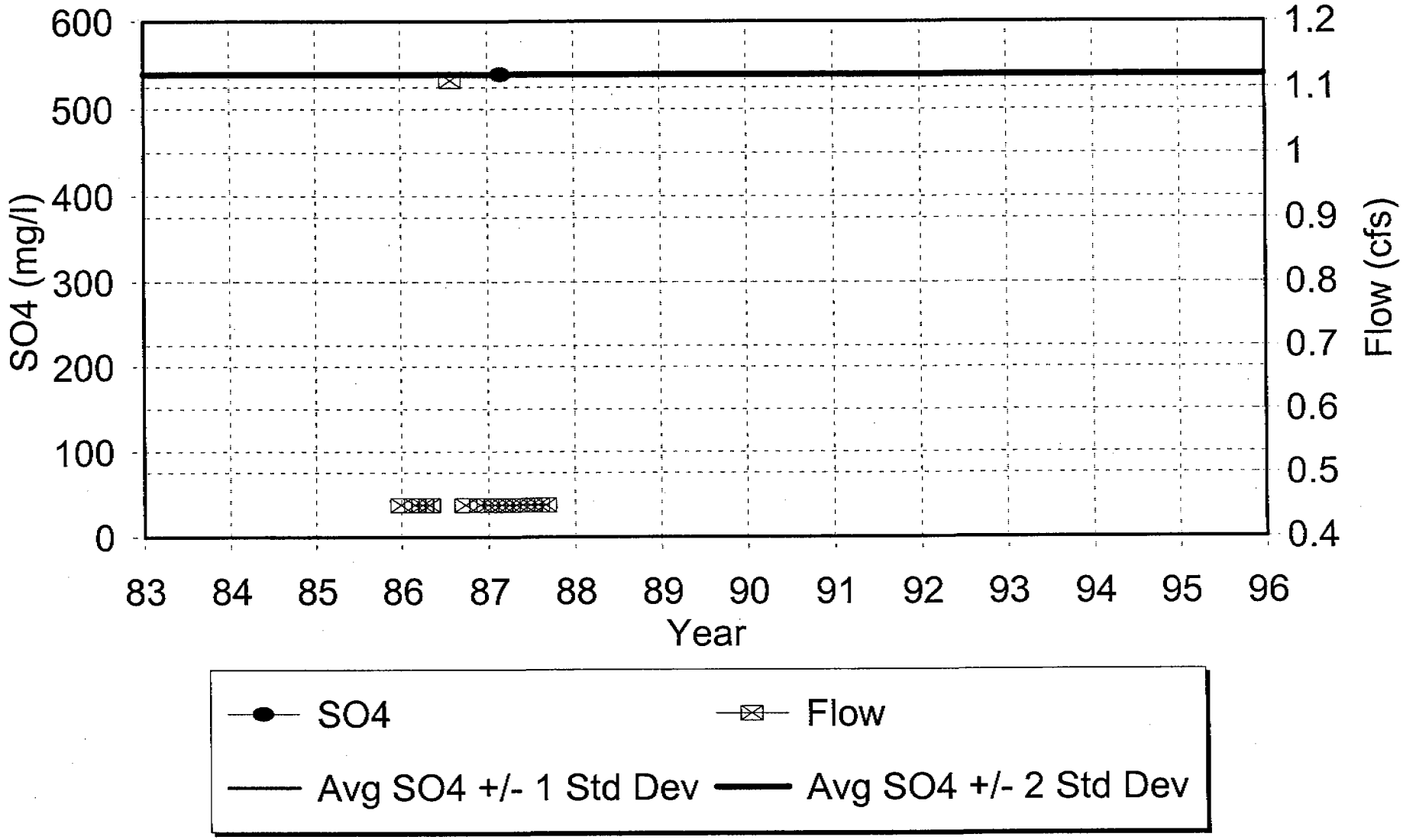
APPENDIX D
IN-MINE STATIONS

Station Mudwater Discharge

SO4 vs. Flow



Cyprus Plateau Mining Company - Water Quality Data

Station: 101 | Property: Star Point | Location: 1500' N 2000' W of SE com. Sec. 10 T15S, R6E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7250

Print Date: February 27, 1998

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-80																						
Feb-80																						
Mar-80																						
Apr-80																						
May-80																						
Jun-80																						
Jul-80																						
Aug-80																						
Sep-80																						
Oct-80	10/01/80	0.01	7.3	3900	18	2600	33			261		3	1758	296	216	10.7	190		0.65	0.214	0.018	
Nov-80																						
Dec-80																						
Jan-81																						
Feb-81																						
Mar-81	03/25/81	0.3	7.6	970	2	689	404			151		76	328	92.8	49.4	5.8	62.8		0.21	54	1.13	
Apr-81																						
May-81																						
Jun-81																						
Jul-81																						
Aug-81																						
Sep-81																						
Oct-81																						
Nov-81	11/24/81																					INACCESSIBLE
Dec-81	12/29/81																					INACCESSIBLE
Jan-82	01/14/82																					FROZEN - NO FLOW
Feb-82																						
Mar-82																						
Apr-82																						
May-82																						
Jun-82	06/22/82	0.01	7.9	5100	22	3340	354			360		153	2080	380	330	11	170		2.32	5.55	0.205	
Jul-82																						
Aug-82																						
Sep-82																						
Oct-82																						
Nov-82																						
Dec-82																						
Jan-83																						
Feb-83																						
Mar-83	03/30/83	0			3																	
Apr-83																						
May-83	05/12/83	0.06	8.1	2700	3	2083	108			456		193	1200	346	210	12	135		0.06	0.44	0.03	
Jun-83																						
Jul-83																						
Aug-83																						
Sep-83																						
Oct-83	10/07/83	0.05	8	3000	13	2268	101			368	1	214	1180	186	237	9	215		0.06	0.29	0.02	
Nov-83																						
Dec-83																						
Jan-84	01/06/84																					FROZEN - NO FLOW
Feb-84																						
Mar-84	03/30/84	0	8	3800		3152	37			451		207	1650	276	333	10	153	<	0.05	0.11	0.02	
Apr-84																						
May-84																						
Jun-84	06/29/84	0.13	7.3	2100		1670	122			296		94	900	156	164	11	90	<	0.05	0.51	0.03	
Jul-84																						
Aug-84																						
Sep-84	09/21/84	0.05	7.1	2300		1783	342			290	1	23	960	186	166	13	102	<	0.05	1.92	0.1	
Oct-84																						
Nov-84																						
Dec-84	12/11/84	0	7.4	2770		2146	25			298		256	1560	111	0.6	10	78	<	0.05	0.56	0.09	
Jan-85	01/11/85	0	7.8	3528		2560											166					
Feb-85	02/21/85																					FROZEN - NO FLOW
Mar-85	03/31/85	0.07	8	1660		1183	2682			235		72	640	130	120	6	60	<	0.05	< 0.05	0.33	
Apr-85																						
May-85																						
Jun-85	06/27/85	0.01	7.9	3750		3168	8			355		215	1800	278	344	11	165			0.38	0.02	
Jul-85																						
Aug-85																						
Sep-85	09/27/85	0.02	7.5	3481	8	2962	10			357	1	185	1700	270	302	10.5	152	<	0.05	< 0.05	0.02	
Oct-85																						
Nov-85																						
Dec-85																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: February 27, 1998

Station: 101 | Property: Star Point | Location: 1500' N 2000' W of SE com. Sec. 10 T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7250

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cal/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-86																							
Feb-86																							
Mar-86	03/11/86	0.11	7.7	1550	3	1047	46			289		32	540	140	101	10	30	<	0.05	0.33	0.04		
Apr-86																							
May-86																							
Jun-86																							
Jul-86																							
Aug-86																							
Sep-86	09/24/86	0.14	7.3	1000	10	694	3318			121	1	69	350	78	57	5	58	<	0.05	0.63	0.44		
Oct-86																							
Nov-86																							
Dec-86																							
Jan-87																							
Feb-87																							
Mar-87	03/18/87	0.03	7.9	2600		1694	11			301		206	1000	192	195	11	142	<	0.05	0.1	< 0.01		
Apr-87																							
May-87	05/26/87	0.11	9	1800	6.6	1554	50			281		40	838	157	158	11	19		0.02	0.47	0.1		
Jun-87																							
Jul-87																							
Aug-87																							
Sep-87	09/24/87	0.01	8.7	3290	6.1	2844	6		1974	368		207	1718	263	540	9	151	<	0.02	< 0.02	< 0.01		
Oct-87																							
Nov-87																							
Dec-87																							
Jan-88																							
Feb-88																							
Mar-88																							
Apr-88																							
May-88																							
Jun-88	06/15/88	0.01	8.7	2270	10.2	3046	< 2		1982	354		117	1702	255	328	10	163	<	0.02	< 0.02	< 0.01		
Jul-88	07/16/88		8.6	2950	21.8																		
Aug-88	08/20/88	0.05	8.8	2150	11.4																		
Sep-88	09/30/88	0.03	9.2	2115	7.5	3006	4		2029	332		236	1753	262	335	10	164	<	0.02	0.02	< 0.01		
Oct-88																							
Nov-88																							
Dec-88																							
Jan-89																							
Feb-89																							
Mar-89																							
Apr-89																							
May-89																							
Jun-89	06/05/89	0																					
Jul-89	07/11/89	0																					
Aug-89	08/22/89	0																					
Sep-89	09/15/89	0																					
Oct-89																							
Nov-89																							
Dec-89																							
Jan-90																							
Feb-90																							
Mar-90																							
Apr-90																							
May-90	05/30/90	0																					
Jun-90																							
Jul-90	07/06/90	0																					
Aug-90	08/30/90	0																					
Sep-90	09/24/90	0																					
Oct-90																							
Nov-90																							
Dec-90																							
Jan-91																							
Feb-91																							
Mar-91																							
Apr-91																							
May-91																							
Jun-91	06/13/91	0																					
Jul-91	07/16/91	0																					
Aug-91																							
Sep-91	09/17/91	0																					
Oct-91																							
Nov-91																							
Dec-91																							

Cyprus Plateau Mining Company - Water Quality Data

Print Date: February 27, 1998

Station: 101 | Property: Star Point | Location: 1500' N 2000' W of SE corn. Sec. 10 T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7250

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-92																							
Feb-92																							
Mar-92																							
Apr-92																							
May-92																							
Jun-92																							
Jul-92																							
Aug-92																							
Sep-92																							
Oct-92																							
Nov-92																							
Dec-92																							
Jan-93																							
Feb-93																							
Mar-93																							
Apr-93																							
May-93																							
Jun-93	06/25/93	0.012	15.6	6640	13.22	5824	32		3940	537	48	58	1655	222	345	13	186	<	0.02 <	0.02 <	0.01		
Jul-93	07/26/93	0																					
Aug-93	08/18/93	0																					
Sep-93	09/28/93	0																					
Oct-93																							
Nov-93																							
Dec-93																							
Jan-94																							
Feb-94																							
Mar-94																							
Apr-94																							
May-94																							
Jun-94	06/20/94	0																					
Jul-94	07/20/94	0																					
Aug-94																							
Sep-94	09/21/94	0.08	9	1355	13.8	914	16		243	281	18	240	198	38	36	6	258		0.26	0.39 <	0.01		
Oct-94																							
Nov-94																							
Dec-94																							
Jan-95																							
Feb-95																							
Mar-95																							
Apr-95																							
May-95																							
Jun-95	06/23/95	0.0111	8.5	3310	9	2790 <	5 <	2	1740	321 <	2	310	1410	232	283	10.4	171	-2.4 <	0.01 <	0.01 <	0.005		
Jul-95	07/27/95	0.011	8.75	3270	28																		
Aug-95	08/29/95	0.014	8.44	3430	11																		
Sep-95	09/29/95	0.027	8.5	3280	6.67	2910	16	7	1820	350 <	2	220	1450	258	285	9.2	162	-0.1 <	0.01	0.11 <	0.01		
Oct-95																							
Nov-95																							
Dec-95																							
Jan-96																							
Feb-96																							
Mar-96																							
Apr-96																							
May-96																							
Jun-96	06/12/96	0.005	7.99	3950	15	2620			2040	255	18	20	1630	255	342	11	194	10.4	0.02 <	0.03	0.01		
Jul-96	07/23/96	0.009	8.78	3350	20																		
Aug-96	08/19/96	0.008	8.84	3300	19																		
Sep-96																							
Oct-96	10/19/96	0.012	8.93	1306	3	960	5 <	2 <	744	268	8	47	430	134	99.5	7.5	36	2.4	0.01 <	0.01 <	0.005		
Nov-96																							
Dec-96																							
Jan-97																							
Feb-97																							
Mar-97																							
Apr-97																							
May-97																							
Jun-97	06/18/97	0.08	8.36	3210	20	2000		2 <	2180	210	16	244	1050	194	223	12.2	134	1.2	0.01 <	0.16	0.01		
Jul-97	07/31/97	0.06	7.75	1442	11																		
Aug-97	08/13/97	0.03	8.47	2300	15																		
Sep-97	09/17/97	0.045	8.85	1156	19	700	26	5 <	430	140	10 <	120	330	84	53	6.8	100	0.1	0.01 <	0.51	0.01		
Oct-97																							
Nov-97																							
Dec-97																							

Cyprus Plateau Mining Company - Water Quality Data

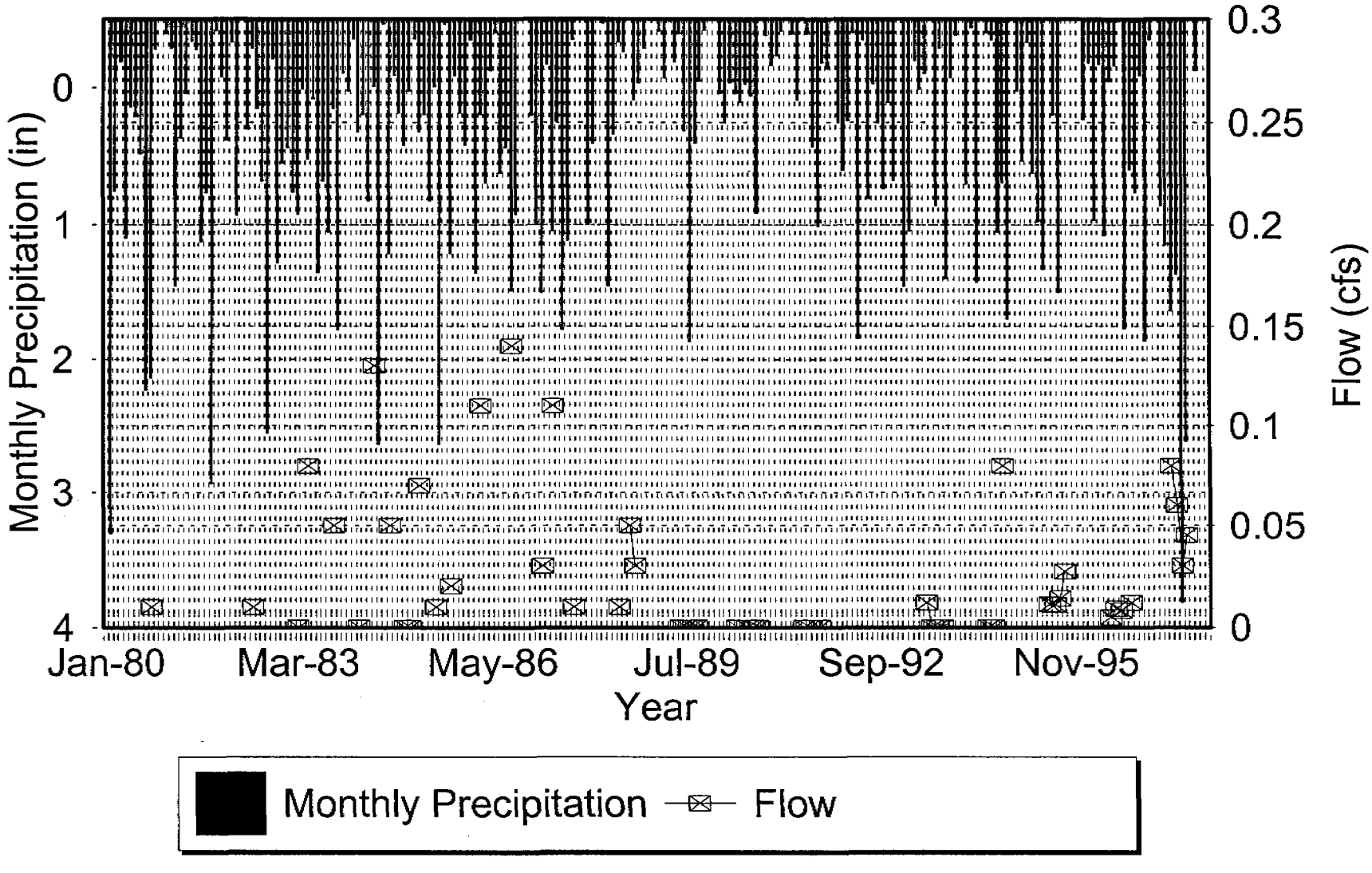
Station: 101 Property: Star Point Location: 1500' N 2000' W of SE corn. Sec. 10 T15S, R6E Station Type: Stream Sampling Frequency: Quarterly Formation: Print Date: February 27, 1998 Elevation: 7250

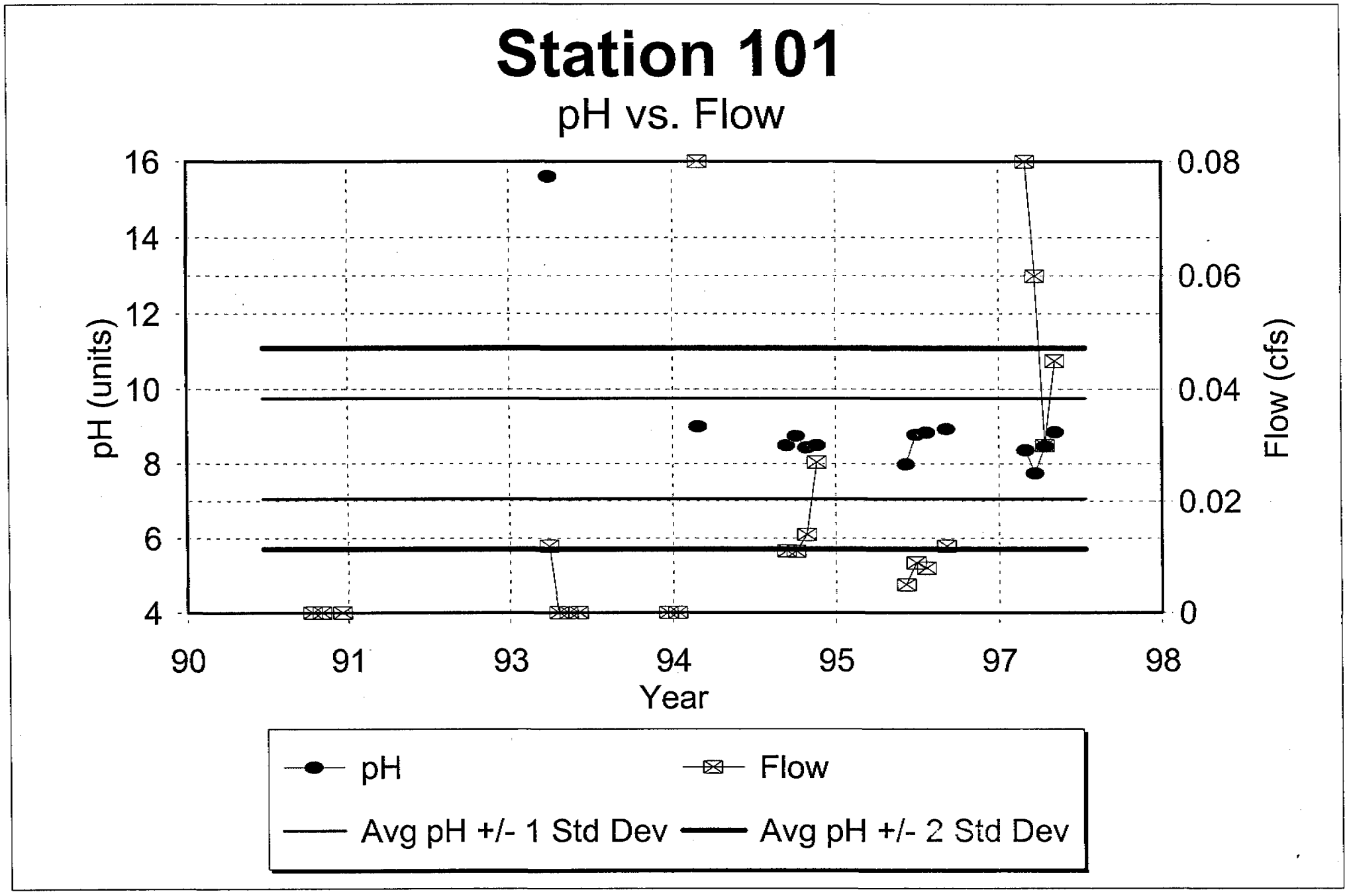
Date Mo-Yr	Sample Date	Field Measurements Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	Laboratory Measurements TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
END DATA																						
Count		52	36	36	29	28	25	5	11	27	12	27	27	27	27	27	28	6	26	27	27	
Minimum		0	7.1	970	2	689 <	2 <	2 <	243	121 <	1 <	3	198	38	0.6	5	19	-2.4 <	0.01 <	0.01 <	0.005	
Maximum		0.3	15.6	6640	28	5824 <	3318 <	7 <	3940	537 <	48 <	310	2080	380	540	13	258	10.4 <	2.32 <	54 <	1.13	
Average		0.0312	8.4044	2780.1	12.044	2226.8 <	310.52 <	3.6 <	1738.4	306.89 <	10.5 <	142.85	1178.1	202.66	216.76	9.7074	132.39	1.9333 <	0.1608 <	2.4779 <	0.1001	
Standard Deviation		0.0523	1.3446	1168	6.7183	1090.8 <	606.08 <	2.0591 <	966.53	91.435 <	13.105 <	87.92	553.34	83.747	125.88	2.1534	58.778	4.0561 <	0.4505 <	10.16 <	0.2265	
Avg. -1 Std. Dev.		-0.021	7.0599	1612.1	5.3262	1138 <	-495.6 <	1.5409 <	771.84	215.45 <	-2.605 <	54.932	624.81	118.91	90.877	7.554	73.608	-2.123 <	-0.29 <	-7.682 <	-0.126	
Avg. +1 Std. Dev.		0.0636	9.749	3948.1	18.763	3319.6 <	1116.6 <	5.6591 <	2704.9	398.32 <	23.605 <	230.77	1731.5	286.41	342.64	11.861	191.16	5.9895 <	0.6113 <	12.638 <	0.3266	
Avg. -2 Std. Dev.		-0.073	5.7153	444.06	-1.392	47.236 <	-1302 <	-0.518 <	-194.7	124.02 <	-15.71 <	-32.99	71.464	35.165	-35	5.4007	14.829	-6.179 <	-0.74 <	-17.84 <	-0.353	
Avg. +2 Std. Dev.		0.1359	11.094	5116.1	25.461	4410.4 <	1922.7 <	7.7183 <	3671.4	489.76 <	36.711 <	318.69	2284.8	370.15	468.52	14.014	249.94	10.046 <	1.0618 <	22.797 <	0.5531	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

Station 101

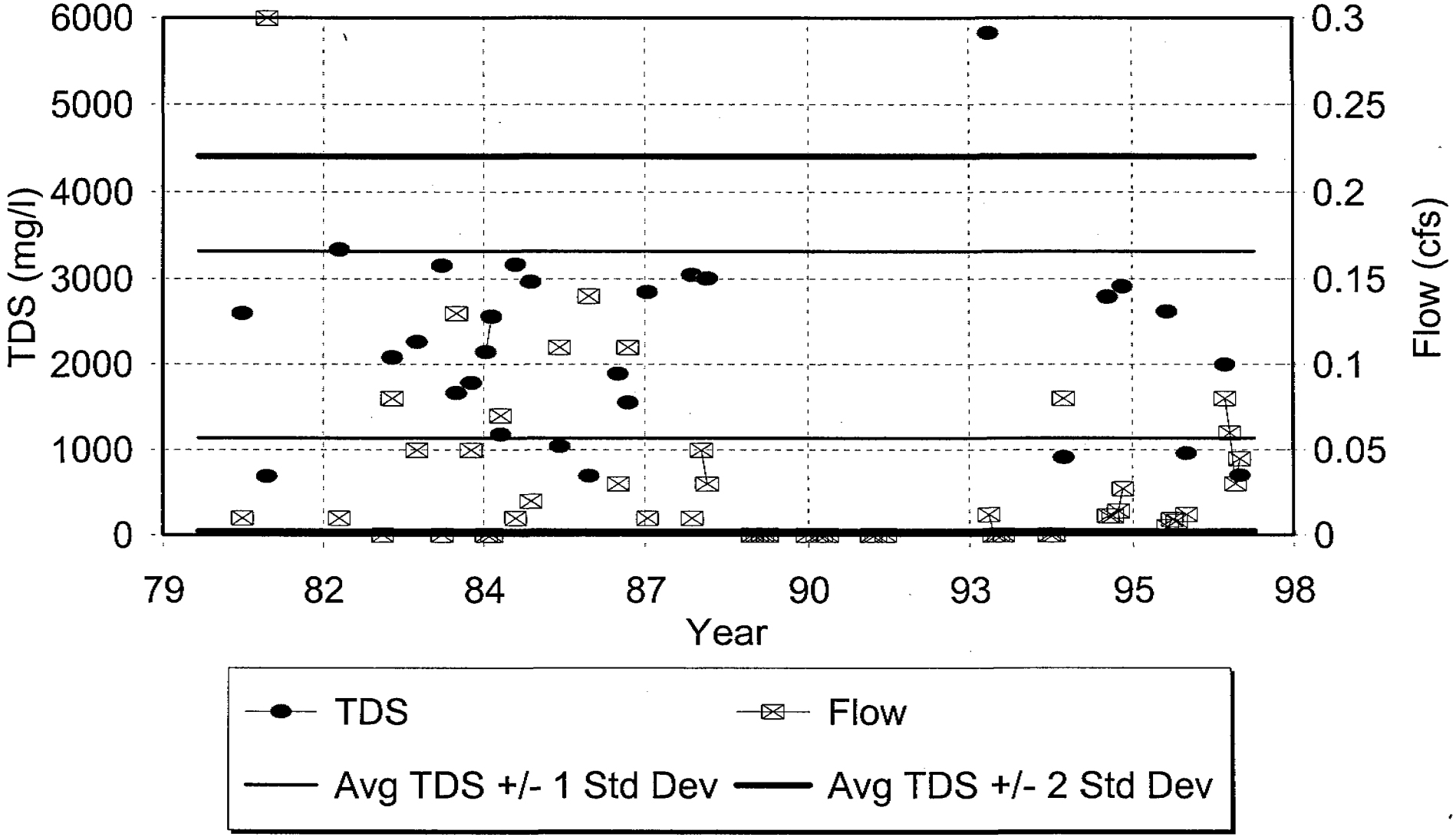
Monthly Precipitation vs. Flow




Station 101
pH vs. Flow
16
14
12
10
8
6
4
pH (units)
0.08
0.06
0.04
0.02
0
Flow (cfs)
90
91
93
94
95
97
98
Year
pH
Flow
Avg pH +/- 1 Std Dev
Avg pH +/- 2 Std Dev

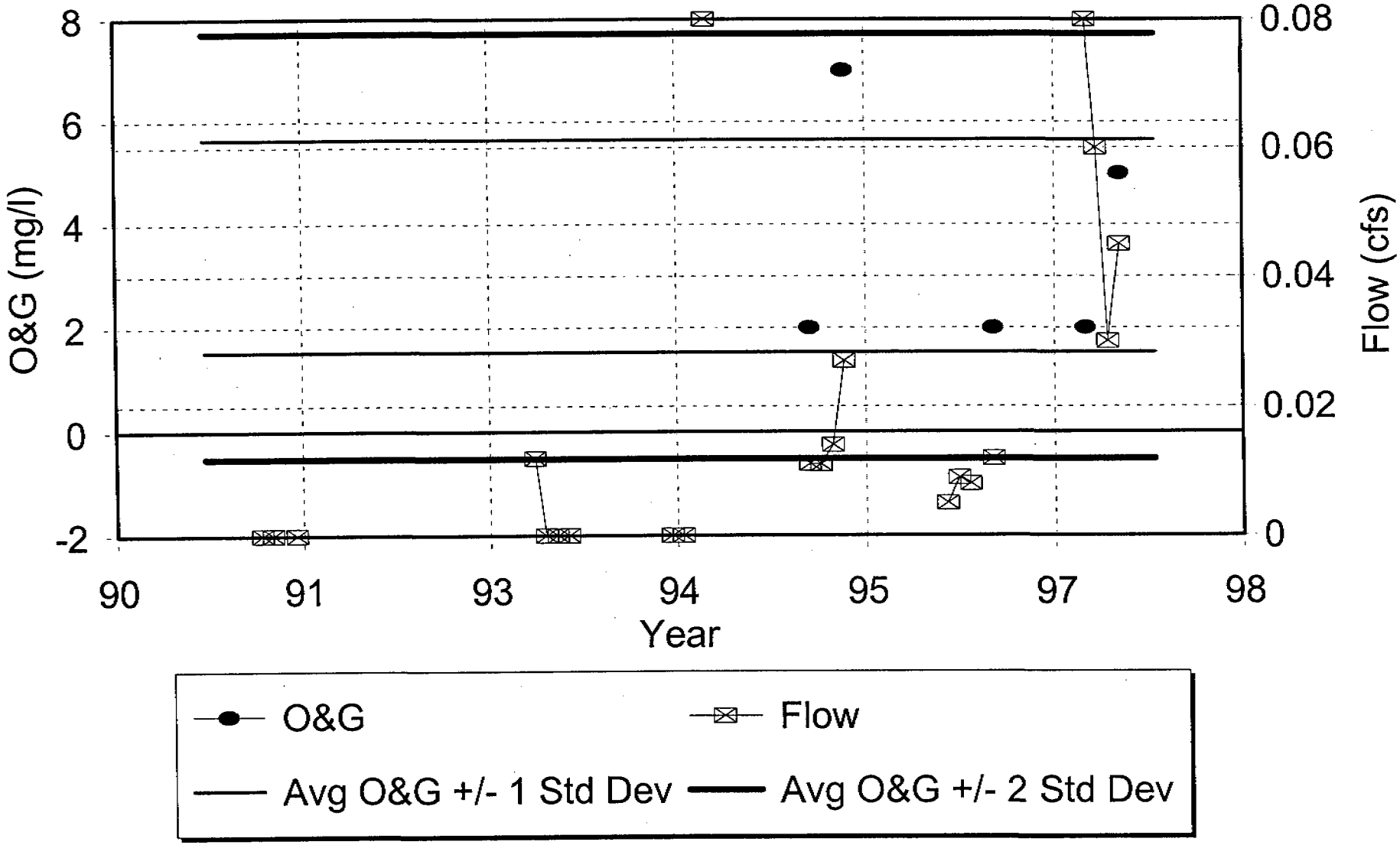
Station 101

TDS vs. Flow

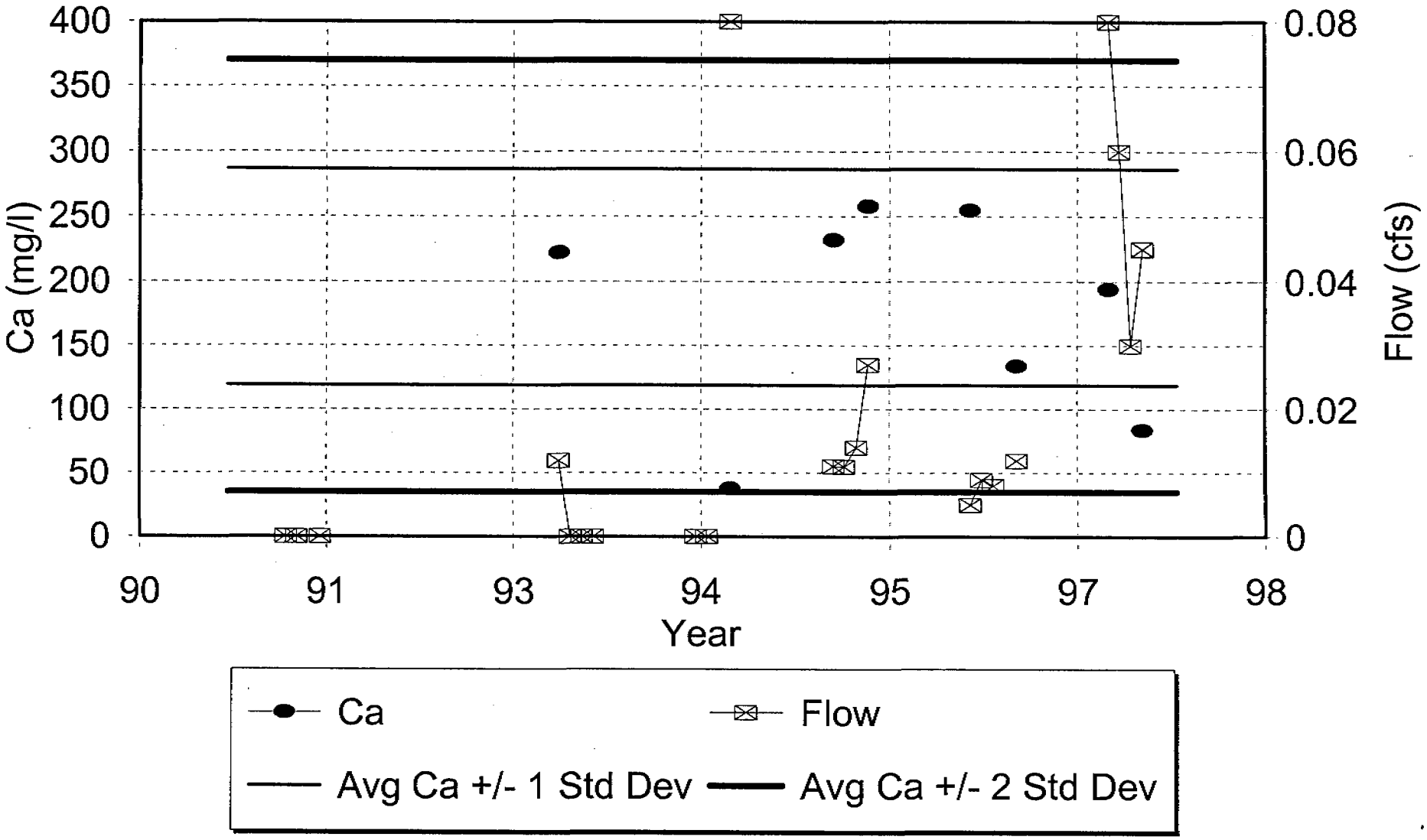


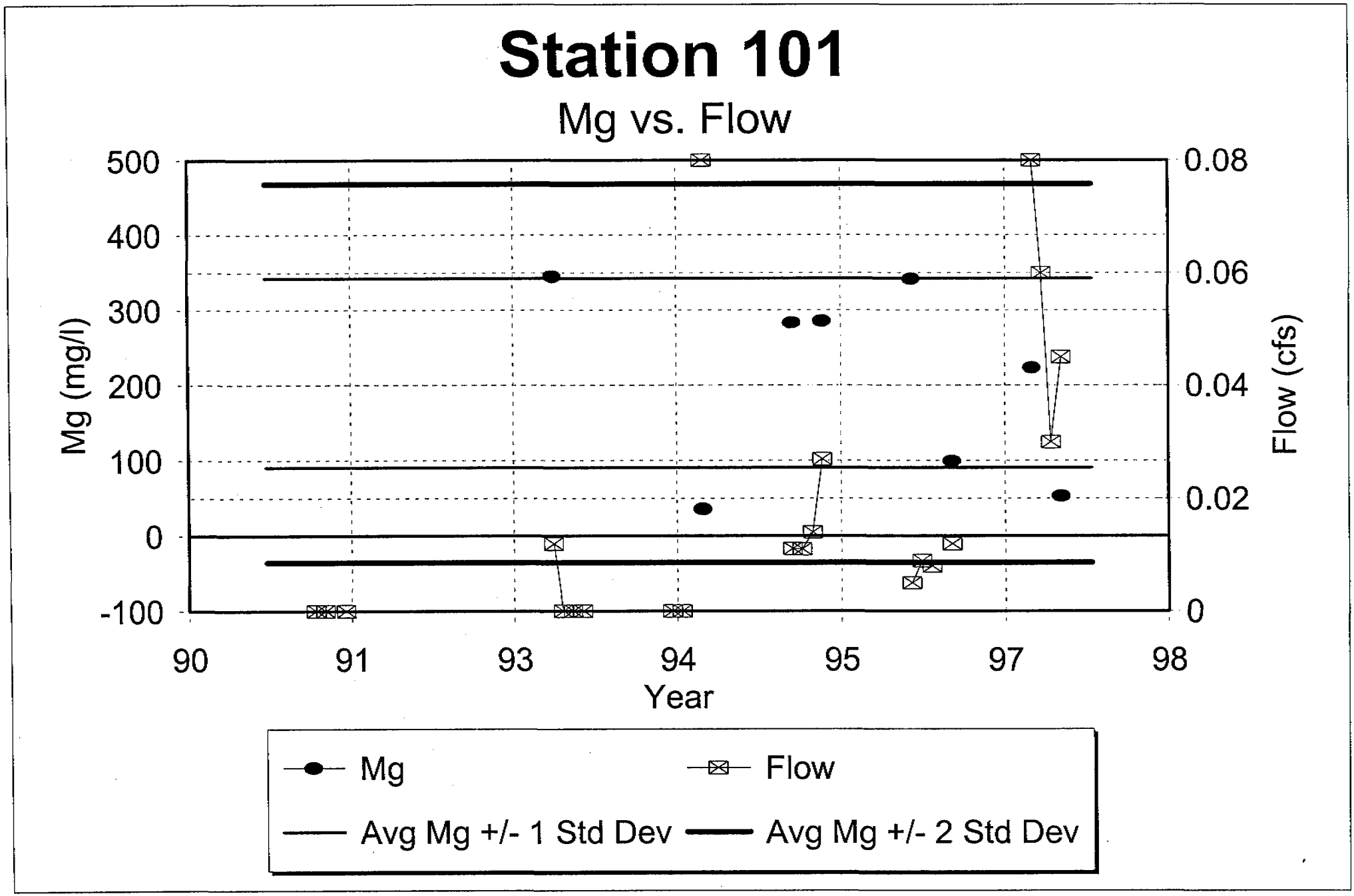
Station 101

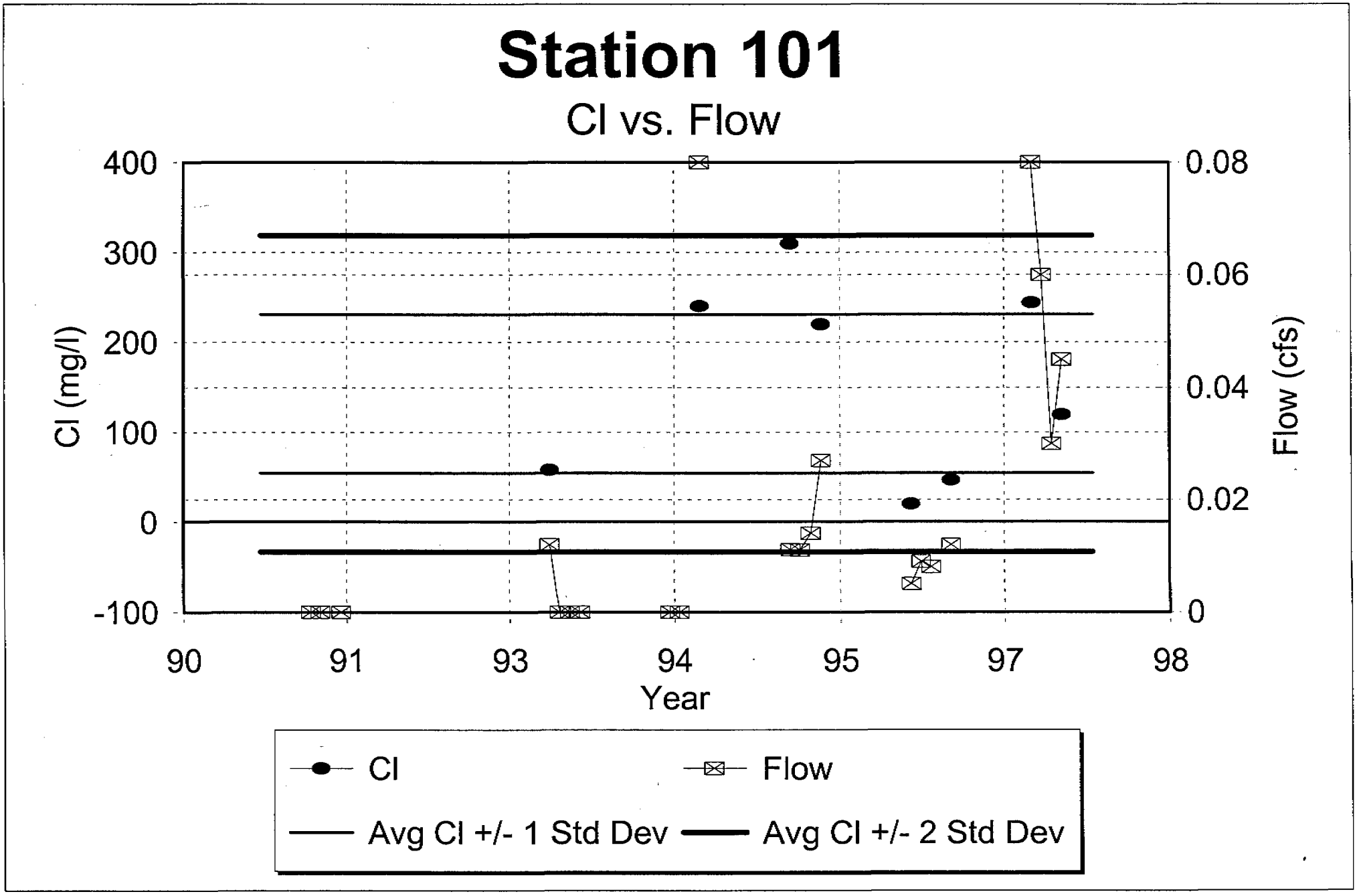
Oil & Grease vs. Flow

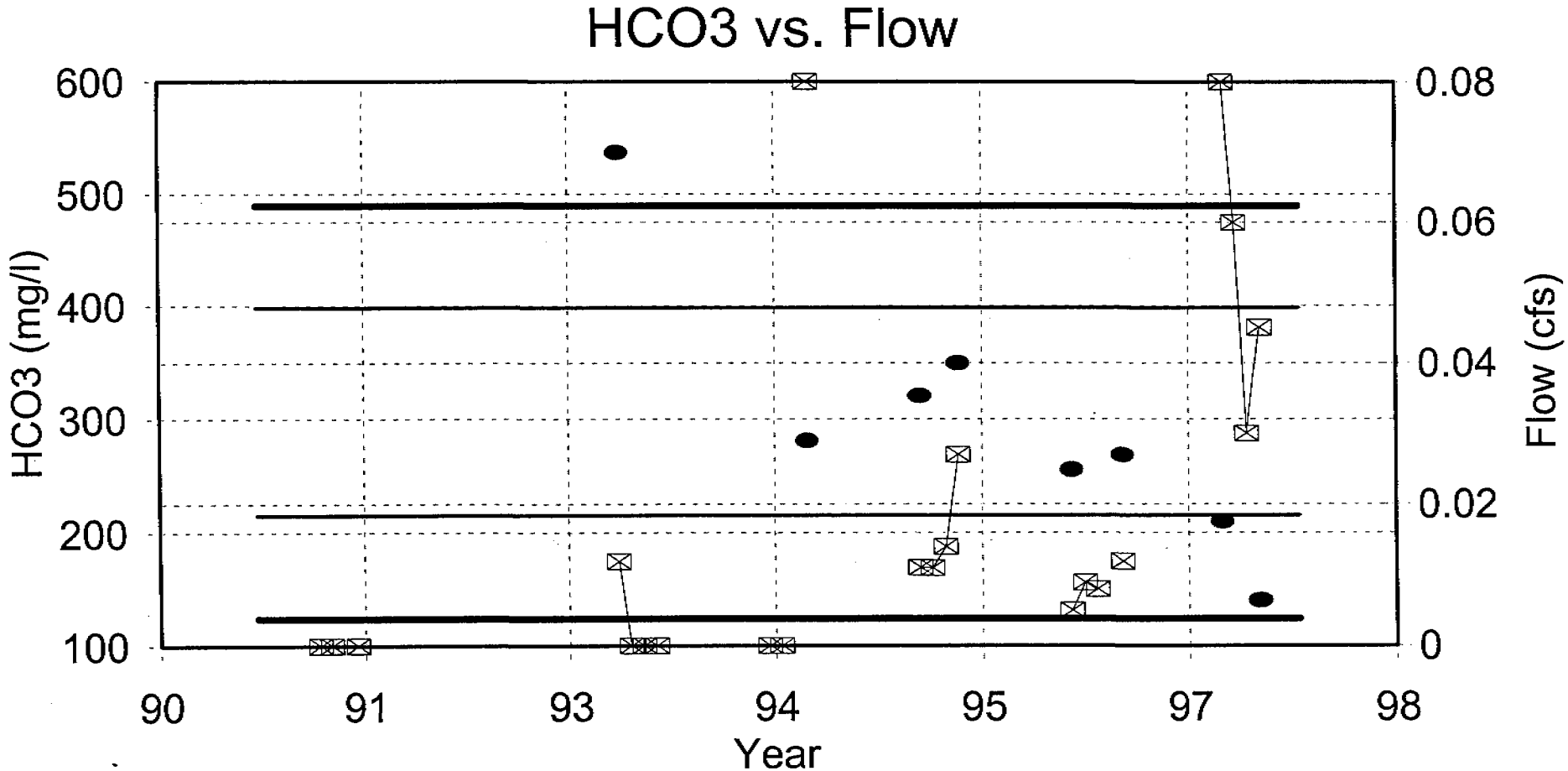


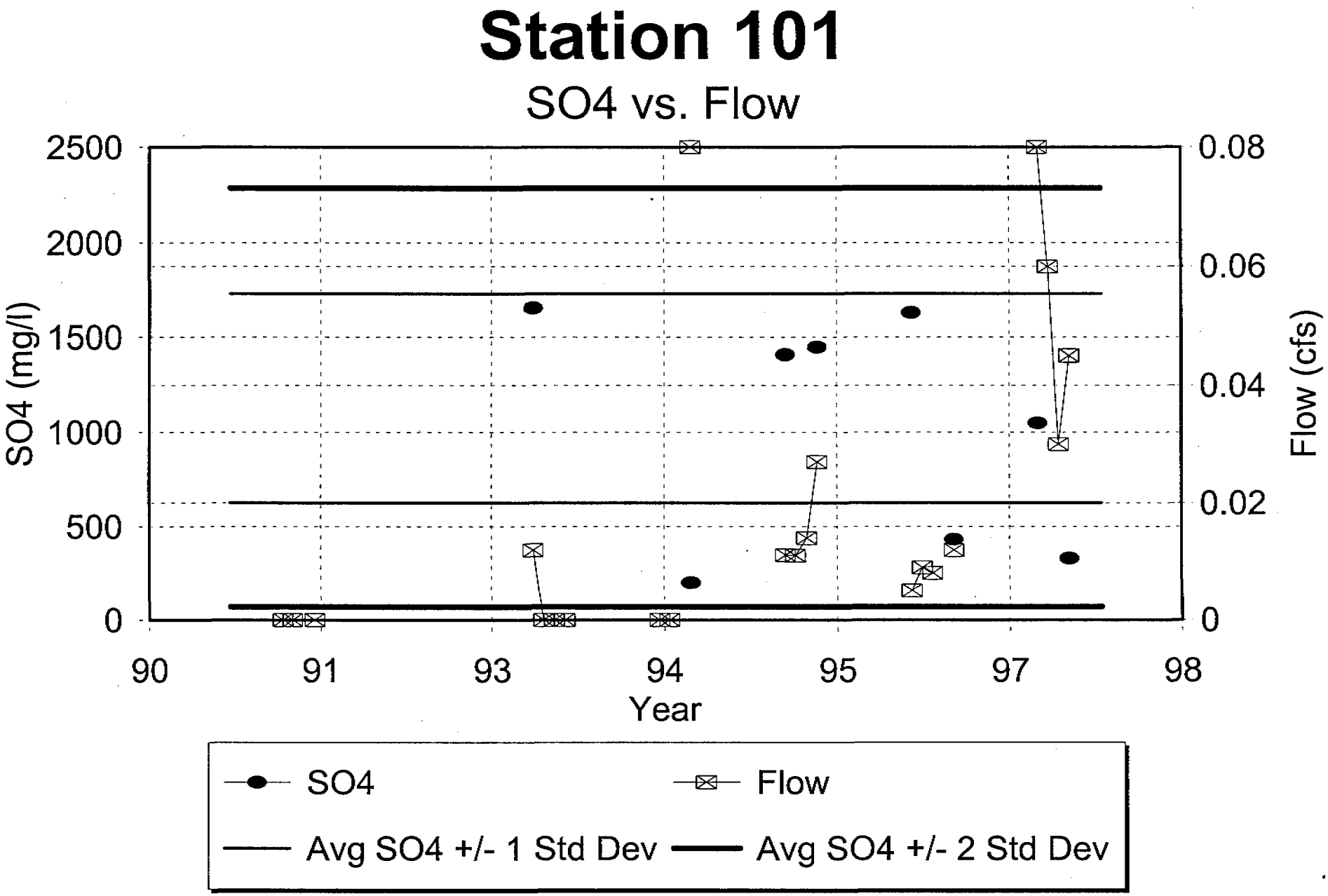
Station 101


Ca vs. Flow
Ca (mg/l)
400
350
300
250
200
150
100
50
0
Flow (cfs)
0.08
0.06
0.04
0.02
0
90
91
93
94
95
97
98
Year
Ca
Flow
Avg Ca +/- 1 Std Dev
Avg Ca +/- 2 Std Dev


Station 101
Mg vs. Flow
500
400
300
200
100
0
-100
Mg (mg/l)
0.08
0.06
0.04
0.02
0
Flow (cfs)
90
91
93
94
95
97
98
Year
Mg
Flow
Avg Mg +/- 1 Std Dev
Avg Mg +/- 2 Std Dev


Station 101
Cl vs. Flow
400
300
200
100
0
-100
Cl (mg/l)
0.08
0.06
0.04
0.02
0
Flow (cfs)
90
91
93
94
95
97
98
Year
Cl
Flow
Avg Cl +/- 1 Std Dev
Avg Cl +/- 2 Std Dev


Station 101
HCO3 vs. Flow
600
500
400
300
200
100
HCO3 (mg/l)
0.08
0.06
0.04
0.02
0
Flow (cfs)
90
91
93
94
95
97
98
Year
HCO3
Flow
Avg HCO3 +/- 1 Std Dev
Avg HCO3 +/- 2 Std Dev


Station 101
SO4 vs. Flow
SO4 (mg/l)
2500
2000
1500
1000
500
0
Flow (cfs)
0.08
0.06
0.04
0.02
0
90
91
93
94
95
97
98
Year
SO4
Flow
Avg SO4 +/- 1 Std Dev
Avg SO4 +/- 2 Std Dev

Cyprus Plateau Mining Company - Water Quality Data

Print Date: February 27, 1998

Station: 51 | Property: Star Point | Location: 2000' S 2500' W of NE corn. Sec 5, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7820

Date		Field Measurements				Laboratory Measurements																			
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	NO3 (D) (mg/l)	NO2 (D) (mg/l)	Comments
Jan-81																								
Feb-81																								
Mar-81																								
Apr-81	04/28/81	0.2	8.5	800	4	1020	319			361		28	520	126.4	90.2	6.1	84		0.04	4.83	0.17			
May-81	05/27/81																							IN-ACCESSIBLE
Jun-81	06/16/81	0.05	8.5	1700	23	1195	99			276		60	690	40	170.4	2.6	100		0.02	2.05	0.07			
Jul-81	07/17/81			840		550				290		22	220	80	64.8	4.8	15.1		0.05	0.11	0.01			
Aug-81	08/22/81	0.02			14	1300				276		18	530	70.4	55.7	15.8	165.3		15.5		0.659			
Sep-81																								
Oct-81	10/08/81																							IN-ACCESSIBLE
Nov-81	11/24/81																							IN-ACCESSIBLE RAIN R
Dec-81	12/29/81																							IN-ACCESSIBLE
Jan-82																								
Feb-82																								
Mar-82																								
Apr-82																								
May-82																								
Jun-82																								
Jul-82																								
Aug-82																								
Sep-82																								
Oct-82																								
Nov-82																								
Dec-82																								
Jan-83																								
Feb-83																								
Mar-83	03/24/83																							IN-ACCESSIBLE
Apr-83	04/21/83	0.11	8.1	5700	6	4531	178			316		80	2790	430	230	19.4	590		0.09	0.09	0.01			
May-83	05/12/83																							IN-ACCESSIBLE
Jun-83	06/28/83	0.59	7.2	2250	19	1551	610			296		54	900	148	167	9	83	<	0.05	2.7	0.12			
Jul-83																								
Aug-83																								
Sep-83																								
Oct-83	10/06/83	0.12	8.1	2550	15.5	1992	50			295	1	74	1020	210	186	11	116	<	0.05	0.63	0.04			
Nov-83																								
Dec-83																								
Jan-84	01/06/84																							FROZEN - NO FLOW
Feb-84																								
Mar-84	03/30/84																							IN-ACCESSIBLE
Apr-84																								
May-84																								
Jun-84	06/21/84	0.01	8	1300	16	924	150			299		20	510	113	109	7	18	<	0.05	0.79	0.06			
Jul-84																								
Aug-84																								
Sep-84																								
Oct-84	10/25/84	0.12	7.6	1300	16	924	3			356	1	12	400	116	103	5	13		0.24	0.24 <	0.01			
Nov-84																								
Dec-84	12/11/84																							IN-ACCESSIBLE - SNOW
Jan-85																								
Feb-85	02/21/85																							IN-ACCESSIBLE - SNOW
Mar-85																								
Apr-85																								
May-85																								
Jun-85	06/13/85	0.09	8.1	930		599	14			270		8	310	115	64	7.7	8	<	0.05	0.15	0.02			
Jul-85																								
Aug-85																								
Sep-85	09/05/85	0.16	7.8	1400		1009	1234			256	1	25	520	122	102	9	31	<	0.05	8.41	0.38			
Oct-85																								
Nov-85																								
Dec-85																								
Jan-86																								
Feb-86																								
Mar-86																								
Apr-86																								
May-86																								
Jun-86	06/12/86	0.19	8.4	2250	20	1724	308			318		77	1000	192	167	10.8	104		0.11	0.32	0.06			
Jul-86																								
Aug-86																								
Sep-86																								
Oct-86	10/06/86	0.79	8	2018		1566 <	0.5			277	1	72	1000	176	166.6	18.1	97.1	<	0.05	0.53	0.07			
Nov-86																								
Dec-86																								
Jan-87																								
Feb-87																								
Mar-87																								
Apr-87																								
May-87	05/19/87	0.89	8.6	1100	8	1000				156		26	564		895				0.98		12.1			AFTER RAIN AND SNOW
Jun-87																								
Jul-87	07/16/87	0.08	9	385	13.1																			

Cyprus Plateau Mining Company - Water Quality Data

Print Date: February 27, 1998

Station: 51 | Property: Star Point | Location: 2000' S 2500' W of NE corn. Sec 5, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7820

Date		Field Measurements				Laboratory Measurements																			
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	NO3 (D) (mg/l)	NO2 (D) (mg/l)	Comments
Aug-87	08/12/87	0.07	8.6	320	14																			
Sep-87	09/22/87	0.07	8.5	1980	16.2	1786 <	2		1173	255		74	1111		186			<	0.02	0.03	0.01			
Oct-87																								
Nov-87																								
Dec-87																								
Jan-88																								
Feb-88																								
Mar-88																								
Apr-88																								
May-88																								
Jun-88	06/03/88	0.14	8.3	1197	27	1538	32		1115	246		61	949						0.02	0.25	0.02			
Jul-88	07/15/88	0.07	8.5	1480	11.2																			
Aug-88	08/13/88	0.01	8.7	2100	22																			
Sep-88	09/03/88	0.02	8.5	1950	22	1652	16		1101	234		68	1006						0.04	0.21	0.01			
Oct-88																								
Nov-88																								
Dec-88																								
Jan-89																								
Feb-89																								
Mar-89																								
Apr-89																								
May-89																								
Jun-89	06/07/89	0.03	8.4	1700	10	1514 <	2		1071	215		55	908					<	0.02	0.09	0.01			
Jul-89	07/11/89	0.02	8.4	1950	10																			
Aug-89	08/22/89	0.01	8.4	1830	10																			
Sep-89	09/15/89	0.03	8.7	1850	4	1490 <	2		1011	300		48	809					<	0.02	0.07	0.02			
Oct-89																								
Nov-89																								
Dec-89																								
Jan-90																								
Feb-90																								
Mar-90																								
Apr-90																								
May-90	05/30/89	0.09	7.7	1740	9	1406	1340		907	278		52	776						0.04	29	0.59			
Jun-90																								
Jul-90	07/06/89	0																						NO FLOW
Aug-90	08/22/90	0																						NO FLOW
Sep-90	09/24/90	0																						NO FLOW
Oct-90																								
Nov-90																								
Dec-90																								
Jan-91																								
Feb-91																								
Mar-91																								
Apr-91																								
May-91																								
Jun-91	06/13/91	0.03		1530	11	1186 <	2		796	242	12	44	681	120	121	8	79	<	0.02	0.08	0.01			
Jul-91																								
Aug-91																								
Sep-91																								
Oct-91																								
Nov-91																								
Dec-91																								
Jan-92																								
Feb-92																								
Mar-92																								
Apr-92																								
May-92	05/20/92	0.0512	8.5	1520	16.2	1250	482		803	222	4	41	722	121	122	9	69		0.0047					
Jun-92																								
Jul-92	06/15/92	0.0001																						
Aug-92	08/24/92	0.005	10.4	1890	16.2																			
Sep-92																								
Oct-92																								
Nov-92																								
Dec-92																								
Jan-93																								
Feb-93																								
Mar-93																								
Apr-93																								
May-93																								
Jun-93	06/22/93	0.111	13.4	3788	21	2700	40		1808	312	0	52	753	145	132	8	74	<	0.02	0.05	0.01			
Jul-93	07/26/93	0																						NO FLOW
Aug-93	08/17/93	0																						NO FLOW
Sep-93	09/27/93	0.036	6.4	693	3.1	1686 <	2		1034	310	0	61	988	161	154	10	101	<	0.02 <	0.02 <	0.01			
Oct-93																								
Nov-93																								
Dec-93																								
Jan-94																								
Feb-94																								

Cyprus Plateau Mining Company - Water Quality Data

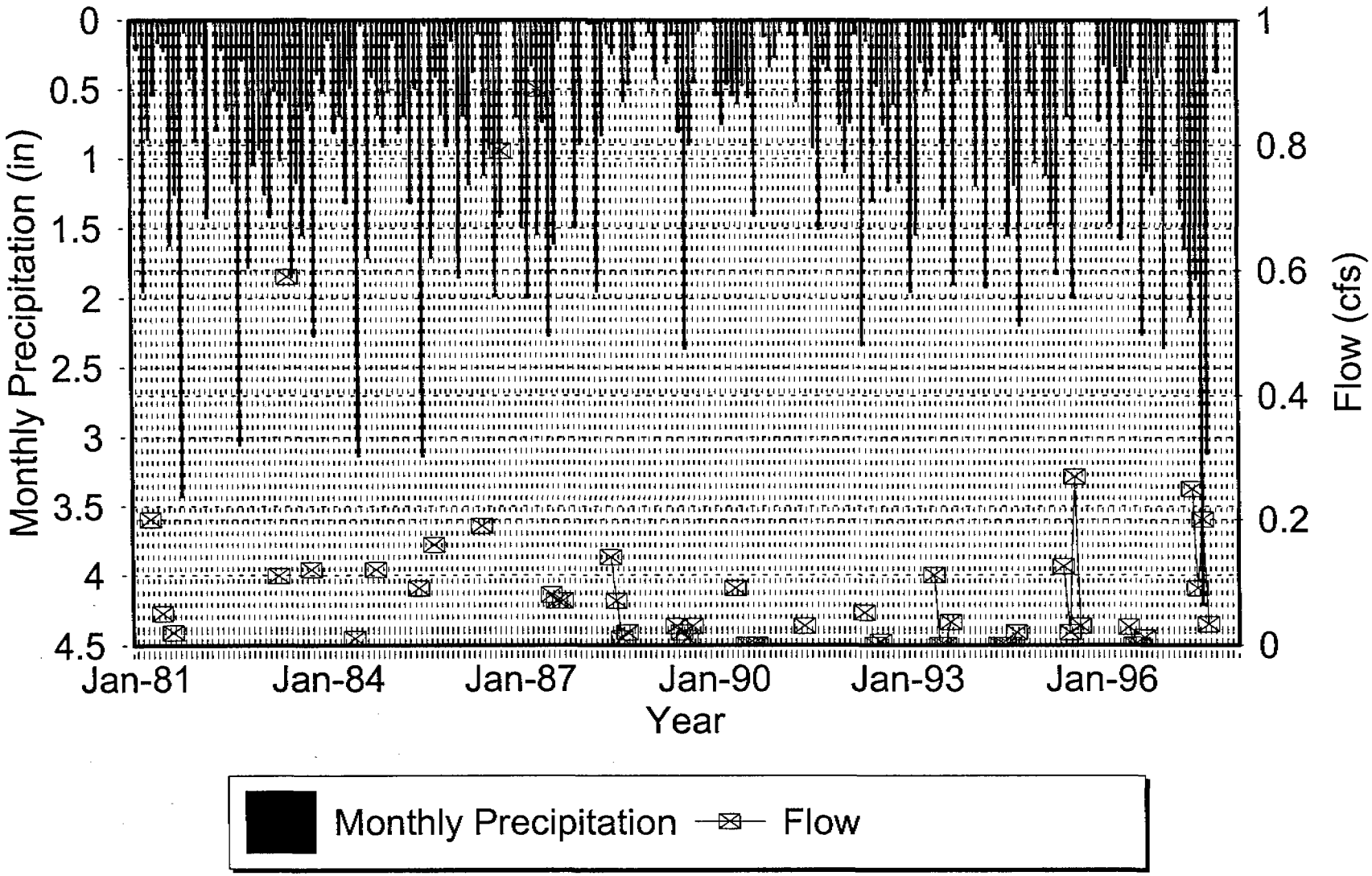
Station: 51 | Property: Star Point | Location: 2000' S 2500' W of NE corn. Sec 5, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Print Date: February 27, 1998 | Elevation: 7820

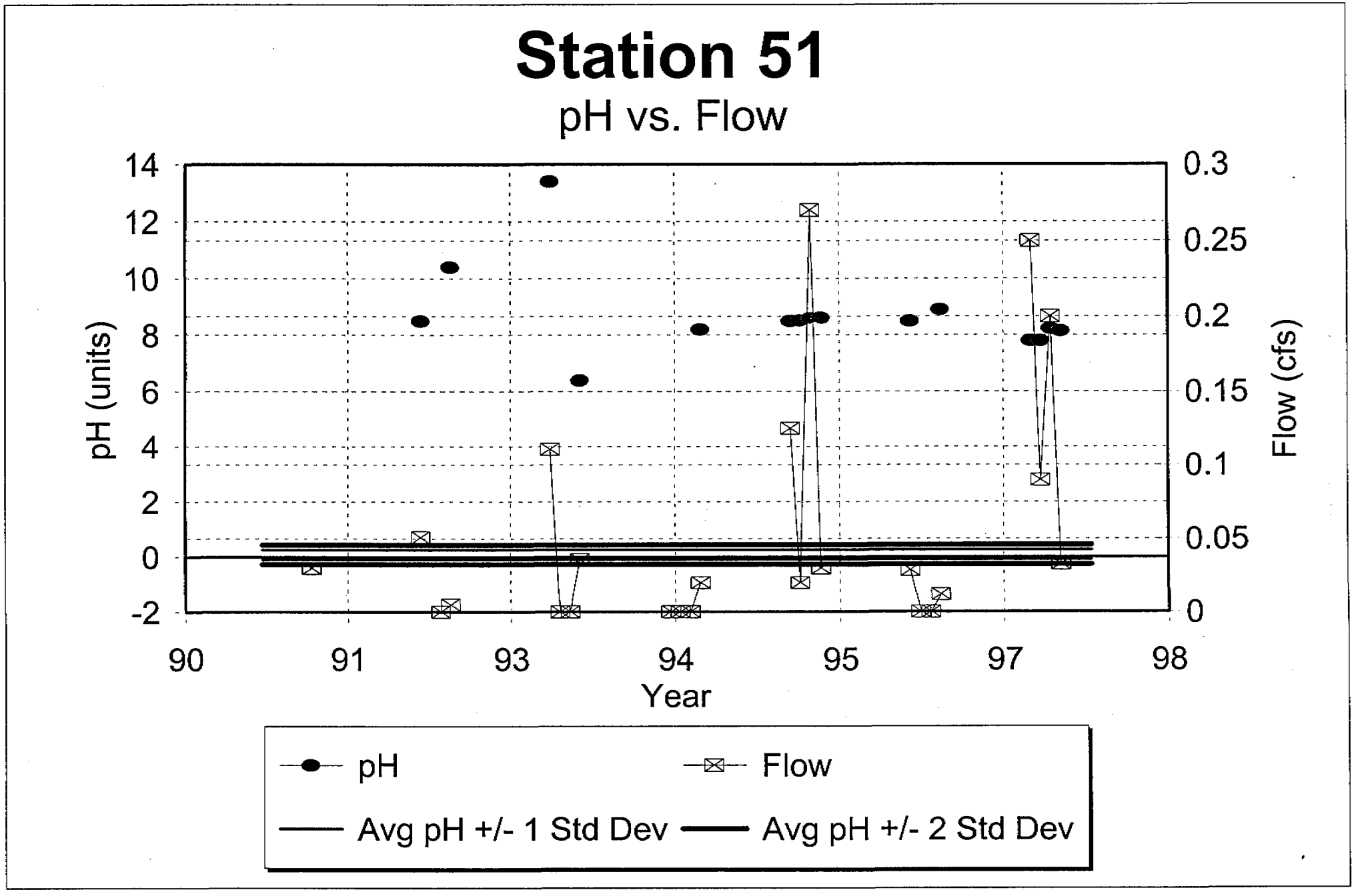
Date Mo-Yr	Sample Date	Field Measurements Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	Laboratory Measurements TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	NO3 (D) (mg/l)	NO2 (D) (mg/l)	Comments
Mar-94																								
Apr-94																								
May-94																								
Jun-94	06/08/94	0																						NO FLOW
Jul-94	07/19/94	0																						NO FLOW
Aug-94	08/31/94	0																						NO FLOW
Sep-94	09/21/94	0.02	8.2	1061	10.1	1210 <	2		910	311	0	48	626	159	125	9	66		0.18	0.19	0.02			
Oct-94																								
Nov-94																								
Dec-94																								
Jan-95																								
Feb-95																								
Mar-95																								
Apr-95																								
May-95																								
Jun-95	06/21/95	0.125	8.5	1540	20.4	1310 <	5 <	2	853	240	10	46	600	129	129	7.8	64.7	3	0.02	0.01 <	0.005	0.04 <	0.01	
Jul-95	07/26/95	0.02	8.51	3320	27																			
Aug-95	08/23/95	0.27	8.59	1750	14																			Rain last 24-48 hrs.
Sep-95	09/27/95	0.03	8.6	2270	5	1600 <	5 <	2	1030	249 <	2	56	887	170	148	9.2	92.7	-0.4 <	0.01 <	0.01 <	0.005 <	0.02 <	0.01	
Oct-95																								
Nov-95																								
Dec-95																								
Jan-96																								
Feb-96																								
Mar-96																								
Apr-96																								
May-96																								
Jun-96	06/11/96	0.029	8.5	1790	18	1370		2 <	971	247	7	50	770	150	145	9.7	85.3	1.6	0.04	0.14	0.005 <	0.03	0.01	
Jul-96	07/23/96	0																						Dry
Aug-96	08/19/96	0																						Dry
Sep-96	10/02/96	0.012	8.9	2160	3.5	1460		2 <	1020	276	2 <	58	830	157	153	8.5	90.3	0	0.03	0.06	0.02	0.02	0.01	
Oct-96																								
Nov-96																								
Dec-96																								
Jan-97																								
Feb-97																								
Mar-97																								
Apr-97																								
May-97																								
Jun-97	06/18/97	0.25	7.8	1840	11	1470		2 <	1110	276	2 <	56	810	185	157	8.6	85	4	0.26	0.53	0.018	0.02 <	0.02	
Jul-97	07/31/97	0.09	7.8	2140	11																			
Aug-97	08/13/97	0.2	8.23	530	16																			
Sep-97	09/17/97	0.033	8.15	1737	11	1400	1 <	5 <	840	410	10 <	47	680	140	120	8.9	74	-7.7	0.01 <	0.05	0.046	0.04	0.01	
Oct-97																								
Nov-97																								
Dec-97																								
END DATA																								
Count		52	39	41	38	31	25	6	17	31	15	31	31	24	26	24	24	6	31	28	30	6	6	
Minimum		0	6.4	320	3.1	550 <	0.5 <	2 <	796	156 <	0 <	8	220	40	55.7	2.6	8	-7.7 <	0.0047 <	0.01 <	0.005 <	0.02 <	0.01	
Maximum		0.89	13.4	5700	27	4531 <	1340 <	5 <	1808	410 <	12 <	80	2790	430	895	19.4	590	4 <	15.5 <	29 <	12.1 <	0.04 <	0.02	
Average		0.1018	8.4379	1765.3	13.803	1481.1 <	196.02 <	2.5 <	1032.5	279.52 <	3.5333 <	48.161	802.65	148.99	163.95	9.2917	96.063	0.0833 <	0.584 <	1.8443 <	0.4856 <	0.0283 <	0.0117	
Standard Deviation		0.1782	0.9918	921.33	6.2496	686.7 <	359.36 <	1.118 <	224.02	47.146 <	3.9811 <	19.479	422.81	69.83	151.6	3.7444	109.03	3.8072 <	2.7288 <	5.5204 <	2.1627 <	0.009 <	0.0037	
Avg. -1 Std. Dev.		-0.076	7.4461	844.01	7.5531	794.37 <	-163.3 <	1.382 <	808.51	232.37 <	-0.448 <	28.682	379.83	79.162	12.348	5.5472	-12.97	-3.724 <	-2.145 <	-3.676 <	-1.677 <	0.0194 <	0.0079	
Avg. +1 Std. Dev.		0.28	9.4298	2686.7	20.052	2167.8 <	555.38 <	3.618 <	1256.6	326.66 <	7.5144 <	67.64	1225.5	218.82	315.55	13.036	205.09	3.8905 <	3.3129 <	7.3647 <	2.6483 <	0.0373 <	0.0154	
Avg. -2 Std. Dev.		-0.255	6.4543	-77.32	1.3035	107.67 <	-522.7 <	0.2639 <	584.48	185.22 <	-4.429 <	9.2036	-42.98	9.3315	-139.3	1.8028	-122	-7.531 <	-4.874 <	-9.196 <	-3.84 <	0.0104 <	0.0042	
Avg. +2 Std. Dev.		0.4581	10.422	3608	26.302	2854.5 <	914.74 <	4.7361 <	1480.6	373.81 <	11.495 <	87.119	1648.3	288.65	467.15	16.781	314.12	7.6977 <	6.0417 <	12.885 <	4.811 <	0.0463 <	0.0191	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

Station 51

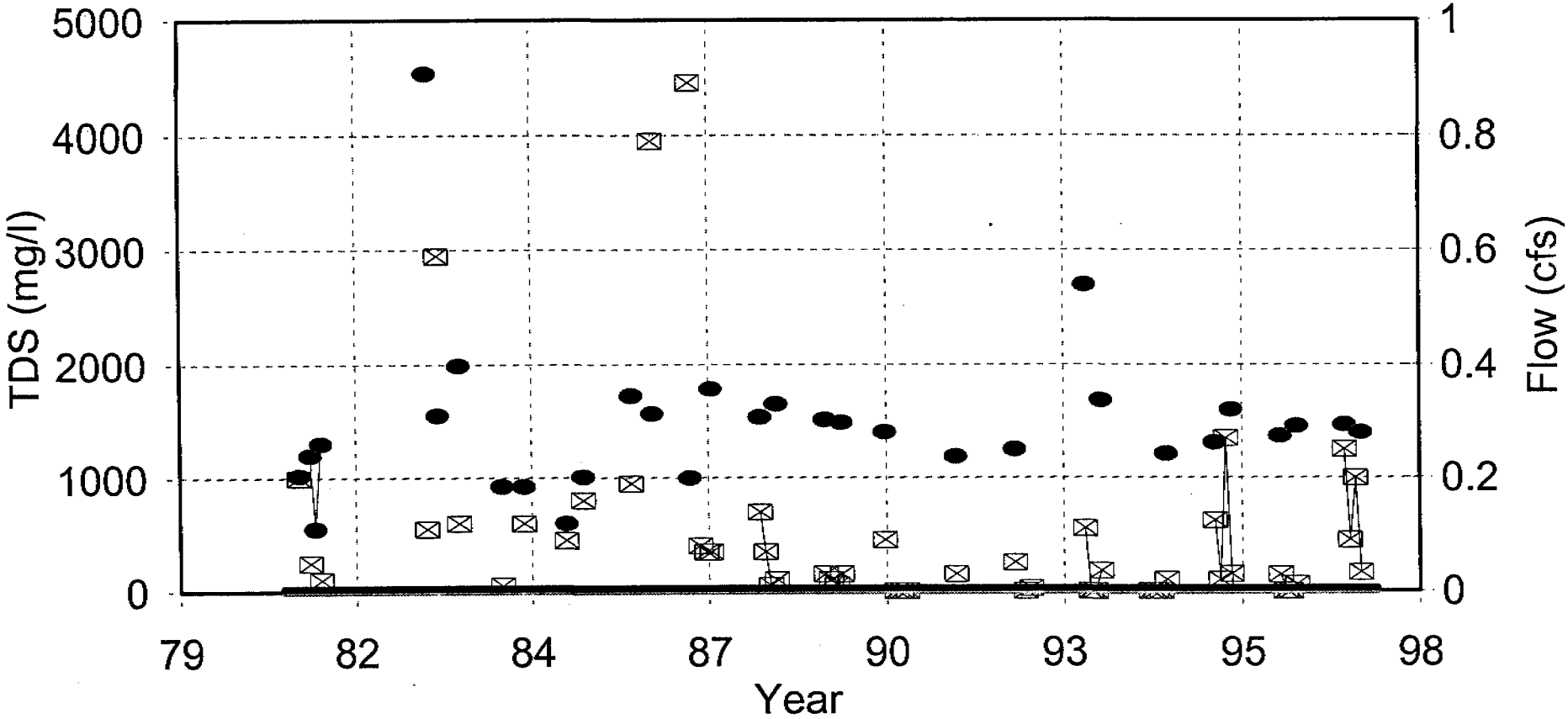
Monthly Precipitation vs. Flow



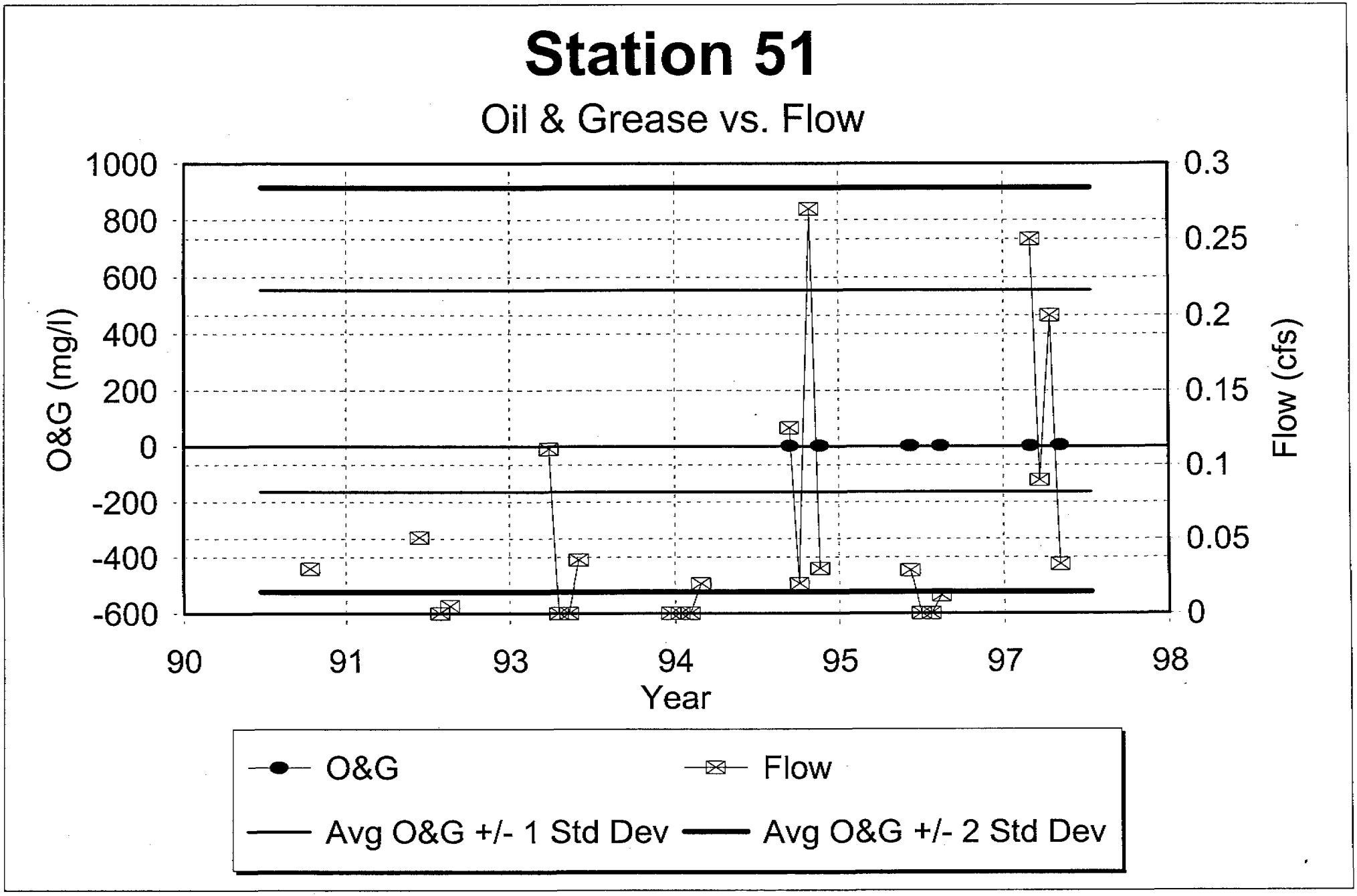

Station 51
pH vs. Flow
pH (units)
14
12
10
8
6
4
2
0
-2
Flow (cfs)
0.3
0.25
0.2
0.15
0.1
0.05
0
90
91
93
94
95
97
98
Year
pH
Flow
Avg pH +/- 1 Std Dev
Avg pH +/- 2 Std Dev

