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A WATER QUALITY STUDY OF THE AKAMINA-KISHINENA WATERSHED AND OTHER TRIBUTARIES TO THE FLATHEAD RIVER IN BRITISH COLUMBIA SUBJECTED TO LOGGING

DATA REPORT

A.L.Smith, G.L.Ennis,
S.W.Sheehan and T.M.Tuominen

March 1985

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

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(DATA REPORT)

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ABSTRACT

In 1978, salvage logging in the Akamina-Kishinena watershed was proposed to control an infestation of mountain pine beetles. At that time logging was in progress in the adjacent Elder and Sage Creek drainages. Kishinena, Elder and Sage Creeks flow across the International Boundary and into the North Fork of the Flathead River. Because of the potential for adverse transboundary effects of logging, the Water Quality Branch, Inland Waters Directorate, undertook a water quality study of the Canadian portion of these streams. Water chemistry, suspended sediments, and periphytic algae were monitored in Akamina, Kishinena, Elder and Sage Creeks in 1979. Additional samples were collected in 1980 and 1982, after logging had begun in the Kishinena watershed.

This report presents the data from these collections and measurements.

RESUME

En 1978, la récupération du bois de coupe dans le bassin Akamina-Kishinena a été proposée afin de contrôler une épidémie de dendroctone du pin Ponderosa (Dendroctonus ponderosae, "mountain pine beetle"). A cette époque, l'abattage était déjà en cours dans les bassins adjacents des ruisseaux Elder et Sage. Ces derniers, ainsi que le Kishinena, traversent la frontière internationale pour se jeter dans le bras nord de la rivière Flathead. Comme cet abattage pouvait avoir des effets néfastes outre-frontière, la Direction de la qualité des eaux de la Direction générale des eaux intérieures a entrepris une étude de la qualité des eaux de la portion canadienne de ces cours d'eau. La chimie de l'eau, les particules en suspension et les algues périphytiques des ruisseaux Akamina, Kishinena, Elder et Sage ont été soumis à une surveillance continue en 1979. Des échantillons supplémentaires ont été recueillis en 1980 et en 1982, après que l'abattage ait commencé dans le bassin Kishinena.

Le présent rapport renferme les données recueillies dans le cadre de ce projet.

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Introduction

In 1978 the British Columbia Forestry Service proposed salvage logging in the Akamina-Kishinena Valley to harvest stands of lodgepole pine (*Pinus contorta* var. *latifolia* Engelm.) infested with mountain pine beetles (*Dendroctonus ponderosae* Hopk.). Since Kishinena Creek, a tributary to the Flathead River, flows across the International Boundary into Glacier National Park, the United States Government expressed concern that the logging might impair the water quality in the park and in the North Fork of the Flathead River. Because of the potential effects of logging on transboundary waters, the Water Quality Branch, Inland Waters Directorate was asked to monitor water quality in the Akamina-Kishinena region.

This report presents hydrometric, chemical and biological data collected in 1978-1982 from the Akamina-Kishinena watershed and from two adjacent tributaries to the North Fork of the Flathead River.

Study Sites

Four study sites were chosen: Akamina Creek, in an area to be protected from logging, Kishinena Creek in an area scheduled for logging in 1979, and Elder and Sage Creeks whose watersheds had already been partially logged (Figure 1).

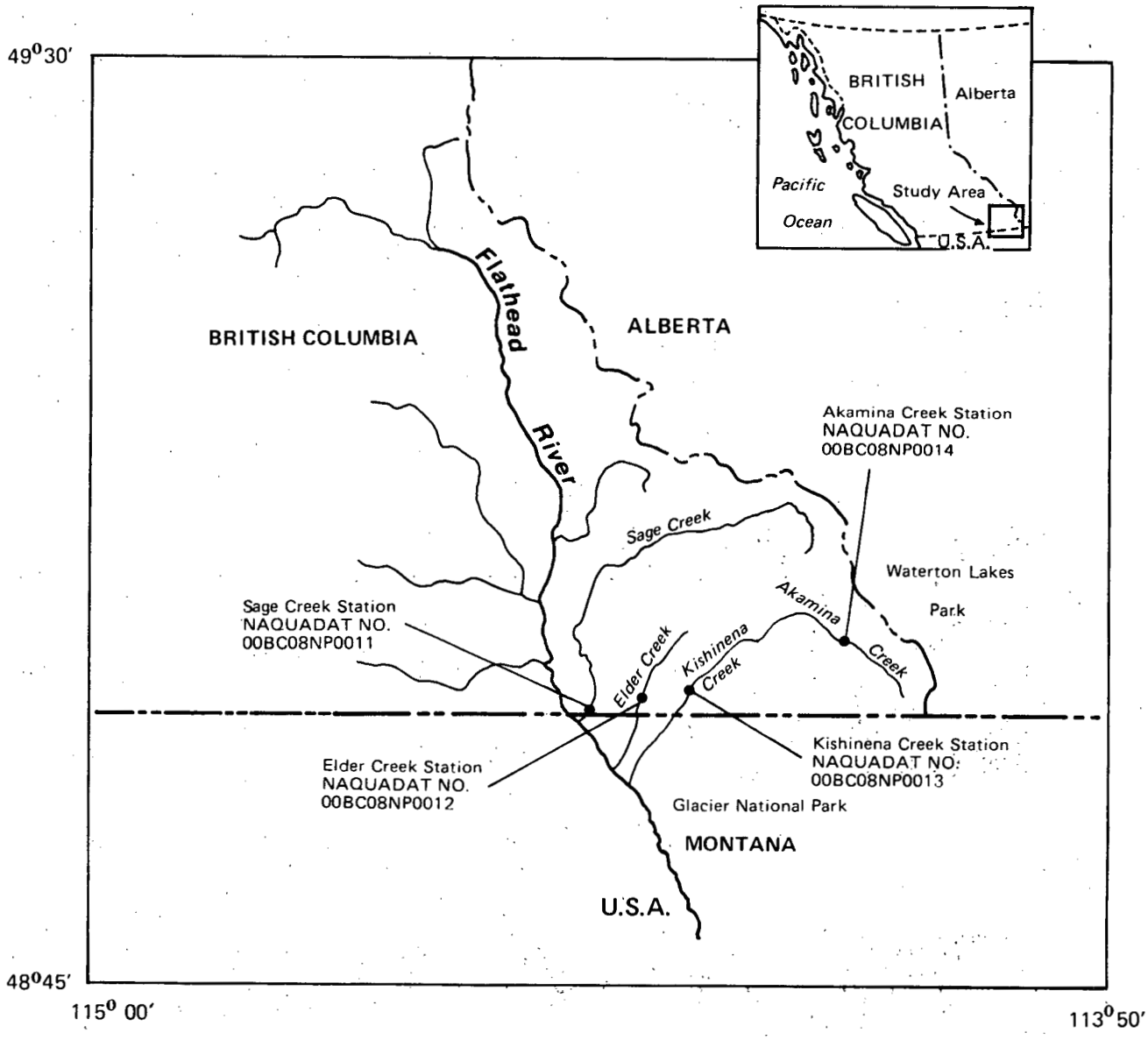

Fig. 1 Sample station locations and NAQUADAT station numbers in the eastern Flathead River Basin, British Columbia. Note that the upstream portion of Kishinena Creek is known as Akamina Creek.

Methods

Sampling Schedule

In all years, sampling was scheduled for the period of maximum algal abundance, while more intensive sampling in 1979 was designed to include pre-freshet, freshet and post-freshet periods.

Sampling and Analytical Methods

A complete description of hydrometric measurements and the collection and analysis of chemical and biological samples are presented in the interpretive report (Smith et al., 1985).

Descriptions of the methods may also be found in other sources. Stream discharge (Table 1) measurements are detailed by Braybrooks (1978). Water chemistry (Tables 3-12) analyses are described in the NAQUADAT Dictionary (Inland Waters Directorate, Water Quality Branch, 1983). The method for each chemical parameter may be identified by its NAQUADAT code number (Table 2). Analyses of suspended sediments and total dissolved solids (Tables 13 and 14) are described by Inland Waters Directorate, Water Survey of Canada (1981). In calculating descriptive statistics for analytical results, each value recorded as "less than detection limit" was substituted with the appropriate limit of detection. Methods of collection and analyses of algal samples from whole rocks (Tables 16-21) are detailed by Sheehan et al., (1980).

Diatom cell counts are not reported for qualitative samples, but the algal composition of the samples examined is tabulated in intervals of percent composition (i.e., <5%, 5-20%, >20%).

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We are pleased to acknowledge the encouragement and support of Dr. W.E. Erlebach, Chief of the Water Quality Branch, Pacific and Yukon Region throughout all phases of this study.

We thank personnel from Water Resources Branch of Canada, particularly John Gilbert who provided hydrometric measurements and Carol Penner of the New Westminster Sediment Laboratory who analyzed water samples for suspended sediment. We are grateful to F.T.S. Mah and personnel of the Analytical Services Division, Water Quality Branch, Pacific and Yukon Region for precise and timely data. We are also grateful to Stewart Yee and Mary Bolin for algal identifications.

We are especially grateful to Dr. Simon Whitlow and Maureen Lamb of Water Quality Branch, Ottawa for formatting the chemical data. We express our thanks to Mary Lou Haines for typing the endless drafts of the report.

TABLE 1

Discharge Data for the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982, Taken From Hydrometric Survey Notes

Date	Time (MST)	Water Temperature °C	Instantaneous Discharge Rate m^3/s	Mean Velocity m/s
Akamina Creek:				
3 Apr 1979	1330	-	0.042	0.12
15 May 1979	1055	3.3	0.580	0.55
14 June 1979	1130	-	2.67	1.03
29 Aug 1979	1055	6.1	0.15	0.39
8 Nov 1979	1445	0.5	0.068	0.26
28 July 1982	845	6.0	0.917	0.59
Kishinena Creek:				
16 Aug 1978	1045	9.4	2.61	0.53
3 Apr 1979	1000	0.0	0.750	0.18
15 May 1979	945	3.9	8.78	0.99
14 June 1979	935	5.0	17.1	1.30
29 Aug 1979	855	8.8	1.22	0.46
8 Nov 1979	1305	3.0	0.688	0.26
28 July 1982	1045	10.0	4.90	0.81
Elder Creek:				
16 Aug 1978	845	8.8	0.18	0.15
3 Apr 1979	1450	0.0	0.079	0.14
15 May 1979	1250	5.0	1.91	0.99
14 June 1979	1305	5.5	1.34	0.70
29 Aug 1979	1305	13.8	0.11	0.21
8 Nov 1979	1140	0.0	0.071	0.14
Sage Creek:				
16 Aug 1978	1320	11.6	1.77	0.58
3 Apr 1979	1545	2.2	1.07	0.40
15 May 1979	1445	7.8	12.8	1.16
14 June 1979	1430	8.3	17.5	1.41
29 Aug 1979	1445	15.0	0.643	0.30
8 Nov 1979	1006	2.5	0.481	0.32

TABLE 2

NAQUADAT Code Numbers and Limits of Detection for the Water Chemistry Parameters Measured in the Akamina-Kishinena Watershed Study

Parameter	NAQUADAT Number	Detection Limit
Colour	02011	5.0
Specific Conductance	02041	0.2 μ sie/cm
Water Temperature (Lab)	02061 L	
Water Temperature (Field)	02061 S	
Turbidity	02073	0 jtu
Total Organic Carbon	06001	Variable
Total Inorganic Carbon	06051	0.5 mg/L
Particulate Carbon	06903	Variable
NO_3/NO_2 (dissolved)	07110	0.002 mg/L
Ammonia (dissolved)	07557	0.002 mg/L
Total Dissolved Nitrogen (unfiltered)	07651	0.01 mg/L
Total Dissolved Nitrogen (filtered)	07655	0.01 mg/L
Particulate Nitrogen	07903	Variable
Fluoride (dissolved)	09106	0.05 mg/L
Alkalinity (total)	10101	0.5 mg/L $CaCO_3$
Alkalinity (phenolphthalein)	10151	0.5[1] mg/L $CaCO_3$
pH (Lab)	10301 L	
Nonfilterable residue	10401	10.0 mg/L
Filterable residue	10451	10.0 mg/L
Nonfilterable residue (fixed)	10501	10.0 mg/L
Filterable residue (fixed)	10551	10.0 mg/L
Hardness (total)	10603	0.5 mg/L $CaCO_3$
Sodium (dissolved)	11103	0.2 mg/L
Magnesium (dissolved)	12101	Calculated
Silica (reactive)	14105	0.2 mg/L
Total phosphorus	15406	0.002 mg/L
Sulphate (dissolved)	16306	0.5 mg/L

[1]This limit of detection applies at pH greater than 8.3. At lower pH phenolphthalein alkalinity = 0

Table 2 (Continued)

Parameter	NAQUADAT Number	Detection Limit
Chloride (dissolved)	17206	0.2 mg/L
Potassium (dissolved)	19103	0.2 mg/L
Calcium (dissolved)	20101	0.5 mg/L
Manganese (total)	25004	0.01 mg/L
Manganese (extractable)	25304	0.01 mg/L
Iron (total)	26005	0.001 mg/L
Iron (extractable)	26305	0.001 mg/L
Nickel (total)	28002	0.001 mg/L
Nickel (extractable)	28302	0.001 mg/L
Copper (total)	29005	0.001 mg/L
Copper (extractable)	29305	0.001 mg/L
Zinc (total)	30005	0.001 mg/L
Zinc (extractable)	30305	0.001 mg/L
Arsenic (extractable)	33304	0.0001 mg/L
Selenium (extractable)	34302	0.0001 mg/L
Cadmium (extractable)	48302	0.0005 mg/L
Barium (extractable)	56301	0.01 mg/L
Mercury (extractable)	80311	0.05 µg/L
Lead (total)	82002	0.001 mg/L
Lead (extractable)	82302	0.001 mg/L

TABLE 3.

NAQUADAT Detailed and Summary Report
of Water Quality Data For Some Tributaries to the
North Fork of the Flathead River, 1978-1982

Values presented in this table are single measurements or means of replicates. Replicate values (when they exist) are presented in Tables 4 through 12.

When the same parameter has been processed or measured by different methods on different dates, all data are listed in one column, and the differences are indicated with back-up codes. For example, the sample for total dissolved nitrogen is either filtered in the field (07655) or not filtered (07651) prior to analysis.

07655		
Nitrogen		
Total		
Dissolved		
.051	51	(not filtered)
.058		(filtered)

Note: Although the detection limit for nonfilterable residues (10401 and 10501) is 10 mg/L (Table 2), the laboratory sometimes reports lower values, Caution is advised in interpreting values below 10 mg/L.

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0014 LAT. 49D 3M 20S LONG. 114D 7M 49S
AKAMINA CREEK 7300 METRES WNW OF CAMERON LAKE CAMPSITE NEAR BC-ALTA BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	02041L SPECIFIC CONDUCT. USIE/CM	02061L TEMP. WATER DEG.C.	02061S TEMP. WATER DEG.C.	02073L TURBIDITY JTU	06001R CARBON TOTAL ORGANIC C MG/L	06051R CARBON TOTAL INORGANIC C MG/L	06903R CARBON PARTICULATE C MG/L
79-04-03	1215	325	L5.	140.00	19.3	--	.2	L1.5	11.0	--
79-05-15	1047	325	5.	109.00	21.4	--	.7	2.8	6.1	.105
79-06-14	1110	325	5.	94.20	20.5	--	.8	3.3	8.1	--
79-08-29	1034	325	L5.	128.00	20.8	--	.8	2.9	8.7	.041
79-11-08	1430	325	L5.	138.00	20.3	2.0	.4	4.0	7.8	.026
80-08-26	0825	325	5.	125.00	21.2	--	.3	L1.0	9.0	.061
82-07-28	0849	325	L5.	110.00	21.6	--	.3	--	--	--
	0850	325	L5.	109.00	21.6	--	.4	2.8	11.3	.043
		MINIMUM	L5.	94.20	19.3	2.0	.2	L1.0	6.1	.026
		MAXIMUM	5.	140.00	21.6	2.0	.8	4.0	11.3	.105
		MEAN/MOYENNE	*5.	119.15	20.8	2.0	.5	*2.6	8.9	.055
		STD.DEV./ECART-TYPE	*0.	16.10	.8	--	.2	*1.0	1.8	.030
		GMEAN/MOYENNEG	*5.	118.18	20.8	2.0	.4	*2.4	8.7	.049
		MEDIAN/MEDIANE	L5.	117.50	21.0	--	.4	2.8	8.7	.043
		FLAG/IND.-L	5	0	0	0	0	2	0	0
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	8	8	8	1	8	7	7	5

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0014 LAT. 49D 3M 20S LONG. 114D 7M 49S
AKAMINA CREEK 7300 METRES WNW OF CAMERON LAKE CAMPSITE NEAR BC-ALTA BORDER, BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110R NITROGEN DISSOLVED NO3 & NO2 N MG/L	07557R NITROGEN DISSOLVED AMMONIA N MG/L	07655R NITROGEN TOTAL DISSOLVED N MG/L	07903R NITROGEN PARTICULATE N MG/L	09106L FLUORIDE DISSOLVED F MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10301L PH PH UNITS
79-04-03	1215	325	.044	.002	.051 51R	--	L.05	41.9	0.0	7.6
79-05-15	1047	325	.040	.004	.058	.007	.05	37.2	0.0	7.8
79-06-14	1110	325	.028	L.002	.045 51R	--	L.05	37.8	0.0	7.8
79-08-29	1034	325	.014	.004	.025	L.005	L.05	43.3	0.0	7.7
79-11-08	1430	325	.030	.010	.041	L.005	L.05	42.2	0.0	7.5
80-08-26	0825	325	.012	.007	.044	.009	L.05	41.8	0.0	7.5
82-07-28	0849	325	--	--	--	--	L.05	41.9	0.0	7.8
	0850	325	.007	L.002	.027	L.005	L.05	41.9	0.0	7.7
MINIMUM			.007	L.002	.025	L.005	L.05	37.2	0.0	7.5
MAXIMUM			.044	.010	.058	.009	.05	43.3	0.0	7.8
MEAN/MOYENNE			.025	*.005	.042	*.006	*.05	41.0	0.0	7.7
STD.DEV./ECART-TYPE			.014	*.003	.012	*.002	*.00	2.2	0.0	.1
GMEAN/MOYENNEG			.021	*.004	.040	*.006	*.05	40.9	1.0	7.7
MEDIAN/MEDIANE			.028	.004	.044	L.005	L.05	41.9	0.0	7.7
FLAG/IND.-L			0	2	0	3	7	0	0	0
-G			0	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			7	7	7	5	8	8	8	8

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0014
AKAMINA CREEK 7300 METRES WNW OF CAMERON LAKE CAMPSITE NEAR BC-ALTA BORDER. BRITISH COLUMBIA.
LAT. 49D 3M 20S LONG. 114D 7M 49S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	10603L HARDNESS TOTAL CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	14105L SILICA REACTIVE SIO2 MG/L
79-04-03	1215	325	L1.	85.	L1.	69.	65.6	1.2	6.2	4.4
79-05-15	1047	325	4.	81.	2.	54.	51.0	.9	4.5	4.7
79-06-14	1110	325	2.	67.	L1.	42.	45.6	.7	4.2	4.2
79-08-29	1034	325	2.	111.	L1.	67.	60.6	1.1	4.9	5.0
79-11-08	1430	325	1.	82.	L1.	74.	68.0	1.1	7.7	4.8
80-08-26	0825	325	3.	85.	2.	68.	57.8	3.9	4.8	4.6
82-07-28	0849	325	--	--	--	--	55.0	.8	7.6	4.2
	0850	325	--	--	--	--	54.8	.8	7.5	4.2
MINIMUM			L1.	67.	L1.	42.	45.6	.7	4.2	4.2
MAXIMUM			4.	111.	2.	74.	68.0	3.9	7.7	5.0
MEAN/MOYENNE			*2.	85.	*1.	62.	57.3	1.3	5.9	4.5
STD.DEV./ECART-TYPE			*1.	14.	*1.	12.	7.4	1.1	1.5	.3
GMEAN/MOYENNEG			*2.	84.	*1.	61.	56.9	1.1	5.8	4.5
MEDIAN/MEDIANE			2.	84.	L1.	68.	56.4	1.0	5.6	4.5
FLAG/IND.-L			1	0	4	0	0	0	0	0
-G			0	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			6	6	6	6	8	8	8	8

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0014 LAT. 49D 3M 20S LONG. 114D 7M 49S
AKAMINA CREEK 7300 METRES WNW OF CAMERON LAKE CAMPSITE NEAR BC-ALTA BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15102R PHOSPHORUS TOTAL DISSOLVED P MG/L	15406R PHOSPHORUS TOTAL P MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	17206L CHLORIDE DISSOLVED CL MG/L	19103L POTASSIUM DISSOLVED K MG/L	20101L CALCIUM DISSOLVED CA MG/L	25304R MANGANESE EXTRBLE. MN MG/L	25004R MANGANESE TOTAL MN MG/L
79-04-03	1215	325	--	.004	27.0	L.2	.2	16.1	--	--
79-05-15	1047	325	--	.004	16.1	.3	.3	12.9	L.010	--
79-06-14	1110	325	--	.003	9.1	.2	.2	11.3	--	L.010
79-08-29	1034	325	--	.003	20.0	.2	.2	16.2	.013	--
79-11-08	1430	325	--	.002	25.0	.3	.2	14.5	.020	--
80-08-26	0825	325	--	.001	20.0	.3	.4	15.2	.010	--
82-07-28	0849	325	--	--	12.5	L.2	L.2	9.5	--	--
	0850	325	.003	.003	12.8	L.2	L.2	9.6	.010	--
		MINIMUM	.003	.001	9.1	L.2	L.2	9.5	L.010	L.010
		MAXIMUM	.003	.004	27.0	.3	.4	16.2	.020	L.010
		MEAN/MOYENNE	.003	.003	17.8	*.2	*.2	13.2	*.013	*.010
		STD.DEV./ECART-TYPE	--	.001	6.3	*.1	*.1	2.8	*.004	--
		GMEAN/MOYENNEG	.003	.003	16.8	*.2	*.2	12.9	*.012	*.010
		MEDIAN/MEDIANE	--	.003	18.1	.2	.2	13.7	.010	--
		FLAG/IND.-L	0	0	0	3	2	0	1	1
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	1	7	8	8	8	8	5	1

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0014 LAT. 49D 3M 20S LONG. 114D 7M 49S
AKAMINA CREEK 7300 METRES WNW OF CAMERON LAKE CAMPSITE NEAR BC-ALTA BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	26005R IRON TOTAL FE MG/L	26305R IRON EXTRBLE. FE MG/L	28002R NICKEL TOTAL NI MG/L	28302R NICKEL EXTRBLE. NI MG/L	29005R COPPER TOTAL CU MG/L	29305R COPPER EXTRBLE. CU MG/L	30005R ZINC TOTAL ZN MG/L	30305R ZINC EXTRBLE. ZN MG/L
79-05-15	1047	325	--	.070	--	L.001	--	.004	--	L.001
79-06-14	1110	325	.018	--	L.001	--	.004	--	.001	--
79-08-29	1034	325	--	.007	--	.002	--	.002	--	L.001
79-11-08	1430	325	--	.003	--	.001	--	.001	--	L.001
80-08-26	0825	325	--	.003	--	.001	--	.001	--	L.001
82-07-28	0850	325	--	.007	--	--	--	.002	--	.004
		MINIMUM	.018	.003	L.001	L.001	.004	.001	.001	L.001
		MAXIMUM	.018	.070	L.001	.002	.004	.004	.001	.004
		MEAN/MOYENNE	.018	.018	*.001	*.001	.004	.002	.001	*.001
		STD.DEV./ECART-TYPE	--	.029	--	--	--	.001	--	*.001
		GMEAN/MOYENNEG	.018	.008	*.001	*.001	.004	.002	.001	*.001
		MEDIAN/MEDIANE	--	.007	--	--	--	.002	--	L.001
		FLAG/IND.-L	0	0	1	1	0	0	0	4
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	1	5	1	4	1	5	1	5

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0014 LAT. 49D 3M 20S LONG. 114D 7M 49S
AKAMINA CREEK 7300 METRES WNW OF CAMERON LAKE CAMPSITE NEAR BC-ALTA BORDER. BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	48302R CADMIUM EXTRBLE. CD MG/L	56301R BARIUM EXTRBLE. BA MG/L	80311R MERCURY EXTRBLE. HG UG/L	82002R LEAD TOTAL PB MG/L	82302R LEAD EXTRBLE. PB MG/L
79-04-03	1215	325	.0002	L.0001	--	--	L.05	--	--
79-05-15	1047	325	.0002	L.0001	--	.10	L.05	--	L.001
79-06-14	1110	325	.0003	L.0001	--	.10	L.05	L.001	--
79-08-29	1034	325	.0004	L.0001	L.0005	.10	L.05	--	.001
79-11-08	1430	325	L.0001	L.0001	L.0005	.10	L.05	--	L.001
80-08-26	0825	325	--	--	L.0005	.20	L.05	--	.001
82-07-28	0850	325	.0002	L.0001	--	--	L.05	--	.002
		MINIMUM	L.0001	L.0001	L.0005	.10	L.05	L.001	L.001
		MAXIMUM	.0004	L.0001	L.0005	.20	L.05	L.001	.002
		MEAN/MOYENNE	*.0002	*.0001	*.0005	.12	*.05	*.001	*.001
		STD.DEV./ECART-TYPE	*.0001	*0.0000	--	.04	*.00	--	*.000
		GMEAN/MOYENNEG	*.0002	*.0001	*.0005	.11	*.05	*.001	*.001
		MEDIAN/MEDIANE	.0002	L.0001	--	.10	L.05	--	.001
		FLAG/IND.-L	1	6	3	0	7	1	2
		-G	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	6	6	3	5	7	1	5

FOOTNOTE: L - LESS THAN DETECTION LIMIT / PLUS PETIT QUE LA LIMITE DE DETECTION
NOTEZ BIEN: G - GREATER THAN MEASUREMENT LIMIT / PLUS GRAND QUE LA LIMITE MESURE
* - THESE STATISTICS INCLUDE FLAGGED VALUES / CES STATISTIQUES COMPORTENT DES VALEURS INDICATIVES

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0013
KISHINENA CREEK AT OR NEAR U.S. BORDER BRITISH COLUMBIA

LAT. 49D OM OS LONG. 114D 21M 45S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	02041L SPECIFIC CONDUCT. USIE/CM	02061L TEMP. WATER DEG.C.	02061S TEMP. WATER DEG.C.	02073L TURBIDITY JTU	06001R CARBON TOTAL ORGANIC C MG/L	06051R CARBON TOTAL INORGANIC C MG/L	06903R CARBON PARTICULATE C MG/L
78-08-16	1100	325	L5.	139.00	20.9	9.0	.4	--	--	.067
79-04-03	0915	325	L5.	176.00	19.2	-.6	.2	2.3	16.0	.058
79-05-15	0835	325	5.	128.00	21.4	--	1.0	2.4	9.0	.168
79-06-14	0910	325	5.	93.90	20.5	--	1.5	4.0	8.9	--
79-08-28	1330	325	L5.	156.00	20.5	--	.3	L2.0	14.0	.081
79-08-29	0730	325	L5.	156.00	20.9	--	.4	2.4	15.0	.073
79-11-08	1300	327	L5.	181.00	20.5	3.5	.4	3.4	12.3	.027
80-08-26	1030	325	5.	151.00	21.3	--	.3	L1.0	14.0	.061
82-07-28	1044	325	L5.	112.00	21.6	--	.7	--	--	--
	1045	325	L5.	112.00	21.6	--	.3	L.7	13.0	.069
MINIMUM			L5.	93.90	19.2	-.6	.2	L.7	8.9	.027
MAXIMUM			5.	181.00	21.6	9.0	1.5	4.0	16.0	.168
MEAN/MOYENNE			*5.	140.49	20.8	4.0	.5	*2.3	12.8	.075
STD.DEV./ECART-TYPE			*0.	28.76	.7	--	.4	*1.1	2.6	.041
GMEAN/MOYENNEG			*5.	137.71	20.8	3.2	.4	*2.0	12.5	.068
MEDIAN/MEDIANE			L5.	145.00	20.9	--	.4	2.4	13.5	.068
FLAG/IND.-L			7	0	0	0	0	3	0	0
-G			0	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			10	10	10	3	10	8	8	8

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0013 LAT. 49D OM OS LONG. 114D 21M 45S
KISHINENA CREEK AT OR NEAR U.S. BORDER BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110R NITROGEN DISSOLVED NO3 & NO2 N MG/L	07557R NITROGEN DISSOLVED AMMONIA N MG/L	07655R NITROGEN TOTAL DISSOLVED N MG/L	07903R NITROGEN PARTICULATE N MG/L	09106L FLUORIDE DISSOLVED F MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10301L PH PH UNITS
78-08-16	1100	325	.011	L.002	.045	L.005	L.05	56.4	0.0	7.9
79-04-03	0915	325	.062	.003	.087	.015	L.05	63.1	0.0	7.7
79-05-15	0835	325	.092	.005	.123	.013	.06	53.5	0.0	7.9
79-06-14	0910	325	.029	.003	.055 51R	--	L.05	41.0	0.0	8.0
79-08-28	1330	325	.021	.006	.048	.006	.14	61.2	0.0	8.0
79-08-29	0730	325	.025	.006	.045	L.005	.06	62.5	0.0	8.0
79-11-08	1300	327	.044	.007	.062	L.005	.05	64.0	0.0	7.9
80-08-26	1030	325	.017	.002	.043	L.007	L.05	61.1	0.0	7.8
82-07-28	1044	325	--	--	--	--	L.05	47.9	0.0	7.9
	1045	325	.004	L.002	.027	L.005	L.05	48.2	0.0	7.9
		MINIMUM	.004	L.002	.027	L.005	L.05	41.0	0.0	7.7
		MAXIMUM	.092	.007	.123	.015	.14	64.0	0.0	8.0
		MEAN/MOYENNE	.034	*.004	.060	*.008	*.06	55.9	0.0	7.9
		STD.DEV./ECART-TYPE	.028	*.002	.029	*.004	*.03	7.9	0.0	.1
		GMEAN/MOYENNEG	.024	*.004	.054	*.007	*.06	55.3	1.0	7.9
		MEDIAN/MEDIANE	.025	.003	.048	*.005	L.05	58.8	0.0	7.9
		FLAG/IND.-L	0	2	0	5	6	0	0	0
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	9	9	9	8	10	10	10	10

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0013
KISHINENA CREEK AT OR NEAR U.S. BORDER BRITISH COLUMBIA

LAT. 49D OM OS LONG. 114D 21M 45S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	10603L HARDNESS TOTAL CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	14105L SILICA REACTIVE SIO2 MG/L
78-08-16	1100	325	--	--	--	--	66.4	1.3	4.6	4.5
79-04-03	0915	325	L1.	115.	L1.	99.	85.0	2.2	6.8	4.4
79-05-15	0835	325	9.	88.	8.	56.	59.0	1.2	4.9	4.6
79-06-14	0910	325	6.	59.	4.	36.	46.0	.7	3.8	4.0
79-08-28	1330	325	L1.	127.	L1.	81.	77.5	1.6	5.5	5.1
79-08-29	0730	325	2.	127.	L1.	80.	76.9	1.5	5.3	5.1
79-11-08	1300	327	L1.	99.	L1.	86.	88.1	1.9	6.9	4.8
80-08-26	1030	325	2.	90.	2.	73.	75.2	.8	5.3	4.6
82-07-28	1044	325	--	--	--	--	56.6	.9	4.6	4.1
	1045	325	--	--	--	--	56.4	1.0	4.6	4.1
MINIMUM			L1.	59.	L1.	36.	46.0	.7	3.8	4.0
MAXIMUM			9.	127.	8.	99.	88.1	2.2	6.9	5.1
MEAN/MOYENNE			*3.	101.	*3.	73.	68.7	1.3	5.2	4.5
STD.DEV./ECART-TYPE			*3.	25.	*3.	21.	13.9	.5	1.0	.4
GMEAN/MOYENNEG			*2.	98.	*2.	70.	67.4	1.2	5.2	4.5
MEDIAN/MEDIANE			2.	99.	L1.	80.	70.8	1.3	5.1	4.6
FLAG/IND.-L			3	0	4	0	0	0	0	0
-G			0	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			7	7	7	7	10	10	10	10

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0013 LAT. 49D 0M 0S LONG. 114D 21M 45S
KISHINENA CREEK AT OR NEAR U.S. BORDER BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15102R PHOSPHORUS TOTAL DISSOLVED P MG/L	15406R PHOSPHORUS TOTAL P MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	17206L CHLORIDE DISSOLVED CL MG/L	19103L POTASSIUM DISSOLVED K MG/L	20101L CALCIUM DISSOLVED CA MG/L	25304R MANGANESE EXTRBLE. MN MG/L	25004R MANGANESE TOTAL MN MG/L
78-08-16	1100	325	--	.002	12.8	.3	.4	19.0	--	L.010
79-04-03	0915	325	--	.002	26.0	.3	.4	22.9	--	--
79-05-15	0835	325	--	.005	10.4	.4	.4	15.5	L.010	--
79-06-14	0910	325	--	.003	5.9	.2	.3	12.1	--	L.010
79-08-28	1330	325	--	.002	17.3	.5	.4	21.9	.020	--
79-08-29	0730	325	--	L.002	17.4	.5	.3	22.0	.017	--
79-11-08	1300	327	--	.002	24.0	.8	.2	23.9	.020	--
80-08-26	1030	325	--	.002	13.2	.5	.2	21.3	L.010	--
82-07-28	1044	325	--	--	9.0	L.2	.2	15.0	--	--
	1045	325	L.002	.002	8.6	L.2	.3	15.0	L.010	--
MINIMUM			L.002	.002	5.9	L.2	.2	12.1	L.010	L.010
MAXIMUM			L.002	.005	26.0	.8	.4	23.9	.020	L.010
MEAN/MOYENNE			*.002	*.003	14.5	*.4	.3	18.9	*.014	*.010
STD.DEV./ECART-TYPE			--	*.001	6.7	*.2	.1	4.1	*.005	--
GMEAN/MOYENNEG			*.002	*.002	13.1	*.4	.3	18.4	*.014	*.010
MEDIAN/MEDIANE			--	.002	13.0	.4	.3	20.2	*.013	--
FLAG/IND.-L			1	1	0	2	0	0	3	2
-G			0	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			1	9	10	10	10	10	6	2

