Technical Report No. 54

SAGINAW BAY LIMNOLOGICAL DATA

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PREFACE

In 1973 the University of Michigan Sea Grant Program began a multidisciplinary investigation of water quality in the Saginaw Bay (Lake Huron), Saginaw River, and all other major tributaries in the Saginaw drainage basin. The intent of this program was similar to a recently completed University of Michigan Sea Grant investigation of limnology and water resource problems in Grand Traverse Bay (Auer et al. 1976). The objectives of the Saginaw study were:

1) To assess water quality characteristics and to identify regions of diminished quality.
2) To identify and evaluate sources of contamination.
3) To examine trends in water quality and identify present or potential problems.
4) To provide information needed to design future water quality investigations of specific problems.
5) To aid in the development of water quality models which could be used to establish resource management policies for the Saginaw drainage basin.

The objectives of the overall program were addressed by conducting several projects which dealt with a wide variety of engineering and scientific topics. These included studies of hydrological cycles, water circulation, biological production, and suspended sediment. Mathematical modeling projects concerned with fluid transport and nutrient cycles were also conducted. This preliminary report concerns physical, chemical, and biological water quality

data collected as part of a routine monitoring program. The results of other studies are available in separate publications.

Water quality samples were collected for approximately two years from Saginaw Bay tributaries and for one year from Saginaw Bay. Funding cutbacks in the Sea Grant Program resulted in termination of the project before a thorough analysis of the data base could be synthesized, particularly with regard to an understanding of seasonal nutrient dynamics. Thus, the preparation of a comprehensive limnological and water quality report for Saginaw Bay and its tributaries has been delayed.

This report has been prepared to facilitate immediate access to Sea Grant water quality data from Saginaw Bay and its tributaries. This preliminary report includes a listing of all data collected regarding physical and chemical parameters and certain biological indicators. Much of the data are presented in unanalyzed form although some summaries of the data are included. It is hoped that these data (although not presented with an associated comprehensive evaluation) will be useful to other researchers and agencies presently investigating the water resources of the Saginaw Bay region.

ACKNOWLEDGEMENTS

Dr. Dean Arnold, Tom Kelly, Dr. Peter Meier, and Donald McLaughlin contributed to various aspects of the field data collection program. Mary Lee Sharp performed the chemical analyses under the direction of Dr. K. H. Mancy.

Samples were collected with the help of Captain Richard Thibault and the crew of the R/V LAURENTIAN.

James Squire, Richard Lautz, and Fred Juengling assisted with the data reduction and the computer program for data storage and retrieval.

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INTRODUCTION

The Saginaw Bay region has long been recognized as a highly productive and valuable water resource system. However, because of decreased environmental quality, its value as a water resource has been diminished (Freedman 1974). In 1973 the University of Michigan Sea Grant Program began an extensive limnological monitoring program to investigate the effect of contaminant sources on water quality in Saginaw Bay and its tributaries. Emphasis was placed on eutrophication-related parameters. One expected use of this program was to facilitate the development of a mathematical model which could be used as a management decision-making tool and would also permit proper focus of future investigations into pertinent problems such as eutrophication, suspended solids, pathogenic bacteria, and turbidity. This report is intended to present the results from this water quality and limnological monitoring program.

Presentation of the results is divided into three major sections. The first section describes the methods and materials used in this study. A description of the techniques by which the limnological data were collected is important in interpretation of such data. The second and third sections list the actual data. Each of these sections is divided into subsections which describe sample station locations and various segments of the water quality data base. Summaries and a limited analysis of the data are also included.

METHODS AND MATERIALS

A monitoring program was devised to assess water quality in Saginaw Bay and its tributaries. The program consists of the monitoring of physical, chemical, and biological parameters in both the bay and its tributaries. The parameters measured included: temperature, dissolved oxygen, transparency, suspended solids, alkalinity, chlorides, major phytoplankton nutrients, iron, fecal coliform bacteria, chlorophyll *a*, and primary productivity. Specifics concerning the sampling dates and locations are given in separate chapters.

Water samples were taken from both river and bay stations using four-liter polyvinylchloride Van Dorn sampling bottles. Surface samples were obtained using plastic buckets. At bay stations, samples were taken at various depth intervals depending on the total depth. (Samples were always taken at depths of 2 meters and 1 meter off the bottom.) The bottom water samples were taken by a modified, inverted Van Dorn bottle designed to close when a weight suspended one meter below the bottle made contact with the bottom.

Water samples were siphoned from Van Dorn bottles into containers for storage and preservation. Waters intended for nutrient analysis were temporarily stored in refrigerated 1-liter polyethylene bottles. All samples were transported daily from the sampling vessel to a laboratory located in Bay City. The samples were then processed and prepared for transport to University of Michigan laboratories in Ann Arbor for analysis. Portions of the water samples intended for nutrient analysis were transferred into smaller polyethylene bottles and frozen, while other portions were pressure filtered

into a 60 mℓ polyethylene bottle through a 0.45 μ membrane filter (Millipore) and then frozen. Some analyses were conducted in Bay City. These analyses included dissolved oxygen titration, suspended solids measurements, chlorophyll *a* concentrations and fecal coliform counts. Detailed sample storage and preservation techniques for each parameter are discussed in the following sections. A summary of the methods of analysis and estimates for the uncertainty associated with the techniques are given in Table 1.

Quality control of analysis techniques was routinely practiced. Each day standard calibration samples were measured in addition to Saginaw Bay or tributary water samples. Control samples were introduced approximately once for each twenty analyses. Spike and recovery experiments were also routinely performed. Studies were performed to test storage and preservation techniques. Results from these quality control procedures indicate adequate precision and accuracy. In 1973 the analytical staff participated in a U.S. Environmental Protection Agency interlaboratory nutrient analysis comparison. The results of this study are shown in Table 2. These tests indicate high reliability in Sea Grant analysis techniques.

TABLE 1. Summary of methods of analysis.

Parameter	Method	Remarks
Absolute Irradiance	Weather-Measure and Weston meters	uncertainty = 5 - 10%
Alkalinity	Acid titration	uncertainty = 0.02 meq/ℓ
Ammonia Nitrogen	Auto Analyzer Phenate reaction	detection limit = 10 μg N/ℓ uncertainty = 15 μg N/ℓ
Chlorides	Auto Analyzer	detection limit = 0.2 uncertainty = 3%
Chlorophyll *a*	Fluorimetry	detection limit = 0.1 μg chl *a*/ℓ uncertainty = 8%
Coliform Bacteria	Membrane filter	---
Dissolved Oxygen	Azide-Winkler titration	uncertainty = 0.05 mg/ℓ
Hydrogen Ion Activity	Photovolt Model 126A	uncertainty = 0.02 pH units
Iron	Auto Analyzer TPTZ method	detection limit = 20 μg Fe/ℓ uncertainty = 2 - 3%
Nitrate and Nitrite Nitrogen	Auto Analyzer	detection limit = 10 μg N/ℓ uncertainty = 1%
Phosphorus	Auto Analyzer Ascorbic acid reduction	detection limit = 5 μg P/ℓ uncertainty = 20% @ 10 μg P/ℓ 2% @ 60 μg P/ℓ
Primary Productivity	*In situ* C^{14} Bicarbonate uptake Liquid Scintillation	uncertainty = 10 - 20%
Relative Light	Beckman Enviro-Eye	uncertainty = 5 - 10%
Silicon	Auto Analyzer silicomolybdate complex formation	detection limit = 0.03 mg Si/ℓ uncertainty = 1%
Specific Conductivity	YSI meter	uncertainty = 5 - 7%
Suspended Solids	Filtration & weighing	uncertainty = 1 mg/ℓ
Temperature	Bathythermograph mercury thermometer	uncertainty = 0.1°C uncertainty = .5°C
Transparency	Secchi disc	---
Turbidity	Hach Turbidimeter	uncertainty = 1 JTU

TABLE 2. EPA interlaboratory comparison study.

	Sample A		Sample B	
	U of M	EPA	U of M	EPA
Total P mg/ℓ	0.069	0.064	0.043	0.038
Soluble Reaction P mg/ℓ	0.010	0.010	0.008	0.008
NH_3-N mg/ℓ	0.039	0.041	0.021	0.026
NO_3-N mg/ℓ	0.268	0.252	0.631	0.610

Alkalinity

Alkalinity samples were stored, unfrozen, in completely filled polyethylene bottles. Analyses were made immediately following the cruise using the acidification - pH measurement technique (Strickland and Parsons 1968). The samples were titrated with 0.01 N hydrochloric acid to a pH below 4. The alkalinity was calculated according to the equation:

$$\text{Alk. } (\text{meq}/\ell) = \frac{Na\ Va - Va\ (H^+)}{Vs}$$

where Na = normality of the acid (meq/ℓ)
Va = volume of acid used in titration (ℓ)
Vs = volume of sample (ℓ)
(H^+) = normality of final hydrogen ion concentration (meq/ℓ)

Ammonia Nitrogen

Ammonia concentrations were determined on the Auto Analyzer II utilizing the Berthelot reaction. In this technique the formation of a blue compound results when a solution of an ammonium salt is added to sodium phenoxide (Technicon Instrument Corporation 1973B, U.S.E.P.A. 1974). EDTA was used to prevent precipitation of calcium and magnesium hydroxides. The detection limit was 10 μg N/ℓ. The accuracy of the test at low concentrations, however, was highly dependent on ammonia contamination from laboratory air. The level of uncertainty was 15 μg N/ℓ.

Chlorides

Filtered and frozen water samples were used for the determination of chloride concentration. Analyses were made on the Technicon Auto Analyzer II. A colorimetric determination was used which depended on the liberation of thiocyanate ion from mercuric thiocyanate caused by the formation of an unionized but soluble mercuric chloride. In the presence of ferric ions,

liberated thiocyanate ions form a highly colored compound; the intensity of this color is proportional to the original chloride concentration (Technicon Instrument Corp. 1971; O'Brien 1962; Zall et al. 1956). The chloride detection limit was 0.2 mg/ℓ and the level of uncertainty was 3%.

Chlorophyll

Samples intended for chlorophyll *a* analysis were collected and stored in 1-liter amber polybottles containing 5 mℓ of magnesium carbonate in suspension. While still aboard ship (or at the end of the day in the Bay City laboratory) 50 to 500 mℓ of the stored samples was filtered through a 0.45 μ membrane (Millipore) filter. The filters were folded and then frozen in coin envelopes which were placed inside an evacuated desiccator containing Dryerite. All operations were performed in complete darkness. The samples were analyzed for chlorophyll *a* at the Bay City laboratory as outlined by Strickland and Parsons (1968). A G.K. Turner Model 110 Fluorimeter was used for the analysis. The unit was periodically calibrated using standard chlorophyll *a* samples and checked against spectrophotometric techniques. The detection limit was 0.1 μg Chl*a*/ℓ and the level of uncertainty was 8%.

Coliform Bacteria

Determinations of fecal coliform abundance were accomplished on tributary samples using the membrane filter technique as outlined in Standard Methods (APHA 1971). Samples were collected and stored on ice until returned to the Bay City laboratory. There the waters were filtered through 0.45 μ membrane filters (Millipore) and incubated for 24 hours at 35°C in petri dishes containing M-FC broth (a solution containing tryptose, peptone, yeast, lactose and bile salts). Sterilization of the filtration apparatus was accomplished

by igniting ethanol within the filtration funnels. Blue colonies were counted as representative of one fecal coliform count. Counting was facilitated by use of a 10X binocular microscope. Counts were also occasionally done for total coliform following procedures similar to the above but using M-Endo broth and an incubation temperature of 35°C. (APHA 1971).

Dissolved Oxygen

Samples for dissolved oxygen were analyzed using the sodium azide modification of the Winkler titration method (APHA 1971). Samples were fixed with acid immediately in the field in standard glass D.O. bottles. The samples were acidified and titrated with thiosulfate either aboard ship or at the end of the day in the Bay City laboratory. The titrant was standardized each day with a biniodate solution. The level of uncertainty of the test was 0.05 mg/ℓ.

Hydrogen Ion Activity

The hydrogen ion activity of sampled waters was determined using a Photovolt Model 126A pH meter with temperature correction. A combination glass electrode was used. The meter was calibrated to two different pH buffer solutions each day. The level of accuracy of the test was 0.02 pH units.

Iron

Analyses for dissolved and total iron were performed on both membrane filtered and unfiltered nutrient water samples. A colorimetric procedure used is based on the formation of a violet complex of ferrous iron with TPTZ. The water samples are treated with thioglycolic acid and hydroxylamine to insure solubility and reduction of the iron. The intensity of the color produced is proportional to the iron concentration. Measurements were made using an Auto Analyzer II. The detection limit was 20 μg Fe/ℓ with a level of uncertainty of 2 - 3%.

Nitrate and Nitrite Nitrogen

Nitrate was determined on the Auto Analyzer II using a procedure in which nitrate was reduced to nitrite in a cadmium column and then reacted with sulfanilamide under acid conditions to form a diazo compound. This compound then couples with N-1 napthylethylenediamine dihydrochloride to form a reddish purple azo dye, the intensity of which is proportional to the nitrite concentration of the sample (Technicon Instrument Corp. 1972, U.S.E.P.A. 1974). Nitrite concentration was measured separately by foregoing the reduction. The detection limit of the test was 10 μg N/ℓ, with a level of uncertainty of ±1%.

Phosphorus

Total dissolved phosphorus was determined from filtered nutrient water samples after digesting in a persulfate solution (Menzel and Corwin 1965). The amount of released soluble reactive phosphorus was analyzed on the Auto Analyzer II using the Murphy and Riley (1962) ascorbic acid reduction technique (Technicon Instrument Corporation 1973a, U.S.E.P.A. 1974). A phosphomolybdenum complex is formed and reduced by ascorbic acid to form a blue compound, the intensity of which is directly proportional to the phosphorus concentration. Total phosphorus was determined similarly except that the analysis was performed with an unfiltered nutrient water sample. The detection limit in both tests was 5 μg P/ℓ with a level of uncertainty of 20% at low concentrations (10 μg P/ℓ range) and 2% at higher concentrations (60 μg P/ℓ).

Primary Productivity

Saginaw Bay primary productivity was determined using an *in situ* C^{14}-bicarbonate uptake technique. Two clear and one opaque 250 mℓ glass stoppered Pyrex reagent bottles were filled with water from specified depths. Each bottle

was stored in the dark and then individually inoculated with two microcuries of C^{14} bicarbonate solution (Strickland and Parsons 1968). The inoculum was transferred from the ampules to the bottles with a syringe. The bottles were then mounted on plexiglas racks, lowered to their respective depths, and anchored on station to a separately attached buoy. After four to six hours of incubation, the bottles were retrieved and fixed with a formaldehyde solution. The contents of the bottles were later filtered onto 0.45 μ membrane filters (Millipore) and rinsed with distilled water. The filters and associated suspended solids were then exposed to fuming hydrochloric acid for 10 minutes to remove inorganic carbonate particles which might contain C^{14} (Wetzel 1965). The filters were subsequently placed in 20 mℓ polyethylene liquid-scintillation vials and covered with a dioxane-based water-miscible solution. The radiocarbon uptake was determined using a Unilux I liquid scintillation counter. At the Ann Arbor laboratory the carbon uptake was then computed to determine the C^{14}, pH, and alkalinity measurements (Strickland and Parsons 1968).

Relative Light and Absolute Irradiance

Relative light was measured at 1 meter intervals in the water column with a Beckman Enviro-Eye. Measurements were taken relative to the measured surface light. Absolute irradiance was measured with a Weston light meter while sampling the bay stations. This provided a measurement of surface irradiance in foot-candles at stations where primary production was measured. A Weather-Measure solar radiation recorder was used to determine incident solar radiation. The levels of uncertainty in both instruments were 5 - 10%.

Silicon

Dissolved silicon concentrations were determined from filtered nutrient water samples using an Auto Analyzer II technique. This method is based on the

formation of a silicomolybdate complex which is reduced by an ascorbic acid solution to form molybdenum blue. Oxalic acid was used to prevent phosphate interference (Technicon Instrument Corp. 1973c, APHA 1971). The detection limit for this test was 0.03 mg Si/ℓ and the level of uncertainty was 1%.

Specific Conductivity

Electrical conductivity was measured on the alkalinity samples prior to titration using a YSI Model 31 conductivity bridge calibrated in μmho units. All measurements were corrected to 25°C. A level of uncertainty of 5 to 7% was expected.

Suspended Solids

Water samples were filtered using pre-weighed glass fiber filters. The filter and retained material were then dried for 24 hours at 103°C and weighed. The weight of the residue is then expressed as suspended solids in weight per volume. The test has a level of uncertainty of 1 mg/ℓ.

Transparency

A standard Secchi disc (20 cm diameter) was used to measure water transparency. Values are the average of the levels of disappearance and reappearance of the disc recorded in meters from the surface. The precision and accuracy vary widely depending on environmental conditions and personnel.

Turbidity

Measurements of turbidity were made using Hach model 2100A turbidimeter. Readings are expressed in Jackson Turbidity Units, with an uncertainty level of 1 JTU.

Temperature

Water temperatures were measured on sampled water using a standard

mercury thermometer. *In situ* measurements were also made using a Martek Instruments Corporation submersible thermistor. The level of uncertainty for all measurements was .1°C.

TRIBUTARY DATA

Sampling Location and Frequency

Beginning in August of 1973 all major tributaries to the Saginaw River and Saginaw Bay were monitored for several water quality parameters on an approximately bi-weekly schedule through August of 1974 and on a weekly schedule through August, 1975. Some departures from the schedule were necessary as a consequence of weather or personnel limitations. A total of 80 sampling cruises were conducted. The locations of the tributary sampling stations are described in Table 3. In addition, it should be noted that some Saginaw River data (taken from the lower river) are included in the bay data section of this report.

Tributary Chemical and Biological Data

A presentation of the tributary data follows. The data have been divided into three appendices because of the column width limitations of the computer line printer. Appendix 1 includes all chemical and physical parameters except iron and suspended solids. Appendix 2 presents suspended solids, turbidity, iron and coliform data. The third Appendix of the data file contains the chlorophyll *a* data. Abbreviations, symbols and units of the data are shown in Table 4.

TABLE 3. Tributary station locations.

Cass River: Station 1. 120 feet north of the M-13 (East Road) Bridge in Saginaw County about 2.5 miles from confluence with Shiawassee River.

Tittabawassee River: Station 2. One-half mile south of West Michigan Road on Center Road in Saginaw County about 2.5 miles from confluence with Shiawassee River and Cass River.

Shiawassee River: Station 3. Fergus Road west of M-13 (East Road) in Saginaw County about 15 miles from confluence with Tittabawassee River and Cass River.

Flint River: Station 4. At U.S.G.S gauging station #1490 in Saginaw County about 10 miles from confluence of Shiawassee River.

Saginaw River: Station 12A. At Belinda (Johnson Street) Bridge at Bay City in Bay County about 6 miles from mouth.

Kawkawlin River: Station 5. Off M-13 in Bay County about 4 miles upstream of mouth.

Pine River: Station 6. At Arenac State Road in Arenac County about 3.0 miles from mouth.

Rifle River: Station 7. On Stovet Road in Arenac County about 2 miles from Wigwam Bay.

Au Gres River: Station 9. At US-23 east of the city of Au Gres in Arenac County.

Tawas River: Station 10. Off First Street in the city of Tawas in Iosco County about one-half mile from mouth.

East Au Gres River: Station 11. Approximately one-half mile upstream from mouth in Arenac County.

Quanicassee River: Station 14. Off M-25 about 1.5 miles from mouth.

Sebewaing River: Station 15. Off M-25 Bridge in Huron County less than one-half mile from mouth.

Shebeon River: Station 16. Ruhl Road Bridge in Huron County about one-half mile from mouth.

Mud Creek: Station 17. At M-25 (Port Austin Road) in Huron County about one-half mile from mouth.

Pigeon River: Station 18. At M-25 (Port Austin Road) in Huron County about one-quarter mile from mouth.

Pinnebog River: Station 19. Off M-25 (Port Austin Road) in Huron County about one-half mile from mouth.

Saginaw River: Station 20. At M-46 in Saginaw County about 20 miles from mouth.

TABLE 4. Abbreviations, symbols, and units for tributary data.

CRU:	cruise number
STA:	sampling station number
DAY:	ascending order (5688 = 7/26/1970)
DEPTH:	depth (meters)
ALK:	alkalinity (meq/ℓ)
COND:	specific conductivity (μmhos/cm^2) @ 25°C
DO:	dissolved oxygen (mg/ℓ)
CL:	chlorides (mg/ℓ)
NH_3:	ammonia (g N/ℓ)
NO_3:	nitrate (μg N/ℓ)
NO_2:	nitrite (μg N/ℓ)
TDP:	total dissolved phosphorus (μg P/ℓ)
TP:	total phosphorus (μg P/ℓ)
PP:	particulate phosphorus (μg P/ℓ)
OP:	dissolved reactive phosphorus (μg P/ℓ)
Si:	dissolved reactive silicon (mg Si/ℓ)
pH:	-log $[H^+]$
TEMP:	temperature (°C)
TFE:	total iron (μg Fe/ℓ)
DFE:	dissolved iron (μg Fe/ℓ)
SS:	suspended solids (mg/ℓ)
TVR:	turbidity (Jackson Turbidity Units)
TC:	total coliform (counts/100 mℓ)
FC:	fecal coliform (counts/100 mℓ)
CHL A:	chlorophyll *a* (μg/ℓ)
**	No data available

Tributary Data Summaries

Appendix 4 summarizes the raw tributary data presented in Appendices 1 and 2. The statistical summmary includes identification of the maximum, minimum, and average (algebraic mean) of all observations.

Calculations of Tributary Loading Rates

Loading rates of various physical, chemical and biological parameters were calculated for each tributary. The loads were obtained by multiplying the estimated flows by measured concentrations.

Stream Flow Estimation

The determination of stream loadings into Saginaw Bay requires the estimation of a stream flow correction factor. This factor is required to project the value for the measured flow of each stream to a value at its mouth. The correction factors were developed using several methods depending upon the amount of existing data available. For those streams having one or more USGS gauging stations, the total drainage area of the stream was divided by the drainage area above the USGS station located farthest downstream. This quotient is used as a correction factor assuming identical runoff per unit area throughout the drainage basin below the last gauge.

Several streams (such as the East Au Gres) have no regular USGS gauging stations, but are reported in the miscellaneous portion of USGS publications. Daily flows for these rivers were divided by the corresponding flow of a nearby river having a gauging station. The arithmetic mean of the resulting quotients was determined. A factor defined by the formulation:

$$\text{factor} = \left(\begin{array}{c}\text{arithmetic mean}\\ \text{of flow ratio}\end{array}\right) \left(\frac{\text{total area above mouth}}{\text{area above point of measurement}}\right)$$

was multiplied by the flow of the nearby stream to estimate the flow of the ungauged streams. Streams having neither USGS stations or any other reported flows were assumed to have a flow per unit drainage area equal to that of a neighboring river. A correction factor was derived by dividing the total area of the drainage basin by the area above the USGS station of the neighboring river. A summary of the techniques used to estimate the flow of the tributaries at the mouth is given in Table 5. Flow data are listed in Appendix 5.

Loading calculations employed several necessary assumptions which introduce errors. The assumption of equal flow per unit area on the same or nearby basins may not be valid. Topographic and geologic differences may exist which affect runoff. These considerations may interact causing a change in the rate of stream runoff.

Drainage area was determined using Water Resource Commission or US Geological Survey Office data where possible. Where no data existed, estimations were made using a planimeter and topographic maps.

The listed loadings for all rivers except the Saginaw River are assumed to be at the mouth. The Saginaw River loadings were calculated at stations farther upstream (B54, B1, and B9) in an attempt to minimize the effects of flow reversal on concentration measurements (see Figure 1).

TABLE 5. Calculated tributary flow at mouth.

DRAINAGE BASIN	AREA Sq. Mi.	FACTOR
Pigeon River	125.0	2.273xUSGS #1585
Pinnebog River	198.2	3.604xUSGS #1585
Quanicassee River	79.0	1.436xUSGS #1585
Sebewaing River	110.0	2.000xUSGS #1585
Wiscoggin Drain	65.0	1.180xUSGS #1585
Shebeon River	48.0	0.870xUSGS #1585
Mud Creek	11.0	0.200xUSGS #1585
Rifle River	387.0	1.210xUSGS #1420
Kawkawlin River	244.0	2.420xUSGS #1435
Pine River	96.7	0.300xUSGS #1420
Pinconning River	31.5	0.066xUSGS #1420
White Feather River	28.0	0.066xUSGS #1420
Saganing River	31.5	0.082xUSGS #1420
Au Gres River	281.0	1.660xUSGS #1385
East Au Gres River	119.0	1.160XUSGS #1385
Tawas River	170.0	1.610xUSGS #1385
Cass River	889.0	1.050xUSGS #1515
Flint River	1394.0	1.170xUSGS #1490
Tittabawassee River	2620.0	1.090xUSGS #1560
Chippewa River	1011.0	1.690xUSGS #1545 (before 1972) 2.430xUSGS #1540 (after 1972)
Pine River	398.0	1.020xUSGS #1555
Shiawassee River	1160.0	1.820xUSGS #1450
SAGINAW - Total	6222.0	1.040xCombined flow of Tittabawassee, Cass, Flint, and Shiawassee Rivers

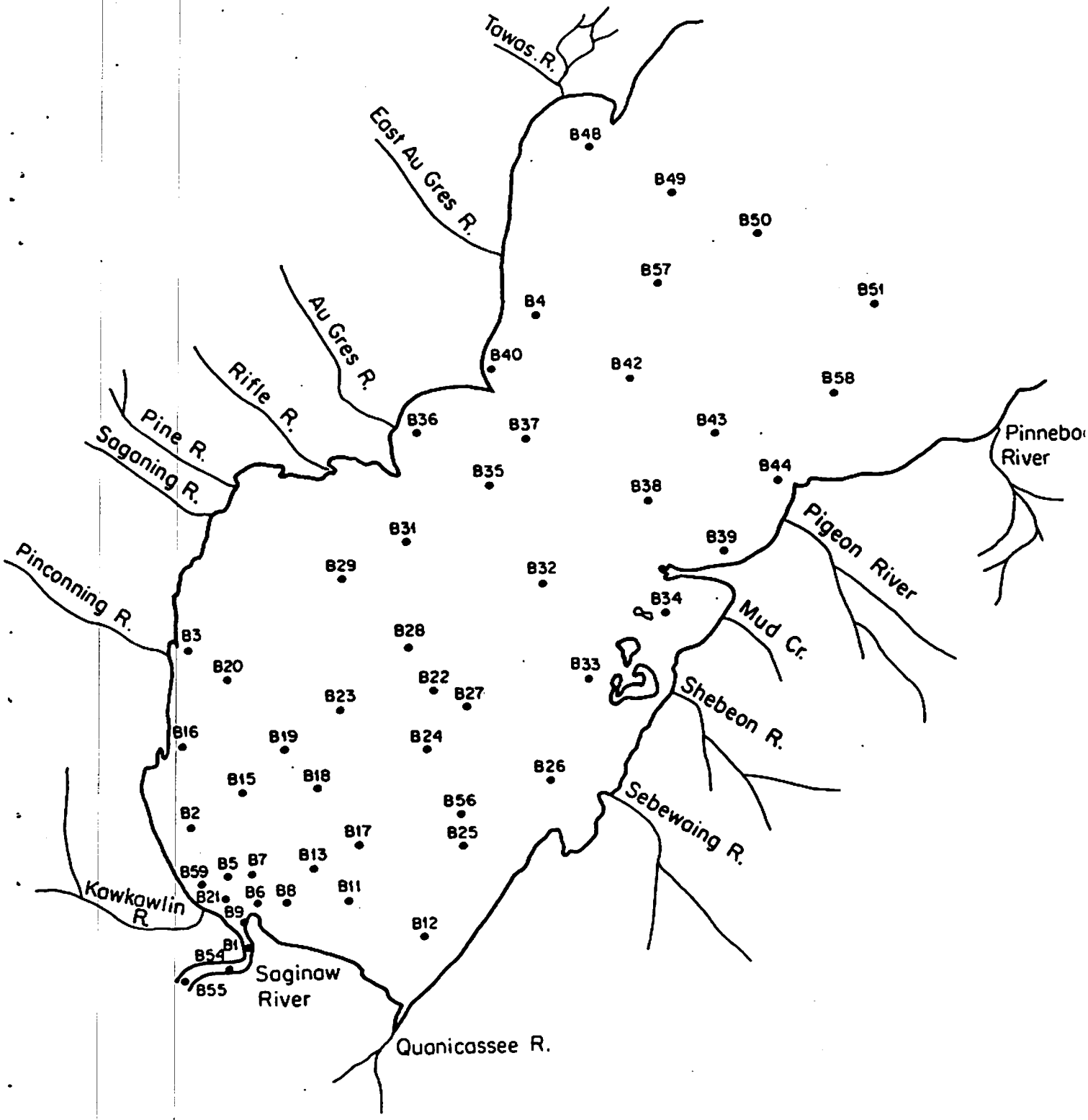

FIGURE 1. Saginaw Bay station locations.

Appendices 6 and 7 contain the tributary load calculations. Applicable abbreviations, symbols and units are presented in Table 6.

TABLE 6. Abbreviations, symbols, and units for loading calculations.

CRU:	cruise number
STA:	station number
FLOW:	tributary calculated flow at the mouth (cfs)
CL:	chloride load (kg/day)
NH_3:	ammonia load (kg/day)
NO_3:	nitrate load (kg/day)
TDP:	total dissolved phosphorus load (kg/day)
PP:	particulate phosphorus load (kg/day)
OP:	soluble reactive phosphorus load (kg/day)
SI:	dissolved reactive silicon load (kg/day)
TFE:	total iron load (kg/day)
DFE:	dissolved iron load (kg/day)
TCOL:	total coliform load (counts/day)
FCOL:	fecal coliform load (counts/day)
xxx	No data available

Loading Summary

Table 7 presents a brief statistical summary of the loading data listed in this section. The abbreviations used are consistent with previous Tables. Total average Saginaw River and Saginaw Bay loads were computed and the respective percentage contributions from each river are displayed. It is observed that for all parameters the Saginaw River contributes the overwhelming majority of the loading to Saginaw Bay.

TABLE 7. Statistical summary of tributary loadings to Saginaw Bay.

Location	Tributary	Cl	Total P	NH_3-N	NO_3-N	Si	Total Iron	Total Coliform
Saginaw River	Average	895.00	3.73	5.54	19.50	33.10	19.90	282.00
	% of bay	84.47	79.53	87.11	65.28	69.29	73.54	94.88
Cass River	Average	28.90	.35	.34	3.04	3.25	3.40	7.30
	% of bay	2.73	7.46	5.35	10.18	6.80	12.56	2.46
	% of Sag. R.	3.23	9.38	6.14	15.59	9.82	17.09	2.59
Tittabawassee	Average	656.00	.76	1.66	5.79	16.30	4.03	25.60
	% of bay	61.91	16.20	26.10	19.38	34.12	14.89	8.61
	% of Sag. R.	73.30	20.38	29.96	29.69	49.25	20.25	9.08
Shiawassee River (without Flint River)	Average	63.60	.74	.51	3.61	6.89	4.74	34.90
	% of bay	6.00	15.78	8.02	12.09	14.42	17.52	11.74
	% of Sag. R.	7.11	19.84	9.21	18.51	20.82	23.82	12.38
Flint River	Average	139.00	1.66	1.75	4.56	7.70	5.50	99.90
	% of bay	13.12	35.39	27.52	15.27	16.12	20.33	33.61
	% of Sag. R.	15.53	44.50	31.59	23.38	23.26	27.64	35.43
Kawkawlin River	Average	15.50	.07	.06	.82	.86	.39	2.84
	% of bay	1.46	1.49	.94	2.75	1.80	1.44	.96
Pine River	Average	66.40	.34	.32	1.46	3.45	1.61	3.90
	% of bay	6.27	7.25	5.03	4.89	7.22	5.95	1.31
Rifle River	Average	21.00	.12	.04	.31	3.79	1.97	1.74
	% of bay	1.98	2.56	.63	1.04	7.93	7.28	.59
Au Gres River	Average	12.30	.04	.03	.42	1.47	.43	1.09
	% of bay	1.16	.85	.47	1.41	3.08	1.59	.37

TABLE 7. Statistical summary of tributary loadings to Saginaw Bay (continued).

Location	Tributary	Cl	Total P	NH_3-N	NO_3-N	Si	Total Iron	Total Coliform
Tawas River	Average	6.45	.11	.15	.21	1.66	.37	2.56
	% of bay	.61	2.35	2.36	.70	3.47	1.37	.86
East Au Gres River	Average	7.28	.12	.06	.30	1.52	1.48	.84
	% of bay	.69	2.56	.94	1.00	3.18	5.47	.28
Quanicassee River	Average	4.72	.03	.01	.93	.17	.14	.21
	% of bay	.45	.64	.16	3.11	.36	.52	.07
Sebewaing River	Average	7.72	.03	.02	2.30	.45	.20	.96
	% of bay	.73	.64	.31	7.70	.94	.74	.32
Shebeon Creek	Average	6.20	<.01	.01	1.14	.16	.05	.20
	% of bay	.59	.11	.16	3.82	.33	.18	.07
Mud Creek	Average	1.05	<.01	<.01	.22	.04	.01	.07
	% of bay	.10	.10	.07	.74	.08	.04	.02
Pigeon River	Average	7.87	.05	.04	1.86	.53	.29	.51
	% of bay	.74	1.07	.63	6.23	1.11	1.07	.17
Pinnebog River	Average	1.77	.01	.03	<.01	.09	.01	.00
	% of bay	.17	.21	.47	.01	.19	.01	.00
Saginaw River	Average	903.00	3.57	4.23	17.80	31.00	23.10	246.00
	% of bay	85.22	76.12	66.51	59.59	64.89	77.97	82.77
Pinconning River	Average	3.95	.01	<.01	.32	.19	.11	.14
	% of bay	.37	.21	.07	1.07	.40	.41	.05
Saganing River	Average	2.39	.02	<.01	.08	.29	.10	.16
	% of bay	.23	.43	.09	.27	.61	.37	.05
Load to Bay	Average	1059.60	4.69	6.36	29.87	47.77	27.05	297.22

SAGINAW BAY DATA

Sampling Location and Frequency

Between September 1974 and August 1975 nine water quality sampling cruises were conducted on Saginaw Bay and the Saginaw River. One additional special preliminary cruise was conducted in August 1973. The locations of the routine sampling stations are shown in Figure 1. The locations of the August 1973 special sampling cruise are shown in Figure 2. The Saginaw Bay data are listed in Appendix 8, 9, 10, and 11.

Saginaw Bay Chemical and Biological Data

The abbreviations, symbols and units used for the bay data are presented in Table 8.

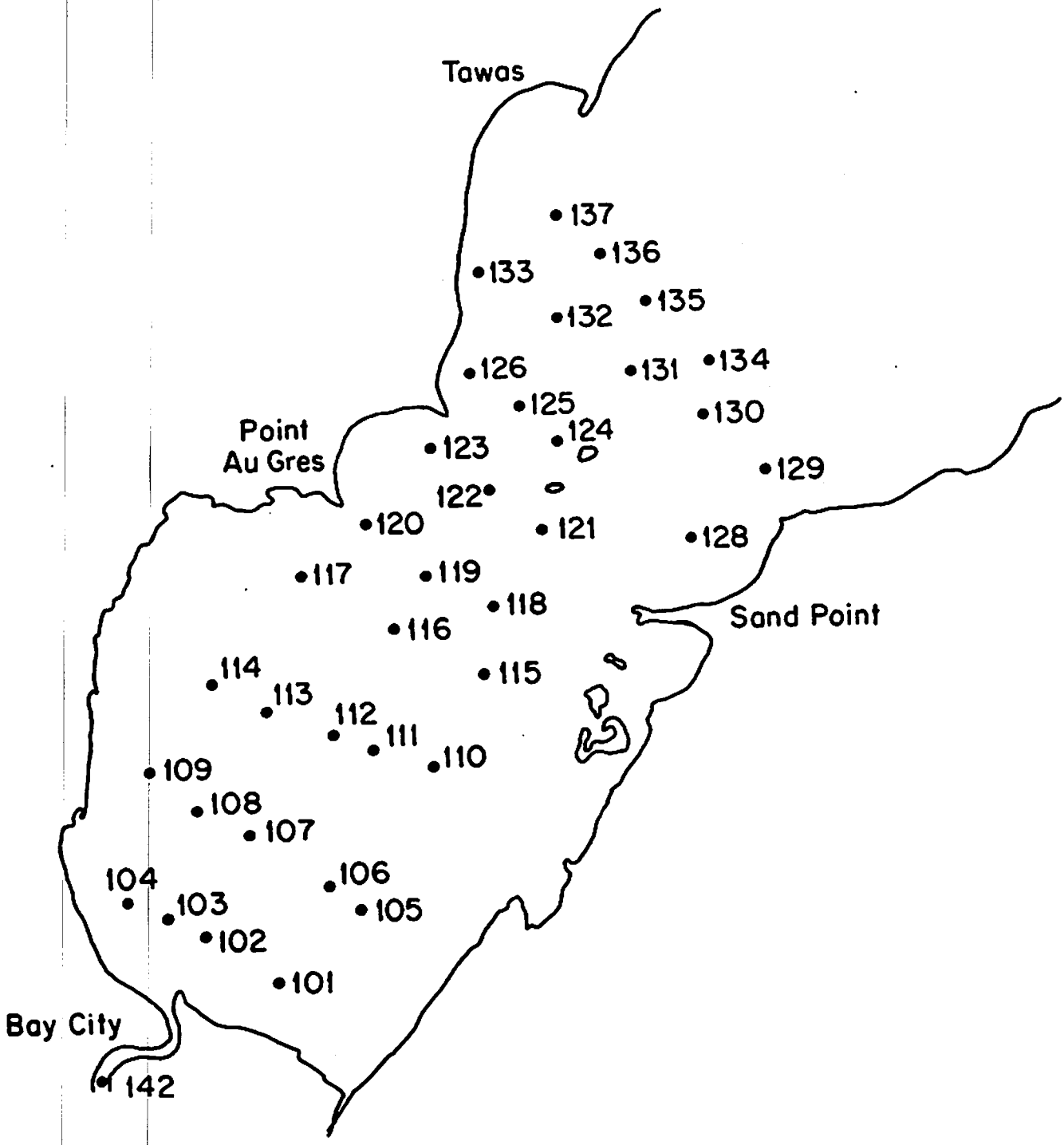

FIGURE 2. Saginaw Bay sampling stations: 22-25 August 1973.

TABLE 8. Abbreviations, symbols and units for Saginaw Bay data.

CRU:	cruise number
STA:	sampling station number
DAY:	ascending order (5688 = 7/26/1970)
DEPTH:	depth (meters)
ALK:	alkalinity (meq/ℓ)
COND:	conductivity (μmhos/cm^2) @ 25°C
DO:	dissolved oxygen (mg/ℓ)
CL:	chlorides (mg/ℓ)
NH_3:	ammonia (μg N/ℓ)
NO_3:	nitrate (μg N/ℓ)
NO_2:	nitrite (μg N/ℓ)
TDP:	total dissolved phosphorus (μg P/ℓ)
TP:	total phosphorus (μg P/ℓ)
PP:	particulate phosphorus (μg P/ℓ)
OP:	soluble reactive phosphorus (μg P/ℓ)
Si:	dissolved reactive silicon (mg Si/ℓ)
pH:	-log $[H^+]$
TEMP:	temperature (°C)
TFE:	total iron (μg Fe/ℓ)
DFE:	dissolved iron (μg Fe/ℓ)
SS:	suspended solids (μmg/ℓ)
TVR:	turbidity (Jackson Turbidity Units)
SECCHI:	secchi disc ($meters^{-1}$)
SURFACE LIGHT:	incident solar radiation (kcal/cm^2/hr)
DEPTH:	(meters)
LIGHT:	percent reduction of incident light at depth
UPTAKE:	carbon-14 productivity (μg carbon/ℓ/hr)
**	No data

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APPENDIX 1

SAGINAW STREAM CHEMISTRY : CASS RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	1	15AUG73	6802	0	3.55	620	3.70	54.90	35.50	126.90	9.30	****	503.34	****	68.95	0.24	7.90	23
2	1	10SEP73	6828	0	4.06	665	4.00	72.20	337.80	311.10	54.20	140.21	598.86	458.68	47.47	0.14	****	21
3	1	20SEP73	6838	0	3.98	822	7.90	148.00	681.00	512.10	50.40	494.87	764.80	269.93	194.20	1.91	****	15
4	1	04OCT73	6852	0	3.79	620	2.40	61.60	250.10	659.50	39.20	398.70	583.87	185.17	160.39	1.66	****	18
5	1	17OCT73	6865	0	4.25	714	3.60	67.70	782.00	395.00	52.60	249.81	415.65	165.84	190.16	1.86	****	13
6	1	01NOV73	6880	0	4.39	724	5.80	58.70	405.10	469.90	90.50	211.22	376.86	165.64	127.53	1.49	****	10
7	1	15NOV73	6894	0	4.64	710	10.60	54.30	480.70	689.20	17.10	283.07	544.75	261.84	206.00	3.24	****	7
8	1	29NOV73	6908	0	4.52	694	8.90	42.70	166.50	849.50	20.70	122.02	175.55	53.56	78.99	3.20	****	5
10	1	08JAN74	6948	0	4.26	770	11.80	43.00	372.10	4532.50	29.30	146.24	147.61	1.37	96.95	5.13	****	0
12	1	21FEB74	6992	0	4.32	536	11.60	43.60	315.50	1980.00	16.30	121.30	132.71	11.41	30.19	3.35	****	0
13	1	06MAR74	7005	0	1.85	304	11.30	17.40	173.40	1810.00	14.10	83.55	251.93	168.38	44.40	1.56	****	3
14	1	20MAR74	7027	0	3.95	658	12.10	35.70	122.50	1520.00	10.60	79.87	112.21	32.34	****	2.06	****	2
15	1	17APR74	7047	0	3.41	519	9.00	24.60	109.20	1550.00	26.20	66.37	235.40	169.03	34.23	1.93	****	10
16	1	01MAY74	7061	0	4.53	641	7.10	28.90	164.80	950.00	20.70	84.83	201.83	117.00	41.41	0.99	****	16
17	1	15MAY74	7075	0	4.22	589	8.50	32.00	73.60	490.00	13.00	68.72	136.56	67.84	36.22	1.29	****	13
18	1	29MAY74	7089	0	4.64	601	6.90	32.30	184.20	968.00	28.50	77.07	173.14	96.07	35.40	1.87	****	16
19	1	12JUN74	7103	0	4.66	641	5.80	41.80	206.20	569.40	40.20	96.07	239.68	143.60	42.51	0.68	****	20
20	1	25JUN74	7116	0	4.97	668	7.10	45.20	61.80	737.20	26.40	60.41	172.71	112.31	24.94	1.85	****	19
21	1	10JUL74	7131	0	4.14	648	8.10	112.00	16.70	****	2.80	33.97	178.55	144.58	9.39	0.14	****	27
22	1	23JUL74	7144	0	4.65	848	3.00	187.00	406.20	377.10	53.90	149.37	245.64	96.27	64.06	1.85	****	21
23	1	07AUG74	7159	0	3.90	647	12.60	133.00	9.40	11.80	7.60	77.75	203.46	125.71	19.79	0.63	****	25
24	1	13AUG74	7165	0	3.15	704	9.20	125.00	49.30	86.10	21.60	70.81	205.54	134.74	35.89	1.00	****	25
25	1	16AUG74	7168	0	4.01	739	9.60	138.00	20.50	75.70	17.40	104.81	274.52	169.72	60.64	0.78	****	20
26	1	21AUG74	7173	0	3.78	732	8.30	140.00	42.60	81.00	22.30	116.51	199.84	83.33	63.28	0.45	****	25
27	1	29AUG74	7181	0	3.75	725	4.10	146.00	220.50	155.90	30.60	90.63	200.98	110.35	44.43	0.80	****	21
28	1	05SEP74	7188	0	3.66	746	5.10	170.00	430.90	270.40	43.80	131.96	251.54	119.58	95.49	1.01	8.00	16
29	1	10SEP74	7193	0	3.89	751	9.30	162.00	220.80	544.50	121.70	125.31	290.30	164.99	81.86	0.35	8.40	20
30	1	16SEP74	7199	0	3.84	722	6.10	178.00	217.60	254.50	31.80	114.98	240.03	125.05	95.06	0.34	7.80	18
31	1	02OCT74	7215	0	3.86	728	5.60	81.20	484.40	335.10	31.40	139.40	277.85	138.42	87.86	0.32	8.10	10
32	1	09OCT74	7222	0	3.91	657	6.70	51.80	261.40	271.40	15.30	119.67	296.30	176.63	26.34	0.38	****	11
33	1	17OCT74	7230	0	4.36	705	3.90	63.00	445.40	135.40	10.10	151.07	319.61	168.54	55.49	0.85	7.80	12
34	1	06NOV74	7250	0	4.22	672	5.50	45.40	455.90	266.30	20.80	165.84	301.71	135.88	81.63	0.46	7.90	9
35	1	11NOV74	7255	0	4.48	705	9.60	29.60	154.00	352.10	10.20	108.33	233.35	125.02	29.24	1.54	****	9
36	1	15NOV74	7259	0	4.70	760	10.50	55.10	333.70	772.30	21.10	142.30	211.25	68.95	50.07	1.99	****	3
37	1	27NOV74	7271	0	4.65	720	11.90	26.30	271.80	602.00	15.10	122.51	157.39	34.85	17.96	1.84	****	2
38	1	02DEC74	7276	0	4.63	725	12.80	41.30	227.70	684.70	11.20	127.43	160.91	33.48	57.93	1.98	****	1
41	1	16DEC74	7290	0	4.65	767	13.10	20.70	231.40	671.20	8.20	83.59	126.32	42.74	37.91	2.06	****	0
42	1	19DEC74	7293	0	4.72	872	16.00	51.10	216.10	1033.80	12.90	89.72	124.92	35.21	55.78	2.19	****	0
43	1	30DEC74	7304	0	4.61	746	14.10	28.60	347.60	922.00	11.40	****	****	****	105.75	1.91	****	0
45	1	10JAN75	7315	0	4.16	684	12.90	22.30	165.30	3768.10	19.20	96.10	132.26	36.15	60.08	2.04	****	1
46	1	14JAN75	7319	0	2.94	574	12.30	****	212.40	3523.50	22.90	90.69	157.46	66.76	55.52	2.66	****	0
47	1	17JAN75	7322	0	3.26	643	12.70	****	206.50	4670.20	35.20	98.19	140.08	41.89	55.88	3.09	****	0
49	1	24JAN75	7334	0	4.09	706	12.20	****	252.90	1988.40	24.90	90.04	126.42	36.38	54.87	3.53	****	0
50	1	05FEB75	7341	0	3.26	572	11.40	****	279.80	1483.20	19.10	****	****	****	64.87	2.33	****	0
51	1	14FEB75	7350	0	4.70	750	11.10	25.60	450.10	1417.80	18.40	125.58	156.84	31.26	78.92	3.32	****	0
52	1	21FEB75	7357	0	4.60	790	11.00	58.20	504.40	1399.00	26.40	155.27	177.64	22.36	91.05	3.18	****	1
53	1	26FEB75	7362	0	1.69	298	10.50	****	558.20	1294.00	21.80	151.17	300.90	149.73	120.59	1.67	****	0
54	1	03MAR75	7367	0	2.89	486	12.00	****	269.20	1551.40	17.00	83.26	129.94	46.68	43.26	2.47	****	0
55	1	06MAR75	7370	0	3.44	584	11.90	****	232.10	1415.80	14.20	77.42	107.35	29.93	47.07	2.79	****	0
56	1	10MAR75	7374	0	3.91	681	12.20	****	269.60	1189.20	12.40	82.61	98.91	16.30	47.37	2.81	****	0
57	1	14MAR75	7378	0	4.16	684	12.70	10.70	330.10	1186.20	13.40	108.92	115.01	6.10	36.06	2.62	****	0
58	1	18MAR75	7382	0	3.77	614	11.80	****	225.80	1361.70	17.80	80.39	101.52	21.12	28.23	2.03	****	3
59	1	21MAR75	7385	0	2.46	422	10.90	****	368.70	1565.20	21.90	90.01	148.23	58.22	40.16	1.76	****	3
60	1	26MAR75	7390	0	2.46	413	10.70	****	179.30	2211.60	22.30	55.19	187.71	132.52	23.15	2.10	****	1
61	1	31MAR75	7395	0	3.18	533	11.90	****	127.50	2444.40	15.80	43.62	73.55	29.93	24.71	2.36	****	0
63	1	09APR75	7404	0	3.57	566	11.70	22.40	131.20	1598.70	13.70	48.61	72.60	23.99	31.52	2.18	****	4

64	1	14APR75	7409	0	2.90	595	11.40	****	67.50	2136.20	14.80	28.26	69.44	41.17	12.88	1.84	****	4
65	1	18APR75	7413	0	2.70	498	9.60	****	87.80	2461.80	19.40	40.20	86.32	46.13	16.43	1.00	****	10
66	1	21APR75	7416	0	2.03	309	8.60	****	168.20	1627.40	21.10	51.41	373.60	322.19	30.48	1.94	****	9
67	1	24APR75	7419	0	3.85	475	8.60	****	241.70	1669.80	27.80	49.16	131.38	82.22	22.85	2.06	****	9
68	1	30APR75	7425	0	3.91	546	8.40	****	159.20	1554.10	26.30	55.42	123.55	68.13	32.89	1.87	****	13
69	1	13MAY75	7438	0	4.31	642	7.30	25.20	106.70	550.30	13.90	45.15	126.85	81.70	17.77	0.92	****	15
70	1	16MAY75	7441	0	4.41	658	6.50	29.00	131.20	5214.10	20.80	227.03	323.49	96.56	25.17	1.09	****	15
71	1	21MAY75	7446	0	4.53	653	8.70	26.50	65.90	351.90	20.60	57.47	127.21	69.73	18.52	0.57	****	10
72	1	27MAY75	7452	0	4.09	550	7.20	****	185.70	1452.10	90.80	76.84	183.04	108.20	45.61	3.05	****	15
73	1	04JUN75	7460	0	****	**	5.70	27.70	272.80	1279.90	43.60	102.01	201.37	99.36	45.44	3.04	****	19
74	1	11JUN75	7467	0	****	**	6.60	3.80	128.90	1207.60	49.80	75.05	183.47	108.43	36.19	3.18	****	18
75	1	16JUN75	7472	0	****	**	6.30	17.90	117.80	1132.10	33.10	82.05	176.46	94.41	36.94	2.99	****	21
76	1	24JUN75	7480	0	****	**	5.20	25.60	148.30	1063.50	30.90	83.52	187.03	103.51	40.26	2.54	****	27
77	1	26JUN75	7482	0	****	**	8.20	38.00	56.40	805.40	30.80	132.49	172.13	39.64	13.76	2.26	****	27
78	1	03JUL75	7489	0	****	**	7.50	55.90	22.70	241.60	30.40	30.42	163.59	133.17	1.01	1.39	****	27
79	1	24JUL75	7510	0	****	**	****	66.40	247.50	165.10	38.30	63.18	195.44	132.26	20.60	0.28	****	**
80	1	07AUG75	7528	0	****	**	****	66.70	230.90	163.70	32.90	74.26	207.17	132.91	50.76	0.26	****	**

SAGINAW STREAM CHEMISTRY : TITTABAWAASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	2	15AUG73	6802	0	3.34	**	7.80	226.00	140.80	880.20	26.00	****	321.11	****	30.48	2.23	8.50	25
2	2	10SEP73	6828	0	3.25	**	4.40	322.00	140.90	178.00	16.40	131.38	324.30	192.93	40.49	1.81	****	22
3	2	20SEP73	6838	0	3.18	**	6.90	228.00	213.70	1271.20	20.70	165.12	358.27	193.15	38.92	1.11	****	17
4	2	04OCT73	6852	0	3.86	640	6.35	200.75	300.40	403.45	22.35	438.76	634.51	195.74	166.24	1.25	****	19
5	2	17OCT73	6865	0	3.46	764	7.90	130.00	179.00	211.20	10.10	119.67	178.84	59.17	61.78	****	****	14
6	2	01NOV73	6880	0	3.42	794	8.20	139.00	337.10	381.90	14.40	79.25	146.83	67.58	37.26	3.27	****	11
7	2	15NOV73	6894	0	3.34	1000	9.60	192.00	724.80	252.60	14.30	65.66	176.79	111.17	25.10	2.62	****	7
8	2	29NOV73	6908	0	3.54	685	10.90	98.50	151.20	924.70	15.90	54.15	109.44	55.16	22.59	3.54	****	5
10	2	08JAN74	6948	0	4.08	1257	10.10	162.00	810.40	755.50	7.30	62.85	130.14	67.29	21.09	4.46	****	0
11	2	01FEB74	6972	0	2.48	475	11.80	50.70	154.30	1183.60	9.40	101.19	147.97	46.78	35.66	2.76	****	1
12	2	21FEB74	6992	0	2.96	391	10.40	273.00	551.20	320.00	6.60	62.36	85.87	23.50	16.95	3.47	****	2
13	2	06MAR74	7005	0	2.12	330	11.50	32.20	219.10	730.00	7.70	69.73	172.49	102.76	36.67	2.39	****	3
14	2	28MAR74	7027	0	2.64	576	11.90	69.90	232.40	620.00	5.80	60.70	90.33	29.63	19.63	2.60	****	1
15	2	17APR74	7047	0	2.58	456	9.60	54.60	117.60	710.00	9.30	57.93	154.23	96.30	29.37	2.29	****	10
16	2	01MAY74	7061	0	2.63	477	8.00	61.00	151.50	420.00	11.00	58.06	164.73	106.67	24.81	2.04	****	**
17	2	15MAY74	7075	0	2.94	530	8.60	66.80	117.00	330.00	8.30	23.11	108.43	85.31	18.26	2.09	****	13
18	2	29MAY74	7089	0	2.66	603	7.80	113.00	165.70	283.40	12.10	38.17	135.32	97.15	19.36	2.43	****	16
19	2	12JUN74	7103	0	2.71	1172	6.60	288.00	167.40	859.70	27.60	43.39	168.84	125.44	22.75	2.83	****	19
20	2	25JUN74	7116	0	3.62	823	****	143.00	293.40	735.50	23.00	52.06	122.51	70.45	18.48	2.62	****	19
21	2	10JUL74	7131	0	3.21	799	8.80	219.00	298.40	408.60	26.00	28.75	157.98	129.23	14.74	2.05	****	27
22	2	23JUL74	7144	0	3.05	1177	5.80	327.00	465.10	198.70	35.20	69.83	147.84	78.04	28.88	2.22	****	21
23	2	07AUG74	7159	0	3.10	619	7.70	133.00	78.50	80.50	10.10	28.23	79.84	51.57	6.00	2.75	****	24
24	2	13AUG74	7165	0	2.30	1230	14.20	310.00	114.10	168.30	42.90	56.07	204.11	148.07	21.35	0.61	****	27
25	2	16AUG74	7168	0	3.03	996	11.60	251.00	186.90	137.80	24.80	32.89	149.83	116.90	8.90	1.20	****	25
26	2	21AUG74	7173	0	3.18	1030	8.90	164.00	300.00	97.30	17.70	42.48	142.76	100.28	16.72	1.76	****	25
27	2	29AUG74	7181	0	3.07	861	7.90	224.00	43.20	58.70	11.30	21.42	72.31	50.92	3.85	2.20	****	21
28	2	05SEP74	7188	0	3.14	1192	10.20	323.00	466.20	151.80	19.10	59.85	128.02	68.17	19.49	1.20	8.50	19
29	2	10SEP74	7193	0	3.06	1395	8.90	239.00	356.30	170.20	31.90	73.71	139.30	65.59	44.24	1.58	8.30	22
30	2	16SEP74	7199	0	3.09	1167	7.60	325.00	625.20	251.60	44.90	78.17	128.31	50.14	55.42	2.30	7.90	18
31	2	02OCT74	7215	0	3.23	1186	8.70	241.00	283.80	356.20	13.40	67.55	131.90	64.35	15.26	1.91	8.20	12
32	2	09OCT74	7222	0	3.39	837	8.70	164.00	182.70	181.20	9.20	46.16	105.85	59.69	11.18	1.97	****	12
33	2	17OCT74	7230	0	3.50	929	8.80	98.20	163.30	134.50	6.00	43.36	86.85	43.49	8.41	1.19	8.00	12
34	2	06NOV74	7250	0	3.35	905	8.80	128.00	343.10	295.10	12.30	86.49	151.43	64.94	23.34	1.92	8.10	9
35	2	11NOV74	7255	0	3.88	878	9.50	154.00	700.60	647.40	25.80	101.74	154.13	52.39	26.60	2.16	****	10
36	2	15NOV74	7259	0	3.91	953	10.80	178.00	747.90	501.40	22.30	102.79	138.81	36.02	28.46	2.79	****	5
37	2	27NOV74	7271	0	3.77	980	12.80	193.00	905.10	596.00	30.80	78.04	112.60	34.59	****	2.40	****	2
38	2	02DEC74	7276	0	3.90	1114	12.80	187.00	1074.00	500.20	21.50	103.80	123.20	19.40	24.61	2.30	****	1
39	2	06DEC74	7280	0	3.74	822	13.70	137.00	495.50	328.40	10.90	58.19	80.55	22.36	21.45	2.68	****	0
40	2	10DEC74	7284	0	3.90	980	13.30	184.00	721.70	562.90	16.20	91.48	135.22	43.72	33.41	2.41	****	0
41	2	16DEC74	7290	0	3.73	999	12.60	201.00	759.30	271.20	13.40	64.91	102.23	37.26	17.90	2.52	****	0
43	2	30DEC74	7304	0	3.80	999	13.20	194.00	648.80	175.40	5.70	64.42	73.77	9.36	26.80	2.74	****	1
44	2	06JAN75	7311	0	4.00	999	13.60	200.00	473.90	502.80	13.00	****	48.77	****	8.96	2.31	****	0
45	2	10JAN75	7315	0	3.73	744	13.10	104.00	150.40	512.10	7.20	23.11	47.07	23.96	8.70	2.77	****	2
46	2	14JAN75	7319	0	3.17	585	12.90	66.70	145.60	2768.90	15.40	39.93	72.37	32.44	16.04	3.19	****	0
47	2	17JAN75	7322	0	3.48	796	13.10	119.00	200.90	1661.50	13.60	50.69	72.10	21.48	14.38	3.65	****	0
48	2	22JAN75	7327	0	3.85	717	12.40	85.30	733.30	978.00	8.20	26.83	41.08	14.25	7.60	3.66	****	0
49	2	29JAN75	7334	0	3.15	706	11.60	121.00	491.60	945.40	12.80	78.27	116.48	38.21	39.87	3.24	****	0
50	2	05FEB75	7341	0	3.59	940	11.90	160.00	569.90	758.80	8.30	70.58	83.33	12.75	38.01	3.67	****	0
51	2	14FEB75	7350	0	3.75	879	11.50	167.00	677.30	663.50	6.90	122.22	139.66	17.44	71.69	3.87	****	0
52	2	21FEB75	7357	0	3.58	742	11.90	131.00	396.20	608.60	7.40	75.79	100.64	24.84	27.94	3.71	****	0
53	2	26FEB75	7362	0	2.38	421	12.40	27.10	459.10	807.20	12.80	115.24	234.49	119.25	56.04	2.53	****	0
54	2	03MAR75	7367	0	3.19	814	12.10	157.00	452.90	789.60	8.50	68.59	106.73	38.14	23.99	3.08	****	0
55	2	06MAR75	7370	0	3.79	647	12.40	37.60	211.60	311.50	4.10	30.77	62.30	31.52	11.93	3.47	****	1
56	2	10MAR75	7374	0	3.58	999	12.20	213.00	688.80	499.80	7.70	71.23	95.88	24.65	18.00	2.86	****	1
57	2	14MAR75	7378	0	3.34	706	12.00	123.00	300.60	444.30	6.80	44.73	66.54	21.81	12.22	3.21	****	1
58	2	18MAR75	7382	0	3.18	616	11.30	98.80	229.90	557.70	8.60	46.23	64.09	17.86	13.33	2.59	****	4

59	2	21MAR75 7385	0	2.91	565	11.30	80.80	240.20	8986.20	10.20	****	****	****	****	3.01	****	4
60	2	28MAR75 7390	0	2.59	445	11.40	24.40	191.00	1497.00	12.40	56.66	139.69	83.03	14.74	2.71	****	1
61	2	31MAR75 7395	0	2.78	528	12.40	65.50	131.70	935.30	7.00	41.79	69.60	27.81	17.47	2.89	****	1
63	2	09APR75 7404	0	2.80	741	12.10	141.00	185.80	411.10	6.00	31.52	61.61	30.09	10.50	2.57	****	4
64	2	14APR75 7409	0	3.27	605	11.70	81.90	94.70	2100.90	9.30	41.86	67.68	25.82	13.53	2.07	****	5
65	2	18APR75 7413	0	3.03	557	11.60	63.40	108.00	780.70	6.10	35.27	52.33	27.06	7.66	2.21	****	10
66	2	21APR75 7416	0	2.83	500	10.10	49.50	108.30	1047.20	10.50	35.70	89.52	53.82	16.82	2.39	****	9
67	2	24APR75 7419	0	3.03	522	9.70	57.40	92.30	682.30	7.40	32.96	75.24	42.28	10.27	2.11	****	9
69	2	30APR75 7425	0	3.08	516	10.60	60.70	153.60	570.30	8.40	46.42	82.38	35.96	19.43	1.96	****	13
69	2	13MAY75 7438	0	3.08	635	7.90	91.30	148.80	289.10	14.30	75.96	212.81	136.85	27.29	2.16	****	15
70	2	16MAY75 7441	0	3.28	817	7.40	138.00	296.30	313.00	19.50	93.95	181.13	87.17	24.03	2.44	****	16
71	2	21MAY75 7446	0	3.25	675	7.90	10.97	63.60	225.00	12.60	48.90	111.10	62.20	12.45	1.76	****	22
72	2	27MAY75 7452	0	3.52	768	2.60	128.00	35.90	476.10	37.80	65.62	156.02	90.40	18.16	2.83	****	9
73	2	04JUN75 7460	0	****	**	6.50	134.20	476.40	360.60	16.10	63.31	144.16	80.85	15.94	2.24	****	15
74	2	11JUN75 7467	0	****	**	7.30	92.40	170.70	845.10	23.30	47.82	133.59	85.77	8.90	2.24	****	20
75	2	16JUN75 7472	0	****	**	6.60	121.70	123.40	684.40	14.60	65.40	134.80	69.41	10.99	1.70	****	20
76	2	24JUN75 7480	0	****	**	6.30	83.90	92.90	711.70	15.20	45.05	83.10	38.04	8.57	2.59	****	26
77	2	26JUN75 7482	0	****	**	7.30	95.40	62.90	631.10	18.30	38.63	95.06	56.43	6.36	2.65	****	26
78	2	03JUL75 7489	0	****	**	10.80	144.10	21.40	2.10	0.60	31.78	93.30	61.52	1.01	0.87	****	27
79	2	24JUL75 7510	0	****	**	****	131.00	118.00	337.40	14.10	24.06	92.98	68.92	3.65	2.39	****	0
80	2	07AUG75 7524	0	****	**	****	162.00	98.30	****	9.00	24.22	122.64	98.42	5.48	1.14	****	0

SAGINAW STREAM CHEMISTRY : SHIAWASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	3	15AUG73	6802	0	4.77	615	6.10	51.30	79.00	102.00	6.50	****	948.01	****	226.02	2.75	8.60	23
2	3	10SEP73	6828	0	4.87	630	6.10	58.70	277.90	183.20	17.20	962.35	1287.70	325.35	398.70	3.02	****	19
3	3	20SEP73	6838	0	4.65	670	7.90	58.50	595.80	224.30	33.60	886.39	1113.62	227.22	477.92	2.41	****	14
5	3	17OCT73	6865	0	4.64	623	8.30	54.80	177.30	88.90	9.70	426.73	570.17	143.44	317.23	0.35	****	11
6	3	01NOV73	6880	0	4.45	608	8.40	44.30	246.40	552.70	38.40	368.05	440.10	72.47	246.81	3.00	****	10
7	3	15NOV73	6890	0	4.60	620	9.30	44.30	442.20	634.40	41.50	****	****	****	****	3.75	****	8
8	3	29NOV73	6908	0	3.50	506	10.60	30.10	158.60	2027.30	33.70	165.44	457.05	291.48	110.35	3.70	****	5
9	3	19DEC73	6928	0	5.05	701	13.70	103.00	503.20	1834.40	33.50	175.65	301.91	126.26	138.00	3.82	****	0
10	3	08JAN74	6948	0	4.70	639	13.30	40.40	371.70	1508.80	15.60	144.87	167.79	22.90	81.37	4.52	****	0
11	3	01FEB74	6972	0	3.11	475	13.30	21.00	90.60	1818.10	13.20	61.97	171.28	109.31	58.58	3.48	****	3
13	3	06MAR74	7005	0	2.26	330	11.40	17.70	179.60	1720.00	14.90	119.87	299.10	179.23	59.92	1.39	****	5
14	3	28MAR74	7027	0	4.27	586	12.30	29.30	188.40	810.00	10.40	****	182.89	****	55.00	1.79	****	2
15	3	17APR74	7047	0	3.94	498	9.90	26.40	83.90	570.00	13.50	148.23	243.13	94.90	58.75	1.52	****	11
16	3	01MAY74	7061	0	4.49	538	8.00	33.90	101.20	280.00	16.30	206.36	307.03	100.67	84.34	0.39	****	16
17	3	15MAY74	7075	0	4.28	528	8.80	29.30	22.70	270.00	9.70	113.28	208.48	95.19	62.72	0.27	****	14
18	3	29MAY74	7089	0	4.31	504	8.50	24.90	100.40	392.70	23.00	106.76	191.59	84.83	51.90	1.89	****	16
19	3	12JUN74	7103	0	4.42	540	7.50	33.20	85.00	429.50	27.30	222.56	322.90	100.34	152.37	2.58	****	19
20	3	25JUN74	7116	0	4.68	567	****	35.40	84.70	575.80	41.00	208.84	333.50	124.66	119.09	2.57	****	17
21	3	10JUL74	7131	0	4.63	567	4.70	97.90	16.10	****	0.90	175.06	342.30	167.37	118.01	2.03	****	26
22	3	23JUL74	7144	0	4.63	631	5.80	114.00	152.80	143.90	17.10	299.72	426.73	126.94	150.77	2.26	****	20
23	3	07AUG74	7159	0	4.57	646	6.50	133.00	12.80	2.50	1.80	269.67	378.49	108.85	172.32	****	****	23
24	3	13AUG74	7165	0	2.44	655	4.90	108.00	13.80	8.40	1.70	203.72	364.47	160.69	152.47	****	****	24
25	3	16AUG74	7168	0	4.42	642	6.90	105.00	33.40	16.10	6.70	270.81	474.98	204.30	176.82	****	****	23
26	3	21AUG74	7173	0	4.89	640	7.10	124.00	31.50	12.30	4.40	282.02	384.35	102.30	220.08	1.12	****	25
27	3	29AUG74	7181	0	4.81	671	5.60	120.00	185.10	197.10	19.20	327.63	341.65	14.08	222.04	2.16	****	20
28	3	05SEP74	7188	0	4.76	678	6.30	135.00	172.50	528.00	32.00	****	****	****	294.77	2.26	8.20	16
29	3	10SEP74	7193	0	4.64	660	6.10	134.00	77.70	372.70	27.30	****	****	****	317.39	1.17	8.50	20
30	3	15SEP74	7199	0	4.31	547	7.70	127.00	171.30	378.60	29.80	****	****	****	****	1.77	8.10	16
31	3	02OCT74	7215	0	4.41	649	8.70	39.50	260.20	753.70	37.00	400.48	538.55	129.94	306.41	0.55	8.20	10
32	3	09OCT74	7222	0	4.78	672	7.70	38.90	146.50	619.90	26.60	****	****	****	260.38	0.33	****	11
33	3	17OCT74	7230	0	4.88	659	9.00	37.50	224.60	559.00	28.40	322.22	404.24	82.02	115.93	0.64	8.10	11
34	3	06NOV74	7250	0	4.49	592	10.00	21.00	163.90	605.00	24.20	307.06	415.65	108.59	165.31	1.19	7.70	7
35	3	11NOV74	7255	0	4.41	556	9.90	****	173.60	511.90	24.30	210.27	282.19	71.92	72.34	2.90	****	9
36	3	15NOV74	7259	0	4.66	605	11.70	****	262.00	701.90	29.00	****	306.21	****	170.86	2.76	****	2
37	3	27NOV74	7271	0	4.77	645	13.20	****	182.70	783.00	17.30	270.81	289.88	19.10	94.05	2.17	****	1
38	3	02DEC74	7276	0	4.56	594	13.40	****	244.60	679.60	12.30	204.40	265.85	61.45	113.22	2.35	****	0
39	3	06DEC74	7280	0	4.77	578	13.30	****	345.80	330.80	21.80	****	436.51	****	236.38	1.29	****	0
40	3	10DEC74	7284	0	4.49	652	13.30	****	258.10	432.60	8.90	262.56	280.62	18.06	143.31	1.84	****	0
41	3	16DEC74	7290	0	4.57	654	13.10	17.90	340.70	900.30	15.10	247.01	266.73	19.72	148.40	2.27	****	0
43	3	30DEC74	7304	0	4.58	580	13.60	****	****	442.00	7.40	168.31	196.09	27.78	109.01	1.85	****	1
44	3	06JAN75	7311	0	4.84	702	13.50	31.40	179.90	799.20	8.80	35.89	192.67	156.77	103.77	1.26	****	0
45	3	10JAN75	7315	0	2.70	467	12.30	****	271.30	3590.40	24.60	111.95	278.96	167.01	89.39	1.72	****	2
46	3	14JAN75	7319	0	3.55	540	13.50	****	162.70	2053.60	15.40	118.14	156.35	38.21	62.56	3.03	****	0
47	3	17JAN75	7322	0	4.13	599	12.70	****	184.70	1443.00	14.50	124.30	154.00	29.70	42.80	3.62	****	0
48	3	22JAN75	7327	0	4.67	631	13.10	****	275.40	1219.50	11.90	140.80	153.42	12.62	38.24	3.46	****	0
49	3	29JAN75	7334	0	4.16	573	12.30	****	349.00	856.30	9.10	186.28	207.43	21.16	127.53	2.73	****	0
50	3	05FEB75	7341	0	4.01	519	13.00	****	165.60	930.30	8.40	123.85	136.66	12.81	83.85	2.64	****	0
51	3	14FEB75	7350	0	5.11	675	12.20	****	434.20	824.10	10.40	161.85	191.75	28.04	123.65	3.15	****	0
52	3	21FEB75	7357	0	4.60	744	12.00	68.70	543.40	708.00	10.00	208.41	218.65	10.24	121.24	2.82	****	0
53	3	26FEB75	7362	0	2.09	319	12.40	****	343.40	1274.90	17.20	131.08	237.69	106.60	91.41	1.94	****	0
54	3	03MAR75	7367	0	3.39	461	13.00	****	197.20	1089.30	12.90	102.45	126.19	23.73	35.79	2.43	****	0
55	3	06MAR75	7370	0	3.78	509	13.10	****	216.90	884.70	10.50	87.24	131.87	44.63	42.87	2.94	****	0
56	3	10MAR75	7374	0	3.91	543	12.90	****	206.80	657.40	9.60	85.22	124.53	39.32	41.08	2.54	****	0
57	3	14MAR75	7378	0	4.15	562	12.80	****	258.60	722.50	11.50	109.96	143.02	33.06	48.05	2.64	****	0
58	3	18MAR75	7382	0	2.73	424	11.30	****	414.10	1460.80	24.50	123.78	200.62	76.84	64.81	1.83	****	4
59	3	21MAR75	7385	0	3.43	522	10.90	****	186.40	1719.60	23.30	124.17	157.78	33.61	51.08	2.17	****	5

60	3	26MAR75	7390	0	2.67	401	11.90	****	168.00	1705.60	20.00	94.57	232.05	137.47	40.46	2.38	****	2
61	3	31MAR75	7395	0	3.62	499	12.50	****	108.50	1663.80	11.30	63.83	105.98	42.15	30.87	2.67	****	1
63	3	09APR75	7404	0	3.84	534	11.40	16.40	177.70	1349.90	10.40	65.30	103.80	38.50	39.61	2.10	****	5
64	3	14APR75	7409	0	3.21	473	11.20	****	81.20	2222.10	14.60	59.95	118.31	58.35	34.33	1.70	****	5
65	3	18APR75	7413	0	3.74	516	9.90	****	90.30	1564.30	14.90	77.98	155.18	77.20	38.53	0.94	****	10
66	3	21APR75	7416	0	2.23	299	9.60	****	85.10	1018.10	13.20	57.70	264.29	206.59	35.40	1.74	****	10
67	3	29APR75	7419	0	2.49	309	8.70	****	70.50	708.50	12.60	45.12	196.87	151.75	21.03	2.05	****	10
68	3	30APR75	7425	0	3.36	439	9.00	****	325.70	742.90	16.90	78.37	156.02	77.65	42.51	1.78	****	13
69	3	13MAY75	7438	0	4.91	536	8.40	****	66.10	537.70	20.90	83.00	159.77	76.77	28.07	0.94	****	15
70	3	16MAY75	7441	0	4.28	561	7.90	****	29.30	605.10	18.20	127.21	191.36	64.16	58.71	0.97	****	16
71	3	21MAY75	7446	0	4.30	525	6.90	****	18.30	77.30	7.70	106.83	172.03	65.20	42.71	****	****	9
72	3	27MAY75	7452	0	4.30	543	6.10	****	119.00	1063.70	52.30	139.14	203.62	64.48	73.94	1.79	****	24
73	3	04JUN75	7460	0	****	**	7.10	19.50	48.70	774.70	46.10	206.81	285.71	78.89	87.53	2.95	****	19
74	3	11JUN75	7467	0	****	**	7.00	25.80	48.50	924.10	51.90	201.83	293.86	92.03	84.96	3.11	****	20
75	3	16JUN75	7472	0	****	**	7.10	18.50	65.50	637.80	32.10	281.21	284.08	2.87	109.96	2.23	****	21
76	3	24JUN75	7480	0	****	**	5.50	21.60	27.60	465.60	13.90	197.16	319.71	122.54	71.75	2.41	****	26
77	3	26JUN75	7482	0	****	**	6.40	0.0	83.90	1930.80	66.60	128.35	313.68	185.33	65.20	2.52	****	26
78	3	03JUL75	7489	0	****	**	5.40	18.10	12.20	436.10	11.20	200.98	269.57	68.59	91.48	3.95	****	26
79	3	24JUL75	7510	0	****	**	****	47.60	191.50	100.00	13.40	298.19	408.15	109.96	179.01	1.14	****	**
80	3	07AUG75	7524	0	****	**	****	61.00	129.50	414.10	23.40	584.84	962.68	377.84	302.50	1.39	****	**

SAGINAW STREAM CHEMISTRY : FLINT RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	4	15AUG73	6892	0	4.25	650	5.60	60.20	2561.00	242.20	211.80	****2348.50		****	1040.27	2.97	8.20	24
2	4	10SEP73	6828	0	4.11	605	6.40	59.60	1659.00	69.40	40.10	2065.9	2579.3	526.49	994.95	2.47	****	19
3	4	20SEP73	6838	0	2.84	519	5.10	57.50	1684.00	387.40	116.40	2015.0	2581.3	566.26	1005.71	3.01	****	14
4	4	04OCT73	6852	0	3.58	705	4.40	80.20	4857.00	2186.30	432.20	****	****	****	****	4.21	****	18
5	4	17OCT73	6865	0	3.66	690	6.40	82.80	125.20	3109.70	150.70	****	****	****	****	2.44	****	11
6	4	01NOV73	6880	0	3.87	643	8.40	56.00	873.50	1762.00	132.30	872.38	1087.54	215.00	795.11	1.82	****	10
7	4	15NOV73	6894	0	3.76	680	6.50	59.10	721.70	2626.10	233.80	967.57	1390.39	422.82	1397.56	2.34	****	9
8	4	29NOV73	6908	0	3.02	498	7.00	47.60	422.30	907.60	41.10	245.02	640.59	395.76	176.40	2.33	****	6
9	4	19DEC73	6928	0	4.72	794	10.60	77.30	995.70	1720.70	59.40	526.49	562.35	35.66	592.02	3.80	****	0
10	4	08JAN74	6948	0	4.57	726	11.50	55.50	904.00	1658.80	44.10	382.72	437.82	55.00	355.01	3.74	****	0
11	4	01FEB74	6972	0	3.13	518	12.10	36.40	351.70	1733.00	27.50	156.41	249.75	93.37	107.58	3.26	****	3
12	4	21FEB74	6992	0	3.45	628	9.90	99.90	825.80	1450.00	6.50	441.08	581.58	140.51	23.37	2.67	****	1
13	4	06MAR74	7005	0	2.35	381	10.70	33.90	289.40	1120.00	17.80	129.81	306.60	176.79	74.46	2.58	****	4
14	4	20MAR74	7027	0	3.71	632	11.80	49.40	519.80	1080.00	31.60	378.49	396.74	18.26	167.37	2.21	****	3
15	4	17APR74	7047	0	3.44	509	9.10	36.50	376.30	950.00	44.40	336.11	508.56	172.45	190.42	2.08	****	10
16	4	01MAY74	7061	0	4.13	605	6.30	51.00	351.20	1070.00	14.70	376.86	1141.00	764.14	496.82	1.08	****	16
17	4	15MAY74	7075	0	3.95	614	6.70	57.10	357.90	820.00	7.90	416.30	632.11	215.81	372.94	1.39	****	14
18	4	29MAY74	7089	0	3.63	494	6.90	35.20	179.50	907.50	61.90	276.02	470.09	194.07	187.97	1.70	****	16
19	4	12JUN74	7103	0	4.04	556	5.30	48.40	117.90	899.90	97.70	341.32	658.52	317.20	338.39	1.07	****	19
20	4	25JUN74	7116	0	4.27	607	7.00	50.80	151.20	1808.20	139.50	385.01	592.99	207.99	331.22	1.34	****	18
21	4	10JUL74	7131	0	4.29	626	5.50	139.00	41.90	1928.40	49.00	572.78	933.66	360.88	764.47	1.76	****	27
22	4	23JUL74	7144	0	4.41	690	5.60	147.00	134.60	1959.30	133.80	768.71	843.36	74.85	957.79	0.69	****	20
23	4	07AUG74	7159	0	4.00	610	7.80	140.00	23.20	1876.70	104.80	****	****	****	****	1.88	****	24
24	4	13AUG74	7165	0	3.36	666	5.50	125.00	75.30	2001.40	98.80	572.13	739.04	166.78	739.04	2.62	****	24
25	4	16AUG74	7168	0	4.17	710	6.60	87.00	39.00	1127.40	61.40	660.80	824.45	163.55	800.98	2.22	****	24
26	4	21AUG74	7173	0	4.18	702	5.90	141.00	118.50	2503.20	135.80	623.31	691.12	67.94	785.01	2.06	****	26
27	4	29AUG74	7181	0	4.06	738	5.60	154.00	1176.00	2991.00	367.40	1533.50	1558.61	25.07	2148.99	2.93	****	20
28	4	05SEP74	7188	0	3.68	647	6.50	132.00	538.90	2818.60	218.80	833.58	896.50	63.05	833.58	1.99	7.90	16
29	4	10SEP74	7193	0	4.28	709	6.70	144.00	186.10	2500.50	127.90	869.77	979.96	109.96	944.10	2.01	8.20	20
30	4	16SEP74	7199	0	3.84	694	6.10	144.00	180.50	3552.10	199.70	1096.01	1108.40	12.22	1143.93	2.39	7.60	16
31	4	02OCT74	7215	0	3.33	668	6.70	71.40	724.20	2415.80	204.10	818.26	1390.72	572.46	700.90	2.20	7.90	10
32	4	09OCT74	7222	0	3.97	666	5.80	67.00	642.20	3015.80	230.30	841.08	1315.41	474.00	800.00	2.08	****	11
33	4	17OCT74	7230	0	3.85	682	5.40	36.00	322.70	1647.70	114.70	1192.83	1490.15	297.34	1350.29	2.06	7.80	12
34	4	06NOV74	7250	0	3.98	651	2.00	53.20	1851.00	1691.20	162.20	444.99	916.06	471.07	318.47	1.82	7.40	9
35	4	11NOV74	7255	0	4.30	684	5.00	50.00	1148.00	2383.00	191.90	689.49	889.33	199.74	679.06	1.63	****	11
36	4	15NOV74	7259	0	4.32	710	7.50	55.40	1302.00	2155.50	118.40	664.39	797.40	132.98	658.52	1.37	****	4
37	4	27NOV74	7271	0	4.07	705	9.80	69.80	1492.00	2110.30	110.30	760.56	809.46	49.03	761.21	1.75	****	1
38	4	02DEC74	7276	0	4.44	718	9.80	52.40	1476.00	1832.70	85.10	482.48	488.67	6.16	458.03	1.42	****	1
39	4	06DEC74	7280	0	4.69	756	10.40	66.30	1478.00	1194.00	52.60	673.19	931.06	257.80	544.09	1.00	****	0
40	4	10DEC74	7284	0	4.10	781	11.10	97.90	970.60	1195.70	47.30	383.70	458.68	74.82	332.65	1.67	****	0
41	4	16DEC74	7290	0	4.47	796	8.80	64.40	1087.00	1248.00	71.10	597.23	726.65	129.42	554.85	1.82	****	0
42	4	19DEC74	7293	0	4.53	876	11.90	115.00	989.50	1329.70	69.00	560.07	754.04	193.97	511.82	1.88	****	1
43	4	30DEC74	7304	0	4.61	790	10.10	103.00	1149.00	2553.00	161.60	800.00	913.45	113.45	1050.05	1.77	****	2
44	4	06JAN75	7311	0	4.65	999	10.80	175.00	900.30	1883.50	112.30	586.15	797.40	211.25	689.16	2.46	****	1
45	4	10JAN75	7315	0	3.32	642	9.80	49.30	409.60	1597.50	31.10	199.61	580.28	380.77	147.03	2.61	****	2
46	4	14JAN75	7319	0	3.55	540	12.80	****	300.60	1519.70	20.70	264.42	338.06	73.64	170.17	2.95	****	0
49	4	29JAN75	7334	0	4.05	692	11.50	62.20	464.00	1802.40	45.70	370.01	453.47	83.46	393.81	3.43	****	2
50	4	05FEB75	7341	0	4.05	633	12.00	20.40	421.10	2203.90	38.90	360.88	431.62	70.74	346.86	3.35	****	1
51	4	14FEB75	7350	0	4.43	718	11.10	64.60	1186.00	1706.80	119.70	541.49	541.49	0.0	****	3.65	****	0
52	4	21FEB75	7357	0	4.63	999	10.10	202.00	1248.00	1427.10	103.40	562.02	676.45	114.43	509.54	2.92	****	2
53	4	26FEB75	7362	0	2.57	497	11.40	52.30	513.50	1275.30	57.20	215.91	318.50	102.59	144.12	2.26	****	0
54	4	03MAR75	7367	0	3.31	514	12.40	9.40	1031.00	992.70	40.90	324.40	386.64	62.23	161.01	2.83	****	0
55	4	06MAR75	7370	0	3.36	539	11.80	15.90	671.30	1049.80	61.80	307.09	332.85	25.75	234.00	2.59	****	1
56	4	10MAR75	7374	0	3.50	717	11.70	103.00	1449.00	890.80	65.20	389.24	459.33	70.09	279.06	2.47	****	1
57	4	14MAR75	7378	0	3.54	679	11.70	****	760.80	1040.80	64.40	326.98	363.15	36.19	249.03	2.76	****	2
58	4	18MAR75	7382	0	2.64	530	10.80	29.40	1204.00	1252.90	72.10	****	****	****	239.64	2.27	****	4