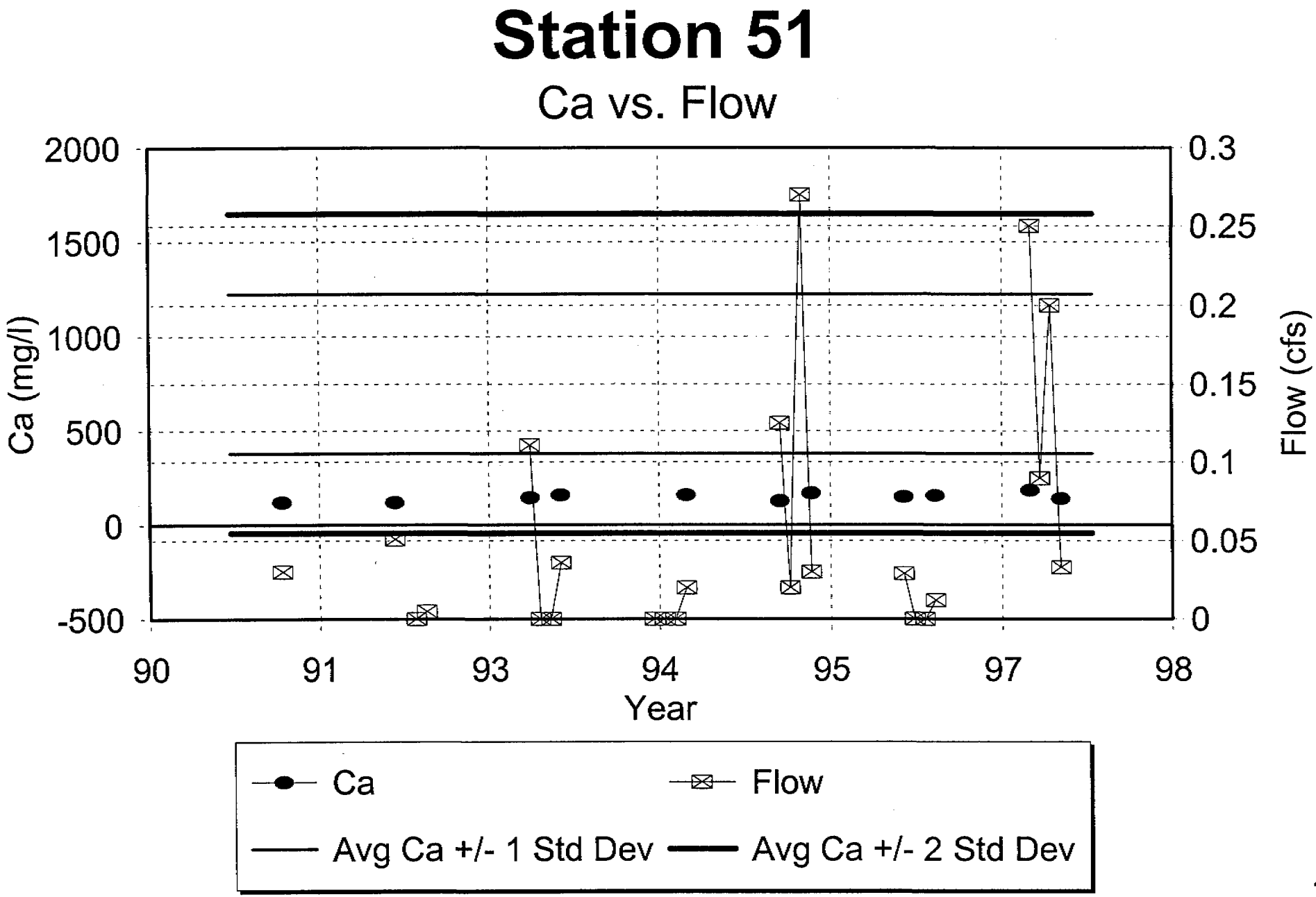
Station 51

TDS vs. Flow



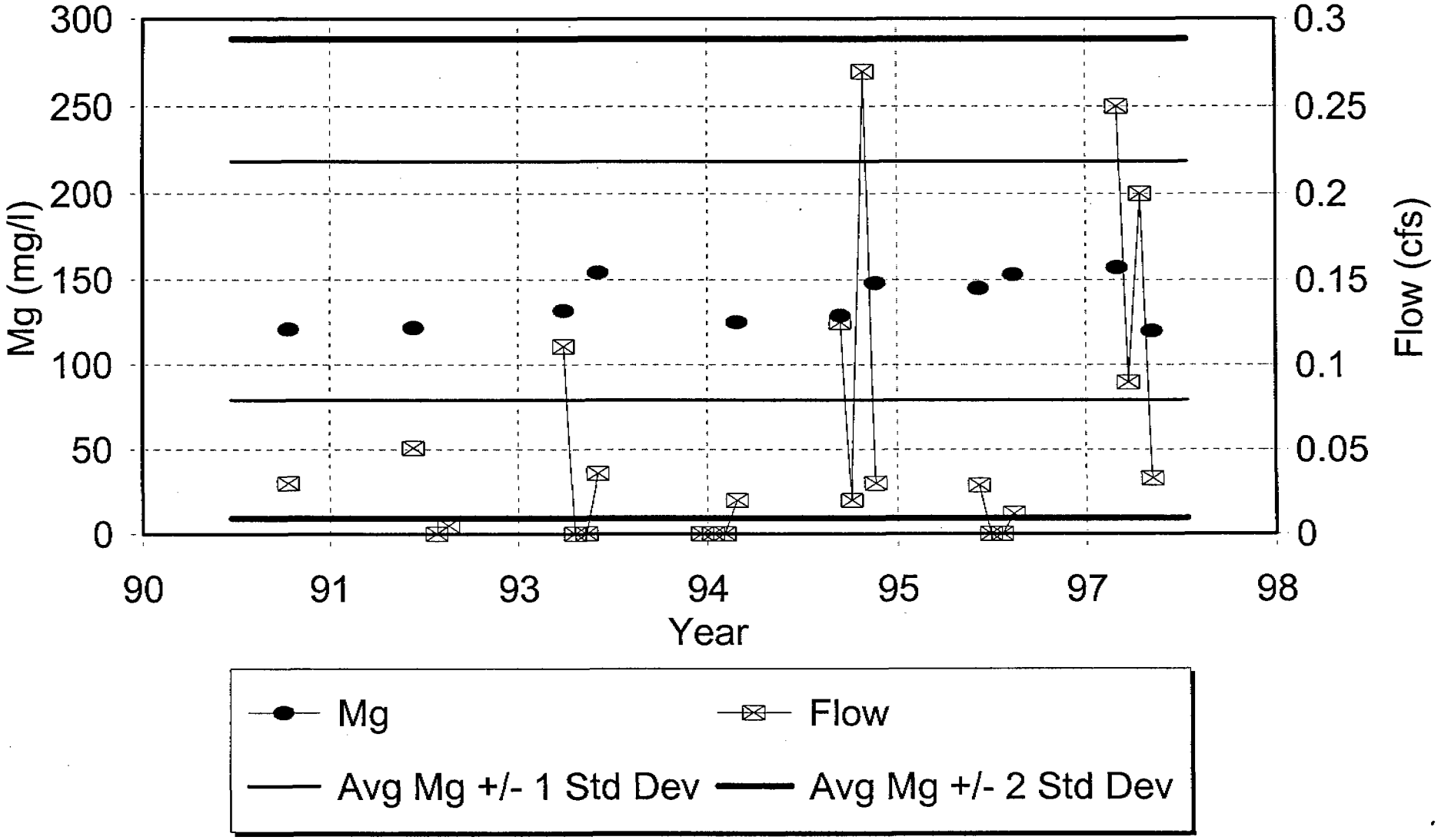
TDS
Flow
Avg TDS +/- 1 Std Dev
Avg TDS +/- 2 Std Dev

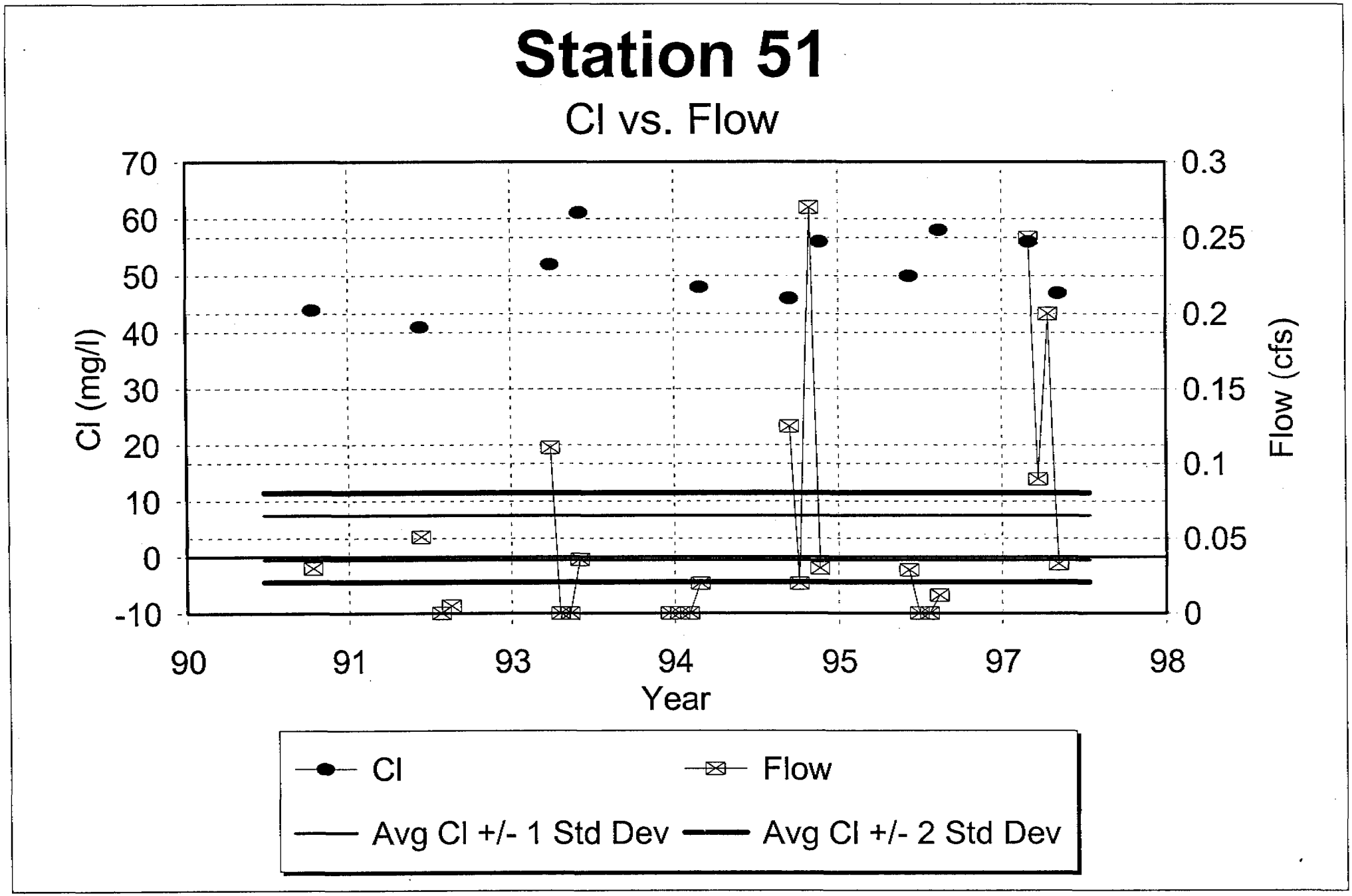

Station 51
Oil & Grease vs. Flow
1000
800
600
400
200
0
-200
-400
-600
O&G (mg/l)
0.3
0.25
0.2
0.15
0.1
0.05
0
Flow (cfs)
90
91
93
94
95
97
98
Year
O&G
Flow
Avg O&G +/- 1 Std Dev
Avg O&G +/- 2 Std Dev


Station 51
Ca vs. Flow
2000
1500
1000
500
0
-500
Ca (mg/l)
0.3
0.25
0.2
0.15
0.1
0.05
0
Flow (cfs)
90
91
93
94
95
97
98
Year
Ca
Flow
Avg Ca +/- 1 Std Dev
Avg Ca +/- 2 Std Dev

Station 51

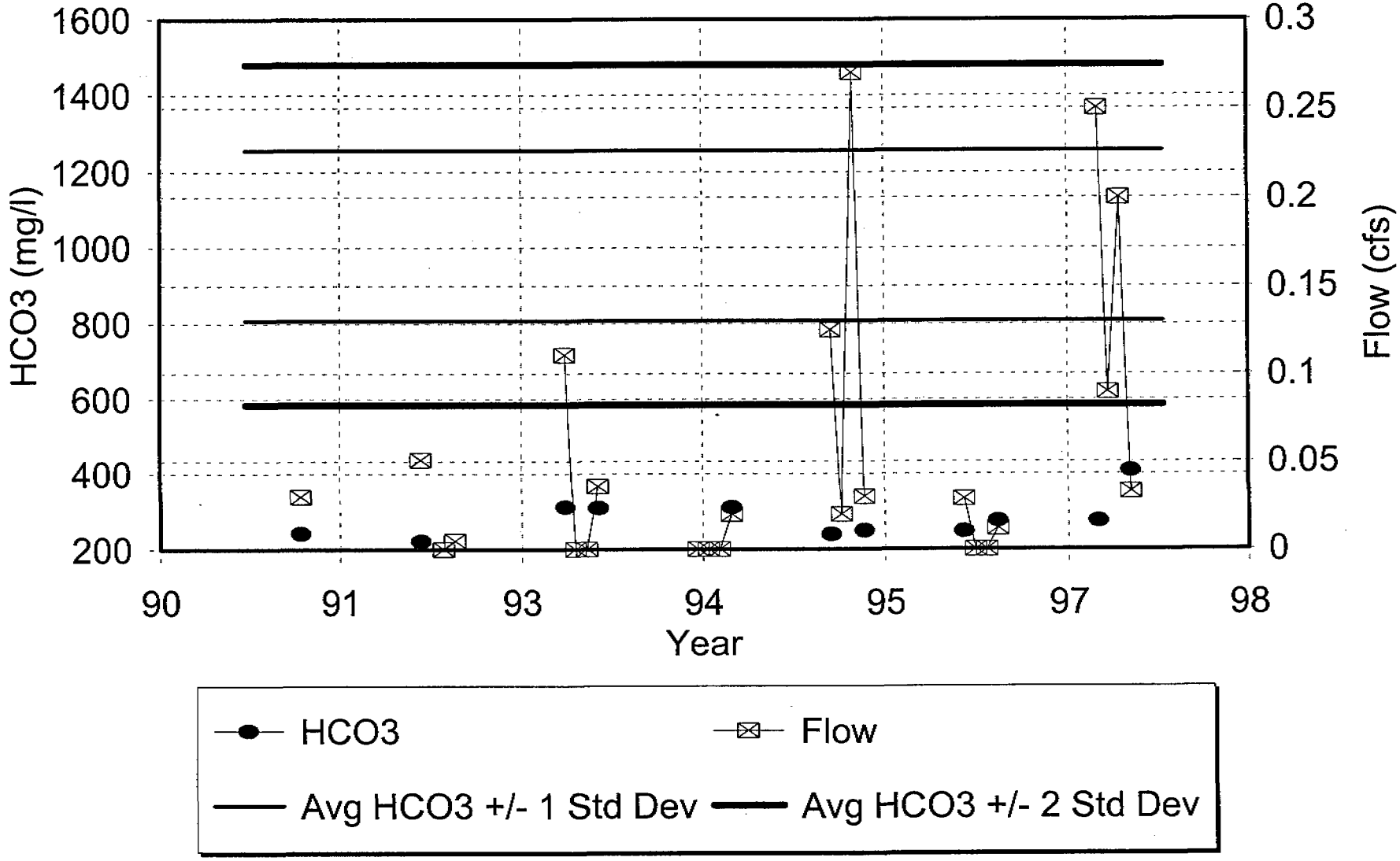
Mg vs. Flow

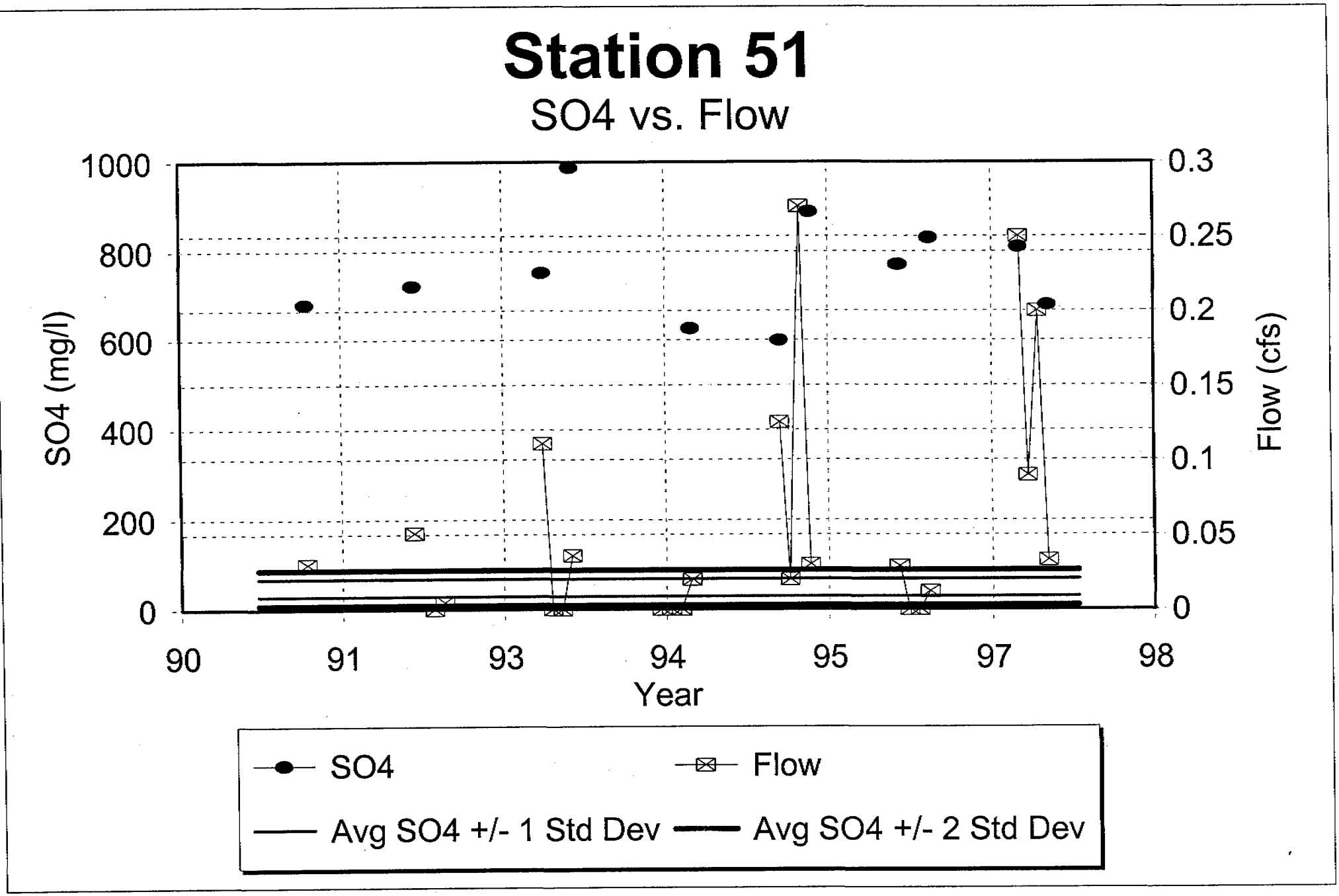



Station 51
Cl vs. Flow
Cl (mg/l)
70
60
50
40
30
20
10
0
-10
0.3
0.25
0.2
0.15
0.1
0.05
0
Flow (cfs)
90
91
93
94
95
97
98
Year
Cl
Flow
Avg Cl +/- 1 Std Dev
Avg Cl +/- 2 Std Dev

Station 51

HCO3 vs. Flow




Station 51
SO4 vs. Flow
SO4 (mg/l)
1000
800
600
400
200
0
Flow (cfs)
0.3
0.25
0.2
0.15
0.1
0.05
0
90
91
93
94
95
97
98
Year
SO4
Flow
Avg SO4 +/- 1 Std Dev
Avg SO4 +/- 2 Std Dev

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 361 | Property: Star Point | Location: 1500' N 2375' E of SW com. Sec 36, T14S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7770

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-80																						
Feb-80																						
Mar-80																						
Apr-80																						
May-80																						
Jun-80																						
Jul-80																						
Aug-80	08/27/80					550																
Sep-80																						
Oct-80	10/02/80	0.14				445																
Nov-80	11/10/80	0.3				490																
Dec-80																						
Jan-81	01/06/81																					FROZEN
Feb-81	02/04/81																					FROZEN
Mar-81	03/25/81																					FROZEN
Apr-81	04/28/81																					INACCESSIBLE
May-81	05/27/81	0.2				515																
Jun-81	06/16/81	0.1				559																
Jul-81	07/17/81					1400																
Aug-81	08/29/81																					INACCESSIBLE - RAIN -
Sep-81																						
Oct-81	10/08/81																					INACCESSIBLE - RAIN -
Nov-81	11/24/81																					INACCESSIBLE
Dec-81	12/29/81																					INACCESSIBLE
Jan-82																						
Feb-82																						
Mar-82																						
Apr-82																						
May-82																						
Jun-82																						
Jul-82																						
Aug-82																						
Sep-82																						
Oct-82																						
Nov-82																						
Dec-82																						
Jan-83																						
Feb-83																						
Mar-83	03/24/83																					INACCESSIBLE - MUD &
Apr-83	04/21/83																					INACCESSIBLE - MUD &
May-83	05/12/83																					INACCESSIBLE - MUD &
Jun-83	06/28/83	0.5				913																
Jul-83																						
Aug-83																						
Sep-83																						
Oct-83	10/06/83	0.27				505																
Nov-83																						
Dec-83																						
Jan-84																						
Feb-84																						
Mar-84	03/30/84																					INACCESSIBLE - HIT MU
Apr-84																						
May-84						742																
Jun-84	06/20/84	3																				
Jul-84																						
Aug-84																						
Sep-84																						
Oct-84						735																
Nov-84																						
Dec-84	12/11/84																					IN-ACCESSIBLE - GATES
Jan-85																						
Feb-85	02/21/85																					IN-ACCESSIBLE - GATES
Mar-85																						
Apr-85																						
May-85																						
Jun-85	06/13/85	0.18				585																
Jul-85																						
Aug-85																						
Sep-85	09/05/85	0.89				598																
Oct-85																						
Nov-85																						
Dec-85																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 361 | Property: Star Point | Location: 1500' N 2375' E of SW corn. Sec 36, T14S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7770

Date		Field Measurements				Laboratory Measurements																Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	
Jan-86																						
Feb-86																						
Mar-86																						
Apr-86																						
May-86																						
Jun-86	06/12/86	1.46				520																
Jul-86																						
Aug-86																						
Sep-86																						
Oct-86	10/06/86	0.23				519																
Nov-86																						
Dec-86																						
Jan-87																						
Feb-87																						
Mar-87																						
Apr-87																						
May-87	05/19/87	0.45				446																
Jun-87																						
Jul-87	07/16/87	0.08																				
Aug-87	07/12/87	0.06																				
Sep-87	09/22/87	0.06				564																
Oct-87																						
Nov-87																						
Dec-87																						
Jan-88																						
Feb-88																						
Mar-88																						
Apr-88																						
May-88																						
Jun-88	06/01/88	0.15				502																
Jul-88	07/15/88	0.04																				
Aug-88	08/13/88	0.03																				
Sep-88	09/03/88	0.01				508																
Oct-88																						
Nov-88																						
Dec-88																						
Jan-89																						
Feb-89																						
Mar-89																						
Apr-89																						
May-89																						
Jun-89	06/06/89	0.03				486																
Jul-89	07/11/89	0.02																				
Aug-89																						
Sep-89	09/15/89	0.02				510																
Oct-89																						
Nov-89																						
Dec-89																						
Jan-90																						
Feb-90																						
Mar-90																						
Apr-90																						
May-90	05/30/90	0.07				440																
Jun-90																						
Jul-90	07/06/90	0.01																				
Aug-90	08/22/90	0.01																				
Sep-90	09/24/90	0.02				504																
Oct-90																						
Nov-90																						
Dec-90																						
Jan-91																						
Feb-91																						
Mar-91																						
Apr-91																						
May-91																						
Jun-91	06/13/91	0.05	8.7	610	6	464	< 2		323	268	14	15	80	32	41	3	10		< 0.02	0.05	< 0.01	
Jul-91	07/16/91	0.02	8.3	720	10																	
Aug-91																						
Sep-91	09/17/91	0.02	8.5	720	8	474			382	310	7	16	134	74	48	3	12		0.07	0.21	0.02	
Oct-91																						
Nov-91																						
Dec-91																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 361 | Property: Star Point | Location: 1500' N 2375' E of SW corn, Sec 36, T14S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7770

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-92																						
Feb-92																						
Mar-92																						
Apr-92																						
May-92	05/20/92	0.039	8.5	697	10.2	452	14		359	281	10	14	138	68	46	3	12	<	0.02	0.06		
Jun-92																						
Jul-92	07/15/92	0.003	10.7	668	18.6																	
Aug-92	08/24/92	0.001	10.3	728	15.3																	
Sep-92																						
Oct-92																						
Nov-92																						
Dec-92																						
Jan-93																						
Feb-93																						
Mar-93																						
Apr-93																						
May-93																						
Jun-93	06/22/93	0.036	13.2	1620	13.4	1024	24		918	317	10	16	183	90	57	3	15	<	0.02 <	0.02 <	0.01	
Jul-93	07/26/93	0.009	7.4	772	15.2																	
Aug-93	08/17/93	0.008	6.3	798	6.4																	
Sep-93	09/27/93	0.013	6.9	766	1.8	528	12		425	317	10	19	178	78	56	4	15	<	0.02	0.17 <	0.01	
Oct-93																						
Nov-93																						
Dec-93																						
Jan-94																						
Feb-94																						
Mar-94																						
Apr-94																						
May-94																						
Jun-94	06/08/94	0.004	7.8	824	13.4	458	4		374	323	6	16	142	71	48	3	14	<	0.02	0.07 <	0.01	
Jul-94	07/19/94	0																				NO FLOW
Aug-94	08/31/94	0																				NO FLOW
Sep-94	09/21/94	0																				NO FLOW
Oct-94																						
Nov-94																						
Dec-94																						
Jan-95																						
Feb-95																						
Mar-95																						
Apr-95																						
May-95																						
Jun-95	06/21/95	0.29	8.7	879	9	610 <	5 <	2	487	255	10	16	220	96.1	60	3.4	16.3	0.8 <	0.03	0.11	0.006	
Jul-95	07/26/95	0.045	8.35	1046	17																	
Aug-95	08/23/95	0.07	8.5	935	13																	All flow in cfs and temp. in
Sep-95	09/27/95	0.04	8.7	1070	3	610	12 <	2	511	282 <	2	20	220	92.1	68.2	3.8	18	1.2 <	0.01	0.35	0.009	
Oct-95																						
Nov-95																						
Dec-95																						
Jan-96																						
Feb-96																						
Mar-96																						
Apr-96																						
May-96																						
Jun-96	06/11/96	0.035	8.4	755	11	555		2 <	488	285	15	15	180	92.7	62.3	3.5	15.5	1.5	0.04	0.37	0.01	
Jul-96	07/23/96	0.033	6.82	836	10																	
Aug-96	08/19/96	0.022	8.8	740	6																	
Sep-96	09/30/96	0.01	8.7	1100	2.5	552			476	306	2 <	19	180	87.2	63.3	3.6	15	-0.6	0.01 <	0.06	0.01	
Oct-96																						
Nov-96																						
Dec-96																						
Jan-97																						
Feb-97																						
Mar-97																						
Apr-97																						
May-97																						
Jun-97	06/17/97	0.16	8.4	1110	7	771		2 <	675	317	2 <	28	310	129	85.7	4	23.1	3.4	0.01 <	0.08	0.005	
Jul-97	07/30/97	0.045	8.12	1144	9.5																	
Aug-97	08/13/97	0.07	8.31	757	12.5																	
Sep-97	09/17/97	0.07	8.47	1059	6.5	580	16	5 <	530	290	10 <	24	180	96	70	4.6	21	6.2	0.01 <	0.4	0.012	
Oct-97																						
Nov-97																						
Dec-97																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

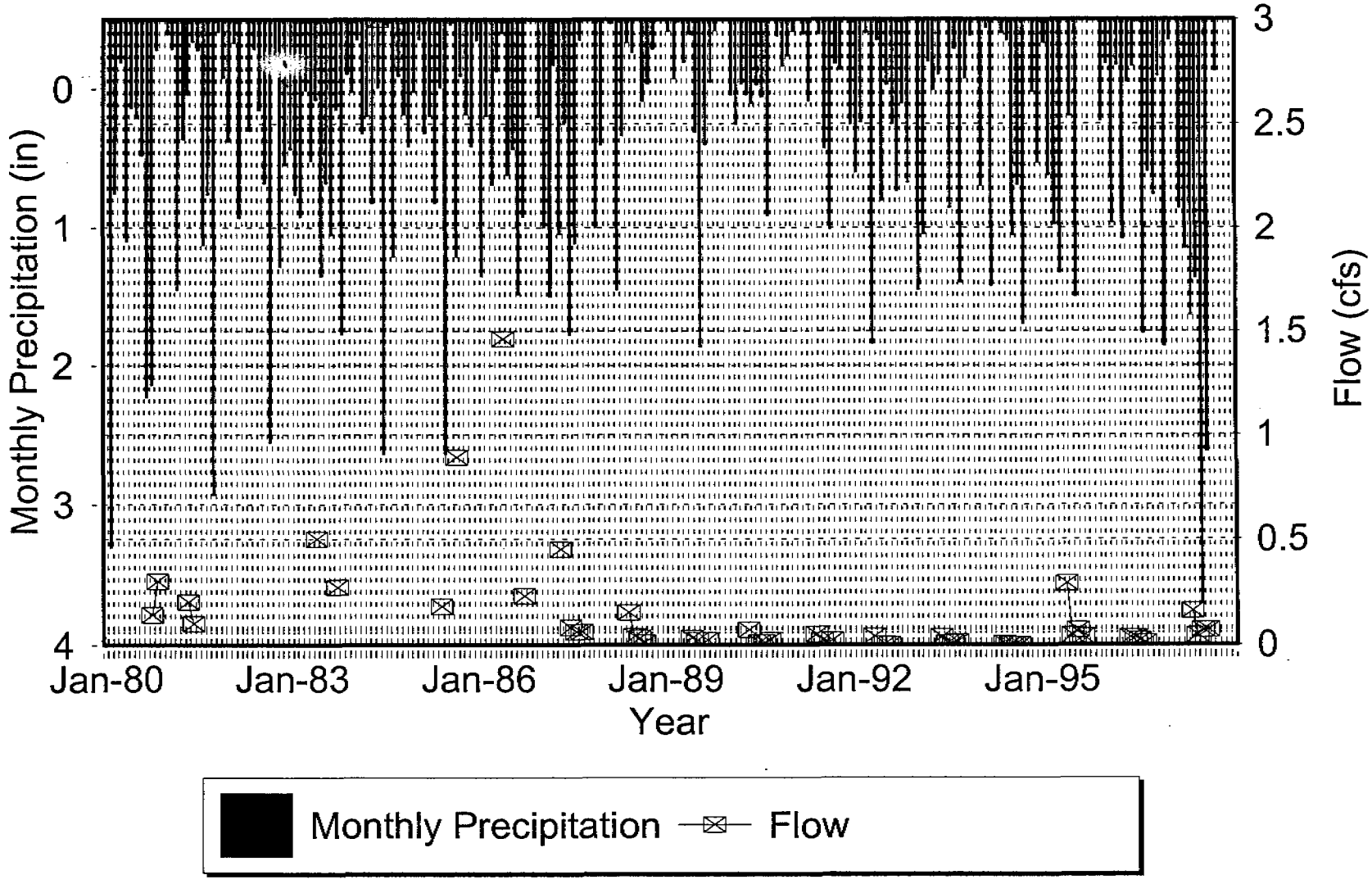
Station: 361 | Property: Star Point | Location: 1500' N 2375' E of SW corn. Sec 36, T14S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7770

Date		Field Measurements				Laboratory Measurements																
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
END DATA																						
	Count	52	23	23	23	34	8	5	12	12	12	12	12	12	12	12	12	6	12	12	11	
	Minimum	0	6.3	610	1.8	440 <	2 <	2 <	323	255 <	2 <	14	60	32	41	3	10	-0.6 <	0.01 <	0.02 <	0.005	
	Maximum	3	13.2	1620	18.6	1400 <	24 <	5 <	918	323 <	15 <	28	310	129	85.7	4.6	23.1	6.2 <	0.07 <	0.4 <	0.02	
	Average	0.1812	8.6465	885.39	9.8626	591.59 <	11.125 <	2.6 <	495.83	295.92 <	8.1667 <	18.167	178.75	83.842	58.792	3.4917	15.575	2.0833 <	0.0233 <	0.1625 <	0.0102	
	Standard Deviation	0.4635	1.3087	221.33	4.419	190.84 <	6.6086 <	1.2 <	156.42	21.195 <	4.259 <	3.9965	54.328	21.923	11.69	0.5057	3.5658	2.1651 <	0.0165 <	0.132 <	0.0036	
	Avg. -1 Std. Dev.	-0.282	7.3378	664.06	5.4636	400.75 <	4.3162 <	1.4 <	339.42	274.72 <	3.9077 <	14.17	124.42	61.918	46.902	2.9859	12.009	-0.102 <	0.0068 <	0.0305 <	0.0065	
	Avg. +1 Std. Dev.	0.6447	9.9552	1106.7	14.302	782.43 <	17.934 <	3.8 <	652.25	317.11 <	12.426 <	22.163	233.08	105.77	70.681	3.9974	19.141	4.2684 <	0.0398 <	0.2945 <	0.0138	
	Avg. -2 Std. Dev.	-0.746	6.0291	442.72	1.0446	209.91 <	-2.493 <	0.2 <	183	253.53 <	-0.351 <	10.174	70.094	39.995	35.012	2.4802	8.4433	-2.267 <	-0.01 <	-0.101 <	0.0029	
	Avg. +2 Std. Dev.	1.1082	11.264	1326.1	18.721	973.27 <	24.743 <	5 <	808.67	338.31 <	16.685 <	26.16	287.41	127.69	82.571	4.5031	22.707	6.4536 <	0.0563 <	0.4265 <	0.0175	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

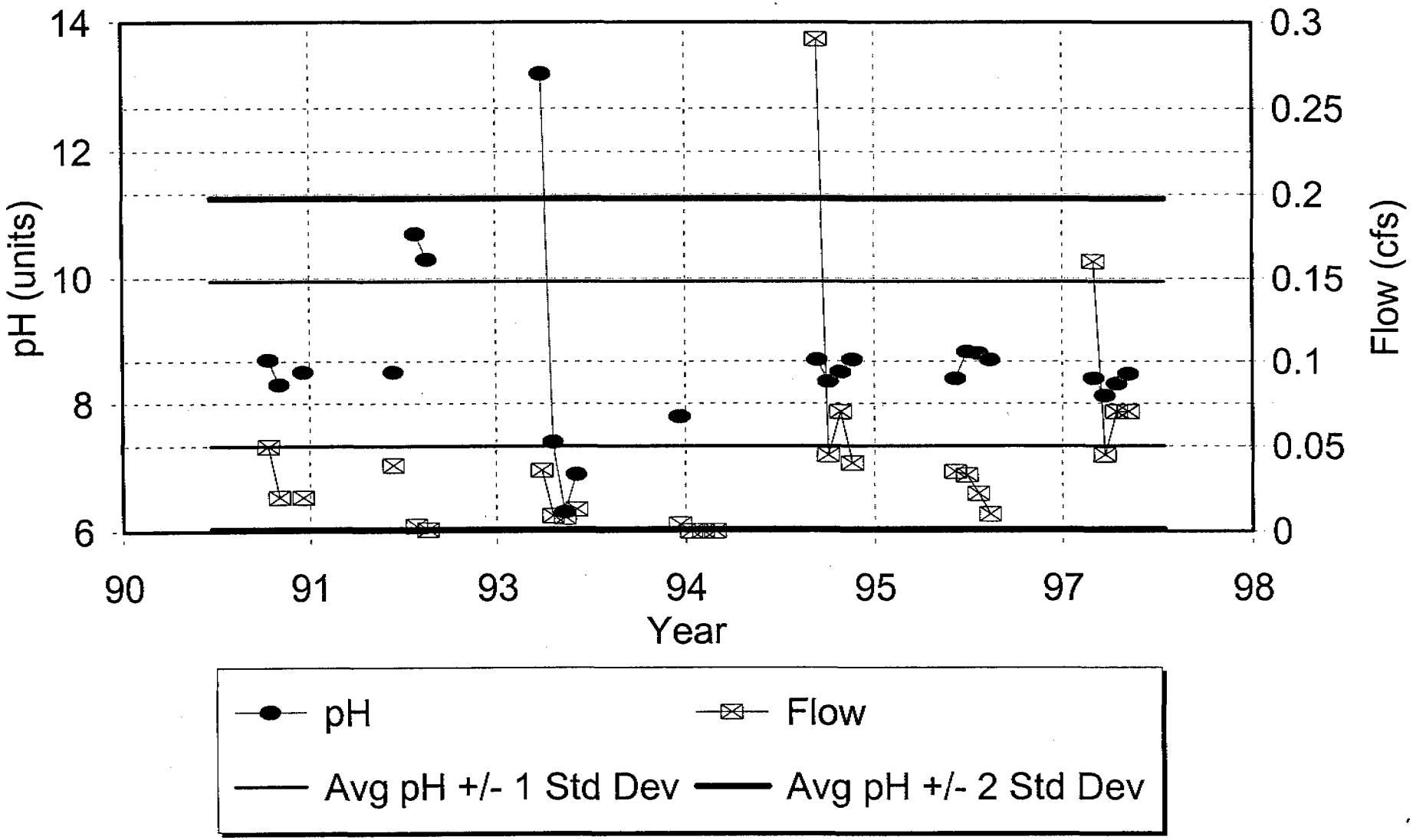
Station 361

Monthly Precipitation vs. Flow



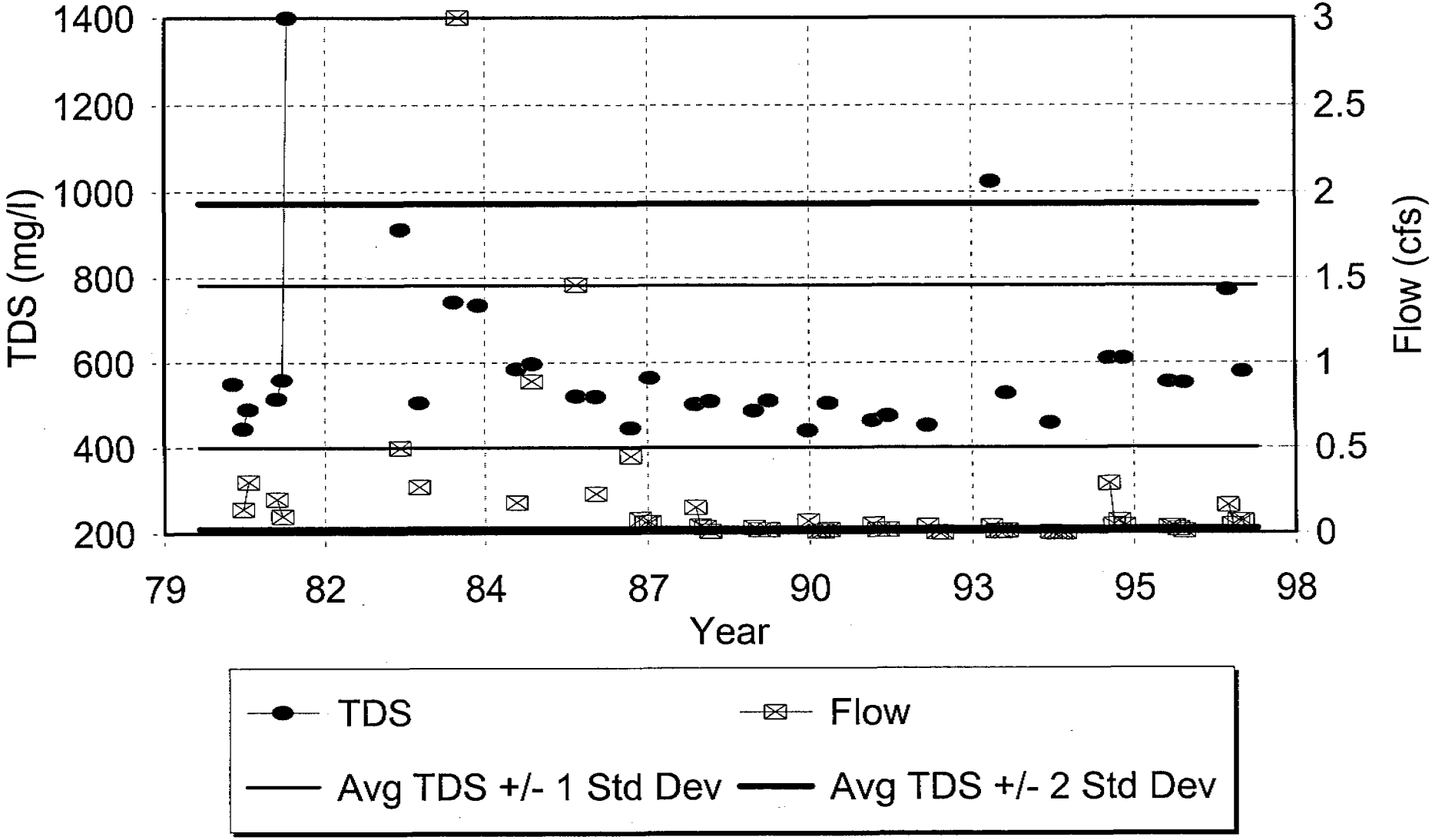
Station 361

pH vs. Flow



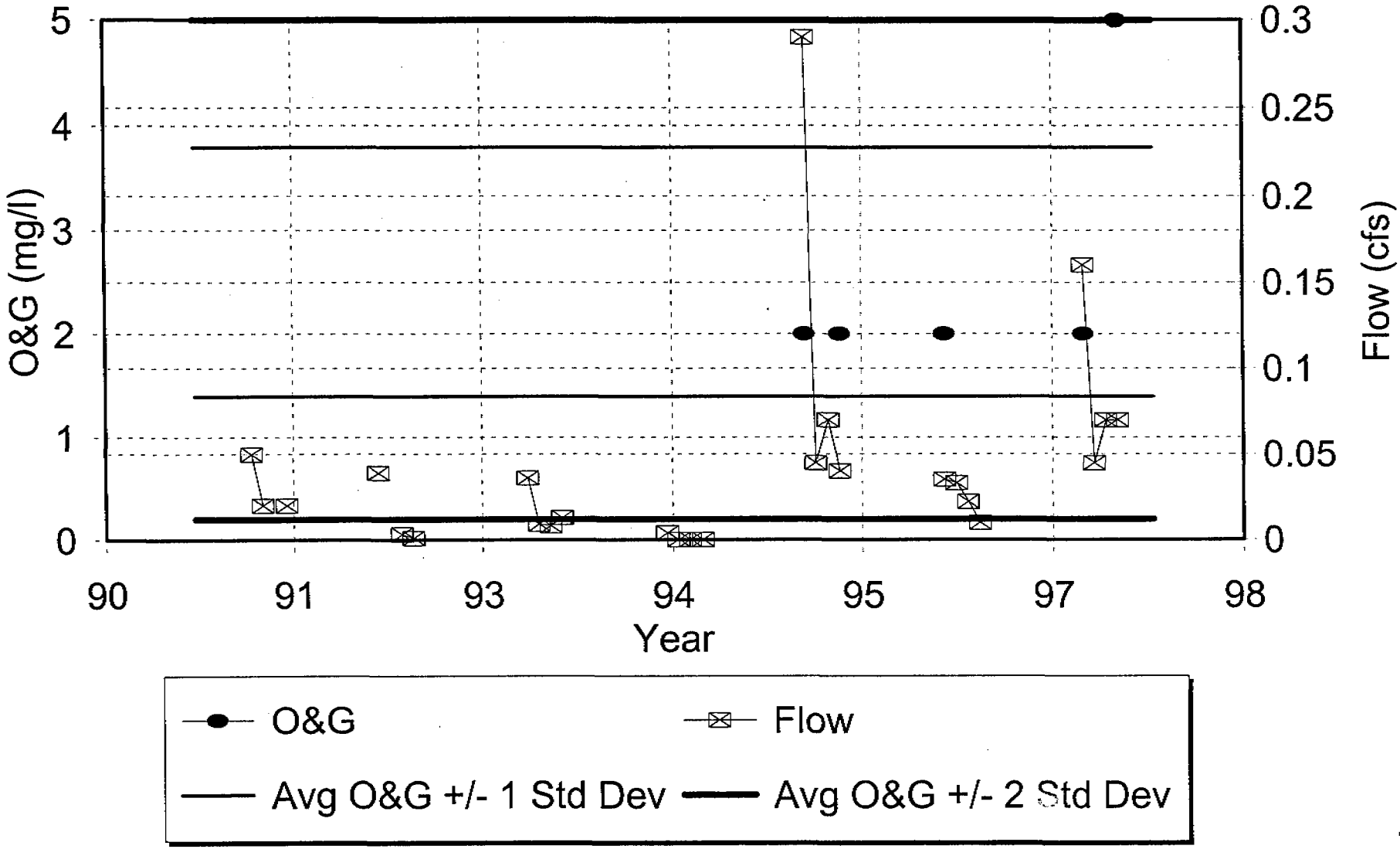
Station 361

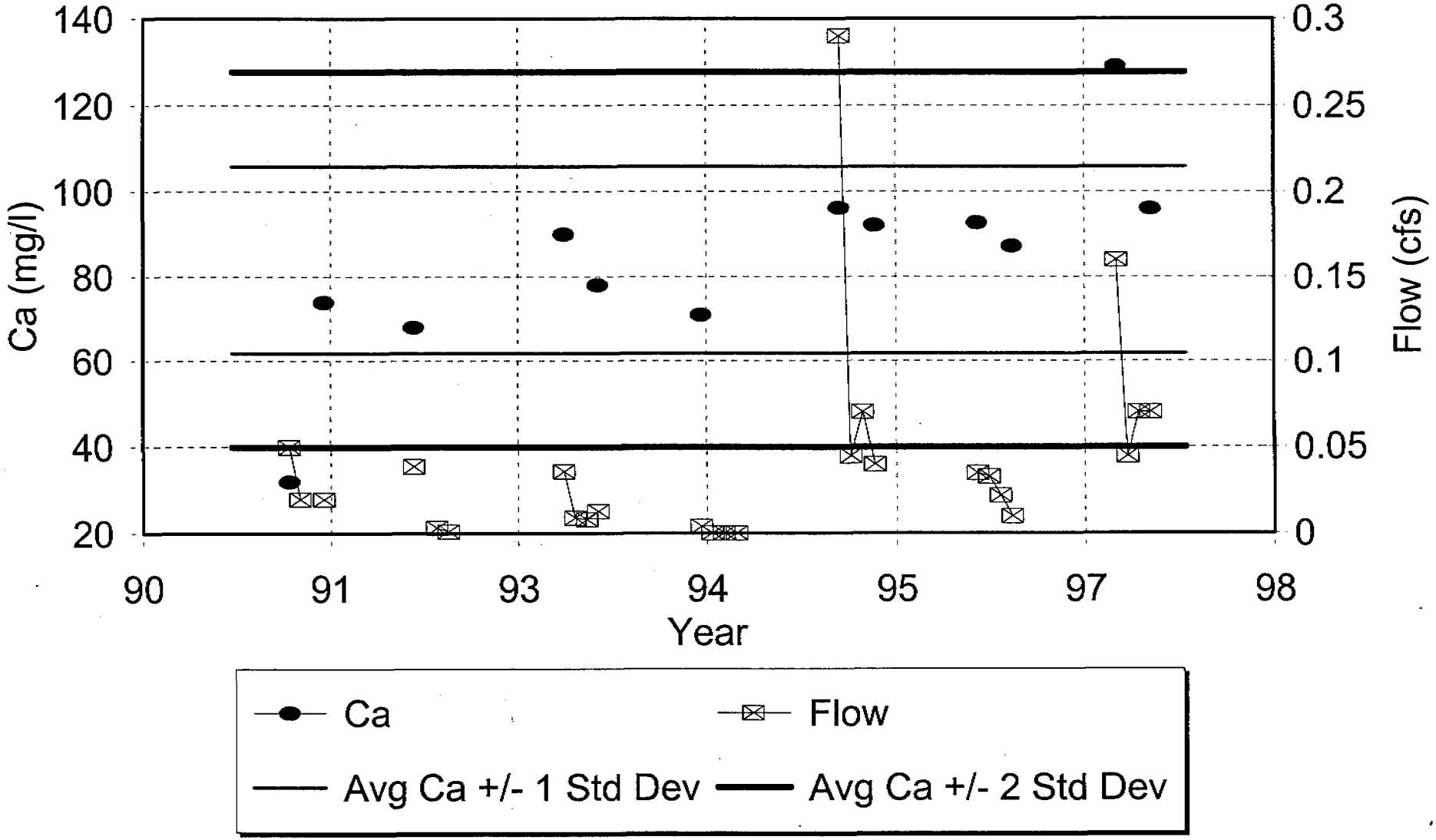
TDS vs. Flow

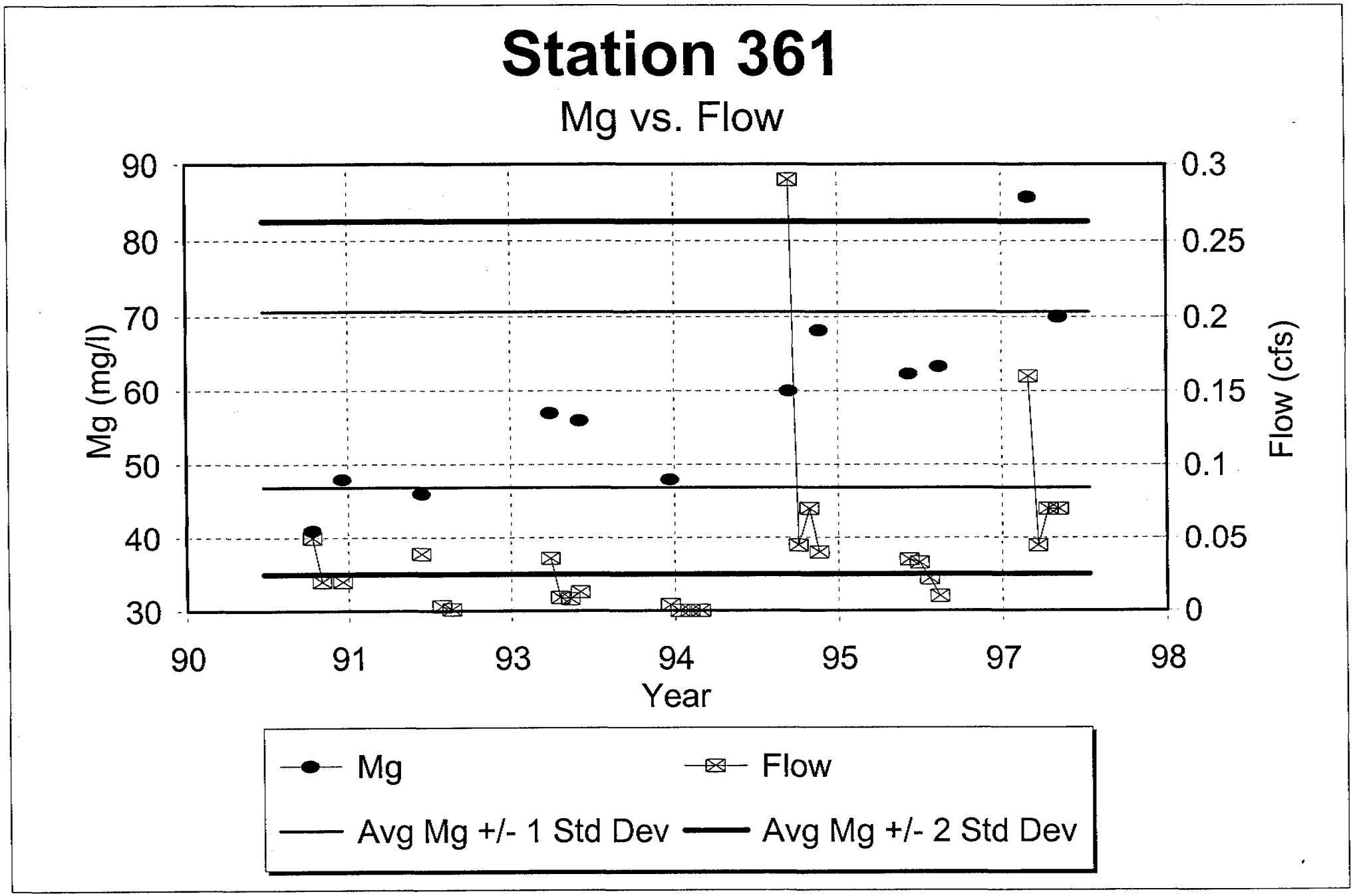


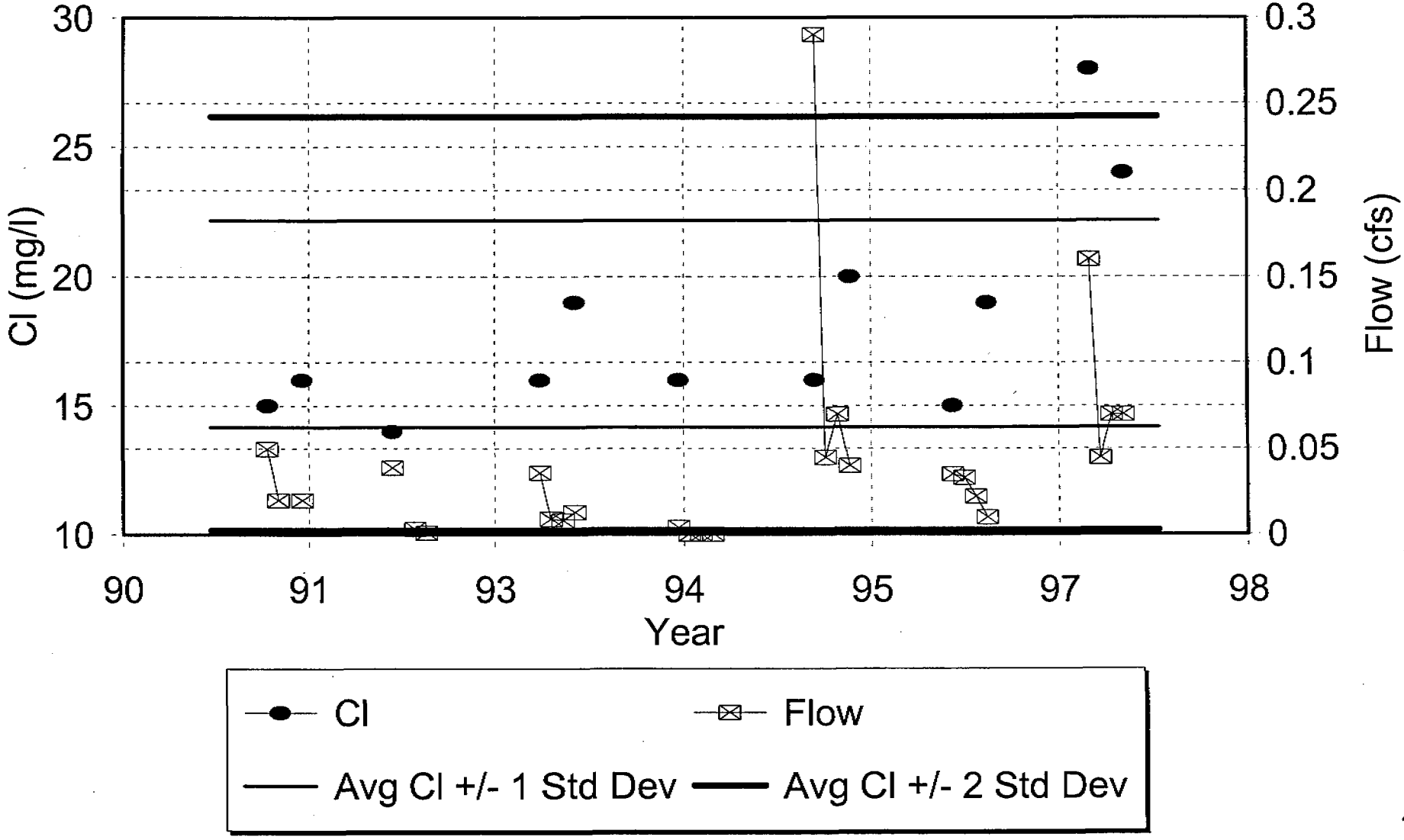
Station 361

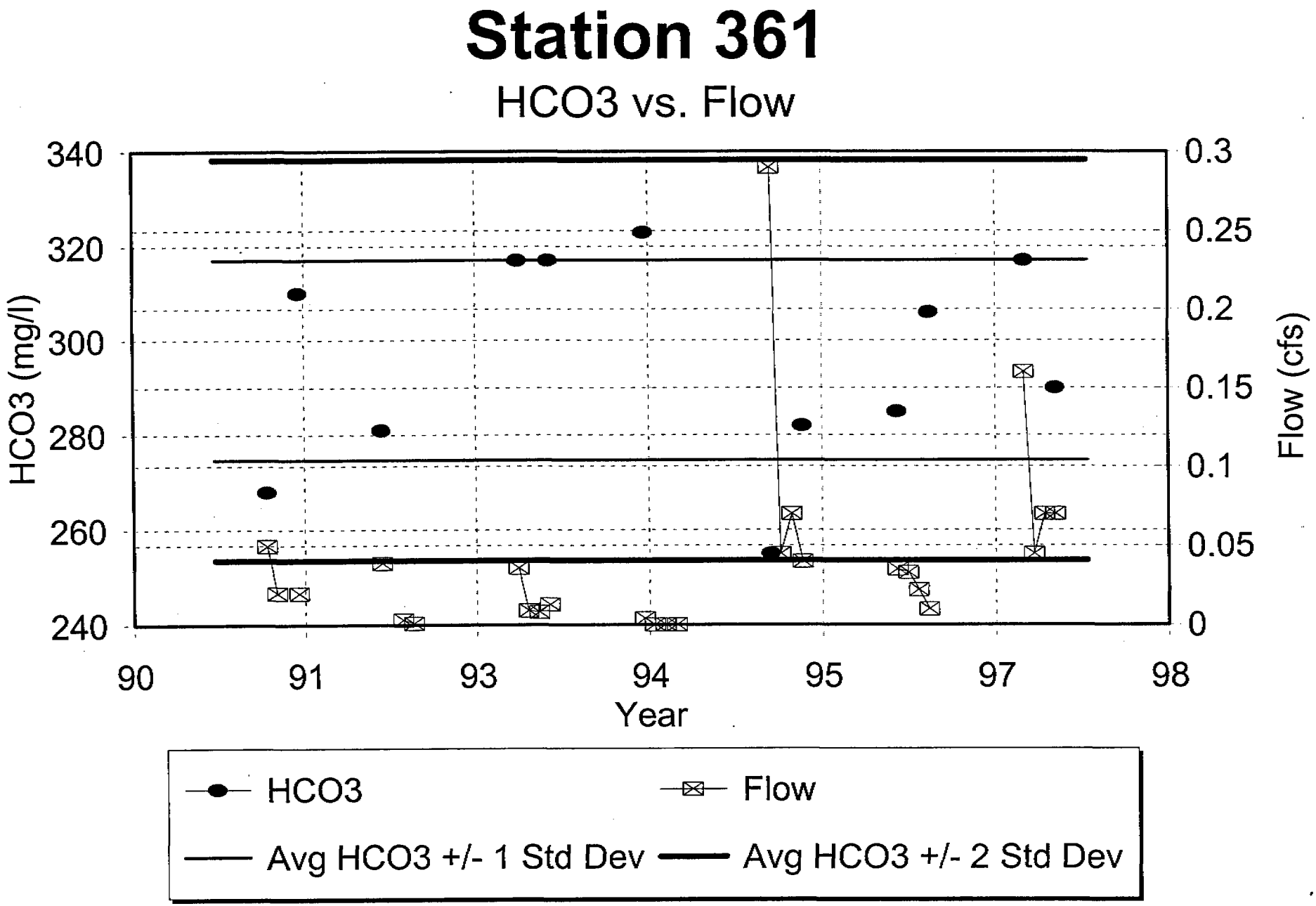
Oil & Grease vs. Flow

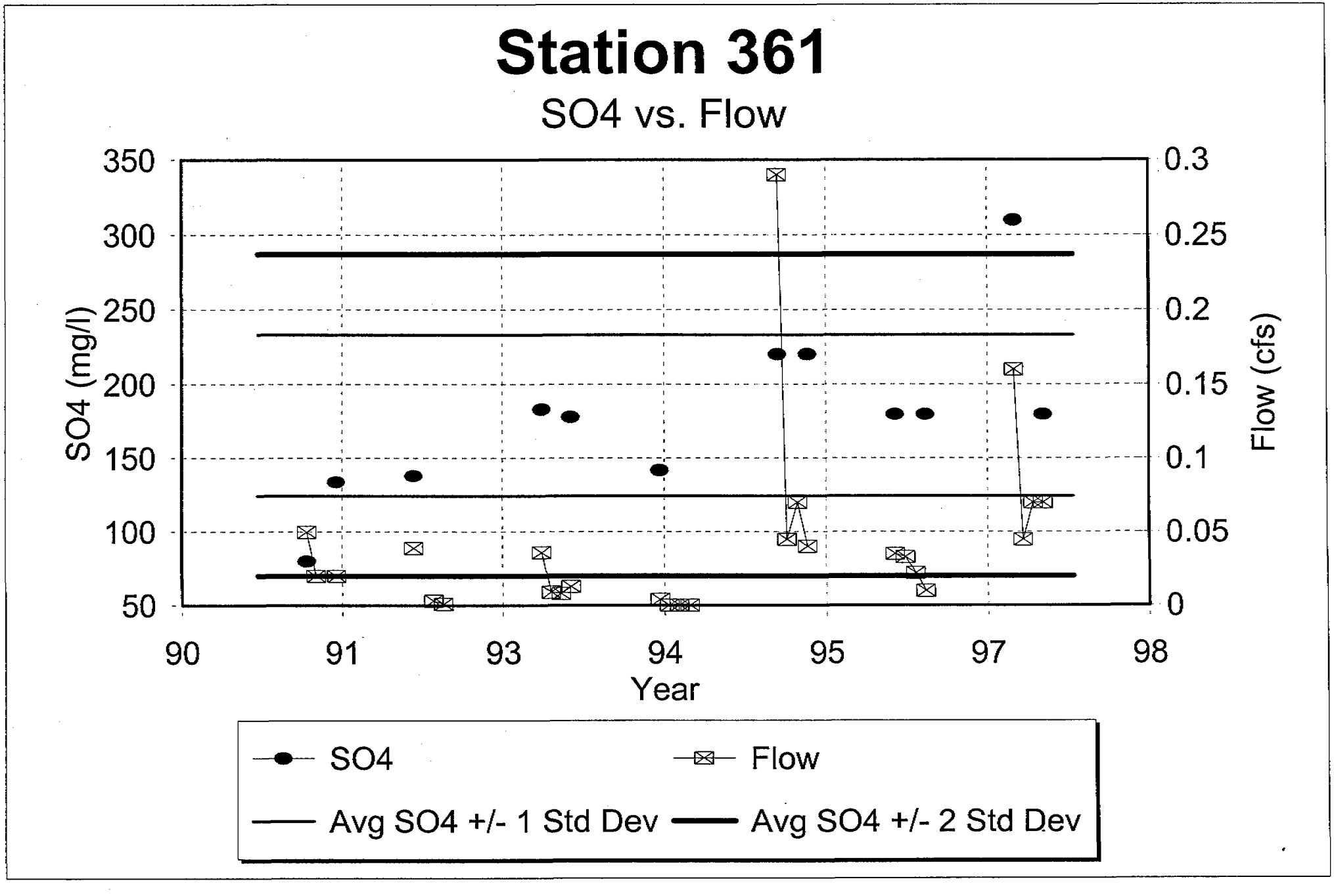



Station 361
Ca vs. Flow
Ca (mg/l)
140
120
100
80
60
40
20
Flow (cfs)
0.3
0.25
0.2
0.15
0.1
0.05
0
90
91
93
94
95
97
98
Year
Ca
Flow
Avg Ca +/- 1 Std Dev
Avg Ca +/- 2 Std Dev


Station 361
Mg vs. Flow
Mg (mg/l)
90
80
70
60
50
40
30
Flow (cfs)
0.3
0.25
0.2
0.15
0.1
0.05
0
90
91
93
94
95
97
98
Year
Mg
Flow
Avg Mg +/- 1 Std Dev
Avg Mg +/- 2 Std Dev


Station 361
Cl vs. Flow
Cl (mg/l)
30
25
20
15
10
Flow (cfs)
0.3
0.25
0.2
0.15
0.1
0.05
0
90
91
93
94
95
97
98
Year
Cl
Flow
Avg Cl +/- 1 Std Dev
Avg Cl +/- 2 Std Dev


Station 361
HCO3 vs. Flow
HCO3 (mg/l)
340
320
300
280
260
240
Flow (cfs)
0.3
0.25
0.2
0.15
0.1
0.05
0
90
91
93
94
95
97
98
Year
HCO3
Flow
Avg HCO3 +/- 1 Std Dev
Avg HCO3 +/- 2 Std Dev


Station 361
SO4 vs. Flow
SO4 (mg/l)
350
300
250
200
150
100
50
0.3
0.25
0.2
0.15
0.1
0.05
0
Flow (cfs)
90
91
93
94
95
97
98
Year
SO4
Flow
Avg SO4 +/- 1 Std Dev
Avg SO4 +/- 2 Std Dev

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 341 | Property: Star Point | Location: 1375' N 750' W of SE com. Sec 34, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7960

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-80																						
Feb-80																						
Mar-80																						
Apr-80																						
May-80																						
Jun-80																						
Jul-80																						
Aug-80																						
Sep-80																						
Oct-80	10/03/80	0.34				259																
Nov-80	11/10/80	1				273																
Dec-80	12/30/80	0.26				290																
Jan-81	01/26/81	0.26				314																
Feb-81	02/04/81																					IN-ACCESSIBLE
Mar-81	03/24/81																					IN-ACCESSIBLE
Apr-81	04/28/81	0.6				239																
May-81	05/28/81	0.7				255																
Jun-81	06/27/81					540																
Jul-81	07/31/81					269																
Aug-81																						
Sep-81																						
Oct-81																						
Nov-81	11/24/81																					IN-ACCESSIBLE
Dec-81																						
Jan-82																						
Feb-82																						
Mar-82																						
Apr-82																						
May-82																						
Jun-82																						
Jul-82																						
Aug-82																						
Sep-82																						
Oct-82																						
Nov-82																						
Dec-82	12/29/82																					IN-ACCESSIBLE
Jan-83																						
Feb-83																						
Mar-83	03/24/83																					IN-ACCESSIBLE - SNOW
Apr-83	04/21/83																					IN-ACCESSIBLE - SNOW
May-83	05/12/83																					IN-ACCESSIBLE - SNOW
Jun-83	06/29/83	2.8				229																
Jul-83																						
Aug-83																						
Sep-83	09/07/83	0.35				216																
Oct-83																						
Nov-83																						
Dec-83																						
Jan-84	01/05/84	0.35				301																
Feb-84																						
Mar-84	03/30/84																					IN-ACCESSIBLE
Apr-84																						
May-84																						
Jun-84	06/21/84	0.2				219																
Jul-84																						
Aug-84																						
Sep-84	09/21/84	0.5				220																
Oct-84																						
Nov-84																						
Dec-84	12/31/84																					SNOW - IN-ACCESSIBLE
Jan-85																						
Feb-85	02/21/85																					IN-ACCESSIBLE
Mar-85	03/31/85	1.8				252																
Apr-85																						
May-85																						
Jun-85	06/13/85	5.4				229																
Jul-85																						
Aug-85	08/15/85	0.66				255																
Sep-85																						
Oct-85																						
Nov-85																						
Dec-85																						

Cyprus Plateau Mining Company - Water Quality Data

Station: 341 | Property: Star Point | Location: 1375' N 750' W of SE com. Sec 34, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Print Date: March 2, 1998 | Elevation: 7960

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-86																							
Feb-86																							
Mar-86																							
Apr-86																							
May-86																							
Jun-86	06/12/86	3.5				206																	
Jul-86																							
Aug-86																							
Sep-86																							
Oct-86	10/03/86	0.52				251																	
Nov-86																							
Dec-86																							
Jan-87																							
Feb-87																							
Mar-87																							
Apr-87																							
May-87																							
Jun-87	06/25/87	0.86				202																	
Jul-87	07/16/87	0.76																					
Aug-87	08/12/87	0.35																					
Sep-87	09/23/87	0.24				270																	
Oct-87																							
Nov-87																							
Dec-87																							
Jan-88																							
Feb-88																							
Mar-88																							
Apr-88																							
May-88																							
Jun-88	06/02/88	1.32				234																	
Jul-88	07/09/88	0.38																					
Aug-88	08/20/88	0.34																					
Sep-88	09/03/88	0.2				274																	
Oct-88																							
Nov-88																							
Dec-88																							
Jan-89																							
Feb-89																							
Mar-89																							
Apr-89																							
May-89																							
Jun-89	06/07/89	0.2				260																	
Jul-89	07/11/89	0.16																					
Aug-89	08/23/89	0.1																					
Sep-89	09/14/89	0.14				288																	
Oct-89																							
Nov-89																							
Dec-89																							
Jan-90																							
Feb-90																							
Mar-90																							
Apr-90																							
May-90																							
Jun-90	06/02/90	0.48				292																	
Jul-90	07/06/90	0.15																					
Aug-90	08/22/90	0.15																					
Sep-90	09/24/90	0.15				324																	
Oct-90																							
Nov-90																							
Dec-90																							
Jan-91																							
Feb-91																							
Mar-91																							
Apr-91																							
May-91																							
Jun-91	06/12/91	1.41	7.2	460	5	250				254		3	16	57	18	2	3	<	0.02	0.15	< 0.01		
Jul-91	07/16/91	0.26	8.1	460	8																		
Aug-91																							
Sep-91	09/17/91	0.09	8.4	380	5	286				305	7	5	21	62	27	1	4	<	0.02	0.06	< 0.01		
Oct-91																							
Nov-91																							
Dec-91																							

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 341 | Property: Star Point | Location: 1375' N 750' W of SE com. Sec 34, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7960

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-92																						
Feb-92																						
Mar-92																						
Apr-92																						
May-92	05/20/92	1.02	8.5	454	7.1	246				256	5	2	47	57	24	1	4	<	0.02 <	0.02		
Jun-92																						
Jul-92	07/15/92	0.11	9.9	507	7.6	314				303	2	4	29	71	25 <	1	4	<	0.02 <	0.02		
Aug-92	08/24/92	0.09	9.7	512	7.9																	
Sep-92	09/21/92	0.024	6.8	528	6.2	292				264	14	4	33	66	30	1	4	<	0.02 <	0.02		
Oct-92																						
Nov-92																						
Dec-92																						
Jan-93																						
Feb-93																						
Mar-93																						
Apr-93																						
May-93																						
Jun-93	06/22/93	3.13	14	628	12	416				268	0	2	2	55	20	1	3	<	0.02 <	0.02 <	0.01	
Jul-93	07/22/93	0.41	7.3	389	9.8																	
Aug-93	06/18/93	0.32	7.1	440	7.3																	
Sep-93	09/27/93	0.16	8.9	467	8.9	274				307	0	4	21	61	27	1	4	<	0.02	0.03 <	0.01	
Oct-93																						
Nov-93																						
Dec-93																						
Jan-94																						
Feb-94																						
Mar-94																						
Apr-94																						
May-94																						
Jun-94	06/26/94	0.088	8.2	555	5.9	280				327	0	4	25	70	31	2	7	<	0.02	0.03 <	0.01	LAB FILTRATION REQUI
Jul-94	07/20/94	0.029	8.3	214	10.5																	
Aug-94	08/31/94	0.221	8.3	463	14.2																	
Sep-94	09/21/94	0.02	8.1	500	14.9	306				317	0	6	33	74	32	2	5	<	0.02	0.26	0.01	
Oct-94																						
Nov-94																						
Dec-94																						
Jan-95																						
Feb-95																						
Mar-95																						
Apr-95																						
May-95																						
Jun-95	06/22/95	8.44	8.5	461	3.5	260	46 <	2	257	245 <	2	3	10	71.1	19.4	1.1	2.8	0.4	0.06	0.21	0.014	
Jul-95	07/26/95	1.32	8.31	443	7																	All flows in cfs and temp.
Aug-95	08/26/95	0.09	8.65	449	13																	
Sep-95	09/27/95	0.2	8.6	495	9	230 <	5 <	2	244	214 <	2	3	14	57.7	24.2	1.5	3.4	3.7 <	0.01 <	0.01 <	0.005	
Oct-95																						
Nov-95																						
Dec-95																						
Jan-96																						
Feb-96																						
Mar-96																						
Apr-96																						
May-96																						
Jun-96	06/11/96	1.37	8.1	396	8	221		2 <	234	211	2 <	1 <	10	57.9	21.6	0.9	3.1	3.9	0.03	0.31	0.008	
Jul-96	07/23/96	0.419	8.8	474	7																	
Aug-96	08/19/96	0.286	8.68	418	11																	
Sep-96																						
Oct-96	10/01/96	0.233	8.4	606	6	279		3	292	250	2 <	4	20	71.9	27.3	1.1	4.1	4.3	0.01 <	0.01 <	0.005	
Nov-96																						
Dec-97																						
Jan-97																						
Feb-97																						
Mar-97																						
Apr-97																						
May-97																						
Jun-97	06/17/97	1.88	8.6	453	6.5	265		2 <	265	242	2 <	3	20	67.2	23.6	1	3.1	0.7	0.01 <	0.07	0.005	
Jul-97	07/30/97	0.44	8.25	428	8.5																	
Aug-97	08/13/97	0.33	8.62	404	7.5																	
Sep-97	09/16/97	0.36	8.45	471	7	300	9	5 <	260	220	10 <	3.1	18	57	28	1.9	4	4.9	0.01 <	0.85	0.02	
Oct-97																						
Nov-97																						
Dec-97																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

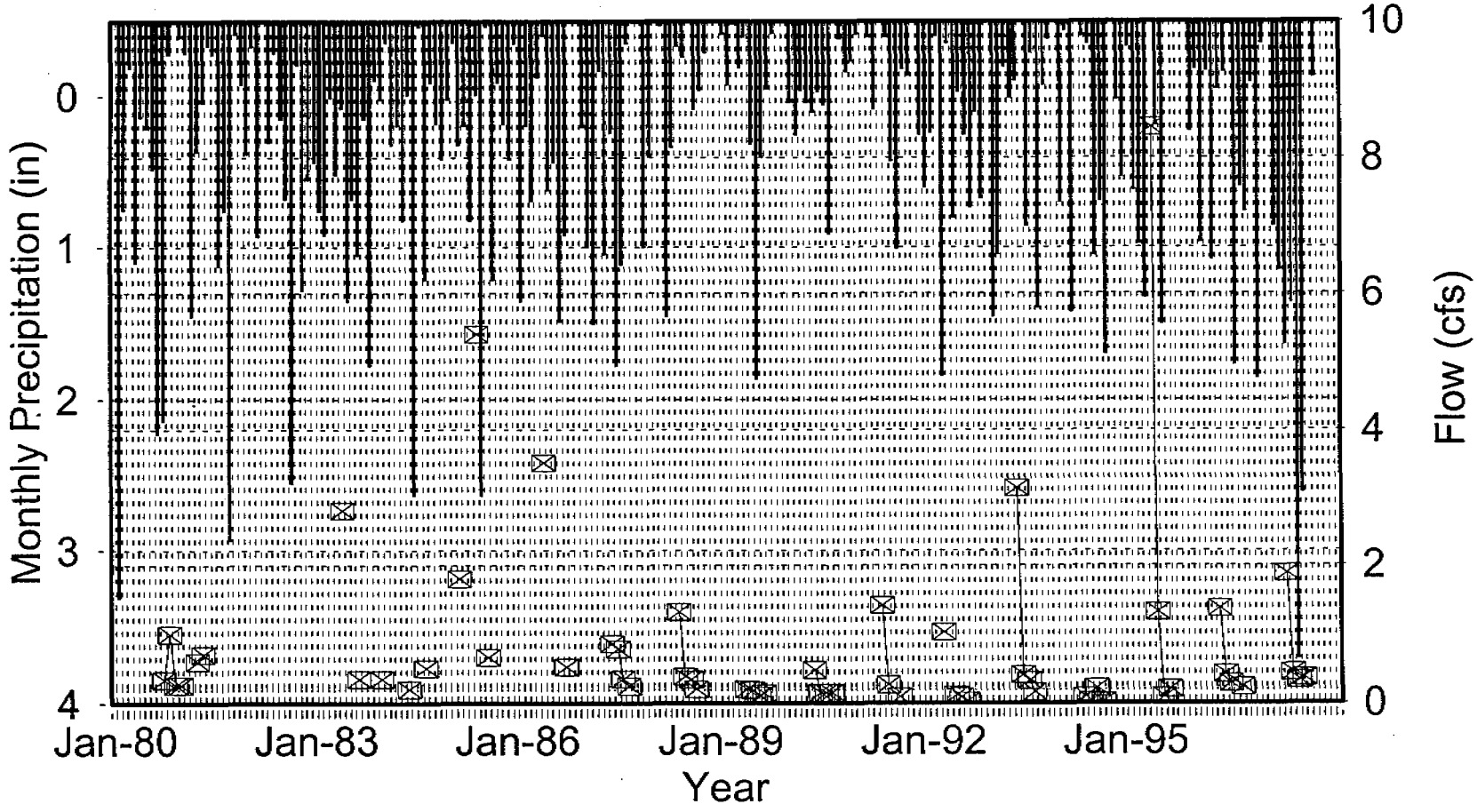
Station: 341 Property: Star Point Location: 1375' N 750' W of SE com. Sec 34, T15S, R7E Station Type: Stream Sampling Frequency: Quarterly Formation: Elevation: 7960