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0013
KISHINENA CREEK AT OR NEAR U.S. BORDER BRITISH COLUMBIA

LAT. 49D OM OS LONG. 114D 21M 45S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	26005R IRON TOTAL FE MG/L	26305R IRON EXTRBLE. FE MG/L	28002R NICKEL TOTAL NI MG/L	28302R NICKEL EXTRBLE. NI MG/L	29005R COPPER TOTAL CU MG/L	29305R COPPER EXTRBLE. CU MG/L	30005R ZINC TOTAL ZN MG/L	30305R ZINC EXTRBLE. ZN MG/L
78-08-16	1100	325	.050	--	--	--	L.001	--	.001	--
79-05-15	0835	325	--	.080	--	L.001	--	.001	--	L.001
79-06-14	0910	325	.060	--	L.001	--	.003	--	.001	--
79-08-28	1330	325	--	.012	--	.001	--	.002	--	L.001
79-08-29	0730	325	--	.012	--	.001	--	.002	--	L.001
79-11-08	1300	327	--	.012	--	.001	--	.005	--	.001
80-08-26	1030	325	--	.013	--	L.001	--	.001	--	L.001
82-07-28	1045	325	--	.022	--	--	--	.002	--	L.001
MINIMUM			.050	.012	L.001	L.001	L.001	.001	.001	L.001
MAXIMUM			.060	.080	L.001	.001	.003	.005	.001	.001
MEAN/MOYENNE			.055	.025	*.001	*.001	*.002	.002	.001	*.001
STD.DEV./ECART-TYPE			--	.027	--	*.000	--	.002	--	*.000
GMEAN/MOYENNEG			.055	.019	*.001	*.001	*.002	.002	.001	*.001
MEDIAN/MEDIANE			--	.013	--	.001	--	.002	--	L.001
FLAG/IND.-L			0	0	1	2	1	0	0	5
-G			0	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			2	6	1	5	2	6	2	6

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0013 LAT. 49D 0M 0S LONG. 114D 21M 45S
KISHINENA CREEK AT OR NEAR U.S. BORDER BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	48302R CADMIUM EXTRBLE. CD MG/L	56301R BARIUM EXTRBLE. BA MG/L	80311R MERCURY EXTRBLE. HG UG/L	82002R LEAD TOTAL PB MG/L	82302R LEAD EXTRBLE. PB MG/L
78-08-16	1100	325	--	--	--	.20	--	L.001	--
79-04-03	0915	325	.0002	.0001	--	--	L.05	--	--
79-05-15	0835	325	.0002	L.0001	--	.10	L.05	--	L.001
79-06-14	0910	325	.0002	L.0001	--	.10	L.05	L.001	--
79-08-28	1330	325	.0004	L.0001	L.0005	.10	L.05	--	L.001
79-08-29	0730	325	.0004	L.0001	L.0005	.10	L.05	--	L.001
79-11-08	1300	327	L.0001	L.0001	L.0005	L.10	L.05	--	.001
80-08-26	1030	325	--	--	L.0005	.20	L.05	--	L.001
82-07-28	1045	325	.0002	L.0001	--	--	L.05	--	.003
		MINIMUM	L.0001	L.0001	L.0005	L.10	L.05	L.001	L.001
		MAXIMUM	.0004	.0001	L.0005	.20	L.05	L.001	.003
		MEAN/MOYENNE	*.0002	*.0001	*.0005	*.13	*.05	*.001	*.001
		STD.DEV./ECART-TYPE	*.0001	* 0.000 0	--	*.05	*.00	--	*.001
		GMEAN/MOYENNEG	*.0002	*.0001	*.0005	*.12	*.05	*.001	*.001
		MEDIAN/MEDIANE	.0002	L.0001	--	.10	L.05	--	L.001
		FLAG/IND.-L	1	6	4	1	8	2	4
		-G	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	7	7	4	7	8	2	6

FOOTNOTE: L - LESS THAN DETECTION LIMIT / PLUS PETIT QUE LA LIMITE DE DETECTION
NOTEZ BIEN: G - GREATER THAN MEASUREMENT LIMIT / PLUS GRAND QUE LA LIMITE MESURE
* - THESE STATISTICS INCLUDE FLAGGED VALUES / CES STATISTIQUES COMPORTENT DES VALEURS INDICATIVES

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0012 LAT. 49D OM OS LONG. 114D 24M 20S
ELDER CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL.	UNITS	02041L SPECIFIC CONDUCT. USIE/CM	02061L TEMP. WATER DEG.C.	02061S TEMP. WATER DEG.C.	02073L TURBIDITY JTU	06001R CARBON TOTAL ORGANIC C MG/L	06051R CARBON TOTAL INORGANIC C MG/L	06903R CARBON PARTICULATE C MG/L
78-08-16	0900	325	L5.		80.90	20.2	9.0	.5	--	--	.061
79-04-03	1400	325	5.		125.00	19.3	--	.6	2.9	15.0	--
79-05-15	1235	325	20.		66.50	21.4	--	1.3	7.6	6.7	.156
79-06-14	1230	325	5.		40.40	20.5	--	1.0	2.8	3.3	--
79-08-29	1220	325	L5.		93.00	20.6	--	.4	4.2	8.0	.062
79-11-08	1100	325	L5.		96.00	20.5	.5	.5	2.0	9.3	.035
		MINIMUM	L5.		40.40	19.3	.5	.4	2.0	3.3	.035
		MAXIMUM	20.		125.00	21.4	9.0	1.3	7.6	15.0	.156
		MEAN/MOYENNE	*7.		83.63	20.4	4.8	.7	3.9	8.4	.078
		STD.DEV./ECART-TYPE	*6.		28.71	.7	--	.4	2.2	4.3	--
		GMEAN/MOYENNEG	*6.		78.97	20.4	2.1	.7	3.5	7.5	.067
		MEDIAN/MEDIANE	*5.		86.95	20.5	--	.6	2.9	8.0	--
		FLAG/IND.-L	3		0	0	0	0	0	0	0
		-G	0		0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	6		6	6	2	6	5	5	4

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0012 LAT. 49D 0M 0S LONG. 114D 24M 20S
ELDER CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110R NITROGEN DISSOLVED NO3 & NO2 N MG/L	07557R NITROGEN DISSOLVED AMMONIA N MG/L	07655R NITROGEN TOTAL DISSOLVED N MG/L	07903R NITROGEN PARTICULATE N MG/L	09106L FLUORIDE DISSOLVED F MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10301L PH PH UNITS
78-08-16	0900	325	.004	L.002	.031	.010	.06	36.1	0.0	7.8
79-04-03	1400	325	.036	L.002	.068 51R	--	L.05	59.7	0.0	7.7
79-05-15	1235	325	.002	.005	.120	.014	.05	30.8	0.0	7.5
79-06-14	1230	325	.003	L.002	.040 51R	--	L.05	18.2	0.0	7.6
79-08-29	1220	325	.003	.004	.030	L.005	L.05	41.8	0.0	7.9
79-11-08	1100	325	.003	.008	.031	L.005	.06	45.6	0.0	7.7
		MINIMUM	.002	L.002	.030	L.005	L.05	18.2	0.0	7.5
		MAXIMUM	.036	.008	.120	.014	.06	59.7	0.0	7.9
		MEAN/MOYENNE	.009	*.004	.053	*.008	*.05	38.7	0.0	7.7
		STD.DEV./ECART-TYPE	.013	*.002	.036	--	*.00	14.1	0.0	.1
		GMEAN/MOYENNEG	.005	*.003	.046	*.008	*.05	36.3	1.0	7.7
		MEDIAN/MEDIANE	.003	*.003	.036	--	*.05	39.0	0.0	7.7
		FLAG/IND.-L	0	3	0	2	3	0	0	0
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	6	6	6	4	6	6	6	6

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0012
ELDER CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

LAT. 49D OM OS LONG. 114D 24M 20S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	10603L HARDNESS TOTAL CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	14105L SILICA REACTIVE SIO2 MG/L
78-08-16	0900	325	--	--	--	--	37.7	1.5	2.8	6.6
79-04-03	1400	325	L1.	84.	L1.	68.	60.6	2.1	4.5	6.9
79-05-15	1235	325	6.	64.	3.	28.	32.0	1.0	2.3	7.3
79-06-14	1230	325	2.	29.	1.	11.	20.0	.8	1.7	5.6
79-08-29	1220	325	2.	87.	L1.	53.	44.3	1.7	3.4	7.3
79-11-08	1100	325	1.	49.	L1.	47.	50.7	1.7	4.1	6.4
MINIMUM			L1.	29.	L1.	11.	20.0	.8	1.7	5.6
MAXIMUM			6.	87.	3.	68.	60.6	2.1	4.5	7.3
MEAN/MOYENNE			*2.	63.	*1.	41.	40.9	1.5	3.1	6.7
STD.DEV./ECART-TYPE			*2.	24.	*1.	22.	14.3	.5	1.1	.6
GMEAN/MOYENNEG			*2.	58.	*1.	35.	38.6	1.4	3.0	6.7
MEDIAN/MEDIANE			2.	64.	L1.	47.	41.0	1.6	3.1	6.8
FLAG/IND.-L			1	0	3	0	0	0	0	0
-G			0	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			5	5	5	5	6	6	6	6

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0012 LAT. 49D OM OS LONG. 114D 24M 20S
ELDER CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406R PHOSPHORUS TOTAL P MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	17206L CHLORIDE DISSOLVED CL MG/L	19103L POTASSIUM DISSOLVED K MG/L	20101L CALCIUM DISSOLVED CA MG/L	25304R MANGANESE EXTRBLE. MN MG/L	25004R MANGANESE TOTAL MN MG/L
78-08-16	0900	325	.006	4.3	.1	.3	10.5	--	L.010
79-04-03	1400	325	.005	5.5	.3	L.2	16.9	--	--
79-05-15	1235	325	.010	3.1	.4	.2	9.1	L.010	--
79-06-14	1230	325	.004	2.6	.2	.1	5.2	--	L.010
79-08-29	1220	325	.004	5.2	L.2	.2	12.2	.013	--
79-11-08	1100	325	.003	9.0	L.2	L.2	13.6	L.010	--
		MINIMUM	.003	2.6	.1	.1	5.2	L.010	L.010
		MAXIMUM	.010	9.0	.4	.3	16.9	.013	L.010
		MEAN/MOYENNE	.005	5.0	*.2	*.2	11.3	*.011	*.010
		STD.DEV./ECART-TYPE	.003	2.3	*.1	*.1	4.0	--	--
		GMEAN/MOYENNEG	.005	4.6	*.2	*.2	10.6	*.011	*.010
		MEDIAN/MEDIANE	.005	4.8	*.2	*.2	11.4	--	--
		FLAG/IND.-L	0	0	2	2	0	2	2
		-G	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			6	6	6	6	6	3	2

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0012 LAT. 49D OM OS LONG. 114D 24M 20S
ELDER CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	26005R IRON TOTAL FE MG/L	26305R IRON EXTRBLE. FE MG/L	28002R NICKEL TOTAL NI MG/L	28302R NICKEL EXTRBLE. NI MG/L	29005R COPPER TOTAL CU MG/L	29305R COPPER EXTRBLE. CU MG/L	30005R ZINC TOTAL ZN MG/L	30305R ZINC EXTRBLE. ZN MG/L
78-08-16	0900	325	.050	--	--	--	.002	--	.007	--
79-05-15	1235	325	--	.250	--	L.001	--	.001	--	L.001
79-06-14	1230	325	.026	--	L.001	--	.004	--	L.001	--
79-08-29	1220	325	--	.017	--	.001	--	.006	--	L.001
79-11-08	1100	325	--	.009	--	.001	--	.002	--	L.001
		MINIMUM	.026	.009	L.001	L.001	.002	.001	L.001	L.001
		MAXIMUM	.050	.250	L.001	.001	.004	.006	.007	L.001
		MEAN/MOYENNE	.038	.092	*.001	*.001	.003	.003	*.004	*.001
		STD.DEV./ECART-TYPE	--	--	--	--	--	--	--	--
		GMEAN/MOYENNEG	.036	.034	*.001	*.001	.003	.002	*.003	*.001
		MEDIAN/MEDIANE	--	--	--	--	--	--	--	--
		FLAG/IND.-L	0	0	1	1	0	0	1	3
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	2	3	1	3	2	3	2	3

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0012 LAT. 49D OM OS LONG. 114D 24M 20S
ELDER CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	48302R CADMIUM EXTRBLE. CD MG/L	56301R BARIUM EXTRBLE. BA MG/L	80311R MERCURY EXTRBLE. HG UG/L	82002R LEAD TOTAL PB MG/L	82302R LEAD EXTRBLE. PB MG/L
78-08-16	0900	325	--	--	--	L.10	--	L.001	--
79-04-03	1400	325	.0001	L.0001	--	--	L.05	--	--
79-05-15	1235	325	.0001	L.0001	--	L.10	L.05	--	L.001
79-06-14	1230	325	L.0001	L.0001	--	L.10	L.05	L.001	--
79-08-29	1220	325	.0004	L.0001	L.0005	L.10	L.05	--	L.001
79-11-08	1100	325	L.0001	L.0001	L.0005	.10	L.05	--	L.001
		MINIMUM	L.0001	L.0001	L.0005	L.10	L.05	L.001	L.001
		MAXIMUM	.0004	L.0001	L.0005	.10	L.05	L.001	L.001
		MEAN/MOYENNE	*.0002	*.0001	*.0005	*.10	*.05	*.001	*.001
		STD.DEV./ECART-TYPE	*.0001	*0.0000	--	*.00	*0.00	--	--
		GMEAN/MOYENNEG	*.0001	*.0001	*.0005	*.10	*.05	*.001	*.001
		MEDIAN/MEDIANE	.0001	L.0001	--	L.10	L.05	--	--
		FLAG/IND.-L	2	5	2	4	5	2	3
		-G	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	5	5	2	5	5	2	3

FOOTNOTE: L - LESS THAN DETECTION LIMIT / PLUS PETIT QUE LA LIMITE DE DETECTION
NOTEZ BIEN: G - GREATER THAN MEASUREMENT LIMIT / PLUS GRAND QUE LA LIMITE MESURE
* - THESE STATISTICS INCLUDE FLAGGED VALUES / CES STATISTIQUES COMPORTENT DES VALEURS INDICATIVES

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0011
SAGE CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

LAT. 49D OM OS LONG. 114D 27M 29S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	02041L SPECIFIC CONDUCT. USIE/CM	02061L TEMP. WATER DEG.C.	02061S TEMP. WATER DEG.C.	02073L TURBIDITY JTU	06001R CARBON TOTAL ORGANIC C MG/L	06051R CARBON TOTAL INORGANIC C MG/L	06903R CARBON PARTICULATE C MG/L
78-08-16	1300	325	L5.	168.00	20.9	11.0	.5	--	--	.082
79-04-03	1500	325	L5.	208.00	19.4	--	.3	L3.2	22.0	--
79-05-15	1445	325	5.	122.00	21.4	--	1.9	4.4	8.7	.247
79-06-14	1410	325	5.	84.20	20.5	--	1.8	3.4	8.7	--
79-08-29	1420	325	L5.	196.00	20.6	--	.3	5.7	18.7	.066
79-11-08	0940	325	L5.	209.00	20.2	3.0	.5	3.7	27.3	.053
80-08-26	1220	325	5.	187.00	21.3	--	.4	L1.0	19.0	.083
		MINIMUM	L5.	84.20	19.4	3.0	.3	L1.0	8.7	.053
		MAXIMUM	5.	209.00	21.4	11.0	1.9	5.7	27.3	.247
		MEAN/MOYENNE	*5.	167.74	20.6	7.0	.8	*3.6	17.4	.106
		STD.DEV./ECART-TYPE	*0.	47.55	.7	--	.7	*1.6	7.4	.080
		GMEAN/MOYENNEG	*5.	160.55	20.6	5.7	.6	*3.2	15.9	.090
		MEDIAN/MEDIANE	L5.	187.00	20.6	--	.5	3.6	18.8	.082
		FLAG/IND.-L	4	0	0	0	.0	2	0	0
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	7	7	7	2	7	6	6	5

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0011 LAT. 49D OM OS LONG. 114D 27M 29S
SAGE CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	07110R NITROGEN DISSOLVED NO3 & NO2 N MG/L	07557R NITROGEN DISSOLVED AMMONIA N MG/L	07655R NITROGEN TOTAL DISSOLVED N MG/L	07903R NITROGEN PARTICULATE N MG/L	09106L FLUORIDE DISSOLVED F MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10301L PH PH UNITS
78-08-16	1300	325	.016	L.002	.043	.006	L.05	77.7	0.0	8.1
79-04-03	1500	325	.089	.003	.133 51R	--	L.05	93.3	0.0	8.1
79-05-15	1445	325	.084	.004	.138	.021	L.05	56.7	0.0	8.2
79-06-14	1410	325	.018	.002	.045 51R	--	L.05	39.2	0.0	7.9
79-08-29	1420	325	.020	.005	.053	L.005	L.05	93.1	0.0	8.2
79-11-08	0940	325	.046	.010	.073	L.005	.07	106.0	0.0	8.0
80-08-26	1220	325	.012	L.002	.047	L.007	L.05	83.1	0.0	8.1
		MINIMUM	.012	L.002	.043	L.005	L.05	39.2	0.0	7.9
		MAXIMUM	.089	.010	.138	.021	.07	106.0	0.0	8.2
		MEAN/MOYENNE	.041	*.004	.076	*.009	*.05	78.4	0.0	8.1
		STD.DEV./ECART-TYPE	.033	*.003	.042	*.007	*.01	23.2	0.0	.1
		GMEAN/MOYENNEG	.030	*.003	.068	*.007	*.05	74.9	1.0	8.1
		MEDIAN/MEDIANE	.020	.003	.053	.006	L.05	83.1	0.0	8.1
		FLAG/IND.-L	0	2	0	3	6	0	0	0
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	7	7	7	5	7	7	7	7

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0011 LAT. 49D OM OS LONG. 114D 27M 29S
SAGE CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	10603L HARDNESS TOTAL CACO3 MG/L	11103L SODIUM DISSOLVED NA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	14105L SILICA REACTIVE SIO2 MG/L
78-08-16	1300	325	--	--	--	--	83.3	1.6	5.4	5.4
79-04-03	1500	325	L1.	126.	L1.	111.	104.0	2.1	7.2	5.1
79-05-15	1445	325	14.	81.	10.	45.	56.0	1.3	4.4	4.8
79-06-14	1410	325	8.	52.	6.	35.	42.8	.8	3.4	4.2
79-08-29	1420	325	2.	145.	L1.	96.	101.0	1.8	6.8	6.0
79-11-08	0940	325	2.	134.	L1.	116.	119.0	1.8	8.6	5.8
80-08-26	1220	325	2.	95.	L1.	88.	92.6	1.5	5.9	5.6
		MINIMUM	L1.	52.	L1.	35.	42.8	.8	3.4	4.2
		MAXIMUM	14.	145.	10.	116.	119.0	2.1	8.6	6.0
		MEAN/MOYENNE	*5.	106.	*3.	82.	85.5	1.6	6.0	5.3
		STD.DEV./ECART-TYPE	•5.	36.	*4.	34.	27.2	.4	1.8	.6
		GMEAN/MOYENNEG	•3.	100.	*2.	75.	81.1	1.5	5.7	5.2
		MEDIAN/MEDIANE	2.	111.	L1.	92.	92.6	1.6	5.9	5.4
		FLAG/IND.-L	1	0	4	0	0	0	0	0
		-G	0	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	6	6	6	6	7	7	7	7

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0011 LAT. 49D OM OS LONG. 114D 27M 29S
SAGE CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	15406R PHOSPHORUS TOTAL P MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	17206L CHLORIDE DISSOLVED CL MG/L	19103L POTASSIUM DISSOLVED K MG/L	20101L CALCIUM DISSOLVED CA MG/L	25304R MANGANESE EXTRBLE. MN MG/L	25004R MANGANESE TOTAL MN MG/L
78-08-16	1300	325	.004	9.1	.4	.5	24.4	--	L.010
79-04-03	1500	325	.003	15.6	.7	.2	29.8	--	--
79-05-15	1445	325	.009	6.4	.6	.3	15.2	L.010	--
79-06-14	1410	325	.006	3.8	.3	.3	11.5	--	L.010
79-08-29	1420	325	.002	10.0	.5	.6	29.3	L.020	--
79-11-08	0940	325	.003	11.5	.5	.3	33.4	L.010	--
80-08-26	1220	325	.002	11.5	.7	.5	27.3	L.010	--
		MINIMUM	.002	3.8	.3	.2	11.5	L.010	L.010
		MAXIMUM	.009	15.6	.7	.6	33.4	L.020	L.010
		MEAN/MOYENNE	.004	9.7	.5	.4	24.4	*.012	*.010
		STD.DEV./ECART-TYPE	.002	3.8	.1	.1	8.1	--	--
		GMEAN/MOYENNEG	.004	8.9	.5	.4	23.0	*.012	*.010
		MEDIAN/MEDIANE	.003	10.0	.5	.3	27.3	--	--
		FLAG/IND.-L	0	0	0	0	0	4	2
		-G	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	7	7	7	7	7	4	2

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0011
SAGE CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

LAT. 49D OM OS LONG. 114D 27M 29S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	26005R IRON TOTAL FE MG/L	26305R IRON EXTRBLE. FE MG/L	28002R NICKEL TOTAL NI MG/L	28302R NICKEL EXTRBLE. NI MG/L	29005R COPPER TOTAL CU MG/L	29305R COPPER EXTRBLE. CU MG/L	30005R ZINC TOTAL ZN MG/L	30305R ZINC EXTRBLE. ZN MG/L
78-08-16	1300	325	.070	--	--	--	.001	--	.001	--
79-05-15	1445	325	--	.100	--	L.001	--	.004	--	L.001
79-06-14	1410	325	.260	--	L.001	--	.003	--	.001	--
79-08-29	1420	325	--	.013	--	.001	--	.002	--	L.001
79-11-08	0940	325	--	.011	--	.001	--	.003	--	.001
80-08-26	1220	325	--	.017	--	L.001	--	L.001	--	L.001
MINIMUM			.070	.011	L.001	L.001	.001	L.001	.001	.001
MAXIMUM			.260	.100	L.001	.001	.003	.004	.001	L.001
MEAN/MOYENNE			.165	.035	*.001	*.001	.002	*.002	.001	*.001
STD.DEV./ECART-TYPE			--	--	--	--	--	--	--	--
GMEAN/MOYENNEG			.135	.022	*.001	*.001	.002	*.002	.001	*.001
MEDIAN/MEDIANE			--	--	--	--	--	--	--	--
FLAG/IND.-L			0	0	1	2	0	1	0	3
-G			0	0	0	0	0	0	0	0
SAMPLES/ECHANTILLONS			2	4	1	4	2	4	2	4

NAQUADAT
DETAILED AND SUMMARY REPORT / RAPPORT DETAILLE ET SOMMAIRE

STATION - 00BC08NP0011 LAT. 49D OM OS LONG. 114D 27M 29S
SAGE CREEK AT OR NEAR U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	48302R CADMIUM EXTRBLE. CD MG/L	56301R BARIUM EXTRBLE. BA MG/L	80311R MERCURY EXTRBLE. HG UG/L	82002R LEAD TOTAL PB MG/L	82302R LEAD EXTRBLE. PB MG/L
78-08-16	1300	325	--	--	--	.26	--	L.001	--
79-04-03	1500	325	.0001	L.0001	--	--	L.05	--	--
79-05-15	1445	325	.0001	L.0001	--	.10	L.05	--	L.001
79-06-14	1410	325	.0002	L.0001	--	.10	L.05	L.001	--
79-08-29	1420	325	.0001	L.0001	L.0005	.20	L.05	--	L.001
79-11-08	0940	325	L.0001	L.0001	L.0005	.10	L.05	--	L.001
80-08-26	1220	325	--	--	L.0005	.20	L.05	--	L.001
		MINIMUM	L.0001	L.0001	L.0005	.10	L.05	L.001	L.001
		MAXIMUM	.0002	L.0001	L.0005	.26	L.05	L.001	L.001
		MEAN/MOYENNE	*.0001	*.0001	*.0005	.16	*.05	*.001	*.001
		STD.DEV./ECART-TYPE	*.0000	*0.0000	--	.07	*.00	--	--
		GMEAN/MOYENNEG	*.0001	*.0001	*.0005	.15	*.05	*.001	*.001
		MEDIAN/MEDIANE	.0001	L.0001	--	.15	L.05	--	--
		FLAG/IND.-L	1	5	3	0	6	2	4
		-G	0	0	0	0	0	0	0
		SAMPLES/ECHANTILLONS	5	5	3	6	6	2	4

FOOTNOTE: L - LESS THAN DETECTION LIMIT / PLUS PETIT QUE LA LIMITE DE DETECTION
NOTEZ BIEN: G - GREATER THAN MEASUREMENT LIMIT / PLUS GRAND QUE LA LIMITE MESURE
* - THESE STATISTICS INCLUDE FLAGGED VALUES / CES STATISTIQUES COMPORTENT DES VALEURS INDICATIVES

TABLE 4

Replicate Data and Descriptive Statistics for Total Phosphorus (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982

Location & Date	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:							
3 Apr 1979	0.003	0.004	0.004	0.004	0.001	0.004	1.181
15 May 1979	0.005	0.004	0.004	0.004	0.001	0.004	1.138
14 June 1979	0.003	0.003	0.003	0.003	0.000	0.003	1.000
29 Aug 1979	0.004	0.003	L0.002	0.003	0.001	0.003	1.417
8 Nov 1979	0.002	0.002	0.002	0.002	0.000	0.002	1.000
26 Aug 1980	0.002	L0.001	0.002	0.002	0.001	0.002	1.492
28 July 1982	0.003	0.003	0.003	0.003	0.000	0.003	1.000
Kishinena Creek:							
16 Aug 1978	0.003	0.002	0.002	0.002	0.001	0.002	1.264
3 Apr 1979	0.002	L0.002	0.002	0.002	0.000	0.002	1.000
15 May 1979	0.006	0.005	0.005	0.005	0.001	0.005	1.111
14 June 1979	0.003	0.003	0.003	0.003	0.000	0.003	1.000
28 Aug 1979	0.002	0.003	L0.002	0.002	0.001	0.002	1.264
29 Aug 1979	L0.002	L0.002	L0.002	L0.002	0.000	L0.002	1.000
8 Nov 1979	0.002			-	-	-	-
29 Aug 1980	0.001	0.002	0.002	0.002	0.001	0.002	1.492
28 July 1982	0.003	0.002	0.002	0.002	0.001	0.002	1.264
Elder Creek:							
16 Aug 1978	0.005	0.007	0.007	0.006	0.001	0.006	1.214
3 Apr 1979	0.005	0.005	0.005	0.005	0.000	0.005	1.000
15 May 1979	0.011	0.010	0.010	0.010	0.001	0.010	1.056
14 June 1979	0.004	0.004	0.003	0.004	0.001	0.004	1.181
29 Aug 1979	0.004	0.004	0.004	0.004	0.000	0.004	1.000
8 Nov 1979	0.003	0.003	0.003	0.003	0.000	0.003	1.000
Sage Creek:							
16 Aug 1978	0.005	0.003	0.004	0.004	0.001	0.004	1.292
3 Apr 1979	0.003	0.004	0.003	0.003	0.001	0.003	1.181
15 May 1979	0.009	0.009	0.008	0.009	0.001	0.009	1.070
14 June 1979	0.004	0.008	0.006	0.006	0.002	0.006	1.416
29 Aug 1979	0.002	0.002	L0.002	0.002	0.000	0.002	1.000
8 Nov 1979	0.006	L0.002	L0.002	0.003	0.002	0.003	1.886
26 Aug 1980	0.001	0.003	0.001	0.002	0.001	0.001	1.697

TABLE 5

Replicate Data and Descriptive Statistics for Particulate Nitrogen (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982

Location & Date	Replicates				Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:								
15 May 1979	0.005	0.009	0.006		0.007	0.002	0.007	1.351
29 Aug 1979	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
8 Nov 1979	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
26 Aug 1980	L0.007	L0.012	L0.007		L0.009	0.003	L0.008	1.365
28 July 1982	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
Kishinena Creek:								
16 Aug 1978	L0.005	L0.005			L0.005	0.000	L0.005	1.000
3 Apr 1979	L0.005	0.035	L0.005		0.015	0.017	0.010	3.076
15 May 1979	0.013	0.013	0.014		0.013	0.001	0.013	1.044
28 Aug 1979	0.007	L0.005	L0.005		0.006	0.001	0.006	1.214
29 Aug 1979	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
8 Nov 1979	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
26 Aug 1980	L0.007	L0.007	L0.007		L0.007	0.000	L0.007	1.000
28 July 1982	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
Elder Creek:								
16 Aug 1978	0.014	L0.005			0.010	0.006	0.008	2.071
15 May 1979	0.015	0.013	0.015		0.014	0.001	0.014	1.086
29 Aug 1979	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
8 Nov 1979	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
Sage Creek:								
16 Aug 1978	L0.005	0.007			0.006	0.001	0.006	1.269
15 May 1979	0.020	0.019	0.024		0.021	0.003	0.021	1.131
29 Aug 1979	L0.005	L0.005	L0.005	L0.005	L0.005	0.000	L0.005	1.000
8 Nov 1979	L0.005	L0.005	L0.005		L0.005	0.000	L0.005	1.000
26 Aug 1980	L0.007	L0.007	L0.007		L0.007	0.000	L0.007	1.000

TABLE 6

Replicate Data and Descriptive Statistics for Dissolved Nitrates and Nitrites (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982

Location & Date	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:							
3 Apr 1979	0.044	0.045	0.043	0.044	0.001	0.044	1.023
15 May 1979	0.040	0.040	0.039	0.040	0.001	0.040	1.014
14 June 1979	0.028	0.028	0.029	0.028	0.001	0.028	1.020
29 Aug 1979	0.014	0.014	0.014	0.014	0.000	0.014	1.000
8 Nov 1979	0.030	0.030	0.030	0.030	0.000	0.030	1.000
26 Aug 1980	0.010	0.014	0.011	0.012	0.002	0.012	1.189
28 July 1982	0.007	0.007	0.008	0.007	0.001	0.007	1.080
Kishinena Creek:							
16 Aug 1978	0.011	0.010		0.011	0.001	0.011	1.070
3 Apr 1979	0.056	0.066	0.064	0.062	0.005	0.062	1.091
15 May 1979	0.091	0.092	0.092	0.092	0.001	0.092	1.006
14 June 1979	0.029	0.030	0.029	0.029	0.001	0.029	1.020
28 Aug 1979	0.021	0.020	0.021	0.021	0.001	0.021	1.028
29 Aug 1979	0.025	0.025	0.024	0.025	0.001	0.025	1.024
8 Nov 1979	0.044	0.044	0.044	0.044	0.000	0.044	1.000
26 Aug 1980	0.019	0.016	0.016	0.017	0.002	0.017	1.104
28 July 1982	0.004	0.003	0.004	0.004	0.001	0.004	1.181
Elder Creek:							
16 Aug 1978	0.004	0.004		0.004	0.000	0.004	1.000
3 Apr 1979	0.037	0.036	0.035	0.036	0.001	0.036	1.028
15 May 1979	0.002	L0.002	0.003	0.002	0.001	0.002	1.264
14 June 1979	0.004	0.003	0.003	0.003	0.001	0.003	1.181
29 Aug 1979	0.003	0.003	0.003	0.003	0.000	0.003	1.000
8 Nov 1979	0.003	0.003	0.003	0.003	0.000	0.003	1.000
Sage Creek:							
16 Aug 1978	0.016	0.016		0.016	0.000	0.016	1.000
3 Apr 1979	0.089	0.090	0.088	0.089	0.001	0.089	1.011
15 May 1979	0.083	0.084	0.084	0.084	0.001	0.084	1.007
14 June 1979	0.017	0.018	0.018	0.018	0.001	0.018	1.033
29 Aug 1979	0.020	0.020	0.020	0.020	0.000	0.020	1.000
8 Nov 1979	0.046	0.046	0.046	0.046	0.000	0.046	1.000
26 Aug 1980	0.013	0.012	0.012	0.012	0.001	0.012	1.047

TABLE 7

Replicate Data and Descriptive Statistics for Dissolved Ammonia (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982

Location & Date	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:							
3 Apr 1979	L0.002	0.002	0.002	0.002	0.000	0.002	1.000
15 May 1979	0.005	0.004	0.004	0.004	0.001	0.004	1.138
14 June 1979	L0.002	L0.002	L0.002	L0.002	0.000	L0.002	1.000
29 Aug 1979	0.004	0.004	0.005	0.004	0.001	0.004	1.138
8 Nov 1979	0.010	0.011	0.009	0.010	0.001	0.010	1.106
26 Aug 1980	0.002	0.002	0.017	0.007	0.009	0.004	3.440
28 July 1982	L0.002	L0.002	0.002	L0.002	0.000	L0.002	1.000
Kishinena Creek:							
16 Aug 1978	L0.002	L0.002		L0.002	0.000	L0.002	1.000
3 Apr 1979	0.002	0.002	0.004	0.003	0.001	0.003	1.492
15 May 1979	0.005	0.005	0.005	0.005	0.000	0.005	1.000
14 June 1979	0.003	L0.002	0.004	0.003	0.001	0.003	1.417
28 Aug 1979	0.007	0.005	0.005	0.006	0.001	0.006	1.214
29 Aug 1979	0.006	0.006	0.006	0.006	0.000	0.006	1.000
8 Nov 1979	0.008	0.007	0.007	0.007	0.001	0.007	1.080
26 Aug 1980	0.003	L0.002	0.002	0.002	0.001	0.002	1.264
28 July 1982	L0.002	L0.002	L0.002	L0.002	0.000	L0.002	1.000
Elder Creek:							
16 Aug 1978	L0.002	L0.002		L0.002	0.000	L0.002	1.000
3 Apr 1979	L0.002	L0.002	L0.002	L0.002	0.000	L0.002	1.000
15 May 1979	0.005	0.005	0.005	0.005	0.000	0.005	1.000
14 June 1979	L0.002	L0.002	L0.002	L0.002	0.000	L0.002	1.000
29 Aug 1979	0.004	0.005	0.004	0.004	0.001	0.004	1.138
8 Nov 1979	0.008	0.008	0.008	0.008	0.000	0.008	1.000
Sage Creek:							
16 Aug 1978	L0.002	L0.002		L0.002	0.000	L0.002	1.000
3 Apr 1979	0.002	0.004	0.002	0.003	0.001	0.003	1.492
15 May 1979	0.002	0.005	0.006	0.004	0.002	0.004	1.802
14 June 1979	L0.002	0.003	L0.002	0.002	0.001	0.002	1.264
29 Aug 1979	0.004	0.006	0.005	0.005	0.001	0.005	1.225
8 Nov 1979	0.011	0.010	0.009	0.010	0.001	0.010	1.106
26 Aug 1980	L0.002	L0.002	L0.002	L0.002	0.000	L0.002	1.000