59	4	21MAR75	7385	0	3.23	556	10.60	****	588.70	1299.50	61.80	346.21	348.17	1.96	214.61	2.47	****	4
60	4	26MAR75	7390	0	2.72	455	11.10	****	255.40	1210.90	30.50	116.28	262.04	145.75	51.90	3.13	****	2
61	4	31MAR75	7395	0	3.06	499	****	29.30	356.20	1582.40	29.10	137.73	205.12	67.38	88.87	2.53	****	0
63	4	09APR75	7404	0	3.32	575	11.60	57.40	578.90	1480.40	36.40	211.97	282.12	70.16	139.17	2.41	****	8
64	4	14APR75	7409	0	3.21	529	10.70	35.70	374.80	1536.20	35.00	141.09	216.04	74.95	99.63	2.09	****	6
65	4	18APR75	7413	0	3.56	539	9.60	40.40	718.60	1220.40	43.20	187.65	268.79	81.14	127.14	1.29	****	10
66	4	21APR75	7416	0	2.39	369	9.50	****	469.00	996.60	26.40	67.97	314.13	246.16	50.63	1.64	****	9
67	4	24APR75	7419	0	2.75	378	8.60	****	159.90	947.90	23.30	82.87	249.78	166.91	44.96	1.91	****	10
68	4	30APR75	7425	0	3.13	464	8.00	14.00	469.20	957.20	45.50	184.06	327.63	143.57	100.86	1.76	****	12
69	4	13MAY75	7438	0	3.81	588	6.40	43.70	544.90	127.00	15.50	294.21	444.99	150.77	192.99	1.22	****	14
70	4	16MAY75	7441	0	3.86	640	4.70	66.20	601.20	1591.20	223.90	517.04	635.37	118.34	413.37	1.35	****	6
71	4	21MAY75	7446	0	3.93	688	3.90	79.20	767.80	2259.70	821.90	1036.68	1184.03	147.35	966.59	1.35	****	24
72	4	27MAY75	7452	0	3.66	644	3.60	74.30	200.70	6213.60	39.80	341.32	578.32	237.00	367.08	1.78	****	23
73	4	04JUN75	7460	0	****	**	2.80	55.00	674.50	1449.60	280.10	331.02	755.21	424.19	170.73	1.62	****	18
74	4	11JUN75	7467	0	****	**	4.90	32.90	171.60	1047.60	143.60	370.92	624.29	253.37	233.90	1.88	****	20
75	4	16JUN75	7472	0	****	**	4.30	50.30	208.60	1462.80	188.90	423.25	759.81	336.56	315.11	2.32	****	20
76	4	24JUN75	7480	0	****	**	3.60	45.90	132.00	1651.40	157.80	378.84	450.66	71.82	195.40	2.04	****	26
77	4	26JUN75	7482	0	****	**	3.90	35.10	128.40	1319.00	99.70	279.84	593.22	313.38	149.60	2.18	****	26
78	4	03JUL75	7489	0	****	**	3.30	48.00	119.30	1302.60	122.50	659.01	791.79	132.78	544.75	3.33	****	26
79	4	24JUL75	7510	0	****	**	****	82.40	171.50	1684.70	216.10	2048.26	2566.27	518.01	1328.12	2.37	****	**
90	4	07AUG75	7524	0	****	**	****	64.70	316.90	3813.80	283.50	1683.79	2315.58	631.79	1075.80	2.87	****	**

SAGINAW STREAM CHEMISTRY : KAWKAWLIN RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	5	15AUG73	6802	0	3.43	640	8.20	75.50	458.10	****	30.30	****	321.44	****	10.86	1.51	8.20	25
2	5	10SEP73	6828	0	3.73	620	4.10	81.80	****	****	1.00	60.54	327.30	266.77	18.81	0.67	****	21
3	5	20SEP73	6838	0	3.42	550	5.70	75.30	32.00	33.10	2.30	148.62	760.23	611.58	22.07	1.00	****	15
4	5	04OCT73	6852	0	3.59	580	5.00	81.60	40.10	26.80	5.80	69.86	203.59	133.73	19.89	1.09	****	18
5	5	17OCT73	6865	0	3.58	653	7.30	98.90	15.30	****	1.20	41.01	180.51	139.50	16.69	0.89	****	13
6	5	01NOV73	6880	0	4.36	819	7.30	129.00	133.90	385.60	26.70	79.22	89.91	10.63	28.82	1.51	****	10
7	5	15NOV73	6894	0	3.19	600	11.50	85.20	****	195.20	11.50	49.36	118.99	69.67	13.85	1.01	****	6
8	5	29NOV73	5908	0	3.34	791	10.60	83.10	****	9798.10	30.30	95.03	138.94	43.91	55.16	3.19	****	4
13	5	06MAR74	7005	0	1.52	258	10.50	16.50	151.40	990.00	7.50	77.26	156.22	78.96	46.52	1.66	****	3
14	5	28MAR74	7027	0	2.29	405	12.50	29.10	11.70	940.00	4.10	32.27	49.55	17.28	15.06	1.02	****	5
15	5	17APR74	7047	0	2.52	403	7.50	28.90	37.70	1290.00	14.40	49.19	174.74	125.54	24.35	1.67	****	12
16	5	01MAY74	7061	0	3.65	644	9.90	67.90	24.00	800.00	28.70	38.86	194.43	155.57	19.23	1.05	****	17
17	5	15MAY74	7075	0	3.11	516	7.70	52.60	28.10	790.00	13.80	37.16	175.00	137.83	28.75	0.94	****	14
18	5	29MAY74	7089	0	2.51	290	7.10	12.70	32.50	106.90	5.90	51.12	113.45	62.33	24.48	****	****	16
19	5	12JUN74	7103	0	2.00	339	4.80	43.00	166.80	1690.90	54.30	90.76	226.44	135.68	64.71	2.48	****	18
20	5	25JUN74	7116	0	3.38	723	****	144.00	32.80	723.90	42.70	26.18	104.94	78.76	8.28	0.66	****	19
21	5	10JUL74	7131	0	3.80	778	5.10	213.00	38.90	****	3.00	27.74	169.52	141.78	18.61	0.24	****	25
22	5	23JUL74	7144	0	3.27	599	3.90	170.00	12.50	12.50	2.30	61.68	163.00	101.32	24.52	1.14	****	21
23	5	07AUG74	7159	0	3.66	635	8.80	163.00	77.20	10.80	1.70	51.80	207.14	155.34	15.48	1.36	****	23
24	5	13AUG74	7165	0	2.06	614	10.80	146.00	15.20	****	1.70	51.90	142.07	90.17	17.57	1.63	****	23
25	5	16AUG74	7168	0	3.56	668	4.60	64.40	38.30	****	1.90	60.60	167.60	106.99	22.82	0.82	****	23
26	5	21AUG74	7173	0	3.66	603	3.70	129.00	28.00	2.00	2.10	60.99	161.79	100.80	22.62	1.99	****	25
28	5	05SEP74	7188	0	3.49	592	7.80	139.00	22.90	11.90	1.00	47.27	114.26	66.99	9.16	1.59	8.30	19
29	5	10SEP74	7193	0	3.54	611	5.10	154.00	55.80	17.30	1.40	46.29	116.38	70.09	18.00	0.99	8.10	20
30	5	16SEP74	7199	0	3.46	596	7.10	150.00	21.60	16.20	1.30	39.02	111.46	72.40	11.28	0.80	7.90	16
31	5	02OCT74	7215	0	3.37	619	7.90	34.10	31.30	92.70	0.80	37.91	124.83	86.91	10.89	0.39	8.20	9
32	5	09OCT74	7222	0	3.44	612	9.10	95.90	27.80	104.60	1.00	23.11	104.22	81.11	6.39	****	****	11
33	5	17OCT74	7230	0	4.09	714	7.90	110.00	24.60	82.10	3.90	34.56	114.52	79.97	7.50	0.20	7.80	11
34	5	06NOV74	7250	0	4.13	733	8.70	121.00	117.20	120.60	5.90	51.41	157.95	106.54	11.64	0.51	7.70	7
36	5	15NOV74	7259	0	5.07	1050	11.70	187.00	317.30	194.50	13.00	42.41	143.99	101.58	5.97	1.71	****	2
37	5	27NOV74	7271	0	4.83	**	15.30	179.00	70.30	214.70	10.10	31.33	139.95	108.59	7.50	2.11	****	1
38	5	02DEC74	7276	0	4.32	845	13.90	140.00	60.40	124.20	4.70	28.98	112.80	83.81	5.12	1.30	****	1
39	5	06DEC74	7280	0	4.96	1178	15.80	207.00	58.80	115.60	5.80	36.09	136.30	100.21	9.26	1.83	****	0
41	5	16DEC74	7290	0	5.48	999	11.80	174.00	149.30	106.60	5.00	18.78	78.66	59.89	2.44	2.73	****	0
42	5	19DEC74	7293	0	5.19	999	9.70	186.00	236.80	352.50	9.70	37.82	131.87	94.05	13.24	2.96	****	0
43	5	30DEC74	7304	0	5.32	999	9.40	197.00	144.91	659.50	17.90	18.58	97.12	78.53	7.01	3.00	****	0
45	5	10JAN75	7315	0	3.40	889	11.30	134.00	104.30	8550.40	23.00	70.81	114.91	44.17	33.15	2.32	****	0
48	5	22JAN75	7327	0	3.93	821	6.80	28.60	106.70	2400.60	35.20	29.73	63.37	33.64	11.48	3.29	****	0
49	5	29JAN75	7334	0	3.13	596	6.40	60.00	224.80	1193.70	46.80	62.53	97.60	35.08	37.39	2.97	****	0
50	5	05FEB75	7341	0	2.83	502	6.70	8.80	61.80	826.90	7.70	34.00	43.13	9.13	18.29	2.53	****	0
51	5	14FEB75	7350	0	4.03	678	5.00	72.80	125.70	754.60	8.70	40.95	58.88	17.93	19.63	2.94	****	0
52	5	21FEB75	7357	0	2.44	728	9.40	153.00	403.70	1200.60	24.10	157.49	201.89	44.40	103.67	1.45	****	0
53	5	26FEB75	7362	0	1.98	297	10.90	****	391.30	1244.60	15.20	171.18	271.30	100.11	139.79	1.63	****	0
54	5	03MAR75	7367	0	1.97	369	7.60	****	122.80	886.80	9.30	56.33	86.72	30.38	35.79	2.19	****	0
55	5	06MAR75	7370	0	3.19	595	9.50	68.40	210.80	1096.60	11.30	44.79	80.91	36.12	19.92	2.33	****	0
56	5	10MAR75	7374	0	2.90	542	7.60	45.80	130.90	533.20	8.50	39.35	53.24	13.89	21.22	2.23	****	0
57	5	14MAR75	7378	0	3.22	569	8.50	62.60	129.80	461.40	8.10	51.93	64.16	12.22	24.22	2.25	****	0
58	5	18MAR75	7382	0	2.65	502	11.00	35.90	118.30	1563.20	13.60	78.76	91.64	12.88	36.77	1.28	****	0
59	5	21MAR75	7385	0	2.78	520	11.90	22.00	68.40	2293.40	18.10	51.92	76.57	24.52	18.26	1.41	****	2
60	5	26MAR75	7390	0	2.14	398	11.70	****	102.70	2598.50	15.70	55.13	96.10	40.98	20.99	1.98	****	0
61	5	31MAR75	7395	0	2.10	372	11.80	12.10	29.40	1357.30	7.30	35.34	47.20	11.87	18.35	1.99	****	0
62	5	04APR75	7399	0	2.27	397	****	14.80	28.40	1130.90	7.40	31.33	41.89	10.56	16.01	1.24	****	0
63	5	09APR75	7404	0	2.66	579	11.60	64.40	46.90	2206.40	11.30	49.62	77.42	27.81	29.63	1.49	****	2
64	5	14APR75	7509	0	2.65	480	11.30	23.70	24.40	2523.00	10.80	28.49	52.68	24.19	17.34	1.23	****	5
65	5	18APR75	7413	0	2.95	540	8.60	43.60	148.40	1406.80	16.60	29.41	87.82	58.42	11.44	****	****	12
66	5	21APR75	7416	0	2.81	498	8.70	30.10	177.10	1527.10	17.40	78.40	115.16	56.76	45.02	1.04	****	9

67	5	24APR75	7419	0	2.80	445	6.60	25.00	146.20	1225.30	15.10	51.38	122.58	71.20	25.53	0.77	****	10
68	5	30APR75	7425	0	3.09	500	7.40	35.00	137.00	1029.00	19.70	29.80	135.58	105.79	14.31	0.20	****	14
69	5	13MAY75	7438	0	3.21	444	5.80	19.50	70.10	204.20	13.00	66.57	161.53	94.96	32.05	0.49	****	14
70	5	16MAY75	7441	0	3.64	561	4.90	54.60	144.80	190.20	21.20	60.24	189.73	129.49	27.74	0.24	****	7
71	5	21MAY75	7446	0	3.57	500	4.60	49.30	74.10	31.70	18.40	114.23	153.55	39.32	35.83	0.81	****	8
72	5	27MAY75	7452	0	3.71	594	4.50	42.30	109.40	105.00	17.20	97.96	109.41	11.44	70.45	2.03	****	23
73	5	04JUN75	7460	0	****	**	5.20	68.90	234.50	1329.70	26.50	97.25	228.04	130.79	34.26	1.52	****	16
74	5	11JUN75	7467	0	****	**	5.50	34.30	86.80	1731.70	97.00	46.45	110.58	64.12	9.16	2.20	****	18
75	5	16JUN75	7472	0	****	**	5.70	79.20	137.00	1846.30	88.90	90.76	186.24	95.49	18.35	1.47	****	19
76	5	24JUN75	7480	0	****	**	2.40	0.0	41.80	172.60	17.60	101.42	147.65	46.23	66.34	3.02	****	24
77	5	26JUN75	7482	0	****	**	11.90	25.00	15.90	143.80	33.60	43.68	172.06	128.38	7.69	1.93	****	26
78	5	03JUL75	7489	0	****	**	2.50	17.70	82.40	40.20	7.80	99.01	205.71	106.70	44.69	2.28	****	26
79	5	24JUL75	7510	0	****	**	****	36.40	301.40	4757.20	82.70	102.33	169.03	66.70	54.44	3.39	****	**
80	5	07AUG75	7524	0	****	**	****	39.50	164.10	593.88	34.30	92.13	158.92	66.79	27.38	2.75	****	**

SAGINAW STREAM CHEMISTRY : PINE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	6	15AUG73	6802	0	3.54	790	5.60	167.00	778.10	65.60	46.60	****	****	****	266.18	2.30	8.30	24
4	6	04OCT73	6852	0	3.85	660	7.80	107.00	1015.00	172.60	62.70	763.17	770.66	7.50	247.08	5.87	****	17
6	6	01NOV73	6880	0	3.22	772	8.00	143.00	1435.00	764.40	35.40	559.74	750.78	191.10	419.89	3.94	****	10
13	6	06MAR74	7005	0	1.23	206	11.60	16.00	168.40	570.00	5.90	129.62	245.54	115.93	57.83	1.47	****	4
14	6	28MAR74	7027	0	3.18	616	12.90	66.90	233.30	1140.00	8.30	207.57	211.22	3.65	40.82	2.35	****	1
15	6	17APR74	7047	0	2.48	398	10.30	43.60	36.60	930.00	9.10	72.37	118.83	46.45	33.32	1.95	****	12
16	6	01MAY74	7061	0	3.27	508	13.60	54.50	35.20	460.00	13.40	79.51	115.21	35.70	32.60	0.90	****	15
17	6	15MAY74	7075	0	2.47	366	8.10	33.40	37.60	790.00	12.40	55.09	177.38	122.28	30.51	2.47	****	13
18	6	29MAY74	7089	0	3.67	578	13.80	71.40	271.40	865.00	66.20	169.59	276.06	106.47	107.55	1.60	****	18
19	6	12JUN74	7103	0	3.06	423	7.20	35.10	89.70	2640.10	39.40	143.93	160.59	16.66	94.87	3.80	****	16
20	6	23JUN74	7114	0	4.00	581	9.10	65.20	74.70	1796.40	62.20	74.56	129.29	54.74	39.22	2.36	****	17
60	6	26MAR75	7390	0	1.84	299	12.40	****	140.10	869.70	12.80	69.44	115.47	46.03	30.97	2.45	****	0
63	6	09APR75	7404	0	2.32	383	12.20	36.00	78.40	1017.10	7.30	47.82	93.24	45.41	29.63	2.42	****	1

SAGINAW STREAM CHEMISTRY : RIFLE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	7	15AUG73	6802	0	3.54	416	8.60	17.50	5.00	****	1.00	****	24.25	****	22.07	2.88	8.60	23
2	7	10SEP73	6828	0	3.71	390	9.30	17.70	9.90	****	0.40	0.0	21.35	21.35	5.12	2.83	****	21
3	7	20SEP73	6838	0	3.63	401	10.80	17.30	15.80	22.30	0.50	13.43	30.74	17.31	7.47	3.58	****	15
4	7	04OCT73	6852	0	3.54	380	9.50	19.00	7.90	****	0.70	61.26	86.19	24.94	78.04	3.39	****	16
5	7	17OCT73	6865	0	4.03	408	10.40	20.40	15.80	****	1.70	31.69	66.73	35.04	4.92	4.11	****	**
6	7	01NOV73	6880	0	3.54	435	10.00	19.40	29.10	127.60	2.30	29.31	55.19	25.88	8.70	4.50	****	10
7	7	15NOV73	6894	0	3.27	420	11.30	18.50	****	27.70	2.20	25.62	25.07	0.55	6.68	3.41	****	6
15	7	17APR74	7047	0	2.15	292	10.20	11.90	34.50	230.00	3.90	20.41	123.16	102.76	15.06	2.69	****	9
16	7	01MAY74	7061	0	3.25	374	10.60	16.30	50.30	110.00	3.10	11.21	46.42	35.21	11.34	2.47	****	15
17	7	15MAY74	7075	0	3.00	343	8.90	15.50	****	170.00	3.40	19.43	105.62	86.19	14.41	2.82	****	12
18	7	29MAY74	7089	0	3.34	378	10.70	11.80	29.00	20.60	1.50	8.48	27.38	18.91	2.54	2.57	****	17
19	7	12JUN74	7103	0	3.21	346	8.70	16.10	37.30	233.60	5.80	18.68	135.62	116.94	10.27	3.67	****	17
20	7	25JUN74	7116	0	3.54	400	9.50	15.20	27.60	104.70	2.40	8.41	27.94	19.53	2.74	3.11	****	19
21	7	10JUL74	7131	0	2.52	259	6.40	54.50	18.50	421.00	9.10	30.58	369.68	337.41	22.75	2.78	****	22
60	7	26MAR75	7390	0	2.64	325	12.80	****	100.40	339.40	6.40	31.92	84.79	52.88	7.14	3.47	****	0
63	7	09APR75	7404	0	3.04	366	12.00	****	25.30	362.10	3.40	24.42	62.46	38.04	6.49	3.30	****	3

SAGINAW STREAM CHEMISTRY : BIG CREEK

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	8	15AUG73	6802	0	3.80	581	10.30	5.20	37.70	97.50	3.20	****	38.34	****	9.45	3.04	8.70	29
15	8	17APR74	7047	0	2.05	466	8.80	10.50	60.10	1150.00	8.10	29.54	66.54	33.74	14.28	1.99	****	14
17	8	15MAY74	7075	0	2.39	357	8.10	11.50	10.00	530.00	6.10	26.89	101.13	74.23	15.26	2.62	****	13
18	8	29MAY74	7089	0	3.34	567	****	11.70	139.40	371.80	10.90	21.87	41.53	19.66	6.00	2.54	****	20
19	8	12JUN74	7103	0	2.98	513	7.80	10.90	126.30	789.00	12.70	27.91	67.81	39.90	9.42	3.40	****	19
60	8	26MAR75	7390	0	1.94	387	11.20	****	126.20	914.00	7.40	41.21	68.85	27.64	9.06	2.71	****	0

SAGINAW STREAM CHEMISTRY : AU GRES RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	9	15AUG73	6802	0	4.11	800	6.00	55.80	38.00	15.20	2.70	0.0	72.11	72.11	9.81	3.21	8.30	24
2	9	10SEP73	6828	0	4.26	900	9.60	61.50	9.90	****	1.40	0.0	77.13	77.13	4.01	2.95	****	22
3	9	20SEP73	6838	0	4.37	838	8.90	59.70	107.50	32.80	2.00	16.37	18.81	2.44	75.27	3.62	****	14
4	9	04OCT73	6852	0	4.28	880	8.10	72.20	124.60	35.30	3.10	35.40	40.95	5.54	9.81	3.67	****	17
5	9	17OCT73	6865	0	4.22	751	9.50	49.00	31.30	59.10	1.40	26.86	60.86	34.00	4.47	4.95	****	11
6	9	01NOV73	6880	0	3.94	691	9.10	40.40	36.50	787.70	19.50	23.31	42.45	19.14	6.59	4.93	****	9
7	9	15NOV73	6894	0	****	**	10.30	42.70	****	250.50	4.20	16.23	27.61	11.38	3.26	3.61	****	7
14	9	28MAR74	7027	0	3.44	695	13.10	21.00	18.50	460.00	3.20	24.68	42.18	17.51	6.62	2.83	****	1
15	9	17APR74	7047	0	2.55	456	9.20	14.00	5.60	640.00	6.90	36.61	99.85	63.24	15.97	2.14	****	12
16	9	01MAY74	7061	0	3.30	519	9.60	19.30	33.00	190.00	3.70	21.81	48.57	26.76	16.85	1.89	****	14
17	9	15MAY74	7075	0	3.24	543	8.30	15.80	****	720.00	7.20	16.85	75.89	59.04	13.53	2.37	****	13
18	9	29MAY74	7089	0	3.62	572	8.80	17.20	49.90	223.30	5.10	11.64	49.49	37.85	2.97	1.86	****	16
19	9	12JUN74	7103	0	3.77	627	7.50	19.10	67.60	2018.00	25.10	36.38	95.00	58.61	12.81	3.47	****	18
20	9	25JUN74	7116	0	3.93	770	7.90	51.80	48.90	528.10	8.80	13.59	36.32	22.72	4.56	2.67	****	19
21	9	10JUL74	7131	0	3.53	567	5.30	45.90	68.70	2519.70	30.50	52.65	135.32	82.67	29.34	3.57	****	23
60	9	26MAR75	7390	0	2.28	307	11.60	****	173.80	730.50	12.50	53.66	99.92	46.26	17.41	2.42	****	0
61	9	09APR75	7404	0	3.00	511	11.50	****	44.50	830.10	5.10	21.26	70.81	49.55	7.99	2.57	****	2

SAGINAW STREAM CHEMISTRY : TAWAS RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	10	15AUG73	6802	0	2.50	268	5.40	6.20	42.00	150.70	7.10	40.33	155.40	115.08	35.66	1.38	7.80	24
2	10	10SEP73	6828	0	2.60	252	7.40	5.00	69.80	94.70	9.40	101.26	171.90	70.64	43.23	1.19	****	20
3	10	20SEP73	6838	0	3.90	262	8.50	5.50	57.80	166.10	9.60	87.01	154.72	67.71	44.92	1.20	****	14
4	10	05OCT73	6853	0	2.47	255	6.30	5.30	55.20	87.10	8.60	99.66	323.82	224.16	71.10	1.17	****	14
5	10	17OCT73	6865	0	2.49	284	9.20	2.20	187.60	46.70	3.30	63.28	100.83	37.56	44.56	1.23	****	10
6	10	01NOV73	6880	0	2.44	283	9.20	5.60	167.20	205.60	6.10	65.92	86.19	20.28	44.34	1.97	****	9
7	10	15NOV73	6894	0	2.26	**	10.80	3.90	207.40	63.60	4.40	69.73	89.94	20.21	40.03	2.34	****	5
13	10	06MAR74	7005	0	****	**	****	6.60	220.50	320.00	6.30	76.09	137.57	61.48	45.35	2.08	****	**
14	10	28MAR74	7027	0	1.77	209	13.10	4.60	51.90	90.00	12.20	47.24	57.47	10.24	19.72	1.94	****	18
15	10	17APR74	7047	0	1.37	159	11.40	3.50	****	80.00	****	22.00	40.55	18.55	17.25	1.08	****	12
16	10	01MAY74	7061	0	1.65	195	9.20	4.80	62.50	60.00	3.40	41.60	80.95	39.35	26.08	0.45	****	14
17	10	15MAY74	7075	0	2.43	345	9.00	6.90	29.00	80.00	4.40	49.98	96.63	46.65	28.52	1.07	****	14
18	10	29MAY74	7089	0	2.00	209	8.90	3.30	85.60	11.70	4.30	29.80	60.73	30.94	18.48	0.77	****	18
19	10	12JUN74	7103	0	2.34	267	7.00	7.70	148.40	132.50	8.70	****	229.28	****	176.95	1.60	****	18
20	10	25JUN74	7116	0	2.28	244	6.80	5.80	135.50	90.00	9.40	99.92	151.59	51.67	25.23	1.41	****	19
21	10	10JUL74	7131	0	2.23	243	4.10	50.80	114.60	103.40	13.90	45.03	104.71	68.88	29.50	2.08	****	24
60	10	26MAR75	7390	0	1.93	240	12.30	****	89.20	253.80	5.30	46.00	57.51	11.51	16.85	1.96	****	0
61	10	09APR75	7404	0	2.17	280	11.70	****	80.10	199.90	3.10	****	****	****	19.43	1.81	****	2

SAGINAW STREAM CHEMISTRY : EAST AU GRES RIVER

CRD	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	11	15AUG73	6802	0	3.27	390	9.40	3.80	68.40	16.50	1.20	0.0	19.07	19.07	6.65	3.29	8.60	22
2	11	10SEP73	6828	0	3.53	418	10.30	22.80	93.60	****	2.70	****	****	****	5.31	2.84	****	19
3	11	20SEP73	6830	0	3.54	403	8.70	9.80	115.70	10.30	1.40	16.69	17.73	1.04	4.24	3.74	****	12
4	11	08OCT73	6952	0	3.35	380	10.00	****	112.40	3.60	1.50	****	****	****	167.37	4.32	****	15
5	11	17OCT73	6865	0	3.39	437	11.00	10.80	30.20	72.30	0.90	21.81	38.50	16.69	5.44	4.53	****	10
6	11	01NOV73	6880	0	3.08	524	10.90	21.90	28.00	386.20	4.60	15.81	42.67	26.86	6.06	4.21	****	9
7	11	15NOV73	6894	0	3.12	460	10.60	20.10	****	159.80	1.80	11.15	27.71	16.56	3.19	3.84	****	5
13	11	06MAR74	7005	0	2.07	288	10.30	8.00	135.10	570.00	3.60	57.60	251.74	194.13	31.95	2.03	****	2
14	11	28MAR74	7027	0	2.74	447	12.50	10.60	25.20	320.00	2.40	26.60	59.66	33.06	9.16	2.26	****	1
15	11	17APR74	7047	0	2.09	297	9.20	9.80	11.00	190.00	3.70	31.72	96.01	64.29	14.87	1.72	****	11
16	11	01MAY74	7061	0	2.74	354	10.00	9.00	33.60	140.00	3.10	15.32	58.48	43.16	11.51	2.17	****	14
17	11	15MAY74	7075	0	2.11	223	8.30	13.70	16.20	240.00	5.30	31.07	96.59	65.53	16.37	2.03	****	13
18	11	29MAY74	7089	0	2.97	373	9.80	7.90	43.40	98.60	3.50	14.08	37.49	23.41	3.62	2.52	****	15
19	11	12JUN74	7103	0	2.84	356	8.50	10.50	65.10	154.90	7.00	51.51	86.26	34.75	34.10	2.41	****	16
20	11	25JUN74	7116	0	3.18	405	9.20	7.80	38.60	112.60	3.50	13.76	30.51	16.76	3.98	2.77	****	16
21	11	10JUL74	7131	0	2.25	270	4.90	48.60	84.20	443.90	14.00	62.30	192.99	130.69	46.36	1.55	****	20
60	11	26MAR75	7390	0	2.03	313	11.10	****	75.30	526.10	5.10	27.91	67.25	39.35	10.56	2.51	****	0
63	11	09APR75	7404	0	2.41	367	11.40	****	31.10	374.90	3.20	19.56	41.79	22.23	6.49	2.46	****	3

SAGINAW STREAM CHEMISTRY : SAGINAW RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (U*MHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	12A	16AUG73	6803	0	3.61	772	5.40	120.50	1202.50	276.15	64.85	262.59	618.91	356.32	96.18	2.39	8.10	24
2	12A	11SEP73	6829	0	3.63	825	4.05	174.50	323.50	597.35	53.50	258.71	682.00	425.10	80.04	1.09	****	23
3	12A	20SEP73	6838	0	3.51	995	6.05	234.50	315.70	757.85	50.60	295.06	614.92	319.86	90.13	1.64	****	17
4	12A	04OCT73	6852	0	3.45	960	4.31	205.50	678.64	770.00	78.40	405.11	710.90	305.79	156.28	1.93	****	18
5	12A	17OCT73	6865	0	3.48	938	3.95	172.50	1253.25	381.50	53.12	226.89	348.06	177.82	144.71	2.30	****	14
6	12A	04NOV73	6880	0	3.58	1011	6.00	186.00	999.50	517.65	40.25	283.01	414.35	131.44	214.71	2.14	****	11
7	12A	15NOV73	6894	0	3.30	655	9.25	105.32	671.90	506.35	34.38	248.39	399.43	130.19	157.55	2.41	****	06
8	12A	29NOV73	6908	0	3.92	762	9.50	97.50	455.75	2014.55	56.75	163.38	325.46	162.01	96.90	3.00	****	05
9	12A	19DEC73	6928	0	4.03	838	11.60	104.00	600.40	1778.40	33.30	230.32	248.84	18.52	146.15	3.68	****	C
10	12A	09JAN74	6948	0	3.90	821	10.10	83.00	619.90	2801.80	29.70	200.10	254.48	54.34	145.14	3.61	****	C
11	12A	01FEB74	6972	0	2.32	414	11.65	32.60	222.65	2234.25	18.05	87.32	276.91	189.57	60.68	2.62	****	1
12	12A	21FEB74	6992	0	3.81	251	8.90	114.50	760.00	1075.00	23.75	261.64	326.82	65.18	87.14	3.54	****	C
13	12A	06MAR74	7005	0	2.14	330	10.70	24.45	270.35	1200.00	10.55	78.48	358.88	280.39	37.89	2.19	****	4
14	12A	26MAR74	7027	0	3.34	676	12.25	62.80	359.92	1250.00	14.38	155.73	218.14	62.41	44.86	2.35	****	1
15	12A	17APR74	7047	0	2.46	374	9.05	41.35	191.62	960.00	19.28	99.76	221.28	121.52	46.98	2.10	****	10
16	12A	01MAY74	7061	0	3.70	620	6.55	76.20	422.70	672.50	39.75	129.68	241.17	111.49	79.01	1.35	****	16
17	12A	15MAY74	7075	0	3.48	646	7.80	68.82	246.45	527.50	30.72	139.02	247.34	108.31	85.31	1.53	****	13
18	12A	29MAY74	7089	0	3.64	632	7.40	100.50	194.18	748.42	35.15	76.23	216.17	140.16	35.80	1.84	****	16
19	12A	12JUN74	7103	0	3.16	616	4.70	80.10	297.48	838.12	35.10	138.28	262.98	124.70	95.68	2.29	****	21
20	12A	25JUN74	7116	0	3.60	615	6.70	75.50	279.90	966.58	47.55	99.00	246.23	147.23	64.83	1.93	****	20
21	12A	10JUL74	7131	0	3.28	648	7.05	160.50	212.55	395.48	42.88	78.08	276.62	198.52	44.35	****	****	25
22	12A	23JUL74	7144	0	3.78	775	2.85	202.50	621.30	424.15	57.45	165.27	258.57	93.30	67.11	0.70	****	22
23	12A	07AUG74	7159	0	3.64	838	6.50	225.00	462.00	260.50	39.70	131.34	265.40	134.05	60.96	0.43	****	23
24	12A	13AUG74	7165	0	2.40	902	4.40	210.50	442.80	369.50	45.95	171.44	281.04	109.60	144.66	1.02	****	23
25	12A	16AUG74	7168	0	3.50	816	5.90	198.50	299.60	313.85	37.05	126.42	318.52	192.08	74.30	1.44	****	24
26	12A	21AUG74	7133	0	3.59	816	5.15	199.50	520.10	379.00	52.05	154.92	304.01	149.11	117.80	0.91	****	24
27	12A	29AUG74	7181	0	3.45	827	7.85	220.50	469.95	376.05	49.10	149.26	379.46	230.24	91.12	0.95	****	23
28	12A	05SEP74	7188	0	3.68	932	12.45	243.00	377.00	381.75	49.85	133.24	370.34	237.02	94.66	1.44	8.85	21
29	12A	10SEP74	7193	0	3.53	921	10.85	253.00	231.00	335.55	36.60	125.26	333.71	208.38	98.11	1.14	8.65	22
30	12A	16SEP74	7199	0	3.28	851	7.10	234.00	438.75	363.55	35.15	107.31	225.92	118.60	87.96	0.78	7.95	19
31	12A	02OCT74	7215	0	3.54	942	7.15	183.00	719.65	852.10	53.35	180.82	304.16	123.32	121.44	1.40	8.20	12
32	12A	09OCT74	7222	0	3.39	958	7.10	287.50	644.75	843.75	58.75	200. 2	289.76	89.74	153.40	1.44	****	12
33	12A	17OCT74	7230	0	3.60	911	6.90	177.00	757.45	770.00	47.10	198.11	304.98	106.84	130.06	1.68	8.00	12
34	12A	06NOV74	7250	0	3.75	918	6.15	172.00	871.25	728.00	43.90	210.76	320.16	107.78	107.60	1.42	7.95	10
35	12A	11NOV74	7255	0	3.52	875	6.85	151.50	916.40	860.70	48.05	265.08	340.28	50.38	172.70	2.06	****	9
36	12A	15NOV74	7259	0	4.16	831	9.00	114.50	856.95	747.50	41.15	285.82	350.78	64.98	155.92	2.01	****	5
37	12A	27NOV74	7271	0	4.20	756	10.80	91.10	792.35	814.65	34.50	298.03	378.98	80.82	185.01	2.34	****	3
38	12A	02DEC74	7276	0	3.94	688	11.50	82.25	869.85	849.95	36.15	261.54	321.60	60.04	141.92	1.99	****	3
39	12A	06DEC74	7280	0	4.08	876	12.20	153.00	1059.00	837.80	30.60	233.90	357.62	123.75	186.18	2.26	****	0
40	12A	10DEC74	7284	0	4.24	881	11.90	115.00	994.90	851.30	24.60	276.09	355.99	79.97	194.39	1.93	****	C
41	12A	16DEC74	7290	0	4.21	806	11.20	94.75	711.60	502.00	18.45	222.58	285.27	62.71	165.96	2.16	****	1
42	12A	19DEC74	7293	0	4.23	871	11.55	120.00	670.30	577.30	19.50	244.63	287.76	43.13	177.64	2.24	****	0
43	12A	30DEC74	7304	0	4.22	950	11.20	170.00	755.90	823.70	24.80	178.19	233.45	55.26	122.64	2.15	****	1
44	12A	06JAN75	7311	0	4.22	912	11.50	109.10	598.80	741.25	20.40	238.70	309.62	70.92	170.58	1.78	****	1
45	12A	10JAN75	7315	0	3.98	820	12.00	99.10	559.20	1794.60	22.65	335.45	344.91	14.34	247.88	2.36	****	2
4	12A	14JAN75	7319	0	2.87	526	12.20	22.25	258.45	2627.60	21.15	170.22	249.08	78.86	110.79	2.80	****	C
47	12A	17JAN75	7322	0	3.20	625	12.00	8.30	205.70	2432.50	18.10	115.34	157.91	42.58	50.50	2.68	****	0
48	12A	22JAN75	7327	0	3.93	686	10.55	47.95	349.15	3399.10	31.95	125.52	166.47	40.94	66.80	3.42	****	C
49	12A	29JAN75	7334	0	3.92	778	10.00	93.75	479.85	1470.65	24.85	197.51	244.73	47.22	148.22	3.61	****	C
50	12A	05FEB75	7341	0	3.09	589	10.90	54.70	422.80	1536.80	21.30	177.60	213.63	36.02	132.49	2.64	****	0
51	12A	14FEB75	7350	0	4.13	780	10.75	116.50	561.80	1313.45	20.95	208.82	251.48	42.66	165.61	3.29	****	C
52	12A	21FEB75	7357	0	4.31	875	9.40	143.00	1013.00	1101.20	20.75	287.68	123.21	35.54	233.04	3.22	****	1
53	12A	26FEB75	7362	0	1.94	360	11.20	****	483.20	1030.50	19.85	114.50	300.44	185.93	71.94	1.98	****	0
54	12A	03MAR75	7367	0	2.88	338	11.20	13.40	387.40	1339.25	23.10	124.16	175.00	50.84	70.08	2.44	****	C
55	12A	06MAR75	7370	0	3.20	574	11.25	50.20	579.40	1199.25	21.05	142.38	167.99	25.61	82.85	2.74	****	C
56	12A	10MAR75	7374	0	3.44	645	11.65	70.60	466.90	916.15	21.95	146.41	158.16	11.75	78.34	3.00	****	1

57	12A	14MAR75	7370	0	3.64	784	11.90	133.50	831.75	995.45	22.40	****	211.18	****	86.20	2.70	****	1
58	12A	18MAR75	7382	0	3.66	664	12.10	77.20	533.75	1254.10	28.65	206.92	206.22	4.73	131.59	2.59	****	4
59	12A	21MAR75	7385	0	2.82	515	10.60	24.65	402.55	1414.10	25.00	126.70	172.38	45.67	58.37	2.11	****	3
60	12A	26MAR75	7390	0	2.61	416	10.95	****	214.55	1766.60	20.40	74.26	237.34	163.08	24.27	2.34	****	2
61	12A	31MAR75	7395	0	2.99	513	11.75	38.95	233.90	1651.70	18.00	84.60	125.28	40.68	43.72	2.74	****	1
62	12A	04APR75	7399	0	2.99	584	12.00	70.55	257.35	1481.60	14.40	76.40	110.91	31.39	41.38	2.90	****	1
63	12A	09APR75	7404	0	3.33	622	11.65	75.40	438.50	1443.55	20.50	119.71	170.38	50.68	57.75	2.18	****	5
64	12A	14APR75	7409	0	2.95	520	11.15	32.05	168.90	2271.25	17.90	65.17	115.37	50.21	40.47	2.09	****	5
65	12A	18APR75	7413	0	3.08	531	10.20	32.10	315.75	1037.10	24.15	79.42	143.96	80.85	33.51	1.08	****	11
66	12A	21APR75	7416	0	2.50	398	8.70	11.95	233.20	1301.70	19.00	54.78	277.92	223.13	31.33	1.88	****	9
67	12A	24APR75	7419	0	2.76	401	8.30	8.00	140.55	1234.00	20.75	55.44	234.50	179.08	32.34	1.92	****	10
68	12A	30APR75	7425	0	3.16	493	8.20	24.50	287.20	1180.25	27.40	78.73	185.25	106.52	36.62	1.72	****	12
69	12A	13MAY75	7438	0	3.66	592	7.05	54.60	262.80	696.55	39.50	84.90	269.06	184.16	45.02	1.52	****	16
70	12A	16MAY75	7441	0	3.63	639	5.45	70.75	342.50	617.90	46.20	108.95	227.48	118.53	54.62	1.24	****	15
71	12A	21MAY75	7446	0	3.65	614	7.20	63.25	208.15	622.55	52.80	92.47	223.64	131.16	44.47	1.46	****	22
72	12A	27MAY75	7452	0	3.64	646	5.25	80.85	266.80	462.35	59.65	142.17	234.20	92.03	91.98	1.24	****	20
73	12A	04JUN75	7460	0	****	**	4.10	75.10	435.00	888.85	146.85	161.49	296.68	135.19	71.48	2.08	****	20
74	12A	11JUN75	7467	0	****	**	5.80	38.55	263.45	1412.95	88.55	116.40	217.56	101.16	47.91	2.23	****	18
75	12A	16JUN75	7472	0	****	**	6.50	67.45	306.65	1094.65	86.15	106.33	238.88	132.55	45.35	2.18	****	20
76	12A	24JUN75	7480	0	****	**	4.90	40.15	145.10	1192.60	74.90	98.62	181.92	83.30	33.65	1.72	****	25
77	12A	26JUN75	7482	0	****	**	4.90	59.35	285.95	976.15	73.05	123.52	227.44	103.92	52.81	2.06	****	26
78	12A	03JUL75	7489	0	****	**	3.30	59.50	248.05	998.65	101.20	142.21	227.24	85.03	81.86	1.93	****	26
79	12A	24JUL75	7510	0	****	**	****	54.65	260.65	183.70	18.35	89.34	192.18	102.84	57.91	2.19	****	**
80	12A	07AUG75	7524	0	****	**	****	98.60	556.90	226.20	41.30	118.47	219.54	101.07	73.46	0.54	****	**

SAGINAW STREAM CHEMISTRY : QUANICASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	14	16AUG73	6803	0	2.58	390	5.60	42.10	3.40	****	0.80	0.0	269.60	269.60	10.46	0.35	8.10	24
2	14	11SEP73	6829	0	2.07	270	7.90	22.70	7.40	****	0.20	0.0	181.26	181.26	5.87	0.54	****	20
3	14	21SEP73	6839	0	3.78	370	8.40	37.40	9.80	1.40	0.80	3.29	336.76	333.50	9.85	0.87	****	13
4	14	05OCT73	6853	0	2.40	332	7.40	31.00	10.50	****	0.80	5.61	216.46	210.86	23.80	0.78	****	15
5	14	18OCT73	6866	0	2.54	517	10.00	78.40	27.40	35.00	8.50	40.68	181.03	140.34	7.99	0.49	****	10
6	14	02NOV73	6881	0	2.04	327	10.50	29.70	3.10	7.10	0.40	17.05	75.99	58.91	2.12	0.63	****	9
7	14	15NOV73	6894	0	2.32	365	7.10	31.70	121.70	95.30	5.80	14.12	85.22	71.10	2.02	0.70	****	4
13	14	07MAR74	7006	0	2.38	433	10.50	25.90	157.50	5550.00	15.00	205.09	314.20	109.11	147.25	1.56	****	5
14	14	29MAR74	7028	0	3.48	721	16.20	49.30	****	7280.00	20.60	8.83	143.21	134.38	6.68	0.58	****	1
15	14	18APR74	7048	0	3.12	519	10.30	41.80	32.40	950.00	20.00	37.49	246.26	208.77	25.98	1.17	****	10
16	14	02MAY74	7062	0	****	518	10.50	47.20	50.40	1060.00	33.60	16.56	174.44	157.88	9.81	0.02	****	16
17	14	16MAY74	7076	0	3.28	541	8.80	49.80	****	1030.00	21.20	18.84	191.97	175.13	12.81	0.33	****	13
18	14	30MAY74	7090	0	2.99	472	12.70	41.00	35.80	932.90	31.80	9.88	137.08	127.21	2.15	****	****	17
19	14	13JUN74	7104	0	2.74	421	8.00	37.40	37.00	399.20	23.20	9.52	165.51	155.99	3.03	****	****	17
20	14	26JUN74	7117	0	3.14	519	9.90	52.30	32.60	823.30	43.40	24.55	158.08	133.53	4.73	0.39	****	19
21	14	11JUL74	7132	0	2.52	416	7.20	58.00	14.80	****	0.50	14.64	130.37	115.73	2.58	0.50	****	23
22	14	23JUL74	7144	0	2.11	377	7.50	49.70	21.10	****	1.10	13.20	106.37	93.17	2.12	0.43	****	21
23	14	07AUG74	7159	0	2.34	392	11.40	48.70	14.30	****	1.30	14.28	112.31	98.03	1.60	0.64	****	26
24	14	13AUG74	7165	0	0.98	382	8.00	59.40	77.90	****	1.20	16.43	101.26	84.83	4.96	0.14	****	23
25	14	16AUG74	7168	0	2.08	478	5.20	66.90	31.40	****	1.40	20.77	193.42	172.62	3.59	0.89	****	23
29	14	10SEP74	7193	0	2.63	424	8.20	67.70	19.90	13.60	1.00	18.68	157.13	138.45	5.80	0.55	8.70	22
30	14	16SEP74	7199	0	2.18	410	8.30	73.00	26.30	19.60	0.70	16.23	129.62	113.38	3.33	****	8.50	15
60	14	26MAR75	7390	0	3.39	621	13.20	11.00	109.00	8236.10	25.70	122.22	181.39	59.17	52.55	1.66	****	1
63	14	09APR75	7404	0	3.72	741	11.80	55.50	46.40	4664.10	33.60	18.81	65.53	46.72	7.56	0.92	****	5

SAGINAW STREAM CHEMISTRY : SEBEWAING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	15	16AUG73	6803	0	3.31	610	7.00	63.20	957.40	380.80	47.80	****	393.81	****	45.77	0.60	7.90	25
2	15	11SEP73	6829	0	2.45	450	6.80	61.00	21.90	****	2.40	7.14	373.92	366.75	5.77	0.47	****	22
3	15	21SEP73	6839	0	2.65	505	8.00	73.10	80.30	283.50	8.90	860.97	931.71	70.74	49.94	0.72	****	16
4	15	05OCT73	6853	0	2.47	500	7.50	69.00	28.50	109.50	2.90	39.22	453.47	414.35	24.22	0.70	****	17
5	15	18OCT73	6866	0	2.88	623	10.80	86.80	381.50	50.50	6.80	127.56	270.61	143.05	84.63	0.81	****	12
6	15	02NOV73	6881	0	3.08	707	10.00	87.20	455.20	106.60	10.90	108.95	208.25	99.33	71.20	1.19	****	10
7	15	16NOV73	6895	0	3.61	700	11.20	58.20	115.30	125.10	9.10	75.66	155.73	80.03	31.56	1.34	****	5
13	15	07MAR74	7006	0	3.38	520	11.40	30.20	42.60	10190.00	17.50	80.07	124.99	44.92	27.03	2.38	****	6
14	15	29MAR74	7028	0	4.28	779	13.20	****	37.70	8180.00	16.70	45.80	63.86	18.06	15.43	1.45	****	1
15	15	18APR74	7048	0	4.23	731	9.50	43.30	28.50	8230.00	26.20	21.74	64.74	43.00	14.93	0.70	****	11
17	15	16MAY74	7076	0	4.51	732	8.50	44.00	21.10	6340.00	47.90	26.80	71.85	45.05	15.97	0.55	****	13
18	15	30MAY74	7090	0	4.55	708	10.10	42.20	44.70	7656.10	38.80	13.46	41.08	27.61	2.67	****	****	17
19	15	13JUN74	7104	0	4.46	713	7.80	45.00	87.10	5825.20	89.00	49.88	128.44	78.57	17.38	1.57	****	20
20	15	26JUN74	7117	0	4.47	718	12.90	46.70	27.20	6231.80	100.60	12.58	75.79	63.21	1.40	0.52	****	21
21	15	11JUL74	7132	0	2.92	502	4.60	81.40	296.40	618.10	28.50	43.72	129.39	85.67	24.94	0.94	****	27
60	15	26MAR75	7390	0	****	0	11.30	12.80	36.50	10960.00	16.40	45.67	69.60	23.93	10.50	2.26	****	1
63	15	09APR75	7404	0	4.18	719	12.30	32.70	65.60	9380.60	16.60	34.82	56.27	21.45	16.27	2.22	****	2

SAGINAW STREAM CHEMISTRY : SHEDEON RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	16	16AUG73	6803	0	3.96	645	11.70	47.30	863.80	8.50	15.10	****	277.69	****	6.10	1.59	8.30	23
2	16	11SEP73	6829	0	2.48	440	5.20	36.60	6.70	7.30	0.60	25.49	284.14	258.65	9.45	1.58	****	22
13	16	07MAR74	7006	0	3.41	603	10.70	39.90	155.20	9610.00	30.20	****	****	****	54.21	2.11	****	5
14	16	29MAR74	7028	0	4.54	999	13.30	50.80	42.50	9000.00	19.30	59.82	66.11	6.29	17.54	1.34	****	3
15	16	18APR74	7048	0	4.53	896	12.70	62.50	****	8620.00	31.80	28.39	46.94	18.55	13.20	0.38	****	9
17	16	16MAY74	7076	0	4.82	913	11.00	63.00	****	7270.00	31.40	41.66	69.14	27.48	19.14	0.77	****	11
18	16	30MAY74	7090	0	5.16	874	12.80	52.80	50.10	6383.40	80.40	26.93	64.22	37.29	6.81	0.17	****	17
19	16	13JUN74	7104	0	5.12	1058	10.70	99.80	33.90	****	123.30	40.39	71.30	30.90	14.77	1.13	****	16
20	16	26JUN74	7117	0	4.43	882	13.50	53.70	29.40	5935.00	43.20	18.88	28.04	9.16	3.00	0.04	****	20

SAGINAW STREAM CHEMISTRY : MUD CREEK

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	17	16AUG73	6803	0	3.69	580	7.20	44.60	765.60	47.90	27.80	****	230.09	****	4.34	1.10	8.20	25
2	17	11SEP73	6829	0	2.46	330	5.60	116.00	241.10	475.80	34.80	83.10	188.56	105.46	52.81	0.85	****	22
3	17	21SEP73	6839	0	2.67	391	6.80	37.40	38.10	33.90	2.70	7.17	147.48	140.31	5.67	0.83	****	15
4	17	05OCT73	6853	0	2.42	320	5.60	31.60	83.30	195.50	6.50	0.0	497.15	497.15	4.60	0.77	****	17
5	17	18OCT73	6866	0	2.52	395	7.80	29.20	91.50	76.60	4.80	19.40	90.89	71.49	4.47	0.70	****	11
13	17	07MAR74	7006	0	3.38	556	10.10	37.50	315.70	8540.00	31.60	223.34	250.20	26.86	119.71	2.02	****	5
14	17	29MAR74	7028	0	4.81	951	12.20	54.60	229.30	9790.00	33.00	187.48	209.81	22.33	55.29	1.92	****	1
15	17	18APR74	7048	0	4.93	869	9.10	52.10	90.80	11690.00	5.60	123.98	222.72	98.75	44.73	1.25	****	9
17	17	16MAY74	7076	0	5.05	840	9.80	52.10	48.80	9590.00	7.00	144.03	183.24	39.22	75.44	1.56	****	11
18	17	30MAY74	7090	0	5.56	867	8.20	55.00	119.00	9688.90	109.20	103.50	182.59	79.09	40.36	0.82	****	18
19	17	13JUN74	7104	0	5.41	886	4.30	55.40	437.20	****	429.70	217.83	278.96	61.12	105.92	3.15	****	18
20	17	26JUN74	7117	0	5.90	975	7.90	31.40	84.90	7376.30	78.90	75.08	158.08	83.00	12.71	1.58	****	21
63	17	09APR75	7404	0	4.23	818	14.30	53.80	171.80	10500.00	63.10	89.00	101.58	12.58	57.64	2.01	****	3

SAGINAW STREAM CHEMISTRY : PIGEON RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	18	16AUG73	6803	0	3.55	540	7.60	31.40	1291.00	79.90	26.90	0.0	269.80	269.80	3.36	1.73	8.20	24
2	18	11SEP73	6829	0	2.55	360	7.40	23.20	11.50	****	0.70	0.0	162.18	162.18	4.96	0.99	****	22
3	18	21SEP73	6839	0	2.86	430	8.10	25.80	44.10	6.30	3.00	7.17	147.48	140.31	3.00	0.92	****	16
4	18	05OCT73	6853	0	2.61	415	6.50	22.60	63.50	94.70	4.10	0.0	122.02	122.02	2.80	0.81	****	17
5	18	18OCT73	6866	0	3.73	678	7.50	38.30	53.50	37.00	3.10	45.77	90.04	44.27	17.18	0.85	****	12
6	18	02NOV73	6881	0	2.94	529	9.20	46.20	64.00	87.90	3.90	97.80	154.69	56.89	49.16	0.57	****	9
13	18	07MAR74	7006	0	2.15	330	10.30	16.80	104.00	5170.00	21.40	151.23	246.91	95.68	66.28	2.08	****	6
14	18	29MAR74	7028	0	4.79	861	12.30	45.50	490.40	5970.00	20.10	226.50	238.86	12.36	69.34	1.77	****	2
15	18	18APR74	7048	0	4.61	721	9.60	40.90	276.70	6430.00	35.90	183.18	252.23	69.05	81.99	1.49	****	11
16	18	02MAY74	7062	0	4.57	744	12.00	43.40	24.30	5210.00	31.50	30.77	79.15	48.38	19.49	1.20	****	14
17	18	16MAY74	7076	0	4.67	749	9.10	42.80	18.50	6220.00	34.90	59.17	127.63	68.46	36.35	1.09	****	11
18	18	30MAY74	7090	0	5.14	744	9.90	35.60	38.70	4387.10	31.30	32.27	73.22	40.95	6.32	0.63	****	19
19	18	13JUN74	7104	0	4.74	713	7.40	37.90	129.30	5458.90	122.30	68.72	188.92	120.20	34.30	1.88	****	19
20	18	26JUN74	7117	0	4.89	763	11.10	39.70	27.10	6575.30	56.70	18.65	142.82	124.17	2.41	1.56	****	21
21	18	11JUL74	7132	0	3.82	648	10.40	71.50	55.80	2203.20	34.50	43.85	146.70	102.82	15.94	1.17	****	26
60	18	26MAR75	7390	0	3.06	510	12.30	****	104.70	6833.70	26.50	74.72	133.92	59.20	23.54	2.15	****	1
63	18	09APR75	7404	0	4.31	747	12.60	30.90	127.00	7674.10	22.90	55.35	79.12	23.77	37.49	2.08	****	3

SAGINAW STREAM CHEMISTRY : PINNEBOG RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
1	19	16AUG73	6803	0	****	**	16.50	45.50	880.20	53.40	20.10	9.94	265.36	255.42	6.00	2.22	8.50	24

SAGINAW STREAM CHEMISTRY : SAGINAW RIVER UPSTREAM

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
2	20	14SEP73	6832	0	3.52	**	6.00	266.00	355.00	627.60	25.60	365.12	607.99	242.87	123.06	2.29	****	22
3	20	20SEP73	6838	0	3.87	950	6.00	193.00	1075.00	555.20	22.60	802.94	1201.96	399.02	321.44	2.26	****	15
4	20	04OCT73	6852	0	3.17	980	4.80	225.00	340.30	618.80	41.20	284.11	559.52	285.41	97.25	2.47	****	19
5	20	18OCT73	6866	0	3.38	688	7.60	97.40	358.10	156.60	11.80	111.59	198.44	86.85	66.11	2.94	****	14
6	20	01NOV73	6880	0	4.05	821	7.30	125.00	363.10	615.00	37.30	348.82	459.01	110.06	221.65	2.48	****	10
7	20	15NOV73	6894	0	3.81	760	10.00	132.00	547.90	622.40	40.30	387.94	440.10	52.16	238.14	2.76	****	7
9	20	29NOV73	6908	0	3.90	694	9.50	71.80	289.60	2127.70	43.20	173.86	337.41	163.59	121.01	3.14	****	5
11	20	01FEB74	6972	0	2.35	410	11.60	28.20	162.00	2176.00	19.70	89.72	204.86	115.14	60.44	2.70	****	2
12	20	21FEB74	6992	0	****	**	****	99.30	610.20	970.00	21.60	227.45	247.79	23.60	72.34	3.31	****	1
13	20	07MAR74	7006	0	2.06	319	10.90	22.30	182.20	1180.00	12.50	****	210.40	****	45.02	2.20	****	3
14	20	28MAR74	7027	0	3.32	598	12.10	57.80	242.50	1150.00	11.30	111.20	157.98	46.78	34.39	2.32	****	2
15	20	17APR74	7047	0	3.07	482	9.10	40.90	118.00	1010.00	19.20	183.18	252.23	69.05	81.99	1.49	****	10
16	20	01MAY74	7061	0	3.77	572	6.90	54.80	186.30	660.00	43.30	166.36	259.89	93.53	78.08	1.41	****	**
17	20	15MAY74	7075	0	3.64	571	7.90	55.40	324.30	640.00	5.50	235.40	360.56	125.15	193.90	1.58	****	13
18	20	29MAY74	7089	0	3.69	658	7.20	95.50	138.70	666.70	28.20	76.81	208.93	132.13	38.08	2.03	****	16
19	20	13JUN74	7104	0	3.14	890	6.00	197.00	148.10	994.00	56.10	130.73	250.89	120.16	81.92	2.08	****	20
20	20	25JUN74	7116	0	4.23	724	7.70	97.30	231.80	1183.90	53.50	159.28	297.41	138.13	84.76	1.96	****	19
21	20	11JUL74	7132	0	3.76	783	9.00	195.00	41.00	596.00	40.90	113.71	290.40	176.69	52.13	1.06	****	27
22	20	23JUL74	7144	0	3.49	968	7.00	275.00	184.00	254.40	33.30	133.50	272.05	138.58	61.61	1.66	****	22
23	20	07AUG74	7159	0	3.18	875	11.80	254.00	92.10	225.90	25.80	104.74	214.38	109.60	37.13	1.89	****	26
24	20	13AUG74	7165	0	2.23	742	5.40	154.00	23.00	168.20	29.90	104.68	252.42	147.71	61.65	0.87	****	25
25	20	16AUG74	7168	0	3.86	840	8.50	194.00	150.70	649.30	68.50	251.22	310.48	59.27	178.06	1.46	****	24
26	20	21AUG74	7173	0	3.76	909	9.50	203.00	31.40	411.00	43.70	182.98	379.79	196.68	153.15	1.11	****	25
27	20	29AUG74	7181	0	3.49	1071	6.60	288.00	233.60	349.70	38.60	170.95	267.42	96.46	93.82	1.61	****	22
28	20	05SEP74	7188	0	3.45	1068	9.70	298.00	458.90	549.00	39.40	217.87	295.36	77.49	163.03	1.78	8.30	19
29	20	10SEP74	7193	0	3.68	909	7.90	235.00	274.00	525.50	46.00	220.54	344.26	123.72	216.04	2.05	8.40	21
30	20	16SEP74	7199	0	3.81	814	5.70	237.00	380.70	692.70	57.50	244.99	350.12	105.20	249.06	2.03	7.70	19
31	20	02OCT74	7215	0	3.37	858	7.30	135.00	311.30	601.60	34.60	281.50	367.40	85.87	205.61	2.07	8.10	12
32	20	09OCT74	7222	0	3.67	848	7.30	161.00	452.50	1407.70	97.20	374.57	463.25	88.51	382.72	1.76	****	12
33	20	17OCT74	7220	0	3.78	1110	7.10	221.00	520.60	870.00	63.60	317.39	492.26	174.74	182.66	1.84	7.90	12
34	20	06NOV74	7250	0	4.10	726	7.10	91.20	521.10	1367.40	90.20	237.07	504.97	267.84	333.50	1.52	8.00	9
35	20	11NOV74	7255	0	4.46	671	6.70	83.20	534.10	1124.70	64.60	382.40	400.65	18.32	209.72	1.80	****	9
36	20	15NOV74	7259	0	4.17	749	10.80	97.50	642.40	732.90	32.30	277.33	320.23	42.90	148.79	2.27	****	4
37	20	27NOV74	7271	0	4.04	776	11.80	105.00	489.90	664.70	24.30	179.66	198.60	18.94	84.34	2.30	****	2
38	20	02DEC74	7276	0	3.94	945	12.40	170.00	907.60	722.00	26.70	183.96	226.50	42.51	124.83	2.54	****	1
39	20	04DEC74	7280	0	4.08	876	12.40	117.00	791.70	729.70	22.50	370.34	406.85	36.67	239.41	2.01	****	0
40	20	10DEC74	7284	0	4.37	826	12.00	104.00	521.80	887.10	21.70	249.65	310.68	60.99	174.44	1.95	****	0
41	20	16DEC74	7290	0	4.44	784	11.50	107.00	481.30	871.10	25.70	249.98	277.85	27.87	108.69	2.00	****	1
42	20	19DEC74	7293	0	3.91	999	12.90	186.00	633.80	333.50	12.50	92.03	130.86	38.83	52.23	2.38	****	0
43	20	30DEC74	7304	0	4.21	854	13.10	130.00	474.93	806.10	24.60	183.11	235.21	52.09	146.83	2.52	****	1
44	20	06JAN75	7311	0	4.41	907	12.60	109.00	425.60	1153.70	36.00	323.85	327.30	3.46	262.33	2.31	****	0
45	20	10JAN75	7315	0	3.60	695	10.90	91.50	309.80	2582.50	26.40	110.51	210.20	99.69	68.53	1.87	****	1
46	20	14JAN75	7319	0	3.04	565	12.20	****	168.30	2191.70	18.00	108.98	151.56	42.58	69.47	2.86	****	0
49	20	29JAN75	7334	0	3.46	701	11.10	109.00	395.00	1202.70	18.40	91.28	115.21	23.93	71.30	3.45	****	0
50	20	05FEB75	7341	0	3.59	613	12.10	****	199.00	874.40	12.90	161.79	208.67	46.88	87.99	1.53	****	0
52	20	21FEB75	7357	0	3.66	882	11.20	173.00	552.40	946.50	37.90	186.28	188.66	2.38	102.56	3.13	****	0
53	20	26FEB75	7362	0	1.82	320	11.10	****	450.90	1084.90	21.90	121.37	277.56	156.19	91.35	1.83	****	0

58	20	03MAR75	7367	0	2.99	514	11.40	15.20	505.50	1251.60	23.30	142.98	195.40	52.42	66.18	2.63	****	0
59	20	06MAR75	7370	0	3.45	588	11.50	51.40	403.60	1011.40	21.70	134.28	142.66	8.38	63.05	3.04	****	1
55	20	10MAR75	7374	0	3.61	796	11.50	135.00	645.60	926.20	32.60	196.71	211.44	14.74	142.10	2.96	****	0
57	20	14MAR75	7378	0	3.62	712	11.90	106.00	471.50	873.60	24.90	****	159.61	****	82.25	3.11	****	1
58	20	18MAR75	7382	0	3.22	639	11.60	61.40	519.10	1053.40	23.80	150.45	178.19	27.74	59.85	2.19	****	3
59	20	21MAR75	7385	0	2.76	486	10.90	9.70	299.90	1482.70	23.20	106.05	157.36	51.31	49.36	2.10	****	3
60	20	26MAR75	7390	0	2.43	409	11.10	****	188.70	1834.40	20.10	71.62	229.41	157.78	27.91	2.27	****	1
61	20	31MAR75	7395	0	3.09	508	11.70	23.20	214.20	1875.30	19.10	84.79	120.46	35.66	32.80	2.57	****	0
63	20	09APR75	7404	0	3.17	550	11.60	92.50	403.20	1091.00	17.00	101.65	147.78	46.13	43.23	2.18	****	4
64	20	14APR75	7409	0	2.95	501	10.90	22.20	177.50	2361.70	20.70	72.57	143.93	71.36	33.90	2.31	****	5
65	20	18APR75	7413	0	3.04	516	10.20	17.50	332.50	1516.50	20.40	95.03	163.75	68.72	57.96	0.84	****	10
66	20	21APR75	7416	0	2.22	352	8.70	****	370.70	1311.30	19.60	55.91	415.65	359.90	10.37	1.86	****	9
67	20	24APR75	7419	0	2.71	392	8.00	****	133.60	1294.10	22.00	53.17	241.24	188.07	29.76	1.92	****	10
68	20	30APR75	7425	0	3.31	485	8.00	14.70	259.10	1152.00	29.20	87.04	219.10	132.06	37.00	1.51	****	13
69	20	13MAY75	7438	0	3.79	662	6.30	74.60	199.00	644.60	42.40	94.28	219.69	125.41	39.51	1.37	****	15
70	20	16MAY75	7441	0	3.39	696	7.00	10.97	241.30	475.00	43.40	113.58	214.54	100.96	43.10	1.87	****	16
71	20	21MAY75	7446	0	3.79	651	6.90	80.30	71.30	428.50	47.70	100.41	239.32	138.91	40.95	1.38	****	23
72	20	27MAY75	7452	0	3.84	644	4.30	76.50	405.20	1215.80	92.30	155.93	241.37	85.44	74.56	2.15	****	23
73	20	04JUN75	7460	0	****	**	5.10	73.50	391.30	1073.50	196.00	278.47	438.50	160.03	132.39	2.08	****	19
74	20	11JUN75	7472	0	****	**	5.90	50.70	200.10	1233.70	96.60	109.73	242.32	132.58	39.05	1.99	****	20
75	20	16JUN75	7480	0	****	**	6.20	102.80	209.10	895.40	56.20	100.83	243.98	143.15	42.45	2.07	****	21
76	20	24JUN75	7480	0	****	**	6.10	70.60	60.10	873.30	50.60	83.06	173.20	90.14	18.06	2.27	****	24
77	20	26JUN75	7482	0	****	**	5.30	81.10	70.90	1028.70	82.70	108.17	221.03	112.86	45.74	2.22	****	27
78	20	03JUL75	7489	0	****	**	7.70	78.20	13.20	397.30	41.80	80.72	259.33	178.62	37.75	1.80	****	27
79	20	24JUL75	7510	0	****	**	****	66.80	83.90	503.40	35.70	121.70	272.18	150.48	70.25	2.26	****	**
80	20	07AUG75	7524	0	****	**	****	128.00	67.60	546.60	46.80	106.63	331.54	224.91	57.51	1.28	****	**

SAGINAW STREAM CHEMISTRY : PINCONNING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
6	23	01NOV73	6880	0	3.78	957	8.60	127.00	13.70	11000.00	20.70	73.12	104.29	31.20	41.01	4.84	****	10
7	23	15NOV73	6894	0	****	**	9.00	179.00	7.00	7320.10	70.50	119.64	159.15	39.54	52.55	2.84	****	7
13	23	06MAR74	7005	0	1.47	309	10.80	14.50	126.10	1350.00	7.70	113.81	172.81	59.01	54.87	1.39	****	5
14	23	28MAR74	7027	0	3.84	714	13.20	59.90	35.00	4190.00	14.00	55.62	72.21	16.59	16.27	1.56	****	1
15	23	17APR74	7047	0	3.57	551	10.30	39.40	16.00	3850.00	14.10	67.12	116.84	49.71	22.92	2.03	****	12
17	23	15MAY74	7075	0	2.43	325	8.00	21.90	24.50	2240.00	14.40	77.39	212.49	135.09	56.66	2.30	****	13
18	23	29MAY74	7089	0	4.44	636	11.70	46.30	37.60	3518.80	37.60	18.55	64.09	45.54	4.73	0.75	****	16
19	23	12JUN74	7103	0	2.31	281	8.40	35.20	73.90	5141.00	34.20	69.31	156.94	87.95	36.97	3.68	****	18
20	23	25JUN74	7116	0	5.23	737	9.10	45.00	43.40	4162.80	47.00	36.06	125.61	89.55	8.18	1.15	****	15

SAGINAW STREAM CHEMISTRY : SAGANING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
13	24	06MAR74	7005	0	1.12	175	11.90	6.90	21.60	360.00	4.80	52.91	116.48	63.57	28.07	1.86	****	3
14	24	28MAR74	7027	0	2.90	477	12.90	31.60	****	660.00	3.50	****	35.63	****	13.50	1.63	****	2
15	24	17APR74	7047	0	2.15	286	9.10	15.70	42.40	360.00	8.00	59.01	84.14	25.13	27.91	2.01	****	13
17	24	15MAY74	7075	0	2.43	315	7.40	16.60	****	870.00	12.90	84.50	228.79	144.29	54.47	2.13	****	13
18	24	29MAY74	7089	0	3.71	529	13.90	52.60	47.90	456.10	18.30	25.43	66.96	41.53	10.17	1.27	****	18
19	24	12JUN74	7103	0	3.76	539	6.80	14.00	67.10	758.00	16.80	71.92	137.60	65.69	49.32	3.56	****	18
60	24	26MAR75	7390	0	1.57	228	11.60	****	67.20	695.00	10.80	59.07	84.63	25.62	25.95	2.10	****	0
63	24	09APR75	7404	0	2.25	318	10.30	****	21.10	674.90	8.60	84.40	125.18	40.78	57.64	1.77	****	2

SAGINAW STREAM CHEMISTRY : DRAINAGE DITCH

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
15	31	17APR74	7047	0	****	**	****	49.20	14.80	2090.00	15.20	31.49	192.37	160.88	26.44	1.11	****	**
17	31	15MAY74	7075	0	****	**	****	52.60	****	150.00	3.90	22.07	78.40	56.33	20.96	0.50	****	**
18	31	29MAY74	7069	0	****	**	****	47.90	70.70	1233.90	16.20	12.94	86.13	73.19	3.16	0.66	****	15

SAGINAW STREAM CHEMISTRY : DRAINAGE DITCH

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
17	32	16MAY74	7076	0	****	**	****	92.60	****	8970.00	40.30	23.05	58.39	35.34	21.55	1.23	****	11
18	32	30MAY74	7090	0	****	**	****	47.50	33.00	8158.60	61.50	30.45	59.33	28.88	6.36	0.16	****	16

SAGINAW STREAM CHEMISTRY : DRAINAGE DITCH

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
15	33	19APR74	7048	0	****	**	****	43.10	****	9840.00	24.10	40.62	66.34	25.72	12.52	0.62	****	11
19	33	13JUN74	7104	0	****	**	****	55.40	25.30	8618.50	102.60	12.97	30.94	17.96	3.98	0.50	****	16

APPENDIX 2

SAGINAW STREAM CHEMISTRY : CASS RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TKN (UG/L)	DPN (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	1	15AUG71	6802	0	****	1563.90	****	****	**	**
2	1	10SEP73	6828	0	82.20	1637.30	****	****	700	**
3	1	20SEP73	6838	0	46.20	686.80	****	****	1500	**
4	1	08OCT73	6852	0	32.80	436.10	****	****	200	**
5	1	17OCT73	6865	0	1084.30	140.60	****	****	350	40
6	1	01NOV73	6880	0	1662.30	136.20	****	****	100	100
7	1	15NOV73	6894	0	1336.00	195.40	****	5.50	220	800
8	1	29NOV73	6908	0	623.60	149.70	****	15.00	1500	185
10	1	08JAN74	6948	0	276.00	152.70	****	8.40	60	100
12	1	21FEB74	6992	0	215.30	68.90	3.64	10.00	110	100
13	1	06MAR74	7005	0	2958.70	91.90	92.70	95.00	100	210
14	1	28MAR74	7027	0	359.80	93.10	4.74	5.50	100	100
15	1	17APR74	7047	0	2636.10	78.00	49.40	55.00	120	100
16	1	01MAY74	7061	0	1846.10	182.90	53.10	42.00	100	100
17	1	15MAY74	7075	0	1059.00	88.00	20.05	27.00	140	**
18	1	29MAY74	7089	0	1149.30	145.00	31.56	23.00	200	200
19	1	12JUN74	7103	0	1221.00	1.20	102.80	24.00	200	200
20	1	25JUN74	7116	0	1150.40	0.0	33.33	26.00	**	**
21	1	10JUL74	7131	0	1456.30	108.00	42.85	36.00	100	100
22	1	23JUL74	7144	0	1511.80	68.00	47.90	34.00	3600	3500
23	1	07AUG74	7159	0	479.70	69.90	29.33	9.00	1550	200
24	1	13AUG74	7165	0	362.90	56.40	27.33	9.00	**	**
25	1	16AUG74	7168	0	589.80	60.60	****	18.00	**	**
26	1	21AUG74	7173	0	302.70	85.70	26.11	18.00	1300	300
27	1	29AUG74	7181	0	822.70	65.10	31.00	27.00	**	**
28	1	05SEP74	7188	0	677.80	78.20	30.00	17.00	**	**
29	1	10SEP74	7193	0	599.40	68.80	51.00	17.50	**	**
30	1	16SEP74	7199	0	699.20	82.90	42.00	22.00	**	**
31	1	02OCT74	7215	0	838.60	128.00	42.00	22.50	**	**
32	1	09OCT74	7222	0	1065.30	114.50	34.00	20.00	280	**
33	1	17OCT74	7230	0	1014.00	113.30	45.00	26.00	**	**
34	1	06NOV74	7250	0	917.80	51.80	63.71	24.00	600	200
35	1	11NOV74	7255	0	918.20	121.50	37.25	19.00	**	**
36	1	15NOV74	7259	0	479.30	49.80	13.60	8.00	**	**
37	1	27NOV74	7271	0	299.10	116.10	10.60	5.00	150	100
38	1	02DEC74	7276	0	269.20	123.30	6.80	6.50	**	**
41	1	16DEC74	7290	0	163.90	36.90	24.40	5.00	100	**
42	1	19DEC74	7293	0	132.30	44.00	4.20	4.50	**	**
43	1	30DEC74	7304	0	112.30	45.70	4.00	2.50	**	**
45	1	10JAN75	7315	0	393.10	36.60	12.00	15.00	100	1060
46	1	14JAN75	7319	0	1134.60	59.20	22.50	35.00	**	**
47	1	17JAN75	7322	0	632.50	63.30	11.50	22.50	**	1750
49	1	29JAN75	7334	0	274.80	42.90	9.10	8.00	**	**
50	1	05FEB75	7341	0	273.00	49.90	9.06	9.50	**	100
51	1	18FEB75	7350	0	217.70	53.70	11.10	6.00	**	100
52	1	21FEB75	7357	0	220.50	51.90	6.60	7.50	**	**
53	1	26FEB75	7362	0	2324.00	81.60	93.00	72.50	733	1887
54	1	03MAR75	7367	0	683.00	58.90	14.90	20.00	**	**
55	1	06MAR75	7370	0	358.70	49.50	11.30	11.00	500	100
56	1	10MAR75	7374	0	195.30	27.80	9.90	8.00	360	100
57	1	14MAR75	7378	0	295.50	42.00	****	9.00	**	**
58	1	18MAR75	7382	0	417.80	39.80	****	15.00	140	100
59	1	21MAR75	7385	0	1482.70	84.70	****	37.00	440	**
60	1	26MAR75	7390	0	3010.40	54.50	****	77.00	520	100
61	1	31MAR75	7395	0	401.30	63.80	****	12.00	100	100
63	1	09APR75	7404	0	300.80	37.80	****	10.00	140	100

64	1	19APR75	7409	0	563.70	55.60	****	18.00	**	100
65	1	19APR75	7413	0	583.30	47.80	****	21.00	**	**
66	1	21APR75	7416	0	5540.60	50.80	****	242.00	**	**
67	1	24APR75	7419	0	1219.50	58.90	****	40.50	500	150
68	1	30APR75	7425	0	682.50	62.00	****	23.00	**	**
69	1	13MAY75	7438	0	640.70	26.80	38.00	22.50	**	**
70	1	16MAY75	7441	0	907.50	33.30	48.40	26.00	400	140
71	1	21MAY75	7445	0	488.00	27.30	26.40	16.00	**	**
72	1	27MAY75	7452	0	1005.50	43.10	68.60	41.50	860	780
73	1	04JUN75	7460	0	711.60	35.20	51.60	35.00	1040	1040
74	1	11JUN75	7467	0	1011.30	27.10	70.00	50.50	**	**
75	1	16JUN75	7472	0	890.30	23.30	32.00	41.50	2500	1500
76	1	24JUN75	7480	0	729.20	28.20	57.75	35.00	200	150
77	1	26JUN75	7482	0	494.00	25.40	31.75	22.00	**	**
78	1	03JUL75	7489	0	408.80	23.70	44.75	29.00	**	**
79	1	24JUL75	7480	0	426.70	125.40	****	****	**	**
80	1	07AUG75	7486	0	564.60	282.70	****	****	**	**

