JIM FORD CREEK STUDY

Clearwater County

Data Collected 1979

Final Summary October 1980

Department of Health and Welfare
Division of Environment
Statehouse
Boise, Idaho 83720

Water Quality Summary
No. 11

JIM FORD CREEK STUDY

Clearwater County

Data Collected 1979

Final Summary October 1980

Department of Health and Welfare
Division of Environment
Statehouse
Boise, Idaho 83720

TABLE OF CONTENTS

Summary

Data Inventory

Graphics

SUMMARY OF JIM FORD CREEK STUDY

During the 1979 Water Year a water quality study was conducted on Jim Ford Creek in Clearwater County to assess the impact of the City of Weippe and Timberline High School discharges, to assess nonpoint source impacts, and to determine the present water quality of the stream. In the study six mainstem, one tributary, and two sewage discharge stations were monitored on approximately a bi-monthly frequency for the following parameter categories:

Temperature	Solids
Dissolved Oxygen	Select Ions
pH	Nutrients
Bacteria	Trace Inorganic Toxins
Oxygen Demand	

The study indicates that Jim Ford Creek has consistent bacteria violations and frequent turbidity levels and iron concentrations which exceed recommended criteria. A violation of the 6.0 mg/l dissolved oxygen standard was also observed in August of 1979 below the confluence of Grasshopper Creek.

A portion, if not all, of the bacteria violations on Jim Ford Creek could be eliminated if the City of Weippe and the Timberline High School sewage treatment facilities were upgraded to secondary treatment requirements. The high iron concentrations are probably caused by excessive turbidity which is due to upstream agricultural and sivicultural

nonpoint sources and possibly channel erosion. The dissolved oxygen violation was caused by the Weippe discharge and low summer stream flows.

The turbidity and iron problem on Jim Ford Creek could be reduced by the application of best management practices to agricultural and sivicultural nonpoint sources in the upper watershed. A channel stability analysis should also be conducted on the upper portion of the stream to determine the contribution of channel erosion. A scheduled municipal construction grant for Weippe will alleviate their bacteria contribution, and the effluent limitation determination for Weippe also indicates the city should eliminate or reduce their discharge when the stream dilution is less than 50:1. This treatment requirement will eliminate any future dissolved oxygen violations below Weippe.

DATA INVENTORY

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020155
46 26 20.0 116 12 25.0 2
JIM FORD CR NEAR MOUTH
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790616
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070
MILES 0324.30 0139.30 048.60 000.20

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	6	9.75000	44.7750	6.69141	.686299	2.73176	16.5000	.000000	78/10/24	79/08/14
00042	ALTITUDE	FEET	AB MSL	1	1040.00					1040.00	1040.00	01/01/01	01/01/01
00061	STREAM	FLOW,	INST-CFS	4	49.2275	7393.75	85.9869	1.74672	42.9934	178.000	1.51000	78/10/24	79/08/14
00076	TURB	TRBIDMTR	HACH FTU	6	8.71666	132.478	11.5099	1.32045	4.69890	25.0000	.500000	78/10/24	79/08/14
00094	CNDUCTVY	FIELD	MICROMHO	2	30.0000	.000000	.000000		.000000	30.0000	30.0000	79/03/20	79/05/01
00095	CNDUCTVY	AT 25C	MICROMHO	6	96.0333	2092.88	45.7480	.476377	18.6766	139.000	32.2000	78/10/24	79/08/14
00116	INTNSVE	SURVEY	IDENT	7	791609	.000000	.000000		.000000	791609	791609	01/01/01	79/08/14
00300	DO		MG/L	6	11.0833	3.38174	1.83895	.165920	.750748	13.5000	8.30000	78/10/24	79/08/14
00335	COD	LOWLEVEL	MG/L	5	12.3400	64.1880	8.01174	.649250	3.58296	21.6000	5.10000	78/10/24	79/08/14
00400	PH		SU	5	7.98000	.017029	.130494	.016353	.058359	8.10000	7.80000	78/10/24	79/08/14
00403	LAB	PH	SU	4	7.42500	.442505	.665210	.089591	.332605	8.00000	6.50000	79/03/20	79/08/14
00410	T ALK	CACO3	MG/L	6	40.8333	458.967	21.4235	.524658	8.74612	67.0000	15.0000	78/10/24	79/08/14
00425	HCO3 ALK	CACO3	MG/L	6	40.8333	458.967	21.4235	.524658	8.74612	67.0000	15.0000	78/10/24	79/08/14
00430	CO3 ALK	CACO3	MG/L	6	.833333	.166667	.408249	.489898	.166667	1.00000	.000000	78/10/24	79/08/14
00500	RESIDUE	TOTAL	MG/L	6	93.6667	223.073	14.9356	.159455	6.09744	109.000	71.0000	78/10/24	79/08/14
00530	RESIDUE	TOT NFLT	MG/L	6	6.10000	8.94001	2.98999	.490162	1.22066	10.0000	2.00000	78/10/24	79/08/14
00610	NH3+NH4-	N TOTAL	MG/L	5	.039200	.000294	.017152	.437559	.007671	.065000	.020000	78/10/24	79/08/14
00615	NO2-N	TOTAL	MG/L	1	.002000					.002000	.002000	79/01/24	79/01/24
00620	NO3-N	TOTAL	MG/L	1	.770000					.770000	.770000	79/01/24	79/01/24
00625	TOT KJEL	N	MG/L	6	.553333	.053867	.232093	.419445	.094752	.800000	.200000	78/10/24	79/08/14
00630	NO2&NO3	N-TOTAL	MG/L	6	.285500	.086870	.294737	1.03235	.120326	.770000	.020000	78/10/24	79/08/14
00665	PHOS-TOT		MG/L P	6	.053333	.001427	.037771	.708211	.015420	.120000	.010000	78/10/24	79/08/14
00900	TOT HARD	CACO3	MG/L	6	38.3333	391.467	19.7855	.516144	8.07741	60.0000	15.0000	78/10/24	79/08/14
00916	CALCIUM	CA-TOT	MG/L	6	9.16666	15.2227	3.90163	.425632	1.59283	13.0000	3.00000	78/10/24	79/08/14
00927	MGNSIUM	MG,TOT	MG/L	6	3.45000	3.19901	1.78858	.518428	.730184	5.60000	1.20000	78/10/24	79/08/14
00929	SODIUM	NA,TOT	MG/L	6	5.01666	6.58170	2.56548	.511392	1.04735	8.00000	2.10000	78/10/24	79/08/14
00937	PTSSIUM	K,TOT	MG/L	6	2.25000	.759000	.871206	.387203	.355668	3.80000	1.40000	78/10/24	79/08/14
00940	CHLORIDE	CL	MG/L	6	5.03333	11.7667	3.43026	.681508	1.40040	11.0000	2.00000	78/10/24	79/08/14
00945	SULFATE	SO4-TOT	MG/L	6	9.50000	5.50000	2.34521	.246864	.957427	13.0000	6.00000	78/10/24	79/08/14
00951	FLUORIDE	F,TOTAL	MG/L	5	.114000	.000230	.015166	.133033	.006782	.130000	.100000	78/10/24	79/08/14
00956	SILICA	TOTAL	MG/L	6	23.6333	20.8426	4.56537	.193175	1.86380	29.0000	18.5000	78/10/24	79/08/14
01002	ARSENIC	AS,TOT	UG/L	7	10.0000	.000000	.000000		.000000	10.0000	10.0000	78/10/24	80/05/22
01022	BORON	B,TOT	UG/L	1	100.000					100.000	100.000	80/05/22	80/05/22
01027	CADMIUM	CD,TOT	UG/L	7	2.14286	3.80953	1.95180	.910840	.737711	5.00000	1.00000	78/10/24	80/05/22
01032	CHROMIUM	HEX-VAL	UG/L	1	50.0000					50.0000	50.0000	80/05/22	80/05/22
01034	CHROMIUM	CR,TOT	UG/L	1	50.0000					50.0000	50.0000	80/05/22	80/05/22
01042	COPPER	CU,TOT	UG/L	7	10.0000	.000000	.000000		.000000	10.0000	10.0000	78/10/24	80/05/22
01045	IRON	FE,TOT	UG/L	7	366.428	277298	526.591	1.43709	199.033	1465.00	55.0000	78/10/24	80/05/22
01051	LEAD	PB,TOT	UG/L	7	50.0000	.000000	.000000		.000000	50.0000	50.0000	78/10/24	80/05/22

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020155
46 26 20.0 116 12 25.0 2
JIM FORD CR NEAR MOUTH
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790616
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070
MILES 0324.30 0139.30 048.60 000.20

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
01055	MANGNESE	MN	UG/L	7	12.8571	57.1429	7.55929	.587945	2.85714	30.0000	10.0000	78/10/24	80/05/22
01077	SILVER	AG,TOT	UG/L	3	1.00000	.000000	.000000		.000000	1.00000	1.00000	78/10/24	80/05/22
01092	ZINC	ZN,TOT	UG/L	5	2.00000	1.50000	1.22474	.612372	.547722	4.00000	1.00000	79/01/24	80/05/22
01501	ALPHA	TOTAL	PC/L	6	.906666	.047827	.218693	.241206	.089281	1.09000	.500000	78/10/24	79/08/14
03501	BETA	TOTAL	PC/L	6	3.27166	5.49524	2.34419	.716513	.957012	7.40000	1.00000	78/10/24	79/08/14
31616	FEC COLI	MFM-FCBR	/100ML	6	58.6667	5988.27	77.3839	1.31904	31.5918	210.000	7.00000	78/10/24	79/08/14
31679	FECSTREP	MF M-ENT	/100ML	6	44.5000	3035.50	55.0954	1.23810	22.4926	150.000	4.00000	78/10/24	79/08/14
70300	RESIDUE	DISS-180 C	MG/L	2	87.5000	4.50000	2.12132	.024244	1.50000	89.0000	86.0000	78/10/24	79/01/24
70507	PHOS-T	ORTHO	MG/L P	6	.035000	.000295	.017181	.490898	.007014	.059000	.019000	78/10/24	79/08/14
71900	MERCURY	HG,TOTAL	UG/L	7	.500000	.000000	.000000		.000000	.500000	.500000	78/10/24	80/05/22

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020156
46 23 05.0 115 56 55.0 2
JIMFORD CR DWNSTM-GRASSHOPPER CR
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790616
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070
MILES 0324.30 0139.30 048.60 015.20

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	6	9.81666	34.0297	5.83350	.594244	2.38151	16.1000	1.00000	78/10/25	79/08/14
00042	ALTITUDE	FEET	AB MSL	1	2960.00					2960.00	2960.00	01/01/01	01/01/01
00061	STREAM	FLOW,	INST-CFS	1	2.00000					2.00000	2.00000	78/10/25	78/10/25
00076	TURB	TRBIDMTR	HACH FTU	6	12.9333	136.103	11.6663	.902035	4.76275	28.0000	2.10000	78/10/25	79/08/14
00094	CNDUCTVY	FIELD	MICROMHO	2	29.0000	2.00000	1.41421	.048766	1.00000	30.0000	28.0000	79/03/20	79/05/01
00095	CNDUCTVY	AT 25C	MICROMHO	6	161.050	42441.7	206.014	1.27919	84.1048	572.000	28.3000	78/10/25	79/08/14
00116	INTNSVE	SURVEY	IDENT	7	791609	.000000	.000000		.000000	791609	791609	01/01/01	79/08/14
00300	DO		MG/L	6	9.26666	6.25478	2.50096	.269888	1.02101	11.5000	4.50000	78/10/25	79/08/14
00335	COD	LOWLEVEL	MG/L	6	41.9500	2322.85	48.1959	1.14889	19.6759	139.000	11.7000	78/10/25	79/08/14
00400	PH		SU	6	7.83333	.062695	.250390	.031965	.102221	8.30000	7.60000	78/10/25	79/08/14
00403	LAB	PH	SU	4	6.82500	.109217	.330480	.048422	.165240	7.20000	6.50000	79/03/20	79/08/14
00500	RESIDUE	TOTAL	MG/L	6	142.433	11759.8	108.442	.761356	44.2714	360.000	70.0000	78/10/25	79/08/14
00530	RESIDUE	TOT NFLT	MG/L	6	20.0167	303.762	17.4288	.870712	7.11526	48.0000	2.00000	78/10/25	79/08/14
00610	NH3+NH4-	N TOTAL	MG/L	6	2.18883	10.0215	3.16568	1.44629	1.29238	8.15000	.026000	78/10/25	79/08/14
00615	NO2-N	TOTAL	MG/L	1	.011000					.011000	.011000	78/10/25	78/10/25
00620	NO3-N	TOTAL	MG/L	1	.190000					.190000	.190000	78/10/25	78/10/25
00625	TOT KJEL	N	MG/L	6	4.62166	55.8187	7.47119	1.61656	3.05010	19.6000	.400000	78/10/25	79/08/14
00630	NO2&NO3	N-TOTAL	MG/L	6	.103333	.006058	.077835	.753239	.031776	.202000	.020000	78/10/25	79/08/14
00665	PHOS-TOT		MG/L P	6	.893333	2.10203	1.44984	1.62295	.591893	3.80000	.070000	78/10/25	79/08/14
00940	CHLORIDE	CL	MG/L	6	11.1617	134.082	11.5794	1.03742	4.72727	32.0000	2.17000	78/10/25	79/08/14
31616	FEC COLI	MFM-FCBR	/100ML	5	222.200	52685.2	229.533	1.03300	102.650	600.000	49.0000	78/10/25	79/08/14
31679	FECSTREP	MF M-ENT	/100ML	5	71.8000	5100.70	71.4192	.994697	31.9396	178.000	9.00000	78/10/25	79/08/14
70507	PHOS-T	ORTHO	MG/L P	6	.362166	.178593	.422603	1.16687	.172527	1.09000	.021000	78/10/25	79/08/14

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020157
46 23 00.0 115 56 25.0 2
GRASSHOPPER CR N OF WEIPPE
16035 IDAHO CLEARWATER
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 791201
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070 0110
MILES 0324.30 0139.30 048.60 015.40 000.20

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	5	6.52000	26.0270	5.10167	.782465	2.28154	14.6000	1.50000	78/10/25	79/06/05
00061	STREAM	FLOW,	INST-CFS	2	.655000	.238051	.487904	.744892	.345000	1.00000	.310000	78/10/25	79/06/05
00076	TURB	TRBIDMTR	HACH FTU	5	19.5600	59.9681	7.74391	.395905	3.46318	26.0000	7.80000	78/10/25	79/06/05
00094	CNDUCTVY	FIELD	MICROMHO	2	26.5000	4.50000	2.12132	.080050	1.50000	28.0000	25.0000	79/03/20	79/05/01
00095	CNDUCTVY	AT 25C	MICROMHO	5	69.4200	972.492	31.1848	.449220	13.9463	104.000	33.1000	78/10/25	79/06/05
00116	INTNSVE	SURVEY	IDENT	5	791609	.000000	.000000		.000000	791609	791609	78/10/25	79/06/05
00300	DO		MG/L	5	11.3600	1.55310	1.24623	.109704	.557333	12.6000	9.70000	78/10/25	79/06/05
00335	COD	LOWLEVEL	MG/L	4	37.8500	1118.87	33.4495	.883739	16.7247	86.8000	13.1000	78/10/25	79/06/05
00400	PH		SU	5	8.03999	.193115	.439449	.054658	.196527	8.80000	7.70000	78/10/25	79/06/05
00403	LAB	PH	SU	3	6.56667	.123337	.351193	.053481	.202762	6.90000	6.20000	79/03/20	79/06/05
00500	RESIDUE	TOTAL	MG/L	5	92.2999	339.538	18.4266	.199638	8.24061	107.700	61.8000	78/10/25	79/06/05
00530	RESIDUE	TOT NFLT	MG/L	5	17.4400	122.833	11.0830	.635495	4.95648	29.0000	2.00000	78/10/25	79/06/05
00610	NH3+NH4-	N TOTAL	MG/L	5	.028400	.000189	.013759	.484460	.006153	.047000	.009000	78/10/25	79/06/05
00615	NO2-N	TOTAL	MG/L	5	.007200	.000040	.006340	.880604	.002835	.015000	.001000	78/10/25	79/06/05
00620	NO3-N	TOTAL	MG/L	5	.087400	.018309	.135310	1.54817	.060512	.327000	.010000	78/10/25	79/06/05
00625	TOT KJEL	N	MG/L	5	.504000	.093080	.305091	.605339	.136441	.800000	.100000	78/10/25	79/06/05
00630	NO2&NO3	N-TOTAL	MG/L	5	.098000	.020070	.141668	1.44560	.063356	.350000	.020000	78/10/25	79/06/05
00665	PHOS-TOT		MG/L P	5	.098000	.001270	.035637	.363645	.015937	.150000	.060000	78/10/25	79/06/05
00940	CHLORIDE	CL	MG/L	4	4.88000	11.7323	3.42524	.701894	1.71262	9.00000	2.00000	78/10/25	79/06/05
31616	FEC COLI	MFM-FCBR	/100ML	4	205.500	16454.3	128.274	.624207	64.1372	320.000	22.0000	78/10/25	79/06/05
31679	FECSTREP	MF M-ENT	/100ML	4	41.2500	1760.92	41.9633	1.01729	20.9816	98.0000	9.00000	78/10/25	79/06/05
70507	PHOS-T	ORTHO	MG/L P	5	.041400	.000588	.024245	.585620	.010843	.080000	.020000	78/10/25	79/06/05

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020158
46 22 55.0 115 56 45.0 2
JIMFORD CR DWNSTM-WEIPPE OUTFALL
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790616
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070
MILES 0324.30 0139.30 048.60 015.40

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	5	8.34000	35.1031	5.92479	.710406	2.64964	16.5000	.500000	78/10/25	79/06/05
00042	ALTITUDE	FEET	AB MSL	1	2980.00					2980.00	2980.00	01/01/01	01/01/01
00076	TURB	TRBIDMTR	HACH FTU	5	21.5200	146.253	12.0935	.561966	5.40837	36.0000	6.60000	78/10/25	79/06/05
00094	CNDUCTVY	FIELD	MICROMHO	2	27.5000	.500000	.707107	.025713	.500000	28.0000	27.0000	79/03/20	79/05/01
00095	CNDUCTVY	AT 25C	MICROMHO	5	79.3400	2378.74	48.7723	.614725	21.8116	133.000	29.7000	78/10/25	79/06/05
00116	INTNSVE	SURVEY	IDENT	6	791609	.000000	.000000		.000000	791609	791609	01/01/01	79/06/05
00300	DO		MG/L	5	9.85999	.738098	.859126	.087132	.384213	10.5000	8.40000	78/10/25	79/06/05
00335	COD	LOWLEVEL	MG/L	5	32.2400	390.242	19.7545	.612734	8.83450	66.4000	18.5000	78/10/25	79/06/05
00400	PH		SU	5	8.38000	.612122	.782382	.093363	.349892	9.50000	7.70000	78/10/25	79/06/05
00403	LAB	PH	SU	3	6.83333	.863426	.929207	.135982	.536478	7.90000	6.20000	79/03/20	79/06/05
00500	RESIDUE	TOTAL	MG/L	5	104.400	459.808	21.4431	.205394	9.58966	129.000	75.0000	78/10/25	79/06/05
00530	RESIDUE	TOT NFLT	MG/L	5	13.6600	155.928	12.4871	.914138	5.58441	35.0000	2.00000	78/10/25	79/06/05
00610	NH3+NH4-	N TOTAL	MG/L	5	.785799	1.73784	1.31827	1.67762	.589549	3.10000	.024000	78/10/25	79/06/05
00615	NO2-N	TOTAL	MG/L	5	.006600	.000051	.007127	1.07991	.003187	.019000	.001000	78/10/25	79/06/05
00620	NO3-N	TOTAL	MG/L	5	.056200	.001712	.041379	.736277	.018505	.121000	.020000	78/10/25	79/06/05
00625	TOT KJEL	N	MG/L	5	1.36800	2.52211	1.58812	1.16090	.710227	4.20000	.500000	78/10/25	79/06/05
00630	NO2&NO3	N-TOTAL	MG/L	5	.062000	.002220	.047117	.759950	.021071	.140000	.020000	78/10/25	79/06/05
00665	PHOS-TOT		MG/L P	5	.356000	.222529	.471730	1.32509	.210964	1.19000	.080000	78/10/25	79/06/05
00940	CHLORIDE	CL	MG/L	5	6.87400	31.8223	5.64113	.820647	2.52279	13.0000	2.17000	78/10/25	79/06/05
31616	FEC COLI	MFM-FCBR	/100ML	4	113.500	3897.00	62.4259	.550008	31.2130	188.000	50.0000	78/10/25	79/06/05
31679	FECSTREP	MF M-ENT	/100ML	4	29.0000	142.000	11.9164	.410909	5.95819	41.0000	13.0000	78/10/25	79/06/05
70507	PHOS-T	ORTHO	MG/L P	5	.292000	.143530	.378853	1.29744	.169428	.900000	.027000	78/10/25	79/06/05

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020159
46 22 30.0 115 56 20.0 2
WEIPPE OUTFALL
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790616
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070
MILES 0324.30 0139.30 048.60 016.30