TABLE 8

Replicate Data and Descriptive Statistics for Total Dissolved Nitrogen (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982

Location & Date	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:							
3 Apr 1979	0.045	0.055	0.053	0.051	0.005	0.051	1.113
15 May 1979	0.055	0.060	0.060	0.058	0.003	0.058	1.051
14 June 1979	0.045	0.045	0.045	0.045	0.000	0.045	1.000
29 Aug 1979	0.025	0.025	0.025	0.025	0.000	0.025	1.000
8 Nov 1979	0.041	0.041	0.041	0.041	0.000	0.041	1.000
26 Aug 1980	0.032	0.055	0.045	0.044	0.012	0.043	1.315
28 July 1982	0.027	0.024	0.031	0.027	0.004	0.027	1.137
Kishinena Creek:							
16 Aug 1978	0.043	0.046		0.045	0.002	0.045	1.049
3 Apr 1979	0.085	0.086	0.090	0.087	0.003	0.087	1.031
15 May 1979	0.120	0.125	0.125	0.123	0.003	0.123	1.024
14 June 1979	0.055	0.055	0.055	0.055	0.000	0.055	1.000
28 Aug 1979	0.050	0.050	0.045	0.048	0.003	0.048	1.063
29 Aug 1979	0.045	0.045	0.045	0.045	0.000	0.045	1.000
8 Nov 1979	0.065	0.061	0.061	0.062	0.002	0.062	1.037
26 Aug 1980	0.050	0.040	0.040	0.043	0.006	0.043	1.138
28 July 1982	0.028	0.027	0.027	0.027	0.001	0.027	1.021
Elder Creek:							
16 Aug 1978	0.033	0.029		0.031	0.003	0.031	1.096
3 Apr 1979	0.070	0.065	0.070	0.068	0.003	0.068	1.044
15 May 1979	0.120	0.120	0.120	0.120	0.000	0.120	1.000
14 June 1979	0.045	0.040	0.035	0.040	0.005	0.040	1.134
29 Aug 1979	0.030	0.030	0.030	0.030	0.000	0.030	1.000
8 Nov 1979	0.031	0.031	0.031	0.031	0.000	0.031	1.000
Sage Creek:							
16 Aug 1978	0.043	0.043		0.043	0.000	0.043	1.000
3 Apr 1979	0.130	0.140	0.130	0.133	0.006	0.133	1.044
15 May 1979	0.140	0.135	0.140	0.138	0.003	0.138	1.021
14 June 1979	0.045	0.045	0.045	0.045	0.000	0.045	1.000
29 Aug 1979	0.055	0.055	0.050	0.053	0.003	0.053	1.057
8 Nov 1979	0.071	0.076	0.071	0.073	0.003	0.073	1.040
26 Aug 1980	0.045	0.045	0.050	0.047	0.003	0.047	1.063

TABLE 9

Replicate Data and Descriptive Statistics for Particulate Carbon (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982

Location & Date	Replicates				Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:								
15 May 1979	0.096	0.110	0.108		0.105	0.008	0.105	1.077
29 Aug 1979	0.047	0.037	0.038		0.041	0.006	0.040	1.140
8 Nov 1979	0.028	0.027	0.022		0.026	0.003	0.026	1.139
26 Aug 1980	0.052	0.083	0.047		0.061	0.020	0.059	1.354
28 July 1982	0.036	0.045	0.049		0.043	0.007	0.043	1.173
Kishinena Creek:								
16 Aug 1978	0.077	0.057			0.067	0.014	0.066	1.237
3 Apr 1979	0.052	0.075	0.046		0.058	0.015	0.056	1.290
15 May 1979	0.182	0.155	0.167		0.168	0.014	0.168	1.084
28 Aug 1979	0.097	0.077	0.069		0.081	0.014	0.080	1.190
29 Aug 1979	0.072	0.073	0.074		0.073	0.001	0.073	1.014
8 Nov 1979	0.028	0.028	0.026		0.027	0.001	0.027	1.044
26 Aug 1980	0.061	0.060	0.061		0.061	0.001	0.061	1.009
28 July 1982	0.069	0.071	0.067		0.069	0.002	0.069	1.029
Elder Creek:								
16 Aug 1978	0.082	0.039			0.061	0.030	0.057	1.691
15 May 1979	0.148	0.174	0.146		0.156	0.016	0.156	1.103
29 Aug 1979	0.058	0.061	0.068		0.062	0.005	0.062	1.085
8 Nov 1979	0.028	0.038	0.039		0.035	0.006	0.035	1.202
Sage Creek:								
16 Aug 1978	0.076	0.088			0.082	0.009	0.082	1.109
15 May 1979	0.239	0.245	0.258		0.247	0.010	0.247	1.040
29 Aug 1979	0.066	0.066	0.065	0.067	0.066	0.001	0.066	1.012
8 Nov 1979	0.049	0.053	0.056		0.053	0.004	0.053	1.069
26 Aug 1980	0.079	0.086	0.085		0.083	0.004	0.083	1.047

TABLE 10

Replicate Data and Descriptive Statistics for Total Inorganic Carbon (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1979-1982

Location & Date	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:							
3 Apr 1979	11.0	11.0	11.0	11.0	0.00	11.0	1.00
15 May 1979	6.1	6.1	6.1	6.1	0.00	6.1	1.00
14 June 1979	8.1	7.7	8.6	8.1	0.45	8.1	1.06
29 Aug 1979	7.7	10.0	8.5	8.7	1.17	8.7	1.14
8 Nov 1979	6.8	8.6	7.9	7.8	0.91	7.7	1.13
26 Aug 1980	9.0	9.0	9.0	9.0	0.00	9.0	1.00
28 July 1982	11.0	11.0	12.0	11.3	0.58	11.3	1.05
Kishinena Creek:							
3 Apr 1979	16.0	16.0	16.0	16.0	0.00	16.0	1.00
15 May 1979	7.9	10.0	9.2	9.0	1.06	9.0	1.13
14 June 1979	8.6	9.0	9.0	8.9	0.23	8.9	1.03
28 Aug 1979	14.0	14.0	14.0	14.0	0.00	14.0	1.00
29 Aug 1979	15.0	15.0	15.0	15.0	0.00	15.0	1.00
8 Nov 1979	12.0	13.0	12.0	12.3	0.58	12.3	1.05
26 Aug 1980	14.0	14.0	14.0	14.0	0.00	14.0	1.00
28 July 1982	13.0	13.0	13.0	13.0	0.00	13.0	1.00
Elder Creek:							
3 Apr 1979	15.0	15.0	15.0	15.0	0.00	15.0	1.00
15 May 1979	5.7	7.4	7.0	6.7	0.89	6.7	1.15
14 June 1979	3.3	3.3	3.3	3.3	0.00	3.3	1.00
29 Aug 1979	8.5	7.7	7.7	8.0	0.46	8.0	1.06
8 Nov 1979	8.9	10.0	8.9	9.3	0.64	9.3	1.07
Sage Creek:							
3 Apr 1979	22.0	23.0	21.0	22.0	1.00	22.0	1.05
15 May 1979	10.0	7.9	8.3	8.7	1.12	8.7	1.13
14 June 1979	8.4	9.0	8.6	8.7	0.31	8.7	1.04
29 Aug 1979	18.0	19.0	19.0	18.7	0.58	18.7	1.03
8 Nov 1979	27.0	29.0	26.0	27.3	1.53	27.3	1.06
26 Aug 1980	19.0	19.0	19.0	19.0	0.00	19.0	1.00

TABLE 11

Replicate Data and Descriptive Statistics for Total Organic Carbon (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1979-1982

Location & Date	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:							
3 Apr 1979	L1.5	L1.5	L1.5	L1.5	0.00	L1.5	1.00
15 May 1979	3.2	2.6	2.6	2.8	0.35	2.8	1.13
14 June 1979	3.3	2.6	3.9	3.3	0.65	3.2	1.23
29 Aug 1979	3.8	3.5	L1.4	2.9	1.31	2.7	1.74
8 Nov 1979	4.7	2.6	4.7	4.0	1.21	3.9	1.41
26 Aug 1980	L1.0	L1.0	L1.0	L1.0	0.00	L1.0	1.00
28 July 1982	7.1	L0.59	L0.60	2.8	3.76	1.4	4.18
Kishinena Creek:							
3 Apr 1979	2.4	2.3	2.3	2.3	0.06	2.3	1.02
15 May 1979	1.9	2.5	2.8	2.4	0.46	2.4	1.22
14 June 1979	3.9	4.6	3.5	4.0	0.56	4.0	1.15
28 Aug 1979	L2.0	L2.0	L2.0	L2.0	0.00	L2.0	1.00
29 Aug 1979	2.5	2.0	2.6	2.4	0.32	2.4	1.15
8 Nov 1979	3.7	2.2	4.4	3.4	1.12	3.3	1.43
26 Aug 1980	L1.0	L1.0	L1.0	L1.0	0.00	L1.0	1.00
28 July 1982	L0.67	L0.67	L0.67	L0.67	0.00	L0.67	1.00
Elder Creek:							
3 Apr 1979	2.3	L2.2	4.3	2.9	1.18	2.8	1.45
15 May 1979	6.9	8.5	7.3	7.6	0.83	7.5	1.11
14 June 1979	2.6	2.6	3.2	2.8	0.35	2.8	1.13
29 Aug 1979	4.7	4.5	3.4	4.2	0.70	4.2	1.19
8 Nov 1979	2.6	1.9	L1.4	2.0	0.60	1.9	1.36
Sage Creek:							
3 Apr 1979	L3.2	L3.4	L3.0	L3.2	0.20	L3.2	1.06
15 May 1979	3.1	4.1	6.0	4.4	1.47	4.2	1.39
14 June 1979	3.4	3.5	3.4	3.4	0.06	3.4	1.02
29 Aug 1979	4.3	5.1	7.7	5.7	1.78	5.5	1.35
8 Nov 1979	L3.7	L3.9	L3.6	L3.7	0.15	L3.7	1.04
26 Aug 1980	L1.0	L1.0	L1.0	L1.0	0.00	L1.0	1.00

TABLE 12a

Replicate Data and Descriptive Statistics for Extractable Metals (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, August 28-29, 1979
Values (except Hg) are mg/L; Hg is measured in µg/L

Location & Date Metal	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek, August 29:							
Ba	0.1	0.1	0.1	0.1	0.0	0.1	1.0
Cd	L0.0005	L0.0005	L0.0005	L0.0005	0.0000	L0.0005	1.0000
Cu	0.003	0.002	0.001	0.002	0.001	0.002	1.743
Fe	0.012	0.006	0.004	0.007	0.004	0.007	1.743
Hg	L0.05	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	0.01	0.01	0.02	0.01	0.01	0.01	1.49
Ni	0.002	0.002	0.002	0.002	0.000	0.002	1.000
Pb	0.001	L0.001	0.001	0.001	0.000	0.001	1.000
Zn	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Kishinena Creek, August 28:							
Ba	0.1	0.1	0.1	0.1	0.0	0.1	1.0
Cd	L0.0005	L0.0005	L0.0005	L0.0005	0.0000	L0.0005	1.0000
Cu	0.002	L0.001	0.003	0.002	0.001	0.002	1.743
Fe	0.012	0.011	0.012	0.012	0.001	0.012	1.052
Hg	L0.05	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	0.01	0.03	L0.02	0.02	0.01	0.02	1.74
Ni	0.001	0.002	0.001	0.001	0.001	0.001	1.492
Pb	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Zn	L0.001	0.001	L0.001	L0.001	0.000	L0.001	1.000
Kishinena Creek, August 29:							
Ba	0.1	0.1	0.1	0.1	0.0	0.1	1.0
Cd	L0.0005	L0.0005	L0.0005	L0.0005	0.0000	L0.0005	1.0000
Cu	L0.001	0.003	0.001	0.002	0.001	0.001	1.886
Fe	0.012	0.012	0.013	0.012	0.001	0.012	1.047
Hg	L0.05	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	0.03	L0.01	L0.01	0.02	0.01	0.01	1.886
Ni	0.001	0.001	0.001	0.001	0.000	0.001	1.000
Pb	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Zn	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000

TABLE 12a (Continued)

Location & Date Metal	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Elder Creek, August 29:							
Ba	L0.1	L0.1	L0.1	L0.1	0.0	L0.1	1.0
Cd	L0.0005	L0.0005	L0.0005	L0.0005	0.0000	L0.0005	1.0000
Cu	0.006	0.007	0.005	0.006	0.001	0.006	1.183
Fe	0.032	0.008	0.011	0.017	0.013	0.014	2.067
Hg	L0.05	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	0.02	L0.01	0.01	0.01	0.01	0.01	1.49
Ni	0.002	0.001	0.001	0.001	0.001	0.001	1.492
Pb	0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Zn	L0.001	0.001	L0.001	L0.001	0.000	L0.001	1.000
Sage Creek, August 29:							
Ba	0.2	0.2	0.2	0.2	0.0	0.2	1.0
Cd	L0.0005	L0.0005	L0.0005	L0.0005	0.0000	L0.0005	1.0000
Cu	0.001	0.001	0.003	0.002	0.001	0.001	1.886
Fe	0.013	0.014	0.013	0.013	0.001	0.013	1.044
Hg	L0.05	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	L0.02	L0.02	L0.02	L0.02	0.00	L0.02	1.00
Ni	0.001	0.001	0.001	0.001	0.000	0.001	1.000
Pb	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Zn	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000

TABLE 12b

Replicate Data and Descriptive Statistics for Extractable Metals (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, August 26, 1980
Values (except Hg) are mg/L; Hg is measured in µg/L

Location & Metal	Replicates			Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:							
Ba	0.2	0.2	0.2	0.2	0.0	0.2	1.0
Cd	L0.0005	L0.0005	L0.0005	L0.0005	0.0000	L0.0005	1.0000
Cu	0.001	L0.001	0.001	0.001	0.000	0.001	1.000
Fe	0.003	0.003	0.003	0.003	0.000	0.003	1.000
Hg	L0.05	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	L0.01	L0.01	L0.01	L0.01	0.00	L0.01	1.00
Ni	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Pb	L0.001	0.001	0.001	0.001	0.000	0.001	1.000
Zn	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Kishinena Creek:							
Ba	0.2	0.2	0.2	0.2	0.0	0.2	1.0
Cd	L0.0005	L0.0005	L0.0005	L0.0005	0.0000	L0.0005	1.0000
Cu	L0.001	0.001	0.001	0.001	0.000	0.001	1.000
Fe	0.009	0.020	0.011	0.013	0.001	0.013	1.515
Hg	L0.05	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	L0.01	L0.01	L0.01	L0.01	0.00	L0.01	1.00
Ni	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Pb	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Zn	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Sage Creek:							
Ba	0.2	0.2	0.2	0.2	0.0	0.2	1.0
Cd	L0.0005	L0.0005	L0.0005	L0.0005	0.0000	L0.0005	1.0000
Cu	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Fe	0.017	0.017	0.017	0.017	0.000	0.017	1.000
Hg	L0.05	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	L0.01	L0.01	L0.01	L0.01	0.00	L0.01	1.00
Ni	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Pb	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000
Zn	L0.001	L0.001	L0.001	L0.001	0.000	L0.001	1.000

TABLE 12c

Replicate Data and Descriptive Statistics for Extractable Metals (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, July 28, 1982
Values (except Hg) are mg/L; Hg is measured in µg/L

Location & Metal	Replicates		Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:						
Cu	0.002	0.001	0.002	0.001	0.001	1.633
Fe	0.008	0.006	0.007	0.001	0.007	1.226
Hg	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	L0.01	L0.01	L0.01	0.00	L0.01	1.00
Pb	0.002	0.002	0.002	0.000	0.002	1.000
Zn	0.006	0.001	0.004	0.004	0.002	3.550
Kishinena Creek:						
Cu	0.001	0.002	0.002	0.001	0.001	1.633
Fe	0.024	0.020	0.022	0.003	0.022	1.138
Hg	L0.05	L0.05	L0.05	0.00	L0.05	1.00
Mn	L0.01	L0.01	L0.01	0.00	L0.01	1.00
Pb	0.002	0.003	0.003	0.001	0.002	1.332
Zn	L0.001	0.001	L0.001	0.000	L0.001	1.000

TABLE 13

Replicate Data and Descriptive Statistics for Total Suspended Sediments (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982

Location & Date	Replicates				Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:								
3 Apr 1979	2				-	-	-	-
15 May 1979	3				-	-	-	-
14 June 1979	3	3			3	0.0	3	1.0
29 Aug 1979	2	1			2	0.7	1	1.6
8 Nov 1979	1				-	-	-	-
28 July 1982	1				-	-	-	-
Kishinena Creek:								
16 Aug 1978	2	2	1	1	2	0.6	1	1.5
3 Apr 1979	2	2			2	0.0	2	1.0
15 May 1979	6	4	5		5	1.0	5	1.2
14 June 1979	6	5	8		6	1.5	6	1.3
29 Aug 1979	0	10	3		4	5.1	3	3.3
8 Nov 1979	0	0	0		0	0.0	0	1.0
28 July 1982	3	2	2		2	0.6	2	1.3
Elder Creek:								
16 Aug 1978	1	1	1		1	0.0	1	1.0
3 Apr 1979	0				-	-	-	-
15 May 1979	6	4			5	1.4	5	1.3
14 June 1979	3	2			3	0.7	2	1.3
29 Aug 1979	1	0			1	0.7	-	-
8 Nov 1979	7				-	-	-	-
Sage Creek:								
16 Aug 1978	1	0	0		0	0.6	-	-
3 Apr 1979	3	3			3	0.0	3	1.0
15 May 1979	10	9			10	0.7	9	1.1
14 June 1979	6	8	7		7	1.0	7	1.2
29 Aug 1979	3	2	0		2	1.5	-	-
8 Nov 1979	3	1	2		2	1.0	2	1.7

TABLE 14

Replicate Data and Descriptive Statistics for Total Dissolved Solids (mg/L) Measured in the Akamina-Kishinena Watershed and Some Tributaries to the Flathead River, 1978-1982

Location & Date	Replicates				Arithmetic Mean	Standard Deviation	Geometric Mean	Geometric Factor
Akamina Creek:								
3 Apr 1979	86				-	-	-	-
15 May 1979	82				-	-	-	-
14 June 1979	68	62			65	4	65	1.07
29 Aug 1979	70	75			73	4	72	1.05
8 Nov 1979	80				-	-	-	-
28 July 1982	79				-	-	-	-
Kishinena Creek:								
16 Aug 1978	94	90	89	84	89	4	89	1.05
3 Apr 1979	96	91			94	4	93	1.04
15 May 1979	88	73	77		79	8	79	1.10
14 June 1979	63	57	49		56	7	56	1.13
29 Aug 1979	100	92	92		95	5	95	1.05
8 Nov 1979	100	103	100		101	2	101	1.02
28 July 1982	71	67	57		65	7	65	1.12
Elder Creek:								
16 Aug 1978	55	64	59		59	5	59	1.08
3 Apr 1979	59				-	-	-	-
15 May 1979	58	66			62	6	62	1.10
14 June 1979	43	34			39	6	38	1.18
29 Aug 1979	68	60			64	6	64	1.09
8 Nov 1979	55				-	-	-	-
Sage Creek:								
16 Aug 1978	94	115	104		104	11	104	1.11
3 Apr 1979	115	112			114	2	113	1.02
15 May 1979	71	67			69	3	69	1.04
14 June 1979	60	56	58		58	2	58	1.04
29 Aug 1979	104	109	109		107	3	107	1.03
8 Nov 1979	125	116	120		120	5	120	1.04

TABLE 15

Total Areas (cm^2) of Rocks From Which Periphyton Samples Were Collected

Akamina Creek		Kishinena Creek		Elder Creek		Sage Creek	
Rock No.	Area	Rock No.	Area	Rock No.	Area	Rock No.	Area
April 3, 1979							
T5A	232.0	T1A	112.0	T6A	79.2	T7A	197.4
T5B	78.0	T1B	65.3	T6B	106.7	T7B	210.9
T5C	50.7	T1C	102.6	T6C	182.6	T7C	224.3
T5D	118.8	T1D	62.1				
		T2A	337.2				
		T2B	91.9				
		T2C	90.2				
		T2D	196.5				
		T3A	164.7				
		T3B	113.1				
		T3C	81.6				
		T3D	520.4				
May 15, 1979							
A1	60.7	K 1	164.3	E1	114.8	S1	103.6
A2	37.7	K 2	140.0	E2	93.9	S2	94.0
A3	50.0	K 3	324.7	E3	101.7	S3	124.0
A4	123.2	K 4	168.9	E4	121.1	S4	113.1
		K 5	171.7				
		K 6	89.6				
		K 7	194.6				
		K 8	180.5				
		K 9	66.9				
		K10	149.5				
		K11	248.1				
		K12	173.6				
		K13	76.3				
		K14	102.7				
		K15	92.7				
		K16	69.7				
June 14, 1979							
A1	102.7	K 1	58.8	E1	88.9	S1	155.7
A2	92.4	K 2	89.8	E2	103.0	S2	150.8
A3	201.2	K 3	160.7	E3	186.4	S3	32.0
A4	90.7	K 4	89.3	E4	337.5	S4	112.3

TABLE 15 (Continued)

Akamina Creek		Kishinena Creek		Elder Creek		Sage Creek	
Rock No.	Area	Rock No.	Area	Rock No.	Area	Rock No.	Area
June 14, 1979 (Continued)							
		K 5	91.2				
		K 6	52.9				
		K 7	112.6				
		K 8	83.3				
		K 9	129.3				
		K10	101.0				
		K11	44.9				
		K12	24.8				
		K13	25.8				
		K14	93.8				
		K15	66.3				
		K16	146.8				
August 28-29, 1979							
A1	445.2	Y 1	209.0	E1	82.4	S1	266.2
A2	300.8	Y 2	105.2	E2	285.8	S2	135.8
A3	85.8	Y 3	88.6	E3	149.0	S3	122.2
A4	50.8	Y 4	191.4	E4	229.0	S4	198.8
		R 1	251.0				
		R 2	98.8				
		R 3	156.8				
		R 4	84.8				
		R 5	135.0				
		R 6	270.8				
		R 7	247.2				
		R 8	209.0				
		R 9	134.2				
		R10	119.0				
		R11	144.6				
		R12	128.4				
		R13	133.4				
		R14	185.0				
		R15	386.4				
		R16	164.4				
		R17	335.4				
		R18	148.8				
		R19	141.4				
		R20	113.2				
		R21	432.8				
		R22	182.2				
		R23	115.2				

TABLE 15 (Continued)

Akamina Creek Rock No.	Area	Kishinena Creek Rock No.	Area	Elder Creek Rock No.	Area	Sage Creek Rock No.	Area
August 29, 1979							
		RR 1	105.4				
		RR 2	77.4				
		RR 3	43.2				
		RR 4	122.4				
		RR 5	163.8				
		RR 6	121.8				
		RR 7	216.8				
		RR 8	62.6				
		RR 9	72.8				
		RR10	120.8				
		RR11	152.8				
		RR12	64.8				
		RR13	40.2				
		RR14	89.2				
		RR15	64.2				
		RR16	150.4				
		RR17	72.8				
		RR18	84.6				
		RR19	100.8				
		RR20	91.2				
		RR21	41.6				
		RR22	243.6				
		RR23	541.0				
		RR24	192.0				
		RR25	144.2				
		RR26	199.0				
		RR27	111.6				
November 8, 1979							
A1	67.8	K1	66.3	E1	163.6	S1	71.3
A2	42.7	K2	132.9	E2	119.4	S2	22.5
A3	75.4	K3	47.4	E3	75.7	S3	150.9
A4	38.2	K4	275.0	E4	56.9	S4	90.6

TABLE 15 (Continued)

Akamina Creek		Kishinena Creek		Elder Creek		Sage Creek	
Rock No.	Area	Rock No.	Area	Rock No.	Area	Rock No.	Area
August 26, 1980							
A1	85.9	K1	70.8				
A2	63.7	K2	53.6				
A3	112.6	K3	161.5				
A4	45.4	K4	125.1				
July 28, 1982							
A	681.1	A	233.9				
B	155.2	B	180.7				
C	196.7	C	206.0				
D	148.0	D	143.6				

TABLE 16a

Chlorophyll a Concentrations (mg/m^2) of Periphyton from Akamina Creek, 1979-1980

April 1979		May 1979		June 1979		August 1979		November 1979		August 1980	
Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.
T5B	13.0	A1	4.7	A1	0.78	A1	12.0	A1	1.73	A1	2.4
T5C	13.2	A2	5.1	A2	1.13	A2	1.0	A2	1.13	A2	1.2
		A3	4.3	A3	14.6	A3	0.27	A3	0.85	A3	1.3
		A4	2.7	A4	2.91	A4	0.07	A4	0.63	A4	4.6

TABLE 16b

Chlorophyll a Concentrations (mg/m^2) of Periphyton from Kishinena Creek, 1979-1980

April 1979		May 1979		June 1979		August 1979		November 1979		August 1980	
Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.
T1A	4.53	K1	0.13	K1	1.09	Y1	1.3	K1	8.73	K1	3.8
T1B	2.05	K2	1.7	K2	0.45	Y2	0.53	K2	2.97	K2	10.2
T1C	3.38	K3	1.9	K3	6.64	Y3	1.1	K3	1.42	K3	5.4
T1D	6.88	K4	16.0	K4	5.68	Y4	0.59	K4	1.09	K4	5.4
T2B	2.33	K5	0.33	K5	11.7	R1	0.54				
T2C	0.74	K6	2.3	K6	1.06	R2	1.8				
T3B	6.85	K7	0.72	K7	7.35	R3	1.4				
T3C	4.25	K8	5.9	K8	1.15	R4	1.3				
		K9	0.24	K9	4.13	R5	0.83				
		K10	0.32	K10	3.97	R6	0.71				
		K11	1.94	K11	1.62	R7	0.49				
		K12	9.23	K12	2.80	R8	0.35				
		K13	0.50	K13	3.56	R9	0.66				
		K14	0.20	K14	1.71	R10	1.0				
		K15	4.6	K15	1.45	R11	0.61				
		K16	0.57	K16	1.37	R12	0.69				
						R13	1.1				
						R14	0.56				
						R15	1.1				
						R16	1.4				
						R17	2.7				
						R18	1.2				
						R19	1.3				
						R20	1.6				
						R21	2.0				
						R22	2.1				
						R23	2.4				

TABLE 16b (Continued)

April 1979		May 1979		June 1979		August 1979		November 1979		August 1980	
Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.
						RR1	2.2				
						RR2	1.0				
						RR3	1.9				
						RR4	1.2				
						RR5	1.2				
						RR6	1.8				
						RR7	1.8				
						RR8	2.3				
						RR9	0.88				
						RR10	1.5				
						RR11	0.63				
						RR12	0.74				
						RR13	0.54				
						RR14	0.80				
						RR15	1.1				
						RR16	0.32				
						RR17	0.49				
						RR18	1.2				
						RR19	1.4				
						RR20	1.7				
						RR21	1.5				
						RR22	1.7				
						RR23	0.24				
						RR24	1.3				
						RR25	1.9				
						RR26	1.2				
						RR27	1.4				

TABLE 16c

Chlorophyll a Concentrations (mg/m^2) of Periphyton from Elder Creek, April - November 1979

April 1979		May 1979		June 1979		August 1979		November 1979	
Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.
T6A	7.75	E1	1.9	E1	3.43	E1	0.31	E1	5.97
		E2	0.80	E2	2.02	E2	5.3	E2	7.92
		E3	1.0	E3	12.9	E3	2.2	E3	12.47
		E4	0.83	E4	11.9	E4	21.0	E4	6.94

TABLE 16d

Chlorophyll a Concentrations (mg/m^2) of Periphyton from Sage Creek, May - November, 1979

May 1979		June 1979		August 1979		November 1979	
Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.	Rock No.	Chl.
S1	0.31	S1	5.14	S1	1.7	S1	15.53
S2	0.60	S2	0.32	S2	3.5	S2	14.39
S3	1.1	S3	0.25	S3	2.6	S3	17.26
S4	0.92	S4	0.21	S4	2.3	S4	51.10

TABLE 17

A List of All Chrysophyta, Chlorophyta and Cyanophyta Species Collected from the Akamina-Kishinena Watershed and Adjacent Tributaries to the Flathead River, 1978-1982

Chrysophyta - Bacillariophyceae

Coscinodiscales

Cyclotella glomerata Bachm.
Cyclotella ocellata Pant.
Melosira granulata (Ehr.) Ralfs
Melosira varians Ag.

Fragilariales

Ceratoneis arcus (Ehr.) Kütz.
Ceratoneis arcus var. amphioxys (Rabh.) Brun
Diatoma elongatum Lyngb.
Diatoma hiemale (Lyngb.) Heib.
Diatoma hiemale var. quadratum (Kütz.) Ross
Diatoma vulgare Bory
Fragilaria capucina Desm.
Fragilaria construens (Ehr.) Grun.
Fragilaria construens var. binodis (Ehr.) Grun.
Fragilaria construens var. venter (Ehr.) Grun.
Fragilaria crotonensis Kitton
Fragilaria leptostauron (Ehr.) Hust.
Fragilaria vaucheriae (Kütz.) Peters.
Meridion circulare (Grev.) Ag.
Meridion circulare var. constrictum (Ralfs) V.H.
Synedra acus var. radians (Kütz.) Hust.
Synedra acus var. angustissima Grun.
Synedra rumpens var. fragilarioides Grun.
Synedra ulna (Nitz.) Ehr.
Synedra ulna var. oxyrhynchus (Kütz.) V.H.
Tabellaria fenestrata (Lyngb.) Kütz.
Tabellaria flocculosa (Roth.) Kütz.

Achnanthales

Achnanthes flexella (Kütz.) Brun.
Achnanthes lanceolata (Bréb.) Grun
Achnanthes microcephala (Kütz.) Grun.
Achnanthes minutissima Kütz.
Achnanthes sp.
Cocconeis placentula Ehr.
Rhoicosphenia curvata (Kütz.) Grun.

TABLE 17 (Continued)

Naviculales

Amphipleura pellucida (Kütz.) Kütz.
Amphora coffeaeformis (Ag.) Kütz.
Amphora ovalis (Kütz.) Kütz.
Amphora sp.
Anomoeneis exilis (Kütz.) Cl.
Cymbella affinis Kütz.
Cymbella caespitosa (Kütz.) Brun
Cymbella cistula (Hempr.) Kirchn.
Cymbella mexicana (Ehr.) Cl.
Cymbella prostrata (Berk.) Cl.
Cymbella sinuata Greg.
Cymbella turgida Greg.
Cymbella ventricosa (Kütz.) Kütz.
Cymbella sp.
Diploneis decipiens Cl.-Eu.
Frustulia rhomboides (Ehr.) DT
Gomphonema geminatum (Lyngb.) Ag.
Gomphonema herculeanum Ehr.
Gomphonema intricatum Kütz.
Gomphonema lanceolatum Ehr.
Gomphonema olivaceoides var. densestriata Hust.
Gomphonema olivaceum (Lyngb.) Kütz.
Gomphonema parvulum (Kütz.) Kütz.
Gomphonema sp.
Gyrosigma sciotense (Sulliv. & Wormley)
Navicula arvensis Hust.
Navicula bicephala Hust.
Navicula pelliculosa Hilse
Navicula radiosa Kütz.
Navicula salinarum var. intermedia (Grun.) Cl.
Navicula scutelloides W. Sm. ex Greg.
Navicula tripunctata (O.F. Müll.)
Navicula viridula (Kütz.) Ehr.
Navicula sp. B
Navicula sp.
Neidium sp.
Pinnularia sp.
Stauroneis anceps Ehr.
Stauroneis sp.

TABLE 17 (Continued)

Surirellinees

Denticula elegans Kütz.
Epithemia sorex Kütz.
Epithemia turgida (Ehr.) Kütz.
Nitzschia acicularis (Kütz.) W. Sm.
Nitzschia dissipata (Kütz.) Grun.
Nitzschia frustulum (Kütz.) Grun.
Nitzschia hantzschiana Rabh.
Nitzschia linearis W. Sm.
Nitzschia palea (Kütz.) W. Sm.
Nitzschia sp.
Surirella angustata Kütz.

Chrysophyta - Chrysophyceae

Hydrurus foetidus (Vill.) Trev.
Unidentified Species

Chlorophyta

Closterium sp.
Cosmarium sp.
Microspora sp.
Mougeotia sp.
Oedogonium sp.
Spirogyra sp.
Stigeoclonium sp.
Ulothrix zonata (Weber & Mohr) Kütz.
Ulothrix sp.
Zygnema sp.
Unidentified filamentous
Unidentified unicellular

Cyanophyta

Gloeotrichia sp.
Lyngbya sp.
Merismopedia sp.
Oscillatoria sp. A
Oscillatoria sp. B
Oscillatoria sp.
Nostoc verrucosum Vauch.
Spirulina sp.