Date Mo-Yr	Sample Date	Field Measurements Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	Laboratory Measurements TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
END DATA																						
Count		59	27	27	27	41	3	6	6	15	14	15	15	15	15	15	15	6	15	15	12	
Minimum		0.02	6.8	214	3.5	202 <	5 <	2 <	234	211 <	0 <	1 <	2	55	18 <	0.9	2.6	0.4 <	0.01 <	0.01 <	0.005	
Maximum		8.44	14	828	14.9	540 <	46 <	5 <	292	327 <	14 <	6 <	47	74	32 <	2	7	4.9 <	0.06 <	0.85 <	0.02	
Average		0.8137	8.5467	468.7	8.3074	273.17 <	20 <	2.6667 <	256.67	265.53 <	3.4286 <	3.4067 <	21.267	63.853	25.207 <	1.3	3.9	2.9833 <	0.0207 <	0.1393 <	0.0098	
Standard Deviation		1.3851	1.2573	98.004	2.7347	57.325 <	18.457 <	1.1055 <	18.163	36.751 <	4.0482 <	1.198 <	10.742	6.5403	4.1002 <	0.4274	1.0093	1.763 <	0.0118 <	0.2124 <	0.004	
Avg. -1 Std. Dev.		-0.571	7.2894	370.7	5.5727	215.85 <	1.5428 <	1.5611 <	240.5	228.78 <	-0.62 <	2.2086 <	10.524	57.313	21.107 <	0.8726	2.8907	1.2204 <	0.0089 <	-0.073 <	0.0057	
Avg. +1 Std. Dev.		2.1988	9.804	566.71	11.042	330.5 <	38.457 <	3.7722 <	276.83	302.28 <	7.4768 <	4.6047 <	32.009	70.394	29.307 <	1.7274	4.9093	4.7463 <	0.0325 <	0.3517 <	0.0138	
Avg. -2 Std. Dev.		-1.956	6.0321	272.7	2.6381	158.52 <	-16.91 <	0.4556 <	222.34	192.03 <	-4.668 <	1.0106 <	-0.218	50.773	17.006 <	0.4452	1.8814	-0.543 <	-0.003 <	-0.285 <	0.0017	
Avg. +2 Std. Dev.		3.5839	11.061	664.71	13.777	387.82 <	56.914 <	4.8777 <	294.99	339.04 <	11.525 <	5.8027 <	42.751	76.934	33.407 <	2.1548	5.9186	6.5093 <	0.0443 <	0.5641 <	0.0178	

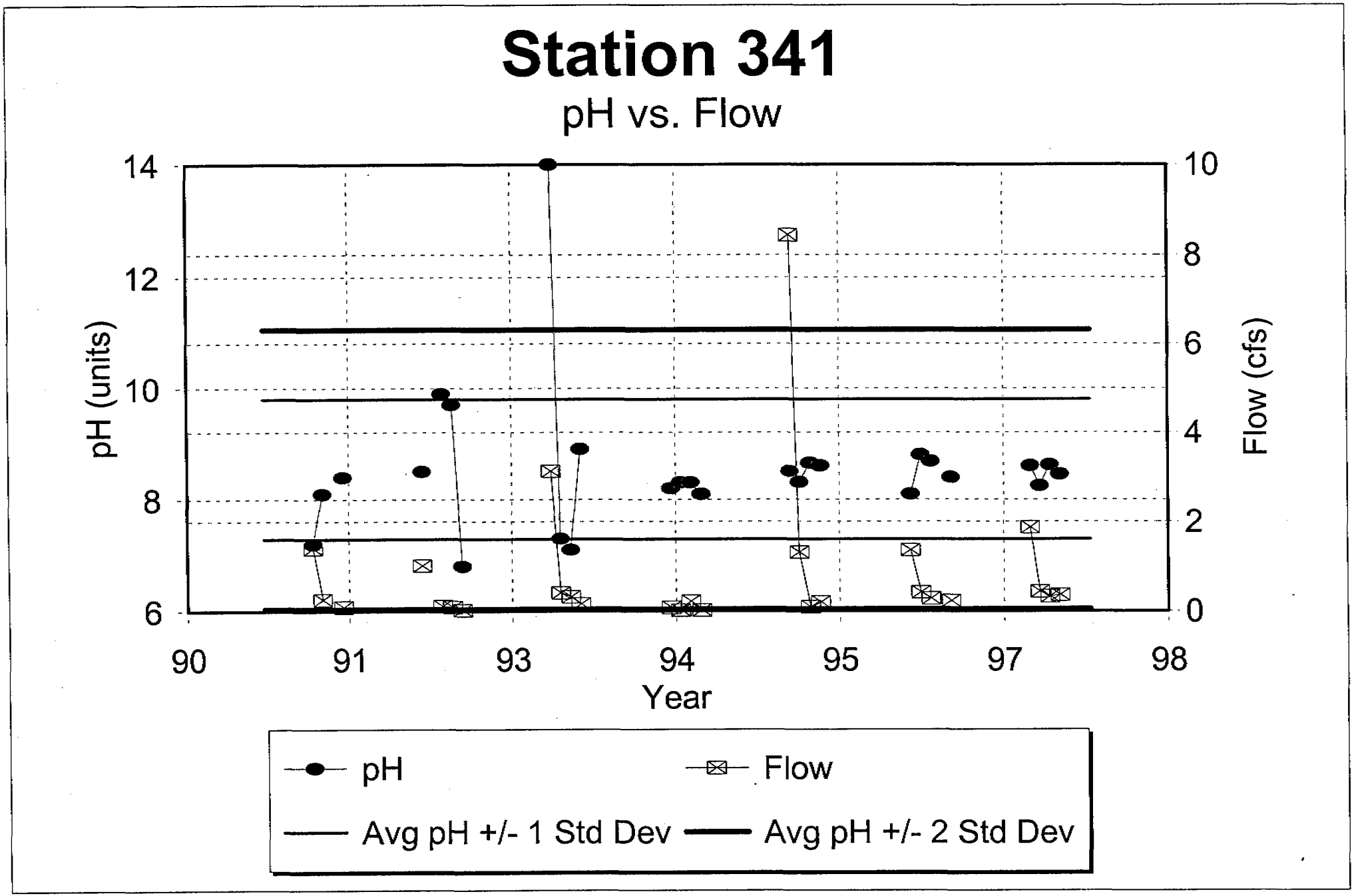
NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

Station 341

Monthly Precipitation vs. Flow

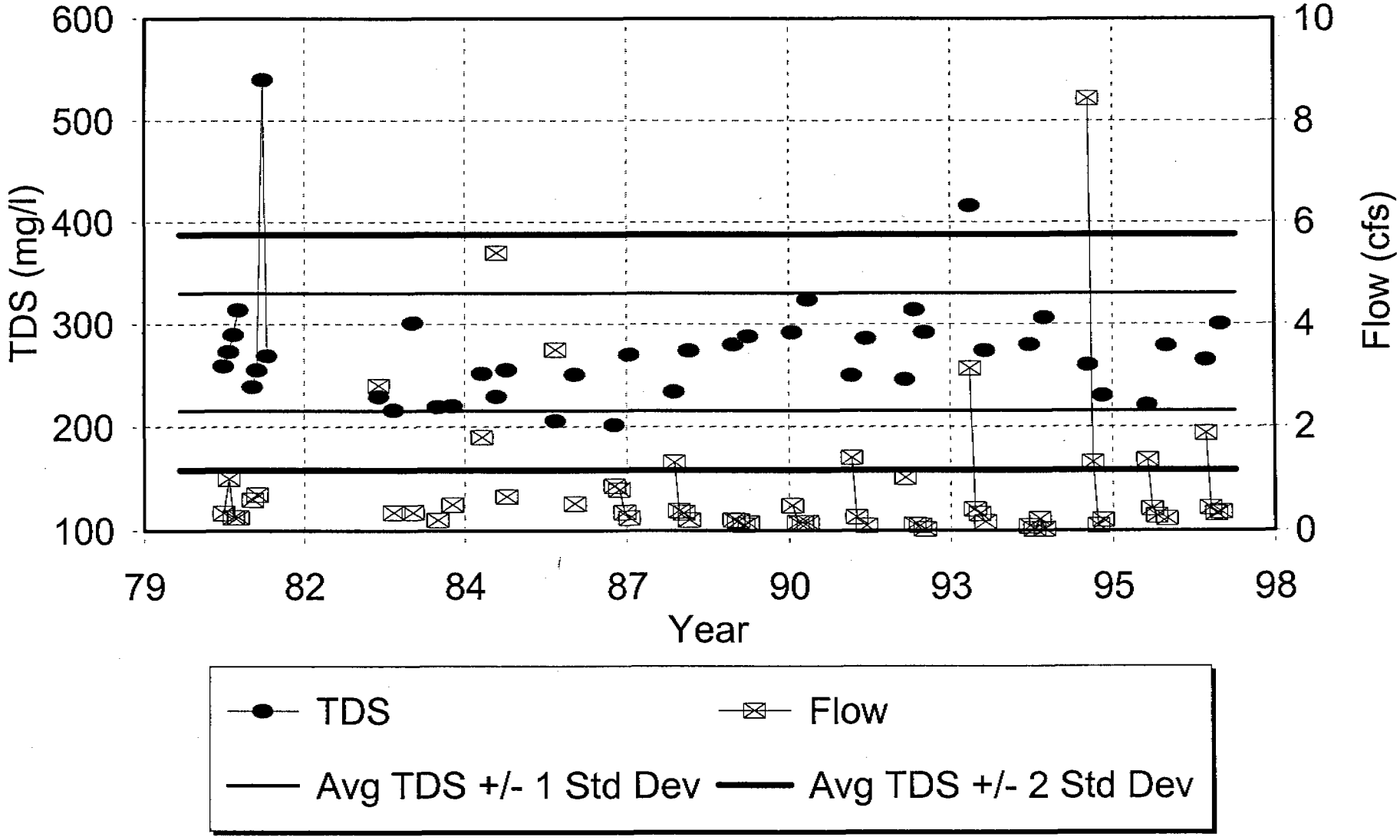


Monthly Precipitation — Flow


Station 341
pH vs. Flow
14
12
10
8
6
pH (units)
10
8
6
4
2
0
Flow (cfs)
90
91
93
94
95
97
98
Year
pH
Flow
Avg pH +/- 1 Std Dev
Avg pH +/- 2 Std Dev

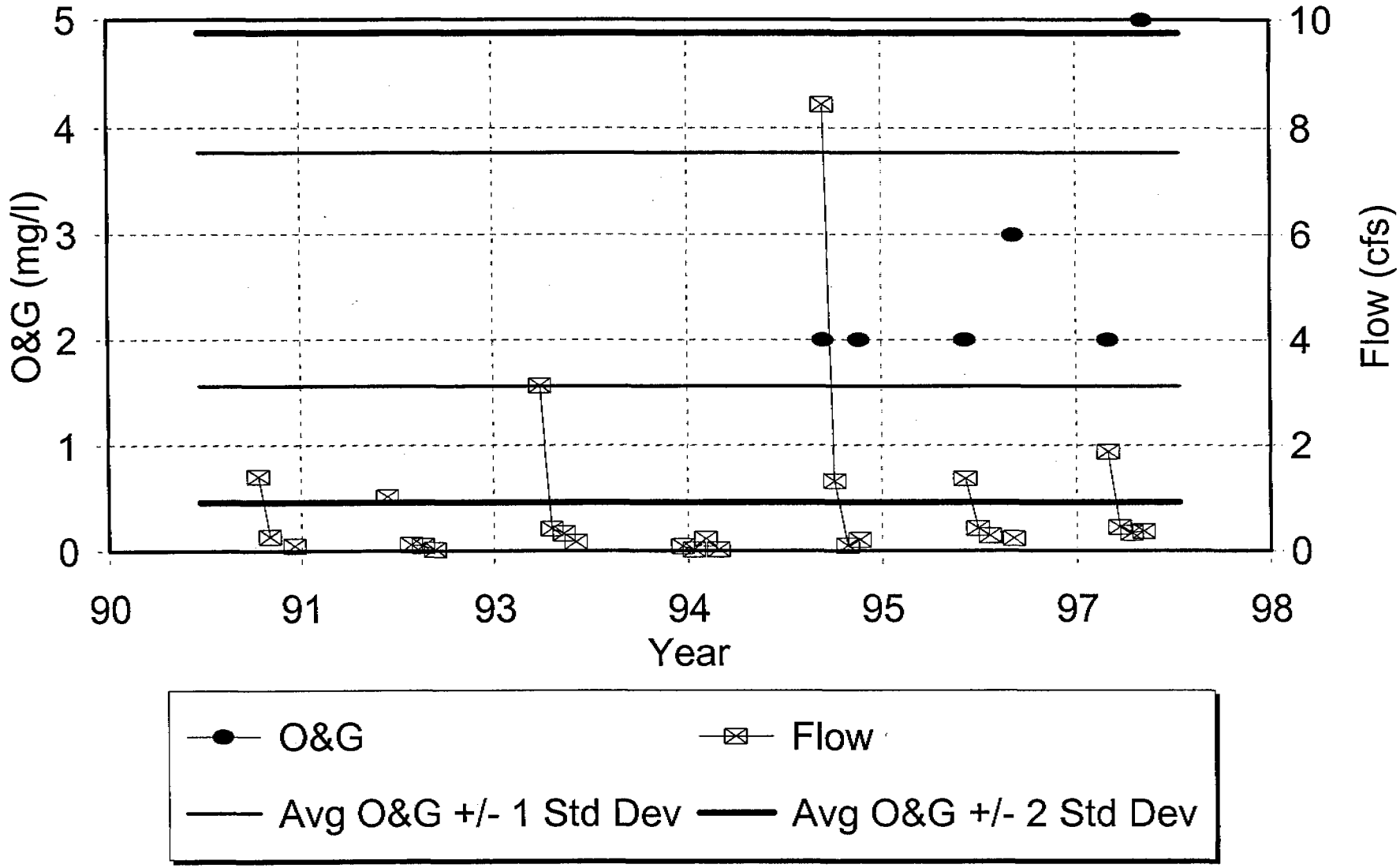
Station 341

TDS vs. Flow



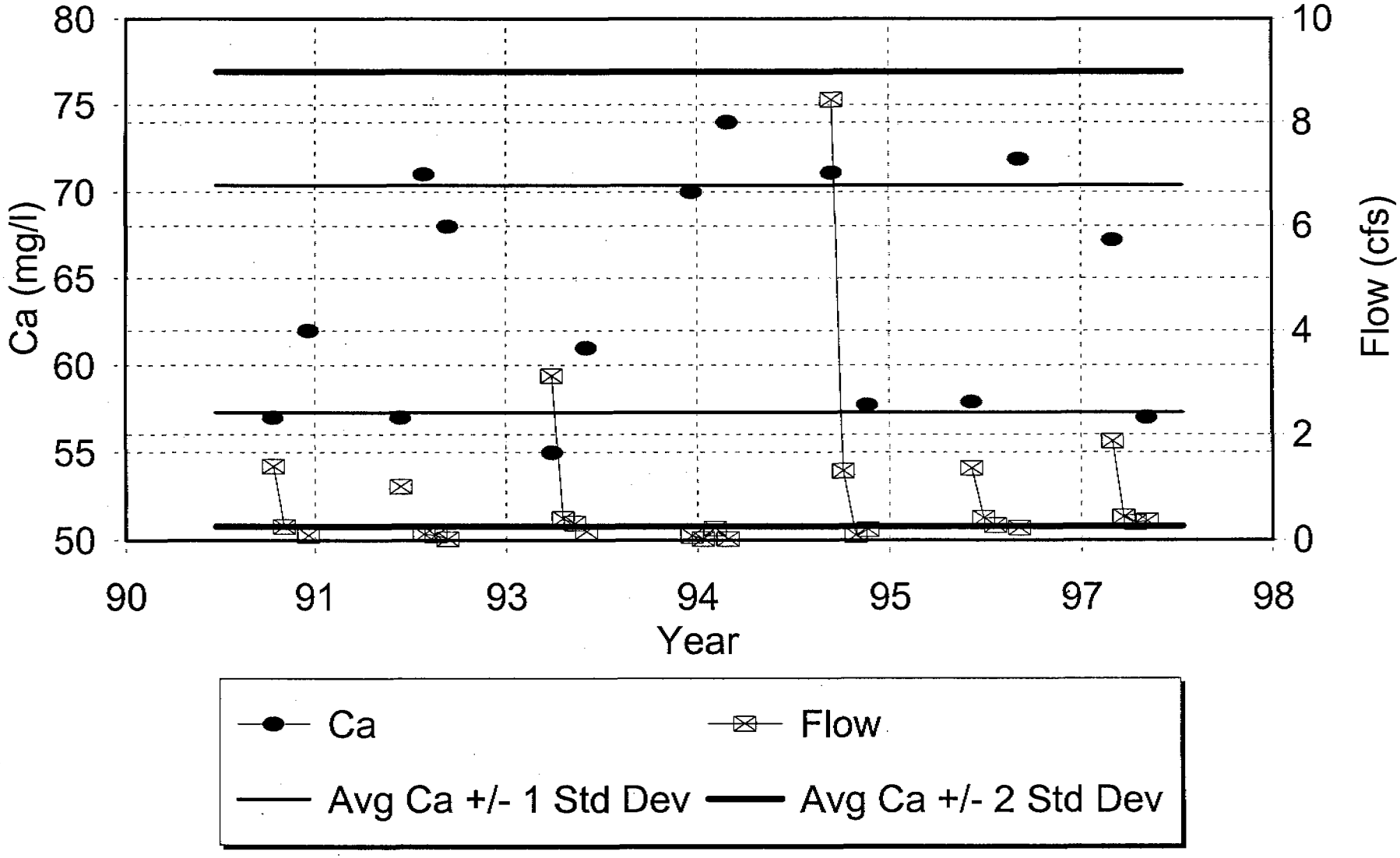
Station 341

Oil & Grease vs. Flow



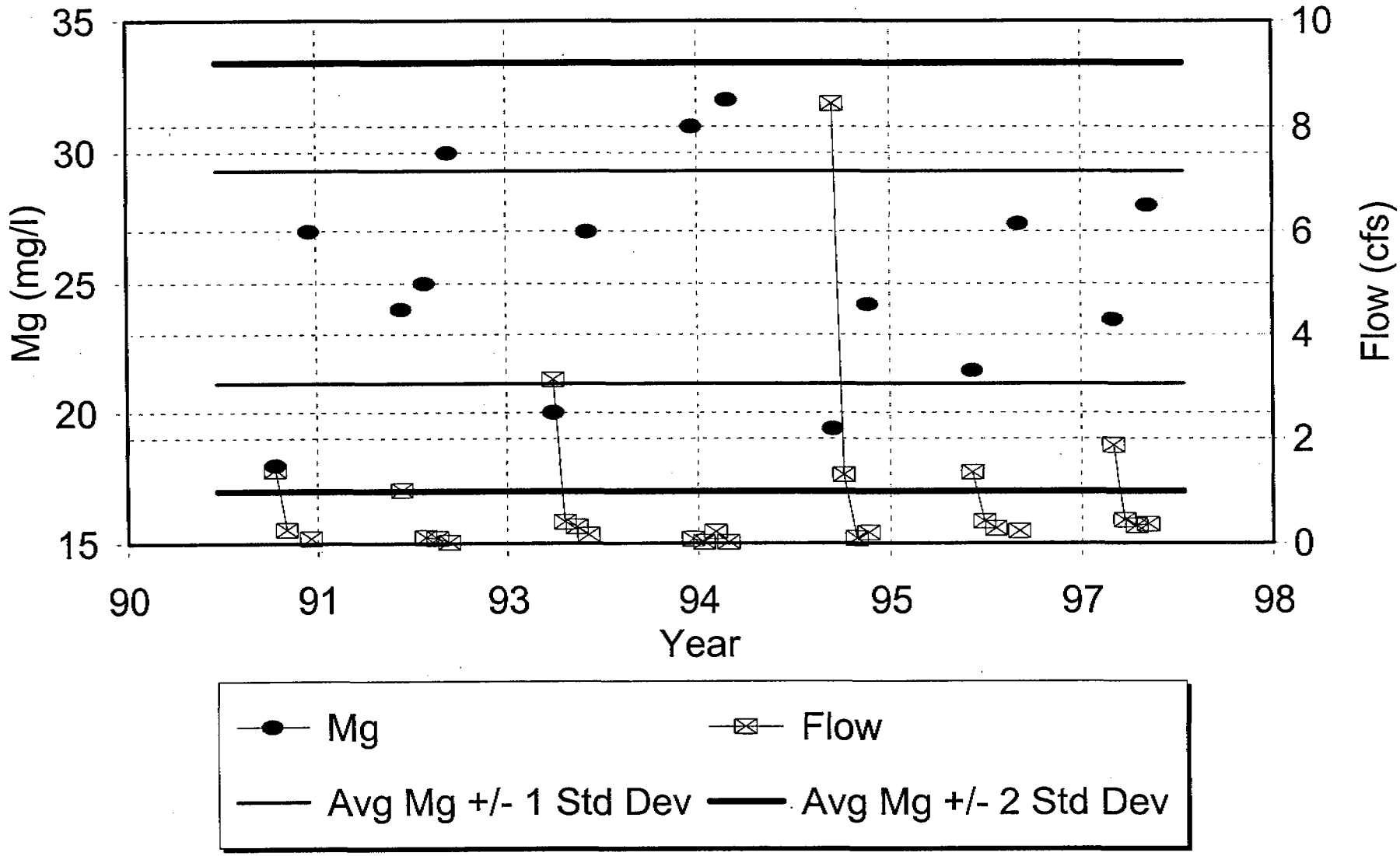
Station 341

Ca vs. Flow



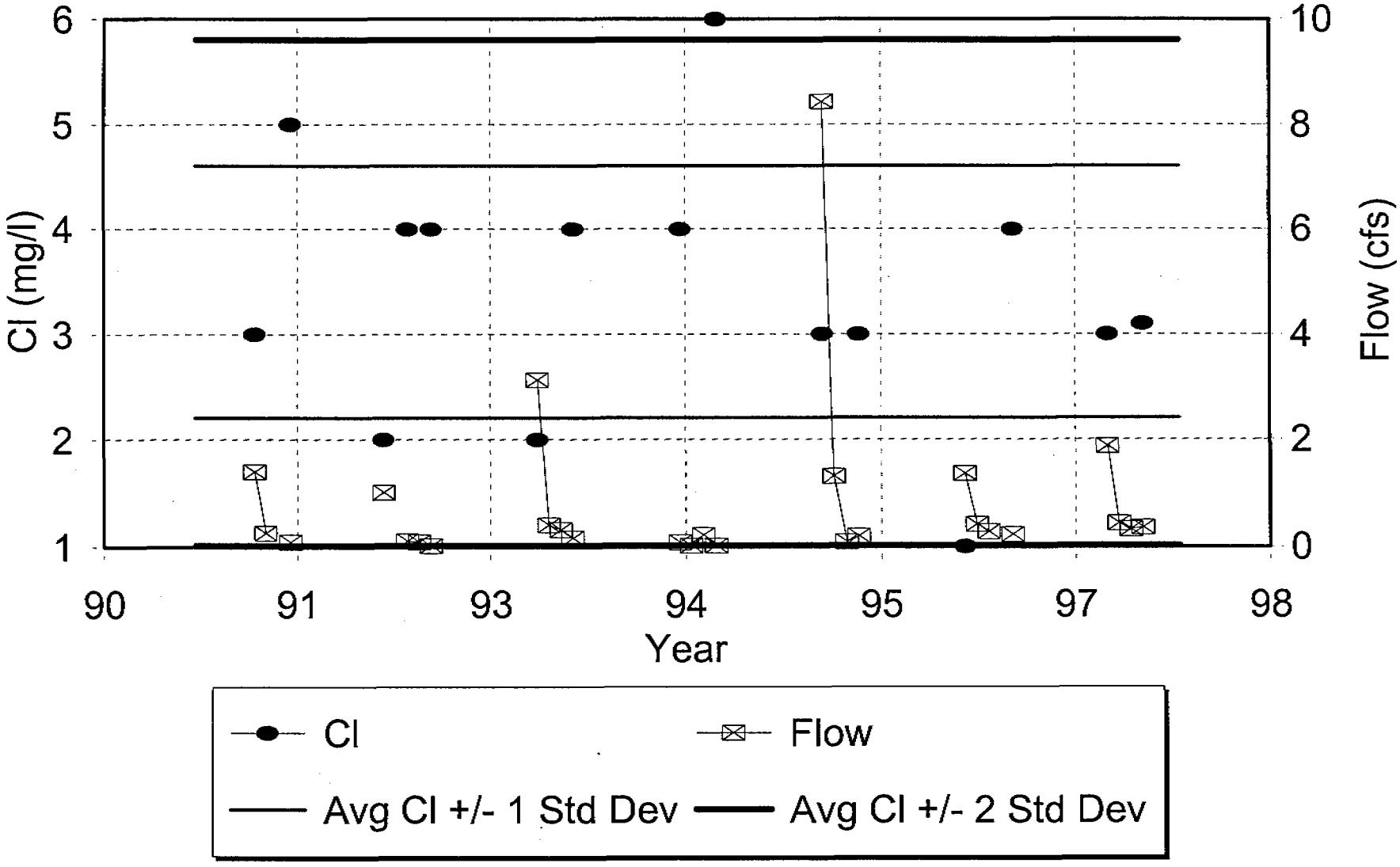
Station 341

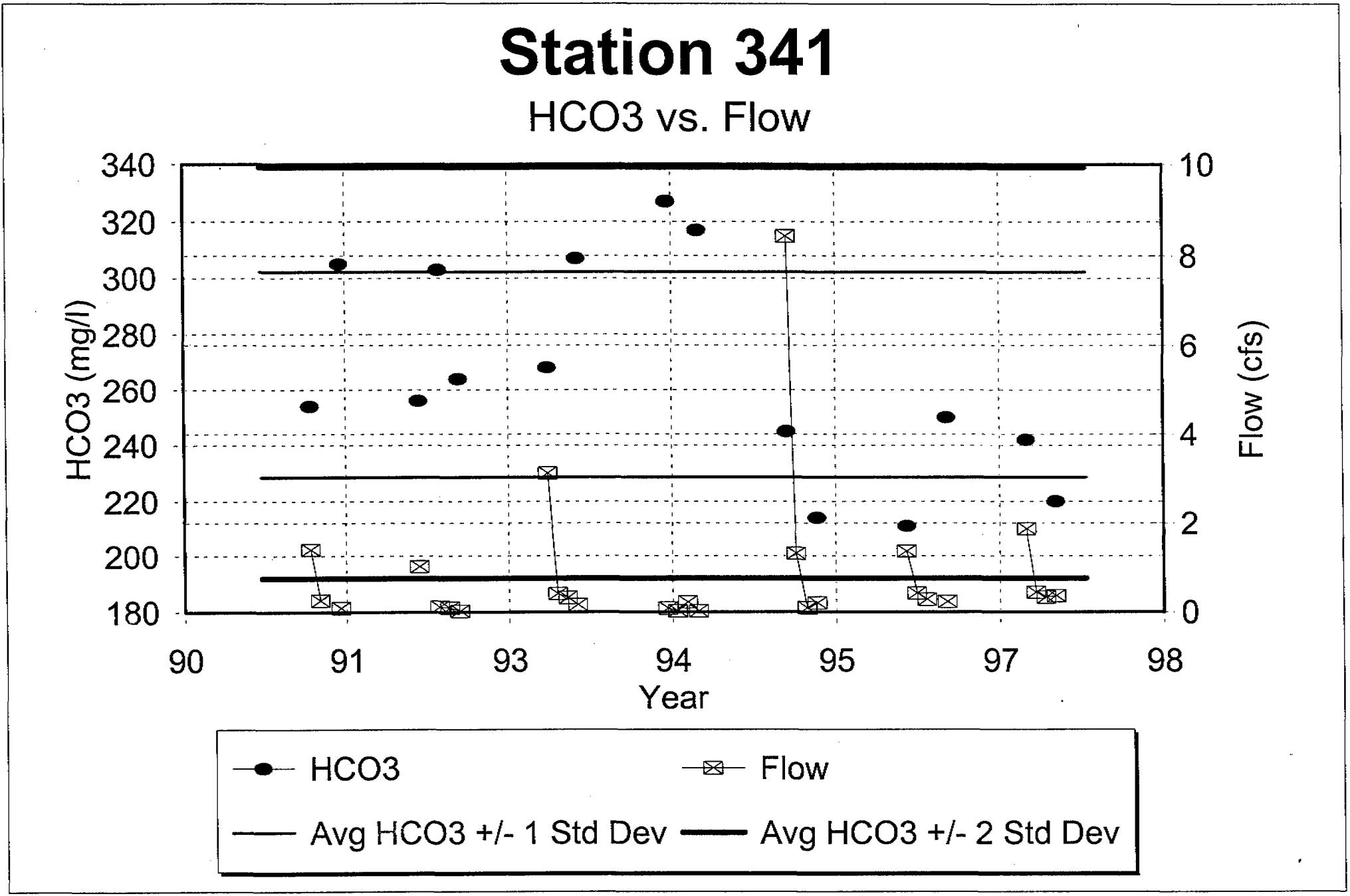
Mg vs. Flow



Station 341

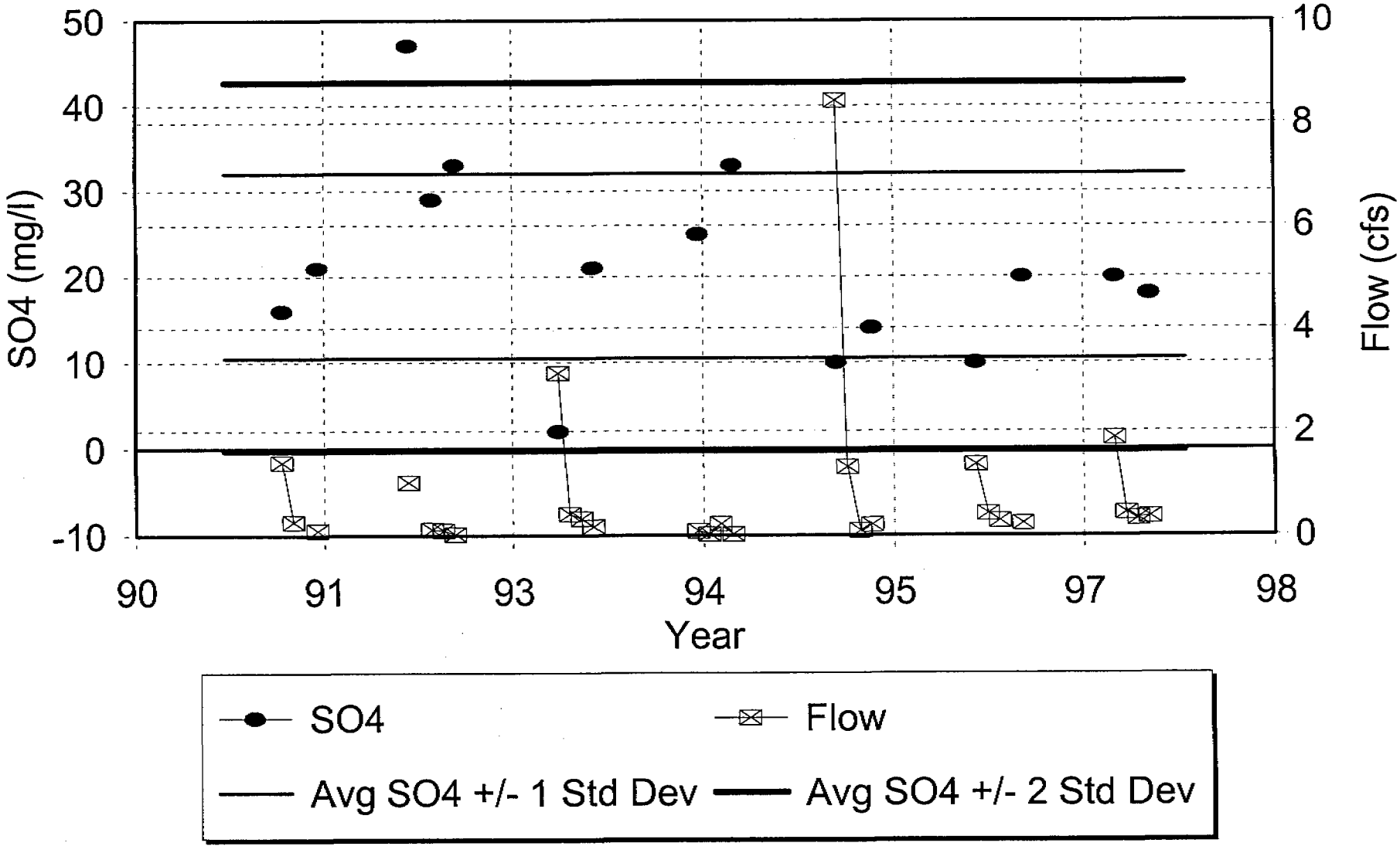
Cl vs. Flow




Station 341
HCO3 vs. Flow
HCO3 (mg/l)
340
320
300
280
260
240
220
200
180
Flow (cfs)
10
8
6
4
2
0
90
91
93
94
95
97
98
Year
HCO3
Flow
Avg HCO3 +/- 1 Std Dev
Avg HCO3 +/- 2 Std Dev

Station 341

SO4 vs. Flow



Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1996

Station: 342 | Property: Star Point | Location: 1250' N 500' W of SE corn. Sec 34, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7900

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-80																						
Feb-80																						
Mar-80																						
Apr-80																						
May-80																						
Jun-80																						
Jul-80																						
Aug-80																						
Sep-80																						
Oct-80	10/03/80	0.5				255																
Nov-80	11/10/80	2				282																
Dec-80	12/30/80	1				760																
Jan-81	01/26/81	0.9				315																IN-ACCESSIBLE
Feb-81	02/04/81																					IN-ACCESSIBLE
Mar-81	03/25/81																					
Apr-81	04/28/81	3				212																
May-81	05/28/81	2.5				251																
Jun-81	06/27/81					586																
Jul-81	07/31/81					280																
Aug-81																						
Sep-81																						
Oct-81																						
Nov-81	11/24/81																					IN-ACCESSIBLE
Dec-81	12/29/81																					IN-ACCESSIBLE
Jan-82																						
Feb-82																						
Mar-82																						
Apr-82																						
May-82																						
Jun-82																						
Jul-82																						
Aug-82																						
Sep-82																						
Oct-82																						
Nov-82																						
Dec-82																						
Jan-83																						
Feb-83																						
Mar-83	03/24/83																					IN-ACCESSIBLE - SNOW
Apr-83	04/21/83																					IN-ACCESSIBLE - SNOW
May-83	05/12/83																					IN-ACCESSIBLE - SNOW
Jun-83	06/29/83	4.1				226																IN-ACCESSIBLE - SNOW
Jul-83																						
Aug-83																						
Sep-83	09/07/83	0.35				212																IN-ACCESSIBLE - SNOW
Oct-83																						
Nov-83																						
Dec-83																						
Jan-84	01/05/84	0.35				299																
Feb-84																						IN-ACCESSIBLE
Mar-84	03/30/84																					
Apr-84																						
May-84																						
Jun-84	06/21/84	0.2				223																
Jul-84																						
Aug-84																						
Sep-84	09/21/84	0.4				215																
Oct-84																						
Nov-84																						
Dec-84	12/31/84																					ROAD SNOWED IN - ALT
Jan-85																						
Feb-85																						
Mar-85	03/31/85	2.75				248																
Apr-85																						
May-85																						
Jun-85	06/13/85	5.4				237																
Jul-85	08/15/85	0.44																				
Aug-85						300																
Sep-85																						
Oct-85																						
Nov-85																						
Dec-85																						

Cyprus Plateau Mining Company - Water Quality Data

Station: 342 | Property: Star Point | Location: 1250' N 500' W of SE com. Sec 34, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7900

Print Date: March 2, 1998

Date		Field Measurements				Laboratory Measurements																
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-86																						
Feb-86																						
Mar-86																						
Apr-86																						
May-86																						
Jun-86	06/12/86	3.3				228																
Jul-86																						
Aug-86																						
Sep-86																						
Oct-86	10/03/86	0.34				276																
Nov-86																						
Dec-86																						
Jan-87																						
Feb-87																						
Mar-87																						
Apr-87																						
May-87																						
Jun-87	06/27/87	1.3				222																
Jul-87	07/16/87	1.17																				
Aug-87	08/12/87	0.51																				
Sep-87	09/23/87	0.29				322																
Oct-87																						
Nov-87																						
Dec-87																						
Jan-88																						
Feb-88																						
Mar-88																						
Apr-88																						
May-88																						
Jun-88	06/02/88	1.98				242																
Jul-88	07/09/88	0.57																				
Aug-88	08/20/88	0.52																				
Sep-88	09/03/88	0.3				316																
Oct-88																						
Nov-88																						
Dec-88																						
Jan-89																						
Feb-89																						
Mar-89																						
Apr-89																						
May-89																						
Jun-89	06/07/89	0.3				308																
Jul-89	07/11/89	0.26																				
Aug-89	08/23/89	0.23																				
Sep-89	09/14/89	0.08				312																
Oct-89																						
Nov-89																						
Dec-89																						
Jan-90																						
Feb-90																						
Mar-90																						
Apr-90																						
May-90																						
Jun-90	06/02/90	0.71				312																
Jul-90	07/06/90	0.29																				
Aug-90	08/22/90	0.2																				
Sep-90	09/24/90	0.23				354																
Oct-90																						
Nov-90																						
Dec-90																						
Jan-91																						
Feb-91																						
Mar-91																						
Apr-91																						
May-91																						
Jun-91	06/12/91	1.41	7.2	460	6	212		209	244	10	3	10	54	18	2	2		< 0.02	0.6	0.02		
Jul-91	07/16/91	0.36	8.1	520	8																	
Aug-91																						
Sep-91	09/17/91	0.13	8.2	430	6	314		305	359	0	3	19	71	31	2	5		0.06	0.1	0.02		
Oct-91																						
Nov-91																						
Dec-91																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 342 | Property: Star Point | Location: 1250' N 500' W of SE corn. Sec 34, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7900

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-92																						
Feb-92																						
Mar-92																						
Apr-92																						
May-92	05/20/92	0.68	8.6	463	8.8	256	10		251	261	2	1	45	61	24	1	3	<	0.02	0.15		
Jun-92																						
Jul-92	07/15/92	0.16	9.8	552	9.4	376 <	2		290	310	2	3	41	75	25	1	3	<	0.02	0.06		
Aug-92	08/24/92	0.13	9.6	558	9.1																	
Sep-92	09/21/92	0.037	6.8	588	7.6	312	8		318	261	10	3	86	73	33	2	3	<	0.02	0.06		
Oct-92																						
Nov-92																						
Dec-92																						
Jan-93																						
Feb-93																						
Mar-93																						
Apr-93																						
May-93																						
Jun-93	06/22/93	3.62	14.1	862	13.8	484 <	4		448	281	0	2	2	55	21	1	3	<	0.02	0.05 <	0.01	
Jul-93	07/22/93	0.61	7.3	437	10.9																	
Aug-93	08/16/93	0.48	7.2	506	8.7																	
Sep-93	09/27/93	0.24	7.2	546	8.4	304	2		265	320	0	3	33	60	28	2	3	<	0.02	0.08 <	0.01	
Oct-93																						
Nov-93																						
Dec-93																						
Jan-94																						
Feb-94																						
Mar-94																						
Apr-94																						
May-94																						
Jun-94	06/28/94	0.263	8.3	641	9.5	302 <	2		325	344	0	3	31	76	33	2	5		0.08	0.12	0.02	
Jul-94	07/20/94	0.261	8.3	230	10																	
Aug-94	08/31/94	0.036	8.4	500	14.3																	
Sep-94	09/21/94	0.26	8.2	496	12.2	300 <	2		347	383	0	3	33	83	34	2	4	<	0.02	0.03 <	0.01	
Oct-94																						
Nov-94																						
Dec-94																						
Jan-95																						
Feb-95																						
Mar-95																						
Apr-95																						
May-95																						
Jun-95	06/22/95	12.66	8.5	490	3.5	230	30 <	2	249	245 <	2	3 <	10	69.5	18.3	0.9	2.6	0.3	0.06	0.2	0.015	
Jul-95	07/26/95	0.88	8.32	456	7																	
Aug-95	08/28/95	0.09	8.74	474	13																	
Sep-95	09/27/95	0.3	8.5	569	8	250 <	5 <	2	279	238 <	2	3	12	65	26.4	1.4	3.5	6.1 <	0.01	0.07	0.011	
Oct-95																						
Nov-95																						
Dec-95																						
Jan-96																						
Feb-96																						
Mar-96																						
Apr-96																						
May-96																						
Jun-96	06/11/96	2.05	7.9	429	9	253		6	251	225	8	1 <	20	62.5	23	0.9	3.1	0.4	0.06	0.44	0.013	
Jul-96	07/23/96	0.629	8.75	563	8																	
Aug-96	08/19/96	0.492	8.62	507	11																	
Sep-96																						
Oct-96	10/01/96	0.544	8.4	709	7	334		4	347	280	2 <	3	40	85	32.6	1.6	3.9	4.6	0.05	0.08	0.01	
Nov-96																						
Dec-96																						
Jan-97																						
Feb-97																						
Mar-97																						
Apr-97																						
May-97																						
Jun-97	06/17/97	2.63	8.7	507	7	275		2 <	284	248	2 <	2	20	71.7	25.5	1	3.2	3.2	0.04	0.24	0.011	
Jul-97	07/30/97	1.04	8.32	492	8.5																	
Aug-97	08/13/97	0.77	8.42	520	7.5																	
Sep-97	09/16/97	0.83	8.34	592	7	350	31	5 <	270	260	10 <	3.1	40	47	37	2.2	4.3	-4.2	0.01 <	1.3	0.037	
Oct-97																						
Nov-97																						
Dec-97																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

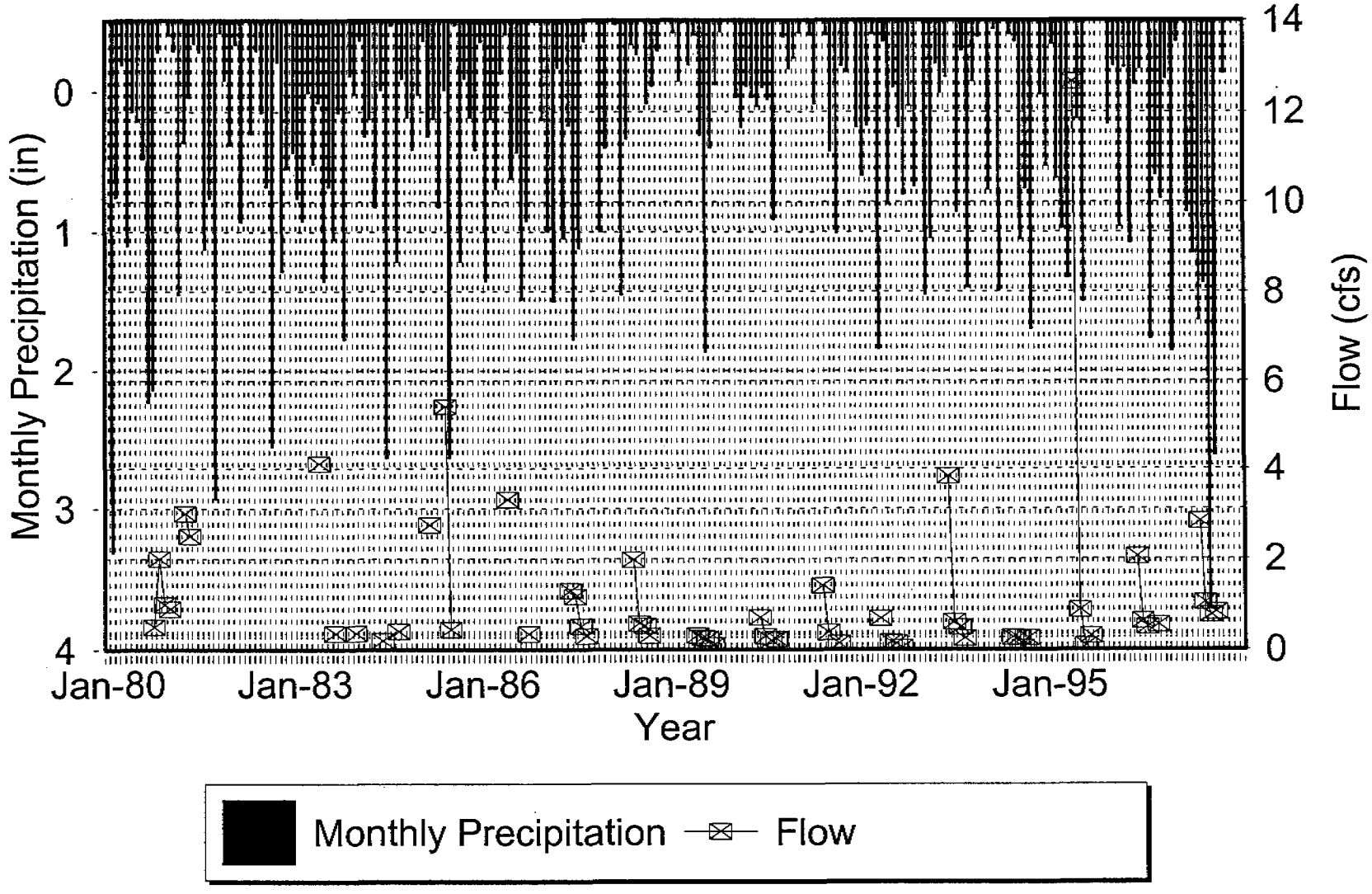
Station: 342 | Property: Star Point | Location: 1250' N 500' W of SE com. Sec 34, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7900

Date		Field Measurements				Laboratory Measurements																Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	
END DATA																						
Count		59	27	27	27	41	10	6	15	15	15	15	15	15	15	15	15	6	15	15	12	
Minimum		0.036	6.8	230	3.5	212 <	2 <	2 <	209	225 <	0 <	1 <	2	47	18	0.9	2	-4.2 <	0.01 <	0.03 <	0.01	
Maximum		12.66	14.1	862	14.3	760 <	31 <	6 <	448	383 <	10 <	3.1 <	86	85	37	2.2	5	6.1 <	0.08 <	1.3 <	0.037	
Average		1.1607	8.4744	522.11	8.6593	301.1 <	9.6 <	3.5 <	295.87	283.93 <	3.3333 <	2.6067 <	29.467	67.247	27.467	1.5333	3.44	1.7333 <	0.034 <	0.2387 <	0.0156	
Standard Deviation		1.8897	1.267	106.61	2.4196	101.49 <	10.772 <	1.6073 <	55.164	46.67 <	3.8413 <	0.716 <	19.876	10.414	5.7403	0.4975	0.8188	3.3782 <	0.0215 <	0.3227 <	0.0076	
Avg. -1 Std. Dev.		-0.729	7.1874	415.3	6.4397	199.61 <	-1.172 <	1.8927 <	240.7	237.26 <	-0.508 <	1.8907 <	9.5908	56.833	21.726	1.0358	2.6212	-1.645 <	0.0125 <	-0.064 <	0.008	
Avg. +1 Std. Dev.		3.0504	9.7615	628.92	11.279	402.59 <	20.372 <	5.1073 <	351.03	330.6 <	7.1746 <	3.3226 <	49.343	77.66	33.207	2.0309	4.2588	5.1115 <	0.0555 <	0.5614 <	0.0232	
Avg. -2 Std. Dev.		-2.619	5.9004	308.49	4.0201	98.122 <	-11.94 <	0.2654 <	185.54	190.59 <	-4.349 <	1.1747 <	-10.29	46.419	15.986	0.5382	1.6024	-5.023 <	-0.009 <	-0.407 <	0.0004	
Avg. +2 Std. Dev.		4.94	11.048	735.73	13.696	504.07 <	31.144 <	6.7146 <	406.19	377.27 <	11.016 <	4.0386 <	69.218	88.074	38.947	2.5264	5.0776	8.4897 <	0.0771 <	0.8841 <	0.0308	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

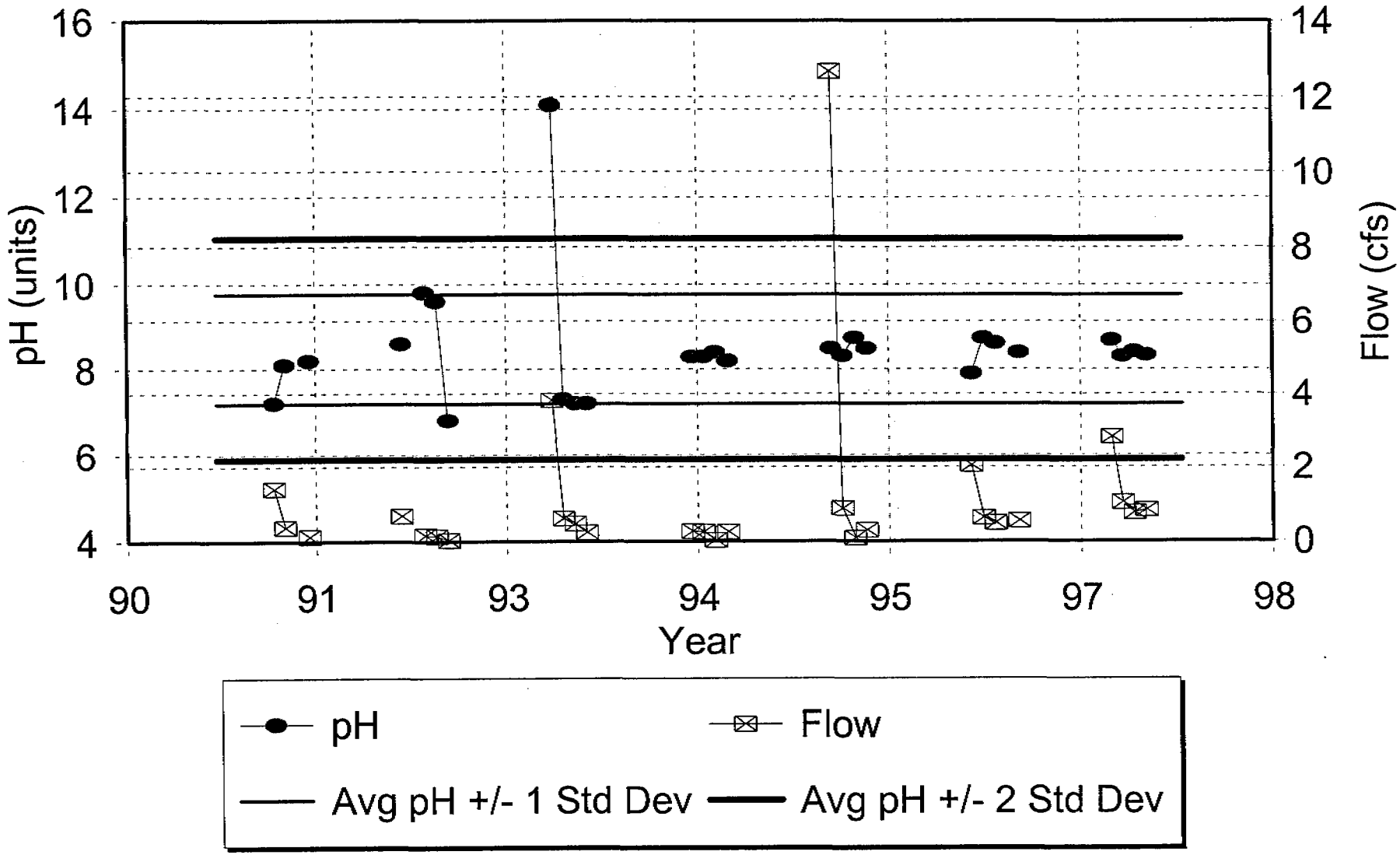
Station 342

Monthly Precipitation vs. Flow



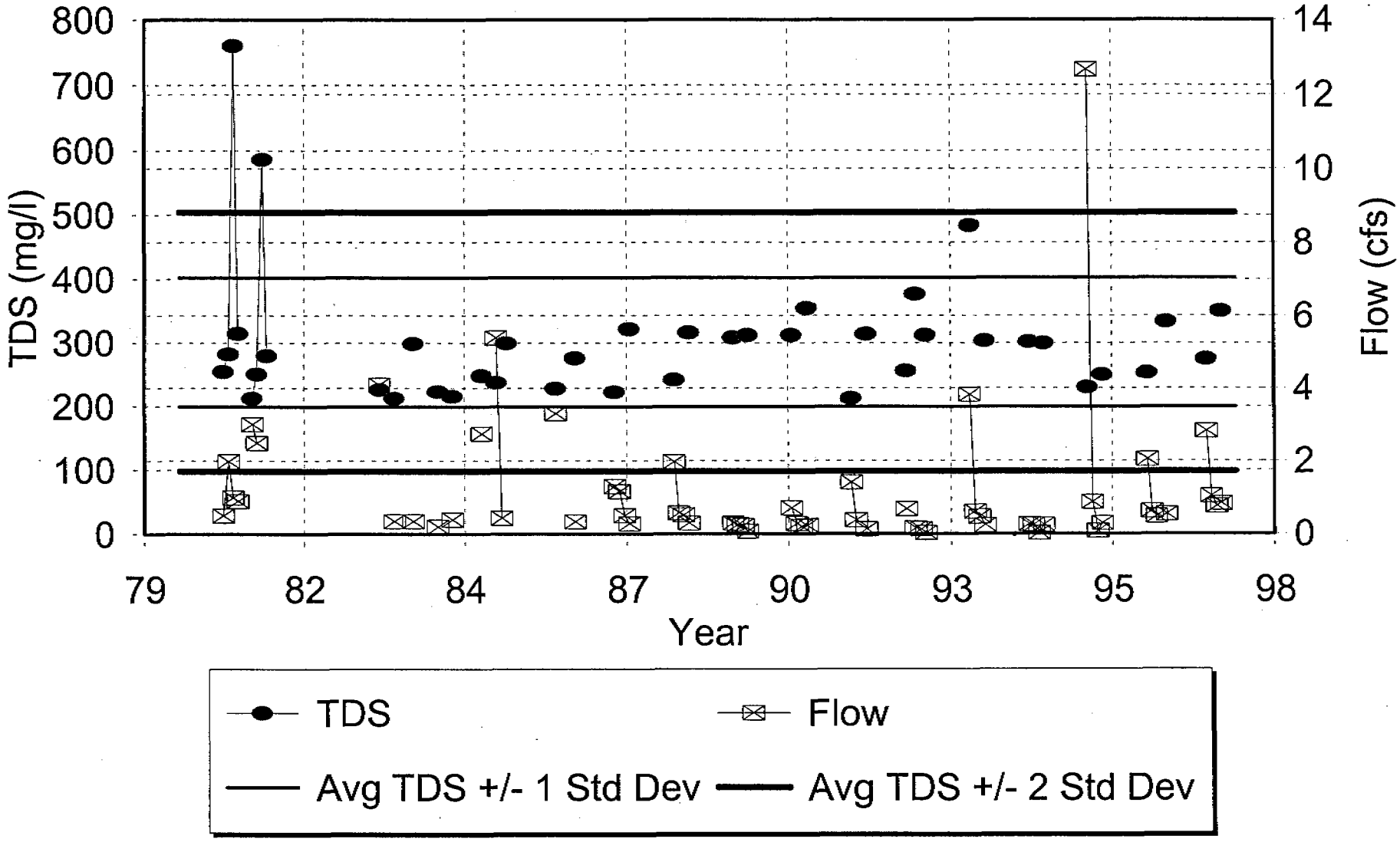
Station 342

pH vs. Flow



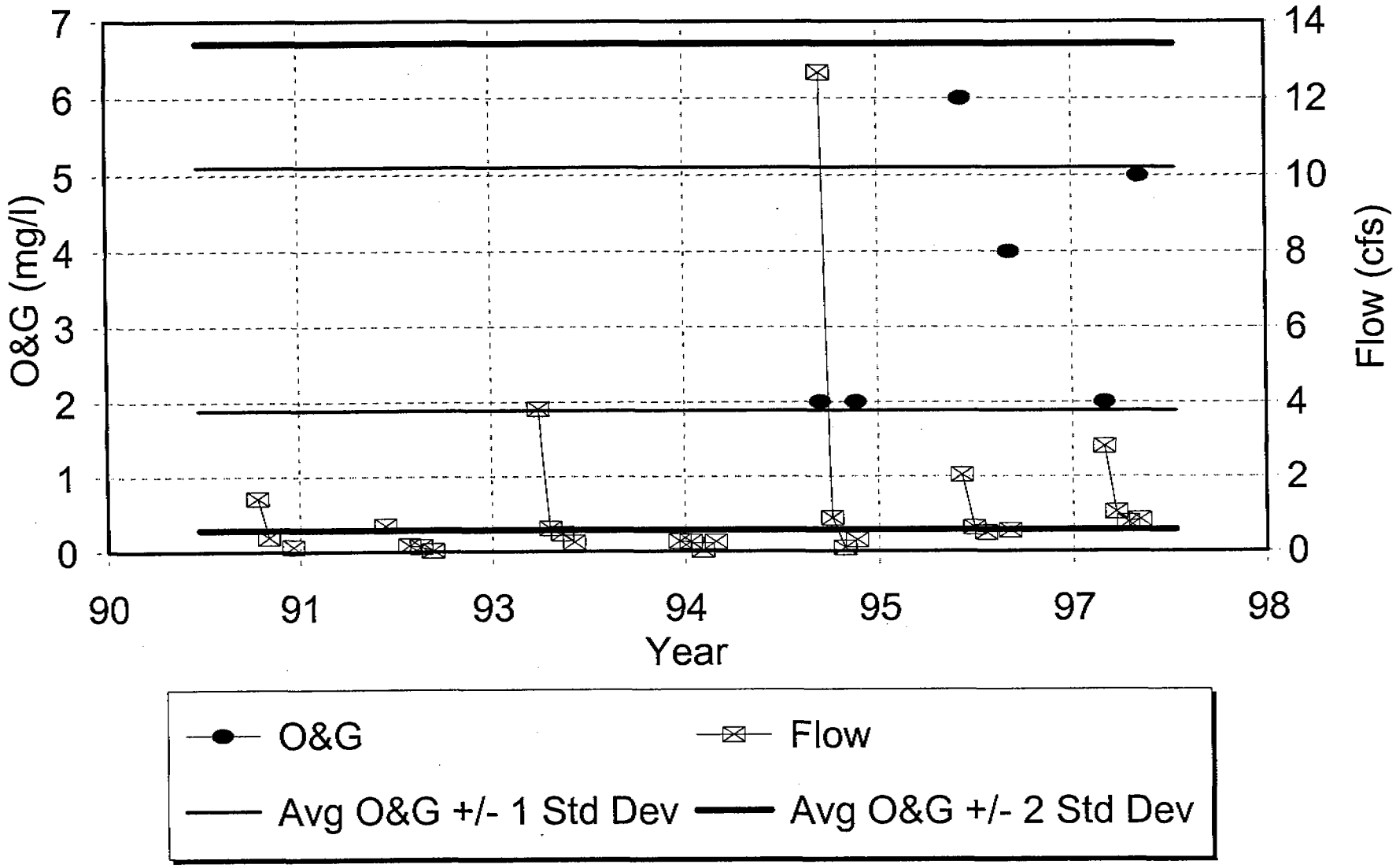
Station 342

TDS vs. Flow



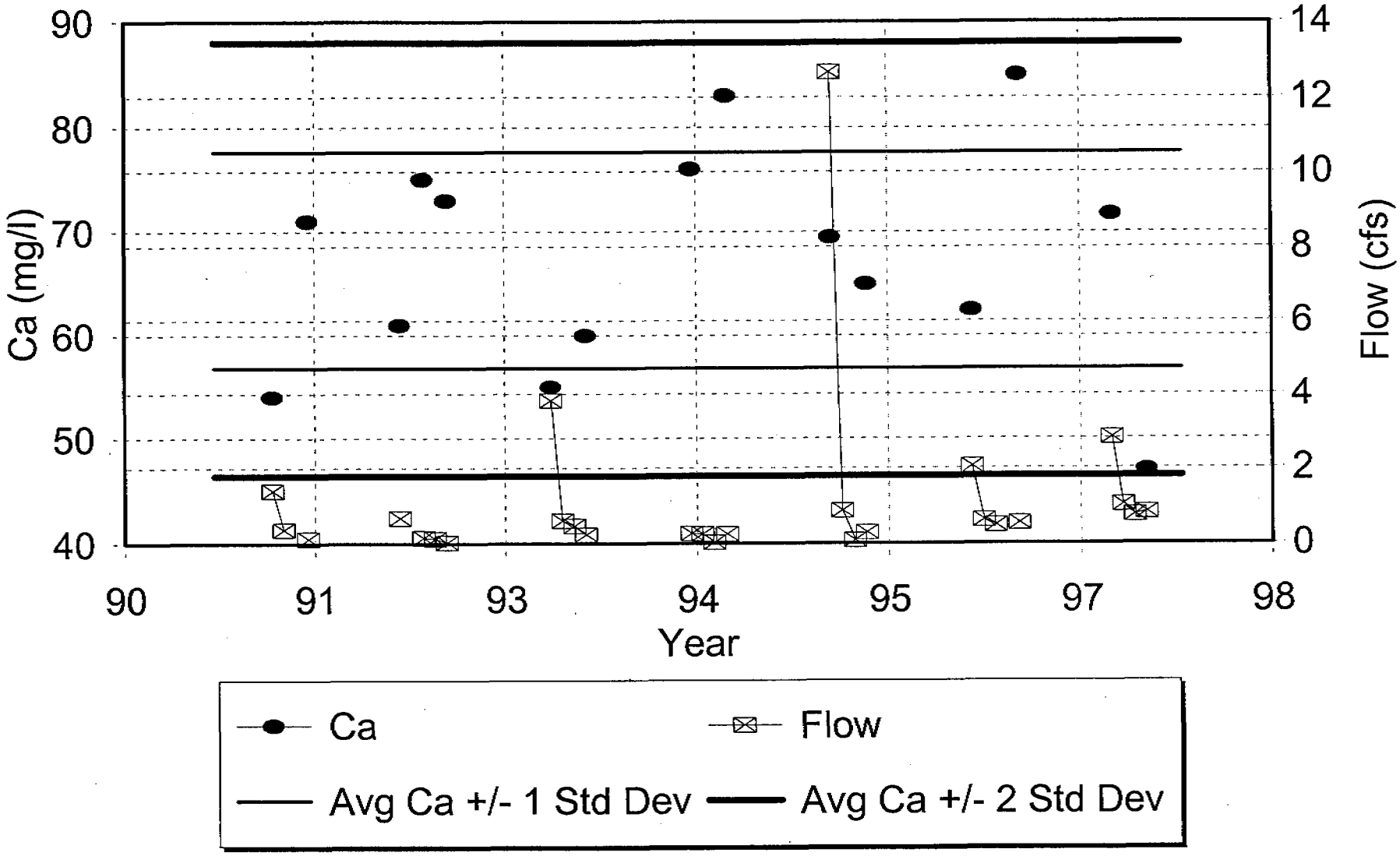
Station 342

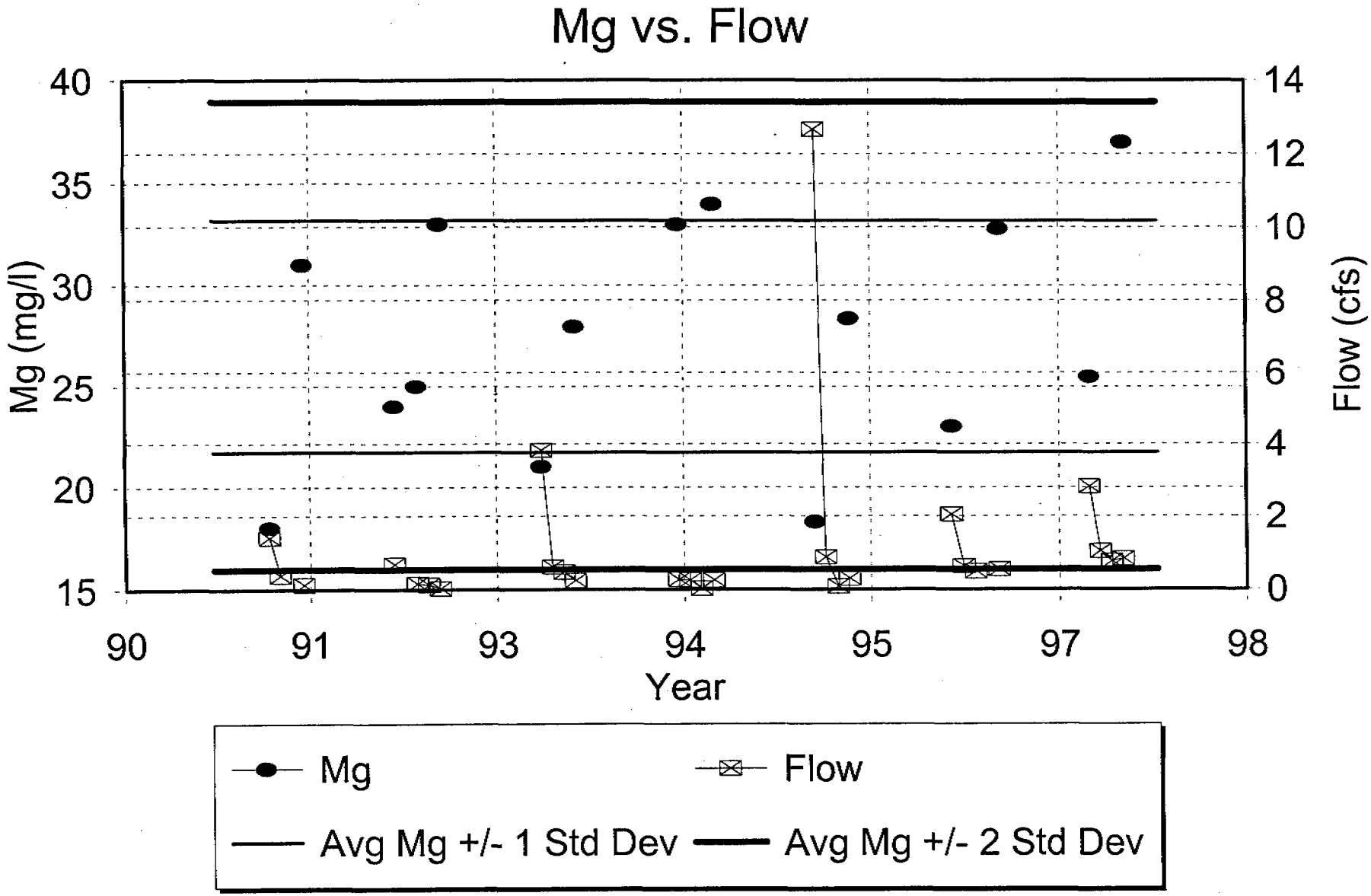
Oil & Grease vs. Flow



Station 342

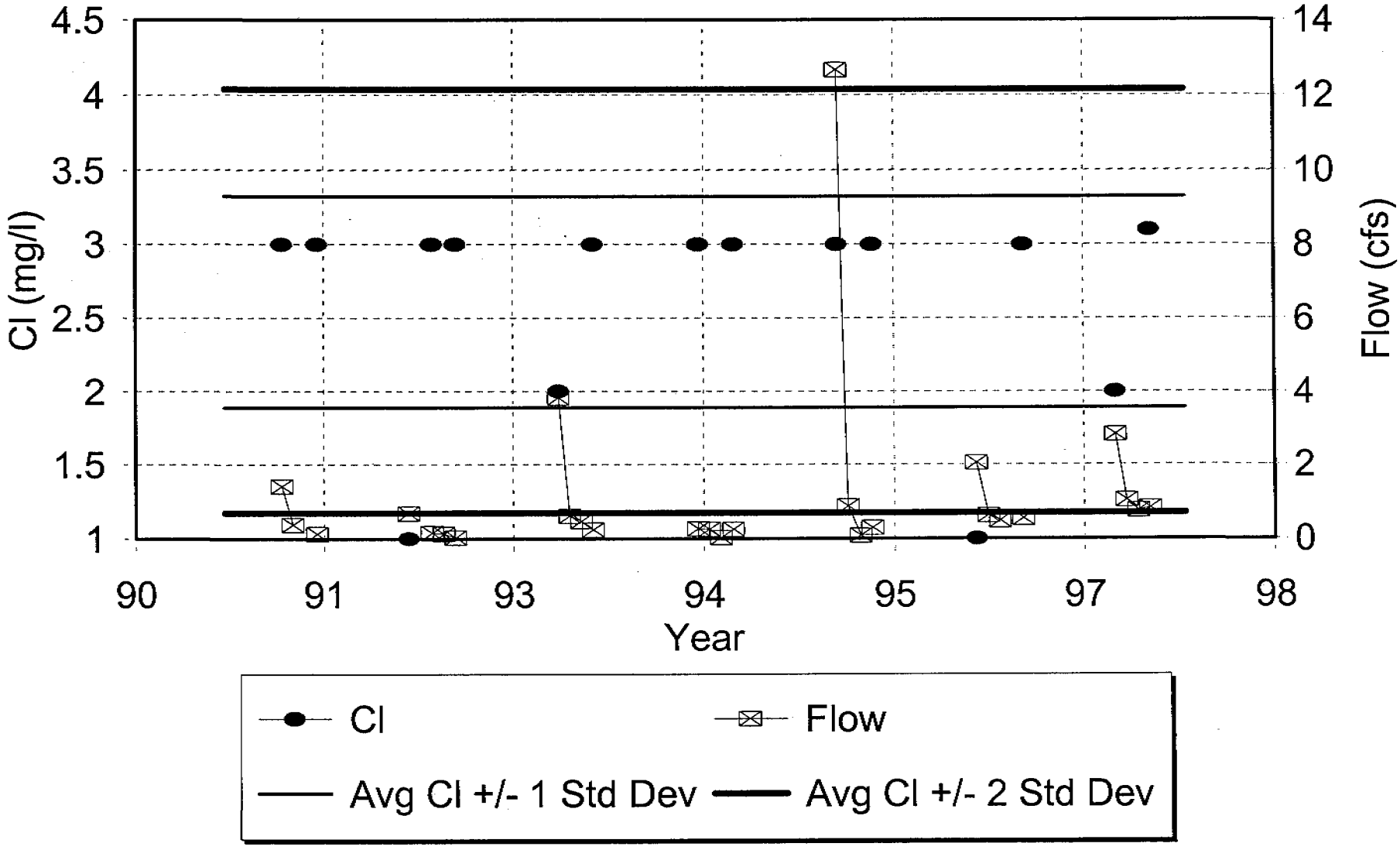
Ca vs. Flow

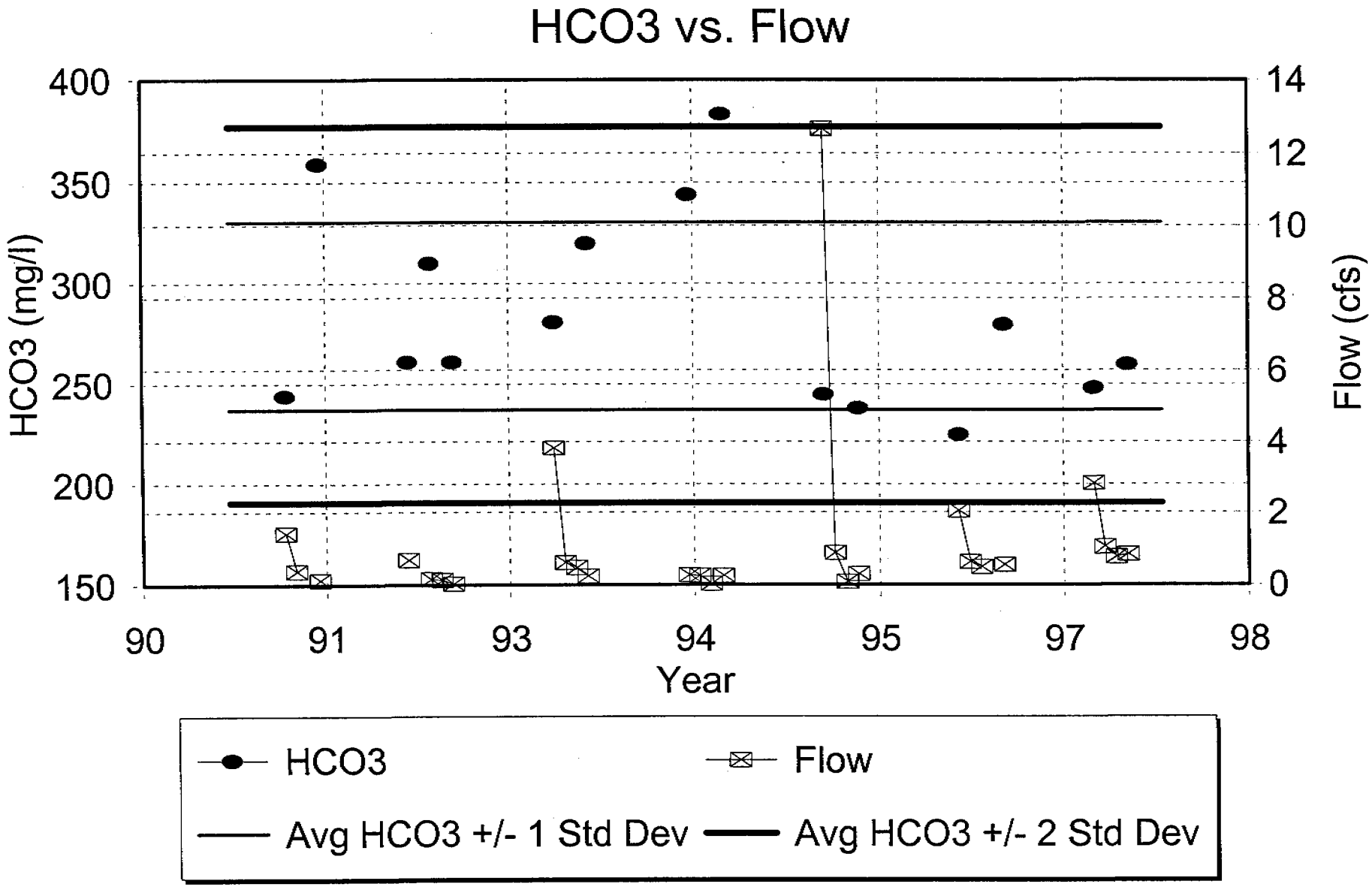


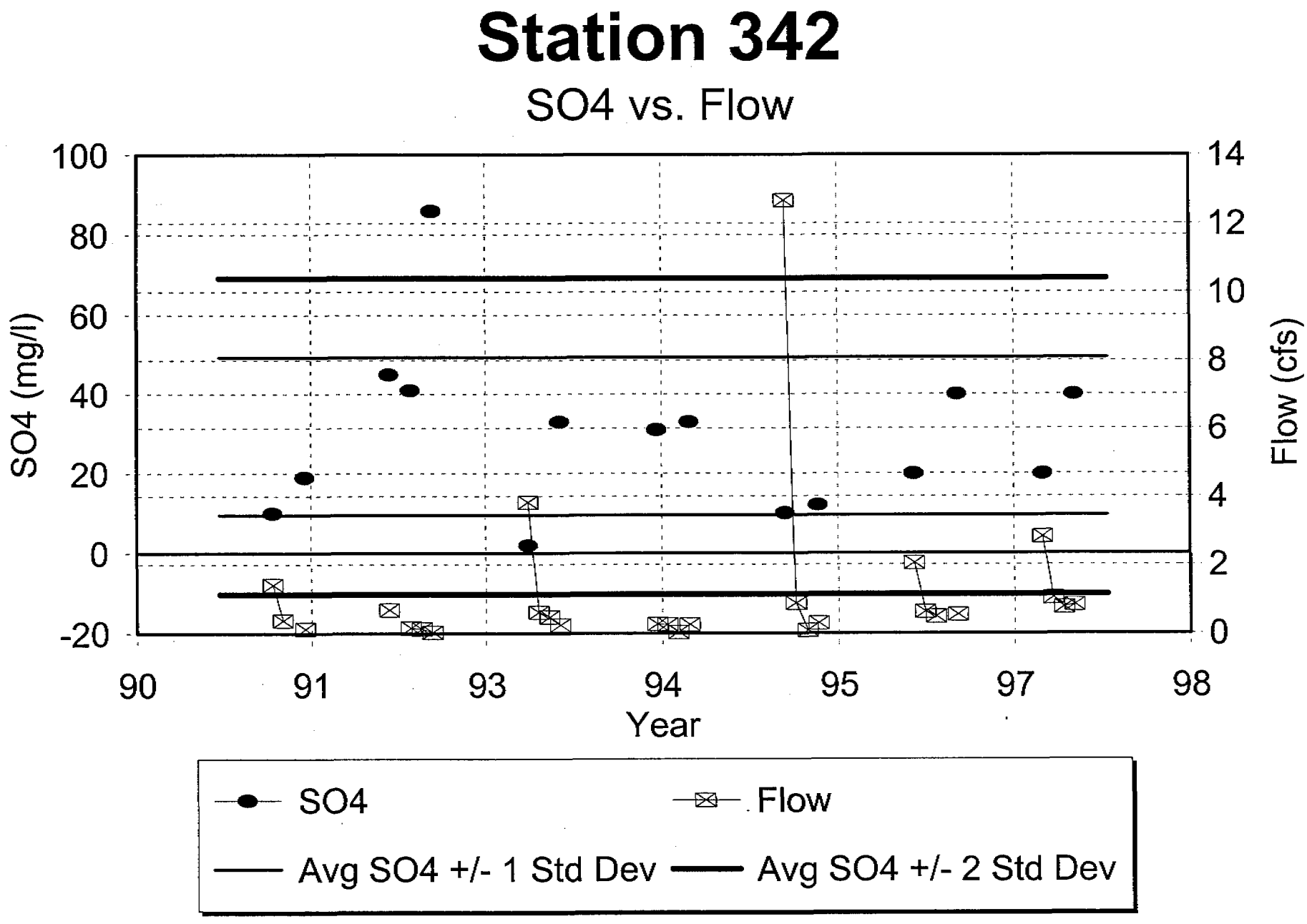

Station 342
Mg vs. Flow
Mg (mg/l)
40
35
30
25
20
15
Flow (cfs)
14
12
10
8
6
4
2
0
90
91
93
94
95
97
98
Year
Mg
Flow
Avg Mg +/- 1 Std Dev
Avg Mg +/- 2 Std Dev