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	5	8.50000	26.2500	5.12347	.602762	2.29129	14.0000	4.00000	78/10/25	79/06/05
00042	ALTITUDE	FEET	AB MSL	1	2985.00					2985.00	2985.00	01/01/01	01/01/01
00061	STREAM	FLOW,	INST-CFS	2	45.0031	4049.43	63.6352	1.41402	44.9969	90.0000	.006300	78/10/25	79/05/01
00076	TURB	TRBIDMTR	HACH FTU	5	12.1800	222.782	14.9259	1.22544	6.67506	38.0000	2.20000	78/10/25	79/06/05
00094	CNDUCTVY	FIELD	MICROMHO	2	130.000	800.000	28.2843	.217571	20.0000	150.000	110.000	79/03/20	79/05/01
00095	CNDUCTVY	AT 25C	MICROMHO	5	304.100	32023.4	178.951	.588461	80.0293	505.000	165.500	78/10/25	79/06/05
00116	INTNSVE	SURVEY	IDENT	6	791609	.000000	.000000		.000000	791609	791609	01/01/01	79/06/05
00300	DO		MG/L	5	2.88000	.786995	.887127	.308030	.396735	4.10000	1.80000	78/10/25	79/06/05
00335	COD	LOWLEVEL	MG/L	5	92.0199	10487.2	102.407	1.11288	45.7977	269.800	28.0000	78/10/25	79/06/05
00400	PH		SU	5	7.65999	.113098	.336301	.043904	.150398	8.10000	7.30000	78/10/25	79/06/05
00403	LAB	PH	SU	3	6.55000	.032593	.180535	.027563	.104232	6.75000	6.40000	79/03/20	79/06/05
00500	RESIDUE	TOTAL	MG/L	5	218.080	13540.2	116.362	.533576	52.0388	373.700	132.000	78/10/25	79/06/05
00530	RESIDUE	TOT NFLT	MG/L	5	8.60000	31.3800	5.60179	.651371	2.50519	18.0000	3.00000	78/10/25	79/06/05
00610	NH3+NH4-	N TOTAL	MG/L	5	6.20020	49.0794	7.00567	1.12991	3.13303	16.7000	.027000	78/10/25	79/06/05
00615	NO2-N	TOTAL	MG/L	5	.041600	.004704	.068588	1.64875	.030673	.164000	.003000	78/10/25	79/06/05
00620	NO3-N	TOTAL	MG/L	5	.137200	.026499	.162786	1.18649	.072800	.396000	.020000	78/10/25	79/06/05
00625	TOT KJEL	N	MG/L	5	10.4800	107.477	10.3671	.989228	4.63631	23.4000	1.50000	78/10/25	79/06/05
00630	NO2&NO3	N-TOTAL	MG/L	5	.176000	.050930	.225677	1.28225	.100926	.560000	.030000	78/10/25	79/06/05
00665	PHOS-TOT		MG/L P	5	3.75600	14.2487	3.77474	1.00499	1.68812	8.10000	.640000	78/10/25	79/06/05
00940	CHLORIDE	CL	MG/L	5	29.8800	198.478	14.0882	.471493	6.30044	49.5000	17.2000	78/10/25	79/06/05
31616	FEC COLI	MFM-FCBR	/100ML	4	12165.0	.195E+09	13983.6	1.14949	6991.78	27000.0	120.000	78/10/25	79/06/05
31679	FECSTREP	MF M-ENT	/100ML	4	464.500	320748	566.346	1.21926	283.173	1200.00	10.0000	78/10/25	79/06/05
70507	PHOS-T	ORTHO	MG/L P	5	3.00480	10.2379	3.19967	1.06485	1.43094	7.44000	.406000	78/10/25	79/06/05

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020160
46 22 20.0 115 56 15.0 2
JIMFORD CR UPSTM-WEIPPE OUTFALL
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790616
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070
MILES 0324.30 0139.30 048.60 016.50

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	4	10.2000	21.3267	4.61809	.452754	2.30904	16.5000	5.80000	78/10/25	79/06/05
00042	ALTITUDE	FEET	AB MSL	1	2990.00					2990.00	2990.00	01/01/01	01/01/01
00061	STREAM	FLOW,	INST-CFS	2	1.06000	1.51380	1.23037	1.16072	.870000	1.93000	.190000	78/10/25	79/06/05
00076	TURB	TRBIDMTR	HACH FTU	4	20.7500	56.2500	7.50000	.361446	3.75000	29.0000	13.0000	78/10/25	79/06/05
00094	CNDUCTVY	FIELD	MICROMHO	2	28.5000	.500000	.707107	.024811	.500000	29.0000	28.0000	79/03/20	79/05/01
00095	CNDUCTVY	AT 25C	MICROMHO	4	55.5750	872.789	29.5430	.531588	14.7715	96.0000	31.3000	78/10/25	79/06/05
00116	INTNSVE	SURVEY	IDENT	5	791609	.000000	.000000		.000000	791609	791609	01/01/01	79/06/05
00300	DO		MG/L	4	10.0500	1.15674	1.07552	.107017	.537759	11.2000	8.60000	78/10/25	79/06/05
00335	COD	LOWLEVEL	MG/L	4	24.7250	29.2224	5.40578	.218636	2.70289	30.9000	19.8000	78/10/25	79/06/05
00400	PH		SU	4	8.17500	.189290	.435075	.053220	.217537	8.80000	7.80000	78/10/25	79/06/05
00403	LAB	PH	SU	3	6.86666	.123451	.351356	.051168	.202856	7.20000	6.50000	79/03/20	79/06/05
00500	RESIDUE	TOTAL	MG/L	4	97.9499	610.422	24.7067	.252238	12.3534	124.000	74.8000	78/10/25	79/06/05
00530	RESIDUE	TOT NFLT	MG/L	4	15.3000	271.827	16.4872	1.07759	8.24358	40.0000	6.00000	78/10/25	79/06/05
00610	NH3+NH4-	N TOTAL	MG/L	4	.036250	.000340	.018446	.508852	.009223	.050000	.011000	78/10/25	79/06/05
00625	TOT KJEL	N	MG/L	4	.847500	.029025	.170367	.201024	.085184	1.10000	.740000	78/10/25	79/06/05
00630	NO2&NO3	N-TOTAL	MG/L	4	.048250	.002902	.053866	1.11640	.026933	.129000	.020000	78/10/25	79/06/05
00665	PHOS-TOT		MG/L P	4	.122500	.001425	.037749	.308157	.018875	.160000	.090000	78/10/25	79/06/05
00940	CHLORIDE	CL	MG/L	4	4.09250	10.8516	3.29417	.804929	1.64709	9.00000	2.17000	78/10/25	79/06/05
31616	FEC COLI	MFM-FCBR	/100ML	4	56.2500	1544.25	39.2969	.698612	19.6485	98.0000	14.0000	78/10/25	79/06/05
31679	FECSTREP	MF M-ENT	/100ML	4	28.2500	854.916	29.2389	1.03501	14.6195	72.0000	11.0000	78/10/25	79/06/05
70507	PHOS-T	ORTHO	MG/L P	4	.035250	.000238	.015435	.437883	.007718	.052000	.015000	78/10/25	79/06/05

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020161
46 22 15.0 115 56 00.0 2
JIMFORD BL CONFL-PLEASANT ACRES
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790616
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070
MILES 0324.30 0139.30 048.60 016.70

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	2	5.90000	23.1200	4.80833	.814970	3.40000	9.30000	2.50000	79/03/20	79/05/01
00042	ALTITUDE	FEET	AB MSL	1	2995.00					2995.00	2995.00	01/01/01	01/01/01
00061	STREAM	FLOW,	INST-CFS	1	160.000					160.000	160.000	79/03/20	79/03/20
00076	TURB	TRBIDMTR	HACH FTU	2	28.0000	8.00000	2.82843	.101015	2.00000	30.0000	26.0000	79/03/20	79/05/01
00094	CNDUCTVY	FIELD	MICROMHO	2	25.0000	.000000	.000000		.000000	25.0000	25.0000	79/03/20	79/05/01
00095	CNDUCTVY	AT 25C	MICROMHO	2	32.5000	24.5000	4.94975	.152300	3.50000	36.0000	29.0000	79/03/20	79/05/01
00116	INTNSVE	SURVEY	IDENT	3	791609	.000000	.000000		.000000	791609	791609	01/01/01	79/05/01
00300	DO		MG/L	2	10.5500	.125153	.353769	.033533	.250153	10.8000	10.3000	79/03/20	79/05/01
00335	COD	LOWLEVEL	MG/L	2	23.1000	36.9800	6.08112	.263252	4.30000	27.4000	18.8000	79/03/20	79/05/01
00400	PH		SU	2	8.00000	1.62001	1.27280	.159100	.900003	8.90000	7.10000	79/03/20	79/05/01
00403	LAB	PH	SU	2	6.45000	.124985	.353532	.054811	.249985	6.70000	6.20000	79/03/20	79/05/01
00500	RESIDUE	TOTAL	MG/L	2	94.9000	729.621	27.0115	.284631	19.1000	114.000	75.8000	79/03/20	79/05/01
00530	RESIDUE	TOT NFLT	MG/L	2	26.0500	31.2058	5.58622	.214442	3.95005	30.0000	22.1000	79/03/20	79/05/01
00610	NH3+NH4-	N TOTAL	MG/L	2	.043500	.000041	.006364	.146304	.004500	.048000	.039000	79/03/20	79/05/01
00615	NO2-N	TOTAL	MG/L	2	.009000	.000050	.007071	.785675	.005000	.014000	.004000	79/03/20	79/05/01
00620	NO3-N	TOTAL	MG/L	2	.075500	.006161	.078489	1.03959	.055500	.131000	.020000	79/03/20	79/05/01
00625	TOT KJEL	N	MG/L	2	.725000	.031250	.176777	.243830	.125000	.850000	.600000	79/03/20	79/05/01
00630	NO2&NO3	N-TOTAL	MG/L	2	.085000	.008450	.091924	1.08146	.065000	.150000	.020000	79/03/20	79/05/01
00665	PHOS-TOT		MG/L P	2	.110000	.000200	.014142	.128565	.010000	.120000	.100000	79/03/20	79/05/01
00940	CHLORIDE	CL	MG/L	2	2.58500	.344456	.586903	.227042	.415004	3.00000	2.17000	79/03/20	79/05/01
31616	FEC COLI	MFH-FCBR	/100ML	2	121.500	6844.50	82.7315	.680918	58.5000	180.000	63.0000	79/03/20	79/05/01
31679	FECSTREP	MF M-ENT	/100ML	2	27.5000	4.50000	2.12132	.077139	1.50000	29.0000	26.0000	79/03/20	79/05/01
70507	PHOS-T	ORTHO	MG/L P	2	.049000	.000002	.001414	.028865	.001000	.050000	.048000	79/03/20	79/05/01

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020162
46 22 10.0 115 55 55.0 2
JIMFORD CR UPSTM-PLEASANT ACRES
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790616
0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 1070
MILES 0324.30 0139.30 048.60 016.90

PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	5	7.30000	40.9701	6.40079	.876821	2.86252	17.0000	1.00000	78/10/25	79/06/05
00042	ALTITUDE	FEET	AB MSL	1	300.000					300.000	300.000	01/01/01	01/01/01
00061	STREAM	FLOW,	INST-CFS	2	75.9800	11256.0	106.094	1.39634	75.0200	151.000	.960000	79/03/20	79/06/05
00076	TURB	TRBIDMTR	HACH FTU	5	20.2200	144.293	12.0122	.594075	5.37201	31.0000	2.10000	78/10/25	79/06/05
00094	CNDUCTVY	FIELD	MICROMHO	2	24.5000	.500000	.707107	.028861	.500000	25.0000	24.0000	79/03/20	79/05/01
00095	CNDUCTVY	AT 25C	MICROMHO	5	103.140	10791.7	103.883	1.00720	46.4579	283.000	29.7000	78/10/25	79/06/05
00116	INTNSVE	SURVEY	IDENT	6	791609	.000000	.000000		.000000	791609	791609	01/01/01	79/06/05
00300	DO		MG/L	5	9.99999	1.62518	1.27483	.127483	.570120	10.9000	7.80000	78/10/25	79/06/05
00335	COD	LOWLEVEL	MG/L	5	23.6800	41.8868	6.47200	.273311	2.89437	32.3000	16.2000	78/10/25	79/06/05
00400	PH		SU	5	7.99999	.275085	.524486	.065561	.234557	8.90000	7.60000	78/10/25	79/06/05
00403	LAB	PH	SU	3	6.43333	.103447	.321632	.049995	.185694	6.80000	6.20000	79/03/20	79/06/05
00500	RESIDUE	TOTAL	MG/L	5	101.840	202.638	14.2351	.139779	6.36612	119.000	81.2000	78/10/25	79/06/05
00530	RESIDUE	TOT NFLT	MG/L	5	14.5400	114.308	10.6915	.735316	4.78138	30.0000	3.00000	78/10/25	79/06/05
00610	NH3+NH4-	N TOTAL	MG/L	5	.050000	.000793	.028160	.563206	.012594	.090000	.021000	78/10/25	79/06/05
00625	TOT KJEL	N	MG/L	5	.552000	.009520	.097572	.176761	.043636	.700000	.460000	78/10/25	79/06/05
00630	NO2&NO3	N-TOTAL	MG/L	5	.053400	.002973	.054523	1.02104	.024384	.145000	.010000	78/10/25	79/06/05
00665	PHOS-TOT		MG/L P	5	.116000	.000430	.020737	.178766	.009274	.130000	.080000	78/10/25	79/06/05
00940	CHLORIDE	CL	MG/L	4	4.05000	11.0767	3.32816	.821769	1.66408	9.00000	2.00000	78/10/25	79/06/05
31616	FEC COLI	MFM-FCBR	/100ML	4	216.750	112781	335.829	1.54938	167.914	720.000	28.0000	78/10/25	79/06/05
31679	FECSTREP	MF M-ENT	/100ML	4	36.5000	999.000	31.6070	.865944	15.8035	83.0000	13.0000	78/10/25	79/06/05
70507	PHOS-T	ORTHO	MG/L P	5	.042800	.000133	.011541	.269657	.005161	.058000	.028000	78/10/25	79/06/05

STORET RETRIEVAL DATE 80/12/15 - INVENT - VERSION OF AUG. 1980

2020163
46 24 35.0 115 54 40.0 2
TIMBERLINE HIGH SCHOOL EFFLUENT
16035 IDAHO
PACIFIC NORTHWEST 130800
LOWER SNAKE
21IDSURV 790630
0000 CLASS 00

