

Chemical, Physical and Biological

Characterization of Devils Lake 1995 - 1999

Edward T. Schafer, Governor
Murray G. Sagsveen, State Health Officer

Prepared by
Scott A. Elstad
Environmental Scientist



North Dakota Department of Health
Division of Water Quality
1200 Missouri Ave.
Bismarck, N.D. 58506-5520
701.328.5210

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Introduction

Devils Lake is a hypereutrophic saline lake comprising approximately 125,000 acres (51,020 hectares). It is located in southern Ramsey and northern Benson Counties (Figure 1). The Devils Lake chain consists of several bays and East Devils Lake (Figure 2). The major inflows to Devils Lake are Big Coulee (Mauvais Coulee) and Channel A. Based on the dominant cations and anions in solution, water in Devils Lake is of the sodium-sulfate type.

The Devils Lake Basin is comprised of 2.4 million acres in northeastern North Dakota (Figure 1). The watershed is located in the northern glaciated plains and is an undulating mix of integrated and nonintegrated drainage patterns. Streams within the basin are intermittent. The two primary drainages are Channel A and Big Coulee (Mauvais Coulee). Channel A drains the Dry Lake, Edmore, Starkweather and Sweetwater areas, while Big Coulee drains Lake Irving, Lake Alice, Chain of Lakes and Mauvais Coulee.

Water levels for Devils Lake were first recorded in 1860. Since then there have been extreme fluctuations in the water level (Figure 3). Along with these water level changes there have been corresponding changes in total dissolved solids (TDS). These changes have affected the aquatic community structure. Fluctuating water levels are primarily related to the closed basin nature of the system. The absence of a surface outlet and the fact that annual evaporation frequently exceeds annual precipitation are important causes of the high TDS. Spring runoff, most of which enters the system through West Bay (naturally) and Six Mile Bay (Channel A) is the major source of water. According to the USGS, approximately 80 percent of the water contributed to Devils Lake enters through these two sources (Greg Wiche pers. comm.) Groundwater also contributes to the hydrologic budget. As a result, Devils Lake is extremely vulnerable to widely fluctuating lake levels.

Nutrients and TDS are identified as the important variables affecting water quality in Devils Lake. High concentrations of nutrients in Devils Lake cause prolific algal blooms dominated by cyanophyta (blue-green algae). These algal blooms result in impaired water-based recreation. TDS affects fish reproduction, fish growth and algal blooms.

Methods

Ten sampling sites were identified from west to east across the Devils Lake chain of lakes. The ten sites are: East Minnewaukan Flats (380251); West Minnewaukan Flats (380250); West Bay (380236); SW West Bay (384160); Six Mile Bay (380221); Creel Bay (380222); Main Bay (380233); East Bay (380234); East Bay near Black Tiger (380237); East Devils Lake (380235) and Pelican Lake (385029) (Figure 1).

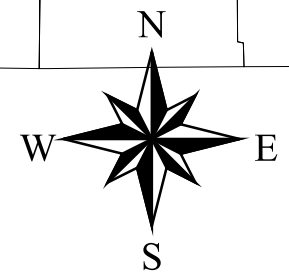
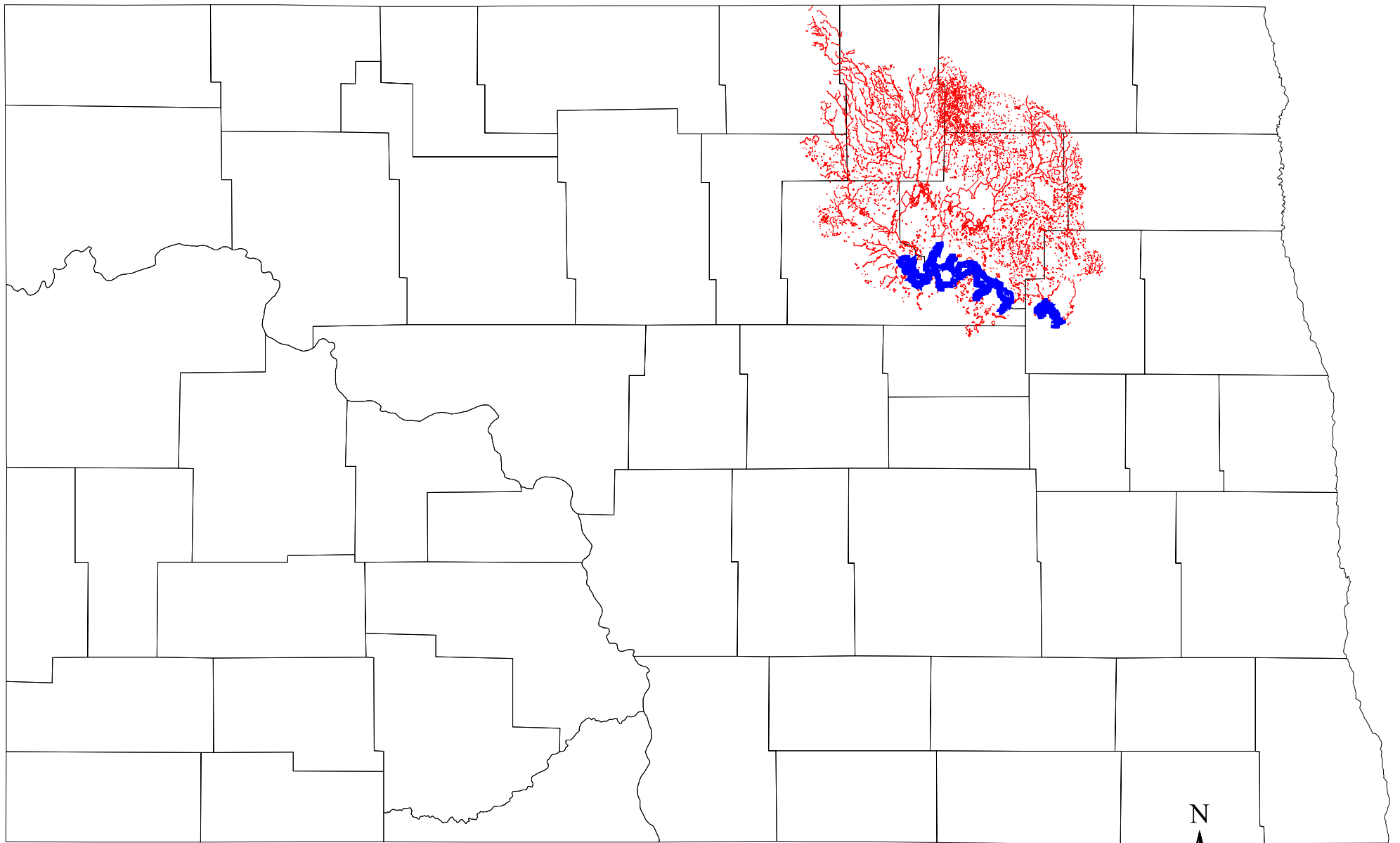
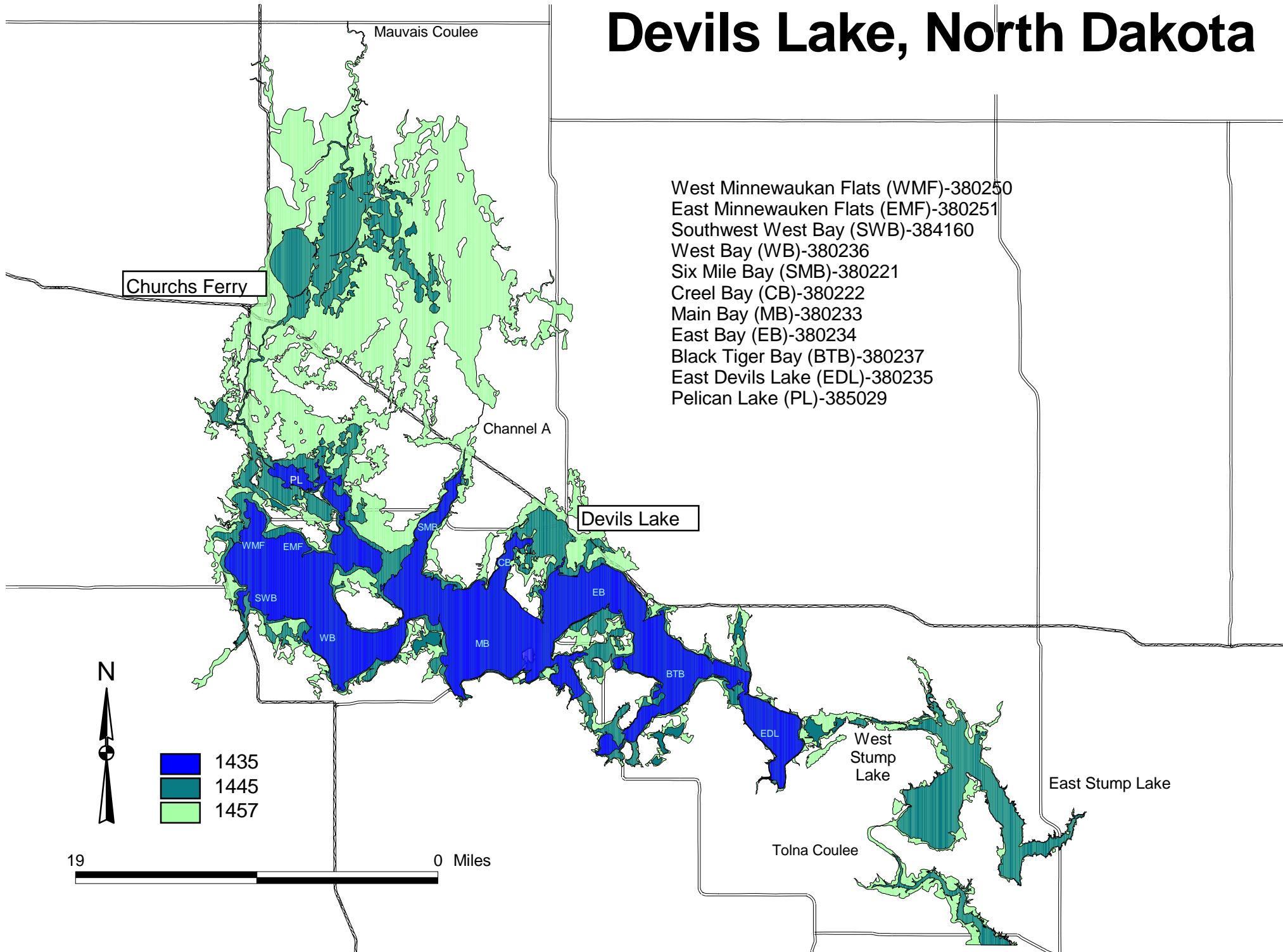