SAGINAW STREAM CHEMISTRY : TITTABAWASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TFE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	2	15AUG73	6802	0	****	288.90	****	****	**	**
2	2	10SEP73	6828	0	19.30	410.50	****	****	600	**
3	2	20SEP73	6839	0	40.40	331.00	****	****	500	**
4	2	04OCT73	6852	0	21.10	625.25	****	****	1550	**
5	2	17OCT73	6865	0	478.40	115.40	****	****	900	420
6	2	01NOV73	6880	0	680.90	122.70	****	****	300	3200
7	2	15NOV73	6894	0	782.30	143.10	****	9.00	1000	940
8	2	29NOV73	6908	0	633.30	143.70	****	13.50	300	180
10	2	08JAN74	6948	0	500.80	132.90	****	9.00	50	100
11	2	01FEB74	6972	0	847.10	208.40	26.00	29.00	220	420
12	2	21FEB74	6992	0	407.30	74.40	13.08	12.00	160	360
13	2	06MAR74	7005	0	1388.40	86.40	58.80	51.50	100	500
14	2	29MAR74	7027	0	418.20	172.90	9.24	8.00	140	220
15	2	17APR74	7047	0	1219.20	113.00	27.45	33.00	200	280
16	2	01MAY74	7061	0	1208.10	118.00	29.95	33.00	200	480
17	2	15MAY74	7075	0	778.80	74.60	26.90	25.00	100	**
18	2	29MAY74	7089	0	876.70	57.40	23.85	15.00	340	300
19	2	12JUN74	7103	0	1692.00	38.40	51.90	40.50	520	680
20	2	25JUN74	7116	0	458.80	19.80	10.04	7.00	**	**
21	2	10JUL74	7131	0	333.70	83.50	15.50	9.00	120	100
22	2	23JUL74	7144	0	487.40	59.70	11.60	7.00	850	300
23	2	07AUG74	7159	0	268.00	60.30	18.50	10.50	750	250
24	2	13AUG74	7165	0	179.90	59.00	26.00	6.00	**	**
25	2	16AUG74	7168	0	289.40	61.90	****	8.00	**	**
26	2	21AUG74	7173	0	232.70	71.60	70.65	8.00	1000	400
27	2	29AUG74	7181	0	286.90	62.20	15.33	7.00	**	**
28	2	05SEP74	7188	0	261.40	66.80	15.33	7.00	**	**
29	2	10SEP74	7193	0	239.50	68.50	23.50	6.00	**	**
30	2	16SEP74	7199	0	250.40	61.50	13.00	7.00	**	**
31	2	02OCT74	7215	0	285.20	79.80	10.33	7.00	**	**
32	2	04OCT74	7222	0	326.10	91.80	12.50	6.50	700	**
33	2	17OCT74	7230	0	301.60	86.90	13.00	7.00	850	**
34	2	05NOV74	7250	0	348.90	96.40	31.22	8.00	1200	1120
35	2	11NOV74	7255	0	302.80	114.10	11.75	3.00	**	**
36	2	15NOV74	7259	0	307.80	130.00	14.00	5.00	**	**
37	2	27NOV74	7271	0	246.40	95.50	8.20	3.50	300	150
38	2	02DEC74	7276	0	228.00	121.90	5.00	4.00	**	**
39	2	05DEC74	7280	0	248.50	118.40	8.60	5.50	100	100
40	2	10DEC74	7284	0	298.90	136.40	6.00	3.50	**	**
41	2	16DEC74	7290	0	139.40	35.60	4.20	5.50	100	**
43	2	30DEC74	7304	0	116.20	49.00	4.40	3.00	0	0
44	2	06JAN75	7311	0	112.10	32.70	****	3.50	**	**
45	2	10JAN75	7315	0	210.70	38.70	7.00	9.00	100	100
46	2	14JAN75	7319	0	482.70	36.80	16.50	17.00	**	**
47	2	17JAN75	7322	0	250.30	44.50	6.80	8.00	**	1250
48	2	22JAN75	7327	0	167.80	26.10	5.70	7.00	**	100
49	2	29JAN75	7334	0	454.70	59.80	13.70	16.00	**	**
50	2	05FEB75	7341	0	182.50	50.60	6.00	5.00	**	100
51	2	14FEB75	7350	0	166.60	45.00	6.60	6.00	**	100
52	2	21FEB75	7357	0	210.90	40.90	8.30	7.00	**	**
53	2	26FEB75	7362	0	1763.90	77.00	10.53	61.00	630	970
54	2	03MAR75	7367	0	302.80	39.70	9.10	8.50	**	**
55	2	06MAR75	7370	0	232.00	20.70	15.10	8.00	280	100
56	2	10MAR75	7374	0	169.20	23.50	5.80	5.00	100	100
57	2	13MAR75	7378	0	265.20	44.00	****	9.00	**	**
58	2	18MAR75	7382	0	270.10	46.60	****	11.00	100	100

59	2	21MAR75	7385	0	326.80	84.70	****	11.00	300	**
60	2	25MAR75	7390	0	1624.80	74.90	****	67.00	560	360
61	2	31MAR75	7395	0	274.00	65.40	****	10.00	100	100
63	2	09APR75	7404	0	826.50	63.40	****	15.00	240	260
64	2	14APR75	7409	0	251.50	55.90	****	9.50	**	**
65	2	18APR75	7413	0	212.30	46.40	****	12.00	**	**
66	2	21APR75	7416	0	593.50	40.30	****	22.50	**	**
67	2	28APR75	7419	0	286.30	51.00	****	11.50	350	350
68	2	30APR75	7425	0	187.80	63.20	****	7.00	**	**
69	2	13MAY75	7438	0	762.30	35.70	****	32.00	**	**
70	2	16MAY75	7441	0	305.30	38.30	15.00	5.00	140	100
71	2	21MAY75	7446	0	203.10	38.20	7.88	7.00	**	**
72	2	27MAY75	7452	0	318.50	35.50	28.20	13.50	300	560
73	2	04JUN75	7460	0	490.80	21.00	53.10	31.00	1280	1000
74	2	11JUN75	7467	0	418.00	21.70	****0	17.00	**	**
75	2	16JUN75	7472	0	583.70	32.10	45.00	26.00	1400	1350
76	2	20JUN75	7480	0	141.40	30.30	32.60	15.50	150	750
77	2	26JUN75	7482	0	274.80	24.20	25.31	12.00	**	**
78	2	03JUL75	7489	0	163.40	24.70	27.60	11.00	**	**
79	2	24JUL75	7490	0	221.10	121.10	****	****	**	**
80	2	07AUG75	7486	0	260.50	153.30	****	****	**	**

SAGINAW STREAM CHEMISTRY : SHIAWASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	3	15AUG73	6802	0	****	1371.90	****	****	**	**
2	3	10SEP73	6828	0	19.60	1370.10	****	****	1000	**
3	3	20SEP73	6838	0	28.50	689.70	****	****	600	**
5	3	17OCT73	6865	0	593.10	125.50	****	****	400	0
6	3	01NOV73	6880	0	676.80	110.10	****	****	400	420
7	3	15NOV73	6894	0	476.40	164.70	****	7.50	1200	100
8	3	29NOV73	6908	0	4823.70	151.50	****	105.00	7000	900
9	3	19DEC73	6928	0	229.00	116.60	****	5.90	**	**
10	3	08JAN74	6948	0	276.00	191.90	****	8.10	200	100
11	3	01FEB74	6972	0	1062.10	188.70	31.60	32.00	1000	360
13	3	06MAR74	7005	0	8046.20	105.30	131.20	100.00	500	980
14	3	28MAR74	7027	0	356.90	82.20	2.60	8.00	100	100
15	3	17APR74	7047	0	808.20	137.90	17.00	15.00	120	400
16	3	01MAY74	7061	0	469.20	91.40	15.45	18.00	220	100
17	3	15MAY74	7075	0	402.80	217.00	5.33	9.00	200	**
18	3	29MAY74	7089	0	897.80	38.10	31.35	16.00	200	360
19	3	12JUN74	7103	0	916.70	0.0	2.60	15.00	320	680
20	3	25JUN74	7116	0	1007.40	0.0	39.06	24.00	**	**
21	3	10JUL74	7131	0	1371.50	111.20	54.80	45.00	160	100
22	3	23JUL74	7144	0	1697.00	59.90	72.90	35.00	1000	1000
23	3	07AUG74	7159	0	1403.50	95.50	148.00	55.00	400	400
24	3	13AUG74	7165	0	1106.40	63.00	146.00	32.00	**	**
25	3	16AUG74	7168	0	1542.70	88.10	****	53.00	**	**
26	3	21AUG74	7173	0	1371.50	70.10	103.90	56.00	2900	400
27	3	29AUG74	7181	0	1050.70	79.70	****	34.00	**	**
28	3	05SEP74	7188	0	617.70	87.40	32.00	17.00	**	**
29	3	10SEP74	7193	0	928.10	58.40	83.00	28.00	**	**
30	3	16SEP74	7199	0	489.60	69.60	28.00	14.00	**	**
31	3	02OCT74	7215	0	297.20	113.80	8.00	3.50	**	**
32	3	09OCT74	7222	0	440.70	110.00	13.00	10.00	260	**
33	3	17OCT74	7230	0	317.10	117.20	9.00	4.00	700	**
34	3	06NOV74	7250	0	419.20	112.20	29.57	6.00	1150	1450
35	3	11NOV74	7255	0	412.40	119.80	21.56	7.50	**	**
36	3	15NOV74	7259	0	252.50	124.90	5.40	2.50	**	**
37	3	27NOV74	7271	0	619.20	126.40	5.00	3.00	150	100
38	3	02DEC74	7276	0	266.90	116.80	6.20	4.50	**	**
39	3	06DEC74	7280	0	394.30	128.00	8.80	5.50	100	100
40	3	10DEC74	7284	0	328.00	142.40	5.80	5.50	**	**
41	3	16DEC74	7290	0	178.60	44.60	24.40	5.00	250	**
43	3	30DEC74	7304	0	137.00	26.40	10.00	4.50	**	**
44	3	06JAN75	7311	0	158.00	32.60	3.20	4.00	**	**
45	3	10JAN75	7315	0	2268.80	35.30	78.00	70.00	100	920
46	3	14JAN75	7319	0	657.90	62.90	21.50	24.00	**	**
47	3	17JAN75	7322	0	270.10	47.40	10.30	9.00	**	**
48	3	22JAN75	7327	0	127.20	44.20	4.60	3.00	**	100
49	3	29JAN75	7334	0	214.30	39.10	8.40	6.00	**	**
50	3	05FEB75	7341	0	163.00	57.60	8.40	5.50	**	420
51	3	14FEB75	7350	0	155.00	29.80	2.20	4.00	**	120
52	3	21FEB75	7357	0	186.90	51.40	3.10	5.00	**	**
53	3	26FEB75	7362	0	2091.80	48.20	88.00	63.00	970	2170
54	3	03MAR75	7367	0	376.30	58.50	9.70	10.00	**	**
55	3	06MAR75	7370	0	423.90	27.20	25.60	13.50	860	340
56	3	10MAR75	7374	0	316.40	17.00	16.50	10.00	240	120
57	3	14MAR75	7378	0	292.00	20.60	****	9.50	**	**
58	3	18MAR75	7382	0	1848.30	82.90	****	42.00	260	240
59	3	21MAR75	7385	0	501.70	63.20	****	16.00	380	**

60	3	26MAR75	7390	0	2828.10	79.50	****	77.00	4200	500
61	3	31MAR75	7395	0	350.10	80.10	****	12.00	100	100
63	3	09APR75	7404	0	363.80	86.50	****	****	620	240
64	3	14APR75	7409	0	575.90	57.60	****	23.50	**	**
65	3	19APR75	7413	0	425.60	50.20	****	18.00	**	**
66	3	21APR75	7416	0	4063.00	78.90	****	170.00	**	**
67	3	24APR75	7419	0	2408.30	61.30	****	70.50	350	1100
68	3	30APR75	7425	0	839.40	72.20	****	23.50	**	**
69	3	13MAY75	7438	0	313.30	48.60	36.00	8.00	**	**
70	3	16MAY75	7441	0	276.40	44.50	12.90	3.00	560	240
71	3	21MAY75	7446	0	134.60	28.00	12.20	3.00	**	**
72	3	27MAY75	7452	0	485.60	35.40	43.60	17.50	750	150
73	3	04JUN75	7460	0	328.30	25.50	29.30	14.00	1700	950
74	3	11JUN75	7467	0	473.70	25.00	38.80	12.00	**	**
75	3	16JUN75	7472	0	626.20	21.20	46.00	24.00	950	1350
76	3	24JUN75	7480	0	408.10	21.50	52.80	31.50	700	850
77	3	26JUN75	7482	0	2287.70	30.60	345.00	185.00	**	**
78	3	03JUL75	7489	0	243.50	27.80	39.80	26.00	**	**
79	3	24JUL75	7480	0	259.50	130.20	****	****	**	**
80	3	07AUG75	7486	0	418.30	236.10	****	****	**	**

SAGINAW STREAM CHEMISTRY : FLINT RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	4	15AUG73	6892	0	****	730.60	****	****	**	**
2	4	10SEP73	6829	0	41.20	430.90	****	****	2600	**
3	4	20SEP73	6818	0	31.80	813.30	****	****	100	**
4	4	04OCT73	6852	0	64.00	675.90	****	****	3000	**
5	4	17OCT73	6865	0	347.50	144.30	****	****	400	1850
6	4	01NOV73	6880	0	1005.80	127.10	****	****	100	17000
7	4	15NOV73	6894	0	484.70	135.00	****	****	180	8200
8	4	29NOV73	6908	0	5396.10	165.20	****	120.00	200	31600
9	4	19DEC73	6928	0	257.40	153.90	****	9.10	**	**
10	4	08JAN74	6948	0	211.50	132.80	****	7.60	700	1800
11	4	01FEB74	6972	0	866.50	158.10	210.00	37.00	1400	11200
12	4	21FEB74	6992	0	1186.90	80.70	48.91	46.00	600	3800
13	4	06MAR74	7005	0	2184.20	72.30	133.80	115.00	900	5000
14	4	28MAR74	7027	0	684.70	111.90	10.17	16.00	600	700
15	4	17APR74	7047	0	2306.70	109.10	54.22	52.00	4500	7000
16	4	01MAY74	7061	0	1739.80	55.50	45.00	55.00	4800	3100
17	4	15MAY74	7075	0	1243.30	27.60	42.35	31.00	1300	**
18	4	29MAY74	7089	0	1405.80	17.90	55.25	30.00	5500	8800
19	4	12JUN74	7103	0	2049.20	20.40	70.13	50.00	8500	8300
20	4	25JUN74	7116	0	794.40	0.0	28.30	21.00	**	**
21	4	10JUL74	7131	0	793.40	79.50	30.65	22.00	800	600
22	4	23JUL74	7144	0	437.20	96.90	18.90	8.50	4200	2300
23	4	07AUG74	7159	0	133.90	584.30	24.50	11.50	550	1550
24	4	13AUG74	7165	0	615.10	78.10	58.00	23.00	**	**
25	4	16AUG74	7168	0	813.90	75.40	****	20.00	**	**
26	4	21AUG74	7173	0	516.60	76.90	20.90	17.50	2800	400
27	4	29AUG74	7181	0	455.00	93.30	23.50	12.00	**	**
28	4	05SEP74	7188	0	393.50	82.90	7.50	10.50	**	**
29	4	10SEP74	7193	0	345.40	102.90	22.50	8.00	**	**
30	4	16SEP74	7199	0	305.20	79.20	16.50	8.00	**	**
31	4	02OCT74	7215	0	291.20	133.20	6.67	3.50	**	**
32	4	09OCT74	7222	0	285.20	128.20	6.67	35.00	**	**
33	4	17OCT74	7230	0	353.30	143.80	6.80	5.00	8500	**
34	4	06NOV74	7250	0	2225.40	100.30	173.80	48.00	1800	9400
35	4	11NOV74	7255	0	449.00	119.50	16.50	8.00	**	**
36	4	15NOV74	7259	0	575.90	127.00	14.00	11.00	**	**
37	4	27NOV74	7271	0	475.40	106.90	11.80	9.00	1100	1300
38	4	02DEC74	7276	0	346.00	120.20	10.00	8.00	**	**
39	4	06DEC74	7280	0	705.50	128.00	18.20	15.00	200	1400
40	4	10DEC74	7284	0	815.80	116.00	30.00	17.00	**	**
41	4	16DEC74	7290	0	271.10	36.60	14.20	11.00	400	**
42	4	19DEC74	7293	0	509.60	54.10	25.00	17.50	**	**
43	4	30DEC74	7304	0	184.70	38.60	2.80	7.00	**	**
44	4	06JAN75	7311	0	213.60	35.80	6.80	7.00	**	**
45	4	10JAN75	7315	0	3651.40	26.30	35.80	95.00	200	6400
46	4	19JAN75	7319	0	881.60	52.70	31.50	29.00	**	**
49	4	29JAN75	7334	0	464.00	42.00	25.80	18.00	**	**
50	4	05FEB75	7341	0	480.30	43.60	20.40	15.00	**	700
51	4	18FEB75	7350	0	1763.90	37.00	5.60	7.00	**	920
52	4	21FEB75	7357	0	433.70	51.10	8.90	15.00	**	**
53	4	26FEB75	7362	0	1942.90	41.40	84.80	64.00	1640	3560
54	4	03MAR75	7367	0	841.30	47.00	28.20	21.50	**	**
55	4	06MAR75	7370	0	639.70	48.90	26.60	21.50	2300	1100
56	4	10MAR75	7374	0	732.80	46.70	38.20	26.00	1000	1300
57	4	14MAR75	7378	0	130.70	35.20	****	49.00	**	**
58	4	19MAR75	7382	0	1384.00	43.30	****	55.00	1100	100

59	4	21MAR75	7385	0	1052.00	63.20	****	25.00	800	**
60	4	26MAR75	7390	0	2588.20	51.40	****	63.00	7100	6400
61	4	31MAR75	7395	0	763.60	83.20	****	25.00	100	100
63	4	09APR75	7404	0	807.70	85.50	****	24.00	1200	200
64	4	14APR75	7409	0	694.60	50.20	****	24.50	**	**
65	4	18APR75	7413	0	602.90	164.30	****	21.00	**	**
66	4	21APR75	7416	0	4015.10	63.00	****	180.00	**	**
67	4	24APR75	7419	0	2715.80	56.00	****	81.00	1900	99999
68	4	30APR75	7425	0	1248.30	78.70	69.40	41.00	**	**
69	4	13MAY75	7438	0	507.00	40.60	59.20	22.00	**	**
70	4	16MAY75	7441	0	638.20	25.20	41.20	14.00	1400	1700
71	4	21MAY75	7446	0	412.30	31.60	27.30	10.00	**	**
72	4	27MAY75	7452	0	699.90	29.10	50.20	35.00	5500	2100
73	4	04JUN75	7460	0	1805.10	21.20	367.00	130.00	12000	10000
74	4	11JUN75	7467	0	575.00	29.50	85.50	42.00	**	**
75	4	16JUN75	7472	0	672.10	41.10	51.00	50.00	4600	3400
76	4	24JUN75	7480	0	231.60	92.30	57.00	36.00	**	12400
77	4	26JUN75	7482	0	1860.30	42.40	180.00	92.00	**	**
78	4	03JUL75	7489	0	354.20	25.60	45.60	19.00	**	**
79	4	24JUL75	7480	0	344.60	115.60	****	****	**	**
80	4	07AUG75	7486	0	347.60	143.60	****	****	**	**

SAGINAW STREAM CHEMISTRY : KAWKAWLIN RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	5	15AUG73	6802	0	****	434.70	****	****	**	**
2	5	10SEP73	6828	0	111.00	797.80	****	****	**	**
3	5	20SEP73	6838	0	59.40	396.00	****	****	800	**
4	5	04OCT73	6852	0	37.00	408.40	****	****	1900	**
5	5	17OCT73	6865	0	596.60	123.00	****	****	500	160
6	5	01NOV73	6880	0	347.50	156.70	****	****	350	120
7	5	15NOV73	6894	0	402.60	148.80	****	5.50	300	100
8	5	29NOV73	6908	0	634.20	136.60	****	20.00	2900	500
13	5	06MAR74	7005	0	995.90	94.30	27.55	29.00	100	130
14	5	28MAR74	7027	0	232.90	122.10	****	5.00	180	100
15	5	17APR74	7047	0	1839.10	116.10	51.47	24.00	100	120
16	5	01MAY74	7061	0	970.60	235.90	35.82	42.00	180	100
17	5	15MAY74	7075	0	1207.80	70.60	27.95	36.00	350	**
18	5	29MAY74	7089	0	633.70	229.20	18.95	7.00	280	180
19	5	12JUN74	7103	0	1567.50	50.50	45.49	54.50	820	400
20	5	25JUN74	7116	0	575.20	87.80	20.05	13.00	**	**
21	5	10JUL74	7131	0	726.80	94.10	24.80	19.00	450	150
22	5	23JUL74	7144	0	480.10	116.80	19.65	15.00	450	550
23	5	07AUG74	7159	0	368.40	98.60	41.00	9.00	350	100
24	5	13AUG74	7165	0	363.70	79.40	23.00	10.00	**	**
25	5	16AUG74	7168	0	653.10	87.80	****	16.00	**	**
26	5	21AUG74	7173	0	527.80	94.80	17.65	16.00	20500	400
28	5	03SEP74	7188	0	412.50	79.80	29.71	10.00	**	**
29	5	10SEP74	7193	0	473.70	85.80	33.60	12.50	**	**
30	5	16SEP74	7199	0	394.90	74.70	16.67	8.00	**	**
31	5	02OCT74	7215	0	400.90	118.90	18.00	7.50	**	**
32	5	09OCT74	7222	0	350.30	101.80	15.20	6.00	460	**
33	5	17OCT74	7230	0	522.60	123.50	21.00	12.00	250	**
34	5	05NOV74	7250	0	917.40	124.50	34.95	11.00	340	960
36	5	15NOV74	7259	0	775.90	141.20	19.00	12.00	**	**
37	5	27NOV74	7271	0	599.40	136.70	13.20	7.50	660	520
38	5	02DEC74	7276	0	339.20	130.70	12.20	7.00	**	**
39	5	06DEC74	7280	0	485.70	136.40	11.00	6.00	100	280
41	5	16DEC74	7290	0	548.10	69.30	7.20	8.50	550	**
42	5	19DEC74	7293	0	773.60	61.90	11.00	10.00	**	**
43	5	30DEC74	7304	0	606.90	29.60	9.06	8.50	**	**
45	5	10JAN75	7315	0	389.40	30.60	32.00	15.50	100	700
48	5	22JAN75	7327	0	280.70	63.40	10.71	7.00	**	580
49	5	29JAN75	7334	0	442.50	71.50	13.80	15.50	**	**
50	5	05FEB75	7341	0	203.40	81.10	7.60	5.00	**	620
51	5	18FEB75	7350	0	303.10	148.40	8.90	5.00	**	920
52	5	21FEB75	7357	0	578.90	132.20	11.90	17.00	**	**
53	5	26FEB75	7362	0	1386.70	32.20	71.20	62.00	1460	1700
54	5	03MAR75	7367	0	317.80	76.00	8.00	10.00	**	**
55	5	06MAR75	7370	0	338.40	59.90	17.60	11.50	800	280
56	5	10MAR75	7374	0	198.70	76.60	5.50	5.00	620	340
57	5	14MAR75	7378	0	199.40	84.50	****	5.00	**	**
58	5	18MAR75	7382	0	358.20	62.60	****	17.00	200	100
59	5	21MAR75	7385	0	290.00	54.20	****	11.00	240	**
60	5	26MAR75	7390	0	511.50	71.70	****	20.00	320	160
61	5	31MAR75	7395	0	115.30	73.00	****	5.00	100	100
62	5	04APR75	7399	0	127.80	79.50	****	3.00	100	100
63	5	09APR75	7404	0	300.10	43.20	****	14.00	760	220
64	5	14APR75	7509	0	239.70	63.30	****	11.00	**	**
65	5	18APR75	7413	0	495.60	56.40	****	23.00	**	**
66	5	21APR75	7416	0	558.60	55.50	****	24.50	**	**

67	5	28APR75	7419	0	669.40	80.60	****	22.50	1100	150
68	5	30APR75	7425	0	670.60	93.00	****	23.50	**	**
69	5	13MAY75	7438	0	637.00	183.80	****	15.50	**	**
70	5	16MAY75	7441	0	888.60	88.50	42.20	20.00	280	300
71	5	21MAY75	7446	0	368.20	116.10	19.00	9.50	**	**
72	5	27MAY75	7452	0	126.60	97.30	36.40	22.00	900	160
73	5	04JUN75	7460	0	791.90	95.70	69.30	41.00	4200	7100
74	5	11JUN75	7467	0	418.30	42.80	****0	19.00	**	**
75	5	16JUN75	7472	0	563.00	37.90	53.00	35.50	800	850
76	5	23JUN75	7480	0	238.20	147.60	11.33	5.00	600	200
77	5	26JUN75	7482	0	267.20	70.20	20.00	9.00	**	**
78	5	03JUN75	7489	0	539.30	83.90	49.00	29.00	**	**
79	5	28JUL75	7480	0	477.00	126.10	****	****	**	**
80	5	27AUG75	7486	0	466.00	181.30	****	****	**	**

SAGINAW STREAM CHEMISTRY : PINE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TFE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	6	15AUG73	6802	0	****	451.00	****	****	**	**
4	6	04OCT73	6852	0	68.50	552.80	****	****	1425	**
6	6	01NOV73	6880	0	649.90	204.10	****	****	200	1880
13	6	06MAR74	7005	0	1437.90	201.90	****	46.00	100	250
14	6	28MAR74	7027	0	631.60	142.50	****	16.00	100	100
15	6	17APR74	7047	0	850.70	244.70	****	21.00	100	100
16	6	01MAY74	7061	0	302.00	118.70	****	10.00	220	120
17	6	15MAY74	7075	0	1601.40	127.80	****	48.00	100	**
18	6	29MAY74	7089	0	505.90	93.30	****	5.00	390	860
19	6	12JUN74	7103	0	1062.30	113.50	****	23.00	780	540
20	6	23JUN74	7114	0	669.30	80.90	****	11.00	**	**
60	6	25MAR75	7390	0	660.70	125.80	****	18.00	100	100
63	6	09APR75	7404	0	709.60	98.80	****	24.00	410	190

SAGINAW STREAM CHEMISTRY : RIFLE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TFE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	7	15AUG73	6802	0	****	270.40	****	****	**	**
2	7	10SEP73	6828	0	17.80	336.50	****	****	100	**
3	7	20SEP73	6838	0	26.30	272.40	****	****	100	**
4	7	04OCT73	6852	0	22.30	519.00	****	****	100	**
5	7	17OCT73	6865	0	357.90	130.10	****	****	80	45
6	7	01NOV73	6880	0	597.80	169.00	****	****	100	110
7	7	15NOV73	6894	0	****	****	****	3.40	100	100
15	7	17APR74	7047	0	1785.90	95.00	****	54.00	140	100
16	7	01MAY74	7061	0	391.60	38.20	15.77	15.00	145	100
17	7	15MAY74	7075	0	1441.80	79.20	69.53	38.00	100	**
18	7	29MAY74	7089	0	218.10	16.50	****	3.00	**	**
19	7	12JUN74	7103	0	853.40	45.90	****	12.00	260	150
20	7	25JUN74	7116	0	239.60	2.30	****	7.00	**	**
21	7	10JUL74	7131	0	9377.60	74.10	****	250.00	**	330
60	7	26MAR75	7390	0	878.00	83.10	****	28.00	145	100
63	7	09APR75	7404	0	635.60	53.00	****	23.00	**	**

SAGINAW STREAM CHEMISTRY : BIG CREEK

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	8	15AUG73	6802	0	****	465.40	****	****	**	**
15	8	17APR74	7047	0	2186.30	1368.70	****	20.00	100	100
17	8	15MAY74	7075	0	1551.80	250.60	****	39.00	100	**
18	8	29MAY74	7089	0	1641.40	557.50	****	15.00	**	**
19	8	12JUN74	7103	0	1693.80	530.30	****	12.00	**	**
60	8	26MAR75	7390	0	1227.20	480.70	****	15.00	100	100

SAGINAW STREAM CHEMISTRY : AU GRES RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	9	15AUG73	6802	0	****	681.60	****	****	**	**
2	9	10SEP73	6828	0	6.10	355.70	****	****	600	**
3	9	20SEP73	6838	0	32.60	247.70	****	****	700	**
4	9	04OCT73	6852	0	19.60	291.70	****	****	650	**
5	9	17OCT73	6865	0	404.90	134.30	****	****	300	180
6	9	01NOV73	6880	0	444.90	138.80	****	****	100	320
7	9	15NOV73	6894	0	361.30	139.70	****	7.00	120	240
14	9	28MAR74	7027	0	649.30	130.80	****	17.50	100	**
15	9	17APR74	7047	0	1158.80	112.90	28.95	36.00	100	100
16	9	01MAY74	7061	0	536.60	85.80	15.38	14.50	200	100
17	9	15MAY74	7075	0	938.20	94.80	****	28.00	100	**
18	9	29MAY74	7089	0	668.40	38.50	****	16.00	100	130
19	9	12JUN74	7103	0	731.80	70.00	****	19.50	400	280
20	9	25JUN74	7116	0	448.80	34.60	****	11.00	**	**
21	9	10JUL74	7131	0	1725.30	130.60	****	53.00	380	580
60	9	26MAR75	7390	0	769.20	114.60	****	30.00	100	100
63	9	09APR75	7404	0	750.50	70.40	****	27.00	**	**

SAGINAW STREAM CHEMISTRY : TAWAS RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	10	15AUG73	6802	0	103.50	307.20	****	****	**	**
2	10	10SEP73	6828	0	43.10	224.90	****	****	800	**
3	10	20SEP73	6838	0	32.90	272.50	****	****	600	**
4	10	05OCT73	6853	0	71.40	193.60	****	****	200	**
5	10	17OCT73	6865	0	285.00	123.70	****	****	250	40
6	10	01NOV73	6880	0	309.60	170.50	****	****	150	200
7	10	15NOV73	6894	0	290.60	163.30	****	2.10	260	220
13	10	06MAR74	7005	0	515.40	181.50	****	10.00	100	100
14	10	28MAR74	7027	0	190.50	144.90	****	4.00	100	100
15	10	17APR74	7047	0	255.60	165.90	****	4.00	100	100
16	10	01MAY74	7061	0	242.00	71.00	****	****	110	100
17	10	15MAY74	7075	0	470.60	162.10	****	9.00	100	**
18	10	29MAY74	7089	0	231.70	57.70	****	1.00	100	100
19	10	12JUN74	7103	0	264.80	99.90	****	6.00	860	3400
20	10	25JUN74	7116	0	244.10	65.70	****	6.00	**	**
21	10	10JUL74	7131	0	871.90	184.00	****	17.50	680	640
60	10	26MAR75	7390	0	212.30	95.60	****	5.00	230	560
63	10	09APR75	7404	0	172.10	86.40	****	7.00	1560	1180

SAGINAW STREAM CHEMISTRY : EAST AU GRES RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	11	15AUG73	6802	0	0.0	323.50	****	****	**	**
2	11	10SEP73	6828	0	22.30	240.30	****	****	100	**
3	11	20SEP73	6838	0	48.30	241.60	****	****	100	**
4	11	04OCT73	6852	0	38.30	362.40	****	****	100	**
5	11	17OCT73	6865	0	390.80	120.10	****	****	65	62
6	11	01NOV73	6880	0	605.00	141.30	****	****	100	100
7	11	15NOV73	6894	0	491.80	141.60	****	11.00	100	100
13	11	06MAR74	7005	0	3411.00	119.30	399.60	175.00	100	100
14	11	29MAR74	7027	0	872.20	208.20	11.77	11.00	**	**
15	11	17APR74	7047	0	1562.70	171.40	****	38.00	100	100
16	11	01MAY74	7061	0	818.10	124.10	****	17.00	100	100
17	11	15MAY74	7075	0	1402.80	239.70	****	40.00	100	**
18	11	29MAY74	7089	0	555.40	127.00	14.70	14.00	100	100
19	11	12JUN74	7103	0	1096.40	160.70	****	28.00	160	290
20	11	25JUN74	7116	0	525.50	135.10	****	13.00	**	**
21	11	10JUL74	7131	0	3495.40	627.00	****	67.50	**	**
60	11	26MAR75	7390	0	766.50	125.90	****	30.00	**	**
63	11	09APR75	7404	0	468.10	119.40	****	19.00	**	**

SAGINAW STREAM CHEMISTRY : SAGINAW RIVER

CRD	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPR (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	12A	16AUG73	6803	0	17.10	771.70	****	****	**	**
2	12A	11SEP73	6829	0	13.70	920.20	****	****	4900	**
3	12A	20SEP73	6838	0	63.30	668.35	****	****	4200	**
4	12A	08OCT73	6852	0	28.25	485.15	****	****	5350	**
5	12A	17OCT73	6865	0	748.25	98.48	****	****	4060	3462
6	12A	01NOV73	6880	0	594.65	130.57	****	****	2100	2100
7	12A	15NOV73	6894	3	573.35	131.60	****	14.75	4000	6900
8	12A	29NOV73	6908	3	1095.30	137.85	****	41.50	250	3500
9	12A	19DEC73	6928	0	299.80	129.20	****	9.20	**	**
10	12A	08JAN74	6948	0	201.80	138.60	****	9.80	1200	3200
11	12A	01FEB74	6972	0	1861.15	146.65	62.50	76.00	1400	700
12	12A	21FEB74	6992	0	428.50	87.35	8.48	13.50	1500	1200
13	12A	06MAR74	7005	0	3562.85	99.00	132.20	86.00	500	1000
14	12A	28MAR74	7027	0	629.05	95.72	8.73	12.00	400	400
15	12A	17APR74	7047	0	1905.52	97.75	39.71	49.00	950	600
16	12A	01MAY74	7061	0	914.60	37.45	24.90	35.00	630	150
17	12A	15MAY74	7075	0	1102.98	104.65	27.50	17.50	850	**
18	12A	29MAY74	7089	0	831.98	25.60	27.48	16.50	300	900
19	12A	12JUN74	7103	0	1363.38	46.45	39.00	31.50	900	900
20	12A	25JUN74	7116	0	932.82	11.62	27.06	20.00	**	**
21	12A	10JUL74	7131	0	1119.15	71.70	36.70	29.50	600	250
22	12A	23JUL74	7144	0	624.10	83.20	33.62	23.00	4600	3850
23	12A	07AUG74	7159	0	573.10	88.65	33.50	17.00	1225	1175
24	12A	13AUG74	7165	0	380.40	68.75	30.34	13.00	**	**
25	12A	16AUG74	7168	0	763.80	73.70	****	22.00	**	**
26	12A	21AUG74	7173	0	625.55	91.80	67.59	23.00	28350	1000
27	12A	29AUG74	7181	0	702.65	67.15	72.00	22.00	**	**
28	12A	05SEP74	7188	0	576.65	65.20	46.00	19.00	**	**
29	12A	10SEP74	7193	0	507.85	55.15	45.50	13.25	**	**
30	12A	16SEP74	7199	0	408.65	59.35	27.50	10.00	**	**
31	12A	02OCT74	7215	0	461.00	98.90	22.00	10.00	**	**
32	12A	09OCT74	7222	0	407.30	111.65	18.50	9.00	1850	**
33	12A	17OCT74	7230	0	581.25	101.95	24.00	12.25	1650	**
34	12A	06NOV74	7250	0	430.45	120.96	36.69	8.00	3600	6750
35	12A	11NOV74	7255	0	382.90	116.75	15.25	8.00	**	**
36	12A	15NOV74	7259	0	383.85	151.55	12.70	7.00	**	**
37	12A	27NOV74	7271	0	482.55	112.95	17.70	8.00	1700	1500
38	12A	03DEC74	7276	0	352.66	126.80	10.10	8.00	**	**
39	12A	06DEC74	7280	0	450.00	104.00	9.60	7.50	100	750
40	12A	10DEC74	7284	0	515.50	116.00	11.20	9.50	**	**
41	12A	16DEC74	7290	0	251.90	37.85	8.70	8.50	300	**
42	12A	19DEC74	7293	0	163.60	61.95	13.20	7.00	**	**
43	12A	30DEC74	7304	0	157.80	44.10	5.40	5.50	**	**
44	12A	06JAN75	7311	0	182.65	35.15	5.00	5.25	**	**
45	12A	10JAN75	7315	0	327.55	40.10	11.34	15.00	575	1775
46	12A	14JAN75	7319	0	1075.90	49.60	50.34	49.50	**	**
47	12A	17JAN75	7322	0	762.30	102.40	23.20	10.00	**	5700
48	12A	22JAN75	7327	0	347.60	43.45	10.80	10.00	**	1375
49	12A	29JAN75	7334	0	303.85	38.50	9.90	9.25	**	**
50	12A	05FEB75	7341	0	339.70	58.40	10.20	12.50	**	1110
51	12A	19FEB75	7350	0	262.80	35.70	6.55	7.75	**	1400
52	12A	21FEB75	7357	0	230.85	30.85	5.10	6.25	**	**
53	12A	26FEB75	7362	0	2824.85	67.30	15.40	43.00	4675	2050
54	12A	03MAR75	7367	0	721.40	52.00	16.10	22.50	**	**
55	12A	06MAR75	7370	0	421.15	73.55	15.40	16.00	1800	350
56	12A	10MAR75	7374	0	298.85	44.20	11.30	10.00	1800	700

57	12A	18MAR75	7378	0	296.20	88.25	****	9.00	**	**
58	12A	18MAR75	7381	0	278.50	87.50	****	10.00	100	100
59	12A	21MAR75	7385	0	809.25	62.85	****	24.75	900	**
60	12A	26MAR75	7390	0	2884.80	88.95	****	75.00	800	100
61	12A	31MAR75	7395	0	988.65	61.40	****	20.00	100	100
62	12A	04APR75	7399	0	857.20	54.60	****	14.00	100	100
63	12A	07APR75	7404	0	913.30	88.70	****	15.00	1050	225
64	12A	14APR75	7409	0	584.50	86.85	****	21.00	**	**
65	12A	19APR75	7413	0	670.50	58.30	****	27.00	**	**
66	12A	21APR75	7416	0	3297.25	72.75	****	167.50	**	**
67	12A	28APR75	7419	0	2324.90	89.15	****	73.00	3650	2050
68	12A	30APR75	7425	0	878.23	62.60	85.90	31.00	**	**
69	12A	13MAY75	7434	0	929.05	82.70	93.80	32.50	**	**
70	12A	16MAY75	7441	0	734.35	85.10	39.90	23.50	1950	1250
71	12A	21MAY75	7446	0	878.95	37.35	29.30	15.25	**	**
72	12A	27MAY75	7452	0	823.50	29.90	23.20	16.75	2050	1150
73	12A	04JUN75	7460	0	506.25	23.55	60.75	21.00	3500	1750
74	12A	11JUN75	7467	0	606.20	25.70	29.80	25.75	**	**
75	12A	16JUN75	7472	0	408.85	23.75	30.00	19.00	4900	2500
76	12A	20JUN75	7480	0	337.05	25.60	28.60	15.75	4100	3300
77	12A	26JUN75	7482	0	843.70	32.95	33.00	20.25	**	**
78	12A	03JUL75	7489	0	321.45	22.70	23.40	19.50	**	**
79	12A	29JUL75	7480	0	482.35	111.80	****	****	**	**
80	12A	07AUG75	7486	0	383.35	162.85	****	****	**	**

SAGINAW STREAM CHEMISTRY : QUANICASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	14	16AUG73	6803	0	17.70	584.80	****	****	600	**
2	14	11SEP73	6829	0	8.00	430.30	****	****	**	**
3	14	21SEP73	6839	0	27.90	494.70	****	****	200	**
4	14	05OCT73	6853	0	48.20	834.60	****	****	500	**
5	14	18OCT73	6866	0	412.80	103.10	****	****	100	40
6	14	02NOV73	6881	0	244.40	106.70	****	****	100	100
7	14	15NOV73	6894	0	615.30	131.50	****	18.00	100	100
13	14	07MAR74	7006	0	1660.60	63.10	****	49.00	100	120
14	14	29MAR74	7028	0	439.20	60.50	****	15.00	100	100
15	14	18APR74	7048	0	1179.90	99.50	****	50.00	100	100
16	14	02MAY74	7062	0	1197.40	24.70	56.60	41.00	100	100
17	14	16MAY74	7076	0	1338.90	37.50	76.60	20.00	100	**
18	14	30MAY74	7090	0	606.00	2.60	36.00	19.00	300	100
19	14	13JUN74	7104	0	968.20	0.0	45.25	38.00	360	440
20	14	26JUN74	7117	0	550.70	18.30	****	17.00	**	**
21	14	11JUL74	7132	0	438.10	76.70	****	18.00	120	100
22	14	23JUL74	7144	0	278.80	75.10	****	****	450	400
23	14	07AUG74	7159	0	362.60	77.50	27.00	14.00	350	400
24	14	13AUG74	7165	0	235.60	76.20	41.00	13.00	**	**
25	14	16AUG74	7168	0	751.20	74.90	****	24.00	**	**
29	14	10SEP74	7193	0	620.90	59.60	39.00	15.00	**	**
30	14	16SEP74	7199	0	428.60	56.80	42.00	17.00	**	**
60	14	26MAR75	7390	0	725.90	46.60	****	24.00	100	100
53	14	09APR75	7404	0	179.30	29.00	****	10.00	100	100

SAGINAW STREAM CHEMISTRY : SEBEWAING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	15	16AUG73	6803	0	****	688.80	****	****	16000	**
2	15	11SEP73	6829	0	20.50	734.00	****	****	4900	**
3	15	21SEP73	6839	0	34.30	984.90	****	****	4100	**
4	15	05OCT73	6853	0	****	****	****	****	900	**
5	15	18OCT73	6866	0	740.10	98.50	****	****	2600	8500
6	15	02NOV73	6881	0	555.30	121.60	****	****	1400	1600
7	15	16NOV73	6895	0	434.80	145.20	****	6.50	2200	5600
13	15	07MAR74	7006	0	1264.80	52.90	****	49.00	100	700
14	15	29MAR74	7028	0	295.90	83.20	****	9.50	100	100
15	15	18APR74	7048	0	508.70	15.30	****	19.00	220	130
17	15	16MAY74	7076	0	538.90	55.50	****	27.00	100	**
18	15	30MAY74	7090	0	323.30	0.0	****	10.00	240	210
19	15	13JUN74	7104	0	790.80	0.0	****	30.50	440	1480
20	15	26JUN74	7117	0	158.30	0.0	****	6.00	**	**
21	15	11JUL74	7132	0	1150.40	59.80	****	39.00	180	100
60	15	26MAR75	7390	0	632.80	29.90	****	28.50	100	100
63	15	09APR75	7404	0	471.90	21.50	****	22.50	740	320

SAGINAW STREAM CHEMISTRY : SHEDRON RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	16	16AUG73	6803	0	****	474.50	****	****	**	**
2	16	11SEP73	6829	0	14.80	685.60	****	****	1100	**
13	16	07MAR74	7006	0	480.00	68.60	****	17.00	100	250
14	16	29MAR74	7028	0	549.00	71.50	****	9.00	100	100
15	16	18APR74	7048	0	193.00	43.30	****	9.00	100	100
17	16	16MAY74	7076	0	238.80	58.60	****	11.00	100	**
18	16	30MAY74	7090	0	248.00	82.20	****	3.00	**	**
19	16	13JUN74	7104	0	109.30	0.0	****	41.00	510	330
20	16	26JUN74	7117	0	15.50	0.0	****	3.00	**	**

SAGINAW STREAM CHEMISTRY : MUD CREEK

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	17	16AUG73	6803	0	****	711.60	****	****	900	**
2	17	11SEP73	6829	0	369.00	901.00	****	****	2200	**
3	17	21SEP73	6839	0	49.60	565.60	****	****	1400	**
4	17	05OCT73	6853	0	33.60	1419.60	****	****	800	**
5	17	18OCT73	6865	0	695.80	104.60	****	****	**	**
13	17	07MAR74	7006	0	395.20	54.60	****	16.00	300	750
14	17	29MAR74	7028	0	309.70	71.60	****	8.00	500	2000
15	17	18APR74	7048	0	1162.20	59.70	****	28.00	100	4000
17	17	16MAY74	7076	0	422.20	79.00	****	17.00	100	**
18	17	30MAY74	7090	0	770.40	15.10	****	24.00	160	**
19	17	13JUN74	7104	0	995.00	0.0	****	26.00	780	600
20	17	26JUN74	7117	0	808.40	0.0	****	15.00	**	**
63	17	09APR75	7404	0	179.80	29.70	****	7.50	100	400

SAGINAW STREAM CHEMISTRY : PIGEON RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	18	16AUG73	6803	0	18.10	1036.30	****	****	**	**
2	18	11SEP73	6829	0	0.0	644.50	****	****	2300	**
3	18	21SEP73	6839	0	34.80	220.40	****	****	300	**
4	18	05OCT73	6853	0	36.90	500.40	****	****	400	**
5	18	18OCT73	6865	0	367.20	99.90	****	****	1000	440
6	18	02NOV73	6881	0	347.70	126.80	****	****	1400	1040
13	18	07MAR74	7006	0	1667.90	78.10	****	53.00	100	250
14	18	29MAR74	7028	0	695.30	31.00	****	13.00	100	100
15	18	18APR74	7048	0	676.70	43.30	****	21.00	140	140
16	18	02MAY74	7062	0	316.90	31.80	****	10.00	180	350
17	18	16MAY74	7076	0	657.80	35.60	****	24.00	100	**
18	18	30MAY74	7090	0	517.60	1.60	****	12.00	120	100
19	18	13JUN74	7104	0	1233.00	0.0	****	35.00	660	820
20	18	26JUN74	7117	0	970.80	0.0	****	14.00	**	**
21	18	11JUL74	7132	0	922.70	61.40	****	25.00	350	1650
60	18	26MAR75	7390	0	1160.90	61.30	****	37.00	100	100
63	18	09APR75	7404	0	391.20	24.90	****	15.50	120	100

SAGINAW STREAM CHEMISTRY : PINNEBOG RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
1	19	16AUG73	6803	0	33.60	157.20	****	****	**	**

SAGINAW STREAM CHEMISTRY : SAGINAW RIVER UPSTREAM

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
2	20	18SEP73	6832	0	9.90	449.60	****	****	800	**
3	20	20SEP73	6838	0	19.90	577.80	****	****	3700	**
4	20	08OCT73	6852	0	31.10	718.70	****	****	1400	**
5	20	18OCT73	6866	0	560.10	106.10	****	****	1000	150
6	20	01NOV73	6880	0	889.30	145.70	****	****	3600	3200
7	20	15NOV73	6894	0	471.00	148.10	****	2.50	3600	6800
8	20	29NOV73	6908	0	1306.10	121.60	****	38.00	2200	4400
11	20	01FEB74	6972	0	1522.60	161.80	39.30	63.00	1400	1600
12	20	21FEB74	6992	0	293.90	54.90	14.00	12.00	800	2400
13	20	07MAR74	7006	0	2011.10	****	68.80	57.00	600	2800
14	20	28MAR74	7027	0	900.50	99.70	7.80	7.50	100	400
15	20	17APR74	7047	0	676.70	43.30	49.85	51.00	950	500
16	20	01MAY74	7061	0	1445.50	88.80	48.45	54.00	1300	400
17	20	15MAY74	7075	0	1150.80	98.50	30.79	29.00	1600	**
18	20	29MAY74	7089	0	1121.40	36.30	33.25	22.00	1000	3300
19	20	13JUN74	7104	0	888.40	13.80	22.60	22.00	3100	800
20	20	25JUN74	7116	0	748.90	14.40	30.07	16.00	**	**
21	20	11JUL74	7132	0	951.50	78.80	31.29	25.00	1500	100
22	20	23JUL74	7144	0	629.20	76.70	29.60	****	3000	1200
23	20	07AUG74	7159	0	300.50	62.10	17.95	10.00	350	350
24	20	13AUG74	7165	0	367.30	63.50	42.00	11.00	**	**
25	20	16AUG74	7168	0	506.90	67.80	****	22.00	**	**
26	20	21AUG74	7173	0	506.60	70.80	26.07	16.00	5400	200
27	20	29AUG74	7181	0	502.50	71.60	44.00	18.00	**	**
28	20	05SEP74	7188	0	389.50	70.50	19.00	11.00	**	**
29	20	10SEP74	7193	0	462.80	63.50	44.00	12.00	**	**
30	20	16SEP74	7199	0	547.40	70.60	31.00	15.00	**	**
31	20	02OCT74	7215	0	498.60	109.60	22.67	12.00	**	**
32	20	09OCT74	7222	0	532.40	110.60	27.00	12.50	1000	**
33	20	17OCT74	7220	0	870.40	115.40	28.00	14.00	1700	**
34	20	06NOV74	7250	0	501.60	139.80	40.68	13.00	3300	560
35	20	11NOV74	7255	0	684.70	109.10	28.75	16.00	**	**
36	20	15NOV74	7259	0	437.70	120.00	17.20	9.00	**	**
37	20	27NOV74	7271	0	332.20	101.10	12.80	8.00	200	240
38	20	02DEC74	7276	0	261.30	92.10	12.00	5.50	**	**
39	20	06DEC74	7280	0	332.90	122.00	10.20	7.00	100	220
40	20	10DEC74	7284	0	437.20	126.80	15.00	9.00	**	**
41	20	16DEC74	7290	0	219.80	50.90	8.60	7.00	150	**
42	20	19DEC74	7293	0	151.00	35.60	7.02	5.00	**	**
43	20	30DEC74	7304	0	155.10	32.70	14.00	4.50	**	**
44	20	06JAN75	7311	0	161.90	47.80	5.60	5.00	**	**
45	20	10JAN75	7315	0	1337.60	61.80	40.00	44.50	700	3100

46	20	14JAN75	7319	0	906.90	57.10	42.67	38.00	**	**
49	20	29JAN75	7338	0	296.10	39.60	13.80	13.50	**	**
50	20	05FEB75	7341	0	285.40	78.20	8.20	9.50	**	100
52	20	21FEB75	7357	0	204.60	83.50	9.40	7.50	**	**
53	20	26FEB75	7362	0	2803.20	67.00	13.10	95.00	3850	1300
54	20	03MAR75	7367	0	661.90	385.80	17.90	20.00	**	**
55	20	06MAR75	7370	0	313.90	62.60	13.10	12.50	1600	100
56	20	10MAR75	7374	0	307.20	40.50	13.00	11.50	200	100
57	20	14MAR75	7378	0	317.20	****	****	11.00	**	**
58	20	18MAR75	7382	0	525.40	53.90	****	20.00	600	200
59	20	21MAR75	7385	0	861.80	89.50	****	25.00	1100	**
60	20	26MAR75	7390	0	3083.30	89.20	****	77.00	320	830
61	20	31MAR75	7395	0	581.00	63.20	****	22.00	100	100
63	20	09APR75	7403	0	496.70	48.50	****	18.00	700	200
64	20	14APR75	7409	0	605.70	32.60	****	25.00	**	**
65	20	18APR75	7411	0	711.60	335.50	****	29.00	**	**
66	20	21APR75	7416	0	6628.50	62.90	****	205.00	**	**
67	20	28APR75	7419	0	2253.70	36.00	****	78.00	3100	2800
68	20	30APR75	7425	0	1223.50	85.20	76.00	44.00	**	**
69	20	13MAY75	7438	0	836.60	29.60	45.40	28.00	**	**
70	20	16MAY75	7441	0	470.00	34.70	24.40	15.00	2200	100
71	20	21MAY75	7446	0	324.50	28.50	23.80	12.00	**	**
72	20	27MAY75	7452	0	449.30	41.80	26.40	21.00	1800	800
73	20	04JUN75	7460	0	589.50	27.00	40.30	25.00	3000	2300
74	20	11JUN75	7472	0	843.50	33.10	41.00	30.50	**	**
75	20	16JUN75	7480	0	522.10	19.40	25.00	26.00	4600	2200
76	20	24JUN75	7480	0	309.70	24.40	29.20	18.50	900	800
77	20	26JUN75	7482	0	424.10	25.90	46.29	39.00	**	**
78	20	03JUN75	7489	0	419.00	21.00	39.20	24.00	**	**
79	20	24JUL75	7480	0	579.00	195.30	****	****	**	**
80	20	07AUG75	7486	0	454.60	157.40	****	****	**	**

SAGINAW STREAM CHEMISTRY : PINCONNING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
6	23	01NOV73	6880	0	355.00	126.80	****	****	100	270
7	23	15NOV73	6894	0	902.00	151.80	****	21.50	**	**
13	23	06MAR74	7005	0	942.90	187.00	****	37.00	120	100
14	23	28MAR74	7027	0	412.40	74.00	****	14.00	190	180
15	23	17APR74	7047	0	1427.90	126.70	****	23.00	100	200
17	23	15MAY74	7075	0	2310.80	70.20	****	85.00	**	**
18	23	29MAY74	7089	0	841.20	11.20	****	7.00	260	**
19	23	12JUN74	7103	0	1115.20	42.50	****	35.00	**	**
20	23	25JUN74	7116	0	207.80	18.20	****	5.00	**	**

SAGINAW STREAM CHEMISTRY : SAGANING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
13	24	06MAR74	7005	0	854.50	103.30	****	24.00	100	100
14	24	28MAR74	7027	0	134.60	240.90	****	5.00	100	100
15	24	17APR74	7047	0	409.00	155.60	****	14.00	100	100
17	24	15MAY74	7075	0	1693.60	145.50	****	48.00	**	**
18	24	29MAY74	7089	0	466.70	99.80	****	8.00	190	230
19	24	12JUN74	7103	0	735.00	141.70	****	15.00	**	**
60	24	26MAR75	7390	0	279.90	94.80	****	10.00	100	100
63	24	09APR75	7404	0	252.40	113.30	****	8.00	150	100

SAGINAW STREAM CHEMISTRY : DRAINAGE DITCH

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
15	31	17APR74	7047	0	1998.60	7.20	****	****	**	**
17	31	15MAY74	7075	0	1065.60	62.30	****	****	**	**
18	31	29MAY74	7089	0	1553.80	0.0	****	****	**	**

SAGINAW STREAM CHEMISTRY : DRAINAGE DITCH

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
17	32	16MAY74	7076	0	483.20	38.00	****	****	**	**
18	32	30MAY74	7090	0	140.60	0.0	****	****	**	**

SAGINAW STREAM CHEMISTRY : DRAINAGE DITCH

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
15	33	18APR74	7048	0	191.80	53.20	****	****	**	**
14	33	11JUN74	7104	0	77.50	0.0	****	****	**	**

APPENDIX 3

SAGINAW STREAM CHLOROPHYL A : CASS RIVER

CRD	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	1	15AUG73	6802	0	9.206
2	1	10SEP73	6827	0	58.930
3	1	20SEP73	6837	0	23.769
4	1	08OCT73	6852	0	43.613
5	1	17OCT73	6865	0	20.868
6	1	01NOV73	6879	0	36.594
7	1	15NOV73	6893	0	18.287
8	1	29NOV73	6908	0	3.996
10	1	08JAN74	6948	0	0.398
12	1	21FEB74	6992	0	0.189
13	1	06MAR74	7005	0	0.933
14	1	28MAR74	7027	0	1.917
15	1	17APR74	7047	0	1.174
16	1	01MAY74	7061	0	12.568
17	1	15MAY74	7075	0	2.815
18	1	29MAY74	7089	0	7.148
19	1	13JUN74	7104	0	12.041
20	1	25JUN74	7116	0	17.881
21	1	10JUL74	7131	0	46.047
22	1	23JUL74	7144	0	17.595
23	1	07AUG74	7159	0	45.438
24	1	13AUG74	7165	0	75.497
25	1	16AUG74	7168	0	23.956
26	1	21AUG74	7173	0	1.166
27	1	29AUG74	7181	0	30.515
28	1	05SEP74	7188	0	39.331
29	1	10SEP74	7193	0	99.356
30	1	16SEP74	7199	0	39.783
31	1	02OCT74	7215	0	18.833
32	1	09OCT74	7222	0	34.810
33	1	17OCT74	7230	0	10.386
34	1	06NOV74	7250	0	11.840
35	1	11NOV74	7255	0	24.718
36	1	15NOV74	7259	0	11.840
37	1	27NOV74	7271	0	2.149
38	1	02DEC74	7276	0	1.794
41	1	16DEC74	7290	0	0.809
42	1	19DEC74	7293	0	1.077
43	1	30DEC74	7304	0	1.231
45	1	10JAN75	7315	0	2.589
46	1	14JAN75	7319	0	1.607
47	1	17JAN75	7322	0	1.299
49	1	29JAN75	7334	0	0.621
50	1	05FEB75	7341	0	0.929
51	1	14FEB75	7350	0	0.507
52	1	21FEB75	7357	0	0.553
53	1	26FEB75	7362	0	2.014
54	1	03MAR75	7367	0	0.758
55	1	06MAR75	7370	0	0.712
56	1	10MAR75	7374	0	0.570
57	1	14MAR75	7378	0	0.678
58	1	18MAR75	7382	0	1.664
59	1	21MAR75	7385	0	1.675
60	1	26MAR75	7390	0	1.641
61	1	31MAR75	7395	0	0.718
63	1	09APR75	7404	0	1.134
64	1	14APR75	7409	0	1.852
65	1	18APR75	7413	0	2.200
66	1	21APR75	7416	0	2.064
67	1	24APR75	7419	0	2.572
68	1	30APR75	7415	0	3.185
69	1	13MAY75	7438	0	10.663
70	1	16MAY75	7441	0	3.739
71	1	21MAY75	7446	0	13.155
72	1	27MAY75	7452	0	3.808
73	1	04JUN75	7461	0	6.785
74	1	11JUN75	7467	0	0.598
75	1	16JUN75	7472	0	6.301
76	1	24JUN75	7480	0	10.940
77	1	26JUN75	7482	0	17.725
78	1	03JUL75	7489	0	33.002
79	1	24JUL75	7510	0	24.864
80	1	07AUG75	7524	0	23.738

SAGINAW STREAM CHLOROPHYL A : TITTABAWASSEE RIVER

CRD	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	2	15AUG73	6802	0	32.871
2	2	10SEP73	6827	0	9.557
3	2	20SEP73	6837	0	5.821
4	2	08OCT73	6852	0	13.819
5	2	17OCT73	6865	0	3.729
6	2	01NOV73	6879	0	9.266
7	2	15NOV73	6893	0	2.273
8	2	29NOV73	6908	0	5.464
10	2	08JAN74	6948	0	0.977
11	2	31JAN74	6971	0	1.580
12	2	21FEB74	6992	0	0.329
13	2	04MAR74	7005	0	1.460
14	2	20MAR74	7021	0	0.967
15	2	17APR74	7047	0	1.787
16	2	01MAY74	7061	0	11.447
17	2	15MAY74	7075	0	3.597
18	2	29MAY74	7089	0	11.809
19	2	13JUN74	7103	0	8.034
20	2	25JUN74	7116	0	7.646
21	2	10JUL74	7131	0	37.192
22	2	23JUL74	7144	0	11.017
23	2	07AUG74	7159	0	16.132
24	2	13AUG74	7165	0	82.731
25	2	16AUG74	7168	0	51.537
27	2	29AUG74	7181	0	25.995
28	2	05SEP74	7188	0	31.194
29	2	10SEP74	7193	0	22.378
30	2	16SEP74	7199	0	10.455
31	2	02OCT74	7215	0	7.685
32	2	09OCT74	7222	0	5.470
33	2	17OCT74	7230	0	7.339
34	2	05NOV74	7250	0	3.670
35	2	11NOV74	7255	0	2.977
36	2	15NOV74	7259	0	4.293
37	2	27NOV74	7271	0	5.747
38	2	02DEC74	7276	0	2.673
39	2	06DEC74	7280	0	5.816
40	2	10DEC74	7284	0	1.895
41	2	16DEC74	7290	0	2.470
43	2	30DEC74	7304	0	5.124
44	2	06JAN75	7311	0	3.232
45	2	10JAN75	7315	0	6.370
46	2	14JAN75	7319	0	1.963
47	2	17JAN75	7322	0	1.151
48	2	22JAN75	7327	0	1.162
49	2	29JAN75	7344	0	1.692
50	2	05FEB75	7341	0	2.893
51	2	14FEB75	7350	0	2.741
52	2	21FEB75	7357	0	3.875
53	2	26FEB75	7362	0	7.347
54	2	03MAR75	7367	0	1.924
55	2	06MAR75	7370	0	2.724
56	2	10MAR75	7374	0	2.040
57	2	14MAR75	7378	0	1.980
58	2	18MAR75	7382	0	3.147
59	2	21MAR75	7385	0	1.794
60	2	26MAR75	7390	0	2.640
61	2	31MAR75	7395	0	1.812
63	2	04APR75	7404	0	1.523
64	2	14APR75	7409	0	2.335
65	2	16APR75	7413	0	4.501
66	2	21APR75	7416	0	4.639
67	2	24APR75	7419	0	7.201
68	2	30APR75	7415	0	7.270
69	2	14MAY75	7438	0	12.255
70	2	16MAY75	7441	0	11.563
71	2	21MAY75	7446	0	14.955
72	2	27MAY75	7452	0	23.738
73	2	04JUN75	7461	0	10.593
74	2	11JUN75	7467	0	9.278
75	2	16JUN75	7472	0	6.508
76	2	24JUN75	7480	0	10.109
77	2	26JUN75	7482	0	11.493
78	2	03JUL75	7489	0	35.488
79	2	24JUL75	7510	0	16.049
80	2	07AUG75	7524	0	48.599

SAGINAW STREAM CHLOROPHYL A : SHIAWASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	3	15AUG73	6802	0	39.524
2	3	10SEP73	6827	0	15.874
3	3	20SEP73	6837	0	15.838
4	3	04OCT73	6852	0	94.159
5	3	17OCT73	6865	0	****
6	3	01NOV73	6879	0	6.771
7	3	15NOV73	6893	0	1.242
8	3	29NOV73	6908	0	11.523
9	3	19DEC73	6928	0	1.004
10	3	08JAN74	6948	0	0.400
11	3	31JAN74	6971	0	0.653
12	3	06MAR74	7005	0	1.806
14	3	28MAR74	7027	0	0.702
15	3	17APR74	7047	0	2.920
16	3	01MAY74	7061	0	10.826
17	3	15MAY74	7075	0	16.556
18	3	29MAY74	7089	0	3.131
19	3	13JUN74	7104	0	4.861
20	3	25JUN74	7116	0	3.853
21	3	10JUL74	7131	0	49.810
22	3	23JUL74	7144	0	14.539
23	3	07AUG74	7159	0	****
24	3	13AUG74	7165	0	92.224
25	3	16AUG74	7168	0	****
26	3	21AUG74	7173	0	70.439
27	3	29AUG74	7181	0	21.248
28	3	05SEP74	7188	0	5.331
29	3	10SEP74	7193	0	27.351
30	3	16SEP74	7199	0	8.862
31	3	02OCT74	7215	0	3.046
32	3	09OCT74	7222	0	1.726
33	3	17OCT74	7230	0	1.540
34	3	06NOV74	7250	0	4.223
35	3	11NOV74	7255	0	8.447
36	3	15NOV74	7259	0	2.562
37	3	27NOV74	7271	0	1.379
38	3	02DEC74	7276	0	1.082
39	3	06DEC74	7280	0	2.149
40	3	10DEC74	7284	0	0.832
41	3	16DEC74	7290	0	1.692
43	3	30DEC74	7308	0	2.504
44	3	06JAN75	7311	0	3.808
45	3	10JAN75	7315	0	8.932
46	3	14JAN75	7319	0	1.515
47	3	17JAN75	7322	0	0.746
48	3	22JAN75	7327	0	0.581
49	3	29JAN75	7344	0	0.815
50	3	05FEB75	7341	0	1.527
51	3	14FEB75	7350	0	0.547
52	3	21FEB75	7357	0	1.362
53	3	26FEB75	7362	0	2.843
54	3	03MAR75	7367	0	1.726
55	3	06MAR75	7370	0	2.470
56	3	10MAR75	7374	0	1.794
57	3	14MAR75	7378	0	1.601
58	3	18MAR75	7382	0	2.437
59	3	21MAR75	7385	0	2.876
60	3	26MAR75	7390	0	2.876
61	3	31MAR75	7395	0	1.506
63	3	09APR75	7404	0	3.486
64	3	14APR75	7409	0	3.909
65	3	18APR75	7413	0	7.685
66	3	21APR75	7416	0	6.578
67	3	24APR75	7419	0	4.500
68	3	30APR75	7415	0	5.331
69	3	13MAY75	7438	0	8.378
70	3	16MAY75	7441	0	4.639
71	3	21MAY75	7446	0	9.070
72	3	27MAY75	7452	0	6.231
73	3	04JUN75	7461	0	3.670
74	3	11JUN75	7467	0	2.115
75	3	16JUN75	7472	0	4.085
76	3	24JUN75	7480	0	15.480
77	3	26JUN75	7482	0	2.700
78	3	03JUL75	7489	0	4.602
79	3	24JUL75	7510	0	12.047
80	3	07AUG75	7524	0	9.347

SAGINAW STREAM CHLOROPHYL A : FLINT RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	4	15AUG73	6802	0	5.022
2	4	10SEP73	6827	0	7.048
3	4	20SEP73	6837	0	7.682
4	4	04OCT73	6852	0	10.788
5	4	17OCT73	6865	0	2.268
6	4	01NOV73	6879	0	14.453
7	4	15NOV73	6893	0	0.985
8	4	29NOV73	6909	0	13.485
9	4	19DEC73	6928	0	1.806
10	4	08JAN74	6948	0	0.470
11	4	31JAN74	6971	0	0.718
12	4	21FEB74	6992	0	1.761
13	4	06MAR74	7005	0	1.686
14	4	28MAR74	7027	0	2.106
15	4	17APR74	7047	0	3.793
16	4	01MAY74	7061	0	29.801
17	4	15MAY74	7075	0	7.225
18	4	29MAY74	7089	0	15.307
19	4	13JUN74	7103	0	19.867
20	4	25JUN74	7116	0	3.492
21	4	10JUL74	7131	0	16.161
22	4	23JUL74	7144	0	22.230
23	4	07AUG74	7159	0	23.472
24	4	13AUG74	7165	0	22.987
25	4	16AUG74	7168	0	85.895
26	4	21AUG74	7173	0	3.913
27	4	29AUG74	7181	0	5.401
28	4	05SEP74	7188	0	6.993
29	4	10SEP74	7193	0	10.455
30	4	16SEP74	7199	0	4.570
31	4	02OCT74	7215	0	2.403
32	4	09OCT74	7222	0	2.555
33	4	17OCT74	7230	0	1.827
34	4	06NOV74	7250	0	32.098
35	4	11NOV74	7255	0	3.116
36	4	15NOV74	7259	0	5.816
37	4	27NOV74	7271	0	3.266
38	4	02DEC74	7276	0	3.367
39	4	06DEC74	7280	0	10.801
40	4	10DEC74	7284	0	12.532
41	4	16DEC74	7290	0	9.070
42	4	19DEC74	7293	0	10.524
43	4	30DEC74	7304	0	5.885
44	4	06JAN75	7311	0	10.524
45	4	10JAN75	7315	0	11.216
46	4	14JAN75	7319	0	5.124
49	4	29JAN75	7344	0	1.698
50	4	05FEB75	7341	0	1.544
51	4	14FEB75	7350	0	0.678
52	4	21FEB75	7357	0	1.316
53	4	26FEB75	7362	0	2.640
54	4	03MAR75	7367	0	2.758
55	4	06MAR75	7370	0	1.800
56	4	10MAR75	7374	0	1.320
57	4	14MAR75	7378	0	1.242
58	4	18MAR75	7382	0	1.960
59	4	21MAR75	7385	0	2.386
60	4	26MAR75	7390	0	3.130
61	4	31MAR75	7395	0	1.709
63	4	09APR75	7404	0	2.504
64	4	14APR75	7409	0	2.843
65	4	18APR75	7413	0	7.755
66	4	21APR75	7416	0	5.193
67	4	24APR75	7419	0	6.785
68	4	30APR75	7415	0	5.747
69	4	13MAY75	7438	0	12.601
70	4	16MAY75	7441	0	5.954
71	4	21MAY75	7446	0	8.101
72	4	27MAY75	7452	0	11.563
73	4	04JUN75	7461	0	10.109
74	4	11JUN75	7467	0	8.309
75	4	16JUN75	7472	0	10.386
76	4	24JUN75	7480	0	7.339
77	4	26JUN75	7482	0	9.139
78	4	03JUL75	7489	0	7.755
79	4	24JUL75	7510	0	10.306
80	4	07AUG75	7524	0	3.947

SAGINAW STREAM CHLOROPHYL A : KANKAKLIN RIVER

CHU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	5	15AUG73	6802	0	4.888
2	5	10SEP73	6827	0	14.136
3	5	20SEP73	6837	0	8.038
4	5	04OCT73	6852	0	17.462
5	5	17OCT73	6865	0	21.317
6	5	01NOV73	6879	0	5.504
7	5	15NOV73	6893	0	13.004
8	5	29NOV73	6908	0	2.775
13	5	05MAR74	7005	0	1.328
14	5	28MAR74	7027	0	0.778
15	5	17APR74	7047	0	1.896
16	5	01MAY74	7061	0	60.550
17	5	15MAY74	7075	0	11.198
18	5	29MAY74	7089	0	32.781
19	5	13JUN74	7104	0	2.393
20	5	25JUN74	7116	0	20.590
21	5	10JUL74	7131	0	19.642
22	5	23JUL74	7144	0	24.338
23	5	07AUG74	7159	0	48.599
24	5	13AUG74	7165	0	9.832
25	5	16AUG74	7168	0	11.216
26	5	21AUG74	7173	0	7.827
28	5	05SEP74	7188	0	11.840
29	5	10SEP74	7193	0	8.724
30	5	16SEP74	7199	0	20.633
31	5	02OCT74	7215	0	16.617
32	5	09OCT74	7222	0	19.110
33	5	17OCT74	7230	0	22.433
34	5	06NOV74	7250	0	20.771
35	5	11NOV74	7255	0	38.201
36	5	15NOV74	7259	0	22.018
37	5	27NOV74	7271	0	29.159
38	5	02DEC74	7276	0	28.481
39	5	06DEC74	7280	0	25.826
41	5	16DEC74	7290	0	11.840
42	5	19DEC74	7293	0	7.270
43	5	30DEC74	7304	0	6.993
45	5	10JAN75	7315	0	3.147
48	5	22JAN75	7327	0	1.327
49	5	29JAN75	7334	0	0.872
50	5	05FEB75	7341	0	0.342
51	5	14FEB75	7350	0	0.507
52	5	21FEB75	7357	0	0.849
53	5	26FEB75	7362	0	1.827
54	5	03MAR75	7367	0	0.798
55	5	06MAR75	7370	0	1.430
56	5	10MAR75	7374	0	1.003
57	5	14MAR75	7378	0	0.872
58	5	18MAR75	7382	0	1.441
59	5	21MAR75	7385	0	3.063
60	5	26MAR75	7390	0	1.179
61	5	31MAR75	7395	0	1.447
62	5	04APR75	7399	0	0.974
63	5	09APR75	7404	0	1.980
64	5	14APR75	7409	0	1.794
65	5	18APR75	7413	0	10.524
66	5	21APR75	7416	0	5.262
67	5	28APR75	7419	0	4.431
68	5	30APR75	7415	0	9.555
69	5	13MAY75	7438	0	12.740
70	5	16MAY75	7441	0	8.032
71	5	21MAY75	7446	0	14.401
72	5	27MAY75	7452	0	15.145
73	5	04JUN75	7461	0	14.540
74	5	11JUN75	7467	0	6.162
75	5	16JUN75	7472	0	12.809
76	5	24JUN75	7480	0	2.493
77	5	26JUN75	7482	0	28.029
78	5	03JUL75	7489	0	7.962
79	5	24JUL75	7510	0	5.262
80	5	07AUG75	7524	0	5.885

SAGINAW STREAM CHLOROPHYL A : PINE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	5	15AUG73	6802	0	5.193
4	6	04OCT73	6852	0	7.257
5	5	01NOV73	6879	0	4.435
13	6	06MAR74	7005	0	0.605
14	6	28MAR74	7027	0	0.518
15	6	17APR74	7047	0	0.891
16	6	01MAY74	7061	0	13.958
17	6	15MAY74	7075	0	3.369
18	6	29MAY74	7089	0	5.734
19	6	13JUN74	7104	0	1.942
20	6	25JUN74	7116	0	2.709
60	6	26MAR75	7390	0	0.780
61	6	09APR75	7404	0	0.889

SAGINAW STREAM CHLOROPHYL A : RIFLE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	7	15AUG73	6802	0	0.688
2	7	10SEP73	6827	0	1.728
3	7	20SEP73	6837	0	6.058
4	7	04OCT73	6852	0	53.239
5	7	17OCT73	6865	0	9.557
6	7	02NOV73	6880	0	1.825
7	7	15NOV73	6893	0	1.626
15	7	17APR74	7047	0	1.010
16	7	01MAY74	7061	0	2.604
17	7	15MAY74	7075	0	2.047
18	7	29MAY74	7089	0	2.318
19	7	13JUN74	7104	0	2.754
20	7	25JUN74	7116	0	1.204
21	7	10JUL74	7131	0	3.853
60	7	26MAR75	7390	0	2.724
61	7	09APR75	7404	0	1.438

SAGINAW STREAM CHLOROPHYL A : BIG CREEK

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	8	15AUG73	6802	0	3.037
17	8	15MAY74	7075	0	5.139
18	8	29MAY74	7089	0	1.800
19	8	13JUN74	7104	0	0.950
60	8	26MAR75	7390	0	0.387

SAGINAW STREAM CHLOROPHYL A : AU GRES RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	9	15AUG73	6802	0	4.835
2	9	10SEP73	6827	0	14.453
3	9	20SEP73	6837	0	0.367
4	9	04OCT73	6852	0	2.232
5	9	17OCT73	6865	0	1.055
6	9	01NOV73	6879	0	1.023
7	9	15NOV73	6893	0	0.686
13	9	06MAR74	7005	0	0.729
14	9	28MAR74	7027	0	2.739
15	9	17APR74	7047	0	0.929
16	9	01MAY74	7061	0	2.182
17	9	15MAY74	7075	0	4.666
18	9	29MAY74	7089	0	3.311
19	9	13JUN74	7104	0	2.002
20	9	25JUN74	7116	0	0.643
21	9	10JUL74	7131	0	1.806
60	9	26MAR75	7390	0	1.384
61	9	09APR75	7404	0	0.986

SAGINAW STREAM CHLOROPHYL A : TAWAS RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	10	19AUG73	6802	0	27.197
2	10	10SEP73	6827	0	0.672
3	10	20SEP73	6837	0	1.152
4	10	05OCT73	6853	0	3.499
5	10	17OCT73	6865	0	2.433
6	10	01NOV73	6879	0	2.117
7	10	15NOV73	6893	0	0.799
14	10	26MAR74	7027	0	1.290
15	10	17APR74	7047	0	2.241
16	10	01MAY74	7061	0	2.408
17	10	15MAY74	7075	0	3.025
18	10	29MAY74	7089	0	2.137
19	10	13JUN74	7104	0	1.309
20	10	25JUN74	7116	0	1.851
21	10	10JUL74	7131	0	2.258
60	10	26MAR75	7390	0	1.117
63	10	09APR75	7404	0	1.288

SAGINAW STREAM CHLOROPHYL A : EAST AU GRES RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	11	19AUG73	6801	0	1.021
2	11	10SEP73	6827	0	1.371
3	11	20SEP73	6837	0	0.653
4	11	04OCT73	6852	0	1.224
5	11	17OCT73	6865	0	0.590
6	11	01NOV73	6879	0	1.194
7	11	15NOV73	6893	0	0.961
13	11	06MAR74	7005	0	2.077
14	11	26MAR74	7027	0	0.572
15	11	17APR74	7047	0	1.242
16	11	01MAY74	7061	0	1.371
17	11	15MAY74	7075	0	2.589
18	11	29MAY74	7089	0	1.296
19	11	13JUN74	7104	0	2.589
20	11	25JUN74	7116	0	0.324
21	11	10JUL74	7131	0	1.193
60	11	26MAR75	7390	0	0.877
63	11	09APR75	7404	0	0.513

SAGINAW STREAM CHLOROPHYL A : SAGINAW RIVER

CRN	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	12A	16AUG73	6803	0	51.888
2	12A	11SEP73	6828	0	30.403
3	12A	20SEP73	6837	0	36.811
4	12A	04OCT73	6852	0	73.275
5	12A	17OCT73	6865	0	20.093
6	12A	01NOV73	6879	0	11.305
7	12A	15NOV73	6893	0	11.495
8	12A	29NOV73	6908	0	18.374
9	12A	19DEC73	6928	0	3.462
10	12A	08JAN74	6948	0	0.562
11	12A	31JAN74	6971	0	0.908
12	12A	21FEB74	6992	0	0.286
13	12A	06MAR74	7005	0	3.658
14	12A	28MAR74	7027	0	2.198
15	12A	17APR74	7047	0	4.267
16	12A	01MAY74	7061	0	14.298
17	12A	15MAY74	7075	0	10.988
18	12A	29MAY74	7089	0	25.466
19	12A	13JUN74	7104	0	14.028
20	12A	25JUN74	7116	0	17.429
21	12A	10JUL74	7131	0	64.311
22	12A	23JUL74	7144	0	18.219
23	12A	07AUG74	7159	0	32.211
24	12A	13AUG74	7165	0	8.204
25	12A	16AUG74	7168	0	42.608
26	12A	21AUG74	7173	0	38.091
27	12A	29AUG74	7181	0	****
27	12A	29AUG74	7181	0	****
29	12A	10SEP74	7193	0	75.815
30	12A	16SEP74	7199	0	32.662
31	12A	02OCT74	7215	0	24.638
32	12A	09OCT74	7222	0	17.482
33	12A	17OCT74	7230	0	16.686
34	12A	06NOV74	7250	0	4.085
35	12A	11NOV74	7255	0	9.278
36	12A	15NOV74	7259	0	17.864
37	12A	27NOV74	7271	0	9.104
38	12A	02DEC74	7276	0	5.055
39	12A	06DEC74	7280	0	6.716
40	12A	10DEC74	7284	0	2.961
41	12A	16DEC74	7290	0	3.156
42	12A	19DEC74	7293	0	6.128
43	12A	30DEC74	7304	0	5.816
44	12A	06JAN75	7311	0	15.024
45	12A	10JAN75	7315	0	2.445
46	12A	14JAN75	7319	0	2.225
47	12A	17JAN75	7322	0	1.527
48	12A	22JAN75	7327	0	1.245
49	12A	29JAN75	7334	0	1.231
50	12A	05FEB75	7341	0	1.339
51	12A	14FEB75	7350	0	1.362
52	12A	21FEB75	7357	0	1.407
53	12A	26FEB75	7362	0	4.604
54	12A	03MAR75	7367	0	1.684
55	12A	06MAR75	7370	0	2.056
56	12A	10MAR75	7374	0	2.268
57	12A	14MAR75	7378	0	1.996
58	12A	19MAR75	7382	0	1.766
59	12A	21MAR75	7385	0	2.355
60	12A	26MAR75	7390	0	2.436
61	12A	31MAR75	7395	0	1.778
62	12A	04APR75	7399	0	1.701
63	12A	08APR75	7404	0	3.316
64	12A	14APR75	7409	0	2.378
65	12A	18APR75	7413	0	7.408
66	12A	21APR75	7416	0	6.682
67	12A	24APR75	7419	0	6.958
68	12A	30APR75	7415	0	8.966
69	12A	13MAY75	7438	0	15.024
70	12A	16MAY75	7441	0	4.431
71	12A	21MAY75	7446	0	17.306
72	12A	27MAY75	7452	0	13.619
73	12A	04JUN75	7461	0	13.709
74	12A	11JUN75	7467	0	10.282
75	12A	16JUN75	7472	0	13.016
76	12A	24JUN75	7480	0	10.178
77	12A	26JUN75	7482	0	6.750
78	12A	03JUL75	7489	0	9.605
79	12A	24JUL75	7510	0	14.990
80	12A	07AUG75	7524	0	24.525

SAGINAW STREAM CHLOROPHYL A : OWANICASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	14	16AUG73	6803	0	42.068
2	14	11SEP73	6828	0	27.141
3	14	21SEP73	6838	0	30.108
4	14	05OCT73	6853	0	63.520
5	14	18OCT73	6866	0	57.645
6	14	02NOV73	6880	0	18.250
7	14	16NOV73	6894	0	7.994
13	14	07MAR74	7006	0	3.070
14	14	29MAR74	7028	0	19.747
15	14	18APR74	7048	0	9.904
16	14	02MAY74	7062	0	35.520
17	14	16MAY74	7076	0	61.709
18	14	30MAY74	7090	0	42.128
19	14	14JUN74	7105	0	27.393
20	14	26JUN74	7117	0	30.749
21	14	11JUL74	7132	0	32.510
22	14	23JUL74	7144	0	54.184
23	14	07AUG74	7159	0	40.687
24	14	13AUG74	7165	0	47.468
25	14	16AUG74	7168	0	47.694
29	14	10SEP74	7193	0	35.262
30	14	14SEP74	7199	0	36.618
60	14	26MAR75	7390	0	6.370
61	14	09APR75	7404	0	4.907

SAGINAW STREAM CHLOROPHYL A : SEBEWAING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	15	15AUG73	6801	0	22.697
2	15	11SEP73	6828	0	29.460
3	15	21SEP73	6838	0	37.634
4	15	05OCT73	6853	0	77.272
5	15	18OCT73	6866	0	46.932
6	15	02NOV73	6880	0	28.868
7	15	16NOV73	6894	0	16.594
13	15	07MAR74	7006	0	0.027
14	15	29MAR74	7028	0	0.076
15	15	18APR74	7049	0	0.194
17	15	16MAY74	7076	0	2.589
18	15	30MAY74	7090	0	2.649
19	15	14JUN74	7105	0	2.498
20	15	26JUN74	7117	0	18.016
21	15	11JUL74	7132	0	7.465
60	15	26MAR75	7390	0	0.484
63	15	09APR75	7404	0	0.456