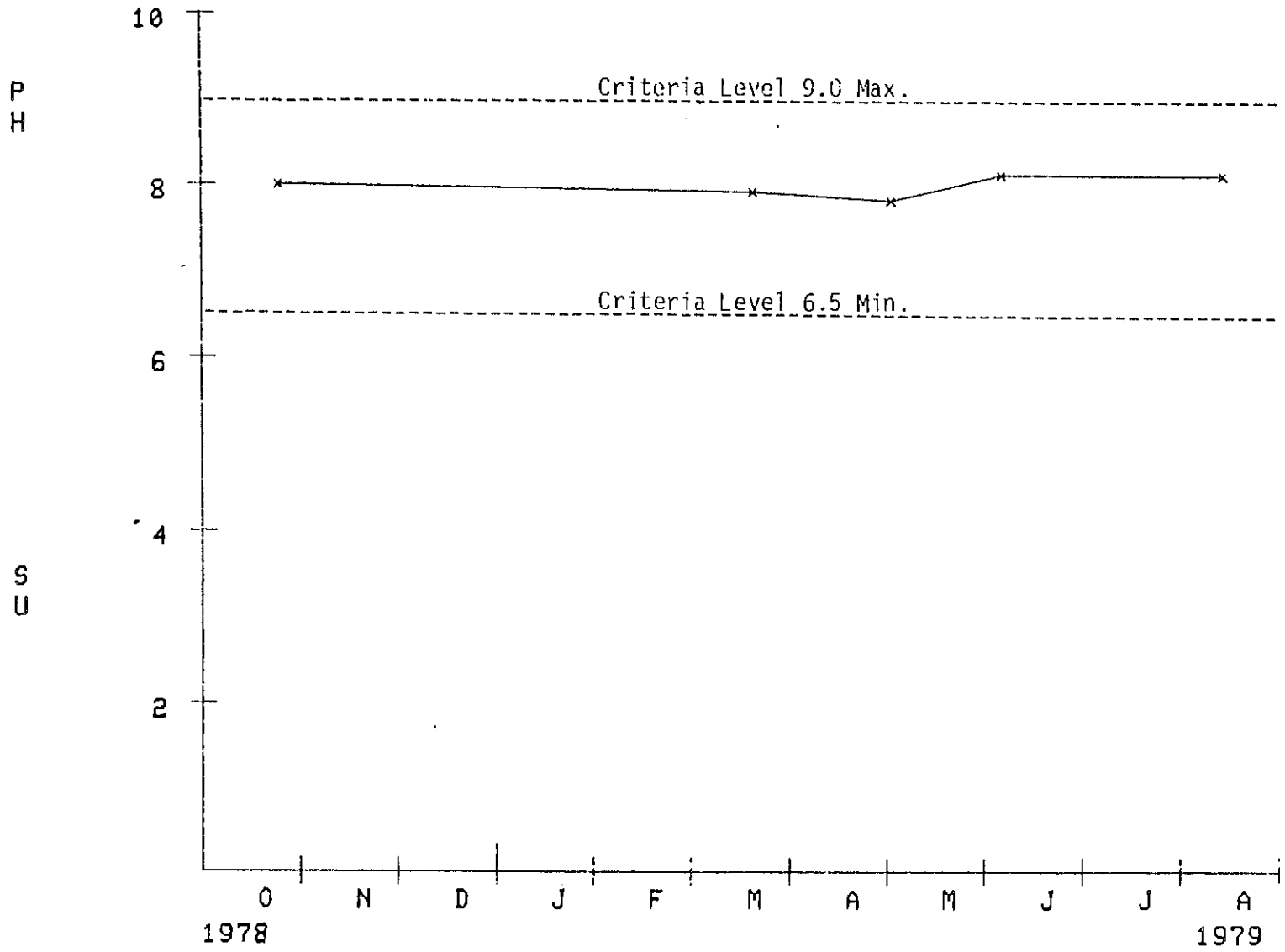
/TYPA/MUN/TREATD/OUTFL/PIPE

INDEX 1310001 002740 01350 1070 0110
MILES 0324.30 0139.30 048.60 015.40 002.70

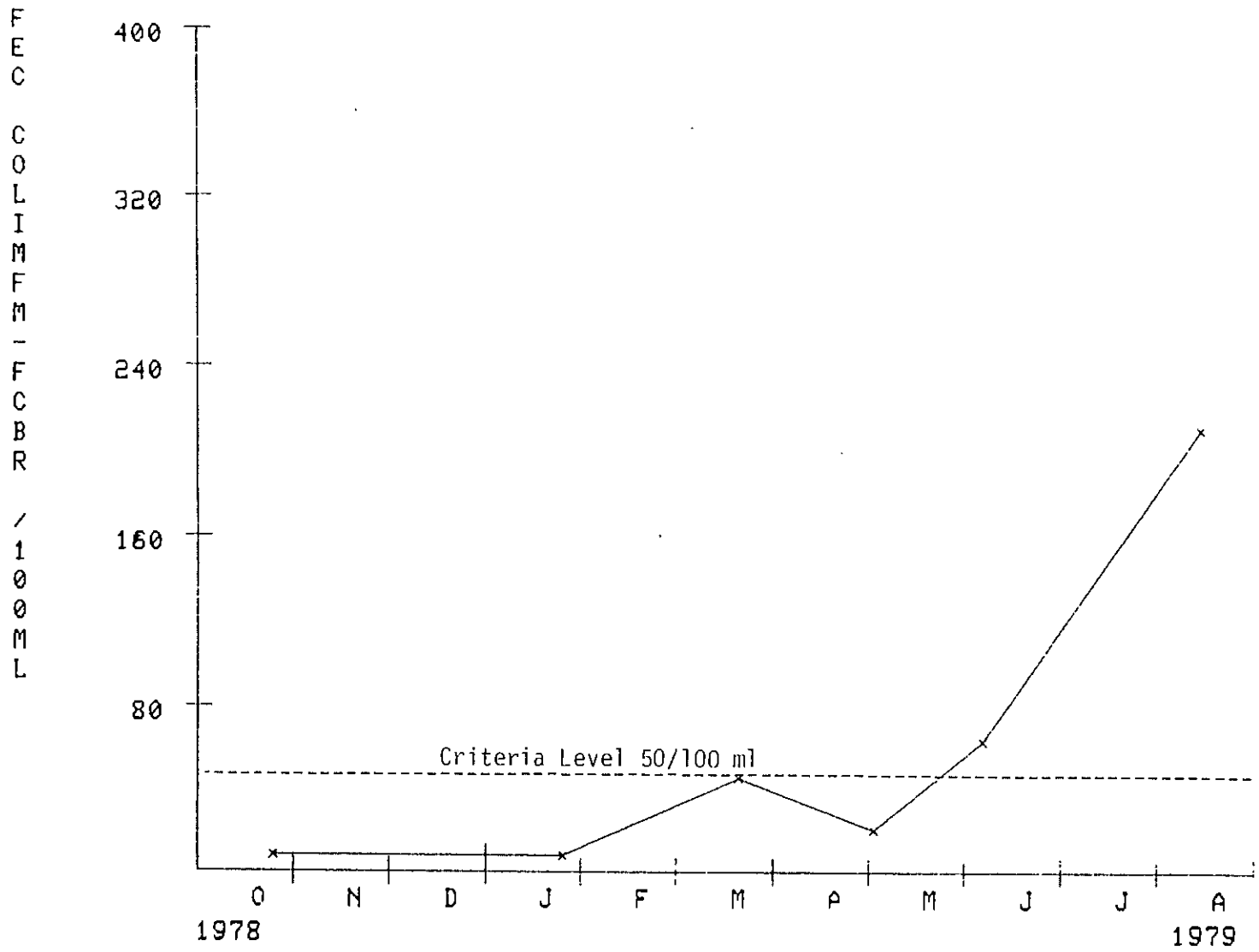
PARAMETER				NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010	WATER	TEMP	CENT	3	4.60000	22.6800	4.76235	1.03529	2.74954	10.0000	1.00000	78/10/25	79/03/20
00042	ALTITUDE	FEET	AB MSL	1	3060.00					3060.00	3060.00	01/01/01	01/01/01
00061	STREAM	FLOW,	INST-CFS	2	.004150	.000030	.005445	1.31198	.003850	.008000	.000300	78/10/25	79/03/20
00076	TURB	TRBIDMTR	HACH FTU	3	18.1333	169.053	13.0021	.717025	7.50674	28.0000	3.40000	78/10/25	79/03/20
00094	CNDUCTVY	FIELD	MICROMHO	1	460.000					460.000	460.000	79/03/20	79/03/20
00095	CNDUCTVY	AT 25C	MICROMHO	3	1132.00	351013.	592.464	.523378	342.059	1813.00	735.000	78/10/25	79/03/20
00116	INTNSVE	SURVEY	IDENT	4	791609	.000000	.000000		.000000	791609	791609	01/01/01	79/03/20
00300	DO		MG/L	3	5.63333	6.92335	2.63123	.467082	1.51914	7.30000	2.60000	78/10/25	79/03/20
00335	COD	LOWLEVEL	MG/L	3	151.967	32776.8	181.044	1.19134	104.526	361.000	45.1000	78/10/25	79/03/20
00400	PH		SU	3	7.06667	.373344	.611019	.086465	.352772	7.60000	6.40000	78/10/25	79/03/20
00403	LAB	PH	SU	1	7.00000					7.00000	7.00000	79/03/20	79/03/20
00500	RESIDUE	TOTAL	MG/L	3	684.333	159898	399.873	.584324	230.867	1143.00	409.000	78/10/25	79/03/20
00530	RESIDUE	TOT NFLT	MG/L	3	21.6667	22.3341	4.72590	.218118	2.72850	27.0000	18.0000	78/10/25	79/03/20
00610	NH3+NH4-	N TOTAL	MG/L	3	10.2533	49.3011	7.02148	.684800	4.05385	17.6000	3.61000	78/10/25	79/03/20
00615	NO2-N	TOTAL	MG/L	3	.049333	.000114	.010693	.216747	.006174	.061000	.040000	78/10/25	79/03/20
00620	NO3-N	TOTAL	MG/L	3	.280333	.066620	.258109	.920722	.149019	.510000	.001000	78/10/25	79/03/20
00625	TOT KJEL	N	MG/L	3	17.3966	161.584	12.7116	.730691	7.33903	31.1000	5.99000	78/10/25	79/03/20
00630	NO2&NO3	N-TOTAL	MG/L	3	.330000	.072100	.268514	.813680	.155027	.570000	.040000	78/10/25	79/03/20
00665	PHOS-TOT		MG/L P	3	2.40333	.438438	.662147	.275512	.382291	3.16000	1.93000	78/10/25	79/03/20
00940	CHLORIDE	CL	MG/L	3	265.333	42024.4	204.999	.772608	118.356	502.000	143.000	78/10/25	79/03/20
31616	FEC COLI	MFM-FCBR	/100ML	2	2230.00	5577800	2361.74	1.05907	1670.00	3900.00	560.000	78/10/25	79/03/20
31679	FECSTREP	MF M-ENT	/100ML	2	313.000	122018	349.311	1.11601	247.000	560.000	66.0000	78/10/25	79/03/20
70507	PHOS-T	ORTHO	MG/L P	3	1.63667	.226033	.475429	.290486	.274489	2.10000	1.15000	78/10/25	79/03/20

GRAPHICS

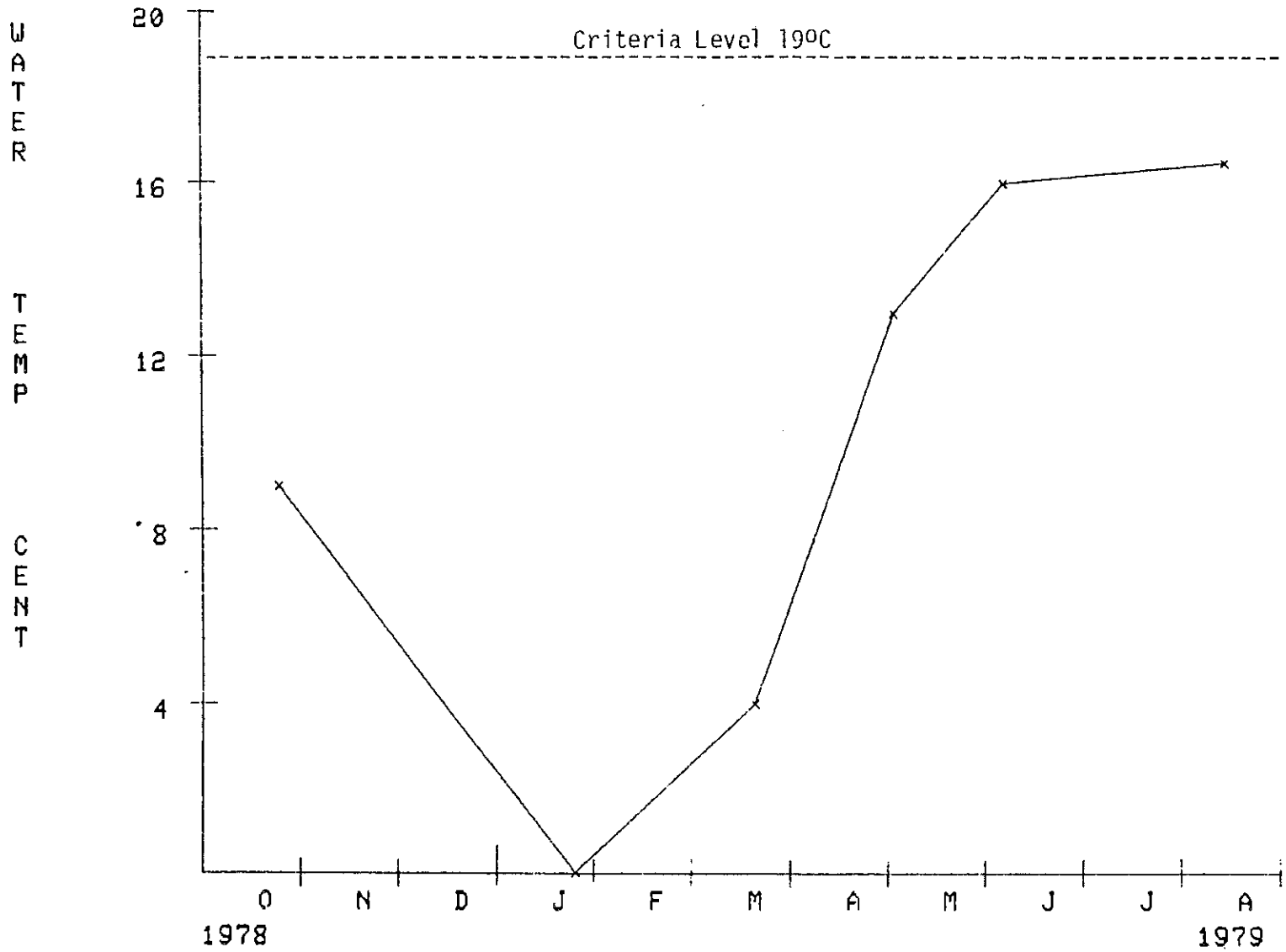
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



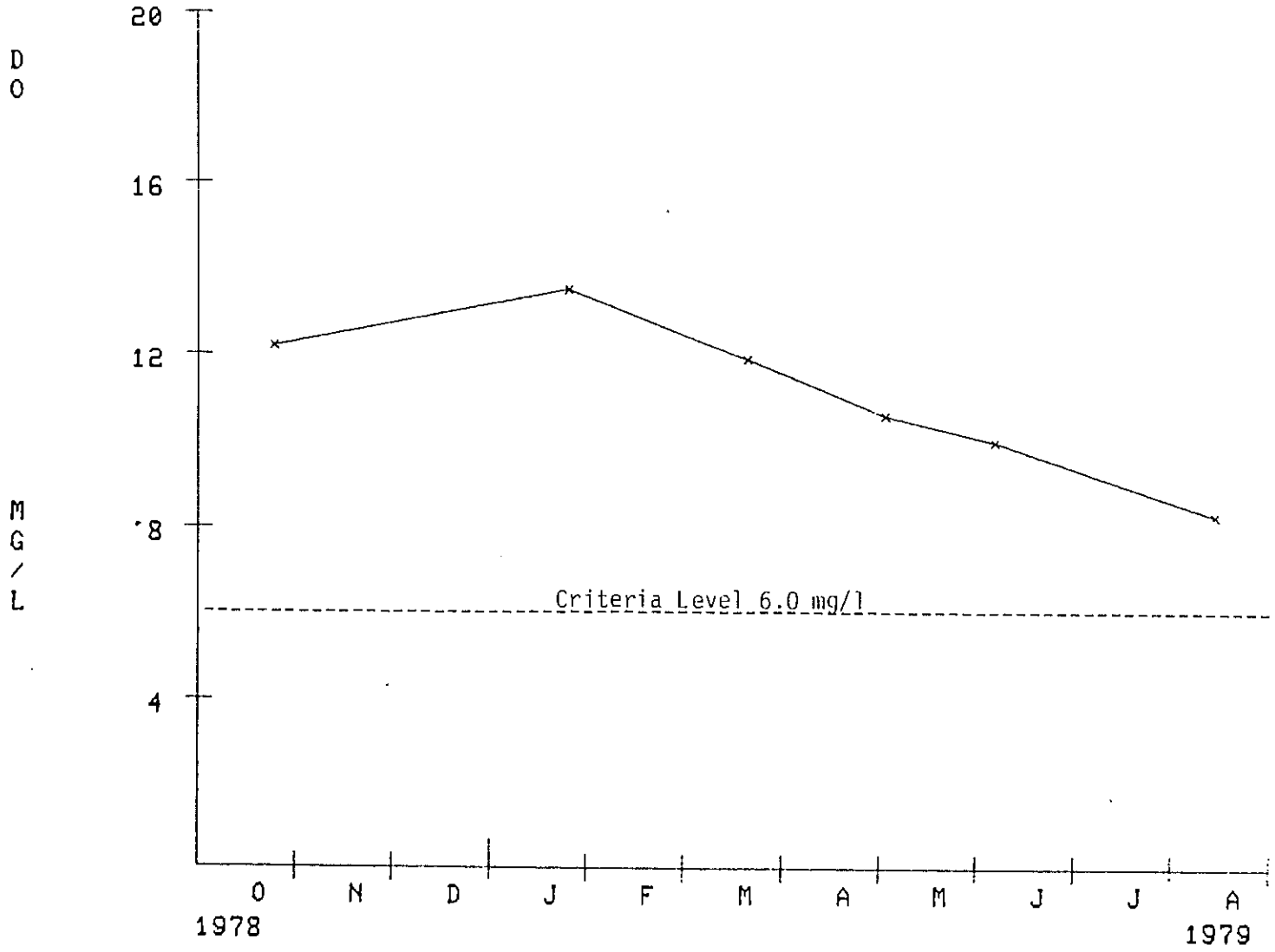
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



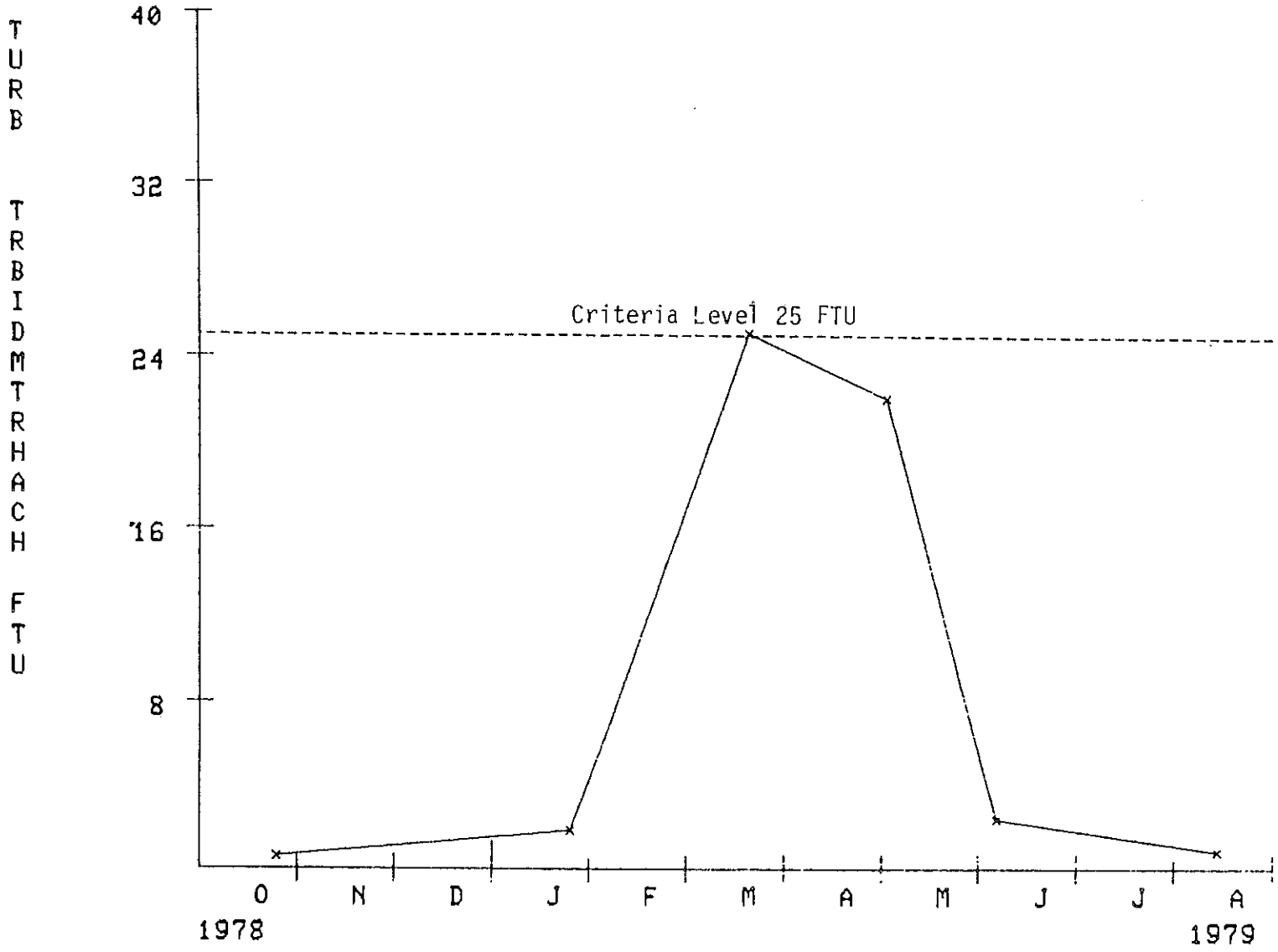
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



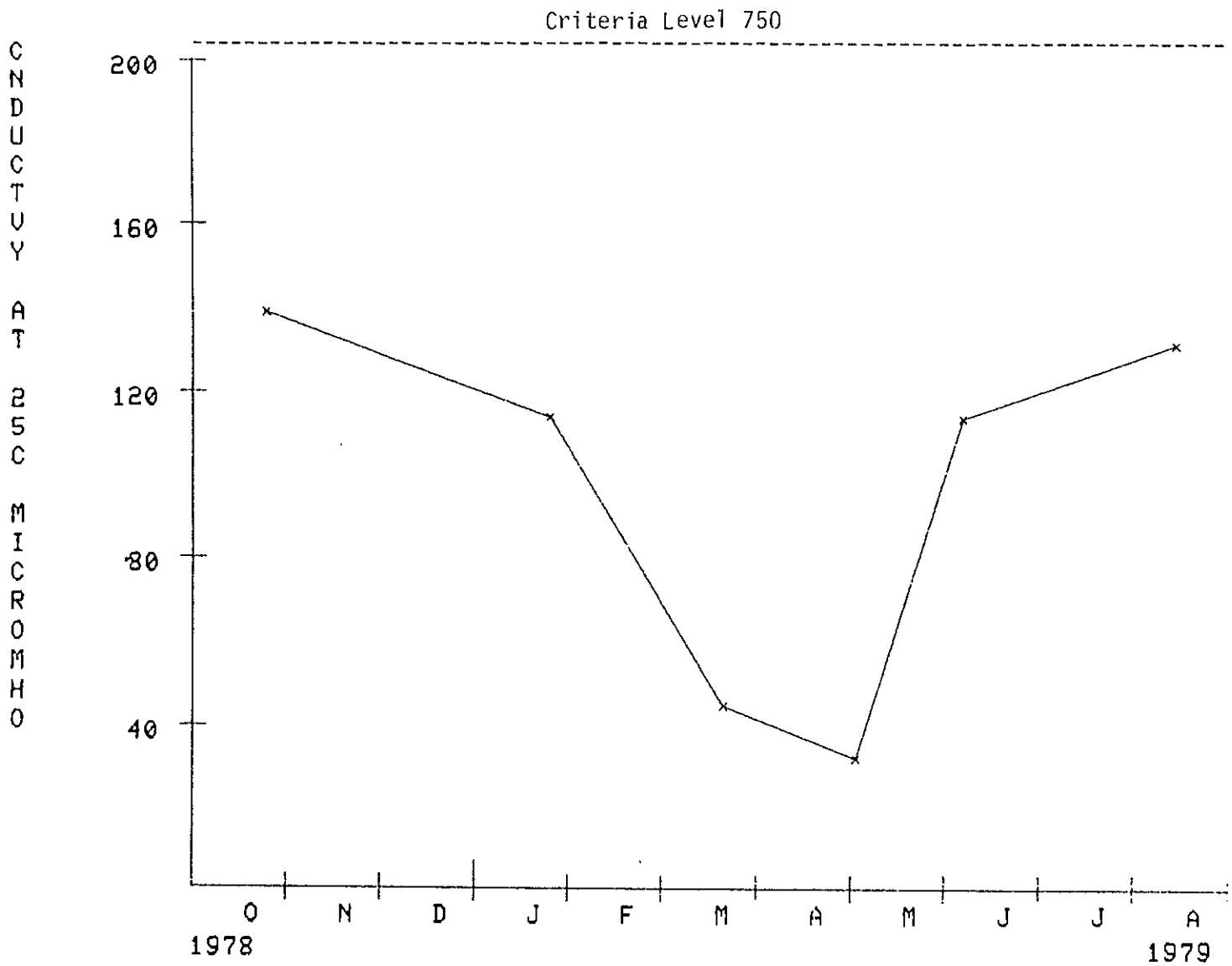
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