TABLE 18

Percent Composition (by volume) of Periphyton in Qualitative Samples Collected from some Tributaries to the North Fork of the Flathead River, August 16, 1978

+ denotes that the algal group or species made up < 5% of total algal volume examined
++ denotes that the algal group or species made up 5-20% of total algal volume examined
+++ denotes that the algal group or species made up >20% of total algal volume examined

Species	Kishinena Creek	Elder Creek	Sage Creek
Chrysophyta			
Bacillariophyceae	+++	+++	++
Cymbella spp.			*
Gomphonema spp.		*	*
Ceratoneis arcus	*		*
Non Diatom Chysophytes			
Hydrurus foetidus	++		
Chlorophyta			
Closterium sp.		+++	
Ulothrix zonata	+++		+++
Ulothrix sp.	++		
Cyanophyta			
Oscillatoria sp.		+	+
Nostoc verrucosum		+	

*Major Species

TABLE 19

Percent Composition (by volume) of Diatom and Non-Diatom Periphyton collected from the Akamina-Kishinena Watershed and Adjacent Tributaries to the Flathead River 1979-1982

Algal composition of qualitative samples is reported in intervals of percent composition (by volume) as follows:

+ denotes that the algal group or species made up < 5% of total algal volume examined
++ denotes that the algal group or species made up 5-20% of total algal volume examined
+++ denotes that the algal group or species made up >20% of total algal volume examined

Date: April 3, 1979
Station: Akamina Creek

Species	Rock Number 5A	5B	5C	5D
Chrysophyta				
Bacillariophyceae	35	59	60	65
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	65	41	40	35
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: April 3, 1979
Station: Kishinena Creek

Species	Rock Number 1A	1B	1C	1D	2A	2B	2C	2D
Chrysophyta								
Bacillariophyceae	99	100	99	100	100	100	100	99
Non-Diatom Chrysophytes								
Hydrurus foetidus	0	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0	0
Chlorophyta								
Closterium sp.	0	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0
Stigeoclonium sp.	0	0	0	0	0	0	0	0
Ulothrix zonata	0	0	0	0	0	0	0	0
Ulothrix sp.	1	0	1	0	0	0	0	1
Zygnema sp.	0	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0	0
Cyanophyta								
Gloeotrichia sp.	0	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0	0
Oscillatoria sp. A	0	0	0	0	0	0	0	0
Oscillatoria sp. B	0	0	0	0	0	0	0	0
Oscillatoria sp.	0	0	0	0	0	0	0	0
Nostoc verrucosum	0	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0	0

Date: April 3, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number 3A	3B	3C	3D
Chrysophyta				
Bacillariophyceae	100	100	99	100
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	1	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: April 3, 1979
Station: Elder Creek

Species	Rock Number 6A	6B	6C
Chrysophyta			
Bacillariophyceae	98	10	19
Non-Diatom Chrysophytes			
Hydrurus foetidus	0	0	0
Unidentified species	0	0	0
Chlorophyta			
Closterium sp.	0	0	0
Cosmarium sp.	0	0	0
Microspora sp.	0	0	0
Mougeotia sp.	0	0	0
Oedogonium sp.	0	0	0
Spirogyra sp.	0	0	0
Stigeoclonium sp.	0	0	0
Ulothrix zonata	0	0	0
Ulothrix sp.	0	0	0.8
Zygnema sp.	0	0	0
Unidentified unicellular	0	90	80.2
Cyanophyta			
Gloeotrichia sp.	0	0	0
Lyngbya sp.	0	0	0
Merismopedia sp.	0	0	0
Oscillatoria sp. A	0	0	0
Oscillatoria sp. B	0	0	0
Oscillatoria sp.	2	0	0
Nostoc verrucosum	0	0	0
Spirulina sp.	0	0	0

Date: April 3, 1979
Station: Sage Creek

Species	Rock Number 7A	7B	7C
Chrysophyta			
Bacillariophyceae	45	97	96
Non-Diatom Chrysophytes			
Hydrurus foetidus	0	0	0
Unidentified species	0	0	0
Chlorophyta			
Closterium sp.	0	0	0
Cosmarium sp.	0	0	0
Microspora sp.	0	0	0
Mougeotia sp.	0	0	0
Oedogonium sp.	0	0	0
Spirogyra sp.	0	0	0
Stigeoclonium sp.	0	0	0
Ulothrix zonata	0	0	0
Ulothrix sp.	55	0	1
Zygnema sp.	0	0	0
Unidentified unicellular	0	0	0
Cyanophyta			
Gloeotrichia sp.	0	0	0
Lyngbya sp.	0	0	0
Merismopedia sp.	0	0	0
Oscillatoria sp. A	0	0	0
Oscillatoria sp. B	0	3	3
Oscillatoria sp.	0	0	0
Nostoc verrucosum	0	0	0
Spirulina sp.	0	0	0

Date: May 15, 1979
Station: Akamina Creek

Species	Rock Number A1	A2	A3	A4
Chrysophyta				
Bacillariophyceae	100	90	95	100
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	10	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	trace	0	5	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock Number K1	K2	K3	K4	K5	K6	K7	K8
Chrysophyta								
Bacillariophyceae	100	90	89	90	95	96	91	90
Non-Diatom Chrysophytes								
Hydrurus foetidus	0	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0	0
Chlorophyta								
Closterium sp.	0	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	4
Oedogonium sp.	0	0	0	1.6	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0
Stigeoclonium sp.	0	2	1.6	2.4	2.5	0	6	0
Ulothrix zonata	0	0	0	0	0	0	0	0
Ulothrix sp.	0	0	2.4	0	2.5	0	0	6
Zygnema sp.	0	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0	0
Cyanophyta								
Gloeotrichia sp.	0	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	5.4	0	0	0	0
Merismopedia sp.	0	0	0	0.6	0	0	0	0
Oscillatoria sp. A	0	0	0	0	0	0	0	0
Oscillatoria sp. B	0	0	0	0	0	0	0	0
Oscillatoria sp.	0	8	7	0	0	4	3	0
Nostoc verrucosum	0	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0	0

Date: May 15, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number K9	K10	K11	K12	K13	K14	K15	K16
Chrysophyta								
Bacillariophyceae	100	97	100	80	100	98	95	100
Non-Diatom Chrysophytes								
Hydrurus foetidus	0	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0	0
Chlorophyta								
Closterium sp.	0	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	2	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0
Stigeoclonium sp.	0	0	0	0	0	0	0	0
Ulothrix zonata	0	0	0	0	0	0	0	0
Ulothrix sp.	0	0	0	0	0	0	3	0
Zygnema sp.	0	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0	0
Cyanophyta							2	
Gloeotrichia sp.	0	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	*	0
Merismopedia sp.	0	0	0	0	0	0	0	0
Oscillatoria sp. A	0	0	0	0	0	0	0	0
Oscillatoria sp. B	0	0	0	0	0	0	0	0
Oscillatoria sp.	0	3	0	20	0	0	*	0
Nostoc verrucosum	0	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0	0

*percentages unavailable

Date: May 15, 1979
Station: Elder Creek

Species	Rock Number E1	E2	E3	E4
Chrysophyta				
Bacillariophyceae	80	74	90	60
Non-Diatom Chrysophytes		25		
Hydrurus foetidus	trace	*	0	40
Unidentified species	15	*	9	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	trace	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	5	1	1	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

*percentages unavailable

Date: May 15, 1979
Station: Sage Creek

Species	Rock Number S1	S2	S3	S4
Chrysophyta				
Bacillariophyceae	55	40	40	55
Non-Diatom Chrysophytes	43			45
Hydrurus foetidus	*	60	60	*
Unidentified species	*	0	0	*
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	2	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

*percentages unavailable

Date: June 14, 1979
Station: Akamina Creek

Species	Rock Number A1	A2	A3	A4
Chrysophyta				
Bacillariophyceae	95	60	50	75
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	15	0
Unidentified species	3	0	0	20
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	40	0	0
Oscillatoria sp. B	0	0	17.5	5
Oscillatoria sp.	2	0	17.5	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.				

Date: June 14, 1979
Station: Kishinena Creek

Species	Rock Number K1	K2	K3	K4	K5	K6	K7	K8
Chrysophyta								
Bacillariophyceae	96	90	46	46	50	90	52	90
Non-Diatom Chrysophytes								
Hydrurus foetidus	1	7	4	4	0	0	trace	0
Unidentified species	0	0	0	0	0	0	0	0
Chlorophyta								
Closterium sp.	0	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0
Oedogonium sp.	0	0	2	0	0	0	3	0
Spirogyra sp.	0	0	0	0	0	0	0	0
Stigeoclonium sp.	0	0	0	0	0	0	0	0
Ulothrix zonata	0	0	0	0	0	0	0	0
Ulothrix sp.	0	0	0	0	0	0	0	0
Zygnema sp.	0	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0	0
Cyanophyta								
Gloeotrichia sp.	0	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0	0
Oscillatoria sp. A	0	0	0	0	0	0	0	0
Oscillatoria sp. B	0	0	0	40	45	0	4.5	7
Oscillatoria sp.	3	3	48	10	5	10	40.5	3
Nostoc verrucosum	0	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0	0

Date: June 14, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number K9	K10	K11	K12	K13	K14	K15	K16
Chrysophyta								
Bacillariophyceae	80	80	95	90	89	65	80	80
Non-Diatom Chrysophytes								
Hydrurus foetidus	10	10	0	6	0	35	10	10
Unidentified species	0	0	0	0	0	0	0	0
Chlorophyta								
Closterium sp.	0	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0
Oedogonium sp.	3	3	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0
Stigeoclonium sp.	0	0	0	0	0	0	0	0
Ulothrix zonata	0	0	0	0	0	0	0	0
Ulothrix sp.	0	0	0	0	0	0	0	0
Zygnema sp.	0	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0	0
Cyanophyta	7	7			11			
Gloeotrichia sp.	0	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0	0
Oscillatoria sp. A	0	*	2	0	*	0	0	7
Oscillatoria sp. B	*	0	0	4	*	0	6	0
Oscillatoria sp.	*	*	3	0	0	0	4	3
Nostoc verrucosum	0	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0	0

*percentages unavailable

Date: June 14, 1979
Station: Elder Creek

Species	Rock Number E1	E2	E3	E4
Chrysophyta				
Bacillariophyceae	60	90	55	60
Non-Diatom Chrysophytes			45	
Hydrurus foetidus	30	0	*	35
Unidentified species	0	0	*	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	6	0	0
Oscillatoria sp. B	10	0	0	5
Oscillatoria sp.	0	4	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

*Percentages unavailable

Date: June 14, 1979
Station: Sage Creek

Species	Rock Number S1	S2	S3	S4
Chrysophyta				
Bacillariophyceae	50	70	100	65
Non-Diatom Chrysophytes				
Hydrurus foetidus	49	30	0	35
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	1	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: June 14, 1979
Station: Qualitative Samples

Species	Station: Akamina Creek	Station: Elder Creek
Chrysophyta		
Bacillariophyceae	++	+++
Non-Diatom Chrysophytes		
Hydrurus foetidus	+++	+++
Chlorophyta		
Oedogonium sp.		+

+ denotes that the algal group or species made up < 5% of total algal volume examined
++ denotes that the algal group or species made up 5-20% of total algal volume examined
+++ denotes that the algal group or species made up >20% of total algal volume examined

Date: August 29, 1979
Station: Akamina Creek

Species	Rock Number A1	A2	A3	A4
Chrysophyta				
Bacillariophyceae	49	100	100	98
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	51	0	0	1
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	1
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock Number Y1	Y2	Y3	Y4
Chrysophyta				
Bacillariophyceae	96	97	100	60
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	3	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	16
Oscillatoria sp. B	0	0	0	24
Oscillatoria sp.	1	3	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: August 28, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number R1	R2	R3	R4	R5	R6	R7	R8
Chrysophyta								
Bacillariophyceae	95	96	97	90	96	98	96	98
Non-Diatom Chrysophytes								
Hydrurus foetidus	0	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0	0
Chlorophyta								
Closterium sp.	0	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0
Stigeoclonium sp.	4	1	2	1	0	1.5	3	0
Ulothrix zonata	0	0	0	0	0	0	0	0
Ulothrix sp.	0	0	0	0	0	0	0	0
Zygnema sp.	0	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0	0
Cyanophyta	0	3	0	0	0	0	1	0
Gloeotrichia sp.	0	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0	0
Oscillatoria sp. A	0.5	*	1	5	4	0.5	*	2
Oscillatoria sp. B	0.5	*	0	4	0	0	*	0
Oscillatoria sp.	0	0	0	0	0	0	0	0
Nostoc verrucosum	0	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0	0

*percentages unavailable

Date: August 28, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number R9	R10	R11	R12	R13	R14	R15	R16
Chrysophyta								
Bacillariophyceae	99	98	99.5	97	98	99	98	98
Non-Diatom Chrysophytes								
Hydrurus foetidus	0	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0	0
Chlorophyta								
Closterium sp.	0	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0	0
Stigeoclonium sp.	0	0	0.5	0.5	0	0	1	1
Ulothrix zonata	0	0	0	0	0	0	0	0
Ulothrix sp.	0	0	0	0	0	0	0	0
Zygnema sp.	0	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0	0
Cyanophyta					2			
Gloeotrichia sp.	0	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0	0
Oscillatoria sp. A	1	2	0	1.0	*	1	1	1
Oscillatoria sp. B	0	trace	0	1.5	*	0	0	0
Oscillatoria sp.	0	0	0	0	0	0	0	0
Nostoc verrucosum	0	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0	0

*percentages unavailable

Date: August 28, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number R17	R18	R19	R20	R21	R22	R23
Chrysophyta							
Bacillariophyceae	89	89	94	97	98	92	98
Non-Diatom Chrysophytes							
Hydrurus foetidus	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0
Chlorophyta							
Closterium sp.	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0
Stigeoclonium sp.	1	5	3	0	1	1.6	0
Ulothrix zonata	0	0	0	0	0	0	0
Ulothrix sp.	0	0	0	0	0	0	0
Zygnema sp.	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0
Cyanophyta							
Gloeotrichia sp.	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0
Oscillatoria sp. A	0	2.4	1.5	3	0	1.5	1
Oscillatoria sp. B	10	3.6	1.5	0	1	4.9	1
Oscillatoria sp.	0	0	0	0	0	0	0
Nostoc verrucosum	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0

Date: August 28, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number RR1	RR2	RR3	RR4	RR5	RR6	RR7
Chrysophyta							
Bacillariophyceae	92	97	92	95	93	95	98
Non-Diatom Chrysophytes							
Hydrurus foetidus	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0
Chlorophyta							
Closterium sp.	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	0	0
Spirogyra sp.	0	0	1.2	0	0	0	0
Stigeoclonium sp.	5	2	4.8	1.5	5.6	3	1
Ulothrix zonata	0	0	0	1.5	1.4	0	0
Ulothrix sp.	0	0	0	0	0	0	0
Zygnema sp.	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0
Cyanophyta	3	1					
Gloeotrichia sp.	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0
Oscillatoria sp. A	*	*	1.8	2	0	1.2	0
Oscillatoria sp. B	*	*	0.2	0	0	0.8	1
Oscillatoria sp.	0	0	0	0	0	0	0
Nostoc verrucosum	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0

*percentages unavailable

Date: August 28, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number RR8	RR9	RR10	RR11	RR12	RR13	RR14
Chrysophyta							
Bacillariophyceae	98	99	93	95	98	95	97
Non-Diatom Chrysophytes							
Hydrurus foetidus	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0
Chlorophyta							
Closterium sp.	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0
Stigeoclonium sp.	1	0.5	3	2.4	0	3	2
Ulothrix zonata	0	0	0	0	0	0	0
Ulothrix sp.	0	0	0	0.6	0	0	0
Zygnema sp.	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0
Cyanophyta			4				
Gloeotrichia sp.	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0
Oscillatoria sp. A	1	0.5	*	2	1	0.8	0.6
Oscillatoria sp. B	0	0	*	0	1	1.2	0.4
Oscillatoria sp.	0	0	0	0	0	0	0
Nostoc verrucosum	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0

*percentages unavailable

Date: August 28, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number RR15	RR16	RR17	RR18	RR19	RR20	RR21
Chrysophyta							
Bacillariophyceae	98	98	100	93	92	98	100
Non-Diatom Chrysophytes							
Hydrurus foetidus	0	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0	0
Chlorophyta							
Closterium sp.	0	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0	0
Stigeoclonium sp.	1	1	0	2.4	3	1	0
Ulothrix zonata	0	0	0	0	0	0	0
Ulothrix sp.	0	0	0	1.6	2	0	0
Zygnema sp.	0	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0	0
Cyanophyta							
Gloeotrichia sp.	0	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0	0
Oscillatoria sp. A	0	0.5	0	2.1	0	1	0
Oscillatoria sp. B	1	0.5	0	0.9	3	0	0
Oscillatoria sp.	0	0	0	0	0	0	0
Nostoc verrucosum	0	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0	0

Date: August 28, 1979
Station: Kishinena Creek (Continued)

Species	Rock Number RR22	RR23	RR24	RR25	RR26	RR27
Chrysophyta						
Bacillariophyceae	96	93	93	75	99	99
Non-Diatom Chrysophytes						
Hydrurus foetidus	0	0	0	0	0	0
Unidentified species	0	0	0	0	0	0
Chlorophyta						
Closterium sp.	0	0	0	0	0	0
Cosmarium sp.	0	0	0	0	0	0
Microspora sp.	0	0	0	0	0	0
Mougeotia sp.	0	0	0	0	0	0
Oedogonium sp.	0	0	0	0	0	0
Spirogyra sp.	0	0	0	0	0	0
Stigeoclonium sp.	3	3	4	22	0	1
Ulothrix zonata	0	0	0	0	0	0
Ulothrix sp.	0	0	0	trace	0	0
Zygnema sp.	0	0	0	0	0	0
Unidentified unicellular	0	0	0	0	0	0
Cyanophyta						
Gloeotrichia sp.	0	0	0	0	0	0
Lyngbya sp.	0	0	0	0	0	0
Merismopedia sp.	0	0	0	0	0	0
Oscillatoria sp. A	0	0.8	1.5	3	0	0
Oscillatoria sp. B	0	3.2	1.5	0	1	0
Oscillatoria sp.	1	0	0	0	0	0
Nostoc verrucosum	0	0	0	0	0	0
Spirulina sp.	0	0	0	0	0	0

Date: August 29, 1979
Station: Elder Creek

Species	Rock Number E1	E2	E3	E4
Chrysophyta				
Bacillariophyceae	85	1	74	90
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	1	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	3	0	0	0
Oscillatoria sp. B	12	99	25	10
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: August 29, 1979
Station: Sage Creek

Species	Rock Number S1	S2	S3	S4
Chrysophyta				
Bacillariophyceae	85	85	85	85
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	14	14	11.7	15
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	1.3	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0.02	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	1	0.98	2	0
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: August 28 - 29, 1979
Station: Qualitative Samples

Species	Station: Kishinena Creek	Station: Elder Creek
Chlorophyta		
Spirogyra sp.	+++	*
Cyanophyta		
Oscillatoria sp.		*
Nostoc verrucosum		primarily

*percentages unavailable

+ denotes that the algal group or species made up < 5% of total algal volume examined
++ denotes that the algal group or species made up 5-20% of total algal volume examined
+++ denotes that the algal group or species made up >20% of total algal volume examined

Date: November 8, 1979
Station: Akamina Creek

Species	Rock Number A1	A2	A3	A4
Chrysophyta				
Bacillariophyceae	100	100	100	100
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: November 8, 1979
Station: Kishinena Creek

Species	Rock Number K1	K2	K3	K4
Chrysophyta				
Bacillariophyceae	92	95	70	80
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	1	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				20
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0.7	2.8	0	*
Oscillatoria sp. B	6.3	2.2	30	*
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

*percentages unavailable

Date: November 8, 1979
Station: Elder Creek

Species	Rock Number E1	E2	E3	E4
Chrysophyta				
Bacillariophyceae	60	30	40	50
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	6.6	0	0
Stigeoclonium sp.	0	6.8	10	9
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	6.6	0	1
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	20	20	16
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	40	30	30	24
Spirulina sp.	0	0	0	0

Date: November 8, 1979
Station: Sage Creek

Species	Rock Number S1	S2	S3	S4
Chrysophyta				
Bacillariophyceae	50	70	60	80
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	trace	0
Cosmarium sp.	0	0	trace	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	13.5	0	5	0
Spirogyra sp.	13.5	0	0	0
Stigeoclonium sp.	0	0	20	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	18	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta		30		
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	*	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	5	*	15	20
Oscillatoria sp.	0	0	0	0
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

*percentages unavailable

Date: November 8, 1979
Station: Qualitative Samples

Species	Station: Kishinena Creek	Station: Sage Creek
Chrysophyta		
Bacillariophyceae	+	+++
Chlorophyta		
Closterium sp.		+
Cosmarium sp.		+
Oedogonium sp.		++
Zygnema sp.		++
Cyanophyta		
Merismopedia sp.		+
Oscillatoria sp. A		+
Oscillatoria sp. B	+++	++

+ denotes that the algal group or species made up < 5% of total algal volume examined
++ denotes that the algal group or species made up 5-20% of total algal volume examined
+++ denotes that the algal group or species made up >20% of total algal volume examined

Date: August 26, 1980
Station: Akamina Creek

Species	Rock Number A1	A2	A3	A4
Chrysophyta				
Bacillariophyceae	99.5	100	100	99
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	0	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	0
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	0
Ulothrix zonata	0	0	0	0
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta				
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	0	0	0	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	0.5	0	0	1
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	0

Date: August 26, 1980
Station: Kishinena Creek

Species	Rock Number K1	K2	K3	K4
Chrysophyta				
Bacillariophyceae	98	100	85	86
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	0
Unidentified species	0	0	0	0
Chlorophyta				
Closterium sp.	0	trace	0	0
Cosmarium sp.	0	0	0	0
Microspora sp.	0	0	0	0
Mougeotia sp.	0	0	0	2
Oedogonium sp.	0	0	0	0
Spirogyra sp.	0	0	0	0
Stigeoclonium sp.	0	0	0	7.4
Ulothrix zonata	0	0	0	3
Ulothrix sp.	0	0	0	0
Zygnema sp.	0	0	0	0
Unidentified unicellular	0	0	0	0
Cyanophyta			15	
Gloeotrichia sp.	0	0	0	0
Lyngbya sp.	2	0	*	0
Merismopedia sp.	0	0	0	0
Oscillatoria sp. A	0	0	0	0
Oscillatoria sp. B	0	0	0	0
Oscillatoria sp.	0	0	*	1.6
Nostoc verrucosum	0	0	0	0
Spirulina sp.	0	0	0	trace

*percentages unavailable

Date: August 26, 1980
Station: Qualitative Samples

Species	Station: Kishinena Creek	Station: Sage Creek
Chrysophyta		
Bacillariophyceae	+++	
Chlorophyta		+++
Microspora sp.		*
Ulothrix zonata	+++	*

*percentages unavailable

+ denotes that the algal group or species made up < 5% of total algal volume examined
++ denotes that the algal group or species made up 5-20% of total algal volume examined
+++ denotes that the algal group or species made up >20% of total algal volume examined

Date: July 28, 1982
Station: Akamina Creek

Species	Rock Number A (qualitative)	B	C	D
Chrysophyta				
Bacillariophyceae	+++	50.8	100	100
Non-Diatom Chrysophytes				
Hydrurus foetidus	+++	0	0	0
Unidentified species		0	0	0
Chlorophyta				
Closterium sp.		0	0	0
Cosmarium sp.		0	0	0
Microspora sp.		0	0	0
Mougeotia sp.		0	0	0
Oedogonium sp.		0	0	0
Spirogyra sp.		0	0	0
Stigeoclonium sp.		0	0	0
Ulothrix zonata		0	0	0
Ulothrix sp.		0	0	0
Zygnema sp.		0	0	0
Unidentified filamentous		0	0	0
Unidentified unicellular		0	0	0
Cyanophyta				
Gloeotrichia sp.		0	0	0
Lyngbya sp.		9.2	0	0
Merismopedia sp.		0	0	0
Oscillatoria sp. A		0	0	0
Oscillatoria sp. B		0	0	0
Oscillatoria sp.	+	40	0	0
Nostoc verrucosum		0	0	0
Spirulina sp.		0	0	0

+ denotes that the algal group or species made up < 5% of total algal volume examined
++ denotes that the algal group or species made up 5-20% of total algal volume examined
+++ denotes that the algal group or species made up >20% of total algal volume examined

Date: July 28, 1982
Station: Kishinena Creek

Species	Rock Number A	B	C	D (qualitative)
Chrysophyta				
Bacillariophyceae	80.0	96	100	+
Non-Diatom Chrysophytes				
Hydrurus foetidus	0	0	0	
Unidentified species	0	0	0	
Chlorophyta				
Closterium sp.	0	0	0	
Cosmarium sp.	0	0	0	
Microspora sp.	0	0	0	
Mougeotia sp.	0	0	0	
Oedogonium sp.	0	0	0	
Spirogyra sp.	0	0	0	
Stigeoclonium sp.	0	0	0	
Ulothrix zonata	0	0	0	+++
Ulothrix sp.	0	0	0	
Zygnema sp.	0	0	0	
Unidentified filamentous	0	0	0	++
Unidentified unicellular	0	0	0	
Cyanophyta				
Gloeotrichia sp.	0	0	0	
Lyngbya sp.	trace	0	0	
Merismopedia sp.	0	0	0	
Oscillatoria sp. A	0	0	0	
Oscillatoria sp. B	0	0	0	
Oscillatoria sp.	19.2	4	trace	+
Nostoc verrucosum	0	0	0	
Spirulina sp.	0	0	0	

+ denotes that the algal group or species made up < 5% of total algal volume examined
++ denotes that the algal group or species made up 5-20% of total algal volume examined
+++ denotes that the algal group or species made up >20% of total algal volume examined

TABLE 20

Densities of Periphytic Diatoms (cells/cm^2) Collected From Some Tributaries to the North Fork of the Flathead River 1979-1982

Date: April 3, 1979
Station: Akamina Creek

Species	Rock T5A Cell Count	Rock T5B Cell Count	Rock T5C Cell Count	Rock T5D Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	1686	3149	0	0
Ceratoneis arcus var. amphioxys	0	0	1963	0
Diatoma elongatum	0	0	1963	0
Diatoma hiemale	0	0	982	0
Diatoma hiemale var. quadratum	0	3149	491	26877
Diatoma vulgare	1686	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	982	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	982	3840
Fragilaria vaucheriae	1686	0	0	0
Meridion circulare	0	3149	3926	3840
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	12647	9447	3926	15358
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	23607	6298	19141	57594
Achnanthes sp.	0	0	491	0
Cocconeis placentula	36253	15745	27485	40316
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	6380	7679
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	0	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: April 3, 1979
Station: Akamina Creek

Species	Rock T5A Cell Count	Rock T5B Cell Count	Rock T5C Cell Count	Rock T5D Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	3149	1963	7679
Cymbella turgida	0	0	0	0
Cymbella ventricosa	1686	0	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	157660	455031	75092	437714
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	1686	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	6745	0	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	3372	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	3372	0	982	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	252087	499117	146749	600897

Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T1A Cell Count	Rock T1B Cell Count	Rock T1C Cell Count	Rock T1D Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	71	1591	0
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	71	0	0
Diatoma hiemale var. quadratum	1705	424	2387	2043
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	1705	141	398	0
Fragilaria construens var. venter	0	0	796	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	141	0	0
Fragilaria vaucheriae	10229	424	0	2043
Meridion circulare	0	0	0	2043
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	141	0	0
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	138941	2542	24266	203239
Achnanthes sp.	0	212	0	0
Cocconeis placentula	7672	353	1591	2043
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	3410	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	1705	141	0	6128
Cymbella cistula	1705	0	398	6128
Cymbella mexicana	0	0	0	0

continued
Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T1A Cell Count	Rock T1B Cell Count	Rock T1C Cell Count	Rock T1D Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	0	0	0
Cymbella turgida	0	0	0	0
Cymbella ventricosa	5114	141	0	2043
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	141	0	0
Gomphonema olivaceum	57111	16520	27846	44937
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	15343	424	398	28596
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees.				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	1705	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	1705	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	5114	0	398	4085
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	253163	21886	60068	303326

Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T2A Cell Count	Rock T2B Cell Count	Rock T2C Cell Count	Rock T2D Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	2073	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	0	168	0
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	0	0	0	1957
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	1520	34	5872
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	7254	0	0	5872
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	1036	0	0	3915
Fragilaria vaucheriae	0	0	101	9787
Meridion circulare	0	507	67	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	507	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	2073	0	0	0
Achnanthes lanceolata	0	507	34	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	136792	14438	1277	175187
Achnanthes sp.	0	0	50	0
Cocconeis placentula	11399	37742	588	13702
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	1520	34	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	34	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	507	134	0
Cymbella cistula	0	507	67	0
Cymbella mexicana	0	0	0	0

continued
Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T2A Cell Count	Rock T2B Cell Count	Rock T2C Cell Count	Rock T2D Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	4145	5066	67	3915
Cymbella turgida	0	0	34	0
Cymbella ventricosa	0	2026	0	3915
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	8290	507	0	0
Gomphonema olivaceum	154409	8612	1848	59701
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	2073	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	1013	0	0
Navicula sp.	2073	1013	302	3915
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	1957
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	4145	0	34	3915
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	335761	75990	4872	293610

Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T3A Cell Count	Rock T3B Cell Count	Rock T3C Cell Count	Rock T3D Cell Count
Coscinodiscales				
Cyclotella glomerata	4721	0	0	2789
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	0	0	0
Ceratoneis arcus var. amphioxys	0	0	1223	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	1223	2789
Diatoma hiemale var. quadratum	0	0	0	8368
Diatoma vulgare	0	0	612	0
Fragilaria capucina	0	0	0	5579
Fragilaria construens	0	0	0	5579
Fragilaria construens var. binodis	0	0	4894	2789
Fragilaria construens var. venter	2361	3775	1835	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	1223	5579
Fragilaria vaucheriae	9442	15100	1223	19526
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	2789
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	2789
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	234880	432238	88697	295676
Achnanthes sp.	0	0	0	0
Cocconeis placentula	12983	15100	5505	5579
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	0	0	0
Cymbella cistula	2361	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T3A Cell Count	Rock T3B Cell Count	Rock T3C Cell Count	Rock T3D Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	3775	3670	0
Cymbella turgida	0	0	0	0
Cymbella ventricosa	2361	0	0	2789
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	2789
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	2361	0	1223	0
Gomphonema olivaceum	69638	52850	66675	55788
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	2361	0	0	0
Navicula sp.	2361	26425	2447	19526
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	2789
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	2361	0	0	0
Nitzschia frustulum	0	3775	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	7082	7550	1223	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	355270	560588	181675	443515

Date: April 3, 1979
Station: Elder Creek

Species	Rock T6A Cell Count	Rock T6B Cell Count	Rock T6C Cell Count
Coscinodiscales			
Cyclotella glomerata	0	0	0
Cyclotella ocellata	0	0	0
Melosira granulata	0	0	0
Melosira varians	0	0	0
Fragilariales			
Ceratoneis arcus	0	0	0
Ceratoneis arcus var. amphioxys	0	0	0
Diatoma elongatum	0	0	0
Diatoma hiemale	0	0	0
Diatoma hiemale var. quadratum	32	1395	7382
Diatoma vulgare	0	0	0
Fragilaria capucina	0	0	0
Fragilaria construens	0	0	0
Fragilaria construens var. binodis	0	0	0
Fragilaria construens var. venter	0	0	0
Fragilaria crotonensis	0	0	0
Fragilaria leptostauron	0	0	0
Fragilaria vaucheriae	12	1395	0
Meridion circulare	0	0	0
Synedra acus var. radians	0	0	0
Synedra acus var. angustissima	0	0	0
Synedra ulna	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0
Tabellaria fenestrata	0	0	0
Tabellaria flocculosa	0	0	0
Achnanthales			
Achnanthes flexella	0	0	0
Achnanthes lanceolata	32	5578	12919
Achnanthes microcephala	0	0	0
Achnanthes minutissima	476	12551	191942
Achnanthes sp.	0	0	0
Cocconeis placentula	44	11854	24916
Rhoicosphenia curvata	0	1395	0
Naviculales			
Amphipleura pellucida	0	0	0
Amphora coffeaeformis	0	0	0
Amphora ovalis	0	0	0
Amphora sp.	0	0	0
Anomoeneis exilis	0	0	0
Cymbella affinis	0	0	0
Cymbella caespitosa	16	0	0
Cymbella cistula	0	0	0
Cymbella mexicana	0	0	0

continued
Date: April 3, 1979
Station: Elder Creek

Species	Rock T6A Cell Count	Rock T6B Cell Count	Rock T6C Cell Count
Cymbella prostrata	0	0	0
Cymbella sinuata	8	2789	0
Cymbella turgida	0	0	0
Cymbella ventricosa	40	1395	0
Cymbella sp.	0	0	0
Diploneis decipiens	0	0	0
Frustulia rhomboides	0	0	0
Gomphonema geminatum	0	0	0
Gomphonema herculeanum	0	0	0
Gomphonema intricatum	0	0	0
Gomphonema lanceolatum	0	0	0
Gomphonema olivaceum	524	170839	65519
Gomphonema parvulum	0	0	0
Gomphonema sp.	0	0	0
Gyrosigma sciotense	0	0	0
Navicula arvensis	0	0	0
Navicula bicephala	0	0	0
Navicula pelliculosa	0	0	0
Navicula radiosa	0	0	0
Navicula salinarum var. intermedia	0	0	0
Navicula scutelloides	0	0	0
Navicula tripunctata	0	0	0
Navicula viridula	0	0	0
Navicula sp.B	0	0	1846
Navicula sp.	20	1395	0
Neidium sp.	0	0	0
Pinnularia sp.	0	0	0
Stauroneis anceps	0	0	0
Stauroneis sp.	0	0	0
Surirellinees			
Denticula elegans	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0	0	0
Nitzschia acicularis	0	0	0
Nitzschia dissipata	0	0	0
Nitzschia frustulum	0	0	0
Nitzschia hantzschiana	0	0	1846
Nitzschia linearis	0	0	0
Nitzschia palea	8	0	1846
Nitzschia sp.	0	0	0
Surirella angustata	0	0	0
Total Cell Count	1212	210585	308215