Figure 1. Devils Lake watershed.

Devils Lake, North Dakota



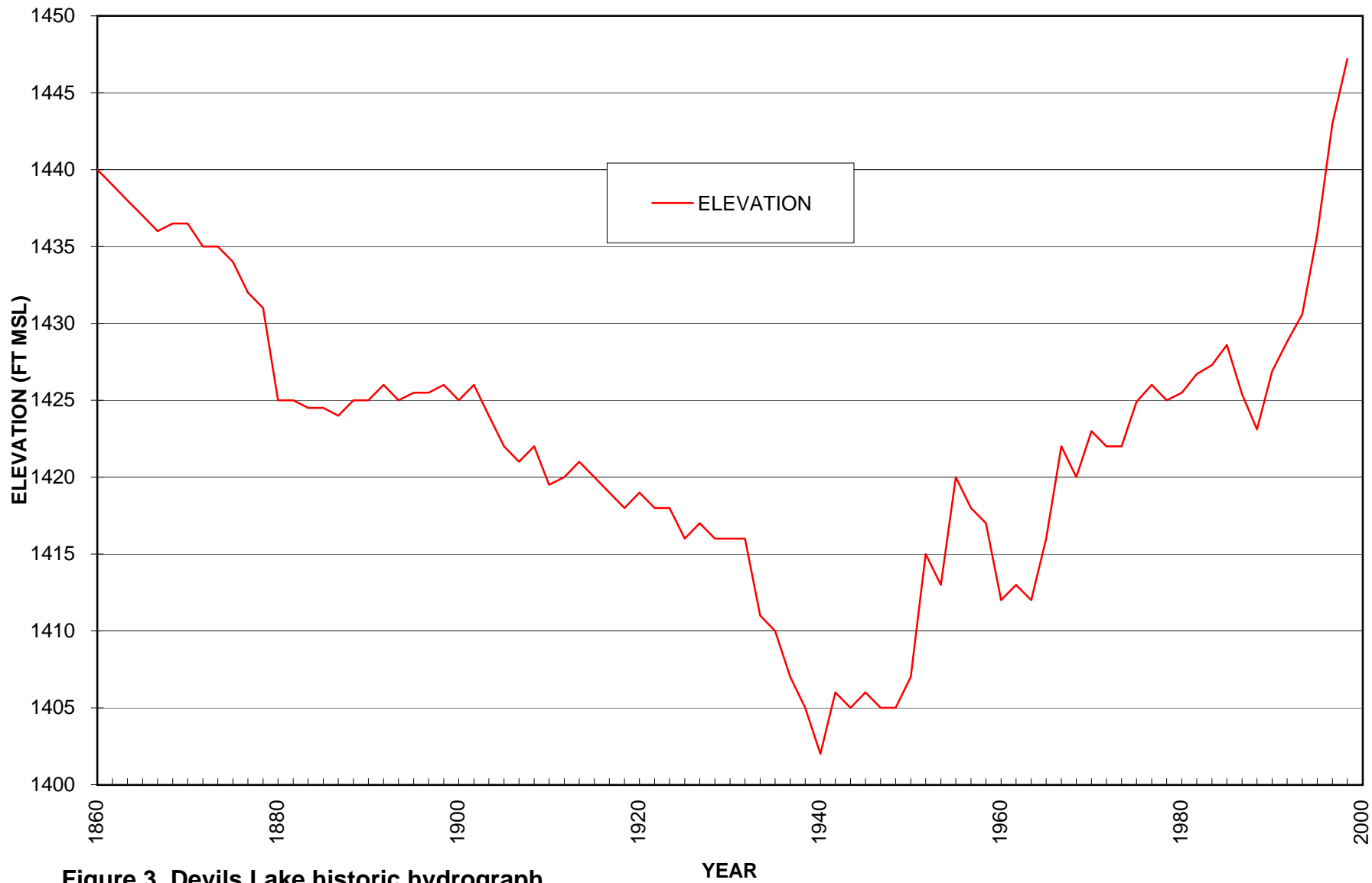


Figure 3. Devils Lake historic hydrograph.

Sampling occurred four times in 1995 and 1999 and six times each in 1996, 1997, and 1998. The first sample of each year was collected in late winter under ice-cover during February or March. The second sample was collected during the third week of May. In 1996, 1997 and 1998 the samples were collected during the first week of July, August, September and October, respectively. In 1995 and 1999 the third sample was collected in July (1995) or August (1999) while the fourth sample was collected in October.

Physical, chemical and biological variables that were sampled at each monitoring site consisted of the following: dissolved oxygen, pH, temperature and conductivity profiles; chlorophyll-a; phytoplankton; ammonia as N; total Kjeldahl nitrogen; nitrate + nitrite as N; total phosphate as P; dissolved phosphate as P; total dissolved solids; major cation/anions; and trace elements. Temperature, oxygen, pH and specific conductivity profiles were recorded at one meter intervals. Chlorophyll-a and phytoplankton were collected as a composite sample of the top 2 meters of the water column. The remaining chemical variables were analyzed from the two discrete samples collected at approximately 1.0 meters below the surface and 0.5 meters above the bottom. A mid-column sample was taken at sites greater than four meters deep. This sample was taken just below the thermocline, if present, otherwise it was taken at the center of the water column.