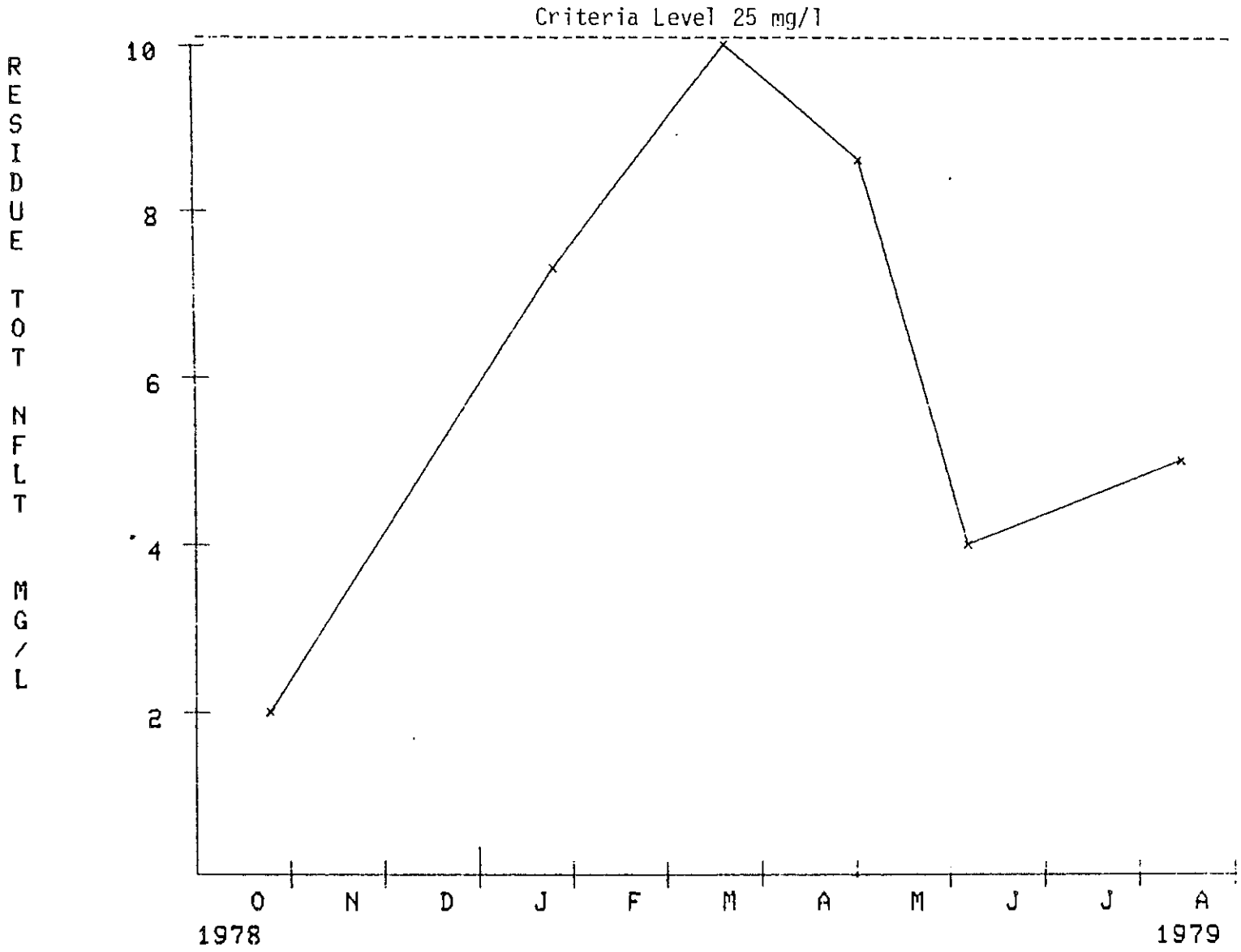
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



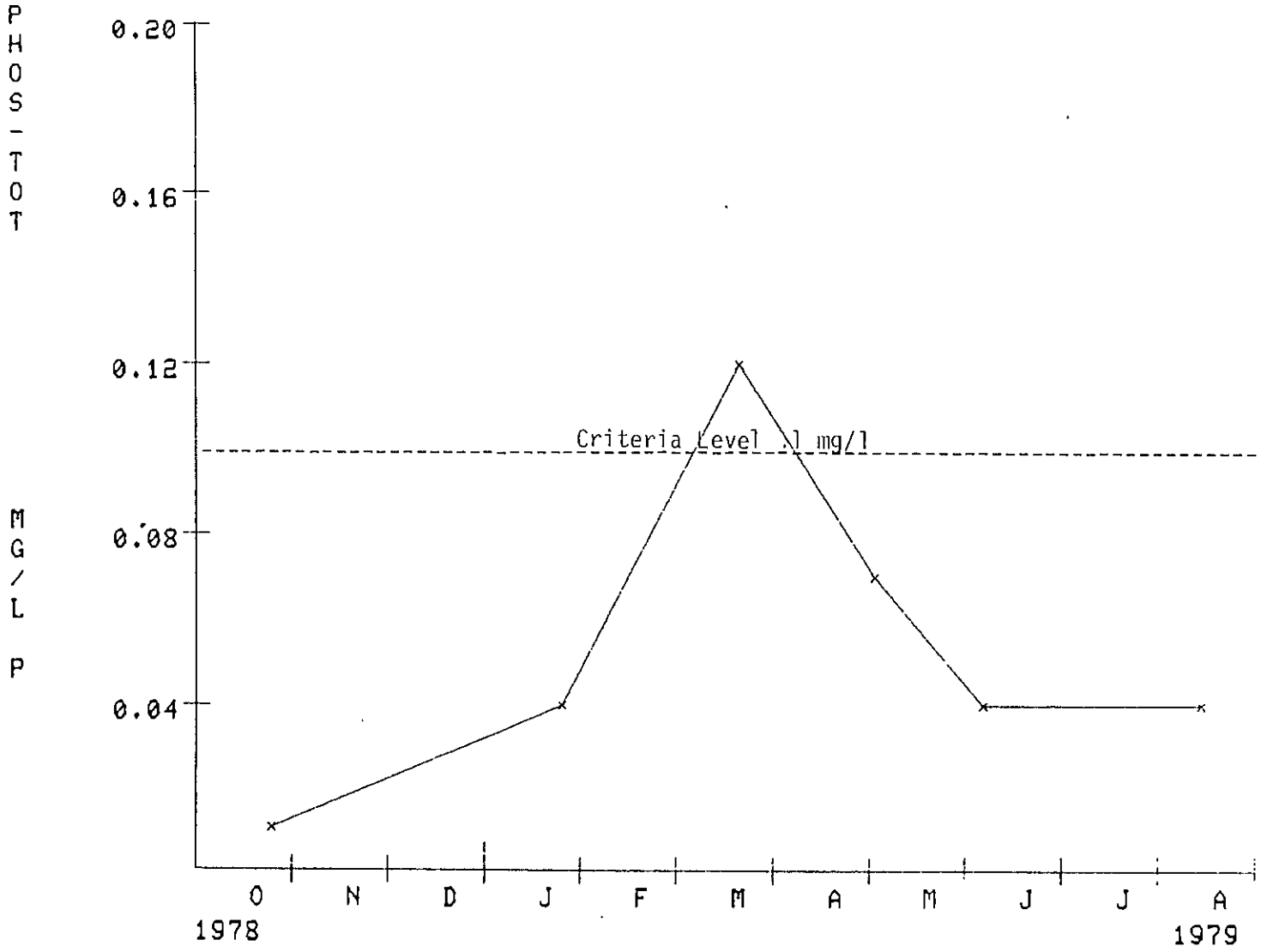
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



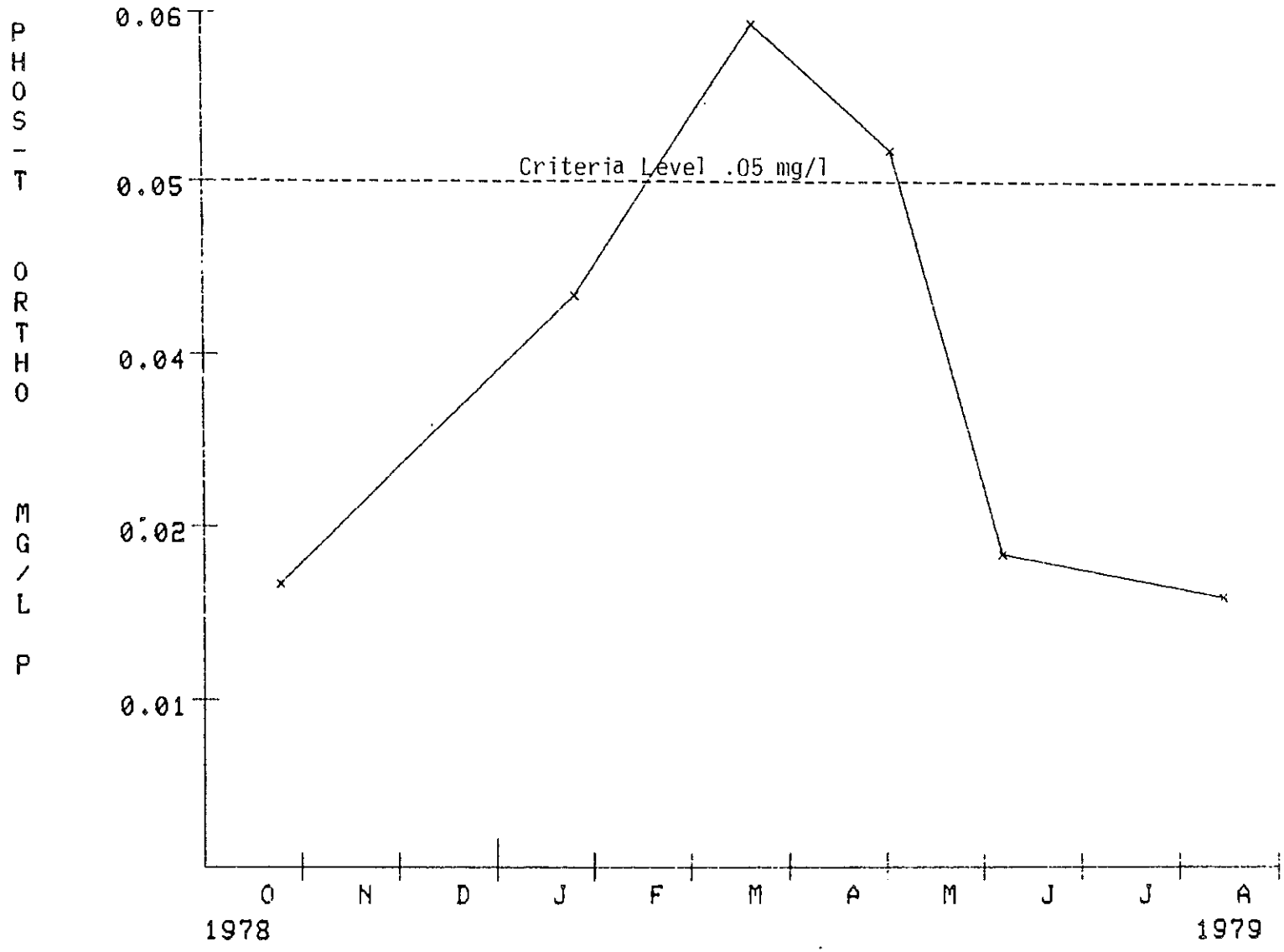
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



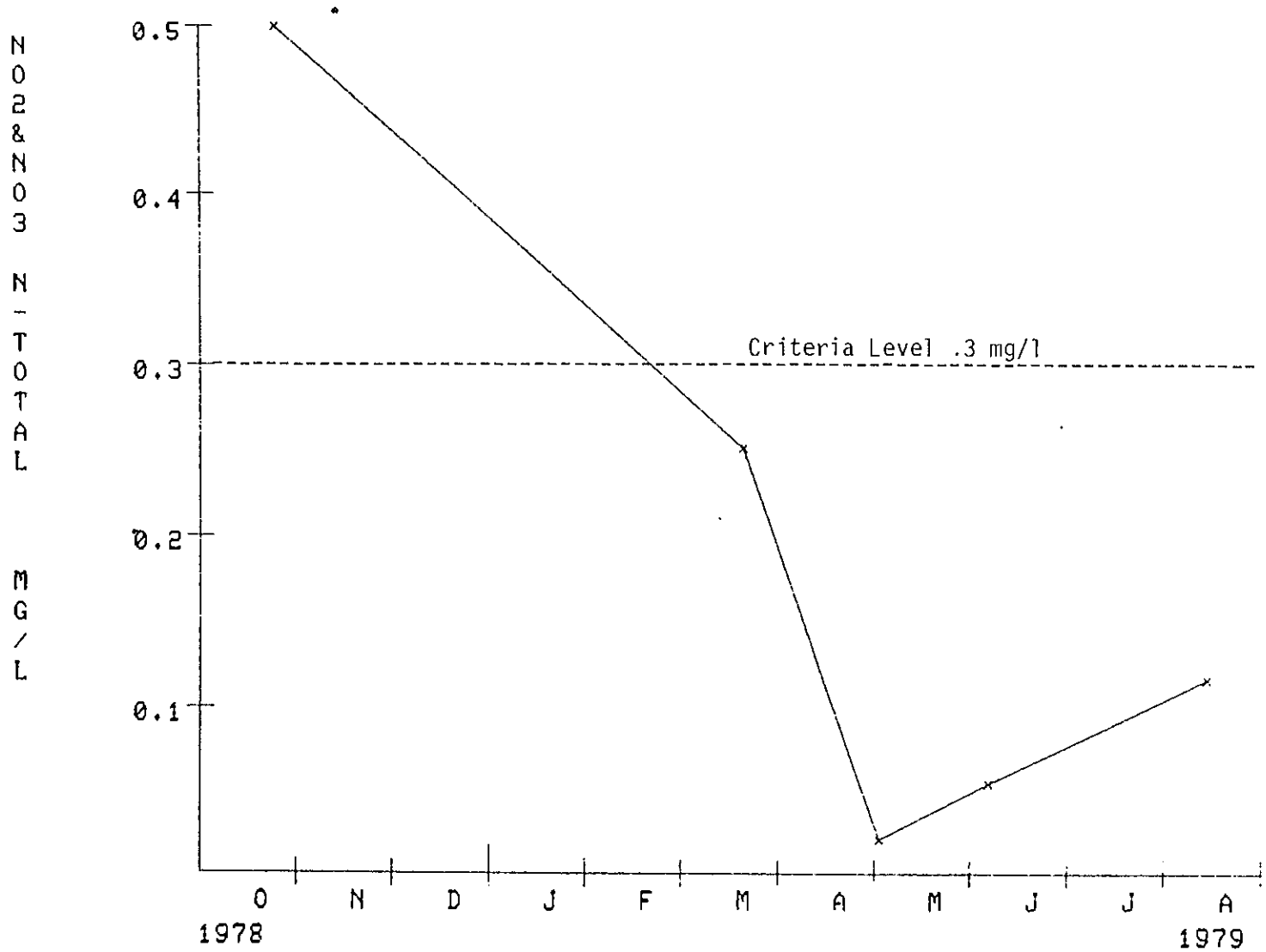
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



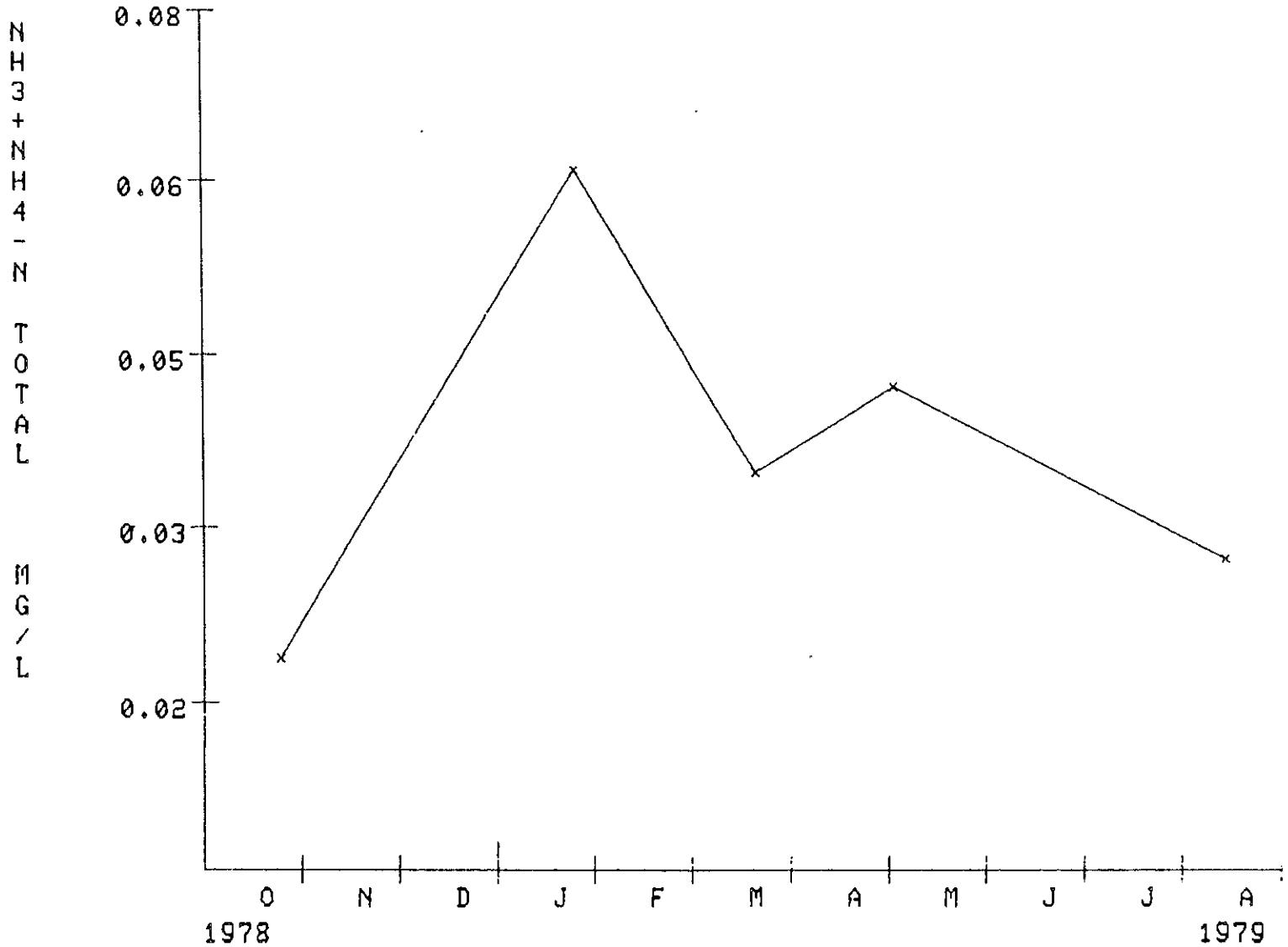
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



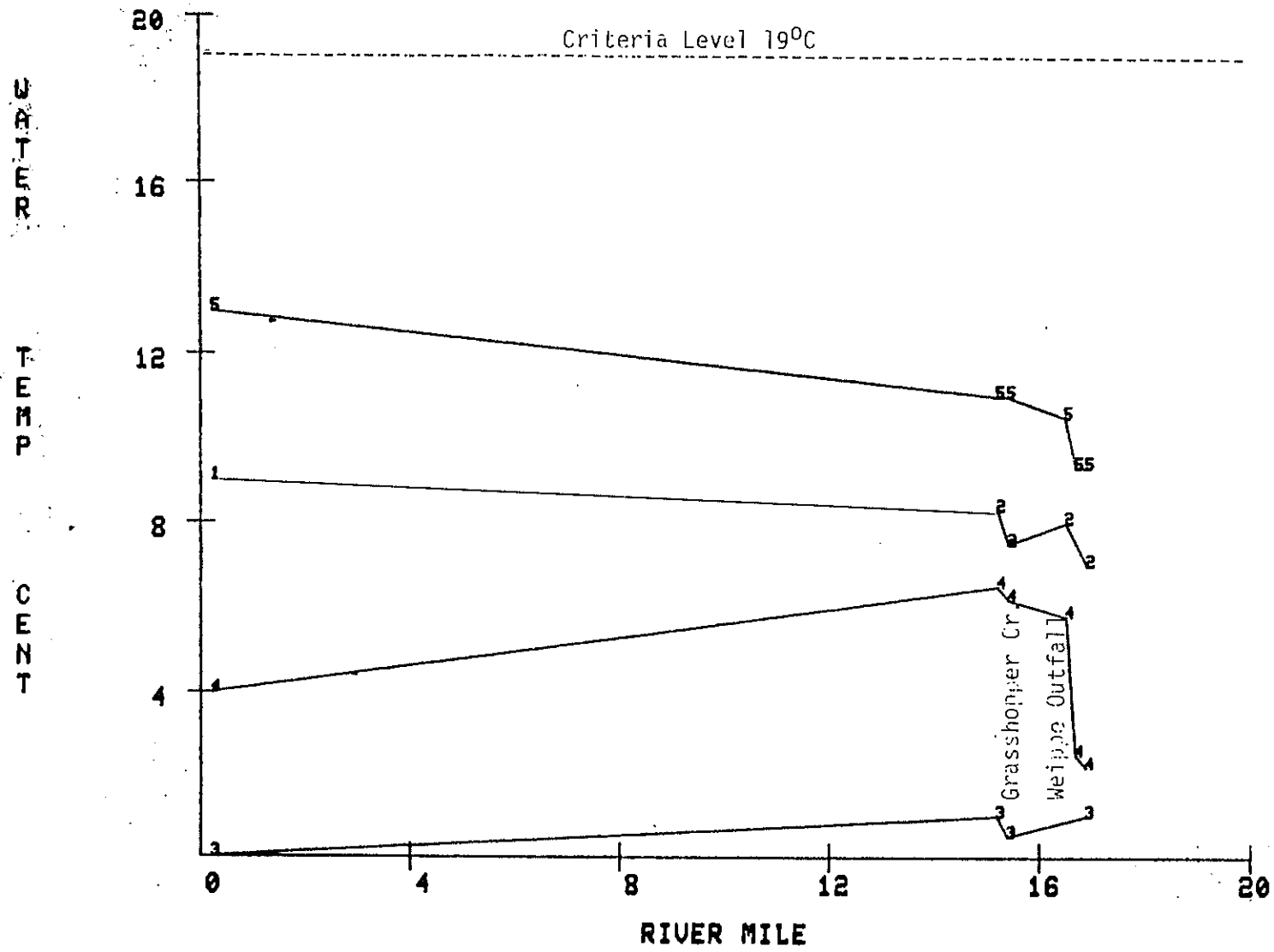
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