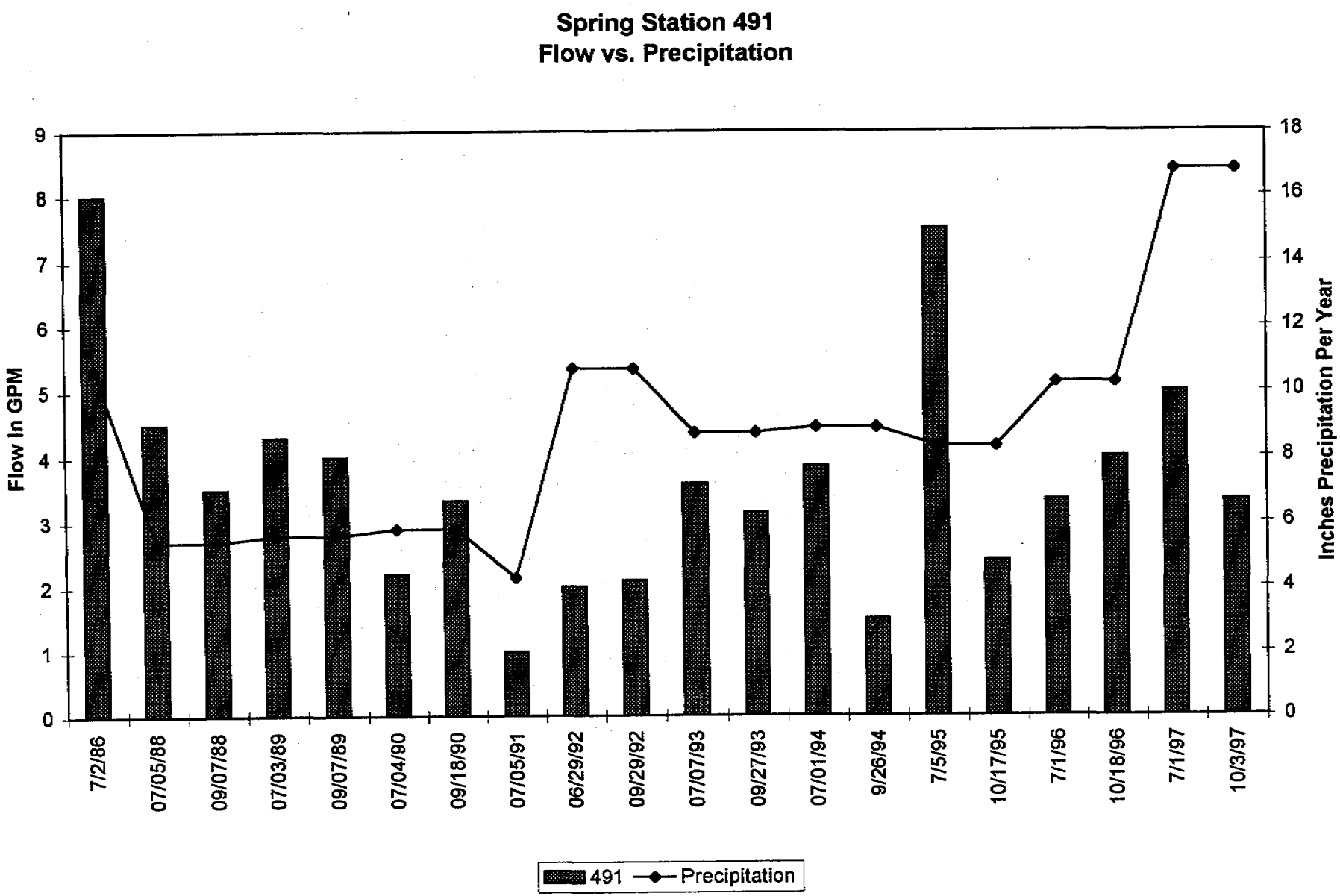
Station 342

Cl vs. Flow



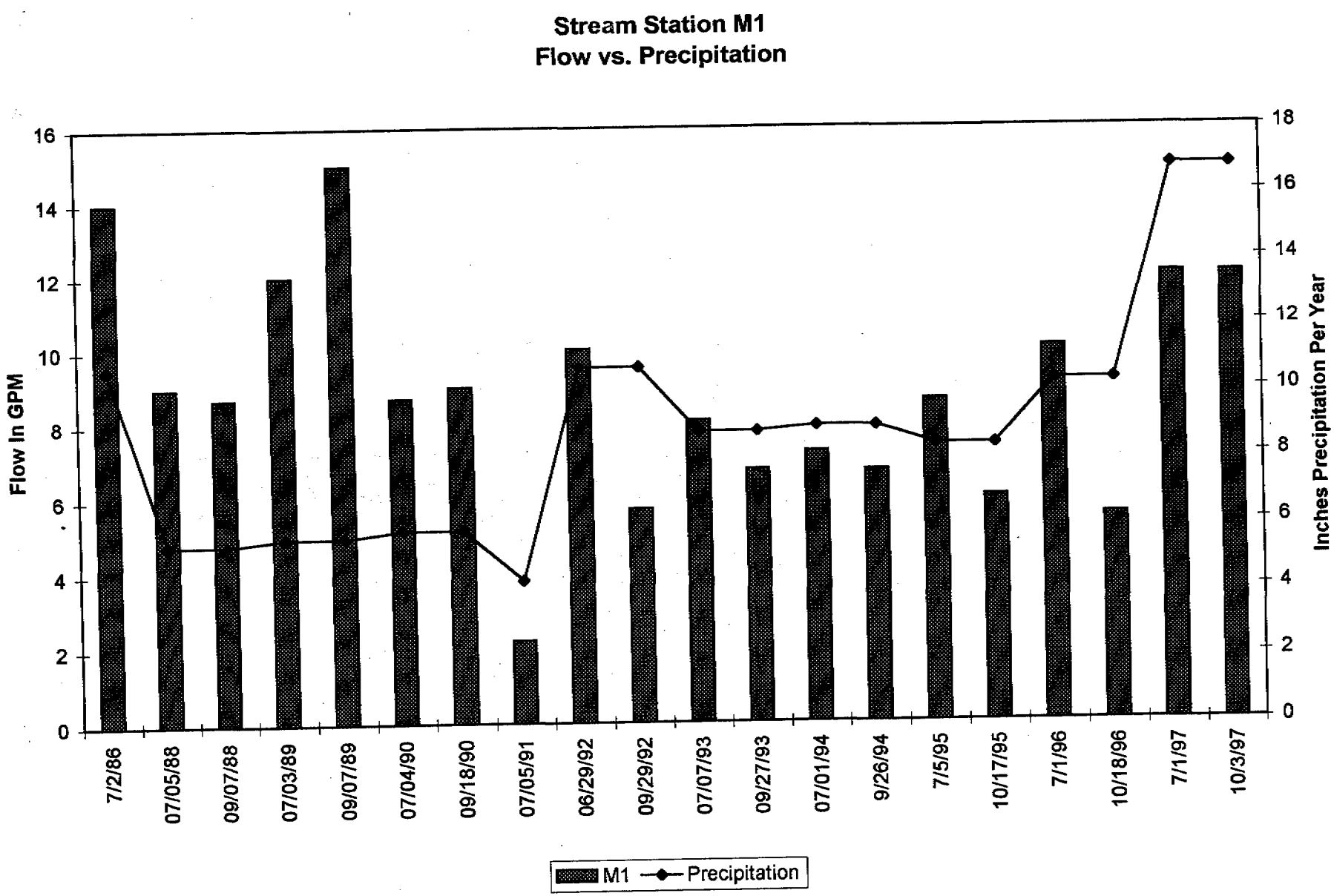

Station 342
HCO3 vs. Flow
400
350
300
250
200
150
HCO3 (mg/l)
14
12
10
8
6
4
2
0
Flow (cfs)
90
91
93
94
95
97
98
Year
HCO3
Flow
Avg HCO3 +/- 1 Std Dev
Avg HCO3 +/- 2 Std Dev


Station 342
SO4 vs. Flow
SO4 (mg/l)
Flow (cfs)
100
80
60
40
20
0
-20
14
12
10
8
6
4
2
0
90
91
93
94
95
97
98
Year
SO4
Flow
Avg SO4 +/- 1 Std Dev
Avg SO4 +/- 2 Std Dev


Spring Station 491
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
0
1
2
3
4
5
6
7
8
9
0
2
4
6
8
10
12
14
16
18
7/2/86
07/05/88
09/07/88
07/03/89
09/07/89
07/04/90
09/18/90
07/05/91
06/29/92
09/29/92
07/07/93
09/27/93
07/01/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
491
Precipitation

SPRING STATION 491

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		8.0		7.40	267
07/05/88	8:25A M	4.5	4.0	7.58	205
09/07/88	9:00 AM	3.5	5.0	8.25	240
07/03/89	8:00A M	4.3	3.0	7.81	420
09/07/89	10:20 AM	4.0	5.0	7.38	460
07/04/90	8:10 AM	2.2	4.0	7.8	450
09/18/90	9:00A M	3.3	5.0	8.4	420
07/05/91	11:25 AM	1.0	5.0	7.7	370
06/29/92	10:15 AM	2	3.5	7.13	381
09/29/92	10:00AM	2	4.3	6.33	368
07/07/93	10:40 AM	3.59	4.6	6.37	305
09/27/93	9:20 AM	3.14	4.5	8.3	315
07/01/94	9:20 AM	1.6	7.2	7.84	317
09/26/94	11:25 AM	1.5	8.7	8.06	387
07/05/95	9:50 AM	7.5	6	7.11	151
10/17/95	10:50 AM	2.4	5	7.56	379
07/01/96	10:05 AM	3.33	7	7.91	346
07/01/97	10:20 AM	5	7.5	7.95	303
10/03/97	11:00 AM	3.33	4	7.82	361
AVG		3.48	5.2	7.62	339
MAX		8.00	8.7	8.40	460
MIN		1.00	3.0	6.33	151
STD DEV		1.85	1.5	0.57	82

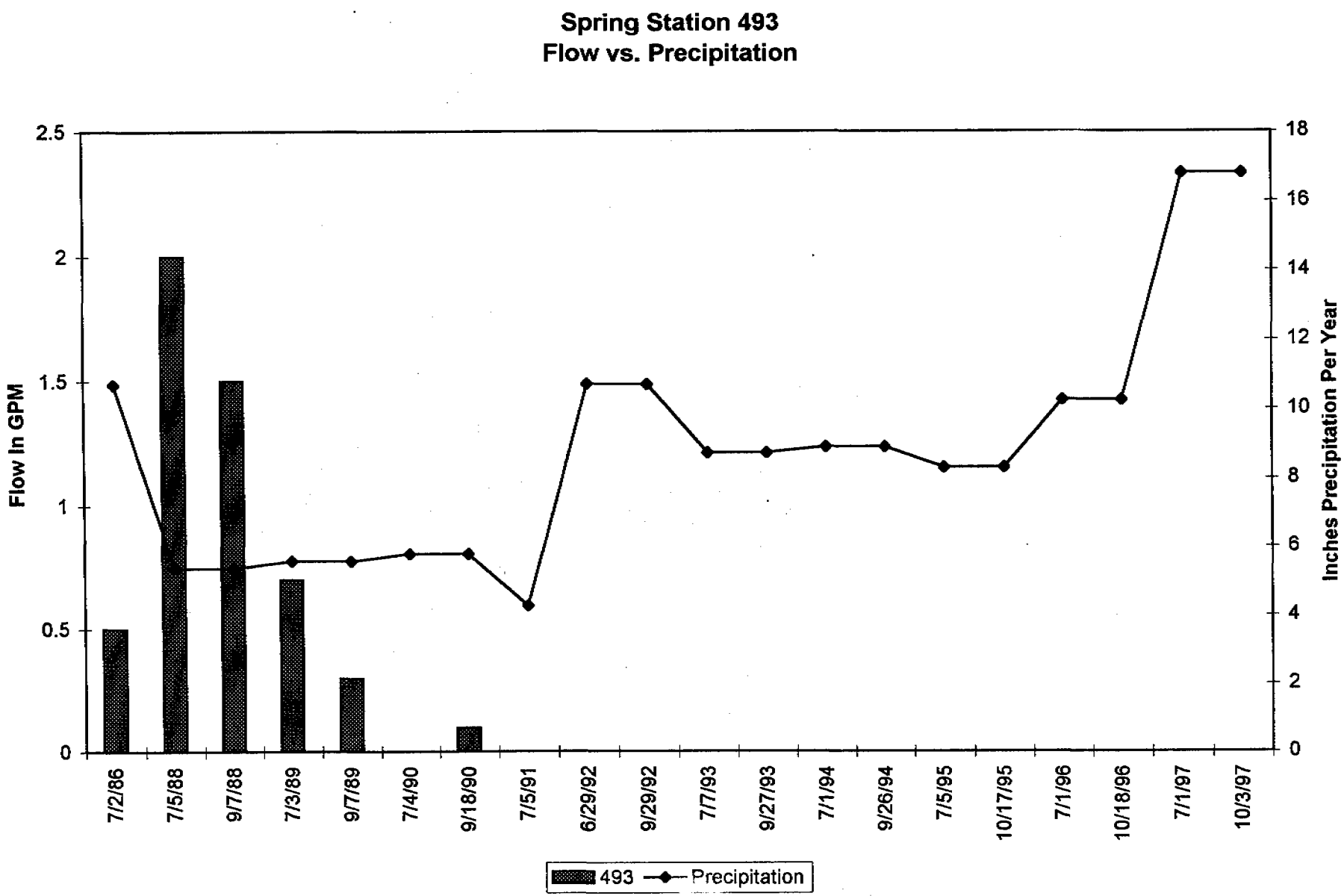

Stream Station M1
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
0
2
4
6
8
10
12
14
16
18
7/2/86
07/05/88
09/07/88
07/03/89
09/07/89
07/04/90
09/18/90
07/05/91
06/29/92
09/29/92
07/07/93
09/27/93
07/01/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M1
Precipitation

STREAM STATION M1

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		14.0			
10/09/87	9:13 AM	4.3	3.2	7.8	240
07/05/88	8:40 AM	9	5.6	8	235
09/07/88	9:15 AM	8.7	5	8.6	240
07/03/89	8:20 AM	12	4	8.3	400
09/07/89	10:35 AM	15.0	6	8.1	420
07/04/90	8:10 AM	8.7	5	8.4	420
09/18/90	9:30 AM	9.0	5	8.6	380
07/05/91	11:00 AM	2.2	8	8.58	380
06/29/92	10:30AM	10	7.2	8.39	419
09/29/92	10:15 AM	5.7	3.1	6.99	395
07/07/93	10:50 AM	8.071	6.4	6.89	355
09/07/93	9:50 AM	6.726	6.2	6.5	365
07/01/94	9:20 AM	7.21	7.1	7.52	365
09/26/94	11:25 AM	6.7	9.9	8.46	405
07/05/95	10:15 AM	8.6	5	8.10	245
10/17/95	11:00 AM	6	5	7.6	379
07/01/96	10:10 AM	10		8.6	428
10/18/96	10:50 AM	5.5	1	8.4	444
07/01.97	10:35 AM	12	5	7.9	401
10/03/97	11:13 AM	12	5	7.4	432
AVG		8.64	5.4	7.96	367
MAX		15.00	9.9	8.60	444
MIN		2.20	1.0	6.50	235
STD DEV		3.18	1.9	0.63	70

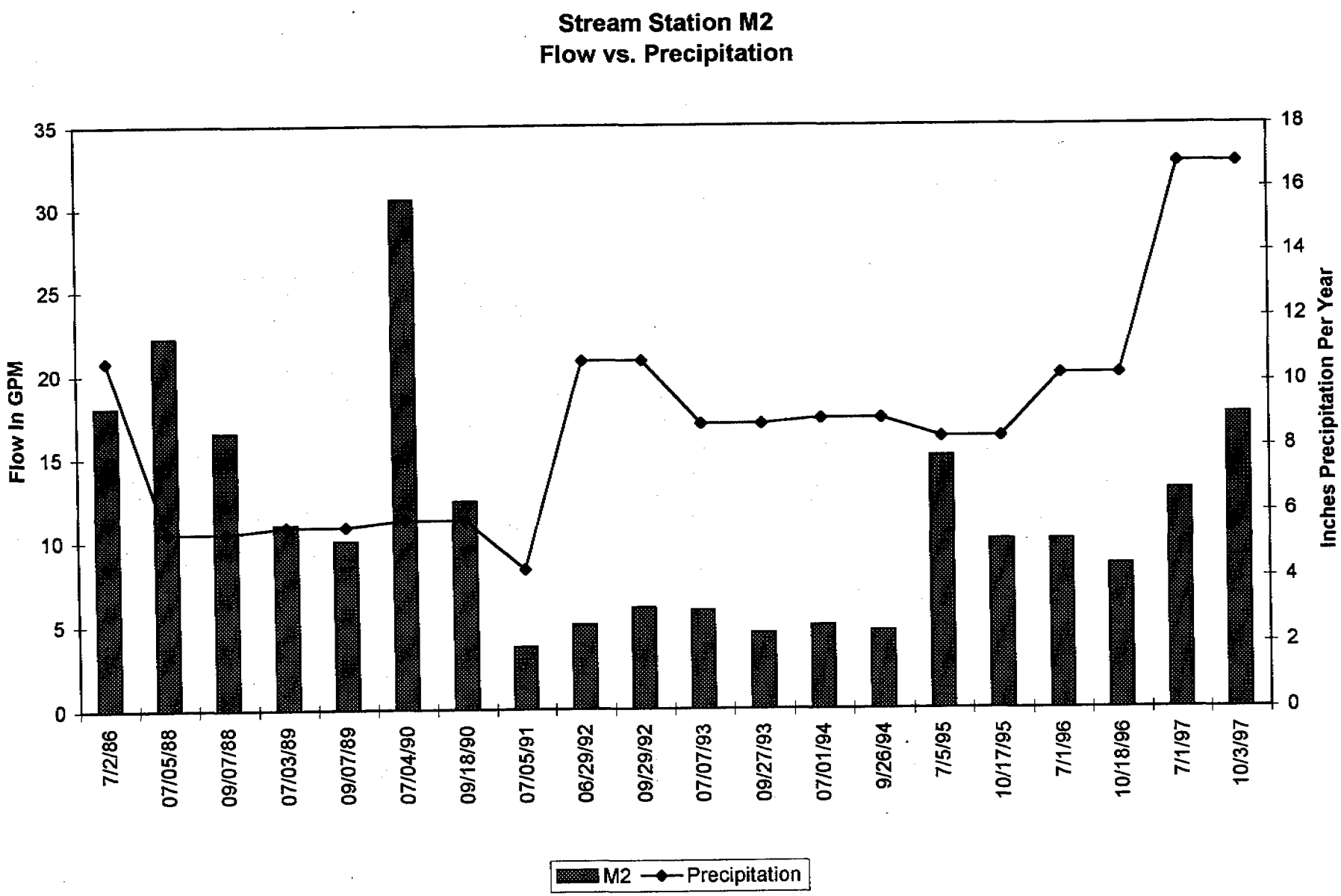
SPRING STATION 493

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		0.5		6.6	359
07/05/88	8:47 AM	2.0	5.2	8.0	205
09/07/88	9:20 AM	1.5	6.0	8.7	230
07/03/89	8:20 AM	0.7	5.0	8.2	410
09/07/89	10:40 AM	.3	6.0	8.0	450
07/04/90	8:30 AM	0.0			
09/18/90	9:45 AM	0.1	6.0	8.3	370
07/05/91	11:48 AM	0			
06/29/92	10:40 AM	0			
09/29/92	10:35 AM	0			
07/07/93	11:00 AM	0			
09/27/93	10:00 AM	0			
07/01/94	9:25 AM	0			
09/26/94	11:30 AM	0			
07/05/95	10:18 AM	0			
10/17/95	11:10 AM	0			
07/01/96	10:15 AM	0			
10/18/96	10:55 AM	0			
07/01/97	10:40 AM	0			
10/03/97	11:20 AM	0			
AVG		0.26	5.6	7.97	337
MAX		2.00	6.0	8.70	450
MIN		0.00	5.0	6.60	205
STD DEV		0.55	0.5	0.72	99


Spring Station 493
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
2.5
2
1.5
1
0.5
0
18
16
14
12
10
8
6
4
2
0
7/2/86
7/5/88
9/7/88
7/3/89
9/7/89
7/4/90
9/18/90
7/5/91
6/29/92
9/29/92
7/7/93
9/27/93
7/1/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
493
Precipitation

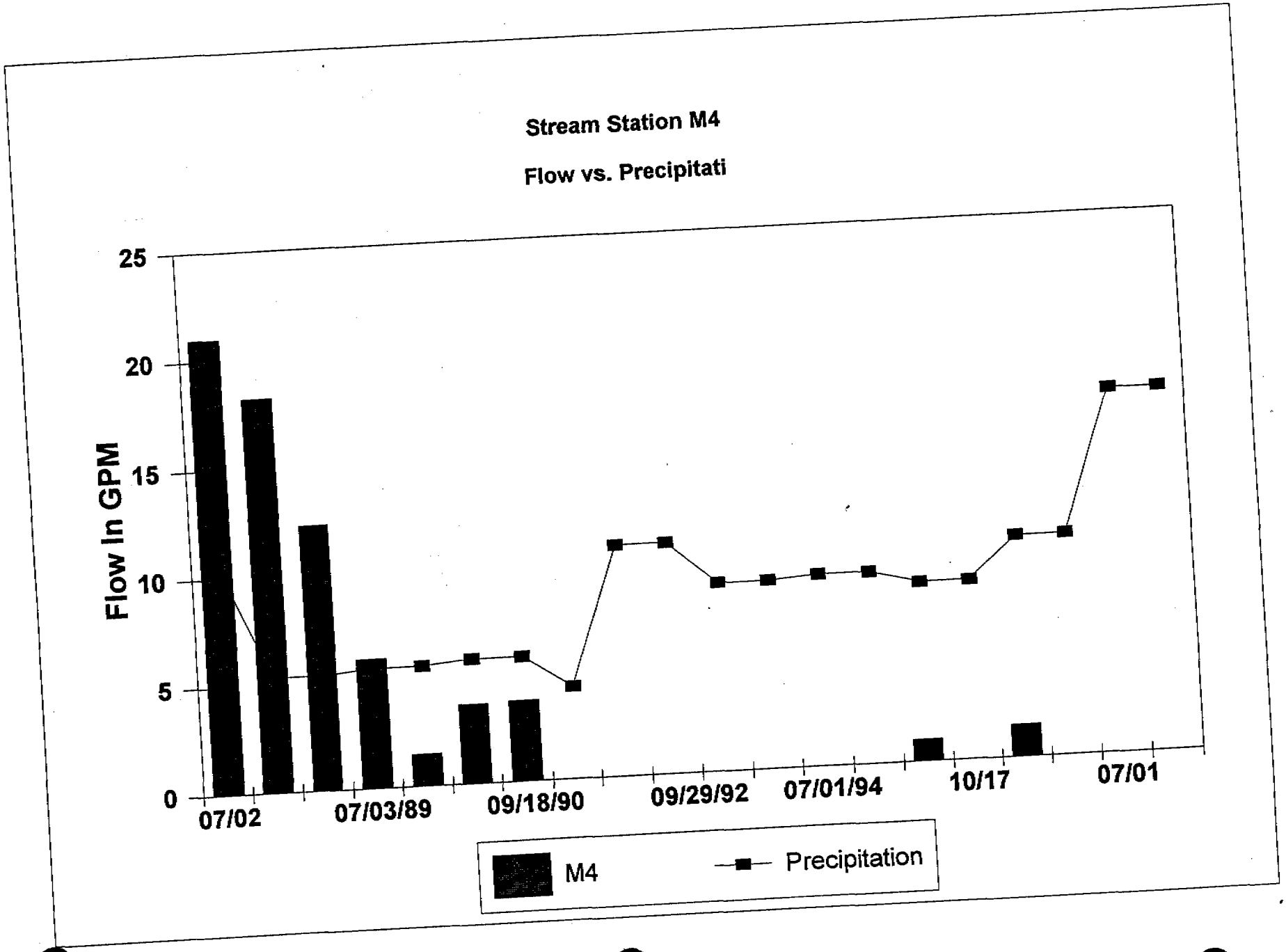
STREAM STATION M2

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		18.0			
10/09/87	9:50 AM	20.0	2.6	8.5	360
07/05/88	9:05 AM	22.2	6.5	6.9	250
09/07/88	9:45 AM	16.5	8.0	8.8	250
07/03/89	8:50 AM	11.0	5.0	8.4	360
09/07/89	10:50 AM	10.0	8.0	8.2	410
07/04/90	8:55 AM	30.5	7.0	8.6	430
09/18/90	10:15 AM	12.4	6.0	8.3	340
07/05/91	11:50 AM	3.7	8.0	8.3	410
06/29/92	10:55 AM	5	7.4	8.47	424
09/29/92	10:45 AM	6	3.6	7.31	417
07/07/93	11:25 AM	5.82	5.6	6.95	348
09/27/93	10:25 AM	4.48	5.1	6.9	
07/01/94	9:30 AM	4.9	7.2	7.52	387
09/26/94	11:45 AM	4.6	10.3	8.55	402
07/05/95	10:25 AM	15	5	8.15	260
10/17/95	11:20 AM	10	4	8.39	420
07/01/96	10:25 AM	10	8	8.33	409
10/18/96	11:05 AM	8.5	0.5	8.74	495
07/01/97	10:50 AM	13	5	8.13	405
10/03/97	11:33 AM	17.5	5	8.44	393
AVG		11.86	5.9	8.09	377
MAX		30.50	10.3	8.80	495
MIN		3.70	0.5	6.90	250
STD DEV		7.02	2.2	0.62	65


Stream Station M2
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
35
30
25
20
15
10
5
0
18
16
14
12
10
8
6
4
2
0
7/2/86
07/05/88
09/07/88
07/03/89
09/07/89
07/04/90
09/18/90
07/05/91
06/29/92
09/29/92
07/07/93
09/27/93
07/01/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M2
Precipitation

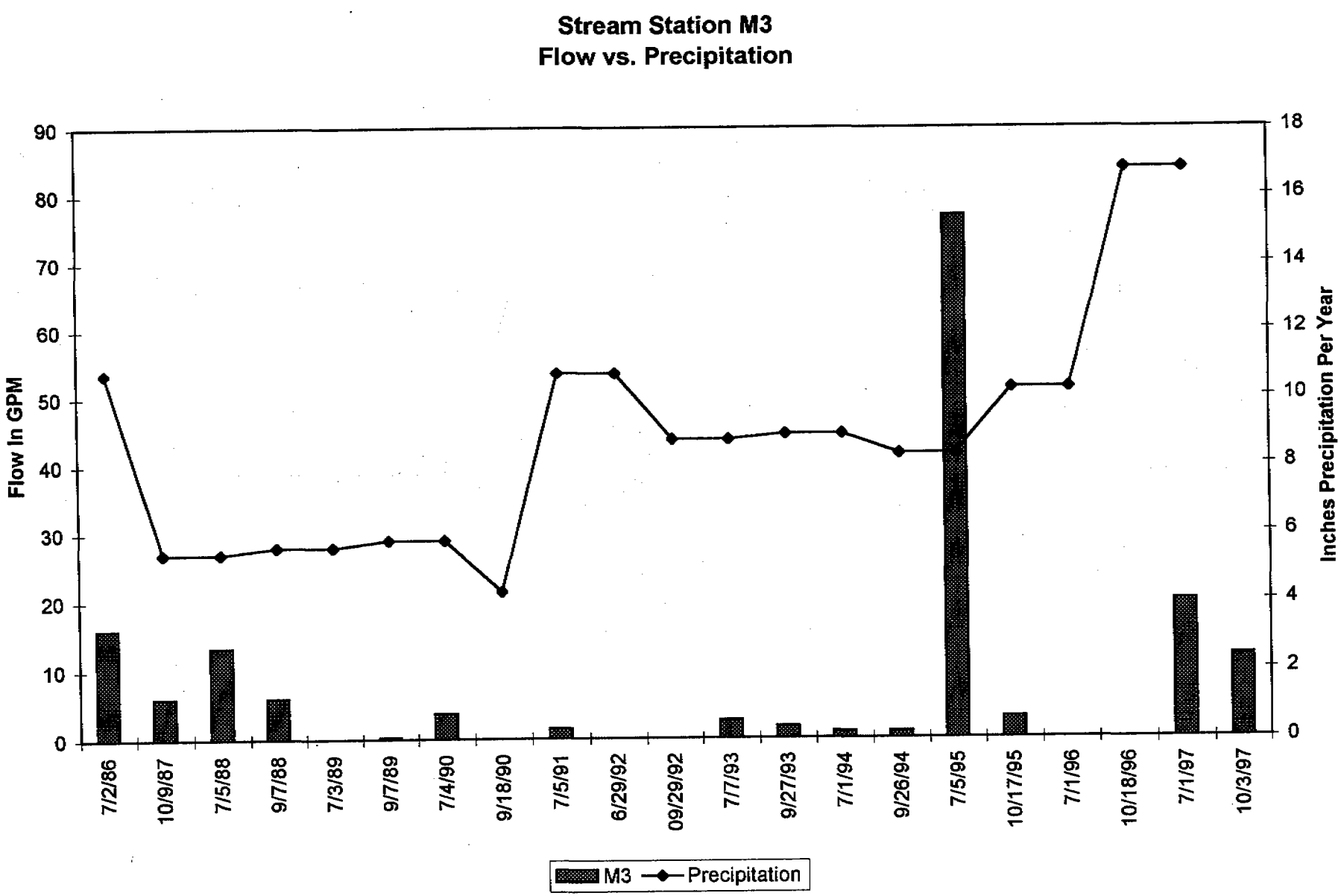
STREAM STATION M4

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		21.0		7.4	356
10/09/87	10:15 AM	20.0	3.4	8.6	440
07/05/88	9:35 AM	18.2	7.8	8.3	262
09/07/88	10:05 AM	12.3	8.0	9.2	280
07/03/89	9:10 AM	6.0	5.0	8.6	380
09/07/89	11:10AM	1.5	9.0	8.3	410
07/04/90	9:15 AM	3.7	7.5	8.7	430
09/18/90	10:30 AM	3.8	5.0	8.3	330
07/05/91	12:00 PM	0			
06/29/92	11:45 AM	0			
09/29/92	11:30 AM	0			
07/07/93	11:47	0			
09/27/93	11:47	0			
07/01/94	9:50 AM	0			
09/26/94	12:05 AM	0			
07/05/95	10:50 AM	1	9	8.28	283
10/17/95	11:35 AM	0			
07/01/96	9:55 AM	1.5	5	7.92	436
10/18/96	11:20 AM	0			
07/01/97	11:15 AM	0			
10/03/97	11:50 AM	0			
AVG		4.24	6.6	8.36	361
MAX		21.00	9.0	9.20	440
MIN		0.00	3.4	7.40	262
STD DEV		7.13	2.1	0.48	69


Stream Station M4
Flow vs. Precipitati
Flow In GPM
25
20
15
10
5
0
07/02
07/03/89
09/18/90
09/29/92
07/01/94
10/17
07/01
M4
Precipitation

STREAM STATION M3

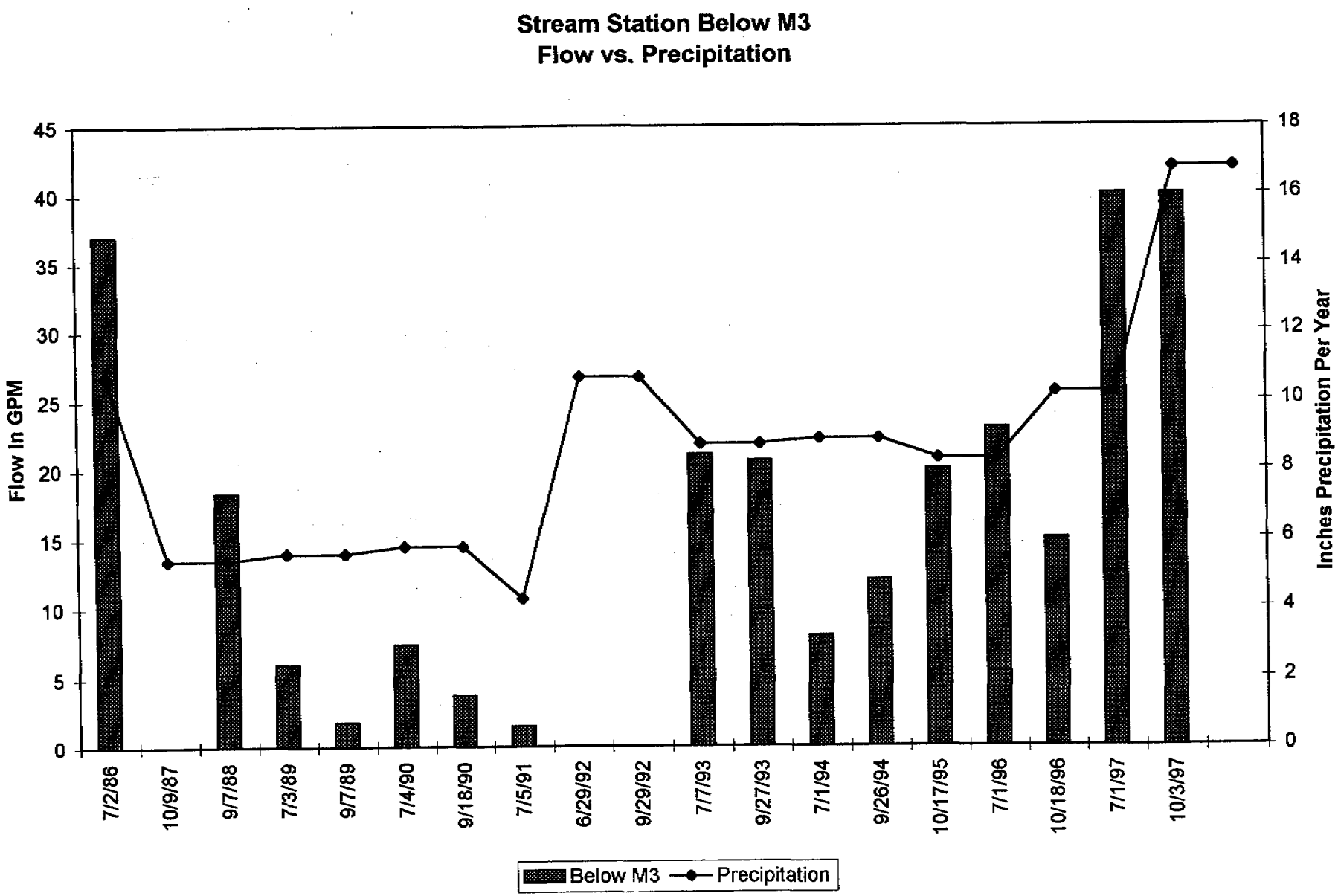
DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		16.0		7.5	360
10/09/87	10:25 AM	6.0	2.8	8.3	400
07/05/88	9:45 AM	13.3	8.4	8.5	267
09/07/88	10:10 AM	6.0	7.9	9.1	265
07/03/89	9:30 AM	0.0			
09/07/89	1:15 AM	0.3	5.0	7.9	760
07/04/90	9:30 AM	3.7	7.0	8.7	430
09/18/90	10:30 AM	0.0			
07/05/91	12:20 AM	1.5	6.0	8.1	810
06/29/92	11:45 AM	0			
09/29/92	11:30 AM	0			
07/07/93	11:50 AM	2.69	4.8	6.2	1178
09/27/93	10:50 AM	1.79	4.2	6.3	1195
07/01/94	9:55 AM	1.0	5.2	7.5	1210
09/26/94	12:00 PM	1	10	7.9	1340
07/05/95	10:55 AM	77	7	8.23	539
10/17/95	11:40 AM	3	5	7.57	1304
07/01/96	10:45 AM	0			
10/18/96	11:20 AM	0			
07/01/97	11:20 AM	20	5.5	7.8	1170
10/03/97	12:08 PM	12	5	7.87	1110
AVG		7.87	6.0	7.83	823
MAX		77.00	10.0	9.10	1340
MIN		0.00	2.8	6.20	265
STD DEV		16.90	1.9	0.78	411


Stream Station M3
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
0
10
20
30
40
50
60
70
80
90
0
2
4
6
8
10
12
14
16
18
7/2/86
10/9/87
7/5/88
9/7/88
7/3/89
9/7/89
7/4/90
9/18/90
7/5/91
6/29/92
09/29/92
7/7/93
9/27/93
7/1/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M3
Precipitation

STREAM STATION BELOW M3

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86 [1]		37		7.45	363
10/09/87 [1]		26	3.1	8.5	420
07/05/88 [1]		31.5	8.1	8.4	264.5
09/07/88 [1]		18.3	8	9.2	272.5
07/03/89 [1]		6	5	8.6	380
09/07/89 [1]		1.8	7	8.1	585
07/04/90 [1]		7.4	7.3	8.7	430
09/18/90 [1]		3.8	5	8.3	330
07/05/91 [1]		1.5	6	8.1	810
06/29/92 [1]		0			
07/07/93	12:00 PM	21.07	6.2	6.01	2190
09/27/93	11:00 AM	20.63	6	6.25	2205
07/01/94	10:00 AM	8	7.2	7.8	2285
09/26/94	12:09 PM	12	8.7	7.19	2330
10/17/95	12:00 PM	20	6	7.25	2350
07/01/96	10:55 AM	23	7	8.37	2170
10/18/96	11:30 PM	15	5	7.55	1355
07/01/97	12:15 PM	40	5	7.57	1919
10/03/97	11:45 AM	40	5.5	7.57	2120
AVG [2]		22.19	6.3	7.28	2103
MAX [2]		40.00	8.7	8.37	2350
MIN [2]		8.00	5.0	6.01	1355
STD DEV [2]		11.18	1.2	0.74	309

1. Flow is a combination of M3 & M4; temp., pH, and conductivity are averages of M3 & M4. For use in comparing later values since this station was added in 1993.
2. Statistics include only data from 1993 - 1997.


Stream Station Below M3
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
45
40
35
30
25
20
15
10
5
0
18
16
14
12
10
8
6
4
2
0
7/2/86
10/9/87
9/7/88
7/3/89
9/7/89
7/4/90
9/18/90
7/5/91
6/29/92
9/29/92
7/7/93
9/27/93
7/1/94
9/26/94
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
Below M3
Precipitation

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: M8 | Property: Star Point | Location: 2400' N 250' W of SE corn. Sec 18, T15S, R6E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 6300

Date		Field Measurements				Laboratory Measurements																	Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)		
Jan-88																							
Feb-88																							
Mar-88																							
Apr-88																							
May-88																							
Jun-88	06/01/88	0.31				230																	
Jul-88	07/15/88	0.04				276																	
Aug-88	08/13/88	0.03																					
Sep-88	09/30/88	0.04				310																	
Oct-88																							
Nov-88																							
Dec-88																							
Jan-89																							
Feb-89																							
Mar-89																							
Apr-89	04/27/89					1098																	FLOW NOT MEASURED
May-89																							
Jun-89	06/06/89	0.03				1280																	
Jul-89	07/03/89	0.03				1050																	
Aug-89	08/22/89	0.06																					
Sep-89	09/15/89	0.06				1196																	
Oct-89																							
Nov-89																							
Dec-89																							
Jan-90																							
Feb-90																							
Mar-90																							
Apr-90																							
May-90	05/30/90	0.04				1434																	
Jun-90																							
Jul-90	07/04/90	0.07				1602																	
Aug-90	08/22/90	0.01																					
Sep-90	09/18/90	0.01				1566																	
Oct-90																							
Nov-90																							
Dec-90																							
Jan-91																							
Feb-91																							
Mar-91																							
Apr-91																							
May-91	05/15/91					1424				356	10	11	753						< 0.02	< 0.02	< 0.01		
Jun-91	06/12/91	0	7.2	1760	15	1280				356		12	803	148	166	6	32		< 0.02	< 0.02	< 0.01		
Jul-91	07/16/91	0.01	8.2	1660	17	1594				337	5	11	868	131	185	7	11		< 0.02	< 0.02	< 0.01		
Aug-91																							
Sep-91	09/17/91	0	8.4	1740	10	1492					12	13	862	156	190	6	29		< 0.02	< 0.02	< 0.01		
Oct-91																							
Nov-91																							
Dec-91																							
Jan-92																							
Feb-92																							
Mar-92																							
Apr-92																							
May-92	05/20/92	0.0049	8.4	1.6	10.3	1352				339	10	10	770	134	169	6	10		< 0.02	< 0.02			
Jun-92																							
Jul-92			9.6	1	8.5	1536				354	5	14	883	157	198	5	9		< 0.02	< 0.02			
Aug-92	08/27/92	0.005	9.6	1740	11.7																		
Sep-92	09/21/92	0.001	6.9	2	12.8	1464				271	17	12	883	131	193	7	10		< 0.02	< 0.02			
Oct-92																							
Nov-92																							
Dec-92																							
Jan-93																							
Feb-93																							
Mar-93																							
Apr-93																							
May-93																							
Jun-93	06/21/93	0.013	13.9	3480	18	2946				383	17	10	823	170	175	6	9		< 0.02	< 0.02	< 0.01		
Jul-93	07/07/93	0.002	7.1	1690	17.9	2972				354	0	11	864	157	176	6	10		< 0.02	< 0.02	< 0.01		
Aug-93	08/18/93	0.01	6.9	1700	8																		
Sep-93	09/27/93	0.002	7.1	1678	11.3	1396				298	0	11	852	154	157	8	10		< 0.02	< 0.02	< 0.01		
Oct-93																							
Nov-93																							
Dec-93																							

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1996

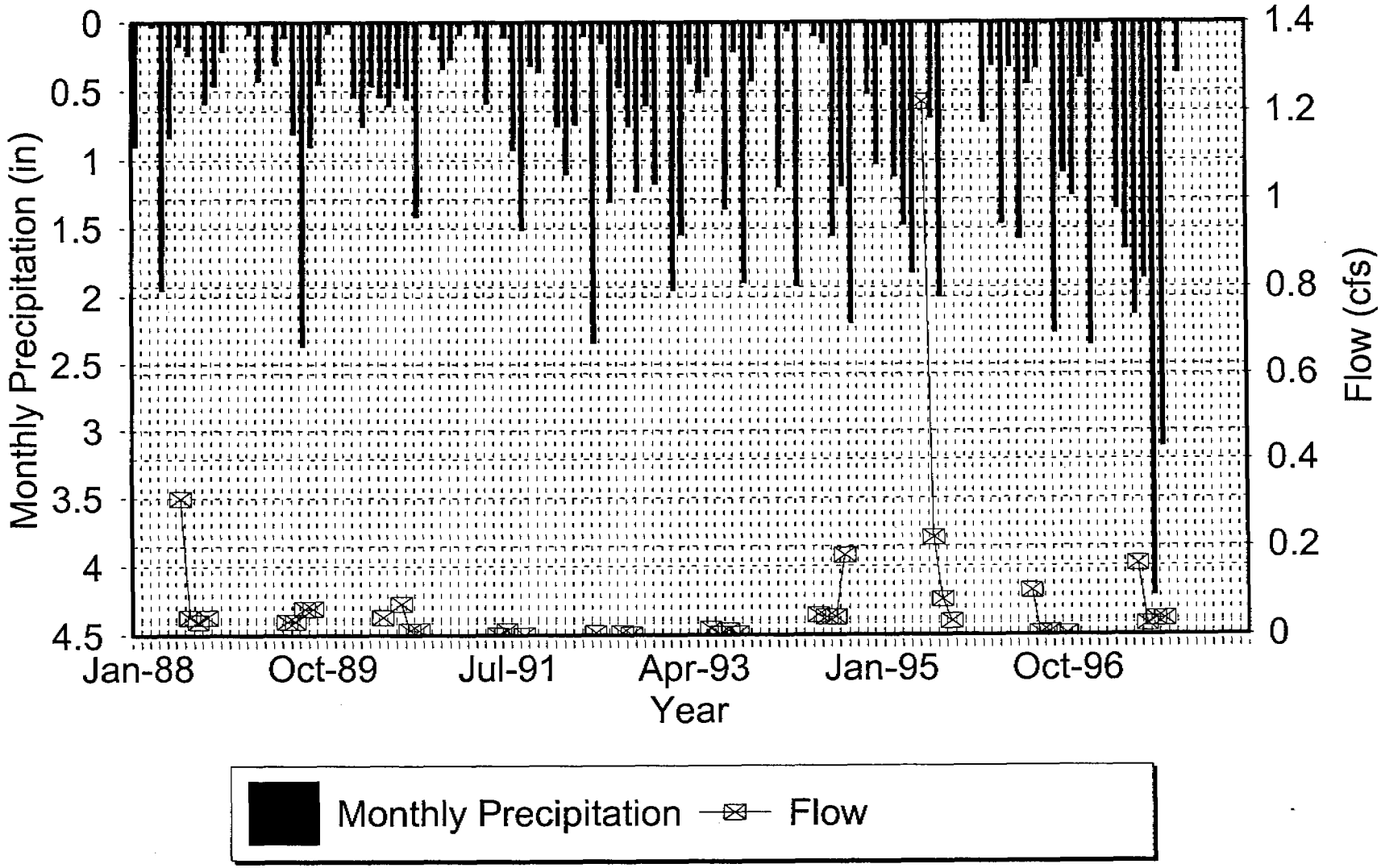
Station: M8 | Property: Star Point | Location: 2400' N 250' W of SE com. Sec 18, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8300

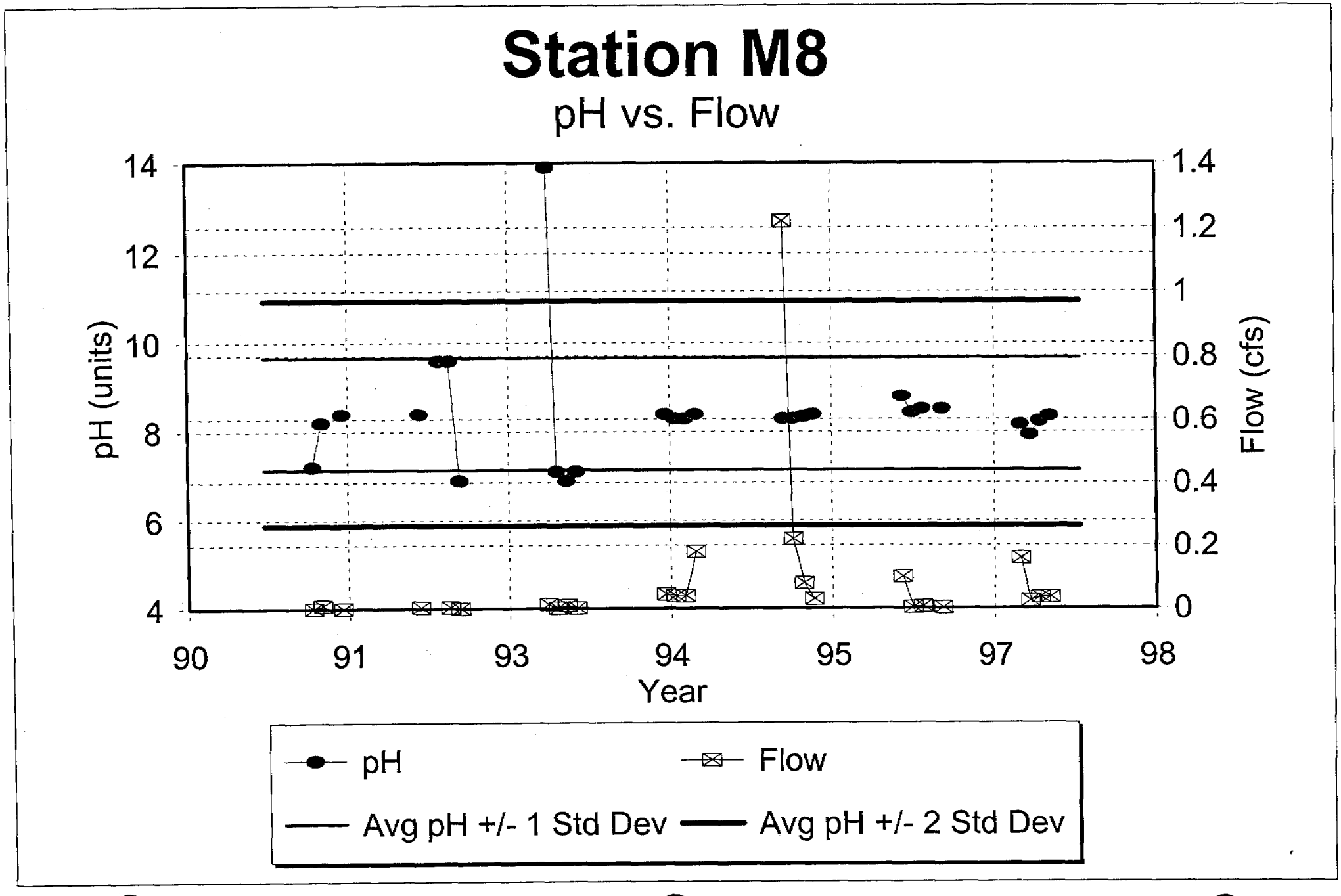
Date		Field Measurements				Laboratory Measurements																
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-94																						
Feb-94																						
Mar-94																						
Apr-94																						
May-94																						
Jun-94	06/06/94	0.045	6.4	1640	13.6	1290				384	0	6	694	161	140	10	8		0.03 <	0.02 <	0.01	
Jul-94	07/20/94	0.04	8.3	1500	13.3	1364				371	12	8	714	168	137	10	9		0.02 <	0.02 <	0.01	
Aug-94	08/31/94	0.04	8.3	1365	15																	RAIN IN A.M. = ~.10". LO
Sep-94	09/21/94	0.18	8.4	1515	15	1250				421	0	10	671	178	148	12	10		0.05	0.04 <	0.01	
Oct-94																						
Nov-94																						
Dec-94																						
Jan-95																						
Feb-95																						
Mar-95																						
Apr-95																						
May-95																						
Jun-95	06/22/95	1.22	8.3	751	4.8	450	6 <	2	386	219 <	2	2	160	89.6	39.5	1.9	2.3	0.3	0.02	0.06 <	0.005	
Jul-95	07/27/95	0.22	8.3	1800	18	1550	10 <	2	1210	320 <	2	10	910	181	185	7.6	9.2	-1.9 <	0.01 <	0.01 <	0.005	
Aug-95	08/23/95	0.08	8.34	1282	10																	New ph probe and calibra
Sep-95	09/28/95	0.03	8.4	1220	7.81	1610	26 <	2	1280	360 <	2	11	800	198	190	8.2	9.3	3.6 <	0.01	0.08	0.01	
Oct-95																						
Nov-95																						
Dec-95																						
Jan-96																						
Feb-96																						
Mar-96																						
Apr-96																						
May-96																						
Jun-96	06/12/96	0.1	8.8	1339	10	832			729	264	2 <	3	430	141	91.5	3.6	4.1	1.5	0.01 <	0.01 <	0.006	
Jul-96	07/23/96	0.004	6.44	1697	22	1590		2 <	1340	268	2 <	11	960	199	205	10	10	1.5	0.02	3.34	0.11	
Aug-96	08/19/96	0.006	8.52	1836	15																	
Sep-96																						
Oct-96	10/18/96	0.002	8.52	2320	0	1670	22	2 <	1410	360	2 <	12	1030	215	212	7.1	9.5	-0.7	0.01 <	0.06	0.008	
Nov-96																						
Dec-96																						
Jan-97																						
Feb-97																						
Mar-97																						
Apr-97																						
May-97																						
Jun-97	06/16/97	0.16	8.16	1490	12.5	976		2 <	859	265	2 <	4	530	166	108	4.2	4.6	2.7	0.02	0.05	0.01	
Jul-97	07/31/97	0.024	7.93	1972	10.5	1700	10	5 <	1300	320	10 <	6.1	900	220	190	6.3	8.1	3.5	0.01 <	0.04	0.005	
Aug-97	08/13/97	0.035	8.24	1901	12																	
Sep-97	09/17/97	0.035	8.36	1703	9	1600	1 <	5 <	1200	410	10 <	17	780	210	170	6.7	8	0.1	0.32	0.04	0.02	
Oct-97																						
Nov-97																						
Dec-97																						
END DATA																						
Count		38	27	27	27	32	6	6	9	21	21	22	22	21	21	21	21	9	22	22	19	
Minimum		0	6.9	1	0	230	1 <	2 <	386	219 <	0 <	2	160	89.6	39.5	1.9	2.3	-1.9 <	0.01 <	0.01 <	0.005	
Maximum		1.22	13.9	3480	22	2972	26 <	5 <	1410	421 <	17 <	17	1030	220	212	12	32	3.6 <	0.32 <	3.34 <	0.11	
Average		0.0789	8.4078	1510.5	12.178	1355.7	12.5 <	2.75 <	1079.3	334.76 <	5.8095 <	9.8682	770.91	164.98	163.1	6.8857	10.576	1.1778 <	0.0332 <	0.1805 <	0.0147	
Standard Deviation		0.1987	1.2624	695.48	4.4811	580.86	8.7512 <	1.299 <	324.87	50.434 <	5.4999 <	3.463	187.88	31.186	40.654	2.2837	6.8253	1.7862 <	0.0631 <	0.6897 <	0.0227	
Avg. -1 Std. Dev.		-0.12	7.1454	815.02	7.697	774.83	3.7468 <	1.451 <	754.46	284.33 <	0.3096 <	6.4052	583.03	133.79	122.44	4.602	3.7509	-0.608 <	-0.03 <	-0.509 <	-0.008	
Avg. +1 Std. Dev.		0.2776	9.6702	2206	16.659	1936.5	21.251 <	4.049 <	1404.2	385.2 <	11.309 <	13.331	958.79	196.17	203.75	9.1695	17.401	2.964 <	0.0963 <	0.8702 <	0.0374	
Avg. -2 Std. Dev.		-0.318	5.883	119.54	3.2159	193.97	-5.002 <	0.1519 <	429.59	233.89 <	-5.19 <	2.9422	395.16	102.61	81.788	2.3182	-3.074	-2.395 <	-0.093 <	-1.199 <	-0.031	
Avg. +2 Std. Dev.		0.4763	10.933	2901.5	21.14	2517.4	30.002 <	5.3481 <	1729.1	435.63 <	16.809 <	16.794	1146.7	227.35	244.4	11.453	24.227	4.7502 <	0.1594 <	1.5599 <	0.0601	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

Station M8

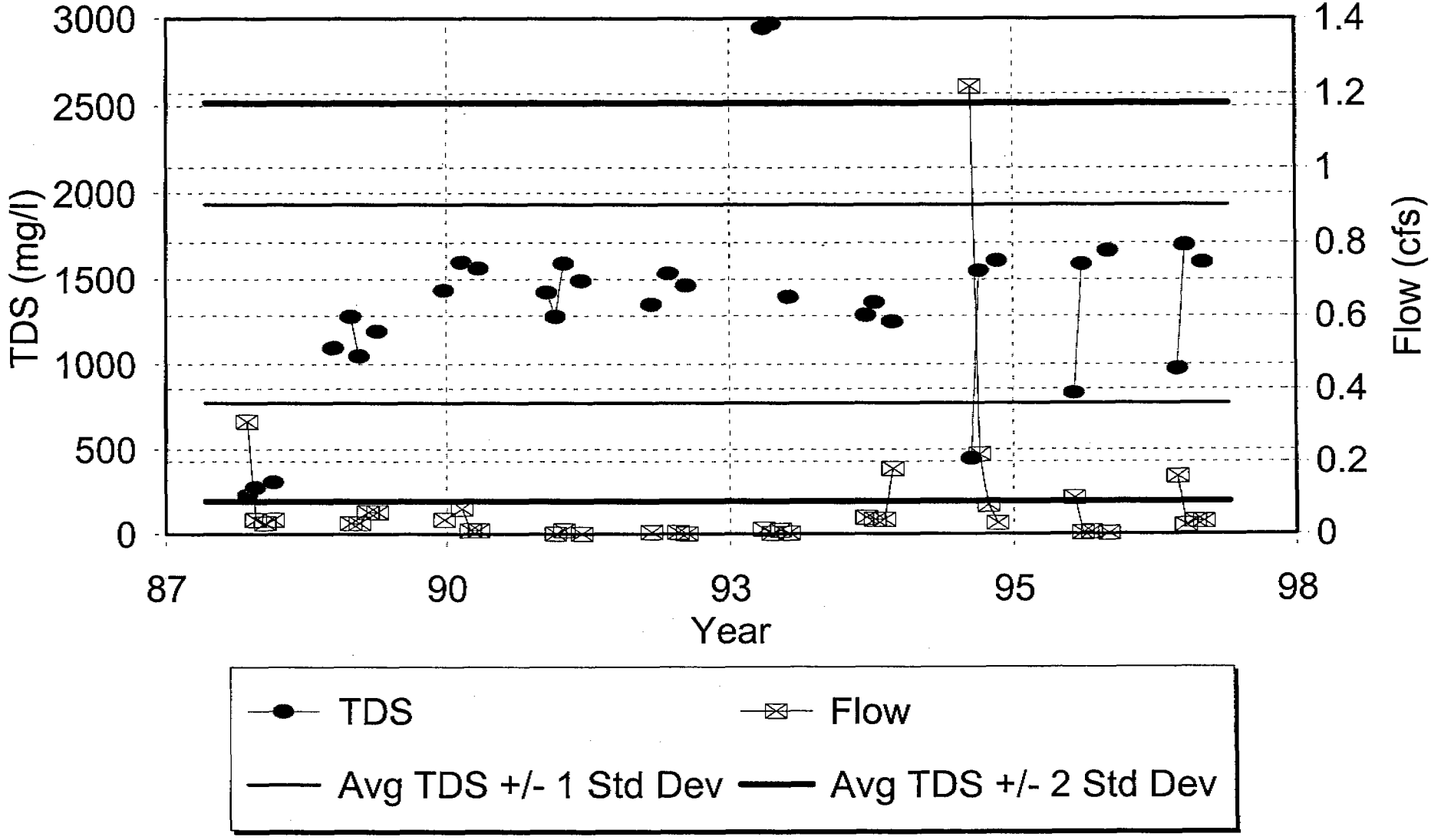
Monthly Precipitation vs. Flow




Station M8
pH vs. Flow
14
12
10
8
6
4
pH (units)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Flow (cfs)
90
91
93
94
95
97
98
Year
pH
Flow
Avg pH +/- 1 Std Dev
Avg pH +/- 2 Std Dev

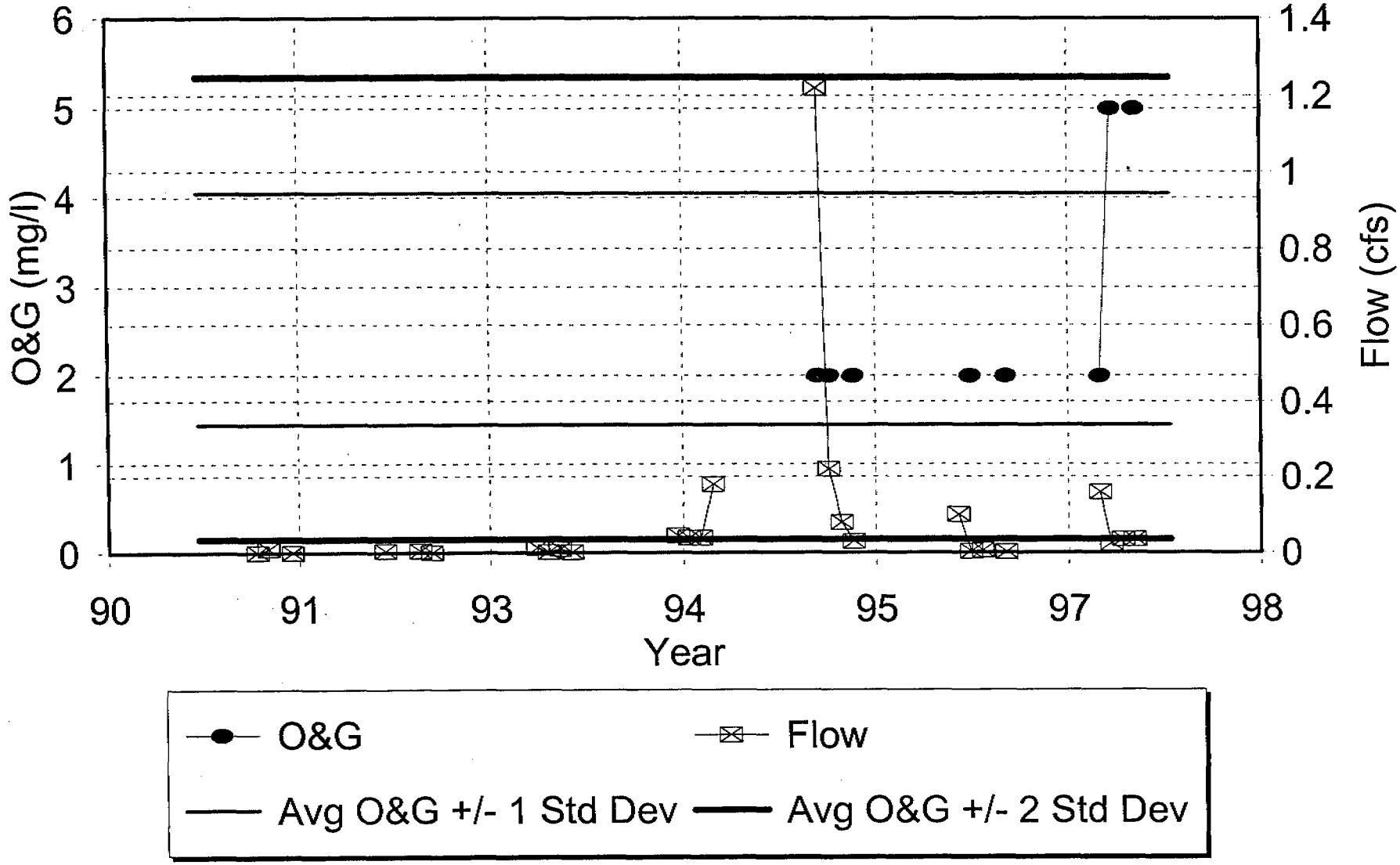
Station M8

TDS vs. Flow



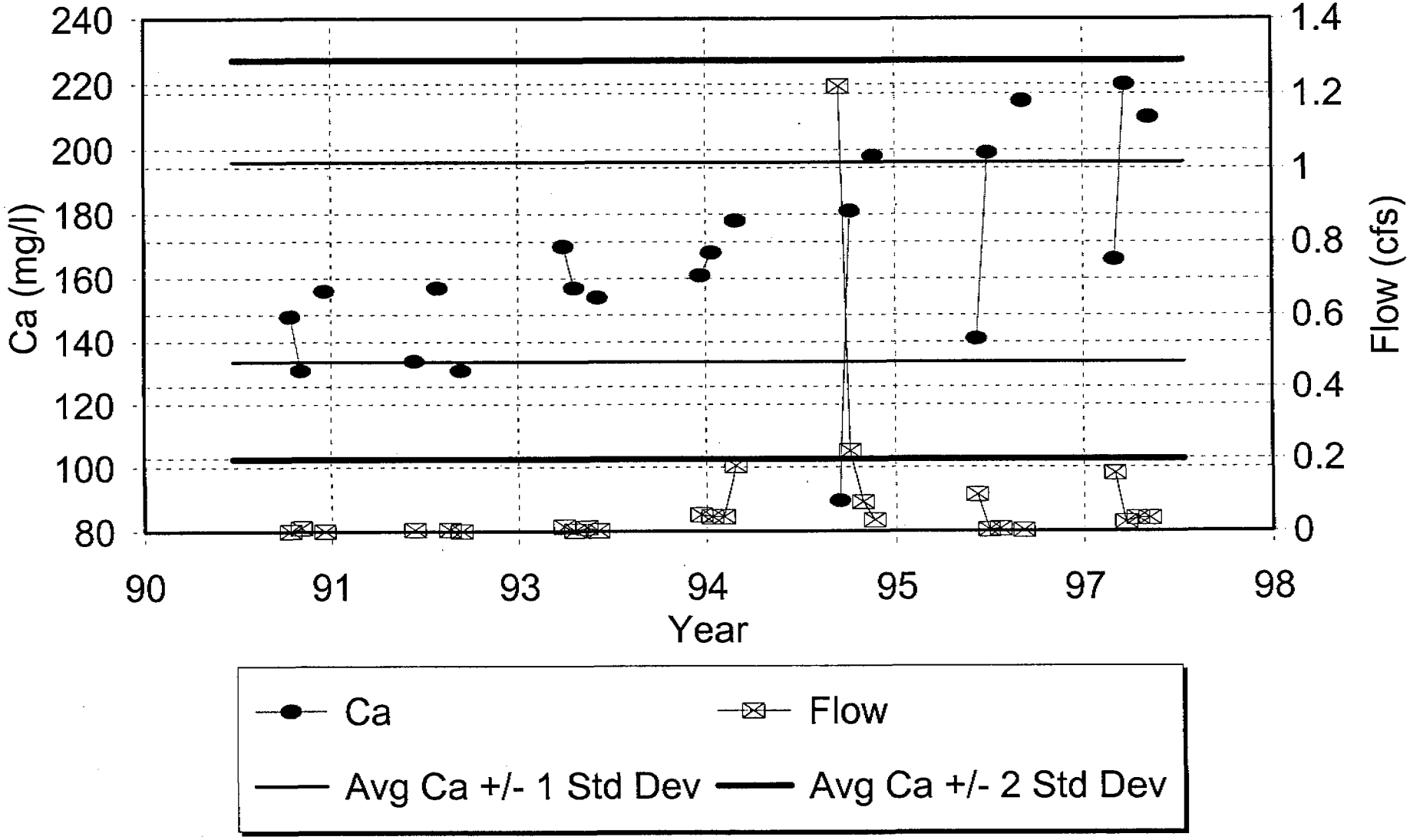
Station M8

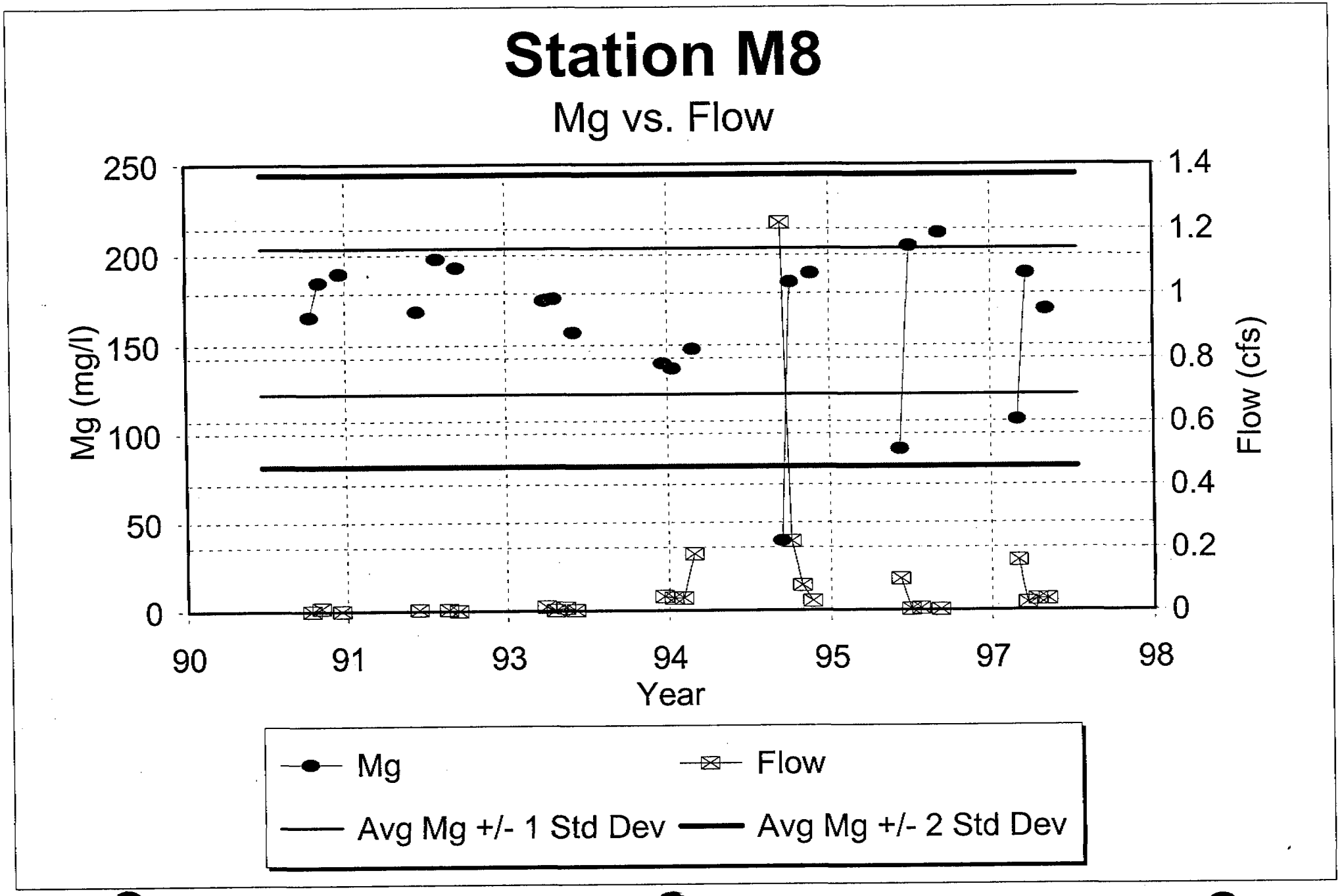
Oil & Grease vs. Flow



Station M8

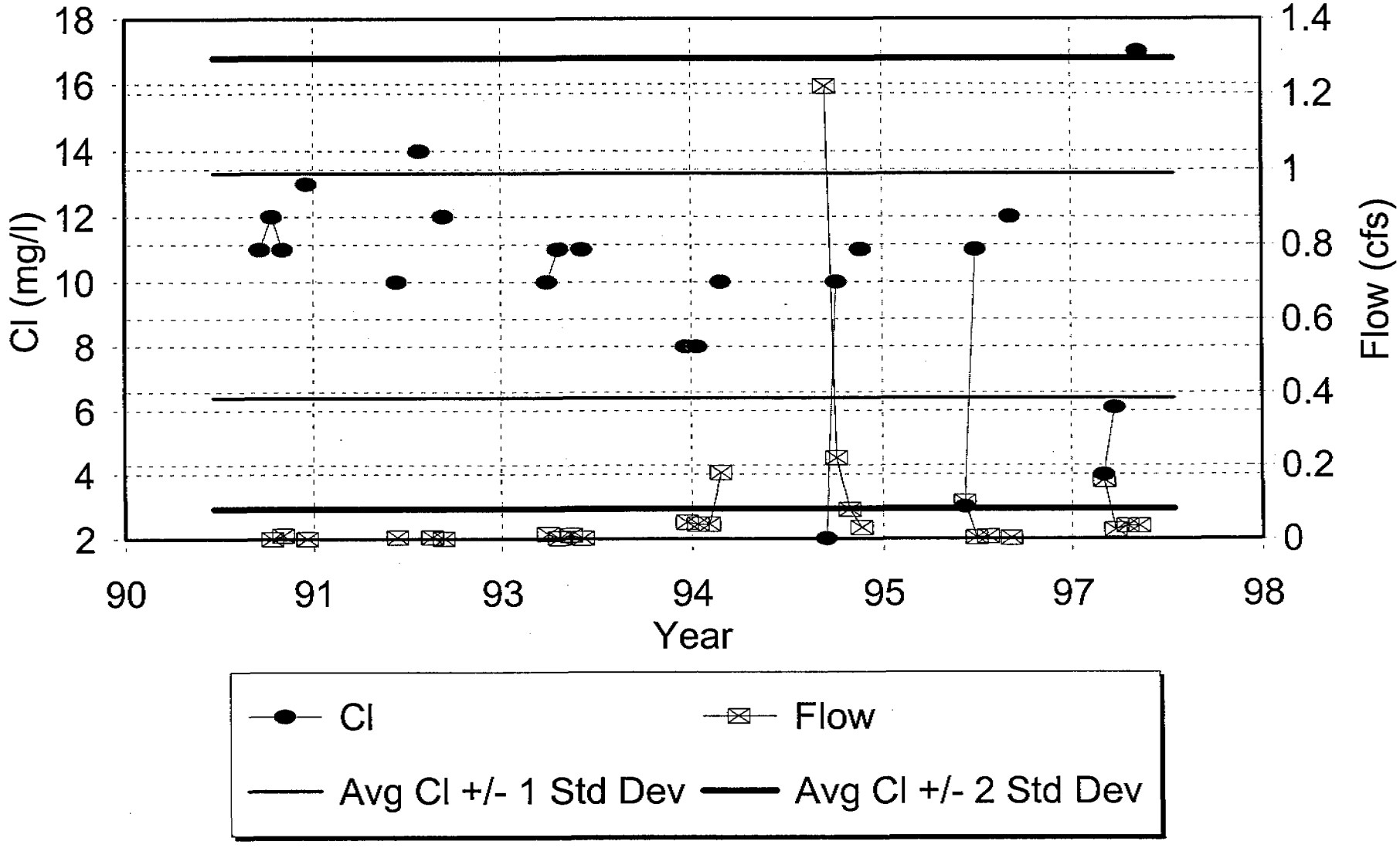
Ca vs. Flow




Station M8
Mg vs. Flow
Mg (mg/l)
250
200
150
100
50
0
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Flow (cfs)
90
91
93
94
95
97
98
Year
Mg
Flow
Avg Mg +/- 1 Std Dev
Avg Mg +/- 2 Std Dev