Water quality samples were collected, handled, and tracked in accordance with standard procedures outlined in the North Dakota State Department of Health, Division of Water Quality, Standard Operating Procedures for Field Samplers (NDS DHCL 1993). Quality assurance/quality control protocols are outlined in the Standard Operating Procedures for Field Samplers and in the Lake Water Quality Assessment (LWQA) Quality Assurance Project Plan (QAPP) (NDS DHCL 1991).

Analytical methods used for analysis of water quality samples are described in Section 9, 10, and 11 of the North Dakota State Department of Health, Division of Chemistry, Quality Assurance Manual, Volume 1. All methods used by the Division of Chemistry are approved EPA methods from 40 CFR 136 (NDS DHCL 1990). Quality control samples for the Division of Chemistry are described in the Division of Chemistry Quality Assurance Manual.

Field duplicate samples are checked to ensure sample integrity. Quality control charts are maintained by the Quality Assurance Representative (QAR) for all duplicate sample results collected. Quality control boundaries are established for all data collected by variable. Quality control boundaries are established based on the previous 100 duplicate sample results. Duplicate sample results, which exceed the mean percent difference of the previous 100 results by more than one standard deviation, will be considered out-of-control margins. If field blank results exceed the quality control boundaries, corrective action is taken. Specific procedures for data review, validation, and verification can be found in the North Dakota State Department of Health, Division of Water Quality, Standard Operating Procedures for Field Samplers (NDS DHCL 1993) and the LWQA QAPP (NDS DHCL 1991).

All field calibration procedures, including equipment calibration methods, equipment repair, and calibration documentation are described in the North Dakota State Department of Health, Division of Water Quality, Standard Operating Procedures for Field Samplers (NDS DHCL 1993). The Division of Water Quality is responsible for incorporating all data into the Department's sample information database (SID). All results are also available in the

Environmental Protection Agencies (EPA) storage and retrieval database (STORET).

Results and Discussion

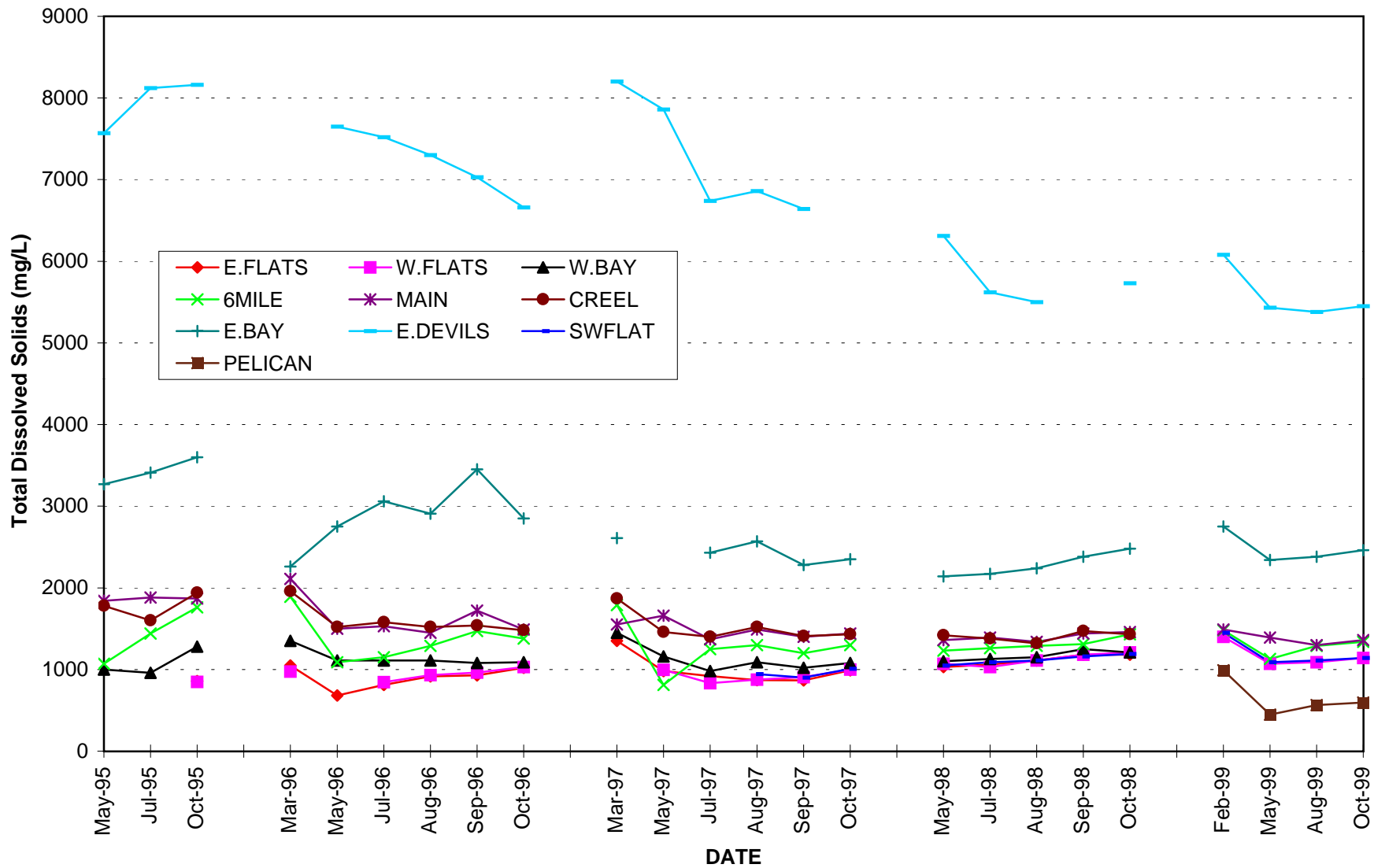
Annual evaporation and infiltration could not keep ahead of the tremendous amount of water being added to the Devils Lake basin over the past few years. Between 1993 and 1999 Devils Lake has increased in size from 50,000 surface acres to approximately 125,000 surface acres (Figure 2) and has risen 25 feet to 1447.1 (Figure 3). Flow in Channel A and Big Coulee exceeded 1,000 cfs in August 1997 (Appendix B). With record spring runoff and numerous wet summers Big Coulee has flowed all year long.

With the increase in surface runoff since 1993 TDS concentrations have declined significantly when compared to data collected in 1990-91 (Elstad 1992). However, from 1995 to 1999 TDS concentrations have remained fairly constant (Figure 4). Between 1995 and 1999 TDS concentrations in samples collected at the surface have ranged from 441 to 447 mg/L at Six Mile Bay and Pelican Lake to 8,200 mg/L at East Devils Lake. This is a increase from the western areas of the lake to the eastern areas. There are two significant changes in concentration which occur spatially in Devils Lake. TDS increases from Main Bay to East Bay and Black Tiger Bay to East Devils Lake. Specific conductance follows the same pattern as TDS concentrations. Values measured at 1 meter 702 uS/cm at Pelican Lake site to 9,600 in East Devils Lake (Figure 5).

Temporal trends in sulfate (SO_4) concentrations are similar to the pattern shown for TDS. Sulfate concentrations decreased with the initial influx of water, in 1993 and 1994, remaining fairly constant from 1995 through 1999 (Figure 6). During 1999, the only areas in Devils Lake which were less than the 450 mg/L state standard for Class IA streams were the West Minnewaukan Flats, southwest Minnewaukan Flats in May and Pelican Lake.