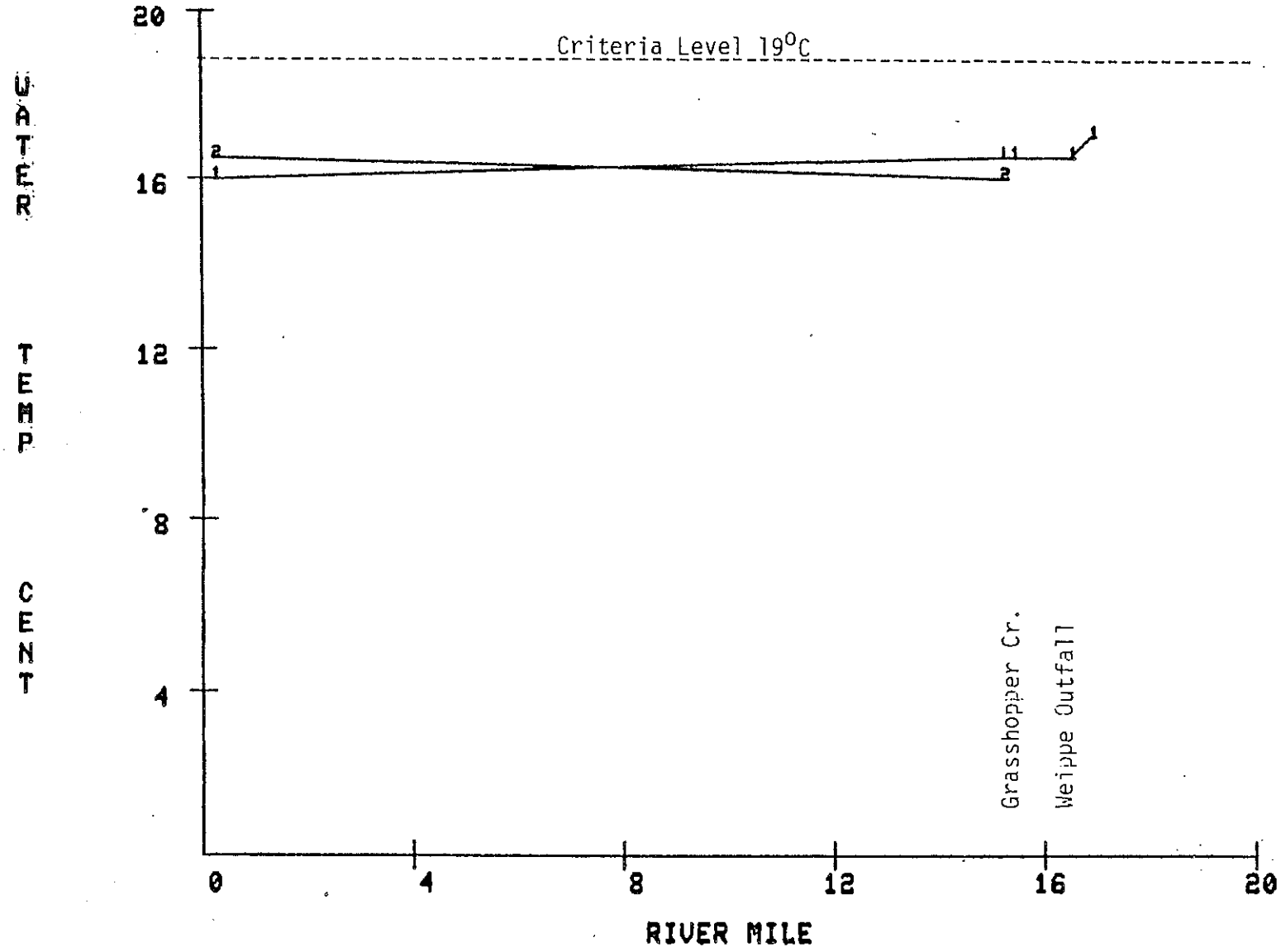
STORET STATION 2020155
JIM FORD CR NEAR MOUTH



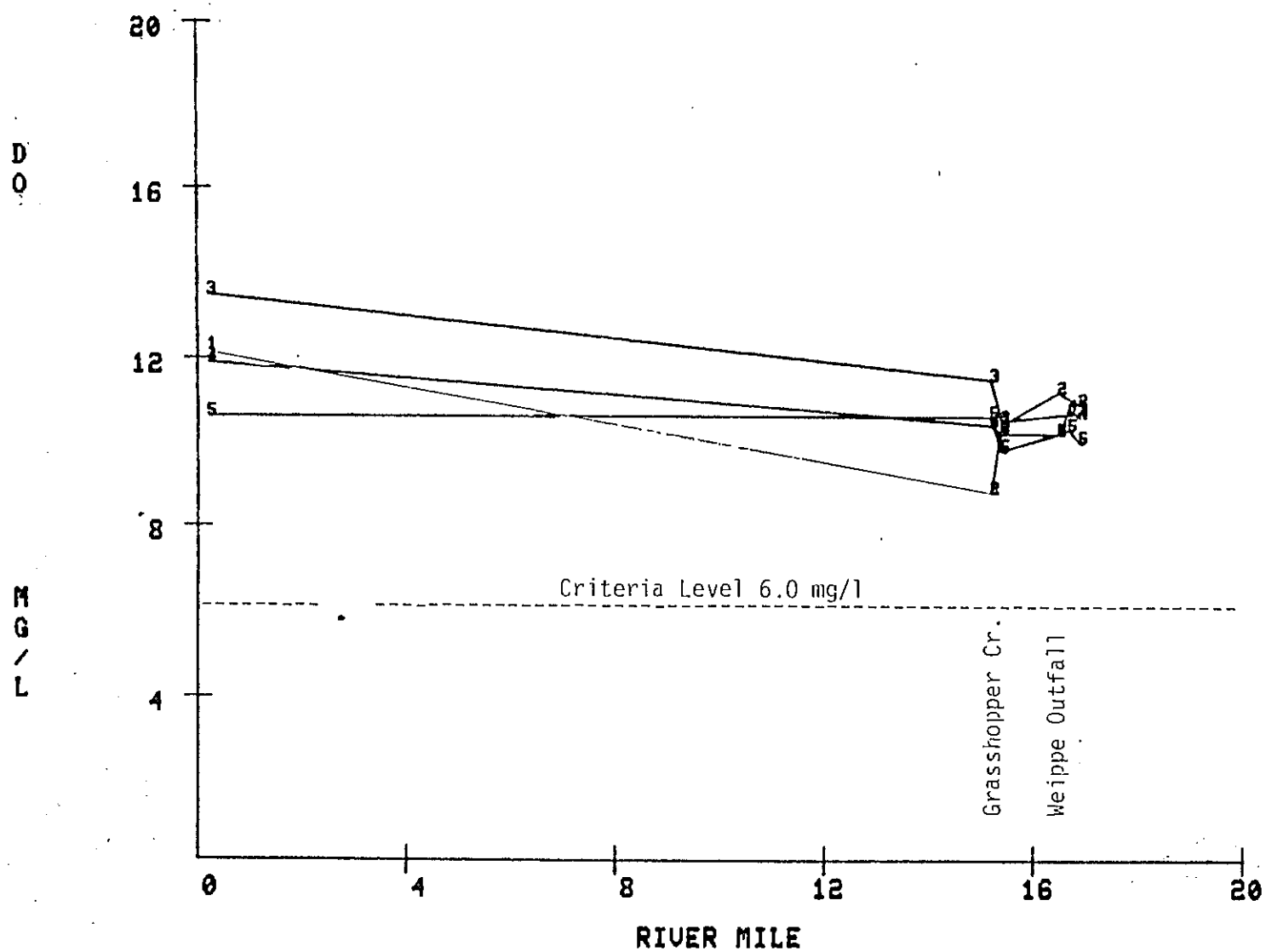
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



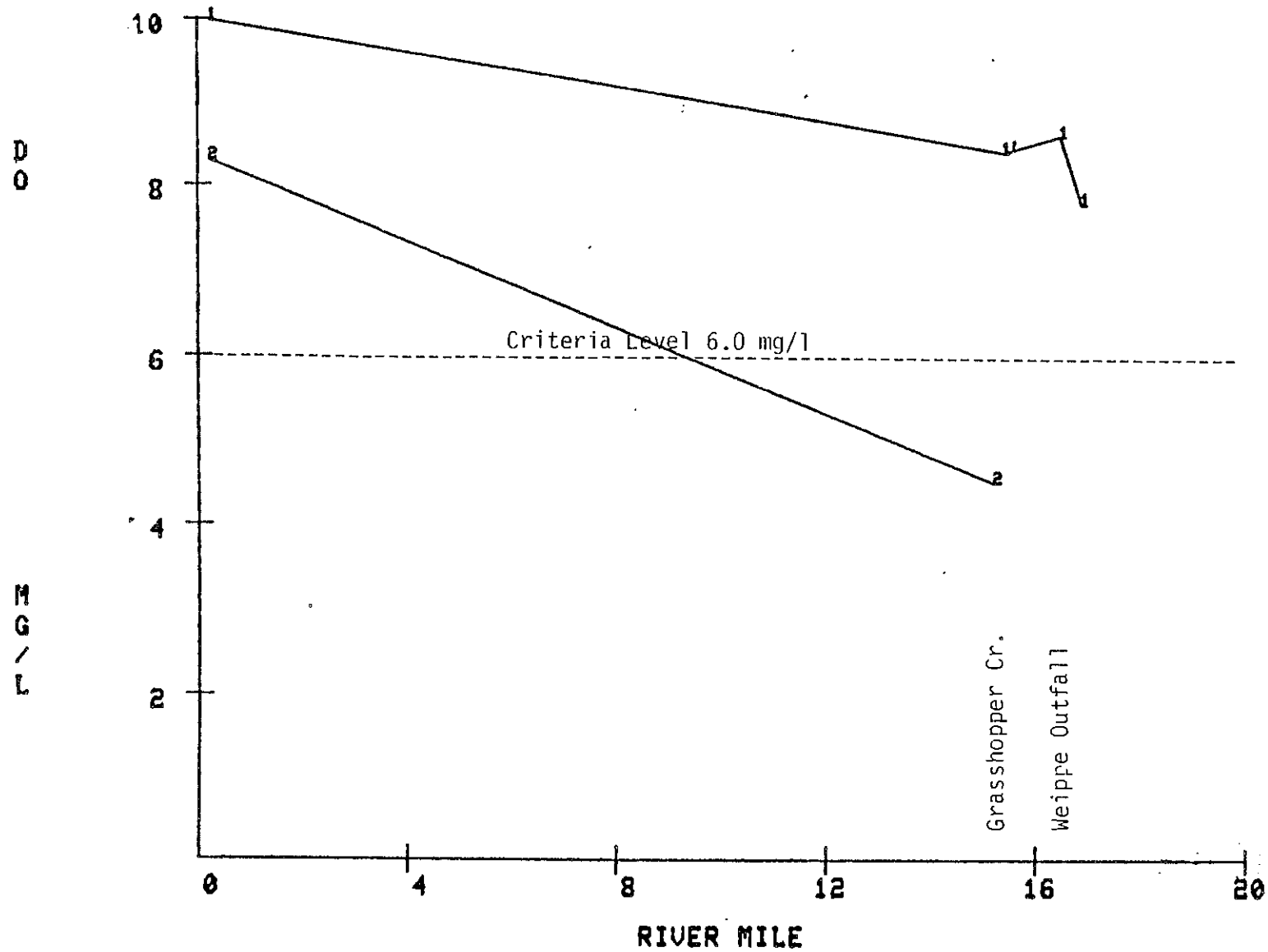
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



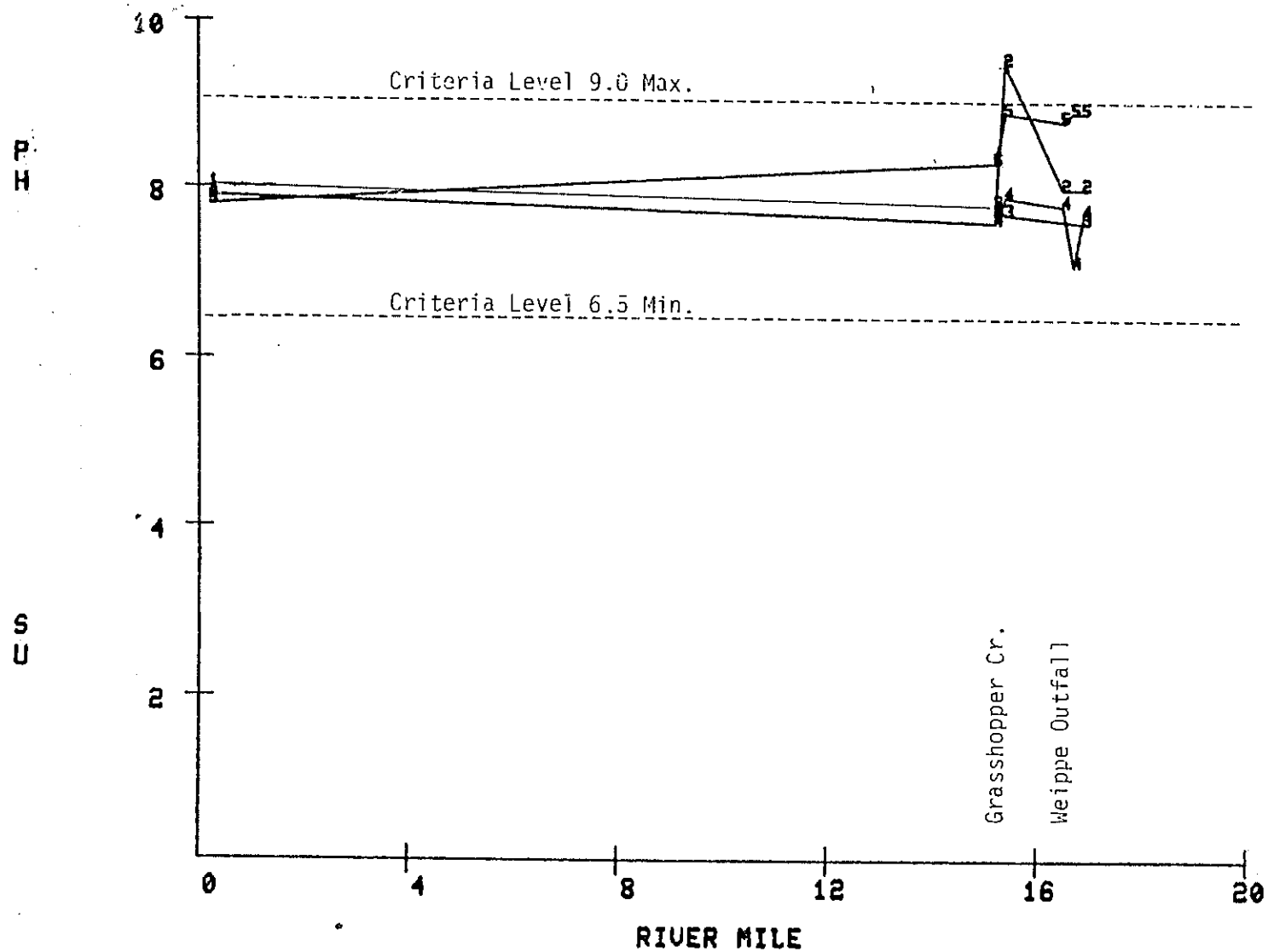
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



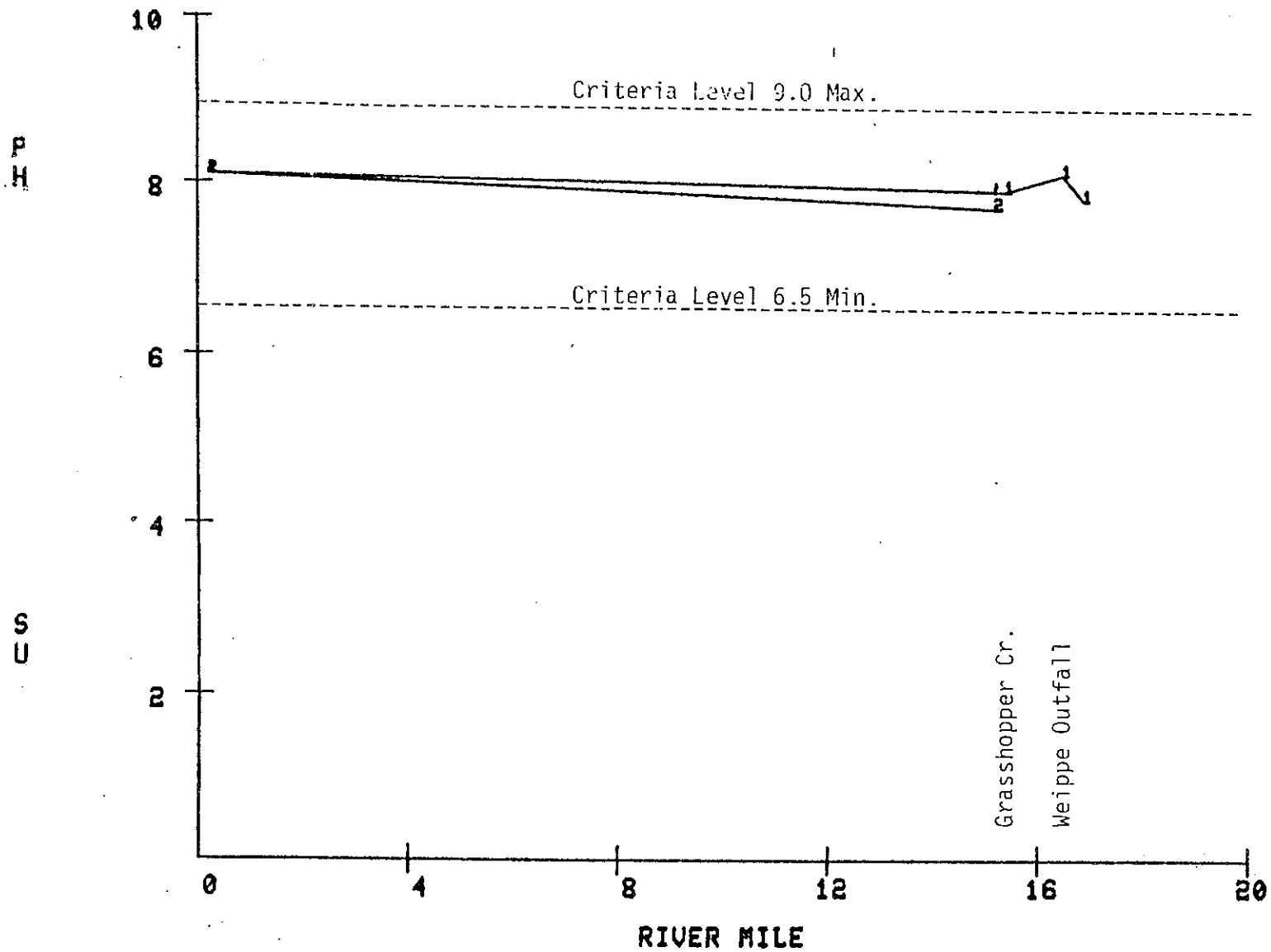
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