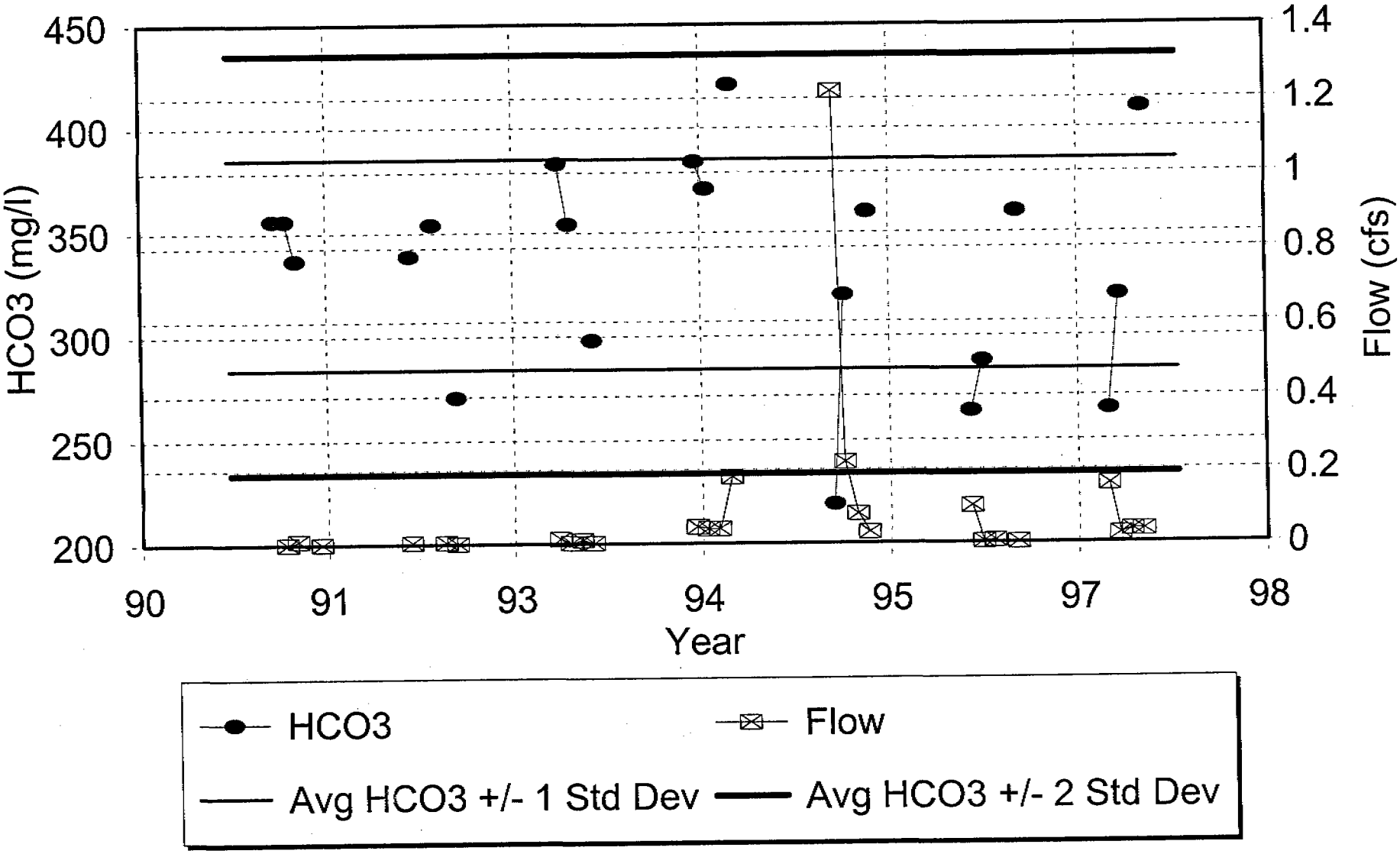
Station M8

Cl vs. Flow



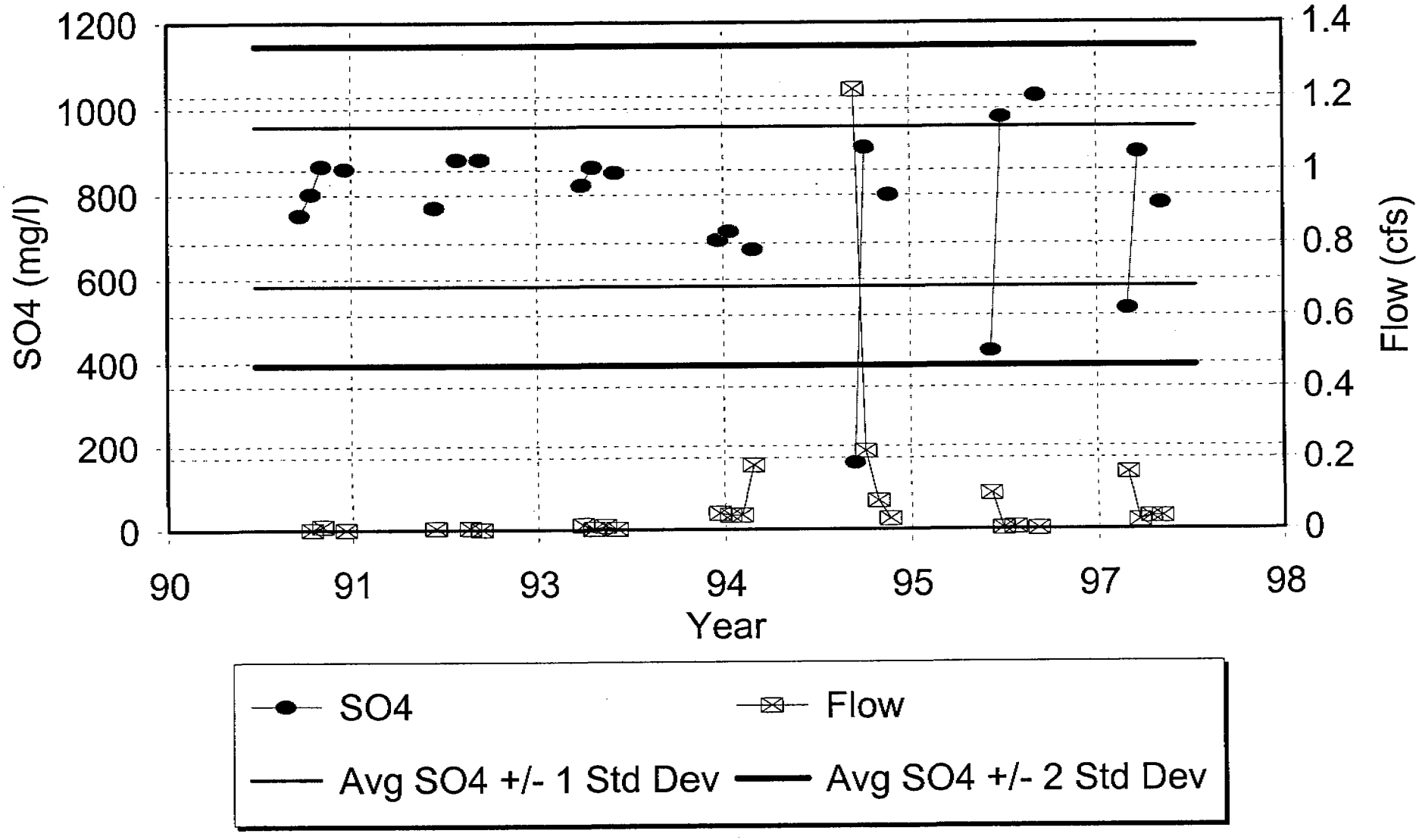
Station M8

HCO3 vs. Flow



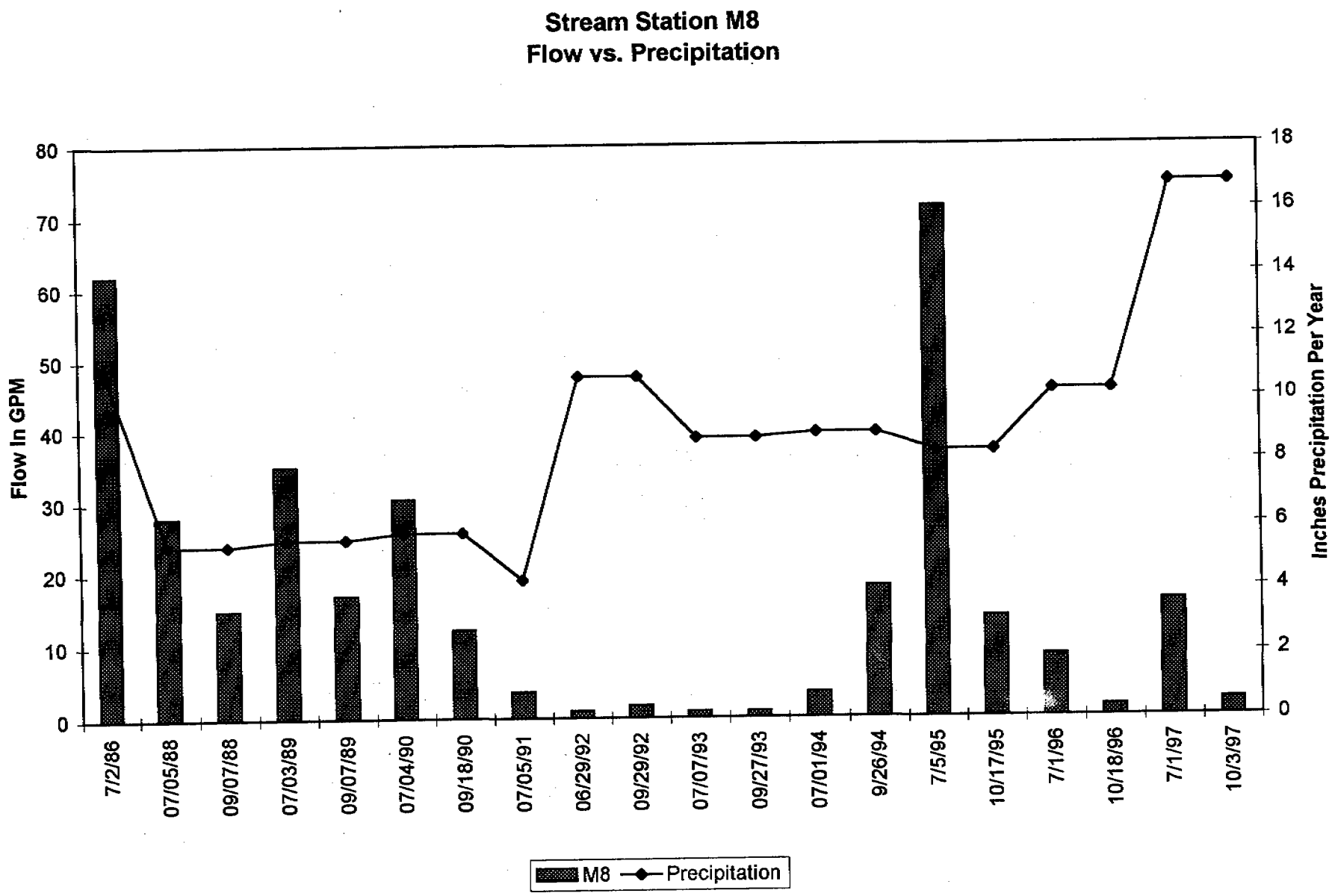
Station M8

SO4 vs. Flow



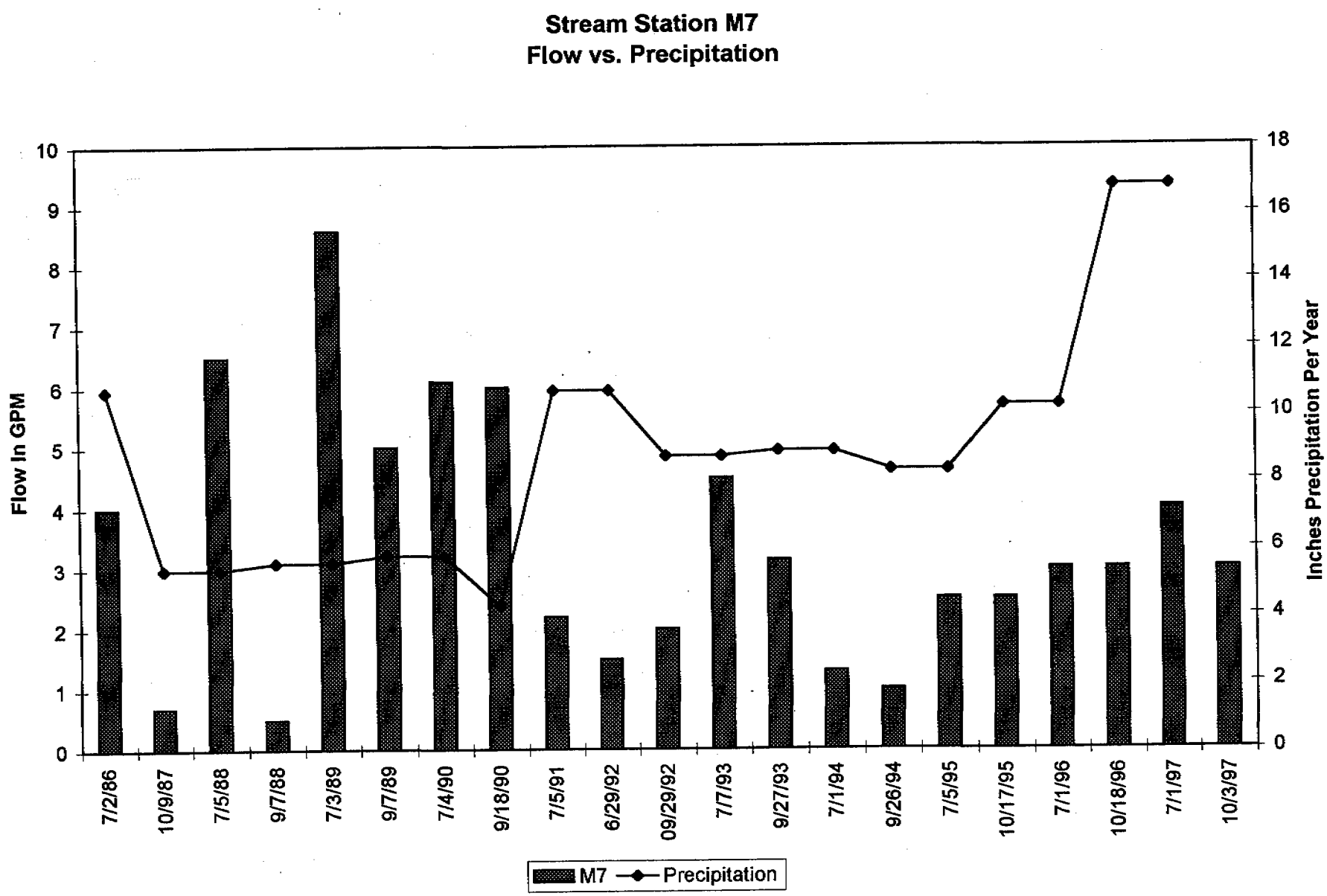
STREAM STATION M8

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		62.0		7.8	422
10/09/87	12:25 PM	25.0	5.8	8.9	220
07/05/88	11:00AM	28.0	16.2	8.4	398
09/07/88	11:30AM	15.0	12.0	9.6	315
07/03/89	11 :00AM	35.0	14.0	8.4	1390
09/07/89	12:50 PM	17.0	11.0	8.3	1500
07/04/90	10:35 AM	30.5	16.0	8.3	1810
09/18/90	11:40 AM	12.2	8.0	8.3	1640
07/05/91	1:15 PM	3.7	14.0	8.4	1570
06/29/92	1:45 PM	1	19.9	8.53	1710
09/29/92	1 :00PM	1.75	9.9	6.84	2050
07/07/93	11:10 PM	.90	17.9	7.12	1690
09/27/93	11:10AM	0.90	11.3	7.1	1678
07/01/94	10:30 AM	19.4	8	7.95	1545
09/26/94	1:30 PM	18	8.9	8.1	1497
07/05/95	12:30 PM	71.4	13	8.45	1068
10/17/95	12:55 PM	13.8	5	8.39	1922
07/01/96	12:15 PM	8.5	18	8.62	1890
10/18/96	12:35 PM	1.5	0	8.52	2320
07/01/97	1:00 PM	2.3	6	8.31	2060
10/03/97	12:45 PM	15.9	15	8.1	2170
AVG		18.27	11.5	8.21	1470
MAX		71.40	19.9	9.60	2320
MIN		0.90	0.0	6.84	220
STD DEV		19.23	5.1	0.62	629


Stream Station M8
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
0
10
20
30
40
50
60
70
80
0
2
4
6
8
10
12
14
16
18
7/2/86
07/05/88
09/07/88
07/03/89
09/07/89
07/04/90
09/18/90
07/05/91
06/29/92
09/29/92
07/07/93
09/27/93
07/01/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M8
Precipitation

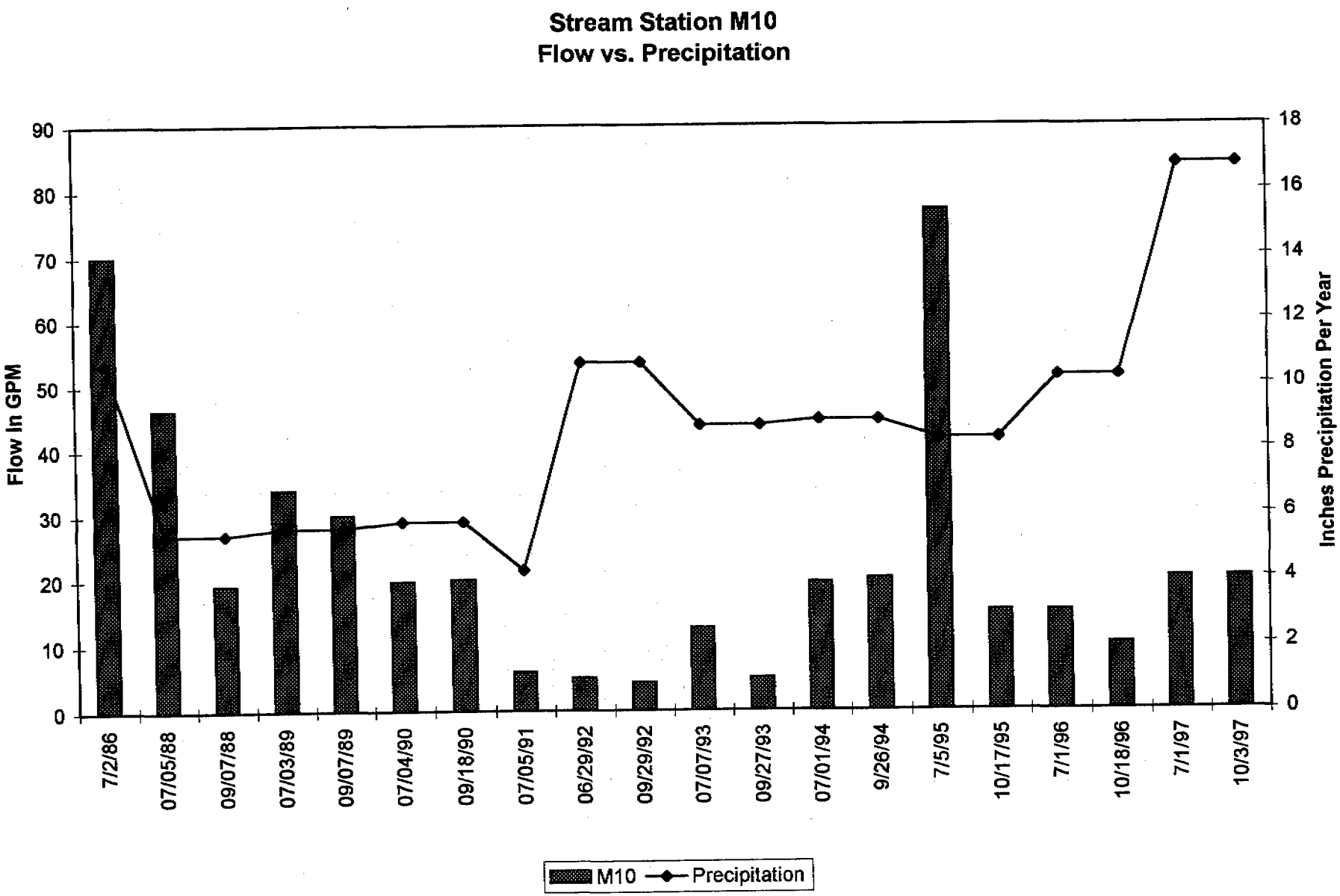
STREAM STATION M7

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		4.0		7.6	567
10/09/87	12:40 PM	0.7	11.4	8.5	695
07/05/88	11:05 AM	6.5	12.5	8.4	530
09/07/88	11:30 AM	0.5	17.0	9.3	630
07/03/89	11:10 AM	8.6	10.0	8.6	1530
09/07/89	12:55 PM	5.0	17.0	8.2	1400
07/04/90	10:45 AM	6.1	11.0	8.4	1320
09/18/90	11:35 AM	6.0	8.0	8.5	1300
07/05/91	1:15 PM	2.2	16.0	8.5	1030
06/29/92	1:35 PM	1.5	21.1	8.57	1216
09/29/92	1:05 PM	2	17.7	7.18	1230
07/07/93	1:15 PM	4.48	19.5	7.36	1120
09/27/93	11:15 AM	3.14	11.4	7.4	1140
07/01/94	10:35 AM	1.3	10.2	7.45	1230
09/26/94	1:35 PM	1	14.8	8.4	1637
07/05/95	12:35 PM	2.5	15	8.4	1039
10/17/95	1:00 PM	2.5	13	8.39	1922
07/01/96	12:20 PM	3	16	8.94	1290
10/18/96	12:45 PM	3	9	8.51	1320
07/01/97	12:50 PM	4	16	8.12	1588
10/03/97	1:05 PM	3	11	8.42	1243
AVG		3.38	13.9	8.24	1189
MAX		8.60	21.1	9.30	1922
MIN		0.50	8.0	7.18	530
STD DEV		2.12	3.6	0.54	357


Stream Station M7
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
0
1
2
3
4
5
6
7
8
9
10
0
2
4
6
8
10
12
14
16
18
7/2/86
10/9/87
7/5/88
9/7/88
7/3/89
9/7/89
7/4/90
9/18/90
7/5/91
6/29/92
09/29/92
7/7/93
9/27/93
7/1/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M7
Precipitation

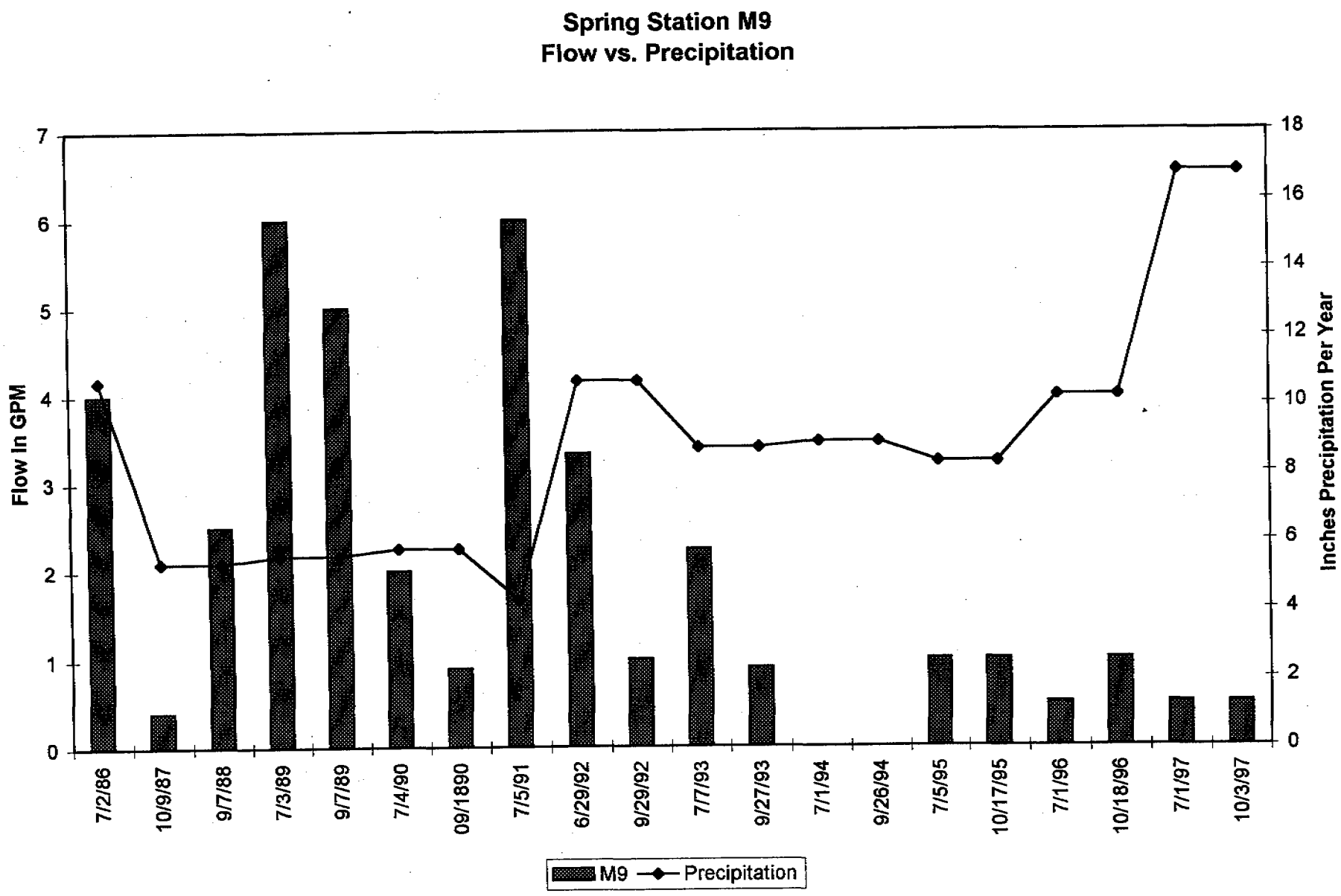
STREAM STATION M10

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		70.0		8.0	492
10/09/87	12:50 PM	25.0	7.0	8.8	525
07/05/88	11:48 AM	46.2	20.0	8.4	600
09/07/88	11:55 AM	19.2	14.0	9.4	398
07/03/89	11:30 AM	34.0	15.0	8.2	1420
09/07/89	1:10 PM	30.0	13.0	8.3	1510
07/04/90	11:00AM	19.7	15.0	8.5	1650
09/18/90	12:05 PM	20.0	7.0	8.2	1560
07/05/91	1:20 PM	15.0	15.0	8.3	1420
06/29/92	1:40 PM	5	17.3	8.34	1520
09/29/92	11:15 PM	4.3	10.9	6.98	1550
07/07/93	1:35 PM	12.6	18.5	7.04	1620
09/27/93	11:35 AM	4.93	12.2	7.00	1640
07/01/94	10:50 AM	21.5	9.6	7.75	1548
09/26/94	1:45 PM	20	10.1	8.36	1535
07/05/95	12:45 PM	77	15	8.42	1025
10/17/95	1:10 PM	15	6	8.4	1836
07/01/96	12:25 PM	15	19	8.53	1900
10/18/96	12:50 PM	10	1.5	8.48	1830
07/01/97	1:15 PM	20	9	8.28	1596
10/03/97	1:05 PM	20	16	8.25	1970
AVG		24.02	12.6	8.19	1388
MAX		77.00	20.0	9.40	1970
MIN		4.30	1.5	6.98	398
STD DEV		19.17	4.9	0.58	482


Stream Station M10
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
0
10
20
30
40
50
60
70
80
90
0
2
4
6
8
10
12
14
16
18
7/2/86
07/05/88
09/07/88
07/03/89
09/07/89
07/04/90
09/18/90
07/05/91
06/29/92
09/29/92
07/07/93
09/27/93
07/01/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M10
Precipitation

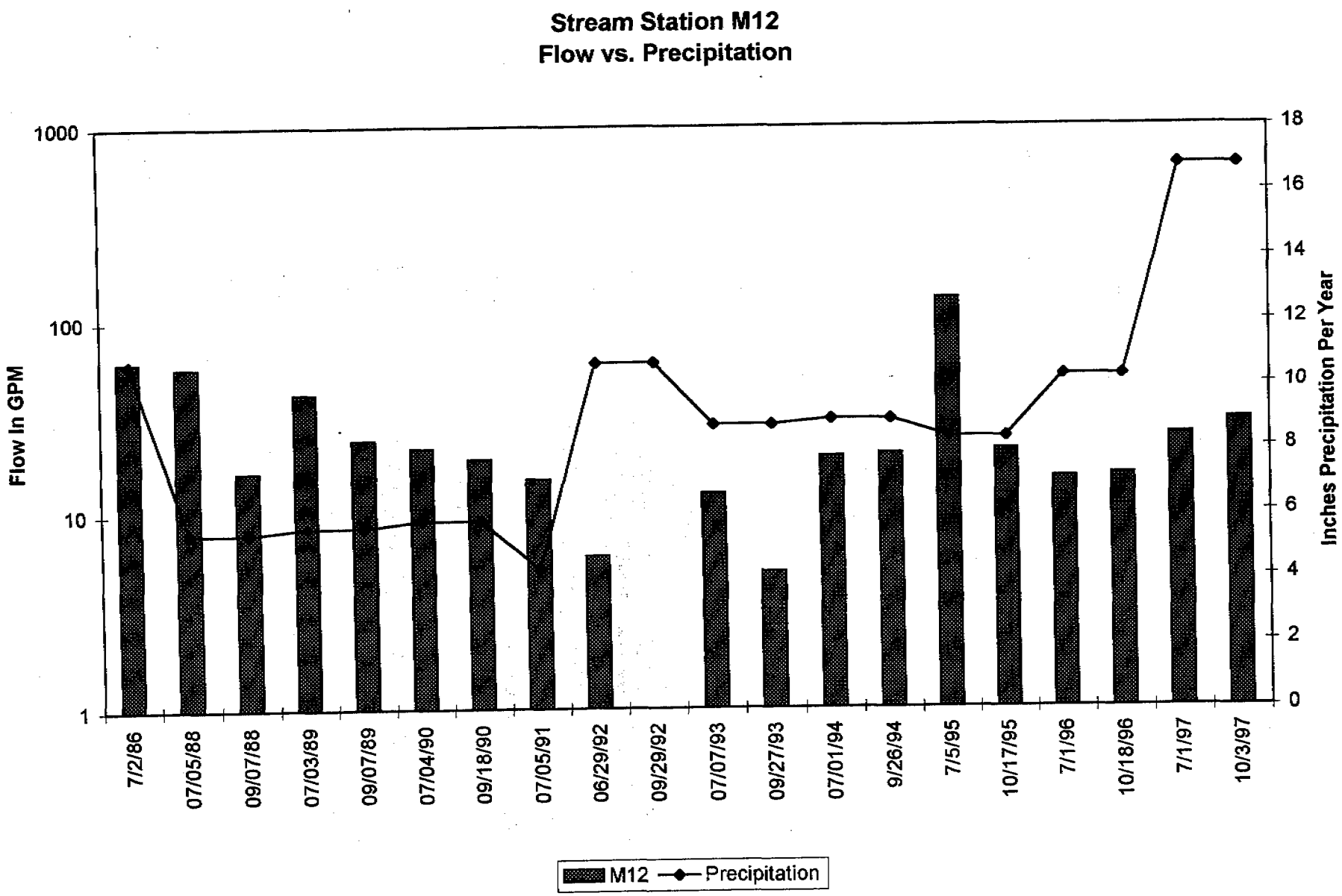
SPRING STATION M9

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		4.0		7.8	2046
10/09/87	12:55 PM	.4	11.6	8.2	1250
09/07/88	11:55 AM	2.5	14.5	8.8	1500
07/03/89	1135 AM	6.0	10.0	8.0	2020
09/07/89	1:05 PM	5.0	13.0	8.1	2000
07/04/90	11:05 AM	2.0	12.0	8.4	2110
09/1890	12:00A M	0.9	7.0	8.4	1770
07/05/91	1:00 PM	6.0	14.0	8.1	1850
06/29/92	1:45 PM	3.33	17.1	8.24	2090
09/29/92	1:10 PM	1	14.9	6.93	2200
07/07/93	1:25 PM	2.24	16.8	6.8	2050
09/27/93	11:25 AM	0.90	11.4	6.96	2055
07/01/94	10:55 AM	0			
09/26/94	1:40 PM	0			
07/05/95	12:40 PM	1	18	8.03	1661
10/17/95	13:05 PM	1	8	8.26	2200
07/01/96	12:28 PM	0.5	14	8.10	2280
10/18/96	12:50 PM	1.0	5	8.29	2218
07/01/97	1:00 PM	0.5			
10/03/97	1:10 PM	0.5	13	8.12	1895
AVG		1.94	12.5	7.97	1953
MAX		6.00	18.0	8.80	2280
MIN		0.00	5.0	6.80	1250
STD DEV		1.93	3.7	0.56	275


Spring Station M9
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
0
1
2
3
4
5
6
7
0
2
4
6
8
10
12
14
16
18
7/2/86
10/9/87
9/7/88
7/3/89
9/7/89
7/4/90
09/1890
7/5/91
6/29/92
9/29/92
7/7/93
9/27/93
7/1/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M9
Precipitation

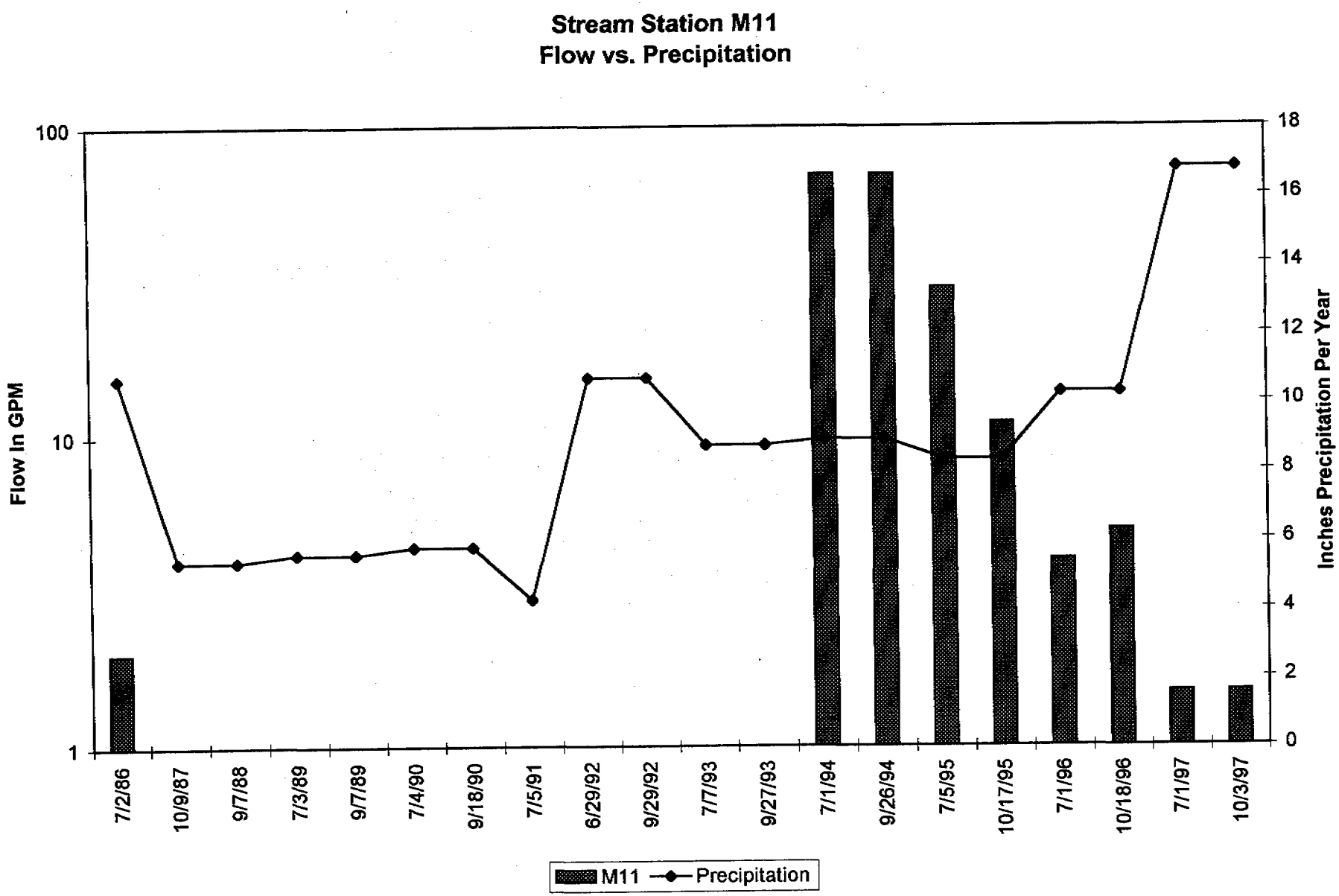
STREAM STATION M12

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		62.0		8.1	592
10/09/87	1:00PM	20.0	10.5	8.9	635
07/05/88	12:25 PM	57.7	16.8	8.7	680
09/07/88	12:30 PM	16.4	15.0	9.1	550
07/03/89	12:00PM	41.8	15.0	8.3	1460
09/07/89	1:25 PM	24.0	13.0	8.3	1520
07/04/90	11:25 AM	21.7	!13.0	8.7	1710
09/18/90	12:05 PM	19.0	7.0	8.3	1770
07/05/91	1:40 PM	15.0	19.0	8.4	1550
06/29/92	1:55 PM	6	25.1	8.49	1900
07/07/93	1:45 PM	12.6	23.4	7.33	1650
09/27/93	11:45 AM	4.93	13.1	7.28	1665
07/01/94	12:30 PM	21.6	9.7	7.74	1548
09/26/94	2:30 PM	20	13.3	8.42	2090
07/05/95	12:55 PM	130.2	18	8.48	1135
10/17/95	1:20 PM	21	10	8.42	1879
07/01/96	12:40 PM	15	21	8.56	2010
10/18/96	1:05 PM	15.5	4	8.53	1776
07/01/97	1:17 PM	25	18.5	8.39	2060
10/03/97	1:30 PM	30	12	8.35	1659
AVG		28.97	14.6	8.34	1492
MAX		130.20	25.1	9.10	2090
MIN		4.93	4.0	7.28	550
STD DEV		28.01	5.4	0.45	502


Stream Station M12
Flow vs. Precipitation
Flow In GPM
1000
100
10
1
Inches Precipitation Per Year
18
16
14
12
10
8
6
4
2
0
7/2/86
07/05/88
09/07/88
07/03/89
09/07/89
07/04/90
09/18/90
07/05/91
06/29/92
09/29/92
07/07/93
09/27/93
07/01/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M12
Precipitation

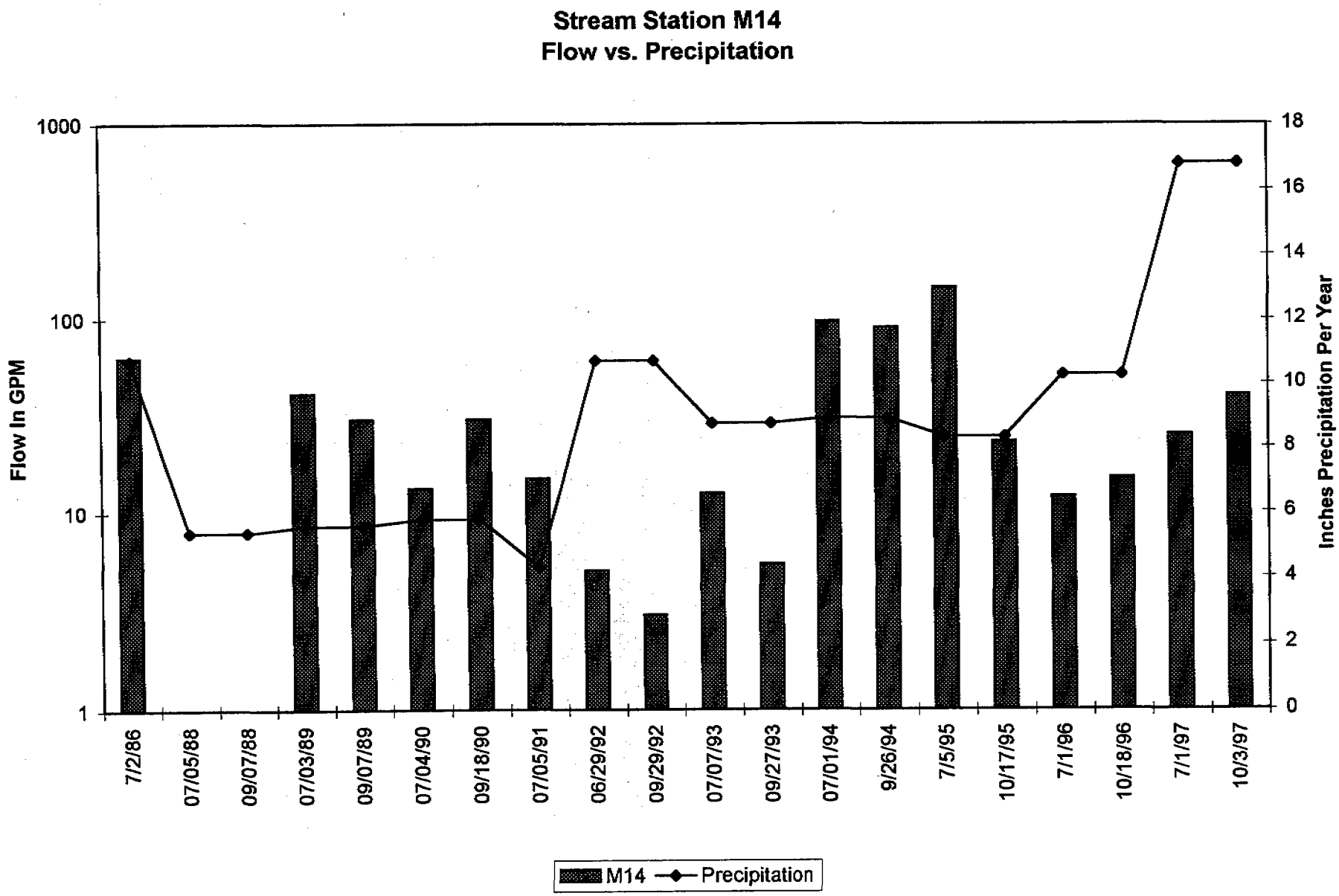
STREAM STATION M11

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		2.0		8.0	1600
10/09/87	12:55 PM	0			
09/07/88	12:40 PM	0			
07/03/89	11:55 AM	0			
09/07/89	1:25 PM	0			
07/04/90	11:10 AM	0			
09/18/90	12:10 PM	0			
07/05/91	1:40 PM	0			
06/29/92	1:50 PM	0			
09/29/92	1:45 PM	0			
07/07/93	1:40 PM	0			
09/27/93	11:55 AM	0			
07/01/94	12:40 PM	70	10	8.2	2760
09/26/94	1:55 PM	70	10.1	8.22	2780
07/05/95	1:00 PM	30	12	8.14	2430
10/17/95	1:15 PM	11	7	8.23	3040
07/01/96	12:35 PM	4	12	8.16	2840
10/18/96	1:00 PM	5	3	8.19	3370
07/01/97	1:15 PM	1.5	10.5	8.22	3230
10/03/97	1:40 PM	1.5	10	8.15	2830
AVG		9.75	9.3	8.17	2764
MAX		70.00	12.0	8.23	3370
MIN		0.00	3.0	8.00	1600
STD DEV		21.73	3.0	0.07	517


Stream Station M11
Flow vs. Precipitation
Flow In GPM
100
10
1
Inches Precipitation Per Year
18
16
14
12
10
8
6
4
2
0
7/2/86
10/9/87
9/7/88
7/3/89
9/7/89
7/4/90
9/18/90
7/5/91
6/29/92
9/29/92
7/7/93
9/27/93
7/1/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M11
Precipitation

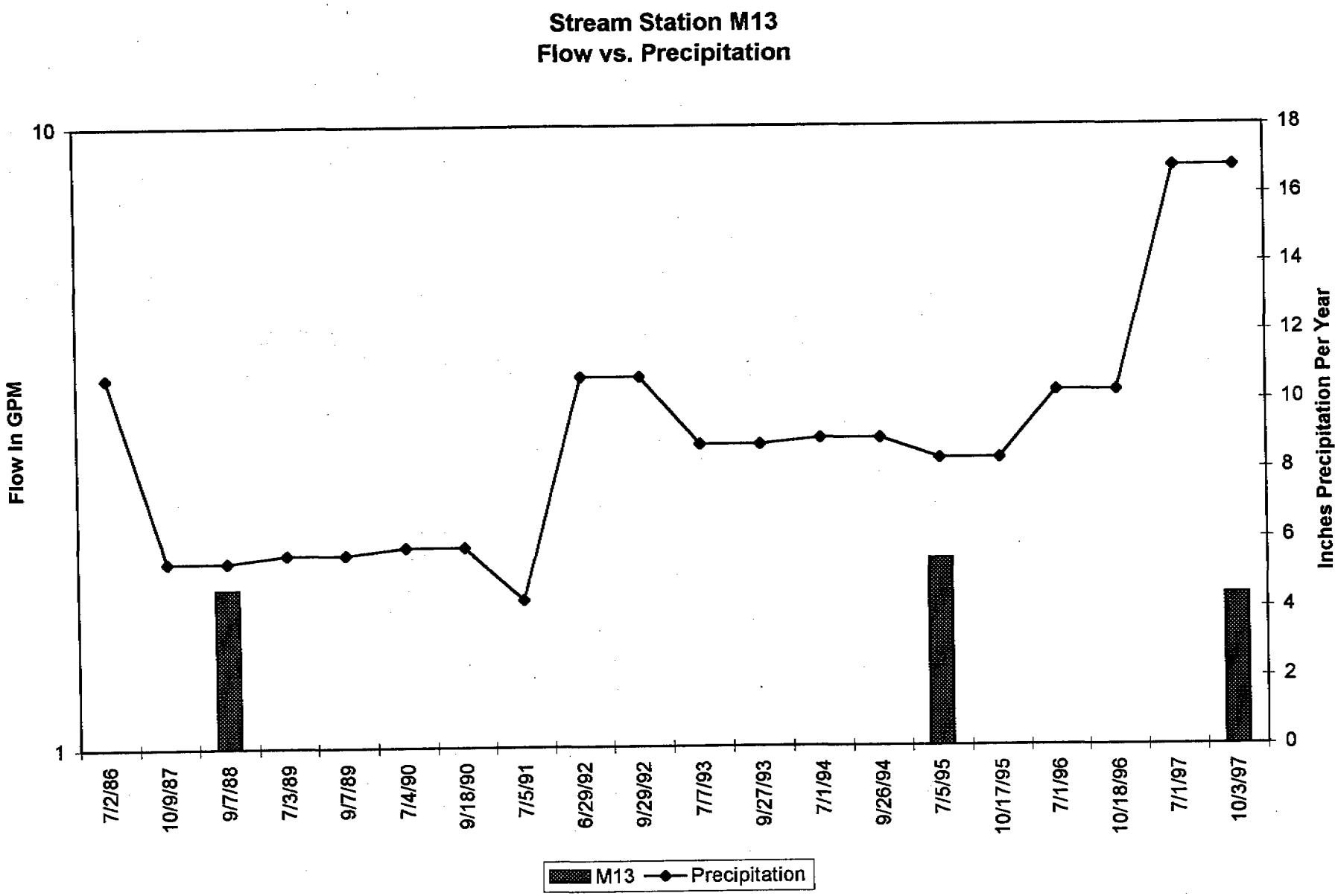
STREAM STATION M14

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		63.0		8.0	592
10/09/87	1:15 PM	25.0	7.0	8.8	620
07/03/89	12:10 PM	41.8	13.0	8.3	1500
09/07/89	1:35 PM	30.0	13.0	8.3	1520
07/04/90	11:55AM	13.3	12.0	8.7	1710
09/18/90	12:15 PM	30.0	8.0	8.2	1530
07/05/91	1:50 PM	3.5	15.0	8.4	1580
06/29/92	2:10 PM	5	17.2	8.39	1890
09/29/92	1:35 PM	3	8.3	6.99	1850
07/07/93	2:00PM	12.6	23.5	7.34	1660
09/27/93	12:00 PM	5.38	13.2	7.23	1686
07/01/94	1:25 PM	22	10	7.71	1550
09/26/94	2:25 PM	90	13.4	8.38	2110
07/05/95	1:40 PM	145.9	16	8.39	1435
10/17/95	1:35 PM	23	7	8.5	2430
07/01/96	12:50 PM	12	17	8.58	2120
10/18/96	1:10 PM	15	1	8.62	2350
07/01/97	1:25 PM	25	14.5	8.47	2100
10/03/97	2:05 PM	40	10	8.42	1870
AVG		31.87	12.2	8.20	1690
MAX		145.90	23.5	8.80	2430
MIN		3.00	1.0	6.99	592
STD DEV		35.16	5.0	0.51	480


Stream Station M14
Flow vs. Precipitation
Flow In GPM
1000
100
10
1
Inches Precipitation Per Year
18
16
14
12
10
8
6
4
2
0
7/2/86
07/05/88
09/07/88
07/03/89
09/07/89
07/04/90
09/18/90
07/05/91
06/29/92
09/29/92
07/07/93
09/27/93
07/01/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M14
Precipitation

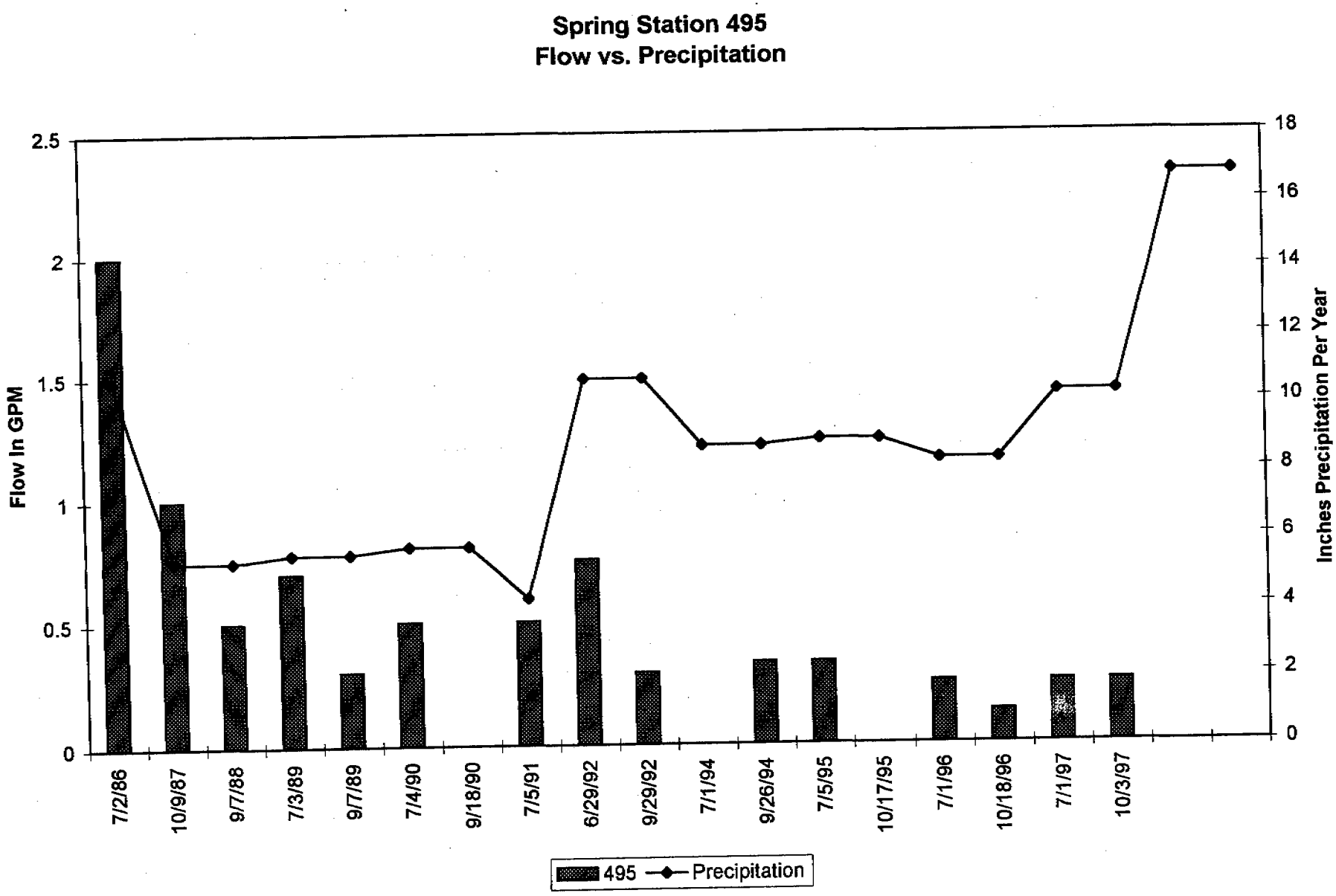
STREAM STATION M13

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		1.0		8.0	1073
10/09/87	1:05 PM	0			
09/07/88	12:12 PM	1.8	13.8	8.5	920
07/03/89	12:05 PM	0			
09/07/89	1:30 PM	0			
07/04/90	12:00 PM	0			
09/18/90	12:20 PM	0			
07/05/91	1:50 PM	0			
06/29/92	2:05 PM	0			
09/29/92	1:30 PM	0			
07/07/93	1:55 PM	0			
09/27/93	11:55 AM	0			
07/01/94	12:55 PM	0			
09/26/94	2:20 PM	0			
07/05/95	1:30 PM	2	17	8.37	1254
10/17/95	1:30 PM	0			
07/01/96	12:46 PM	0			
10/18/96	1:10 PM	0			
07/01/97	1:20 PM	0			
10/03/97	2:00 PM	1.75	10	8.48	1473
AVG		0.33	13.6	8.34	1180
MAX		2.00	17.0	8.50	1473
MIN		0.00	10.0	8.00	920
STD DEV		0.69	3.5	0.23	238


Stream Station M13
Flow vs. Precipitation
Flow In GPM
10
1
Inches Precipitation Per Year
18
16
14
12
10
8
6
4
2
0
7/2/86
10/9/87
9/7/88
7/3/89
9/7/89
7/4/90
9/18/90
7/5/91
6/29/92
9/29/92
7/7/93
9/27/93
7/1/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
M13
Precipitation

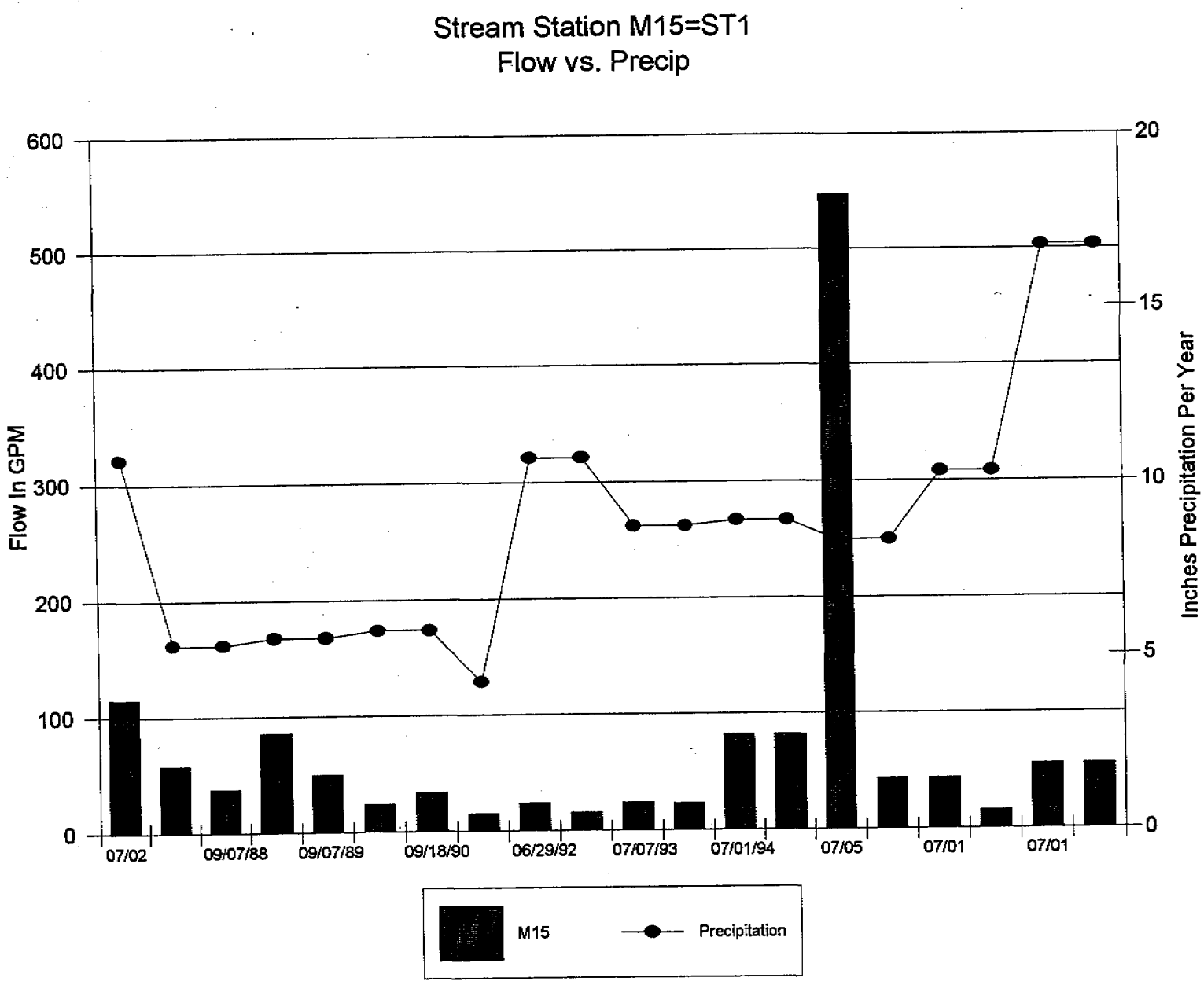
SPRING STATION 495

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		2.0		7.8	1397
10/09/87	4:30 PM	1			
09/07/88	1:00 PM	0.5	17	8.1	1650
07/03/89	12:30 PM	0.7	17	7.6	2330
09/07/89	1:55 PM	0.3	17	7.8	2400
07/04/90	12:20 PM	0.5	1.0	8.0	2300
09/18/90	12:30 PM	0			
07/05/91	2:00 PM	0.5	17	8.4	1720
06/29/92	2:30 PM	0.75	10.7	6.83	2490
09/29/92	2:00 PM	0.29	16.6	6.67	2360
07/01/94	1:40 PM	0			
09/26/94	2:45 PM	0.33	18.7	8.12	2730
07/05/95	2:00 PM	0.33	14	6.98	2240
10/17/95	1:45 PM	0			
07/01/96	1:10 PM	0.25	22	8.08	2530
10/18/96	1:30 PM	0.13	8	8.11	2060
07/01/97	1:30 PM	0.25	19	8.03	2170
10/03/97	2:25 PM	0.25			
AVG		0.45	14.8	7.73	2183
MAX		2.00	22.0	8.40	2730
MIN		0.00	1.0	6.67	1397
STD DEV		0.47	5.7	0.55	383


Spring Station 495
Flow vs. Precipitation
Flow In GPM
Inches Precipitation Per Year
2.5
2
1.5
1
0.5
0
18
16
14
12
10
8
6
4
2
0
7/2/86
10/9/87
9/7/88
7/3/89
9/7/89
7/4/90
9/18/90
7/5/91
6/29/92
9/29/92
7/1/94
9/26/94
7/5/95
10/17/95
7/1/96
10/18/96
7/1/97
10/3/97
495
Precipitation

STREAM STATION M15

DATE	FIELD MEASUREMENTS				
	TIME	FLOW IN GPM	TEMP	pH	CONDUCTIVITY UHMOS/CM
07/02/86		115		8.1	1190
10/09/87	4:00 PM	47.0	10.1	8.3	210
07/05/88	12:50 PM	58.3	17.2	8.0	980
09/07/88	1:15 PM	37.3	16.5	8.8	1090
07/03/89	12:35 PM	85.3	16.0	8.0	1670
09/07/89	2:00PM	49.4	15.0	8.1	1630
07/04/90	12:30 PM	24.2	13.0	8.5	880
09/18/90	1:30 PM	33.7	15.0	8.2	1590
07/05/91	2:00PM	33.7	15.0	8.2	1590
06/29/92	1:45 PM	24.2	17.2	8.2	1890
09/29/92	1:15 PM	15.7	10.7	6.9	1670
07/07/93	2:15 PM	24.2	19.0	7.0	1660
09/27/93	12:15 PM	23.3	13.3	7.3	1685
07/01/94	1:45 PM	23.2	10	7.72	1565
09/26/94	3:10 PM	82	13.4	8.24	2710
07/05/95	2:20 PM	547.5	14	8.19	1535
10/17/95	1:45 PM	43.5	9	8.27	2150
07/01/96	1:15 PM	43.5	18	8.38	1920
10/18/96	1:40 PM	15.3	6	8.39	1940
07/01/97	1:40 PM	55.2	16	8.27	2070
10/03/97	2:30 PM	55.5	12	8.31	1434
AVG		68.43	13.8	8.07	1574
MAX		547.50	19.0	8.80	2710
MIN		15.30	6.0	6.90	210
STD DEV		112.60	3.4	0.47	518


Stream Station M15=ST1
Flow vs. Precip
Flow In GPM
600
500
400
300
200
100
0
Inches Precipitation Per Year
20
15
10
5
0
07/02
09/07/88
09/07/89
09/18/90
06/29/92
07/07/93
07/01/94
07/05
07/01
07/01
M15
Precipitation

Cyprus Plateau Mining Company - Water Quality Data

Station: ST1 | Property: Star Point | Location: 2250' S 2250' W of NE corn. Sec 20, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation:

Print Date: March 2, 1998
Elevation: 7855

Date		Field Measurements				Laboratory Measurements																		
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	NO3 (D) (mg/l)	NO2 (D) (mg/l)	Comments
Jan-80																								
Feb-80																								
Mar-80																								
Apr-80																								
May-80																								
Jun-80																								
Jul-80																								
Aug-80	08/28/80					1190																		
Sep-80	09/17/80					1330																		
Oct-80																								
Nov-80																								
Dec-80																								
Jan-81	01/27/81	0.2				1054																		
Feb-81	02/18/81	0.05				1020																		
Mar-81																								
Apr-81	04/28/81	0.5				845																		
May-81																								
Jun-81	06/22/82	0.4				240																		
Jul-81																								
Aug-81																								
Sep-81																								
Oct-81																								
Nov-81																								
Dec-81																								
Jan-82																								
Feb-82																								
Mar-82																								
Apr-82																								
May-82																								
Jun-82																								
Jul-82																								
Aug-82																								
Sep-82																								
Oct-82																								
Nov-82																								
Dec-82																								
Jan-83																								
Feb-83																								
Mar-83	03/24/83																							IN-ACCESSIBLE - SNOW
Apr-83	04/21/83																							IN-ACCESSIBLE - SNOW
May-83	05/12/83																							IN-ACCESSIBLE - SNOW
Jun-83	06/29/83	1.5				394																		
Jul-83																								
Aug-83																								
Sep-83																								
Oct-83	10/04/83	0.35				1270																		
Nov-83																								
Dec-83																								
Jan-84	01/06/84	0.43				1215																		
Feb-84																								
Mar-84	03/30/84																							IN-ACCESSIBLE - MUDD
Apr-84																								
May-84																								
Jun-84	06/21/84	0.35				702																		
Jul-84																								
Aug-84																								
Sep-84																								
Oct-84						1104																		
Nov-84																								
Dec-84																								
Jan-85																								
Feb-85	02/21/85																							IN-ACCESSIBLE - SNOW
Mar-85	03/31/85	0.55				751																		
Apr-85																								
May-85																								
Jun-85	06/13/85	2				645																		
Jul-85																								
Aug-85																								
Sep-85	09/27/85	0.15				1130																		
Oct-85																								
Nov-85																								
Dec-85																								
Jan-86																								
Feb-86																								
Mar-86	03/28/86	0.82				879																		
Apr-86																								
May-86																								
Jun-86	06/12/86	0.31				488																		
Jul-86																								

Cyprus Plateau Mining Company - Water Quality Data

Station: ST1 | Property: Star Point | Location: 2250' S 2250' W of NE corn. Sec 20, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7855

Print Date: March 2, 1998

Date		Field Measurements				Laboratory Measurements																			Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	NO3 (D) (mg/l)	NO2 (D) (mg/l)		
Aug-86																									
Sep-86																									
Oct-86	10/13/86	0.22				885																			
Nov-86																									
Dec-86																									
Jan-87																									
Feb-87																									
Mar-87																									
Apr-87																									
May-87	05/23/87	0.59				670																			
Jun-87																									
Jul-87	07/20/87	0.09																							
Aug-87	08/12/87	0.09																							
Sep-87	09/22/87	0.11				1008																			
Oct-87																									
Nov-87																									
Dec-87																									
Jan-88																									
Feb-88																									
Mar-88																									
Apr-88																									
May-88																									
Jun-88	06/01/88	0.28				574																			
Jul-88	07/15/88	0.11																							
Aug-88	08/13/88	0.05																							
Sep-88	09/30/88	0.14				996																			
Oct-88																									
Nov-88																									
Dec-88																									
Jan-89																									
Feb-89																									
Mar-89																									
Apr-89																									
May-89																									
Jun-89	06/06/89	0.08				1258																			
Jul-89	07/03/89	0.19																							
Aug-89	08/22/89	0.11																							
Sep-89	09/15/89	0.11				1250																			
Oct-89																									
Nov-89																									
Dec-89																									
Jan-90																									
Feb-90																									
Mar-90																									
Apr-90																									
May-90																									
Jun-90	06/02/90	0.1				1472																			
Jul-90	07/04/90	0.08																							
Aug-90	08/22/90	0.05																							
Sep-90	09/24/90	0.08				1360																			
Oct-90																									
Nov-90																									
Dec-90																									
Jan-91																									
Feb-91																									
Mar-91																									
Apr-91																									
May-91																									
Jun-91	06/12/91	0.15	7.2	1870	13	1454	< 2		1100	388		18	821	171	164	7	36		< 0.02	0.35	0.03				
Jul-91	07/16/91	0.08	7.9	1640	18																				
Aug-91																									
Sep-91	09/17/91	0	8.3	1650	10	1350			1000	420	5	16	704	162	145	6	12		0.2	0.31	0.03				
Oct-91																									
Nov-91																									
Dec-91																									
Jan-92																									
Feb-92																									
Mar-92																									
Apr-92																									
May-92	05/20/92	0.044	8.1	1	10.9	1716	12		1276	393	0	18	1021	197	191	8	16		< 0.02	0.11					
Jun-92																									
Jul-92	07/16/92	0.0534																							
Aug-92	08/26/92	0.037	8	1755	11.6																				
Sep-92	09/21/92	0.02	6.8	2	12.8	1336	46		1063	364	7	14	741	171	155	7	13		< 0.02	1					
Oct-92																									
Nov-92																									
Dec-92																									
Jan-93																									
Feb-93																									

Cyprus Plateau Mining Company - Water Quality Data

Station: ST1 | Property: Star Point | Location: 2250' S 2250' W of NE corn. Sec 20, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7855

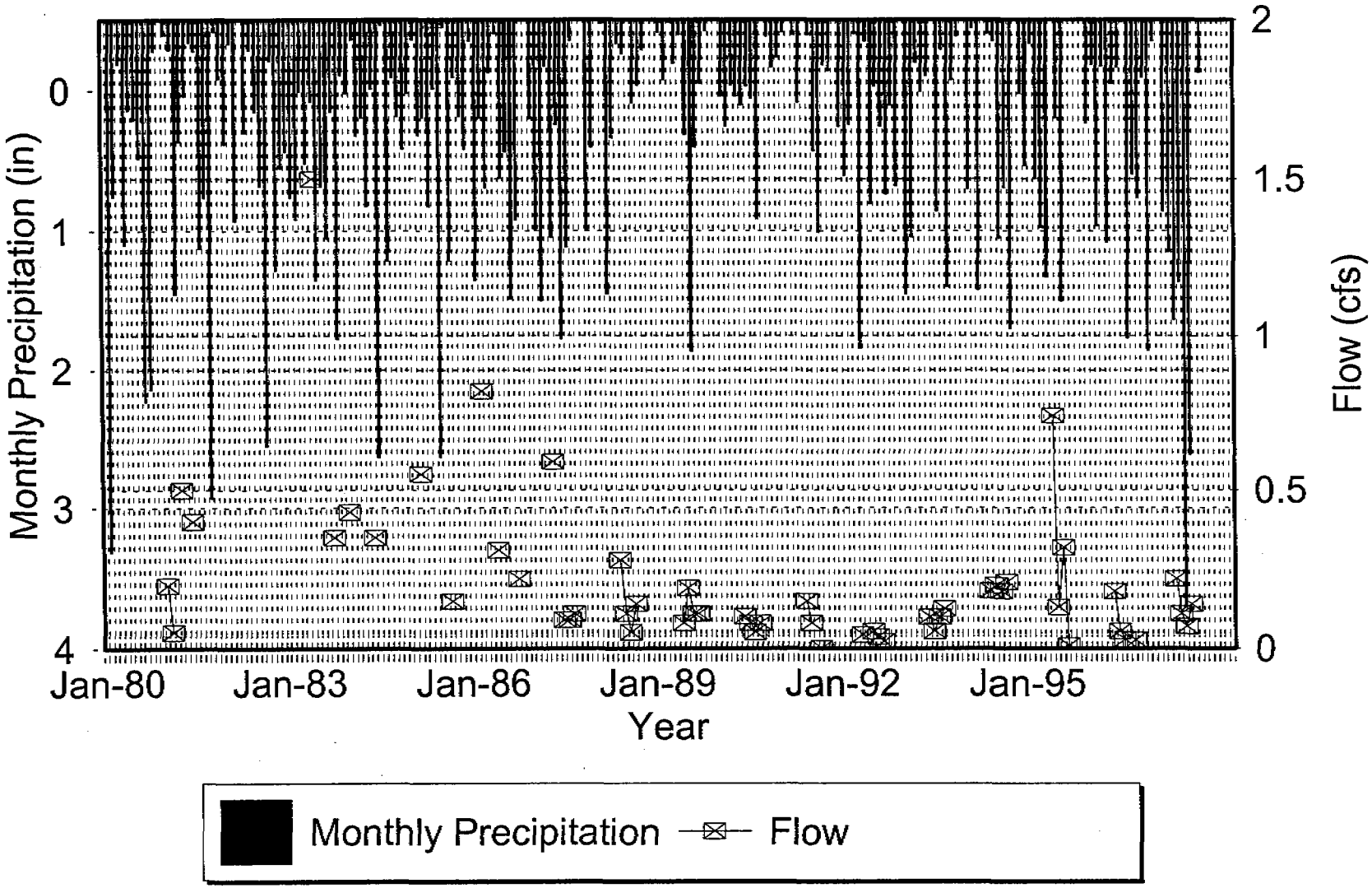
Print Date: March 2, 1998

Date		Field Measurements				Laboratory Measurements																			Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	NO3 (D) (mg/l)	NO2 (D) (mg/l)	
Mar-93																									
Apr-93																									
May-93																									
Jun-93	06/21/93	0.099	13.7	3520	20.4	2884	36		2290	395	0	18	815	179	170	7	16	<	0.02	0.19	0.02				
Jul-93	07/27/93	0.054	6.8	1700	10.7																				
Aug-93	08/18/93	0.099	6.6	1720	11.1																				
Sep-93	09/28/93	0.125	6.5	2390	6.8	2230	6		1599	373	2	21	1544	236	246	9	23	<	0.2	0.14	0.02				
Oct-93																									
Nov-93																									
Dec-93																									
Jan-94																									
Feb-94																									
Mar-94																									
Apr-94																									
May-94																									
Jun-94	06/08/94	0.182	8.1	2400	12.3	2076	10		1476	372	0	34	1270	236	216	15	16		0.11	0.19	0.02				
Jul-94	07/20/94	0.2	8.2	1056	12.1																				
Aug-94	08/31/94	0.18	8.3	2380	16.2																				RAIN IN A.M. = ~.10". LO
Sep-94	09/21/94	0.21	8.2	2310	15.8	2210	6		1462	354	0	15	1300	247	206	20	15		0.09	0.15 <	0.01				
Oct-94																									
Nov-94																									
Dec-94																									
Jan-95																									
Feb-95																									
Mar-95																									
Apr-95																									
May-95																									
Jun-95	06/22/95	0.74	8.4	1050	6	810	6 <	2	638	255 <	2	7	400	123	80.4	5.8	6.5	-2	0.02	0.12	0.007	0.51 <	0.01		
Jul-95	07/27/95	0.13	8.22	2070	16																				
Aug-95	08/23/95	0.32	7.03	1460	12																				
Sep-95	09/28/95	0.008	8	1360	8.88	1880	14	5	1420	323 <	2	14	1030	223	209	17.3	16.7	1.6	0.02	0.26	0.023	0.53 <	0.01		
Oct-95																									
Nov-95																									
Dec-95																									
Jan-96																									
Feb-96																									
Mar-96																									
Apr-96																									
May-96																									
Jun-96	06/12/96	0.18	7.6	1735	11	1190			1010	298	2 <	11	670	164	145	9.6	11.8	1.2	0.01 <	0.23	0.023	0.1	0.01		
Jul-96	07/23/96	0.054	8.36	1430	18																				
Aug-96	08/19/96	0.027	8.51	1471	16																				
Sep-96																									
Oct-96	10/22/96	0.026	8.39	1940	6	1460	12	2 <	1200	375	2 <	15	780	194	175	11.3	15.4	1.5	0.03	0.16	0.023				
Nov-96																									
Dec-96																									
Jan-97																									
Feb-97																									
Mar-97																									
Apr-97																									
May-97																									
Jun-97	06/18/97	0.22	8.24	1723	14	1160		2 <	1030	288	2 <	12	640	167	148	8.4	11.1	4.1	0.06	0.2	0.019	0.09	0.01		
Jul-97	07/30/97	0.11	8.04	1809	12																				
Aug-97	08/13/97	0.07	8.14	1789	13																				
Sep-97	09/17/97	0.14	8.3	1760	12	1400	13	5 <	1200	310	10 <	26	1100	190	170	11	15	-10	0.01 <	0.61	0.041	0.12	0.01		
Oct-97																									
Nov-97																									
Dec-97																									
END DATA																									
Count		57	26	26	26	39	11	5	14	14	13	14	14	14	14	14	14	6	14	14	12	5	5		
Minimum		0	6.5	1	6	240 <	2 <	2 <	638	255 <	0 <	7	400	123	80.4	5.8	6.5	-10 <	0.01 <	0.11 <	0.007	0.09 <	0.01		
Maximum		2	13.7	3520	20.4	2884 <	46 <	5 <	2290	420 <	10 <	34	1544	247	246	20	36	4.1 <	0.2 <	1 <	0.041	0.53 <	0.01		
Average		0.2394	8.0742	1592	12.636	1202.2 <	14.818 <	3.2 <	1268.9	350.57 <	2.6154 <	17.071	916.86	190	172.89	10.171	15.964	-0.6 <	0.0593 <	0.2871 <	0.0222	0.27 <	0.01		
Standard Deviation		0.3403	1.2768	687.11	3.6186	528.43 <	13.009 <	1.4697 <	371.25	46.264 <	2.8966 <	6.4194	297.76	33.76	38.805	4.2167	6.594	4.5625 <	0.0644 <	0.2335 <	0.0086	0.2045 <	0		
Avg. -1 Std. Dev.		-0.101	6.7974	1004.9	9.0191	673.77 <	1.809 <	1.7303 <	897.61	304.31 <	-0.281 <	10.652	619.1	156.24	134.08	5.9547	9.3703	-5.163 <	-0.005 <	0.0536 <	0.0136	0.0655 <	0.01		
Avg. +1 Std. Dev.		0.5797	9.351	2379.1	16.256	1730.6 <	27.827 <	4.6697 <	1640.1	396.84 <	5.512 <	23.491	1214.6	223.76	211.69	14.388	22.558	3.9625 <	0.1237 <	0.5206 <	0.0307	0.4745 <	0.01		
Avg. -2 Std. Dev.		-0.441	5.5206	317.75	5.4005	145.34 <	-11.2 <	0.2606 <	526.36	258.04 <	-3.178 <	4.2326	321.34	122.48	95.276	1.738	2.7763	-9.725 <	-0.07 <	-0.18 <	0.005	-0.139 <	0.01		
Avg. +2 Std. Dev.		0.92	10.628	3066.2	19.875	2259.1 <	40.837 <	6.1394 <	2011.3	443.1 <	8.4087 <	29.91	1512.4	257.52	250.5	18.605	29.152	8.5251 <	0.1881 <	0.7541 <	0.0393	0.6789 <	0.01		