Chlorophyll-*a* concentrations follow a temporal pattern that is typical for midwest lakes and reservoirs. Concentrations in Devils Lake display cyclic highs and lows with East Bay and East Devils Lake having the highest concentrations in 1995, East Devils Lake having the highest concentration in 1996, West Bay and the Minnewaukan Flats displaying the highest levels in 1997 (Figure 7). In 1995 and 1996 chlorophyll-*a* concentrations were generally greatest in the eastern most areas of Devils Lake early in the year. During the summer of 1997, this began to change, with East Minnewaukan Flats, Southwest West Bay, West Bay and Main Bay all displaying consistently higher levels. This may be due to high nutrient loading in this area. During 1998 concentrations of chlorophyll remained higher in the west and southwest Minnewaukan Flats areas with East Bay and East Devils Lake increasing. The eastern areas of Devils Lake once again displayed the highest concentrations again in 1999.

Total phosphate concentrations (TPO_4) steadily increased from 1995 to 1998, decreasing in 1999 (Figure 8). Total phosphate concentrations closely follow those of chlorophyll-*a* concentrations. This could be due to the higher than normal runoff patterns and nonpoint loading from the Devils Lake watershed. TPO_4 is adsorbed on the sediments which are wash from fields during spring runoff and summer rainfall events and carried to the lake. Other possible sources are from fertilizers, manure, point source discharges and internal loading from lake sediments. As is the case with chlorophyll-*a*, TPO_4 concentrations also



**Figure 4. Devils Lake Total Dissolved Solids (TDS) concentrations (mg/L)
(samples collected at 1 meter).**

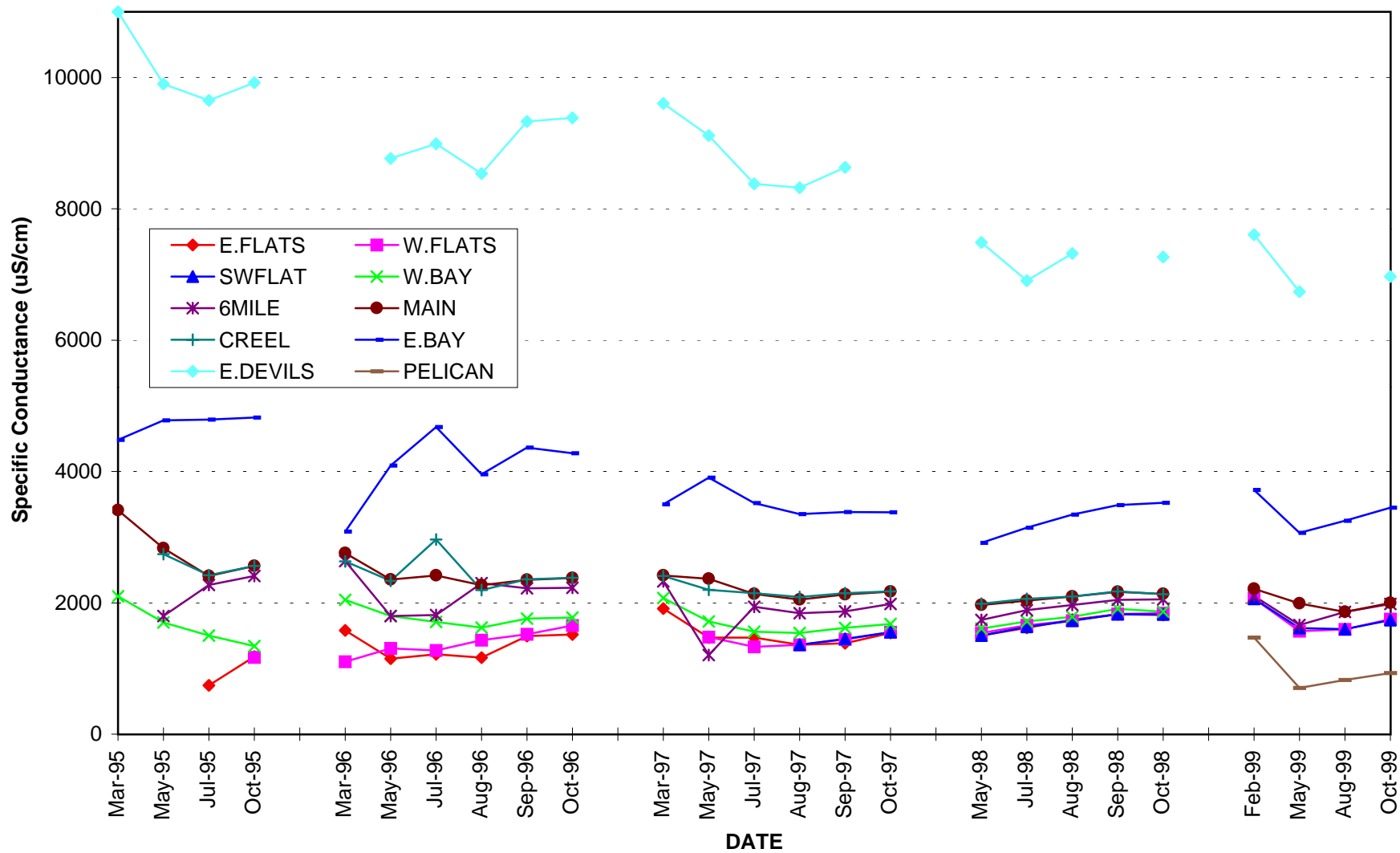


Figure 5. Devils Lake Specific Conductance Levels ($\mu\text{S}/\text{cm}$) (samples collected at 1 meter).