SAGINAW STREAM CHLOROPHYL A : SHIAWASSEE RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	16	16AUG73	6803	0	37.959
2	16	11SEP73	6828	0	17.538
13	16	07MAR74	7006	0	0.324
14	16	29MAR74	7028	0	0.162
15	16	18APR74	7048	0	0.945
17	16	16MAY74	7076	0	3.650
18	16	30MAY74	7090	0	1.550
19	16	14JUN74	7105	0	3.462
20	16	26JUN74	7117	0	0.853

SAGINAW STREAM CHLOROPHYL A : MUD CREEK

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	17	15AUG73	6802	0	2.349
2	17	11SEP73	6828	0	15.648
3	17	21SEP73	6838	0	19.276
4	17	05OCT73	6853	0	47.915
5	17	18OCT73	6866	0	9.661
13	17	07MAR74	7006	0	0.421
14	17	29MAR74	7028	0	0.286
15	17	18APR74	7048	0	0.248
17	17	16MAY74	7076	0	3.688
18	17	30MAY74	7090	0	3.763
19	17	14JUN74	7105	0	2.243
20	17	26JUN74	7117	0	0.632
63	17	09APR75	7404	0	1.715

SAGINAW STREAM CHLOROPHYL A : PIGEON RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	18	16AUG73	6803	0	8.775
2	19	11SEP73	6829	0	27.609
3	19	21SEP73	6839	0	19.751
4	18	05OCT73	6853	0	14.511
5	18	18OCT73	6865	0	10.378
6	18	02NOV73	6880	0	6.296
13	19	07MAR74	7006	0	0.605
14	18	29MAR74	7028	0	0.297
15	18	18APR74	7048	0	0.621
16	18	02MAY74	7062	0	1.911
17	18	16MAY74	7076	0	6.622
18	19	30MAY74	7090	0	2.333
19	18	14JUN74	7105	0	4.681
20	18	26JUN74	7117	0	21.613
21	18	11JUL74	7132	0	9.332
50	18	25MAR75	7390	0	1.185
61	18	09APR75	7404	0	1.134

SAGINAW STREAM CHLOROPHYL A : PINNEBOG RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	19	16AUG73	6803	0	9.603
7	19	15NOV73	6893	0	2.381

SAGINAW STREAM CHLOROPHYL A : SAGINAW RIVER UPSTREAM

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
3	20	20SEP73	6837	0	15.349
4	20	04OCT73	6852	0	29.481
5	20	17OCT73	6865	0	7.048
6	20	01NOV73	6879	0	17.073
7	20	15NOV73	6893	0	9.347
8	20	29NOV73	6909	0	9.665
11	20	31JAN74	6971	0	1.626
12	20	21FEB74	6992	0	0.351
13	20	06MAR74	7005	0	1.445
14	20	20MAR74	7027	0	1.938
15	20	17APR74	7047	0	1.976
16	20	01MAY74	7061	0	20.168
17	20	15MAY74	7075	0	7.385
18	20	29MAY74	7089	0	16.377
19	20	13JUN74	7104	0	10.295
20	20	25JUN74	7116	0	24.624
21	20	10JUL74	7131	0	70.620
22	20	23JUL74	7144	0	27.363
23	20	07AUG74	7159	0	47.694
24	20	13AUG74	7165	0	49.955
25	20	15AUG74	7168	0	43.626
26	20	21AUG74	7173	0	40.939
27	20	29AUG74	7181	0	36.392
28	20	05SEP74	7188	0	21.117
29	20	10SEP74	7193	0	30.515
30	20	16SEP74	7199	0	15.163
31	20	02OCT74	7215	0	9.832
32	20	09OCT74	7222	0	10.870
33	20	17OCT74	7230	0	12.601
34	20	06NOV74	7250	0	16.963
35	20	11NOV74	7255	0	10.316
36	20	15NOV74	7259	0	8.378
37	20	27NOV74	7271	0	4.570
38	20	02DEC74	7276	0	2.707
39	20	06DEC74	7280	0	3.790
40	20	10DEC74	7284	0	2.690
41	20	16DEC74	7290	0	3.418
42	20	19DEC74	7293	0	6.093
43	20	30DEC74	7304	0	5.054
44	20	06JAN75	7311	0	12.124
45	20	10JAN75	7315	0	5.262
46	20	14JAN75	7319	0	1.523
49	20	29JAN75	7334	0	1.458
50	20	05FEB75	7341	0	1.532
52	20	21FEB75	7357	0	2.741
53	20	26FEB75	7362	0	3.462
54	20	03MAR75	7367	0	1.269
55	20	06MAR75	7370	0	1.591
56	20	10MAR75	7374	0	1.419
57	20	14MAR75	7378	0	1.635
58	20	18MAR75	7382	0	1.880
59	20	21MAR75	7385	0	2.132
60	20	26MAR75	7390	0	2.098
61	20	31MAR75	7395	0	1.362
63	20	04APR75	7404	0	1.472
64	20	14APR75	7409	0	2.186
65	20	18APR75	7413	0	9.901
66	20	21APR75	7416	0	5.124
67	20	24APR75	7419	0	6.301
68	20	30APR75	7425	0	9.486
69	20	13MAY75	7438	0	11.355
70	20	16MAY75	7441	0	10.247
71	20	21MAY75	7446	0	16.486
72	20	27MAY75	7452	0	18.987
73	20	04JUN75	7461	0	13.432
74	20	11JUN75	7467	0	9.209
75	20	16JUN75	7472	0	14.609
76	20	24JUN75	7480	0	15.855
77	20	26JUN75	7482	0	12.809
78	20	03JUL75	7489	0	24.864
79	20	24JUL75	7510	0	18.833
80	20	07AUG75	7524	0	40.235

SAGINAW STREAM CHLOROPHYL A : PINCONNING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
6	23	01NOV73	6879	0	1.395
13	23	06MAR74	7005	0	0.437
14	23	20MAR74	7027	0	0.373
15	23	17APR74	7047	0	0.778
17	23	15MAY74	7075	0	3.703
18	23	29MAY74	7089	0	4.831
19	23	13JUN74	7104	0	0.891
20	23	25JUN74	7116	0	2.694

SAGINAW STREAM CHLOROPHYL A : SAGANING RIVER

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
13	24	06MAR74	7005	0	0.724
14	24	20MAR74	7027	0	0.351
15	24	17APR74	7047	0	0.319
17	24	15MAY74	7075	0	6.622
18	24	29MAY74	7089	0	0.826
19	24	13JUN74	7104	0	0.761
60	24	26MAR75	7390	0	0.399
63	24	09APR75	7404	0	1.185

APPENDIX 4

SAGINAW STREAM CHEMISTRY: MAX,AV,MIN,#OBS

	ALK (MEQ/L)	COND (MMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	FDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
STATION -- 1 CASS RIVER														
MAXIMUM	4.97	872.00	16.00	187.00	782.00	5214.10	121.70	494.87	764.80	458.68	206.00	5.13	8.40	27.00
AVERAGE	3.83	482.17	9.00	62.03	238.20	1169.95	26.99	111.45	218.69	103.19	55.65	1.79	7.99	10.39
MINIMUM	1.69	298.00	2.40	3.80	9.40	11.80	2.80	28.26	69.44	1.37	1.01	0.14	7.80	0.0
# OBSER	65	65	71	55	73	72	73	70	71	70	72	73	7	71
STATION -- 2 TITTABAWASSEE RIVER														
MAXIMUM	4.08	1395.00	14.20	327.00	1074.00	8986.20	44.90	438.76	634.51	195.74	166.24	4.46	8.50	27.00
AVERAGE	3.25	791.00	9.99	145.23	318.76	689.74	14.72	66.15	132.08	64.50	23.53	2.44	8.21	10.03
MINIMUM	2.12	330.00	2.60	10.97	21.40	2.10	0.60	21.42	41.08	9.36	1.01	0.61	7.90	0.0
# OBSER	69	66	74	77	77	76	77	74	76	74	75	76	7	76
STATION -- 3 SHIAWASSEE RIVER														
MAXIMUM	5.11	784.00	13.70	135.00	603.20	3530.40	66.60	962.35	1287.70	377.84	477.92	4.52	8.60	26.00
AVERAGE	4.13	564.35	9.79	54.95	182.73	829.85	19.56	203.32	309.15	96.33	123.05	2.17	8.20	9.82
MINIMUM	2.09	249.00	4.70	0.0	12.20	2.50	0.40	35.89	103.80	2.87	21.03	0.27	7.70	0.0
# OBSER	68	68	73	84	75	73	76	67	71	67	74	72	7	74
STATION -- 4 FLINT RIVER														
MAXIMUM	4.72	999.00	12.80	202.00	4857.00	6213.60	821.90	2065.90	2581.30	764.14	2148.99	4.21	8.20	27.00
AVERAGE	3.76	636.99	8.01	70.81	701.79	1666.71	114.09	569.99	787.32	195.81	505.75	2.23	7.86	10.27
MINIMUM	2.35	369.00	2.00	9.40	23.20	69.40	6.50	67.97	205.12	0.0	23.37	0.69	7.40	0.0
# OBSER	69	69	74	71	77	77	77	72	73	72	73	77	7	75
STATION -- 5 KAWKAWLIN RIVER														
MAXIMUM	5.48	1178.00	15.80	215.00	458.10	9798.10	97.00	171.18	760.23	611.58	139.79	3.39	8.30	26.00
AVERAGE	3.33	609.69	8.20	81.82	107.70	1083.62	16.93	58.63	144.63	83.44	25.87	1.62	8.03	10.12
MINIMUM	1.52	258.00	2.40	0.0	11.70	2.00	0.40	18.58	41.89	9.13	2.44	0.20	7.70	0.0
# OBSER	62	61	66	67	67	64	70	69	70	69	70	67	7	68
STATION -- 6 PINE RIVER														
MAXIMUM	4.00	790.00	13.80	167.00	1435.00	2640.10	66.20	763.17	770.66	191.10	419.89	5.87	8.30	24.00
AVERAGE	2.93	506.15	10.20	69.92	337.96	929.30	29.36	197.70	263.69	65.99	110.04	2.61	8.30	11.38
MINIMUM	1.23	206.00	5.60	16.00	35.20	65.60	5.90	47.82	93.24	3.65	29.63	0.90	8.30	0.0
# OBSER	13	13	13	12	13	11	13	12	12	12	13	13	1	13
STATION -- 7 RIFLE RIVER														
MAXIMUM	4.03	435.00	12.80	54.50	100.40	421.00	9.10	61.26	369.68	337.41	78.04	4.50	8.60	23.00
AVERAGE	3.25	370.81	9.98	19.36	29.03	180.75	2.49	22.32	80.79	62.20	14.11	1.22	8.60	13.67
MINIMUM	2.15	254.00	6.40	11.80	5.00	20.60	0.40	0.0	21.35	0.55	2.54	2.47	8.60	0.0
# OBSER	16	16	16	14	14	12	16	15	16	15	16	16	1	15

SAGINAW STREAM CHEMISTRY: MAX,AV,MIN,#OBS

	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
STATION -- 8 BIG CREEK														
MAXIMUM	3.80	581.00	11.20	11.70	139.40	1150.00	12.70	41.21	101.13	74.23	15.26	3.40	8.70	29.00
AVERAGE	2.75	478.50	9.24	9.96	83.32	642.05	8.07	29.48	64.03	39.03	10.58	2.72	8.70	15.83
MINIMUM	1.94	357.00	7.80	5.20	10.00	97.50	3.20	21.87	38.34	19.66	6.00	1.99	8.70	0.0
# OBSER	5	6	5	5	6	6	6	5	6	5	6	6	1	6
STATION -- 9 AU GRES RIVER														
MAXIMUM	4.37	900.00	13.10	72.20	173.80	2519.70	30.50	53.66	135.32	82.67	75.27	4.95	8.30	24.00
AVERAGE	3.61	636.69	9.08	39.03	57.23	602.52	8.38	23.96	64.31	40.35	14.19	3.10	8.30	13.06
MINIMUM	2.24	287.00	5.30	14.00	5.60	15.20	1.40	0.0	18.81	2.44	2.97	1.86	8.30	0.0
# OBSER	16	16	17	15	15	16	17	17	17	17	17	17	1	17
STATION -- 10 TAWAS RIVER														
MAXIMUM	3.90	345.00	13.10	50.80	220.50	320.00	13.90	101.26	323.82	224.16	176.95	2.34	7.80	24.00
AVERAGE	2.28	289.69	8.84	7.98	106.14	124.21	7.03	60.98	123.52	55.93	41.51	1.48	7.80	13.82
MINIMUM	1.37	159.00	4.10	2.20	29.00	11.70	3.10	22.00	40.55	10.24	16.85	0.45	7.80	0.0
# OBSER	17	16	17	16	17	18	17	16	17	16	18	18	1	17
STATION -- 11 EAST AU GRES RIVER														
MAXIMUM	3.54	524.00	12.50	48.60	135.10	570.00	14.00	62.30	251.74	194.13	167.37	4.53	8.60	22.00
AVERAGE	2.82	372.50	9.78	14.34	59.24	224.69	3.81	26.06	72.78	46.72	21.51	2.84	8.60	11.28
MINIMUM	2.03	223.00	4.90	3.80	11.00	3.60	0.90	0.0	17.73	1.04	3.19	1.55	8.60	0.0
# OBSER	18	18	18	15	17	17	18	16	16	16	18	18	1	18
STATION --12A SAGINAW RIVER														
MAXIMUM	4.31	1011.00	12.45	287.50	1253.25	3399.10	146.85	405.11	710.90	425.10	247.88	3.68	8.85	26.00
AVERAGE	3.46	705.28	8.67	107.17	489.62	1022.98	38.46	164.91	279.83	116.23	97.61	2.06	8.24	10.14
MINIMUM	1.94	251.00	2.85	8.00	140.55	183.70	10.55	54.78	110.81	4.73	24.27	0.43	7.95	0.0
# OBSER	72	72	78	78	80	80	80	79	80	79	80	79	7	78
STATION -- 14 QUINICASSEE RIVER														
MAXIMUM	3.78	741.00	16.20	78.40	157.60	8236.10	43.40	205.09	336.76	333.50	147.25	1.66	8.70	26.00
AVERAGE	2.68	456.50	9.39	46.15	40.46	1943.60	12.19	27.78	169.02	141.24	14.94	0.67	8.43	14.67
MINIMUM	0.98	270.00	5.20	11.00	3.10	1.40	0.20	0.0	65.53	46.72	1.60	0.02	8.10	1.00
# OBSER	23	24	24	24	22	16	24	24	24	24	24	21	3	24
STATION -- 15 SENEWAING RIVER														
MAXIMUM	4.55	779.00	13.20	87.20	957.40	10960.00	100.60	860.97	931.71	414.35	84.63	2.38	7.90	27.00
AVERAGE	3.59	601.00	9.58	54.96	161.62	4666.71	28.65	99.63	212.56	101.61	27.04	1.15	7.90	13.29
MINIMUM	2.45	0.0	4.60	12.80	21.10	50.50	2.40	7.14	41.08	18.06	1.40	0.47	7.90	1.00
# OBSER	16	17	17	16	17	16	17	16	17	16	17	16	1	17

SAGINAW STREAM CHEMISTRY: MAX,AV,MIN,#OBS

	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
STATION -- 16 SHEDDEN RIVER														
MAXIMUM	5.16	1050.00	13.50	99.80	863.80	9610.00	123.30	59.82	284.14	258.65	54.21	2.11	8.30	23.00
AVERAGE	4.27	812.22	11.29	56.27	168.80	5865.52	41.70	34.51	113.45	55.47	16.02	1.01	8.30	14.00
MINIMUM	2.48	440.00	5.20	36.60	6.70	7.30	0.60	18.88	28.04	6.29	3.00	0.04	8.30	3.00
# OBSER	9	9	9	9	7	8	9	7	8	7	9	9	1	9
STATION -- 17 MUD CREEK														
MAXIMUM	5.90	975.00	14.30	116.00	765.60	11690.00	429.70	223.34	497.15	497.15	119.71	3.15	8.20	25.00
AVERAGE	4.08	675.23	8.38	50.05	209.01	5667.16	64.21	106.16	210.87	103.11	44.90	1.43	8.20	13.54
MINIMUM	2.42	320.00	4.30	29.20	38.10	33.90	2.70	0.0	90.89	12.58	4.34	0.70	8.20	1.00
# OBSER	13	13	13	13	13	12	13	12	13	12	13	13	1	13
STATION -- 18 PIGEON RIVER														
MAXIMUM	5.14	861.00	12.60	71.50	1291.00	7674.10	122.30	226.50	269.80	269.80	81.99	2.15	8.20	26.00
AVERAGE	3.82	616.59	9.61	37.03	172.01	3902.38	28.22	64.42	156.22	91.79	27.88	1.35	8.20	13.71
MINIMUM	2.15	310.00	6.50	16.80	11.50	6.30	0.70	0.0	73.22	12.36	2.41	0.57	8.20	1.00
# OBSER	17	17	17	16	17	16	17	17	17	17	17	17	1	17
STATION -- 19 PINNEBOG RIVER														
MAXIMUM	****	****	16.50	45.50	880.20	53.40	20.10	9.94	265.36	255.42	6.00	2.22	8.50	24.00
AVERAGE	****	****	16.50	45.50	880.20	53.40	20.10	9.94	265.36	255.42	6.00	2.22	8.50	24.00
MINIMUM	****	****	16.50	45.50	880.20	53.40	20.10	9.94	265.36	255.42	6.00	2.22	8.50	24.00
# OBSER	0	0	1	1	1	1	1	1	1	1	1	1	1	1
STATION -- 20 SAGINAW RIVER UPSTREAM														
MAXIMUM	4.65	1110.00	13.10	298.00	1075.00	2582.50	196.00	802.94	1201.96	399.02	382.72	3.45	8.40	27.00
AVERAGE	3.49	714.17	9.07	116.79	333.76	956.62	38.14	181.53	286.02	107.38	107.25	2.10	8.07	10.70
MINIMUM	1.82	319.00	4.30	9.70	13.20	156.60	5.50	53.17	115.21	2.38	10.37	0.84	7.70	0.0
# OBSER	64	63	70	67	73	73	73	71	73	71	73	73	6	70
STATION -- 21 PINCONNING RIVER														
MAXIMUM	5.23	957.00	13.20	179.00	126.10	11000.00	70.50	119.64	212.49	135.09	56.66	4.84	****	18.00
AVERAGE	3.38	563.75	9.90	63.13	41.91	4708.07	29.80	70.07	131.60	61.58	32.68	2.28	****	10.78
MINIMUM	1.47	281.00	8.00	14.50	7.00	1350.00	7.70	18.55	64.09	16.59	4.73	0.75	****	1.00
# OBSER	8	8	9	9	9	9	9	9	9	9	9	9	0	9
STATION -- 24 SAGANING RIVER														
MAXIMUM	3.76	539.00	13.90	52.60	67.20	870.00	18.30	84.50	228.79	148.29	57.64	3.56	****	18.00
AVERAGE	2.49	358.38	10.49	22.90	44.55	604.25	10.46	62.46	109.43	58.09	33.38	2.04	****	8.63
MINIMUM	1.12	175.00	6.80	6.90	21.10	360.00	3.50	25.43	35.61	25.13	10.17	1.27	****	0.0
# OBSER	8	8	8	6	6	8	8	7	8	7	8	8	0	8

SAGINAW STREAM CHEMISTRY: MAX,AV,MIN,#OBS

	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
STATION -- 31	DRAINAGE	DITCH												
MAXIMUM	****	****	****	52.60	70.70	2090.00	16.20	31.49	192.37	160.88	26.44	1.11	****	15.00
AVERAGE	****	****	****	49.90	42.75	1157.97	11.77	22.17	118.97	96.80	16.85	0.76	****	15.00
MINIMUM	****	****	****	47.90	14.80	150.00	3.90	12.94	78.40	56.33	3.16	0.50	****	15.00
# OBSER	0	0	0	3	2	3	3	3	3	3	3	3	0	1
STATION -- 32	DRAINAGE	DITCH												
MAXIMUM	****	****	****	92.60	33.00	8970.00	61.50	30.45	59.33	35.34	21.55	1.23	****	16.00
AVERAGE	****	****	****	70.05	33.00	8564.30	50.90	26.75	58.86	32.11	13.95	0.69	****	13.50
MINIMUM	****	****	****	47.50	33.00	8158.60	40.30	23.05	58.39	28.88	6.36	0.16	****	11.00
# OBSER	0	0	0	2	1	2	2	2	2	2	2	2	0	2
STATION -- 33	DRAINAGE	DITCH												
MAXIMUM	****	****	****	55.40	25.30	9440.00	102.60	40.62	66.34	25.72	12.52	0.62	****	16.00
AVERAGE	****	****	****	49.25	25.30	9029.25	63.35	26.79	48.64	21.84	8.25	0.56	****	13.50
MINIMUM	****	****	****	43.10	25.30	8618.50	24.10	12.97	30.94	17.96	3.98	0.50	****	11.00
# OBSER	0	0	0	2	1	2	2	2	2	2	2	2	0	2

SAGINAW STREAM CHEMISTRY: MAX,AV,MIN,#OBS

	TFR (UG/L)	DFR (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
STATION -- 1 CASS RIVER						
MAXIMUM	5540.60	1637.30	102.80	242.00	3600.00	3500.00
AVERAGE	845.09	128.92	33.70	26.54	561.87	444.22
MINIMUM	32.80	0.0	3.64	2.50	60.00	40.00
# OBSER	72	73	50	65	39	36
STATION -- 2 TITTABAWASSEE RIVER						
MAXIMUM	1753.90	625.25	70.65	67.00	1550.00	3200.00
AVERAGE	421.03	88.77	18.86	13.61	446.05	467.95
MINIMUM	19.30	19.80	4.20	3.00	0.0	0.0
# OBSER	76	77	51	69	43	39
STATION -- 3 SHIAWASSEE RIVER						
MAXIMUM	4823.70	1371.90	345.00	185.00	7000.00	2170.00
AVERAGE	812.49	119.74	39.18	26.87	831.75	498.89
MINIMUM	19.60	0.0	2.20	2.50	100.00	0.0
# OBSER	75	76	52	68	40	36
STATION -- 4 FLINT RIVER						
MAXIMUM	5306.10	813.30	367.00	180.00	12000.00	99999.00
AVERAGE	935.45	112.06	48.25	33.58	2334.25	7679.97
MINIMUM	11.80	0.0	2.80	3.50	100.00	100.00
# OBSER	76	77	54	68	40	36
STATION -- 5 KAWKAWLIN RIVER						
MAXIMUM	1839.10	797.80	71.20	62.00	20500.00	7100.00
AVERAGE	516.59	120.73	24.83	15.92	1155.13	555.71
MINIMUM	37.00	29.60	5.50	3.00	100.00	100.00
# OBSER	69	70	44	62	39	35
STATION -- 6 PINE RIVER						
MAXIMUM	1601.40	552.80	****	48.00	1425.00	1880.00
AVERAGE	762.15	196.60	****	22.20	356.82	460.00
MINIMUM	54.50	80.90	****	5.00	100.00	100.00
# OBSER	12	13	0	10	11	9
STATION -- 7 RIFLE RIVER						
MAXIMUM	9377.60	519.00	69.51	250.00	260.00	330.00
AVERAGE	1203.12	145.65	42.65	43.34	124.53	129.38
MINIMUM	17.00	2.30	15.77	3.00	80.00	45.00
# OBSER	14	15	2	10	11	8

SAGINAW STREAM CHEMISTRY: MAX,AV,MIN,#OBS

	TPC (UG/L)	DPC (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
STATION -- 4 BIG CREEK						
MAXIMUM	2186.30	1368.70	****	39.00	100.00	100.00
AVERAGE	1660.10	608.87	****	20.20	100.00	100.00
MINIMUM	1227.20	250.60	****	12.00	100.00	100.00
# OBSER	5	6	0	5	3	2
STATION -- 9 AU GRES RIVER						
MAXIMUM	1725.30	681.60	28.95	53.00	700.00	580.00
AVERAGE	602.89	168.97	22.16	23.59	282.14	225.56
MINIMUM	6.10	34.60	15.38	7.00	100.00	100.00
# OBSER	15	17	2	11	14	9
STATION -- 10 TAWAS RIVER						
MAXIMUM	871.90	307.20	****	17.50	1560.00	3400.00
AVERAGE	267.06	153.91	****	6.51	387.50	561.67
MINIMUM	32.90	57.70	****	1.00	100.00	40.00
# OBSER	18	18	0	11	16	12
STATION -- 11 EAST AU GRES RIVER						
MAXIMUM	3495.40	627.00	399.60	175.00	160.00	290.00
AVERAGE	920.59	207.14	142.02	40.29	102.08	119.00
MINIMUM	0.0	119.30	11.77	11.00	65.00	62.00
# OBSER	18	18	3	12	12	8
STATION --12A SAGINAW RIVER						
MAXIMUM	3562.85	920.20	132.20	167.50	28350.00	6900.00
AVERAGE	697.83	102.82	28.04	23.69	2528.72	1717.23
MINIMUM	13.70	11.62	5.10	5.25	100.00	100.00
# OBSER	80	80	56	72	43	39
STATION -- 14 QUINICASSEE RIVER						
MAXIMUM	1660.60	834.60	76.60	50.00	600.00	440.00
AVERAGE	555.67	146.85	47.93	23.65	215.56	164.29
MINIMUM	8.00	0.0	27.00	10.00	100.00	40.00
# OBSER	24	24	8	17	18	14
STATION -- 15 SEUENAING RIVER						
MAXIMUM	1264.80	984.90	****	49.00	16000.00	8500.00
AVERAGE	528.05	191.32	****	22.50	2145.00	1712.73
MINIMUM	20.50	0.0	****	6.00	100.00	100.00
# OBSER	15	16	0	11	16	11

SAGINAW STREAM CHEMISTRY: MAX,AV,MIN,#OBS

	TFR (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
STATION -- 16 SHEBOEN RIVER						
MAXIMUM	549.00	685.60	****	41.00	1100.00	330.00
AVERAGE	231.05	164.92	****	13.29	335.00	195.00
MINIMUM	14.80	0.0	****	3.00	100.00	100.00
# OBSER	8	9	0	7	6	4
STATION -- 17 MUD CREEK						
MAXIMUM	1162.20	1419.60	****	28.00	2200.00	4000.00
AVERAGE	474.24	308.62	****	17.69	667.27	1550.00
MINIMUM	31.60	0.0	****	7.50	100.00	400.00
# OBSER	12	13	0	8	11	5
STATION -- 18 PIGEON RIVER						
MAXIMUM	1667.90	1036.30	****	53.00	2300.00	1650.00
AVERAGE	559.73	176.31	****	23.59	491.33	462.73
MINIMUM	0.0	0.0	****	10.00	100.00	100.00
# OBSER	17	17	0	11	15	11
STATION -- 19 PINNEBOG RIVER						
MAXIMUM	33.60	157.20	****	****	****	****
AVERAGE	33.60	157.20	****	****	****	****
MINIMUM	33.60	157.20	****	****	****	****
# OBSER	1	1	0	0	0	0
STATION -- 20 SAGINAW RIVER UPSTREAM						
MAXIMUM	6628.50	718.70	76.00	205.00	5400.00	6800.00
AVERAGE	758.02	101.57	27.69	25.96	1673.66	1313.24
MINIMUM	9.90	13.80	5.60	2.50	100.00	100.00
# OBSER	73	71	53	65	41	34
STATION -- 23 PINCONNING RIVER						
MAXIMUM	2310.80	187.00	****	85.00	260.00	270.00
AVERAGE	901.69	89.82	****	28.44	154.90	187.50
MINIMUM	207.80	11.20	****	5.00	100.00	100.00
# OBSER	9	9	0	8	5	4
STATION -- 24 SAGANING RIVER						
MAXIMUM	1093.60	240.90	****	44.00	190.00	230.00
AVERAGE	603.21	136.86	****	16.00	123.33	121.67
MINIMUM	134.60	94.80	****	5.00	100.00	100.00
# OBSER	8	8	0	8	6	6

SASINAW STREAM CHEMISTRY: MAX,AV,MIN,#OBS

	TFE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)	TC (#/100ML)	FC (#/100ML)
STATION -- 31 DRAINAGE DITCH						
MAXIMUM	1999.60	62.30	****	****	****	****
AVERAGE	1539.33	23.17	****	****	****	****
MINIMUM	1065.60	0.0	****	****	****	****
# OBSER	3	3	0	0	0	0
STATION -- 32 DRAINAGE DITCH						
MAXIMUM	483.20	38.00	****	****	****	****
AVERAGE	311.90	19.00	****	****	****	****
MINIMUM	140.60	0.0	****	****	****	****
# OBSER	2	2	0	0	0	0
STATION -- 33 DRAINAGE DITCH						
MAXIMUM	391.80	53.20	****	****	****	****
AVERAGE	234.65	26.60	****	****	****	****
MINIMUM	77.50	0.0	****	****	****	****
# OBSER	2	2	0	0	0	0

APPENDIX 5

CASS RIVER

CRU	STA	DAY	FLOW (CFS)
1	1	15AUG73	96.00
2	1	10SEP73	81.00
3	1	20SEP73	72.00
4	1	08OCT73	66.00
5	1	17OCT73	72.00
6	1	01NOV73	121.00
7	1	15NOV73	110.00
8	1	29NOV73	171.00
10	1	08JAN74	273.00
12	1	21FEB74	820.00
13	1	06MAR74	1114.00
14	1	28MAR74	551.00
15	1	17APR74	1083.00
16	1	01MAY74	805.00
17	1	15MAY74	816.00
18	1	29MAY74	383.00
19	1	12JUN74	216.00
20	1	25JUN74	171.00
21	1	10JUL74	102.00
22	1	23JUL74	76.00
23	1	07AUG74	77.00
24	1	13AUG74	65.00
25	1	16AUG74	56.00
26	1	21AUG74	56.00
27	1	29AUG74	85.00
28	1	05SEP74	85.00
29	1	10SEP74	82.00
30	1	16SEP74	47.00
31	1	02OCT74	76.00
32	1	09OCT74	66.00
33	1	17OCT74	81.00
34	1	06NOV74	140.00
35	1	11NOV74	104.00
36	1	15NOV74	100.00
37	1	27NOV74	148.00
38	1	02DEC74	134.00
41	1	16DEC74	183.00
42	1	19DEC74	156.00
43	1	30DEC74	168.00
45	1	10JAN75	736.00
46	1	14JAN75	524.00
47	1	17JAN75	507.00
49	1	29JAN75	609.00
50	1	05FEB75	378.00
51	1	10FEB75	173.00
52	1	21FEB75	262.00
53	1	26FEB75	2310.00
54	1	03MAR75	578.00
55	1	06MAR75	388.00
56	1	10MAR75	299.00
57	1	18MAR75	315.00
58	1	19MAR75	693.00
59	1	21MAR75	1659.00
60	1	24MAR75	5000.00
61	1	31MAR75	1196.00
63	1	09APR75	567.00
64	1	10APR75	3561.00
65	1	18APR75	2310.00
66	1	21APR75	5523.00
67	1	29APR75	1586.00
68	1	30APR75	699.00
69	1	13MAY75	522.00
70	1	16MAY75	811.00
71	1	21MAY75	272.00
72	1	27MAY75	622.00
73	1	04JUN75	244.00
74	1	11JUN75	496.00
75	1	16JUN75	322.00
76	1	24JUN75	219.00
77	1	26JUN75	185.00
78	1	03JUL75	109.00
79	1	28JUL75	112.00
80	1	07AUG75	48.00

TITTABAWASSEE RIVER

CRC	STA	DAY	FLOW (CFS)
1	2	15AUG73	840.00
2	2	10SEP73	570.00
3	2	20SEP73	577.00
4	2	04OCT73	745.00
5	2	17OCT73	1017.00
6	2	01NOV73	2700.00
7	2	15NOV73	1853.00
8	2	29NOV73	2638.00
10	2	08JAN74	1590.00
11	2	01FEB74	1576.00
12	2	21FEB74	2009.00
13	2	06MAR74	17000.00
14	2	28MAR74	3128.00
15	2	17APR74	6376.00
16	2	01MAY74	3510.00
17	2	15MAY74	6453.00
18	2	29MAY74	2954.00
19	2	12JUN74	5105.00
20	2	25JUN74	1570.00
21	2	10JUL74	812.00
22	2	23JUL74	521.00
23	2	07AUG74	1210.00
24	2	13AUG74	590.00
25	2	16AUG74	576.00
26	2	21AUG74	502.00
27	2	29AUG74	1039.00
28	2	05SEP74	586.00
29	2	10SEP74	621.00
30	2	16SEP74	808.00
31	2	02OCT74	1093.00
32	2	09OCT74	521.00
33	2	17OCT74	1243.00
34	2	06NOV74	1243.00
35	2	11NOV74	1221.00
36	2	15NOV74	1286.00
37	2	27NOV74	1072.00
38	2	02DEC74	1076.00
39	2	06DEC74	1613.00
40	2	10DEC74	1086.00
41	2	16DEC74	880.00
43	2	30DEC74	1352.00
44	2	06JAN75	1188.00
45	2	10JAN75	2888.00
46	2	14JAN75	8650.00
47	2	17JAN75	5766.00
48	2	22JAN75	5003.00
49	2	29JAN75	2056.00
50	2	05FEB75	1885.00
51	2	14FEB75	1104.00
52	2	21FEB75	2213.00
53	2	26FEB75	5679.00
54	2	03MAR75	2016.00
55	2	06MAR75	2605.00
56	2	10MAR75	1700.00
57	2	14MAR75	2285.00
58	2	18MAR75	2161.00
59	2	21MAR75	2560.00
60	2	26MAR75	7347.00
61	2	31MAR75	8600.00
63	2	07APR75	8524.00
64	2	14APR75	3836.00
65	2	18APR75	3477.00
66	2	21APR75	5821.00
67	2	28APR75	5058.00
68	2	30APR75	3172.00
69	2	12MAY75	2594.00
70	2	16MAY75	1842.00
71	2	21MAY75	1976.00
72	2	27MAY75	1831.00
73	2	04JUN75	1068.00
74	2	11JUN75	1439.00
75	2	16JUN75	8229.00
76	2	20JUN75	2224.00
77	2	26JUN75	2016.00
78	2	03JUL75	777.00
79	2	28JUL75	1555.00
80	2	07AUG75	651.00

SHIAWASSEE RIVER

CRU	STA	DAY	FLOW (CFS)
1	3	15APR73	337.00
2	3	10SEP73	127.00
3	3	20SEP73	948.00
5	3	17OCT73	255.00
6	3	01NOV73	380.00
7	3	15NOV73	237.00
8	3	29NOV73	2002.00
9	3	19DEC73	586.00
10	3	08JAN74	819.00
11	3	01FEB74	2567.00
12	3	06MAR74	6115.00
14	3	24APR74	1127.00
15	3	17APR74	1229.00
16	3	01MAY74	885.00
17	3	15MAY74	1196.00
18	3	29MAY74	1335.00
19	3	12JUN74	7[illegible].00
20	3	25JUN74	601.00
21	3	10JUL74	150.00
22	3	23JUL74	242.00
23	3	07AUG74	175.00
24	3	13AUG74	220.00
25	3	16AUG74	204.00
26	3	21AUG74	235.00
27	3	29AUG74	160.00
28	3	05SEP74	190.00
29	3	10SEP74	317.00
30	3	16SEP74	260.00
31	3	02OCT74	185.00
32	3	09OCT74	182.00
33	3	17OCT74	137.00
34	3	06NOV74	404.00
35	3	11NOV74	872.00
36	3	15NOV74	308.00
37	3	27NOV74	344.00
38	3	02DEC74	895.00
39	3	06DEC74	873.00
40	3	10DEC74	822.00
41	3	16DEC74	551.00
43	3	30DEC74	415.00
44	3	06JAN75	346.00
45	3	10JAN75	1456.00
46	3	14JAN75	1656.00
47	3	17JAN75	1092.00
48	3	22JAN75	1[illegible]2.00
49	3	27JAN75	1270.00
50	3	05FEB75	1110.00
51	3	10FEB75	601.00
52	3	21FEB75	740.00
53	3	26FEB75	3600.00
54	3	07MAR75	2190.00
55	3	20MAR75	1670.00
56	3	13APR75	1181.00
57	3	14APR75	1[illegible]2.00
58	3	18APR75	1[illegible].00
59	3	01MAY75	2710.00
60	3	[illegible]	[illegible]
61	3	31MAY75	2639.00
62	3	09APR75	2111.00
64	3	14APR75	2912.00
65	3	18APR75	2310.00
66	3	21APR75	7600.00
67	3	24APR75	5045.00
68	3	30APR75	2985.00
69	3	13MAY75	4127.00
70	3	16MAY75	913.00
71	3	21MAY75	795.00
72	3	27MAY75	501.00
73	3	04JUN75	564.00
74	3	11JUN75	564.00
75	3	16JUN75	657.00
76	3	24JUN75	601.00
77	3	26JUN75	1219.00
78	3	03JUL75	877.00
79	3	24JUL75	226.00
80	3	07AUG75	200.00

FLINT RIVER

CRU	STA	DAY	FLOW (CFS)
1	4	15AUG73	812.00
2	4	10SEP73	215.00
3	4	20SEP73	373.00
4	4	08OCT73	267.00
5	4	17OCT73	232.00
6	4	01NOV73	640.00
7	4	15NOV73	810.00
8	4	29NOV73	2200.00
9	4	19DEC73	585.00
10	4	08JAN74	819.00
11	4	01FEB74	3650.00
12	4	21FEB74	1170.00
13	4	06MAR74	7778.00
14	4	28MAR74	1170.00
15	4	17APR74	3834.00
16	4	01MAY74	851.00
17	4	15MAY74	1505.00
18	4	29MAY74	1919.00
19	4	12JUN74	665.00
20	4	25JUN74	579.00
21	4	10JUL74	332.00
22	4	23JUL74	352.00
23	4	07AUG74	311.00
24	4	13AUG74	329.00
25	4	16AUG74	288.00
26	4	21AUG74	276.00
27	4	29AUG74	307.00
28	4	05SEP74	280.00
29	4	10SEP74	264.00
30	4	16SEP74	212.00
31	4	02OCT74	310.00
32	4	09OCT74	300.00
33	4	17OCT74	215.00
34	4	06NOV74	738.00
35	4	11NOV74	848.00
36	4	15NOV74	822.00
37	4	27NOV74	940.00
38	4	02DEC74	544.00
39	4	06DEC74	540.00
40	4	10DEC74	757.00
41	4	16DEC74	640.00
42	4	19DEC74	668.00
43	4	30DEC74	514.00
44	4	06JAN75	516.00
45	4	10JAN75	2160.00
46	4	14JAN75	1909.00
49	4	29JAN75	1112.00
50	4	05FEB75	1157.00
51	4	18FEB75	760.00
52	4	21FEB75	667.00
53	4	26FEB75	2809.00
54	4	03MAR75	2118.00
55	4	06MAR75	1269.00
56	4	10MAR75	1194.00
57	4	14MAR75	1252.00
58	4	18MAR75	1700.00
59	4	21MAR75	2211.00
60	4	26MAR75	7809.00
61	4	31MAR75	3330.00
63	4	15APR75	3077.00
64	4	18APR75	4229.00
65	4	18APR75	7609.00
66	4	21APR75	7301.00
67	4	28APR75	7277.00
68	4	30APR75	2890.00
69	4	13MAY75	1287.00
70	4	16MAY75	830.00
71	4	21MAY75	624.00
72	4	27MAY75	700.00
73	4	04JUN75	790.00
74	4	11JUN75	1240.00
75	4	16JUN75	971.00
76	4	20JUN75	810.00
77	4	26JUN75	1825.00
78	4	03JUL75	694.00
79	4	07JUL75	339.00
80	4	30JUL75	351.00

KAWKAWLIN RIVER

CRU	STA	DAY	FLOW (CFS)
1	5	15AUG73	0.0
2	5	10SEP73	0.0
3	5	20SEP73	0.0
4	5	09OCT73	0.01
5	5	17OCT73	0.02
6	5	01NOV73	1.50
7	5	15NOV73	3.30
8	5	29NOV73	167.00
13	5	06FEB74	2934.00
14	5	28MAR74	208.00
15	5	17APR74	883.00
16	5	01MAY74	114.00
17	5	15MAY74	921.00
18	5	29MAY74	177.00
19	5	12JUN74	1482.00
20	5	25JUN74	130.00
21	5	10JUL74	53.00
22	5	23JUL74	19.00
23	5	07AUG74	11.30
24	5	13AUG74	11.00
25	5	16AUG74	6.30
26	5	21AUG74	12.00
28	5	05SEP74	8.60
29	5	10SEP74	1.40
30	5	16SEP74	3.10
31	5	02OCT74	1.60
32	5	09OCT74	0.56
33	5	17OCT74	1.50
34	5	06NOV74	6.30
36	5	15NOV74	3.40
37	5	27NOV74	11.00
38	5	02DEC74	15.00
39	5	06DEC74	10.00
41	5	16DEC74	13.00
42	5	19DEC74	15.00
43	5	30DEC74	15.00
45	5	10JAN75	27.00
48	5	22JAN75	73.00
49	5	29JAN75	104.00
50	5	05FEB75	87.00
51	5	18FEB75	23.00
52	5	21FEB75	27.00
53	5	26FEB75	811.00
54	5	03MAR75	314.00
55	5	06MAR75	92.00
56	5	10MAR75	41.00
57	5	14MAR75	44.00
58	5	18MAR75	57.00
59	5	21MAR75	287.00
60	5	26MAR75	1133.00
61	5	31MAR75	510.00
62	5	04APR75	290.00
63	5	09APR75	315.00
64	5	14APR75	675.00
65	5	18APR75	303.00
66	5	21APR75	566.00
67	5	28APR75	855.00
68	5	10APR75	215.00
69	5	13MAY75	136.00
70	5	16MAY75	68.00
71	5	21MAY75	51.00
72	5	27MAY75	51.00
73	5	04JUN75	41.00
74	5	11JUN75	211.00
75	5	16JUN75	126.00
76	5	24JUN75	802.00
77	5	26JUN75	737.00
78	5	03JUL75	39.00
79	5	24JUL75	273.00
80	5	07AUG75	34.00

PINE RIVER

CRU	STA	DAY	FLOW (CFS)
1	6	15AUG73	170.00
4	6	09OCT73	98.00
6	6	01NOV73	336.00
13	6	06FEB74	2275.00
14	6	28MAR74	400.00
15	6	17APR74	723.00
16	6	01MAY74	330.00
17	6	15MAY74	632.00
18	6	29MAY74	860.00
19	6	12JUN74	633.00
20	6	23JUN74	352.00
60	6	26MAR75	1173.00
63	6	09APR75	652.00

RIFLE RIVER

CRU	STA	DAY	FLOW (CFS)
1	7	15AUG73	202.00
2	7	10SEP73	172.00
3	7	20SEP73	208.00
4	7	09OCT73	275.00
5	7	17OCT73	243.00
6	7	01NOV73	359.00
7	7	15NOV73	290.00
13	7	17APR74	1307.00
14	7	01MAY74	508.00
17	7	15MAY74	1042.00
18	7	29MAY74	361.00
19	7	12JUN74	536.00
20	7	25JUN74	276.00
21	7	10JUL74	542.00
60	7	26MAR75	885.00
63	7	09APR75	679.00

BIG CREEK

CRU	STA	DAY	FLOW (CFS)
1	8	15AUG73	-1.00
15	8	17APR74	-1.00
17	8	15MAY74	-1.00
18	8	29MAY74	-1.00
19	9	12JUN74	-1.00
60	8	26MAR75	-1.00

AU GRES RIVER

CRU	STA	DAY	FLOW (CFS)
1	9	15AUG73	85.00
2	9	10SEP73	124.00
3	9	20SEP73	30.00
4	9	09OCT73	58.00
5	9	17OCT73	56.00
6	9	01NOV73	164.00
7	9	15NOV73	100.00
14	9	28MAR74	211.00
15	9	17APR74	536.00
16	9	01MAY74	274.00
17	9	15MAY74	815.00
18	9	29MAY74	141.00
19	9	12JUN74	365.00
20	9	25JUN74	100.00
21	9	10JUL74	136.00
60	9	26MAR75	556.00
63	9	09APR75	357.00

TAWAS RIVER

CRU	STA	DAY	FLOW (CFS)
1	10	15AUG73	83.00
2	10	10SEP73	26.00
3	10	20SEP73	29.00
4	10	09OCT73	12.00
5	10	17OCT73	68.00
6	10	01NOV73	159.00
7	10	15NOV73	97.00
13	10	06MAR74	3111.00
14	10	28MAR74	508.00
15	10	17APR74	578.00
16	10	01MAY74	260.00
17	10	15MAY74	802.00
18	10	29MAY74	137.00
19	10	12JUN74	358.00
20	10	25JUN74	97.00
21	10	10JUL74	112.00
60	10	26MAR75	539.00
63	10	09APR75	386.00

BAST AT GRES RIVER

CRU	STA	DAT	FICW (CFS)
1	11	15AUG73	31.00
2	11	10SEP73	19.00
3	11	20SEP73	21.00
4	11	04OCT73	81.00
5	11	17OCT73	46.00
6	11	01NOV73	115.00
7	11	15NOV73	70.00
13	11	06MAR74	2836.00
14	11	28MAR74	147.00
15	11	17APR74	416.00
16	11	01MAY74	191.00
17	11	15MAY74	290.00
18	11	29MAY74	95.00
19	11	12JUN74	255.00
20	11	25JUN74	70.00
21	11	10JUL74	95.00
60	11	26MAR75	389.00
63	11	09APR75	249.00

SAGINAW RIVER

CRU	STA	DAT	FICW (CFS)
1	12A	16AUG73	1631.00
2	12A	11SEP73	878.00
3	12A	20SEP73	1713.00
4	12A	04OCT73	1303.00
5	12A	17OCT73	2155.00
6	12A	01NOV73	3373.00
7	12A	15NOV73	2891.00
8	12A	29NOV73	7708.00
9	12A	19DEC73	2608.00
10	12A	08JAN74	3121.00
11	12A	01FEB74	16980.00
12	12A	21FEB74	5200.00
13	12A	06MAR74	8083.00
14	12A	28MAR74	6190.00
15	12A	17APR74	12253.00
16	12A	01MAY74	5877.00
17	12A	15MAY74	10373.00
18	12A	29MAY74	6688.00
19	12A	12JUN74	7232.00
20	12A	25JUN74	2038.00
21	12A	10JUL74	1826.00
22	12A	23JUL74	1655.00
23	12A	07AUG74	1048.00
24	12A	13AUG74	1260.00
25	12A	16AUG74	1171.00
26	12A	21AUG74	1112.00
27	12A	29AUG74	1551.00
28	12A	05SEP74	1112.00
29	12A	10SEP74	1294.00
30	12A	16SEP74	902.00
31	12A	04OCT74	2151.00
32	12A	09OCT74	1528.00
33	12A	17OCT74	1509.00
34	12A	06NOV74	2626.00
35	12A	11NOV74	2377.00
36	12A	15NOV74	2701.00
37	12A	27NOV74	2563.00
38	12A	02DEC74	2381.00
39	12A	06DEC74	2651.00
40	12A	10DEC74	2488.00
41	12A	16DEC74	2349.00
42	12A	19DEC74	2552.00
43	12A	30DEC74	2585.00
44	12A	06JAN75	2260.00
45	12A	10JAN75	7576.00
46	12A	14JAN75	5602.00
47	12A	17JAN75	5842.00
48	12A	22JAN75	5838.00
49	12A	30JAN75	6605.00
50	12A	05FEB75	8399.00
51	12A	14FEB75	7385.00
52	12A	21FEB75	8082.00
53	12A	26FEB75	15034.00
54	12A	03MAR75	7172.00
55	12A	06MAR75	6377.00
56	12A	10MAR75	8619.00
57	12A	13MAR75	5301.00
58	12A	18MAR75	7204.00
59	12A	21MAR75	10571.00
60	12A	26MAR75	25355.00
61	12A	31MAR75	12229.00
62	12A	04APR75	8367.00
63	12A	09APR75	11106.00
64	12A	14APR75	13085.00
65	12A	18APR75	11184.00
66	12A	21APR75	27376.00
67	12A	24APR75	23845.00
68	12A	30APR75	10136.00
69	12A	13MAY75	5751.00
70	12A	16MAY75	8241.00
71	12A	21MAY75	3248.00
72	12A	27MAY75	8210.00
73	12A	04JUN75	2725.00
74	12A	11JUN75	3885.00
75	12A	16JUN75	6499.00
76	12A	20JUN75	4608.00
77	12A	26JUN75	5455.00
78	12A	03JUL75	2125.00
79	12A	24JUL75	2325.00
80	12A	07AUG75	1300.00

QUAMICASSEE RIVER

CRU	STA	DAY	FLOW (CFS)
1	14	16AUG73	6.30
2	14	11SEP73	4.00
3	14	21SEP73	3.90
4	14	05OCT73	8.00
5	14	18OCT73	13.00
6	14	02NOV73	12.00
7	14	15NOV73	17.00
13	14	07MAR74	112.00
14	14	29MAR74	105.00
15	14	18APR74	115.00
16	14	02MAY74	106.00
17	14	16MAY74	116.00
18	14	30MAY74	37.00
19	14	13JUN74	20.00
20	14	26JUN74	17.00
21	14	11JUL74	11.00
22	14	23JUL74	7.20
23	14	07AUG74	6.30
24	14	13AUG74	5.60
25	14	16AUG74	4.90
29	14	10SEP74	3.90
30	14	16SEP74	4.50
60	14	26APR75	333.00
63	14	09APR75	98.00

SEBEWAING RIVER

CRU	STA	DAY	FLOW (CFS)
1	15	16AUG73	9.00
2	15	11SEP73	5.60
3	15	21SEP73	4.90
4	15	05OCT73	11.00
5	15	18OCT73	10.00
6	15	02NOV73	17.00
7	15	16NOV73	34.00
13	15	07MAR74	434.00
14	15	29MAR74	146.00
15	15	18APR74	160.00
17	15	16MAY74	162.00
18	15	30MAY74	52.00
19	15	13JUN74	20.00
20	15	26JUN74	24.00
21	15	11JUL74	16.00
60	15	26APR75	464.00
63	15	09APR75	136.00

SHERIDAN RIVER

CRU	STA	DAY	FLOW (CFS)
1	16	16AUG73	3.20
2	16	11SEP73	2.40
13	16	07MAR74	185.00
14	16	29MAR74	64.00
15	16	18APR74	70.00
17	16	16MAY74	70.00
18	16	30MAY74	23.00
19	16	13JUN74	12.00
20	16	26JUN74	10.00

MUD CREEK

CRU	STA	DAY	FLOW (CFS)
1	17	16AUG73	0.88
2	17	11SEP73	0.56
3	17	21SEP73	0.48
4	17	05OCT73	1.10
5	17	18OCT73	1.80
13	17	07MAR74	43.00
14	17	29MAR74	15.00
15	17	18APR74	16.00
17	17	16MAY74	16.00
18	17	30MAY74	5.20
19	17	13JUN74	2.80
20	17	26JUN74	2.40
63	17	09APR75	14.00

PIGEON RIVER

CRU	STA	DAY	FLOW (CFS)
1	18	16AUG73	10.00
2	18	11SEP73	6.40
3	18	21SEP73	5.50
4	18	05OCT73	13.00
5	18	18OCT73	20.00
6	18	02NOV73	19.00
13	18	07MAR74	433.00
14	18	29MAR74	166.00
15	18	18APR74	182.00
16	18	02MAY74	160.00
17	18	16MAY74	184.00
18	18	30MAY74	59.00
19	18	13JUN74	32.00
20	18	26JUN74	27.00
21	18	11JUL74	18.00
60	18	26APR75	527.00
63	18	09APR75	155.00

PINNEBOG RIVER

CRU	STA	DAY	FLOW (CFS)
1	19	16AUG73	15.90

PINCONNING RIVER

CRU	STA	DAY	FLOW (CFS)
6	23	01NOV73	20.00
7	23	15DEC73	16.00
13	23	06APR74	80.00
14	23	28APR74	20.00
15	23	17APR74	71.00
17	23	15MAY74	57.00
18	23	29MAY74	20.00
19	23	12JUN74	29.00
20	23	25JUN74	15.00

SAGANING RIVER

CRU	STA	DAY	FLOW (CFS)
13	24	06APR74	107.00
14	24	28APR74	25.00
15	24	17APR74	89.00
17	24	15MAY74	71.00
18	24	29MAY74	38.00
19	24	12JUN74	36.00
60	24	20MAR75	60.00
63	24	05APR75	46.00

DRAINAGE DITCH

CRU	STA	DAY	FLOW (CFS)
15	31	17APR74	-1.00
17	31	15MAY74	-1.00
18	31	29MAY74	-1.00

DRAINAGE DITCH

CRU	STA	DAY	FLOW (CFS)
17	32	16MAY74	-1.00
18	32	30MAY74	-1.00

DRAINAGE DITCH

CRU	STA	DAY	FLOW (CFS)
15	33	18APR74	-1.00
19	33	12JUN74	-1.00

APPENDIX 6

CRIS RIVER CRP	YEA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	1	15[illegible]73	86.00	0.116E+05	0.787E+01	0.267E+02	****	0.106E+03	****	0.185E+02	0.505E+02
2	1	105E73	9[illegible].00	0.728E+04	0.339E+02	0.312E+02	0.181E+02	0.601E+02	0.860E+02	0.476E+01	0.140E+02
3	1	205E73	77.00	0.261E+05	0.[illegible]29E+02	0.902E+02	0.872E+02	0.135E+03	0.875E+02	0.342E+02	0.336E+03
4	1	0[illegible]0C73	66.00	0.[illegible]E+04	0.401E+02	0.106E+03	0.648E+02	0.983E+02	0.299E+02	0.259E+02	0.268E+03
5	1	170C73	72.00	0.[illegible]10E+05	0.178E+02	0.696E+02	0.880E+02	0.732E+02	0.292E+02	0.335E+02	0.328E+03
6	1	0[illegible]0873	[illegible].00	0.170E+05	0.128E+02	0.139E+03	0.625E+02	0.112E+03	0.490E+02	0.378E+02	0.881E+03
7	1	1590873	110.00	0.186E+05	0.1[illegible]9E+03	0.105E+03	0.762E+02	0.187E+03	0.705E+02	0.558E+02	0.872E+03
8	1	2[illegible]0873	57[illegible].00	0.5[illegible]8E+05	0.233E+02	0.1[illegible]9E+04	0.171E+03	0.246E+03	0.750E+02	0.111E+03	0.448E+04
10	1	0[illegible]1378	273.00	0.267E+05	0.249E+02	0.301E+04	0.977E+02	0.986E+02	0.915E+00	0.648E+02	0.343E+04
12	1	21[illegible]E78	820.00	0.848E+05	0.427E+03	0.203E+04	0.125E+03	0.136E+03	0.117E+02	0.310E+02	0.348E+04
13	1	06[illegible]378	[illegible]	0.[illegible]E+06	0.387E+04	0.404E+05	0.186E+04	0.562E+04	0.375E+04	0.990E+03	0.348E+05
14	1	24[illegible]378	5[illegible].00	0.481E+05	0.165E+03	0.205E+04	0.108E+03	0.151E+03	0.436E+02	****	0.278E+04
15	1	17A[illegible]78	1083.00	0.[illegible]E+05	0.279E+03	0.396E+04	0.169E+03	0.601E+03	0.431E+03	0.873E+02	0.492E+04
16	1	0[illegible]8378	805.00	0.286E+05	0.163E+03	0.981E+03	0.841E+02	0.200E+03	0.116E+03	0.411E+02	0.981E+03
17	1	15[illegible]378	816.00	0.639E+05	0.187E+03	0.979E+03	0.137E+03	0.273E+03	0.135E+03	0.723E+02	0.258E+04
18	1	29[illegible]378	3[illegible].00	0.303E+05	0.173E+03	0.907E+03	0.722E+02	0.162E+03	0.900E+02	0.332E+02	0.175E+04
19	1	12[illegible]378	3[illegible].00	0.221E+05	0.103E+03	0.301E+03	0.508E+02	0.127E+03	0.759E+02	0.225E+02	0.359E+03
20	1	25[illegible]378	171.00	0.188E+05	0.259E+02	0.308E+03	0.253E+02	0.723E+02	0.470E+02	0.104E+02	0.778E+03
21	1	10[illegible]E78	[illegible].00	0.279E+05	0.817E+01	****	0.848E+01	0.446E+02	0.361E+02	0.234E+01	0.349E+02
22	1	[illegible]	76.00	0.788E+05	0.755E+02	0.701E+02	0.278E+02	0.457E+02	0.179E+02	0.119E+02	0.344E+03
23	1	07[illegible]78	77.00	0.251E+05	0.177E+01	0.222E+01	0.146E+02	0.383E+02	0.237E+02	0.373E+01	0.119E+03
24	1	1[illegible]0678	65.00	0.139E+05	0.786E+0[illegible]	0.137E+02	0.113E+02	0.327E+02	0.214E+02	0.571E+01	0.159E+03
25	1	16[illegible]678	55.00	0.189E+05	0.281E+01	0.104E+03	0.144E+02	0.376E+02	0.233E+02	0.831E+01	0.107E+03
26	1	21[illegible]678	55.00	0.192E+05	0.588E+01	0.111E+02	0.160E+02	0.279E+02	0.114E+02	0.867E+01	0.617E+02
27	1	2[illegible]678	85.00	0.165E+05	0.283E+02	0.172E+02	0.938E+01	0.221E+02	0.121E+02	0.489E+01	0.881E+02
28	1	25[illegible]678	95.00	0.187E+05	0.478E+02	0.298E+02	0.145E+02	0.277E+02	0.132E+02	0.105E+02	0.111E+03
29	1	10[illegible]678	92.00	0.166E+05	0.227E+02	0.553E+02	0.129E+02	0.298E+02	0.170E+02	0.881E+01	0.359E+02
30	1	16[illegible]678	87.00	0.205E+05	0.251E+02	0.292E+02	0.133E+02	0.276E+02	0.144E+02	0.110E+02	0.391E+02
31	1	02[illegible]78	76.00	0.151E+05	0.901E+02	0.6[illegible]E+02	0.259E+02	0.517E+02	0.257E+02	0.163E+02	0.595E+02
32	1	0[illegible]0C78	66.00	0.[illegible]E+04	0.8[illegible]E+02	0.438E+02	0.113E+02	0.478E+02	0.285E+02	0.425E+01	0.614E+02
33	1	17[illegible]C78	81.00	0.125E+05	0.[illegible]E+02	0.268E+02	0.299E+02	0.633E+02	0.334E+02	0.110E+02	0.168E+03
34	1	3[illegible]0878	140.00	0.156E+05	0.156E+03	0.912E+02	0.568E+02	0.103E+03	0.465E+02	0.280E+02	0.158E+03
35	1	11[illegible]0878	108.00	0.753E+04	0.[illegible]E+02	0.896E+02	0.276E+02	0.594E+02	0.318E+02	0.744E+01	0.392E+03
36	1	15[illegible]878	[illegible].00	0.135E+05	0.816E+02	0.189E+03	0.388E+02	0.517E+02	0.169E+02	0.122E+02	0.487E+03
37	1	27[illegible]0878	189.00	0.952E+04	0.980E+02	0.219E+03	0.448E+02	0.570E+02	0.126E+02	0.650E+01	0.666E+03
38	1	0[illegible]0E78	138.00	0.135E+05	0.786E+02	0.224E+03	0.418E+02	0.528E+02	0.110E+02	0.190E+02	0.649E+03
39	1	16[illegible]E78	[illegible].00	0.257E+04	0.106E+03	0.309E+03	0.384E+02	0.581E+02	0.197E+02	0.174E+02	0.948E+03
40	1	10[illegible]E78	196.00	0.245E+05	0.108E+03	0.896E+03	0.830E+02	0.593E+02	0.169E+02	0.267E+02	0.105E+04
41	1	30[illegible]E78	168.00	0.118E+05	0.183E+03	0.379E+03	****	****	****	0.435E+02	0.785E+03
42	1	[illegible]8[illegible]78	7[illegible].00	0.803E+05	0.298E+03	0.680E+04	0.178E+03	0.239E+03	0.653E+02	0.108E+03	0.369E+04
43	1	10[illegible]78	[illegible].00	****	0.8[illegible]E+03	0.797E+04	0.205E+03	0.356E+03	0.151E+03	0.126E+03	0.601E+04
44	1	17[illegible]78	567.00	****	0.286E+03	0.648E+04	0.136E+03	0.198E+03	0.581E+02	0.775E+02	0.429E+04
45	1	24[illegible]78	6[illegible].00	****	0.171E+03	0.296E+04	0.134E+03	0.188E+03	0.542E+02	0.818E+02	0.526E+04
46	1	05E[illegible]78	3[illegible].00	****	0.2[illegible]E+03	0.137E+04	****	****	****	0.600E+02	0.215E+04
47	1	18E[illegible]78	1[illegible].00	0.[illegible]08E+05	0.181E+03	0.600E+03	0.512E+02	0.669E+02	0.132E+02	0.338E+02	0.181E+04
48	1	1[illegible]E[illegible]78	[illegible].00	0.373E+05	0.2[illegible]E+03	0.897E+03	0.945E+02	0.118E+03	0.183E+02	0.584E+02	0.204E+04
49	1	26E[illegible]78	7[illegible].00	****	0.372E+04	0.711E+04	0.858E+03	0.170E+04	0.846E+03	0.682E+03	0.948E+04
50	1	0[illegible]78	[illegible].00	****	0.3[illegible]E+03	0.219E+04	0.118E+03	0.184E+03	0.660E+02	0.612E+02	0.349E+04
51	1	06[illegible]78	[illegible].00	****	0.2[illegible]E+03	0.138E+04	0.715E+02	0.102E+03	0.288E+02	0.447E+02	0.265E+04
52	1	19[illegible]78	2[illegible].00	****	0.197E+03	0.870E+03	0.608E+02	0.728E+02	0.119E+02	0.347E+02	0.206E+04
53	1	[illegible]78	[illegible].00	0.8[illegible]5E+04	0.358E+03	0.9[illegible]E+03	0.819E+02	0.806E+02	0.870E+01	0.278E+02	0.202E+04
54	1	18[illegible]78	6[illegible].00	****	0.3[illegible]E+03	0.2[illegible]E+04	0.[illegible]6E+03	0.172E+03	0.358E+02	0.479E+02	0.348E+04
55	1	1[illegible]E[illegible]5	16[illegible].00	****	0.156E+04	0.615E+04	0.365E+03	0.602E+03	0.236E+03	0.163E+03	0.718E+04
56	1	[illegible]	5[illegible].00	****	0.[illegible]E+04	0.27[illegible]E+05	0.676E+03	0.230E+04	0.162E+04	0.288E+03	0.257E+05
57	1	31[illegible]875	1166.00	****	0.[illegible]	0.7[illegible]E+04	0.127E+03	0.213E+03	0.868E+02	0.717E+03	0.685E+04
58	1	0[illegible]875	967.00	0.53[illegible]E+05	0.1[illegible]E+03	0.378E+04	0.115E+03	0.172E+03	0.568E+02	0.746E+02	0.516E+04

64	1	18APR75	2964.00	****	0.489E+03	0.155E+05	0.205E+03	0.503E+03	0.298E+03	0.933E+02	0.133E+05
65	1	19APR75	2329.00	****	0.499E+03	0.180E+05	0.228E+03	0.490E+03	0.262E+03	0.933E+02	0.568E+04
66	1	21APR75	5523.00	****	0.227E+04	0.220E+05	0.695E+03	0.505E+04	0.835E+04	0.412E+03	0.262E+05
67	1	24APR75	4596.00	****	0.338E+03	0.688E+04	0.191E+03	0.510E+03	0.319E+03	0.887E+02	0.799E+04
68	1	30APR75	693.00	****	0.272E+03	0.266E+04	0.948E+02	0.211E+03	0.117E+03	0.562E+02	0.320E+04
69	1	13MAY75	522.00	0.322E+05	0.136E+03	0.713E+03	0.577E+02	0.162E+03	0.104E+03	0.227E+02	0.117E+04
70	1	16MAY75	811.00	0.232E+05	0.132E+03	0.524E+04	0.228E+03	0.325E+03	0.971E+02	0.253E+02	0.110E+04
71	1	21MAY75	272.00	0.176E+05	0.820E+02	0.239E+03	0.382E+02	0.887E+02	0.469E+02	0.123E+02	0.379E+03
72	1	27MAY75	632.00	****	0.283E+03	0.227E+04	0.117E+03	0.282E+03	0.165E+03	0.698E+02	0.464E+04
73	1	08JUN75	289.00	0.165E+05	0.163E+03	0.764E+03	0.609E+02	0.120E+03	0.593E+02	0.271E+02	0.181E+04
74	1	11JUN75	896.00	0.867E+04	0.256E+03	0.150E+04	0.911E+02	0.223E+03	0.132E+03	0.839E+02	0.386E+04
75	1	16JUN75	392.00	0.172E+05	0.113E+03	0.102E+04	0.787E+02	0.169E+03	0.905E+02	0.354E+02	0.287E+04
76	1	20JUN75	213.00	0.137E+05	0.795E+02	0.570E+03	0.847E+02	0.100E+03	0.555E+02	0.216E+02	0.136E+04
77	1	26JUN75	185.00	0.172E+05	0.255E+02	0.365E+03	0.600E+02	0.779E+02	0.179E+02	0.623E+01	0.102E+04
78	1	03JUL75	199.00	0.189E+05	0.605E+01	0.688E+02	0.814E+01	0.436E+02	0.355E+02	0.269E+00	0.371E+03
79	1	28JUL75	112.00	0.192E+05	0.678E+02	0.852E+02	0.173E+02	0.536E+02	0.362E+02	0.564E+01	0.767E+02
80	1	07AUG75	88.00	0.783E+04	0.279E+02	0.192E+02	0.872E+01	0.243E+02	0.156E+02	0.596E+01	0.305E+02
SUMMATION			50320.00	0.154E+07	0.251E+05	0.219E+06	0.939E+04	0.285E+05	0.150E+05	0.499E+04	0.237E+06
# OBSERVATIONS			73	55	73	72	70	71	70	72	73
AVERAGE VALUE			689.32	0.289E+05	0.388E+03	0.304E+04	0.138E+03	0.345E+03	0.214E+03	0.692E+02	0.325E+04

CFM	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	2	15AUG73	880.00	0.468E+06	0.289E+03	0.181E+04	****	0.660E+03	****	0.626E+02	0.458E+04
2	2	05SEP73	570.00	0.449E+06	0.196E+03	0.294E+03	0.183E+03	0.452E+03	0.269E+03	0.565E+02	0.252E+04
3	2	20SEP73	577.00	0.322E+06	0.302E+03	0.179E+04	0.233E+03	0.504E+03	0.273E+03	0.589E+02	0.157E+04
4	2	04OCT73	703.00	0.368E+06	0.550E+03	0.739E+03	0.804E+03	0.116E+04	0.359E+03	0.305E+03	0.229E+04
5	2	17OCT73	1017.00	0.451E+06	0.621E+03	0.732E+03	0.415E+03	0.620E+03	0.205E+03	0.214E+03	****
6	2	31OCT73	2108.00	0.716E+06	0.174E+04	0.197E+04	0.408E+03	0.756E+03	0.348E+03	0.192E+03	0.168E+05
7	2	15NOV73	1853.00	0.870E+06	0.329E+04	0.115E+04	0.298E+03	0.801E+03	0.504E+03	0.114E+03	0.119E+05
8	2	29NOV73	2638.00	0.636E+06	0.976E+03	0.597E+04	0.349E+03	0.706E+03	0.356E+03	0.146E+03	0.228E+05
10	2	08JAN74	1050.00	0.432E+06	0.256E+04	0.201E+04	0.168E+03	0.347E+03	0.179E+03	0.562E+02	0.119E+05
11	2	31FEB74	6376.00	0.865E+06	0.263E+04	0.202E+05	0.173E+04	0.253E+04	0.798E+03	0.609E+03	0.471E+05
12	2	21FEB74	2403.00	0.161E+07	0.325E+04	0.189E+04	0.368E+03	0.506E+03	0.139E+03	0.999E+02	0.205E+05
13	2	06MAR74	17009.00	0.138E+07	0.911E+04	0.304E+05	0.290E+04	0.718E+04	0.427E+04	0.153E+04	0.998E+05
14	2	28MAR74	1138.00	0.535E+06	0.178E+04	0.474E+04	0.465E+03	0.691E+03	0.227E+03	0.150E+03	0.199E+05
15	2	17APR74	6376.00	0.952E+06	0.183E+04	0.111E+05	0.908E+03	0.281E+04	0.150E+04	0.458E+03	0.357E+05
16	2	01MAY74	3510.00	0.528E+06	0.130E+04	0.261E+04	0.499E+03	0.141E+04	0.916E+03	0.213E+03	0.175E+05
17	2	15MAY74	6953.00	0.105E+07	0.185E+04	0.521E+04	0.365E+03	0.171E+04	0.135E+04	0.288E+03	0.330E+05
18	2	22MAY74	2958.00	0.817E+06	0.120E+04	0.205E+04	0.276E+03	0.978E+03	0.702E+03	0.140E+03	0.176E+05
19	2	12JUN74	5185.00	0.363E+07	0.211E+04	0.108E+05	0.546E+03	0.213E+04	0.158E+04	0.286E+03	0.356E+05
20	2	25JUN74	1570.00	0.549E+06	0.113E+04	0.283E+04	0.200E+03	0.471E+03	0.271E+03	0.710E+02	0.101E+05
21	2	10JUL74	972.00	0.435E+06	0.593E+03	0.812E+03	0.571E+02	0.314E+03	0.257E+03	0.293E+02	0.407E+04
22	2	23JUL74	921.00	0.737E+06	0.105E+04	0.447E+03	0.158E+03	0.333E+03	0.176E+03	0.650E+02	0.500E+04
23	2	07AUG74	1210.00	0.398E+06	0.232E+03	0.238E+03	0.836E+02	0.236E+03	0.153E+03	0.178E+02	0.814E+04
24	2	13AUG74	569.00	0.447E+06	0.165E+03	0.243E+03	0.809E+02	0.295E+03	0.214E+03	0.308E+02	0.881E+03
25	2	16AUG74	576.00	0.358E+06	0.263E+03	0.194E+03	0.463E+02	0.211E+03	0.165E+03	0.125E+02	0.169E+04
26	2	21AUG74	592.00	0.201E+06	0.368E+03	0.120E+03	0.522E+02	0.175E+03	0.123E+03	0.205E+02	0.216E+04
27	2	29AUG74	1039.00	0.569E+06	0.110E+03	0.149E+03	0.548E+02	0.184E+03	0.129E+03	0.979E+01	0.559E+04
28	2	05SEP74	596.00	0.463E+06	0.668E+03	0.218E+03	0.858E+02	0.184E+03	0.977E+02	0.279E+02	0.172E+04
29	2	19SEP74	621.00	0.363E+06	0.581E+03	0.259E+03	0.112E+03	0.212E+03	0.997E+02	0.672E+02	0.240E+04
30	2	26SEP74	809.00	0.324E+06	0.628E+03	0.251E+03	0.780E+02	0.128E+03	0.500E+02	0.553E+02	0.230E+04
31	2	02OCT74	1033.00	0.880E+06	0.104E+04	0.130E+04	0.247E+03	0.482E+03	0.235E+03	0.557E+02	0.658E+04
32	2	09OCT74	921.00	0.370E+06	0.412E+03	0.408E+03	0.104E+03	0.239E+03	0.134E+03	0.252E+02	0.444E+04
33	2	17OCT74	1283.00	0.299E+06	0.497E+03	0.409E+03	0.132E+03	0.264E+03	0.132E+03	0.256E+02	0.362E+04
34	2	06NOV74	1283.00	0.389E+06	0.165E+04	0.897E+03	0.263E+03	0.461E+03	0.197E+03	0.710E+02	0.584E+04
35	2	11NOV74	1221.00	0.460E+06	0.209E+04	0.193E+04	0.304E+03	0.460E+03	0.157E+03	0.795E+02	0.645E+04
36	2	15NOV74	1206.00	0.560E+06	0.235E+04	0.158E+04	0.323E+03	0.437E+03	0.113E+03	0.895E+02	0.878E+04
37	2	27NOV74	1472.00	0.695E+06	0.326E+04	0.215E+04	0.281E+03	0.406E+03	0.125E+03	****	0.864E+04
38	2	02DEC74	1079.00	0.493E+06	0.283E+04	0.132E+04	0.274E+03	0.325E+03	0.512E+02	0.649E+02	0.607E+04
39	2	06DEC74	1613.00	0.541E+06	0.196E+04	0.130E+04	0.230E+03	0.319E+03	0.882E+02	0.846E+02	0.106E+05
40	2	10DEC74	1086.00	0.884E+06	0.192E+04	0.150E+04	0.243E+03	0.359E+03	0.116E+03	0.888E+02	0.640E+04
41	2	16DEC74	889.00	0.433E+06	0.163E+04	0.584E+03	0.140E+03	0.220E+03	0.802E+02	0.385E+02	0.543E+04
43	2	30DEC74	1352.00	0.642E+06	0.215E+04	0.580E+03	0.243E+03	0.248E+03	0.310E+02	0.886E+02	0.906E+04
44	2	05JAN75	1189.00	0.581E+06	0.138E+04	0.146E+04	****	0.142E+03	****	0.260E+02	0.671E+04
45	2	10JAN75	2888.00	0.735E+06	0.106E+04	0.362E+04	0.163E+03	0.333E+03	0.169E+03	0.615E+02	0.196E+05
46	2	18JAN75	4659.00	0.753E+06	0.166E+04	0.315E+05	0.455E+03	0.824E+03	0.369E+03	0.183E+03	0.363E+05
47	2	27JAN75	5766.00	0.168E+07	0.283E+04	0.234E+05	0.715E+03	0.102E+04	0.303E+03	0.203E+03	0.515E+05
48	2	27JAN75	5863.00	0.114E+07	0.984E+04	0.431E+05	0.360E+03	0.551E+03	0.191E+03	0.102E+03	0.491E+05
49	2	29JAN75	2856.00	0.845E+06	0.304E+04	0.661E+04	0.547E+03	0.814E+03	0.267E+03	0.279E+03	0.226E+05
50	2	05FEB75	1083.00	0.583E+06	0.207E+04	0.276E+04	0.257E+03	0.303E+03	0.465E+02	0.138E+03	0.134E+05
51	2	14FEB75	1184.00	0.467E+06	0.190E+04	0.186E+04	0.142E+03	0.391E+03	0.488E+02	0.201E+03	0.108E+05
52	2	21FEB75	2217.00	0.709E+06	0.215E+04	0.330E+04	0.410E+03	0.545E+03	0.134E+03	0.151E+03	0.201E+05
53	2	26FEB75	5677.00	0.377E+06	0.638E+04	0.112E+05	0.160E+04	0.326E+04	0.166E+04	0.779E+03	0.352E+05
54	2	03MAR75	2016.00	0.774E+06	0.277E+04	0.289E+04	0.338E+03	0.526E+03	0.188E+03	0.118E+03	0.152E+05
55	2	06MAR75	2605.00	0.240E+06	0.135E+04	0.199E+04	0.196E+03	0.397E+03	0.201E+03	0.760E+02	0.221E+05
56	2	10MAR75	1765.00	0.320E+06	0.298E+04	0.216E+04	0.308E+03	0.414E+03	0.107E+03	0.778E+02	0.124E+05
57	2	14MAR75	2285.00	0.676E+06	0.165E+04	0.284E+04	0.246E+03	0.365E+03	0.120E+03	0.671E+02	0.176E+05
58	2	18MAR75	3161.00	0.687E+06	0.178E+04	0.431E+04	0.358E+03	0.496E+03	0.138E+03	0.103E+03	0.200E+05

59	2	21[illegible]75	3568.00	0.705E+06	0.209E+08	0.788E+05	****	****	****	****	0.262E+05
60	2	26[illegible]75	7387.00	0.839E+06	0.383E+08	0.269E+05	0.102E+08	0.251E+08	0.189E+08	0.265E+03	0.487E+05
61	2	[illegible]75	8609.00	0.737E+06	0.188E+08	0.105E+05	0.470E+03	0.783E+03	0.313E+03	0.197E+03	0.325E+05
63	2	0[illegible]75	8524.00	0.156E+07	0.206E+08	0.455E+08	0.389E+03	0.682E+03	0.333E+03	0.116E+03	0.284E+05
64	2	[illegible]75	3836.00	0.767E+06	0.886E+03	0.197E+05	0.392E+03	0.638E+03	0.242E+03	0.127E+03	0.198E+05
65	2	18[illegible]75	3877.00	0.539E+06	0.919E+03	0.669E+08	0.300E+03	0.530E+03	0.230E+03	0.652E+02	0.188E+05
66	2	21[illegible]75	5921.00	0.705E+06	0.158E+08	0.189E+05	0.508E+03	0.127E+08	0.766E+03	0.240E+03	0.340E+05
67	2	28[illegible]75	5059.00	0.710E+06	0.118E+08	0.884E+08	0.408E+03	0.931E+03	0.523E+03	0.127E+03	0.261E+05
68	2	30[illegible]75	3172.00	0.871E+06	0.119E+08	0.893E+08	0.369E+03	0.639E+03	0.279E+03	0.151E+03	0.152E+05
69	2	13[illegible]75	2598.00	0.579E+06	0.948E+03	0.183E+08	0.482E+03	0.135E+08	0.869E+03	0.173E+03	0.138E+05
70	2	16[illegible]75	1982.00	0.622E+06	0.138E+08	0.181E+08	0.423E+03	0.816E+03	0.393E+03	0.108E+03	0.110E+05
71	2	21[illegible]75	1029.00	0.393E+05	0.292E+03	0.796E+03	0.171E+03	0.388E+03	0.217E+03	0.435E+02	0.615E+08
72	2	27[illegible]75	1831.00	0.573E+06	0.161E+03	0.213E+08	0.298E+03	0.699E+03	0.405E+03	0.814E+02	0.127E+05
73	2	08[illegible]75	1069.00	0.359E+06	0.128E+08	0.982E+03	0.165E+03	0.377E+03	0.211E+03	0.417E+02	0.585E+08
74	2	11[illegible]75	1833.00	0.325E+06	0.601E+03	0.298E+08	0.168E+03	0.470E+03	0.302E+03	0.313E+02	0.789E+08
75	2	16[illegible]75	8223.00	0.126E+07	0.128E+08	0.708E+08	0.677E+03	0.139E+08	0.718E+03	0.118E+03	0.176E+05
76	2	20[illegible]75	3238.00	0.857E+06	0.505E+03	0.387E+08	0.285E+03	0.452E+03	0.207E+03	0.466E+02	0.141E+05
77	2	26[illegible]75	2016.00	0.471E+06	0.310E+03	0.311E+08	0.191E+03	0.469E+03	0.278E+03	0.318E+02	0.131E+05
78	2	3[illegible]75	777.00	0.278E+06	0.407E+02	0.399E+01	0.608E+02	0.177E+03	0.117E+03	0.192E+01	0.165E+08
79	2	28[illegible]75	1559.00	0.500E+06	0.458E+03	0.129E+08	0.918E+02	0.355E+03	0.263E+03	0.139E+02	0.912E+08
80	2	07[illegible]75	651.00	0.258E+06	0.157E+03	****	0.386E+02	0.195E+03	0.157E+03	0.873E+01	0.182E+08
SUMMATION			197716.00	0.505E+08	0.128E+06	0.480E+06	0.278E+05	0.580E+05	0.298E+05	0.106E+05	0.128E+07
# OBSERVATIONS			77	77	77	76	74	76	74	75	76
AVERAGE VALUE			2567.38	0.656E+06	0.166E+08	0.579E+08	0.376E+03	0.763E+03	0.397E+03	0.142E+03	0.163E+05