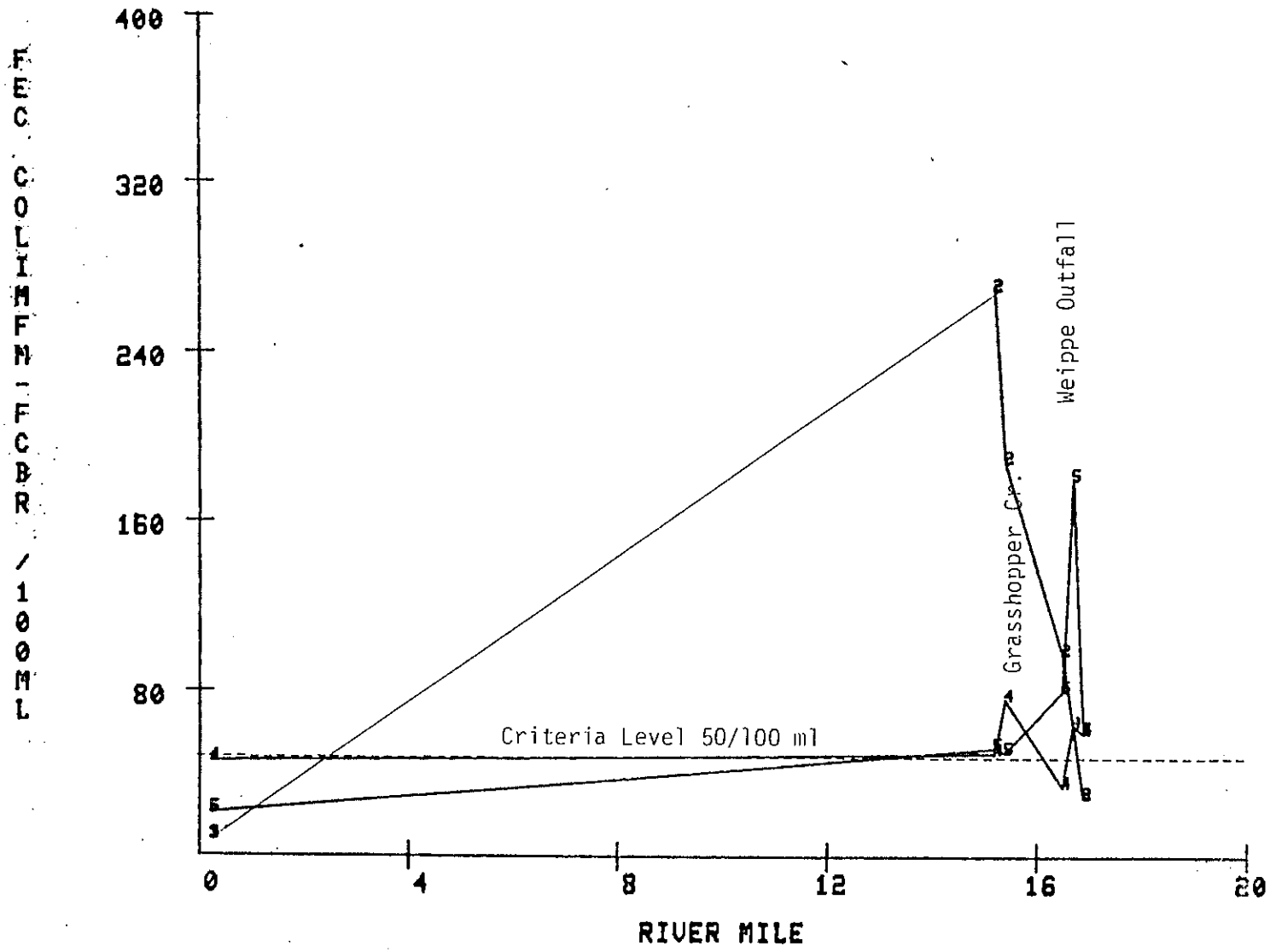
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



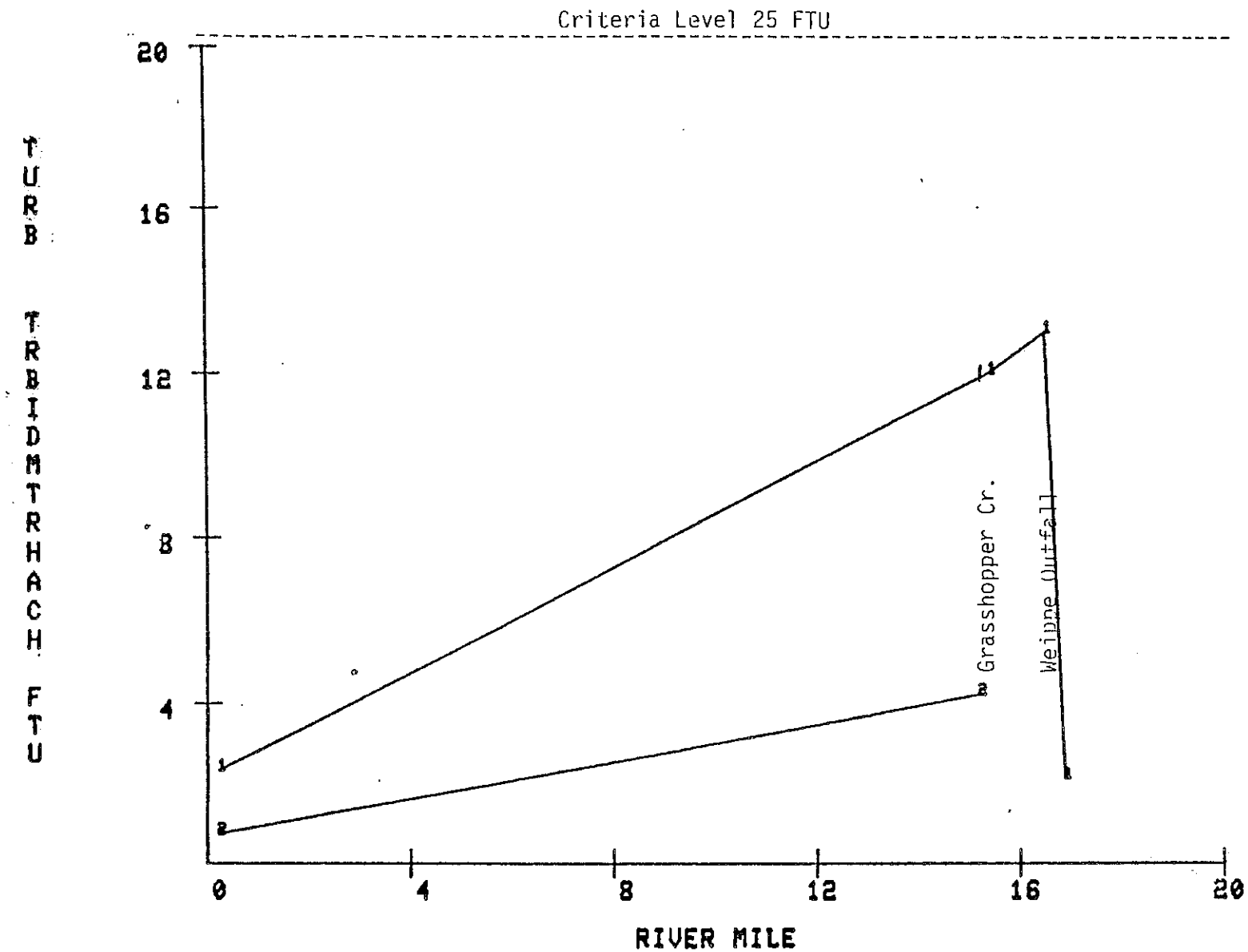
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



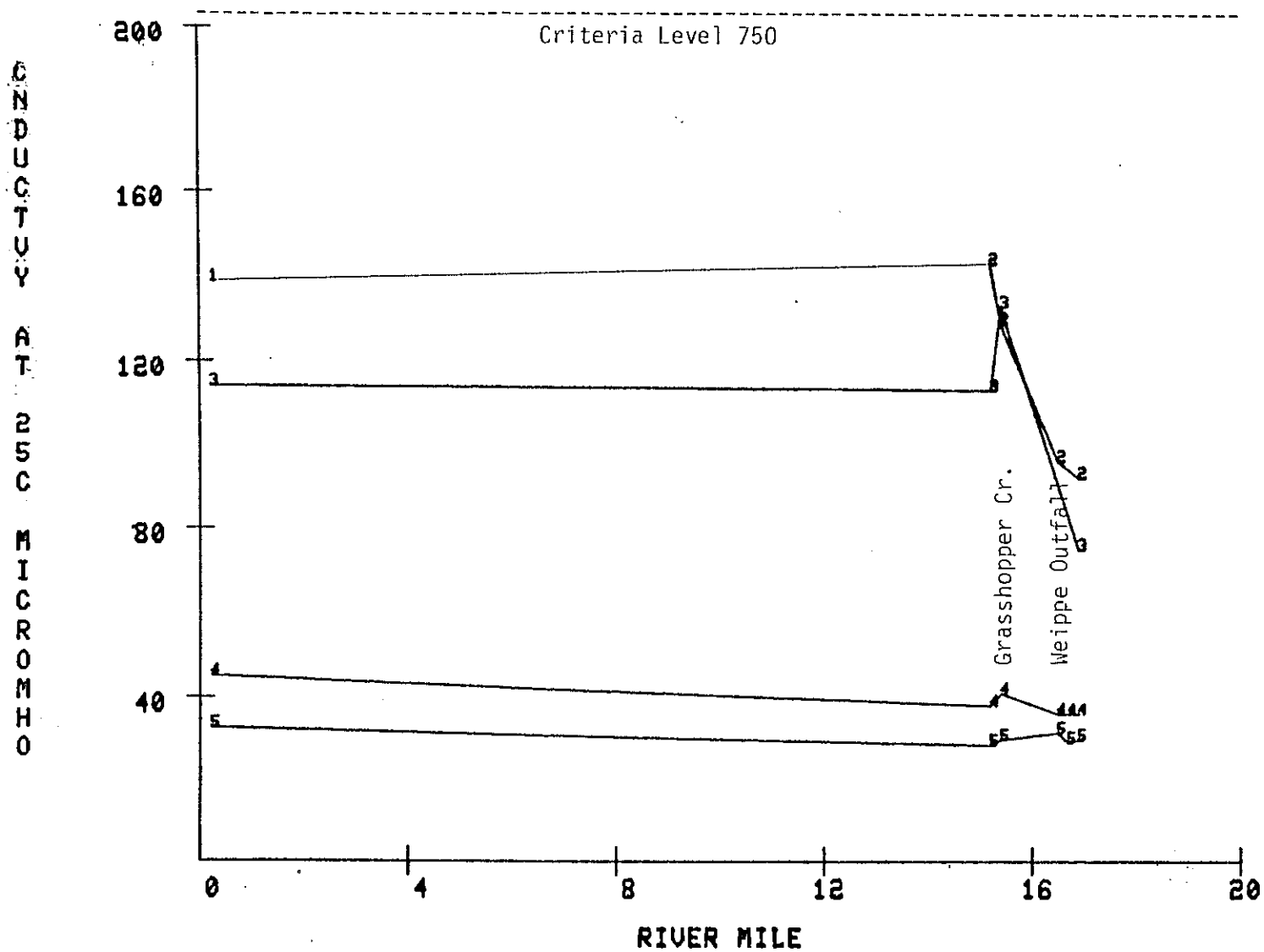
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



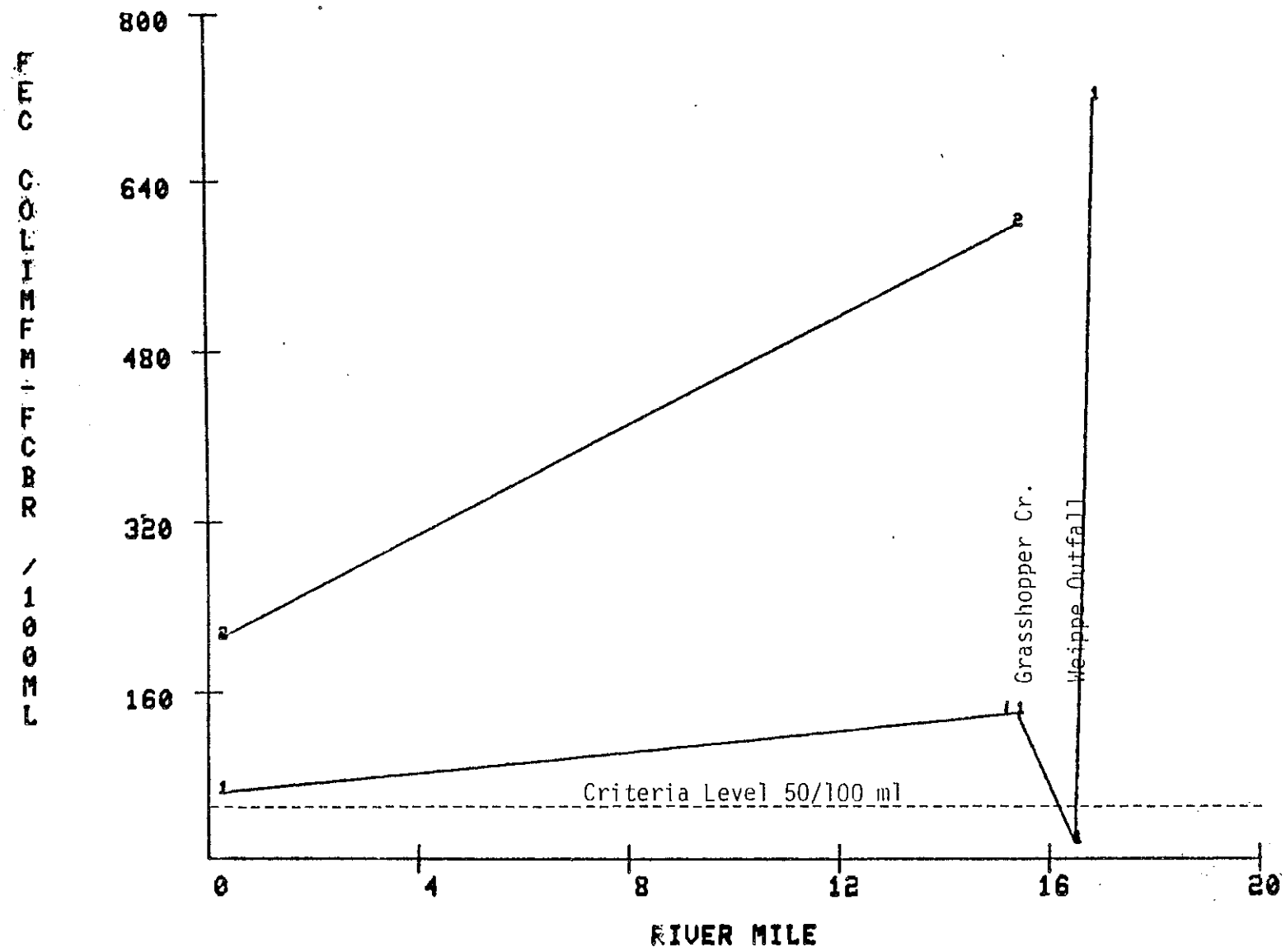
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



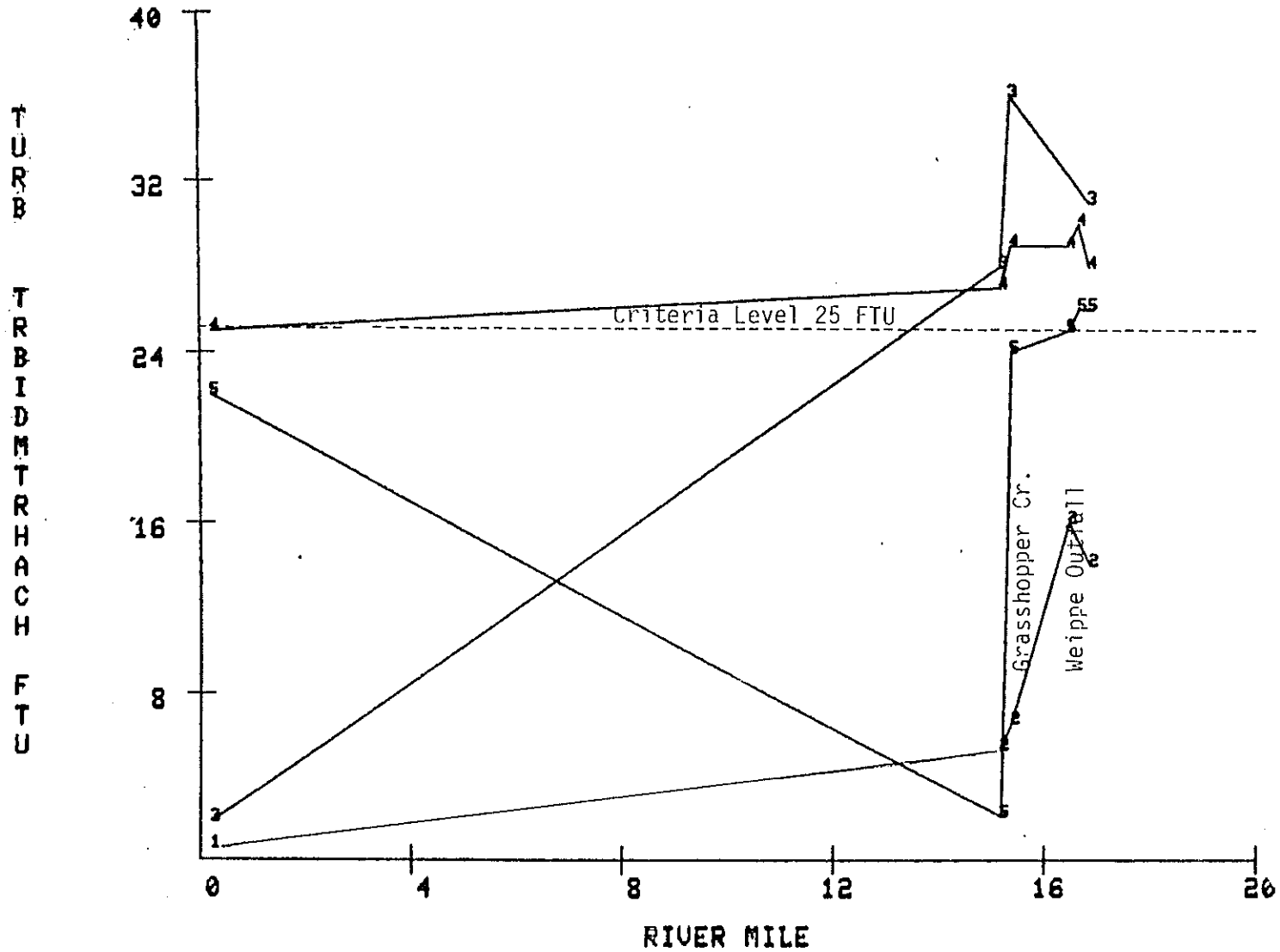
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



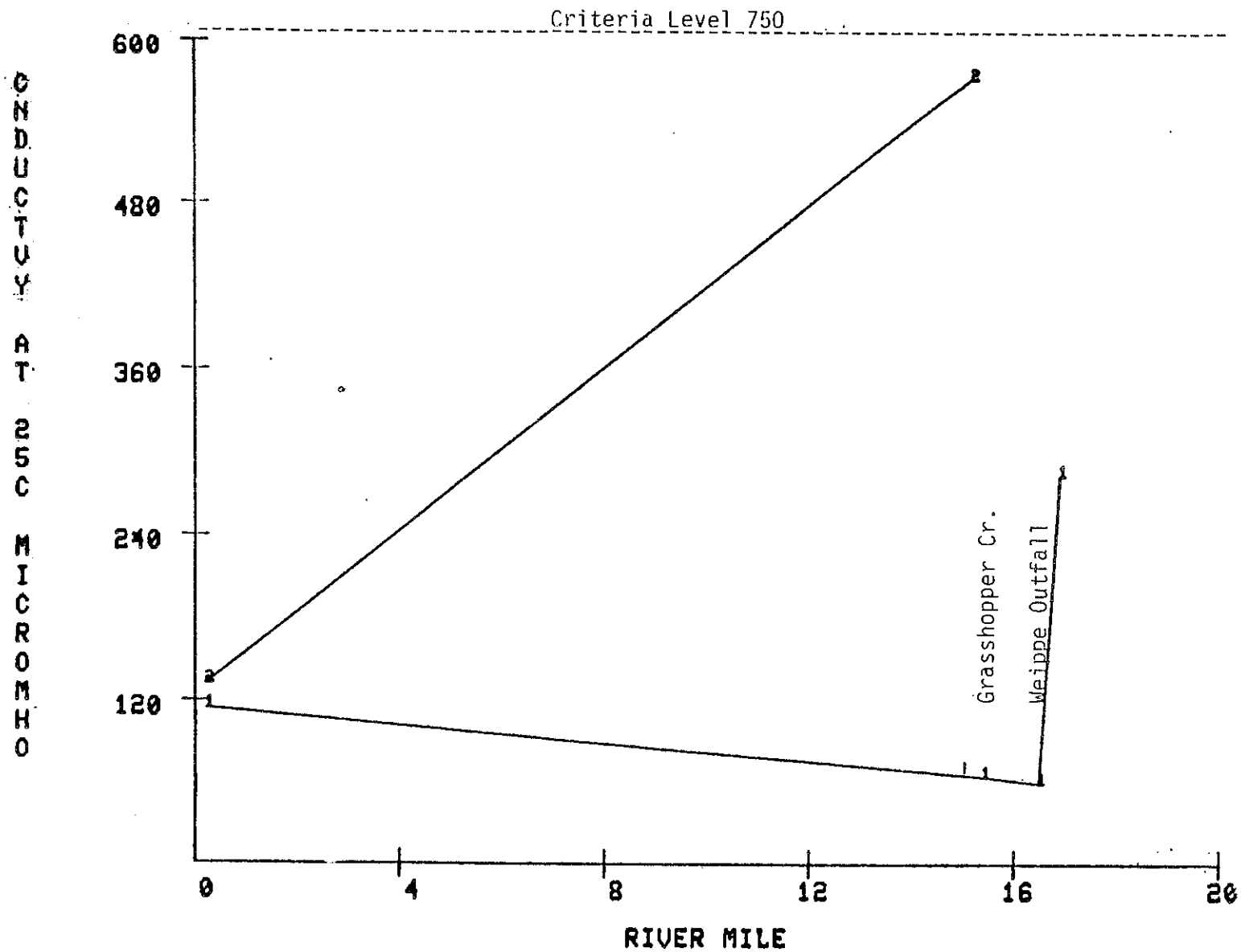
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