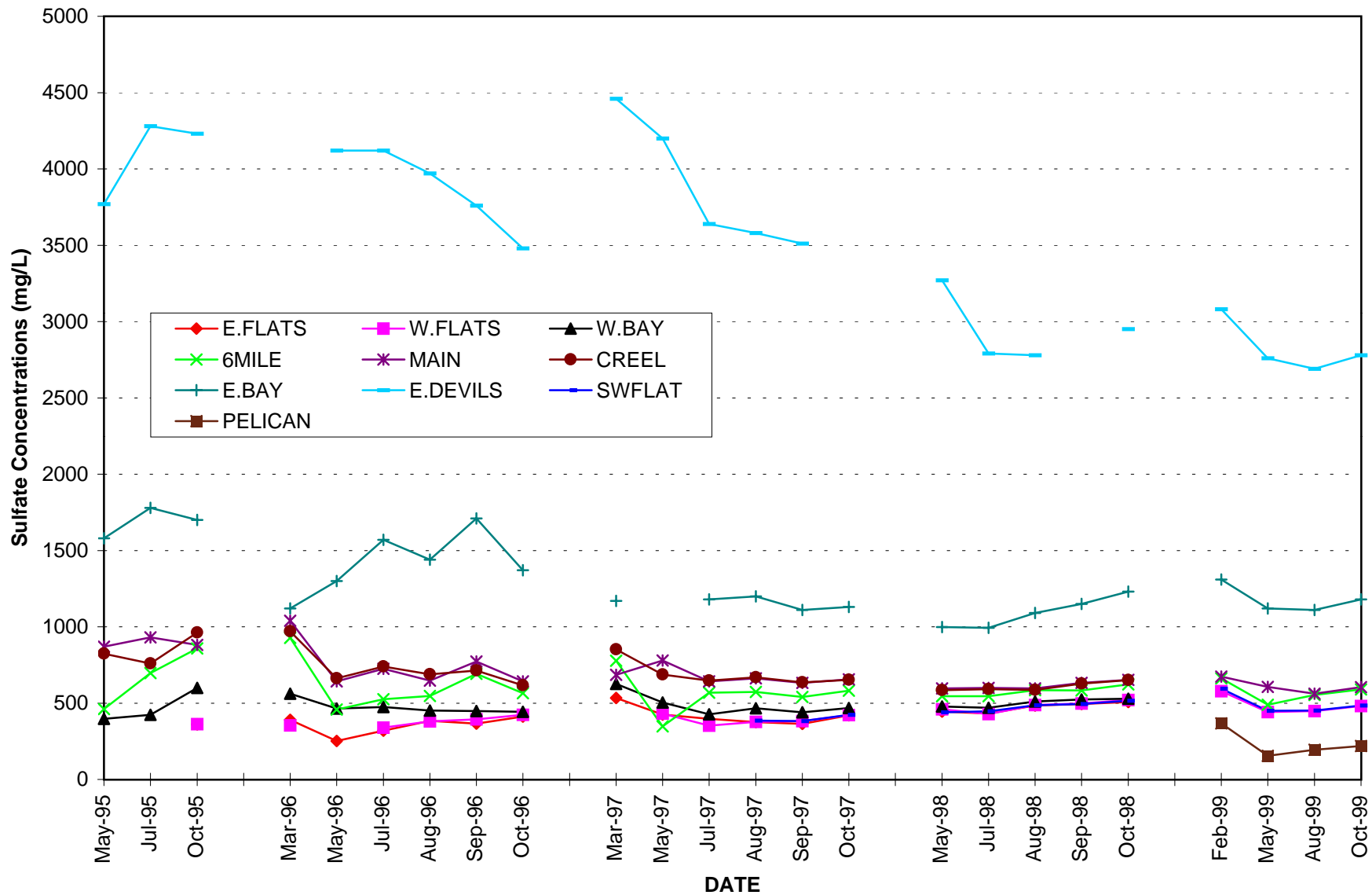


Figure 6. Devils Lake Sulfate Concentrations (mg/L)
 (samples collected at 1 meter).

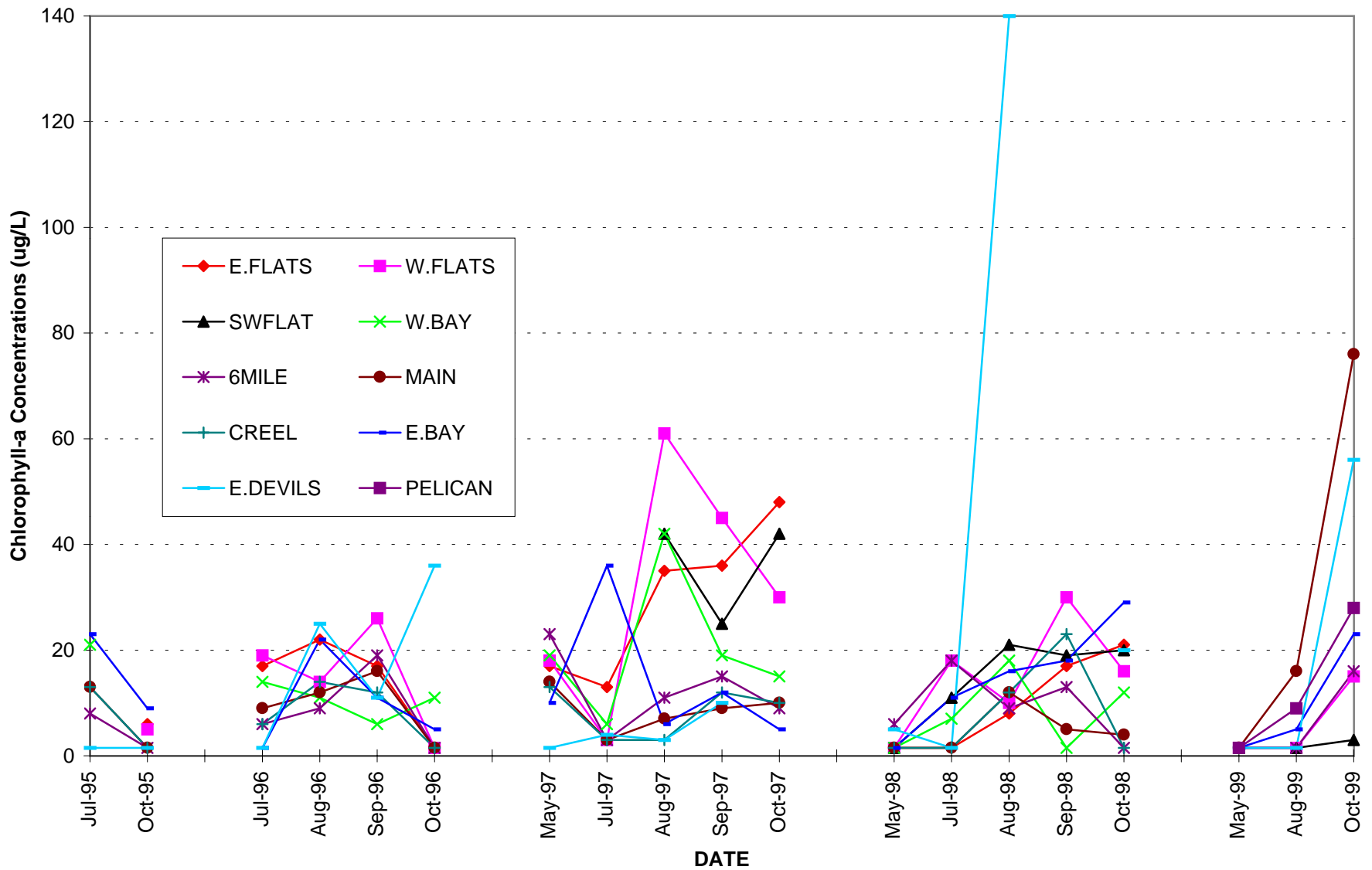


Figure 7. Devils Lake chlorophyll-a concentrations (ug/L) (0-2 meter composite sample).