SHIAWASSEE RIVER

CPU	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	3	05AUG73	347.00	0.398E+05	0.643E+02	0.791E+02	****	0.735E+03	****	0.175E+03	0.213E+04
2	3	05SEP73	427.00	0.182E+05	0.861E+02	0.569E+02	0.299E+03	0.400E+03	0.101E+03	0.124E+03	0.938E+02
3	3	20SEP73	188.00	0.206E+05	0.230E+03	0.790E+02	0.312E+03	0.392E+03	0.801E+02	0.168E+03	0.849E+01
5	3	17OCT73	255.00	0.382E+05	0.111E+03	0.555E+02	0.266E+03	0.356E+03	0.895E+02	0.198E+03	0.218E+03
6	3	01NOV73	380.00	0.412E+05	0.229E+03	0.518E+03	0.342E+03	0.409E+03	0.674E+02	0.229E+03	0.279E+04
7	3	15NOV73	337.00	0.365E+05	0.365E+03	0.523E+03	****	****	****	****	0.309E+04
8	3	29NOV73	2032.00	0.187E+06	0.777E+03	0.993E+04	0.810E+03	0.224E+04	0.143E+04	0.580E+03	0.181E+05
9	3	10DEC73	586.00	0.138E+06	0.806E+03	0.245E+04	0.235E+03	0.403E+03	0.169E+03	0.184E+03	0.510E+04
10	3	08JAN74	812.00	0.810E+05	0.745E+03	0.302E+04	0.290E+03	0.336E+03	0.459E+02	0.163E+03	0.906E+04
11	3	01FEB74	2567.00	0.183E+06	0.731E+03	0.159E+05	0.541E+03	0.149E+04	0.958E+03	0.511E+03	0.304E+05
12	3	05FEB74	6115.00	0.265E+06	0.269E+04	0.257E+05	0.179E+04	0.447E+04	0.268E+04	0.896E+03	0.208E+05
14	3	28MAR74	1107.00	0.794E+05	0.519E+03	0.219E+04	****	0.495E+03	****	0.149E+03	0.485E+04
15	3	17APR74	1027.00	0.125E+06	0.396E+03	0.269E+04	0.700E+03	0.115E+04	0.448E+03	0.277E+03	0.717E+04
16	3	01MAY74	895.00	0.738E+05	0.219E+03	0.606E+03	0.447E+03	0.665E+03	0.218E+03	0.183E+03	0.844E+03
17	3	15MAY74	1196.00	0.857E+05	0.664E+02	0.790E+03	0.331E+03	0.610E+03	0.279E+03	0.184E+03	0.790E+03
18	3	29MAY74	1325.00	0.807E+05	0.325E+03	0.127E+04	0.346E+03	0.621E+03	0.275E+03	0.168E+03	0.613E+04
19	3	12JUN74	728.00	0.591E+05	0.151E+03	0.765E+03	0.396E+03	0.575E+03	0.179E+03	0.271E+03	0.460E+04
20	3	25JUN74	604.00	0.521E+05	0.125E+03	0.847E+03	0.307E+03	0.490E+03	0.183E+03	0.175E+03	0.378E+04
21	3	10JUL74	850.00	0.308E+06	0.177E+02	****	0.193E+03	0.377E+03	0.184E+03	0.130E+03	0.223E+04
22	3	23JUL74	242.00	0.675E+05	0.995E+02	0.852E+02	0.177E+03	0.253E+03	0.752E+02	0.893E+02	0.134E+04
23	3	07AUG74	175.00	0.569E+05	0.588E+01	0.107E+01	0.115E+03	0.162E+03	0.466E+02	0.738E+02	****
24	3	13AUG74	229.00	0.602E+05	0.779E+01	0.469E+01	0.118E+03	0.203E+03	0.896E+02	0.851E+02	****
25	3	16AUG74	206.00	0.529E+05	0.168E+02	0.811E+01	0.136E+03	0.239E+03	0.103E+03	0.891E+02	****
26	3	21AUG74	235.00	0.712E+05	0.131E+02	0.737E+01	0.162E+03	0.221E+03	0.588E+02	0.127E+03	0.644E+03
27	3	29AUG74	160.00	0.479E+05	0.725E+02	0.772E+02	0.128E+03	0.138E+03	0.551E+01	0.869E+02	0.846E+03
28	3	05SEP74	150.00	0.658E+05	0.836E+02	0.256E+03	****	****	****	0.143E+03	0.109E+04
29	3	10SEP74	317.00	0.108E+06	0.693E+02	0.289E+03	****	****	****	0.246E+03	0.907E+03
30	3	16SEP74	200.00	0.621E+05	0.838E+02	0.195E+03	****	****	****	****	0.966E+03
31	3	02OCT74	180.00	0.183E+05	0.120E+03	0.349E+03	0.189E+03	0.249E+03	0.601E+02	0.142E+03	0.258E+03
32	3	09OCT74	182.00	0.173E+05	0.652E+02	0.276E+03	****	****	****	0.116E+03	0.147E+03
33	3	17OCT74	187.00	0.181E+05	0.198E+03	0.269E+03	0.155E+03	0.195E+03	0.395E+02	0.559E+02	0.308E+03
34	3	06NOV74	808.00	0.208E+05	0.162E+03	0.598E+03	0.304E+03	0.411E+03	0.107E+03	0.163E+03	0.118E+04
35	3	11NOV74	872.00	****	0.201E+03	0.592E+03	0.243E+03	0.327E+03	0.832E+02	0.837E+02	0.336E+04
36	3	15NOV74	308.00	****	0.197E+03	0.529E+03	****	0.231E+03	****	0.129E+03	0.208E+04
37	3	27NOV74	368.00	****	0.163E+03	0.697E+03	0.241E+03	0.258E+03	0.170E+02	0.838E+02	0.193E+04
38	3	03DEC74	805.00	****	0.296E+03	0.823E+03	0.248E+03	0.322E+03	0.744E+02	0.137E+03	0.285E+04
39	3	06DEC74	873.00	****	0.400E+03	0.383E+03	****	0.505E+03	****	0.274E+03	0.149E+04
40	3	10DEC74	822.00	****	0.266E+03	0.447E+03	0.271E+03	0.290E+03	0.186E+02	0.148E+03	0.190E+04
41	3	16DEC74	551.00	0.241E+05	0.459E+03	0.121E+04	0.333E+03	0.360E+03	0.266E+02	0.200E+03	0.306E+04
43	3	30DEC74	855.00	****	****	0.492E+03	0.187E+03	0.218E+03	0.309E+02	0.121E+03	0.206E+04
44	3	06JAN75	386.00	0.266E+05	0.152E+03	0.677E+03	0.304E+02	0.163E+03	0.133E+03	0.878E+02	0.107E+04
45	3	10JAN75	1356.00	****	0.966E+03	0.129E+05	0.399E+03	0.994E+03	0.595E+03	0.318E+03	0.613E+04
46	3	14JAN75	1655.00	****	0.659E+03	0.833E+04	0.479E+03	0.633E+03	0.155E+03	0.253E+03	0.123E+05
47	3	17JAN75	1802.00	****	0.678E+03	0.527E+04	0.458E+03	0.562E+03	0.108E+03	0.156E+03	0.132E+05
48	3	22JAN75	1062.00	****	0.736E+03	0.326E+04	0.376E+03	0.410E+03	0.337E+02	0.102E+03	0.924E+04
49	3	29JAN75	1274.00	****	0.109E+04	0.267E+04	0.581E+03	0.647E+03	0.660E+02	0.398E+03	0.851E+04
50	3	05FEB75	1140.00	****	0.450E+03	0.253E+04	0.336E+03	0.371E+03	0.348E+02	0.228E+03	0.717E+04
51	3	18FEB75	601.00	****	0.638E+03	0.121E+04	0.241E+03	0.282E+03	0.412E+02	0.182E+03	0.463E+04
52	3	21FEB75	783.00	0.132E+06	0.104E+04	0.136E+04	0.399E+03	0.419E+03	0.196E+02	0.232E+03	0.540E+04
53	3	26FEB75	3600.00	****	0.306E+04	0.114E+05	0.117E+04	0.212E+04	0.949E+03	0.814E+03	0.173E+05
54	3	03MAR75	2198.00	****	0.105E+04	0.582E+04	0.547E+03	0.674E+03	0.127E+03	0.191E+03	0.157E+05
55	3	06MAR75	1678.00	****	0.888E+03	0.346E+04	0.357E+03	0.540E+03	0.183E+03	0.176E+03	0.120E+05
56	3	10MAR75	1482.00	****	0.599E+03	0.190E+04	0.287E+03	0.360E+03	0.114E+03	0.119E+03	0.735E+04
57	3	14MAR75	1092.00	****	0.718E+03	0.113E+04	0.294E+03	0.382E+03	0.883E+02	0.128E+03	0.705E+04
58	3	18MAR75	1365.00	****	0.119E+04	0.488E+04	0.413E+03	0.670E+03	0.257E+03	0.216E+03	0.611E+04
59	3	21MAR75	2720.00	****	0.128E+04	0.115E+05	0.829E+03	0.105E+04	0.224E+03	0.341E+03	0.145E+05

60	3	26[illegible]75	[illegible].00	****	0.170E+00	0.[illegible]0E+05	0.956E+03	0.235E+00	0.139E+00	0.409E+03	0.241E+05
61	3	31[illegible]75	2637.00	****	0.701E+03	0.107E+05	0.412E+03	0.688E+03	0.272E+03	0.199E+03	0.172E+05
63	3	09A0875	[illegible].00	0.847E+05	0.918E+03	0.697E+00	0.337E+03	0.536E+03	0.199E+03	0.205E+03	0.108E+05
64	3	10A0875	2[illegible]2.00	****	0.579E+03	0.158E+05	0.477E+03	0.843E+03	0.416E+03	0.245E+03	0.121E+05
65	3	19A0875	2388.00	****	0.519E+03	0.899E+00	0.408E+03	0.891E+03	0.483E+03	0.221E+03	0.540E+00
66	3	2[illegible]A0875	7600.00	****	0.160E+00	0.191E+05	0.108E+00	0.497E+00	0.388E+00	0.665E+03	0.327E+05
67	3	28A0875	6085.00	****	0.156E+00	0.157E+05	0.998E+03	0.836E+00	0.336E+00	0.465E+03	0.454E+05
68	3	30A0875	2085.00	****	0.238E+00	0.503E+00	0.572E+03	0.114E+00	0.567E+03	0.310E+03	0.130E+05
69	3	13[illegible]875	[illegible]27.00	****	0.182E+03	0.[illegible]0E+00	0.229E+03	0.481E+03	0.212E+03	0.774E+02	0.259E+00
70	3	16[illegible]875	983.00	****	0.705E+02	0.146E+00	0.306E+03	0.460E+03	0.154E+03	0.141E+03	0.233E+00
71	3	21[illegible]875	700.00	****	0.358E+02	0.151E+03	0.209E+03	0.336E+03	0.127E+03	0.835E+02	****
72	3	27[illegible]875	[illegible].00	****	0.262E+03	0.230E+00	0.307E+03	0.449E+03	0.142E+03	0.163E+03	0.395E+00
73	3	08[illegible]875	560.00	0.265E+05	0.672E+02	0.107E+00	0.285E+03	0.398E+03	0.109E+03	0.121E+03	0.407E+00
74	3	11[illegible]875	560.00	0.356E+05	0.669E+02	0.128E+00	0.278E+03	0.405E+03	0.127E+03	0.117E+03	0.429E+00
75	3	16[illegible]875	657.00	0.297E+05	0.105E+03	0.103E+00	0.452E+03	0.457E+03	0.461E+01	0.177E+03	0.358E+00
76	3	20[illegible]875	601.00	0.318E+05	0.406E+02	0.685E+03	0.290E+03	0.470E+03	0.180E+03	0.106E+03	0.354E+00
77	3	26[illegible]875	1219.00	0.0	0.250E+03	0.576E+00	0.383E+03	0.936E+03	0.553E+03	0.194E+03	0.752E+00
78	3	03[illegible]75	877.00	0.211E+05	0.142E+02	0.532E+03	0.235E+03	0.315E+03	0.800E+02	0.107E+03	0.461E+00
79	3	20[illegible]75	226.00	0.263E+05	0.106E+03	0.553E+02	0.165E+03	0.226E+03	0.608E+02	0.990E+02	0.630E+03
80	3	07A0875	200.00	0.298E+05	0.638E+02	0.203E+03	0.286E+03	0.471E+03	0.185E+03	0.148E+03	0.680E+03
SUMMATION			[illegible].00	0.280E+07	0.381E+05	0.271E+06	0.264E+05	0.522E+05	0.238E+05	0.155E+05	0.496E+06
# OBSERVATIONS			76	48	75	75	67	71	67	74	72
AVERAGE VALUE			[illegible]251.93	0.636E+05	0.508E+03	0.361E+00	0.398E+03	0.735E+03	0.355E+03	0.210E+03	0.689E+00

PLANT CRN	PIPER STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	0	15AUG73	812.00	0.607E+05	0.259E+04	0.204E+03	****	0.237E+04	****	0.105E+04	0.299E+04
2	0	19SEP73	215.00	0.310E+05	0.873E+03	0.365E+02	0.109E+04	0.136E+04	0.277E+03	0.523E+03	0.130E+04
3	0	20SEP73	371.00	0.525E+05	0.154E+04	0.354E+03	0.184E+04	0.236E+04	0.517E+03	0.918E+03	0.275E+04
4	0	08OCT73	267.00	0.329E+05	0.317E+04	0.143E+04	****	****	****	****	0.275E+04
5	0	17OCT73	232.00	0.470E+05	0.711E+02	0.177E+04	****	****	****	****	0.138E+04
6	0	01NOV73	639.00	0.874E+05	0.136E+04	0.275E+04	0.136E+04	0.170E+04	0.336E+03	0.128E+04	0.284E+04
7	0	15NOV73	880.00	0.694E+05	0.488E+03	0.309E+04	0.114E+04	0.163E+04	0.497E+03	0.164E+04	0.275E+04
8	0	29NOV73	2200.00	0.256E+06	0.227E+04	0.489E+04	0.132E+04	0.345E+04	0.213E+04	0.949E+03	0.125E+05
9	0	13DEC73	585.00	0.111E+06	0.143E+04	0.246E+04	0.754E+03	0.805E+03	0.510E+02	0.847E+03	0.544E+04
10	0	08JAN74	819.00	0.111E+06	0.181E+04	0.332E+04	0.767E+03	0.877E+03	0.110E+03	0.711E+03	0.749E+04
11	0	01FEB74	3650.00	0.325E+06	0.314E+04	0.155E+05	0.140E+04	0.223E+04	0.834E+03	0.961E+03	0.291E+05
12	0	21FEB74	1170.00	0.286E+06	0.236E+04	0.415E+04	0.126E+04	0.166E+04	0.402E+03	0.669E+02	0.764E+04
13	0	06MAR74	7079.00	0.587E+06	0.501E+04	0.134E+05	0.225E+04	0.531E+04	0.306E+04	0.129E+04	0.447E+05
14	0	29MAR74	1170.00	0.181E+06	0.149E+04	0.309E+04	0.108E+04	0.114E+04	0.523E+02	0.479E+03	0.633E+04
15	0	17APR74	2438.00	0.217E+06	0.224E+04	0.566E+04	0.200E+04	0.303E+04	0.103E+04	0.113E+04	0.124E+05
16	0	01MAY74	851.00	0.106E+06	0.731E+03	0.223E+04	0.785E+03	0.238E+04	0.159E+04	0.103E+04	0.225E+04
17	0	15MAY74	1509.00	0.211E+06	0.132E+04	0.308E+04	0.154E+04	0.233E+04	0.797E+03	0.138E+04	0.513E+04
18	0	29MAY74	1013.00	0.165E+06	0.843E+03	0.426E+04	0.130E+04	0.221E+04	0.911E+03	0.883E+03	0.798E+04
19	0	12JUN74	865.00	0.102E+06	0.250E+03	0.190E+04	0.722E+03	0.139E+04	0.671E+03	0.716E+03	0.226E+04
20	0	25JUN74	579.00	0.720E+05	0.214E+03	0.256E+04	0.545E+03	0.840E+03	0.295E+03	0.469E+03	0.190E+04
21	0	10JUL74	383.00	0.133E+06	0.402E+02	0.185E+04	0.549E+03	0.895E+03	0.346E+03	0.733E+03	0.169E+04
22	0	23JUL74	352.00	0.127E+06	0.116E+03	0.169E+04	0.662E+03	0.726E+03	0.645E+02	0.825E+03	0.594E+03
23	0	07AUG74	311.00	0.107E+06	0.177E+02	0.143E+04	****	****	****	****	0.143E+04
24	0	13AUG74	339.00	0.101E+06	0.606E+02	0.161E+04	0.461E+03	0.595E+03	0.134E+03	0.595E+03	0.211E+04
25	0	16AUG74	289.00	0.613E+05	0.275E+02	0.794E+03	0.466E+03	0.581E+03	0.115E+03	0.564E+03	0.156E+04
26	0	21AUG74	276.00	0.952E+05	0.800E+02	0.169E+04	0.421E+03	0.467E+03	0.459E+02	0.530E+03	0.139E+04
27	0	29AUG74	287.00	0.931E+05	0.711E+03	0.181E+04	0.927E+03	0.942E+03	0.151E+02	0.130E+04	0.177E+04
28	0	05SEP74	280.00	0.775E+05	0.316E+03	0.166E+04	0.489E+03	0.526E+03	0.370E+02	0.489E+03	0.117E+04
29	0	19SEP74	264.00	0.930E+05	0.120E+03	0.162E+04	0.562E+03	0.633E+03	0.710E+02	0.610E+03	0.130E+04
30	0	16SEP74	242.00	0.747E+05	0.936E+02	0.184E+04	0.568E+03	0.575E+03	0.634E+01	0.593E+03	0.124E+04
31	0	02OCT74	119.00	0.542E+05	0.549E+03	0.183E+04	0.621E+03	0.105E+04	0.434E+03	0.532E+03	0.167E+04
32	0	03OCT74	300.00	0.892E+05	0.471E+03	0.221E+04	0.617E+03	0.965E+03	0.348E+03	0.587E+03	0.153E+04
33	0	17OCT74	315.00	0.277E+05	0.249E+03	0.127E+04	0.919E+03	0.115E+04	0.229E+03	0.104E+04	0.159E+04
34	0	06NOV74	730.00	0.961E+05	0.334E+04	0.305E+04	0.803E+03	0.165E+04	0.851E+03	0.575E+03	0.329E+04
35	0	19NOV74	888.00	0.597E+05	0.137E+04	0.285E+04	0.823E+03	0.106E+04	0.238E+03	0.811E+03	0.195E+04
36	0	15NOV74	822.00	0.572E+05	0.134E+04	0.223E+04	0.686E+03	0.823E+03	0.137E+03	0.680E+03	0.141E+04
37	0	27NOV74	880.00	0.820E+05	0.175E+04	0.248E+04	0.893E+03	0.951E+03	0.576E+02	0.894E+03	0.206E+04
38	0	03DEC74	588.00	0.697E+05	0.196E+04	0.244E+04	0.682E+03	0.650E+03	0.820E+01	0.610E+03	0.189E+04
39	0	06DEC74	550.00	0.892E+05	0.199E+04	0.161E+04	0.906E+03	0.125E+04	0.347E+03	0.732E+03	0.135E+04
40	0	10DEC74	757.00	0.181E+06	0.180E+04	0.221E+04	0.711E+03	0.849E+03	0.139E+03	0.616E+03	0.309E+04
41	0	16DEC74	680.00	0.101E+06	0.170E+04	0.195E+04	0.935E+03	0.114E+04	0.203E+03	0.869E+03	0.285E+04
42	0	19DEC74	669.00	0.188E+06	0.162E+04	0.217E+04	0.915E+03	0.123E+04	0.317E+03	0.836E+03	0.307E+04
43	0	30DEC74	518.00	0.130E+06	0.144E+04	0.321E+04	0.101E+04	0.115E+04	0.143E+03	0.132E+04	0.223E+04
44	0	06JAN75	576.00	0.221E+06	0.114E+04	0.239E+04	0.740E+03	0.101E+04	0.267E+03	0.870E+03	0.311E+04
45	0	10JAN75	2160.00	0.261E+06	0.217E+04	0.846E+04	0.106E+04	0.307E+04	0.202E+04	0.778E+03	0.138E+05
46	0	14JAN75	1900.00	****	0.186E+04	0.740E+04	0.129E+04	0.165E+04	0.358E+03	0.828E+03	0.144E+05
47	0	20JAN75	1113.00	0.169E+06	0.126E+04	0.430E+04	0.101E+04	0.123E+04	0.227E+03	0.107E+04	0.933E+04
50	0	25FEB75	1157.00	0.577E+05	0.119E+04	0.624E+04	0.102E+04	0.122E+04	0.200E+03	0.982E+03	0.948E+04
51	0	18FEB75	760.00	0.120E+06	0.221E+04	0.318E+04	0.101E+04	0.101E+04	0.0	****	0.680E+04
52	0	21FEB75	667.00	0.330E+06	0.204E+04	0.233E+04	0.917E+03	0.110E+04	0.187E+03	0.831E+03	0.477E+04
53	0	26FEB75	2808.00	0.359E+06	0.353E+04	0.876E+04	0.148E+04	0.219E+04	0.705E+03	0.990E+03	0.155E+05
54	0	07MAR75	2[illegible]0.00	0.487E+05	0.534E+04	0.514E+04	0.168E+04	0.200E+04	0.322E+03	0.834E+03	0.147E+05
55	0	06MAR75	1160.00	0.533E+05	0.225E+04	0.252E+04	0.103E+04	0.111E+04	0.862E+02	0.784E+03	0.867E+04
56	0	10MAR75	1193.00	0.301E+06	0.423E+04	0.260E+04	0.114E+04	0.134E+04	0.205E+03	0.815E+03	0.721E+04
57	0	14MAR75	1252.00	****	0.231E+04	0.319E+04	0.100E+04	0.111E+04	0.111E+03	0.763E+03	0.845E+04
58	0	18MAR75	1708.00	0.123E+06	0.593E+04	0.524E+04	****	****	****	0.100E+04	0.949E+04

59	0	21MAR75	2211.00	****	0.318E+08	0.703E+08	0.187E+08	0.188E+08	0.106E+02	0.116E+08	0.134E+05
60	0	26MAR75	7859.00	****	0.898E+08	0.234E+05	0.225E+08	0.506E+08	0.282E+08	0.100E+08	0.605E+05
61	0	31MAR75	3338.00	0.239E+06	0.291E+08	0.129E+05	0.112E+08	0.167E+08	0.550E+03	0.725E+03	0.206E+05
62	0	03APR75	3077.00	0.832E+06	0.836E+08	0.111E+05	0.160E+08	0.212E+08	0.528E+03	0.105E+08	0.181E+05
63	0	08APR75	3779.00	0.282E+06	0.296E+08	0.121E+05	0.111E+08	0.171E+08	0.592E+03	0.787E+03	0.165E+05
65	0	18APR75	7603.00	0.258E+06	0.459E+08	0.779E+08	0.120E+08	0.172E+08	0.518E+03	0.812E+03	0.823E+08
66	0	21APR75	7301.00	****	0.838E+08	0.178E+05	0.121E+08	0.561E+08	0.440E+08	0.904E+03	0.293E+05
67	0	28APR75	7777.00	****	0.285E+08	0.169E+05	0.188E+08	0.485E+08	0.297E+08	0.800E+03	0.340E+05
68	0	30APR75	2800.00	0.990E+05	0.332E+08	0.677E+08	0.130E+08	0.232E+08	0.102E+08	0.713E+03	0.128E+05
69	0	13MAY75	1287.00	0.138E+06	0.172E+08	0.400E+03	0.926E+03	0.180E+08	0.875E+03	0.608E+03	0.388E+08
70	0	16MAY75	880.00	0.103E+06	0.129E+08	0.383E+08	0.111E+08	0.137E+08	0.255E+03	0.890E+03	0.291E+08
71	0	21MAY75	629.00	0.121E+06	0.117E+08	0.385E+08	0.158E+08	0.181E+08	0.225E+03	0.188E+08	0.206E+08
72	0	27MAY75	703.00	0.127E+06	0.388E+03	0.106E+05	0.585E+03	0.990E+03	0.806E+03	0.629E+03	0.305E+08
73	0	08JUN75	788.00	0.100E+06	0.121E+08	0.268E+08	0.603E+03	0.137E+08	0.772E+03	0.311E+03	0.295E+08
74	0	11JUN75	1280.00	0.938E+05	0.521E+03	0.318E+08	0.113E+08	0.189E+08	0.769E+03	0.710E+03	0.570E+08
75	0	16JUN75	971.00	0.119E+06	0.896E+03	0.388E+08	0.101E+08	0.181E+08	0.800E+03	0.789E+03	0.551E+08
76	0	20JUN75	830.00	0.910E+05	0.262E+03	0.327E+08	0.751E+03	0.893E+03	0.182E+03	0.387E+03	0.408E+08
77	0	26JUN75	1825.00	0.157E+06	0.573E+03	0.599E+08	0.125E+08	0.265E+08	0.180E+08	0.668E+03	0.973E+08
78	0	03JUL75	688.00	0.803E+05	0.200E+03	0.210E+08	0.110E+08	0.133E+08	0.222E+03	0.912E+03	0.557E+08
79	0	08JUL75	339.00	0.683E+05	0.182E+03	0.180E+08	0.170E+08	0.213E+08	0.430E+03	0.110E+08	0.197E+08
80	0	07AUG75	351.00	0.556E+05	0.272E+03	0.328E+08	0.185E+08	0.199E+08	0.583E+03	0.924E+03	0.246E+08
SUMMATION			106777.00	0.989E+07	0.135E+06	0.351E+06	0.768E+05	0.121E+06	0.828E+05	0.605E+05	0.593E+06
# OBSERVATIONS			77	79	77	77	72	73	72	73	77
AVERAGE VALUE			1378.92	0.139E+06	0.175E+08	0.456E+08	0.106E+08	0.166E+08	0.588E+03	0.829E+03	0.770E+08

RANKAN'TT PIETT CPP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	5	15*0673	0.3	0.0	0.0	****	****	0.0	****	0.0	0.0
2	5	1057073	0.0	0.0	****	****	0.0	0.0	0.0	0.0	0.0
3	5	20050773	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	5	0805773	0.02	0.393E+01	0.196E-02	0.111E-02	0.302E-02	0.996E-02	0.659E-02	0.973E-03	0.518E-01
5	5	*70673	0.02	0.880E+0*	0.780E-03	****	0.201E-02	0.883E-02	0.683E-02	0.817E-03	0.435E-01
6	5	0190873	*.53	0.873E+01	0.49*E+00	0.182E+01	0.22*E+00	0.330E+00	0.390E-01	0.106E+00	0.554E+01
7	5	1590873	3.33	0.813E+03	****	0.196E+01	0.471E+00	0.114E+01	0.665E+00	0.132E+00	0.964E+01
8	5	2290873	163.00	0.380E+05	****	0.800E+00	0.388E+02	0.568E+02	0.179E+02	0.225E+02	0.130E+04
9	5	0673873	2989.00	0.987E+05	0.305E+03	0.592E+00	0.862E+03	0.930E+03	0.472E+03	0.278E+03	0.993E+04
10	5	2948873	709.00	0.188E+05	0.535E+01	0.878E+03	0.169E+02	0.252E+02	0.879E+01	0.766E+01	0.519E+03
11	5	1780873	883.00	0.628E+05	0.8*0E+02	0.279E+00	0.*96E+01	0.377E+0*	0.271E+03	0.526E+02	0.361E+04
12	5	0*0*873	119.00	0.199E+05	0.669E+0*	0.22*E+03	0.*09E+02	0.582E+02	0.*30E+02	0.536E+01	0.293E+03
13	5	1590873	821.00	0.582E+05	0.2*9E+02	0.810E+01	0.383E+02	0.180E+03	0.182E+03	0.296E+02	0.968E+03
14	5	2280873	*37.00	0.550E+03	0.28*E+02	0.463E+02	0.22*E+02	0.491E+02	0.270E+02	0.106E+02	****
15	5	0290873	1083.00	0.152E+06	0.508E+03	0.597E+00	0.320E+03	0.799E+03	0.479E+03	0.228E+03	0.875E+04
16	5	0590873	*76.00	0.87*E+05	0.102E+02	0.241E+03	0.871E+01	0.383E+02	0.262E+02	0.276E+01	0.220E+03
17	5	1390873	61.00	0.279E+05	0.508E+0*	****	0.360E+01	0.220E+02	0.*80E+02	0.241E+0*	0.311E+02
18	5	2190873	19.00	0.796E+00	0.581E+00	0.591E+00	0.287E+01	0.758E+01	0.471E+01	0.110E+01	0.530E+02
19	5	2780873	11.00	0.829E+00	0.208E+01	0.291E+00	0.139E+01	0.557E+01	0.418E+01	0.817E+00	0.366E+02
20	5	3480873	11.00	0.381E+00	0.809E+00	****	0.180E+01	0.382E+0*	0.243E+01	0.873E+00	0.439E+02
21	5	1680873	6.33	0.933E+03	0.599E+00	****	0.938E+00	0.258E+01	0.165E+01	0.352E+00	0.126E+02
22	5	2480873	12.33	0.373E+03	0.822E+00	0.587E-01	0.179E+01	0.875E+01	0.296E+01	0.660E+00	0.584E+02
23	5	0580873	9.00	0.*56E+03	0.258E+00	0.138E+00	0.532E+00	0.*29E+0*	0.758E+00	0.103E+00	0.179E+02
24	5	1080873	1.00	0.527E+03	0.191E+00	0.593E-01	0.159E+00	0.399E+00	0.240E+00	0.617E-01	0.339E+01
25	5	*680873	3.33	0.118E+03	0.168E+00	0.*23E+01	0.*96E+00	0.885E+00	0.589E+00	0.856E-01	0.607E+01
26	5	0280873	*.60	0.*33E+03	0.123E+00	0.367E+00	0.*98E+00	0.489E+00	0.380E+00	0.826E-01	0.153E+01
27	5	3080873	0.56	0.131E+03	0.381E-01	0.183E+00	0.317E-01	0.183E+00	0.111E+00	0.875E-02	****
28	5	1780873	*.50	0.808E+03	0.933E-01	0.301E+00	0.177E+00	0.420E+00	0.293E+00	0.275E-01	0.738E+00
29	5	0480873	6.33	0.187E+03	0.18*E+0*	0.*86E+0*	0.732E+00	0.283E+0*	0.168E+01	0.179E+00	0.786E+01
30	5	1580873	3.83	0.156E+03	0.268E+01	0.162E+01	0.353E+00	0.120E+01	0.885E+00	0.897E-01	0.182E+02
31	5	2180873	*.00	0.882E+03	0.283E+0*	0.578E+01	0.883E+00	0.377E+01	0.292E+01	0.202E+00	0.568E+02
32	5	0280873	15.00	0.518E+03	0.222E+01	0.856E+01	0.*96E+01	0.818E+0*	0.308E+01	0.188E+00	0.477E+02
33	5	0680873	10.00	0.506E+03	0.188E+01	0.283E+01	0.883E+00	0.333E+01	0.285E+01	0.227E+00	0.848E+02
34	5	1680873	13.00	0.553E+03	0.875E+01	0.339E+0*	0.537E+00	0.250E+0*	0.190E+01	0.776E-01	0.868E+02
35	5	1990873	15.00	0.688E+03	0.869E+01	0.129E+02	0.139E+01	0.488E+01	0.385E+01	0.486E+00	0.109E+03
36	5	2390873	15.33	0.723E+03	0.532E+01	0.283E+02	0.602E+00	0.356E+01	0.288E+01	0.257E+00	0.110E+03
37	5	2790873	37.00	0.885E+03	0.685E+0*	0.565E+03	0.868E+0*	0.759E+0*	0.292E+01	0.219E+0*	0.153E+03
38	5	2280873	73.00	0.511E+03	0.191E+02	0.829E+03	0.531E+01	0.113E+02	0.601E+0*	0.205E+0*	0.588E+03
39	5	2980873	*08.00	0.173E+05	0.572E+02	0.304E+03	0.159E+02	0.288E+02	0.893E+01	0.951E+01	0.756E+03
40	5	0580873	87.00	0.187E+03	0.1*3E+02	0.*76E+03	0.728E+01	0.918E+01	0.198E+01	0.389E+01	0.539E+03
41	5	1080873	*31.00	0.812E+03	0.7*7E+01	0.825E+02	0.230E+01	0.331E+01	0.101E+01	0.110E+01	0.165E+03
42	5	1780873	37.00	0.101E+05	0.267E+02	0.793E+02	0.104E+02	0.133E+02	0.293E+01	0.605E+01	0.958E+02
43	5	2680873	8*1.00	****	0.291E+03	0.*25E+04	0.*72E+03	0.273E+03	0.101E+03	0.181E+03	0.168E+04
44	5	0390873	112.00	****	0.937E+02	0.677E+01	0.430E+02	0.662E+02	0.232E+02	0.273E+02	0.167E+04
45	5	0690873	93.00	0.150E+05	0.476E+03	0.287E+03	0.191E+03	0.182E+02	0.813E+01	0.488E+01	0.524E+03
46	5	1390873	81.00	0.859E+04	0.131E+02	0.535E+03	0.395E+0*	0.534E+0*	0.139E+01	0.213E+01	0.224E+03
47	5	1980873	99.00	0.676E+04	0.180E+02	0.897E+02	0.559E+01	0.691E+01	0.132E+01	0.261E+01	0.282E+03
48	5	2680873	97.00	0.85*E+04	0.281E+03	0.371E+03	0.187E+03	0.247E+02	0.306E+01	0.873E+01	0.304E+03
49	5	3180873	137.00	0.*58E+05	0.983E+02	0.*6*E+0*	0.365E+02	0.538E+02	0.172E+02	0.128E+02	0.990E+03
50	5	0680873	1111.00	****	0.285E+03	0.720E+04	0.153E+03	0.266E+03	0.114E+03	0.582E+02	0.589E+04
51	5	1280873	530.00	0.157E+05	0.387E+02	0.176E+04	0.958E+03	0.612E+03	0.154E+02	0.238E+02	0.258E+04
52	5	0880873	220.00	0.165E+05	0.*91E+03	0.8*2E+03	0.322E+03	0.797E+02	0.749E+01	0.114E+02	0.880E+03
53	5	0480873	315.00	0.836E+05	0.361E+02	0.170E+04	0.382E+03	0.597E+02	0.214E+02	0.228E+02	0.115E+04
54	5	1080873	675.00	0.397E+05	0.*03E+03	0.*7*E+04	0.870E+03	0.870E+02	0.399E+02	0.286E+02	0.203E+04
55	5	1680873	363.00	0.387E+05	0.132E+03	0.132E+04	0.2*5E+03	0.780E+03	0.515E+02	0.102E+02	****
56	5	2180873	566.00	0.837E+05	0.285E+03	0.235E+04	0.103E+03	0.187E+03	0.706E+02	0.623E+02	0.144E+04

67	5	[illegible]	[illegible]	0.278E+05	0.1[illegible]E+03	0.[illegible]E+04	0.572E+02	0.136E+03	0.793E+02	0.288E+02	0.857E+03
69	5	[illegible]	[illegible]	0.[illegible]E+05	0.7[illegible]E+02	0.5[illegible]E+03	0.157E+03	0.713E+03	0.556E+02	0.753E+01	0.105E+03
69	5	[illegible]	[illegible]	0.6[illegible]E+04	0.233E+02	0.679E+02	0.272E+02	0.537E+02	0.316E+02	0.107E+02	0.163E+03
70	5	[illegible]	[illegible]	0.99[illegible]E+04	0.2[illegible]E+02	0.316E+02	0.[illegible]E+02	0.316E+02	0.215E+02	0.862E+01	0.359E+02
71	5	[illegible]	[illegible]	0.615E+04	0.[illegible]E+01	0.[illegible]E+01	0.[illegible]E+02	0.192E+02	0.891E+01	0.847E+01	0.101E+03
72	5	[illegible]	[illegible]	0.5[illegible]E+04	0.137E+02	0.171E+02	0.122E+02	0.137E+02	0.103E+01	0.879E+01	0.253E+03
73	5	[illegible]	[illegible]	0.6[illegible]E+04	0.275E+02	0.133E+03	0.976E+01	0.229E+02	0.131E+02	0.388E+01	0.152E+03
74	5	[illegible]	[illegible]	0.177E+05	0.[illegible]E+03	0.8[illegible]E+03	0.2[illegible]E+02	0.571E+02	0.331E+02	0.873E+01	0.118E+04
75	5	[illegible]	[illegible]	0.208E+05	0.822E+02	0.569E+03	0.280E+02	0.578E+02	0.298E+02	0.566E+01	0.453E+03
76	5	[illegible]	[illegible]	0.0	0.8[illegible]E+03	0.170E+03	0.997E+02	0.485E+03	0.455E+02	0.652E+02	0.297E+04
77	5	[illegible]	[illegible]	0.[illegible]E+05	0.[illegible]E+01	0.[illegible]E+02	0.259E+02	0.999E+02	0.788E+02	0.846E+01	0.112E+04
78	5	[illegible]	[illegible]	0.[illegible]E+04	0.78[illegible]E+01	0.308E+01	0.985E+01	0.196E+02	0.102E+02	0.826E+01	0.218E+03
79	5	[illegible]	[illegible]	0.[illegible]E+05	0.201E+01	0.218E+04	0.683E+02	0.113E+03	0.885E+02	0.364E+02	0.226E+04
80	5	[illegible]	[illegible]	0.3[illegible]E+04	0.137E+02	0.898E+02	0.744E+01	0.132E+02	0.556E+01	0.228E+01	0.229E+03
STRAFTON			19087.14	0.108E+07	0.193E+08	0.527E+05	0.222E+08	0.873E+08	0.250E+08	0.128E+08	0.579E+05
[illegible]			79	67	67	69	69	70	69	70	67
[illegible]			200.67	0.[illegible]E+05	0.5[illegible]E+02	0.[illegible]E+03	0.[illegible]E+02	0.675E+02	0.362E+02	0.183E+02	0.868E+03

PIPE STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	6	[illegible]	[illegible]	0.378E+03	0.274E+02	****	****	****	0.111E+03	0.957E+03
4	6	[illegible]	[illegible]	[illegible]	0.818E+02	0.183E+03	0.185E+03	0.180E+01	0.592E+02	0.181E+04
5	6	[illegible]	[illegible]	[illegible]	[illegible]	0.460E+03	0.617E+03	0.157E+03	0.345E+03	0.328E+04
13	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.137E+04	0.645E+01	0.322E+03	0.818E+04
14	6	[illegible]	[illegible]	[illegible]	0.112E+04	0.203E+03	0.207E+03	0.357E+01	0.399E+02	0.230E+04
15	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.212E+03	0.827E+02	0.593E+02	0.307E+04
16	6	[illegible]	[illegible]	[illegible]	[illegible]	0.759E+02	0.119E+03	0.391E+02	0.311E+02	0.859E+03
17	6	[illegible]	[illegible]	[illegible]	[illegible]	0.852E+02	0.278E+03	0.199E+03	0.472E+02	0.382E+04
18	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.120E+03	0.121E+03	0.180E+04
19	6	[illegible]	[illegible]	[illegible]	0.497E+04	0.222E+03	0.248E+03	0.257E+02	0.196E+03	0.586E+04
20	6	[illegible]	[illegible]	[illegible]	0.155E+04	0.682E+02	0.111E+03	0.471E+02	0.338E+02	0.203E+04
60	6	[illegible]	****	[illegible]	[illegible]	[illegible]	0.331E+03	0.132E+03	0.889E+02	0.703E+04
63	6	[illegible]	[illegible]	0.125E+03	0.162E+04	0.763E+02	0.149E+03	0.724E+02	0.473E+02	0.386E+04
SUMMATION		[illegible]	[illegible]	[illegible]	0.190E+05	0.261E+04	0.412E+04	0.151E+04	0.185E+04	0.488E+05
# OBSERVATIONS		11	12	11	11	12	12	12	13	13
AVERAGE VALUE		[illegible]	0.668E+05	0.116E+03	0.186E+04	0.218E+03	0.343E+03	0.126E+03	0.112E+03	0.375E+04

PIPE STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	7	[illegible]	0.465E+04	0.287E+01	****	****	0.120E+02	****	0.109E+02	0.182E+04
3	7	[illegible]	0.785E+04	[illegible]	****	0.0	0.898E+01	0.898E+01	0.215E+01	0.119E+04
4	7	[illegible]	0.980E+04	[illegible]	[illegible]	0.683E+01	0.156E+02	0.881E+01	0.380E+01	0.182E+04
8	7	[illegible]	0.128E+05	0.532E+01	****	0.412E+02	0.580E+02	0.168E+02	0.525E+02	0.228E+04
5	7	[illegible]	[illegible]	[illegible]	****	0.210E+02	0.462E+02	0.243E+02	0.341E+01	0.285E+04
6	7	[illegible]	0.170E+05	[illegible]	[illegible]	[illegible]	0.485E+02	0.227E+02	0.764E+01	0.395E+04
7	7	[illegible]	0.131E+05	****	[illegible]	0.182E+02	0.171E+02	0.390E+00	0.474E+01	0.242E+04
15	7	[illegible]	0.391E+05	[illegible]	[illegible]	[illegible]	0.398E+03	0.329E+03	0.482E+02	0.860E+04
16	7	[illegible]	0.203E+05	[illegible]	[illegible]	0.639E+02	0.577E+02	0.438E+02	0.181E+02	0.307E+04
17	7	[illegible]	0.375E+05	****	0.833E+03	0.495E+02	0.269E+03	0.220E+01	0.367E+02	0.719E+04
18	7	[illegible]	0.108E+05	[illegible]	[illegible]	0.789E+01	0.242E+02	0.167E+02	0.224E+01	0.227E+04
19	7	[illegible]	0.211E+05	[illegible]	[illegible]	0.245E+02	0.178E+03	0.153E+03	0.135E+02	0.481E+04
20	7	[illegible]	0.103E+05	[illegible]	0.707E+02	0.568E+01	0.189E+02	0.132E+02	0.185E+01	0.210E+04
21	7	[illegible]	0.772E+05	[illegible]	[illegible]	0.406E+02	0.490E+03	0.487E+03	0.302E+02	0.369E+04
60	7	[illegible]	****	[illegible]	[illegible]	0.691E+02	0.184E+03	0.114E+03	0.155E+02	0.751E+04
63	7	[illegible]	****	[illegible]	[illegible]	0.806E+02	0.104E+03	0.632E+02	0.108E+02	0.588E+04
SUMMATION		[illegible]	0.298E+06	[illegible]	0.378E+04	0.411E+03	[illegible]	0.148E+04	0.258E+03	0.607E+05
# OBSERVATIONS		16	18	18	12	15	16	15	16	16
AVERAGE VALUE		[illegible]	0.2[illegible]E+05	0.431E+02	0.312E+03	0.287E+02	0.120E+03	0.988E+02	0.161E+02	0.379E+04

BIG CREEK

CRP	STA	DAY	FLOW (CFS)	Cl- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	9	15A0[illegible]7	****	****	****	****	****	****	****	****	****
15	8	17[illegible]79	****	****	****	****	****	****	****	****	****
17	9	15[illegible]79	****	****	****	****	****	****	****	****	****
18	9	2[illegible]79	****	****	****	****	****	****	****	****	****
19	9	1[illegible]79	****	****	****	****	****	****	****	****	****
60	9	26[illegible]	****	****	****	****	****	****	****	****	****
SUMMATION			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
# OBSERVATIONS			1	0	0	0	0	0	0	0	0
AVERAGE VALUE			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

AU GRES RIVER

CRP	STA	DAY	FLOW (CFS)	Cl- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	9	15[illegible]7	85.00	0.618E+04	0.[illegible]8E+01	0.167E+01	0.0	0.794E+01	0.794E+01	0.108E+01	0.353E+03
2	9	20[illegible]7	1[illegible].00	0.197E+05	0.[illegible]E+01	****	0.0	0.234E+02	0.234E+02	0.122E+01	0.895E+03
3	9	25[illegible]7	99.00	0.[illegible]E+04	0.[illegible]E+0[illegible]	0.24[illegible]E+0[illegible]	0.[illegible]E+0[illegible]	0.[illegible]E+01	0.179E+00	0.552E+01	0.266E+03
4	9	9[illegible]7	[illegible].00	0.102E+05	0.177E+02	0.501E+01	0.502E+01	0.581E+01	0.786E+00	0.139E+01	0.521E+03
5	9	17[illegible]7	66.00	0.79[illegible]E+04	0.5[illegible]E+0[illegible]	0.954E+01	0.934E+01	0.983E+01	0.549E+01	0.722E+00	0.759E+03
6	9	[illegible]	[illegible].00	0.162E+05	0.146E+02	0.396E+0[illegible]	0.915E+0[illegible]	0.170E+02	0.768E+0[illegible]	0.264E+01	0.198E+04
7	9	15[illegible]7	[illegible].00	0.108E+05	****	0.613E+02	0.397E+01	0.675E+01	0.278E+01	0.798E+00	0.883E+03
8	9	28[illegible]7	[illegible].00	0.198E+05	0.955E+0[illegible]	0.227E+0[illegible]	0.[illegible]7E+02	0.218E+02	0.904E+01	0.342E+01	0.146E+04
15	9	17[illegible]79	506.00	0.298E+05	0.8[illegible]7E+01	0.9[illegible]E+0[illegible]	0.5[illegible]E+02	0.146E+03	0.922E+02	0.23[illegible]E+02	0.312E+04
16	9	21[illegible]79	[illegible].00	0.129E+05	0.2[illegible]E+02	0.127E+01	0.146E+02	0.326E+02	0.179E+02	0.113E+02	0.127E+04
17	9	15[illegible]79	[illegible].00	0.160E+05	****	0.731E+01	0.[illegible]E+02	0.771E+02	0.599E+02	0.137E+02	0.241E+04
18	9	2[illegible]79	181.00	0.593E+04	0.172E+02	0.770E+02	0.402E+01	0.171E+02	0.131E+02	0.102E+01	0.642E+03
19	9	12[illegible]79	165.00	0.171E+05	0.608E+02	0.180E+04	0.325E+02	0.848E+02	0.523E+02	0.118E+02	0.310E+04
20	9	5[illegible]79	[illegible].00	0.[illegible]7E+05	0.1[illegible]E+02	0.[illegible]91E+0[illegible]	0.3[illegible]E+01	0.889E+0[illegible]	0.556E+01	0.112E+01	0.653E+03
21	1	19[illegible]79	1[illegible].00	0.153E+05	0.2[illegible]E+02	0.138E+03	0.175E+02	0.450E+02	0.275E+02	0.976E+01	0.119E+04
60	1	26[illegible]75	[illegible].00	****	0.2[illegible]6E+03	0.998E+03	0.730E+02	0.136E+03	0.629E+02	0.237E+02	0.329E+04
61	9	0[illegible]75	[illegible].00	****	0.[illegible]E+02	0.3[illegible]E+0[illegible]	0.[illegible]86E+0[illegible]	0.618E+02	0.413E+02	0.698E+01	0.224E+04
SUMMATION			[illegible].00	0.185E+06	0.8[illegible]E+03	0.668E+04	0.271E+03	0.703E+03	0.432E+03	0.119E+03	0.251E+05
# OBSERVATIONS			[illegible]	[illegible]	[illegible]	16	17	17	17	17	17
AVERAGE VALUE			[illegible].01	0.12[illegible]E+05	0.[illegible]E+03	0.4[illegible]E+03	0.159E+02	0.413E+02	0.254E+02	0.701E+01	0.147E+04

CPP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	10	[illegible]	81.00	0.652E+03	0.482E+01	0.159E+02	0.828E+01	0.163E+02	0.121E+02	0.375E+01	0.185E+03
2	10	[illegible]	76.00	0.318E+03	0.498E+01	0.602E+01	0.684E+01	0.109E+02	0.889E+01	0.275E+01	0.757E+02
3	10	[illegible]	72.00	0.330E+03	0.413E+01	0.148E+02	0.677E+01	0.112E+02	0.880E+01	0.319E+01	0.851E+02
4	10	[illegible]	83.00	0.106E+04	0.111E+02	0.175E+02	0.200E+02	0.650E+02	0.450E+02	0.183E+02	0.235E+03
5	10	[illegible]	69.00	0.248E+03	0.298E+02	0.731E+01	0.991E+01	0.158E+02	0.588E+01	0.698E+01	0.193E+03
6	10	[illegible]	69.00	0.218E+04	0.659E+02	0.800E+02	0.756E+02	0.335E+02	0.789E+01	0.172E+02	0.766E+03
7	10	[illegible]	87.00	0.126E+03	0.832E+02	0.151E+02	0.165E+02	0.213E+02	0.480E+01	0.950E+01	0.555E+03
8	10	[illegible]	3381.00	0.586E+05	0.183E+04	0.265E+04	0.679E+03	0.114E+04	0.509E+03	0.375E+03	0.172E+05
10	10	[illegible]	208.00	0.230E+04	0.[illegible]E+02	0.889E+02	0.236E+02	0.287E+02	0.511E+01	0.984E+01	0.968E+03
15	10	[illegible]	570.00	0.895E+04	****	0.113E+03	0.311E+02	0.573E+02	0.262E+02	0.284E+02	0.153E+04
16	10	[illegible]	[illegible]	0.[illegible]E+04	0.407E+02	0.190E+02	0.271E+02	0.527E+02	0.256E+02	0.170E+02	0.293E+03
17	10	[illegible]	[illegible]	0.679E+04	0.265E+02	0.797E+02	0.492E+02	0.950E+02	0.459E+02	0.281E+02	0.105E+04
18	10	[illegible]	[illegible]	0.111E+04	0.287E+02	0.332E+01	0.312E+01	0.204E+02	0.104E+02	0.619E+01	0.258E+03
19	10	[illegible]	[illegible]	0.667E+04	0.123E+02	0.145E+02	****	0.199E+01	****	0.153E+03	0.139E+04
20	10	[illegible]	[illegible]	0.138E+04	0.332E+02	0.218E+02	0.237E+02	0.360E+02	0.123E+02	0.599E+01	0.335E+03
21	10	[illegible]	132.00	0.168E+05	0.370E+02	0.334E+02	0.116E+02	0.338E+02	0.222E+02	0.953E+01	0.672E+03
62	10	[illegible]	532.00	****	0.[illegible]E+02	0.335E+03	0.607E+02	0.758E+02	0.152E+02	0.222E+02	0.258E+04
63	10	[illegible]	300.00	****	0.[illegible]E+02	0.163E+03	****	****	****	0.164E+02	0.153E+04
SUMMATION			6036.00	0.103E+06	0.[illegible]E+04	0.375E+04	0.955E+03	0.191E+04	0.756E+03	0.726E+03	0.299E+05
				13	16	17	18	16	17	16	18
* DIFFERENCE											
AVERAGE VALUE			395.33	0.685E+04	0.187E+03	0.298E+03	0.537E+02	0.112E+03	0.473E+02	0.403E+02	0.166E+04

CPP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	11	[illegible]	11.00	0.298E+03	0.[illegible]E+01	0.125E+01	0.0	0.185E+01	0.185E+01	0.508E+00	0.250E+03
2	11	[illegible]	10.00	0.101E+04	0.835E+01	****	****	****	****	0.287E+00	0.132E+03
3	11	[illegible]	21.00	0.508E+03	0.598E+01	0.529E+00	0.957E+00	0.911E+00	0.534E-01	0.218E+00	0.192E+03
4	11	[illegible]	8.00	****	0.131E+02	0.361E+00	****	****	****	0.168E+02	0.833E+03
5	11	[illegible]	96.00	0.122E+04	0.389E+01	0.818E+01	0.285E+01	0.433E+01	0.199E+01	0.612E+00	0.510E+03
6	11	[illegible]	115.00	0.616E+04	0.780E+01	0.109E+02	0.885E+01	0.120E+02	0.756E+01	0.171E+01	0.118E+04
7	11	[illegible]	70.00	0.188E+04	****	0.278E+02	0.[illegible]E+01	0.875E+01	0.288E+01	0.586E+00	0.658E+03
13	11	[illegible]	2836.00	0.877E+05	0.805E+03	0.381E+04	0.383E+03	0.150E+04	0.116E+04	0.190E+03	0.121E+05
14	11	[illegible]	487.00	0.361E+04	0.906E+01	0.115E+03	0.957E+01	0.215E+02	0.119E+02	0.329E+01	0.813E+03
15	11	[illegible]	916.00	0.997E+04	0.[illegible]E+02	0.[illegible]E+02	0.138E+02	0.977E+02	0.658E+02	0.151E+02	0.175E+04
16	11	[illegible]	121.00	0.821E+04	0.157E+02	0.658E+02	0.716E+01	0.273E+02	0.202E+02	0.538E+01	0.101E+04
17	11	[illegible]	220.00	0.973E+04	0.135E+02	0.170E+03	0.220E+02	0.605E+02	0.465E+02	0.116E+02	0.188E+04
18	11	[illegible]	53.00	0.131E+04	0.[illegible]E+02	0.239E+02	0.181E+02	0.909E+01	0.567E+01	0.877E+00	0.610E+03
19	11	[illegible]	255.00	0.655E+04	0.861E+02	0.966E+02	0.331E+02	0.538E+02	0.217E+02	0.213E+02	0.150E+04
20	11	[illegible]	70.00	0.138E+04	0.663E+02	0.[illegible]E+02	0.236E+01	0.523E+01	0.287E+01	0.682E+00	0.478E+03
21	11	[illegible]	55.00	0.312E+05	0.[illegible]E+02	0.[illegible]E+02	0.185E+02	0.489E+02	0.304E+02	0.108E+02	0.360E+03
62	11	[illegible]	100.00	****	0.[illegible]E+02	0.502E+03	0.266E+02	0.600E+02	0.375E+02	0.101E+02	0.232E+04
63	11	[illegible]	233.00	****	0.[illegible]E+02	0.[illegible]E+02	0.[illegible]E+02	0.355E+02	0.135E+02	0.395E+01	0.150E+04
SUMMATION			4083.00	0.[illegible]E+06	0.[illegible]E+04	0.536E+04	0.515E+03	0.198E+04	0.143E+04	0.298E+03	0.273E+05
				11	15	17	17	16	16	18	18
* DIFFERENCE											
AVERAGE VALUE			376.67	0.7[illegible]E+04	0.[illegible]E+03	0.298E+03	0.[illegible]E+02	0.121E+03	0.891E+02	0.163E+02	0.152E+04

CRP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	123	[illegible]	[illegible]	[illegible]	[illegible]	0.110E+00	0.105E+00	0.247E+00	0.192E+00	0.384E+03	0.958E+00
2	123	[illegible]	[illegible]	[illegible]	[illegible]	0.128E+00	0.556E+01	0.146E+00	0.913E+03	0.172E+03	0.238E+00
3	123	[illegible]	[illegible]	[illegible]	[illegible]	0.215E+00	0.876E+01	0.192E+00	0.949E+03	0.267E+03	0.487E+00
4	123	[illegible]	[illegible]	[illegible]	[illegible]	0.201E+00	0.137E+00	0.241E+00	0.103E+00	0.529E+03	0.653E+00
5	123	[illegible]	[illegible]	[illegible]	[illegible]	0.492E+00	0.110E+00	0.175E+00	0.899E+03	0.728E+03	0.116E+05
6	123	[illegible]	[illegible]	[illegible]	[illegible]	0.827E+00	0.238E+00	0.382E+00	0.108E+00	0.177E+00	0.177E+05
7	123	[illegible]	[illegible]	[illegible]	[illegible]	0.358E+00	0.176E+00	0.283E+00	0.921E+03	0.111E+00	0.170E+05
8	123	[illegible]	[illegible]	[illegible]	[illegible]	0.390E+05	0.198E+00	0.618E+00	0.306E+00	0.183E+00	0.566E+05
9	123	[illegible]	[illegible]	[illegible]	[illegible]	0.527E+05	0.158E+00	0.171E+00	0.127E+03	0.100E+00	0.253E+05
10	123	[illegible]	[illegible]	[illegible]	0.871E+00	0.218E+05	0.153E+00	0.198E+00	0.815E+03	0.111E+00	0.276E+05
11	123	[illegible]	[illegible]	[illegible]	[illegible]	0.848E+05	0.106E+00	0.110E+05	0.750E+00	0.280E+00	0.108E+06
12	123	[illegible]	[illegible]	[illegible]	[illegible]	0.137E+05	0.173E+00	0.816E+00	0.829E+03	0.111E+00	0.450E+05
13	123	[illegible]	[illegible]	0.285E+07	0.270E+05	0.120E+06	0.785E+00	0.359E+05	0.280E+05	0.379E+00	0.219E+06
14	123	[illegible]	[illegible]	0.955E+06	0.505E+00	0.189E+05	0.216E+00	0.331E+00	0.986E+03	0.680E+03	0.356E+05
15	123	[illegible]	[illegible]	0.128E+07	0.571E+00	0.298E+05	0.293E+00	0.663E+00	0.368E+00	0.141E+00	0.630E+05
16	123	[illegible]	[illegible]	0.116E+07	0.613E+00	0.987E+00	0.186E+00	0.387E+00	0.160E+00	0.119E+00	0.198E+05
17	123	[illegible]	[illegible]	0.570E+07	0.675E+00	0.138E+05	0.153E+00	0.628E+00	0.275E+00	0.217E+00	0.388E+05
18	123	[illegible]	[illegible]	[illegible]	[illegible]	0.120E+05	0.129E+00	0.362E+00	0.235E+00	0.593E+03	0.308E+05
19	123	[illegible]	[illegible]	0.182E+07	0.526E+00	0.188E+05	0.285E+00	0.865E+00	0.221E+00	0.169E+00	0.805E+05
20	123	[illegible]	[illegible]	[illegible]	[illegible]	0.798E+00	0.716E+03	0.183E+00	0.109E+00	0.482E+03	0.183E+05
21	123	[illegible]	[illegible]	0.717E+06	[illegible]	0.177E+00	0.383E+03	0.128E+00	0.887E+03	0.198E+03	****
22	123	[illegible]	[illegible]	[illegible]	[illegible]	0.172E+00	0.669E+03	0.105E+00	0.378E+03	0.272E+03	0.283E+00
23	123	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.533E+03	0.120E+00	0.605E+03	0.275E+03	0.198E+00
24	123	[illegible]	[illegible]	[illegible]	0.137E+00	[illegible]	0.573E+03	0.866E+03	0.338E+03	0.486E+03	0.318E+00
25	123	[illegible]	[illegible]	[illegible]	0.899E+03	0.162E+03	0.913E+03	0.550E+03	0.213E+03	0.413E+00	
26	123	[illegible]	[illegible]	[illegible]	[illegible]	0.703E+00	0.827E+03	0.827E+03	0.406E+03	0.320E+03	0.208E+00
27	123	[illegible]	[illegible]	[illegible]	0.178E+00	0.143E+00	0.566E+03	0.488E+00	0.878E+03	0.346E+03	0.360E+00
28	123	[illegible]	[illegible]	[illegible]	0.131E+00	0.138E+03	0.162E+03	0.101E+00	0.645E+03	0.258E+03	0.392E+00
29	123	[illegible]	[illegible]	[illegible]	0.722E+03	0.406E+00	0.397E+03	0.106E+00	0.660E+03	0.311E+03	0.361E+00
30	123	[illegible]	[illegible]	0.511E+06	0.368E+03	0.802E+03	0.237E+03	0.493E+03	0.262E+03	0.198E+03	0.172E+00
31	123	[illegible]	[illegible]	[illegible]	0.373E+00	0.804E+00	0.352E+03	0.160E+00	0.689E+03	0.639E+03	0.737E+00
32	123	[illegible]	[illegible]	[illegible]	0.238E+00	0.315E+00	0.788E+03	0.108E+00	0.335E+03	0.573E+03	0.538E+00
33	123	[illegible]	[illegible]	0.427E+06	0.158E+00	0.361E+00	0.925E+03	0.182E+00	0.894E+03	0.607E+03	0.785E+00
34	123	[illegible]	[illegible]	[illegible]	[illegible]	0.668E+00	0.135E+00	0.206E+00	0.692E+03	0.691E+03	0.912E+00
35	123	[illegible]	[illegible]	0.885E+06	0.533E+00	3.507E+00	0.158E+00	0.198E+00	0.293E+03	0.100E+00	0.120E+05
36	123	[illegible]	[illegible]	0.617E+06	0.641E+00	0.801E+00	0.158E+00	0.189E+00	0.350E+03	0.880E+03	0.108E+05
37	123	[illegible]	[illegible]	0.575E+06	0.837E+00	0.511E+00	0.197E+00	0.239E+00	0.507E+03	0.116E+00	0.187E+05
38	123	[illegible]	[illegible]	0.875E+06	0.398E+00	0.857E+00	0.150E+00	0.188E+00	0.388E+03	0.913E+03	0.118E+05
39	123	[illegible]	[illegible]	1.137E+07	0.737E+00	0.588E+00	0.163E+00	0.209E+00	0.463E+03	0.130E+00	0.158E+05
40	123	[illegible]	[illegible]	0.871E+06	0.661E+00	0.518E+00	0.169E+00	0.217E+00	0.487E+03	0.118E+00	0.117E+05
41	123	[illegible]	[illegible]	0.585E+06	0.807E+00	0.384E+00	0.138E+00	0.168E+00	0.360E+03	0.958E+03	0.128E+05
42	123	[illegible]	[illegible]	0.867E+06	0.888E+00	0.817E+00	0.177E+00	0.208E+00	0.311E+03	0.128E+00	0.162E+05
43	123	[illegible]	[illegible]	[illegible]	0.870E+00	0.559E+00	0.113E+00	0.188E+00	0.350E+03	0.777E+03	0.136E+05
44	123	[illegible]	[illegible]	0.699E+06	0.238E+00	0.873E+00	0.133E+00	0.173E+00	0.396E+03	0.952E+03	0.993E+00
45	123	[illegible]	[illegible]	0.181E+07	0.103E+05	0.331E+05	0.618E+00	0.636E+00	0.268E+03	0.457E+00	0.435E+05
46	123	[illegible]	[illegible]	0.572E+06	0.607E+00	0.671E+05	0.399E+00	0.585E+00	0.185E+00	0.260E+00	0.657E+05
47	123	[illegible]	[illegible]	[illegible]	[illegible]	0.586E+03	0.278E+00	0.380E+00	0.103E+00	0.122E+00	0.685E+05
48	123	[illegible]	[illegible]	0.111E+07	0.867E+00	0.785E+05	0.290E+00	0.389E+00	0.985E+03	0.158E+00	0.790E+05
49	123	[illegible]	[illegible]	0.180E+07	0.748E+00	0.213E+05	0.298E+00	0.368E+00	0.703E+03	0.221E+00	0.537E+05
50	123	[illegible]	[illegible]	0.595E+06	0.885E+00	0.362E+05	0.187E+00	0.225E+00	0.179E+03	0.138E+00	0.278E+05
51	123	[illegible]	[illegible]	0.298E+06	0.821E+00	0.935E+00	0.183E+00	0.171E+00	0.291E+03	0.113E+00	0.274E+05
52	123	[illegible]	[illegible]	0.183E+07	0.111E+05	0.110E+07	0.287E+00	0.323E+00	0.355E+03	0.233E+00	0.322E+05
53	123	[illegible]	[illegible]	****	0.177E+05	0.379E+00	0.425E+00	0.110E+05	0.603E+00	0.260E+00	0.727E+05
54	123	[illegible]	[illegible]	0.245E+06	[illegible]	0.215E+05	0.314E+00	0.307E+00	0.892E+03	0.127E+00	0.428E+05
55	123	[illegible]	[illegible]	0.771E+06	0.891E+00	0.188E+05	0.313E+00	0.258E+00	0.193E+03	0.127E+00	0.421E+05
56	123	[illegible]	[illegible]	0.710E+06	0.581E+00	[illegible]	0.165E+00	0.173E+00	0.133E+03	0.885E+03	0.329E+05

57	128	[illegible]	[illegible]	0.167E+07	0.108E+05	0.128E+05	****	0.263E+08	****	0.108E+08	0.337E+05
58	128	[illegible]	[illegible]	0.136E+07	0.381E+08	0.221E+05	0.365E+08	0.363E+08	0.938E+02	0.232E+08	0.456E+05
59	128	[illegible]	[illegible]	0.638E+06	0.108E+05	0.366E+05	0.328E+08	0.846E+08	0.118E+08	0.151E+08	0.586E+05
60	128	[illegible]	[illegible]	****	0.133E+05	0.[illegible]E+06	0.[illegible]E+08	0.187E+05	0.103E+05	0.151E+08	0.145E+06
61	128	[illegible]	[illegible]	0.117E+07	0.700E+08	0.494E+05	0.253E+08	0.375E+08	0.122E+08	0.131E+08	0.820E+05
62	128	[illegible]	[illegible]	0.[illegible]E+07	0.577E+08	0.301E+05	0.156E+08	0.227E+08	0.683E+03	0.867E+03	0.598E+05
63	128	[illegible]	[illegible]	0.205E+07	0.119E+05	0.392E+05	0.325E+08	0.463E+08	0.138E+08	0.157E+08	0.592E+05
64	128	[illegible]	[illegible]	0.105E+07	0.556E+08	0.737E+05	0.218E+08	0.379E+08	0.165E+08	0.133E+08	0.687E+05
65	128	[illegible]	[illegible]	0.978E+06	0.868E+08	0.288E+05	0.217E+08	0.398E+08	0.221E+08	0.917E+03	0.296E+05
66	128	[illegible]	[illegible]	0.809E+06	0.156E+05	0.872E+05	0.367E+08	0.786E+05	0.189E+05	0.210E+08	0.126E+06
67	128	[illegible]	[illegible]	0.867E+06	0.821E+08	0.721E+05	0.328E+08	0.137E+05	0.105E+05	0.189E+08	0.112E+06
68	128	[illegible]	[illegible]	0.605E+06	0.7[illegible]E+08	0.273E+05	0.[illegible]E+08	0.451E+08	0.268E+08	0.908E+03	0.827E+05
69	128	[illegible]	[illegible]	0.768E+06	0.370E+08	0.980E+08	0.119E+08	0.379E+08	0.259E+08	0.633E+03	0.218E+05
70	128	[illegible]	[illegible]	0.781E+06	0.359E+08	0.607E+08	0.119E+08	0.238E+08	0.128E+08	0.572E+03	0.130E+05
71	128	[illegible]	[illegible]	0.507E+06	0.165E+08	0.[illegible]E+08	0.735E+03	0.178E+08	0.104E+08	0.353E+03	0.116E+05
72	128	[illegible]	[illegible]	0.838E+06	0.275E+08	0.477E+08	0.187E+08	0.282E+08	0.949E+03	0.949E+03	0.128E+05
73	128	[illegible]	[illegible]	0.507E+06	0.298E+08	0.503E+08	0.148E+08	0.198E+08	0.901E+03	0.877E+03	0.139E+05
74	128	[illegible]	[illegible]	0.367E+06	0.251E+08	0.138E+08	0.111E+08	0.207E+08	0.983E+03	0.456E+03	0.212E+05
75	128	[illegible]	[illegible]	0.107E+07	0.488E+08	0.174E+05	0.169E+08	0.380E+08	0.211E+08	0.721E+03	0.387E+05
76	128	[illegible]	[illegible]	0.398E+06	0.187E+08	0.117E+05	0.967E+03	0.179E+08	0.817E+03	0.330E+03	0.169E+05
77	128	[illegible]	[illegible]	0.793E+06	0.383E+08	0.130E+05	0.165E+08	0.308E+08	0.139E+08	0.705E+03	0.275E+05
78	128	[illegible]	[illegible]	0.310E+06	0.129E+08	0.520E+08	0.781E+03	0.118E+08	0.883E+03	0.426E+03	0.101E+05
79	128	[illegible]	[illegible]	0.31[illegible]E+06	0.[illegible]E+08	0.[illegible]E+08	0.508E+03	0.109E+08	0.585E+03	0.329E+03	0.125E+05
80	128	[illegible]	[illegible]	0.318E+06	0.177E+08	0.781E+03	0.377E+03	0.698E+03	0.321E+03	0.234E+03	0.172E+08
SUMMATION			886599.00	0.698E+08	0.483E+06	0.156E+07	0.149E+06	0.299E+06	0.188E+06	0.865E+05	0.261E+07
# OBSERVATIONS			80	79	80	80	79	80	79	80	79
AVERAGE VALUE			[illegible].87	0.895E+06	0.568E+08	0.195E+05	0.188E+08	0.373E+08	0.187E+08	0.108E+08	0.331E+05

QUANICASSES RIVER

CPU	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	PO4 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	10	[illegible]	6.30	0.6[illegible]E+03	0.520E-01	****	0.0	0.816E+01	0.816E+01	0.161E+00	0.539E+01
2	10	[illegible]	8.00	0.[illegible]E+03	0.720E-01	****	0.0	0.177E+01	0.177E+01	0.574E-01	0.528E+01
3	10	[illegible]	1.00	0.[illegible]E+03	0.835E-01	0.116E-01	0.279E-01	0.280E+01	0.277E+01	0.819E-01	0.728E+01
4	10	950[illegible]	9.00	0.607E+03	0.206E+00	****	0.110E+00	0.824E+01	0.813E+01	0.866E+00	0.153E+02
5	10	[illegible]	[illegible]	0.2[illegible]E+00	0.[illegible]E+01	0.111E+01	0.129E+01	0.576E+01	0.446E+01	0.258E+00	0.156E+02
6	10	[illegible]	[illegible]	0.[illegible]E+03	0.[illegible]E-01	0.204E+00	0.50[illegible]E+00	0.223E+01	0.173E+01	0.622E-01	0.185E+02
7	10	15[illegible]	[illegible]	0.132E+00	0.506E+01	0.396E+01	0.587E+00	0.350E+01	0.296E+01	0.840E-01	0.291E+02
13	10	[illegible]	[illegible]	0.[illegible]E+05	0.[illegible]E+03	0.8[illegible]E+00	0.157E+03	0.280E+03	0.933E+02	0.112E+03	0.119E+04
14	10	27[illegible]	105.00	0.127E+05	****	0.187E+00	0.327E+01	0.368E+02	0.345E+02	0.172E+01	0.149E+03
15	10	[illegible]	115.00	0.113E+05	0.312E+01	0.267E+03	0.105E+02	0.693E+02	0.587E+02	0.731E+01	0.329E+03
16	10	[illegible]	106.00	0.[illegible]E+05	0.131E+03	0.275E+03	0.829E+01	0.452E+02	0.409E+02	0.258E+01	0.519E+01
17	10	16[illegible]	115.00	0.181E+05	****	0.292E+03	0.535E+01	0.550E+02	0.497E+02	0.368E+01	0.937E+02
18	10	30[illegible]	37.00	0.371E+04	0.328E+01	0.888E+02	0.898E+00	0.128E+02	0.115E+02	0.195E+00	****
19	10	[illegible]	29.00	0.[illegible]E+04	0.18[illegible]E+01	0.195E+03	0.966E+00	0.8[illegible]E+01	0.763E+01	0.188E+00	****
20	10	26[illegible]	37.00	0.218E+04	0.136E+01	0.382E+02	0.102E+01	0.657E+01	0.555E+01	0.197E+00	0.162E+02
21	10	[illegible]	44.00	0.156E+04	0.398E+03	****	0.194E+00	0.351E+01	0.311E+01	0.698E-01	0.135E+02
22	10	[illegible]	7.00	0.875E+03	0.372E+00	****	0.233E+00	0.187E+01	0.168E+01	0.372E-01	0.757E+01
23	10	[illegible]	6.00	0.822E+03	0.281E+00	****	0.281E+00	0.190E+01	0.165E+01	0.270E-01	0.108E+02
24	10	[illegible]	5.63	0.8[illegible]E+03	0.107E+01	****	0.225E+00	0.139E+01	0.116E+01	0.680E-01	0.192E+01
25	10	[illegible]	9.00	0.8[illegible]E+03	0.276E+00	****	0.209E+00	0.232E+01	0.207E+01	0.430E-01	0.107E+02
28	10	10[illegible]	3.30	0.686E+03	0.150E+00	0.130E+03	0.178E+00	0.150E+01	0.132E+01	0.553E-01	0.525E+01
29	10	[illegible]	3.50	0.8[illegible]E+03	0.299E+00	0.216E+00	0.179E+00	0.183E+01	0.125E+01	0.367E-01	****
60	10	[illegible]	[illegible]	0.8[illegible]E+04	0.883E+01	0.671E+04	0.996E+02	0.148E+03	0.482E+02	0.428E+02	0.135E+04
61	10	[illegible]	60.00	0.111E+05	0.111E+02	0.112E+04	0.851E+01	0.157E+02	0.112E+02	0.181E+01	0.221E+03
SUMMATION			[illegible]	0.[illegible]E+06	0.[illegible]E+03	0.[illegible]E+05	0.290E+03	0.675E+03	0.385E+03	0.178E+03	0.350E+04
# OBSERVATIONS			28	28	27	26	28	28	28	28	21
AVERAGE VALUE			56.35	0.872E+04	0.117E+02	0.932E+03	0.121E+02	0.281E+02	0.161E+02	0.726E+01	0.167E+03

SPRINGING RIVER

CPU	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	PO4 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	15	[illegible]	1.00	0.136E+04	0.206E+02	0.820E+01	****	0.888E+01	****	0.985E+00	0.129E+02
2	15	[illegible]	5.00	0.836E+03	0.100E+00	****	0.978E-01	0.502E+01	0.502E+01	0.791E-01	0.688E+01
3	15	[illegible]	8.33	0.858E+03	0.983E+00	0.313E+01	0.101E+02	0.109E+02	0.831E+00	0.586E+00	0.846E+01
4	15	05[illegible]	[illegible]	0.186E+04	0.767E+00	0.395E+01	0.106E+01	0.122E+02	0.112E+02	0.652E+00	0.188E+02
5	15	[illegible]	18.00	0.342E+04	0.168E+02	0.222E+01	0.562E+01	0.119E+02	0.63[illegible]E+01	0.373E-01	0.357E+02
6	15	[illegible]	27.00	0.365E+04	0.181E+02	0.883E+01	0.453E+01	0.866E+01	0.413E+01	0.296E+01	0.495E+02
7	15	[illegible]	31.00	0.4[illegible]E+04	0.950E+01	0.[illegible]E+02	0.629E+01	0.130E+02	0.666E+01	0.263E+01	0.111E+03
13	15	07[illegible]	124.00	0.321E+05	0.852E+02	0.108E+05	0.850E+02	0.133E+03	0.877E+02	0.287E+02	0.253E+04
14	15	29[illegible]	106.00	****	0.125E+02	0.292E+04	0.168E+02	0.228E+02	0.645E+01	0.552E+01	0.518E+03
15	15	[illegible]	163.00	0.16[illegible]E+05	0.11[illegible]E+02	0.327E+04	0.85[illegible]E+01	0.253E+02	0.168E+02	0.584E+01	0.278E+03
17	15	16[illegible]	162.00	0.178E+05	0.836E+01	0.251E+04	0.106E+02	0.285E+02	0.179E+02	0.633E+01	0.218E+03
18	15	[illegible]	53.00	0.537E+04	0.569E+01	0.978E+03	0.171E+01	0.523E+01	0.351E+01	0.340E+00	****
19	15	[illegible]	39.33	0.398E+04	0.597E+01	0.399E+03	0.382E+01	0.880E+01	0.53[illegible]E+01	0.119E+01	0.108E+03
20	15	26[illegible]	29.00	0.278E+04	0.169E+01	0.366E+03	0.739E+00	0.885E+01	0.371E+01	0.922E-01	0.305E+02
21	15	[illegible]	16.00	0.328E+04	0.196E+02	0.382E+03	0.171E+01	0.506E+01	0.335E+01	0.976E+00	0.368E+02
60	15	26[illegible]	869.00	0.145E+05	0.681E+02	0.128E+05	0.5[illegible]E+02	0.790E+02	0.272E+02	0.119E+02	0.257E+04
61	15	[illegible]	136.00	0.109E+05	0.218E+02	0.312E+04	0.116E+02	0.187E+02	0.714E+01	0.581E+01	0.739E+03
SUMMATION			[illegible]	0.[illegible]E+06	0.257E+03	0.368E+05	0.2[illegible]E+03	0.401E+03	0.173E+03	0.779E+02	0.726E+04
# OBSERVATIONS			17	16	17	16	16	17	16	17	16
AVERAGE VALUE			101.35	0.772E+04	0.151E+02	0.230E+04	0.137E+02	0.236E+02	0.108E+02	0.458E+01	0.458E+03

SHEBEON RIVER

CRV	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	16	16[illegible]77	2.00	0.880E+01	0.803E+01	0.790E-01	****	0.258E+01	****	0.567E-01	0.188E+02
2	16	11[illegible]77	2.80	0.215E+01	0.333E-01	0.879E-01	0.150E+00	0.167E+01	0.152E+01	0.555E-01	0.928E+01
13	16	07[illegible]78	102.00	0.180E+05	0.710E+02	0.888E+08	****	****	****	0.251E+02	0.976E+03
14	16	20[illegible]78	69.00	0.735E+08	0.665E+01	0.182E+08	0.937E+01	0.108E+02	0.985E+00	0.275E+01	0.210E+03
15	16	18[illegible]78	70.00	0.107E+05	****	0.[illegible]81E+08	0.886E+01	0.908E+01	0.318E+01	0.226E+01	0.651E+02
17	16	16[illegible]78	70.00	0.103E+05	****	0.125E+08	0.713E+01	0.118E+02	0.871E+01	0.328E+01	0.132E+03
18	16	20[illegible]78	33.00	0.237E+08	0.292E+01	0.359E+07	0.152E+01	0.361E+01	0.210E+01	0.383E+00	0.957E+01
19	16	13[illegible]78	12.00	0.273E+08	0.935E+00	****	0.119E+01	0.209E+01	0.907E+00	0.438E+00	0.332E+02
20	16	26[illegible]78	12.00	0.131E+08	0.717E+00	0.185E+03	0.862E+00	0.686E+00	0.228E+00	0.738E-01	0.979E+00
SUMMATION			838.00	0.558E+05	0.9[illegible]E+02	0.909E+08	0.287E+02	0.409E+02	0.136E+02	0.384E+02	0.185E+08
# OBSERVATIONS			7	9	7	8	7	8	7	9	9
AVERAGE VALUE			83.46	0.620E+08	0.130E+02	0.114E+08	0.353E+01	0.511E+01	0.195E+01	0.382E+01	0.161E+03

WOOD CREEK

CRV	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	17	16[illegible]77	0.99	0.960E+02	0.165E+01	0.[illegible]03E+00	****	0.895E+00	****	0.938E-02	0.237E+01
2	17	11[illegible]77	0.56	0.159E+03	0.339E+00	0.652E+00	0.118E+00	0.258E+00	0.148E+00	0.724E-01	0.116E+01
3	17	21[illegible]77	0.93	0.839E+02	0.887E-01	0.399E-01	0.882E-02	0.173E+00	0.165E+00	0.666E-02	0.975E+00
4	17	05[illegible]77	1.12	0.966E+02	0.278E+00	0.538E+00	0.0	0.[illegible]26E+01	0.136E+01	0.126E-01	0.211E+01
5	17	18[illegible]77	1.10	0.129E+03	0.493E+00	0.317E+00	0.959E-01	0.809E+00	0.315E+00	0.197E-01	0.308E+01
13	17	07[illegible]78	83.00	0.335E+08	0.332E+02	0.898E+03	0.235E+02	0.263E+02	0.283E+01	0.126E+02	0.213E+03
14	17	20[illegible]78	15.30	0.200E+08	0.8[illegible]E+01	0.359E+03	0.689E+01	0.770E+01	0.819E+00	0.203E+01	0.705E+02
15	17	18[illegible]78	16.00	0.208E+08	0.355E+01	0.858E+03	0.885E+01	0.872E+01	0.387E+01	0.175E+01	0.889E+02
17	17	16[illegible]78	16.00	0.208E+08	0.191E+01	0.375E+03	0.568E+01	0.717E+01	0.158E+01	0.295E+01	0.611E+02
18	17	20[illegible]78	5.33	0.700E+03	0.1[illegible]E+01	0.133E+03	0.[illegible]22E+01	0.232E+01	0.101E+01	0.513E+00	0.108E+02
19	17	13[illegible]78	2.30	0.300E+03	0.291E+01	****	0.183E+01	0.191E+01	0.819E+00	0.726E+00	0.216E+02
20	17	26[illegible]78	2.00	0.188E+03	0.[illegible]00E+00	0.833E+02	0.881E+00	0.928E+00	0.887E+00	0.786E-01	0.928E+01
63	17	09[illegible]75	18.30	0.[illegible]04E+08	0.560E+01	0.360E+03	0.305E+01	0.388E+01	0.831E+00	0.197E+01	0.688E+02
SUMMATION			110.28	0.136E+05	0.6[illegible]E+02	0.262E+08	0.478E+02	0.612E+02	0.138E+02	0.227E+02	0.513E+03
# OBSERVATIONS			13	13	13	12	12	13	12	13	13
AVERAGE VALUE			8.47	0.[illegible]05E+08	0.8[illegible]E+01	0.218E+03	0.395E+01	0.471E+01	0.111E+01	0.175E+01	0.398E+02