Date: April 3, 1979
Station: Sage Creek

Species	Rock T7A Cell Count	Rock T7B Cell Count	Rock T7C Cell Count
Coscinodiscales			
Cyclotella glomerata	10440	0	1090
Cyclotella ocellata	0	0	0
Melosira granulata	0	0	0
Melosira varians	0	0	0
Fragilariales			
Ceratoneis arcus	2610	0	0
Ceratoneis arcus var. amphioxys	0	0	545
Diatoma elongatum	0	0	0
Diatoma hiemale	0	0	545
Diatoma hiemale var. quadratum	7830	0	0
Diatoma vulgare	0	0	0
Fragilaria capucina	0	0	0
Fragilaria construens	2610	0	0
Fragilaria construens var. binodis	7830	0	1090
Fragilaria construens var. venter	0	0	0
Fragilaria crotonensis	0	7928	0
Fragilaria leptostauron	7830	0	545
Fragilaria vaucheriae	2610	31710	2180
Meridion circulare	0	0	0
Synedra acus var. radians	0	0	0
Synedra acus var. angustissima	0	0	0
Synedra ulna	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0
Tabellaria fenestrata	0	0	0
Tabellaria flocculosa	0	0	0
Achnanthales			
Achnanthes flexella	5220	0	0
Achnanthes lanceolata	0	0	0
Achnanthes microcephala	0	0	0
Achnanthes minutissima	187920	1105900	22890
Achnanthes sp.	0	0	0
Cocconeis placentula	7830	27747	13080
Rhoicosphenia curvata	2610	0	0
Naviculales			
Amphipleura pellucida	0	0	0
Amphora coffeaeformis	0	0	0
Amphora ovalis	2610	0	0
Amphora sp.	0	0	0
Anomoeneis exilis	0	0	0
Cymbella affinis	0	0	0
Cymbella caespitosa	5220	0	0
Cymbella cistula	2610	7928	0
Cymbella mexicana	0	0	0

continued
Date: April 3, 1979
Station: Sage Creek

Species	Rock T7A Cell Count	Rock T7B Cell Count	Rock T7C Cell Count
Cymbella prostrata	0	0	0
Cymbella sinuata	9135	0	1363
Cymbella turgida	0	0	0
Cymbella ventricosa	2610	0	0
Cymbella sp.	0	0	0
Diploneis decipiens	0	0	0
Frustulia rhomboides	0	0	0
Gomphonema geminatum	0	0	0
Gomphonema herculeanum	0	0	0
Gomphonema intricatum	0	0	0
Gomphonema lanceolatum	2610	0	0
Gomphonema olivaceum	125280	178371	37878
Gomphonema parvulum	0	0	0
Gomphonema sp.	0	0	0
Gyrosigma sciotense	0	0	0
Navicula arvensis	0	0	0
Navicula bicephala	0	0	0
Navicula pelliculosa	0	0	0
Navicula radiosa	0	0	0
Navicula salinarum var. intermedia	0	0	0
Navicula scutelloides	0	0	0
Navicula tripunctata	0	0	0
Navicula viridula	0	0	0
Navicula sp.B	0	0	0
Navicula sp.	10440	0	0
Neidium sp.	0	0	0
Pinnularia sp.	0	0	0
Stauroneis anceps	0	0	0
Stauroneis sp.	0	0	0
Surirellinees			
Denticula elegans	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0	0	0
Nitzschia acicularis	0	0	0
Nitzschia dissipata	0	0	0
Nitzschia frustulum	2610	0	0
Nitzschia hantzschiana	0	0	0
Nitzschia linearis	0	0	0
Nitzschia palea	10440	7928	0
Nitzschia sp.	0	0	0
Surirella angustata	0	0	0
Total Cell Count	418905	1367511	81205

Date: May 15, 1979
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	881	0	0	0
Ceratoneis arcus var. amphioxys	0	1142	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	1384
Diatoma hiemale var. quadratum	0	1142	0	0
Diatoma vulgare	1762	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	0	0	0	0
Meridion circulare	9689	0	2574	2076
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	2574	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	0	15988	14157	1384
Achnanthes sp.	0	0	0	0
Cocconeis placentula	7927	7423	6435	6229
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	0	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: May 15, 1979
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	2284	1287	2768
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	0	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	310042	145605	176963	210398
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. *intermedia*	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	1142	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	1142	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	0	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	330300	175868	203990	224240

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K1 Cell Count	Rock K2 Cell Count	Rock K3 Cell Count	Rock K4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	14681	5010	15	0
Ceratoneis arcus var. amphioxys	0	1566	70	0
Diatoma elongatum	5872	0	0	0
Diatoma hiemale	11744	0	0	0
Diatoma hiemale var. quadratum	5872	1252	50	0
Diatoma vulgare	0	3131	0	0
Fragilaria capucina	11744	1252	60	0
Fragilaria construens	0	2505	0	0
Fragilaria construens var. binodis	5872	0	0	0
Fragilaria construens var. venter	35233	1252	30	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	8808	939	10	10570
Fragilaria vaucheriae	23489	5323	40	0
Meridion circulare	0	0	35	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	626	15	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	5872	626	10	0
Achnanthes lanceolata	20553	1252	10	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	419862	40077	510	1463973
Achnanthes sp.	0	313	0	0
Cocconeis placentula	26425	2505	205	15855
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	11744	626	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	11744	626	30	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K1 Cell Count	Rock K2 Cell Count	Rock K3 Cell Count	Rock K4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	17617	1566	60	10570
Cymbella turgida	0	0	0	0
Cymbella ventricosa	23489	626	30	21140
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	5872	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	111572	15342	285	200834
Gomphonema parvulum	14681	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	1252	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	626	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	32297	313	10	26426
Neidium sp.	5872	626	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	11744	0	15	0
Nitzschia frustulum	11744	3131	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	11744	1252	0	10570
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	866150	93617	1490	1759938

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K5 Cell Count	Rock K6 Cell Count	Rock K7 Cell Count	Rock K8 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	596	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	2206	1192	0	13299
Ceratoneis arcus var. amphioxys	2868	2383	0	0
Diatoma elongatum	441	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	441	0	1583	7600
Diatoma vulgare	0	1192	0	0
Fragilaria capucina	1765	0	0	3800
Fragilaria construens	0	4766	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	4766	791	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	596	0	0
Fragilaria vaucheriae	2206	7150	4748	11399
Meridion circulare	3971	2383	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	1192	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	662	1192	791	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	23384	79241	74392	364781
Achnanthes sp.	0	0	0	0
Cocconeis placentula	3971	5362	3957	17099
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	4766	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	662	2979	2374	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K5 Cell Count	Rock K6 Cell Count	Rock K7 Cell Count	Rock K8 Cell Count
Cymbella prostrata	0	0	791	0
Cymbella sinuata	1324	5362	0	0
Cymbella turgida	0	0	0	0
Cymbella ventricosa	441	4766	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	882	1192	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	16986	30982	17807	150092
Gomphonema parvulum	1544	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	882	4171	6331	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	396	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	3800
Nitzschia frustulum	441	2383	0	3800
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	596	0	0
Nitzschia palea	441	7150	1583	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	65518	176357	115544	575670

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K9 Cell Count	Rock K10 Cell Count	Rock K11 Cell Count	Rock K12 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	124	202	670	0
Ceratoneis arcus var. amphioxys	124	404	335	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	62	40	0	0
Diatoma hiemale var. quadratum	156	162	4689	4309
Diatoma vulgare	0	0	670	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	1436
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	62	0	0	0
Fragilaria vaucheriae	311	323	4689	10773
Meridion circulare	62	81	335	1436
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	124	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	670	0
Achnanthes lanceolata	124	121	1340	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	5754	1778	33825	158722
Achnanthes sp.	0	0	0	0
Cocconeis placentula	124	424	3349	0
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	670	1436
Amphora sp.	0	40	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	62	182	5024	0
Cymbella cistula	0	0	670	0
Cymbella mexicana	0	0	0	0

continued
Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K9 Cell Count	Rock K10 Cell Count	Rock K11 Cell Count	Rock K12 Cell Count
Cymbella prostrata	0	40	670	0
Cymbella sinuata	0	121	670	0
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	162	3684	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	1340	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	1804	1576	25787	40219
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. *intermedia*	0	0	670	0
Navicula scutelloides	0	0	670	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	62	242	6028	2873
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	81	0	0
Nitzschia frustulum	124	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	62	40	1340	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	9143	6020	97791	221206

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K13 Cell Count	Rock K14 Cell Count	Rock K15 Cell Count	Rock K16 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	321	317	0	633
Ceratoneis arcus var. amphioxys	241	211	0	949
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	70	0	0
Diatoma hiemale var. quadratum	481	0	6012	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	160	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	80	0	6012	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	475
Fragilaria vaucheriae	80	141	24049	633
Meridion circulare	481	387	6012	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	35	0	316
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	6012	0
Achnanthes lanceolata	0	0	12024	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	2125	2957	712446	30374
Achnanthes sp.	0	0	0	0
Cocconeis placentula	1644	3098	3006	8859
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	80	422	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K13 Cell Count	Rock K14 Cell Count	Rock K15 Cell Count	Rock K16 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	160	282	0	949
Cymbella turgida	0	0	0	0
Cymbella ventricosa	241	0	6012	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	5895	2499	72146	4271
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	0	0
Neidium sp.	0	422	45092	0
Pinnularia sp.	80	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	6012	0
Nitzschia frustulum	80	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	80	0	0	316
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	12231	10842	904836	47776

Date: May 15, 1979
Station: Elder Creek

Species	Rock E1 Cell Count	Rock E2 Cell Count	Rock E3 Cell Count	Rock E4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	0	244	101
Ceratoneis arcus var. amphioxys	236	0	0	135
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	2120	774	976	541
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	1493	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	118	221	366	406
Meridion circulare	118	0	122	135
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	111	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	118	0	0	0
Achnanthes lanceolata	0	111	122	575
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	1944	5641	4697	1825
Achnanthes sp.	0	0	0	0
Cocconeis placentula	1355	1825	549	2163
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	118	0	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: May 15, 1979
Station: Elder Creek

Species	Rock E1 Cell Count	Rock E2 Cell Count	Rock E3 Cell Count	Rock E4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	118	111	366	270
Cymbella turgida	0	0	0	0
Cymbella ventricosa	353	332	366	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	11132	5696	8662	3718
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	122	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	118	0	1525	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	244	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	236	0	0	0
Nitzschia sp.	0	0	122	0
Surirella angustata	0	0	0	0
Total Cell Count	18082	16314	18483	9870

Date: May 15, 1979
Station: Sage Creek

Species	Rock S1 Cell Count	Rock S2 Cell Count	Rock S3 Cell Count	Rock S4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	244	400	816	349
Ceratoneis arcus var. amphioxys	0	662	571	349
Diatoma elongatum	0	31	122	29
Diatoma hiemale	49	0	0	58
Diatoma hiemale var. quadratum	0	31	102	291
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	31	0	0
Fragilaria construens	0	0	82	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	163	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	73	277	286	233
Meridion circulare	18	0	82	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	494	1247	1244	2095
Achnanthes sp.	0	0	0	0
Cocconeis placentula	79	92	204	116
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	12	0	0	0
Amphora sp.	0	0	0	58
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	62	82	175
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: May 15, 1979
Station: Sage Creek

Species	Rock S1 Cell Count	Rock S2 Cell Count	Rock S3 Cell Count	Rock S4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	110	262	245	116
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	77	0	407
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	58
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	628	1278	1897	4074
Gomphonema parvulum	0	0	0	58
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	108	82	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0		0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	79	0	41	116
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	1787	4558	6018	8585

Date: June 14, 1979
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	52	197	15660	556
Ceratoneis arcus var. amphioxys	9	0	0	835
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	3915	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	44	0	0
Fragilaria vaucheriae	0	0	0	0
Meridion circulare	24	131	7830	1669
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	131	11745	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	141	241	27405	3338
Achnanthes sp.	0	0	0	0
Cocconeis placentula	52	416	5873	2782
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	44	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: June 14, 1979
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	88	3915	0
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	0	7830	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	893	5300	553973	76505
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	44	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	0	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	1170	6636	638145	85686

Date: June 14, 1979
Station: Kishimena Creek

Species	Rock K1 Cell Count	Rock K2 Cell Count	Rock K3 Cell Count	Rock K4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	2827	3395	6673	13081
Ceratoneis arcus var. amphioxys	2356	12448	20020	23981
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	4360
Diatoma hiemale var. quadratum	0	2829	2224	8720
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	236	1132	0	4360
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	4449	8720
Fragilaria leptostauron	236	0	0	0
Fragilaria vaucheriae	707	0	2224	8720
Meridion circulare	471	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	6715	44132	98986	377157
Achnanthes sp.	236	0	0	0
Cocconeis placentula	825	2263	4449	0
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	1132	0	0
Amphora ovalis	236	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	236	0	2224	8720
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K1 Cell Count	Rock K2 Cell Count	Rock K3 Cell Count	Rock K4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	2238	2263	0	43602
Cymbella turgida	0	0	0	0
Cymbella ventricosa	1296	3395	6673	13081
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	16021	99581	185737	117725
Gomphonema parvulum	471	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	942	0	0	0
Navicula salinarum var. intermedia	0	0	2224	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	0	8720
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	1132	0	0
Stauroneis sp.	0	0	0	8720
Surirellinees				
Denticula elegans	0	0		0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	4360
Nitzschia linearis	0	1132	0	0
Nitzschia palea	0	0	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	36047	174832	335884	654030

Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K5 Cell Count	Rock K6 Cell Count	Rock K7 Cell Count	Rock K8 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	1672	7752	286
Ceratoneis arcus var. amphioxys	0	1672	10336	95
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	88	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma vulgare	0	176	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	176	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	19672	352	7752	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	7869	1232	0	95
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	259670	7568	214472	11662
Achnanthes sp.	0	352	0	95
Cocconeis placentula	7869	176	1292	190
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	3934	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	7869	0	2584	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K5 Cell Count	Rock K6 Cell Count	Rock K7 Cell Count	Rock K8 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	3934	440	2584	190
Cymbella turgida	0	0	0	0
Cymbella ventricosa	11803	352	12920	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	265572	12144	144704	1809
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	1967	0	0	190
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	3934	0	2584	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	594094	26400	406980	14613

Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K9 Cell Count	Rock K10 Cell Count	Rock K11 Cell Count	Rock K12 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	10195	1491	1815	1442
Ceratoneis arcus var. amphioxys	2913	0	0	160
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	160
Diatoma hiemale var. quadratum	0	0	726	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	726	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	2913	0	1452	0
Meridion circulare	0	0	2178	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	1118	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	16749	17894	39204	9131
Achnanthes sp.	0	0	726	0
Cocconeis placentula	0	0	363	320
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	0	2178	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K9 Cell Count	Rock K10 Cell Count	Rock K11 Cell Count	Rock K12 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	5826	0	5082	641
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	373	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	179865	38026	50457	12255
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	1452	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.8	0	0	0	0
Navicula sp.	0	0	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	0	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	218460	58902	106359	24110

Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K13 Cell Count	Rock K14 Cell Count	Rock K15 Cell Count	Rock K16 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	5936	1993	3959	500
Ceratoneis arcus var. amphioxys	4287	1329	3167	50
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	664	792	25
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	0	664	792	25
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	8905	15281	36819	1100
Achnanthes sp.	1319	1993	792	0
Cocconeis placentula	0	664	0	300
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	330	0	2375	75
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K13 Cell Count	Rock K14 Cell Count	Rock K15 Cell Count	Rock K16 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	989	3322	2375	200
Cymbella turgida	0	0	0	0
Cymbella ventricosa	660	664	1584	25
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	26879	72420	64532	1625
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	664	792	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	49305	99660	117978	3925

Date: June 14, 1979
Station: Elder Creek

Species	Rock E1 Cell Count	Rock E2 Cell Count	Rock E3 Cell Count	Rock E4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	18993	5970	184045	144790
Ceratoneis arcus var. amphioxys	4895	891	27003	28328
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	1574
Diatoma hiemale var. quadratum	1566	238	11370	31476
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	0	0	2842	1574
Meridion circulare	0	59	1421	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	196	0	2842	1574
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	196	0	0	9443
Achnanthes sp.	0	0	1421	1574
Cocconeis placentula	587	149	1421	4721
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	0	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: June 14, 1979
Station: Elder Creek

Species	Rock E1 Cell Count	Rock E2 Cell Count	Rock E3 Cell Count	Rock E4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	0	0	1574
Cymbella turgida	0	0	0	0
Cymbella ventricosa	587	0	0	1574
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	1574
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	3231	2257	2842	23607
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	0	1574
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	1574
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	0	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	30251	9563	235209	256529

Date: June 14, 1979
Station: Sage Creek

Species	Rock S1 Cell Count	Rock S2 Cell Count	Rock S3 Cell Count	Rock S4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	15905	205	327	137
Ceratoneis arcus var. amphioxys	0	8	0	0
Diatoma elongatum	6362	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	3181	0	153	0
Diatoma vulgare	0	8	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	16	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	3181	0	22	0
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	3181	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	31810	57	240	515
Achnanthes sp.	0	8	0	0
Cocconeis placentula	0	0	87	0
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	3181	0	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: June 14, 1979
Station: Sage Creek

Species	Rock S1 Cell Count	Rock S2 Cell Count	Rock S3 Cell Count	Rock S4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	25	0	78
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	0	0	20
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	3181	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	431026	955	1461	534
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	0	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	501008	1283	2289	1284

Date: August 29, 1979
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	33	0	0
Ceratoneis arcus var. amphioxys	1849	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	67	0	0
Diatoma hiemale var. quadratum	4756	0	135	321
Diatoma vulgare	1057	22	0	184
Fragilaria capucina	2642	0	0	0
Fragilaria construens	6869	0	0	0
Fragilaria construens var. binodis	0	0	193	0
Fragilaria construens var. venter	3170	0	0	1423
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	5284	33	39	0
Fragilaria vaucheriae	5284	89	0	0
Meridion circulare	1321	111	116	275
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	58	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	643
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	10304	189	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	4227	400	2856	6931
Achnanthes sp.	0	22	0	0
Cocconeis placentula	2114	189	869	1148
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	528	22	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	22	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 29, 1979
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	0	116	689
Cymbella turgida	0	0	0	0
Cymbella ventricosa	2114	44	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	27213	2054	1332	2111
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	1057	22	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	793	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	528	67	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	528	22	116	551
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	1585	0	0	0
Nitzschia hantzschiana	528	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	2114	22	0	138
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	85865	3430	5829	14413

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock Y1 Cell Count	Rock Y2 Cell Count	Rock Y3 Cell Count	Rock Y4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	1488	0	0	66
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	1488	0	0	33
Fragilaria construens	1488	42	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	744	42	0	98
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	24	0
Synedra acus var. angustissima	0	0	0	98
Synedra ulna	1116	63	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	42	0	0
Achnanthes lanceolata	744	0	0	33
Achnanthes microcephala	744	0	49	0
Achnanthes minutissima	60620	2299	1415	1984
Achnanthes sp.	0	42	146	33
Cocconeis placentula	3719	272	1464	656
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	21	0	0
Amphora coffeaeformis	1488	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	8554	84	0	33
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock Y1 Cell Count	Rock Y2 Cell Count	Rock Y3 Cell Count	Rock Y4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	209	1659	98
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	42	49	98
Cymbella sp.	744	0	0	0
Diploneis decipiens	0	42	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	66
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	26405	2905	2611	1263
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	42	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	49	33
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	744	42	0	98
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	49	33
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	744	0	0	0
Nitzschia palea	5207	84	0	197
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	116033	6270	7515	4920

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R1 Cell Count	Rock R2 Cell Count	Rock R3 Cell Count	Rock R4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	6890	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	5742	1697	74
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	679	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	979	2297	679	0
Fragilaria construens	1957	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	3445	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	1723	1357	0
Fragilaria vaucheriae	1957	4594	6447	148
Meridion circulare	3915	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	2297	0	0
Synedra ulna	0	1148	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	2297	0	0
Achnanthes lanceolata	3915	8039	0	0
Achnanthes microcephala	5872	2297	2714	0
Achnanthes minutissima	232931	75220	38341	9768
Achnanthes sp.	0	0	679	0
Cocconeis placentula	2936	5168	4750	2442
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	1957	0	0	0
Amphora coffeaeformis	0	0	679	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	1148	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	1957	4594	5090	148
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R1 Cell Count	Rock R2 Cell Count	Rock R3 Cell Count	Rock R4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	2936	4594	2714	1998
Cymbella turgida	0	0	0	0
Cymbella ventricosa	1957	1148	1357	148
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	30340	40194	31894	8584
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	679	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	1957	0	679	0
Navicula tripunctata	0	1148	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	2297	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	2297	679	0
Nitzschia frustulum	3915	0	3393	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	679	0
Nitzschia palea	5872	9187	2714	0
Nitzschia sp.	0	1148	0	0
Surirella angustata	0	0	0	0
Total Cell Count	305354	188912	107897	23310

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R5 Cell Count	Rock R6 Cell Count	Rock R7 Cell Count	Rock R8 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	145	1052	0	0
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	145	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	45	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	290	0	0	0
Fragilaria construens	145	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	145	526	0	0
Fragilaria vaucheriae	0	0	90	121
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	145	0	0	0
Synedra ulna var. oxyrhynchus	145	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	90	0
Achnanthes microcephala	0	1578	0	0
Achnanthes minutissima	15391	44184	2867	3986
Achnanthes sp.	0	0	0	0
Cocconeis placentula	436	2104	717	181
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	145	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	1052	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	218	2630	67	60
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R5 Cell Count	Rock R6 Cell Count	Rock R7 Cell Count	Rock R8 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	145	526	246	121
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	526	134	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	73	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	7042	25248	2755	4741
Gomphonema parvulum	0	526	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	526	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	145	1052	0	60
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	526	0	0
Nitzschia palea	145	526	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	24902	82582	7011	9271

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R9 Cell Count	Rock R10 Cell Count	Rock R11 Cell Count	Rock R12 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	102	393	52	0
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma vulgare	102	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	407	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	0	943	0	68
Meridion circulare	0	629	0	0
Synedra acus var. radians	0	0	103	0
Synedra acus var. angustissima	0	157	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	102	0	0	0
Achnanthes lanceolata	0	157	0	0
Achnanthes microcephala	204	472	52	0
Achnanthes minutissima	3054	6052	542	3380
Achnanthes sp.	0	0	0	0
Cocconeis placentula	764	2044	1264	811
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	102	157	0	68
Amphora coffeaeformis	0	157	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	509	157	0	135
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R9 Cell Count	Rock R10 Cell Count	Rock R11 Cell Count	Rock R12 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	916	943	800	980
Cymbella turgida	204	157	0	0
Cymbella ventricosa	0	157	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	157	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	9315	11397	5083	5205
Gomphonema parvulum	51	0	206	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. *intermedia*	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	157	52	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	102	157	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	157	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	102	0	0	0
Nitzschia palea	102	472	0	135
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	16135	25073	8153	10782

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R13 Cell Count	Rock R14 Cell Count	Rock R15 Cell Count	Rock R16 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	256	101	0	0
Ceratoneis arcus var. amphioxys	0	0	235	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	0	101	0	541
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	34	0	0
Synedra ulna	0	34	0	216
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	85	0	0	0
Achnanthes microcephala	0	0	0	432
Achnanthes minutissima	4526	761	6809	8216
Achnanthes sp.	0	0	0	0
Cocconeis placentula	555	1301	939	2486
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	85	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	101	235	757
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R13 Cell Count	Rock R14 Cell Count	Rock R15 Cell Count	Rock R16 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	384	203	1174	2486
Cymbella turgida	0	0	235	0
Cymbella ventricosa	0	101	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	43	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	7259	2400	28998	18918
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	34	235	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	34	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	34	235	216
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	216
Nitzschia palea	85	68	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	13280	5307	39094	34484

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R17 Cell Count	Rock R18 Cell Count	Rock R19 Cell Count	Rock R20 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	247	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	990	0	0	0
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma vulgare	0	0	152	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	429	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	495	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	429	0	0
Fragilaria vaucheriae	619	429	101	0
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	495	0	101	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	0	119
Achnanthes microcephala	0	643	607	119
Achnanthes minutissima	21029	44360	6527	6879
Achnanthes sp.	0	0	0	0
Cocconeis placentula	4206	643	557	593
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	119
Amphora coffeaeformis	0	0	0	119
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	429	0	0
Cymbella caespitosa	742	3215	202	119
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R17 Cell Count	Rock R18 Cell Count	Rock R19 Cell Count	Rock R20 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	495	429	405	1067
Cymbella turgida	0	429	0	0
Cymbella ventricosa	495	0	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	9030	15001	6274	8895
Gomphonema parvulum	0	1714	304	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	866	1072	607	237
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	119
Nitzschia frustulum	0	429	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	0	0	237
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	39708	69648	15838	18620

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R21 Cell Count	Rock R22 Cell Count	Rock R23 Cell Count
Coscinodiscales			
Cyclotella glomerata	0	0	5371
Cyclotella ocellata	0	0	0
Melosira granulata	0	0	0
Melosira varians	0	0	0
Fragilariales			
Ceratoneis arcus	0	0	0
Ceratoneis arcus var. amphioxys	0	0	0
Diatoma elongatum	0	0	0
Diatoma hiemale	0	0	1790
Diatoma hiemale var. quadratum	0	0	0
Diatoma vulgare	0	0	0
Fragilaria capucina	0	0	0
Fragilaria construens	0	0	0
Fragilaria construens var. binodis	0	0	0
Fragilaria construens var. venter	0	918	5371
Fragilaria crotonensis	0	0	0
Fragilaria leptostauron	0	0	5371
Fragilaria vaucheriae	0	3672	12531
Meridion circulare	0	0	5371
Synedra acus var. radians	0	0	0
Synedra acus var. angustissima	0	0	0
Synedra ulna	0	1836	0
Synedra ulna var. oxyrhynchus	0	0	0
Tabellaria fenestrata	0	0	0
Tabellaria flocculosa	0	0	0
Achnanthales			
Achnanthes flexella	0	0	0
Achnanthes lanceolata	0	0	0
Achnanthes microcephala	0	0	0
Achnanthes minutissima	159247	93636	144111
Achnanthes sp.	0	0	0
Cocconeis placentula	10431	18819	6266
Rhoicosphenia curvata	0	0	0
Naviculales			
Amphipleura pellucida	695	0	0
Amphora coffeaeformis	0	918	0
Amphora ovalis	0	0	0
Amphora sp.	0	0	0
Anomoeneis exilis	12517	918	25063
Cymbella affinis	695	918	0
Cymbella caespitosa	1391	6426	0
Cymbella cistula	0	0	0
Cymbella mexicana	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R21 Cell Count	Rock R22 Cell Count	Rock R23 Cell Count
Cymbella prostrata	0	0	0
Cymbella sinuata	0	2754	3580
Cymbella turgida	0	0	0
Cymbella ventricosa	0	918	5371
Cymbella sp.	0	0	0
Diploneis decipiens	0	0	0
Frustulia rhomboides	0	0	0
Gomphonema geminatum	0	0	0
Gomphonema herculeanum	0	0	1790
Gomphonema intricatum	0	0	0
Gomphonema lanceolatum	0	0	0
Gomphonema olivaceum	36161	12852	51021
Gomphonema parvulum	0	0	0
Gomphonema sp.	0	0	1790
Gyrosigma sciotense	0	0	0
Navicula arvensis	0	0	0
Navicula bicephala	0	0	0
Navicula pelliculosa	0	0	0
Navicula radiosa	0	0	0
Navicula salinarum var. intermedia	0	0	0
Navicula scutelloides	0	0	0
Navicula tripunctata	0	918	0
Navicula viridula	0	0	0
Navicula sp.8	0	0	0
Navicula sp.	0	0	0
Neidium sp.	0	0	0
Pinnularia sp.	0	0	0
Stauroneis anceps	0	0	0
Stauroneis sp.	0	0	0
Surirellinees			
Denticula elegans	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0	0	0
Nitzschia acicularis	0	0	0
Nitzschia dissipata	0	0	0
Nitzschia frustulum	1391	0	0
Nitzschia hantzschiana	0	0	0
Nitzschia linearis	0	0	0
Nitzschia palea	1391	918	1790
Nitzschia sp.	0	0	0
Surirella angustata	0	0	0
Total Cell Count	223919	146421	276586

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR1 Cell Count	Rock RR2 Cell Count	Rock RR3 Cell Count	Rock RR4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	472	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	339	236	1539
Ceratoneis arcus var. amphioxys	0	5770	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	236	0
Diatoma hiemale var. quadratum	0	679	0	1026
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	558	0	0	1026
Fragilaria construens var. binodis	0	0	0	1026
Fragilaria construens var. venter	1395	0	236	10258
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	236	2052
Fragilaria vaucheriae	1673	1018	1181	4103
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	558	0	0	1026
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	35141	18667	17597	64625
Achnanthes sp.	0	0	0	0
Cocconeis placentula	5020	339	1535	4103
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	472	1026
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	558	0	236	0
Cymbella caespitosa	2510	679	472	3077
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR1 Cell Count	Rock RR2 Cell Count	Rock RR3 Cell Count	Rock RR4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	1116	1358	472	2052
Cymbella turgida	0	0	0	1026
Cymbella ventricosa	558	339	236	2052
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	236	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	40162	22400	10629	27184
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	339	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	1026
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	1697	0	4103
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	1026
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	236	0
Nitzschia palea	0	0	236	7694
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	89248	53625	34958	141048

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR5 Cell Count	Rock RR6 Cell Count	Rock RR7 Cell Count	Rock RR8 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	908	0	3347	276
Ceratoneis arcus var. amphioxys	0	0	1674	0
Diatoma elongatum	0	436	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var: quadratum	0	0	0	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	606	0	0	0
Fragilaria construens var. binodis	0	0	5021	552
Fragilaria construens var. venter	2422	872	13390	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	1211	872	1116	276
Fragilaria vaucheriae	0	9156	3347	0
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	1744	1116	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	2180	1116	552
Achnanthes minutissima	42089	64092	90938	23184
Achnanthes sp.	0	0	0	0
Cocconeis placentula	3028	3488	4463	966
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	606	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	606	0	2232	0
Cymbella caespitosa	3936	2180	4463	1104
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR5 Cell Count	Rock RR6 Cell Count	Rock RR7 Cell Count	Rock RR8 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	1211	6104	2232	966
Cymbella turgida	0	0	0	0
Cymbella ventricosa	1817	3488	2232	276
Cymbella sp.	0	872	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	872	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	29069	36188	39053	12972
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	908	0	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	1116	0
Nitzschia dissipata	606	0	0	0
Nitzschia frustulum	606	0	1116	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	872	0	0
Nitzschia palea	1211	4796	4463	276
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	90840	138212	182433	41400

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR9 Cell Count	Rock RR10 Cell Count	Rock RR11 Cell Count	Rock RR12 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	109
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	510	0	143	0
Ceratoneis arcus var. amphioxys	255	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	143	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	255	596	143	163
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	766	0	0	0
Synedra ulna	0	0	143	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	54
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	109
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	255	0	0	0
Achnanthes minutissima	18757	21470	9321	3590
Achnanthes sp.	0	0	0	0
Cocconeis placentula	638	1193	860	762
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	143	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	1021	596	574	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR9 Cell Count	Rock RR10 Cell Count	Rock RR11 Cell Count	Rock RR12 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	255	1640	287	381
Cymbella turgida	0	0	0	0
Cymbella ventricosa	255	0	430	109
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	143	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	14674	18936	9178	2938
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	298	143	163
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	255	0	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	37897	44730	21653	8378

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR13 Cell Count	Rock RR14 Cell Count	Rock RR15 Cell Count	Rock RR16 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	54	82	101
Ceratoneis arcus var. amphioxys	0	54	82	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	55	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	55	25
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	414	0	0	0
Fragilaria crotonensis	0	0	0	25
Fragilaria leptostauron	0	0	55	25
Fragilaria vaucheriae	414	0	109	0
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	108	0	0
Synedra ulna	0	54	0	50
Synedra ulna var. oxyrhynchus	207	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	0	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	6359	2798	2430	1751
Achnanthes sp.	0	0	0	0
Cocconeis placentula	1396	538	928	416
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	25
Amphora coffeaeformis	0	54	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	27	0
Cymbella caespitosa	414	269	273	50
Cymbella cistula	103	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR13 Cell Count	Rock RR14 Cell Count	Rock RR15 Cell Count	Rock RR16 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	414	215	437	76
Cymbella turgida	0	0	0	0
Cymbella ventricosa	310	108	55	88
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	5687	3685	3467	995
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	50
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	50
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	414	54	0	25
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	25
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	55	25
Nitzschia linearis	0	0	0	76
Nitzschia palea	0	81	82	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	16130	8070	8190	3881

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR17 Cell Count	Rock RR18 Cell Count	Rock RR19 Cell Count	Rock RR20 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	151	0
Fragilariales				
Ceratoneis arcus	156	0	101	0
Ceratoneis arcus var. amphioxys	39	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma vulgare	0	0	202	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	149	0	0
Fragilaria vaucheriae	313	299	202	0
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	101	0
Synedra ulna	0	0	302	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	50	0
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	1955	9412	5443	3706
Achnanthes sp.	0	0	0	0
Cocconeis placentula	2933	1494	3578	232
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	302	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	149	0	0
Cymbella caespitosa	117	2017	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR17 Cell Count	Rock RR18 Cell Count	Rock RR19 Cell Count	Rock RR20 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	547	672	504	463
Cymbella turgida	0	0	0	0
Cymbella ventricosa	39	0	302	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	5396	7022	3276	7836
Gomphonema parvulum	0	149	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	78	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	149	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	196	0	101	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	896	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	448	605	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	11769	22858	15221	12236

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR21 Cell Count	Rock RR22 Cell Count	Rock RR23 Cell Count	Rock RR24 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	0	0	45
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	423	0	0
Fragilaria construens	0	0	257	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	0	0	514	90
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	514	68
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	423	0	0
Achnanthes lanceolata	213	0	0	0
Achnanthes microcephala	0	846	0	0
Achnanthes minutissima	1747	49890	37137	2712
Achnanthes sp.	0	1691	1028	0
Cocconeis placentula	1257	1480	2185	633
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	257	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	64	1691	257	45
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR21 Cell Count	Rock RR22 Cell Count	Rock RR23 Cell Count	Rock RR24 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	596	423	1028	158
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	0	0	0
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	423	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	2599	13741	4626	2938
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	90
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	257	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	0	514	90
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	6475	71030	48573	6870

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR25 Cell Count	Rock RR26 Cell Count	Rock RR27 Cell Count
Coscinodiscales			
Cyclotella glomerata	0	0	0
Cyclotella ocellata	0	0	0
Melosira granulata	0	0	0
Melosira varians	0	0	0
Fragilariales			
Ceratoneis arcus	0	0	337
Ceratoneis arcus var. amphioxys	277	0	0
Diatoma elongatum	0	0	0
Diatoma hiemale	0	0	0
Diatoma hiemale var. quadratum	0	0	0
Diatoma vulgare	0	0	0
Fragilaria capucina	831	0	337
Fragilaria construens	0	0	0
Fragilaria construens var. binodis	0	0	337
Fragilaria construens var. venter	0	0	0
Fragilaria crotonensis	0	0	0
Fragilaria leptostauron	277	0	0
Fragilaria vaucheriae	831	196	168
Meridion circulare	0	0	0
Synedra acus var. radians	0	0	0
Synedra acus var. angustissima	831	0	0
Synedra ulna	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0
Tabellaria fenestrata	0	0	0
Tabellaria flocculosa	0	0	0
Achnanthales			
Achnanthes flexella	277	196	0
Achnanthes lanceolata	277	98	0
Achnanthes microcephala	0	0	0
Achnanthes minutissima	24653	5037	11956
Achnanthes sp.	0	0	674
Cocconeis placentula	1385	2983	1516
Rhoicosphenia curvata	0	0	0
Naviculales			
Amphipleura pellucida	0	0	84
Amphora coffeaeformis	0	0	0
Amphora ovalis	0	0	0
Amphora sp.	0	0	0
Anomoeneis exilis	0	0	0
Cymbella affinis	0	0	0
Cymbella caespitosa	831	98	421
Cymbella cistula	0	0	0
Cymbella mexicana	0	0	0