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

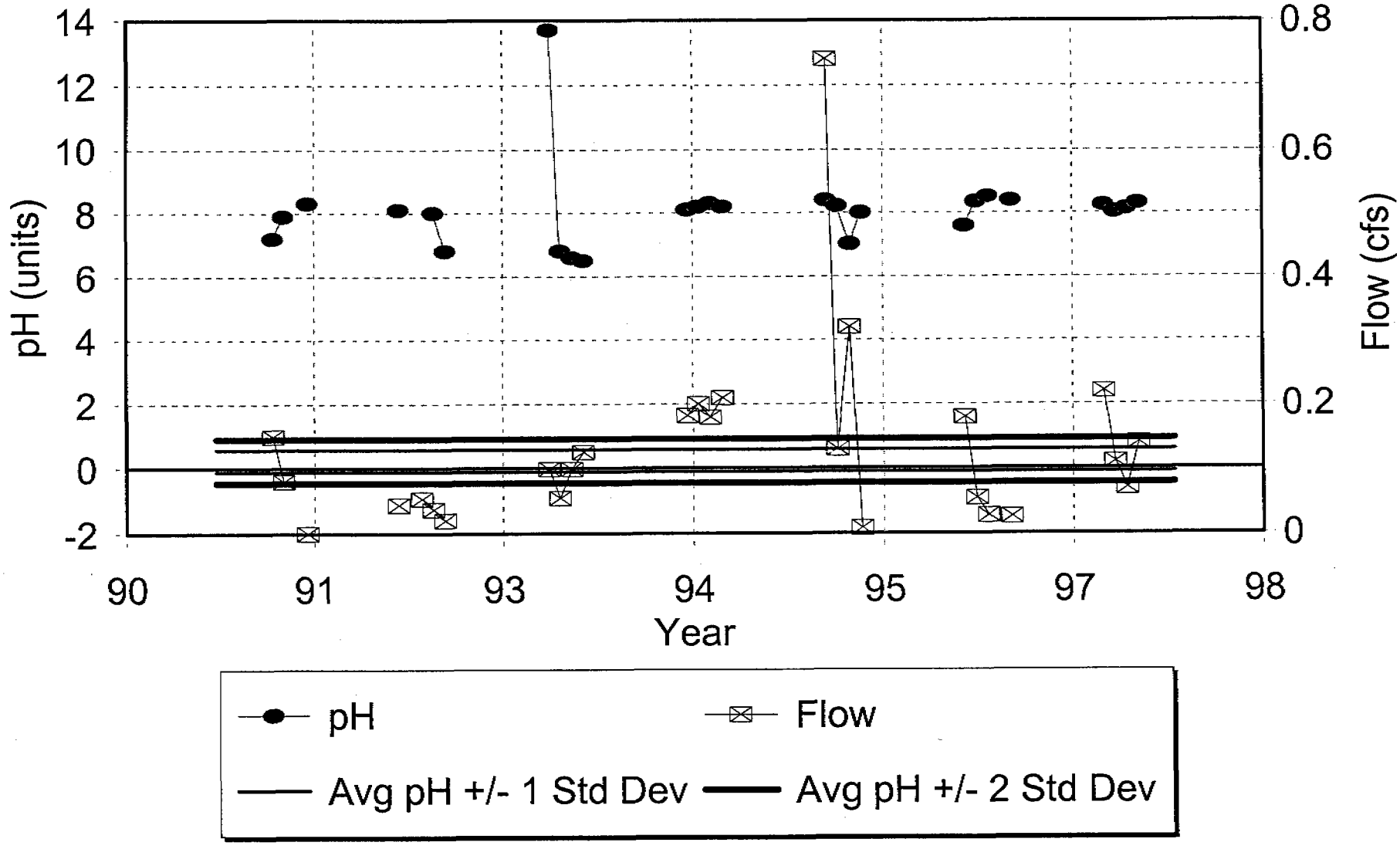
Station ST1

Monthly Precipitation vs. Flow



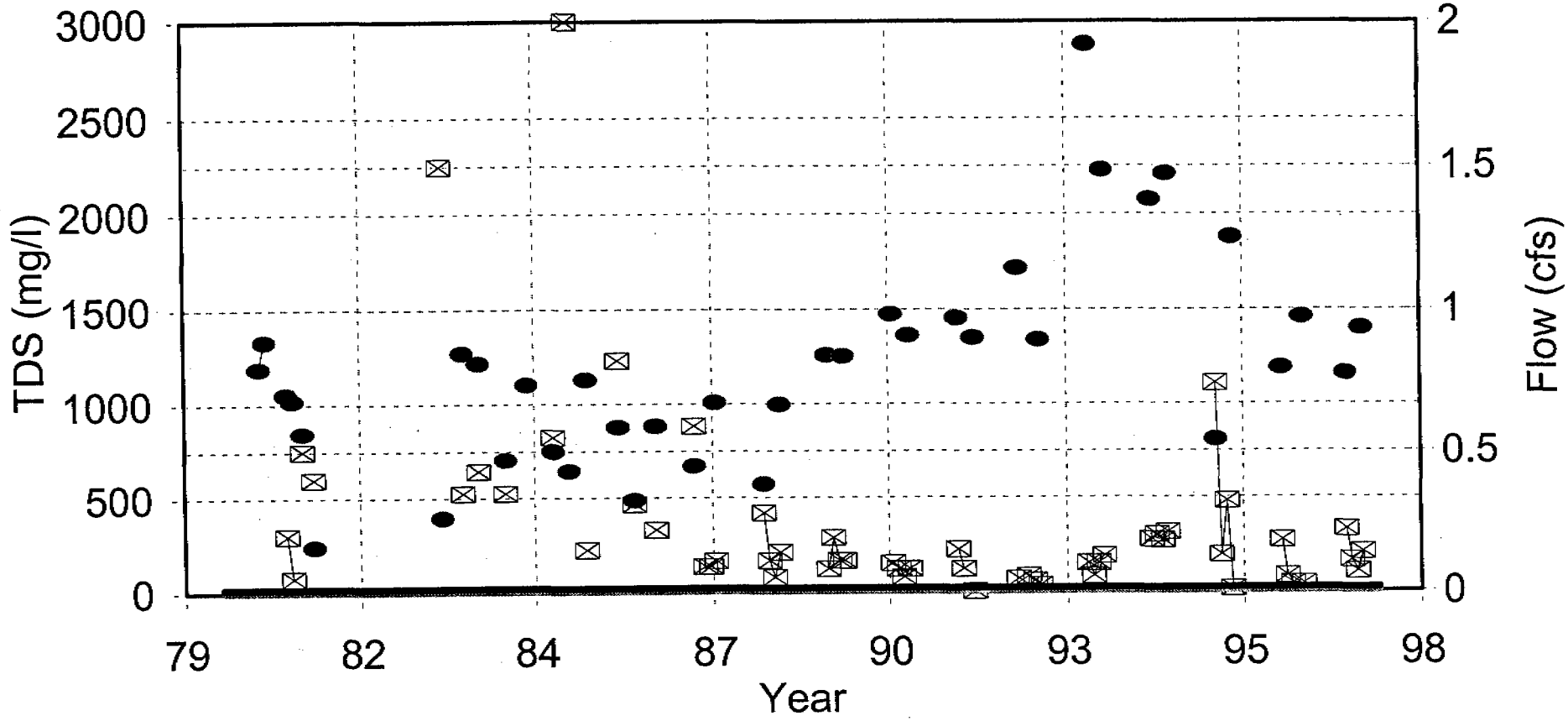
Station ST1

pH vs. Flow



Station ST1

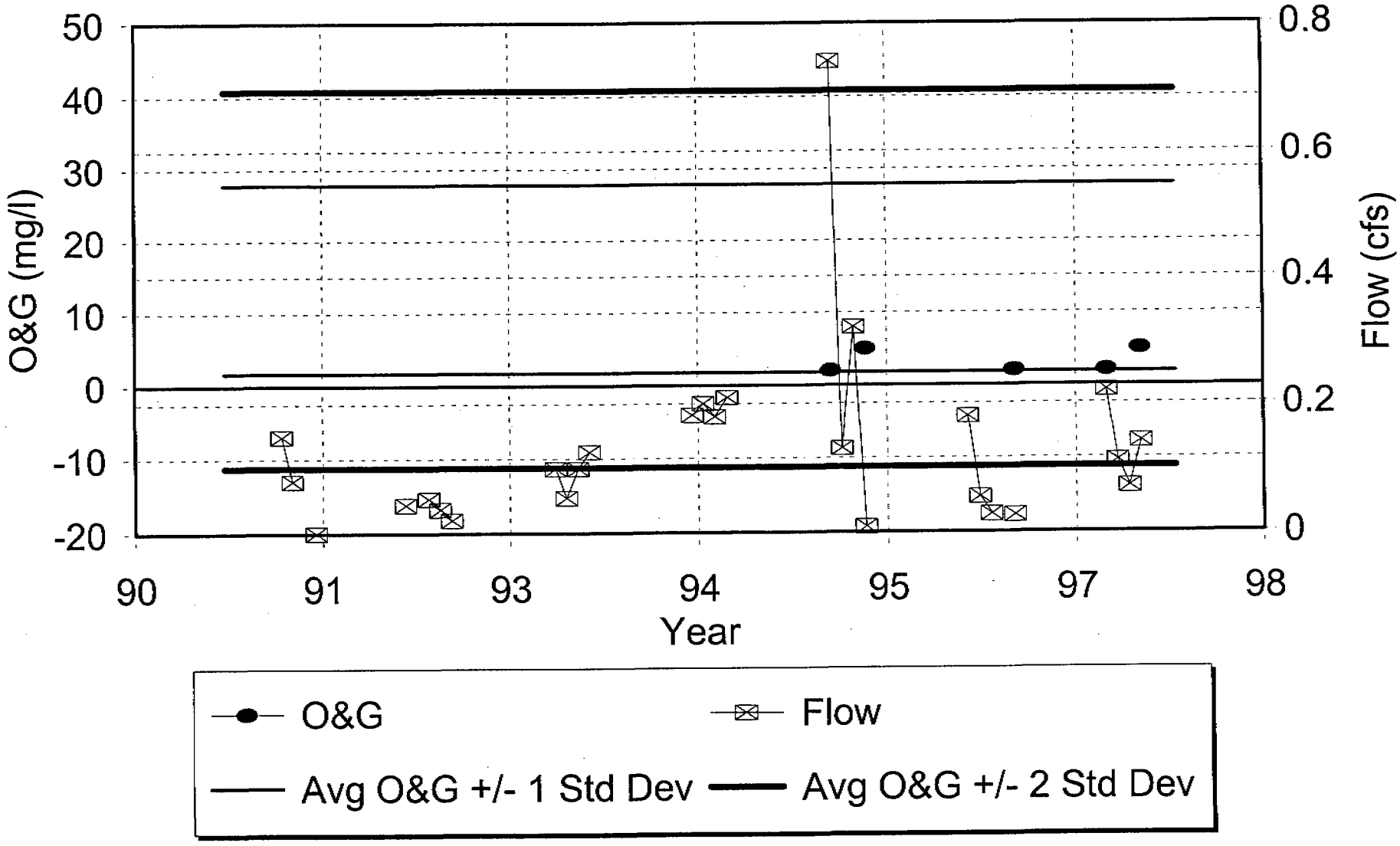
TDS vs. Flow

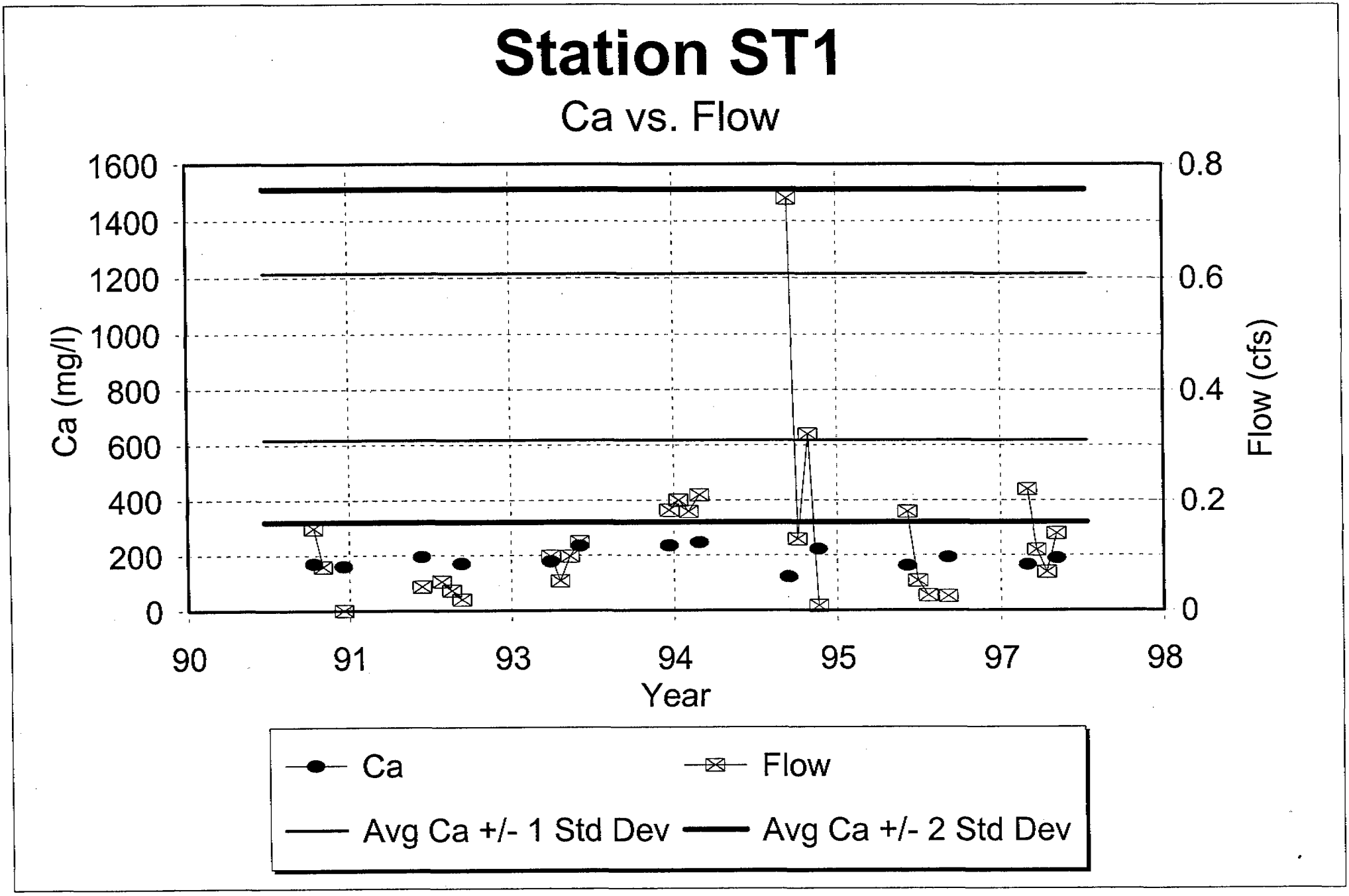


TDS
Flow
Avg TDS +/- 1 Std Dev
Avg TDS +/- 2 Std Dev

Station ST1

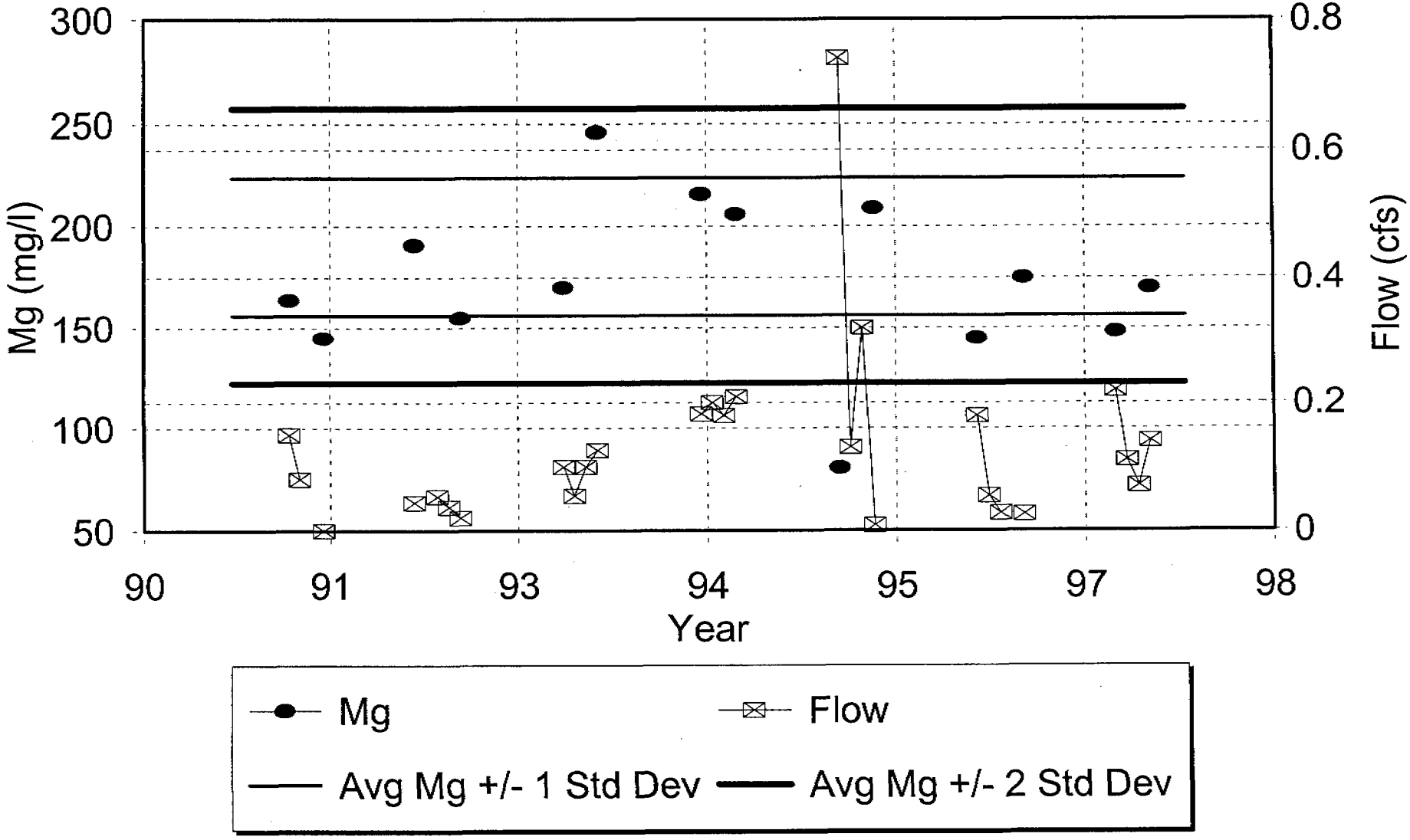
Oil & Grease vs. Flow

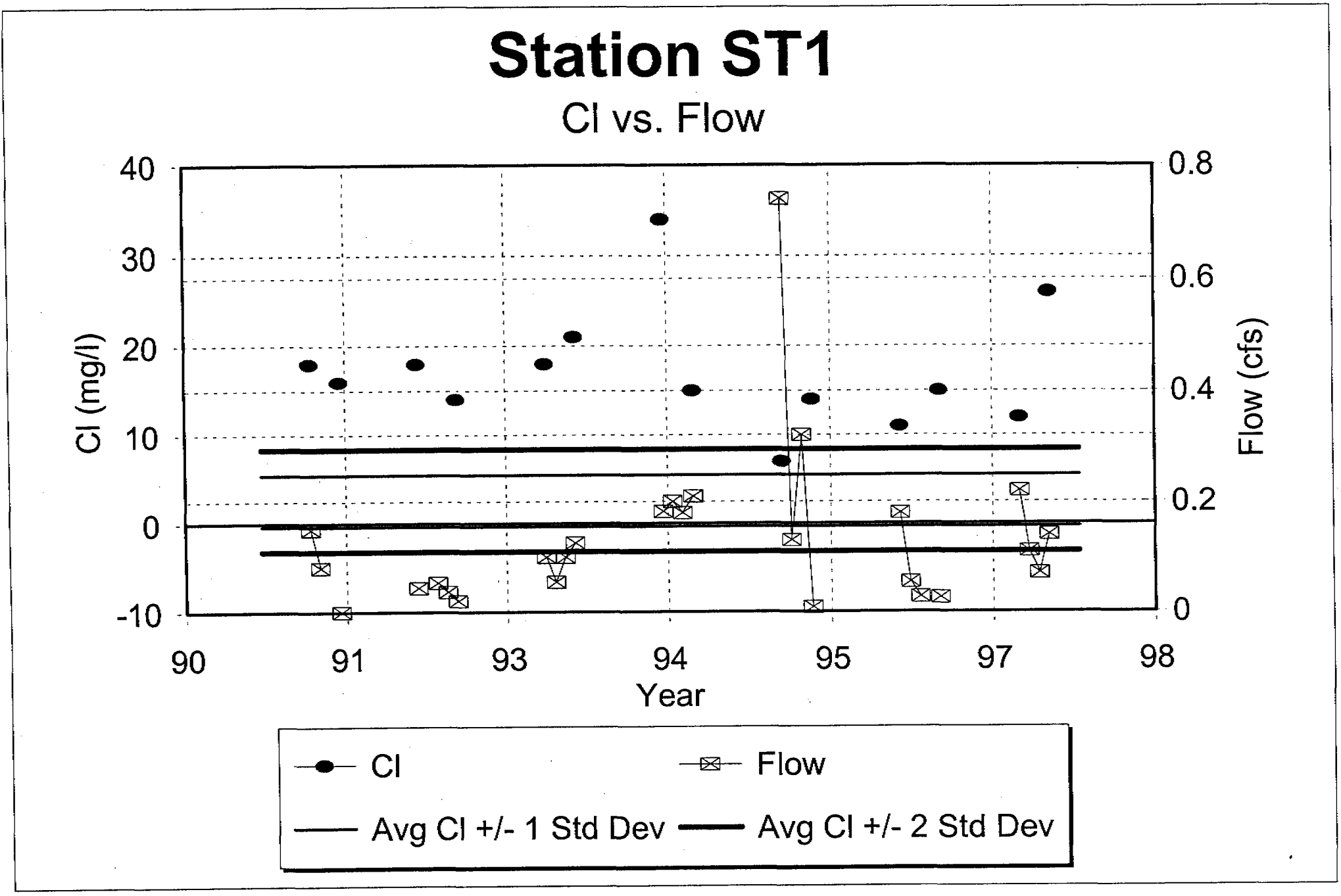


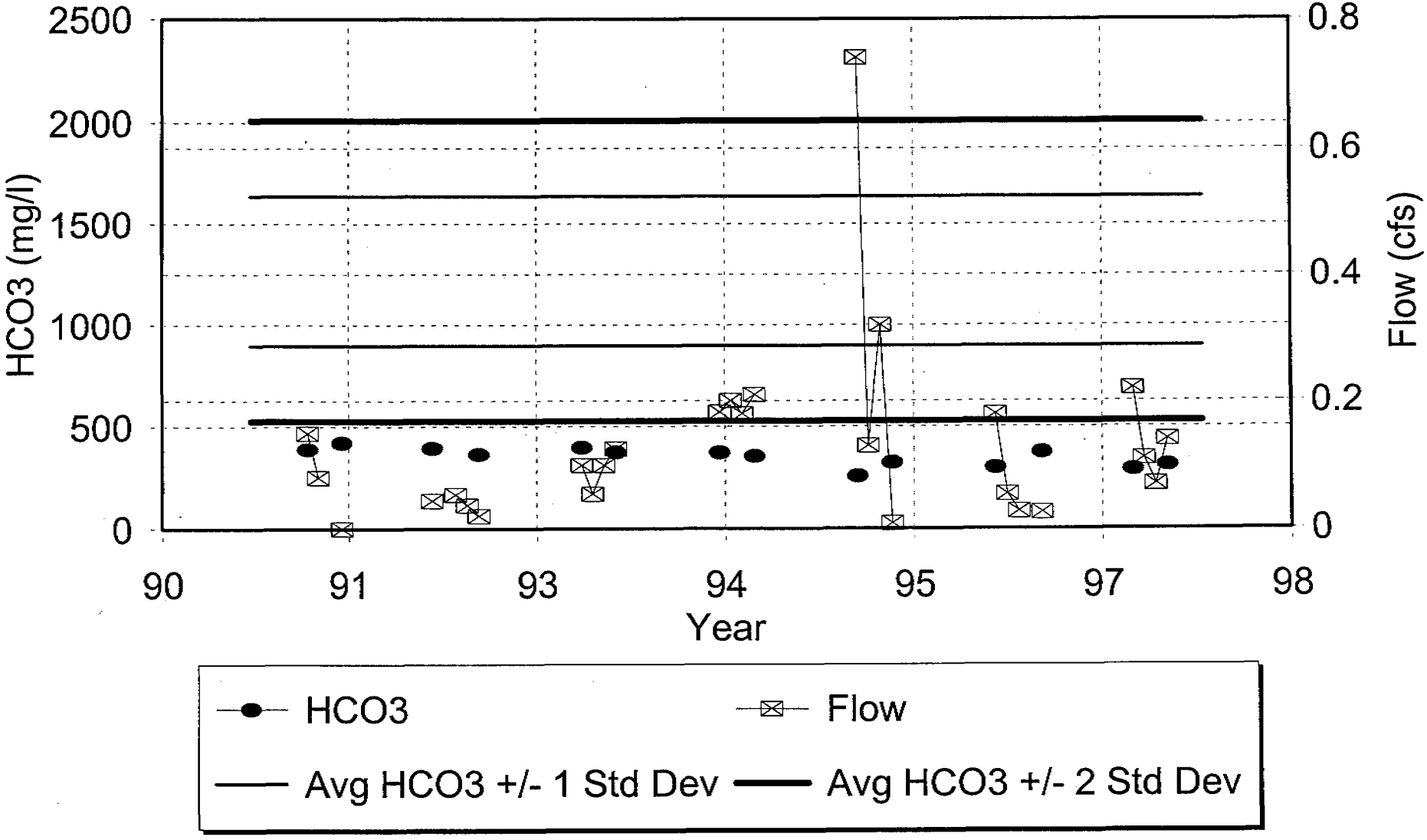

Station ST1
Ca vs. Flow
Ca (mg/l)
1600
1400
1200
1000
800
600
400
200
0
Flow (cfs)
0.8
0.6
0.4
0.2
0
90
91
93
94
95
97
98
Year
Ca
Flow
Avg Ca +/- 1 Std Dev
Avg Ca +/- 2 Std Dev

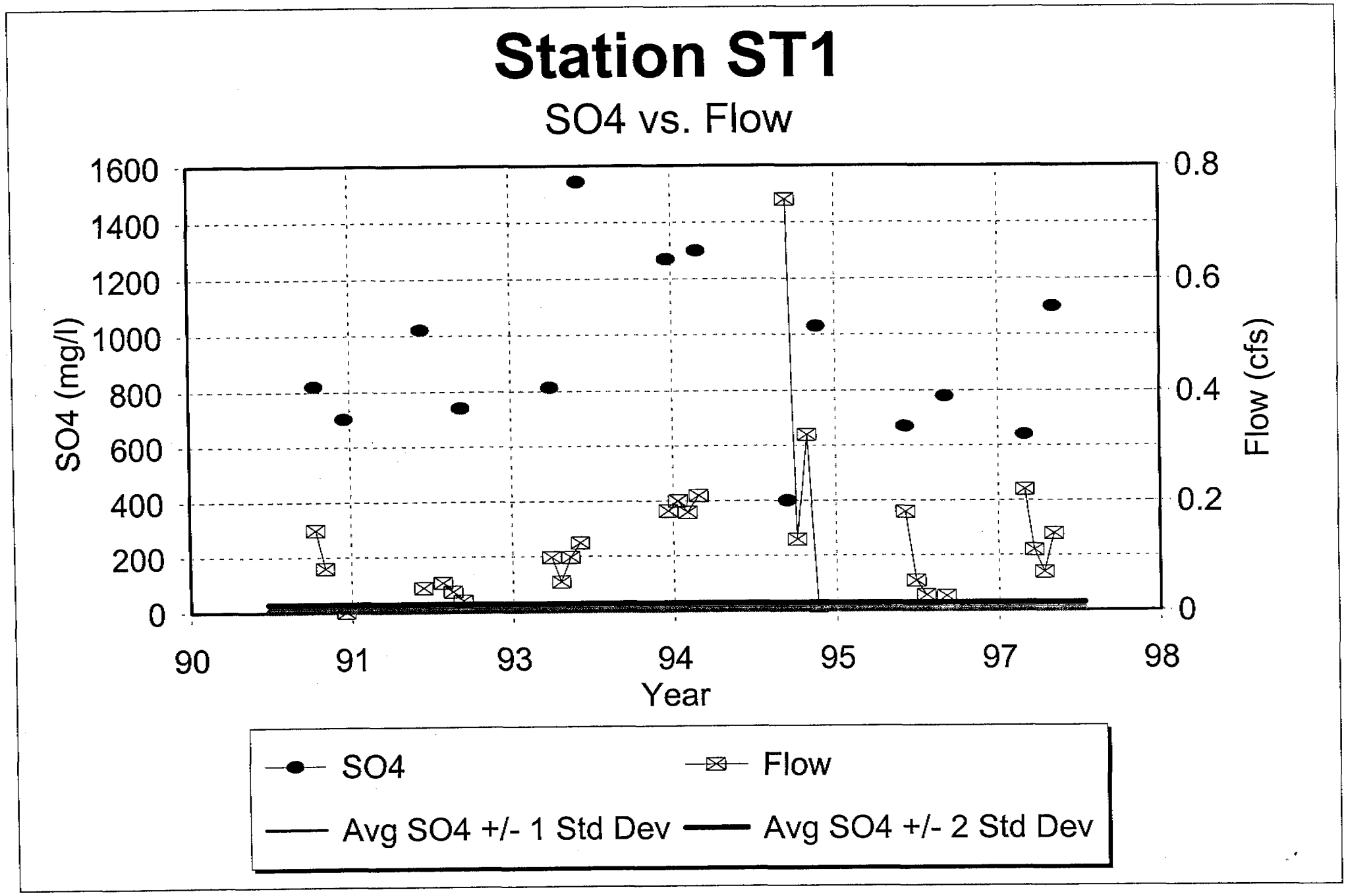
Station ST1

Mg vs. Flow




Station ST1
Cl vs. Flow
Cl (mg/l)
40
30
20
10
0
-10
0.8
0.6
0.4
0.2
0
Flow (cfs)
90
91
93
94
95
97
98
Year
Cl
Flow
Avg Cl +/- 1 Std Dev
Avg Cl +/- 2 Std Dev


Station ST1
HCO3 vs. Flow
2500
2000
1500
1000
500
0
HCO3 (mg/l)
0.8
0.6
0.4
0.2
0
Flow (cfs)
90
91
93
94
95
97
98
Year
HCO3
Flow
Avg HCO3 +/- 1 Std Dev
Avg HCO3 +/- 2 Std Dev


Station ST1
SO4 vs. Flow
SO4 (mg/l)
1600
1400
1200
1000
800
600
400
200
0
Flow (cfs)
0.8
0.6
0.4
0.2
0
90
91
93
94
95
97
98
Year
SO4
Flow
Avg SO4 +/- 1 Std Dev
Avg SO4 +/- 2 Std Dev

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: ST2 | Property: Star Point | Location: 2375' S 2500' W of NE com. Sec 20, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7840

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-81	01/27/81	0.07				503																
Feb-81																						
Mar-81																						
Apr-81	04/27/81	0.74				340																
May-81																						
Jun-81																						
Jul-81																						
Aug-81																						
Sep-81																						
Oct-81																						
Nov-81																						
Dec-81																						
Jan-82																						
Feb-82																						
Mar-82																						
Apr-82																						
May-82																						
Jun-82	06/22/82					255																
Jul-82																						
Aug-82																						
Sep-82																						
Oct-82																						
Nov-82																						
Dec-82																						
Jan-83																						
Feb-83																						
Mar-83	03/24/83																					IN-ACCESSIBLE - SNOW
Apr-83	04/21/83																					IN-ACCESSIBLE - SNOW
May-83	05/21/83																					IN-ACCESSIBLE - SNOW
Jun-83	06/29/83	3				386																
Jul-83																						
Aug-83																						
Sep-83																						
Oct-83	10/04/83	0.25				343																
Nov-83																						
Dec-83																						
Jan-84	01/06/84	0.21																				EST AIR FLOW - NO SAM
Feb-84																						
Mar-84	03/30/84																					IN-ACCESSIBLE - MUDD
Apr-84																						
May-84																						
Jun-84	06/21/84	1.38				251																
Jul-84																						
Aug-84																						
Sep-84																						
Oct-84	10/25/84					421																
Nov-84																						
Dec-84	12/31/84																					ALT SITE SEE ST1 FOR
Jan-85																						
Feb-85	02/21/85																					IN-ACCESSIBLE - SNOW
Mar-85	03/31/85	0.39				330																
Apr-85																						
May-85																						
Jun-85	06/13/85	3.5				260																
Jul-85																						
Aug-85																						
Sep-85	09/27/85	0.08				381																
Oct-85																						
Nov-85																						
Dec-85																						
Jan-86																						
Feb-86																						
Mar-86	03/28/86	1.34				421																
Apr-86																						
May-86																						
Jun-86	06/12/86	1.64				241																
Jul-86																						
Aug-86																						
Sep-86																						
Oct-86	10/13/86	0.06				502																
Nov-86																						
Dec-86																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: ST2 | Property: Star Point | Location: 2375' S 2500' W of NE corn. Sec 20, T15S, R6E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7840

Date		Field Measurements				Laboratory Measurements																	
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-87																						
Feb-87																						
Mar-87																						
Apr-87																						
May-87	05/23/87	0.86				316																
Jun-87																						
Jul-87	07/20/87	0.15																				
Aug-87	08/12/87	0.06																				
Sep-87	09/22/87	0.09				506																
Oct-87																						
Nov-87																						
Dec-87																						
Jan-88																						
Feb-88																						
Mar-88																						
Apr-88																						
May-88																						
Jun-88	06/01/88	0.68				292																
Jul-88	07/15/88	0.02																				
Aug-88	08/13/88	0.12																				
Sep-88	09/30/88	0.13				502																
Oct-88																						
Nov-88																						
Dec-88																						
Jan-89																						
Feb-89																						
Mar-89																						
Apr-89																						
May-89																						
Jun-89	06/06/89	0.1				484																
Jul-89	07/03/89	0.11																				
Aug-89	08/22/89	0.08																				
Sep-89	09/15/89	0.09				512																
Oct-89																						
Nov-89																						
Dec-89																						
Jan-90																						
Feb-90																						
Mar-90																						
Apr-90																						
May-90																						
Jun-90	06/02/90	0.18				568																
Jul-90	07/04/90	0.05																				
Aug-90	08/22/90	0.08																				
Sep-90	09/24/90	0.08				610																
Oct-90																						
Nov-90																						
Dec-90																						
Jan-91																						
Feb-91																						
Mar-91																						
Apr-91																						
May-91																						
Jun-91	06/12/91	0.34	7.2	680	11	390				307		7	113	65	45	2	11	<	0.02	0.13	< 0.01	
Jul-91	07/16/91	0.15	8.2	670	16	<	2		347													
Aug-91																						
Sep-91	09/17/91	0.22	8.4	740	7	480			410	344	5	7	117	77	53	2	6		0.06	0.12	0.01	
Oct-91																						
Nov-91																						
Dec-91																						
Jan-92																						
Feb-92																						
Mar-92																						
Apr-92																						
May-92	05/20/92	0.51	8.4	1	10.3	374	44		341	310	2	3	97	69	41	2	5	<	0.02	0.31		
Jun-92																						
Jul-92	07/16/92	0.1524	9.8	805	9.3																	
Aug-92	08/26/92	0.11	8.4	835	9.2																	
Sep-92	09/21/92	[illegible]074	6.8	841	9	530	14		485	295	10	6	220	89	64	3	7	<	0.02	0.14		
Oct-92																						
Nov-92																						
Dec-92																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: ST2 | Property: Star Point | Location: 2375' S 2500' W of NE corn. Sec 20, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7840

Date		Field Measurements				Laboratory Measurements																	Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)		
Jan-93																							
Feb-93																							
Mar-93																							
Apr-93																							
May-93																							
Jun-93	06/21/93	1.39	14.7	1026	18.4	588	52		516	285	0	3	45	59	27	1	3	<	0.02	0.96	0.41		
Jul-93	07/27/93	0.391	7	694	8.5																		
Aug-93	08/18/93	0.248	6.7	924	8.6																		
Sep-93	09/28/93	0.28	6.5	1200	5	904 <	2		706	373	10	10	434	120	99	3	10	<	0.02 <	0.02 <	0.01		
Oct-93																							
Nov-93																							
Dec-93																							
Jan-94																							
Feb-94																							
Mar-94																							
Apr-94																							
May-94																							
Jun-94	06/08/94	0.391	8.3	1200	12.5	874	4		658	354	0	6	395	114	91	3	7		0.07	0.23	0.2		
Jul-94	07/20/94	0.29	8.3	676	11.3																		
Aug-94	08/31/94	0.23	8.4	1470	14.4																		RAIN IN A.M. = ~.10". LO
Sep-94	09/21/94	0.32	8.2	1466	13.7	1320	2		1114	397	0	10	718	183	160	6	11		0.12	0.16	0.01		
Oct-94																							
Nov-94																							
Dec-94																							
Jan-95																							
Feb-95																							
Mar-95																							
Apr-95																							
May-95																							
Jun-95	06/22/95	3.26	8.1	463	5.2	320	32 <	2	317	237 <	2	3	60	78.2	29.5	1.5	3.4	3.3	0.04	0.27	0.021		
Jul-95	07/27/95	0.53	8.41	890	15																		
Aug-95	08/23/95	0.58	7.64	817	12																		
Sep-95	09/28/95	0.015	7.6	875	8.22	1120	6 <	2	874	321 <	2	7	500	149	122	4.7	9.2	2.4	0.02	0.06	0.017		
Oct-95																							
Nov-95																							
Dec-95																							
Jan-96																							
Feb-96																							
Mar-96																							
Apr-96																							
May-96																							
Jun-96	06/12/96	0.062	8.27	762	10	422		2 <	406	233	2 <	3	140	87.4	45.6	1.9	4.3	4.1	0.1	0.41	0.023		
Jul-96	07/23/96	0.25	8.4	880	16																		
Aug-96	08/19/96	0.152	8.65	1068	12																		
Sep-96																							
Oct-96	10/18/96	0.132	8.56	1387	2	1040	18	8	917	344	2 <	8	510	163	124	5	9	2.8	0.06	0.19	0.02		
Nov-96																							
Dec-96																							
Jan-97																							
Feb-97																							
Mar-97																							
Apr-97																							
May-97																							
Jun-97	06/18/97	1.18	8.45	685	13.5	365		2 <	350	214	2 <	3	110	81.7	36.1	2.1	4	4.3	0.04	0.17	0.012		
Jul-97	07/30/97	0.35	8.2	861	11																		
Aug-97	08/13/97	0.35	8.3	875	12																		
Sep-97	09/17/97	0.28	8.43	876	11	630	1 <	5 <	560	270	10 <	13	300	100	76	4.1	7.3	-1.5	0.01 <	0.08	0.008		
Oct-97																							
Nov-97																							
Dec-97																							
END DATA																							
Count		55	27	27	27	35	11	6	14	14	13	14	14	14	14	14	14	6	14	14	12		
Minimum		0.015	6.5	1	2	241 <	1 <	2 <	317	214 <	0 <	3	45	59	27	1	3	-1.5 <	0.01 <	0.02 <	0.008		
Maximum		3.5	14.7	1470	18.4	1320 <	52 <	8 <	1114	397 <	10 <	13	718	183	160	6	11	4.3 <	0.12 <	0.96 <	0.41		
Average		0.505	8.3078	876.56	10.819	508.09 <	16.091 <	3.5 <	571.5	306 <	3.6154 <	6.3571	268.5	102.52	72.371	2.95	6.9429	2.5667 <	0.0443 <	0.2321 <	0.0626		
Standard Deviation		0.7623	1.433	298.37	3.5917	251.8 <	17.563 <	2.2913 <	240.67	52.519 <	3.7115 <	3.0614	202.19	37.083	39.627	1.4226	2.6744	1.9371 <	0.0325 <	0.225 <	0.1167		
Avg. -1 Std. Dev.		-0.257	6.8747	578.18	7.2275	256.28 <	-1.492 <	1.2087 <	330.63	253.48 <	-0.096 <	3.2957	66.315	65.439	32.745	1.5274	4.2685	0.6296 <	0.0118 <	0.0071 <	-0.054		

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

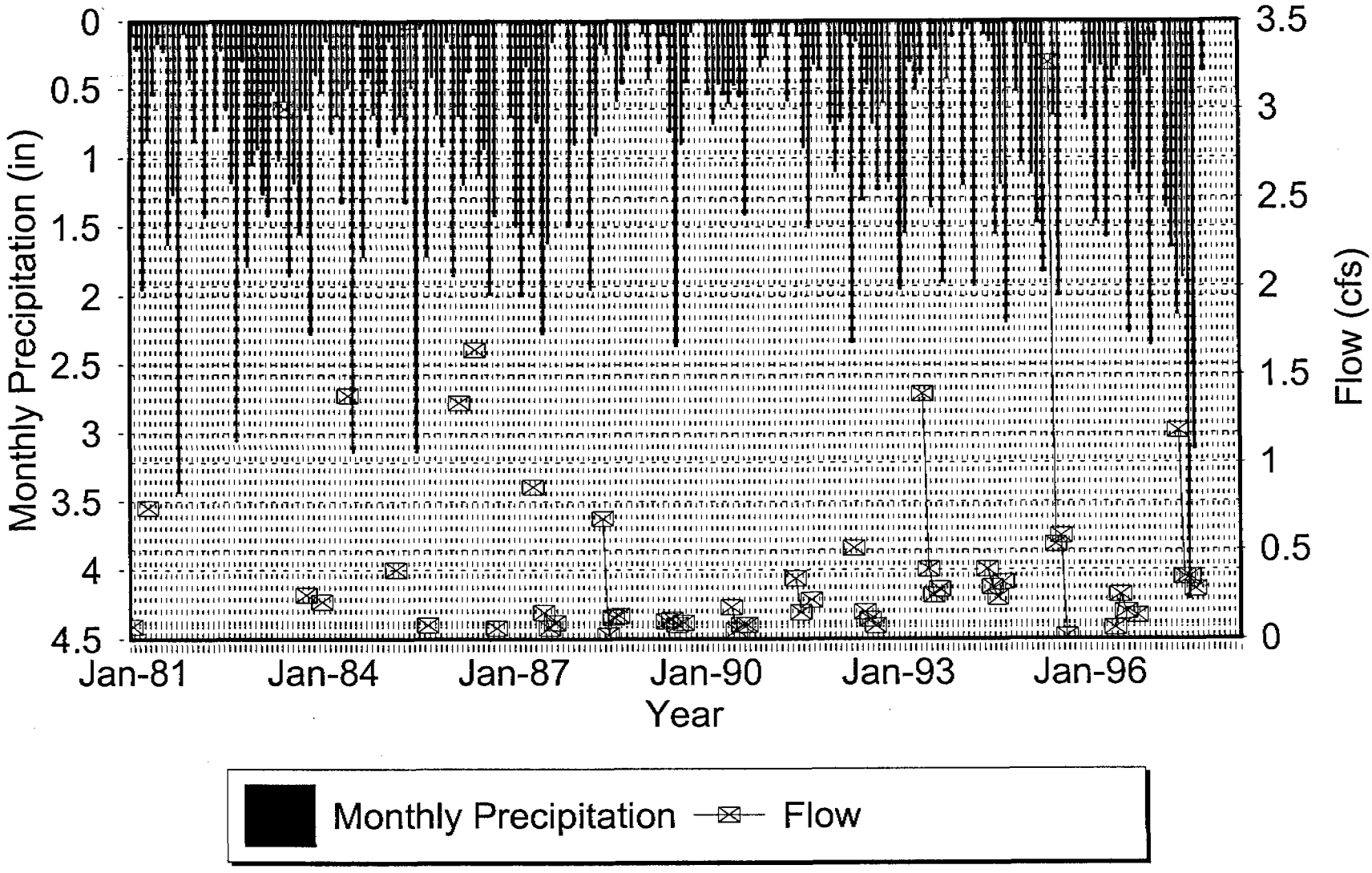
Station: ST2 | Property: Star Point | Location: 2375' S 2500' W of NE corn. Sec 20, T15S, R8E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 7840

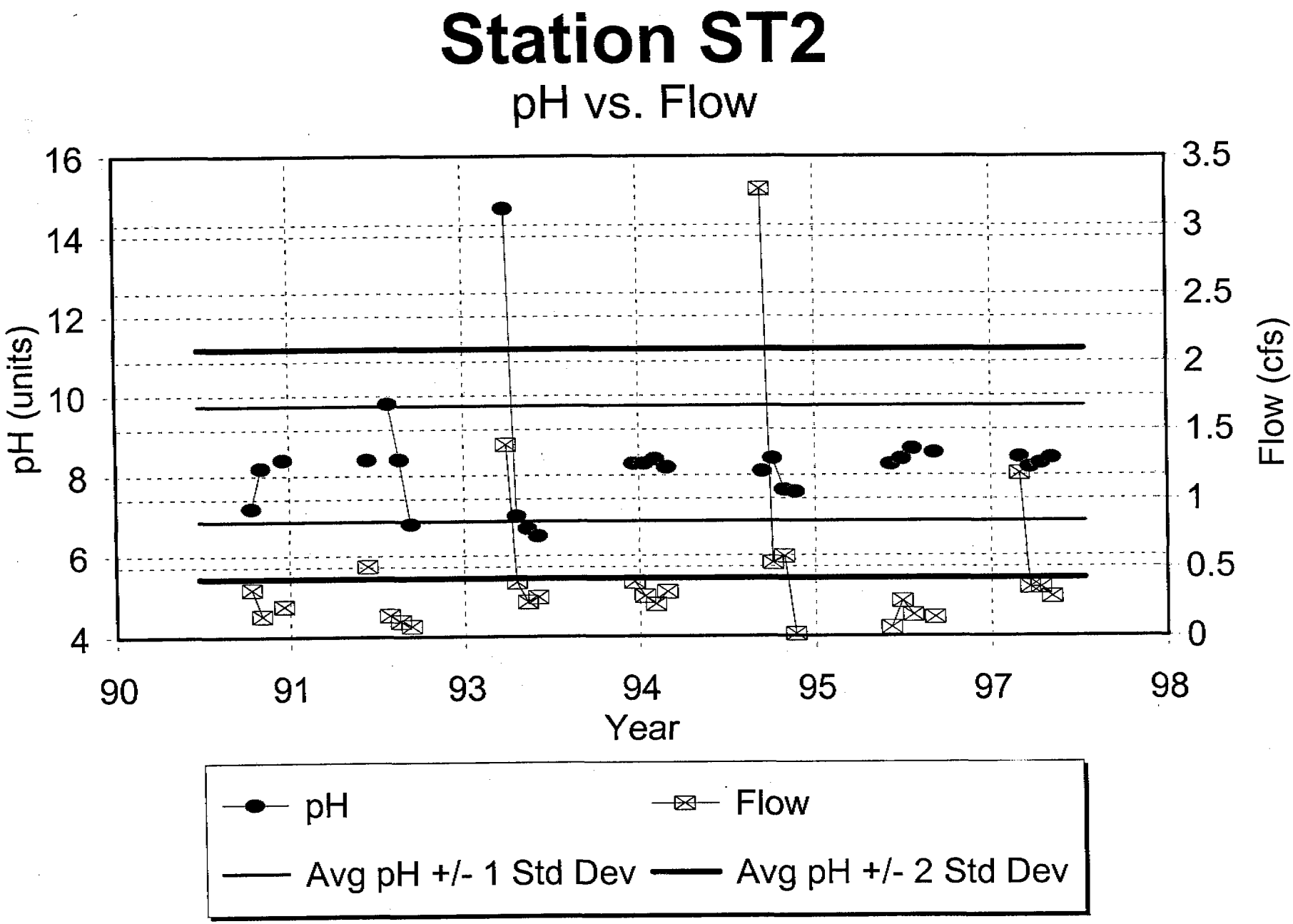
Date		Field Measurements				Laboratory Measurements																Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	
Avg. +1 Std. Dev.		1.2673	9.7406	1174.9	14.411	759.89 <	33.674 <	5.7913 <	812.37	358.52 <	7.3289 <	9.4186	470.69	139.6	112	4.3726	9.6173	4.5037 <	0.0767 <	0.4572 <	0.1793	
Avg. -2 Std. Dev.		-1.02	5.4417	279.81	3.6358	4.479 <	-19.08 <	-1.083 <	89.752	200.96 <	-3.808 <	0.2343	-135.9	28.356	-6.882	0.1047	1.594	-1.307 <	-0.021 <	-0.218 <	-0.171	
Avg. +2 Std. Dev.		2.0295	11.174	1473.3	18.003	1011.7 <	51.258 <	8.0826 <	1053.2	411.04 <	11.038 <	12.48	672.87	176.69	151.63	5.7953	12.292	6.4408 <	0.1092 <	0.6822 <	0.2959	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

Station ST2

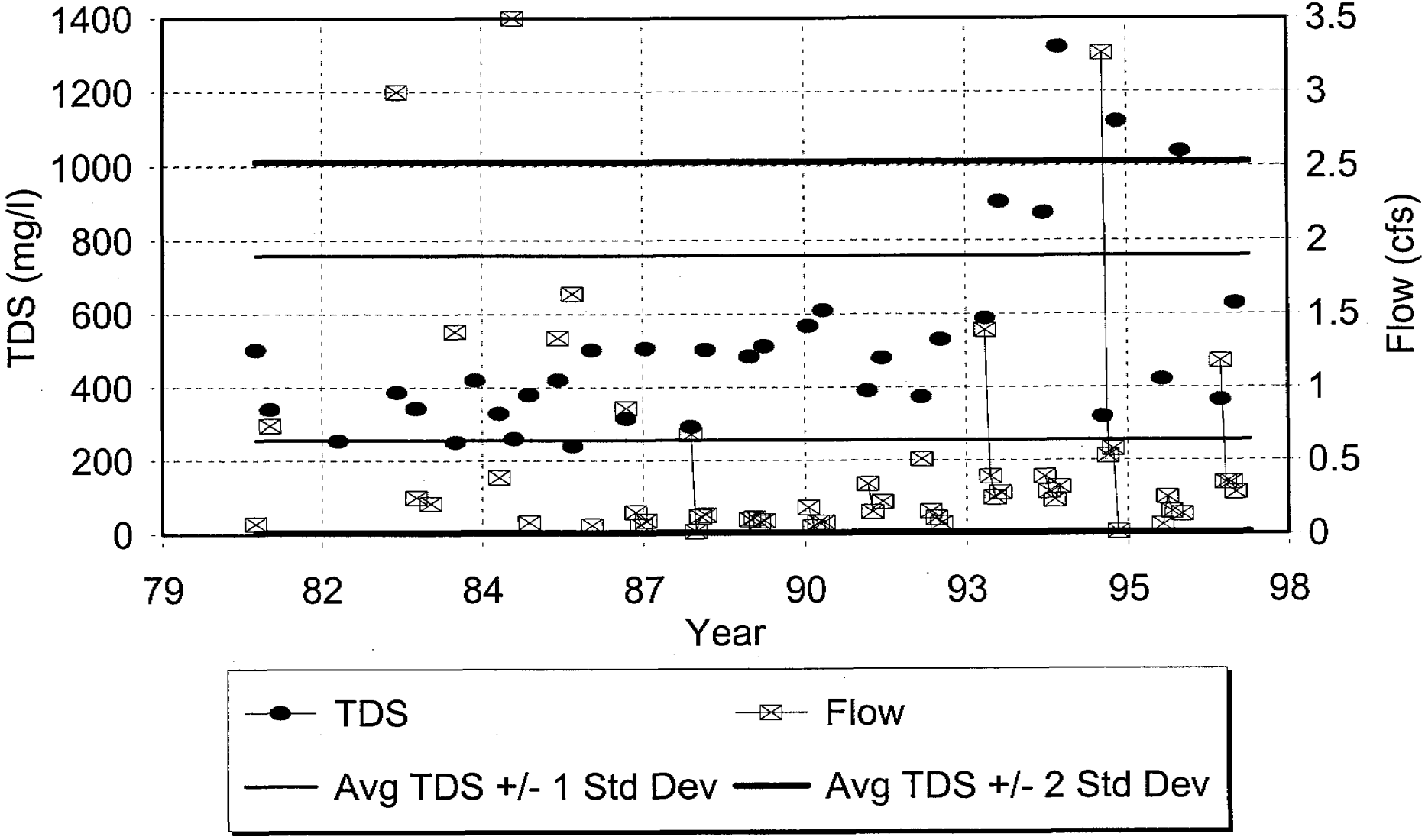
Monthly Precipitation vs. Flow

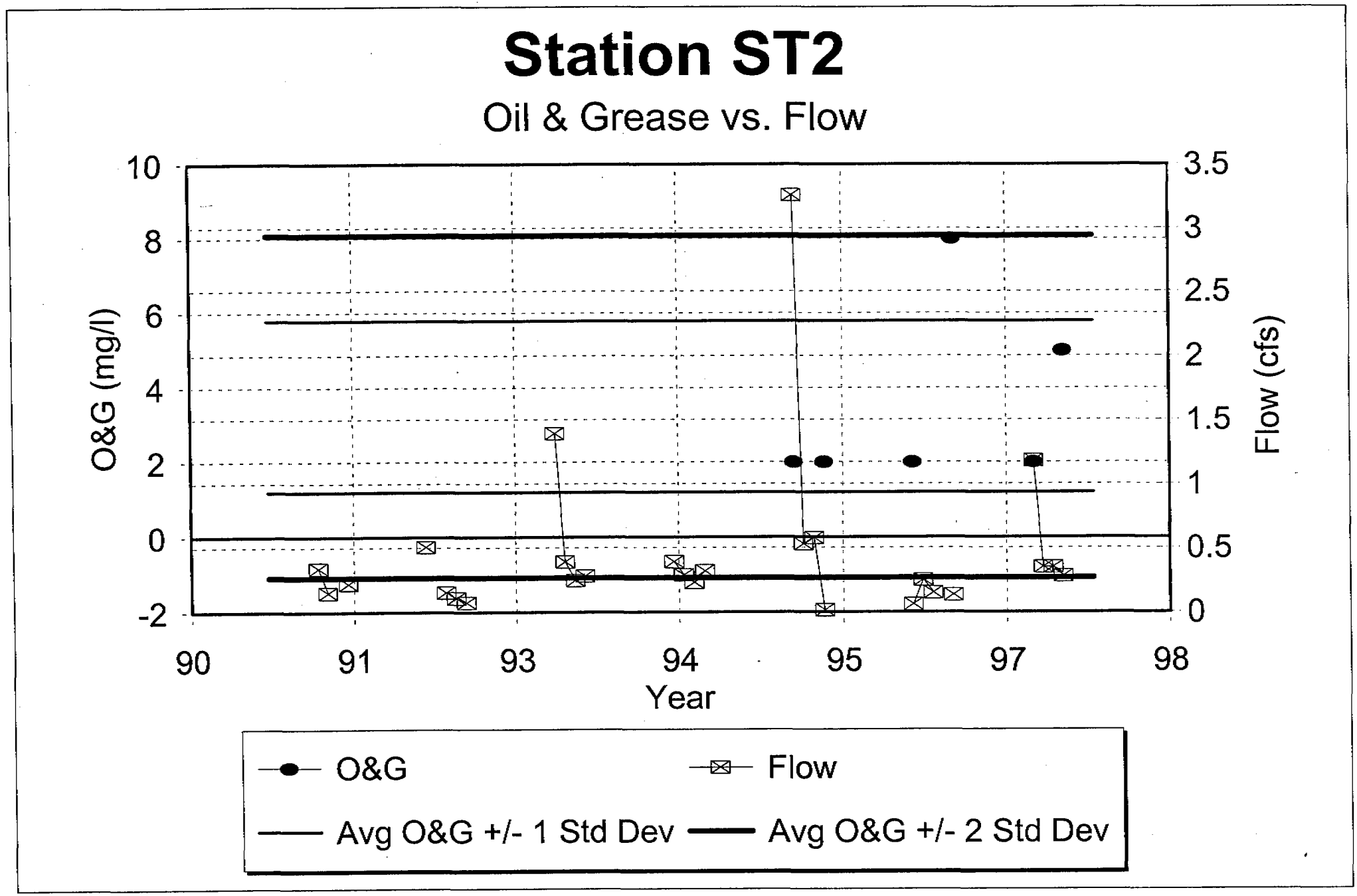



Station ST2
pH vs. Flow
pH (units)
16
14
12
10
8
6
4
Flow (cfs)
3.5
3
2.5
2
1.5
1
0.5
0
90
91
93
94
95
97
98
Year
pH
Flow
Avg pH +/- 1 Std Dev
Avg pH +/- 2 Std Dev

Station ST2

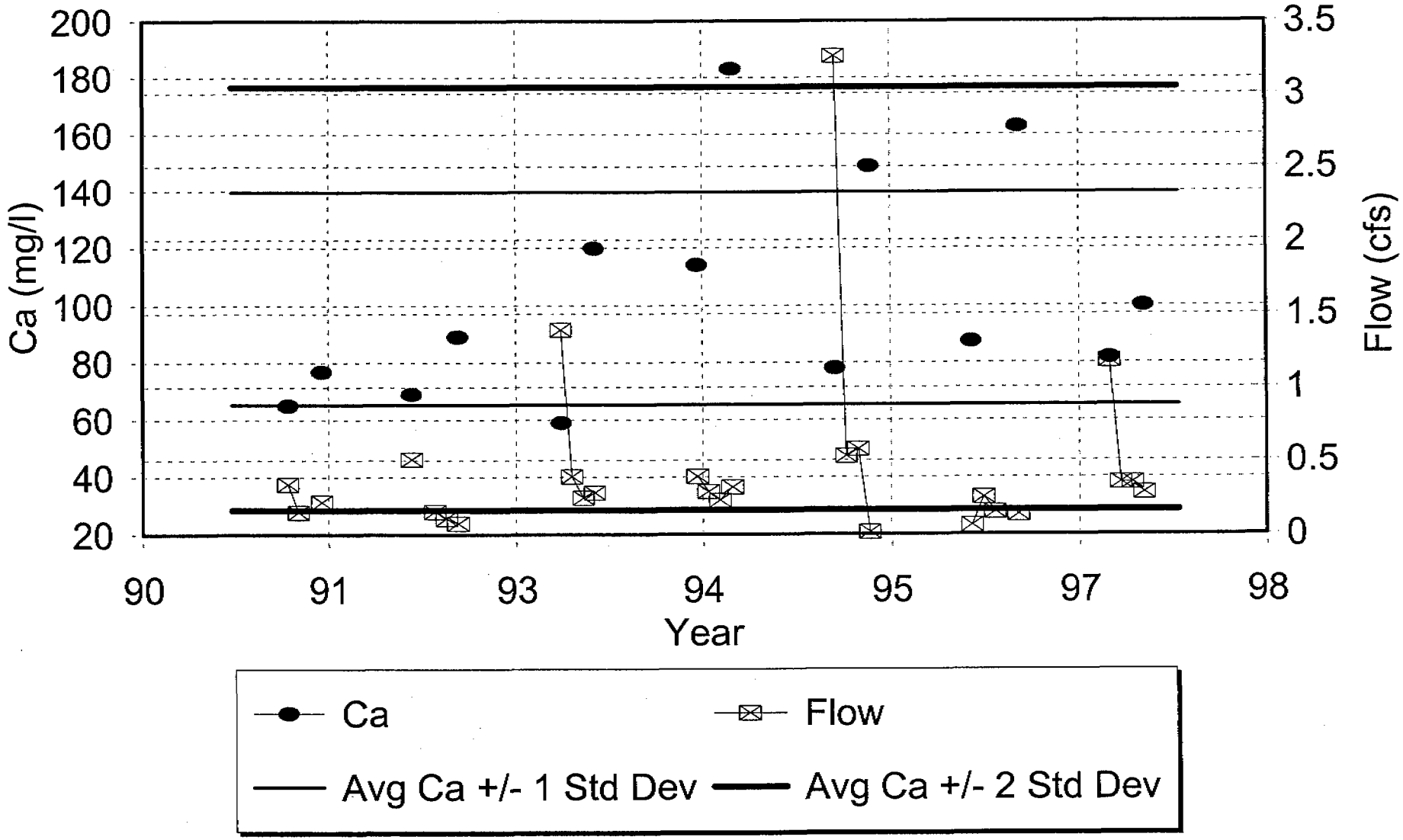
TDS vs. Flow

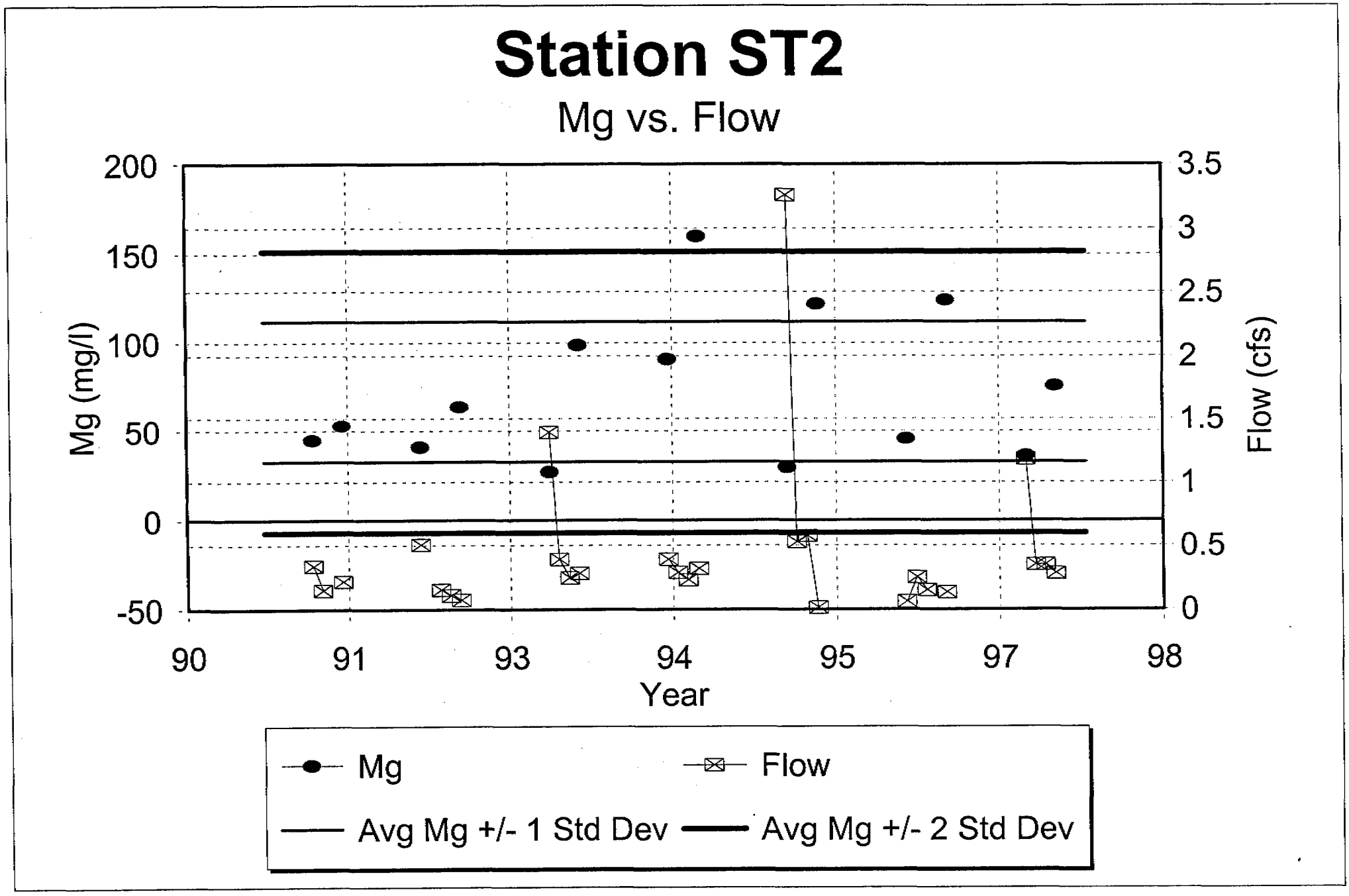



Station ST2
Oil & Grease vs. Flow
O&G (mg/l)
Flow (cfs)
10
8
6
4
2
0
-2
3.5
3
2.5
2
1.5
1
0.5
0
90
91
93
94
95
97
98
Year
O&G
Flow
Avg O&G +/- 1 Std Dev
Avg O&G +/- 2 Std Dev

Station ST2

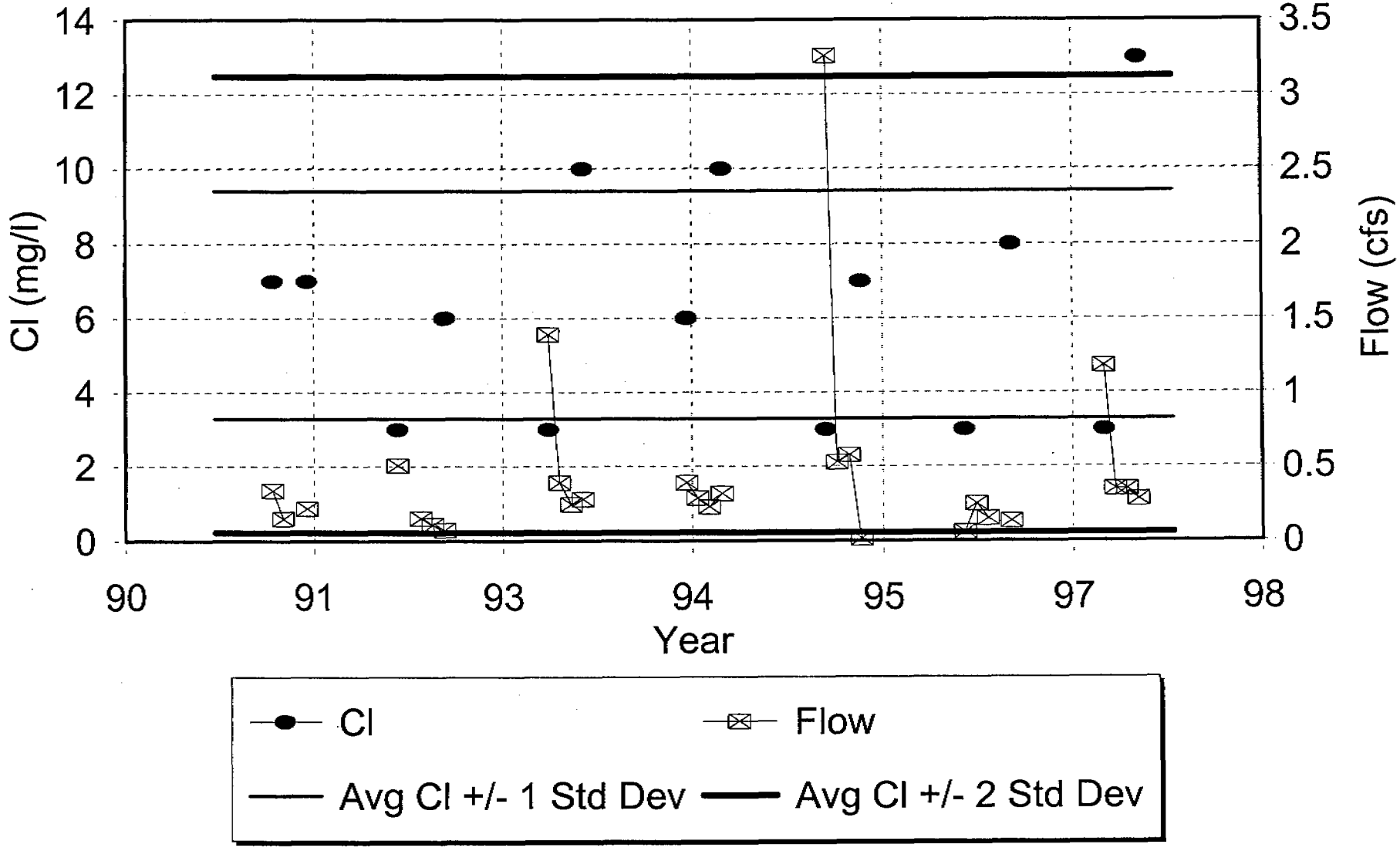
Ca vs. Flow

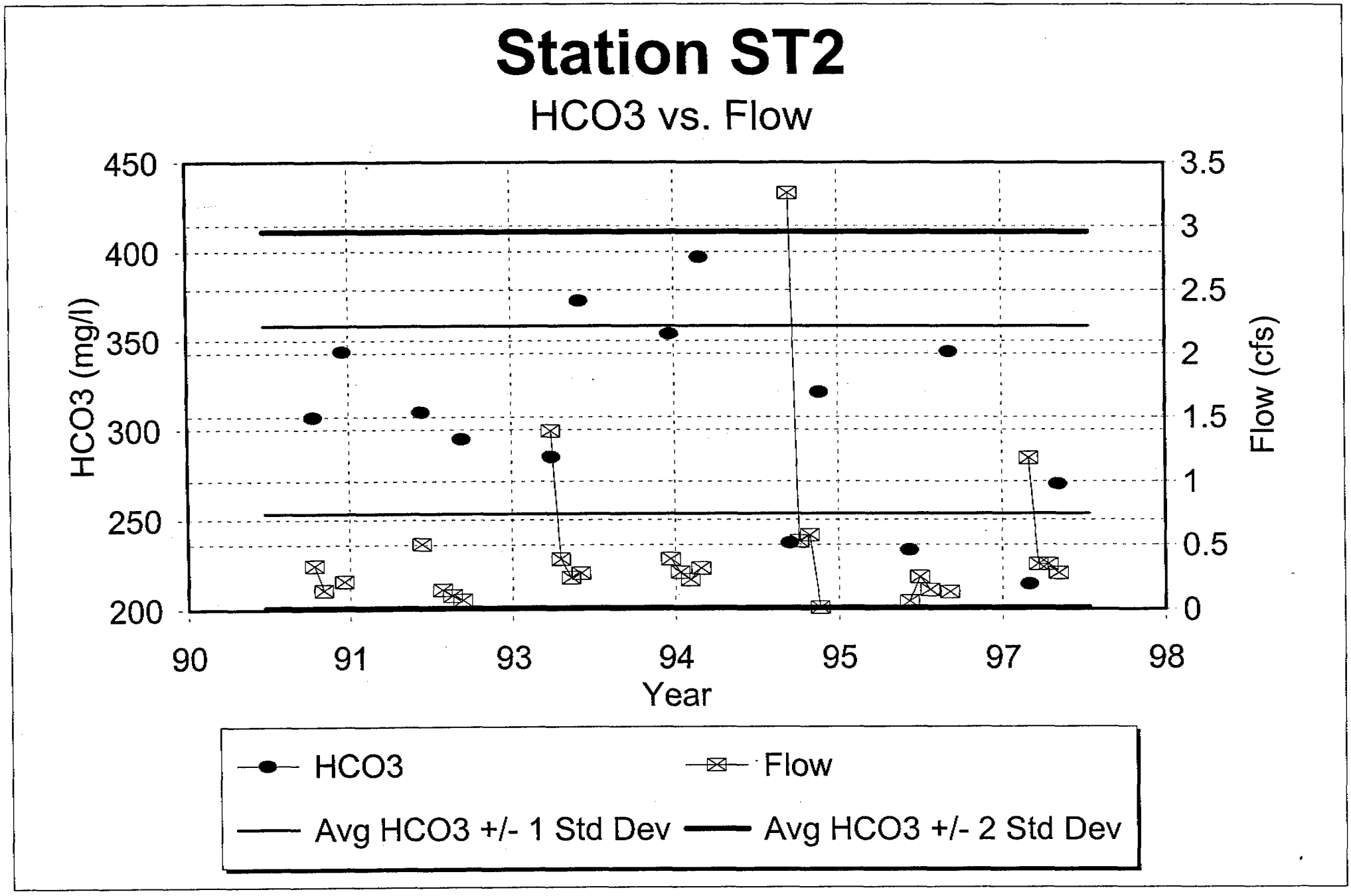



Station ST2
Mg vs. Flow
Mg (mg/l)
200
150
100
50
0
-50
Flow (cfs)
3.5
3
2.5
2
1.5
1
0.5
0
90
91
93
94
95
97
98
Year
Mg
Flow
Avg Mg +/- 1 Std Dev
Avg Mg +/- 2 Std Dev

Station ST2

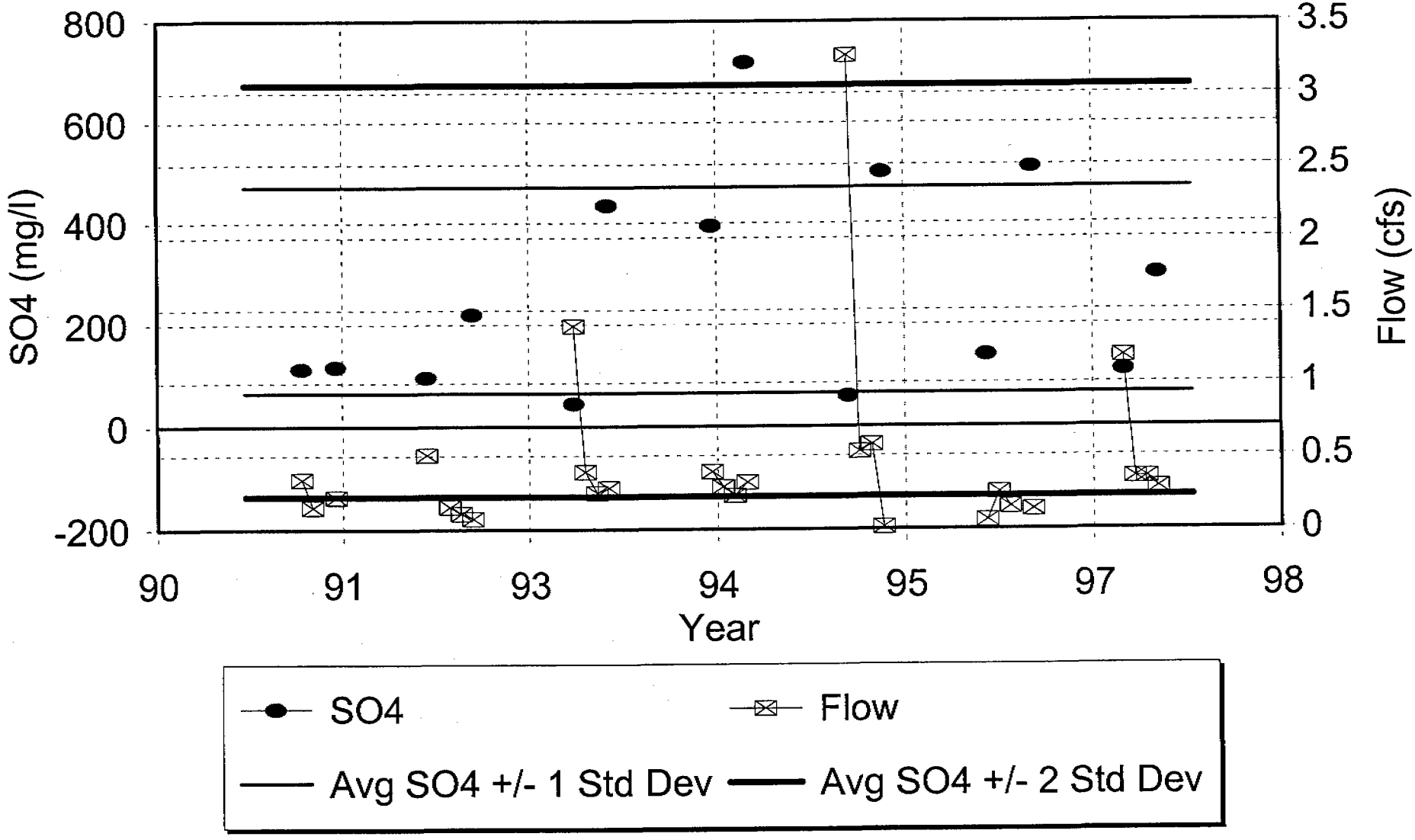
Cl vs. Flow




Station ST2
HCO3 vs. Flow
450
400
350
300
250
200
HCO3 (mg/l)
3.5
3
2.5
2
1.5
1
0.5
0
Flow (cfs)
90
91
93
94
95
97
98
Year
HCO3
Flow
Avg HCO3 +/- 1 Std Dev
Avg HCO3 +/- 2 Std Dev

Station ST2

SO4 vs. Flow



Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 87101CV | Property: Star Point | Location: 300' S 1500' E of NW corn. Sec 10, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8400

Date		Field Measurements				Laboratory Measurements																Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	
Jan-87																						
Feb-87																						
Mar-87																						
Apr-87																						
May-87																						
Jun-87																						
Jul-87																						
Aug-87																						
Sep-87	09/23/87	0.06	8.6	390	6.9	280 <	2		285	294		5	18	60	33	1	7	<	0.02	0.21 <	0.01	
Oct-87																						
Nov-87																						
Dec-87																						
Jan-88																						
Feb-88																						
Mar-88																						
Apr-88																						
May-88																						
Jun-88																						
Jul-88																						
Aug-88																						
Sep-88																						
Oct-88																						
Nov-88																						
Dec-88																						
Jan-89																						
Feb-89																						
Mar-89																						
Apr-89																						
May-89																						
Jun-89																						
Jul-89																						
Aug-89																						
Sep-89																						
Oct-89																						
Nov-89																						
Dec-89																						
Jan-90																						
Feb-90																						
Mar-90																						
Apr-90																						
May-90																						
Jun-90																						
Jul-90																						
Aug-90																						
Sep-90																						
Oct-90																						
Nov-90																						
Dec-90																						
Jan-91																						
Feb-91																						
Mar-91																						
Apr-91																						
May-91																						
Jun-91																						
Jul-91																						
Aug-91																						
Sep-91																						
Oct-91																						
Nov-91																						
Dec-91																						
Jan-92																						
Feb-92																						
Mar-92																						
Apr-92																						
May-92																						
Jun-92																						
Jul-92																						
Aug-92																						
Sep-92																						
Oct-92																						
Nov-92																						
Dec-92																						

Cyprus Plateau Mining Company - Water Quality Data

Station: 87101CV | Property: Star Point | Location: 300' S 1500' E of NW corn. Sec 10, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8400

Print Date: March 2, 1998

Date Mo-Yr	Sample Date	Field Measurements Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	Laboratory Measurements TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cal/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-93																						
Feb-93																						
Mar-93																						
Apr-93																						
May-93																						
Jun-93	06/21/93	0.049	14.8	772	22.6	432	16		406	222	12	4	16	47	21	1	4	<	0.02	0.05 <	0.01	
Jul-93	07/26/93	0																				NO FLOW
Aug-93	08/17/93	0																				NO FLOW
Sep-93	09/13/93	0																				NO FLOW
Oct-93																						
Nov-93																						
Dec-93																						
Jan-94																						
Feb-94																						
Mar-94																						
Apr-94																						
May-94																						
Jun-94	06/28/94	0																				NO FLOW
Jul-94	07/20/94	0																				NO FLOW
Aug-94	08/31/94	0																				NO FLOW
Sep-94																						
Oct-94	10/25/94	0																				NO FLOW
Nov-94																						
Dec-94																						
Jan-95																						
Feb-95																						
Mar-95																						
Apr-95																						
May-95																						
Jun-95	06/21/95	0.19	8.5	298	11.5	190	14 <	2	170	138 <	2	2	30	42.6	15.5	1.1	3.3	1.7	0.06	0.58	0.014	
Jul-95	07/26/95	0.002	8.6	477	16	290 <	5 <	2	295	235	10	6	40	64.2	32.8	1.5	9.9	3.8 <	0.01	0.01 <	0.005	
Aug-95	08/28/95	0.02	8.97	516	13																	Rain in last 24 hrs
Sep-95	09/27/95	0.008	8.9	613	3	310 <	5 <	2	300	249 <	2	7	36	66.1	32.8	1.3	5.8	2.9 <	0.01	0.01 <	0.005	
Oct-95	10/19/95	0.008	8.59	540	39	310 <	5 <	2	315	252	6	6	50	66.9	35.9	1.5	6.5	1.8 <	0.01	0.01 <	0.005	
Nov-95																						
Dec-95																						
Jan-96																						
Feb-96																						
Mar-96																						
Apr-96																						
May-96																						
Jun-96	06/11/96	0.047	8	400	10	238		2 <	240	199	11	2	20	56.2	24.1	1.1	4.4	3.4	0.02	0.16	0.005	
Jul-96	07/23/96	0.014	9.43	461	11	304		2 <	305	236	20	5	30	65.3	34.5	1.3	6.3	4.2	0.01 <	0.05	0.005	
Aug-96	08/19/96	0.008	9.24	465	8																	
Sep-96																						
Oct-96	10/01/96	0.01	7.5	592	6.5	301		5	304	257	3	6	30	68.2	32.5	1.2	6	3	0.01 <	0.03	0.005	
Nov-96																						
Dec-96																						
Jan-97																						
Feb-97																						
Mar-97																						
Apr-97																						
May-97																						
Jun-97	06/17/97	0.13	8	530	12	315		2 <	297	257	8	7	40	66	32	1	7	-0.6	0.01 <	0.08	0.005	
Jul-97	07/30/97	0.045	8.28	548	12	350	7	5 <	230	200	10 <	5.4	39	43	30	1.3	6.6	-0.31	0.02	0.02	0.005	
Aug-97	08/13/97	0.045	8.75	442	12																	
Sep-97																						
Oct-97	10/06/97	0.04	8.56	543	6.5	350	1 <	5 <	150	260	10 <	5.7	34	67	39	1.5	7.8	8	0.01 <	0.02	0.005	
Nov-97																						
Dec-97																						
END DATA																						
Count		22	15	15	15	12	8	10	12	12	11	12	12	12	12	12	12	10	12	12	12	
Minimum		0	7.5	298	3	190 <	1 <	2 <	150	138 <	2 <	2	16	42.6	15.5	1	3.3	-0.6 <	0.01 <	0.01 <	0.005	
Maximum		0.19	14.8	772	39	432 <	16 <	5 <	408	294 <	20 <	7	50	68.2	39	1.5	9.9	8 <	0.06 <	0.58 <	0.014	
Average		0.0307	8.9813	505.8	12.68	305.83 <	6.875 <	2.9 <	274.92	233.25 <	8.5455 <	5.0917	31.917	59.375	30.258	1.2333	6.2167	2.789 <	0.0175 <	0.1025 <	0.0066	
Standard Deviation		0.0462	1.6258	106.82	8.3445	56.937 <	5.0358 <	1.3748 <	66.168	38.321 <	5.0338 <	1.5955	9.6993	9.3668	6.4307	0.1886	1.695	2.3206 <	0.0136 <	0.1564 <	0.0029	
Avg. -1 Std. Dev.		-0.015	7.3555	396.98	4.3355	248.9 <	1.8392 <	1.5252 <	208.75	194.93 <	3.5117 <	3.4961	22.217	50.006	23.828	1.0448	4.5217	0.4684 <	0.0039 <	-0.054 <	0.0037	
Avg. +1 Std. Dev.		0.0769	10.607	612.62	21.025	362.77 <	11.911 <	4.2748 <	341.08	271.57 <	13.579 <	6.6872	41.616	68.744	36.689	1.4219	7.9117	5.1096 <	0.0311 <	0.2589 <	0.0095	
Avg. -2 Std. Dev.		[illegible]062	5.7296	292.16	-4.009	191.96 <	-3.197 <	0.1505 <	142.58	156.61 <	-1.522 [illegible]	[illegible]9006	12.518	40.637	17.397	0.8562	2.8268	-1.852 <	-0.01 <	-0.21 <	0.0008	
Avg. +2 Std. Dev.		[illegible]231	12.233	719.44	29.369	419.71 <	16.947 <	5.8495 <	407.25	309.89 <	18.613 [illegible]	[illegible]828	51.315	78.113	43.12	1.6105	9.6067	7.4302 <	0.0447 <	0.4152 <	0.0124	