CPP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	FP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	19	161[illegible]	10.00	0.768E+03	0.316E+02	0.195E+01	0.0	0.660E+01	0.660E+01	0.822E-01	0.423E+02
2	19	113[illegible]	6.00	0.363E+03	0.140E+00	****	0.0	0.258E+01	0.258E+01	0.777E-01	0.155E+02
3	19	21[illegible]	5.53	0.387E+03	0.59[illegible]E+00	0.889E-01	0.965E-01	0.198E+01	0.189E+01	0.808E-01	0.128E+02
4	19	05[illegible]	13.00	0.719E+03	0.232E+01	0.201E+01	0.0	0.388E+01	0.388E+01	0.891E-01	0.258E+02
5	19	180[illegible]	20.00	0.987E+03	0.262E+01	0.191E+01	0.228E+01	0.441E+01	0.217E+01	0.881E+00	0.416E+02
6	19	07[illegible]	10.00	0.255E+03	0.298E+01	0.803E+01	0.455E+01	0.719E+01	0.264E+01	0.229E+01	0.265E+02
13	19	07[illegible]	891.00	0.203E+05	0.125E+03	0.628E+03	0.182E+03	0.298E+03	0.115E+03	0.799E+02	0.251E+04
14	19	29[illegible]	166.00	0.485E+05	0.133E+03	0.282E+03	0.920E+02	0.970E+02	0.502E+01	0.282E+02	0.719E+03
15	19	08[illegible]	85.00	0.[illegible]E+05	0.132E+03	0.286E+03	0.816E+02	0.142E+03	0.307E+02	0.365E+02	0.663E+03
16	19	02[illegible]	163.00	0.178E+05	0.930E+01	0.218E+03	0.126E+02	0.325E+02	0.199E+02	0.801E+01	0.493E+03
17	19	16[illegible]	189.00	0.193E+05	0.832E+01	0.280E+03	0.266E+02	0.575E+02	0.308E+02	0.168E+02	0.491E+03
18	19	10[illegible]	51.00	0.588E+03	0.559E+01	0.632E+02	0.866E+01	0.196E+02	0.591E+01	0.912E+00	0.909E+02
19	19	13[illegible]	32.00	0.297E+03	0.101E+02	0.827E+02	0.530E+01	0.188E+02	0.981E+01	0.269E+01	0.187E+03
20	19	26[illegible]	17.00	0.262E+03	0.172E+01	0.838E+02	0.123E+01	0.983E+01	0.820E+01	0.159E+00	0.103E+03
21	19	11[illegible]	18.00	0.315E+03	0.285E+01	0.970E+02	0.193E+01	0.686E+01	0.853E+01	0.702E+00	0.515E+02
60	19	26[illegible]	527.00	****	0.135E+03	0.881E+03	0.963E+02	0.173E+03	0.763E+02	0.398E+02	0.277E+04
61	19	08[illegible]	155.00	0.[illegible]E+05	0.881E+02	0.291E+03	0.310E+02	0.300E+02	0.901E+01	0.142E+02	0.789E+03
SUMMATION			2088.00	0.126E+06	0.709E+03	0.298E+05	0.533E+03	0.868E+03	0.335E+03	0.221E+03	0.899E+04
# OBSERVATIONS			17	16	17	16	17	17	17	17	17
AVERAGE VALUE			122.80	0.797E+03	0.417E+02	0.186E+03	0.313E+02	0.510E+02	0.197E+02	0.130E+02	0.529E+03

CPP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	FP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
1	11	16[illegible]	15.00	0.177E+03	0.382E+02	0.208E+01	0.387E+00	0.103E+02	0.998E+01	0.233E+00	0.868E+02
SUMMATION			15.00	0.177E+03	0.382E+02	0.208E+01	0.387E+00	0.103E+02	0.998E+01	0.233E+00	0.868E+02
# OBSERVATIONS			1	1	1	1	1	1	1	1	1
AVERAGE VALUE			15.00	0.177E+03	0.382E+02	0.208E+01	0.387E+00	0.103E+02	0.998E+01	0.233E+00	0.868E+02

CPP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
6	21	01[illegible]	20.00	0.621E+03	0.670E+00	0.538E+01	0.358E+01	0.519E+01	0.153E+01	0.201E+01	0.237E+03
7	21	15[illegible]	16.00	0.701E+03	0.274E+00	0.297E+01	0.468E+01	0.623E+01	0.155E+01	0.206E+01	0.111E+03
13	21	06[illegible]	86.00	0.305E+03	0.265E+02	0.288E+02	0.219E+02	0.364E+02	0.128E+02	0.115E+02	0.292E+03
14	21	29[illegible]	20.00	0.293E+03	0.171E+01	0.205E+01	0.272E+01	0.353E+01	0.812E+00	0.796E+00	0.763E+02
15	21	17[illegible]	7[illegible].00	0.684E+03	0.274E+01	0.599E+03	0.117E+02	0.203E+02	0.863E+01	0.398E+01	0.353E+03
17	21	15[illegible]	57.00	0.305E+03	0.58[illegible]E+01	0.312E+02	0.104E+02	0.296E+02	0.188E+02	0.790E+01	0.321E+03
18	21	27[illegible]	20.00	0.227E+03	0.189E+01	0.172E+01	0.909E+00	0.314E+01	0.223E+01	0.231E+00	0.367E+02
19	21	13[illegible]	31.00	0.350E+03	0.520E+01	0.365E+03	0.892E+01	0.111E+02	0.628E+01	0.262E+01	0.261E+03
20	21	25[illegible]	15.00	0.165E+03	0.153E+01	0.153E+03	0.132E+01	0.861E+01	0.329E+01	0.300E+00	0.422E+02
SUMMATION			338.00	0.155E+05	0.881E+02	0.292E+03	0.685E+02	0.120E+03	0.555E+02	0.318E+02	0.173E+04
# OBSERVATIONS			9	9	9	9	9	9	9	9	9
AVERAGE VALUE			37.11	0.395E+03	0.898E+01	0.324E+01	0.717E+01	0.133E+02	0.617E+01	0.389E+01	0.192E+03

SAMPLING STATION

CRP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
13	28	26[illegible]79	107.00	0.141E+08	0.565E+01	0.982E+02	0.139E+02	0.305E+02	0.166E+02	0.735E+01	0.887E+03
14	29	29[illegible]79	35.00	0.193E+08	****	0.808E+02	****	0.218E+01	****	0.826E+00	0.997E+02
15	30	17[illegible]79	33.00	0.387E+08	0.922E+01	0.789E+02	0.128E+02	0.183E+02	0.587E+01	0.608E+01	0.438E+03
17	31	15[illegible]79	71.00	0.288E+08	****	0.151E+03	0.187E+02	0.397E+02	0.251E+02	0.946E+01	0.370E+03
19	32	19[illegible]79	34.00	0.300E+08	0.787E+01	0.268E+02	0.[illegible]98E+01	0.393E+01	0.284E+01	0.597E+00	0.746E+02
12	28	12[illegible]79	36.00	0.123E+08	0.597E+01	0.668E+02	0.633E+01	0.121E+02	0.579E+01	0.434E+01	0.314E+03
60	29	26[illegible]79	60.00	****	0.896E+01	0.102E+03	0.867E+01	0.128E+02	0.376E+01	0.381E+01	0.308E+03
61	29	[illegible]	85.00	****	0.237E+01	0.760E+02	0.950E+01	0.181E+02	0.859E+01	0.649E+01	0.199E+03
SUMMATION			959.00	0.180E+09	0.358E+02	0.6[illegible]6E+03	0.578E+02	0.133E+03	0.638E+02	0.390E+02	0.229E+04
# OBSERVATIONS			8	6	6	8	7	8	7	8	8
AVERAGE VALUE			57.75	0.233E+08	0.597E+01	0.775E+02	0.963E+01	0.167E+02	0.911E+01	0.487E+01	0.286E+03

DRAINAGE DITCH

CRP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
15	31	27[illegible]79	****	****	****	****	****	****	****	****	****
17	31	15[illegible]79	****	****	****	****	****	****	****	****	****
19	31	29[illegible]79	****	****	****	****	****	****	****	****	****
SUMMATION			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
# OBSERVATIONS			0	0	0	0	0	0	0	0	0
AVERAGE VALUE			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

DRAINAGE DITCH

CRP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
17	32	16[illegible]79	****	****	****	****	****	****	****	****	****
19	32	30[illegible]79	****	****	****	****	****	****	****	****	****
SUMMATION			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
# OBSERVATIONS			0	0	0	0	0	0	0	0	0
AVERAGE VALUE			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

DRAINAGE DITCH

CRP	STA	DAY	FLOW (CFS)	CL- (KG/DAY)	NH3 (KG/DAY)	NO3 (KG/DAY)	TDP (KG/DAY)	TP (KG/DAY)	PP (KG/DAY)	OP (KG/DAY)	SI (KG/DAY)
15	33	18[illegible]79	****	****	****	****	****	****	****	****	****
19	33	12[illegible]79	****	****	****	****	****	****	****	****	****
SUMMATION			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
# OBSERVATIONS			0	0	0	0	0	0	0	0	0
AVERAGE VALUE			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX 7

TITTABAWASSEE RIVER

CRU	STA	DAY	FLOW (CFS)	TPE (KG/DAY)	DPE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	2	15AUG73	880.00	****	0.594E+03	****	****
2	2	10SEP73	570.00	0.269E+02	0.572E+03	0.837E+13	****
3	2	20SEP73	577.00	0.570E+02	0.467E+03	0.706E+13	****
4	2	08OCT73	789.00	0.387E+02	0.115E+04	0.288E+14	****
5	2	17OCT73	1817.00	0.166E+04	0.809E+03	0.312E+14	0.186E+14
6	2	01NOV73	2168.00	0.350E+04	0.632E+03	0.458E+14	0.165E+15
7	2	15NOV73	1853.00	0.355E+04	0.689E+03	0.453E+14	0.426E+14
8	2	29NOV73	2628.00	0.809E+04	0.927E+03	0.198E+14	0.116E+14
10	2	08JAN74	1090.00	0.138E+04	0.358E+03	0.133E+13	0.267E+13
11	2	01FEB74	6976.00	0.185E+05	0.356E+04	0.375E+14	0.717E+14
12	2	21FEB74	2809.00	0.240E+04	0.838E+03	0.983E+13	0.212E+14
13	2	06MAR74	17008.00	0.578E+05	0.359E+04	0.416E+14	0.208E+15
14	2	28APR74	3128.00	0.320E+04	0.132E+04	0.107E+14	0.168E+14
15	2	17APR74	6376.00	0.190E+05	0.176E+04	0.312E+14	0.437E+14
16	2	01MAY74	3510.00	0.104E+05	0.101E+04	0.172E+14	0.412E+14
17	2	15MAY74	6853.00	0.123E+05	0.118E+04	0.158E+14	****
18	2	29MAY74	2958.00	0.638E+04	0.415E+03	0.286E+14	0.217E+14
19	2	12JUN74	5185.00	0.213E+05	0.483E+03	0.655E+14	0.856E+14
20	2	25JUN74	1570.00	0.176E+04	0.761E+02	****	****
21	2	10JUL74	812.00	0.663E+03	0.166E+03	0.238E+13	0.199E+13
22	2	23JUL74	921.00	0.190E+04	0.138E+03	0.192E+14	0.676E+13
23	2	07AUG74	1210.00	0.793E+03	0.179E+03	0.222E+14	0.740E+13
24	2	13AUG74	550.00	0.260E+03	0.852E+02	****	****
25	2	16AUG74	576.00	0.808E+03	0.872E+02	****	****
26	2	21AUG74	502.00	0.286E+03	0.879E+02	0.123E+14	0.491E+13
27	2	29AUG74	1039.00	0.729E+03	0.158E+03	****	****
28	2	05SEP74	586.00	0.375E+03	0.958E+02	****	****
29	2	10SEP74	621.00	0.368E+03	0.104E+03	****	****
30	2	16SEP74	808.00	0.250E+03	0.618E+02	****	****
31	2	02OCT74	1893.00	0.104E+04	0.291E+03	****	****
32	2	09OCT74	921.00	0.735E+03	0.207E+03	0.158E+14	****
33	2	17OCT74	1243.00	0.917E+03	0.264E+03	0.259E+14	****
34	2	06NOV74	1202.00	0.106E+04	0.293E+03	0.365E+14	0.341E+14
35	2	11NOV74	1221.00	0.905E+03	0.381E+03	****	****
36	2	15NOV74	1296.00	0.968E+03	0.409E+03	****	****
37	2	27NOV74	1872.00	0.887E+03	0.388E+03	0.108E+14	0.540E+13
38	2	02DEC74	1078.00	0.601E+03	0.321E+03	****	****
39	2	06DEC74	1613.00	0.981E+03	0.467E+03	0.395E+13	0.395E+13
40	2	10DEC74	1086.00	0.798E+03	0.362E+03	****	****
41	2	16DEC74	820.00	0.300E+03	0.766E+02	0.215E+13	****
43	2	30DEC74	1152.00	0.384E+03	0.162E+03	0.0	0.0
44	2	06JAN75	1199.00	0.326E+03	0.950E+02	****	****
45	2	10JAN75	2888.00	0.189E+04	0.272E+03	0.707E+13	0.707E+13
46	2	14JAN75	8658.00	0.550E+04	0.898E+03	****	****
47	2	17JAN75	5766.00	0.353E+04	0.629E+03	****	0.176E+15
48	2	23JAN75	5883.00	0.225E+04	0.350E+03	****	0.138E+14
49	2	29JAN75	2856.00	0.318E+04	0.418E+03	****	****
50	2	05FEB75	1889.00	0.665E+03	0.188E+03	****	0.363E+13
51	2	10FEB75	1108.00	0.866E+03	0.126E+03	****	0.280E+13
52	2	21FEB75	2213.00	0.118E+04	0.221E+03	****	****
53	2	26FEB75	5679.00	0.285E+05	0.107E+04	0.875E+14	0.125E+15
54	2	03MAR75	2016.00	0.489E+04	0.196E+03	****	****
55	2	06MAR75	2605.00	0.188E+04	0.132E+03	0.178E+14	0.637E+13
56	2	10MAR75	1766.00	0.731E+03	0.102E+03	0.832E+13	0.832E+13
57	2	18MAR75	2285.00	0.186E+04	0.282E+03	****	****
58	2	18MAR75	3161.00	0.209E+04	0.360E+03	0.773E+13	0.773E+13

59	2	21MAR75	3568.00	0.285E+08	0.739E+03	0.262E+18	****
60	2	26MAR75	7387.00	0.292E+05	0.135E+08	0.101E+15	0.607E+18
61	2	31MAR75	8600.00	0.308E+08	0.736E+03	0.113E+18	0.113E+18
63	2	09APR75	8579.00	0.872E+08	0.702E+03	0.266E+18	0.288E+18
64	2	18APR75	3826.00	0.235E+08	0.523E+03	****	****
65	2	18APR75	3877.00	0.181E+08	0.395E+03	****	****
66	2	21APR75	5821.00	0.885E+08	0.578E+03	****	****
67	2	24APR75	5058.00	0.350E+08	0.621E+03	0.833E+18	0.433E+18
68	2	30APR75	3172.00	0.186E+08	0.490E+03	****	****
69	2	13MAY75	2599.00	0.888E+08	0.227E+03	****	****
70	2	16MAY75	5802.00	0.138E+08	0.173E+03	0.631E+13	0.851E+13
71	2	21MAY75	4828.00	0.710E+03	0.133E+03	****	****
72	2	27MAY75	1831.00	0.103E+08	0.159E+03	0.138E+18	0.251E+18
73	2	09JUN75	5068.00	0.128E+08	0.589E+02	0.338E+18	0.261E+18
74	2	11JUN75	1833.00	0.187E+08	0.768E+02	****	****
75	2	16JUN75	8339.00	0.608E+08	0.332E+03	0.185E+15	0.180E+15
76	2	20JUN75	3358.00	0.769E+03	0.165E+03	0.816E+13	0.808E+18
77	2	26JUN75	2016.00	0.136E+08	0.119E+03	****	****
78	2	03JUL75	717.00	0.311E+03	0.870E+02	****	****
79	2	7JUN75	1559.00	0.883E+03	0.462E+03	****	****
80	2	30JUN75	651.00	0.815E+03	0.288E+03	****	****
SUMMATION			197716.00	0.307E+06	0.378E+05	0.110E+16	0.155E+16
# OBSERVATIONS			77	76	77	83	39
AVERAGE VALUE			2567.78	0.403E+08	-0.486E+02	0.256E+18	0.397E+18

SHIAWASSEE RIVER

CRM	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	3	15AUG72	317.00	****	0.106E+08	****	****
2	3	10SEP72	177.00	0.609E+01	0.476E+03	0.311E+13	****
3	3	20SEP72	188.00	0.100E+02	0.283E+03	0.211E+13	****
5	3	17OCT72	255.00	0.370E+03	0.783E+02	0.250E+13	0.0
6	3	01NOV72	190.00	0.629E+03	0.106E+03	0.372E+13	0.390E+13
7	3	15NOV72	337.00	0.393E+03	0.136E+03	0.989E+13	0.828E+12
8	3	29NOV72	2002.00	0.236E+05	0.782E+03	0.383E+15	0.481E+14
9	3	18DEC72	586.00	0.306E+03	0.156E+03	****	****
10	3	08JAN73	819.00	0.553E+03	0.385E+03	0.801E+13	0.200E+13
11	3	01FEB73	3567.00	0.927E+04	0.165E+04	0.873E+14	0.314E+14
13	3	06MAR73	6115.00	0.605E+05	0.158E+04	0.748E+14	0.147E+15
14	3	28MAR73	1107.00	0.967E+03	0.223E+03	0.271E+13	0.271E+13
15	3	17APR73	1939.00	0.381E+04	0.651E+03	0.566E+13	0.189E+14
16	3	01MAY73	885.00	0.102E+04	0.198E+03	0.476E+13	0.217E+13
17	3	15MAY73	1196.00	0.118E+04	0.635E+03	0.585E+13	****
18	3	29MAY73	1325.00	0.291E+04	0.128E+03	0.648E+13	0.117E+14
19	3	12JUN73	728.00	0.163E+04	0.0	0.570E+13	0.121E+14
20	3	25JUN73	601.00	0.198E+04	0.0	****	****
21	3	10JUL73	450.00	0.151E+04	0.122E+03	0.176E+13	0.110E+13
22	3	23JUL73	282.00	0.100E+04	0.355E+02	0.592E+13	0.592E+13
23	3	07AUG73	175.00	0.601E+03	0.409E+02	0.171E+13	0.171E+13
24	3	13AUG73	229.00	0.617E+03	0.351E+02	****	****
25	3	16AUG73	206.00	0.778E+03	0.488E+02	****	****
26	3	21AUG73	235.00	0.789E+03	0.403E+02	0.167E+14	0.230E+13
27	3	29AUG73	160.00	0.411E+03	0.372E+02	****	****
28	3	05SEP73	198.00	0.239E+03	0.423E+02	****	****
29	3	10SEP73	317.00	0.720E+03	0.453E+02	****	****
30	3	16SEP73	200.00	0.240E+03	0.381E+02	****	****
31	3	03OCT73	189.00	0.137E+03	0.526E+02	****	****
32	3	09OCT73	182.00	0.136E+03	0.430E+02	0.116E+13	****
33	3	17OCT73	197.00	0.153E+03	0.565E+02	0.337E+13	****
34	3	06NOV73	808.00	0.418E+03	0.111E+03	0.114E+14	0.183E+14
35	3	11NOV73	871.00	0.477E+03	0.139E+03	****	****
36	3	15NOV73	309.00	0.190E+03	0.981E+02	****	****
37	3	27NOV73	358.00	0.551E+03	0.113E+03	0.138E+13	0.897E+12
38	3	02DEC73	895.00	0.323E+03	0.141E+03	****	****
39	3	06DEC73	873.00	0.456E+03	0.184E+03	0.116E+13	0.116E+13
40	3	10DEC73	822.00	0.339E+03	0.187E+03	****	****
41	3	16DEC73	551.00	0.281E+03	0.601E+02	0.337E+13	****
43	3	30DEC73	855.00	0.153E+03	0.298E+02	****	****
44	3	06JAN74	386.00	0.138E+03	0.276E+02	****	****
45	3	10JAN74	1856.00	0.809E+04	0.126E+03	0.356E+13	0.328E+14
46	3	18JAN74	1656.00	0.267E+04	0.255E+03	****	****
47	3	17JAN74	1093.00	0.986E+03	0.173E+03	****	****
48	3	22JAN74	1093.00	0.380E+03	0.118E+03	****	0.267E+13
49	3	29JAN74	1278.00	0.668E+03	0.122E+03	****	****
50	3	05FEB74	1140.00	0.488E+03	0.156E+03	****	0.118E+14
51	3	18FEB74	601.00	0.223E+03	0.438E+02	****	0.176E+13
52	3	21FEB74	783.00	0.358E+03	0.485E+02	****	****
53	3	26FEB74	3640.00	0.186E+05	0.429E+03	0.868E+14	0.193E+15
54	3	03MAR74	2198.00	0.201E+04	0.313E+03	****	****
55	3	06MAR74	1678.00	0.178E+04	0.111E+03	0.352E+14	0.139E+14
56	3	10MAR74	1481.00	0.916E+03	0.493E+02	0.695E+13	0.387E+13
57	3	18MAR74	1092.00	0.780E+03	0.550E+02	****	****
58	3	28MAR74	1365.00	0.617E+04	0.277E+03	0.868E+13	0.801E+13
59	3	31MAR74	2720.00	0.389E+04	0.422E+03	0.258E+14	****

60	3	26MAR75	8111.00	0.286E+05	0.801E+03	0.828E+15	0.505E+14
61	3	31MAR75	2639.00	0.226E+08	0.259E+03	0.686E+13	0.686E+13
62	3	03APR75	[illegible]	0.188E+08	0.280E+03	0.320E+14	0.128E+14
64	3	10APR75	2912.00	0.810E+08	0.810E+03	****	****
65	3	18APR75	2389.00	0.288E+08	0.288E+03	****	****
66	3	21APR75	7680.00	0.763E+05	0.188E+08	****	****
67	3	28APR75	9085.00	0.533E+05	0.136E+08	0.775E+14	0.293E+15
68	3	30APR75	2885.00	0.613E+08	0.527E+03	****	****
69	3	13MAY75	1127.00	0.868E+03	0.138E+03	****	****
70	3	16MAY75	983.00	0.665E+03	0.107E+03	0.135E+14	0.577E+13
71	3	21MAY75	793.00	0.263E+03	0.587E+02	****	****
72	3	27MAY75	901.00	0.107E+08	0.780E+02	0.165E+14	0.331E+13
73	3	08JUN75	568.00	0.853E+03	0.352E+02	0.235E+14	0.131E+14
74	3	11JUN75	568.00	0.658E+03	0.385E+02	****	****
75	3	16JUN75	657.00	0.101E+08	0.381E+02	0.153E+14	0.217E+14
76	3	20JUN75	609.00	0.600E+03	0.316E+02	0.103E+14	0.125E+14
77	3	26JUN75	1219.00	0.670E+08	0.913E+02	****	****
78	3	23JUN75	877.00	0.298E+03	0.328E+02	****	****
79	3	7JUN75	226.00	0.183E+03	0.720E+02	****	****
80	3	30JUN75	200.00	0.205E+03	0.116E+03	****	****
SUMMATION			95151.00	0.355E+06	0.190E+05	0.139E+16	0.980E+15
# OBSERVATIONS			76	75	76	80	36
AVERAGE VALUE			1250.99	0.878E+08	0.250E+03	0.389E+14	0.261E+14

FLINT RIVER

CRU	STA	DAY	FLOW (CFS)	TPE (KG/DAY)	DPE (KG/DAY)	TCOL (B/DAY)	FCOL (B/DAY)
1	8	15AUG73	812.00	****	0.736E+03	****	****
2	8	10SEP73	215.00	0.217E+02	0.227E+03	0.137E+14	****
3	8	20SEP73	373.00	0.290E+02	0.742E+03	0.913E+12	****
4	8	08OCT73	267.00	0.418E+02	0.482E+03	0.196E+14	****
5	8	17OCT73	232.00	0.197E+03	0.819E+02	0.227E+13	0.105E+14
6	8	04NOV73	638.00	0.157E+04	0.198E+03	0.156E+13	0.265E+15
7	8	15NOV73	850.00	0.569E+03	0.159E+03	0.21[illegible]E+13	0.963E+14
8	8	29NOV73	2200.00	0.290E+05	0.889E+03	0.108E+14	0.170E+16
9	8	19DEC73	585.00	0.368E+03	0.220E+03	****	****
10	8	08JAN74	819.00	0.828E+03	0.266E+03	0.140E+14	0.361E+14
11	8	01FEB74	3650.00	0.774E+04	0.181E+04	0.125E+15	0.100E+16
12	8	21FEB74	1170.00	0.380E+04	0.231E+03	0.172E+14	0.409E+15
13	8	06MAR74	2078.00	0.378E+05	0.125E+04	0.156E+15	0.866E+15
14	8	28MAR74	1170.00	0.136E+04	0.320E+03	0.172E+14	0.200E+14
15	8	17APR74	2830.00	0.137E+05	0.650E+03	0.268E+15	0.817E+15
16	8	01MAY74	851.00	0.362E+04	0.156E+03	0.999E+14	0.685E+14
17	8	15MAY74	1509.00	0.859E+04	0.102E+03	0.880E+14	****
18	8	29MAY74	1919.00	0.660E+04	0.380E+02	0.258E+15	0.813E+15
19	8	12JUN74	865.00	0.838E+04	0.832E+02	0.180E+15	0.176E+15
20	8	25JUN74	579.00	0.113E+04	0.0	****	****
21	8	10JUL74	352.00	0.762E+03	0.762E+02	0.767E+13	0.575E+13
22	8	23JUL74	352.00	0.377E+03	0.834E+02	0.362E+14	0.198E+14
23	8	07AUG74	311.00	0.102E+03	0.418E+03	0.418E+13	0.118E+14
24	8	13AUG74	229.00	0.495E+03	0.629E+02	****	****
25	8	16AUG74	288.00	0.573E+03	0.531E+02	****	****
26	8	21AUG74	276.00	0.389E+03	0.519E+02	0.189E+14	0.270E+13
27	8	29AUG74	247.00	0.275E+02	0.568E+02	****	****
28	8	05SEP74	280.00	0.231E+03	0.487E+02	****	****
29	8	10SEP74	264.00	0.232E+03	0.665E+02	****	****
30	8	16SEP74	212.00	0.158E+03	0.411E+02	****	****
31	8	02OCT74	310.00	0.221E+03	0.101E+03	****	****
32	8	09OCT74	300.00	0.209E+03	0.981E+02	****	****
33	8	17OCT74	315.00	0.272E+03	0.111E+03	0.387E+14	****
34	8	06NOV74	738.00	0.402E+04	0.181E+03	0.325E+14	0.170E+15
35	8	11NOV74	888.00	0.536E+03	0.183E+03	****	****
36	8	15NOV74	822.00	0.595E+03	0.131E+03	****	****
37	8	27NOV74	889.00	0.558E+03	0.126E+03	0.129E+14	0.153E+14
38	8	02DEC74	588.00	0.861E+03	0.160E+03	****	****
39	8	06DEC74	550.00	0.989E+03	0.172E+03	0.269E+13	0.188E+14
40	8	10DEC74	757.00	0.151E+04	0.215E+03	****	****
41	8	16DEC74	680.00	0.424E+03	0.573E+02	0.626E+13	****
42	8	19DEC74	668.00	0.833E+03	0.680E+02	****	****
43	8	30DEC74	578.00	0.232E+03	0.485E+02	****	****
44	8	06JAN75	516.00	0.270E+03	0.452E+02	****	****
45	8	10JAN75	2168.00	0.112E+05	0.132E+03	0.406E+14	0.360E+15
46	8	18JAN75	1089.00	0.429E+04	0.256E+03	****	****
47	8	29JAN75	1112.00	0.126E+04	0.118E+03	****	****
50	8	05FEB75	1157.00	0.136E+04	0.123E+03	****	0.198E+14
51	8	18FEB75	760.00	0.328E+04	0.689E+02	****	0.171E+14
52	8	21FEB75	667.00	0.708E+03	0.834E+02	****	****
53	8	26FEB75	2868.00	0.133E+05	0.208E+03	0.413E+15	0.285E+15
54	8	03MAR75	2119.00	0.836E+04	0.288E+03	****	****
55	8	06MAR75	1269.00	0.214E+04	0.168E+03	0.770E+14	0.368E+14
56	8	10MAR75	1153.00	0.214E+04	0.176E+03	0.525E+14	0.379E+14
57	8	18MAR75	1257.00	0.800E+03	0.109E+03	****	****
58	8	18MAR75	1708.00	0.578E+04	0.181E+03	0.860E+14	0.418E+13

59	0	21MAR75	2741.00	0.569E+08	0.382E+03	0.833E+18	****
60	0	26MAR75	7858.00	0.500E+05	0.993E+03	0.137E+16	0.128E+16
61	0	31MAR75	3338.00	0.623E+08	0.352E+03	0.816E+13	0.816E+13
63	0	09APR75	3077.00	0.608E+08	0.383E+03	0.903E+18	0.151E+18
64	0	14APR75	3229.00	0.589E+08	0.297E+03	****	****
65	0	18APR75	2609.00	0.385E+08	0.105E+08	****	****
66	0	21APR75	7201.00	0.717E+05	0.113E+08	****	****
67	0	28APR75	7237.00	0.898E+05	0.997E+03	0.338E+15	0.178E+17
68	0	30APR75	2850.00	0.883E+08	0.556E+03	****	****
69	0	13MAY75	4287.00	0.160E+08	0.128E+03	****	****
70	0	16MAY75	880.00	0.137E+08	0.583E+02	0.301E+18	0.366E+18
71	0	21MAY75	628.00	0.629E+03	0.882E+02	****	****
72	0	27MAY75	700.00	0.120E+08	0.898E+02	0.982E+18	0.360E+18
73	0	08JUN75	788.00	0.329E+08	0.386E+02	0.218E+15	0.182E+15
74	0	11JUN75	1280.00	0.178E+08	0.835E+02	****	****
75	0	16JUN75	971.00	0.160E+08	0.976E+02	0.109E+15	0.903E+18
76	0	20JUN75	810.00	0.459E+03	0.183E+03	****	0.286E+15
77	0	26JUN75	1835.00	0.831E+08	0.183E+03	****	****
78	0	03JUN75	688.00	0.593E+03	0.828E+02	****	****
79	0	7JUN75	339.00	0.286E+03	0.959E+02	****	****
80	0	30JUN75	351.00	0.299E+03	0.123E+03	****	****
SUMMATION			106377.00	0.818E+06	0.200E+05	0.800E+16	0.258E+17
# OBSERVATIONS			77	76	77	40	36
AVERAGE VALUE			1378.92	0.550E+08	0.260E+03	0.999E+18	0.716E+15

KAWKAWLIN RIVER

CBU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	PFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	5	15AUG72	0.0	****	0.0	****	****
2	5	10SEP72	0.0	0.0	0.0	****	****
3	5	20SEP72	0.0	0.0	0.0	0.0	****
4	5	09OCT72	0.02	0.181E-02	0.200E-01	0.930E+09	****
5	5	17OCT72	0.02	0.292E-01	0.602E-02	0.285E+09	0.783E+08
6	5	01NOV72	1.50	0.128E+01	0.575E+00	0.120E+11	0.440E+10
7	5	15NOV72	3.00	0.388E+01	0.187E+01	0.286E+11	0.958E+10
8	5	29NOV72	147.00	0.259E+03	0.558E+02	0.118E+14	0.204E+13
13	5	06MAR73	2000.00	0.595E+03	0.568E+03	0.598E+13	0.777E+13
18	5	28MAR73	208.00	0.119E+03	0.621E+02	0.916E+12	0.509E+12
15	5	17APR73	893.00	0.397E+03	0.254E+03	0.216E+13	0.259E+13
16	5	01MAY73	118.00	0.271E+03	0.658E+02	0.502E+12	0.279E+12
17	5	15MAY73	821.00	0.124E+03	0.727E+02	0.360E+13	****
18	5	29MAY73	177.00	0.274E+03	0.903E+02	0.121E+13	0.779E+12
19	5	12JUN73	1082.00	0.553E+03	0.178E+03	0.148E+14	0.141E+14
20	5	25JUN73	436.00	0.191E+03	0.292E+02	****	****
21	5	10JUL73	53.00	0.942E+02	0.122E+02	0.583E+12	0.194E+12
22	5	23JUL73	40.00	0.222E+02	0.583E+01	0.209E+12	0.256E+12
23	5	07AUG73	11.00	0.991E+01	0.265E+01	0.982E+11	0.269E+11
24	5	13AUG73	12.00	0.979E+01	0.218E+01	****	****
25	5	16AUG73	6.30	0.101E+02	0.135E+01	****	****
26	5	21AUG73	12.00	0.155E+02	0.278E+01	0.602E+13	0.117E+12
28	5	05SEP73	0.60	0.464E+01	0.898E+00	****	****
29	5	10SEP73	1.80	0.162E+01	0.298E+00	****	****
30	5	26SEP73	2.10	0.300E+01	0.567E+00	****	****
31	5	02OCT73	1.60	0.157E+01	0.465E+00	****	****
32	5	09OCT73	0.56	0.880E+00	0.139E+00	0.630E+10	****
33	5	17OCT73	1.50	0.192E+01	0.453E+00	0.917E+10	****
34	5	06NOV73	6.30	0.181E+02	0.192E+01	0.528E+11	0.148E+12
36	5	15NOV73	3.40	0.695E+01	0.117E+01	****	****
37	5	27NOV73	11.00	0.161E+02	0.368E+01	0.178E+12	0.140E+12
38	5	02DEC73	15.00	0.124E+02	0.480E+01	****	****
39	5	06DEC73	10.00	0.119E+02	0.338E+01	0.245E+11	0.685E+11
41	5	16DEC73	13.00	0.174E+02	0.220E+01	0.175E+12	****
42	5	19DEC73	15.00	0.284E+02	0.237E+01	****	****
43	5	30DEC73	15.00	0.223E+02	0.109E+01	****	****
45	5	10JAN75	27.00	0.257E+02	0.207E+01	0.661E+11	0.462E+12
48	5	27JAN75	73.00	0.501E+02	0.113E+02	****	0.108E+13
49	5	29JAN75	100.00	0.113E+03	0.182E+02	****	****
50	5	05FEB75	87.00	0.833E+02	0.173E+02	****	0.132E+13
51	5	18FEB75	23.00	0.171E+02	0.823E+01	****	0.518E+12
52	5	21FEB75	27.00	0.382E+02	0.873E+01	****	****
53	5	26FEB75	811.00	0.139E+04	0.328E+02	0.187E+14	0.174E+14
54	5	03MAR75	312.00	0.283E+03	0.580E+02	****	****
55	5	06MAR75	52.00	0.762E+02	0.125E+02	0.180E+13	0.630E+12
56	5	10MAR75	81.00	0.190E+03	0.768E+01	0.622E+12	0.381E+12
57	5	18MAR75	88.00	0.215E+03	0.910E+01	****	****
58	5	18MAR75	97.00	0.850E+02	0.189E+02	0.875E+12	0.737E+12
59	5	21MAR75	287.00	0.304E+03	0.481E+02	0.163E+13	****
60	5	26MAR75	1133.00	0.182E+04	0.199E+03	0.887E+13	0.440E+13
61	5	31MAR75	530.00	0.150E+03	0.947E+02	0.130E+13	0.130E+13
62	5	08APR75	290.00	0.307E+03	0.568E+02	0.799E+12	0.709E+12
63	5	22APR75	345.00	0.231E+03	0.332E+02	0.586E+13	0.170E+13
64	5	10APR75	675.00	0.396E+03	0.105E+03	****	****
65	5	18APR75	363.00	0.480E+03	0.501E+02	****	****
66	5	21APR75	566.00	0.778E+03	0.769E+02	****	****

67	5	20APR75	855.00	0.785E+03	0.897E+02	0.122E+18	0.167E+13
68	5	20APR75	275.00	0.351E+03	0.489E+02	****	****
69	5	13MAY75	136.00	0.212E+03	0.612E+02	****	****
70	5	16MAY75	68.00	0.181E+03	0.187E+02	0.466E+12	0.499E+12
71	5	27MAY75	51.00	0.850E+02	0.185E+02	****	****
72	5	27MAY75	51.00	0.150E+02	0.121E+02	0.112E+13	0.200E+12
73	5	30JUN75	81.00	0.798E+02	0.960E+01	0.421E+13	0.712E+13
74	5	11JUN75	211.00	0.216E+03	0.271E+02	****	****
75	5	16JUN75	136.00	0.178E+03	0.177E+02	0.287E+13	0.262E+11
76	5	28JUN75	802.00	0.234E+03	0.185E+03	0.500E+13	0.197E+13
77	5	26JUN75	237.00	0.155E+03	0.807E+02	****	****
78	5	03JUL75	39.00	0.515E+02	0.801E+01	****	****
79	5	7JUL75	277.00	0.319E+03	0.882E+02	****	****
80	5	20JUL75	38.00	0.388E+02	0.151E+02	****	****
SUMMATION			10087.18	0.267E+05	0.286E+04	0.111E+15	0.729E+14
# OBSERVATIONS			70	69	70	30	35
AVERAGE VALUE			209.67	0.387E+03	0.409E+02	0.298E+13	0.208E+13

PINE RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	6	15AUG73	179.00	****	0.188E+03	****	****
4	6	08OCT73	99.00	0.155E+02	0.133E+03	0.382E+13	****
6	6	01NOV73	326.00	0.534E+03	0.168E+03	0.168E+13	0.155E+14
12	6	06JUL78	2275.00	0.800E+04	0.112E+04	0.557E+13	0.139E+14
13	6	28AUG78	899.00	0.618E+03	0.139E+03	0.979E+12	0.979E+12
15	6	17SEP78	728.00	0.152E+04	0.436E+03	0.178E+13	0.178E+13
16	6	01AUG78	330.00	0.288E+03	0.113E+03	0.210E+13	0.114E+13
17	6	15AUG78	632.00	0.248E+04	0.198E+03	0.155E+13	****
18	6	29AUG78	862.00	0.569E+03	0.105E+03	0.839E+13	0.968E+13
19	6	12JUN78	630.00	0.168E+04	0.175E+03	0.120E+14	0.832E+13
20	6	23JUN78	352.00	0.576E+03	0.697E+02	****	****
60	6	26JUL75	1173.00	0.190E+04	0.361E+03	0.287E+13	0.287E+13
63	6	09AUG75	652.00	0.1[illegible]E+04	0.158E+03	0.658E+13	0.303E+13
SUMMATION			8296.00	0.193E+05	0.337E+04	0.829E+14	0.572E+14
# OBSERVATIONS			13	12	13	11	9
AVERAGE VALUE			638.15	0.161E+04	0.259E+03	0.390E+13	0.635E+13

PIPLE RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	7	15AUG73	202.00	****	0.138E+03	****	****
2	7	10SEP73	172.00	0.789E+01	0.142E+03	0.821E+12	****
3	7	20SEP73	208.00	0.138E+02	0.137E+03	0.509E+12	****
4	7	08OCT73	275.00	0.150E+02	0.399E+03	0.673E+12	****
5	7	17OCT73	281.00	0.248E+03	0.901E+02	0.558E+12	0.312E+12
6	7	01NOV73	350.00	0.525E+03	0.148E+03	0.878E+12	0.966E+12
7	7	15NOV73	350.00	****	****	0.709E+12	0.709E+12
15	7	17AUG78	1307.00	0.571E+04	0.398E+03	0.888E+13	0.320E+13
16	7	01AUG78	508.00	0.887E+03	0.475E+02	0.180E+13	0.128E+13
17	7	15AUG78	1082.00	0.368E+04	0.202E+03	0.255E+13	****
18	7	29AUG78	361.00	0.137E+03	0.186E+02	****	****
19	7	12JUN78	536.00	0.112E+04	0.602E+02	0.381E+13	0.117E+13
20	7	25JUN78	276.00	0.162E+03	0.155E+01	****	****
21	7	10JUL78	582.00	0.128E+05	0.983E+02	****	0.838E+13
60	7	26AUG75	885.00	0.190E+04	0.180E+03	0.318E+13	0.217E+13
63	7	09AUG75	679.00	0.106E+04	0.880E+02	****	****
SUMMATION			7925.00	0.275E+05	0.200E+04	0.191E+14	0.749E+14
# OBSERVATIONS			16	14	15	11	8
AVERAGE VALUE			495.31	0.197E+04	0.133E+03	0.174E+13	0.187E+13

BIG CREEK

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	8	15AUG73	****	****	****	****	****
15	8	17APR78	****	****	****	****	****
17	8	15MAY78	****	****	****	****	****
18	8	29MAY78	****	****	****	****	****
19	8	12JUN78	****	****	****	****	****
60	8	26MAR75	****	****	****	****	****
SUMMATION			0.0	0.0	0.0	0.0	0.0
# OBSERVATIONS			0	0	0	0	0
AVERAGE VALUE			0.0	0.0	0.0	0.0	0.0

AT GREE: RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	9	15AUG73	85.00	****	0.759E+02	****	****
2	9	10SEP73	120.00	0.185E+03	0.198E+03	0.182E+13	****
3	9	20SEP73	30.00	0.239E+03	0.182E+02	0.518E+12	****
4	9	08OCT73	58.00	0.278E+03	0.810E+02	0.922E+12	****
5	9	17OCT73	66.00	0.658E+02	0.297E+02	0.880E+12	0.291E+12
6	9	31MAY77	168.00	0.179E+03	0.557E+02	0.801E+12	0.128E+13
7	9	15NOV77	100.00	0.888E+02	0.382E+02	0.298E+12	0.587E+12
14	9	29MAR78	241.00	0.335E+03	0.675E+02	0.516E+12	****
15	9	17APR78	596.00	0.169E+04	0.165E+03	0.186E+13	0.186E+13
16	9	01MAY78	270.00	0.360E+03	0.575E+02	0.138E+13	0.670E+12
17	9	15MAY78	515.00	0.953E+03	0.963E+02	0.102E+13	****
18	9	29MAY78	181.00	0.231E+03	0.133E+02	0.385E+12	0.888E+12
19	9	12JUN78	265.00	0.653E+03	0.625E+02	0.357E+13	0.250E+13
20	9	25JUN78	100.00	0.110E+03	0.887E+01	****	****
21	9	10JUL78	136.00	0.578E+03	0.835E+02	0.126E+13	0.193E+13
60	9	26MAR75	556.00	0.105E+04	0.156E+03	0.136E+13	0.136E+13
61	9	03APR75	357.00	0.656E+03	0.615E+02	****	****
SUMMATION			3728.00	0.695E+04	0.109E+04	0.153E+14	0.105E+14
# OBSERVATIONS			17	16	17	14	9
AVERAGE VALUE			219.88	0.434E+03	0.636E+02	0.109E+13	0.117E+13

IAWAS RIVER

CPU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	10	15AUG73	83.00	0.108E+02	0.373E+02	****	****
2	10	10SEP73	26.00	0.278E+01	0.183E+02	0.509E+12	****
3	10	20SEP73	33.00	0.233E+01	0.193E+02	0.426E+12	****
4	10	05OCT73	82.00	0.183E+02	0.389E+02	0.401E+12	****
5	10	17OCT73	68.00	0.846E+02	0.128E+02	0.391E+12	0.626E+11
6	10	01NOV73	153.00	0.120E+03	0.663E+02	0.583E+12	0.778E+12
7	10	15NOV73	97.00	0.690E+02	0.388E+02	0.617E+12	0.522E+12
13	10	06MAR74	3361.00	0.876E+04	0.150E+04	0.827E+13	0.927E+13
14	10	28MAR74	208.00	0.951E+02	0.723E+02	0.499E+12	0.499E+12
15	10	17APR74	578.00	0.361E+03	0.235E+03	0.181E+13	0.181E+13
16	10	01MAY74	246.00	0.157E+03	0.462E+02	0.716E+12	0.651E+12
17	10	15MAY74	862.00	0.463E+03	0.159E+03	0.984E+12	****
18	10	29MAY74	137.00	0.777E+02	0.193E+02	0.335E+12	0.335E+12
19	10	12JUN74	358.00	0.229E+03	0.865E+02	0.785E+13	0.298E+14
20	10	25JUN74	97.00	0.579E+02	0.156E+02	****	****
21	10	10JUL74	132.00	0.292E+03	0.598E+02	0.220E+13	0.297E+13
60	10	26MAR75	539.00	0.280E+03	0.126E+03	0.303E+13	0.738E+13
63	10	09APR75	386.00	0.146E+03	0.731E+02	0.132E+14	0.999E+13
SUMMATION			6936.00	0.668E+04	0.262E+04	0.410E+14	0.614E+14
# OBSERVATIONS			19	18	18	16	12
AVERAGE VALUE			365.33	0.371E+03	0.186E+03	0.256E+13	0.512E+13

EAST AT GRES RIVER

CPU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	11	15AUG73	21.00	0.0	0.285E+02	****	****
2	11	10SEP73	19.00	0.108E+01	0.112E+02	0.465E+11	****
3	11	20SEP73	21.00	0.248E+01	0.124E+02	0.548E+11	****
4	11	05OCT73	81.00	0.388E+01	0.364E+02	0.100E+12	****
5	11	17OCT73	86.00	0.840E+02	0.135E+02	0.732E+11	0.698E+11
6	11	01NOV73	115.00	0.170E+03	0.398E+02	0.281E+12	0.281E+12
7	11	15NOV73	70.00	0.882E+02	0.283E+02	0.171E+12	0.171E+12
13	11	06MAR74	2836.00	0.203E+05	0.711E+03	0.596E+13	0.596E+13
14	11	28MAR74	187.00	0.318E+03	0.789E+02	****	****
15	11	17APR74	816.00	0.159E+04	0.178E+03	0.102E+13	0.102E+13
16	11	01MAY74	151.00	0.392E+03	0.580E+02	0.467E+12	0.467E+12
17	11	15MAY74	299.00	0.995E+03	0.170E+03	0.703E+12	****
18	11	29MAY74	53.00	0.135E+03	0.308E+02	0.282E+12	0.282E+12
19	11	12JUN74	255.00	0.684E+03	0.100E+03	0.998E+12	0.181E+13
20	11	25JUN74	70.00	0.900E+02	0.231E+02	****	****
21	11	10JUL74	95.00	0.812E+03	0.146E+03	****	****
60	11	26MAR75	389.00	0.729E+03	0.120E+03	****	****
63	11	09APR75	289.00	0.285E+03	0.727E+02	****	****
SUMMATION			6980.00	0.267E+05	0.184E+04	0.101E+14	0.100E+14
# OBSERVATIONS			18	18	18	12	8
AVERAGE VALUE			276.67	0.148E+04	0.102E+03	0.843E+12	0.125E+13

SAMPLING CRU	STA	RIVER DAY	FLOW (CFS)	TPE (KG/DAY)	DPE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	12A	16AUG77	1631.00	0.682E+02	0.308E+00	****	****
2	12A	15SEP77	879.00	0.238E+02	0.138E+00	0.305E+15	****
3	12A	29SEP77	1211.00	0.188E+03	0.197E+00	0.125E+15	****
4	12A	09OCT77	1381.00	0.956E+02	0.160E+00	0.481E+15	****
5	12A	17OCT77	2055.00	0.376E+00	0.495E+03	0.204E+15	0.174E+15
6	12A	01NOV77	3371.00	0.891E+00	0.108E+00	0.173E+15	0.173E+15
7	12A	15NOV77	2851.00	0.806E+00	0.905E+03	0.283E+15	0.488E+15
8	12A	29NOV77	7708.00	0.207E+05	0.259E+00	0.871E+14	0.660E+15
9	12A	13DEC77	2808.00	0.206E+03	0.888E+03	****	****
10	12A	05JAN78	3121.00	0.150E+00	0.106E+00	0.916E+14	0.204E+15
11	12A	01FEB78	16100.00	0.737E+05	0.581E+00	0.559E+15	0.277E+15
12	12A	21FEB78	5200.00	0.580E+00	0.602E+03	0.191E+15	0.153E+15
13	12A	06MAR78	80891.00	0.356E+06	0.990E+00	0.500E+15	0.100E+16
14	12A	29MAR78	6198.00	0.952E+00	0.185E+00	0.606E+14	0.606E+14
15	12A	17APR78	12251.00	0.571E+05	0.293E+00	0.285E+15	0.180E+15
16	12A	01MAY78	5877.00	0.132E+05	0.538E+03	0.935E+14	0.216E+14
17	12A	15MAY78	10373.00	0.280E+05	0.266E+00	0.216E+15	****
18	12A	29MAY78	6800.00	0.139E+05	0.429E+03	0.502E+14	0.151E+15
19	12A	12JUN78	7232.00	0.281E+05	0.822E+03	0.159E+15	0.159E+15
20	12A	25JUN78	1038.00	0.693E+00	0.868E+02	****	****
21	12A	10JUL78	1826.00	0.500E+00	0.370E+03	0.268E+14	0.112E+14
22	12A	23JUL78	1655.00	0.253E+00	0.337E+03	0.186E+15	0.180E+15
23	12A	07AUG78	1988.00	0.259E+00	0.382E+03	0.553E+14	0.530E+14
24	12A	13AUG78	1260.00	0.117E+00	0.212E+03	****	****
25	12A	16AUG78	1171.00	0.219E+00	0.211E+03	****	****
26	12A	21AUG78	1112.00	0.170E+00	0.250E+03	0.771E+15	0.272E+14
27	12A	29AUG78	1551.00	0.267E+00	0.255E+03	****	****
28	12A	05SEP78	1112.00	0.157E+00	0.177E+03	****	****
29	12A	10SEP78	1298.00	0.161E+00	0.175E+03	****	****
30	12A	16SEP78	903.00	0.893E+02	0.131E+03	****	****
31	12A	02OCT78	2151.00	0.283E+00	0.499E+03	****	****
32	12A	09OCT78	1528.00	0.152E+00	0.417E+03	0.502E+14	****
33	12A	17OCT78	1809.00	0.271E+00	0.476E+03	0.771E+14	****
34	12A	06NOV78	2626.00	0.277E+00	0.777E+03	0.231E+15	0.430E+15
35	12A	13NOV78	2377.00	0.223E+00	0.679E+03	****	****
36	12A	15NOV78	2201.00	0.207E+00	0.816E+03	****	****
37	12A	27NOV78	2563.00	0.278E+00	0.708E+03	0.407E+15	0.381E+14
38	12A	02DEC78	2381.00	0.202E+00	0.712E+03	****	****
39	12A	06DEC78	2851.00	0.318E+00	0.725E+03	0.698E+13	0.523E+14
40	12A	10DEC78	2888.00	0.348E+00	0.706E+03	****	****
41	12A	16DEC78	2389.00	0.185E+00	0.215E+03	0.172E+14	****
42	12A	19DEC78	2952.00	0.118E+00	0.303E+03	****	****
43	12A	30DEC78	2585.00	0.100E+00	0.279E+03	****	****
44	12A	06JAN79	2280.00	0.796E+02	0.196E+03	****	****
45	12A	10JAN79	7536.00	0.608E+00	0.739E+03	0.406E+15	0.327E+15
46	12A	14JAN79	6593.00	0.252E+05	0.116E+00	****	****
47	12A	17JAN79	3842.00	0.180E+05	0.287E+00	****	0.137E+16
48	12A	22JAN79	5838.00	0.803E+00	0.100E+00	****	0.317E+15
49	12A	29JAN79	6085.00	0.452E+00	0.571E+03	****	****
50	12A	05FEB79	4253.00	0.357E+00	0.648E+03	****	0.117E+15
51	12A	10FEB79	2785.00	0.179E+00	0.283E+03	****	0.950E+14
52	12A	21FEB79	8682.00	0.231E+00	0.300E+03	****	****
53	12A	26FEB79	15018.00	0.108E+06	0.287E+00	0.172E+16	0.753E+15
54	12A	01MAR79	7177.00	0.127E+05	0.913E+03	****	****
55	12A	06MAR79	6277.00	0.607E+00	0.515E+03	0.215E+15	0.537E+14
56	12A	20MAR79	8653.00	0.333E+00	0.493E+03	0.203E+15	0.797E+14

57	12A	14MAR75	5500.00	0.370E+08	0.552E+03	****	****
58	12A	18MAR75	7709.00	0.808E+08	0.837E+03	0.176E+16	0.176E+16
59	12A	2[illegible]MAR75	10571.00	0.208E+05	0.163E+08	0.233E+15	****
60	12A	26MAR75	25359.00	0.176E+06	0.552E+08	0.896E+15	0.629E+16
61	12A	31MAR75	12720.00	0.186E+05	0.188E+08	0.299E+16	0.299E+16
62	12A	08APR75	8367.00	0.936E+08	0.112E+08	0.205E+16	0.205E+16
63	12A	09APR75	11106.00	0.112E+05	0.121E+08	0.285E+15	0.611E+16
64	12A	18APR75	13805.00	0.179E+05	0.158E+08	****	****
65	12A	19APR75	11198.00	0.183E+05	0.150E+08	****	****
66	12A	2[illegible]APR75	27172.00	0.221E+06	0.887E+08	****	****
67	12A	28APR75	23865.00	0.136E+06	0.287E+08	0.243E+16	0.420E+16
68	12A	30APR75	10136.00	0.218E+05	0.155E+08	****	****
69	12A	13MAY75	5759.00	0.131E+05	0.601E+03	****	****
70	12A	16MAY75	8281.00	0.769E+08	0.872E+03	0.204E+15	0.131E+15
71	12A	21MAY75	3289.00	0.381E+08	0.297E+03	****	****
72	12A	27MAY75	8216.00	0.837E+08	0.308E+03	0.211E+15	0.119E+15
73	12A	08JUN75	2725.00	0.138E+08	0.157E+03	0.233E+15	0.117E+15
74	12A	11JUN75	3889.00	0.577E+08	0.281E+03	****	****
75	12A	16JUN75	6893.00	0.650E+08	0.379E+03	0.779E+15	0.397E+15
76	12A	20JUN75	8009.00	0.331E+08	0.251E+03	0.802E+15	0.328E+15
77	12A	26JUN75	5855.00	0.592E+08	0.480E+03	****	****
78	12A	03JUL75	2129.00	0.167E+08	0.119E+03	****	****
79	12A	07JUN75	2325.00	0.278E+08	0.676E+03	****	****
80	12A	10JUN75	1209.00	0.122E+08	0.518E+03	****	****
SUMMATION			486599.00	0.159E+07	0.919E+05	0.121E+17	0.101E+17
# OBSERVATIONS			80	80	80	83	39
AVERAGE VALUE			6082.47	0.199E+05	0.115E+08	0.282E+15	0.260E+15

QUANICASSEE RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	18	16AUG72	6.30	0.273E+00	0.880E+00	0.925E+11	****
2	18	11SEP72	8.00	0.783E-01	0.421E+01	****	****
3	18	21SEP72	3.80	0.232E+00	0.412E+01	0.466E+11	****
8	18	05OCT72	9.00	0.982E+00	0.163E+02	0.979E+11	****
5	18	18OCT72	13.00	0.131E+02	0.328E+01	0.318E+11	0.127E+11
6	18	02NOV72	42.00	0.718E+01	0.313E+01	0.298E+11	0.298E+11
7	18	15NOV72	17.00	0.256E+02	0.507E+01	0.816E+11	0.816E+11
13	18	07MAR73	312.00	0.127E+00	0.482E+02	0.763E+12	0.916E+12
18	18	29MAR73	105.00	0.113E+03	0.156E+02	0.257E+12	0.257E+12
15	18	18APR73	115.00	0.332E+03	0.280E+02	0.281E+12	0.281E+12
16	18	02MAY73	106.00	0.311E+03	0.681E+01	0.259E+12	0.259E+12
17	18	16MAY73	116.00	0.380E+03	0.106E+02	0.288E+12	****
18	18	29MAY73	37.00	0.583E+02	0.235E+00	0.272E+12	0.905E+11
19	18	13JUN73	20.00	0.878E+02	0.0	0.176E+12	0.215E+12
20	18	26JUN73	17.00	0.229E+02	0.761E+00	****	****
21	18	11JUL73	41.00	0.118E+03	0.206E+01	0.323E+11	0.269E+11
22	18	23JUL73	7.30	0.891E+01	0.132E+01	0.793E+11	0.705E+11
23	18	07AUG73	6.90	0.612E+01	0.131E+01	0.591E+11	0.675E+11
24	18	13AUG73	5.60	0.323E+01	0.108E+01	****	****
25	18	16AUG73	8.70	0.901E+01	0.898E+00	****	****
29	18	05SEP73	1.00	0.592E+01	0.569E+00	****	****
30	18	16SEP73	8.50	0.872E+01	0.625E+00	****	****
60	18	26MAR75	333.00	0.591E+03	0.380E+02	0.815E+12	0.815E+12
63	18	09APR75	58.00	0.830E+02	0.695E+01	0.280E+12	0.280E+12
SUMMATION			1366.70	0.326E+04	0.207E+03	0.383E+13	0.332E+13
# OBSERVATIONS			28	28	28	18	18
AVERAGE VALUE			56.95	0.136E+03	0.864E+01	0.213E+12	0.237E+12

SAGINAW RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	15	16AUG72	8.80	****	0.180E+02	0.308E+13	****
2	15	11SEP72	5.60	0.281E+00	0.101E+02	0.671E+12	****
3	15	21SEP72	8.80	0.803E+00	0.116E+02	0.881E+12	****
8	15	05OCT72	11.00	****	****	0.282E+12	****
5	15	18OCT72	18.00	0.326E+02	0.438E+01	0.118E+13	0.378E+13
6	15	02NOV72	17.00	0.231E+02	0.506E+01	0.582E+12	0.665E+12
7	15	16NOV72	28.00	0.362E+02	0.121E+02	0.183E+13	0.466E+13
13	15	07MAR73	838.00	0.138E+03	0.562E+02	0.106E+13	0.783E+13
18	15	29MAR73	186.00	0.106E+03	0.297E+02	0.357E+12	0.357E+12
15	15	18APR73	160.00	0.199E+03	0.599E+01	0.861E+12	0.503E+12
17	15	16MAY73	162.00	0.218E+03	0.220E+02	0.396E+12	****
18	15	29MAY73	52.00	0.811E+02	0.0	0.305E+12	0.267E+12
19	15	13JUN73	28.00	0.582E+02	0.0	0.201E+12	0.101E+13
20	15	26JUN73	28.00	0.930E+01	0.0	****	****
21	15	11JUL73	16.00	0.850E+02	0.273E+01	0.705E+11	0.391E+11
60	15	26MAR75	868.00	0.718E+03	0.339E+02	0.118E+13	0.118E+13
63	15	09APR75	136.00	0.157E+03	0.715E+01	0.286E+13	0.106E+13
SUMMATION			1721.20	0.298E+04	0.215E+03	0.153E+14	0.209E+14
# OBSERVATIONS			17	15	16	16	11
AVERAGE VALUE			101.25	0.199E+03	0.138E+02	0.959E+12	0.190E+13

SHEBEON RIVER

CRD	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	16	16AUG72	3.80	****	0.881E+01	****	****
2	16	11SEP72	2.80	0.869E-01	0.401E+01	0.686E+11	****
13	16	07MAR78	100.00	0.322E+03	0.317E+02	0.862E+12	0.116E+13
14	16	29MAR78	60.00	0.860E+02	0.112E+02	0.157E+12	0.157E+12
15	16	18APR78	30.00	0.331E+02	0.782E+01	0.171E+12	0.171E+12
17	16	16MAY78	70.00	0.809E+02	0.109E+02	0.171E+12	****
18	16	30MAY78	33.00	0.180E+02	0.863E+01	****	****
19	16	13JUN78	12.00	0.321E+01	0.0	0.150E+12	0.369E+11
20	16	26JUN78	10.00	0.379E+00	0.0	****	****
SUMMATION			800.70	0.399E+03	0.728E+02	0.118E+13	0.158E+13
# OBSERVATIONS			9	8	9	6	8
AVERAGE VALUE			89.26	0.499E+02	0.8[illegible]6E+01	0.196E+12	0.395E+12

BUD CREEK

CRD	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	17	16AUG72	0.88	****	0.153E+01	0.198E+11	****
2	17	11SEP72	0.56	0.506E+00	0.123E+01	0.301E+11	****
3	17	21SEP72	0.88	0.582E-01	0.664E+00	0.168E+11	****
4	17	05OCT72	1.12	0.921E-01	0.383E+01	0.219E+11	****
5	17	19OCT72	1.80	0.306E+01	0.461E+00	****	****
13	17	07MAR78	83.00	0.816E+02	0.578E+01	0.316E+12	0.789E+12
14	17	29MAR78	15.00	0.118E+02	0.263E+01	0.133E+12	0.738E+12
15	17	18APR78	16.00	0.855E+02	0.238E+01	0.391E+11	0.457E+13
17	17	16MAY78	16.00	0.165E+02	0.309E+01	0.391E+11	****
18	17	30MAY78	5.20	0.980E+01	0.192E+00	0.208E+11	****
19	17	13JUN78	2.80	0.229E+01	0.0	0.538E+11	0.811E+11
20	17	26JUN78	2.80	0.875E+01	0.0	****	****
63	17	07APR75	48.00	0.636E+01	0.102E+01	0.383E+11	0.137E+12
SUMMATION			199.28	0.183E+03	0.228E+02	0.773E+12	0.327E+13
# OBSERVATIONS			13	12	13	11	5
AVERAGE VALUE			9.17	0.1[illegible]9E+02	0.175E+01	0.703E+11	0.653E+12

PIGEON RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
1	18	16AUG77	10.00	0.883E+00	0.258E+02	****	****
2	18	11SEP77	6.00	0.0	0.101E+02	0.360E+12	****
3	18	21SEP77	5.50	0.868E+00	0.297E+01	0.808E+11	****
4	18	25OCT77	13.00	0.117E+01	0.159E+02	0.127E+12	****
5	18	18OCT77	20.00	0.180E+02	0.889E+01	0.889E+12	0.215E+12
6	18	02NOV77	13.00	0.162E+02	0.589E+01	0.651E+12	0.483E+12
13	18	07MAR78	853.00	0.205E+08	0.982E+02	0.121E+13	0.302E+13
14	18	23MAR78	166.00	0.282E+03	0.126E+02	0.806E+12	0.806E+12
15	18	18APR78	193.00	0.305E+03	0.193E+02	0.623E+12	0.623E+12
16	18	02MAY78	169.00	0.130E+03	0.131E+02	0.740E+12	0.148E+13
17	18	16MAY78	188.00	0.296E+03	0.160E+02	0.450E+12	****
18	18	30MAY78	59.00	0.787E+02	0.231E+00	0.173E+12	0.188E+12
19	18	13JUN78	32.00	0.965E+02	0.0	0.517E+12	0.682E+12
20	18	26JUN78	27.00	0.313E+02	0.0	****	****
21	18	11JUL78	18.00	0.806E+02	0.270E+01	0.158E+12	0.727E+12
60	18	26APR79	577.00	0.150E+08	0.790E+02	0.129E+13	0.129E+13
63	18	09MAR79	155.00	0.188E+03	0.988E+01	0.855E+12	0.379E+12
SUMMATION			2088.00	0.835E+08	0.312E+03	0.768E+13	0.936E+13
# OBSERVATIONS			17	17	17	15	11
AVERAGE VALUE			122.80	0.291E+03	0.183E+02	0.512E+12	0.851E+12

PINEBOG RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
4	11	16AUG77	15.00	0.131E+01	0.612E+01	****	****
SUMMATION			15.00	0.131E+01	0.612E+01	0.0	0.0
# OBSERVATIONS			1	1	1	0	0
AVERAGE VALUE			15.00	0.131E+01	0.612E+01	0.0	0.0

PINCCHUING RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
6	23	01NOV77	20.00	0.178E+02	0.620E+01	0.889E+11	0.132E+12
7	23	15NOV77	16.00	0.353E+02	0.598E+01	****	****
13	23	06MAR78	86.00	0.198E+03	0.293E+02	0.252E+12	0.210E+12
14	23	23MAR78	79.00	0.202E+02	0.367E+01	0.930E+11	0.891E+11
15	23	17APR78	71.00	0.288E+03	0.220E+02	0.174E+12	0.347E+12
17	23	15MAY78	57.00	0.332E+02	0.979E+01	****	****
18	23	29MAY78	20.00	0.216E+02	0.588E+00	0.127E+12	****
19	23	12JUN78	22.00	0.791E+02	0.302E+01	****	****
20	23	25JUN78	15.00	0.767E+01	0.608E+00	****	****
SUMMATION			338.00	0.950E+03	0.911E+02	0.695E+12	0.778E+12
# OBSERVATIONS			9	9	9	5	4
AVERAGE VALUE			37.11	0.106E+03	0.101E+02	0.139E+12	0.198E+12

SAGAMING RIVER

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
13	28	06MAR79	107.00	0.224E+02	0.179E+02	0.262E+12	0.262E+12
14	28	28MAR79	25.00	0.821E+01	0.187E+02	0.612E+11	0.612E+11
15	28	17APR79	99.00	0.831E+02	0.239E+02	0.218E+12	0.218E+12
17	28	15MAY79	71.00	0.298E+03	0.253E+02	****	****
18	28	29MAY79	28.00	0.378E+02	0.586E+01	0.135E+12	0.135E+12
13	28	12JUN79	36.00	0.687E+02	0.125E+02	****	****
66	28	26MAR79	60.00	0.811E+02	0.139E+02	0.187E+12	0.187E+12
63	28	09APR79	96.00	0.298E+02	0.128E+02	0.169E+12	0.113E+12
SUMMATION			959.00	0.777E+03	0.186E+03	0.948E+12	0.935E+12
# OBSERVATIONS			8	8	8	6	6
AVERAGE VALUE			57.75	0.971E+02	0.182E+02	0.561E+12	0.156E+12

DRAINAGE DITCH

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
15	31	17APR79	****	****	****	****	****
17	31	15MAY79	****	****	****	****	****
18	31	29MAY79	****	****	****	****	****
SUMMATION			0.0	0.0	0.0	0.0	0.0
# OBSERVATIONS			0	0	0	0	0
AVERAGE VALUE			0.0	0.0	0.0	0.0	0.0

DRAINAGE DITCH

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
17	32	16MAY79	****	****	****	****	****
18	32	29MAY79	****	****	****	****	****
SUMMATION			0.0	0.0	0.0	0.0	0.0
# OBSERVATIONS			0	0	0	0	0
AVERAGE VALUE			0.0	0.0	0.0	0.0	0.0

DRAINAGE DITCH

CRU	STA	DAY	FLOW (CFS)	TFE (KG/DAY)	DFE (KG/DAY)	TCOL (#/DAY)	FCOL (#/DAY)
15	33	18APR79	****	****	****	****	****
13	33	13JUN79	****	****	****	****	****
SUMMATION			0.0	0.0	0.0	0.0	0.0
# OBSERVATIONS			0	0	0	0	0
AVERAGE VALUE			0.0	0.0	0.0	0.0	0.0

APPENDIX 8

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
2	1	25SEP74	7208	1	1.70	362	9.30	39.70	30.10	45.20	6.60	11.51	114.39	102.89	1.30	0.53	8.40	15
2	1	25SEP74	7208	9	2.22	405	9.20	51.40	3.60	65.90	8.80	13.95	158.83	144.87	2.64	0.64	8.40	15
2	2	25SEP74	7208	1	1.63	247	9.60	12.40	2.80	1.20	0.30	3.78	50.73	36.95	0.0	0.68	8.60	18
2	2	25SEP74	7208	4	1.79	245	9.60	13.00	1.10	1.20	0.20	4.60	60.54	55.97	0.0	0.67	8.50	14
2	8	26SEP74	7209	1	1.68	225	8.50	10.80	3.10	43.50	0.80	3.46	20.67	17.21	0.55	0.50	8.60	15
2	8	26SEP74	7209	5	1.65	220	9.60	10.80	0.10	39.40	0.80	2.61	20.08	17.47	0.63	0.52	8.50	15
2	8	26SEP74	7209	13	1.67	228	9.80	11.40	0.80	19.60	0.50	4.17	25.53	21.32	0.78	0.52	8.50	15
2	5	25SEP74	7208	1	1.86	240	10.20	13.20	1.70	1.30	0.20	4.86	58.75	53.89	0.0	0.64	8.80	14
2	5	25SEP74	7208	5	1.82	244	10.30	13.20	0.0	1.20	0.30	4.63	59.33	54.74	0.0	0.63	8.80	14
2	6	25SEP74	7208	1	1.99	316	6.10	29.20	4.00	6.00	1.30	5.54	93.24	87.69	0.0	0.61	8.50	14
2	6	25SEP74	7208	8	1.95	309	9.40	25.00	1.20	1.30	0.30	6.00	88.83	82.84	0.0	0.60	8.50	14
2	9	25SEP74	7208	1	2.01	344	9.40	19.90	1.20	21.50	4.10	7.33	100.47	93.11	0.0	0.61	8.50	14
2	9	25SEP74	7208	4	2.09	357	9.70	40.10	4.90	16.70	3.20	7.60	100.31	92.71	0.0	0.61	8.50	14
2	9	25SEP74	7208	7	2.05	348	9.70	33.20	1.90	17.90	1.50	7.76	106.37	98.61	0.0	0.64	8.40	14
2	13	25SEP74	7208	1	1.80	256	8.90	17.20	2.70	3.10	0.10	5.80	55.52	49.71	0.81	0.33	8.70	14
2	13	25SEP74	7208	2	1.80	256	9.50	16.70	1.30	2.90	0.10	4.66	60.31	55.65	0.72	0.35	8.70	14
2	13	25SEP74	7208	5	1.80	258	9.60	16.90	8.00	2.70	0.10	4.43	58.68	54.25	0.68	0.31	8.70	14
2	15	25SEP74	7208	1	1.78	236	9.60	12.00	5.00	1.10	0.20	4.04	48.97	44.92	0.0	0.81	8.50	15
2	15	25SEP74	7208	2	1.79	237	9.70	11.80	4.40	3.40	0.10	4.92	46.26	41.34	0.49	0.85	8.50	15
2	15	25SEP74	7208	5	1.76	239	9.80	11.70	0.0	3.20	0.0	3.98	50.01	46.06	0.42	0.82	8.50	15
2	17	25SEP74	7208	1	1.61	250	7.60	14.00	1.90	2.60	0.10	9.23	53.24	44.04	0.65	0.47	8.70	15
2	17	25SEP74	7208	2	1.83	253	8.80	14.10	5.50	3.30	0.10	4.17	54.44	50.27	0.72	0.46	8.70	15
2	17	25SEP74	7208	5	1.83	250	9.10	14.00	5.00	3.10	0.10	4.79	55.62	50.86	0.46	0.47	8.70	15
2	18	26SEP74	7209	1	1.77	227	9.50	12.00	1.20	2.30	0.0	3.39	45.51	42.09	0.26	0.60	8.50	14
2	18	26SEP74	7209	2	1.71	232	9.40	12.20	6.30	2.50	0.0	3.78	45.67	41.92	0.68	0.76	8.50	14
2	18	26SEP74	7209	8	1.74	231	9.20	12.00	4.40	2.10	0.0	4.17	48.61	44.43	0.81	0.79	8.50	14
2	19	25SEP74	7208	1	0.0	231	9.70	11.30	2.90	2.70	0.10	3.39	45.35	41.92	0.33	0.83	8.50	15
2	19	25SEP74	7208	2	1.77	232	9.70	11.20	8.60	2.90	0.10	3.88	45.31	41.47	0.55	0.78	8.60	15
2	19	25SEP74	7208	8	0.0	232	9.50	11.20	2.50	2.40	0.0	4.24	49.03	44.79	0.23	0.86	8.50	15
2	20	25SEP74	7208	1	1.83	232	10.10	13.00	1.90	2.70	0.10	3.62	52.16	48.54	0.23	0.88	8.60	15
2	20	25SEP74	7208	5	1.79	248	10.40	13.00	4.50	2.70	0.0	4.01	50.79	46.70	0.20	0.87	8.70	15
2	22	26SEP74	7209	1	1.63	209	9.90	9.00	12.50	88.40	1.10	3.23	26.01	22.79	0.88	0.47	8.60	16
2	22	26SEP74	7209	5	1.64	208	10.20	9.00	1.00	86.80	0.90	2.93	25.40	22.43	0.68	0.57	8.50	16
2	22	26SEP74	7209	9	1.61	212	5.50	9.10	0.50	73.30	1.00	3.29	55.78	52.49	0.72	0.57	8.40	16
2	23	26SEP74	7209	1	1.75	226	8.70	11.20	3.30	2.20	0.0	3.52	49.00	45.44	0.52	0.95	8.50	15
2	23	26SEP74	7209	2	1.75	225	10.10	11.10	1.10	1.70	0.0	3.59	44.47	40.88	0.62	0.98	8.50	14
2	23	26SEP74	7209	5	1.73	231	9.70	11.10	12.00	2.20	0.10	4.30	48.77	44.47	0.91	0.87	8.50	14
2	23	26SEP74	7209	9	1.73	229	6.00	11.10	0.0	0.80	0.0	3.55	50.92	47.37	0.52	0.98	8.50	14
2	24	25SEP74	7208	1	0.0	235	9.60	11.50	0.10	3.00	0.10	3.72	40.72	37.00	0.39	0.69	8.50	16
2	24	25SEP74	7208	2	1.74	234	9.70	11.60	18.40	4.20	0.10	4.63	41.89	37.26	1.04	0.64	8.40	16
2	24	25SEP74	7208	7	1.74	234	9.60	11.70	3.80	2.00	0.0	3.59	41.50	37.91	0.33	0.70	8.40	15
2	27	26SEP74	7209	1	1.73	222	10.70	11.80	1.50	1.60	0.10	2.67	31.30	28.59	0.91	0.56	8.70	16
2	27	26SEP74	7209	6	1.73	232	10.00	11.80	8.70	6.70	0.10	3.19	39.58	36.41	0.85	0.53	8.70	16
2	28	26SEP74	7209	1	1.65	216	9.70	9.20	2.40	62.90	1.00	5.05	32.14	27.09	0.72	0.56	8.60	16
2	28	26SEP74	7209	5	1.66	216	9.80	9.30	5.30	71.80	0.90	3.98	33.02	29.08	0.65	0.62	8.50	16
2	28	26SEP74	7209	10	1.65	217	10.00	9.30	5.70	82.20	0.90	4.30	49.00	44.59	0.85	0.64	8.40	16
2	29	26SEP74	7209	1	1.80	233	9.70	12.20	0.0	0.70	0.20	7.37	50.92	43.52	1.30	1.14	8.60	15
2	29	26SEP74	7209	2	1.80	234	9.30	12.40	2.70	1.80	0.0	4.24	52.68	48.41	0.59	1.18	8.60	15
2	29	26SEP74	7209	5	1.79	231	9.80	12.10	0.0	1.80	0.0	4.82	50.30	45.48	0.62	1.16	8.60	15
2	29	26SEP74	7209	8	1.76	235	9.60	12.20	0.60	1.90	0.0	5.44	50.89	45.44	0.68	1.19	8.60	15
2	31	26SEP74	7209	1	1.80	238	10.30	12.20	5.40	2.40	0.0	7.99	41.78	35.79	0.88	1.13	8.60	15

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
2	31	26SEP74	7209	5	1.80	280	9.20	12.20	3.70	1.90	0.0	19.72	44.96	25.23	0.49	1.12	8.70	15
2	31	26SEP74	7209	10	1.77	238	9.40	12.20	4.60	2.70	0.0	4.04	52.84	48.80	0.49	1.15	8.70	15
2	35	26SEP74	7209	1	1.68	218	9.60	9.70	8.20	41.30	1.00	3.36	20.24	16.83	0.59	0.42	8.60	15
2	35	26SEP74	7209	2	1.66	212	10.00	9.70	6.70	35.50	0.90	3.03	18.78	15.75	0.53	0.48	8.60	15
2	35	26SEP74	7209	5	1.65	211	9.90	9.60	4.70	35.60	0.90	3.42	19.66	16.27	0.55	0.47	8.60	15
2	35	26SEP74	7209	12	1.65	218	9.90	9.70	1.80	37.50	1.00	2.12	25.85	23.73	0.55	0.46	8.60	15
2	35	27SEP74	7210	1	1.73	221	9.60	10.50	0.30	22.60	0.60	2.71	15.91	13.20	0.59	0.49	8.70	15
2	35	27SEP74	7210	2	1.70	222	10.00	10.70	0.0	19.90	0.60	2.25	15.88	13.63	0.65	0.49	8.70	15
2	35	27SEP74	7210	5	1.68	222	9.60	10.70	5.10	24.60	0.60	2.18	16.37	14.18	0.62	0.50	8.70	15
2	35	27SEP74	7210	13	1.72	221	9.70	10.60	3.10	24.40	0.60	2.38	17.28	14.90	0.59	0.51	8.70	15
2	37	26SEP74	7209	1	1.58	211	10.10	9.60	0.0	120.10	1.80	2.93	14.41	11.44	0.36	0.46	8.50	15
2	37	26SEP74	7209	13	1.60	210	9.90	8.60	0.20	151.10	1.80	2.48	17.57	15.06	0.55	0.48	8.50	15
2	43	27SEP74	7210	1	1.65	206	9.10	9.00	1.70	84.80	1.50	2.25	10.89	8.64	0.36	0.49	8.60	16
2	43	27SEP74	7210	7	1.65	201	11.10	9.10	6.50	89.20	1.60	2.51	16.69	14.18	0.59	0.50	8.50	16
2	49	27SEP74	7210	1	1.57	199	10.20	6.40	5.30	187.30	2.90	0.75	3.68	2.90	0.36	0.45	8.50	15
2	49	27SEP74	7210	5	1.58	196	11.20	6.40	5.20	196.30	2.80	1.60	3.94	2.31	0.29	0.45	8.50	15
2	49	27SEP74	7210	10	1.52	193	10.20	5.30	4.70	192.90	2.80	1.40	4.04	2.64	0.33	0.44	8.50	15
2	49	27SEP74	7210	18	1.51	193	10.30	6.00	3.30	248.60	2.80	1.43	5.28	3.85	0.46	0.62	8.30	13
2	50	27SEP74	7210	1	1.55	197	10.00	6.40	2.70	211.60	2.90	1.21	3.59	2.41	0.68	0.44	8.50	15
2	50	27SEP74	7210	5	1.58	191	10.10	5.30	5.70	231.40	2.80	1.56	4.82	3.26	0.52	0.43	8.40	15
2	50	27SEP74	7210	10	1.57	197	10.00	6.40	2.90	230.00	2.80	1.96	5.05	3.13	0.29	0.42	8.50	15
2	50	27SEP74	7210	18	1.55	196	10.60	5.90	0.80	217.20	3.10	1.86	4.82	2.97	0.33	0.75	8.30	12
2	51	27SEP74	7210	1	1.57	205	10.00	7.20	1.00	201.10	2.50	1.43	5.87	4.43	0.39	0.48	8.50	16
2	51	27SEP74	7210	5	1.59	200	9.90	7.30	4.10	206.50	2.30	1.60	5.61	4.04	0.46	0.48	8.50	16
2	51	27SEP74	7210	10	1.61	206	9.90	9.00	4.70	171.80	2.20	2.02	6.88	4.89	0.33	0.46	8.50	16
2	51	27SEP74	7210	18	1.56	193	10.20	6.00	1.70	271.20	3.10	1.17	4.60	3.42	0.46	0.88	8.20	12
2	54	25SEP74	7208	1	3.30	937	7.60	271.00	558.50	534.00	53.90	96.56	307.39	210.82	88.70	1.15	7.90	16
2	54	25SEP74	7208	9	3.47	933	7.50	264.00	523.40	497.50	49.90	80.23	305.04	224.81	67.38	1.18	8.00	16
2	55	24SEP74	7207	0	3.51	921	7.34	276.40	701.31	485.87	53.03	122.44	295.87	173.44	90.41	1.67	8.12	15
2	57	27SEP74	7210	1	1.62	205	9.40	8.30	12.10	120.70	2.00	1.53	8.51	6.98	0.49	0.50	8.50	15
2	57	27SEP74	7210	2	1.62	215	9.80	8.30	71.10	185.90	2.10	2.02	7.92	5.90	0.65	0.49	8.40	14
2	57	27SEP74	7210	5	1.65	209	9.60	8.40	8.10	120.80	2.00	2.18	7.30	5.12	0.42	0.50	8.50	15
2	57	27SEP74	7210	15	1.63	200	9.70	7.30	9.70	191.90	2.50	1.21	10.89	9.68	0.33	0.57	8.50	15
2	58	27SEP74	7210	1	1.66	229	10.10	12.60	3.00	57.80	1.20	2.61	18.06	15.45	0.42	0.51	8.60	16
2	58	27SEP74	7210	5	1.68	218	9.90	10.30	3.80	101.60	1.70	2.28	12.09	9.71	0.46	0.45	8.60	16
2	58	27SEP74	7210	13	1.61	207	9.70	8.70	5.20	142.30	2.00	2.25	9.98	7.66	0.62	0.47	****	16
3	1	22OCT74	7235	1	3.55	120	9.30	207.00	585.30	691.80	53.50	152.34	253.89	101.55	129.42	2.26	****	10
3	1	22OCT74	7235	5	3.63	104	9.00	207.00	668.70	689.50	49.70	153.29	282.61	129.32	126.25	2.18	****	9
3	2	23OCT74	7236	2	1.80	239	****	10.20	10.70	1.40	0.20	10.33	23.80	13.46	0.07	0.93	****	9
3	2	23OCT74	7236	4	1.83	242	11.20	10.30	15.50	1.70	0.30	5.09	23.54	18.45	0.23	0.94	****	9
3	5	23OCT74	7236	2	2.04	245	****	11.00	36.50	7.70	1.10	3.13	24.91	15.78	0.39	1.19	****	9
3	5	23OCT74	7236	5	1.85	245	11.20	10.50	38.20	7.30	1.20	20.37	20.37	0.0	0.65	1.10	****	9
3	8	25OCT74	7238	2	1.87	265	8.90	13.00	14.40	17.30	2.10	18.06	31.26	13.20	0.81	0.81	****	9
3	8	25OCT74	7238	8	1.90	242	****	17.20	30.20	16.40	1.00	25.62	27.19	1.56	1.40	0.78	****	10
3	12	23OCT74	7236	2	2.04	241	****	4.10	10.80	1.00	0.70	6.72	23.50	16.79	1.60	0.42	****	8
3	12	23OCT74	7236	4	1.83	247	11.70	10.90	13.90	1.40	0.10	6.29	23.80	17.51	0.13	0.55	****	8
3	13	22OCT74	7235	1	1.82	261	10.20	14.60	13.60	0.80	0.0	7.17	34.13	26.96	0.23	0.72	****	8
3	13	22OCT74	7235	2	1.91	262	9.80	14.30	12.80	0.10	0.0	6.35	31.62	25.30	0.23	0.48	****	8
3	13	22OCT74	7235	5	1.85	261	9.10	14.80	14.00	0.0	0.0	10.71	47.65	36.94	0.0	1.05	****	8
3	15	23OCT74	7236	1	1.76	282	9.50	10.20	36.10	43.40	0.90	4.76	23.83	19.04	0.0	0.78	****	9