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR25 Cell Count	Rock RR26 Cell Count	Rock RR27 Cell Count
Cymbella prostrata	0	0	0
Cymbella sinuata	0	440	1179
Cymbella turgida	0	0	0
Cymbella ventricosa	0	98	168
Cymbella sp.	0	0	0
Diploneis decipiens	0	0	0
Frustulia rhomboides	0	0	0
Gomphonema geminatum	0	0	0
Gomphonema herculeanum	0	0	0
Gomphonema intricatum	0	0	0
Gomphonema lanceolatum	0	0	0
Gomphonema olivaceum	12604	9682	8841
Gomphonema parvulum	0	0	0
Gomphonema sp.	0	0	0
Gyrosigma sciotense	0	0	0
Navicula arvensis	0	0	0
Navicula bicephala	0	0	0
Navicula pelliculosa	0	0	0
Navicula radiosa	0	0	0
Navicula salinarum var. intermedia	0	0	0
Navicula scutelloides	0	0	0
Navicula tripunctata	0	0	168
Navicula viridula	0	0	0
Navicula sp.B	0	0	0
Navicula sp.	0	0	0
Neidium sp.	0	0	0
Pinnularia sp.	0	0	0
Stauroneis anceps	0	0	0
Stauroneis sp.	0	0	0
Surirellinees			
Denticula elegans	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0	0	0
Nitzschia acicularis	0	0	0
Nitzschia dissipata	0	0	0
Nitzschia frustulum	277	0	0
Nitzschia hantzschiana	0	0	168
Nitzschia linearis	0	0	0
Nitzschia palea	0	98	168
Nitzschia sp.	0	0	0
Surirella angustata	0	0	0
Total Cell Count	43351	18924	26523

Date: August 29, 1979
Station: Elder Creek

Species	Rock E1 Cell Count	Rock E2 Cell Count	Rock E3 Cell Count	Rock E4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	30	1561	78	0
Ceratoneis arcus var. amphioxys	59	1561	195	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	78	0
Diatoma hiemale var. quadratum	0	1040	156	1346
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	156	0
Fragilaria vaucheriae	0	4682	156	1683
Meridion circulare	0	0	156	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	1151	9884	1287	3871
Synedra ulna	118	2081	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	472	10144	1365	7069
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	1682	7283	3705	14474
Achnanthes sp.	0	0	0	0
Cocconeis placentula	561	9364	858	5217
Rhoicosphenia curvata	59	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	1040	234	673
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 29, 1979
Station: Elder Creek

Species	Rock E1 Cell Count	Rock E2 Cell Count	Rock E3 Cell Count	Rock E4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	59	1040	0	1346
Cymbella turgida	0	0	0	0
Cymbella ventricosa	354	2601	312	1010
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	337
Frustulia rhomboides	0	520	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	207	1561	312	2861
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	3127	10924	2769	7742
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	78	0
Navicula pelliculosa	0	520	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	30	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	797	19508	1638	6732
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	673
Nitzschia acicularis	59	0	0	0
Nitzschia dissipata	0	1040	0	673
Nitzschia frustulum	0	520	0	337
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	117	168
Nitzschia palea	325	7283	312	4712
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	9086	94156	13962	60925

Date: August 29, 1979
Station: Sage Creek

Species	Rock S1 Cell Count	Rock S2 Cell Count	Rock S3 Cell Count	Rock S4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	0	0	0
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	440	11099	0	0
Diatoma hiemale	440	0	0	0
Diatoma hiemale var. quadratum	0	0	0	1441
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	881	0	3993	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	1762	30522	13976	1441
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	2202	0	0	2162
Fragilaria vaucheriae	1762	5549	1997	0
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	1762	0	1997	1441
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	5549	0	0
Achnanthes lanceolata	881	0	3993	1441
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	88520	649280	263551	132609
Achnanthes sp.	0	0	0	2883
Cocconeis placentula	5725	41621	13976	49008
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	881	0	1997	5766
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 29, 1979
Station: Sage Creek

Species	Rock S1 Cell Count	Rock S2 Cell Count	Rock S3 Cell Count	Rock S4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	4404	11099	7986	1441
Cymbella turgida	0	0	0	0
Cymbella ventricosa	881	5549	1997	1441
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	16295	61043	18968	12973
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	2995	0
Navicula radiosa	0	0	1997	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	2775	0	1441
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	2642	5549	1997	2162
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	22198	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	5549	0	0
Nitzschia hantzschiana	0	5549	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	2642	0	1997	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	1441
Total Cell Count	132120	862932	343415	219093

Date: November 8, 1979
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	94	0	0
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	281	52	0
Diatoma vulgare	0	374	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	259	0	0	0
Fragilaria construens var. binodis	129	0	0	0
Fragilaria construens var. venter	0	0	392	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	129	281	104	872
Fragilaria vaucheriae	0	187	52	3490
Meridion circulare	259	562	104	1745
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	129	0	52	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	129	1451	1279	19629
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	4723	4774	2688	56270
Achnanthes sp.	0	0	0	0
Cocconeis placentula	5111	4399	1253	30098
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	187	104	2181
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	453	281	0	1745
Cymbella cistula	647	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: November 8, 1979
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	518	374	235	1745
Cymbella turgida	0	0	0	0
Cymbella ventricosa	259	281	0	872
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	6664	2574	1984	15703
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	1745
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	94	131	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	52	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	259	468	157	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	19669	16661	8639	136094

Date: November 8, 1979
Station: Kishinena Creek

Species	Rock K1 Cell Count	Rock K2 Cell Count	Rock K3 Cell Count	Rock K4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	0	0	258
Ceratoneis arcus var. amphioxys	0	0	0	172
Diatoma elongatum	3409	0	0	0
Diatoma hiemale	3409	0	0	0
Diatoma hiemale var. quadratum	0	0	0	172
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	6819	734	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	6819	0	0	172
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	6819	0	0	0
Fragilaria vaucheriae	20456	0	293	0
Meridion circulare	0	0	98	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	6819	0	0	172
Synedra ulna	3409	0	196	344
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	3409	0	0	172
Achnanthes microcephala	13638	0	0	0
Achnanthes minutissima	300027	27724	4890	9277
Achnanthes sp.	0	0	0	0
Cocconeis placentula	17047	3488	978	1546
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	367	0	0
Amphora coffeaeformis	3409	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	10228	734	0	0
Cymbella caespitosa	17047	0	293	344
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: November 8, 1979
Station: Kishinena Creek

Species	Rock K1 Cell Count	Rock K2 Cell Count	Rock K3 Cell Count	Rock K4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	6819	734	98	344
Cymbella turgida	0	0	0	172
Cymbella ventricosa	3409	734	391	172
Cymbella sp.	0	0	0	172
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	61369	24419	6846	13572
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	3409	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	0	147	0
Neidium sp.	0	0	0	86
Pinnularia sp.	0	0	0	172
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	98	0
Nitzschia hantzschiana	6819	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	47732	367	342	172
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	552323	59303	14670	27488

Date: November 8, 1979
Station: Elder Creek

Species	Rock E1 Cell Count	Rock E2 Cell Count	Rock E3 Cell Count	Rock E4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	413	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	0	525	0
Ceratoneis arcus var. amphioxys	207	0	525	302
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	517	0	525	603
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	930	0	0	0
Fragilaria crotonensis	413	0	0	0
Fragilaria leptostauron	0	0	0	0
Fragilaria vaucheriae	207	0	0	3620
Meridion circulare	0	0	0	1207
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	3616	0	0	18705
Synedra ulna	517	845	2885	0
Synedra ulna var. oxyrhynchus	0	1443	7869	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	1756	458	525	8146
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	2273	1866	7344	34997
Achnanthes sp.	207	0	3410	0
Cocconeis placentula	3202	880	12590	11163
Rhoicosphenia curvata	0	0	1049	603
Naviculales				
Amphipleura pellucida	207	0	0	0
Amphora coffeaeformis	207	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	207	0	0	0
Cymbella caespitosa	826	352	0	0
Cymbella cistula	0	141	525	0
Cymbella mexicana	0	0	0	0

continued
Date: November 8, 1979
Station: Elder Creek

Species	Rock E1 Cell Count	Rock E2 Cell Count	Rock E3 Cell Count	Rock E4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	413	0	1049	0
Cymbella turgida	0	0	0	0
Cymbella ventricosa	207	422	525	1207
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	1033	141	6820	13577
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	14565	3520	29115	10861
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	525	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	413	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	3202	774	1049	10258
Neidium sp.	0	0	525	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	525	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	413	0	0	0
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	70	0	0
Nitzschia palea	207	141	1574	9654
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	36155	11053	79477	124904

Date: November 8, 1979
Station: Sage Creek

Species	Rock S1 Cell Count	Rock S2 Cell Count	Rock S3 Cell Count	Rock S4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	44395	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	0	9865	0	0
Ceratoneis arcus var. amphioxys	0	0	0	0
Diatoma elongatum	13154	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	13154	0	6342	103354
Diatoma vulgare	0	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	26308	98652	31711	0
Fragilaria construens var. binodis	26308	0	63422	0
Fragilaria construens var. venter	276238	197304	25369	351404
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	13154	24663	3171	0
Fragilaria vaucheriae	157850	39461	19027	103354
Meridion circulare	13154	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	82683
Synedra ulna	0	0	0	41342
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	0	0	6342	0
Achnanthes microcephala	111811	9865	101475	51677
Achnanthes minutissima	1243072	907598	846684	2056745
Achnanthes sp.	65771	83854	0	0
Cocconeis placentula	13154	24663	12684	165366
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	13154	0	6342	0
Amphora coffeaeformis	26308	0	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	105234	0	0	103354
Cymbella caespitosa	92079	29596	25369	165366
Cymbella cistula	0	0	19027	0
Cymbella mexicana	0	0	0	20671

continued
Date: November 8, 1979
Station: Sage Creek

Species	Rock S1 Cell Count	Rock S2 Cell Count	Rock S3 Cell Count	Rock S4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	39463	9865	12684	20671
Cymbella turgida	0	0	0	0
Cymbella ventricosa	0	9865	0	41342
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	9865	0	0
Gomphonema intricatum	0	0	12684	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	249930	98652	19027	206708
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	0
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	39463	39461	0	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	9865	0	0
Nitzschia dissipata	0	9865	6342	0
Nitzschia frustulum	0	0	6342	0
Nitzschia hantzschiana	0	0	12684	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	157850	24663	25369	62012
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	2696611	1637623	1306493	3576048

Date: August 26, 1980
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	0	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	0	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	173	0	0	453
Ceratoneis arcus var. amphioxys	0	25	24	453
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	907
Diatoma hiemale var. quadratum	345	321	156	0
Diatoma vulgare	460	49	24	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	0	0	0	0
Fragilaria construens var. venter	0	0	0	453
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	0	0	24	907
Fragilaria vaucheriae	0	49	0	907
Meridion circulare	115	1408	96	1587
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	0	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0	0
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	3105	346	48	8615
Achnanthes microcephala	0	0	0	0
Achnanthes minutissima	5290	2989	852	14282
Achnanthes sp.	0	0	0	0
Cocconeis placentula	1265	741	324	7935
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	0	0	0	0
Amphora coffeaeformis	0	0	0	1360
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	0	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	0	0	0
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 26, 1980
Station: Akamina Creek

Species	Rock A1 Cell Count	Rock A2 Cell Count	Rock A3 Cell Count	Rock A4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	115	148	48	1360
Cymbella turgida	0	0	0	0
Cymbella ventricosa	115	49	96	1360
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	49	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	0	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	6440	1235	1848	22670
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	0	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	48	0
Navicula scutelloides	0	0	0	907
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	0	198	24	1360
Neidium sp.	115	0	0	1814
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	0	0	0	0
Nitzschia dissipata	115	0	0	0
Nitzschia frustulum	460	0	0	907
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	0	0	0
Nitzschia palea	0	99	24	2267
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	18113	7706	3636	70504

Date: August 26, 1980
Station: Kishinena Creek

Species	Rock K1 Cell Count	Rock K2 Cell Count	Rock K3 Cell Count	Rock K4 Cell Count
Coscinodiscales				
Cyclotella glomerata	0	9083	0	0
Cyclotella ocellata	0	0	0	0
Melosira granulata	3915	0	0	0
Melosira varians	0	0	0	0
Fragilariales				
Ceratoneis arcus	5872	4542	2936	0
Ceratoneis arcus var. amphioxys	0	9083	0	0
Diatoma elongatum	0	0	0	0
Diatoma hiemale	0	0	0	0
Diatoma hiemale var. quadratum	0	0	0	0
Diatoma vulgare	1957	0	0	0
Fragilaria capucina	0	0	0	0
Fragilaria construens	0	0	0	0
Fragilaria construens var. binodis	7830	4542	0	0
Fragilaria construens var. venter	5872	0	1101	0
Fragilaria crotonensis	0	0	0	0
Fragilaria leptostauron	5872	9083	0	0
Fragilaria vaucheriae	5872	27250	0	2610
Meridion circulare	0	0	0	0
Synedra acus var. radians	0	0	0	0
Synedra acus var. angustissima	0	0	0	0
Synedra ulna	3915	0	0	2610
Synedra ulna var. oxyrhynchus	1957	0	367	1305
Tabellaria fenestrata	0	0	0	0
Tabellaria flocculosa	0	0	0	0
Achnanthales				
Achnanthes flexella	0	0	0	0
Achnanthes lanceolata	3915	0	0	0
Achnanthes microcephala	0	22708	4404	19575
Achnanthes minutissima	152677	370140	92117	57420
Achnanthes sp.	9787	4542	0	0
Cocconeis placentula	13702	22708	3670	5220
Rhoicosphenia curvata	0	0	0	0
Naviculales				
Amphipleura pellucida	1957	4542	734	0
Amphora coffeaeformis	1957	4542	0	0
Amphora ovalis	0	0	0	0
Amphora sp.	0	0	0	0
Anomoeneis exilis	1957	0	0	0
Cymbella affinis	0	0	0	0
Cymbella caespitosa	0	122623	5872	7830
Cymbella cistula	0	0	0	0
Cymbella mexicana	0	0	0	0

continued
Date: August 26, 1980
Station: Kishinena Creek

Species	Rock K1 Cell Count	Rock K2 Cell Count	Rock K3 Cell Count	Rock K4 Cell Count
Cymbella prostrata	0	0	0	0
Cymbella sinuata	0	9083	734	1305
Cymbella turgida	0	0	0	0
Cymbella ventricosa	1957	13625	1468	1305
Cymbella sp.	0	0	0	0
Diploneis decipiens	0	0	0	0
Frustulia rhomboides	0	0	0	0
Gomphonema geminatum	1957	0	0	0
Gomphonema herculeanum	0	0	0	0
Gomphonema intricatum	0	0	0	0
Gomphonema lanceolatum	0	0	0	0
Gomphonema olivaceum	35233	79478	12478	106358
Gomphonema parvulum	0	0	0	0
Gomphonema sp.	0	0	0	0
Gyrosigma sciotense	0	0	0	0
Navicula arvensis	0	0	0	0
Navicula bicephala	0	0	0	0
Navicula pelliculosa	0	9083	0	0
Navicula radiosa	0	0	0	0
Navicula salinarum var. intermedia	0	0	0	1305
Navicula scutelloides	0	0	0	0
Navicula tripunctata	0	0	0	0
Navicula viridula	0	0	0	0
Navicula sp.B	0	0	0	0
Navicula sp.	7830	13625	2936	0
Neidium sp.	0	0	0	0
Pinnularia sp.	0	0	0	0
Stauroneis anceps	0	0	0	0
Stauroneis sp.	0	0	0	0
Surirellinees				
Denticula elegans	0	0	0	0
Epithemia sorex	0	0	0	0
Epithemia turgida	0	0	0	0
Nitzschia acicularis	9787	0	0	0
Nitzschia dissipata	0	0	0	0
Nitzschia frustulum	0	0	0	1305
Nitzschia hantzschiana	0	0	0	0
Nitzschia linearis	0	4542	0	0
Nitzschia palea	25446	18166	0	0
Nitzschia sp.	0	0	0	0
Surirella angustata	0	0	0	0
Total Cell Count	311227	762989	128817	208148

Date: July 28, 1982
Station: Akamina Creek

Species	Rock B Cell Count	Rock C Cell Count	Rock D Cell Count
Coscinodiscales			
Cyclotella glomerata	0	0	0
Cyclotella ocellata	0	0	0
Melosira granulata	0	0	0
Melosira varians	0	0	0
Fragilariales			
Ceratoneis arcus	48	13	22
Ceratoneis arcus var. amphioxys	0	0	0
Diatoma elongatum	0	0	0
Diatoma hiemale	26	26	28
Diatoma hiemale var. quadratum	44	32	39
Diatoma vulgare	0	0	0
Fragilaria capucina	0	0	0
Fragilaria construens	0	0	0
Fragilaria construens var. binodis	13	3	11
Fragilaria construens var. venter	0	0	0
Fragilaria crotonensis	0	0	0
Fragilaria leptostauron	9	6	0
Fragilaria vaucheriae	0	0	0
Meridion circulare	79	22	22
Meridion circulare var. constrictum	0	0	0
Synedra acus var. radians	0	0	0
Synedra acus var. angustissima	0	0	0
Synedra rumpens var. fragilarioides	0	3	0
Synedra ulna	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0
Tabellaria fenestrata	0	0	0
Tabellaria flocculosa	0	0	0
Achnanthales			
Achnanthes flexella	0	0	0
Achnanthes lanceolata	4	45	50
Achnanthes microcephala	0	0	0
Achnanthes minutissima	22	96	95
Achnanthes sp.	0	0	0
Cocconeis placentula	286	80	118
Rhoicosphenia curvata	0	0	0
Naviculales			
Amphipleura pellucida	0	0	0
Amphora coffeaeformis	0	0	0
Amphora ovalis	0	0	0
Amphora sp.	0	0	0
Anomoeneis exilis	0	0	0
Cymbella affinis	0	0	0
Cymbella caespitosa	0	0	0
Cymbella cistula	0	0	0
Cymbella mexicana	0	0	0

continued
Date: July 28, 1982
Station: Akamina Creek

Species	Rock B Cell Count	Rock C Cell Count	Rock D Cell Count
Cymbella prostrata	0	0	0
Cymbella sinuata	22	144	213
Cymbella turgida	4	0	0
Cymbella ventricosa	35	0	28
Cymbella sp.	0	0	0
Diploneis decipiens	0	0	0
Frustulia rhomboides	0	0	0
Gomphonema geminatum	0	0	0
Gomphonema herculeanum	4	0	0
Gomphonema intricatum	18	0	0
Gomphonema lanceolatum	0	0	0
Gomphonema olivaceoides var. densestriata	40	118	258
Gomphonema olivaceum	546	346	812
Gomphonema parvulum	75	10	56
Gomphonema sp.	0	0	0
Gyrosigma sciotense	0	0	0
Navicula arvensis	0	0	0
Navicula bicephala	0	0	0
Navicula pelliculosa	0	3	0
Navicula radiosa	0	0	0
Navicula salinarum var. intermedia	0	0	0
Navicula scutelloides	0	0	0
Navicula tripunctata	4	0	0
Navicula viridula	4	0	0
Navicula sp.B	0	0	0
Navicula sp.	0	0	0
Neidium sp.	0	0	0
Pinnularia sp.	0	0	0
Stauroneis anceps	0	0	0
Stauroneis sp.	0	0	0
Surirellinees			
Denticula elegans	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	4	0	0
Nitzschia acicularis	0	0	0
Nitzschia dissipata	0	0	0
Nitzschia frustulum	0	0	0
Nitzschia hantzschiana	0	3	0
Nitzschia linearis	0	0	6
Nitzschia palea	0	3	0
Nitzschia sp.	0	0	0
Surirella angustata	0	0	0
Total Cell Count	1289	954	1758

Date: July 28, 1982
Station: Kishinena Creek

Species	Rock A Cell Count	Rock B Cell Count	Rock C Cell Count
Coscinodiscales			
Cyclotella glomerata	0	0	0
Cyclotella ocellata	0	0	0
Melosira granulata	0	0	0
Melosira varians	0	0	0
Fragilariales			
Ceratoneis arcus	14	14	10
Ceratoneis arcus var. amphioxys	0	0	0
Diatoma elongatum	0	0	3
Diatoma hiemale	0	0	0
Diatoma hiemale var. quadratum	0	0	3
Diatoma vulgare	0	0	0
Fragilaria capucina	0	0	20
Fragilaria construens	0	0	0
Fragilaria construens var. binodis	0	28	0
Fragilaria construens var. venter	0	0	0
Fragilaria crotonensis	0	0	0
Fragilaria leptostauron	0	0	0
Fragilaria vaucheriae	7	0	0
Meridion circulare	0	0	0
Meridion circulare var. constrictum	0	0	0
Synedra acus var. radians	0	0	0
Synedra acus var. angustissima	0	0	0
Synedra rumpens var. fragilarioides	0	0	0
Synedra ulna	0	0	0
Synedra ulna var. oxyrhynchus	0	0	0
Tabellaria fenestrata	0	0	0
Tabellaria flocculosa	0	0	0
Achnanthales			
Achnanthes flexella	0	0	0
Achnanthes lanceolata	28	9	0
Achnanthes microcephala	0	0	0
Achnanthes minutissima	616	455	287
Achnanthes sp.	0	0	0
Cocconeis placentula	98	60	307
Rhoicosphenia curvata	0	0	0
Naviculales			
Amphipleura pellucida	0	0	0
Amphora coffeaeformis	0	0	0
Amphora ovalis	0	5	0
Amphora sp.	0	0	0
Anomoeneis exilis	0	0	0
Cymbella affinis	0	0	0
Cymbella caespitosa	0	0	0
Cymbella cistula	0	0	0
Cymbella mexicana	0	0	0

continued
Date: July 28, 1982
Station: Kishinena Creek

Species	Rock A Cell Count	Rock B Cell Count	Rock C Cell Count
Cymbella prostrata	0	0	0
Cymbella sinuata	7	92	56
Cymbella turgida	0	0	0
Cymbella ventricosa	0	0	3
Cymbella sp.	0	0	0
Diploneis decipiens	0	0	0
Frustulia rhomboides	0	0	0
Gomphonema geminatum	0	0	0
Gomphonema herculeanum	0	0	0
Gomphonema intricatum	0	0	0
Gomphonema lanceolatum	0	0	0
Gomphonema olivaceoides var. densestriata	287	230	0
Gomphonema olivaceum	1050	603	376
Gomphonema parvulum	0	0	0
Gomphonema sp.	0	0	0
Gyrosigma sciotense	0	0	0
Navicula arvensis	0	0	0
Navicula bicephala	0	0	3
Navicula pelliculosa	0	5	0
Navicula radiosa	0	0	0
Navicula salinarum var. intermedia	0	0	0
Navicula scutelloides	0	0	0
Navicula tripunctata	0	0	0
Navicula viridula	0	0	0
Navicula sp.B	0	0	0
Navicula sp.	0	0	0
Neidium sp.	0	0	0
Pinnularia sp.	0	0	0
Stauroneis anceps	0	0	0
Stauroneis sp.	0	0	0
Surirellinees			
Denticula elegans	0	0	0
Epithemia sorex	0	0	0
Epithemia turgida	0	0	0
Nitzschia acicularis	0	0	0
Nitzschia dissipata	0	0	7
Nitzschia frustulum	0	0	0
Nitzschia hantzschiana	0	0	0
Nitzschia linearis	0	0	0
Nitzschia palea	7	0	0
Nitzschia sp.	0	0	0
Surirella angustata	0	0	0
Total Cell Count	2114	1500	1076

TABLE 21

Percent Numeric Composition of Periphytic Diatoms Collected From Some Tributaries to the North Fork of the Flathead River, 1979-1982

Diatom composition of qualitative samples is reported in intervals of percent composition, as follows:

+ denotes that number of cells was < 5% of total cells enumerated
++ denotes that number of cells was 5-20% of total cells enumerated
+++ denotes that number of cells was > 20% of total cells enumerated

Date: April 3, 1979
Station: Akamina Creek

Species	Rock T5A % Abundance	Rock T5B % Abundance	Rock T5C % Abundance	Rock T5D % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.67	.63	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	1.34	.00
Diatoma elongatum	.00	.00	1.34	.00
Diatoma hiemale	.00	.00	.67	.00
Diatoma hiemale var. quadratum	.00	.63	.33	4.47
Diatoma vulgare	.67	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.67	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.67	.64
Fragilaria vaucheriae	.67	.00	.00	.00
Meridion circulare	.00	.63	2.68	.64
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	5.02	1.89	2.68	2.56
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	9.36	1.26	13.04	9.58
Achnanthes sp.	.00	.00	.33	.00
Cocconeis placentula	14.38	3.15	18.73	6.71
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	4.35	1.28
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.00	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: April 3, 1979
Station: Akamina Creek

Species	Rock T5A % Abundance	Rock T5B % Abundance	Rock T5C % Abundance	Rock T5D % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	.63	1.34	1.28
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.67	.00	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	62.54	91.17	51.17	72.84
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.67	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	2.68	.00	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	1.34	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	1.34	.00	.67	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	12	8	15	9
Shannon-Weiner Index	1.91	.65	2.30	1.51

Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T1A % Abundance	Rock T1B % Abundance	Rock T1C % Abundance	Rock T1D % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.32	2.65	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.32	.00	.00
Diatoma hiemale var. quadratum	.67	1.94	3.97	.67
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.67	.65	.66	.00
Fragilaria construens var. venter	.00	.00	1.32	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.65	.00	.00
Fragilaria vaucheriae	4.04	1.94	.00	.67
Meridion circulare	.00	.00	.00	.67
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.65	.00	.00
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	54.88	11.61	40.40	67.00
Achnanthes sp.	.00	.97	.00	.00
Cocconeis placentula	3.03	1.61	2.65	.67
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	1.35	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.67	.65	.00	2.02
Cymbella cistula	.67	.00	.66	2.02
Cymbella mexicana	.00	.00	.00	.00

continued
Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T1A % Abundance	Rock T1B % Abundance	Rock T1C % Abundance	Rock T1D % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	.00	.00	.00
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	2.02	.65	.00	.67
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.65	.00	.00
Gomphonema olivaceum	22.56	75.48	46.36	14.81
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	6.06	1.94	.66	9.43
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.67	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.67	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	2.02	.00	.66	1.35
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	14	15	10	11
Shannon-Weiner Index	2.15	1.49	1.78	1.67

Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T2A % Abundance	Rock T2B % Abundance	Rock T2C % Abundance	Rock T2D % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.62	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.00	3.45	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.67
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	2.00	.69	2.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	2.16	.00	.00	2.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.31	.00	.00	1.33
Fragilaria vaucheriae	.00	.00	2.07	3.33
Meridion circulare	.00	.67	1.38	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.67	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.62	.00	.00	.00
Achnanthes lanceolata	.00	.67	.69	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	40.74	19.00	26.21	59.67
Achnanthes sp.	.00	.00	1.03	.00
Cocconeis placentula	3.40	49.67	12.07	4.67
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	2.00	.69	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.69	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.67	2.76	.00
Cymbella cistula	.00	.67	1.38	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T2A % Abundance	Rock T2B % Abundance	Rock T2C % Abundance	Rock T2D % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	1.23	6.67	1.38	1.33
Cymbella turgida	.00	.00	.69	.00
Cymbella ventricosa	.00	2.67	.00	1.33
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	2.47	.67	.00	.00
Gomphonema olivaceum	45.99	11.33	37.93	20.33
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.62	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	1.33	.00	.00
Navicula sp.	.62	1.33	6.21	1.33
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.67
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	1.23	.00	.69	1.33
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	12	15	17	13
Shannon-Weiner Index	1.82	2.39	2.70	2.02

Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T3A % Abundance	Rock T3B % Abundance	Rock T3C % Abundance	Rock T3D % Abundance
Coscinodiscales				
Cyclotella glomerata	1.33	.00	.00	.63
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.00	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.67	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.67	.63
Diatoma hiemale var. quadratum	.00	.00	.00	1.89
Diatoma vulgare	.00	.00	.34	.00
Fragilaria capucina	.00	.00	.00	1.26
Fragilaria construens	.00	.00	.00	1.26
Fragilaria construens var. binodis	.00	.00	2.69	.63
Fragilaria construens var. venter	.66	.67	1.01	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.67	1.26
Fragilaria vaucheriae	2.66	2.69	.67	4.40
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.63
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.63
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	66.11	77.10	48.82	66.67
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	3.65	2.69	3.03	1.26
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.00	.00	.00
Cymbella cistula	.66	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: April 3, 1979
Station: Kishinena Creek

Species	Rock T3A % Abundance	Rock T3B % Abundance	Rock T3C % Abundance	Rock T3D % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	.67	2.02	.00
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.66	.00	.00	.63
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.63
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.66	.00	.67	.00
Gomphonema olivaceum	19.60	9.43	36.70	12.58
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.66	.00	.00	.00
Navicula sp.	.66	4.71	1.35	4.40
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.63
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.66	.00	.00	.00
Nitzschia frustulum	.00	.67	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	1.99	1.35	.67	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	13	9	14	17
Shannon-Weiner Index	1.70	1.33	1.91	1.96

Date: April 3, 1979
Station: Elder Creek

Species	Rock T6A % Abundance	Rock T6B % Abundance	Rock T6C % Abundance
Coscinodiscales			
Cyclotella glomerata	.00	.00	.00
Cyclotella ocellata	.00	.00	.00
Melosira granulata	.00	.00	.00
Melosira varians	.00	.00	.00
Fragilariales			
Ceratoneis arcus	.00	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00
Diatoma elongatum	.00	.00	.00
Diatoma hiemale	.00	.00	.00
Diatoma hiemale var. quadratum	2.64	.66	2.40
Diatoma vulgare	.00	.00	.00
Fragilaria capucina	.00	.00	.00
Fragilaria construens	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00
Fragilaria vaucheriae	.99	.66	.00
Meridion circulare	.00	.00	.00
Synedra acus var. radians	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00
Synedra ulna	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00
Achnanthales			
Achnanthes flexella	.00	.00	.00
Achnanthes lanceolata	2.64	2.65	4.19
Achnanthes microcephala	.00	.00	.00
Achnanthes minutissima	39.27	5.96	62.28
Achnanthes sp.	.00	.00	.00
Cocconeis placentula	3.63	5.63	8.08
Rhoicosphenia curvata	.00	.66	.00
Naviculales			
Amphipleura pellucida	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00
Amphora ovalis	.00	.00	.00
Amphora sp.	.00	.00	.00
Anomoeneis exilis	.00	.00	.00
Cymbella affinis	.00	.00	.00
Cymbella caespitosa	1.32	.00	.00
Cymbella cistula	.00	.00	.00
Cymbella mexicana	.00	.00	.00

continued
Date: April 3, 1979
Station: Elder Creek

Species	Rock T6A % Abundance	Rock T6B % Abundance	Rock T6C % Abundance
Cymbella prostrata	.00	.00	.00
Cymbella sinuata	.66	1.32	.00
Cymbella turgida	.00	.00	.00
Cymbella ventricosa	3.30	.66	.00
Cymbella sp.	.00	.00	.00
Diploneis decipiens	.00	.00	.00
Frustulia rhomboides	.00	.00	.00
Gomphonema geminatum	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00
Gomphonema intricatum	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00
Gomphonema olivaceum	43.23	81.13	21.26
Gomphonema parvulum	.00	.00	.00
Gomphonema sp.	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00
Navicula arvensis	.00	.00	.00
Navicula bicephala	.00	.00	.00
Navicula pelliculosa	.00	.00	.00
Navicula radiosa	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00
Navicula scutelloides	.00	.00	.00
Navicula tripunctata	.00	.00	.00
Navicula viridula	.00	.00	.00
Navicula sp.B	.00	.00	.60
Navicula sp.	1.65	.66	.00
Neidium sp.	.00	.00	.00
Pinnularia sp.	.00	.00	.00
Stauroneis anceps	.00	.00	.00
Stauroneis sp.	.00	.00	.00
Surirellinees			
Denticula elegans	.00	.00	.00
Epithemia sorex	.00	.00	.00
Epithemia turgida	.00	.00	.00
Nitzschia acicularis	.00	.00	.00
Nitzschia dissipata	.00	.00	.00
Nitzschia frustulum	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.60
Nitzschia linearis	.00	.00	.00
Nitzschia palea	.66	.00	.60
Nitzschia sp.	.00	.00	.00
Surirella angustata	.00	.00	.00
Number of Species	11	10	8
Shannon-Weiner Index	2.01	1.18	1.65

Date: April 3, 1979
Station: Sage Creek

Species	Rock T7A % Abundance	Rock T7B % Abundance	Rock T7C % Abundance
Coscinodiscales			
Cyclotella glomerata	2.49	.00	1.34
Cyclotella ocellata	.00	.00	.00
Melosira granulata	.00	.00	.00
Melosira varians	.00	.00	.00
Fragilariales			
Ceratoneis arcus	.62	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.67
Diatoma elongatum	.00	.00	.00
Diatoma hiemale	.00	.00	.67
Diatoma hiemale var. quadratum	1.87	.00	.00
Diatoma vulgare	.00	.00	.00
Fragilaria capucina	.00	.00	.00
Fragilaria construens	.62	.00	.00
Fragilaria construens var. binodis	1.87	.00	1.34
Fragilaria construens var. venter	.00	.00	.00
Fragilaria crotonensis	.00	.58	.00
Fragilaria leptostauron	1.87	.00	.67
Fragilaria vaucheriae	.62	2.32	2.68
Meridion circulare	.00	.00	.00
Synedra acus var. radians	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00
Synedra ulna	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00
Achnanthales			
Achnanthes flexella	1.25	.00	.00
Achnanthes lanceolata	.00	.00	.00
Achnanthes microcephala	.00	.00	.00
Achnanthes minutissima	44.86	80.87	28.19
Achnanthes sp.	.00	.00	.00
Cocconeis placentula	1.87	2.03	16.11
Rhoicosphenia curvata	.62	.00	.00
Naviculales			
Amphipleura pellucida	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00
Amphora ovalis	.62	.00	.00
Amphora sp.	.00	.00	.00
Anomoeneis exilis	.00	.00	.00
Cymbella affinis	.00	.00	.00
Cymbella caespitosa	1.25	.00	.00
Cymbella cistula	.62	.58	.00
Cymbella mexicana	.00	.00	.00

continued
Date: April 3, 1979
Station: Sage Creek

Species	Rock T7A % Abundance	Rock T7B % Abundance	Rock T7C % Abundance
Cymbella prostrata	.00	.00	.00
Cymbella sinuata	2.18	.00	1.68
Cymbella turgida	.00	.00	.00
Cymbella ventricosa	.62	.00	.00
Cymbella sp.	.00	.00	.00
Diploneis decipiens	.00	.00	.00
Frustulia rhomboides	.00	.00	.00
Gomphonema geminatum	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00
Gomphonema intricatum	.00	.00	.00
Gomphonema lanceolatum	.62	.00	.00
Gomphonema olivaceum	29.91	13.04	46.64
Gomphonema parvulum	.00	.00	.00
Gomphonema sp.	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00
Navicula arvensis	.00	.00	.00
Navicula bicephala	.00	.00	.00
Navicula pelliculosa	.00	.00	.00
Navicula radiosa	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00
Navicula scutelloides	.00	.00	.00
Navicula tripunctata	.00	.00	.00
Navicula viridula	.00	.00	.00
Navicula sp.B	.00	.00	.00
Navicula sp.	2.49	.00	.00
Neidium sp.	.00	.00	.00
Pinnularia sp.	.00	.00	.00
Stauroneis anceps	.00	.00	.00
Stauroneis sp.	.00	.00	.00
Surirellinees			
Denticula elegans	.00	.00	.00
Epithemia sorex	.00	.00	.00
Epithemia turgida	.00	.00	.00
Nitzschia acicularis	.00	.00	.00
Nitzschia dissipata	.00	.00	.00
Nitzschia frustulum	.62	.00	.00
Nitzschia hantzschiana	.00	.00	.00
Nitzschia linearis	.00	.00	.00
Nitzschia palea	2.49	.58	.00
Nitzschia sp.	.00	.00	.00
Surirella angustata	.00	.00	.00
Number of Species	21	7	10
Shannon-Weiner Index	2.56	1.00	2.00