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

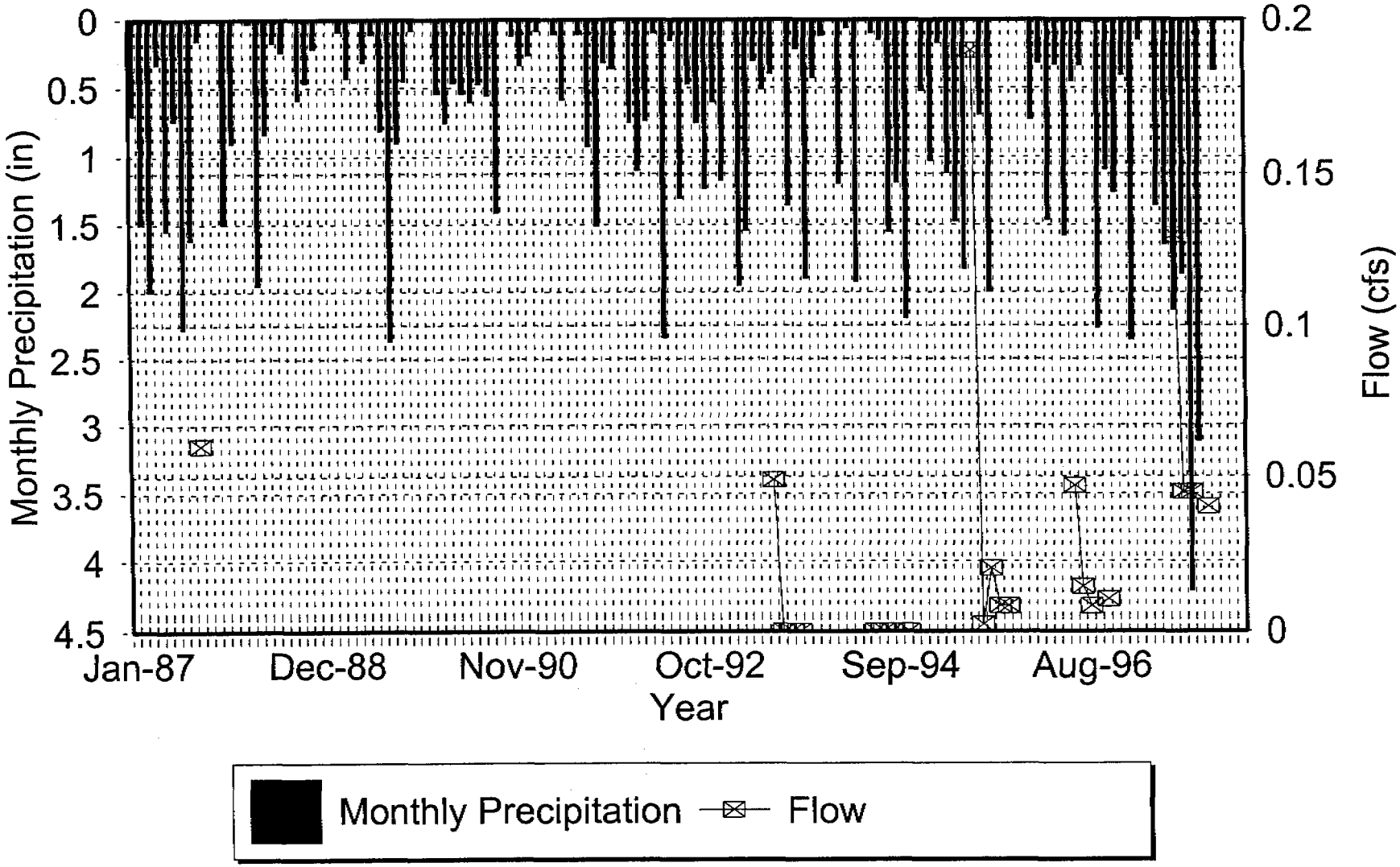
Station: 87101CV | Property: Star Point | Location: 300' S 1500' E of NW corn. Sec 10, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8400

Date		Field Measurements				Laboratory Measurements																Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

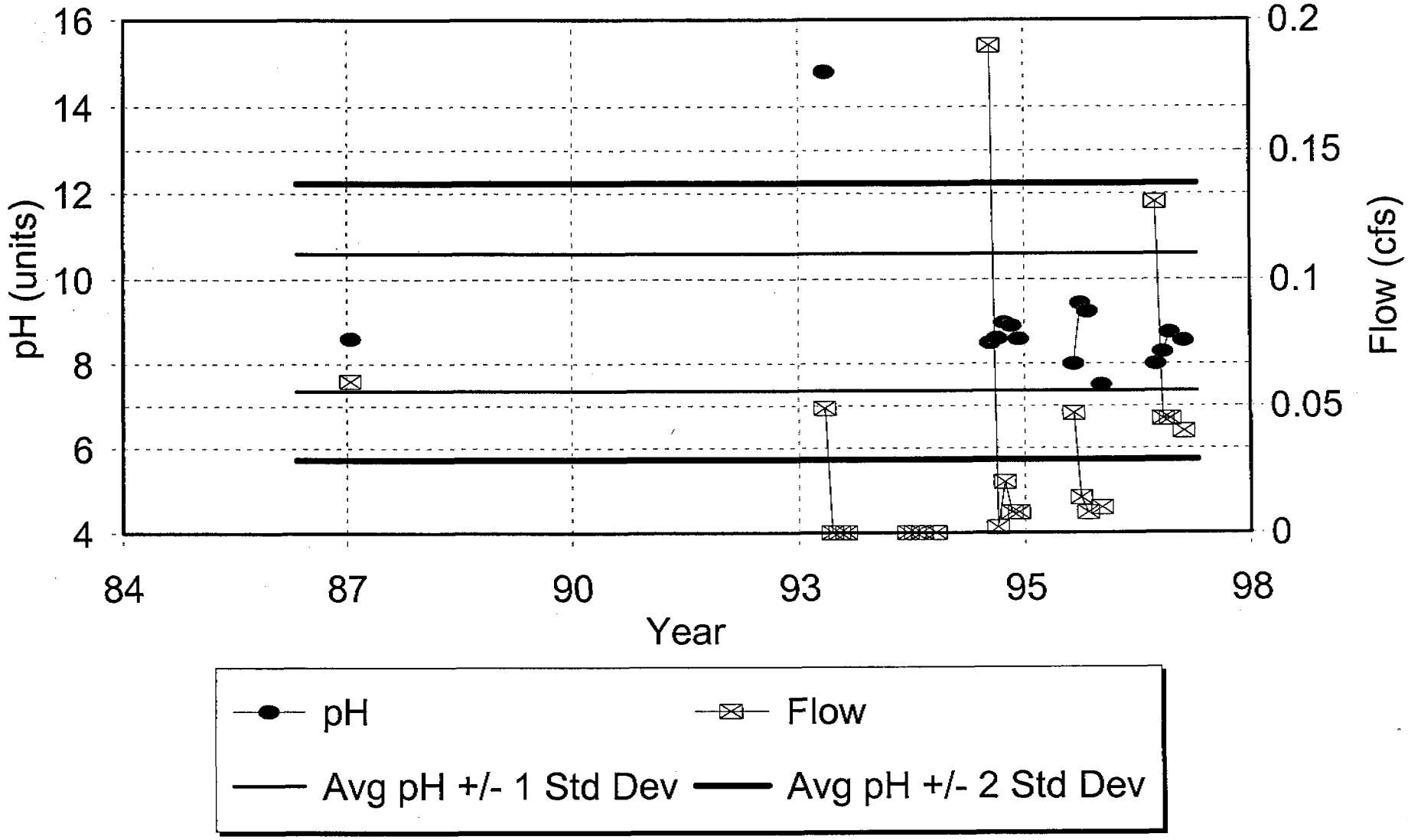
Station 87101CV

Monthly Precipitation vs. Flow

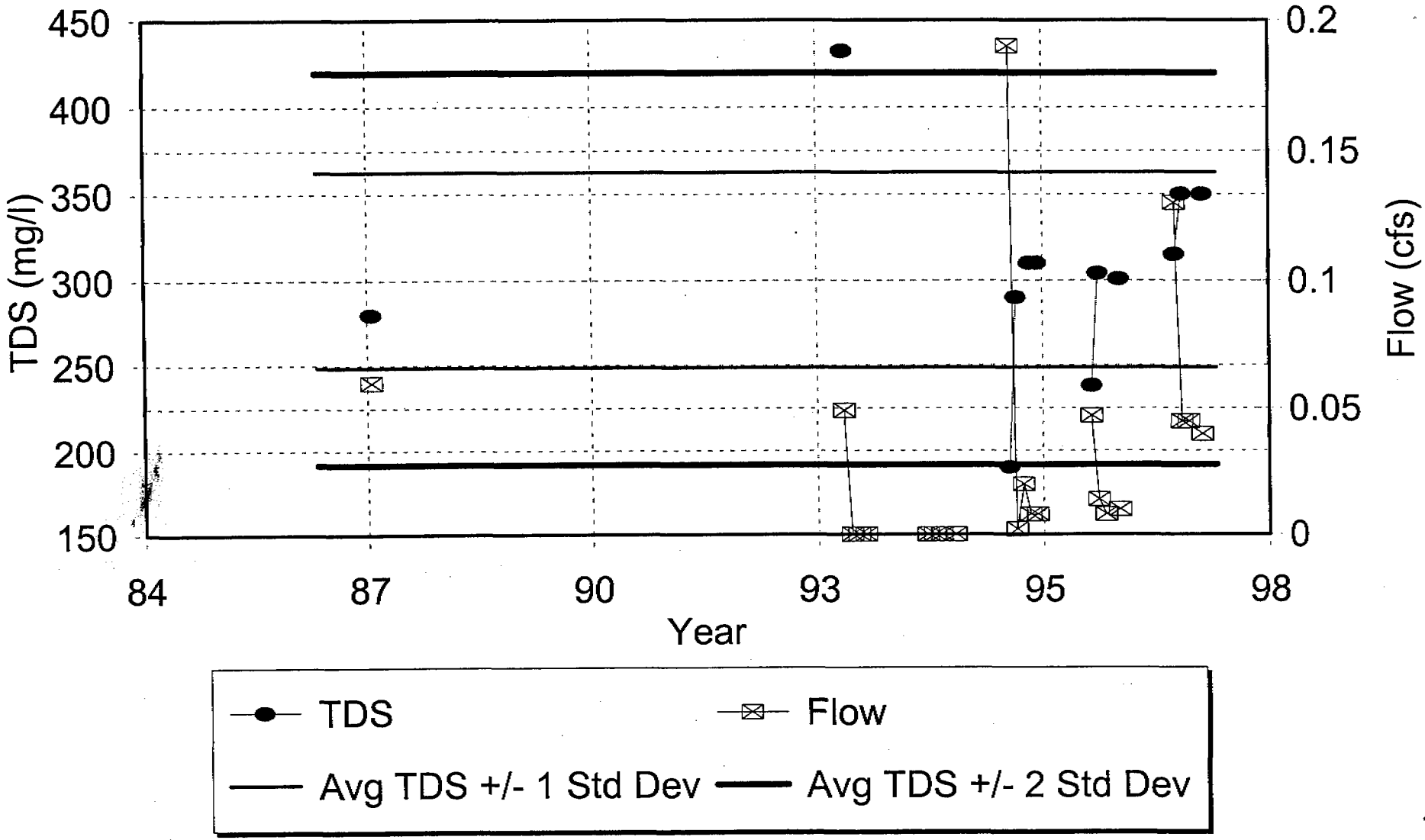


Station 87101CV

pH vs. Flow

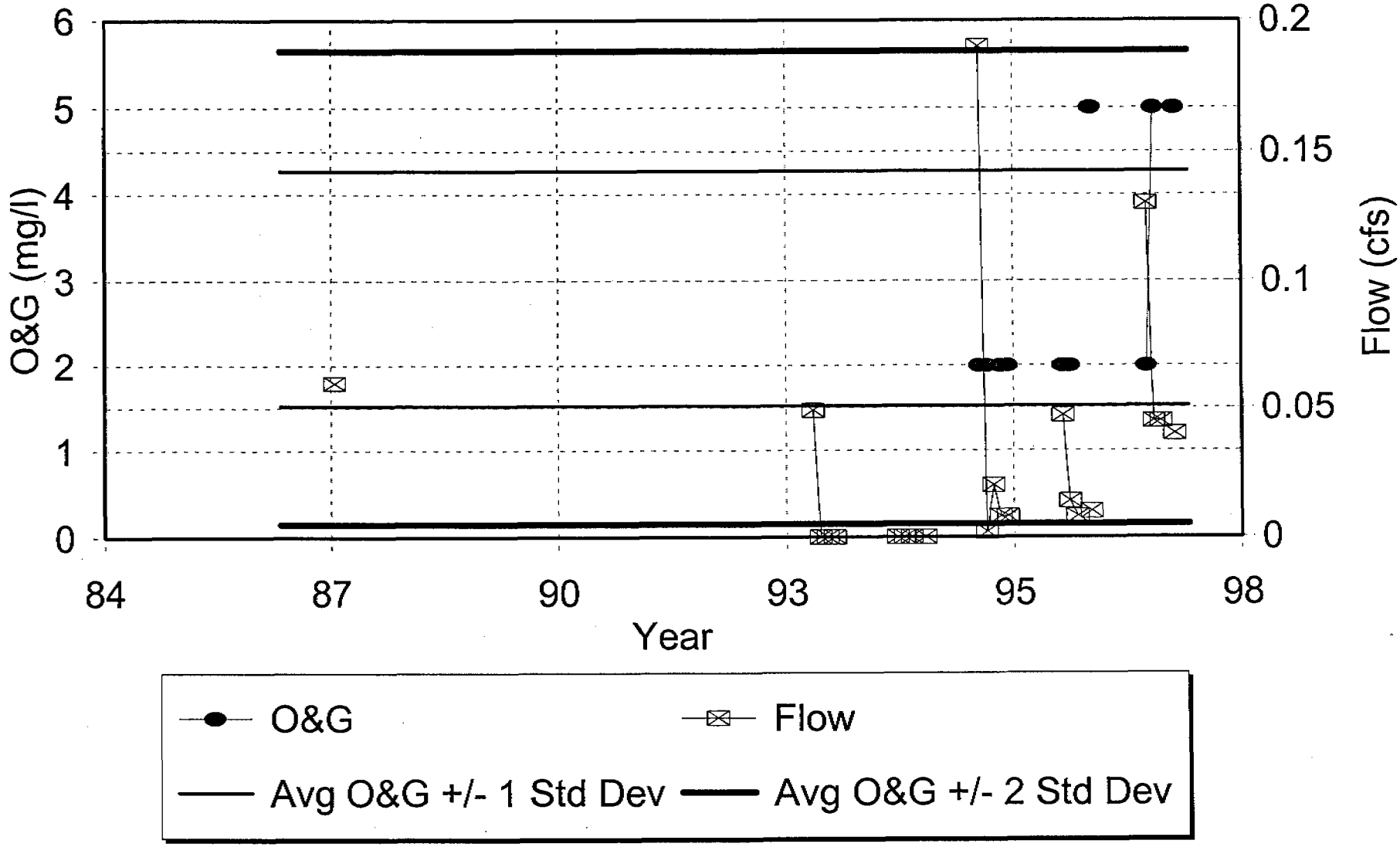


Station 87101CV

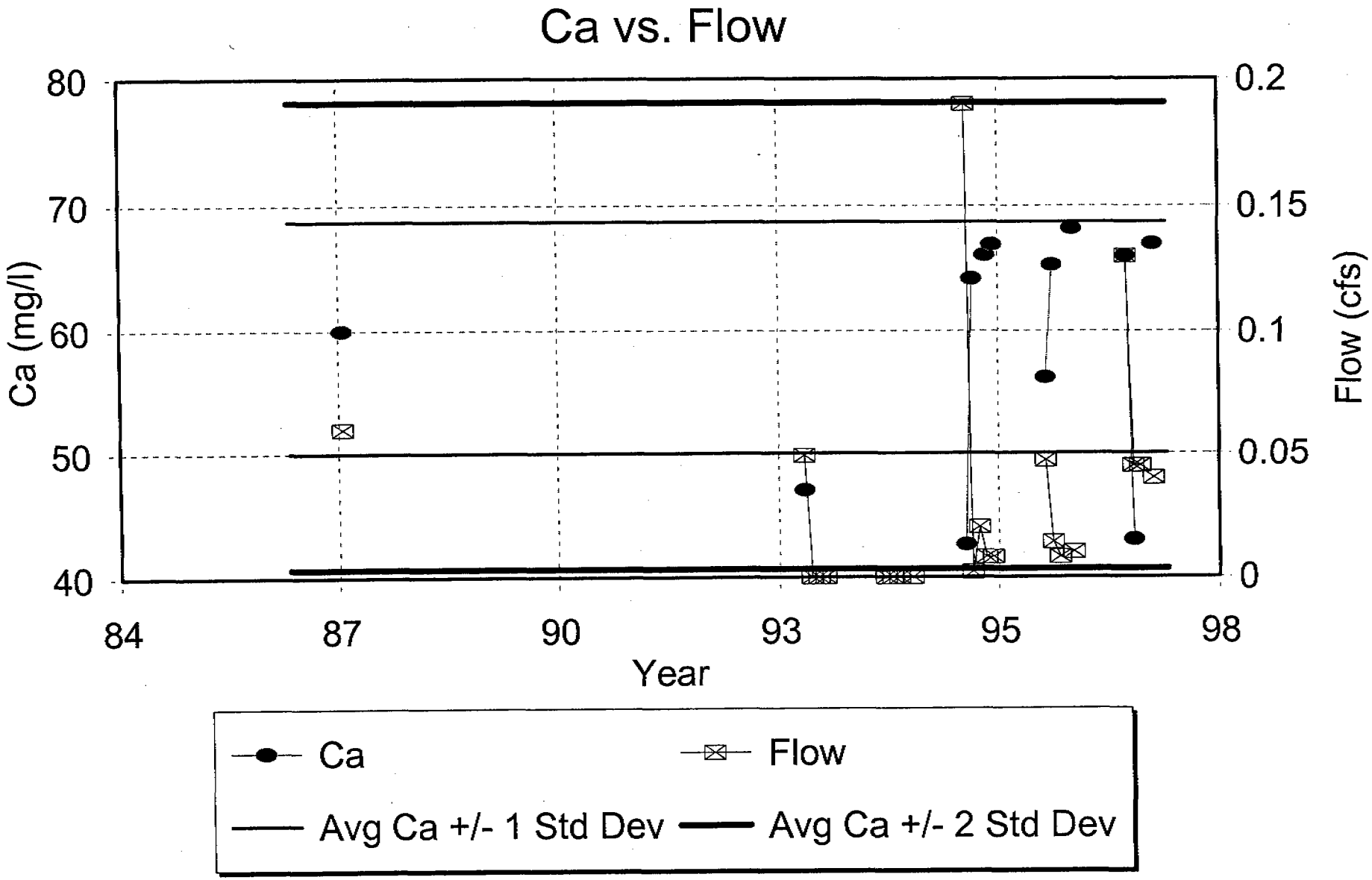


Station 87101CV

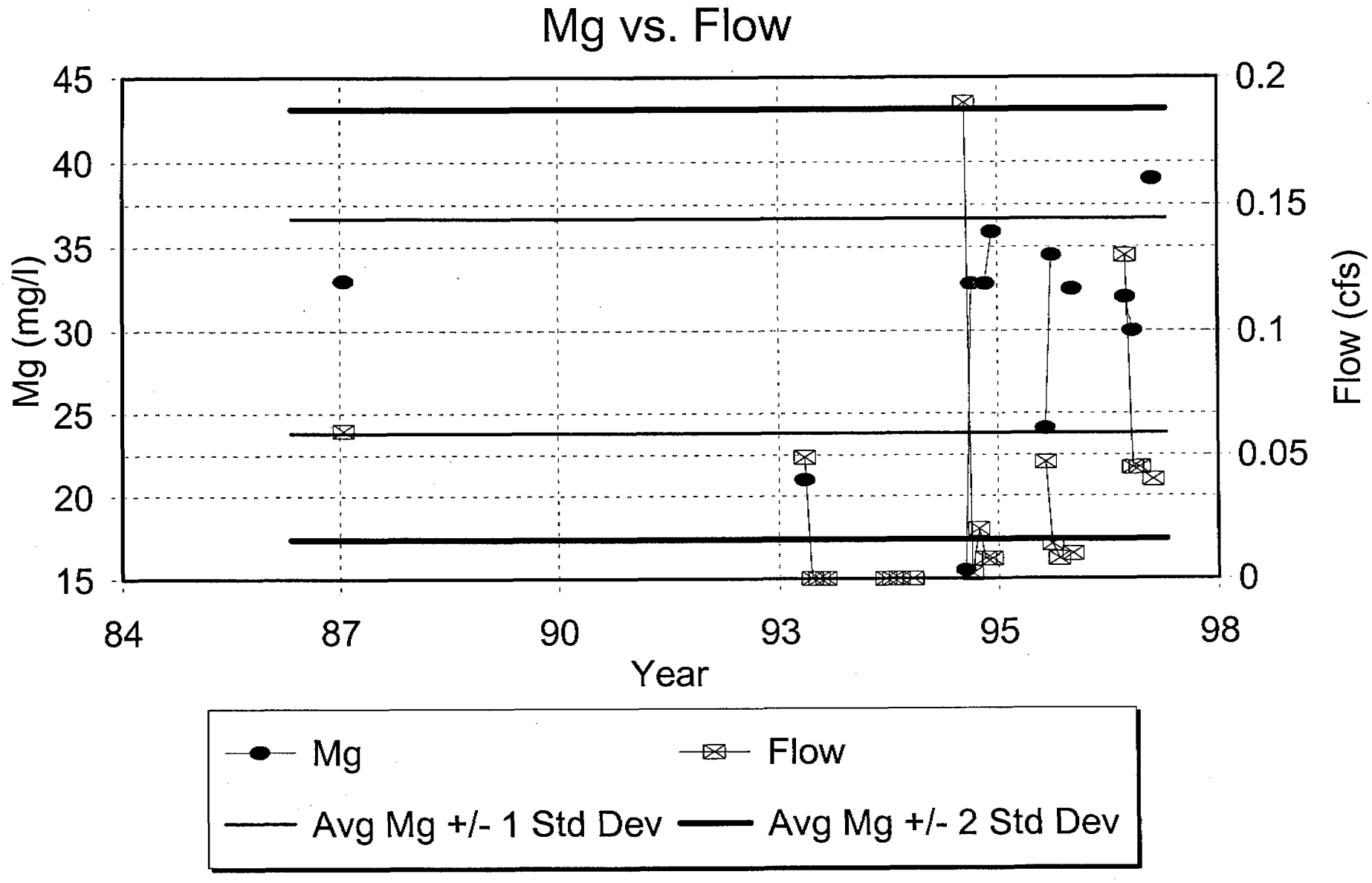
Oil & Grease vs. Flow



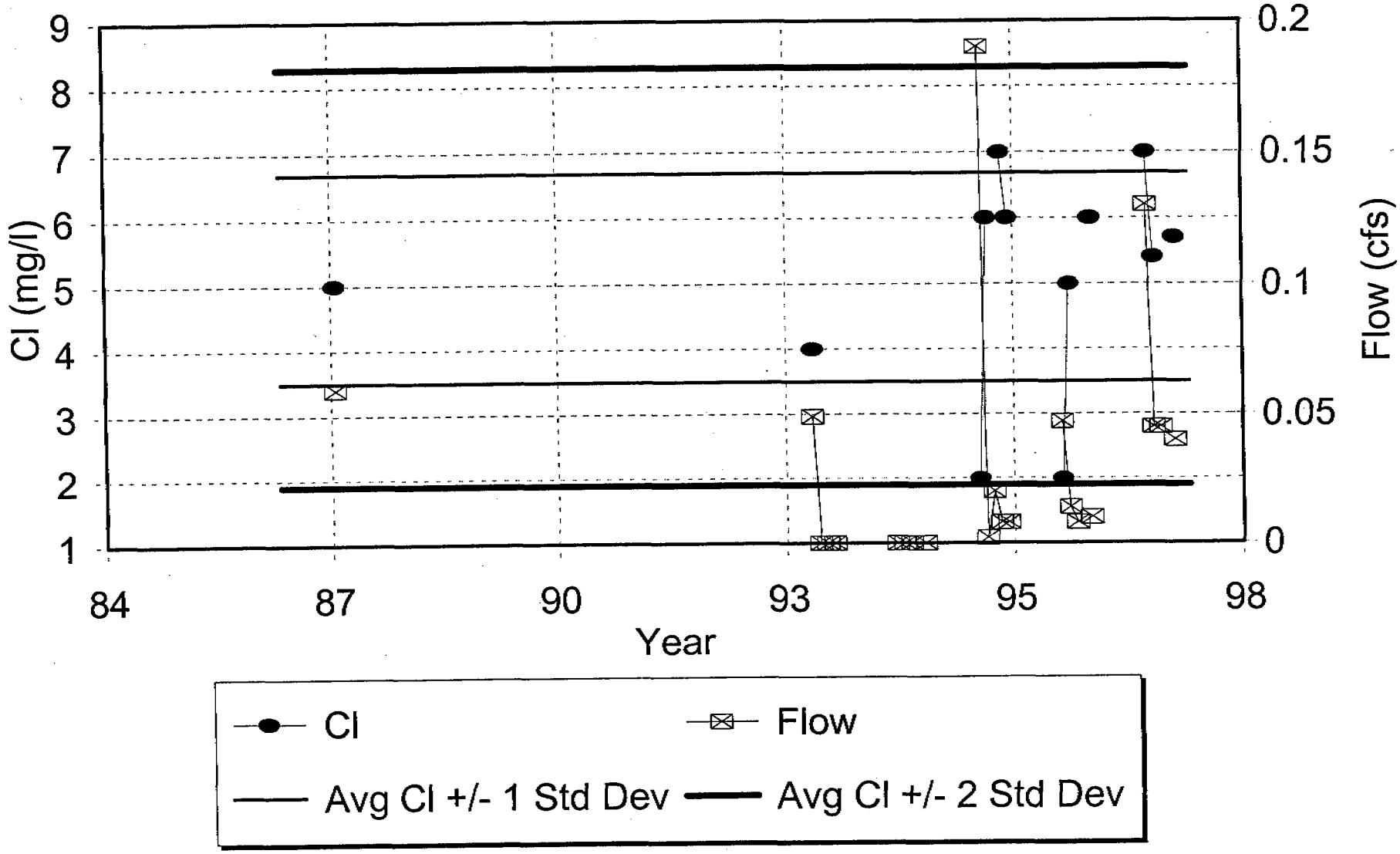
Station 87101CV



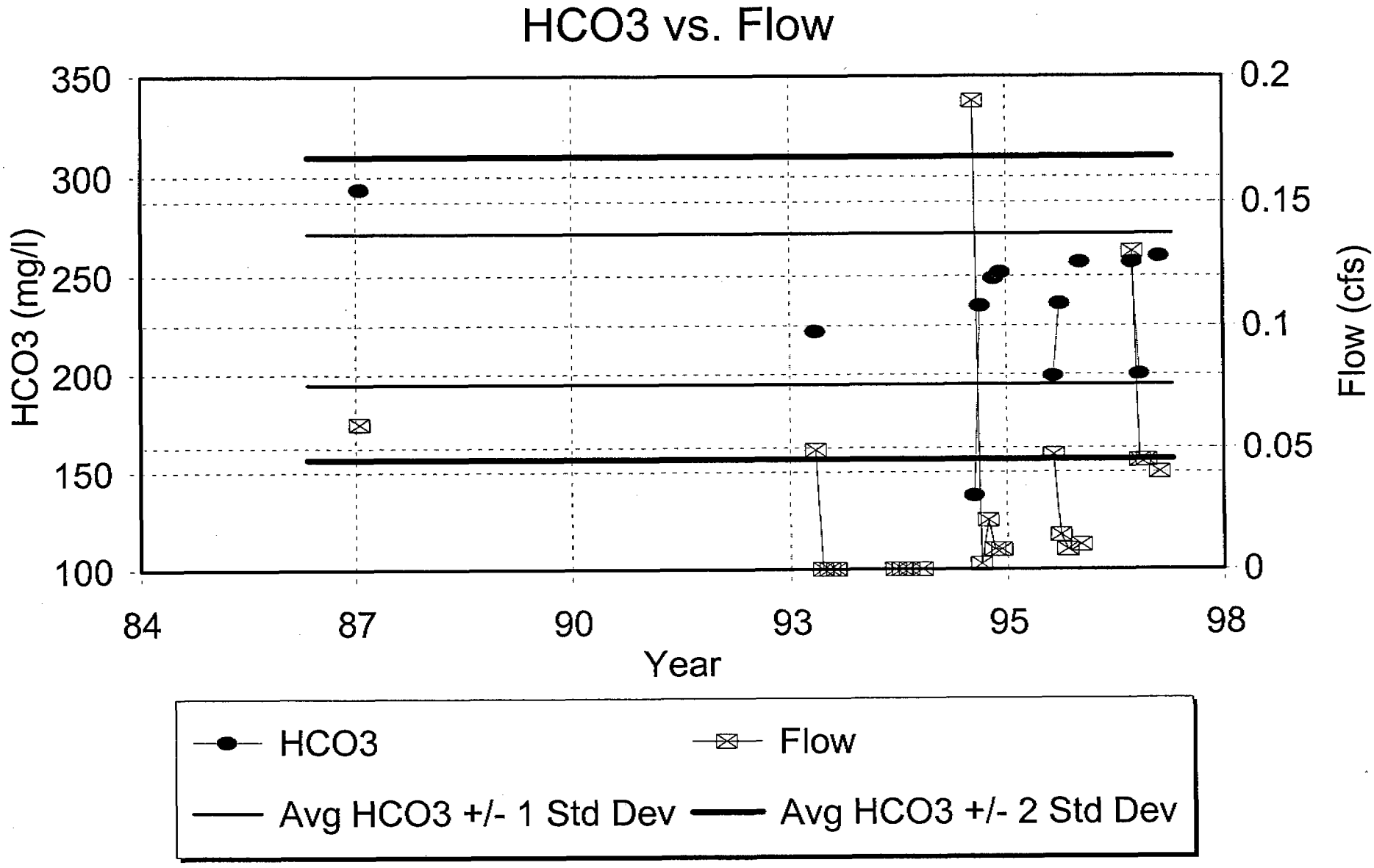
Station 87101CV



Station 87101CV

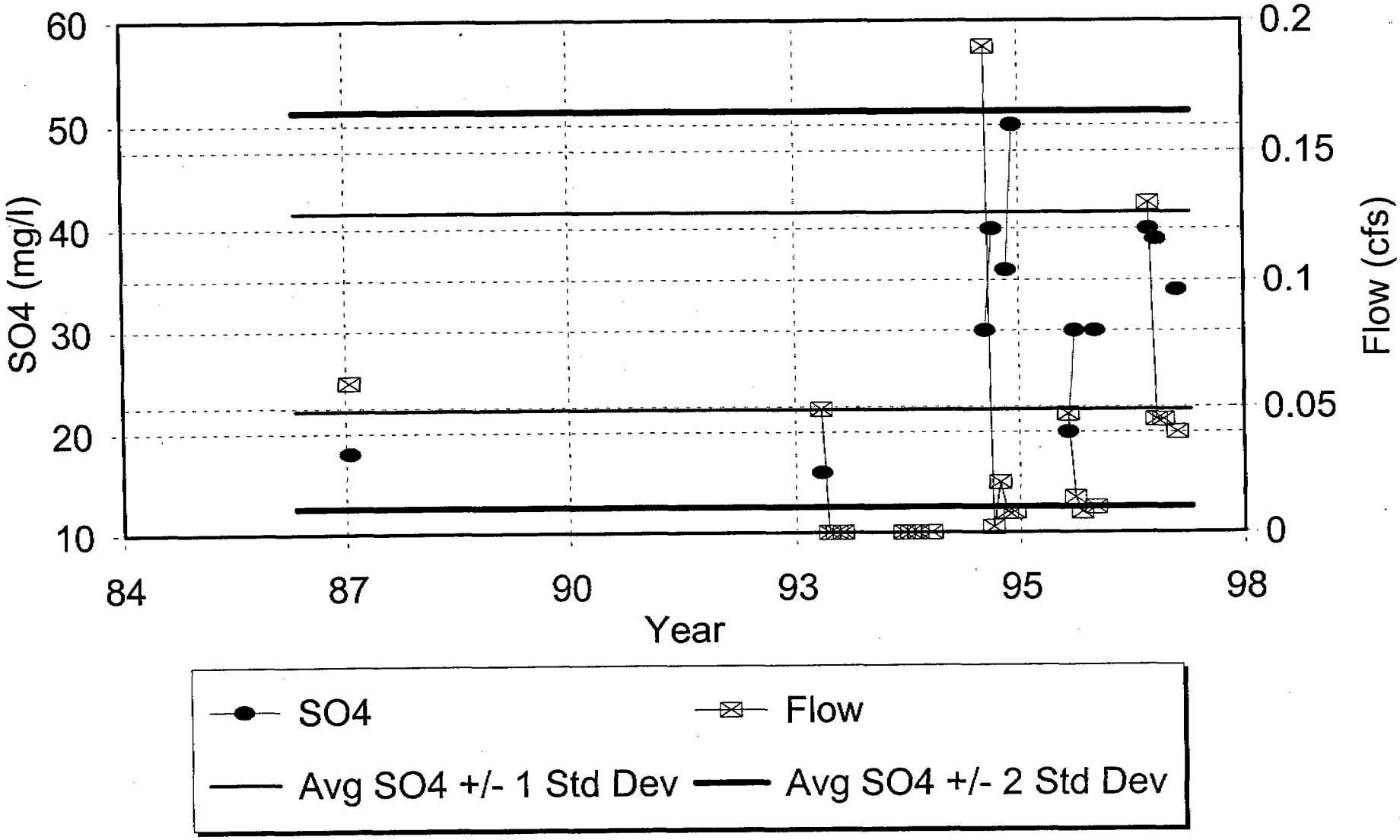


Station 87101CV



Station 87101CV

SO4 vs. Flow



Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 87102CV | Property: Star Point | Location: 0' S 1500' E of NW com. Sec 10, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8395

Date		Field Measurements				Laboratory Measurements																Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	
Jan-88																						
Feb-88																						
Mar-88																						
Apr-88																						
May-88																						
Jun-88																						
Jul-88																						
Aug-88																						
Sep-88																						
Oct-88																						
Nov-88																						
Dec-88																						
Jan-89																						
Feb-89																						
Mar-89																						
Apr-89																						
May-89																						
Jun-89																						
Jul-89																						
Aug-89																						
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Oct-89																						
Nov-89																						
Dec-89																						
Jan-90																						
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Mar-90																						
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Nov-90																						
Dec-90																						
Jan-91																						
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Jul-91																						
Aug-91																						
Sep-91																						
Oct-91																						
Nov-91																						
Dec-91																						
Jan-92																						
Feb-92																						
Mar-92																						
Apr-92																						
May-92																						
Jun-92																						
Jul-92																						
Aug-92																						
Sep-92																						
Oct-92																						
Nov-92																						
Dec-92																						
Jan-93																						
Feb-93																						
Mar-93																						
Apr-93																						
May-93																						
Jun-93	06/21/93	2.521	7.4	67	13	110 <	2		100		0	1	2	30	6 <	1	2		0.08	0.29	0.01	
Jul-93	07/26/93	1.838	7.8	250	11.9	128 <	2		149	146	7	1	10	45	9 <	1	2	<	0.02	0.17 <	0.01	
Aug-93	07/17/93	1.88	6.9	302	6.2																	
Sep-93	09/13/93	1.75	7.6	292	3.9	144 <	2		188	200	0	2	2	49	11 <	1	2		0.03	0.16		
Oct-93																						
Nov-93																						
Dec-93																						

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

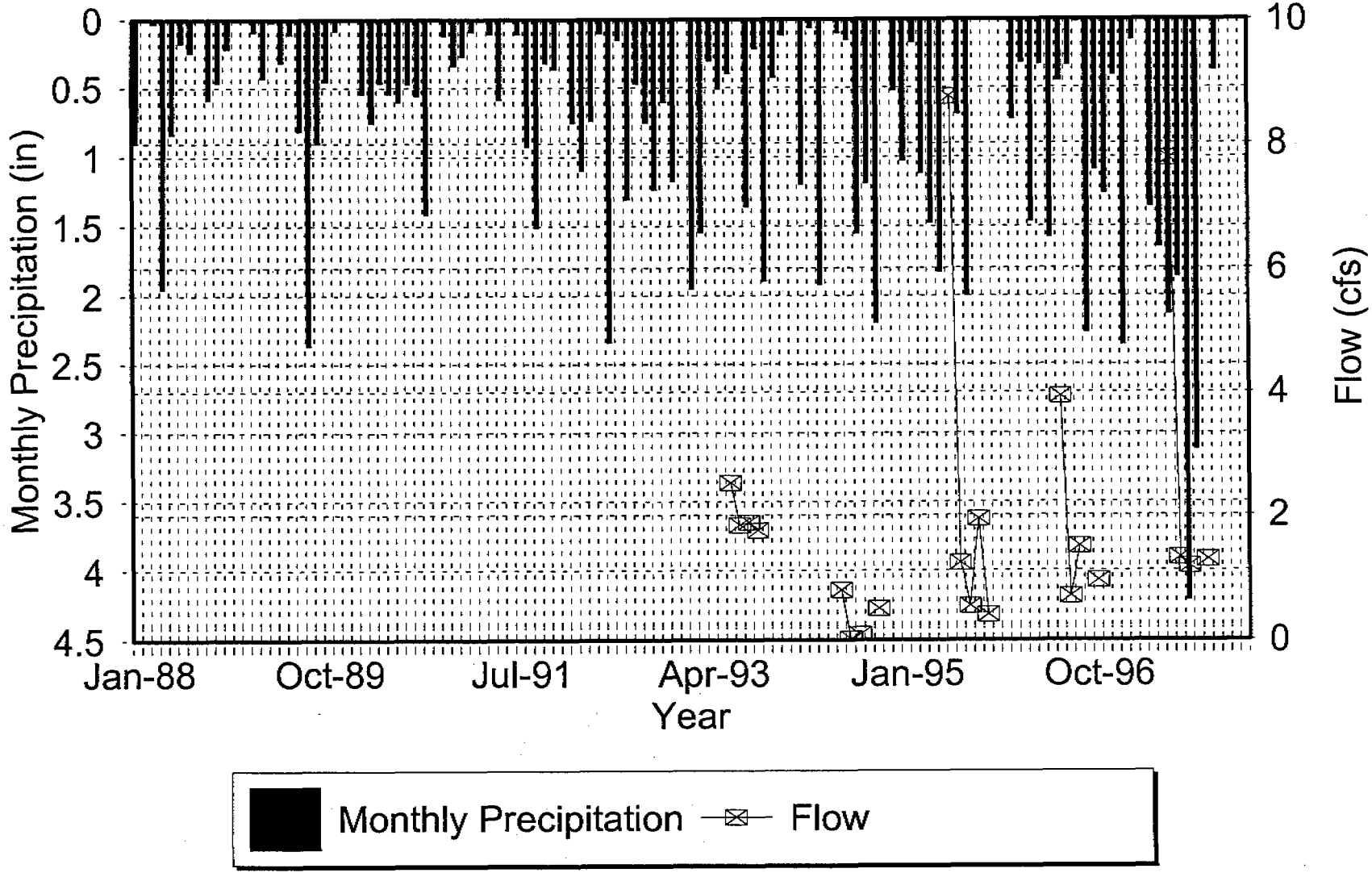
Station: 87102CV | Property: Star Point | Location: 0' S 1500' E of NW com. Sec 10, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 6395

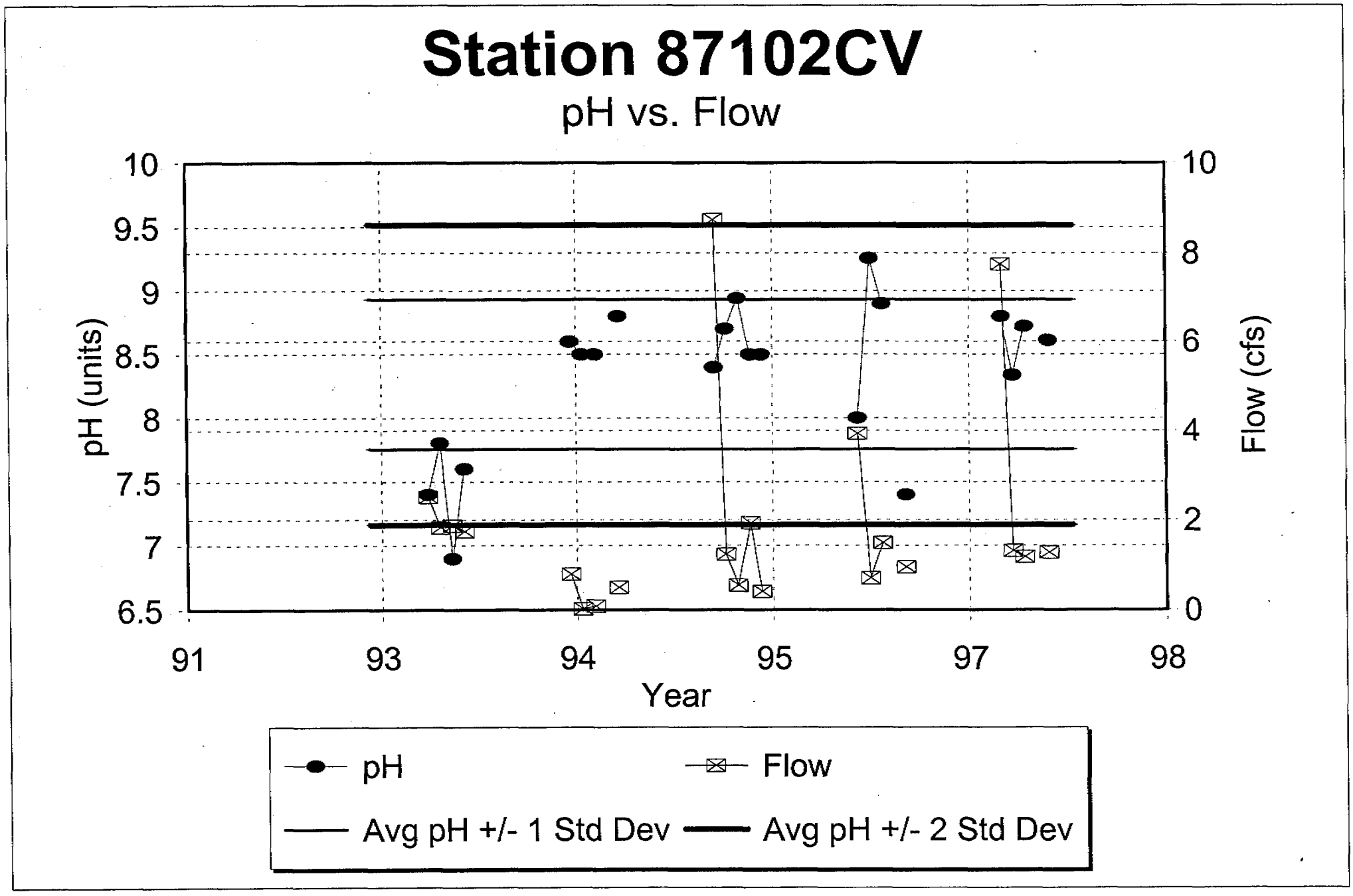
Date Mo-Yr	Sample Date	Field Measurements Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	Laboratory Measurements TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cal/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-94																						
Feb-94																						
Mar-94																						
Apr-94																						
May-94																						
Jun-94	06/28/94	0.794	6.6	342	9.8	162	2		168	198	0	2	6	49	11 <	1	2		0.07	0.17		
Jul-94	07/20/94	0.02	8.5	307	13.4	164 <	2		175	188	7	1	2	52	11 <	1	2		0.06	0.26	0.02	
Aug-94	08/31/94	0.088	8.5	264	9.3																	
Sep-94																						
Oct-94	10/25/94	0.5	8.8	417	1	170 <	5		151		0	1	4	44	10 <	1	3		0.04	0.12		
Nov-94																						
Dec-94																						
Jan-95																						
Feb-95																						
Mar-95																						
Apr-95																						
May-95																						
Jun-95	06/21/95	8.74	8.4	156	11	120	16 <	2	83	71 <	2 <	1	20	25.1	4.9	0.6	1.8	-3.1	0.11	0.72	0.021	
Jul-95	07/26/95	1.235	8.7	239	16	110	10 <	2	141	145 <	2	2	10	42.2	8.6	0.5	2.2	-4.2	0.09	0.33	0.021	
Aug-95	08/28/95	0.543	8.94	298	11																	
Sep-95	09/27/95	1.94	8.5	375	3	160	18	4	165	142 <	2	3	12	49.1	10.4	1	2.2	3.4	0.06	0.22	0.01	
Oct-95	10/19/95	0.41	8.5	305	3.69	180 <	5 <	2	175	155 <	2	3	17	51	11.6	1	2.6	0.9	0.04	0.13 <	0.005	
Nov-95																						
Dec-95																						
Jan-96																						
Feb-96																						
Mar-96																						
Apr-96																						
May-96																						
Jun-96	06/11/96	3.93	8	177	9	90		6	95	88	2 <	1 <	10 <	28.7	5.7	0.5	1.7	5.8	0.14	1	0.021	
Jul-96	07/23/96	0.703	9.26	256	9	161		2 <	172	147	6	2	10 <	51.1	10.6	0.6	2.3	6.3	0.09	0.34	0.021	
Aug-96	08/19/96	1.5	8.9	296	8																	
Sep-96																						
Oct-96	10/01/96	0.951	7.4	349	4	159		5	168	156	2 <	2	10 <	49.9	10.6	0.6	2.3	4.1	0.06	0.13	0.005	
Nov-96																						
Dec-96																						
Jan-97																						
Feb-97																						
Mar-97																						
Apr-97																						
May-97																						
Jun-97	06/17/97	7.75	6.8	192	10.5	130		2 <	116	106	2 <	1	20	35.8	6.5	0.7	1.9	-3.1	0.08	0.4	0.013	
Jul-97	07/30/97	1.32	8.34	318	12	160	9	5 <	150	140	10 <	0.5 <	5 <	44	9.4	1	2.3	4.9	0.03	0.31	0.009	
Aug-97	08/13/97	1.18	8.72	284	13																	
Sep-97																						
Oct-97	10/06/97	1.28	8.61	291	5	220	5	5 <	150	160	10 <	0.5 <	5 <	48	12	1.1	2.8	4.8	0.03	0.27	0.008	
Nov-97																						
Dec-97																						
END DATA																						
Count		21	21	21	21	16	12	10	16	14	16	16	16	16	16	16	16	10	16	16	13	
Minimum		0.02	6.9	87	1	90 <	2 <	2 <	83	71 <	0 <	0.5 <	2 <	25.1	4.9 <	0.5	1.7	-4.2 <	0.02	0.12 <	0.005	
Maximum		8.74	9.26	417	16	220 <	18 <	6 <	175	200 <	10 <	3 <	20 <	52	12 <	1.1	3	6.3 <	0.14	1 <	0.021	
Average		1.9463	8.3414	275.1	6.7567	148 <	6.5 <	3.5 <	145.38	145.86 <	3.375 <	1.5 <	9.0625 <	43.369	9.2813 <	0.85	2.1938	1.98 <	0.0656	0.3138 <	0.0134	
Standard Deviation		2.2226	0.5879	76.391	3.9609	31.123 <	5.3929 <	1.5652 <	29.413	36.257 <	3.3518 <	0.7706 <	5.7714 <	8.4507	2.2153 <	0.2121	0.3436	3.8369 <	0.0322	0.2276 <	0.0062	
Avg. -1 Std. Dev.		-0.276	7.7535	198.7	4.7957	116.88 <	1.1071 <	1.9348 <	115.96	109.6 <	0.0232 <	0.7294 <	3.2911 <	34.918	7.0659 <	0.6379	1.8501	-1.857 <	0.0334	0.0862 <	0.0072	
Avg. +1 Std. Dev.		4.1689	8.9294	351.49	12.718	179.12 <	11.893 <	5.0652 <	174.79	182.11 <	6.7268 <	2.2706 <	14.834 <	51.819	11.497 <	1.0621	2.5374	5.8169 <	0.0978	0.5413 <	0.0196	
Avg. -2 Std. Dev.		-2.499	7.1655	122.31	0.8348	85.755 <	-4.286 <	0.3695 <	86.55	73.344 <	-3.329 <	-0.041 <	-2.48 <	26.467	4.8506 <	0.4257	1.5065	-5.694 <	0.0012	-0.141 <	0.001	
Avg. +2 Std. Dev.		6.3915	9.5173	427.88	16.679	210.25 <	17.286 <	6.6305 <	204.2	218.37 <	10.079 <	3.0411 <	20.605 <	60.27	13.712 <	1.2743	2.881	9.6537 <	0.13	0.7689 <	0.0258	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

Station 87102CV

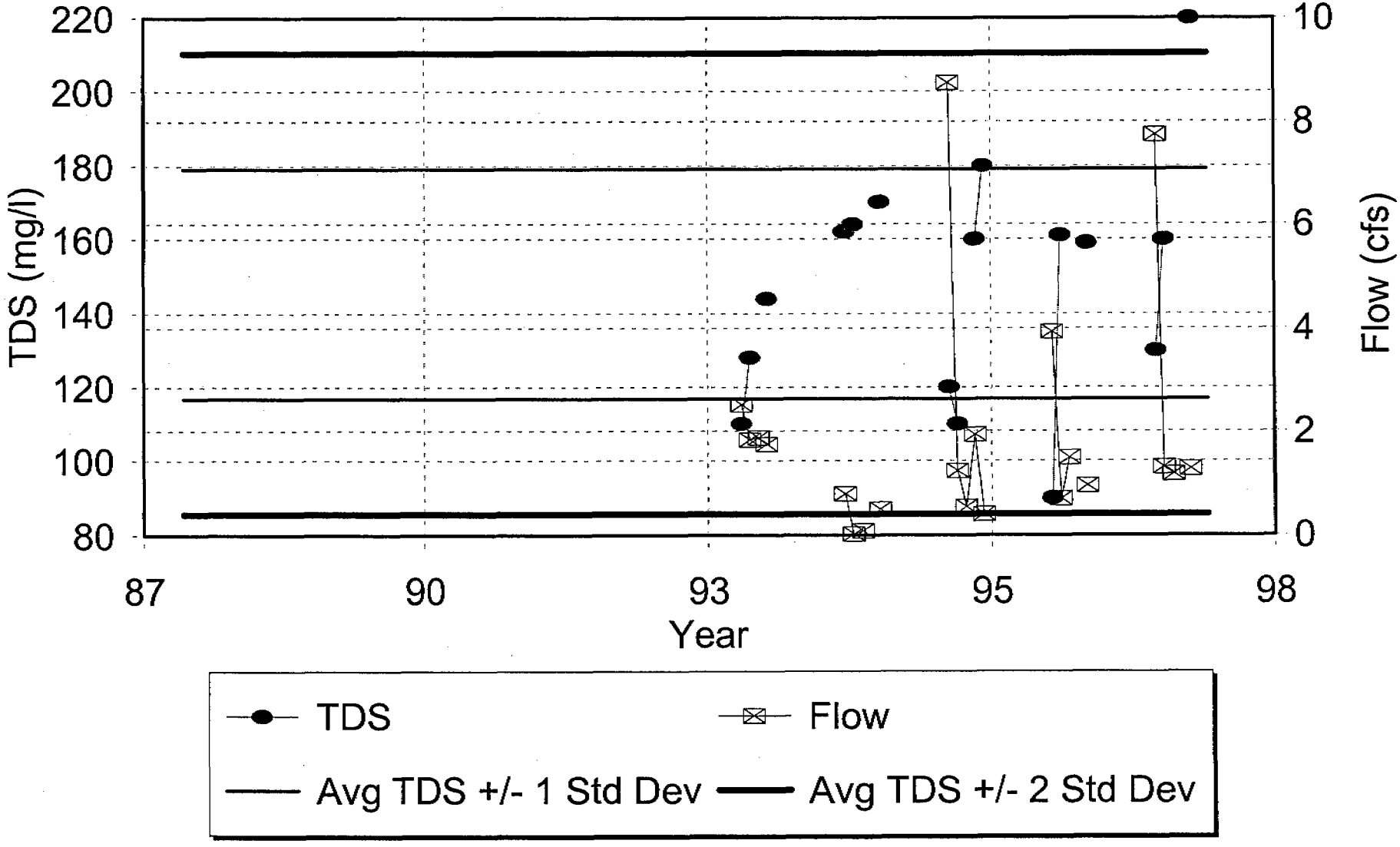
Monthly Precipitation vs. Flow




Station 87102CV
pH vs. Flow
pH (units)
10
9.5
9
8.5
8
7.5
7
6.5
Flow (cfs)
10
8
6
4
2
0
91
93
94
95
97
98
Year
pH
Flow
Avg pH +/- 1 Std Dev
Avg pH +/- 2 Std Dev

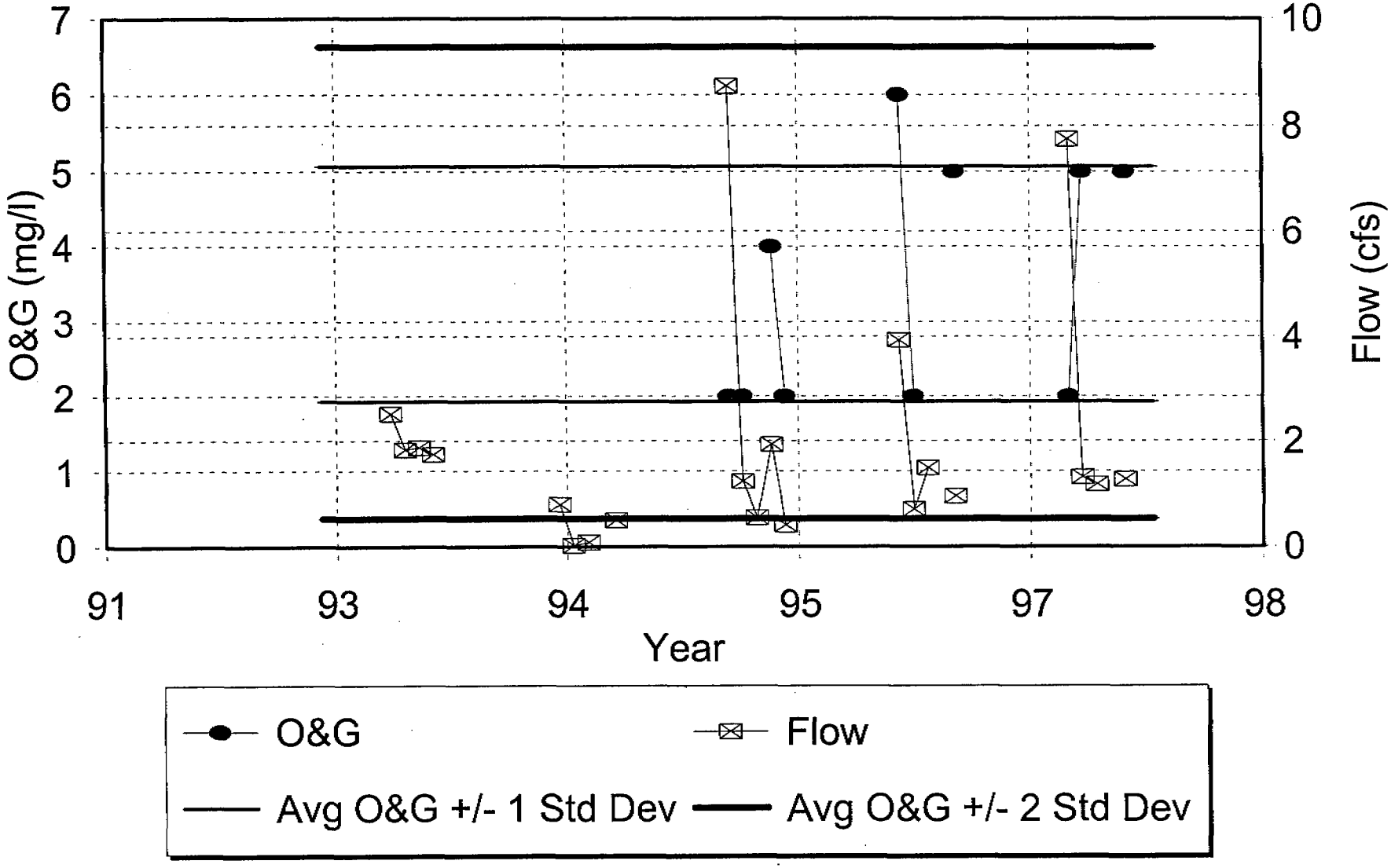
Station 87102CV

TDS vs. Flow



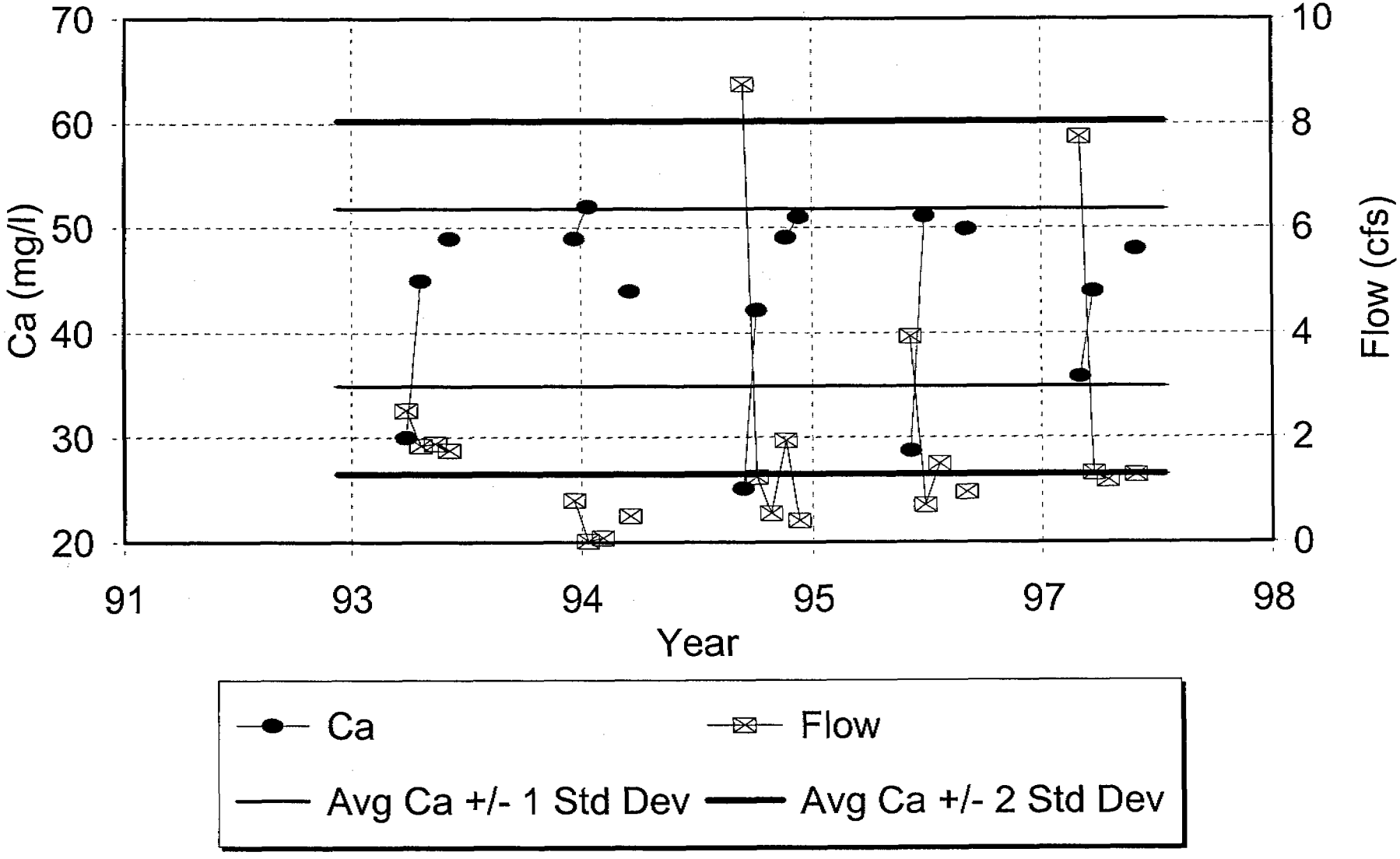
Station 87102CV

Oil & Grease vs. Flow



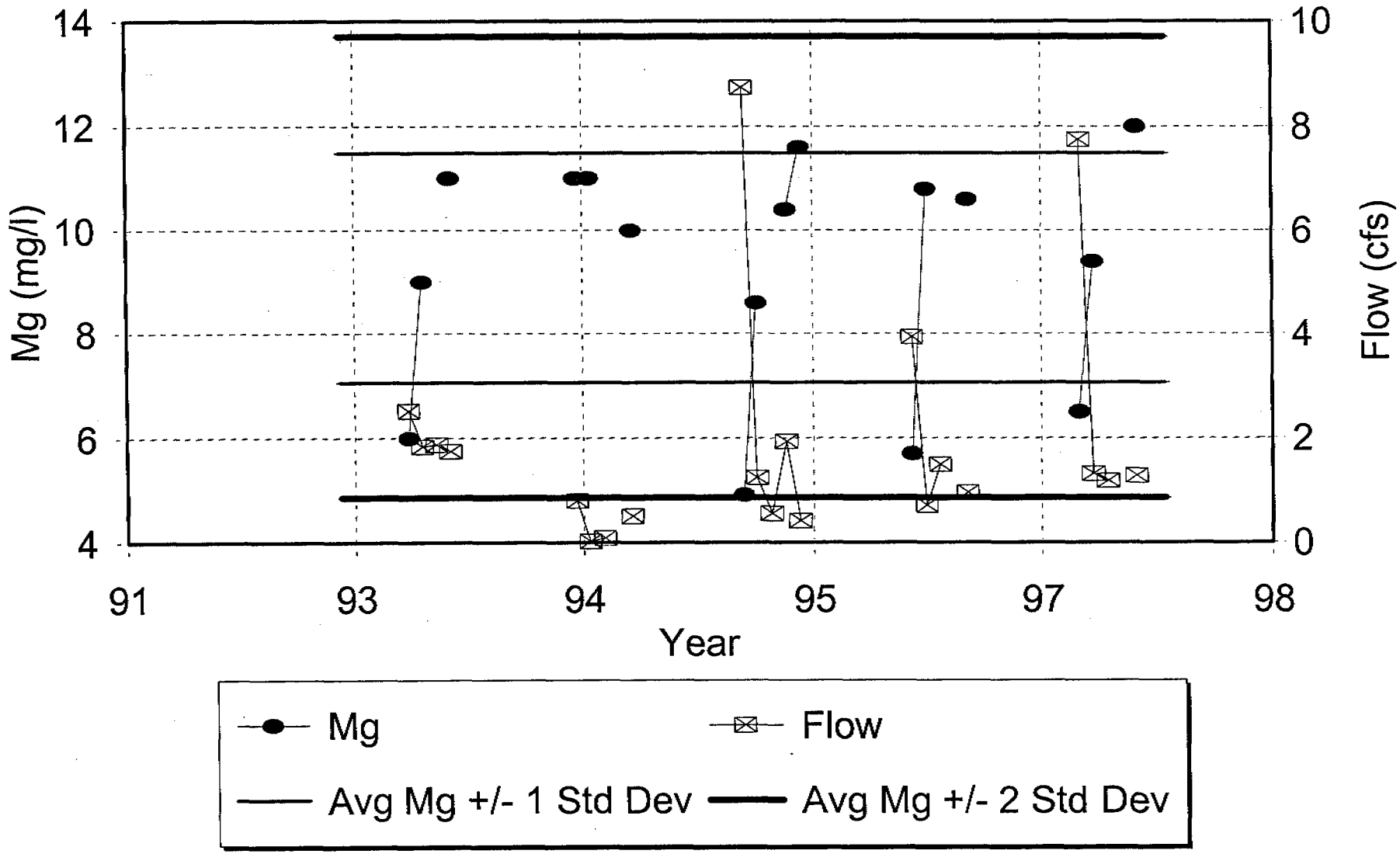
Station 87102CV

Ca vs. Flow

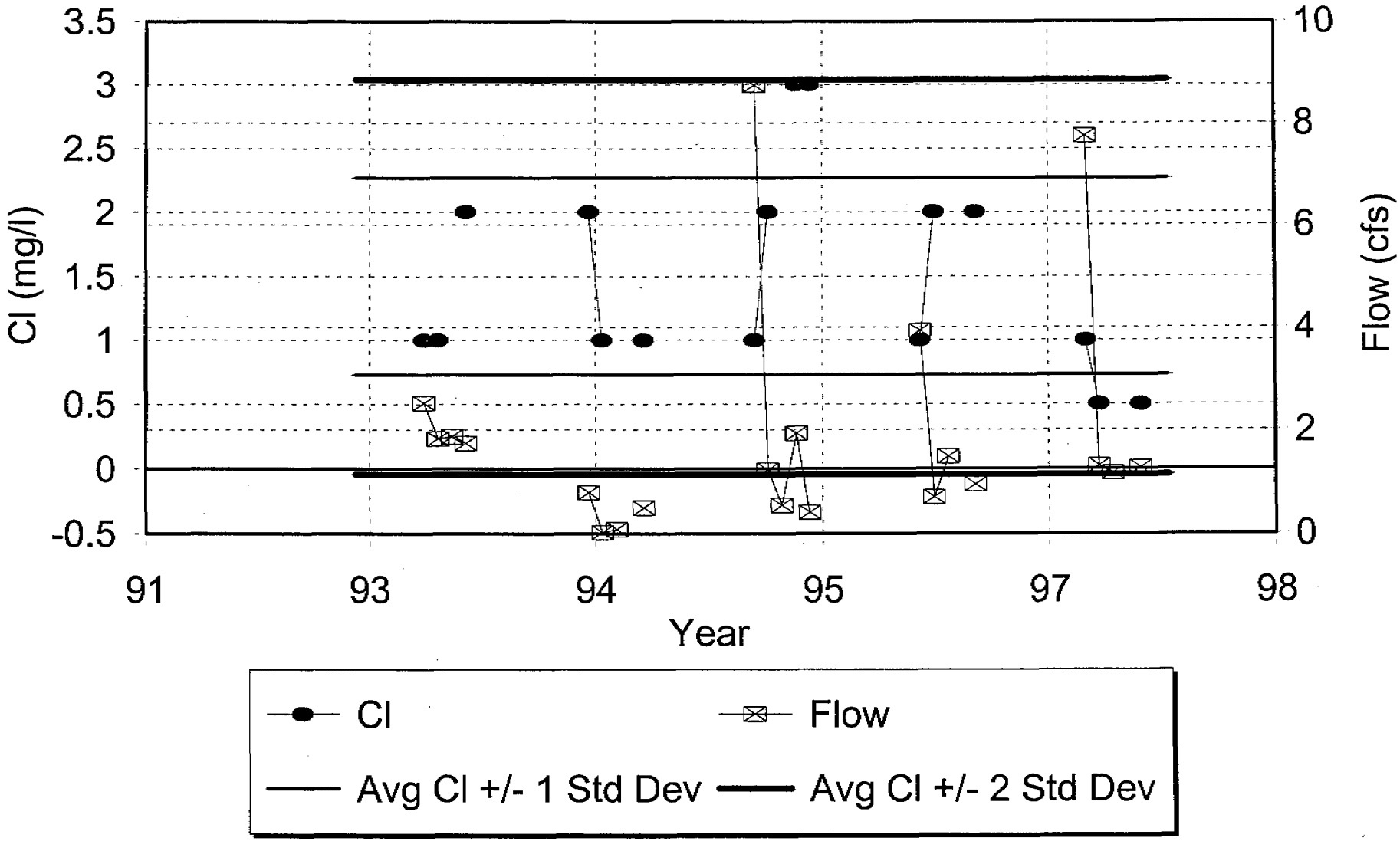


Station 87102CV

Mg vs. Flow

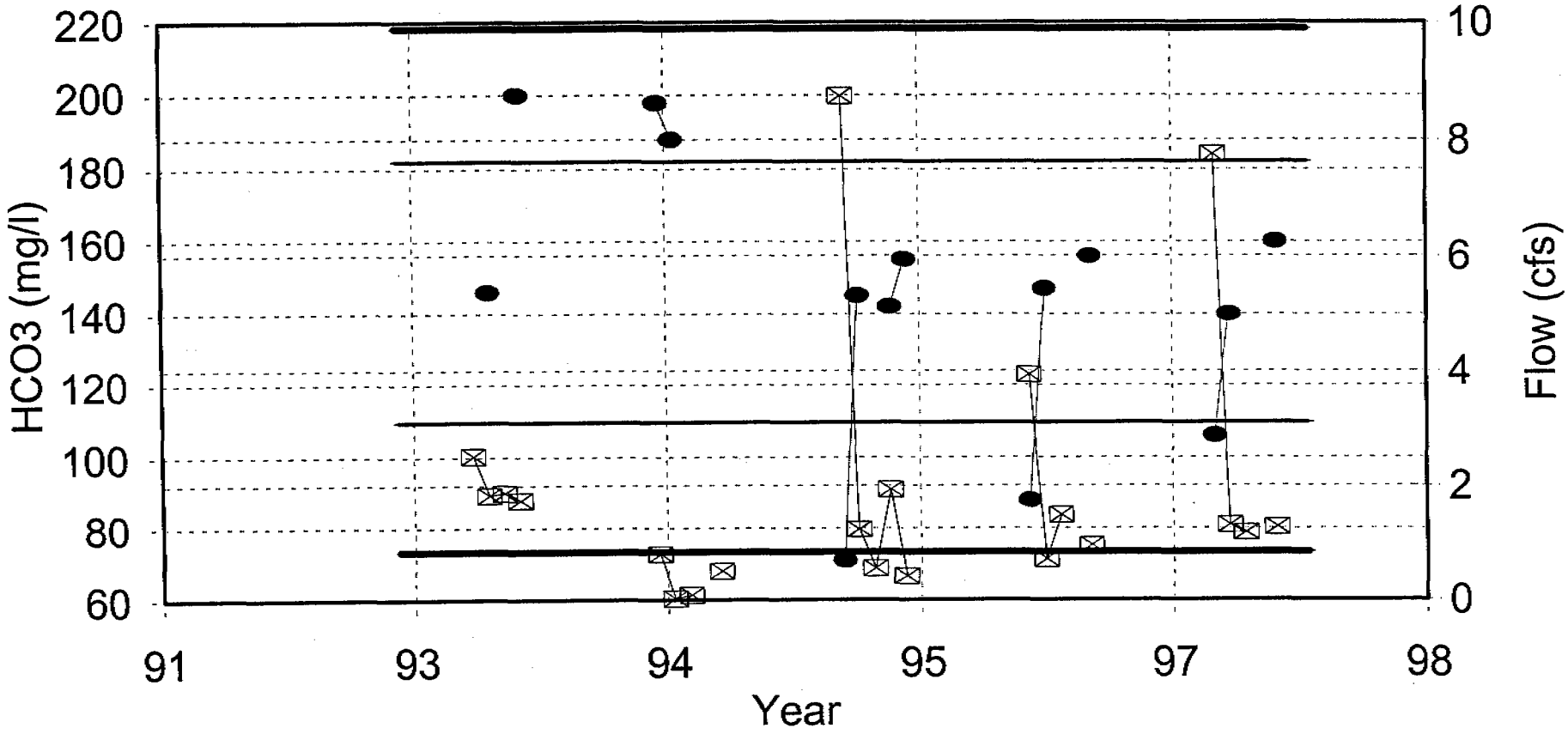


Station 87102CV



Station 87102CV

HCO3 vs. Flow

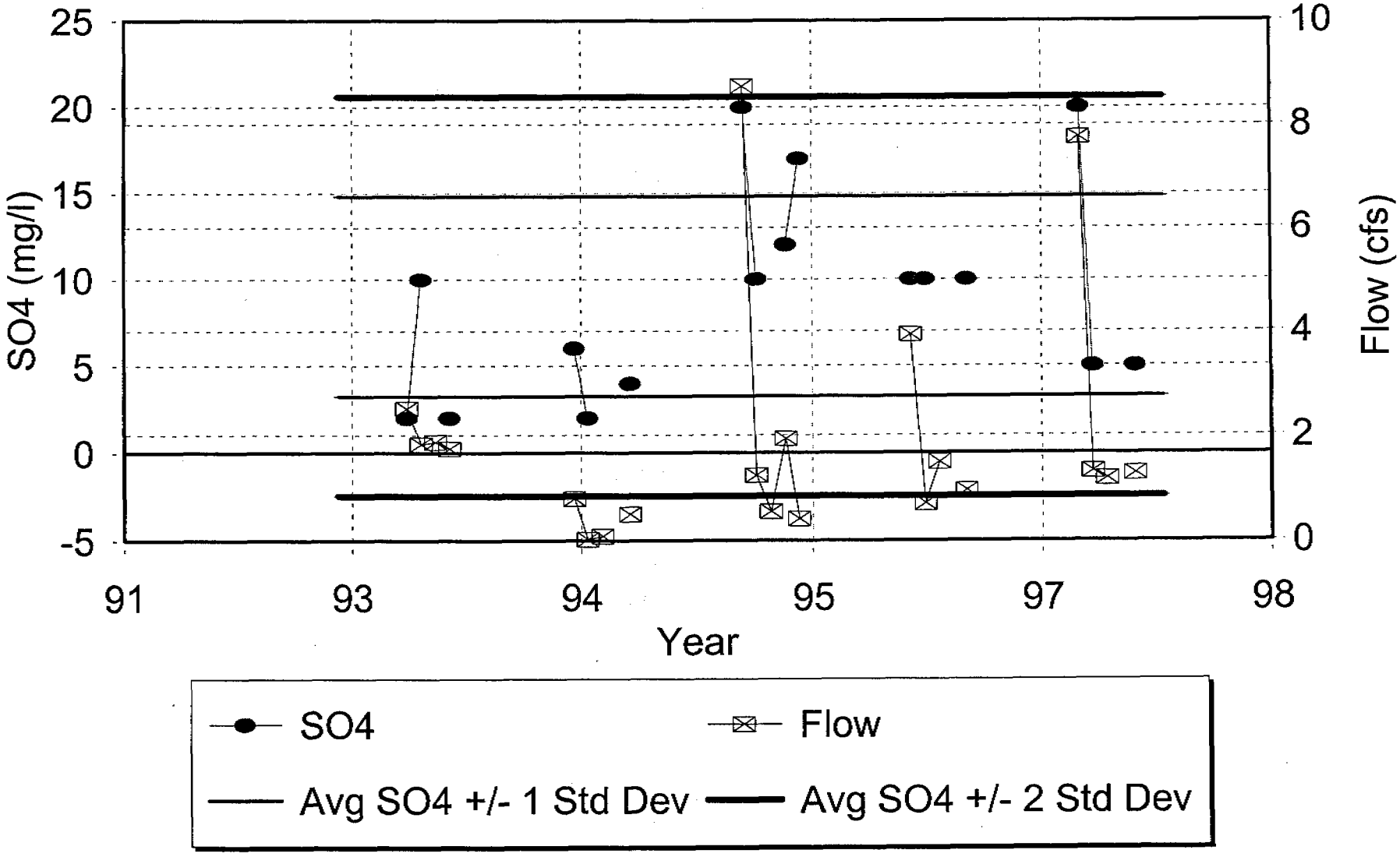


HCO3 — Flow

Avg HCO3 +/- 1 Std Dev — Avg HCO3 +/- 2 Std Dev

Station 87102CV

SO4 vs. Flow



Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

Station: 87103CV | Property: Star Point | Location: 275' S 1000' E of NW com. Sec 10, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8370

Date		Field Measurements				Laboratory Measurements																	Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)		
Jan-88																							
Feb-88																							
Mar-88																							
Apr-88																							
May-88																							
Jun-88																							
Jul-88																							
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Oct-90																							
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Jan-91																							
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Mar-91																							
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Oct-91																							
Nov-91																							
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Jan-92																							
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Mar-92																							
Apr-92																							
May-92																							
Jun-92																							
Jul-92																							
Aug-92																							
Sep-92																							
Oct-92																							
Nov-92																							
Dec-92																							
Jan-93																							
Feb-93																							
Mar-93																							
Apr-93																							
May-93																							
Jun-93	06/21/93	2.57	7.3	65	12.9	100	2		105		0	2	2	32	6 <	1	2		0.08	0.25	0.01		
Jul-93	07/26/93	1.838	7.7	260	11.7	140 <	2		133	149	7	2	12	40	8 <	1	2		0.05	0.37	0.02		
Aug-93	08/17/93	1.88	6.9	304	6.8																		
Sep-93	09/13/93	1.75	7.6	292	4.9	148	10		170	193	0	2	6	50	11 <	1	2		0.03	0.3			
Oct-93																							
Nov-93																							
Dec-93																							

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

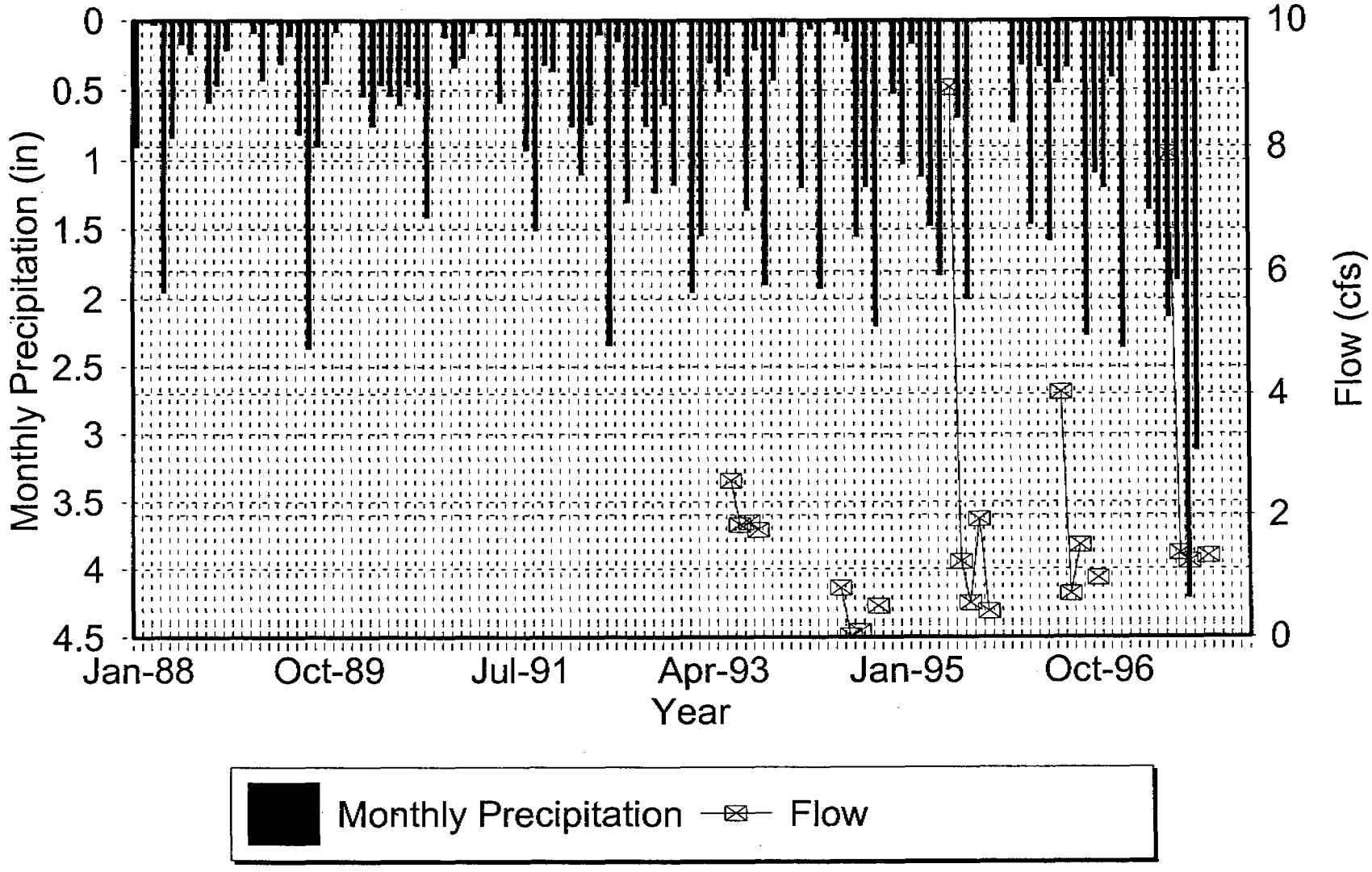
Station: 87103CV | Property: Star Point | Location: 275' S 1000' E of NW corn. Sec 10, T15S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8370