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
3	15	23OCT74	7236	2	1.80	238	10.60	10.40	33.10	43.20	0.80	4.40	25.43	21.03	0.10	0.87	****	10
3	15	23OCT74	7236	8	1.85	240	10.40	8.80	27.00	34.50	1.00	5.70	28.69	22.98	0.13	0.89	****	9
3	17	23OCT74	7236	2	1.94	289	****	20.10	15.00	0.70	0.10	5.84	32.57	26.73	0.0	0.72	****	10
3	17	23OCT74	7236	5	2.01	290	11.00	20.00	20.80	0.60	0.20	5.41	32.21	26.80	0.0	0.40	****	9
3	18	23OCT74	7236	2	1.85	286	****	11.10	10.70	1.30	0.0	6.75	32.08	25.33	0.0	0.93	****	10
3	18	23OCT74	7236	9	1.94	288	10.50	14.00	28.40	2.30	0.40	10.69	38.57	27.87	1.96	0.88	****	9
3	20	23OCT74	7236	2	1.77	238	11.40	9.00	12.50	0.0	0.20	7.95	21.39	13.43	****	0.68	****	9
3	20	23OCT74	7236	4	1.81	226	11.50	9.30	15.80	0.20	0.0	7.99	24.74	16.76	0.0	0.68	****	9
3	23	23OCT74	7236	1	1.77	223	9.90	8.50	18.70	59.60	0.20	4.11	18.84	14.70	0.20	0.49	****	10
3	23	23OCT74	7236	2	1.76	222	10.90	8.20	16.50	61.00	0.30	4.73	21.71	17.02	0.0	0.58	****	10
3	23	23OCT74	7236	5	1.73	232	10.50	6.40	16.50	51.90	0.50	4.43	20.93	16.50	0.03	0.71	****	10
3	23	23OCT74	7236	9	1.71	222	9.80	8.40	17.50	59.60	0.60	4.34	25.59	21.26	1.21	0.70	****	10
3	28	28OCT74	7241	2	1.85	254	****	12.80	2.00	1.80	0.10	3.78	22.33	18.55	1.01	0.48	****	10
3	28	28OCT74	7241	6	1.87	258	11.00	12.50	4.10	1.70	0.0	6.23	21.35	15.13	1.66	0.36	****	10
3	25	26OCT74	7239	2	1.88	289	****	13.70	17.20	2.00	0.20	5.80	26.38	20.57	0.0	0.33	****	**
3	25	26OCT74	7239	6	1.88	261	10.40	13.90	1.30	1.30	0.30	9.98	33.22	23.24	1.53	0.39	****	**
3	26	28OCT74	7241	2	2.02	337	****	39.10	0.0	0.30	0.10	6.06	39.15	33.09	1.17	0.07	****	9
3	26	28OCT74	7241	8	2.04	336	10.60	24.30	3.10	0.40	0.10	4.96	37.03	32.11	0.07	0.07	****	9
3	27	28OCT74	7241	2	1.99	292	****	18.50	0.20	1.40	0.30	5.87	30.02	24.16	0.85	0.33	****	10
3	27	28OCT74	7241	4	1.93	279	11.30	17.50	0.90	1.60	0.0	9.78	26.54	16.76	0.85	0.40	****	10
3	28	28OCT74	7241	2	1.72	220	****	7.40	2.90	115.60	1.60	4.01	14.15	10.14	3.00	0.48	****	10
3	28	28OCT74	7241	5	1.66	220	****	7.80	12.80	115.60	1.70	4.89	16.59	11.74	0.36	0.32	****	10
3	28	28OCT74	7241	11	1.69	220	10.80	6.00	12.40	96.60	1.50	3.33	12.94	9.62	0.68	0.51	****	10
3	29	25OCT74	7238	1	1.92	254	11.20	10.90	10.40	1.50	0.30	10.50	21.91	11.38	0.33	0.85	****	10
3	29	25OCT74	7238	2	1.85	248	11.20	10.40	13.20	2.10	0.30	20.05	25.72	5.67	0.59	0.95	****	10
3	29	25OCT74	7238	5	1.85	250	11.10	10.90	12.80	2.10	0.40	5.74	28.85	23.11	1.24	0.98	****	10
3	29	25OCT74	7238	6	1.85	251	11.20	10.80	10.30	1.80	0.50	7.14	20.51	13.37	1.92	0.93	****	10
3	31	25OCT74	7238	2	1.73	238	****	7.50	5.90	126.60	1.30	5.28	15.81	10.53	0.0	0.65	****	10
3	31	25OCT74	7238	5	1.76	232	****	7.50	14.00	126.60	1.90	****	****	****	0.0	0.62	****	10
3	31	25OCT74	7238	10	1.70	220	10.70	7.40	20.60	122.90	1.30	3.78	12.36	8.57	0.07	0.61	****	9
3	32	28OCT74	7241	2	2.02	311	****	23.70	0.0	1.60	0.10	4.73	38.63	33.90	0.86	0.28	****	9
3	32	28OCT74	7241	3	2.02	307	11.20	24.90	14.80	1.50	0.20	5.48	30.42	24.91	0.95	0.31	****	10
3	33	28OCT74	7241	1	1.94	302	10.80	21.40	0.0	1.00	0.20	5.22	34.88	29.67	0.03	0.28	****	9
3	33	28OCT74	7241	2	2.01	310	10.70	21.20	0.0	1.20	0.10	4.96	33.38	28.43	0.72	0.27	****	9
3	33	28OCT74	7241	3	1.94	302	10.20	21.50	17.30	1.30	0.10	5.02	29.21	24.19	0.42	0.23	****	9
3	35	25OCT74	7238	1	1.62	209	****	5.00	4.60	199.90	1.80	3.72	14.21	10.50	****	0.51	****	10
3	35	25OCT74	7238	2	1.61	209	****	4.80	24.50	197.70	1.90	3.03	8.77	5.74	0.0	0.32	****	10
3	35	25OCT74	7238	5	1.59	204	****	5.20	18.60	180.90	1.80	5.77	13.14	7.37	0.0	0.44	****	10
3	35	25OCT74	7238	10	1.65	212	11.20	5.60	7.30	164.70	1.90	2.44	9.23	6.39	0.98	0.44	****	10
3	38	28OCT74	7241	1	1.68	202	11.10	5.30	20.00	164.40	1.80	4.38	20.80	16.43	1.30	0.29	****	10
3	38	28OCT74	7241	2	1.61	208	11.00	5.70	23.80	161.80	1.50	5.51	9.78	4.28	0.95	0.11	****	10
3	38	28OCT74	7241	5	1.59	206	11.20	5.50	0.80	161.10	1.60	2.31	11.93	9.62	0.0	0.35	****	9
3	39	28OCT74	7241	2	2.01	288	****	17.00	10.20	2.00	0.20	4.85	26.99	22.14	0.72	0.32	****	10
3	39	28OCT74	7241	5	1.95	281	10.90	16.80	11.80	1.70	0.10	3.91	35.31	31.39	0.75	0.37	****	10
3	42	29OCT74	7242	2	1.57	192	****	4.50	0.0	221.40	2.70	2.80	7.04	4.27	1.08	0.58	****	10
3	42	29OCT74	7242	7	1.71	210	11.10	4.40	0.0	221.40	2.30	4.37	6.75	2.35	0.75	0.52	****	10
3	43	29OCT74	7242	2	1.60	198	****	5.20	5.50	197.20	2.20	4.40	6.59	2.18	0.01	0.72	****	10
3	43	29OCT74	7242	5	1.62	199	****	4.90	37.50	197.40	2.10	2.28	7.30	5.02	0.62	0.18	****	10
3	43	29OCT74	7242	8	1.64	199	11.30	4.80	30.10	190.60	2.10	1.99	11.61	9.62	0.72	0.41	****	10
3	44	29OCT74	7242	2	1.80	238	****	11.80	4.60	41.40	0.90	2.93	15.65	12.71	0.81	0.27	****	9

SAGINAW BAY CHEMISTRY

CRT	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OE (UG/L)	SI (MG/L)	PH	TEMP (°C)
3	88	29OCT74	7242	6	1.80	240	10.90	11.60	8.10	39.80	0.90	3.46	19.82	16.40	0.23	0.26	****	9
3	89	29OCT74	7242	2	1.58	182	****	3.90	9.40	244.80	2.40	3.85	8.21	0.36	0.03	0.63	****	10
3	89	29OCT74	7242	5	1.56	189	****	3.20	5.30	256.50	2.40	4.17	7.14	2.97	0.33	0.67	****	10
3	89	29OCT74	7242	10	1.57	190	****	8.00	23.40	247.00	2.30	8.01	8.79	0.78	0.23	0.91	****	10
3	89	29OCT74	7242	18	1.58	189	10.50	8.30	13.50	250.70	2.40	2.35	6.62	4.27	0.29	0.60	****	10
3	90	29OCT74	7242	2	1.58	198	****	4.10	10.90	258.70	2.70	1.92	4.80	2.88	0.26	0.78	****	10
3	90	29OCT74	7242	5	1.58	194	****	4.00	9.30	243.40	2.50	2.18	11.25	9.06	0.39	0.57	****	10
3	90	29OCT74	7242	10	1.55	190	10.00	4.10	7.10	256.50	2.60	2.28	8.34	2.02	0.36	0.61	****	10
3	90	29OCT74	7242	28	1.58	198	10.30	4.30	11.50	263.90	2.40	2.84	6.13	3.29	0.72	0.70	****	10
3	91	29OCT74	7242	2	1.58	188	****	4.30	6.90	255.80	2.50	4.28	4.56	0.33	1.14	0.58	****	10
3	91	29OCT74	7242	5	1.68	185	****	4.40	6.90	248.50	2.40	2.31	6.49	4.17	0.20	0.68	****	10
3	91	29OCT74	7242	10	1.54	187	****	3.10	5.50	217.70	2.10	2.25	9.13	6.88	0.29	0.60	****	10
3	91	29OCT74	7242	21	1.58	189	10.60	4.40	8.70	256.50	2.60	1.83	5.57	3.72	0.23	0.58	****	10
3	54	22OCT74	7235	1	3.51	171	7.10	212.00	659.50	667.00	69.40	132.52	242.94	110.38	109.70	2.18	****	9
3	54	22OCT74	7235	5	3.53	127	11.30	212.00	659.30	711.10	48.60	160.95	254.93	93.99	144.74	2.20	****	9
3	57	29OCT74	7242	1	1.61	200	10.90	3.80	0.0	236.80	2.60	2.51	5.05	2.54	0.55	0.42	****	10
3	57	29OCT74	7242	2	1.57	190	10.80	4.80	4.20	247.00	2.40	1.99	5.12	3.13	0.62	0.72	****	10
3	57	29OCT74	7242	5	1.57	194	10.80	4.00	4.10	249.20	2.30	2.18	6.49	4.30	0.07	0.59	****	10
3	57	29OCT74	7242	17	1.57	189	10.80	4.30	5.90	248.80	2.60	****	****	****	0.88	0.56	****	10
4	1	12NOV74	7256	2	3.96	871	****	117.00	800.50	726.10	54.50	213.24	298.13	84.89	244.76	2.40	****	9
4	1	12NOV74	7256	8	3.91	871	6.10	133.00	888.80	764.90	57.00	238.11	306.99	68.88	250.37	2.10	****	8
4	2	12NOV74	7256	2	1.90	246	****	10.50	26.40	5.00	0.70	3.85	16.82	12.97	0.75	0.75	****	8
4	2	12NOV74	7256	6	1.90	244	10.80	10.60	27.40	5.40	0.80	4.79	26.34	21.55	1.24	0.73	****	8
4	4	22NOV74	7266	2	1.53	186	****	4.60	7.40	260.20	2.70	3.42	6.03	2.61	0.75	0.59	****	6
4	4	22NOV74	7266	5	1.54	182	****	4.30	11.60	260.20	2.90	2.93	5.84	2.90	1.14	0.67	****	6
4	4	22NOV74	7266	12	1.53	188	****	4.70	17.00	256.40	2.60	2.97	7.20	4.24	0.55	0.63	****	7
4	5	12NOV74	7256	2	2.20	418	****	63.00	92.80	283.20	12.00	14.05	89.62	35.60	8.74	0.45	****	8
4	5	12NOV74	7256	4	2.38	418	10.70	62.30	80.00	144.00	9.70	18.00	62.89	44.89	10.30	0.60	****	8
4	6	12NOV74	7256	2	1.95	273	****	16.40	27.30	22.50	2.00	6.45	33.64	27.15	2.58	0.32	****	8
4	6	12NOV74	7256	4	1.96	276	11.10	16.80	27.60	23.20	2.10	5.93	33.74	27.81	1.86	0.36	****	8
4	11	12NOV74	7256	2	1.88	258	****	13.80	15.30	3.50	0.60	4.37	22.36	18.00	3.98	0.36	****	8
4	11	12NOV74	7256	3	1.90	258	11.00	13.00	10.20	1.10	0.30	4.86	32.63	27.78	1.37	0.25	****	8
4	12	12NOV74	7256	2	1.94	259	****	13.60	6.40	1.10	0.30	6.10	24.12	18.03	1.99	0.42	****	8
4	12	12NOV74	7256	4	1.91	264	11.30	13.60	8.70	1.60	0.30	4.30	24.45	20.15	2.28	0.45	****	8
4	13	12NOV74	7256	1	1.87	251	10.80	12.50	25.70	22.40	0.90	4.96	25.62	20.70	1.30	0.22	****	7
4	13	12NOV74	7256	2	1.86	247	10.70	12.40	20.10	21.10	0.90	4.09	20.28	15.42	1.27	0.32	****	7
4	13	12NOV74	7256	5	1.86	247	10.70	12.70	18.00	18.20	0.70	4.04	25.20	21.15	1.21	0.28	****	7
4	15	12NOV74	7256	1	1.92	261	10.90	16.00	28.40	18.80	1.40	4.69	28.13	23.41	2.15	0.43	****	8
4	15	12NOV74	7256	2	1.90	261	****	14.50	27.60	34.40	1.40	3.72	29.67	25.95	1.53	0.36	****	8
4	15	12NOV74	7256	7	1.92	264	10.70	15.10	27.40	31.00	1.80	4.47	44.43	39.97	1.60	0.47	****	8
4	16	12NOV74	7256	2	1.92	252	****	12.10	36.30	4.80	0.60	4.50	26.73	22.23	2.30	0.56	****	8
4	16	12NOV74	7256	6	1.90	250	10.90	11.60	12.50	3.00	0.60	4.53	26.11	21.58	1.37	0.51	****	8
4	17	12NOV74	7256	2	1.80	230	****	9.00	28.00	55.80	1.50	4.73	16.23	11.51	2.71	0.47	****	8
4	17	12NOV74	7256	7	1.82	232	10.90	8.80	32.00	54.80	1.40	4.56	20.60	16.04	1.70	0.47	****	8
4	18	18NOV74	7262	2	1.61	186	****	5.40	15.10	220.60	1.60	****	****	****	1.99	0.46	****	7
4	18	18NOV74	7262	8	1.60	199	11.60	5.40	11.20	219.10	2.00	2.05	9.16	7.11	1.43	0.83	****	7
4	23	18NOV74	7262	1	1.70	219	11.80	7.70	8.30	145.60	1.00	2.74	15.62	12.88	1.04	0.57	****	6
4	23	18NOV74	7262	2	1.71	210	11.70	7.10	5.50	144.20	1.00	3.19	13.46	10.24	0.63	0.68	****	6
4	23	18NOV74	7262	5	1.70	207	11.80	7.20	6.40	151.30	1.10	3.23	11.15	7.89	1.11	0.51	****	6
4	23	18NOV74	7262	8	1.73	219	11.50	8.10	11.00	124.70	0.90	2.71	16.01	13.33	0.60	0.63	****	6
4	24	18NOV74	7262	2	1.54	198	****	4.00	6.00	222.70	1.40	2.15	14.25	12.09	0.85	0.56	****	6
4	24	18NOV74	7262	5	1.64	195	11.80	5.10	32.00	224.10	1.40	3.06	10.27	7.20	1.24	0.27	****	7
4	25	18NOV74	7262	2	1.94	259	****	14.30	6.30	2.90	0.70	4.89	39.45	34.56	1.34	0.10	****	5
4	26	18NOV74	7262	4	1.95	254	12.50	15.00	15.20	2.40	0.80	4.27	30.68	26.41	1.61	0.04	****	5
4	27	18NOV74	7262	2	1.63	202	****	5.70	9.10	178.70	1.30	3.00	15.16	12.16	0.55	0.48	****	6

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	IP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
4	27	18NOV74	7262	4	1.64	195	11.80	5.90	11.50	182.70	1.40	4.34	18.68	14.34	1.01	0.35	****	6
4	28	18NOV74	7262	2	1.60	189	****	4.30	10.40	261.30	2.60	4.25	4.66	2.41	0.49	0.60	****	7
4	28	18NOV74	7262	5	1.56	190	****	3.60	11.60	237.70	2.30	3.75	6.03	2.31	0.68	0.62	****	7
4	28	18NOV74	7262	11	1.54	188	11.50	4.30	13.70	262.60	2.60	3.06	6.91	3.85	1.04	0.64	****	6
4	29	18NOV74	7262	1	1.83	234	11.40	11.70	11.20	38.20	1.20	4.27	24.25	19.98	5.80	1.06	****	6
4	29	18NOV74	7262	2	1.83	232	11.50	10.50	10.80	29.30	0.90	4.21	22.33	18.13	2.31	0.84	****	6
4	29	18NOV74	7262	5	1.81	228	11.80	10.60	13.60	29.90	0.70	4.34	28.17	23.86	1.53	0.82	****	6
4	29	18NOV74	7262	8	1.84	234	11.70	10.20	16.40	40.40	0.90	3.63	21.45	17.77	1.34	0.86	****	6
4	31	19NOV74	7263	2	1.84	236	****	3.40	5.70	208.80	1.30	3.00	12.71	9.71	0.85	0.52	****	5
4	31	19NOV74	7263	5	1.82	235	****	3.60	7.20	44.30	1.20	4.17	19.27	15.13	1.24	0.71	****	5
4	31	19NOV74	7263	11	1.81	248	****	9.50	13.60	39.40	1.20	6.29	18.91	12.62	1.37	0.73	****	5
4	32	19NOV74	7263	2	1.59	198	12.30	6.20	9.50	208.70	1.40	3.13	10.46	7.33	4.24	0.54	****	7
4	32	19NOV74	7263	4	1.58	193	11.80	3.90	8.60	45.90	1.50	4.60	16.10	11.51	1.92	0.74	****	7
4	33	19NOV74	7263	1	1.87	248	11.90	14.10	9.70	6.60	0.70	4.86	23.93	19.07	1.37	0.21	****	5
4	33	19NOV74	7263	2	1.86	250	11.50	14.30	19.00	17.70	1.20	4.66	31.43	26.76	3.55	0.34	****	5
4	33	19NOV74	7263	4	1.86	250	11.50	11.30	13.60	7.20	0.90	5.15	29.21	24.06	1.63	0.21	****	5
4	35	19NOV74	7263	1	1.65	191	11.40	5.80	9.20	201.90	1.90	2.64	14.02	11.38	2.31	0.55	****	7
4	35	19NOV74	7263	2	1.59	197	11.80	6.60	11.70	218.80	2.40	2.74	7.33	4.63	2.97	0.64	****	7
4	35	19NOV74	7263	5	1.61	203	11.00	6.00	6.30	201.70	1.90	3.36	8.44	5.09	2.64	0.56	****	7
4	35	19NOV74	7263	11	1.64	203	11.70	6.00	6.60	206.80	2.30	2.35	7.79	5.44	1.83	0.60	****	7
4	38	19NOV74	7263	1	1.79	228	12.40	10.30	10.30	34.90	1.70	5.28	46.03	40.75	1.50	0.22	****	5
4	38	19NOV74	7263	2	1.81	233	12.20	10.40	7.20	33.40	1.50	7.37	15.94	8.57	1.96	0.21	****	5
4	38	19NOV74	7263	5	1.84	230	12.40	10.60	10.80	34.10	1.40	3.72	22.20	18.48	2.22	0.29	****	5
4	42	22NOV74	7266	2	1.53	185	****	4.60	8.80	263.30	2.60	3.03	5.90	2.84	1.86	0.57	****	7
4	42	22NOV74	7266	8	1.53	186	11.90	4.50	9.90	200.30	2.70	2.93	6.29	3.39	0.75	0.61	****	7
4	43	22NOV74	7266	2	1.51	186	****	5.40	20.80	258.20	2.40	3.19	5.38	2.22	2.77	0.84	****	6
4	43	22NOV74	7266	10	1.51	186	11.80	5.60	28.70	257.40	2.50	3.26	6.62	3.33	3.46	0.62	****	6
4	44	22NOV74	7266	2	1.73	205	****	19.10	13.20	54.00	1.40	7.01	44.30	37.33	3.42	0.25	****	4
4	44	22NOV74	7266	7	2.00	274	12.20	8.20	15.00	174.00	1.50	4.79	30.77	25.98	1.30	0.57	****	4
4	54	12NOV74	7256	2	3.89	868	****	113.00	904.30	762.00	52.40	176.66	267.48	90.82	196.84	2.92	****	9
4	54	12NOV74	7256	9	3.89	870	6.30	113.00	914.60	689.40	46.30	210.69	329.91	119.06	223.70	2.74	****	9
4	56	18NOV74	7262	2	1.78	223	****	5.20	13.60	35.70	1.20	3.03	20.28	17.25	2.87	0.26	****	5
4	56	18NOV74	7262	6	1.79	225	11.90	5.60	14.50	55.70	1.50	4.34	21.35	17.02	1.63	0.23	****	5
5	2	11FEB75	7347	2	2.41	306	16.00	28.50	63.70	502.80	6.70	6.45	50.30	43.85	3.09	0.14	****	0
5	3	11FEB75	7347	1	2.61	408	14.90	11.60	25.80	226.40	2.70	3.85	14.31	10.46	0.55	0.13	****	0
5	5	13FEB75	7349	2	2.61	408	14.90	34.70	53.10	698.90	9.40	12.91	69.93	57.02	4.67	0.87	****	0
5	5	13FEB75	7349	3	2.63	423	15.20	36.40	67.80	772.90	10.30	13.76	77.78	63.96	4.53	0.89	****	0
5	16	11FEB75	7347	1	2.24	293	15.60	15.10	15.00	288.70	2.70	3.19	18.42	15.22	0.46	0.08	****	0
5	25	12FEB75	7348	1	3.05	532	12.50	30.60	33.80	5365.00	14.60	8.67	42.02	33.35	0.81	0.88	****	0
5	30	11FEB75	7347	2	1.86	250	15.20	4.20	15.70	193.40	1.70	3.88	9.26	5.38	1.86	0.78	****	0
5	33	12FEB75	7348	2	2.22	323	12.90	23.10	26.00	470.50	3.10	5.15	22.92	17.77	0.39	0.14	****	0
5	34	12FEB75	7348	2	2.07	278	15.20	14.60	43.60	561.70	3.50	3.38	11.28	7.92	1.37	0.04	****	0
5	34	12FEB75	7348	4	2.25	308	10.60	16.50	40.60	457.50	3.40	4.56	22.23	17.67	0.72	0.18	****	0
5	36	11FEB75	7347	2	1.79	232	14.20	0.0	7.70	117.40	0.90	2.18	7.60	5.41	1.04	0.58	****	0
5	36	11FEB75	7347	3	1.86	256	14.80	4.60	29.80	236.70	1.50	2.80	13.04	10.24	0.42	0.61	****	0
5	37	12FEB75	7348	2	1.65	212	14.00	0.0	184.10	254.90	1.00	2.44	5.90	3.46	0.36	0.65	****	0
5	39	12FEB75	7348	4	1.77	223	13.90	0.90	7.50	285.30	1.30	2.05	10.82	8.77	0.10	0.63	****	0
5	59	13FEB75	7349	2	2.61	441	15.30	38.40	60.60	884.00	19.40	14.38	67.68	53.30	5.28	0.94	****	0
5	59	13FEB75	7349	3	2.79	485	14.10	31.60	92.30	968.50	9.00	26.73	87.76	61.03	13.56	1.25	****	9
5	1	17APR75	7412	2	2.98	520	****	38.10	198.10	1855.00	23.30	71.26	169.06	97.80	25.07	2.28	****	

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
6	1	17APR75	7412	8	3.02	519	10.60	34.10	190.40	1870.70	24.60	67.38	169.68	102.30	31.17	1.83	****	9
6	2	17APR75	7412	2	2.19	328	****	21.00	29.30	594.00	5.90	9.90	86.99	36.09	1.63	0.48	****	6
6	2	17APR75	7412	6	2.14	225	13.40	21.20	47.40	574.10	5.50	11.70	89.55	37.85	1.70	0.45	****	6
6	3	29APR75	7428	2	2.05	285	****	15.70	15.40	284.70	2.90	8.50	27.19	22.69	1.27	0.05	****	10
6	3	29APR75	7428	8	2.02	286	11.60	15.90	8.90	282.70	2.90	8.73	28.61	19.89	1.24	0.04	****	10
6	5	17APR75	7412	2	2.22	388	****	24.20	20.40	668.50	6.70	9.36	52.89	43.13	6.55	0.52	****	6
6	5	17APR75	7412	6	2.33	468	12.70	27.10	41.70	795.60	7.90	11.38	48.48	37.00	1.86	0.58	****	6
6	8	17APR75	7412	2	2.50	450	****	40.00	35.80	1039.40	12.10	19.69	97.25	77.56	2.58	1.20	****	6
6	8	17APR75	7412	4	2.53	453	13.90	39.70	30.00	1038.90	11.40	19.59	98.52	78.92	2.35	1.19	****	5
6	11	17APR75	7412	2	2.18	351	****	25.70	20.50	813.40	7.60	14.38	69.47	55.09	2.12	0.30	****	7
6	11	17APR75	7412	3	2.16	346	15.40	25.70	33.60	832.10	7.50	12.55	60.81	52.26	2.88	0.16	****	7
6	12	17APR75	7412	2	2.25	391	****	30.80	13.20	1109.00	10.10	13.27	62.14	48.87	1.70	0.75	****	5
6	12	17APR75	7412	4	2.30	388	15.00	30.70	19.00	1329.70	10.50	14.05	62.40	48.35	1.99	0.06	****	4
6	13	17APR75	7412	1	2.58	453	13.00	40.10	116.70	1076.50	13.60	35.21	106.76	71.56	6.98	1.17	****	5
6	13	17APR75	7412	2	2.67	482	12.90	40.30	120.20	1103.70	14.20	36.22	110.35	74.13	9.06	1.20	****	5
6	13	17APR75	7412	6	2.77	498	11.70	44.10	186.00	1411.10	17.70	60.60	115.57	54.96	22.49	1.76	****	5
6	15	17APR75	7412	1	1.99	286	13.90	14.20	9.90	297.80	2.80	5.15	22.14	16.98	0.78	0.03	****	5
6	15	17APR75	7412	2	2.00	281	13.80	14.10	46.60	305.20	2.70	5.61	21.81	16.20	1.24	0.07	****	5
6	15	17APR75	7412	5	2.00	288	13.60	14.20	32.40	296.20	2.90	7.14	21.09	13.95	0.46	0.29	****	6
6	16	17APR75	7412	2	2.00	295	****	16.70	9.40	325.30	4.20	7.69	28.85	21.16	1.08	0.21	****	7
6	16	17APR75	7412	4	2.01	300	13.30	16.60	5.30	329.80	4.40	6.91	26.50	19.59	1.04	0.01	****	7
6	17	17APR75	7412	2	2.20	362	****	27.60	24.60	888.10	8.30	14.60	70.29	55.68	2.31	0.44	****	6
6	17	17APR75	7412	5	2.16	361	14.80	27.60	61.70	894.00	8.30	13.69	67.61	53.92	2.25	0.30	****	6
6	18	17APR75	7412	2	2.14	382	****	25.60	8.10	611.70	5.50	11.54	61.97	50.43	1.49	0.26	****	5
6	18	17APR75	7412	9	2.33	383	14.40	26.50	12.20	681.00	5.90	11.54	58.61	47.07	1.73	0.29	****	5
5	20	29APR75	7428	2	2.02	288	****	18.30	14.90	371.90	3.50	6.22	30.94	24.71	1.11	0.01	****	9
6	20	29APR75	7428	5	2.35	299	12.90	18.10	102.80	363.50	3.60	6.19	29.76	23.57	1.43	0.01	****	8
6	23	29APR75	7428	1	2.05	303	12.90	13.30	20.10	495.90	4.70	7.20	41.01	33.81	1.83	0.05	****	7
5	23	29APR75	7428	2	2.07	276	12.60	19.50	12.20	480.80	4.20	8.02	43.94	35.93	5.51	0.04	****	5
6	23	29APR75	7428	5	2.07	295	12.80	19.30	19.90	491.00	4.30	7.17	37.95	30.77	1.66	0.08	****	5
6	23	29APR75	7428	9	2.05	297	12.90	19.50	25.20	488.60	4.80	7.33	43.85	36.51	1.47	0.13	****	7
6	24	29APR75	7428	2	2.00	268	****	16.50	37.10	362.70	3.20	6.49	26.99	20.51	0.98	0.05	****	8
6	24	29APR75	7428	6	1.97	277	13.10	****	27.60	371.00	3.00	5.70	25.43	19.73	1.30	0.10	****	8
6	25	29APR75	7428	2	2.20	348	****	27.50	12.30	749.70	6.30	14.44	73.74	56.04	1.37	0.10	****	9
6	25	29APR75	7428	7	2.23	350	12.70	27.70	36.40	731.00	5.90	10.92	63.15	52.23	1.73	0.05	****	8
6	27	29APR75	7428	2	1.88	263	****	14.20	12.60	342.60	3.10	6.45	25.02	19.36	0.91	0.13	****	8
6	27	29APR75	7428	5	1.93	260	12.80	14.20	21.40	348.60	2.90	5.28	26.57	21.29	0.75	0.03	****	8
6	28	29APR75	7428	2	1.97	268	****	15.10	48.10	345.60	3.30	5.57	31.10	25.53	1.30	0.02	****	8
6	28	29APR75	7428	5	1.97	279	****	15.30	9.70	347.40	3.30	8.22	29.54	21.32	0.75	0.06	****	8
6	28	29APR75	7428	11	2.01	273	13.00	15.50	17.20	355.50	3.50	6.16	29.05	22.89	1.34	0.18	****	8
6	29	17APR75	7412	1	1.94	262	12.70	13.60	17.00	285.10	2.60	6.29	22.43	16.14	0.85	0.04	****	7
6	29	29APR75	7428	2	1.96	266	12.70	13.70	26.10	289.10	2.50	4.82	24.09	19.27	1.01	0.12	****	7
6	29	29APR75	7428	5	1.96	259	12.80	11.70	17.90	284.50	2.50	8.77	11.67	2.25	1.27	0.19	****	7
6	31	01MAY75	7426	2	1.89	256	****	10.50	11.30	262.80	2.70	3.68	18.55	14.87	2.12	0.10	****	8
6	31	01MAY75	7426	10	1.92	249	12.40	8.50	3.30	256.50	2.40	7.66	20.06	13.20	1.73	0.14	****	7
6	32	01MAY75	7426	2	1.78	223	****	4.40	10.00	216.10	2.80	3.17	12.94	0.65	3.26	0.12	****	11
6	32	01MAY75	7426	5	1.79	230	11.60	5.40	8.00	222.50	2.70	3.65	14.38	7.47	1.01	0.15	****	11
6	33	01MAY75	7426	1	1.88	262	11.00	12.70	5.70	318.40	1.00	5.25	27.03	21.78	1.70	0.29	****	10
6	33	01MAY75	7426	2	1.93	263	11.00	12.70	24.20	330.10	3.10	6.06	24.29	18.22	1.40	0.16	****	11
6	35	01MAY75	7426	1	1.97	280	11.00	15.60	12.80	351.70	3.40	11.64	23.63	12.00	0.85	0.05	****	9
6	35	01MAY75	7426	2	1.96	271	13.20	15.60	14.60	344.56	3.60	6.49	27.16	20.67	1.34	0.03	****	9
6	35	01MAY75	7426	5	1.93	272	13.30	14.50	21.40	322.20	1.70	6.88	26.37	19.49	1.08	0.05	****	8
6	35	01MAY75	7426	14	1.91	262	12.60	13.10	17.30	301.10	2.90	4.86	20.60	15.75	1.08	0.04	****	8
6	38	01MAY75	7426	1	1.93	270	11.40	12.70	14.00	521.30	4.70	4.73	20.15	15.42	1.04	0.07	****	11
6	38	01MAY75	7426	2	1.92	270	11.60	12.80	24.40	536.30	4.70	4.17	20.34	16.17	0.91	0.10	****	11

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
5	38	01MAY75	7426	5	1.92	270	11.40	12.40	9.90	559.80	5.00	5.12	19.36	14.25	0.88	0.04	****	11
6	58	29APR75	7424	2	3.17	467	****	35.40	270.70	951.20	28.90	78.01	211.25	133.24	25.20	2.34	****	12
6	58	29APR75	7424	7	3.14	475	8.20	35.50	291.40	946.80	28.20	77.13	227.38	150.58	28.10	2.13	****	12
6	56	29APR75	7424	2	2.05	314	****	21.40	11.70	487.30	4.10	11.34	42.80	31.46	1.37	0.13	****	9
6	56	29APR75	7424	7	2.08	315	12.60	21.40	14.00	487.50	4.00	7.01	39.80	32.80	1.21	0.04	****	9
7	1	05MAY75	7430	2	3.08	471	6.70	39.30	255.20	1034.50	34.60	79.35	218.09	138.75	28.52	2.66	7.70	14
7	1	05MAY75	7430	10	3.07	490	5.90	40.00	275.00	1021.50	34.90	95.29	271.56	176.27	30.97	2.48	7.60	15
7	2	05MAY75	7430	2	2.43	364	11.00	27.40	25.80	623.40	13.30	13.99	84.08	70.09	2.54	0.09	8.50	12
7	2	05MAY75	7430	6	2.38	368	10.70	27.30	20.10	602.80	13.30	12.97	69.89	56.92	2.80	0.28	8.50	12
7	4	06MAY75	7431	2	11.72	196	11.90	0.0	10.10	218.60	2.30	3.42	26.24	22.82	0.88	0.64	8.40	9
7	4	06MAY75	7431	5	1.73	214	11.80	0.0	23.60	213.80	2.50	4.27	12.68	8.41	1.04	0.55	8.40	9
7	4	06MAY75	7431	10	1.71	207	11.80	0.0	16.30	206.70	2.90	4.30	13.30	9.00	1.04	0.57	8.40	9
7	4	06MAY75	7431	13	1.71	210	11.80	0.0	24.70	195.30	2.90	3.55	12.00	8.44	2.41	0.57	8.50	9
7	5	05MAY75	7430	2	3.05	485	9.40	39.50	130.40	972.50	20.30	46.19	136.53	90.33	10.24	1.12	8.10	13
7	5	05MAY75	7430	8	3.10	488	10.10	40.30	144.20	970.10	27.90	92.16	225.82	133.66	13.17	1.04	8.20	13
7	6	05MAY75	7430	2	3.11	476	9.50	40.10	288.70	1020.90	35.30	70.45	231.62	161.17	32.31	2.60	7.80	14
7	6	05MAY75	7430	8	3.15	476	6.40	39.70	294.20	1031.40	35.40	116.09	355.01	238.86	28.26	2.42	7.80	14
7	9	05MAY75	7430	2	3.03	483	6.70	40.00	319.20	1017.00	35.00	92.75	213.82	121.08	30.12	2.41	7.80	14
7	9	05MAY75	7430	10	3.11	487	6.40	39.90	284.40	1027.60	35.50	90.50	253.73	163.23	32.24	2.64	7.80	14
7	13	05MAY75	7430	1	2.74	429	10.30	37.90	8.50	1194.30	21.10	19.23	91.21	71.98	2.05	0.06	8.90	14
7	13	05MAY75	7430	2	2.67	437	13.00	37.50	39.20	1141.50	19.70	21.74	92.52	70.77	1.92	0.02	8.80	13
7	13	05MAY75	7430	5	2.51	431	13.00	36.30	10.40	1022.50	15.90	16.98	69.80	52.81	1.40	0.08	8.80	12
7	15	05MAY75	7430	1	2.43	362	10.90	28.10	11.90	702.50	15.40	14.44	71.20	56.76	2.41	0.21	8.50	12
7	15	05MAY75	7430	2	2.38	364	10.70	28.10	11.00	712.70	15.80	18.91	72.83	53.92	2.28	0.28	8.50	12
7	15	05MAY75	7430	5	2.54	342	11.00	27.70	9.50	696.60	15.00	14.80	71.82	57.02	2.54	0.25	8.50	12
7	17	05MAY75	7430	2	2.12	334	12.40	23.70	13.50	461.70	5.40	12.58	44.82	32.24	1.04	0.07	8.70	12
7	17	05MAY75	7430	6	2.07	423	12.30	23.90	8.70	473.70	5.60	10.69	44.82	34.13	0.91	0.0	8.80	11
7	18	05MAY75	7430	2	2.34	362	13.20	29.30	10.30	699.50	11.00	14.41	70.09	55.68	1.70	0.09	8.80	12
7	18	05MAY75	7430	8	2.33	362	11.80	29.40	24.80	703.20	10.80	13.01	66.15	53.14	1.40	0.16	8.90	11
7	20	05MAY75	7430	2	1.89	265	11.80	15.30	5.30	270.30	2.10	4.76	28.45	23.70	0.88	0.24	8.60	11
7	20	05MAY75	7430	4	1.89	265	11.00	15.50	17.10	273.20	2.50	10.89	22.98	12.09	0.68	0.31	8.60	11
7	22	06MAY75	7431	2	2.04	299	12.00	19.70	18.20	439.50	5.50	10.27	40.16	29.89	1.27	0.06	8.60	11
7	22	06MAY75	7431	9	2.08	300	11.70	18.70	52.30	438.10	5.30	8.35	38.53	30.06	1.70	0.03	8.70	11
7	23	06MAY75	7431	1	2.22	313	10.70	19.30	30.10	869.90	7.70	11.41	45.44	34.03	1.99	0.14	8.30	13
7	23	06MAY75	7431	2	2.15	315	10.80	22.10	43.40	572.90	9.60	10.66	48.08	37.42	2.71	0.11	8.40	13
7	23	06MAY75	7431	5	2.22	317	10.90	22.00	30.00	551.90	8.50	10.40	44.79	31.13	1.73	0.13	8.40	13
7	23	06MAY75	7431	9	2.22	320	10.70	22.00	32.00	548.70	8.70	8.67	62.14	53.46	1.83	0.20	8.40	13
7	24	05MAY75	7430	2	2.05	287	12.10	18.80	14.00	395.10	5.40	8.05	30.15	22.10	1.27	0.05	8.80	12
7	24	05MAY75	7430	7	2.05	293	12.20	19.90	18.00	415.90	5.70	7.69	35.93	28.23	1.24	0.07	8.80	11
7	27	06MAY75	7431	2	1.92	263	11.20	13.90	27.30	328.90	3.80	6.59	31.33	24.74	2.35	0.01	8.60	12
7	27	06MAY75	7431	6	1.95	261	11.20	13.80	31.90	332.60	3.70	9.85	42.45	32.60	2.22	0.08	8.60	12
7	28	06MAY75	7431	2	2.20	328	10.40	24.40	41.70	609.30	9.00	1.56	12.06	10.40	****	0.16	8.50	11
7	28	06MAY75	7431	5	2.23	328	11.00	24.40	50.00	593.00	9.20	1.76	11.44	9.68	****	0.08	8.50	11
7	28	06MAY75	7431	10	2.22	332	11.00	24.70	56.50	606.00	8.80	13.17	55.55	42.38	1.43	0.16	8.50	11
7	29	06MAY75	7431	1	1.87	257	12.10	12.30	12.70	262.70	2.70	6.03	22.92	99.46	1.37	0.11	8.40	11
7	29	06MAY75	7431	2	1.91	252	12.30	12.30	12.10	266.60	2.80	5.64	16.30	10.66	1.11	0.06	8.40	10
7	29	06MAY75	7431	5	1.93	255	12.40	12.30	28.20	272.70	3.10	4.01	19.17	15.16	1.53	0.07	8.40	10
7	29	06MAY75	7431	8	1.90	256	12.20	12.30	11.50	274.30	2.70	5.18	22.79	17.60	1.17	0.09	8.40	9
7	31	06MAY75	7431	2	1.95	273	12.20	15.40	14.00	324.70	2.20	7.07	29.54	22.46	1.43	0.07	8.50	10
7	31	06MAY75	7431	10	1.96	267	12.30	15.50	17.30	324.30	3.90	4.79	20.51	15.71	1.56	0.07	8.50	10

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
7	35	06MAY75	7031	1	1.94	281	12.00	16.50	22.00	376.40	3.60	5.13	27.85	21.32	1.50	0.01	8.50	11
7	35	06MAY75	7031	2	1.95	279	12.00	16.80	10.90	380.10	3.50	7.92	34.33	26.41	1.11	0.13	8.50	11
7	35	06MAY75	7031	5	1.93	277	12.00	15.60	34.20	359.60	3.60	8.15	25.82	17.67	1.83	0.06	8.60	11
7	35	06MAY75	7031	13	1.97	277	12.10	17.10	50.30	389.70	3.80	5.57	31.07	25.49	1.17	0.10	8.60	12
7	37	06MAY75	7031	2	1.89	275	12.10	15.60	16.80	338.40	3.20	6.81	28.09	17.28	0.88	0.02	8.50	9
7	37	06MAY75	7031	5	1.80	273	12.10	15.70	16.90	342.10	3.40	5.57	22.10	16.53	1.27	0.03	8.50	9
7	43	07MAY75	7032	2	1.57	215	12.40	0.0	11.60	216.40	2.60	4.17	9.00	4.82	1.60	0.22	8.50	9
7	43	07MAY75	7032	5	1.59	229	12.10	2.50	25.00	249.50	2.60	3.52	14.05	10.53	1.63	0.22	8.50	9
7	43	07MAY75	7032	8	1.58	204	12.40	1.60	17.90	236.40	3.40	2.93	9.19	6.26	3.10	0.24	8.50	9
7	44	07MAY75	7032	2	1.62	233	10.10	3.80	29.70	382.80	3.30	4.47	12.00	7.53	0.98	0.17	8.50	10
7	44	07MAY75	7032	5	1.64	215	12.00	1.90	18.50	314.60	3.80	3.19	12.00	8.80	1.14	0.09	8.60	9
7	44	07MAY75	7032	8	1.64	233	12.00	1.10	21.10	344.80	3.80	3.46	11.44	7.99	1.14	0.14	8.60	10
7	48	07MAY75	7032	2	1.65	200	12.20	0.0	30.50	103.90	2.20	4.27	8.64	4.37	1.53	0.78	8.50	10
7	48	07MAY75	7032	10	1.73	198	12.00	0.0	41.50	222.70	2.40	4.14	10.40	6.26	1.30	0.66	8.20	10
7	49	07MAY75	7032	2	1.49	199	12.50	0.0	35.80	260.30	1.70	3.33	14.47	11.15	1.53	0.74	8.30	11
7	49	07MAY75	7032	5	1.53	198	13.40	0.0	19.30	264.00	1.70	2.58	6.54	4.01	0.95	0.58	8.30	11
7	49	07MAY75	7032	10	1.62	200	13.20	0.0	47.00	278.40	1.60	2.35	21.68	19.33	1.24	0.61	8.30	11
7	49	07MAY75	7032	22	1.61	198	13.70	0.0	14.30	252.20	1.90	4.63	11.93	7.30	0.81	0.49	8.30	10
7	50	07MAY75	7032	2	1.50	196	13.70	0.0	2.40	250.10	1.30	2.74	6.88	4.14	1.01	0.71	8.30	5
7	50	07MAY75	7032	5	1.46	195	13.60	0.0	13.10	259.60	1.50	4.47	7.60	3.13	0.68	0.64	8.30	5
7	50	07MAY75	7032	10	1.40	198	13.40	0.0	5.30	263.30	1.30	3.59	18.65	15.06	0.91	0.70	8.30	5
7	50	07MAY75	7032	29	1.40	190	13.40	0.0	7.40	262.70	1.60	2.93	9.00	5.06	0.85	0.74	8.30	5
7	51	07MAY75	7032	2	1.63	211	13.40	4.00	16.70	249.40	2.20	4.01	15.39	11.38	0.95	0.41	8.30	7
7	51	07MAY75	7032	5	1.60	216	13.20	4.00	32.20	251.60	2.20	4.86	11.48	6.62	1.08	0.31	8.30	7
7	51	07MAY75	7032	10	1.64	218	13.30	4.00	49.70	252.50	1.10	3.36	12.62	9.26	1.37	0.31	8.40	7
7	51	07MAY75	7032	29	1.61	219	13.40	4.00	25.90	254.10	2.10	4.11	11.74	7.63	0.98	0.31	8.40	14
7	54	07MAY75	7032	2	3.10	497	6.60	39.30	259.50	1051.90	35.60	76.54	208.58	132.00	29.27	2.41	7.60	14
7	54	06MAY75	7031	9	3.12	503	5.40	40.10	275.00	1047.50	35.30	76.97	235.60	158.63	29.01	2.42	7.70	10
7	57	07MAY75	7032	1	1.69	217	12.40	3.50	15.00	239.50	2.00	12.03	20.54	8.51	4.40	0.32	8.50	10
7	57	07MAY75	7032	2	1.68	215	12.30	0.0	24.30	175.50	2.60	4.47	10.07	5.61	1.27	0.32	8.50	10
7	57	07MAY75	7032	5	1.70	220	12.40	3.70	40.30	238.40	3.30	4.56	10.45	6.39	1.65	0.26	8.50	10
7	57	07MAY75	7032	10	1.69	220	12.80	0.0	49.70	173.40	3.70	3.98	11.74	7.76	1.37	0.10	8.50	10
7	57	07MAY75	7032	16	1.60	226	12.40	5.20	85.00	239.40	2.20	7.40	14.47	7.07	3.59	1.26	****	6
7	58	07MAY75	7032	2	1.62	213	12.30	3.90	48.90	276.80	2.90	5.54	11.15	5.61	1.53	0.21	8.50	8
7	58	07MAY75	7032	5	1.62	211	12.60	3.80	20.20	274.10	2.60	5.39	15.19	10.11	1.11	0.18	8.50	8
7	58	07MAY75	7032	13	1.63	220	12.30	3.80	28.20	284.10	3.60	4.99	10.92	5.93	0.98	0.50	8.50	8
8	1	10JUN75	7066	2	3.19	488	5.80	47.80	283.30	2263.30	91.00	85.15	215.00	129.85	62.40	2.45	****	20
8	1	10JUN75	7066	10	3.48	586	6.10	48.30	315.10	2189.60	97.30	89.10	441.73	352.73	71.23	2.23	****	19
8	2	10JUN75	7066	2	1.95	308	10.20	19.80	25.90	162.80	9.80	8.38	51.48	43.10	1.89	0.15	****	18
8	2	10JUN75	7066	6	2.01	307	10.10	19.50	33.70	163.30	9.80	7.82	52.71	44.89	2.48	0.04	****	18
8	4	02JUN75	7058	2	1.79	231	10.60	9.30	15.30	239.80	3.40	3.36	9.91	6.55	0.33	0.21	****	17
8	4	02JUN75	7058	5	1.70	237	11.20	9.10	29.80	249.30	3.30	3.65	15.88	12.22	0.29	0.27	****	15
8	4	02JUN75	7058	15	1.57	199	13.00	2.60	20.90	256.30	1.90	2.12	11.64	9.52	0.46	0.51	****	9
8	5	10JUN75	7066	2	2.47	391	9.10	30.30	28.00	591.00	42.50	26.28	71.36	45.09	5.02	0.65	****	19
8	5	10JUN75	7066	5	2.53	396	8.80	30.10	42.50	569.50	42.90	19.72	94.96	75.24	5.18	0.52	****	19
8	8	10JUN75	7066	2	2.12	299	10.20	18.60	14.60	199.30	8.70	9.10	60.08	50.99	2.12	0.03	****	19
8	8	10JUN75	7066	5	2.14	296	10.10	18.00	24.60	209.10	8.80	9.26	61.52	52.26	2.18	0.03	****	18
8	11	10JUN75	7066	2	1.98	276	9.70	15.00	17.90	244.00	5.90	7.01	86.00	38.99	1.51	0.19	****	18
8	11	10JUN75	7066	5	2.01	278	10.00	15.30	25.90	245.00	5.60	6.52	49.42	42.90	1.43	0.08	****	18
8	12	10JUN75	7066	2	2.66	458	10.60	40.60	18.60	350.50	42.00	15.65	119.71	104.06	2.84	0.38	****	19
8	12	10JUN75	7066	5	2.64	455	10.20	47.10	27.80	364.70	37.70	11.70	117.43	105.73	1.83	0.43	****	18
8	13	10JUN75	7066	1	1.89	386	9.50	16.30	20.90	260.10	7.70	7.86	42.22	34.36	1.76	0.15	****	18
8	13	10JUN75	7066	2	1.98	393	9.40	15.70	27.10	258.00	7.50	8.57	38.53	29.96	1.14	0.06	****	18
8	13	10JUN75	7066	5	1.95	393	9.40	16.40	194.50	296.30	8.30	7.04	38.46	27.42	8.93	0.05	****	18
8	15	10JUN75	7066	1	1.94	382	9.10	15.80	33.00	257.70	7.90	9.19	38.47	29.27	1.83	0.17	****	18

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
8	15	10JUN75	7466	2	1.83	384	9.10	15.70	218.20	287.30	9.70	7.30	35.60	28.30	5.05	0.15	****	18
8	15	10JUN75	7466	5	1.92	378	9.00	15.80	82.10	258.20	9.00	6.85	35.66	28.82	1.73	0.14	****	18
8	16	10JUN75	7466	2	2.01	292	10.70	18.70	12.60	129.10	7.20	8.28	41.47	29.93	1.63	0.10	****	19
8	16	10JUN75	7466	5	1.97	293	10.40	18.80	39.50	127.10	7.40	7.56	42.90	35.34	1.76	0.07	****	18
8	17	10JUN75	7466	2	2.00	284	9.60	16.70	17.80	238.20	6.40	7.66	45.09	37.42	1.63	0.12	****	19
8	17	10JUN75	7466	7	2.00	283	9.40	16.40	27.30	257.80	7.00	7.69	39.51	31.92	1.92	0.08	****	18
8	18	18JUN75	7474	2	1.71	251	9.70	10.40	27.80	213.20	4.10	6.65	21.81	15.16	1.56	0.18	****	19
8	18	18JUN75	7474	9	1.74	251	8.90	****	****	****	****	****	****	****	****	****	****	17
8	20	18JUN75	7474	2	1.79	260	9.30	11.50	19.10	216.30	5.70	7.50	28.49	20.99	2.97	0.12	****	19
8	20	18JUN75	7474	7	1.80	252	8.70	11.10	23.40	224.20	4.40	11.21	24.71	0.98	1.76	0.15	****	19
8	23	18JUN75	7474	1	1.76	249	9.70	10.50	29.80	214.30	4.40	6.32	22.92	16.59	3.78	0.02	****	17
8	23	18JUN75	7474	2	1.76	244	9.80	****	20.90	218.90	4.10	7.95	23.11	15.16	3.65	0.20	****	17
8	23	18JUN75	7474	5	1.78	247	9.90	10.50	39.80	215.60	4.60	7.14	20.11	12.97	3.06	0.17	****	17
8	23	18JUN75	7474	9	1.80	244	8.90	9.90	23.60	223.50	3.90	7.11	23.70	16.59	1.83	0.29	****	16
8	24	18JUN75	7474	2	1.66	253	9.40	10.90	29.30	213.90	3.70	10.59	20.28	9.68	1.70	0.21	****	17
8	24	18JUN75	7474	6	1.69	253	9.30	10.70	32.70	216.70	3.80	6.29	26.60	26.83	1.60	0.17	****	17
8	25	18JUN75	7474	2	2.05	311	9.00	18.50	20.60	191.80	11.10	10.56	50.17	39.61	2.05	0.05	****	20
8	25	18JUN75	7474	6	2.00	273	8.40	15.50	32.60	177.20	6.70	8.80	47.47	38.67	2.51	0.07	****	19
8	26	03JUN75	7459	2	2.05	320	9.70	22.40	18.90	233.90	11.50	8.12	46.00	37.88	1.47	0.05	****	21
8	26	03JUN75	7459	4	2.09	315	9.70	22.70	23.70	238.90	11.20	8.28	45.48	37.20	1.40	0.13	****	21
8	27	18JUN75	7474	2	1.79	250	9.40	10.90	26.00	217.00	4.00	5.67	23.83	18.16	1.40	0.17	****	17
8	27	18JUN75	7474	6	1.78	246	9.10	10.80	25.40	217.60	4.00	5.57	23.18	17.60	1.21	0.30	****	17
8	28	18JUN75	7474	2	1.87	254	10.30	12.50	19.30	196.10	5.10	6.45	20.18	13.72	1.75	0.15	****	17
8	28	18JUN75	7474	5	1.85	261	9.50	12.50	28.20	196.80	5.30	6.16	26.86	20.70	1.92	0.15	****	17
8	28	18JUN75	7474	12	1.63	212	11.40	3.50	20.30	247.60	1.80	3.75	11.41	7.66	1.14	0.49	****	11
8	29	18JUN75	7474	1	1.94	283	9.30	14.20	15.00	185.60	5.70	9.75	26.31	19.82	2.22	0.09	****	7
8	29	18JUN75	7474	2	1.99	275	9.50	14.50	17.00	189.10	5.70	8.67	29.89	21.22	1.43	0.08	****	7
8	29	18JUN75	7474	5	****	**	****	13.90	18.40	191.90	5.50	8.25	37.82	29.57	1.60	0.12	****	**
8	29	18JUN75	7474	7	1.82	250	9.30	8.30	29.40	227.50	5.30	6.23	30.09	23.86	1.76	0.37	****	7
8	31	03JUN75	7459	2	1.99	289	8.90	16.80	26.70	294.60	6.60	5.77	31.04	25.26	1.66	0.27	****	20
8	31	03JUN75	7459	12	1.63	216	11.10	5.50	28.60	255.50	2.30	2.71	15.75	13.04	1.47	0.42	****	10
8	32	03JUN75	7459	2	2.01	292	8.70	17.00	22.30	315.00	5.10	4.89	19.40	14.51	1.99	0.03	****	20
8	32	03JUN75	7459	4	2.01	292	8.70	17.20	22.10	316.80	5.30	4.79	36.28	31.49	2.48	0.07	****	20
8	33	03JUN75	7459	1	2.11	303	9.80	20.10	19.60	301.80	9.10	6.78	35.14	28.36	2.67	0.06	****	20
8	33	03JUN75	7459	2	2.11	307	7.90	20.20	23.30	305.80	9.60	8.93	39.35	30.42	1.11	0.16	****	20
8	33	03JUN75	7459	4	2.11	309	8.70	20.10	30.10	299.10	9.40	8.41	36.09	27.68	2.12	0.10	****	20
8	35	03JUN75	7459	1	2.05	290	9.30	16.90	29.40	290.30	6.40	6.10	21.45	15.35	1.21	0.19	****	18
8	35	03JUN75	7459	2	2.02	298	9.40	17.10	24.20	277.90	6.10	5.57	24.52	18.94	1.37	0.02	****	18
8	35	03JUN75	7459	5	2.03	271	9.20	17.10	27.80	984.10	6.10	6.94	53.50	46.55	1.47	0.22	****	17
8	35	03JUN75	7459	13	1.66	211	12.70	4.70	16.90	253.00	2.10	2.74	14.70	11.96	1.60	0.41	****	11
8	38	02JUN75	7458	1	1.80	252	9.70	10.70	26.30	233.90	3.90	3.85	12.26	8.41	0.26	0.09	****	17
8	38	02JUN75	7458	2	1.80	248	9.80	10.70	26.60	239.50	3.80	3.35	10.50	5.15	0.52	0.16	****	17
8	38	02JUN75	7458	5	1.80	243	9.10	10.20	25.40	236.30	4.00	5.61	16.56	10.95	1.08	0.09	****	17
8	38	02JUN75	7458	7	1.80	240	9.80	10.10	39.40	241.20	3.80	5.54	13.85	8.31	4.24	0.07	****	17
8	39	02JUN75	7458	2	2.05	298	9.10	18.80	23.20	359.40	8.90	7.03	41.63	34.59	1.01	0.32	****	19
8	39	02JUN75	7458	6	2.04	302	9.30	20.30	34.20	374.40	9.90	7.86	26.89	19.03	0.88	0.11	****	16
8	40	02JUN75	7458	2	1.68	225	11.40	5.80	17.70	237.10	1.90	1.33	16.40	13.07	1.37	0.30	****	13
8	40	02JUN75	7458	7	1.51	215	11.00	4.80	14.80	237.20	2.30	2.77	12.84	10.07	1.43	0.17	****	13
8	42	02JUN75	7458	2	1.80	267	9.70	13.50	23.90	261.70	4.70	4.01	12.03	8.02	0.68	0.12	****	19
8	42	02JUN75	7458	9	1.59	213	12.80	5.10	20.50	227.10	2.30	4.11	16.40	12.29	0.98	0.16	****	12

SAGINAW DAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
8	43	02JUN75	7458	2	1.76	249	9.90	9.40	23.20	253.60	4.80	2.71	11.51	8.80	0.81	0.11	****	17
8	43	02JUN75	7458	5	1.73	248	****	10.50	22.80	259.30	4.10	2.80	19.27	16.47	0.55	0.14	****	16
8	43	02JUN75	7458	11	1.53	207	12.80	3.90	25.50	262.90	1.80	3.00	11.18	7.86	0.0	0.51	****	9
8	44	02JUN75	7458	2	1.73	238	9.80	9.60	27.30	258.50	4.60	3.94	11.44	7.50	1.04	0.08	****	17
8	44	02JUN75	7458	5	1.74	240	****	9.70	21.80	262.20	4.50	3.46	15.97	12.84	0.36	0.08	****	17
8	44	02JUN75	7458	9	1.56	215	11.80	5.70	26.40	261.00	2.70	2.90	21.09	18.19	0.52	0.38	****	19
8	54	10JUN75	7466	2	3.26	502	6.10	47.00	291.20	2589.30	93.70	77.16	218.00	140.83	67.81	2.50	****	19
8	54	10JUN75	7466	10	3.31	533	5.10	47.60	267.20	2129.70	85.30	80.00	224.61	144.61	59.17	2.26	****	19
8	56	18JUN75	7474	2	1.81	248	8.70	10.40	27.20	221.00	4.20	7.37	20.93	13.56	1.27	0.15	****	18
8	56	18JUN75	7474	6	1.82	247	8.50	10.30	19.30	225.30	4.20	8.28	22.04	13.76	2.38	0.19	****	18
8	57	02JUN75	7458	1	1.59	222	10.00	7.20	15.70	250.00	2.80	2.84	7.66	4.82	0.0	0.24	****	16
8	57	02JUN75	7458	2	1.62	219	10.50	7.00	14.80	246.10	2.80	2.54	7.56	5.02	0.0	0.25	****	16
8	57	02JUN75	7458	5	1.63	222	10.50	0.70	16.20	246.20	2.80	3.29	7.43	4.14	0.23	0.26	****	15
8	57	02JUN75	7458	10	1.59	200	12.30	3.70	13.50	261.60	1.70	2.15	8.15	6.00	0.26	0.51	****	9
8	57	02JUN75	7458	20	1.54	200	13.60	3.10	27.90	265.90	1.40	3.59	8.44	4.86	0.59	0.46	****	5
9	1	16JUL75	7502	2	****	**	2.80	134.10	424.70	669.60	119.00	161.21	175.49	14.28	123.88	2.70	7.60	23
9	1	16JUL75	7502	9	****	**	3.10	137.50	431.30	658.80	117.50	160.29	188.04	27.74	125.38	2.65	7.80	23
9	2	16JUL75	7502	2	****	**	9.80	11.60	33.60	42.50	9.40	12.03	52.62	40.59	4.40	0.0	8.60	22
9	2	16JUL75	7502	5	****	**	9.70	17.70	26.60	47.70	9.40	9.91	58.81	48.90	4.04	0.0	8.70	22
9	4	16JUL75	7502	2	****	**	8.20	8.70	16.00	167.40	3.10	7.69	11.83	4.14	3.33	0.21	8.00	23
9	4	16JUL75	7502	5	****	**	7.30	8.60	16.40	175.50	3.00	6.16	13.66	7.50	3.19	0.27	7.60	22
9	4	16JUL75	7502	14	****	**	9.10	1.70	52.30	310.30	1.20	10.89	11.12	0.23	4.53	0.44	7.80	10
9	5	16JUL75	7502	2	****	**	10.20	27.30	14.80	3.80	0.80	12.15	92.55	80.39	5.15	0.0	8.80	22
9	5	16JUL75	7502	4	****	**	9.70	28.30	87.30	32.60	0.90	14.25	96.79	82.54	4.92	0.05	7.70	22
9	5	16JUL75	7502	2	****	**	7.60	44.10	113.50	142.30	34.20	28.30	133.27	104.97	15.94	0.09	8.30	23
9	6	16JUL75	7502	8	****	**	7.70	52.50	101.10	193.10	47.20	37.20	157.82	120.62	18.00	0.10	8.40	22
9	9	16JUL75	7502	2	****	**	5.00	68.50	317.20	434.90	84.40	99.95	157.29	57.34	66.44	0.86	7.80	23
9	9	16JUL75	7502	5	****	**	5.80	57.80	240.90	318.60	63.00	62.56	146.54	83.98	37.91	0.46	8.10	23
9	13	16JUL75	7502	1	****	**	8.40	13.00	59.40	95.60	6.60	3.84	36.06	32.18	3.72	0.51	8.20	23
9	13	16JUL75	7502	2	****	**	8.50	13.20	63.40	95.00	6.60	9.91	37.72	27.91	3.16	0.56	8.20	23
9	13	16JUL75	7502	5	****	**	7.90	12.80	69.00	96.00	6.30	6.65	34.46	27.81	3.05	0.56	8.20	22
9	15	16JUL75	7502	1	****	**	5.90	15.50	39.90	60.30	8.10	5.77	42.45	36.67	3.88	0.09	8.30	22
9	15	16JUL75	7502	2	****	**	5.80	15.50	25.40	61.80	7.80	6.91	44.14	37.23	3.13	0.05	8.40	22
9	15	16JUL75	7502	5	****	**	6.30	16.00	37.50	51.80	7.90	9.00	46.13	37.13	4.11	0.05	8.40	22
9	17	16JUL75	7502	2	****	**	8.60	12.00	28.10	128.10	5.00	2.44	19.59	17.15	3.19	0.42	8.10	22
9	17	16JUL75	7502	7	****	**	5.60	12.10	138.80	171.50	5.40	1.92	25.69	23.77	3.85	0.28	8.10	21
9	18	16JUL75	7502	2	****	**	9.30	11.90	31.90	125.10	5.00	2.12	28.79	26.67	2.64	0.41	8.30	22
9	18	16JUL75	7502	4	****	**	9.00	12.40	32.70	110.80	5.20	4.53	21.97	17.44	3.06	0.31	8.20	22
9	20	16JUL75	7502	2	****	**	9.40	12.90	34.80	109.00	7.70	4.07	32.57	28.49	2.87	0.65	8.40	24
9	20	16JUL75	7502	5	****	**	8.20	12.40	41.80	116.80	7.70	4.07	16.06	31.98	3.52	0.45	8.30	22
9	22	16JUL75	7502	2	****	**	10.50	11.80	14.80	117.60	4.50	8.57	26.96	18.39	2.97	0.17	8.50	23
9	22	16JUL75	7502	10	****	**	6.60	8.00	65.80	179.50	4.70	7.73	19.95	12.22	2.84	0.69	8.10	18
9	23	16JUL75	7502	1	****	**	10.80	12.10	16.70	195.10	6.10	4.41	39.41	34.98	3.59	0.51	8.60	22
9	23	16JUL75	7502	2	****	**	9.70	12.30	23.60	107.30	5.80	5.48	29.99	24.52	2.97	0.36	8.60	22
9	23	16JUL75	7502	5	****	**	9.40	12.20	26.20	107.30	5.60	4.56	25.48	21.32	3.13	0.44	8.50	22
9	23	16JUL75	7502	9	****	**	8.60	11.80	32.60	116.60	5.20	3.46	29.37	25.92	3.13	0.53	8.40	22
9	24	16JUL75	7502	2	****	**	8.60	11.90	45.20	116.60	5.30	3.16	27.32	24.16	2.74	0.37	8.20	22
9	24	16JUL75	7502	7	****	**	8.30	12.10	34.70	117.20	5.20	2.64	28.13	25.49	2.84	0.24	8.20	22
9	27	16JUL75	7502	2	****	**	10.10	12.00	13.30	129.30	4.80	8.15	23.99	15.84	3.10	0.34	8.40	24
9	27	16JUL75	7502	5	****	**	9.80	12.10	25.40	128.00	4.90	8.90	32.73	23.83	4.23	0.42	8.60	24

			(M)	(MEQ/L)	(UMHOS)	(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)		(°C)
9	28	16JUL75 7502	2	****	**	9.80	12.60	16.00	79.80	6.80	9.63	22.10	13.07	2.41	0.44	8.80	24
9	28	16JUL75 7502	5	****	**	10.00	12.50	11.30	89.30	5.80	9.13	18.39	9.26	2.64	0.38	8.50	23
9	28	16JUL75 7502	10	****	**	7.30	10.80	26.50	164.90	8.30	9.78	16.43	6.65	2.48	0.27	8.30	20
9	29	16JUL75 7502	1	****	**	9.90	13.10	17.20	69.30	7.40	5.51	27.19	21.68	2.87	0.56	8.50	23
9	29	16JUL75 7502	2	****	**	10.10	13.20	15.60	69.70	7.10	5.15	30.25	25.10	2.74	0.48	8.70	23
9	29	16JUL75 7502	5	****	**	10.00	13.20	18.10	69.70	7.10	2.61	31.52	28.92	2.71	0.38	8.70	23
9	29	16JUL75 7502	9	****	**	6.10	12.10	57.20	109.20	5.90	5.64	27.12	21.48	2.31	0.75	8.20	21
9	31	16JUL75 7502	2	****	**	10.30	15.40	12.70	26.40	3.00	7.79	34.78	26.99	2.87	0.26	8.70	23
9	31	16JUL75 7502	10	****	**	7.60	10.10	51.50	150.40	4.20	6.52	****	****	2.41	0.30	8.30	20
9	35	16JUL75 7502	1	****	**	9.50	14.30	18.50	30.20	1.70	10.46	22.95	12.49	2.93	0.16	8.50	23
9	35	16JUL75 7502	2	****	**	9.40	14.50	8.20	22.70	1.50	8.25	25.04	16.79	3.06	0.17	8.60	23
9	35	16JUL75 7502	5	****	**	9.80	14.40	9.00	31.90	1.40	6.68	27.32	20.64	3.52	0.16	8.70	23
9	35	16JUL75 7502	12	****	**	8.90	8.00	87.30	194.00	2.70	6.81	13.56	6.75	3.19	0.19	8.40	18
9	37	16JUL75 7502	2	****	**	8.60	8.70	14.40	180.30	2.90	6.06	8.96	2.90	2.38	0.14	8.20	22
9	37	16JUL75 7502	14	****	**	11.00	8.60	19.60	218.30	2.00	6.85	7.40	0.55	2.28	0.38	8.20	15
9	41	18JUL75 7504	2	****	**	9.40	9.30	6.90	85.80	1.40	4.60	20.80	16.20	3.00	0.13	8.70	23
9	41	18JUL75 7504	5	****	**	9.20	8.10	7.70	102.60	1.90	5.35	13.07	7.73	3.00	0.37	8.60	23
9	41	18JUL75 7504	9	****	**	8.60	8.00	18.50	193.80	1.00	5.61	8.64	3.03	2.87	0.07	8.60	21
9	44	18JUL75 7504	2	****	**	10.10	7.40	17.10	168.80	1.90	****	****	****	3.19	0.14	8.60	24
9	44	18JUL75 7504	8	****	**	8.50	5.20	20.40	157.20	2.20	7.50	16.98	9.49	3.00	0.07	8.60	22
9	49	18JUL75 7504	2	****	**	9.20	9.30	16.70	166.80	2.80	3.33	7.82	4.50	2.61	0.04	8.50	22
9	49	18JUL75 7504	5	****	**	8.80	8.60	13.50	157.30	2.80	4.99	9.85	4.86	2.84	0.06	8.50	22
9	49	18JUL75 7504	10	****	**	8.60	7.20	19.40	200.10	2.50	0.81	8.22	7.40	2.87	0.05	8.40	21
9	49	18JUL75 7504	17	****	**	11.80	2.60	16.30	313.80	1.20	4.34	7.99	3.65	2.64	0.58	8.20	10
9	50	18JUL75 7504	2	****	**	8.80	5.90	15.50	202.70	2.30	2.05	8.18	6.13	2.51	0.03	8.40	22
9	50	18JUL75 7504	5	****	**	8.50	7.00	34.00	204.60	3.50	2.48	4.99	2.51	2.64	0.06	8.40	22
9	50	18JUL75 7504	10	****	**	8.30	6.60	24.90	307.50	3.30	1.86	4.63	2.77	2.64	0.03	8.30	21
9	50	18JUL75 7504	30	****	**	10.40	0.80	15.80	198.30	1.80	1.70	4.82	3.13	2.31	0.77	8.20	8
9	51	18JUL75 7504	2	****	**	9.20	3.20	10.70	217.50	2.60	****	****	****	2.38	0.15	8.60	21
9	51	18JUL75 7504	5	****	**	9.20	2.20	38.80	221.90	3.50	2.39	9.42	7.04	3.65	0.07	8.40	21
9	51	18JUL75 7504	10	****	**	9.20	3.20	4.30	220.00	2.10	****	****	****	2.64	0.08	8.50	21
9	51	18JUL75 7504	28	****	**	12.90	9.00	28.30	307.10	1.90	2.41	7.20	4.79	2.64	0.71	8.30	8
9	54	16JUL75 7502	2	****	**	3.30	137.60	383.50	653.70	111.40	155.80	167.27	11.48	124.14	2.67	7.40	23
9	54	16JUL75 7502	9	****	**	3.10	134.10	383.50	664.60	111.40	150.42	167.07	16.66	126.10	2.69	7.40	23
9	57	18JUL75 7504	1	****	**	8.60	10.30	9.30	137.90	2.80	2.87	11.31	8.44	2.74	0.06	8.20	22
9	57	18JUL75 7504	2	****	**	8.80	10.20	12.50	138.10	3.10	3.29	10.76	7.47	3.13	0.06	7.90	22
9	57	18JUL75 7504	5	****	**	8.80	10.10	12.10	138.40	3.10	3.98	12.19	8.22	3.19	0.06	8.00	22
9	57	18JUL75 7504	10	****	**	8.50	7.10	20.00	196.00	2.90	5.38	12.06	6.68	2.54	0.07	8.00	20
9	57	18JUL75 7504	17	****	**	11.40	0.80	21.50	212.10	2.10	2.90	8.67	5.77	2.87	0.40	8.00	11
9	58	18JUL75 7504	2	****	**	4.70	1.80	18.20	154.00	3.40	2.34	12.13	9.58	2.58	0.28	8.50	22
9	58	18JUL75 7504	5	****	**	9.20	5.30	17.90	178.30	2.70	5.05	7.86	2.80	3.88	0.03	8.50	22
9	58	18JUL75 7504	14	****	**	9.90	3.10	14.40	97.20	2.40	3.46	15.16	11.70	2.93	0.09	8.40	18
10	1	25AUG75 7542	2	****	**	9.30	51.40	245.50	864.70	53.90	103.96	128.77	24.81	85.77	3.72	7.60	22
10	1	25AUG75 7542	10	****	**	9.10	51.00	274.40	873.50	53.90	106.07	142.76	34.69	83.98	3.77	7.60	22
10	2	25AUG75 7542	2	****	**	8.10	9.40	32.50	2.80	1.00	7.76	43.33	35.57	2.02	0.03	7.90	22
10	2	25AUG75 7542	6	****	**	8.00	4.50	30.80	2.50	0.70	11.83	36.35	24.52	3.52	0.05	8.20	21
10	4	26AUG75 6543	2	****	**	8.70	4.80	18.60	147.60	2.20	3.33	25.43	22.10	2.28	0.01	7.90	21
10	4	26AUG75 6543	5	****	**	8.60	4.40	19.30	141.80	2.10	4.43	7.92	3.49	2.61	0.06	8.10	21
10	4	26AUG75 6543	10	****	**	8.60	4.40	33.50	169.80	2.30	3.49	16.66	13.17	2.67	0.15	8.20	19
10	4	26AUG75 6543	15	****	**	10.60	2.60	30.20	281.00	3.50	4.86	7.56	2.71	2.84	0.61	7.90	12

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	ALK (MEQ/L)	COND (UMHOS)	DO (MG/L)	CL- (MG/L)	NH3 (UG/L)	NO3 (UG/L)	NO2 (UG/L)	TDP (UG/L)	TP (UG/L)	PP (UG/L)	OP (UG/L)	SI (MG/L)	PH	TEMP (°C)
10	5	25AUG75	7542	2	****	**	8.30	39.20	30.00	63.60	12.80	16.10	95.68	79.58	5.84	0.03	8.10	22
10	5	25AUG75	7542	8	****	**	8.20	39.40	42.80	60.80	14.30	14.05	87.37	73.32	4.79	0.02	7.90	22
10	6	25AUG75	7542	2	****	**	8.20	57.10	293.70	717.10	55.30	102.65	114.26	11.61	88.51	3.67	7.60	22
10	6	25AUG75	7542	9	****	**	8.20	57.10	299.80	716.20	55.30	101.48	129.39	27.91	78.70	3.67	7.60	22
10	9	25AUG75	7542	2	****	**	8.10	58.80	266.60	793.70	58.60	112.21	137.54	25.33	77.07	3.80	7.60	22
10	9	25AUG75	7542	9	****	**	8.30	55.20	311.40	802.60	54.60	106.31	125.35	19.04	77.13	2.83	7.60	22
10	13	25AUG75	7542	1	****	**	8.50	10.00	19.20	1.30	0.30	6.98	39.71	32.76	2.80	0.14	8.10	22
10	13	25AUG75	7542	2	****	**	8.50	9.70	32.50	2.70	0.30	7.29	37.49	30.25	2.61	0.01	8.30	22
10	13	25AUG75	7542	5	****	**	8.70	10.20	33.40	2.10	0.20	6.75	33.71	26.96	2.18	0.02	8.30	22
10	15	25AUG75	7542	1	****	**	8.30	9.20	39.00	3.30	1.00	9.26	41.70	32.44	2.25	0.04	8.30	22
10	15	25AUG75	7542	2	****	**	8.70	9.40	48.10	5.40	1.10	8.90	46.23	37.33	3.05	0.06	8.20	22
10	15	25AUG75	7542	50	****	**	8.40	9.20	43.00	5.60	0.90	8.28	43.75	35.47	1.92	0.04	8.10	22
10	17	25AUG75	7542	2	****	**	8.50	9.00	26.40	2.10	0.20	9.39	19.46	10.07	2.05	0.07	7.90	22
10	17	25AUG75	7542	7	****	**	8.20	8.90	31.10	5.20	0.60	6.85	29.76	23.31	2.02	0.07	8.10	22
10	18	25AUG75	7542	2	****	**	8.70	8.60	18.70	11.50	1.70	4.47	31.43	26.96	2.22	0.09	8.20	22
10	18	25AUG75	7542	8	****	**	8.60	8.80	46.10	16.40	1.90	6.62	33.77	27.16	1.83	0.04	7.90	22
10	20	25AUG75	7542	2	****	**	9.40	7.30	14.20	2.40	0.30	5.15	45.77	40.62	2.41	0.07	8.20	22
10	20	25AUG75	7542	5	****	**	9.20	7.40	30.10	3.20	0.30	4.27	33.58	29.31	2.28	0.04	8.40	22
10	22	26AUG75	7543	2	****	**	9.60	2.00	27.50	48.90	2.60	4.99	24.61	19.63	2.61	0.27	7.90	22
10	22	26AUG75	7543	10	****	**	8.10	5.30	35.80	80.70	2.80	5.22	18.84	13.63	2.54	0.33	8.10	21
10	23	26AUG75	7543	10	****	**	7.90	8.40	34.80	28.80	3.00	6.16	26.80	20.64	3.19	0.50	7.40	21
10	23	26AUG75	7543	2	****	**	7.80	8.10	38.30	27.40	2.60	4.56	27.91	23.34	3.19	0.58	7.70	21
10	23	26AUG75	7543	5	****	**	7.70	7.80	33.70	27.40	2.60	5.48	28.00	22.53	2.93	0.53	8.00	20
10	23	26AUG75	7543	9	****	**	7.60	7.40	28.10	30.80	2.60	5.02	30.25	25.23	3.36	0.59	8.10	20
10	24	25AUG75	7542	2	****	**	8.80	7.00	35.40	30.60	3.00	4.17	32.31	28.13	2.58	0.30	8.10	22
10	24	25AUG75	7542	7	****	**	8.80	5.60	57.20	47.20	3.40	4.56	28.10	23.54	1.99	0.36	8.10	22
10	27	26AUG75	7543	20	****	**	10.00	6.10	13.90	1.50	0.0	8.96	19.23	10.27	2.54	0.0	8.30	23
10	27	26AUG75	7543	5	****	**	10.10	6.10	16.20	3.80	1.00	4.79	20.34	15.55	2.61	0.14	8.50	22
10	28	26AUG75	7543	2	****	**	9.90	9.10	17.80	8.40	1.20	4.37	****	****	2.48	0.21	7.70	23
10	28	26AUG75	7543	10	****	**	7.90	1.00	34.60	18.80	1.20	6.59	26.08	19.49	2.61	0.16	7.80	21
10	29	26AUG75	7543	1	****	**	9.10	7.50	36.10	5.90	0.70	6.62	31.10	24.48	3.62	0.09	7.90	21
10	29	26AUG75	7543	2	****	**	8.80	7.50	30.40	4.10	0.20	5.28	32.24	26.96	3.33	0.09	8.10	21
10	29	26AUG75	7543	5	****	**	8.80	7.40	16.30	5.20	0.10	4.79	33.74	28.95	3.46	0.08	8.30	21
10	29	26AUG75	7543	8	****	**	8.50	7.50	18.20	4.00	0.0	4.56	48.87	44.30	3.06	0.07	8.40	21
10	31	26AUG75	7543	2	****	**	7.70	9.20	23.60	18.90	1.20	4.50	31.95	27.45	2.90	0.30	7.80	21
10	31	26AUG75	7543	10	****	**	****	9.00	38.20	27.00	1.60	6.42	35.47	29.05	2.97	0.29	7.90	21
10	35	26AUG75	7543	1	****	**	8.60	9.40	14.50	107.10	1.70	4.56	11.80	7.24	2.44	0.08	7.90	21
10	35	26AUG75	7543	5	****	**	8.40	5.90	17.50	108.70	2.30	4.63	13.59	8.96	2.58	0.07	8.20	21
10	37	26AUG75	7543	2	****	**	8.50	3.80	21.90	137.60	2.40	4.17	7.76	3.59	2.28	0.06	7.90	21
10	37	26AUG75	7543	18	****	**	8.40	4.30	29.40	156.00	1.90	4.82	9.10	4.27	2.61	0.08	8.10	20
10	58	25AUG75	7542	2	****	**	4.30	49.60	245.50	898.50	53.40	107.12	131.41	24.29	65.56	3.77	7.60	22
10	58	25AUG75	7542	9	****	**	4.20	44.40	276.50	891.40	53.20	107.06	125.90	18.84	77.75	3.77	7.50	22