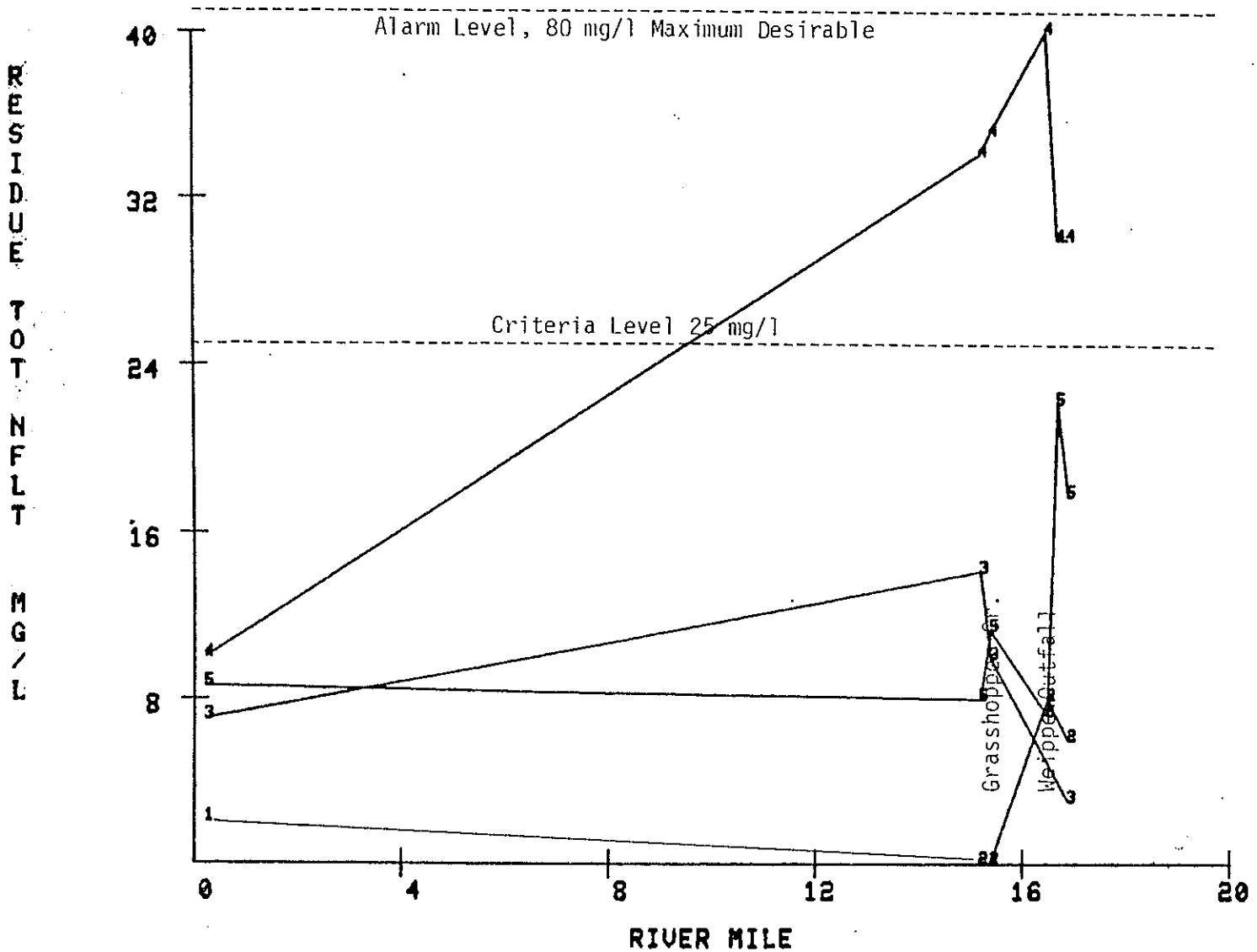
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



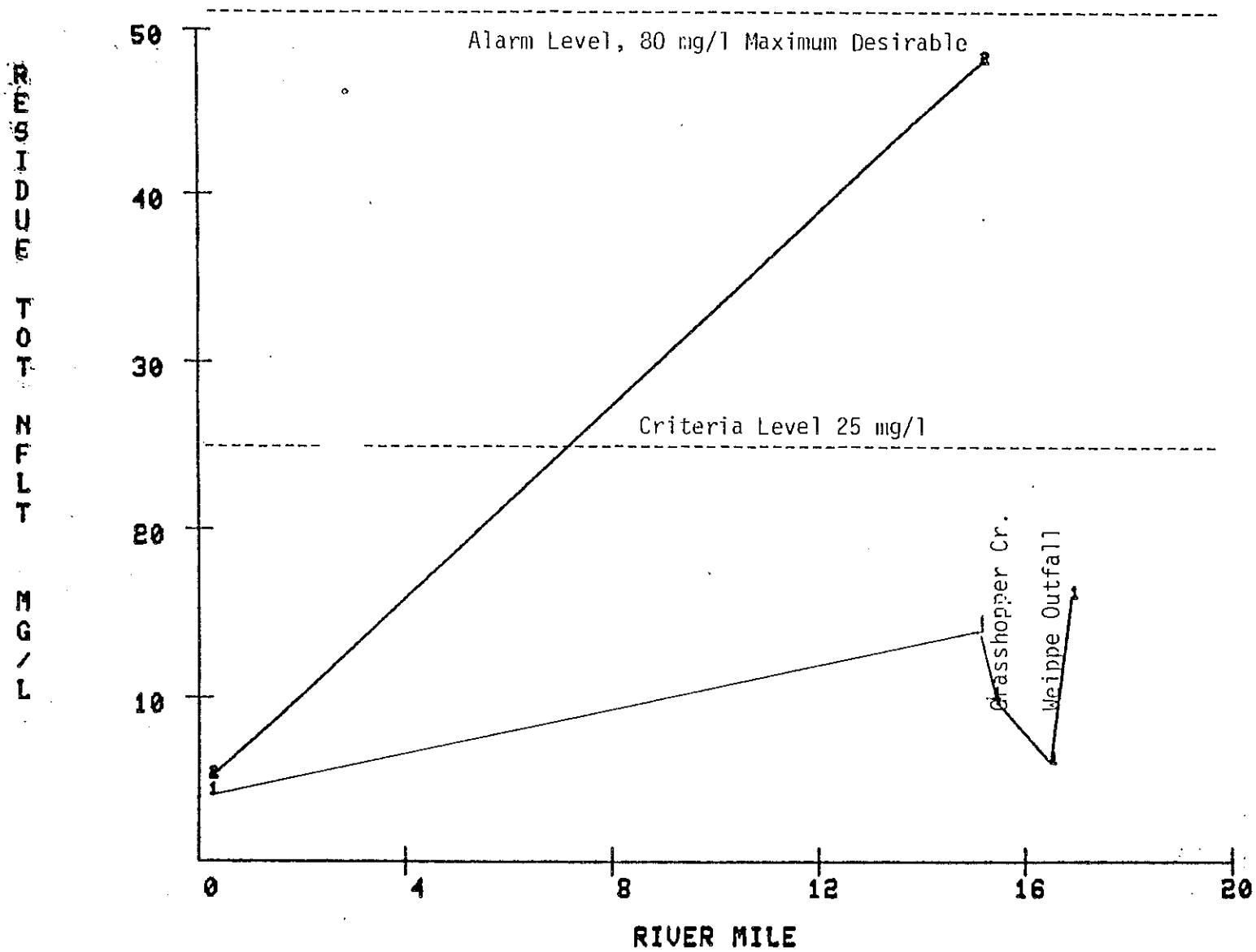
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



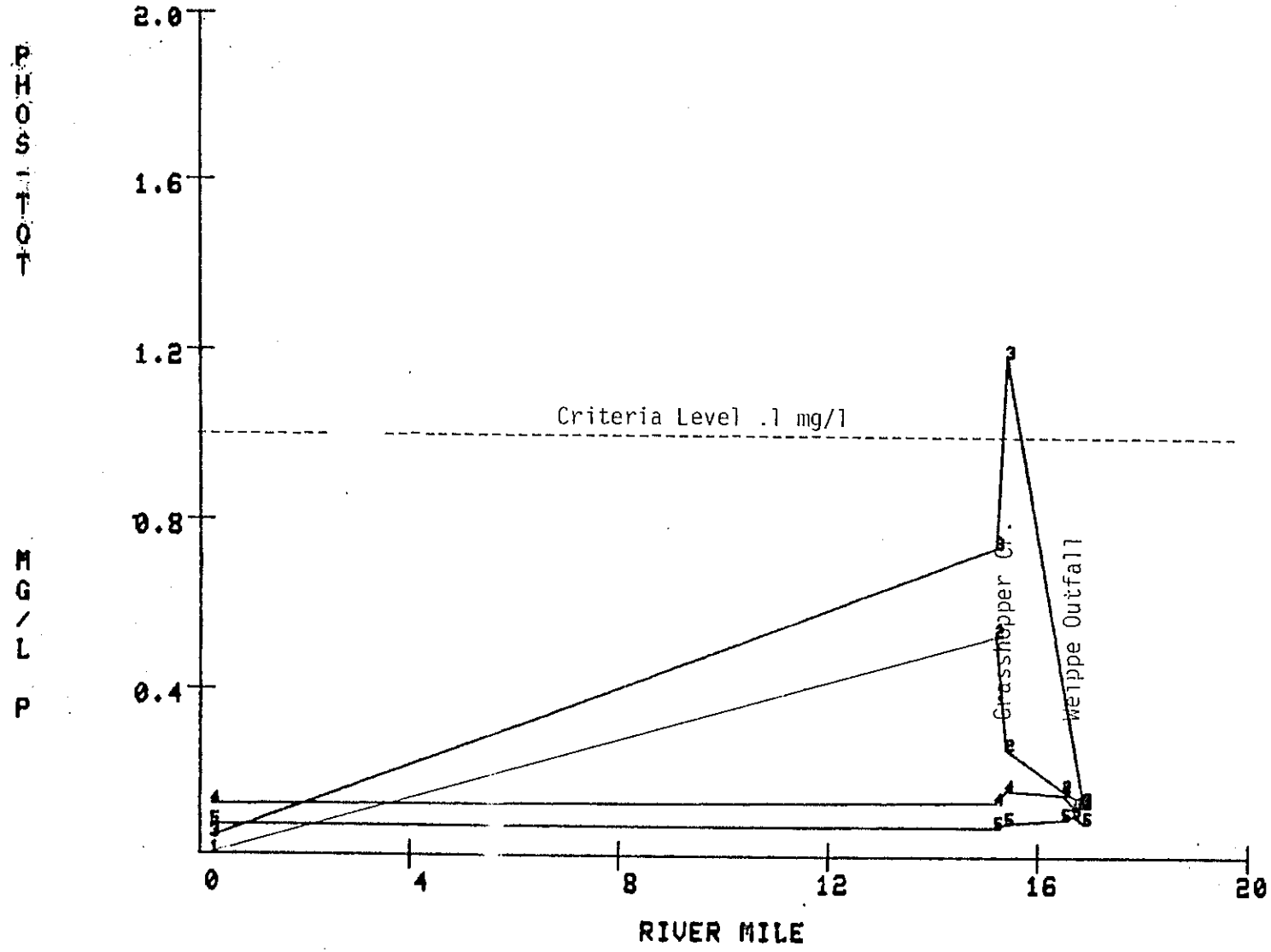
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



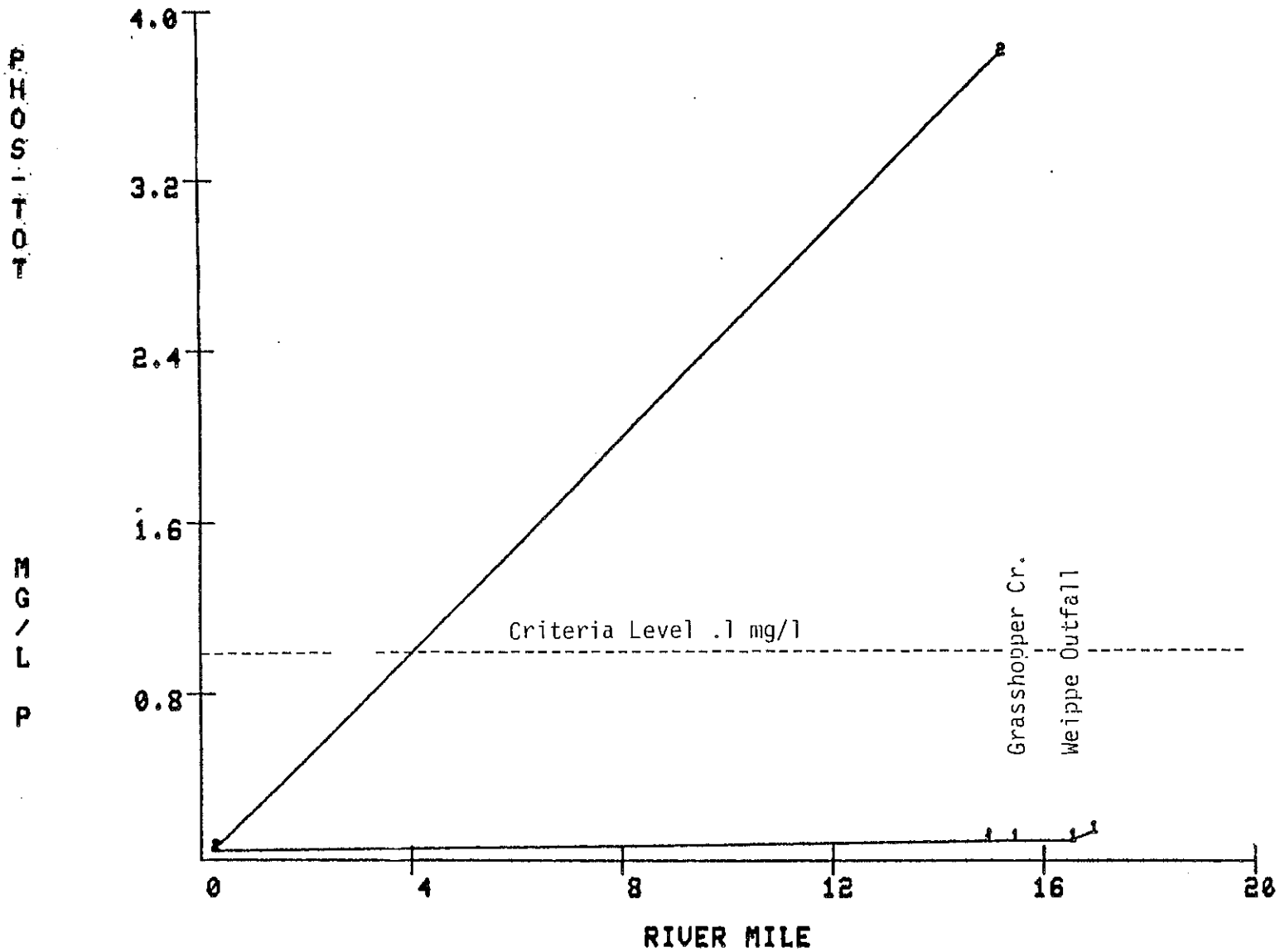
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



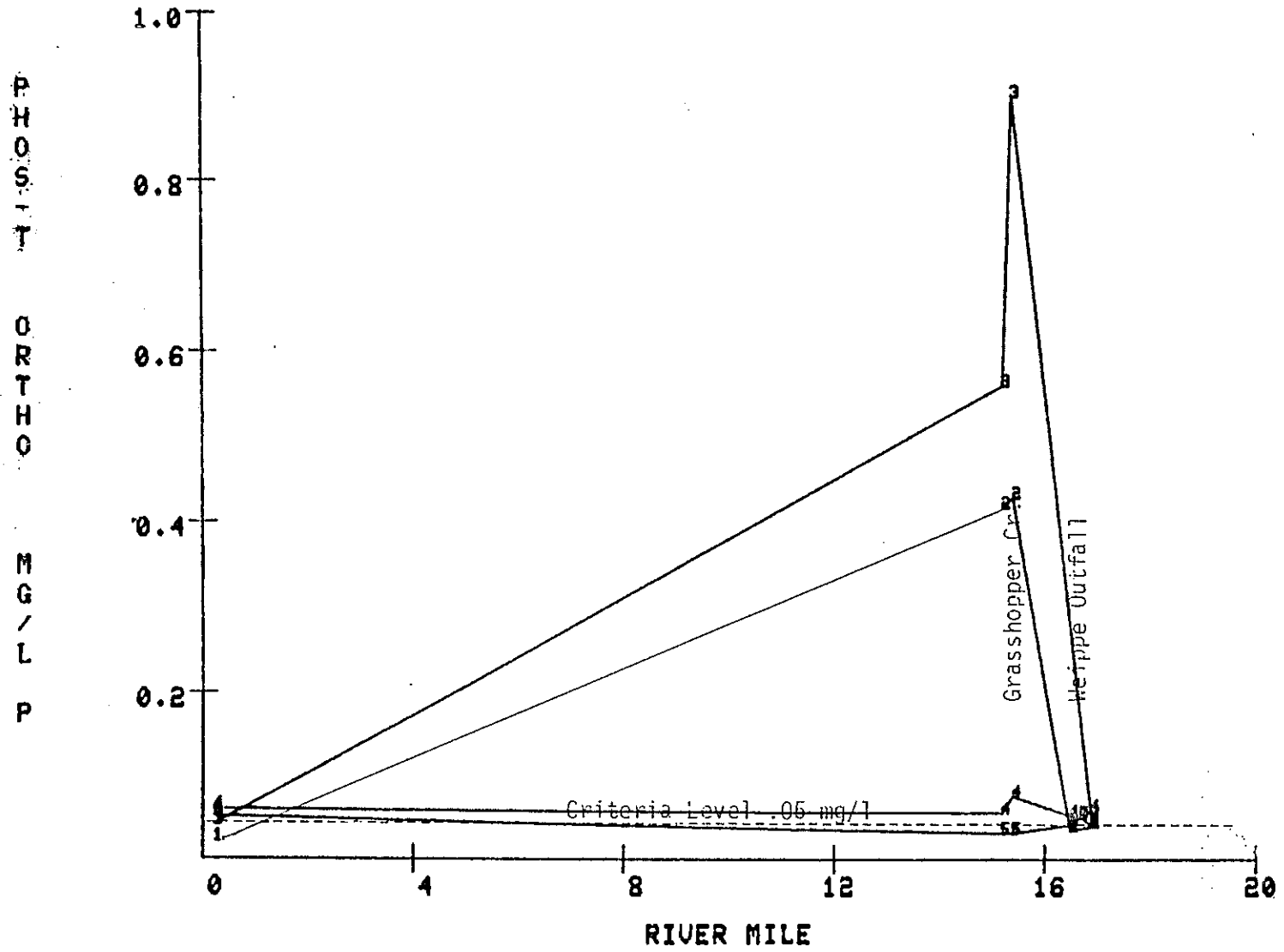
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



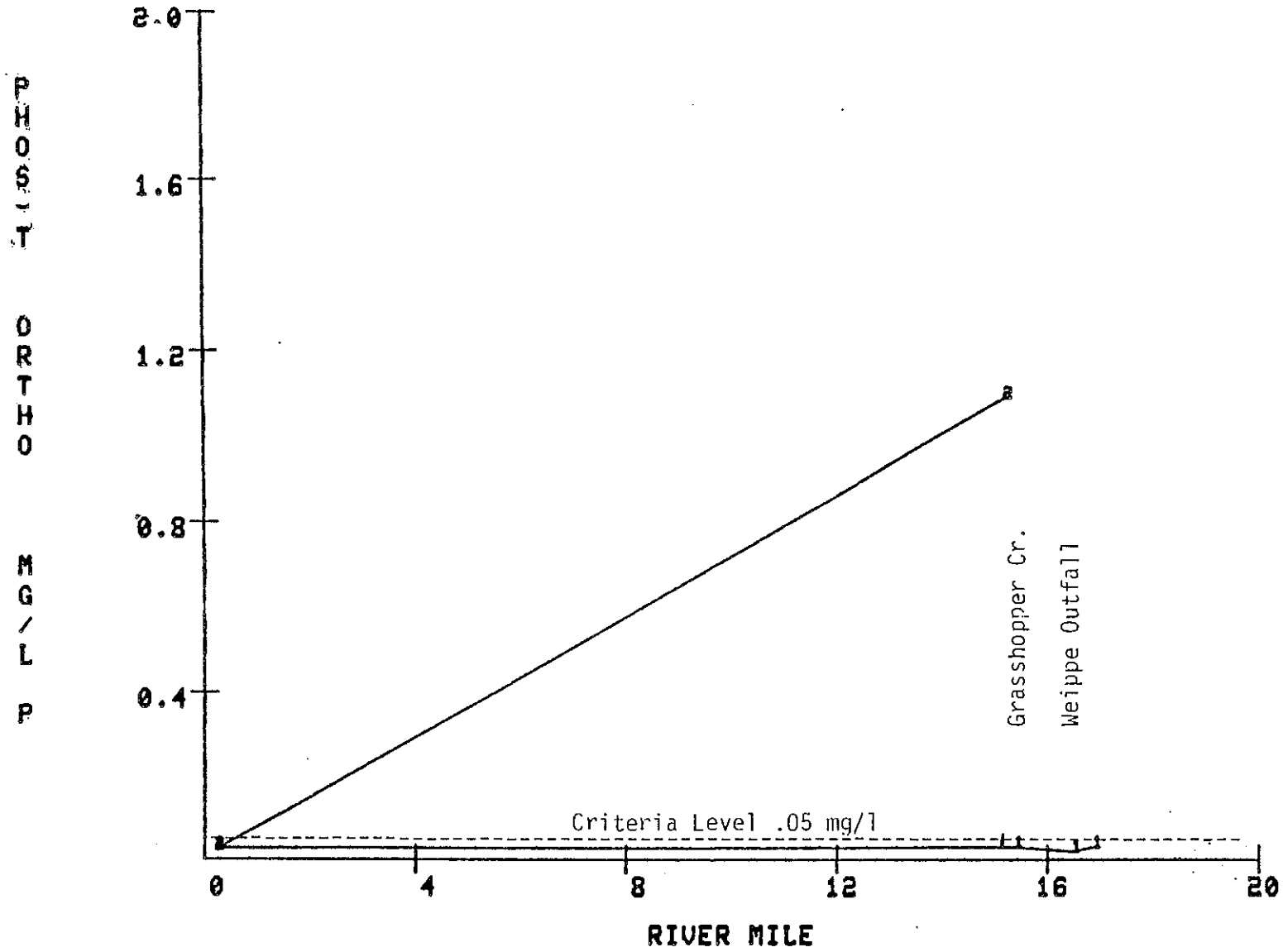
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