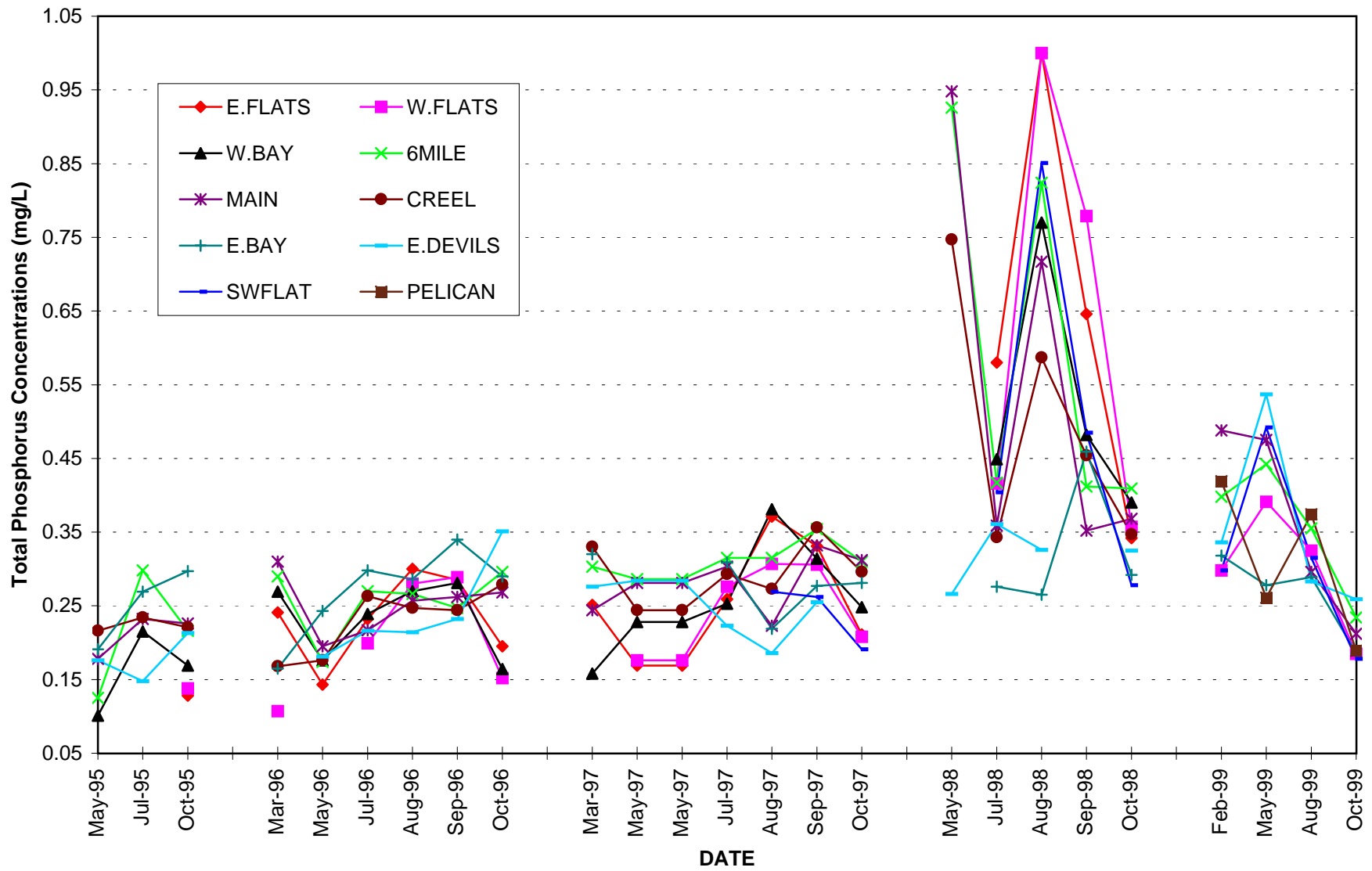


Figure 8. Devils Lake Total Phosphorus Concentrations (mg/L)
 (samples collected at 1 meter).

tend to be higher in the eastern most areas of the lake.

A comprehensive summary of the chemical and water quality data sampled and analyzed for this study can be found in Appendix A. Provisional USGS hydrographs of inflow into Devils Lake can be found in Appendix B.

Appendix C summarizes dissolved oxygen profile data for 1995 to 1999. While there have been periodic depletions in oxygen concentrations in the water column at most sites, in general, oxygen concentrations have remained at or near saturation throughout the lake. Between 1995 and 1997 oxygen depletion generally occurred in the deepest areas of the Devils Lake chain (i.e., West Bay, Six Mile Bay, Creel Bay, Main Bay, East Bay, and East Devils Lake) and was observed in late summer during stratification, or late winter, during ice cover. A weak thermocline was also present in East Devils Lake during the summer of 1997 and 1998. Equipment problems prevented the documentation of stratification (if any) during the summer of 1999.

Phytoplankton analyses were completed on all samples collected in July 1995 and May, July, August, September and October 1996 and 1997 and 1998. Bluegreen (Cyanophyta) algae dominated the phytoplankton community for both volume and density (Tables 1-16). The only period in which bluegreen algae were not dominant was May 1996. During 1996, the highest densities of phytoplankton were found in the more eastern areas of the Devils Lake chain. However, during 1997 this changed somewhat, with phytoplankton densities becoming more uniform throughout the lake. The two sites nearest the Big Coulee inlet, West Minnewaukan Flats and East Minnewaukan Flats, also had much higher densities beginning in July of 1996. Lowest densities were found in Creel Bay. Diatom (Bacillariophyta) and green algae (Chlorophyta) densities were greatest in May of 1996 and 1997. This is a natural phenomenon and is to be expected.

Table 1. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during July, 1995.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WB | 63 | 117,383 | 43,656 | 633 | 161,734 |
| SMB | 500 | 91,312 | 14,953 | 1,875 | 108,640 |
| CB | 766 | 163,390 | 9,859 | 1,000 | 175,016 |
| MB | 750 | 160,273 | 13,921 | 500 | 175,445 |
| EB | 375 | 216,675 | 563 | 125 | 217,688 |
| EDL | 2,320 | 59,781 | 656 | 812 | 63,570 |
| Mean | 796 | 134,802 | 13,935 | 824 | 150,349 |
| Percent | <1 | 90 | 9 | <1 | |

Table 2. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during May, 1996.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 226 | 4,215 | 78,838 | 6,730 | 90,291 |
| EMF | 190 | 245 | 37,739 | 2,230 | 40,403 |
| WB | 785 | 5,506 | 36,851 | 1,160 | 44,302 |
| SMB | 28,795 | 135,750 | 34,122 | 207 | 198,894 |
| CB | 1,707 | 4,000 | 83,900 | 1,482 | 90,590 |
| MB | 11,530 | 12,850 | 53,206 | 4,215 | 81,800 |
| EB | 24,835 | 7,480 | 72,826 | 3,250 | 108,396 |
| BTB | 59,633 | 18,015 | 155,383 | 4,000 | 238,530 |
| EDL | 51,144 | 4,961 | 114,773 | 750 | 211,691 |
| Mean | 19,871 | 21,447 | 74,182 | 2,669 | 118,170 |
| Percent | 17 | 18 | 63 | 2 | |

Table 3. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during July, 1996.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Ballicariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 23 | 93,444 | 86,164 | 1,182 | 190,091 |
| EMF | 238 | 231,282 | 47,509 | 1,410 | 284,481 |
| WB | 102 | 137,064 | 51,962 | 3,185 | 196,312 |
| SMB | 58 | 10,055 | 39,963 | 877 | 50,994 |
| CB | 16 | 15,526 | 11,091 | 3,375 | 30,046 |
| MB | 160 | 18,223 | 20,816 | 1,405 | 40,683 |
| EB | 135 | 26,698 | 89,345 | 8 | 116,183 |
| BTB | 150 | 21,193 | 54,828 | 313 | 76,170 |
| EDL | 0 | 3,920 | 57,281 | 0 | 61,201 |
| Mean | 98 | 61,934 | 50,998 | 1,275 | 114,304 |
| Percent | <1 | 54 | 45 | 1 | |

Table 4. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during August, 1996.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 540 | 178,715 | 24,779 | 312 | 204,457 |
| EMF | 160 | 299,900 | 7,015 | 560 | 307,942 |
| WB | 45 | 76,265 | 24,805 | 380 | 101,495 |
| SMB | 1,960 | 70,690 | 7,410 | 267 | 80,330 |
| CB | 82 | 26,730 | 835 | 65 | 27,720 |
| MB | 270 | 30,386 | 7,440 | 205 | 38,912 |
| EB | 60 | 61,145 | 1,347 | 125 | 62,738 |
| BTB | 10 | 34,720 | 191 | 0 | 34,946 |
| EDL | 1,046 | 206,237 | 216 | 45 | 207,545 |
| Mean | 264 | 109,420 | 8,226 | 218 | 118,129 |
| Percent | <1 | 93 | 7 | <1 | |

Table 5. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during September, 1996.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 2,084 | 177,580 | 1,663 | 636 | 181,913 |
| EMF | 1,577 | 140,893 | 3,372 | 108 | 146,040 |
| WB | 1,980 | 64,565 | 10,465 | 630 | 79,526 |
| SMB | 51 | 23,158 | 577 | 5 | 23,791 |
| CB | 143 | 35,410 | 85 | 323 | 35,966 |
| MB | 72 | 22,455 | 2,620 | 1,515 | 31,682 |
| EB | 20 | 29,985 | 95 | 0 | 30,101 |
| BTB | 0 | 22,625 | 88 | 0 | 22,723 |
| EDL | 2,684 | 60,843 | 1,727 | 0 | 63,256 |
| Mean | 957 | 64,168 | 2,299 | 357 | 67,782 |
| Percent | 1 | 95 | 3 | <1 | |

Table 6. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during October, 1996.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 485 | 92,085 | 727 | 563 | 94,365 |
| EMF | 1,050 | 175,595 | 1,193 | 255 | 178,092 |
| WB | 1,760 | 46,465 | 4,445 | 625 | 53,296 |
| SMB | 20 | 22,965 | 7,770 | 500 | 31,255 |
| CB | 113 | 38,348 | 6,595 | 250 | 45,007 |
| MB | 72 | 32,860 | 10,671 | 817 | 44,421 |
| EB | 17 | 42,285 | 1,438 | 188 | 43,928 |
| BTB | 45 | 33,545 | 850 | 8 | 34,448 |
| EDL | 175 | 92,445 | 7,530 | 0 | 100,150 |
| Mean | 415 | 64,065 | 4,580 | 356 | 69,417 |
| Percent | <1 | 92 | 7 | <1 | |