Date: May 15, 1979
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.27	.00	.00	.00
Ceratoneis arcus var. amphioxys	.00	.65	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.62
Diatoma hiemale var. quadratum	.00	.65	.00	.00
Diatoma vulgare	.53	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.00	.00	.00	.00
Meridion circulare	2.93	.00	1.26	.93
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	1.26	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	.00	9.09	6.94	.62
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	2.40	4.22	3.15	2.78
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.00	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: May 15, 1979
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	1.30	.63	1.23
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	.00	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	93.87	82.79	86.75	93.83
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.65	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.65	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	.00	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	5	8	6	6
Shannon-Weiner Index	.43	1.00	.81	.46

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K1 % Abundance	Rock K2 % Abundance	Rock K3 % Abundance	Rock K4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	1.69	5.35	1.01	.00
Ceratoneis arcus var. amphioxys	.00	1.67	4.70	.00
Diatoma elongatum	.68	.00	.00	.00
Diatoma hiemale	1.36	.00	.00	.00
Diatoma hiemale var. quadratum	.68	1.34	3.36	.00
Diatoma vulgare	.00	3.34	.00	.00
Fragilaria capucina	1.36	1.34	4.03	.00
Fragilaria construens	.00	2.68	.00	.00
Fragilaria construens var. binodis	.68	.00	.00	.00
Fragilaria construens var. venter	4.07	1.34	2.01	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	1.02	1.00	.67	.60
Fragilaria vaucheriae	2.71	5.69	2.68	.00
Meridion circulare	.00	.00	2.35	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.67	1.01	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.68	.67	.67	.00
Achnanthes lanceolata	2.37	1.34	.67	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	48.47	42.81	34.23	83.18
Achnanthes sp.	.00	.33	.00	.00
Cocconeis placentula	3.05	2.68	13.76	.90
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	1.36	.67	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	1.36	.67	2.01	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K1 % Abundance	Rock K2 % Abundance	Rock K3 % Abundance	Rock K4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	2.03	1.67	4.03	.60
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	2.71	.67	2.01	1.20
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.68	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	12.88	16.39	19.13	11.41
Gomphonema parvulum	1.69	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	1.34	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.67	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	3.73	.33	.67	1.50
Neidium sp.	.68	.67	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	1.36	.00	1.01	.00
Nitzschia frustulum	1.36	3.34	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	1.36	1.34	.00	.60
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	25	26	19	8
Shannon-Weiner Index	3.08	3.18	3.13	.94

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K5 % Abundance	Rock K6 % Abundance	Rock K7 % Abundance	Rock K8 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.34	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	3.37	.68	.00	2.31
Ceratoneis arcus var. amphioxys	4.38	1.35	.00	.00
Diatoma elongatum	.67	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.67	.00	1.37	1.32
Diatoma vulgare	.00	.68	.00	.00
Fragilaria capucina	2.69	.00	.00	.66
Fragilaria construens	.00	2.70	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	2.70	.68	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.34	.00	.00
Fragilaria vaucheriae	3.37	4.05	4.11	1.98
Meridion circulare	6.06	1.35	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.68	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	1.01	.68	.68	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	35.69	44.93	64.38	63.37
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	6.06	3.04	3.42	2.97
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	2.70	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	1.01	1.69	2.05	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K5 % Abundance	Rock K6 % Abundance	Rock K7 % Abundance	Rock K8 % Abundance
Cymbella prostrata	.00	.00	.68	.00
Cymbella sinuata	2.02	3.04	.00	.00
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.67	2.70	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	1.35	.68	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	25.93	17.57	15.41	26.07
Gomphonema parvulum	2.36	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	1.35	2.36	5.48	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.34	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.66
Nitzschia frustulum	.67	1.35	.00	.66
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.34	.00	.00
Nitzschia palea	.67	4.05	1.37	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	19	23	12	9
Shannon-Weiner Index	2.98	3.01	1.87	1.54

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K9 % Abundance	Rock K10 % Abundance	Rock K11 % Abundance	Rock K12 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	1.36	3.36	.68	.00
Ceratoneis arcus var. amphioxys	1.36	6.71	.34	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.68	.67	.00	.00
Diatoma hiemale var. quadratum	1.70	2.68	4.79	1.95
Diatoma vulgare	.00	.00	.68	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.65
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.68	.00	.00	.00
Fragilaria vaucheriae	3.40	5.37	4.79	4.87
Meridion circulare	.68	1.34	.34	.65
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	1.36	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.68	.00
Achnanthes lanceolata	1.36	2.01	1.37	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	62.93	29.53	34.59	71.75
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	1.36	7.05	3.42	.00
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.68	.65
Amphora sp.	.00	.67	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.68	3.02	5.14	.00
Cymbella cistula	.00	.00	.68	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K9 % Abundance	Rock K10 % Abundance	Rock K11 % Abundance	Rock K12 % Abundance
Cymbella prostrata	.00	.67	.68	.00
Cymbella sinuata	.00	2.01	.68	.00
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	2.68	3.77	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	1.37	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	19.73	26.17	26.37	18.18
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.68	.00
Navicula scutelloides	.00	.00	.68	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.68	4.03	6.16	1.30
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	1.34	.00	.00
Nitzschia frustulum	1.36	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.68	.67	1.37	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	18	22	8
Shannon-Weiner Index	1.95	3.15	3.02	1.34

Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K13 % Abundance	Rock K14 % Abundance	Rock K15 % Abundance	Rock K16 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	2.62	2.92	.00	1.32
Ceratoneis arcus var. amphioxys	1.97	1.95	.00	1.99
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.65	.00	.00
Diatoma hiemale var. quadratum	3.93	.00	.66	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	1.31	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.66	.00	.66	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.99
Fragilaria vaucheriae	.66	1.30	2.66	1.32
Meridion circulare	3.93	3.57	.66	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.32	.00	.66
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.66	.00
Achnanthes lanceolata	.00	.00	1.33	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	17.38	27.27	78.74	63.58
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	13.44	28.57	.33	18.54
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.66	3.90	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: May 15, 1979
Station: Kishinena Creek

Species	Rock K13 % Abundance	Rock K14 % Abundance	Rock K15 % Abundance	Rock K16 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	1.31	2.60	.00	1.99
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	1.97	.00	.66	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	48.20	23.05	7.97	8.94
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	3.90	4.98	.00
Neidium sp.	.66	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.66	.00
Nitzschia frustulum	.66	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.66	.00	.00	.66
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	12	12	10
Shannon-Weiner Index	2.51	2.60	1.32	1.73

Date: May 15, 1979
Station: Elder Creek

Species	Rock E1 % Abundance	Rock E2 % Abundance	Rock E3 % Abundance	Rock E4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.00	1.32	1.03
Ceratoneis arcus var. amphioxys	1.30	.00	.00	1.37
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	11.73	4.75	5.28	5.48
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	9.15	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.65	1.36	1.98	4.11
Meridion circulare	.65	.00	.66	1.37
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.68	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.65	.00	.00	.00
Achnanthes lanceolata	.00	.68	.66	5.82
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	10.75	34.58	25.41	18.49
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	7.49	11.19	2.97	21.92
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.65	.00	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: May 15, 1979
Station: Elder Creek

Species	Rock E1 % Abundance	Rock E2 % Abundance	Rock E3 % Abundance	Rock E4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.65	.68	1.98	2.74
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	1.95	2.03	1.98	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	61.56	34.92	46.86	37.67
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.66	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.65	.00	8.25	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	1.32	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	1.30	.00	.00	.00
Nitzschia sp.	.00	.00	.66	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	13.00	10.00	14.00	10.00
Shannon-Weiner Index	1.98	2.28	2.38	2.50

Date: May 15, 1979
Station: Sage Creek

Species	Rock S1 % Abundance	Rock S2 % Abundance	Rock S3 % Abundance	Rock S4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	13.65	8.78	13.56	4.07
Ceratoneis arcus var. amphioxys	.00	14.53	9.49	4.07
Diatoma elongatum	.00	.68	2.03	.34
Diatoma hiemale	2.73	.00	.00	.68
Diatoma hiemale var. quadratum	.00	.68	1.69	3.39
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.68	.00	.00
Fragilaria construens	.00	.00	1.36	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	2.71	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	4.10	6.08	4.75	2.71
Meridion circulare	1.02	.00	1.36	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	27.65	27.36	20.68	24.41
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	4.44	2.03	3.39	1.36
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.68	.00	.00	.00
Amphora sp.	.00	.00	.00	.68
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	1.35	1.36	2.03
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: May 15, 1979
Station: Sage Creek

Species	Rock S1 % Abundance	Rock S2 % Abundance	Rock S3 % Abundance	Rock S4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	6.14	5.74	4.07	1.36
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	1.69	.00	4.75
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.68
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	35.15	28.04	31.53	47.46
Gomphonema parvulum	.00	.00	.00	.68
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	2.36	1.36	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans				
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	4.44	.00	.68	1.36
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	10	13	15	16
Shannon-Weiner Index	2.53	2.79	3.01	2.49

Date: June 14, 1979
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	4.42	2.97	2.45	.65
Ceratoneis arcus var. amphioxys	.80	.00	.00	.97
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.61	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.66	.00	.00
Fragilaria vaucheriae	.00	.00	.00	.00
Meridion circulare	2.01	1.98	1.23	1.95
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	1.98	1.84	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	12.05	3.63	4.29	3.90
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	4.42	6.27	.92	3.25
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.66	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: June 14, 1979
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	1.32	.61	.00
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	.00	1.23	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	76.31	79.87	86.81	89.29
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.66	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	.00	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	6	10	9	6
Shannon-Weiner Index	1.23	1.28	.92	.71

Date: June 14, 1979
Station: Akamina Creek, Qualitative

Species	% Abundance
Fragilariales	
Ceratoneis arcus	+++
Ceratoneis arcus var. *amphioxys*	++
Diatoma hiemale	+
Diatoma hiemale var. *quadratum*	+
Diatoma vulgare	+
Fragilaria construens var. *binodis*	+
Fragilaria leptostauron	+
Meridion circulare	+
Achnanthales	
Achnanthes minutissima	+
Naviculales	
Cymbella sinuata	+
Gomphonema olivaceum	++

+ denotes that number of cells was < 5% of total cells enumerated
++ denotes that number of cells was 5-20% of total cells enumerated
+++ denotes that number of cells was > 20% of total cells enumerated

Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K1 % Abundance	Rock K2 % Abundance	Rock K3 % Abundance	Rock K4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	7.84	1.94	1.99	2.00
Ceratoneis arcus var. amphioxys	6.54	7.12	5.96	3.67
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.67
Diatoma hiemale var. quadratum	.00	1.62	.66	1.33
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.65	.65	.00	.67
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	1.32	1.33
Fragilaria leptostauron	.65	.00	.00	.00
Fragilaria vaucheriae	1.96	.00	.66	1.33
Meridion circulare	1.31	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	18.63	25.24	29.47	57.67
Achnanthes sp.	.65	.00	.00	.00
Cocconeis placentula	2.29	1.29	1.32	.00
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.65	.00	.00
Amphora ovalis	.65	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.65	.00	.66	1.33
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K1 % Abundance	Rock K2 % Abundance	Rock K3 % Abundance	Rock K4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	6.21	1.29	.00	6.67
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	3.59	1.94	1.99	2.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	44.44	56.96	55.30	18.00
Gomphonema parvulum	1.31	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	2.61	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.66	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	.00	1.33
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.65	.00	.00
Stauroneis sp.	.00	.00	.00	1.33
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.67
Nitzschia linearis	.00	.65	.00	.00
Nitzschia palea	.00	.00	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	12	11	15
Shannon-Weiner Index	2.71	1.90	1.82	2.21

Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K5 % Abundance	Rock K6 % Abundance	Rock K7 % Abundance	Rock K8 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	6.33	1.90	1.95
Ceratoneis arcus var. amphioxys	.00	6.33	2.54	.65
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.33	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.00	.67	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.67	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	3.31	1.33	1.90	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	1.32	4.67	.00	.65
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	43.71	28.67	52.70	79.80
Achnanthes sp.	.00	1.33	.00	.65
Cocconeis placentula	1.32	.67	.32	1.30
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.66	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	1.32	.00	.63	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K5 % Abundance	Rock K6 % Abundance	Rock K7 % Abundance	Rock K8 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.66	1.67	.63	1.30
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	1.99	1.33	3.17	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	44.70	46.00	35.56	12.38
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.33	.00	.00	1.30
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.66	.00	.63	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	11	13	10	9
Shannon-Weiner Index	1.74	2.26	1.69	1.13

Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K9 % Abundance	Rock K10 % Abundance	Rock K11 % Abundance	Rock K12 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	4.67	2.53	1.71	5.98
Ceratoneis arcus var. amphioxys	1.33	.00	.00	.66
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.66
Diatoma hiemale var. quadratum	.00	.00	.68	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.68	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	1.33	.00	1.37	.00
Meridion circulare	.00	.00	2.05	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	1.90	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	7.67	30.38	36.86	37.87
Achnanthes sp.	.00	.00	.68	.00
Cocconeis placentula	.00	.00	.34	1.33
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.00	2.05	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K9 % Abundance	Rock K10 % Abundance	Rock K11 % Abundance	Rock K12 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	2.67	.00	4.78	2.66
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	.63	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	82.33	64.56	47.44	50.83
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	1.37	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	.00	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	6	5	12	7
Shannon-Weiner Index	1.03	1.22	1.93	1.59

Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K13 % Abundance	Rock K14 % Abundance	Rock K15 % Abundance	Rock K16 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	12.04	2.00	3.36	12.74
Ceratoneis arcus var. amphioxys	8.70	1.33	2.68	1.27
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.67	.67	.64
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.00	.67	.67	.64
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	18.06	15.33	31.21	28.03
Achnanthes sp.	2.68	2.00	.67	.00
Cocconeis placentula	.00	.67	.00	7.64
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.67	.00	2.01	1.91
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: June 14, 1979
Station: Kishinena Creek

Species	Rock K13 % Abundance	Rock K14 % Abundance	Rock K15 % Abundance	Rock K16 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	2.01	3.33	2.01	5.10
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	1.34	.67	1.34	.64
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	54.52	72.67	54.70	41.40
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	.67	.67	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	8	11	11	10
Shannon-Weiner Index	1.98	1.46	1.81	2.25

Date: June 14, 1979
Station: Elder Creek

Species	Rock E1 % Abundance	Rock E2 % Abundance	Rock E3 % Abundance	Rock E4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	62.78	62.42	78.25	56.44
Ceratoneis arcus var. amphioxys	16.18	9.32	11.48	11.04
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.61
Diatoma hiemale var. quadratum	5.18	2.48	4.83	12.27
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.00	.00	1.21	.61
Meridion circulare	.00	.62	.60	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.65	.00	1.21	.61
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	.65	.00	.00	3.68
Achnanthes sp.	.00	.00	.60	.61
Cocconeis placentula	1.94	1.55	.60	1.84
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.00	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: June 14, 1979
Station: Elder Creek

Species	Rock E1 % Abundance	Rock E2 % Abundance	Rock E3 % Abundance	Rock E4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	.00	.00	.61
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	1.94	.00	.00	.61
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.61
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	10.68	23.60	1.21	9.20
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	.00	.61
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.61
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	.00	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	8	6	9	15
Shannon-Weiner Index	1.73	1.51	1.21	2.19

Date: June 14, 1979
Station: Elder Creek, Qualitative

Species	% Abundance
Fragilariales	
Ceratoneis arcus	+++
Ceratoneis arcus var. *amphioxys*	+++
Diatoma hiemale var. *quadratum*	+
Achnanthales	
Achnanthes minutissima	+

+ denotes that number of cells was < 5% of total cells enumerated
++ denotes that number of cells was 5-20% of total cells enumerated
+++ denotes that number of cells was > 20% of total cells enumerated

Date: June 14, 1979
Station: Sage Creek

Species	Rock S1 % Abundance	Rock S2 % Abundance	Rock S3 % Abundance	Rock S4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	3.17	15.97	14.29	10.69
Ceratoneis arcus var. amphioxys	.00	.64	.00	.00
Diatoma elongatum	1.27	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.63	.00	6.67	.00
Diatoma vulgare	.00	.64	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	1.28	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.63	.00	.95	.00
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.63	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	6.35	4.47	10.48	40.08
Achnanthes sp.	.00	.64	.00	.00
Cocconeis placentula	.00	.00	3.81	.00
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.63	.00	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: June 14, 1979
Station: Sage Creek

Species	Rock S1 % Abundance	Rock S2 % Abundance	Rock S3 % Abundance	Rock S4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	1.92	.00	6.11
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	.00	.00	1.53
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.63	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	86.03	74.44	63.81	41.60
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	.00	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	9	8	6	5
Shannon-Weiner Index	.91	1.27	1.66	1.74

Date: August 29, 1979
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.97	.00	.00
Ceratoneis arcus var. amphioxys	2.15	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	1.94	.00	.00
Diatoma hiemale var. quadratum	5.54	.00	2.32	2.23
Diatoma vulgare	1.23	.65	.00	1.27
Fragilaria capucina	3.08	.00	.00	.00
Fragilaria construens	8.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	3.31	.00
Fragilaria construens var. venter	3.69	.00	.00	9.87
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	6.15	.97	.66	.00
Fragilaria vaucheriae	6.15	2.59	.00	.00
Meridion circulare	1.54	3.24	1.99	1.91
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.99	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	4.46
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	12.00	5.50	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	4.92	11.65	49.01	48.09
Achnanthes sp.	.00	.65	.00	.00
Cocconeis placentula	2.46	5.50	14.90	7.96
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.62	.65	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.65	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 29, 1979
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	.00	1.99	4.78
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	2.46	1.29	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	31.69	59.87	22.85	14.65
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	1.23	.65	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.92	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.62	1.94	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.62	.65	1.99	3.82
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	1.85	.00	.00	.00
Nitzschia hantzschiana	.62	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	2.46	.65	.00	.96
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	22	18	10	11
Shannon-Weiner Index	3.57	2.32	2.14	2.50

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock Y1 % Abundance	Rock Y2 % Abundance	Rock Y3 % Abundance	Rock Y4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	1.28	.00	.00	1.33
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	1.28	.00	.00	.67
Fragilaria construens	1.28	.67	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.64	.67	.00	2.00
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.32	.00
Synedra acus var. angustissima	.00	.00	.00	2.00
Synedra ulna	.96	1.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.67	.00	.00
Achnanthes lanceolata	.64	.00	.00	.67
Achnanthes microcephala	.64	.00	.65	.00
Achnanthes minutissima	52.24	36.67	18.83	40.33
Achnanthes sp.	.00	.67	1.95	.67
Cocconeis placentula	3.21	4.33	19.48	13.33
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.33	.00	.00
Amphora coffeaeformis	1.28	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	7.37	1.33	.00	.67
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock Y1 % Abundance	Rock Y2 % Abundance	Rock Y3 % Abundance	Rock Y4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	3.33	22.08	2.00
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	.67	.65	2.00
Cymbella sp.	.64	.00	.00	.00
Diploneis decipiens	.00	.67	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	1.33
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	22.76	46.33	34.74	25.67
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.67	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.65	.67
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.64	.67	.00	2.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.65	.67
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.64	.00	.00	.00
Nitzschia palea	4.49	1.33	.00	4.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	16	10	17
Shannon-Weiner Index	2.28	2.05	2.25	2.62

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R1 % Abundance	Rock R2 % Abundance	Rock R3 % Abundance	Rock R4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	3.65	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	3.04	1.57	.32
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.63	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.32	1.22	.63	.00
Fragilaria construens	.64	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	1.82	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.91	1.26	.00
Fragilaria vaucheriae	.64	2.43	5.97	.63
Meridion circulare	1.28	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	1.22	.00	.00
Synedra ulna	.00	.61	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	1.22	.00	.00
Achnanthes lanceolata	1.28	4.26	.00	.00
Achnanthes microcephala	1.92	1.22	2.52	.00
Achnanthes minutissima	76.28	39.82	35.53	41.90
Achnanthes sp.	.00	.00	.63	.00
Cocconeis placentula	.96	2.74	4.40	10.48
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.64	.00	.00	.00
Amphora coffeaeformis	.00	.00	.63	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.61	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.64	2.43	4.72	.63
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R1 % Abundance	Rock R2 % Abundance	Rock R3 % Abundance	Rock R4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.96	2.43	2.52	8.57
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.64	.61	1.26	.63
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	9.94	21.28	29.56	36.83
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.63	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.64	.00	.63	.00
Navicula tripunctata	.00	.61	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.8	.00	.00	.00	.00
Navicula sp.	.00	1.22	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	1.22	.63	.00
Nitzschia frustulum	1.28	.00	3.14	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.63	.00
Nitzschia palea	1.92	4.86	2.52	.00
Nitzschia sp.	.00	.61	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	23	20	8
Shannon-Weiner Index	1.53	3.13	2.88	1.87

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R5 % Abundance	Rock R6 % Abundance	Rock R7 % Abundance	Rock R8 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.58	1.27	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.58	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.64	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	1.17	.00	.00	.00
Fragilaria construens	.58	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.58	.64	.00	.00
Fragilaria vaucheriae	.00	.00	1.28	1.30
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.58	.00	.00	.00
Synedra ulna var. oxyrhynchus	.58	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	1.28	.00
Achnanthes microcephala	.00	1.91	.00	.00
Achnanthes minutissima	61.81	53.50	40.89	43.00
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	1.75	2.55	10.22	1.95
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.58	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	1.27	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.87	3.18	.96	.65
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R5 % Abundance	Rock R6 % Abundance	Rock R7 % Abundance	Rock R8 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.58	.64	3.51	1.30
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	.64	1.92	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.29	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	28.28	30.57	39.30	51.14
Gomphonema parvulum	.00	.64	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.64	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.58	1.27	.00	.65
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.64	.00	.00
Nitzschia palea	.58	.64	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	15	9	7
Shannon-Weiner Index	1.64	1.97	1.94	1.39

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R9 % Abundance	Rock R10 % Abundance	Rock R11 % Abundance	Rock R12 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.63	1.57	.63	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.63	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	2.52	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.00	3.76	.00	.63
Meridion circulare	.00	2.51	.00	.00
Synedra acus var. radians	.00	.00	1.27	.00
Synedra acus var. angustissima	.00	.63	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.63	.00	.00	.00
Achnanthes lanceolata	.00	.63	.00	.00
Achnanthes microcephala	1.26	1.88	.63	.00
Achnanthes minutissima	18.93	24.14	6.65	31.35
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	4.73	8.15	15.51	7.52
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.63	.63	.00	.63
Amphora coffeaeformis	.00	.63	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	3.15	.63	.00	1.25
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R9 % Abundance	Rock R10 % Abundance	Rock R11 % Abundance	Rock R12 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	5.68	3.76	9.81	9.09
Cymbella turgida	1.26	.63	.00	.00
Cymbella ventricosa	.00	.63	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.63	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	57.73	45.45	62.34	48.28
Gomphonema parvulum	.32	.00	2.53	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.63	.63	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.63	.63	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.63	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.63	.00	.00	.00
Nitzschia palea	.63	1.88	.00	1.25
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	20	9	8
Shannon-Weiner Index	2.15	2.61	1.78	1.88

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R13 % Abundance	Rock R14 % Abundance	Rock R15 % Abundance	Rock R16 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	1.93	1.91	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.60	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.00	1.91	.00	1.57
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.64	.00	.00
Synedra ulna	.00	.64	.00	.63
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.64	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	1.25
Achnanthes minutissima	34.08	14.33	17.42	23.82
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	4.18	24.52	2.40	7.21
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.64	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	1.91	.60	2.19
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R13 % Abundance	Rock R14 % Abundance	Rock R15 % Abundance	Rock R16 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	2.89	3.82	3.00	7.21
Cymbella turgida	.00	.00	.60	.00
Cymbella ventricosa	.00	1.91	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.32	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	54.66	45.22	74.17	54.86
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.64	.60	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.64	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.64	.60	.63
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.63
Nitzschia palea	.64	1.27	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	9	14	9	10
Shannon-Weiner Index	1.62	2.35	1.26	1.95

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R17 % Abundance	Rock R18 % Abundance	Rock R19 % Abundance	Rock R20 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.62	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	2.49	.00	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.00	.00	.96	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.62	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	1.25	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.62	.00	.00
Fragilaria vaucheriae	1.56	.62	.64	.00
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	1.25	.00	.64	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00	.64
Achnanthes microcephala	.00	.92	3.83	.64
Achnanthes minutissima	52.96	63.69	41.21	36.94
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	10.59	.92	3.51	3.18
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.64
Amphora coffeaeformis	.00	.00	.00	.64
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.62	.00	.00
Cymbella caespitosa	1.87	4.62	1.28	.64
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R17 % Abundance	Rock R18 % Abundance	Rock R19 % Abundance	Rock R20 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	1.25	.62	2.56	5.73
Cymbella turgida	.00	.62	.00	.00
Cymbella ventricosa	1.25	.00	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	22.74	21.54	39.62	47.77
Gomphonema parvulum	.00	2.46	1.92	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	2.18	1.54	3.83	1.27
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.64
Nitzschia frustulum	.00	.62	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	.00	.00	1.27
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	12	14	11	12
Shannon-Weiner Index	2.13	1.76	2.07	1.87

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R21 % Abundance	Rock R22 % Abundance	Rock R23 % Abundance
Coscinodiscales			
Cyclotella glomerata	.00	.00	1.94
Cyclotella ocellata	.00	.00	.00
Melosira granulata	.00	.00	.00
Melosira varians	.00	.00	.00
Fragilariales			
Ceratoneis arcus	.00	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00
Diatoma elongatum	.00	.00	.00
Diatoma hiemale	.00	.00	.65
Diatoma hiemale var. quadratum	.00	.00	.00
Diatoma vulgare	.00	.00	.00
Fragilaria capucina	.00	.00	.00
Fragilaria construens	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00
Fragilaria construens var. venter	.00	.63	1.94
Fragilaria crotonensis	.00	.00	.00
Fragilaria leptostauron	.00	.00	1.94
Fragilaria vaucheriae	.00	2.51	4.53
Meridion circulare	.00	.00	1.94
Synedra acus var. radians	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00
Synedra ulna	.00	1.25	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00
Achnanthales			
Achnanthes flexella	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00
Achnanthes microcephala	.00	.00	.00
Achnanthes minutissima	71.12	63.95	52.10
Achnanthes sp.	.00	.00	.00
Cocconeis placentula	4.66	12.85	2.27
Rhoicosphenia curvata	.00	.00	.00
Naviculales			
Amphipleura pellucida	.31	.00	.00
Amphora coffeaeformis	.00	.63	.00
Amphora ovalis	.00	.00	.00
Amphora sp.	.00	.00	.00
Anomoeneis exilis	5.59	.63	9.06
Cymbella affinis	.31	.63	.00
Cymbella caespitosa	.62	4.39	.00
Cymbella cistula	.00	.00	.00
Cymbella mexicana	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock R21 % Abundance	Rock R22 % Abundance	Rock R23 % Abundance
Cymbella prostrata	.00	.00	.00
Cymbella sinuata	.00	1.88	1.29
Cymbella turgida	.00	.00	.00
Cymbella ventricosa	.00	.63	1.94
Cymbella sp.	.00	.00	.00
Diploneis decipiens	.00	.00	.00
Frustulia rhomboides	.00	.00	.00
Gomphonema geminatum	.00	.00	.00
Gomphonema herculeanum	.00	.00	.65
Gomphonema intricatum	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00
Gomphonema olivaceum	16.15	8.78	18.45
Gomphonema parvulum	.00	.00	.00
Gomphonema sp.	.00	.00	.65
Gyrosigma sciotense	.00	.00	.00
Navicula arvensis	.00	.00	.00
Navicula bicephala	.00	.00	.00
Navicula pelliculosa	.00	.00	.00
Navicula radiosa	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00
Navicula scutelloides	.00	.00	.00
Navicula tripunctata	.00	.63	.00
Navicula viridula	.00	.00	.00
Navicula sp.B	.00	.00	.00
Navicula sp.	.00	.00	.00
Neidium sp.	.00	.00	.00
Pinnularia sp.	.00	.00	.00
Stauroneis anceps	.00	.00	.00
Stauroneis sp.	.00	.00	.00
Surirellinees			
Denticula elegans	.00	.00	.00
Epithemia sorex	.00	.00	.00
Epithemia turgida	.00	.00	.00
Nitzschia acicularis	.00	.00	.00
Nitzschia dissipata	.00	.00	.00
Nitzschia frustulum	.62	.00	.00
Nitzschia hantzschiana	.00	.00	.00
Nitzschia linearis	.00	.00	.00
Nitzschia palea	.62	.63	.65
Nitzschia sp.	.00	.00	.00
Surirella angustata	.00	.00	.00
Number of Species	9	14	15
Shannon-Weiner Index	1.40	1.94	2.40

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR1 % Abundance	Rock RR2 % Abundance	Rock RR3 % Abundance	Rock RR4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	1.35	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.63	.68	1.09
Ceratoneis arcus var. amphioxys	.00	10.76	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.68	.00
Diatoma hiemale var. quadratum	.00	1.27	.00	.73
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.63	.00	.00	.73
Fragilaria construens var. binodis	.00	.00	.00	.73
Fragilaria construens var. venter	1.56	.00	.68	7.27
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.68	1.45
Fragilaria vaucheriae	1.88	1.90	3.38	2.91
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.63	.00	.00	.73
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	39.38	34.81	50.34	45.82
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	5.63	.63	4.39	2.91
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	1.35	.73
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.63	.00	.68	.00
Cymbella caespitosa	2.81	1.27	1.35	2.18
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR1 % Abundance	Rock RR2 % Abundance	Rock RR3 % Abundance	Rock RR4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	1.25	2.53	1.35	1.45
Cymbella turgida	.00	.00	.00	.73
Cymbella ventricosa	.63	.63	.68	1.45
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.68	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	45.00	41.77	30.41	19.27
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.63	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.73
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	3.16	.00	2.91
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.73
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.68	.00
Nitzschia palea	.00	.00	.68	5.45
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	11	12	17	20
Shannon-Weiner Index	1.89	2.15	2.16	2.79

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR5 % Abundance	Rock RR6 % Abundance	Rock RR7 % Abundance	Rock RR8 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	1.00	.00	1.83	.67
Ceratoneis arcus var. amphioxys	.00	.00	.92	.00
Diatoma elongatum	.00	.32	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.67	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	2.75	1.33
Fragilaria construens var. venter	2.67	.63	7.34	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	1.33	.63	.61	.67
Fragilaria vaucheriae	.00	6.62	1.83	.00
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	1.26	.61	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	1.58	.61	1.33
Achnanthes minutissima	46.33	46.37	49.85	56.00
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	3.33	2.52	2.45	2.33
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.67	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.67	.00	1.22	.00
Cymbella caespitosa	4.33	1.58	2.45	2.67
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR5 % Abundance	Rock RR6 % Abundance	Rock RR7 % Abundance	Rock RR8 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	1.33	4.42	1.22	2.33
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	2.00	2.52	1.22	.67
Cymbella sp.	.00	.63	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.63	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	32.00	26.18	21.41	31.33
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	1.00	.00	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.61	.00
Nitzschia dissipata	.67	.00	.00	.00
Nitzschia frustulum	.67	.00	.61	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.63	.00	.00
Nitzschia palea	1.33	3.47	2.45	.67
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	16	18	11
Shannon-Weiner Index	2.28	2.44	2.52	1.74

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR9 % Abundance	Rock RR10 % Abundance	Rock RR11 % Abundance	Rock RR12 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	1.30
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	1.35	.00	.66	.00
Ceratoneis arcus var. amphioxys	.67	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.66	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.67	1.33	.66	1.95
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	2.02	.00	.00	.00
Synedra ulna	.00	.00	.66	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.65
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	1.30
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.67	.00	.00	.00
Achnanthes minutissima	49.49	48.00	43.05	42.86
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	1.68	2.67	3.97	9.09
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.66	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	2.69	1.33	2.65	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR9 % Abundance	Rock RR10 % Abundance	Rock RR11 % Abundance	Rock RR12 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.67	3.67	1.32	4.55
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.67	.00	1.99	1.30
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.66	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	38.72	42.33	42.38	35.06
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.67	.66	1.95
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.67	.00	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	12	7	13	10
Shannon-Weiner Index	1.76	1.56	1.90	2.08