APPENDIX 9

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TPC (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)
2	1	25SEP74	7208	1	823.40	20.10	21.00	12.00
2	1	25SEP74	7208	4	2428.50	17.20	40.66	25.00
2	2	25SEP74	7208	1	327.50	10.70	****	7.00
2	2	25SEP74	7208	8	326.40	12.40	****	7.00
2	4	26SEP74	7209	1	78.00	9.00	6.40	2.00
2	4	26SEP74	7209	5	92.50	9.80	4.77	2.00
2	4	26SEP74	7209	13	105.10	10.20	5.77	2.00
2	5	25SEP74	7208	1	234.40	12.40	12.75	6.00
2	5	25SEP74	7208	5	259.60	12.60	11.25	7.00
2	6	25SEP74	7208	1	737.60	9.00	****	15.00
2	6	25SEP74	7209	8	678.00	13.80	****	13.00
2	9	25SEP74	7208	1	577.80	13.30	20.75	14.00
2	9	25SEP74	7208	4	731.60	14.50	21.75	11.00
2	9	25SEP74	7208	7	721.50	15.00	21.00	13.00
2	13	25SEP74	7208	1	257.10	10.20	12.50	8.00
2	13	25SEP74	7208	2	197.40	11.00	****	8.00
2	13	25SEP74	7208	5	300.40	11.20	13.20	9.00
2	15	25SEP74	7208	1	293.10	10.70	11.50	6.00
2	15	25SEP74	7208	2	307.60	10.60	****	7.00
2	15	25SEP74	7208	6	317.90	11.30	12.80	7.00
2	17	25SEP74	7208	1	286.00	10.10	12.66	8.00
2	17	25SEP74	7208	2	302.40	10.90	****	8.00
2	17	25SEP74	7208	6	323.80	10.10	13.60	9.00
2	18	26SEP74	7209	1	270.30	12.00	13.40	4.00
2	18	26SEP74	7209	2	255.30	10.80	****	4.00
2	18	26SEP74	7209	8	291.30	11.10	11.00	6.00
2	19	25SEP74	7208	1	330.60	9.30	10.60	6.00
2	19	25SEP74	7208	2	327.50	11.10	****	6.00
2	19	25SEP74	7208	8	371.70	11.90	12.60	7.00
2	20	25SEP74	7208	1	170.70	10.20	7.29	4.00
2	20	25SEP74	7208	5	164.90	12.60	7.50	4.00
2	22	26SEP74	7209	1	237.90	9.90	****	3.00
2	22	26SEP74	7209	5	254.60	10.60	****	4.00
2	22	26SEP74	7209	9	813.30	10.60	****	14.00
2	23	26SEP74	7209	1	334.20	10.40	11.69	5.00
2	23	26SEP74	7209	2	285.40	****	****	5.00
2	23	26SEP74	7209	5	314.20	12.80	10.60	5.00
2	23	26SEP74	7209	9	332.00	9.20	12.16	6.00
2	24	25SEP74	7208	1	287.10	9.70	13.40	5.00
2	24	25SEP74	7208	2	301.40	11.40	****	7.00
2	24	25SEP74	7208	7	310.50	9.70	14.00	5.00
2	27	26SEP74	7209	1	190.00	9.90	9.65	5.00
2	27	26SEP74	7209	6	300.70	10.80	11.50	7.00
2	28	26SEP74	7209	1	234.00	10.90	9.80	4.70
2	28	26SEP74	7209	5	254.70	11.70	****	4.00
2	28	26SEP74	7209	10	721.50	13.60	16.00	11.00
2	29	26SEP74	7209	1	309.20	14.80	14.16	6.00
2	29	26SEP74	7209	2	372.90	10.40	****	5.00
2	29	26SEP74	7209	5	388.60	9.90	****	4.00
2	29	26SEP74	7209	8	355.70	8.80	15.71	8.00
2	31	26SEP74	7209	1	300.80	16.00	11.00	7.00

SAGINAW BAY CHEMISERT

CRU	STA	DATE	DAY	DEPTH (m)	TFE (MG/L)	DFE (MG/L)	SS (MG/L)	TUR (JTU)
2	31	26SEP74	7209	5	358.20	10.30	****	6.00
2	31	26SEP74	7209	10	535.70	8.90	17.00	10.00
2	35	26SEP74	7209	1	160.50	9.70	5.71	3.00
2	35	26SEP74	7209	2	131.20	7.90	****	2.00
2	35	26SEP74	7209	5	140.70	10.00	5.49	3.00
2	35	26SEP74	7209	12	350.80	6.90	13.33	9.00
2	35	27SEP74	7210	1	61.00	8.70	****	3.00
2	35	27SEP74	7210	2	76.50	10.90	****	3.00
2	35	27SEP74	7210	5	61.80	6.90	****	2.00
2	35	27SEP74	7210	10	73.40	10.50	****	4.00
2	37	26SEP74	7209	1	104.90	14.90	****	2.00
2	37	26SEP74	7209	13	206.40	9.30	****	3.00
2	43	27SEP74	7210	1	52.60	8.10	2.50	2.00
2	43	27SEP74	7210	7	81.80	6.50	3.46	2.50
2	49	27SEP74	7210	1	27.10	8.30	1.33	0.50
2	49	27SEP74	7210	5	28.50	9.20	0.73	0.50
2	49	27SEP74	7210	10	23.90	8.60	1.06	0.50
2	49	27SEP74	7210	18	72.30	10.20	2.80	2.00
2	50	27SEP74	7210	1	77.90	7.30	0.83	0.50
2	50	27SEP74	7210	5	31.40	6.40	0.73	0.50
2	50	27SEP74	7210	10	33.90	8.80	0.86	2.50
2	50	27SEP74	7210	18	37.40	4.80	0.40	3.00
2	51	27SEP74	7210	1	99.40	5.70	1.93	0.50
2	51	27SEP74	7210	5	33.20	6.50	1.40	0.50
2	51	27SEP74	7210	10	34.70	3.40	1.73	0.50
2	51	27SEP74	7210	18	40.30	3.50	1.33	0.50
2	54	25SEP74	7209	1	2375.20	51.30	23.00	17.00
2	54	25SEP74	7209	9	601.80	52.30	40.66	16.00
2	55	28SEP74	7207	0	1421.39	50.49	30.03	14.45
2	57	27SEP74	7210	1	38.40	9.20	3.29	1.00
2	57	27SEP74	7210	3	43.00	7.20	****	1.00
2	57	27SEP74	7210	5	38.30	11.00	2.11	1.00
2	57	27SEP74	7210	15	44.90	10.60	2.11	1.00
2	58	27SEP74	7210	1	50.00	5.20	3.66	1.50
2	58	27SEP74	7210	5	51.50	7.00	3.06	0.50
2	58	27SEP74	7210	13	47.80	7.40	2.73	0.50
3	1	22OCT74	7235	1	304.20	39.10	31.40	7.00
3	1	22OCT74	7235	5	380.30	43.80	33.00	10.50
3	2	23OCT74	7236	2	40.60	12.10	****	2.00
3	2	23OCT74	7236	4	52.10	0.0	****	2.00
3	5	23OCT74	7236	2	46.20	3.00	19.10	2.00
3	5	23OCT74	7236	5	40.30	2.30	19.01	2.50
3	8	25OCT74	7238	2	58.40	3.30	****	3.00
3	8	25OCT74	7238	4	48.50	2.20	****	2.50
3	12	23OCT74	7236	2	49.00	1.50	20.00	3.00
3	12	23OCT74	7236	4	53.90	0.0	20.00	3.00
3	13	22OCT74	7235	1	91.80	0.0	17.00	7.00
3	13	22OCT74	7235	2	70.40	0.0	****	****
3	13	22OCT74	7235	5	144.90	0.0	17.10	6.50
3	15	23OCT74	7236	1	63.00	0.0	18.00	2.50

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TPL (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)
3	15	23OCT74	7236	2	57.20	0.0	****	2.00
3	15	23OCT74	7236	8	115.40	0.0	15.10	2.00
3	17	23OCT74	7236	2	61.50	0.0	15.80	2.50
3	17	23OCT74	7236	5	49.90	0.0	16.10	3.00
3	18	23OCT74	7236	2	49.30	0.0	****	2.00
3	18	23OCT74	7236	9	76.40	0.0	****	2.50
3	20	23OCT74	7236	2	46.90	0.0	18.70	2.00
3	20	23OCT74	7236	6	46.80	0.0	16.20	2.00
3	23	23OCT74	7236	1	50.50	0.0	18.30	2.00
3	23	23OCT74	7236	2	87.90	0.0	****	2.00
3	23	23OCT74	7236	5	80.50	0.0	12.90	2.00
3	23	23OCT74	7236	9	82.30	0.0	15.50	2.50
3	24	28OCT74	7241	2	86.70	0.0	15.40	2.00
3	24	28OCT74	7241	6	85.90	0.80	16.10	2.00
3	25	26OCT74	7239	2	51.00	3.80	****	4.00
3	25	26OCT74	7239	6	66.10	2.10	****	4.00
3	26	28OCT74	7241	2	105.60	0.0	****	4.50
3	26	28OCT74	7241	6	90.00	0.0	****	4.50
3	27	28OCT74	7241	2	98.80	0.0	19.00	3.00
3	27	28OCT74	7241	4	75.60	15.20	****	3.00
3	28	28OCT74	7241	2	20.30	2.30	13.20	1.00
3	28	28OCT74	7241	5	20.10	2.70	14.10	1.00
3	28	28OCT74	7241	11	30.70	0.0	15.20	1.50
3	29	25OCT74	7238	1	38.50	0.0	20.00	2.00
3	29	25OCT74	7238	2	29.30	0.90	****	2.00
3	29	25OCT74	7238	5	88.30	0.0	****	2.50
3	29	25OCT74	7238	6	35.80	8.80	21.30	6.00
3	31	25OCT74	7238	2	32.40	2.80	****	1.50
3	31	25OCT74	7238	5	24.80	6.40	****	1.00
3	31	25OCT74	7238	10	23.10	7.50	****	1.50
3	32	28OCT74	7241	2	76.00	0.0	16.90	4.00
3	32	28OCT74	7241	3	76.10	2.00	16.90	5.50
3	33	28OCT74	7241	1	57.20	0.0	17.30	4.00
3	33	28OCT74	7241	2	66.70	0.0	****	3.50
3	33	28OCT74	7241	3	60.00	0.0	26.10	3.00
3	35	25OCT74	7238	1	34.70	5.50	7.10	1.00
3	35	25OCT74	7238	2	19.60	6.70	****	1.00
3	35	25OCT74	7238	5	22.00	0.0	8.00	1.00
3	35	25OCT74	7238	10	19.40	0.0	7.80	1.00
3	38	29OCT74	7241	1	27.80	0.0	****	1.00
3	38	29OCT74	7241	2	62.00	0.0	****	1.00
3	38	29OCT74	7241	5	19.20	1.20	10.90	0.50
3	39	28OCT74	7241	2	79.40	0.80	****	2.50
3	39	28OCT74	7241	5	88.40	0.0	****	3.00
3	42	29OCT74	7242	2	75.40	0.80	1.80	0.50
3	42	29OCT74	7242	7	29.00	0.0	7.30	0.50
3	43	29OCT74	7242	2	18.50	7.30	5.10	1.00
3	43	29OCT74	7242	5	24.30	3.90	****	0.50
3	43	29OCT74	7242	8	28.90	0.0	5.80	0.50
3	44	29OCT74	7242	2	42.70	0.0	11.70	2.50

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)
3	48	29OCT74	7242	6	68.90	1.90	10.80	0.50
3	49	29OCT74	7242	2	16.50	2.40	2.40	0.50
3	49	29OCT74	7242	5	18.80	10.40	2.00	0.50
3	49	29OCT74	7242	10	15.70	3.20	2.10	0.50
3	49	29OCT74	7242	18	20.30	11.20	3.40	0.50
3	50	29OCT74	7242	2	20.30	8.50	2.60	0.50
3	50	29OCT74	7242	5	10.30	8.90	2.00	0.50
3	50	29OCT74	7242	10	11.20	17.70	2.50	0.50
3	50	29OCT74	7242	28	23.20	4.40	2.20	0.50
3	51	29OCT74	7242	2	11.20	2.50	2.10	0.50
3	51	29OCT74	7242	5	16.50	5.70	2.80	0.50
3	51	29OCT74	7242	10	14.70	6.30	2.30	0.50
3	51	29OCT74	7242	21	12.10	2.30	2.10	0.50
3	54	22OCT74	7235	1	259.10	86.10	24.20	3.50
3	54	22OCT74	7235	5	277.40	38.50	25.70	****
3	57	29OCT74	7242	1	32.60	0.0	****	0.50
3	57	29OCT74	7242	2	18.30	0.0	****	0.50
3	57	29OCT74	7242	5	18.30	0.0	****	0.50
3	57	29OCT74	7242	17	36.40	0.0	****	0.50
4	1	12NOV74	7256	2	230.10	80.40	31.60	9.50
4	1	12NOV74	7256	8	265.40	30.90	31.60	8.00
4	2	12NOV74	7256	2	36.30	13.70	****	3.00
4	2	12NOV74	7256	6	50.30	3.00	****	3.00
4	4	22NOV74	7266	2	6.90	13.30	5.30	1.50
4	4	22NOV74	7266	5	8.70	11.90	****	1.50
4	4	22NOV74	7266	12	20.30	10.60	6.10	2.00
4	5	12NOV74	7256	2	70.60	4.30	17.00	3.50
4	5	12NOV74	7256	4	83.80	10.00	18.00	4.00
4	8	12NOV74	7256	2	74.10	5.50	17.00	3.00
4	8	12NOV74	7256	4	77.80	6.10	18.00	3.00
4	11	12NOV74	7256	2	45.30	8.20	16.00	2.00
4	11	12NOV74	7256	3	53.00	18.60	17.00	3.00
4	12	12NOV74	7256	2	56.70	3.40	13.00	3.50
4	12	12NOV74	7256	4	62.80	3.30	18.00	4.00
4	13	12NOV74	7256	1	48.20	3.60	18.00	3.00
4	13	12NOV74	7256	2	45.60	0.80	****	3.00
4	13	12NOV74	7256	5	39.10	0.0	16.00	3.00
4	15	12NOV74	7256	1	65.80	1.60	16.00	3.00
4	15	12NOV74	7256	2	68.20	0.70	****	3.00
4	15	12NOV74	7256	7	67.00	0.60	17.00	3.00
4	16	12NOV74	7256	2	68.30	1.90	****	5.50
4	16	12NOV74	7256	4	69.70	1.30	****	5.50
4	17	12NOV74	7256	2	46.10	2.40	****	2.00
4	17	12NOV74	7256	7	45.80	5.20	****	2.00
4	18	18NOV74	7262	2	40.90	17.80	****	1.50
4	18	18NOV74	7262	8	44.60	0.40	****	2.00
4	23	18NOV74	7262	1	54.60	1.80	15.00	2.00
4	23	18NOV74	7262	2	37.20	4.60	****	2.00
4	23	18NOV74	7262	5	40.90	2.20	15.00	2.00
4	23	18NOV74	7262	8	68.10	9.60	15.00	2.00
4	26	18NOV74	7262	2	38.40	2.20	****	2.00
4	26	18NOV74	7262	5	30.70	0.0	****	2.00
4	26	18NOV74	7262	2	94.60	6.60	25.00	7.50
4	26	18NOV74	7262	4	79.10	6.80	25.00	7.50
4	27	18NOV74	7262	2	95.90	1.70	20.00	4.00

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TFE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)
4	27	19NOV74	7262	4	89.10	5.80	20.00	4.50
4	28	18NOV74	7262	2	22.60	15.20	11.00	2.00
4	28	18NOV74	7262	5	25.90	3.50	12.00	2.00
4	28	18NOV74	7262	11	17.40	1.50	12.00	1.00
4	29	18NOV74	7262	1	107.80	1.90	21.00	5.00
4	29	18NOV74	7262	2	98.90	1.00	****	5.00
4	29	18NOV74	7262	5	98.70	0.0	21.00	5.00
4	29	18NOV74	7262	8	110.20	0.0	22.00	5.00
4	31	19NOV74	7263	2	85.40	11.00	****	4.00
4	31	19NOV74	7263	5	30.30	9.60	****	4.50
4	31	19NOV74	7263	11	53.10	21.10	****	4.00
4	32	19NOV74	7263	2	35.30	4.90	15.00	3.50
4	32	19NOV74	7263	8	33.90	6.80	16.00	3.50
4	33	19NOV74	7263	1	60.00	3.70	24.00	8.50
4	33	19NOV74	7263	2	92.70	6.30	26.00	8.50
4	33	19NOV74	7263	8	101.20	6.10	26.00	8.50
4	35	19NOV74	7263	1	22.60	1.60	7.10	2.00
4	35	19NOV74	7263	2	6.80	5.00	****	2.00
4	35	19NOV74	7263	5	7.00	0.50	8.00	2.00
4	35	19NOV74	7263	11	9.50	0.70	8.50	2.00
4	38	19NOV74	7263	1	27.60	7.10	****	3.00
4	38	19NOV74	7263	2	30.90	8.10	****	3.00
4	38	19NOV74	7263	5	34.30	5.20	****	3.00
4	42	22NOV74	7266	2	6.50	8.80	5.80	1.00
4	42	22NOV74	7266	8	10.00	10.60	9.40	2.50
4	43	22NOV74	7266	2	11.80	10.70	5.10	2.00
4	43	22NOV74	7266	10	12.00	6.10	7.70	2.50
4	44	22NOV74	7266	2	207.20	18.20	13.50	13.50
4	44	22NOV74	7266	7	215.70	13.60	40.00	13.50
4	54	12NOV74	7256	2	262.10	20.30	27.00	8.50
4	54	12NOV74	7256	9	260.00	27.40	27.00	8.00
4	56	18NOV74	7262	2	65.90	0.0	17.00	3.00
4	56	18NOV74	7262	6	70.90	5.80	18.00	3.50
5	2	11FEB75	7347	2	72.40	6.50	****	3.50
5	3	11FEB75	7347	1	42.00	4.20	****	5.00
5	5	13FEB75	7349	2	120.50	12.70	****	5.00
5	5	13FEB75	7349	3	120.60	13.40	****	5.00
5	16	11FEB75	7347	1	41.00	0.0	****	2.50
5	26	12FEB75	7348	1	87.10	5.50	****	5.00
5	30	11FEB75	7347	2	28.90	4.60	****	1.50
5	33	12FEB75	7348	2	58.10	0.0	****	2.50
5	34	12FEB75	7348	2	22.00	2.30	****	2.50
5	34	12FEB75	7348	4	93.40	5.70	****	7.50
5	36	11FEB75	7347	2	28.40	30.50	****	2.00
5	36	11FEB75	7347	3	48.80	1.20	****	2.00
5	39	12FEB75	7348	2	20.80	4.30	****	2.00
5	39	12FEB75	7348	8	21.70	0.0	****	2.00
5	59	13FEB75	7349	2	109.20	14.50	****	5.00
5	59	13FEB75	7349	3	145.10	16.60	****	5.50
6	1	17APR75	7412	2	979.60	30.10	****	22.00

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPE (UG/L)	SS (MG/L)	TUR (JTU)
6	1	17APR75	7412	8	921.90	36.90	****	23.00
6	2	17APR75	7412	2	109.00	15.00	****	4.50
6	2	17APR75	7412	6	181.80	20.80	****	8.00
6	3	29APR75	7424	2	69.90	5.70	****	4.00
6	3	29APR75	7424	4	52.70	3.80	****	4.50
6	5	17APR75	7412	2	121.40	19.20	****	5.00
6	5	17APR75	7412	6	130.50	18.60	****	5.50
6	8	17APR75	7412	2	191.70	20.00	****	7.50
6	8	17APR75	7412	8	212.80	19.20	****	7.50
6	11	17APR75	7412	2	161.50	15.50	****	6.00
6	11	17APR75	7412	3	182.50	17.30	****	6.00
6	12	17APR75	7412	2	130.70	17.90	****	5.50
6	12	17APR75	7412	4	128.50	15.40	****	5.50
6	13	17APR75	7412	1	227.00	22.30	****	8.00
6	13	17APR75	7412	2	249.10	18.80	****	8.00
6	13	17APR75	7412	6	307.10	23.40	****	11.50
6	15	17APR75	7412	1	40.80	9.40	****	2.50
6	15	17APR75	7412	2	45.60	15.90	****	2.50
6	15	17APR75	7412	5	50.00	71.80	****	2.50
6	16	17APR75	7412	2	56.30	17.00	****	3.00
6	16	17APR75	7412	4	46.90	9.20	****	3.00
6	17	17APR75	7412	2	175.50	42.80	****	5.50
6	17	17APR75	7412	5	158.40	15.40	****	****
6	18	17APR75	7412	2	105.60	14.10	****	5.00
6	18	17APR75	7412	9	113.50	14.10	****	5.00
6	20	29APR75	7424	2	51.50	6.70	****	3.00
6	20	29APR75	7424	5	42.60	4.50	****	4.00
6	23	29APR75	7424	1	84.70	11.60	****	5.00
6	23	29APR75	7424	2	91.30	12.20	****	5.00
6	23	29APR75	7424	5	75.80	9.70	****	5.00
6	23	29APR75	7424	9	97.80	9.00	****	5.00
6	24	29APR75	7424	2	37.80	13.00	****	3.00
6	24	29APR75	7424	6	45.00	7.70	****	3.00
6	25	29APR75	7424	2	127.50	12.60	****	5.00
6	25	29APR75	7424	7	148.90	11.50	****	6.00
6	27	29APR75	7424	2	34.30	7.10	****	1.00
6	27	29APR75	7424	5	47.90	8.90	****	4.00
6	28	29APR75	7424	2	42.60	5.30	****	3.00
6	28	29APR75	7424	5	40.50	39.70	****	3.00
6	28	29APR75	7424	11	31.40	5.10	****	3.00
6	29	17APR75	7412	1	49.70	9.00	****	3.00
6	29	29APR75	7424	2	50.20	8.80	****	3.00
6	29	29APR75	7424	5	28.30	40.70	****	3.00
6	31	01MAY75	7426	2	22.40	0.0	****	2.00
6	31	01MAY75	7426	10	24.20	2.20	****	2.50
6	32	01MAY75	7426	2	20.50	0.0	****	2.00
6	32	01MAY75	7426	5	29.50	6.79	****	2.00
6	33	01MAY75	7426	1	50.30	3.90	****	3.00
6	33	01MAY75	7426	2	43.80	13.70	****	3.00
6	35	01MAY75	7426	1	17.11	10.80	****	2.50
6	35	01MAY75	7426	2	18.80	0.80	****	2.50
6	35	01MAY75	7426	5	23.60	10.60	****	2.50
6	35	01MAY75	7426	14	30.70	0.60	****	2.50
6	38	01MAY75	7426	1	33.70	2.30	****	2.50
6	38	01MAY75	7426	2	31.90	0.10	****	2.00

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TFE (UG/L)	DFP (UG/L)	SS (MG/L)	TUR (JTU)
6	38	01MAY75	7025	5	20.00	6.60	****	2.50
6	54	29APR75	7024	2	1543.30	36.80	****	40.00
6	54	29APR75	7024	7	1638.70	38.00	****	40.50
6	56	29APR75	7024	2	58.00	14.00	****	4.50
6	56	29APR75	7024	7	37.30	6.30	****	5.00
7	1	05MAY75	7030	2	1353.50	40.90	47.40	30.00
7	1	05MAY75	7030	10	1790.80	173.90	28.80	****
7	2	05MAY75	7030	2	232.70	27.00	****	7.00
7	2	05MAY75	7030	6	252.10	26.50	****	8.00
7	8	06MAY75	7031	2	76.20	8.60	1.40	1.50
7	8	06MAY75	7031	5	42.00	11.00	1.90	1.50
7	8	06MAY75	7031	10	28.60	12.70	****	2.00
7	8	06MAY75	7031	13	21.90	12.80	0.95	2.00
7	5	05MAY75	7030	2	641.20	26.20	29.80	17.00
7	5	05MAY75	7030	8	1511.10	377.50	57.80	****
7	6	05MAY75	7030	2	1509.70	82.00	****	37.50
7	6	05MAY75	7030	8	2224.40	67.30	****	56.00
7	9	05MAY75	7030	2	1369.20	190.40	****	38.00
7	9	05MAY75	7030	10	1655.50	198.20	****	50.00
7	13	05MAY75	7030	1	152.30	23.80	9.80	6.50
7	13	05MAY75	7030	2	154.70	26.30	****	5.50
7	13	05MAY75	7030	5	82.90	25.90	8.60	5.00
7	15	05MAY75	7030	1	307.80	38.00	19.30	11.00
7	15	05MAY75	7030	2	317.00	41.10	****	11.50
7	15	05MAY75	7030	5	276.20	38.60	13.80	10.50
7	17	05MAY75	7030	2	55.50	27.60	****	2.50
7	17	05MAY75	7030	6	90.40	24.00	****	3.00
7	18	05MAY75	7030	2	196.80	39.10	6.60	7.00
7	18	05MAY75	7030	8	286.70	32.40	12.90	8.50
7	20	05MAY75	7030	2	50.10	24.20	****	2.00
7	20	05MAY75	7030	6	50.70	25.50	****	2.00
7	22	06MAY75	7031	2	113.20	21.60	****	4.00
7	22	06MAY75	7031	9	96.20	18.10	****	4.50
7	23	06MAY75	7031	1	189.20	22.60	7.50	8.00
7	23	06MAY75	7031	2	255.50	30.20	****	7.00
7	23	06MAY75	7031	5	159.40	21.20	8.00	7.00
7	23	06MAY75	7031	9	213.70	20.80	7.90	9.50
7	24	05MAY75	7030	2	69.90	25.30	****	3.00
7	24	05MAY75	7030	7	124.10	26.40	****	5.50
7	27	06MAY75	7031	2	107.20	22.00	10.20	3.50
7	27	06MAY75	7031	6	202.20	24.00	****	5.50
7	28	06MAY75	7031	2	216.40	33.90	8.70	9.00
7	28	06MAY75	7031	5	250.10	38.30	9.00	9.50
7	28	06MAY75	7031	10	229.80	29.80	4.40	10.00
7	29	06MAY75	7031	1	64.90	12.10	3.00	2.00
7	29	06MAY75	7031	2	24.40	10.10	****	2.00
7	29	06MAY75	7031	5	44.10	6.50	2.80	2.50
7	29	06MAY75	7031	8	102.10	19.10	2.50	3.50
7	31	06MAY75	7031	2	58.50	11.30	****	2.00
7	31	06MAY75	7031	10	27.80	6.20	****	2.00

SASINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TFE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)
7	35	06MAY75	7831	1	43.20	8.00	2.50	2.00
7	35	06MAY75	7831	2	58.40	14.20	****	2.00
7	35	06MAY75	7831	5	33.60	13.30	2.40	1.50
7	35	06MAY75	7831	13	76.60	11.70	2.80	2.00
7	37	06MAY75	7831	2	38.00	11.90	****	2.00
7	37	06MAY75	7831	5	25.90	11.50	****	2.00
7	43	07MAY75	7832	2	22.10	21.80	1.80	1.00
7	43	07MAY75	7832	5	24.20	13.70	****	1.50
7	43	07MAY75	7832	8	26.90	15.40	1.90	1.00
7	48	07MAY75	7832	2	30.40	30.30	1.90	1.50
7	48	07MAY75	7832	5	30.70	27.60	2.40	1.50
7	48	07MAY75	7832	8	36.40	16.50	2.20	1.50
7	48	07MAY75	7832	2	39.10	31.60	****	2.00
7	48	07MAY75	7832	10	34.80	16.90	****	1.50
7	49	07MAY75	7832	2	33.00	10.50	****	1.00
7	49	07MAY75	7832	5	20.10	6.70	****	1.00
7	49	07MAY75	7832	10	53.00	24.30	****	1.50
7	49	07MAY75	7832	22	29.90	25.30	****	1.00
7	50	07MAY75	7832	2	31.50	30.10	****	1.00
7	50	07MAY75	7832	5	34.30	20.10	****	1.00
7	50	07MAY75	7832	10	30.50	29.80	****	1.00
7	50	07MAY75	7832	29	32.10	29.00	****	1.00
7	51	07MAY75	7832	2	21.70	42.30	****	1.00
7	51	07MAY75	7832	5	29.90	29.90	****	1.50
7	51	07MAY75	7832	10	32.00	26.70	****	1.50
7	51	07MAY75	7832	29	17.50	21.70	****	1.50
7	54	07MAY75	7832	2	1280.70	38.30	54.80	34.50
7	54	06MAY75	7831	9	1431.60	39.00	59.20	34.50
7	57	07MAY75	7832	1	29.20	15.60	1.90	1.50
7	57	07MAY75	7832	2	19.90	15.40	****	1.50
7	57	07MAY75	7832	5	26.30	22.60	****	1.50
7	57	07MAY75	7832	10	40.60	20.60	****	1.50
7	57	07MAY75	7832	16	38.60	13.70	****	2.00
7	58	07MAY75	7832	2	21.50	28.90	****	2.00
7	58	07MAY75	7832	5	27.20	25.70	****	1.50
7	58	07MAY75	7832	13	26.40	30.40	****	2.00
8	1	10JUN75	7866	2	592.90	15.80	****	25.50
8	1	10JUN75	7866	10	****	****	****	68.00
8	2	10JUN75	7866	2	160.20	11.00	****	8.00
8	2	10JUN75	7866	6	179.50	12.50	****	8.00
8	4	02JUN75	7858	2	18.80	3.10	0.48	1.00
8	4	02JUN75	7858	5	43.70	0.0	1.20	1.00
8	4	02JUN75	7858	15	21.30	8.00	1.20	1.00
8	5	10JUN75	7866	2	326.20	36.60	****	10.50
8	5	10JUN75	7866	5	250.40	15.50	****	10.00
8	8	10JUN75	7866	2	284.90	9.30	****	11.00
8	8	10JUN75	7866	5	281.60	14.00	****	14.00
8	11	10JUN75	7866	2	212.70	11.90	****	10.00
8	11	10JUN75	7866	5	265.50	12.00	****	12.00
8	12	10JUN75	7866	2	133.50	37.80	****	7.50
8	12	10JUN75	7866	5	122.40	12.50	****	7.50
8	13	10JUN75	7866	1	120.90	16.10	6.40	5.00
8	13	10JUN75	7866	2	140.10	15.70	****	5.00
8	13	10JUN75	7866	5	114.30	16.00	7.00	5.00
8	15	10JUN75	7866	1	176.90	21.50	4.70	5.00

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)
8	15	10JUN75	7466	2	143.10	5.80	****	5.50
8	15	10JUN75	7466	5	133.60	12.90	****	5.50
8	16	10JUN75	7466	2	106.70	15.20	****	4.00
8	16	10JUN75	7466	5	133.70	11.30	****	4.50
8	17	10JUN75	7466	2	115.50	16.00	****	5.00
8	17	10JUN75	7466	7	122.90	18.90	****	5.00
8	18	18JUN75	7474	2	63.30	18.40	****	2.50
8	18	18JUN75	7474	9	****	****	****	13.00
8	20	18JUN75	7474	2	100.20	16.70	****	4.00
8	20	18JUN75	7474	7	197.10	22.40	****	5.50
8	23	18JUN75	7474	1	61.20	11.60	****	1.50
8	23	18JUN75	7474	2	58.40	20.40	****	1.50
8	23	18JUN75	7474	5	49.60	11.40	****	1.50
8	23	18JUN75	7474	9	104.60	18.00	****	4.00
8	24	18JUN75	7474	2	72.30	8.00	****	4.00
8	24	18JUN75	7474	6	93.20	18.30	****	5.00
8	25	18JUN75	7474	2	95.50	13.20	****	3.50
8	25	18JUN75	7474	6	188.10	15.20	****	9.00
8	26	03JUN75	7459	2	91.70	9.00	****	5.00
8	26	03JUN75	7459	8	98.50	6.00	****	5.00
8	27	18JUN75	7474	2	91.80	9.10	****	2.00
8	27	18JUN75	7474	6	79.70	10.20	****	4.00
8	28	18JUN75	7474	2	60.70	15.10	****	2.00
8	28	18JUN75	7474	5	71.80	12.00	****	2.00
8	28	18JUN75	7474	12	62.10	7.60	****	2.00
8	29	18JUN75	7474	1	72.30	18.60	****	2.50
8	29	18JUN75	7474	2	12.80	78.60	****	2.50
8	29	18JUN75	7474	5	75.50	11.10	****	****
8	29	18JUN75	7474	7	110.10	7.10	****	3.00
8	31	03JUN75	7459	2	46.60	17.20	****	2.00
8	31	03JUN75	7459	12	42.80	4.30	****	2.00
8	32	03JUN75	7459	2	54.80	4.30	****	4.00
8	32	03JUN75	7459	8	89.90	4.90	****	4.00
8	33	03JUN75	7459	1	85.20	5.50	13.30	5.00
8	33	03JUN75	7459	2	105.30	13.30	****	5.00
8	33	03JUN75	7459	8	103.90	14.40	6.70	5.00
8	35	03JUN75	7459	1	37.50	11.80	14.50	2.50
8	35	03JUN75	7459	2	38.00	19.10	****	1.50
8	35	03JUN75	7459	5	45.80	13.90	5.00	1.50
8	35	03JUN75	7459	11	21.90	5.50	****	1.50
8	38	02JUN75	7458	1	20.80	18.50	1.50	1.00
8	38	02JUN75	7458	3	23.70	22.70	****	1.00
8	38	02JUN75	7458	5	34.90	17.10	2.20	1.00
8	38	02JUN75	7458	7	27.50	13.30	1.00	1.00
8	39	02JUN75	7459	2	57.50	9.70	****	4.00
8	39	02JUN75	7459	6	59.90	10.80	****	4.50
8	40	02JUN75	7458	2	44.40	0.0	****	1.00
8	40	02JUN75	7458	7	24.70	8.30	****	1.00
8	42	02JUN75	7458	2	31.50	6.70	****	1.00
8	42	02JUN75	7458	9	28.10	63.60	****	1.00

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TPE (UG/L)	DPT (UG/L)	SS (MG/L)	TUR (JTU)
8	43	02JUN75	7458	2	1.10	38.00	****	1.00
8	43	02JUN75	7458	5	41.30	2.10	****	1.00
8	43	02JUN75	7458	11	32.20	6.20	****	1.00
8	44	02JUN75	7458	2	24.80	17.00	****	1.50
8	44	02JUN75	7458	5	29.10	9.70	****	1.00
8	44	02JUN75	7458	9	6.20	59.60	****	2.00
8	50	10JUN75	7466	2	618.80	17.10	****	30.00
8	50	10JUN75	7466	10	742.50	17.60	****	30.00
8	56	18JUN75	7474	2	72.30	24.90	****	2.50
8	56	18JUN75	7474	6	81.10	20.90	****	2.50
8	57	02JUN75	7458	1	17.00	5.90	0.48	1.00
8	57	02JUN75	7458	2	18.90	1.20	****	1.00
8	57	02JUN75	7458	5	****	****	0.32	1.00
8	57	02JUN75	7458	10	14.90	1.50	****	1.00
8	57	02JUN75	7458	20	24.70	1.20	1.20	1.00
9	1	16JUL75	7502	2	892.00	46.70	****	25.50
9	1	16JUL75	7502	9	878.70	41.00	****	27.00
9	2	16JUL75	7502	2	112.20	18.00	****	6.50
9	2	16JUL75	7502	6	95.60	25.70	****	7.00
9	4	16JUL75	7502	2	68.00	35.80	****	2.00
9	4	16JUL75	7502	5	0.0	0.0	****	1.80
9	4	16JUL75	7502	14	****	****	****	1.80
9	5	16JUL75	7502	2	168.80	31.20	****	10.00
9	5	16JUL75	7502	4	224.80	36.80	****	13.00
9	6	16JUL75	7502	2	303.40	26.20	****	16.00
9	6	16JUL75	7502	8	317.30	28.70	****	18.00
9	9	16JUL75	7502	2	373.00	35.70	****	18.00
9	9	16JUL75	7502	6	407.60	29.10	****	18.00
9	13	16JUL75	7502	1	69.80	13.10	****	5.00
9	13	16JUL75	7502	2	75.10	24.50	****	5.00
9	13	16JUL75	7502	5	78.20	18.90	****	4.00
9	15	16JUL75	7502	1	84.80	13.30	****	6.00
9	15	16JUL75	7502	2	88.30	26.60	****	7.00
9	15	16JUL75	7502	5	102.10	20.10	****	6.00
9	17	16JUL75	7502	2	45.50	8.00	****	2.50
9	17	16JUL75	7502	7	98.30	6.80	****	7.00
9	18	16JUL75	7502	2	62.60	7.60	****	3.50
9	18	16JUL75	7502	8	65.30	14.00	****	3.00
9	20	16JUL75	7502	2	74.80	16.90	****	4.50
9	20	16JUL75	7502	5	105.70	12.20	****	5.00
9	22	16JUL75	7502	2	31.90	41.60	****	1.00
9	22	16JUL75	7502	10	72.30	40.70	****	1.00
9	23	16JUL75	7502	1	68.80	6.70	****	2.00
9	23	16JUL75	7502	2	38.90	17.10	****	2.50
9	23	16JUL75	7502	5	58.00	7.20	****	2.50
9	23	16JUL75	7502	9	83.40	3.80	****	4.00
9	24	16JUL75	7502	2	70.00	16.90	****	4.00
9	24	16JUL75	7502	7	72.20	10.00	****	4.00
9	27	16JUL75	7502	2	39.50	32.70	****	3.00
9	27	16JUL75	7502	5	79.30	17.10	****	1.00

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	TFE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)
9	28	16JUL75	7502	2	55.20	41.10	****	2.00
9	28	16JUL75	7502	5	50.20	39.80	****	3.00
9	28	16JUL75	7502	10	44.70	31.30	****	2.50
9	29	16JUL75	7502	1	0.0	0.0	****	4.00
9	29	16JUL75	7502	2	55.10	15.30	****	3.50
9	29	16JUL75	7502	5	66.70	1.00	****	3.50
9	29	16JUL75	7502	9	187.10	25.60	****	8.00
9	31	16JUL75	7502	2	49.60	26.00	****	5.00
9	31	16JUL75	7502	10	****	48.20	****	2.50
9	35	16JUL75	7502	1	0.0	0.0	****	5.00
9	35	16JUL75	7502	2	46.70	38.90	****	5.00
9	35	16JUL75	7502	5	47.10	30.00	****	5.00
9	35	16JUL75	7502	12	37.10	33.10	****	5.00
9	37	16JUL75	7502	2	57.60	31.30	****	2.00
9	37	16JUL75	7502	14	0.0	0.0	****	2.00
9	43	18JUL75	7504	2	36.30	14.70	****	3.00
9	43	18JUL75	7504	5	31.80	12.60	****	2.50
9	43	18JUL75	7504	9	****	****	****	2.00
9	44	18JUL75	7504	2	21.50	21.40	****	3.00
9	44	18JUL75	7504	8	43.40	22.80	****	2.00
9	49	18JUL75	7504	2	****	****	****	1.80
9	49	18JUL75	7504	5	****	****	****	1.60
9	49	18JUL75	7504	10	28.50	9.70	****	1.40
9	49	18JUL75	7504	17	43.20	9.70	****	1.20
9	50	18JUL75	7504	2	23.60	21.50	****	1.00
9	50	18JUL75	7504	5	**0.00	****	****	1.00
9	50	18JUL75	7504	10	****	****	****	0.90
9	50	18JUL75	7504	30	10.20	13.40	****	0.90
9	51	18JUL75	7504	2	30.00	23.30	****	0.90
9	51	18JUL75	7504	5	88.50	27.90	****	0.80
9	51	18JUL75	7504	10	27.30	22.30	****	0.70
9	51	18JUL75	7504	28	38.10	13.00	****	0.90
9	54	16JUL75	7502	2	698.10	51.40	****	31.00
9	54	16JUL75	7502	9	780.60	47.00	****	17.00
9	57	18JUL75	7504	1	53.80	24.20	****	2.10
9	57	18JUL75	7504	2	35.80	25.70	****	****
9	57	18JUL75	7504	5	****	****	****	2.10
9	57	18JUL75	7504	10	26.60	25.50	****	****
9	57	18JUL75	7504	17	32.80	19.80	****	1.80
9	58	18JUL75	7504	2	42.70	16.20	****	1.20
9	58	18JUL75	7504	5	34.50	30.40	****	1.20
9	58	18JUL75	7504	14	44.40	21.80	****	1.10
10	1	25AUG75	7542	2	838.50	31.00	****	39.00
10	1	25AUG75	7542	10	1986.40	40.50	****	56.00
10	2	25AUG75	7542	2	102.10	24.70	****	7.50
10	2	25AUG75	7542	6	****	****	****	7.00
10	4	26AUG75	7543	2	39.80	41.50	****	1.00
10	4	26AUG75	7543	5	172.40	27.10	****	0.70
10	4	26AUG75	7543	10	88.50	31.70	****	0.70
10	4	26AUG75	7543	15	53.90	31.30	****	1.00

SAGINAW BAY CHEMISTRY

CRU	STA	DATE	DAY	DEPTH (M)	FPE (UG/L)	DFE (UG/L)	SS (MG/L)	TUR (JTU)
10	5	25AUG75	7542	2	164.20	42.10	****	11.00
10	5	25AUG75	7542	8	****	****	****	11.00
10	6	25AUG75	7542	2	697.80	46.90	****	29.00
10	6	25AUG75	7542	9	680.80	35.30	****	31.00
10	9	25AUG75	7542	2	757.80	51.30	****	38.00
10	9	25AUG75	7542	9	771.60	37.90	****	37.00
10	13	25AUG75	7542	1	87.10	34.00	****	5.00
10	13	25AUG75	7542	2	72.30	32.70	****	6.00
10	13	25AUG75	7542	5	69.90	25.20	****	6.00
10	15	25AUG75	7542	1	175.90	49.40	****	6.00
10	15	25AUG75	7542	2	125.00	26.70	****	6.00
10	15	25AUG75	7542	50	****	****	****	6.00
10	17	25AUG75	7542	2	****	****	****	4.00
10	17	25AUG75	7542	7	49.20	33.30	****	4.50
10	18	25AUG75	7542	2	200.80	25.20	****	4.00
10	18	25AUG75	7542	8	75.90	37.60	****	4.50
10	20	25AUG75	7542	2	****	****	****	4.00
10	20	25AUG75	7542	5	78.20	34.20	****	5.00
10	22	26AUG75	7543	2	130.60	52.90	****	4.00
10	22	26AUG75	7543	10	69.70	38.50	****	4.00
10	23	26AUG75	7543	10	84.70	33.40	****	4.00
10	23	26AUG75	7543	2	****	****	****	4.00
10	23	26AUG75	7543	5	91.30	50.50	****	4.00
10	23	26AUG75	7543	9	91.20	33.10	****	3.50
10	24	25AUG75	7542	2	77.40	29.70	****	4.00
10	24	25AUG75	7542	7	140.20	33.60	****	6.00
10	27	26AUG75	7543	20	68.30	31.70	****	4.00
10	27	26AUG75	7543	5	125.10	27.10	****	5.00
10	28	26AUG75	7543	2	30.30	29.40	****	4.50
10	28	26AUG75	7543	10	159.40	37.40	****	5.00
10	29	26AUG75	7543	1	80.60	20.00	****	3.50
10	29	26AUG75	7543	2	70.80	25.20	****	4.00
10	29	26AUG75	7543	5	74.30	41.20	****	4.00
10	29	26AUG75	7543	8	95.60	33.10	****	4.00
10	31	26AUG75	7543	2	142.10	49.10	****	3.50
10	31	26AUG75	7543	10	131.00	60.50	****	4.00
10	35	26AUG75	7543	1	112.30	52.40	****	1.50
10	35	26AUG75	7543	5	****	****	****	1.50
10	37	26AUG75	7543	2	107.30	27.00	****	1.00
10	37	26AUG75	7543	14	68.70	40.30	****	1.00
10	54	25AUG75	7542	2	885.20	45.30	****	40.50
10	54	25AUG75	7542	9	542.30	46.60	****	43.00

APPENDIX 10

SAGINAW BAY CHLOROPHYL A DATA
CRUISE 1 -- SPECIAL CRUISE

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	8	22AUG73	6809	2	7.827
1	50	24AUG73	6811	12	3.304
1	101	22AUG73	6809	1	21.188
1	102	22AUG73	6809	1	6.901
1	102	22AUG73	6809	2	9.525
1	102	22AUG73	6809	6	11.439
1	103	22AUG73	6809	1	11.439
1	104	22AUG73	6809	1	10.543
1	105	22AUG73	6809	1	6.263
1	107	22AUG73	6809	1	9.934
1	107	22AUG73	6809	5	10.934
1	107	22AUG73	6809	9	9.109
1	109	22AUG73	6809	1	10.536
1	110	22AUG73	6809	1	3.866
1	111	22AUG73	6809	1	12.473
1	112	22AUG73	6809	2	8.639
1	112	22AUG73	6809	5	8.504
1	112	22AUG73	6809	9	7.451
1	113	23AUG73	6810	1	7.559
1	114	23AUG73	6810	1	4.989
1	115	23AUG73	6810	1	5.669
1	116	23AUG73	6810	1	8.142
1	116	23AUG73	6810	2	8.013
1	116	23AUG73	6810	5	5.313
1	116	23AUG73	6810	9	7.597
1	117	22AUG73	6809	5	8.510
1	118	23AUG73	6810	1	3.564
1	119	23AUG73	6810	1	4.795
1	119	23AUG73	6810	5	2.646
1	120	23AUG73	6810	1	7.937
1	121	24AUG73	6811	1	3.645
1	122	24AUG73	6811	1	3.742
1	122	24AUG73	6811	2	3.456
1	122	24AUG73	6811	5	4.094
1	122	24AUG73	6811	10	2.624
1	123	23AUG73	6810	1	5.238
1	124	24AUG73	6811	1	6.285
1	125	24AUG73	6811	1	2.203
1	125	24AUG73	6811	2	2.505
1	125	24AUG73	6811	5	2.786
1	126	24AUG73	6811	1	3.888
1	128	25AUG73	6812	9	5.356
1	129	25AUG73	6812	1	5.507
1	129	25AUG73	6812	2	2.635
1	129	25AUG73	6812	5	3.672
1	129	25AUG73	6812	13	3.823
1	130	25AUG73	6812	1	3.240
1	131	24AUG73	6811	1	6.371
1	132	24AUG73	6811	1	2.689
1	133	24AUG73	6811	1	2.408
1	134	25AUG73	6812	1	2.446
1	135	25AUG73	6812	1	2.964

SAGINAW BAY CHL A
CRUISE 1 -- SPECIAL CRUISE

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
1	136	25AUG73	6812	1	1.830
1	136	25AUG73	6812	2	2.830
1	136	25AUG73	6812	19	2.900
1	137	24AUG73	6811	1	1.685
1	142	23AUG73	6810	2	24.247
1	153	22AUG73	6809	1	6.020
1	168	22AUG73	6809	1	8.985

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
2	1	25SEP74	7208	1	20.564
2	1	25SEP74	7208	9	23.679
2	2	25SEP74	7208	1	19.387
2	2	25SEP74	7208	4	18.694
2	4	26SEP74	7209	1	9.762
2	4	26SEP74	7209	5	10.732
2	4	26SEP74	7209	12	12.047
2	5	25SEP74	7208	1	18.279
2	5	25SEP74	7208	5	18.209
2	6	25SEP74	7208	1	23.125
2	6	25SEP74	7208	8	17.171
2	9	25SEP74	7208	1	23.056
2	9	25SEP74	7208	4	24.233
2	9	25SEP74	7208	7	21.117
2	13	25SEP74	7208	1	20.356
2	13	25SEP74	7208	2	20.771
2	13	25SEP74	7208	5	19.040
2	15	25SEP74	7208	1	15.232
2	15	25SEP74	7208	2	19.525
2	15	25SEP74	7208	7	18.556
2	17	25SEP74	7208	1	19.179
2	17	25SEP74	7208	2	16.963
2	17	25SEP74	7208	6	16.898
2	18	26SEP74	7209	1	17.171
2	18	26SEP74	7209	2	16.686
2	18	26SEP74	7209	8	19.387
2	19	25SEP74	7208	1	17.586
2	19	25SEP74	7208	2	17.863
2	19	25SEP74	7208	8	18.279
2	20	25SEP74	7208	1	17.725
2	20	25SEP74	7208	5	19.871
2	22	26SEP74	7209	1	11.493
2	22	26SEP74	7209	5	11.909
2	22	26SEP74	7209	9	12.117
2	23	26SEP74	7209	1	11.286
2	23	26SEP74	7209	2	10.386
2	23	26SEP74	7209	5	14.332
2	23	26SEP74	7209	8	10.870
2	24	25SEP74	7208	2	16.548
2	24	25SEP74	7208	7	15.094
2	27	26SEP74	7209	1	12.047
2	27	26SEP74	7209	7	13.640
2	28	26SEP74	7209	1	12.186
2	28	26SEP74	7209	5	12.324
2	28	26SEP74	7209	10	12.394
2	29	26SEP74	7209	1	11.701
2	29	26SEP74	7209	2	10.455
2	29	26SEP74	7209	5	12.186
2	29	26SEP74	7209	8	12.047
2	31	26SEP74	7209	1	10.247
2	31	26SEP74	7209	5	10.870
2	31	26SEP74	7209	10	10.316
2	35	26SEP74	7209	1	9.555
2	35	26SEP74	7209	2	10.316
2	35	26SEP74	7209	5	10.586

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
2	35	26SEP74	7209	10	9.555
2	35	27SEP74	7210	13	8.032
2	37	26SEP74	7209	1	5.124
2	37	26SEP74	7209	12	6.301
2	43	27SEP74	7210	1	4.293
2	43	27SEP74	7210	8	5.851
2	50	27SEP74	7210	1	1.003
2	50	27SEP74	7210	5	0.943
2	50	27SEP74	7210	10	1.244
2	50	27SEP74	7210	27	1.003
2	51	27SEP74	7210	1	1.785
2	51	27SEP74	7210	5	2.191
2	51	27SEP74	7210	10	3.981
2	51	27SEP74	7210	28	0.854
2	54	25SEP74	7208	1	29.385
2	54	25SEP74	7208	9	30.741
2	55	24SEP74	7207	0	27.916
2	57	27SEP74	7210	1	3.289
2	57	27SEP74	7210	2	2.115
2	57	27SEP74	7210	5	3.427
2	57	27SEP74	7210	15	2.216
2	58	27SEP74	7210	1	8.239
2	58	27SEP74	7210	5	6.197
2	58	27SEP74	7210	13	4.466
3	1	22OCT74	7235	1	28.803
3	1	22OCT74	7235	5	28.255
3	2	23OCT74	7236	2	4.687
3	2	23OCT74	7236	4	6.231
3	5	23OCT74	7236	2	5.193
3	5	23OCT74	7236	5	5.124
3	8	25OCT74	7238	2	8.101
3	8	25OCT74	7238	4	6.716
3	12	23OCT74	7236	2	7.339
3	12	23OCT74	7236	4	7.547
3	13	22OCT74	7235	1	10.524
3	13	22OCT74	7235	2	9.624
3	13	22OCT74	7235	5	12.463
3	15	23OCT74	7236	1	9.762
3	15	23OCT74	7236	2	9.832
3	15	23OCT74	7236	8	10.178
3	17	23OCT74	7236	2	9.555
3	17	23OCT74	7236	5	8.932
3	18	23OCT74	7236	2	11.701
3	18	23OCT74	7236	9	10.386
3	20	23OCT74	7236	2	6.231
3	20	23OCT74	7236	4	6.093
3	23	23OCT74	7236	1	8.585
3	23	23OCT74	7236	2	9.147
3	23	23OCT74	7236	5	9.139
3	23	23OCT74	7236	9	9.147
3	24	28OCT74	7241	2	7.824
3	24	28OCT74	7241	6	8.309
3	25	25OCT74	7238	2	6.716
3	25	25OCT74	7238	6	6.439
3	26	28OCT74	7241	2	6.647

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
3	26	28OCT74	7241	4	6.993
3	27	28OCT74	7241	2	6.716
3	27	28OCT74	7241	4	5.262
3	28	28OCT74	7241	2	6.928
3	28	28OCT74	7241	5	5.747
3	28	28OCT74	7241	11	7.062
3	29	25OCT74	7238	1	4.639
3	29	25OCT74	7238	2	5.331
3	29	25OCT74	7238	5	4.362
3	29	25OCT74	7238	6	5.054
3	31	25OCT74	7238	2	5.747
3	31	25OCT74	7238	5	5.193
3	31	25OCT74	7238	10	5.816
3	32	28OCT74	7241	2	8.378
3	32	28OCT74	7241	3	8.309
3	33	28OCT74	7241	1	7.131
3	33	28OCT74	7241	2	6.993
3	33	28OCT74	7241	3	8.032
3	35	25OCT74	7238	1	2.673
3	35	25OCT74	7238	2	2.437
3	35	25OCT74	7238	5	3.232
3	35	25OCT74	7238	10	3.756
3	38	28OCT74	7241	1	3.063
3	38	28OCT74	7241	2	2.657
3	38	28OCT74	7241	5	2.927
3	39	28OCT74	7241	2	5.025
3	39	28OCT74	7241	5	5.431
3	42	29OCT74	7242	2	1.607
3	42	29OCT74	7242	7	1.633
3	43	29OCT74	7242	2	2.025
3	43	29OCT74	7242	5	1.819
3	43	29OCT74	7242	8	2.124
3	44	29OCT74	7242	2	5.816
3	44	29OCT74	7242	6	5.712
3	49	29OCT74	7242	2	0.600
3	49	29OCT74	7242	5	0.925
3	49	29OCT74	7242	10	0.942
3	49	29OCT74	7242	18	0.987
3	50	29OCT74	7242	2	0.676
3	50	29OCT74	7242	5	0.733
3	50	29OCT74	7242	10	0.778
3	50	29OCT74	7242	28	0.964
3	51	29OCT74	7242	2	0.716
3	51	29OCT74	7242	5	0.654
3	51	29OCT74	7242	10	0.615
3	51	29OCT74	7242	21	0.750
3	54	22OCT74	7235	1	25.410
3	54	22OCT74	7235	5	23.679
3	57	29OCT74	7242	1	0.728
3	57	29OCT74	7242	2	0.812
3	57	29OCT74	7242	5	0.857
3	57	29OCT74	7242	17	1.055
4	1	12NOV74	7256	2	7.893
4	1	12NOV74	7256	8	8.032
4	2	12NOV74	7256	2	5.470

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
4	2	12NOV74	7256	6	5.816
4	4	22NOV74	7266	2	0.973
4	4	22NOV74	7266	5	0.981
4	4	22NOV74	7266	12	1.320
4	5	12NOV74	7256	2	16.479
4	5	12NOV74	7256	4	15.998
4	8	12NOV74	7256	2	11.632
4	8	12NOV74	7256	4	10.593
4	11	12NOV74	7256	2	6.508
4	11	12NOV74	7256	3	6.855
4	12	12NOV74	7256	2	7.755
4	12	12NOV74	7256	4	6.785
4	13	12NOV74	7256	1	5.677
4	13	12NOV74	7256	2	6.439
4	13	12NOV74	7256	5	6.716
4	15	12NOV74	7256	1	9.347
4	15	12NOV74	7256	2	9.555
4	15	12NOV74	7256	7	11.009
4	16	12NOV74	7256	2	9.139
4	16	12NOV74	7256	4	10.593
4	17	12NOV74	7256	2	8.655
4	17	12NOV74	7256	7	9.001
4	18	18NOV74	7262	2	2.200
4	18	18NOV74	7262	8	1.997
4	23	18NOV74	7262	1	3.912
4	23	18NOV74	7262	2	3.333
4	23	18NOV74	7262	5	3.080
4	23	18NOV74	7262	8	3.790
4	24	18NOV74	7262	2	2.504
4	24	18NOV74	7262	5	2.562
4	26	18NOV74	7262	2	14.748
4	26	18NOV74	7262	4	14.194
4	27	18NOV74	7262	2	4.154
4	27	18NOV74	7262	4	5.262
4	28	18NOV74	7262	2	0.981
4	28	18NOV74	7262	5	0.863
4	28	18NOV74	7262	11	0.922
4	29	18NOV74	7262	1	8.239
4	29	18NOV74	7262	2	7.547
4	29	18NOV74	7262	5	6.924
4	29	18NOV74	7262	8	7.685
4	31	19NOV74	7263	2	8.032
4	31	19NOV74	7263	5	8.447
4	31	19NOV74	7263	10	7.755
4	32	19NOV74	7263	2	2.555
4	32	19NOV74	7263	4	2.132
4	33	19NOV74	7263	1	6.855
4	33	19NOV74	7263	2	7.201
4	33	19NOV74	7263	4	7.062
4	35	19NOV74	7263	1	2.458
4	35	19NOV74	7263	2	2.077
4	35	19NOV74	7263	5	2.631
4	35	19NOV74	7263	11	2.319
4	38	19NOV74	7263	1	7.893
4	38	19NOV74	7263	2	7.893

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
4	38	19NOV74	7263	5	7.131
4	42	22NOV74	7266	2	1.097
4	42	22NOV74	7266	8	1.252
4	43	22NOV74	7266	2	0.922
4	43	22NOV74	7266	10	1.134
4	44	22NOV74	7266	2	4.518
4	44	22NOV74	7266	7	9.901
4	54	12NOV74	7256	2	6.508
4	54	12NOV74	7256	9	6.716
4	56	18NOV74	7262	2	7.339
4	56	18NOV74	7262	6	7.201
5	2	11FEB75	7347	2	8.655
5	3	11FEB75	7347	1	3.150
5	5	13FEB75	7349	2	13.051
5	5	13FEB75	7349	3	13.605
5	16	11FEB75	7347	2	2.596
5	26	12FEB75	7348	1	5.401
5	30	11FEB75	7347	2	2.008
5	33	12FEB75	7348	2	2.181
5	34	12FEB75	7348	2	2.354
5	34	12FEB75	7348	4	3.808
5	36	11FEB75	7347	2	1.108
5	36	11FEB75	7347	3	1.024
5	39	12FEB75	7348	2	0.798
5	39	12FEB75	7348	4	1.870
5	59	13FEB75	7349	2	14.298
5	59	13FEB75	7349	3	13.848
6	1	17APR75	7412	2	5.470
6	1	17APR75	7412	8	5.608
6	3	29APR75	7424	2	8.378
6	3	29APR75	7424	4	8.585
6	2	17APR75	7412	2	9.416
6	2	17APR75	7412	6	9.832
6	5	17APR75	7412	2	10.524
6	5	17APR75	7412	6	9.416
6	8	17APR75	7412	2	15.648
6	8	17APR75	7412	4	15.786
6	11	17APR75	7412	2	14.955
6	11	17APR75	7412	3	15.371
6	12	17APR75	7412	2	11.147
6	12	17APR75	7412	4	11.355
6	13	17APR75	7412	1	10.524
6	13	17APR75	7412	2	10.109
6	13	17APR75	7412	6	8.516
6	15	17APR75	7412	1	7.339
6	15	17APR75	7412	2	7.685
6	15	17APR75	7412	7	7.962
6	16	17APR75	7412	2	10.178
6	16	17APR75	7412	4	10.247
6	17	17APR75	7412	2	14.194
6	17	17APR75	7412	5	11.909
6	18	17APR75	7412	2	13.086
6	18	17APR75	7412	9	11.909
6	20	29APR75	7424	2	11.355
6	20	29APR75	7424	4	11.770

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
6	23	29APR75	7424	1	12.324
6	23	29APR75	7424	2	13.848
6	23	29APR75	7424	5	14.609
6	23	29APR75	7424	8	14.678
6	24	29APR75	7424	2	12.047
6	24	29APR75	7424	6	10.593
6	25	29APR75	7424	2	18.140
6	25	29APR75	7424	6	17.725
6	27	29APR75	7424	2	8.239
6	27	29APR75	7424	5	8.932
6	28	29APR75	7424	2	11.978
6	28	29APR75	7424	5	11.563
6	28	29APR75	7424	11	10.732
6	29	29APR75	7424	1	6.370
6	29	29APR75	7424	2	7.755
6	29	29APR75	7424	5	6.716
6	31	01MAY75	7426	2	6.578
6	31	01MAY75	7426	10	5.470
6	32	01MAY75	7426	2	4.154
6	32	01MAU75	7426	5	4.223
6	33	01MAY75	7426	1	8.585
6	33	01MAY75	7426	2	8.309
6	35	01MAY75	7426	1	8.239
6	35	01MAY75	7426	2	6.785
6	35	01MAY75	7426	5	8.309
6	35	01MAY75	7426	14	7.685
6	38	01MAY75	7426	1	6.093
6	38	01MAY75	7426	2	6.508
6	38	01MAY75	7426	5	6.439
6	54	29APR75	7424	2	6.716
6	54	29APT75	7424	7	6.093
6	56	29APR75	7424	2	12.809
6	56	29APR75	7424	7	12.047
7	1	05MAY75	7430	2	7.685
7	1	05MAY75	7430	10	6.716
7	2	05MAY75	7430	2	17.171
7	2	05MAY75	7430	6	18.417
7	4	06MAY75	7431	2	2.008
7	4	06MAY75	7431	5	2.005
7	4	06MAY75	7431	10	2.119
7	4	06MAY75	7431	13	2.638
7	5	05MAY75	7430	2	14.194
7	5	05MAY75	7430	4	21.022
7	6	05MAY75	7430	2	7.685
7	6	05MAY75	7430	8	11.147
7	9	05MAY75	7430	2	7.824
7	9	05MAY75	7430	8	8.516
7	13	05MAY75	7430	1	26.221
7	13	05MAY75	7430	2	20.118
7	13	05MAY75	7430	5	24.864
7	15	05MAY75	7430	1	16.825
7	15	05MAY75	7430	2	16.271
7	15	05MAY75	7430	5	17.379
7	17	05MAY75	7430	2	11.424
7	17	05MAY75	7430	6	17.171

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
7	18	05MAY75	7430	2	23.056
7	18	05MAY75	7430	8	18.348
7	20	05MAY75	7430	2	6.785
7	20	05MAY75	7430	8	7.582
7	22	06MAY75	7431	2	9.762
7	22	06MAY75	7431	9	9.970
7	23	06MAY75	7431	1	13.778
7	23	06MAY75	7431	2	12.670
7	23	06MAY75	7431	5	12.117
7	23	06MAY75	7431	9	12.532
7	24	05MAY75	7430	2	11.980
7	24	05MAY75	7430	7	10.285
7	27	06MAY75	7431	2	9.001
7	27	06MAY75	7431	6	9.970
7	28	06MAY75	7431	2	13.432
7	28	06MAY75	7431	5	13.501
7	28	06MAY75	7431	10	14.124
7	29	06MAY75	7431	1	0.524
7	29	06MAY75	7431	2	6.647
7	29	07MAY75	7432	5	7.270
7	29	06MAY75	7431	8	6.647
7	31	06MAY75	7431	2	7.408
7	31	06MAY75	7431	10	6.785
7	35	06MAY75	7431	1	7.685
7	35	06MAY75	7431	2	7.616
7	35	06MAY75	7431	5	8.170
7	35	06MAY75	7431	9	8.862
7	37	06MAY75	7431	2	6.370
7	37	06MAY75	7431	5	6.370
7	43	07MAY75	7432	2	3.358
7	43	07MAY75	7432	5	3.427
7	43	07MAY75	7432	10	3.566
7	44	07MAY75	7432	2	3.323
7	44	07MAY75	7432	5	3.843
7	44	07MAY75	7432	8	4.050
7	48	07MAY75	7432	2	1.373
7	49	07MAY75	7432	2	1.635
7	49	07MAY75	7432	5	1.532
7	49	07MAY75	7432	10	1.396
7	49	07MAY75	7432	22	1.715
7	50	07MAY75	7432	2	1.523
7	50	07MAY75	7432	5	1.869
7	50	07MAY75	7432	10	1.523
7	50	07MAY75	7432	29	1.835
7	51	07MAY75	7432	2	4.674
7	51	07MAY75	7432	5	4.431
7	51	07MAY75	7432	10	4.466
7	51	07MAY75	7432	29	4.881
7	54	05MAY75	7430	2	7.616
7	54	05MAY75	7430	9	8.239
7	57	07MAY75	7432	1	2.640
7	57	07MAY75	7432	2	2.555
7	57	07MAY75	7432	5	3.739
7	57	07MAY75	7432	10	2.115
7	57	07MAY75	7432	16	4.653

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
7	58	07MAY75	7432	2	3.843
7	58	07MAY75	7432	5	3.427
7	58	07MAY75	7432	13	3.427
8	1	10JUN75	7456	2	7.962
8	1	18JUN75	7474	10	4.570
8	2	10JUN75	7456	2	15.994
8	2	10JUN75	7466	6	15.648
8	4	2JUN75	7458	2	1.464
8	4	2JUN75	7458	5	1.607
8	4	2JUN75	7458	10	1.980
8	4	2JUN75	7458	15	1.523
8	5	10JUN75	7456	2	10.870
8	5	10JUN77	7466	5	19.733
8	8	10JUN75	7456	2	6.370
8	8	10JUN75	7456	5	14.124
8	11	10JUN75	7466	2	11.424
8	11	10JUN75	7466	5	10.593
8	12	10JUN75	7466	2	35.036
8	12	10JUN75	7466	5	33.454
8	13	10JUN75	7456	1	12.740
8	13	10JUN75	7456	2	4.061
8	13	10JUN75	7456	6	12.740
8	15	10JUN75	7456	1	5.331
8	15	10JUN75	7456	2	5.954
8	15	10JUN75	7456	8	14.055
8	16	10JUN75	7456	2	6.785
8	16	10JUN75	7456	5	8.447
8	17	10JUN75	7466	2	8.655
8	17	10JUN75	7456	7	12.324
8	18	18JUN75	7474	2	5.331
8	18	18JUN75	7474	9	4.154
8	20	18JUN75	7474	2	11.078
8	20	18JUN75	7474	7	8.585
8	23	18JUN75	7474	1	4.264
8	23	18JUN75	7474	2	10.178
8	23	18JUN75	7474	5	3.063
8	23	18JUN75	7474	9	7.408
8	24	18JUN75	7474	2	3.570
8	24	18JUN75	7474	6	11.424
8	25	18JUN75	7474	2	10.663
8	25	18JUN75	7474	6	3.393
8	26	3JUN75	7459	2	11.424
8	26	3JUN75	7459	4	12.947
8	27	18JUN75	7474	2	7.478
8	27	18JUN75	7474	6	5.677
8	28	18JUN75	7474	2	5.539
8	28	18JUN75	7474	5	2.978
8	28	18JUN75	7474	12	8.239
8	29	18JUN75	7474	1	6.508
8	29	18JUN75	7474	2	5.885
8	29	18JUN75	7474	5	4.570
8	29	18JUN75	7474	7	9.970
8	31	3JUN75	7459	2	2.014
8	31	3JUN75	7459	12	4.569
8	32	3JUN75	7459	2	2.284

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
8	32	3JUN75	7459	4	2.538
8	33	3JUN75	7459	1	6.142
8	33	03JUN75	7459	2	6.125
8	33	3JUN75	7459	4	4.704
8	35	3JUN75	7459	1	1.686
8	35	3JUN75	7459	2	1.772
8	35	3JUN75	7459	5	1.997
8	35	3JUN75	7459	13	3.452
8	38	2JUN75	7458	1	2.250
8	38	2JUN75	7458	2	2.775
8	38	2JUN75	7458	5	3.046
8	39	2JUN75	7458	2	3.469
8	39	2JUN75	7458	6	4.721
8	40	2JUN75	7458	2	1.242
8	40	2JUN75	7458	7	2.096
8	42	2JUN75	7458	2	1.567
8	42	2JUN75	7458	9	5.025
8	43	2JUN75	7458	2	2.098
8	43	2JUN75	7458	5	2.910
8	43	2JUN75	7458	11	3.655
8	44	2JUN75	7458	2	2.775
8	44	2JUN75	7458	5	3.604
8	44	2JUN75	7458	9	4.044
8	54	10JUN75	7456	2	10.940
8	54	10JUN75	7456	10	5.262
8	56	18JUN75	7474	2	9.416
8	56	18JUN75	7474	6	7.339
8	57	2JUN75	7458	1	0.809
8	57	2JUN75	7458	2	0.997
8	57	2JUN75	7458	5	0.889
8	57	2JUN75	7458	10	1.675
8	57	2JUN75	7458	20	1.895
9	1	16JUL75	7502	2	11.355
9	1	16JUL75	7502	9	14.471
9	2	16JUL75	7502	2	21.394
9	2	16JUL75	7502	6	20.079
9	4	17JUL75	7503	2	0.956
9	4	17JUL75	7503	5	0.931
9	4	17JUL75	7503	14	3.003
9	5	16JUL75	7502	2	27.125
9	5	16JUL75	7502	4	28.255
9	6	16JUL75	7502	2	28.255
9	6	16JUL75	7502	8	29.837
9	9	16JUL75	7502	2	11.493
9	9	16JUL75	7502	8	11.840
9	13	16JUL75	7502	1	14.194
9	13	16JUL75	7502	2	12.878
9	13	16JUL75	7502	5	12.394
9	15	16JUL75	7502	1	5.608
9	15	16JUL75	7502	2	20.564
9	15	16JUL75	7502	5	21.325
9	17	16JUL75	7502	2	2.986
9	17	16JUL75	7502	10	3.080
9	18	16JUL75	7502	2	5.470
9	18	16JUL75	7502	8	20.217

SAGINAW BAY CHL A

CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
9	20	16JUL75	7502	2	11.009
9	20	16JUL75	7502	5	11.286
9	22	17JUL75	7503	2	4.264
9	22	17JUL75	7503	10	3.638
9	23	17JUL75	7503	1	4.332
9	23	17JUL75	7503	2	4.298
9	23	17JUL75	7503	5	3.706
9	23	17JUL75	7503	9	4.670
9	24	16JUL75	7502	2	3.384
9	24	16JUL75	7502	7	3.807
9	27	17JUL75	7503	2	4.805
9	27	17JUL75	7503	5	4.822
9	28	17JUL75	7503	2	7.201
9	28	17JUL75	7503	5	8.655
9	28	17JUL75	7503	10	3.316
9	29	17JUL75	7503	1	14.263
9	29	17JUL75	7503	2	14.886
9	29	17JUL75	7503	5	14.263
9	29	17JUL75	7503	9	5.144
9	31	17JUL75	7503	2	16.548
9	31	17JUL75	7503	10	2.673
9	35	17JUL75	7503	1	9.001
9	35	17JUL75	7503	2	9.486
9	35	17JUL75	7503	5	9.001
9	35	17JUL75	7503	12	2.030
9	37	17JUL75	7503	2	0.997
9	37	17JUL75	7503	18	1.624
9	43	18JUL75	7504	2	3.942
9	43	18JUL75	7504	5	5.313
9	43	18JUL75	7504	9	1.732
9	44	18JUL75	7504	2	1.464
9	44	18JUL75	7504	8	3.570
9	49	18JUL75	7504	2	1.362
9	49	18JUL75	7504	5	1.328
9	49	18JUL75	7504	10	0.641
9	49	18JUL75	7504	21	2.200
9	50	18JUL75	7504	2	0.439
9	50	18JUL75	7404	5	0.498
9	50	18JUL75	7504	10	0.487
9	50	18JUL75	7504	30	1.193
9	51	18JUL75	7504	2	0.442
9	51	18JUL75	7504	5	0.410
9	51	18JUL75	7504	10	0.464
9	51	18JUL75	7504	28	1.574
9	54	16JUL75	7502	2	19.387
9	54	16JUL75	7502	9	24.233
9	57	18JUL75	7504	1	2.301
9	57	18JUL75	7504	2	2.403
9	57	18JUL75	7504	5	2.445
9	57	18JUL75	7504	10	2.250
9	57	18JUL75	7504	17	3.912
9	58	18JUL75	7504	2	0.601
9	58	18JUL75	7504	5	0.575
9	58	18JUL75	7504	14	1.362
10	1	25AUG75	7542	2	11.736

SAGINAW BAY CHL A CRU	STA	DATE	DAY	DEPTH (M)	CHL A (UG/L)
10	1	25AUG75	7542	10	10.801
10	2	25AUG75	7542	2	15.025
10	2	25AUG75	7542	6	13.432
10	4	27AUG75	7544	2	4.332
10	4	27AUG75	7544	5	1.810
10	4	27AUG75	7544	10	2.115
10	4	27AUG75	7544	15	1.878
10	5	25AUG75	7542	2	19.733
10	5	25AUG75	7542	4	23.402
10	6	25AUG75	7542	2	12.740
10	6	25AUG75	7542	9	11.078
10	9	25AUG75	7542	2	11.978
10	9	25AUG75	7542	9	10.732
10	13	25AUG75	7542	1	12.809
10	13	25AUG75	7542	5	15.925
10	15	25AUG75	7542	1	16.479
10	15	25AUG75	7542	2	18.140
10	15	25AUG75	7542	5	16.202
10	17	25AUG75	7542	2	12.740
10	17	25AUG75	7542	7	13.432
10	18	25AUG75	7542	2	12.740
10	18	25AUG75	7542	8	13.294
10	20	25AUG75	7542	2	17.517
10	20	25AUG75	7542	5	18.417
10	22	27AUG75	7544	2	7.408
10	22	27AUG75	7544	10	7.478
10	23	27AUG75	7544	1	12.186
10	24	27AUG75	7544	2	11.424
10	24	27AUG75	7544	7	10.732
10	27	27AUG75	7544	2	7.685
10	27	27AUG75	7544	5	8.032
10	28	27AUG75	7544	2	13.501
10	28	27AUG75	7544	10	13.432
10	35	27AUG75	7544	2	8.085
10	35	27AUG75	7544	5	2.146
10	35	27AUG75	7544	13	2.631
10	37	27AUG75	7544	2	1.861
10	37	27AUG75	7544	14	3.790
10	54	25AUG75	7542	2	6.578
10	54	25AUG75	7542	9	6.162

APPENDIX 11

LISTING OF SELECTED PARAMETERS FROM SAGINAW BAY PRIMARY PRODUCTIVITY FILE

STATION	DATE	SECCHI (M)	SURFACE LIGHT (LY/DA)	DEPTH (M)	LIGHT (%)	UPTAKE (UG C/L/HR)	DEPTH (M)	LIGHT (%)	UPTAKE (UG C/L/HR)	DEPTH (M)	LIGHT (%)	UPTAKE (UG C/L/HR)
13	25SEP74	1.0	5600	1	13	21.88	2	1	3.71	5	0	0.69
15	25SEP74	1.0	4450	1	7	24.13	2	2	8.32	5	0	0.00
23	26SEP74	1.0	4517	1	13	40.93	2	2	7.52	5	0	0.45
29	26SEP74	1.0	5630	1	20	34.13	2	5	8.65	5	**	0.00
35	27SEP74	1.6	4325	1	29	20.50	2	10	18.10	5	1	3.86
57	27SEP74	3.3	4827	1	46	8.03	2	31	8.99	5	8	3.82
13	22OCT74	0.8	3683	1	**	17.98	2	**	18.31	5	**	0.43
15	23OCT74	1.3	3338	1	36	12.46	2	9	23.61	5	0	0.38
23	23OCT74	1.5	2517	1	29	11.80	2	10	16.98	5	0	2.83
29	25OCT74	2.0	3200	1	23	7.01	2	10	18.99	5	2	2.83
33	28OCT74	0.9	3580	1	26	13.84	2	10	21.61	3	4	****
38	28OCT74	3.0	3800	1	46	2.57	2	31	5.42	5	11	4.15
57	29OCT74	7.5	950	1	43	1.04	2	34	1.63	5	24	0.60
13	12NOV74	1.8	3750	1	43	4.87	2	11	10.77	5	2	1.38
15	12NOV74	1.5	4200	1	31	9.40	2	6	9.33	5	0	0.44
33	19NOV74	0.9	4250	1	9	4.34	2	2	3.56	3	1	****
35	19NOV74	2.5	3680	1	37	1.86	2	19	2.59	5	5	1.79
38	19NOV74	1.5	3750	1	19	5.99	2	9	6.19	5	0	1.62
13	17APR75	.9	6650	1	12	22.71	2	2	6.58	5	**	0.58
15	17APR75	1.6	6800	1	38	4.92	2	21	6.36	5	2	2.34
23	29APR75	1.8	7000	1	37	21.22	2	14	21.01	5	1	2.39
29	29APR75	2.3	7200	1	53	5.97	2	30	5.65	5	6	5.38
33	01MAY75	2.0	7100	1	59	6.21	2	19	13.31	3	10	****
38	01MAY75	2.5	7750	1	54	4.08	2	28	6.16	5	8	3.46
13	05MAY75	1.0	5300	1	30	47.20	2	2	6.75	5	0	3.79
15	05MAY75	0.8	6300	1	9	60.59	2	0	10.36	5	0	2.70
23	06MAY75	1.0	7300	1	**	24.93	2	**	4.39	5	**	0.44
29	06MAY75	2.4	7300	1	25	12.67	2	14	6.11	5	3	3.88
35	06MAY75	2.3	6100	1	28	18.14	2	15	8.68	5	3	3.42
57	07MAY75	3.5	7700	1	53	3.29	2	31	3.64	5	15	4.41
13	10JUN75	.9	7200	1	13	17.79	2	4	12.76	5	0	0.10
15	10JUN75	.9	7000	1	25	31.44	2	8	9.75	5	0	0.17
23	18JUN75	2.3	7350	1	70	17.36	2	43	10.34	5	7	5.20
29	18JUN75	2.3	7250	1	32	44.59	2	13	40.93	5	0	2.62
33	03JUN75	1.3	7800	1	42	20.41	2	16	24.79	3	6	****
35	03JUN75	2.5	7500	1	65	7.75	2	40	7.21	5	11	3.94
38	02JUN75	2.8	6500	1	50	3.70	2	34	5.45	5	7	1.72
57	02JUN75	6.0	7500	1	54	0.61	2	47	0.68	5	0	1.45
13	16JUL75	1.5	7000	1	45	54.52	2	15	42.43	5	0	0.60
15	16JUL75	1.1	6800	1	32	64.48	2	6	25.43	5	0	0.99
23	17JUL75	2.3	5050	1	53	18.59	2	32	18.26	5	4	3.06
29	17JUL75	2.0	5900	1	40	52.09	2	13	21.74	5	1	2.00
35	17JUL75	1.5	6533	1	37	54.52	2	14	38.46	5	2	4.76
57	18JUL75	2.5	6338	1	38	8.37	2	23	13.13	5	5	4.49
13	25AUG75	1.0	4167	1	21	85.48	2	7	24.79	5	0	2.65
15	25AUG75	1.2	4763	1	27	11607	2	10	51.49	5	0	1.91
23	27AUG75	1.2	3500	1	31	11702	2	10	58.85	5	0	1.83
29	27AUG75	1.3	5625	1	36	95.17	2	12	40.72	5	0	1.93
35	27AUG75	2.1	7300	1	65	25.96	2	34	20.45	5	9	18.62