Table 7. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during May, 1997.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 8,569 | 122,641 | 420 | 2,853 | 134,483 |
| EMF | 21,763 | 18,057 | 1,609 | 1,286 | 42,715 |
| WB | 14,013 | 4 | 1,341 | 1,725 | 17,083 |
| SWWB | - | - | - | - | - |
| SMB | 16,024 | 42,570 | 9,137 | 2,047 | 69,778 |
| CB | 11,772 | 811 | 405 | 1,632 | 14,620 |
| MB | 19,474 | 5,093 | 405 | 1,419 | 26,391 |
| EB | 12,173 | 9,730 | 608 | 816 | 23,328 |
| EDL | 202 | 24,326 | 811 | 811 | 26,728 |
| Mean | 12,999 | 27,904 | 1,842 | 1,574 | 44,391 |
| Percent | 29 | 63 | 4 | 4 | |

Table 8. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during July, 1997.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|--------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 223 | 86,312 | 1,876 | 1,834 | 90,245 |
| EMF | 3,243 | 34,269 | 1,424 | 1,829 | 40,765 |
| SWWB | - | - | - | - | - |
| WB | 12 | 21,494 | 697 | 905 | 23,108 |
| SMB | 208 | 61,230 | 608 | 1,434 | 63,480 |
| CB | 1,059 | 9,953 | 405 | 1,627 | 13,044 |
| MB | 213 | 18,285 | 8,311 | 1,231 | 28,040 |
| EB | 208 | 30,002 | 608 | 203 | 31,021 |
| EDL | 5 | 57,187 | 0 | 609 | 57,801 |
| Mean | 646 | 39,842 | 1,741 | 1,209 | 43,438 |
| Percent | 1 | 92 | 4 | 3 | |

Table 9. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during August, 1997.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|--------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 228 | 74,648 | 1,621 | 608 | 77,105 |
| EMF | 557 | 9,419 | 929 | 3,902 | 14,807 |
| SWWB | 2,783 | 34,612 | 1,660 | 2,239 | 41,294 |
| WB | 483 | 12,325 | 1,450 | 1,696 | 15,954 |
| SMB | 250 | 55,544 | 203 | 811 | 56,808 |
| CB | 215 | 4,831 | 186 | 13,751 | 18,983 |
| MB | 4,257 | 16,648 | 0 | 1,829 | 22,734 |
| EB | 99 | 3,815 | 324 | 568 | 4,806 |
| EDL | 213 | 43,671 | 203 | 405 | 44,492 |
| Mean | 1,009 | 28,390 | 731 | 2,868 | 32,998 |
| Percent | 3 | 86 | 2 | 9 | |

Table 10. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during September, 1997.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|--------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 821 | 43,131 | 1,013 | 608 | 45,573 |
| EMF | 674 | 75,261 | 1,784 | 892 | 78,611 |
| SWWB | 378 | 72,301 | 536 | 890 | 74,105 |
| WB | 744 | 38,520 | 976 | 2,180 | 42,420 |
| SMB | 218 | 38,766 | 268 | 2,433 | 41,685 |
| CB | 445 | 75,189 | 1,221 | 1,419 | 78,274 |
| MB | 0 | 41,360 | 203 | 1,216 | 42,779 |
| EB | 0 | 68,315 | 405 | 203 | 68,923 |
| EDL | 0 | 21,084 | 81 | 405 | 21,570 |
| Mean | 364 | 52,659 | 721 | 1,138 | 54,882 |
| Percent | <1 | 96 | 1 | 2 | |

Table 11. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during October, 1997.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|--------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 1,261 | 68,289 | 0 | 1,839 | 71,389 |
| EMF | 445 | 27,406 | 1,216 | 811 | 29,879 |
| SWWB | 808 | 56,513 | 851 | 1,244 | 59,416 |
| WB | 480 | 84,800 | 953 | 2,122 | 88,355 |
| SMB | 1,424 | 4,317 | 208 | 2,042 | 7,991 |
| CB | 445 | 14,413 | 405 | 1,419 | 16,682 |
| MB | 1,236 | 4,257 | 1,014 | 1,419 | 7,926 |
| EB | 608 | 125 | 1,014 | 1,516 | 3,263 |
| EDL | - | - | - | - | - |
| Mean | 838 | 32,515 | 708 | 1,552 | 35,613 |
| Percent | 2 | 91 | 2 | 4 | |

Table 12. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during May, 1998.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|--------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 12 | 901 | 47,241 | 407 | 48,561 |
| EMF | 16 | 0 | 49,726 | 1,131 | 50,873 |
| SWWB | 27 | 109 | 34,226 | 280 | 34,642 |
| WB | 19 | 8 | 23,712 | 110 | 23,863 |
| SMB | 120 | 176 | 16,576 | 1 | 16,873 |
| CB | 27 | 2,345 | 8,299 | 8 | 10,679 |
| MB | 8 | 90 | 7,602 | 2 | 7,702 |
| EB | 24 | 475 | 17,024 | 0 | 17,523 |
| EDL | 1 | 0 | 55,126 | 8 | 55,135 |
| Mean | 2.8 | 456 | 28,837 | 216 | 29,539 |
| Percent | 0.09 | 1.5 | 98 | 0.6 | |

Table 13. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during July, 1998.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 18 | 32,725 | 53,445 | 1,116 | 87,304 |
| EMF | 240 | 19,428 | 45,453 | 2,140 | 67,261 |
| SWWB | 111 | 31,715 | 71,535 | 288 | 103,649 |
| WB | 219 | 18,988 | 33,175 | 728 | 53,110 |
| SMB | 3 | 49,706 | 11,564 | 360 | 61,633 |
| CB | 47 | 1,678 | 101,148 | 565 | 103,438 |
| MB | 7 | 2,786 | 42,311 | 421 | 45,525 |
| EB | 21 | 165,843 | 16,249 | 200 | 182,313 |
| EDL | 398 | 285,387 | 28,268 | 20 | 314,073 |
| Mean | 118 | 67,584 | 44,794 | 649 | 113,334 |
| Percent | 0.1 | 60 | 40 | 0.5 | |

Table 14. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during August, 1998.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|-----------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 21 | 132,162 | 21,308 | 366 | 153,857 |
| EMF | 46 | 100,440 | 25,081 | 562 | 126,129 |
| SWWB | 59 | 162,044 | 54,238 | 282 | 216,623 |
| WB | 102 | 129,650 | 12,049 | 245 | 142,046 |
| SMB | 50 | 47,688 | 9,753 | 1,459 | 58,950 |
| CB | 8 | 38,918 | 12,215 | 812 | 51,953 |
| MB | 36 | 18,023 | 4,866 | 210 | 23,135 |
| EB | 7 | 2,361,572 | 1,307 | 73 | 2,362,959 |
| EDL | 127 | 764,178 | 63 | 0 | 764,368 |
| Mean | 51 | 417,186 | 15,653 | 445 | 433,335 |
| Percent | <0.1 | 96 | 4 | 0.4 | |

Table 15. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during September, 1998.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 2,324 | 258,488 | 35,801 | 258 | 296,871 |
| EMF | 1,842 | 318,426 | 29,919 | 124 | 350,311 |
| SWWB | 1,231 | 285,634 | 56,068 | 7 | 342,940 |
| WB | 334 | 100,483 | 17,156 | 40 | 118,013 |
| SMB | 267 | 129,543 | 3,609 | 99 | 133,518 |
| CB | 54 | 52,761 | 38 | 79 | 52,932 |
| MB | 125 | 17,209 | 1,260 | 46 | 18,640 |
| EB | 250 | 338,784 | 1,411 | 79 | 340,524 |
| Mean | 794 | 187,666 | 18,167 | 91 | 206,709 |
| Percent | 0.4 | 91 | 9 | <0.1 | |