Date		Field Measurements				Laboratory Measurements																
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	Comments
Jan-94																						
Feb-94																						
Mar-94																						
Apr-94																						
May-94																						
Jun-94	06/28/94	0.794	8.4	345	9.9	172	2		168	198	0	2	4	49	11 <	1	3		0.05	0.18		
Jul-94	07/20/94	0.02	8.5	310	14	170	4		154	190	7	1	2	45	10 <	1	4		0.09	0.38	0.03	
Aug-94	08/31/94	0.088	8.5	257	9.1																	
Sep-94																						
Oct-94	10/25/94	0.5	8.9	351	2	166 <	14		139		0	2	4	41	9 <	1	2		0.04	0.19		
Nov-94																						
Dec-94																						
Jan-95																						
Feb-95																						
Mar-95																						
Apr-95																						
May-95																						
Jun-95	06/21/95	8.93	8.3	161	53.9	120	6 <	2	87	71 <	2 <	1	40	25.8	5.4	0.7	1.9	-10.8	0.12	0.79	0.023	
Jul-95	07/26/95	1.233	8.6	256	16	120	8 <	2	142	123 <	2	2	10	42.2	8.8	0.6	2.2	3.5	0.09	0.31	0.023	
Aug-95	08/28/95	0.555	8.95	299	11																	
Sep-95	09/27/95	1.93	8.5	362	4	180 <	5 <	2	171	145 <	2	3	10	50	11.3	1.1	2.3	4.9	0.19	0.22	0.011	
Oct-95	10/19/95	0.42	8.4	303	3.89	190	8 <	2	178	158 <	2	2	17	51	12.3	0.8	2.6	1.2	0.05	0.14	0.008	
Nov-95																						
Dec-95																						
Jan-96																						
Feb-96																						
Mar-96																						
Apr-96																						
May-96																						
Jun-96	06/11/96	4.02	8	192	9	93		2 <	99	91	2 <	1 <	10 <	29.5	6.2	0.5	1.8	6.3	0.13	0.72	0.022	
Jul-96	07/23/96	0.704	9.27	270	9	174		2 <	176	151	5	2	10	51.2	11.6	0.7	2.5	3.3	0.08	0.32	0.022	
Aug-96	08/19/96	1.5	9.06	288	8																	
Sep-96																						
Oct-96	10/01/96	0.96	7.5	398	5	177		4	180	160	2 <	2	10 <	53.7	11.2	0.8	2.4	3.3	0.07	0.15	0.007	
Nov-96																						
Dec-96																						
Jan-97																						
Feb-97																						
Mar-97																						
Apr-97																						
May-97																						
Jun-97	06/17/97	7.68	8.7	216	10	136		2 <	124	110	2 <	2	20	37.3	7.4	0.6	2.1	-2	0.08	0.4	0.013	
Jul-97	07/30/97	1.37	8.41	289	12	230	29	5 <	71	74	10 <	0.5 <	5 <	20	5.2	0.6	1.3	0.46	0.01 <	0.56	0.008	
Aug-97	08/13/97	1.23	8.66	262	12																	
Sep-97																						
Oct-97	10/06/97	1.32	8.45	302	5	220	31	5 <	180	160	10 <	0.5 <	5 <	51	13	1.1	2.9	8	0.03	0.47	0.015	
Nov-97																						
Dec-97																						
END DATA																						
Count		21	21	21	21	16	12	10	16	14	16	16	16	16	16	16	16	10	16	16	13	
Minimum		0.02	6.9	65	2	93 <	2 <	2 <	71	71 <	0 <	0.5 <	2 <	20	5.2 <	0.5	1.3	-10.8	0.01 <	0.14	0.007	
Maximum		8.93	9.27	398	53.9	230 <	31 <	5 <	180	198 <	10 <	3 <	40 <	53.7	13 <	1.1	4	8	0.19 <	0.79	0.03	
Average		1.9758	8.3143	275.33	10.957	158.5 <	10.083 <	2.8 <	142.31	140.93 <	3.3125 <	1.6875 <	10.438 <	41.794	9.2125 <	0.8438	2.3125	1.816	0.0744 <	0.3594	0.0163	
Standard Deviation		2.268	0.5933	71.298	10.26	37.863 <	9.5521 <	1.249 <	34.894	40.284 <	3.3113 <	0.6585 <	9.069 <	9.9958	2.4987 <	0.1968	0.5967	5.0104	0.0434 <	0.1874	0.0071	
Avg. -1 Std. Dev.		-0.292	7.721	204.04	0.6965	120.64 <	0.5312 <	1.551 <	107.42	100.64 <	0.0012 <	1.029 <	1.3685 <	31.798	6.7138 <	0.647	1.7158	-3.194	0.0309 <	0.172	0.0092	
Avg. +1 Std. Dev.		4.2438	8.9075	346.63	21.217	196.36 <	19.635 <	4.049 <	177.21	181.21 <	6.6238 <	2.346 <	19.508 <	51.79	11.711 <	1.0405	2.9092	6.8264	0.1176 <	0.5468	0.0234	
Avg. -2 Std. Dev.		-2.56	7.1278	132.74	-9.564	82.774 <	-9.021 <	0.302 <	72.525	60.361 <	-3.31 <	0.3705 <	-7.7 <	21.802	4.2151 <	0.4502	1.119	-8.205	-0.013 <	-0.015	0.002	
Avg. +2 Std. Dev.		6.5117	9.5008	417.93	31.477	234.23 <	29.188 <	5.298 <	212.1	221.5 <	9.9351 <	3.0045 <	28.575 <	61.785	14.21 <	1.2373	3.506	11.837	0.1613 <	0.7342	0.0306	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

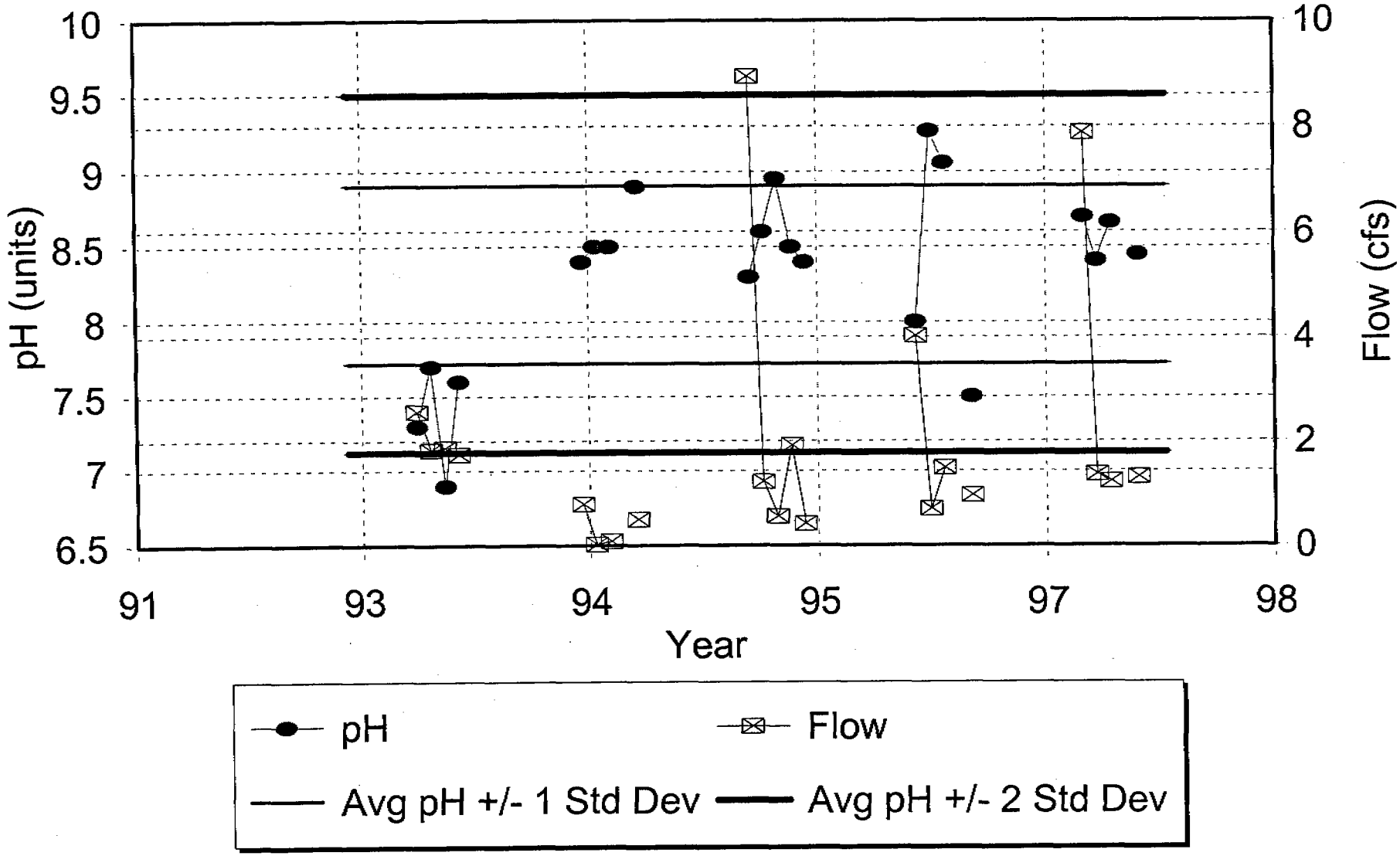
Station 87103CV

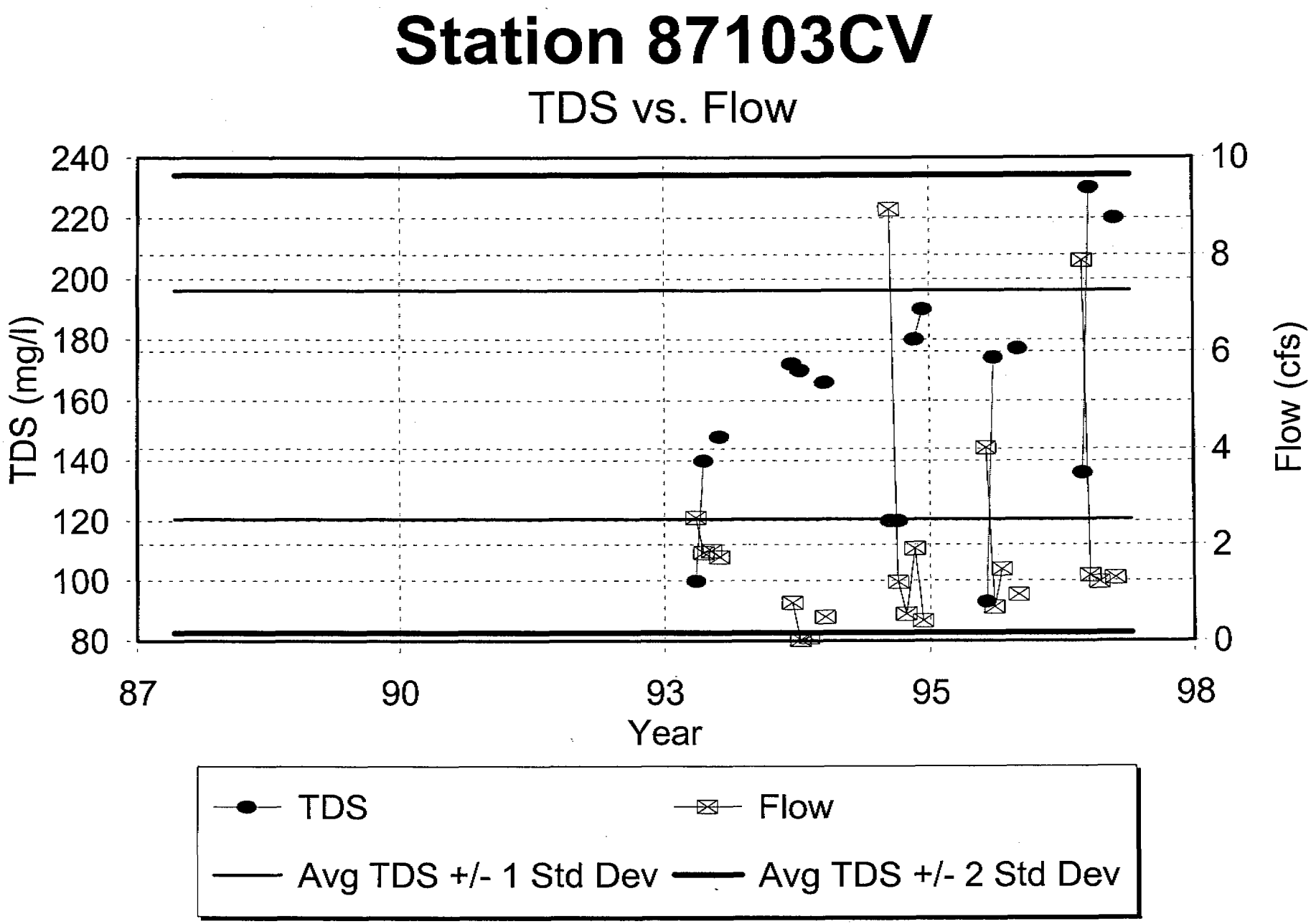
Monthly Precipitation vs. Flow



Station 87103CV

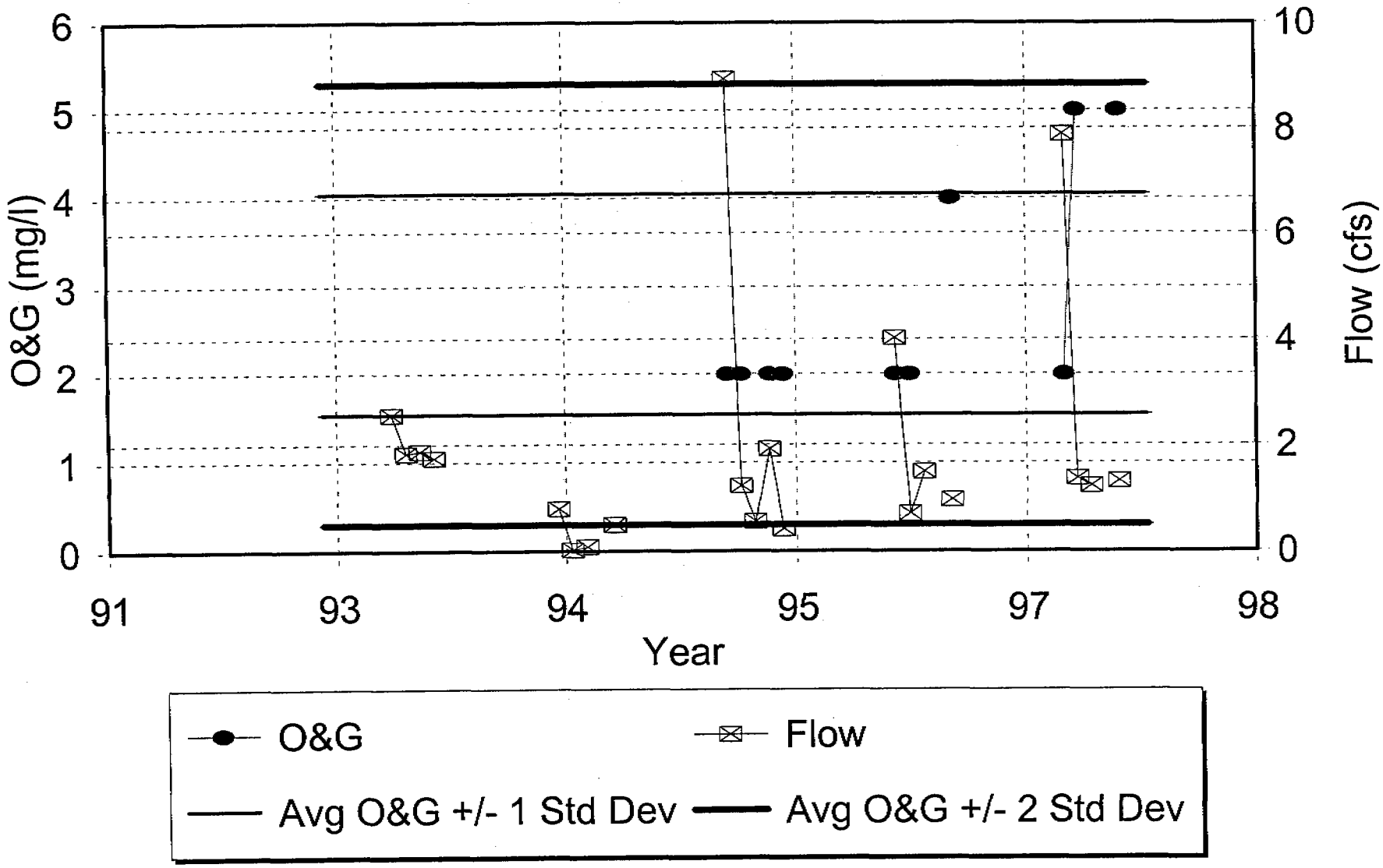
pH vs. Flow




Station 87103CV
TDS vs. Flow
TDS (mg/l)
240
220
200
180
160
140
120
100
80
Flow (cfs)
10
8
6
4
2
0
87
90
93
95
98
Year
TDS
Flow
Avg TDS +/- 1 Std Dev
Avg TDS +/- 2 Std Dev

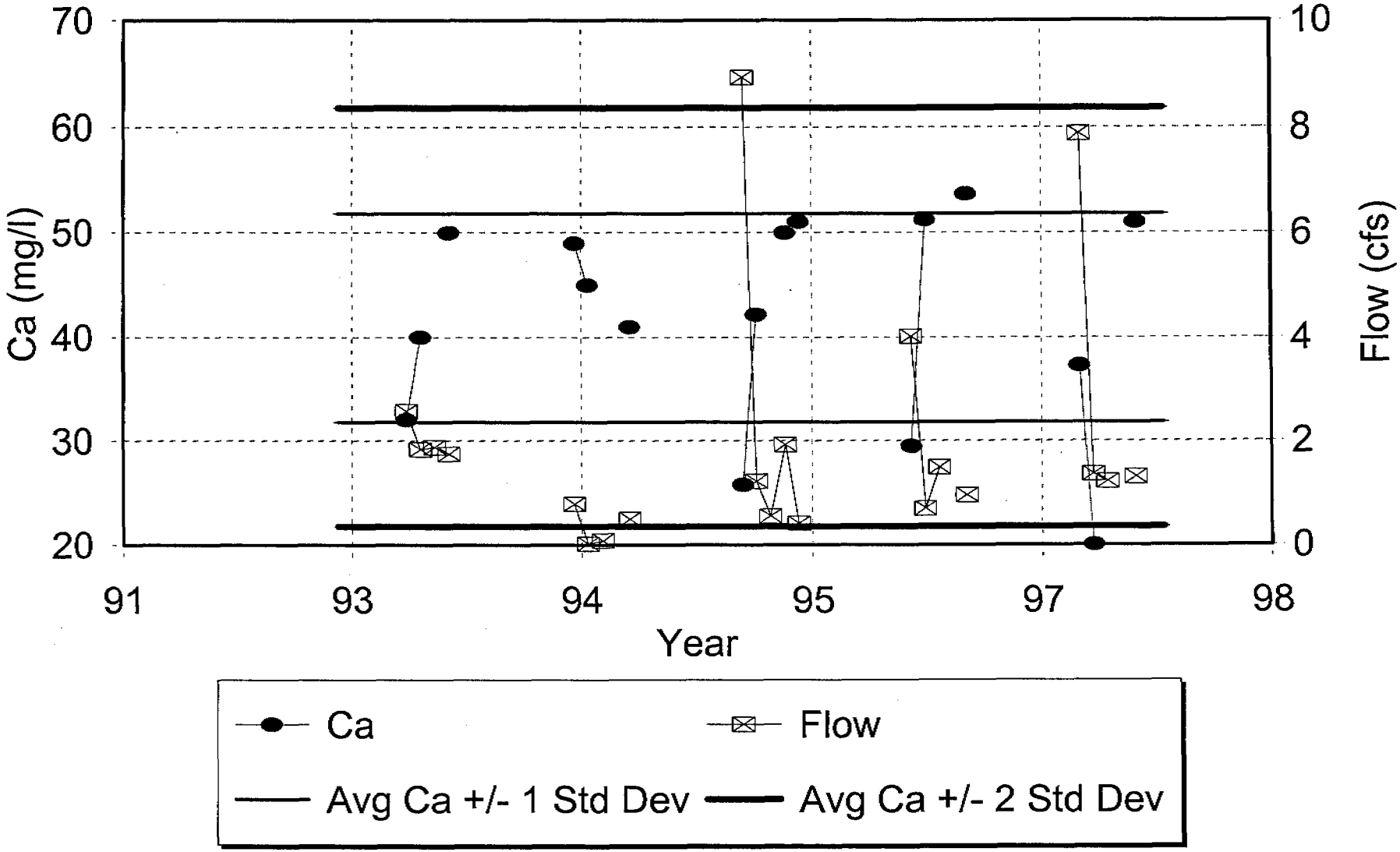
Station 87103CV

Oil & Grease vs. Flow



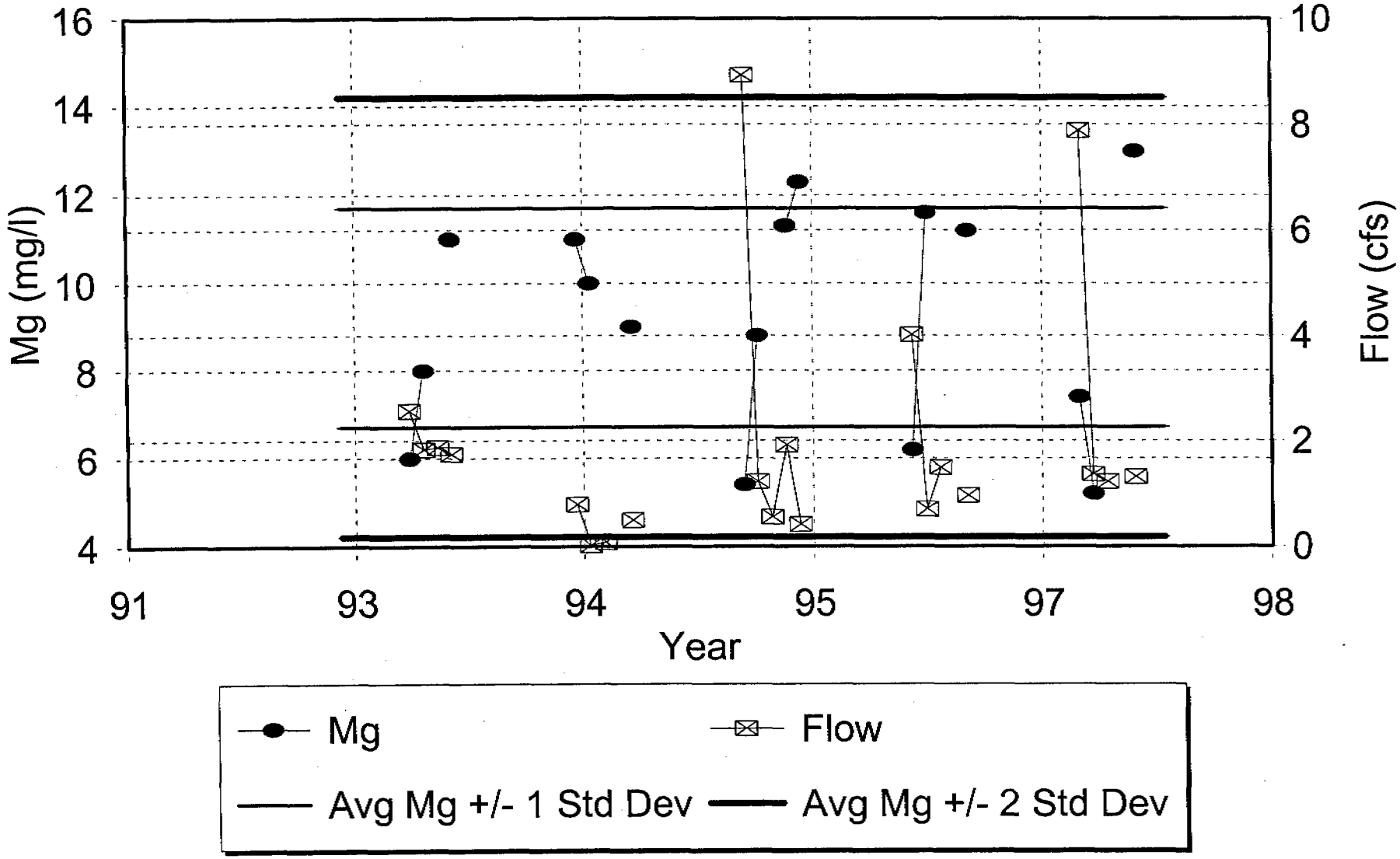
Station 87103CV

Ca vs. Flow



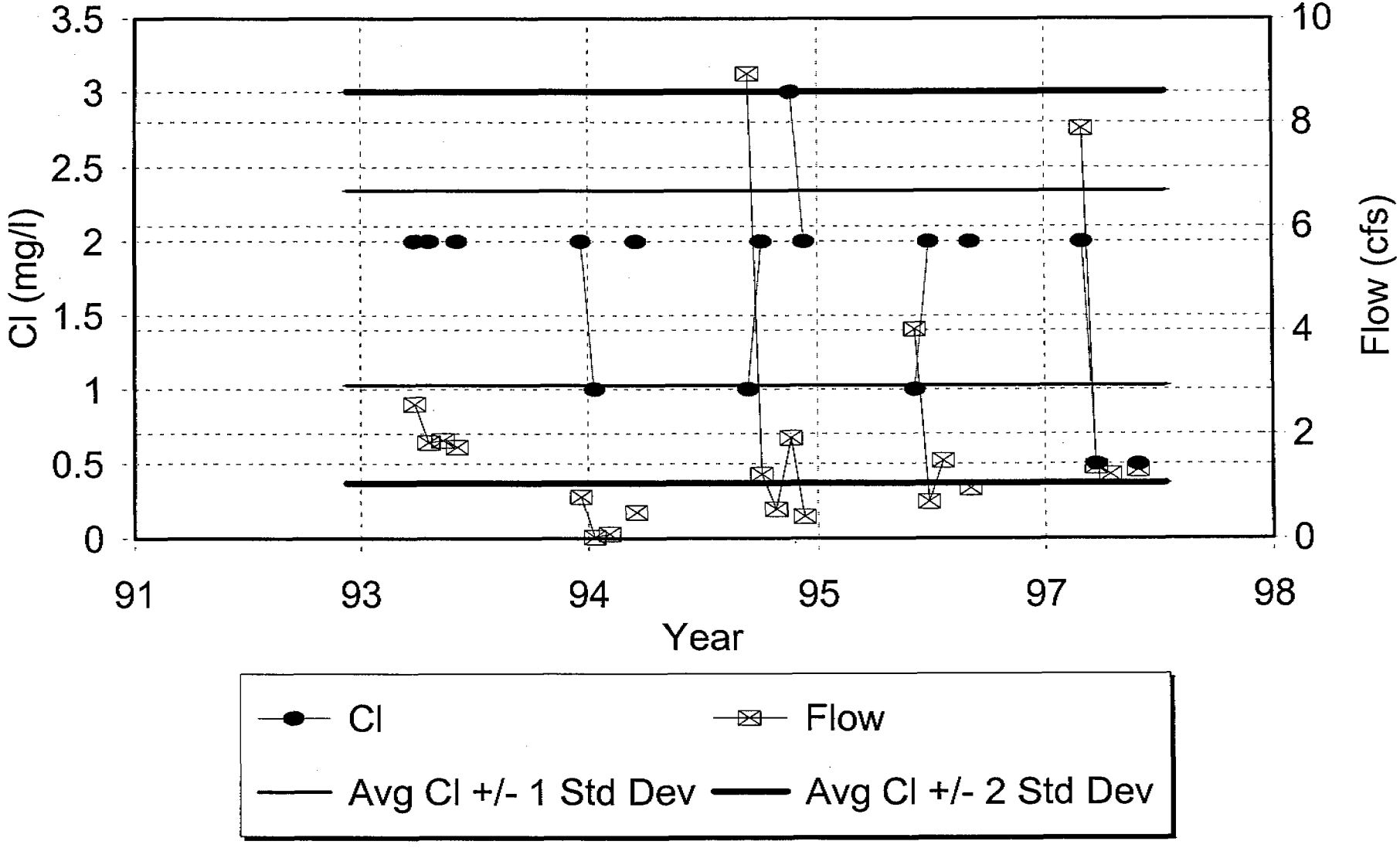
Station 87103CV

Mg vs. Flow



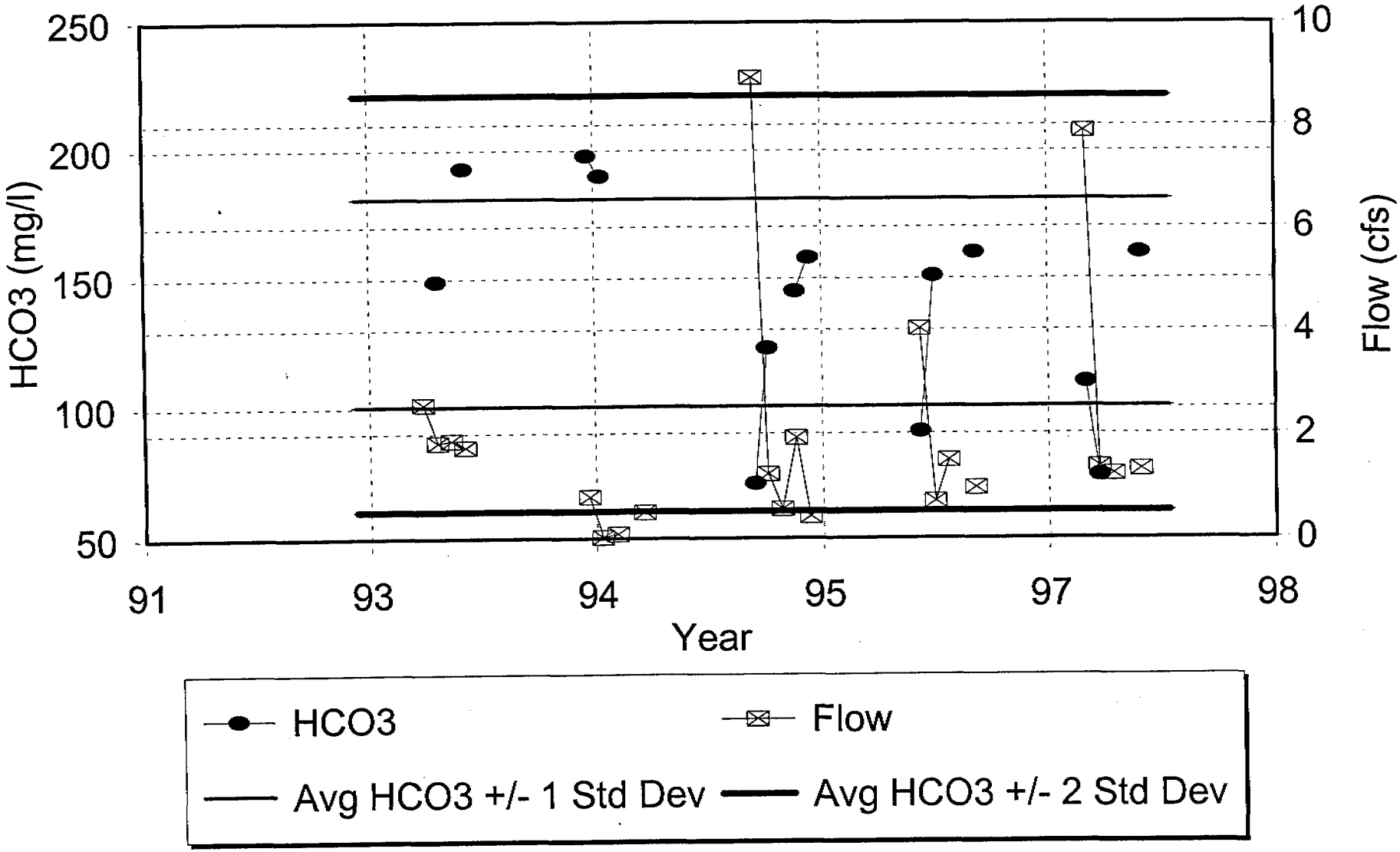
Station 87103CV

Cl vs. Flow



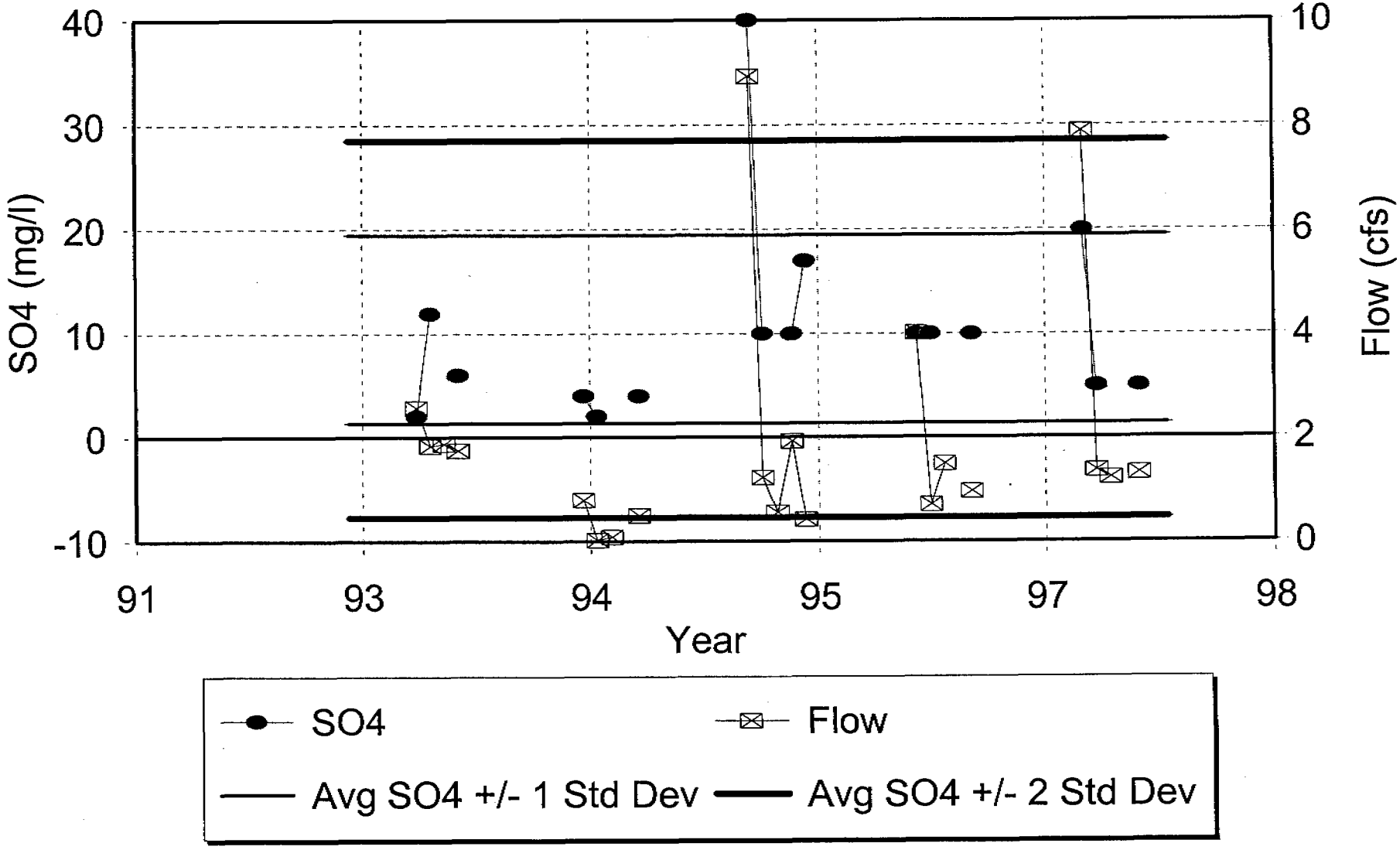
Station 87103CV

HCO3 vs. Flow



Station 87103CV

SO4 vs. Flow



Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1996

Station: 93341CV | Property: Star Point | Location: 1000' S 2000' E of NW corn. Sec 34, T14S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8960

Date		Field Measurements				Laboratory Measurements																Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	
Jan-93																						
Feb-93																						
Mar-93																						
Apr-93																						
May-93																						
Jun-93	06/21/93	1.882	7	60	10.5	96	8		83		0	1	12	25	5 <	1	2		0.12	0.37	0.02	
Jul-93	07/26/93	0.691	8	220	13	122	8		123	127	7	1	6	36	8 <	1	2		0.09	0.4	0.02	
Aug-93	08/17/93	0.535	6.9	266	5.9																	
Sep-93	09/13/93	0	7.8	275	6.4	152 <	2		151	173	0	2	9	44	10 <	1	2		0.08	0.39		
Oct-93																						
Nov-93																						
Dec-93																						
Jan-94																						
Feb-94																						
Mar-94																						
Apr-94																						
May-94																						
Jun-94	06/28/94	0.175	8.7	296	12	150	10		139	166	0	2	4	41	9 <	1	2		0.16	0.52		
Jul-94	07/20/94	0.125	8.5	257	13.3	144 <	2		146	161	5	1	4	42	10 <	1	2		0.14	0.44	0.01	
Aug-94	08/31/94	0.088	8.7	228	9.2																	
Sep-94														38	9 <	1	2					
Oct-94	10/25/94	0.44	8.7	296	3	152 <	5		132		0	2	4						0.08	0.46		
Nov-94																						
Dec-94																						
Jan-95																						
Feb-95																						
Mar-95																						
Apr-95																						
May-95																						
Jun-95	06/21/95	4	8.1	127	11.44	110 <	5 <	2	68	56 <	2 <	1	20	20.5	4.1	0.7	1.6	-3.5	0.14	0.79	0.021	
Jul-95	07/26/95	1.2	8.6	208	17	120	10 <	2	123	107 <	2	1	10	36.7	7.7	0.5	2	3.6	0.15	0.51	0.024	
Aug-95	08/23/95	1.3	8.03	220	10																	
Sep-95	09/27/95	1	8.5	341	3	160 <	5	3	145	122 <	2	5	7	42.4	9.5	1	2.2	4.7	0.12	0.41	0.015	
Oct-95	10/19/95	0.6	8.33	300	4.44	170 <	5 <	2	154	137 <	2	2	20	44.5	10.5	1	2.5	-0.2	0.09	0.09	0.005	
Nov-95																						
Dec-95																						
Jan-96																						
Feb-96																						
Mar-96																						
Apr-96																						
May-96																						
Jun-96	06/11/96	3.67	7.3	155	9	75		2 <	78	73	2 <	1 <	10 <	23.4	4.8	0.5	1.6	5.8	0.16	0.69	0.024	
Jul-96	07/23/96	1.5	8.95	243	9	127		2 <	133	124	2 <	2	10 <	39.1	8.6	0.5	2.1	4.2	0.21	0.6	0.022	
Aug-96	08/19/96	0.3	8.64	240	7																	
Sep-96																						
Oct-96	10/01/96	0.159	7.8	323	6.5	155		5	156	139	2 <	2	10 <	46.9	9.5	0.7	2.2	2.8	0.18	0.36	0.008	
Nov-96																						
Dec-96																						
Jan-97																						
Feb-97																						
Mar-97																						
Apr-97																						
May-97																						
Jun-97	06/17/97	2	8.9	170	10	100		2 <	87	75	2 <	1	20	26	5.3	0.6	2	-2.9	0.11	0.56	0.019	
Jul-97	07/30/97	1	8.15	276	12	130	16	5 <	130	120	10 <	0.5 <	5 <	38	8	0.9	2.1	5.2	0.1	0.38	0.008	
Aug-97	08/13/97	0.71	8.52	224	11.5																	
Sep-97																						
Oct-97	10/06/97	0.8	8.56	235	5	190	1 <	5 <	170	130	10 <	0.5 <	5 <	50	10	1.1	2.5	14	0.05	0.57	0.01	
Nov-97																						
Dec-97																						
END DATA																						
	Count	21	21	21	21	16	12	10	16	14	16	16	16	16	16	16	16	10	16	16	13	
	Minimum	0	6.9	60	3	75 <	1 <	2 <	68	56 <	0 <	0.5 <	4 <	20.5	4.1 <	0.5	1.6	-3.5	0.05	0.09	0.005	
	Maximum	4	8.95	341	17	190 <	16 <	5 <	170	173 <	10 <	5 <	20 <	50	10.5 <	1.1	2.5	14	0.21	0.79	0.024	
	Average	1.056	8.2133	236.19	9.0086	134.56 <	6.4167 <	3 <	126.13	122.14 <	3 <	1.5625 <	9.75 <	37.094	8.0625 <	0.8438	2.05	3.37	0.1238	0.4713	0.0158	
	Standard Deviation	1.0602	0.5824	65.354	3.575	29.165 <	4.0714 <	1.3416 <	29.929	33.658 <	3.182 <	1.044 <	5.517 <	8.5586	2.0445 <	0.212	0.2345	4.7365	0.0409	0.1542	0.0065	
	Avg. -1 Std. Dev.	-0.004	7.6309	170.84	5.4336	105.4 <	2.3453 <	1.6584 <	96.196	88.485 <	-0.182 <	0.5185 <	4.233 <	28.535	6.018 <	0.6317	1.8155	-1.366	0.0828	0.3171	0.0093	
	Avg. +1 Std. Dev.	2.1162	8.7957	301.54	12.584	163.73 <	10.488 <	4.3416 <	156.05	155.8 <	6.182 <	2.6065 <	15.267 <	45.652	10.107 <	1.0558	2.2845	8.1065	0.1647	0.6254	0.0224	
	Avg. -2 Std. Dev.	-1.065	7.0486	105.48	1.8585	76.232 <	-1.726 <	0.3167 <	66.267	54.828 <	-3.364 <	-0.525 <	-1.284 <	19.977	3.9736 <	0.4197	1.581	-6.103	0.0419	0.1629	0.0028	
	Avg. +2 Std. Dev.	3.1764	9.3761	366.9	16.159	192.89 <	14.559 <	5.6833 <	185.98	189.46 <	9.364 <	3.6504 <	20.784 <	54.211	12.151 <	1.2678	2.519	12.843	0.2056	0.7796	0.0289	

Cyprus Plateau Mining Company - Water Quality Data

Print Date: March 2, 1998

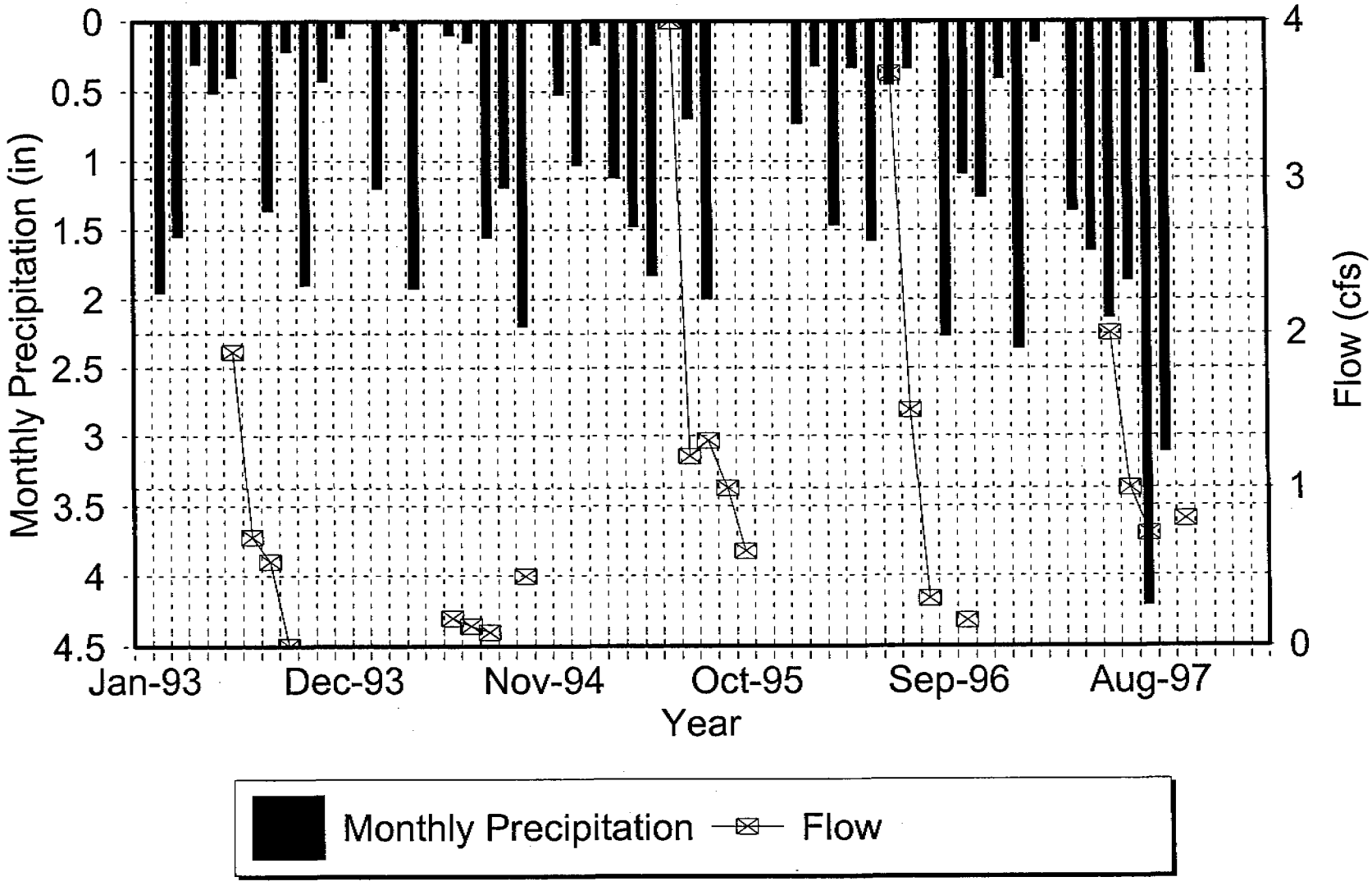
Station: 93341CV | Property: Star Point | Location: 1000' S 2000' E of NW corn. Sec 34, T14S, R7E | Station Type: Stream | Sampling Frequency: Quarterly | Formation: | Elevation: 8960

Date		Field Measurements				Laboratory Measurements																Comments
Mo-Yr	Sample Date	Flow (cfs)	Ph (units)	Sp. Cond. (ohms)	Temp. (C)	TDS (mg/l)	TSS (mg/l)	O&G (mg/l)	Hd-CaCO3 (mg/l)	HCO3 (mg/l)	CO3 (mg/l)	Cl (D) (mg/l)	SO4 (D) (mg/l)	Ca (D) (mg/l)	Mg (D) (mg/l)	K (D) (mg/l)	Na (D) (mg/l)	Cat/An Bal (%)	Fe (D) (mg/l)	Fe (T) (mg/l)	Mn (T) (mg/l)	

NOTE: The "<" symbol indicates that "Less Than" data was found in the data set; statistics are approximate.

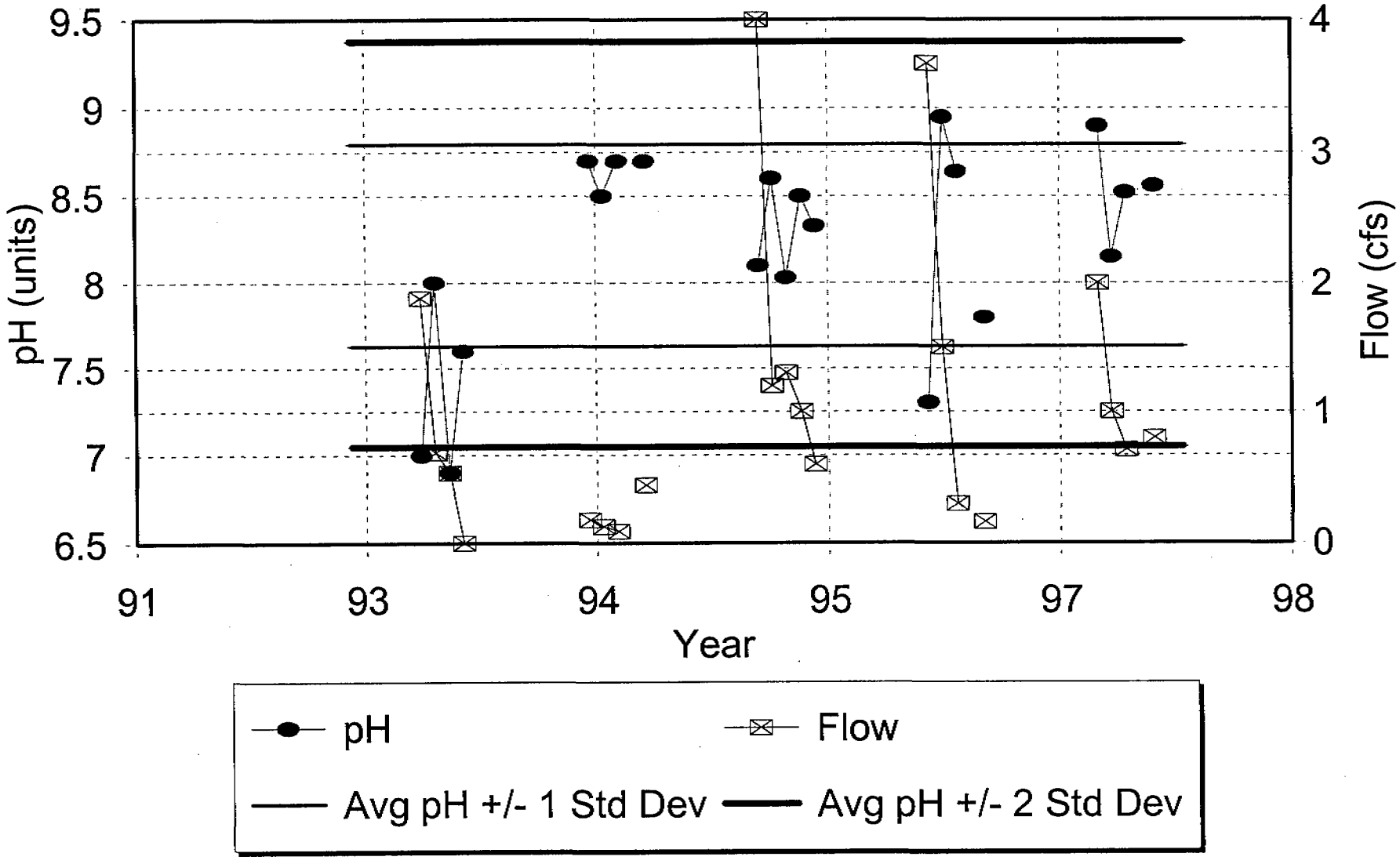
Station 93341CV

Monthly Precipitation vs. Flow

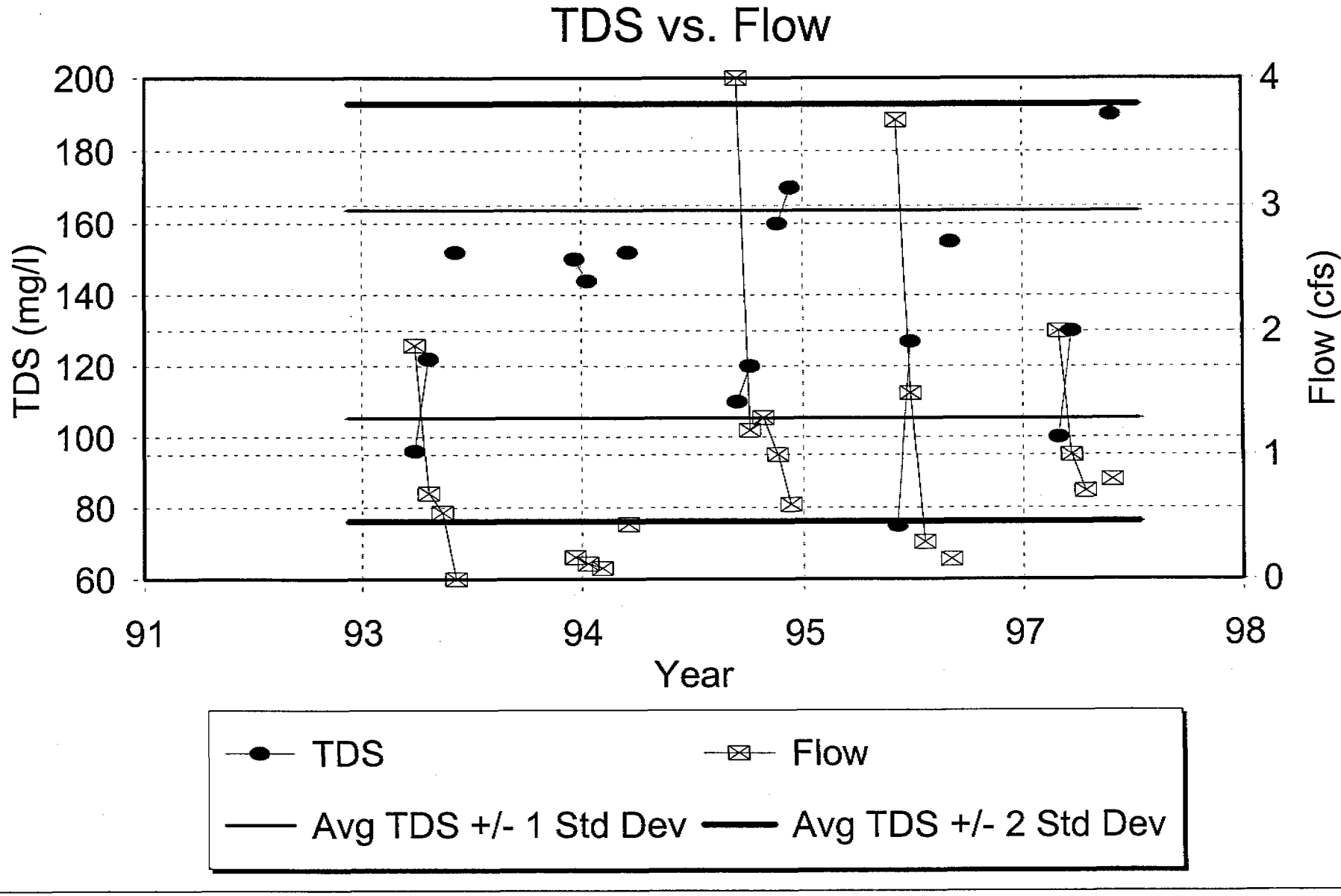


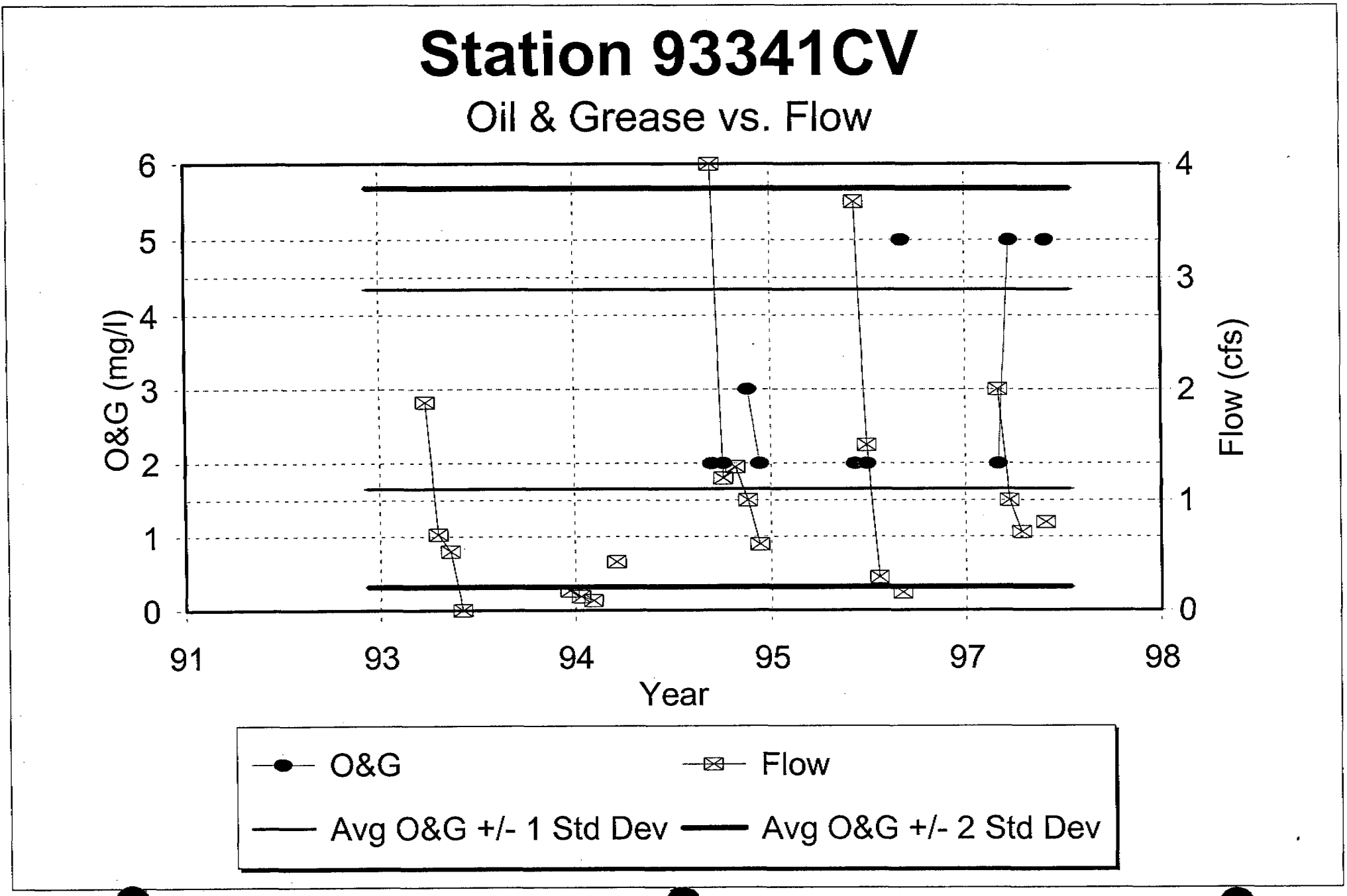
Station 93341CV

pH vs. Flow

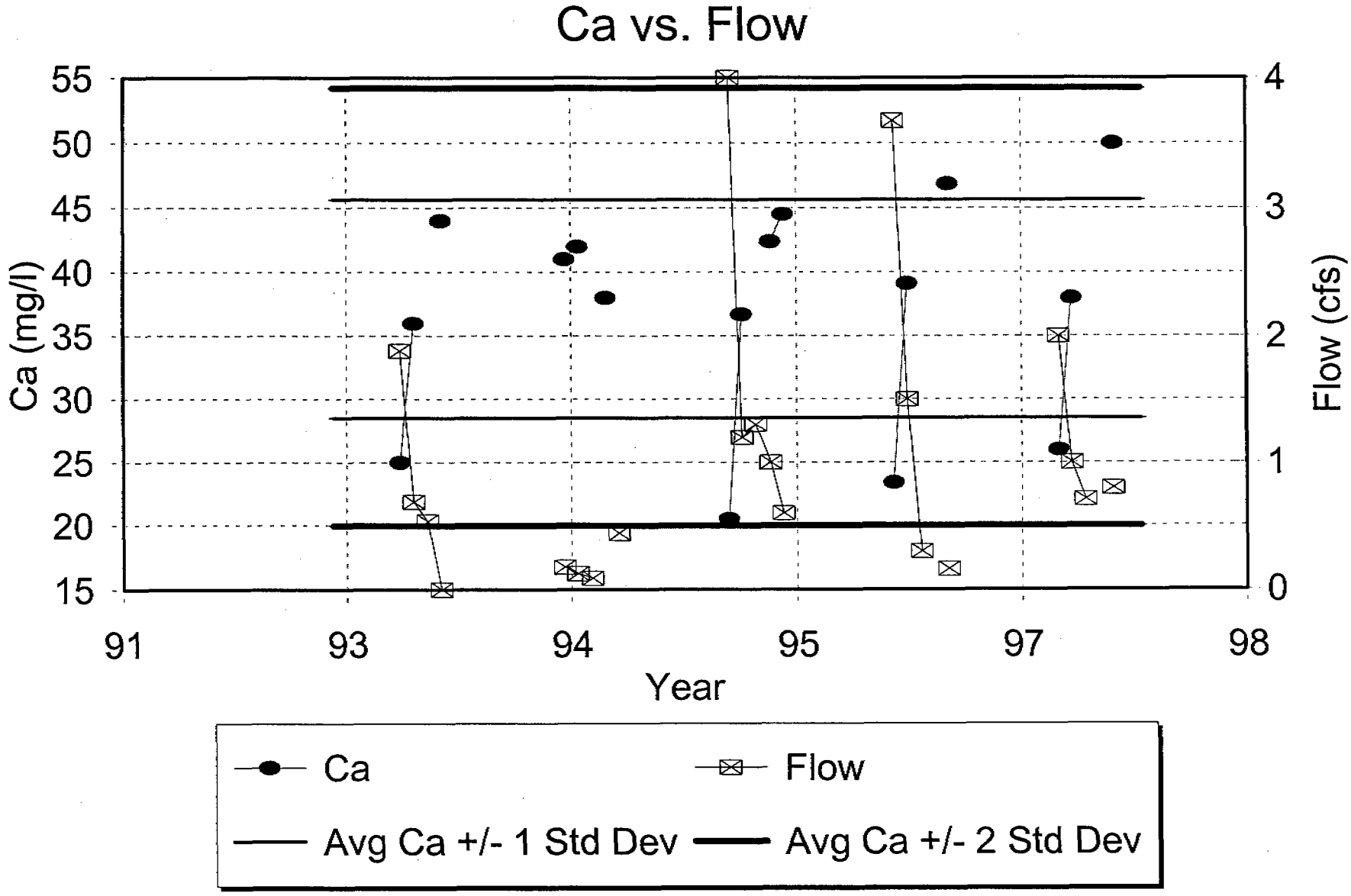


Station 93341CV




Station 93341CV
Oil & Grease vs. Flow
O&G (mg/l)
Flow (cfs)
Year
0
1
2
3
4
5
6
91
93
94
95
97
98
O&G
Flow
Avg O&G +/- 1 Std Dev
Avg O&G +/- 2 Std Dev

Station 93341CV



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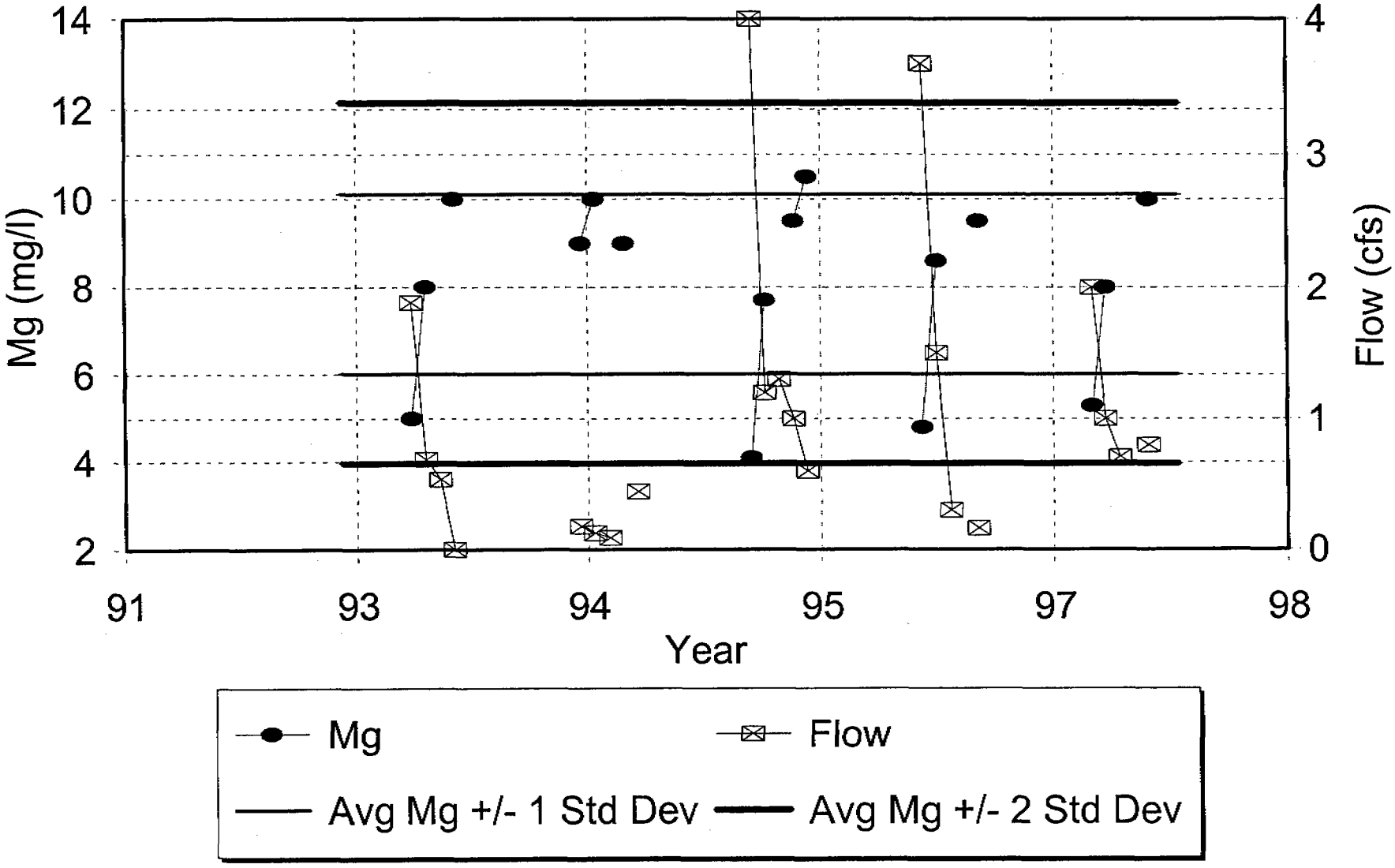
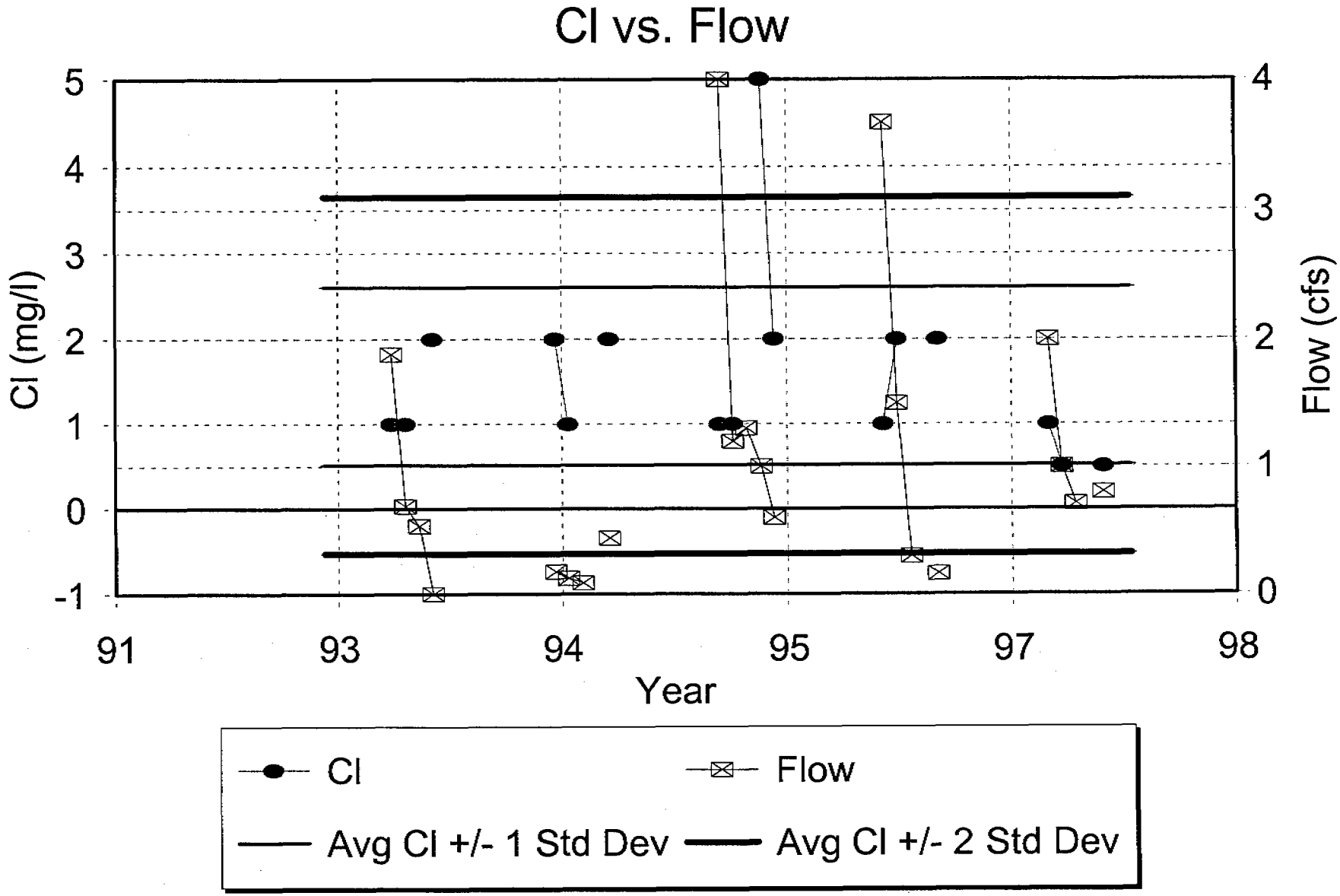
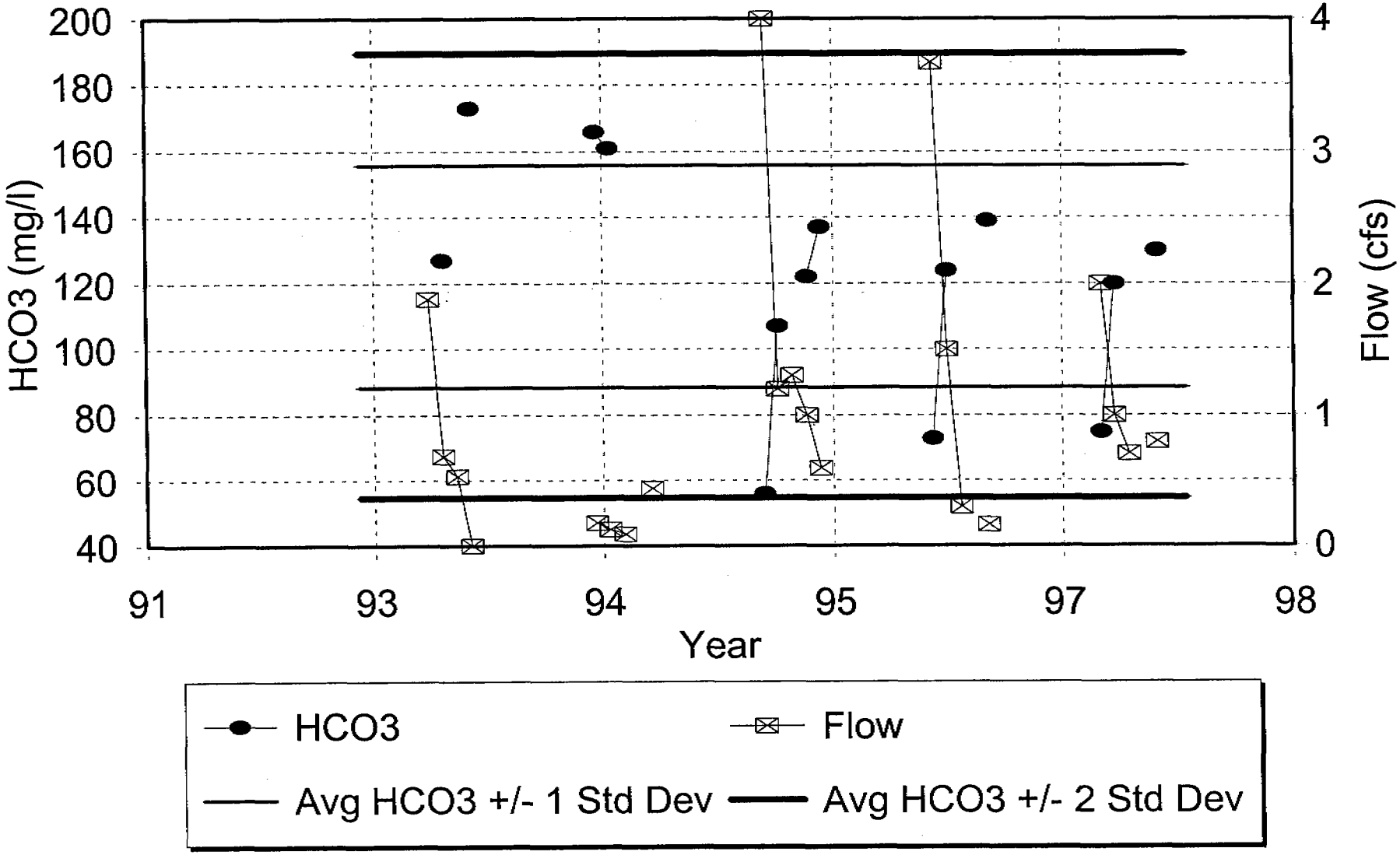
Mg vs. Flow

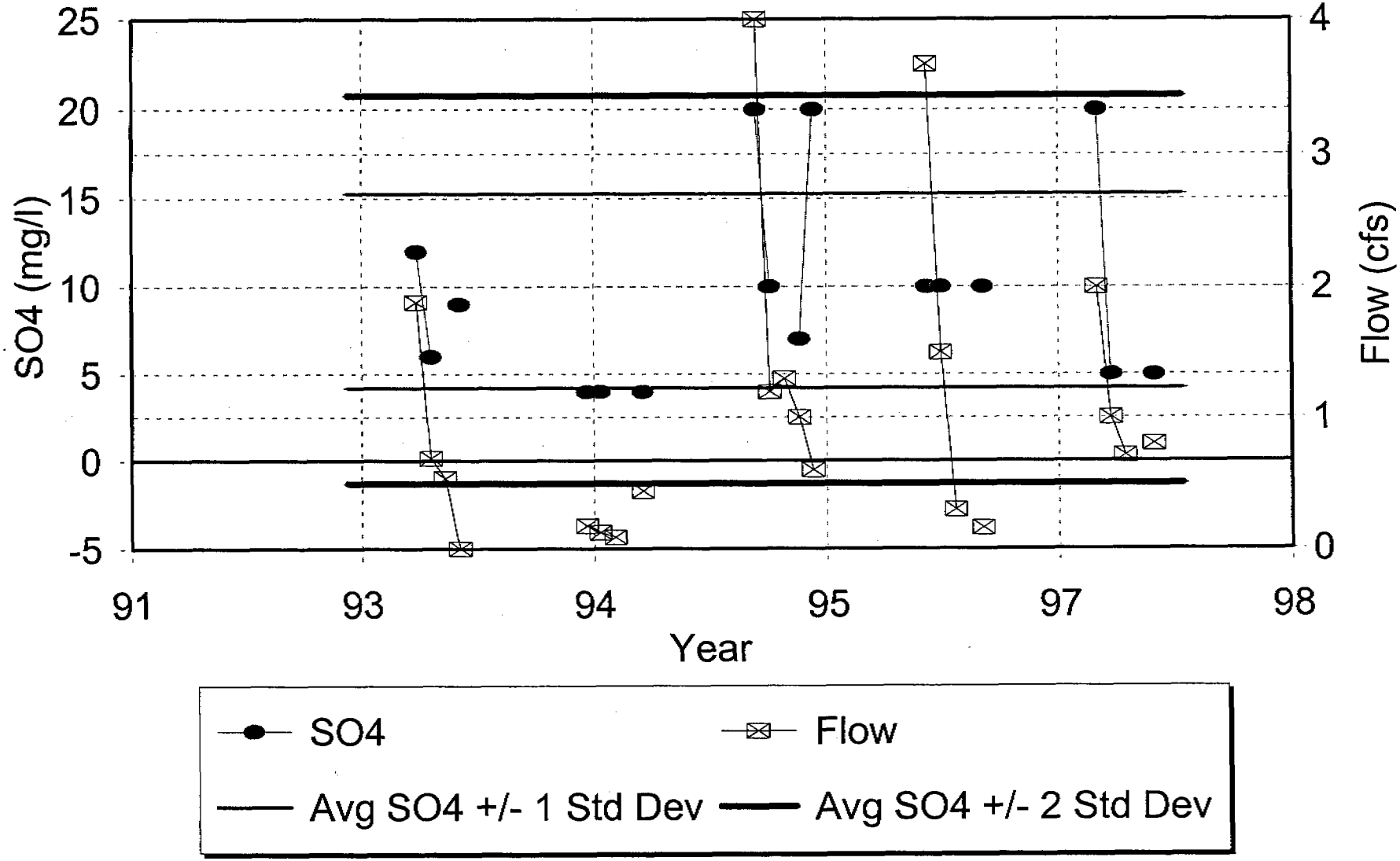


Station 93341CV



Station 93341CV



Station 93341CV

SO4 vs. Flow