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR13 % Abundance	Rock RR14 % Abundance	Rock RR15 % Abundance	Rock RR16 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.67	1.00	2.60
Ceratoneis arcus var. amphioxys	.00	.67	1.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.67	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.67	.65
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	2.56	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.65
Fragilaria leptostauron	.00	.00	.67	.65
Fragilaria vaucheriae	2.56	.00	1.33	.00
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	1.33	.00	.00
Synedra ulna	.00	.67	.00	1.30
Synedra ulna var. oxyrhynchus	1.28	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.00	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	39.42	34.67	29.67	45.13
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	8.65	6.67	11.33	10.71
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.65
Amphora coffeaeformis	.00	.67	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.33	.00
Cymbella caespitosa	2.56	3.33	3.33	1.30
Cymbella cistula	.64	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR13 % Abundance	Rock RR14 % Abundance	Rock RR15 % Abundance	Rock RR16 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	2.56	2.67	5.33	1.95
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	1.92	1.33	.67	2.27
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	35.26	45.67	42.33	25.65
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	1.30
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	1.30
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	2.56	.67	.00	.65
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.65
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.67	.65
Nitzschia linearis	.00	.00	.00	1.95
Nitzschia palea	.00	1.00	1.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	11	13	15	18
Shannon-Weiner Index	2.28	2.08	2.34	2.50

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR17 % Abundance	Rock RR18 % Abundance	Rock RR19 % Abundance	Rock RR20 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.99	.00
Fragilariales				
Ceratoneis arcus	1.33	.00	.66	.00
Ceratoneis arcus var. amphioxys	.33	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.00	.00	1.32	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.65	.00	.00
Fragilaria vaucheriae	2.66	1.31	1.32	.00
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.66	.00
Synedra ulna	.00	.00	1.99	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.33	.00
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	16.61	41.18	35.76	30.28
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	24.92	6.54	23.51	1.89
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	1.99	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.65	.00	.00
Cymbella caespitosa	1.00	8.82	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR17 % Abundance	Rock RR18 % Abundance	Rock RR19 % Abundance	Rock RR20 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	4.65	2.94	3.31	3.79
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.33	.00	1.99	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	45.85	30.72	21.52	64.04
Gomphonema parvulum	.00	.65	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.66	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.65	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	1.66	.00	.66	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	3.92	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	1.96	3.97	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	11	12	15	4
Shannon-Weiner Index	2.14	2.33	2.59	1.22

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR21 % Abundance	Rock RR22 % Abundance	Rock RR23 % Abundance	Rock RR24 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.00	.00	.66
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.60	.00	.00
Fragilaria construens	.00	.00	.53	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.00	.00	1.06	1.32
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	1.06	.99
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.60	.00	.00
Achnanthes lanceolata	3.29	.00	.00	.00
Achnanthes microcephala	.00	1.19	.00	.00
Achnanthes minutissima	26.97	70.24	76.46	39.47
Achnanthes sp.	.00	2.38	2.12	.00
Cocconeis placentula	19.41	2.08	4.50	9.21
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.53	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.99	2.38	.53	.66
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR21 % Abundance	Rock RR22 % Abundance	Rock RR23 % Abundance	Rock RR24 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	9.21	.60	2.12	2.30
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	.00	.00	.00
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.60	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	40.13	19.35	9.52	42.76
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	1.32
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.53	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	.00	1.06	1.32
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	6	10	12	10
Shannon-Weiner Index	2.04	1.44	1.42	1.90

Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR25 % Abundance	Rock RR26 % Abundance	Rock RR27 % Abundance
Coscinodiscales			
Cyclotella glomerata	.00	.00	.00
Cyclotella ocellata	.00	.00	.00
Melosira granulata	.00	.00	.00
Melosira varians	.00	.00	.00
Fragilariales			
Ceratoneis arcus	.00	.00	1.27
Ceratoneis arcus var. amphioxys	.64	.00	.00
Diatoma elongatum	.00	.00	.00
Diatoma hiemale	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00
Diatoma vulgare	.00	.00	.00
Fragilaria capucina	1.92	.00	1.27
Fragilaria construens	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	1.27
Fragilaria construens var. venter	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00
Fragilaria leptostauron	.64	.00	.00
Fragilaria vaucheriae	1.92	1.03	.63
Meridion circulare	.00	.00	.00
Synedra acus var. radians	.00	.00	.00
Synedra acus var. angustissima	1.92	.00	.00
Synedra ulna	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00
Achnanthales			
Achnanthes flexella	.64	1.03	.00
Achnanthes lanceolata	.64	.52	.00
Achnanthes microcephala	.00	.00	.00
Achnanthes minutissima	56.87	26.61	45.08
Achnanthes sp.	.00	.00	2.54
Cocconeis placentula	3.19	15.76	5.71
Rhoicosphenia curvata	.00	.00	.00
Naviculales			
Amphipleura pellucida	.00	.00	.32
Amphora coffeaeformis	.00	.00	.00
Amphora ovalis	.00	.00	.00
Amphora sp.	.00	.00	.00
Anomoeneis exilis	.00	.00	.00
Cymbella affinis	.00	.00	.00
Cymbella caespitosa	1.92	.52	1.59
Cymbella cistula	.00	.00	.00
Cymbella mexicana	.00	.00	.00

continued
Date: August 28, 1979
Station: Kishinena Creek

Species	Rock RR25 % Abundance	Rock RR26 % Abundance	Rock RR27 % Abundance
Cymbella prostrata	.00	.00	.00
Cymbella sinuata	.00	2.33	4.44
Cymbella turgida	.00	.00	.00
Cymbella ventricosa	.00	.52	.63
Cymbella sp.	.00	.00	.00
Diploneis decipiens	.00	.00	.00
Frustulia rhomboides	.00	.00	.00
Gomphonema geminatum	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00
Gomphonema intricatum	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00
Gomphonema olivaceum	29.07	51.16	33.33
Gomphonema parvulum	.00	.00	.00
Gomphonema sp.	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00
Navicula arvensis	.00	.00	.00
Navicula bicephala	.00	.00	.00
Navicula pelliculosa	.00	.00	.00
Navicula radiosa	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00
Navicula scutelloides	.00	.00	.00
Navicula tripunctata	.00	.00	.63
Navicula viridula	.00	.00	.00
Navicula sp.B	.00	.00	.00
Navicula sp.	.00	.00	.00
Neidium sp.	.00	.00	.00
Pinnularia sp.	.00	.00	.00
Stauroneis anceps	.00	.00	.00
Stauroneis sp.	.00	.00	.00
Surirellinees			
Denticula elegans	.00	.00	.00
Epithemia sorex	.00	.00	.00
Epithemia turgida	.00	.00	.00
Nitzschia acicularis	.00	.00	.00
Nitzschia dissipata	.00	.00	.00
Nitzschia frustulum	.64	.00	.00
Nitzschia hantzschiana	.00	.00	.63
Nitzschia linearis	.00	.00	.00
Nitzschia palea	.00	.52	.63
Nitzschia sp.	.00	.00	.00
Surirella angustata	.00	.00	.00
Number of Species	12	10	15
Shannon-Weiner Index	1.81	1.84	2.21

Date: August 29, 1979
Station: Elder Creek

Species	Rock E1 % Abundance	Rock E2 % Abundance	Rock E3 % Abundance	Rock E4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.32	1.66	.56	.00
Ceratoneis arcus var. amphioxys	.65	1.66	1.40	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.56	.00
Diatoma hiemale var. quadratum	.00	1.10	1.12	2.21
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	1.12	.00
Fragilaria vaucheriae	.00	4.97	1.12	2.76
Meridion circulare	.00	.00	1.12	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	12.66	10.50	9.22	6.35
Synedra ulna	1.30	2.21	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	5.19	10.77	9.78	11.60
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	18.51	7.73	26.54	23.76
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	6.17	9.94	6.15	8.56
Rhoicosphenia curvata	.65	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	1.10	1.68	1.10
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 29, 1979
Station: Elder Creek

Species	Rock E1 % Abundance	Rock E2 % Abundance	Rock E3 % Abundance	Rock E4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.65	1.10	.00	2.21
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	3.90	2.76	2.23	1.66
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.55
Frustulia rhomboides	.00	.55	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	2.27	1.66	2.23	4.70
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	34.42	11.60	19.83	12.71
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.56	.00
Navicula pelliculosa	.00	.55	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.32	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	8.77	20.72	11.73	11.05
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	1.10
Nitzschia acicularis	.65	.00	.00	.00
Nitzschia dissipata	.00	1.10	.00	1.10
Nitzschia frustulum	.00	.55	.00	.55
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.84	.28
Nitzschia palea	3.57	7.73	2.23	7.73
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	16	20	19	18
Shannon-Weiner Index	2.94	3.61	3.25	3.44

Date: August 29, 1979
Station: Sage Creek

Species	Rock S1 % Abundance	Rock S2 % Abundance	Rock S3 % Abundance	Rock S4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.00	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.33	1.29	.00	.00
Diatoma hiemale	.33	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.66
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.67	.00	1.16	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	1.33	3.54	4.07	.66
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	1.67	.00	.00	.99
Fragilaria vaucheriae	1.33	.64	.58	.00
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	1.33	.00	.58	.66
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.64	.00	.00
Achnanthes lanceolata	.67	.00	1.16	.66
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	67.00	75.24	76.74	60.53
Achnanthes sp.	.00	.00	.00	1.32
Cocconeis placentula	4.33	4.82	4.07	22.37
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.67	.00	.58	2.63
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 29, 1979
Station: Sage Creek

Species	Rock S1 % Abundance	Rock S2 % Abundance	Rock S3 % Abundance	Rock S4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	3.33	1.29	2.33	.66
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.67	.64	.58	.66
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	12.33	7.07	5.52	5.92
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.87	.00
Navicula radiosa	.00	.00	.58	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.32	.00	.66
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	2.00	.64	.58	.99
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	2.57	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.64	.00	.00
Nitzschia hantzschiana	.00	.64	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	2.00	.00	.58	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.66
Number of Species	16	14	15	15
Shannon-Weiner Index	1.94	1.57	1.54	1.90

Date: November 8, 1979
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.56	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	1.69	.60	.00
Diatoma vulgare	.00	2.25	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	1.32	.00	.00	.00
Fragilaria construens var. binodis	.66	.00	.00	.00
Fragilaria construens var. venter	.00	.00	4.53	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.66	1.69	1.21	.64
Fragilaria vaucheriae	.00	1.12	.60	2.56
Meridion circulare	1.32	3.37	1.21	1.28
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.66	.00	.60	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.66	8.71	14.80	14.42
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	24.01	28.65	31.12	41.35
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	25.99	26.40	14.50	22.12
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	1.12	1.21	1.60
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	2.30	1.69	.00	1.28
Cymbella cistula	3.29	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: November 8, 1979
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	2.63	2.25	2.72	1.28
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	1.32	1.69	.00	.64
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	33.88	15.45	22.96	11.54
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	1.28
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.56	1.51	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.60	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	1.32	2.81	1.81	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	14	16	15	12
Shannon-Weiner Index	2.47	2.93	2.77	2.42

Date: November 8, 1979
Station: Kishinena Creek

Species	Rock K1 % Abundance	Rock K2 % Abundance	Rock K3 % Abundance	Rock K4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.00	.00	.94
Ceratoneis arcus var. amphioxys	.00	.00	.00	.63
Diatoma elongatum	.62	.00	.00	.00
Diatoma hiemale	.62	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.63
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	1.23	1.24	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	1.23	.00	.00	.63
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	1.23	.00	.00	.00
Fragilaria vaucheriae	3.70	.00	2.00	.00
Meridion circulare	.00	.00	.67	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	1.23	.00	.00	.63
Synedra ulna	.62	.00	1.33	1.25
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.62	.00	.00	.63
Achnanthes microcephala	2.47	.00	.00	.00
Achnanthes minutissima	54.32	46.75	33.33	33.75
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	3.09	5.88	6.67	5.63
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.62	.00	.00
Amphora coffeaeformis	.62	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	1.85	1.24	.00	.00
Cymbella caespitosa	3.09	.00	2.00	1.25
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: November 8, 1979
Station: Kishinena Creek

Species	Rock K1 % Abundance	Rock K2 % Abundance	Rock K3 % Abundance	Rock K4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	1.23	1.24	.67	1.25
Cymbella turgida	.00	.00	.00	.63
Cymbella ventricosa	.62	1.24	2.67	.63
Cymbella sp.	.00	.00	.00	.63
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	11.11	41.18	46.67	49.38
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.62	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	.00	1.00	.00
Neidium sp.	.00	.00	.00	.31
Pinnularia sp.	.00	.00	.00	.63
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.67	.00
Nitzschia hantzschiana	1.23	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	8.64	.62	2.33	.63
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	21	9	12	18
Shannon-Weiner Index	2.65	1.69	2.09	2.05

Date: November 8, 1979
Station: Elder Creek

Species	Rock E1 % Abundance	Rock E2 % Abundance	Rock E3 % Abundance	Rock E4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	1.14	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.00	.66	.00
Ceratoneis arcus var. amphioxys	.57	.00	.66	.24
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	1.43	.00	.66	.48
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	2.57	.00	.00	.00
Fragilaria crotonensis	1.14	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00	.00
Fragilaria vaucheriae	.57	.00	.00	2.90
Meridion circulare	.00	.00	.00	.97
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	10.00	.00	.00	14.98
Synedra ulna	1.43	7.64	3.63	.00
Synedra ulna var. oxyrhynchus	.00	13.06	9.90	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	4.86	4.14	.66	6.52
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	6.29	16.88	9.24	28.02
Achnanthes sp.	.57	.00	4.29	.00
Cocconeis placentula	8.86	7.96	15.84	8.94
Rhoicosphenia curvata	.00	.00	1.32	.48
Naviculales				
Amphipleura pellucida	.57	.00	.00	.00
Amphora coffeaeformis	.57	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.57	.00	.00	.00
Cymbella caespitosa	2.29	3.18	.00	.00
Cymbella cistula	.00	1.27	.66	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: November 8, 1979
Station: Elder Creek

Species	Rock E1 % Abundance	Rock E2 % Abundance	Rock E3 % Abundance	Rock E4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	1.14	.00	1.32	.00
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.57	3.82	.66	.97
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	2.86	1.27	8.58	10.87
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	40.29	31.85	36.63	8.70
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.66	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	1.14	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	8.86	7.01	1.32	8.21
Neidium sp.	.00	.00	.66	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.66	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	1.14	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.64	.00	.00
Nitzschia palea	.57	1.27	1.98	7.73
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	24	13	20	14
Shannon-Weiner Index	3.23	3.00	3.06	3.10

Date: November 8, 1979
Station: Sage Creek

Species	Rock S1 % Abundance	Rock S2 % Abundance	Rock S3 % Abundance	Rock S4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	3.40	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.00	.60	.00	.00
Ceratoneis arcus var. amphioxys	.00	.00	.00	.00
Diatoma elongatum	.49	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.49	.00	.49	2.89
Diatoma vulgare	.00	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.98	6.02	2.43	.00
Fragilaria construens var. binodis	.98	.00	4.85	.00
Fragilaria construens var. venter	10.24	12.05	1.94	9.83
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.49	1.51	.24	.00
Fragilaria vaucheriae	5.85	2.41	1.46	2.89
Meridion circulare	.49	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	2.31
Synedra ulna	.00	.00	.00	1.16
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	.00	.00	.49	.00
Achnanthes microcephala	4.15	.60	7.77	1.45
Achnanthes minutissima	46.10	55.42	64.81	57.51
Achnanthes sp.	2.44	5.12	.00	.00
Cocconeis placentula	.49	1.51	.97	4.62
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.49	.00	.49	.00
Amphora coffeaeformis	.98	.00	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	3.90	.00	.00	2.89
Cymbella caespitosa	3.41	1.81	1.94	4.62
Cymbella cistula	.00	.00	1.46	.00
Cymbella mexicana	.00	.00	.00	.58

continued
Date: November 8, 1979
Station: Sage Creek

Species	Rock S1 % Abundance	Rock S2 % Abundance	Rock S3 % Abundance	Rock S4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	1.46	.60	.97	.58
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.00	.60	.00	1.16
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.60	.00	.00
Gomphonema intricatum	.00	.00	.97	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	9.27	6.02	1.46	5.78
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.00
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	1.46	2.41	.00	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.60	.00	.00
Nitzschia dissipata	.00	.60	.49	.00
Nitzschia frustulum	.00	.00	.49	.00
Nitzschia hantzschiana	.00	.00	.97	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	5.85	1.51	1.94	1.73
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	20	18	21	15
Shannon-Weiner Index	2.92	2.50	2.26	2.43

Date: August 26, 1980
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	.00	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	.00	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	.95	.00	.00	.64
Ceratoneis arcus var. amphioxys	.00	.32	.66	.64
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	1.29
Diatoma hiemale var. quadratum	1.90	4.17	4.29	.00
Diatoma vulgare	2.54	.64	.66	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	.00	.00	.00	.00
Fragilaria construens var. venter	.00	.00	.00	.64
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	.00	.00	.66	1.29
Fragilaria vaucheriae	.00	.64	.00	1.29
Meridion circulare	.63	18.27	2.64	2.25
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	.00	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	17.14	4.49	1.32	12.22
Achnanthes microcephala	.00	.00	.00	.00
Achnanthes minutissima	29.21	38.78	23.43	20.26
Achnanthes sp.	.00	.00	.00	.00
Cocconeis placentula	6.98	9.62	8.91	11.25
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.00	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00	1.93
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.00	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	.00	.00	.00
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 26, 1980
Station: Akamina Creek

Species	Rock A1 % Abundance	Rock A2 % Abundance	Rock A3 % Abundance	Rock A4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.63	1.92	1.32	1.93
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.63	.64	2.64	1.93
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.64	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.00	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	35.56	16.03	50.83	32.15
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	.00	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	1.32	.00
Navicula scutelloides	.00	.00	.00	1.29
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	.00	2.56	.66	1.93
Neidium sp.	.63	.00	.00	2.57
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	.00	.00	.00	.00
Nitzschia dissipata	.63	.00	.00	.00
Nitzschia frustulum	2.54	.00	.00	1.29
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.00	.00	.00
Nitzschia palea	.00	1.28	.66	3.22
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	13	14	14	19
Shannon-Weiner Index	2.43	2.66	2.26	3.12

Date: August 26, 1980
Station: Kishinena Creek

Species	Rock K1 % Abundance	Rock K2 % Abundance	Rock K3 % Abundance	Rock K4 % Abundance
Coscinodiscales				
Cyclotella glomerata	.00	1.19	.00	.00
Cyclotella ocellata	.00	.00	.00	.00
Melosira granulata	1.26	.00	.00	.00
Melosira varians	.00	.00	.00	.00
Fragilariales				
Ceratoneis arcus	1.89	.60	2.28	.00
Ceratoneis arcus var. amphioxys	.00	1.19	.00	.00
Diatoma elongatum	.00	.00	.00	.00
Diatoma hiemale	.00	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.00	.00
Diatoma vulgare	.63	.00	.00	.00
Fragilaria capucina	.00	.00	.00	.00
Fragilaria construens	.00	.00	.00	.00
Fragilaria construens var. binodis	2.52	.60	.00	.00
Fragilaria construens var. venter	1.89	.00	.85	.00
Fragilaria crotonensis	.00	.00	.00	.00
Fragilaria leptostauron	1.89	1.19	.00	.00
Fragilaria vaucheriae	1.89	3.57	.00	1.25
Meridion circulare	.00	.00	.00	.00
Synedra acus var. radians	.00	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00	.00
Synedra ulna	1.26	.00	.00	1.25
Synedra ulna var. oxyrhynchus	.63	.00	.28	.63
Tabellaria fenestrata	.00	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00	.00
Achnanthales				
Achnanthes flexella	.00	.00	.00	.00
Achnanthes lanceolata	1.26	.00	.00	.00
Achnanthes microcephala	.00	2.98	3.42	9.40
Achnanthes minutissima	49.06	48.51	71.51	27.59
Achnanthes sp.	3.14	.60	.00	.00
Cocconeis placentula	4.40	2.98	2.85	2.51
Rhoicosphenia curvata	.00	.00	.00	.00
Naviculales				
Amphipleura pellucida	.63	.60	.57	.00
Amphora coffeaeformis	.63	.60	.00	.00
Amphora ovalis	.00	.00	.00	.00
Amphora sp.	.00	.00	.00	.00
Anomoeneis exilis	.63	.00	.00	.00
Cymbella affinis	.00	.00	.00	.00
Cymbella caespitosa	.00	16.07	4.56	3.76
Cymbella cistula	.00	.00	.00	.00
Cymbella mexicana	.00	.00	.00	.00

continued
Date: August 26, 1980
Station: Kishinena Creek

Species	Rock K1 % Abundance	Rock K2 % Abundance	Rock K3 % Abundance	Rock K4 % Abundance
Cymbella prostrata	.00	.00	.00	.00
Cymbella sinuata	.00	1.19	.57	.63
Cymbella turgida	.00	.00	.00	.00
Cymbella ventricosa	.63	1.79	1.14	.63
Cymbella sp.	.00	.00	.00	.00
Diploneis decipiens	.00	.00	.00	.00
Frustulia rhomboides	.00	.00	.00	.00
Gomphonema geminatum	.63	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00	.00
Gomphonema intricatum	.00	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00	.00
Gomphonema olivaceum	11.32	10.42	9.69	51.10
Gomphonema parvulum	.00	.00	.00	.00
Gomphonema sp.	.00	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00	.00
Navicula arvensis	.00	.00	.00	.00
Navicula bicephala	.00	.00	.00	.00
Navicula pelliculosa	.00	1.19	.00	.00
Navicula radiosa	.00	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00	.63
Navicula scutelloides	.00	.00	.00	.00
Navicula tripunctata	.00	.00	.00	.00
Navicula viridula	.00	.00	.00	.00
Navicula sp.B	.00	.00	.00	.00
Navicula sp.	2.52	1.79	2.28	.00
Neidium sp.	.00	.00	.00	.00
Pinnularia sp.	.00	.00	.00	.00
Stauroneis anceps	.00	.00	.00	.00
Stauroneis sp.	.00	.00	.00	.00
Surirellinees				
Denticula elegans	.00	.00	.00	.00
Epithemia sorex	.00	.00	.00	.00
Epithemia turgida	.00	.00	.00	.00
Nitzschia acicularis	3.14	.00	.00	.00
Nitzschia dissipata	.00	.00	.00	.00
Nitzschia frustulum	.00	.00	.00	.63
Nitzschia hantzschiana	.00	.00	.00	.00
Nitzschia linearis	.00	.60	.00	.00
Nitzschia palea	8.18	2.38	.00	.00
Nitzschia sp.	.00	.00	.00	.00
Surirella angustata	.00	.00	.00	.00
Number of Species	22	20	12	12
Shannon-Weiner Index	2.93	2.72	1.68	2.03

Date: August 26, 1980
Station: Kishinena Creek, Qualitative

Species	% Abundance
Fragilariales	
Ceratoneis arcus var. *amphioxys*	+
Fragilaria construens	+
Fragilaria construens var. *binodis*	+
Fragilaria construens var. *venter*	+
Fragilaria leptostauron	+
Fragilaria vaucheriae	+
Synedra ulna	+
Synedra ulna var. *oxyrhynchus*	+
Achnanthales	
Achnanthes lanceolata	+
Achnanthes microcephala	+
Achnanthes minutissima	+++
Cocconeis placentula	+
Naviculales	
Amphora coffeaeformis	+
Cymbella caespitosa	+
Cymbella prostrata	+
Cymbella sinuata	+
Cymbella ventricosa	+
Gomphonema olivaceum	++
Navicula scutelloides	+
Navicula sp.	+
Surirellinees	
Nitzschia palea	+

+ denotes that number of cells was < 5% of total cells enumerated
++ denotes that number of cells was 5-20% of total cells enumerated
+++ denotes that number of cells was > 20% of total cells enumerated

Date: August 26, 1980
Station: Sage Creek, Qualitative

Species	% Abundance
Fragilariales	
Ceratoneis arcus	+
Ceratoneis arcus var. *amphioxys*	+
Diatoma elongatum	+
Fragilaria construens	+
Fragilaria construens var. *binodis*	++
Fragilaria construens var. *venter*	++
Fragilaria leptostauron	+
Fragilaria vaucheriae	++
Synedra ulna var. *oxyrhynchus*	+
Achnanthales	
Achnanthes minutissima	+++
Achnanthes sp.	+
Cocconeis placentula	+
Naviculales	
Cymbella sinuata	+
Cymbella ventricosa	+
Gomphonema olivaceum	++
Surirellinees	
Nitzschia frustulum	+
Nitzschia hantzschiana	+
Nitzschia palea	+

+ denotes that number of cells was < 5% of total cells enumerated
++ denotes that number of cells was 5-20% of total cells enumerated
+++ denotes that number of cells was > 20% of total cells enumerated

Date: July 28, 1982
Station: Akamina Creek

Species	Rock B % Abundance	Rock C % Abundance	Rock D % Abundance
Coscinodiscales			
Cyclotella glomerata	.00	.00	.00
Cyclotella ocellata	.00	.00	.00
Melosira granulata	.00	.00	.00
Melosira varians	.00	.00	.00
Fragilariales			
Ceratoneis arcus	3.75	1.34	1.27
Ceratoneis arcus var. amphioxys	.00	.00	.00
Diatoma elongatum	.00	.00	.00
Diatoma hiemale	2.05	2.68	1.59
Diatoma hiemale var. quadratum	3.41	3.36	2.23
Diatoma vulgare	.00	.00	.00
Fragilaria capucina	.00	.00	.00
Fragilaria construens	.00	.00	.00
Fragilaria construens var. binodis	1.02	.34	.64
Fragilaria construens var. venter	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00
Fragilaria leptostauron	.68	.67	.00
Fragilaria vaucheriae	.00	.00	.00
Meridion circulare	6.14	2.35	1.27
Meridion circulare var. constrictum	.00	.00	.00
Synedra acus var. radians	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00
Synedra rumpens var. fragilarioides	.00	.34	.00
Synedra ulna	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00
Achnanthales			
Achnanthes flexella	.00	.00	.00
Achnanthes lanceolata	.34	4.70	2.87
Achnanthes microcephala	.00	.00	.00
Achnanthes minutissima	1.71	10.07	5.41
Achnanthes sp.	.00	.00	.00
Cocconeis placentula	22.18	8.39	6.69
Rhoicosphenia curvata	.00	.00	.00
Naviculales			
Amphipleura pellucida	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00
Amphora ovalis	.00	.00	.00
Amphora sp.	.00	.00	.00
Anomoeneis exilis	.00	.00	.00
Cymbella affinis	.00	.00	.00
Cymbella caespitosa	.00	.00	.00
Cymbella cistula	.00	.00	.00
Cymbella mexicana	.00	.00	.00

continued
Date: July 28, 1982
Station: Akamina Creek

Species	Rock B % Abundance	Rock C % Abundance	Rock D % Abundance
Cymbella prostrata	.00	.00	.00
Cymbella sinuata	1.71	15.10	12.10
Cymbella turgida	.34	.00	.00
Cymbella ventricosa	2.73	.00	1.59
Cymbella sp.	.00	.00	.00
Diploneis decipiens	.00	.00	.00
Frustulia rhomboides	.00	.00	.00
Gomphonema geminatum	.00	.00	.00
Gomphonema herculeanum	.34	.00	.00
Gomphonema intricatum	1.37	.00	.00
Gomphonema lanceolatum	.00	.00	.00
Gomphonema olivaceoides var. densestriata	3.07	12.42	14.65
Gomphonema olivaceum	42.32	36.24	46.18
Gomphonema parvulum	5.80	1.01	3.18
Gomphonema sp.	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00
Navicula arvensis	.00	.00	.00
Navicula bicephala	.00	.00	.00
Navicula pelliculosa	.00	.34	.00
Navicula radiosa	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00
Navicula scutelloides	.00	.00	.00
Navicula tripunctata	.34	.00	.00
Navicula viridula	.34	.00	.00
Navicula sp.B	.00	.00	.00
Navicula sp.	.00	.00	.00
Neidium sp.	.00	.00	.00
Pinnularia sp.	.00	.00	.00
Stauroneis anceps	.00	.00	.00
Stauroneis sp.	.00	.00	.00
Surirellinees			
Denticula elegans	.00	.00	.00
Epithemia sorex	.00	.00	.00
Epithemia turgida	.34	.00	.00
Nitzschia acicularis	.00	.00	.00
Nitzschia dissipata	.00	.00	.00
Nitzschia frustulum	.00	.00	.00
Nitzschia hantzschiana	.00	.34	.00
Nitzschia linearis	.00	.00	.32
Nitzschia palea	.00	.34	.00
Nitzschia sp.	.00	.00	.00
Surirella angustata	.00	.00	.00
Number of Species	20	17	14
Shannon-Weiner Index	2.82	2.93	2.63

Date: July 28, 1982
Station: Akamina Creek, Qualitative

Species	% Abundance
Fragilariales	
Ceratoneis arcus	+++
Ceratoneis arcus var. *amphioxys*	+
Diatoma hiemale	+
Diatoma hiemale var. *quadratum*	++
Fragilaria construens var. *binodis*	+
Fragilaria leptostauron	+
Meridion circulare	++
Meridion circulare var. *constrictum*	+
Synedra acus var. *radians*	+
Achnanthales	
Cocconeis placentula	+
Naviculales	
Cymbella affinis	+
Cymbella sinuata	+
Cymbella turgida	+
Cymbella ventricosa	++
Gomphonema herculeanum	+
Gomphonema olivaceum	++
Gomphonema parvulum	+

+ denotes that number of cells was < 5% of total cells enumerated
++ denotes that number of cells was 5-20% of total cells enumerated
+++ denotes that number of cells was > 20% of total cells enumerated

Date: July 28, 1982
Station: Kishinena Creek

Species	Rock A % Abundance	Rock B % Abundance	Rock C % Abundance
Coscinodiscales			
Cyclotella glomerata	.00	.00	.00
Cyclotella ocellata	.00	.00	.00
Melosira granulata	.00	.00	.00
Melosira varians	.00	.00	.00
Fragilariales			
Ceratoneis arcus	.66	.92	.92
Ceratoneis arcus var. amphioxys	.00	.00	.00
Diatoma elongatum	.00	.00	.31
Diatoma hiemale	.00	.00	.00
Diatoma hiemale var. quadratum	.00	.00	.31
Diatoma vulgare	.00	.00	.00
Fragilaria capucina	.00	.00	1.84
Fragilaria construens	.00	.00	.00
Fragilaria construens var. binodis	.00	1.84	.00
Fragilaria construens var. venter	.00	.00	.00
Fragilaria crotonensis	.00	.00	.00
Fragilaria leptostauron	.00	.00	.00
Fragilaria vaucheriae	.33	.00	.00
Meridion circulare	.00	.00	.00
Meridion circulare var. constrictum	.00	.00	.00
Synedra acus var. radians	.00	.00	.00
Synedra acus var. angustissima	.00	.00	.00
Synedra rumpens var. fragilarioides	.00	.00	.00
Synedra ulna	.00	.00	.00
Synedra ulna var. oxyrhynchus	.00	.00	.00
Tabellaria fenestrata	.00	.00	.00
Tabellaria flocculosa	.00	.00	.00
Achnanthales			
Achnanthes flexella	.00	.00	.00
Achnanthes lanceolata	1.32	.61	.00
Achnanthes microcephala	.00	.00	.00
Achnanthes minutissima	29.14	30.37	26.69
Achnanthes sp.	.00	.00	.00
Cocconeis placentula	4.64	3.99	28.53
Rhoicosphenia curvata	.00	.00	.00
Naviculales			
Amphipleura pellucida	.00	.00	.00
Amphora coffeaeformis	.00	.00	.00
Amphora ovalis	.00	.31	.00
Amphora sp.	.00	.00	.00
Anomoeneis exilis	.00	.00	.00
Cymbella affinis	.00	.00	.00
Cymbella caespitosa	.00	.00	.00
Cymbella cistula	.00	.00	.00
Cymbella mexicana	.00	.00	.00

continued
Date: July 28, 1982
Station: Kishinena Creek

Species	Rock A % Abundance	Rock B % Abundance	Rock C % Abundance
Cymbella prostrata	.00	.00	.00
Cymbella sinuata	.33	6.13	5.21
Cymbella turgida	.00	.00	.00
Cymbella ventricosa	.00	.00	.31
Cymbella sp.	.00	.00	.00
Diploneis decipiens	.00	.00	.00
Frustulia rhomboides	.00	.00	.00
Gomphonema geminatum	.00	.00	.00
Gomphonema herculeanum	.00	.00	.00
Gomphonema intricatum	.00	.00	.00
Gomphonema lanceolatum	.00	.00	.00
Gomphonema olivaceoides var. densestriata	13.58	15.34	.00
Gomphonema olivaceum	49.67	40.18	34.97
Gomphonema parvulum	.00	.00	.00
Gomphonema sp.	.00	.00	.00
Gyrosigma sciotense	.00	.00	.00
Navicula arvensis	.00	.00	.00
Navicula bicephala	.00	.00	.31
Navicula pelliculosa	.00	.31	.00
Navicula radiosa	.00	.00	.00
Navicula salinarum var. intermedia	.00	.00	.00
Navicula scutelloides	.00	.00	.00
Navicula tripunctata	.00	.00	.00
Navicula viridula	.00	.00	.00
Navicula sp.B	.00	.00	.00
Navicula sp.	.00	.00	.00
Neidium sp.	.00	.00	.00
Pinnularia sp.	.00	.00	.00
Stauroneis anceps	.00	.00	.00
Stauroneis sp.	.00	.00	.00
Surirellinees			
Denticula elegans	.00	.00	.00
Epithemia sorex	.00	.00	.00
Epithemia turgida	.00	.00	.00
Nitzschia acicularis	.00	.00	.00
Nitzschia dissipata	.00	.00	.61
Nitzschia frustulum	.00	.00	.00
Nitzschia hantzschiana	.00	.00	.00
Nitzschia linearis	.00	.00	.00
Nitzschia palea	.33	.00	.00
Nitzschia sp.	.00	.00	.00
Surirella angustata	.00	.00	.00
Number of Species	9	10	11
Shannon-Weiner Index	1.83	2.16	2.09

Date: July 28, 1982
Station: Kishinena Creek, Qualitative

Species	% Abundance
Fragilariales	
Ceratoneis arcus	+
Diatoma hiemale var. *quadratum*	+
Fragilaria capucina	+
Fragilaria crotonensis	+
Fragilaria vaucheriae	+
Meridion circulare	+
Achnanthales	
Achnanthes lanceolata	+
Achnanthes minutissima	+++
Cocconeis placentula	+
Naviculales	
Cymbella sinuata	+
Cymbella turgida	+
Cymbella ventricosa	+
Gomphonema intricatum	+
Gomphonema olivaceoides var. *densestriata*	+
Gomphonema olivaceum	+++
Navicula bicephala	+
Navicula pelliculosa	+
Navicula radiosa	+
Surirellinees	
Nitzschia palea	+

+ denotes that number of cells was < 5% of total cells enumerated
++ denotes that number of cells was 5-20% of total cells enumerated
+++ denotes that number of cells was > 20% of total cells enumerated