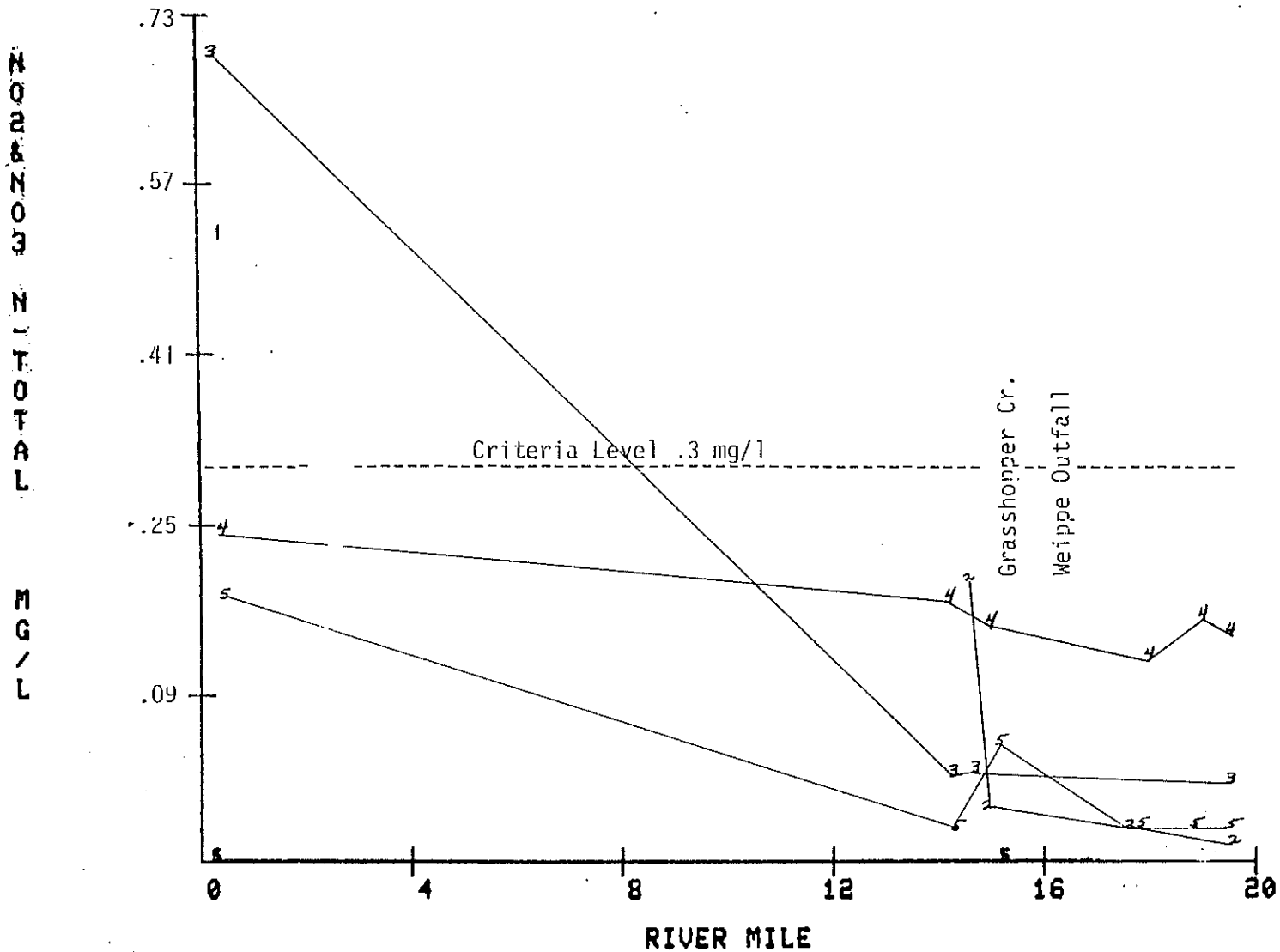
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



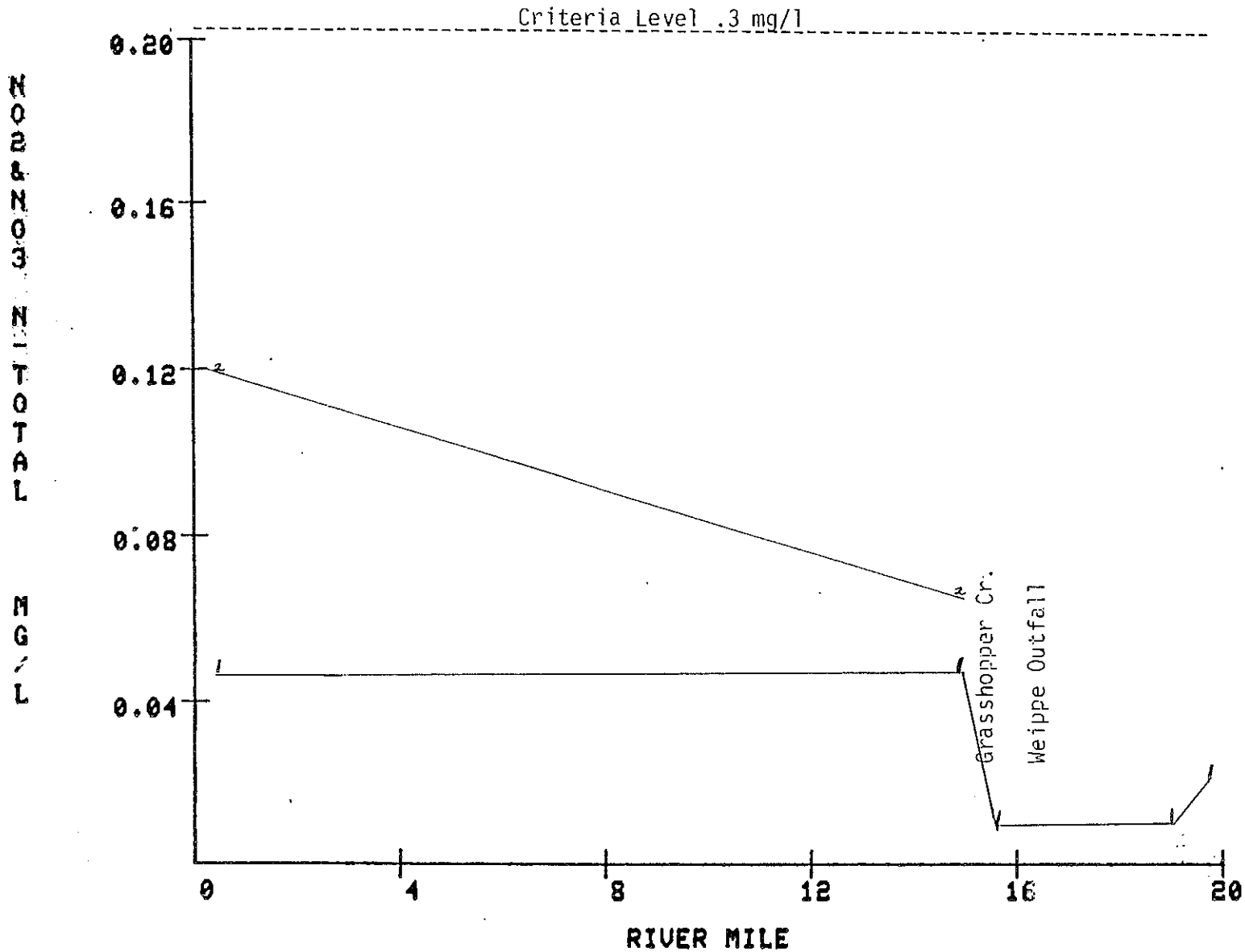
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



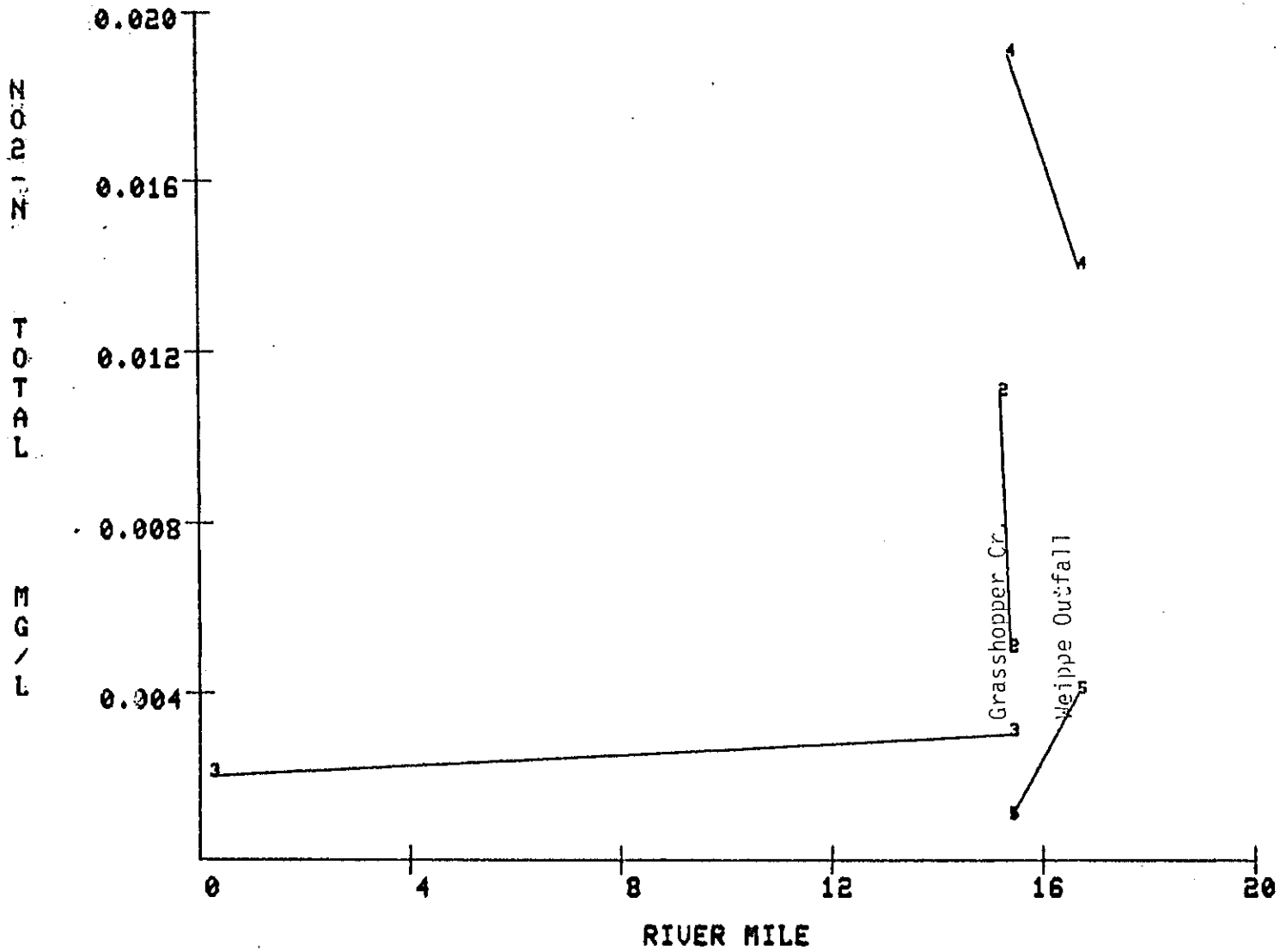
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



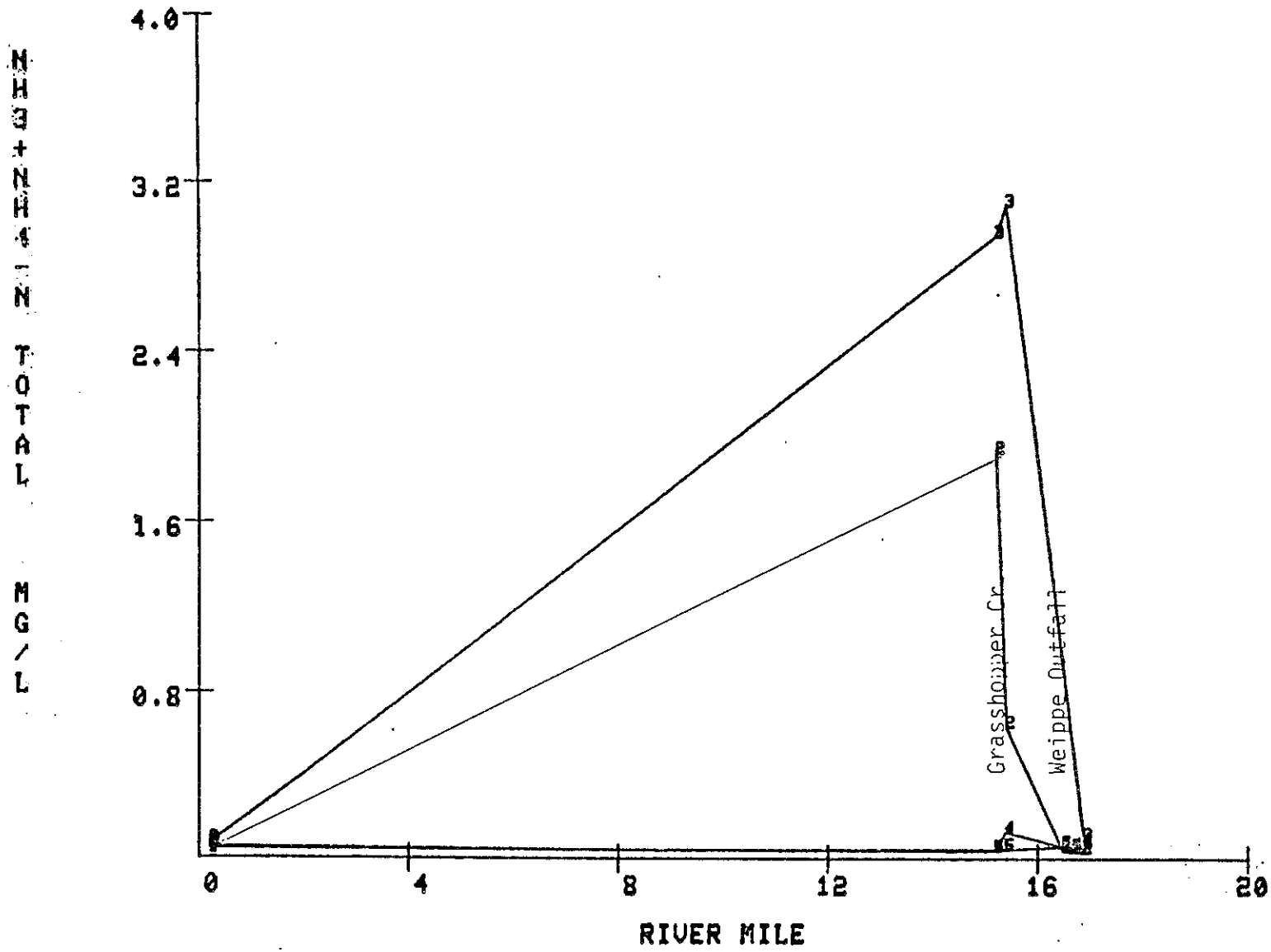
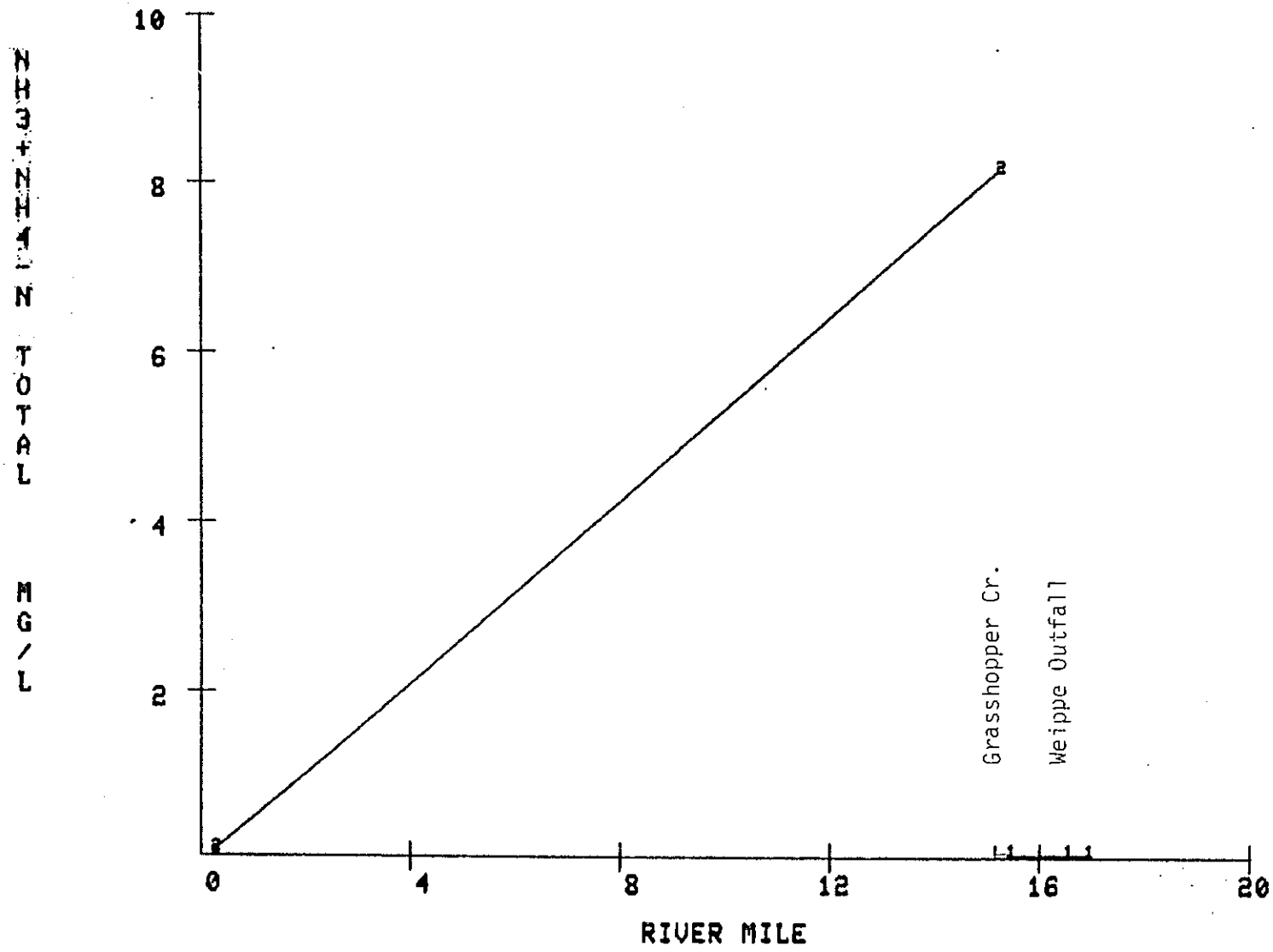
JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79



JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 5 DAYS OF MONITORING
1 : 10-24-78 2 : 10-25-78 3 : 01-24-79
4 : 03-20-79 5 : 05-01-79



JIM FORD CREEK
INTENSIVE SURVEY DATA FOR 2 DAYS OF MONITORING
1 : 06-05-79 2 : 08-14-79