Table 16. Density (cells/mL) of major phytoplankton taxon at selected sites in Devils Lake during October, 1998.

| Site | Taxon Group | | | | Total |
|---------|-----------------|------------|-------------|-------------|---------|
| | Bacillariophyta | Cyanophyta | Chlorophyta | Cryptophyta | |
| WMF | 2,053 | 63,982 | 31,159 | 377 | 97,571 |
| EMF | 6,054 | 57,673 | 37,598 | 527 | 101,852 |
| SWWB | 5,075 | 138,327 | 40,914 | 506 | 184,822 |
| WB | 2,076 | 191,997 | 50,615 | 141 | 244,829 |
| SMB | 458 | 39,383 | 20,158 | 1,100 | 42,959 |
| CB | 89 | 55,054 | 9,977 | 572 | 65,692 |
| MB | 143 | 7,863 | 7,923 | 446 | 16,375 |
| EB | 160 | 703,050 | 2,518 | 41 | 705,769 |
| EDL | 99 | 148,717 | 5,435 | 0 | 154,251 |
| Mean | 1,800 | 156,227 | 22,922 | 412 | 181,362 |
| Percent | 1.0 | 86 | 12.6 | 0.2 | |

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Appendix A
Devils Lake
Water Chemistry Data

1995 - 1999 Devils Lake Water Quality Data
 CREEL BAY (380222)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 1 | 03/15/95 | 13:00 | 1 | 3450 | 414 | 499 | 3 | 0.097 | 1.82 | 0.572 | 0.268 | 0.25 | 716 | 65.8 |
| 2 | 03/15/95 | 13:00 | 7 | 3440 | 411 | 498 | 2 | 0.084 | 1.8 | 0.573 | 0.265 | 0.251 | 682 | 63.6 |
| 3 | 05/15/95 | 16:40 | 1 | 2740 | 339 | 369 | 22 | 0.011 | 1.5 | 0.306 | 0.216 | 0.157 | 552 | 58.2 |
| 4 | 05/15/95 | 16:40 | 7 | 2750 | 334 | 363 | 22 | 0.017 | 1.4 | 0.309 | 0.208 | 0.158 | 575 | 60.3 |
| 5 | 07/27/95 | 11:30 | 1 | 2420 | 313 | 335 | 23 | 0.046 | 1.46 | 0.016 | 0.234 | 0.228 | 495 | 57.6 |
| 6 | 07/27/95 | 11:30 | 9 | 2430 | 317 | 336 | 25 | 0.142 | 1.44 | 0.017 | 0.232 | 0.225 | 535 | 61.6 |
| 7 | 10/03/95 | 10:00 | 1 | 2560 | 335 | 362 | 23 | 0.01 | 1.64 | 0.02 | 0.221 | 0.2 | 608 | 68.6 |
| 8 | 10/03/95 | 10:00 | 8 | 2570 | 338 | 362 | 25 | 0.01 | 1.51 | 0.015 | 0.251 | 0.196 | 608 | 68.9 |
| 9 | 03/26/96 | 10:00 | 1 | 2600 | 363 | 398 | 22 | 0.01 | 1.67 | 0.13 | 0.139 | 0.132 | 570 | 67.7 |
| 10 | 03/26/96 | 10:00 | 4 | 2720 | 391 | 430 | 23 | 0.01 | 1.8 | 0.05 | 0.147 | 0.155 | 613 | 74.1 |
| 11 | 03/26/96 | 10:00 | 8 | 2740 | 389 | 436 | 19 | 0.01 | 1.74 | 0.05 | 0.168 | 0.187 | 629 | 75.5 |
| 12 | 05/20/96 | 16:20 | 1 | 2420 | 329 | 355 | 23 | 0.014 | 1.37 | 0.02 | 0.176 | 0.146 | 493 | 56.2 |
| 13 | 05/20/96 | 16:20 | 5 | 2410 | 329 | 355 | 23 | 0.025 | 1.3 | 0.02 | 0.18 | 0.137 | 522 | 60.2 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 1 | 134 | 500 | 72.6 | 0.157 | 0.008 | 226 | 1180 | 2430 | . | . | 13.6 | 45.7 |
| 2 | 127 | 499 | 70.1 | 0.116 | 0.008 | 228 | 1190 | 2430 | . | . | 9 | 46 |
| 3 | 98.8 | 363 | 51.6 | 0.021 | 0.002 | 178 | 823 | 1780 | . | . | 12.8 | 43.7 |
| 4 | 103 | 376 | 53.7 | 0.019 | 0.002 | 179 | 822 | 1800 | . | . | 13 | 44.7 |
| 5 | 85.3 | 311 | 45.8 | 0.086 | 0.021 | 151 | 760 | 1600 | . | . | 10.4 | 43.6 |
| 6 | 92.5 | 337 | 48.6 | 0.083 | 0.027 | 157 | 866 | 1750 | . | . | 10.8 | 44.9 |
| 7 | 106 | 390 | 54.5 | 0.074 | 0.014 | 160 | 962 | 1940 | . | . | 12 | 49.6 |
| 8 | 106 | 410 | 54 | 0.089 | 0.013 | 160 | 956 | 1960 | . | . | 12.5 | 51.4 |
| 9 | 97.4 | 319 | 51.1 | 0.061 | 0.009 | 164 | 794 | 1710 | . | . | 14.3 | 50.4 |
| 10 | 104 | 356 | 55.3 | 0.063 | 0.01 | 173 | 958 | 1960 | . | . | 15 | 56 |
| 11 | 107 | 340 | 54.9 | 0.093 | 0.017 | 177 | 970 | 1960 | . | . | 15.1 | 56.9 |
| 12 | 85.7 | 318 | 45.2 | 0.01 | 0.008 | 153 | 662 | 1520 | . | . | 11.8 | 45.3 |
| 13 | 90.3 | 336 | 47.5 | 0.021 | 0.013 | 153 | 645 | 1530 | . | . | 12.1 | 51.5 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | . | . | < 0.2 | 1.87 | < 14 | 0.4 | . | 4.3 | . | . | < 9 |
| 2 | . | . | < 0.2 | 1.6 | < 14 | 0.7 | . | 2.7 | . | . | < 9 |
| 3 | . | . | < 0.2 | 0.97 | < 14 | 1.8 | . | 0.2 | . | . | < 9 |
| 4 | . | . | < 0.2 | 0.82 | < 14 | 2 | . | 0.7 | . | . | < 9 |
| 5 | . | 334 | < 0.2 | 1.12 | < 14 | 4.7 | . | 4 | . | . | < 9 |
| 6 | . | 348 | < 0.2 | 1.12 | < 14 | 4.7 | . | 4 | . | . | < 9 |
| 7 | . | . | < 0.02 | 0.27 | 4.75 | < 0.2 | . | 3.35 | . | . | 5.61 |
| 8 | . | . | < 0.02 | < 0.2 | 5.31 | 0.32 | . | 3.61 | . | . | 6.51 |
| 9 | . | 320 | < 0.02 | 0.43 | 6.16 | 1.73 | . | 5.35 | . | . | 6.66 |
| 10 | . | 346 | < 0.02 | 0.32 | 7.36 | 1.93 | . | 4.62 | . | . | 8 |
| 11 | . | 373 | < 0.02 | 0.23 | 6.8 | 1.15 | . | 6.03 | . | . | 2.39 |
| 12 | . | . | 0.02 | 0.41 | 6.98 | 3.88 | . | 5.74 | . | . | 9.38 |
| 13 | . | . | 0.16 | 0.44 | 7.64 | 2.94 | . | 5.63 | . | . | 10.9 |

CREEL BAY (380222)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 14 | 05/20/96 | 16:20 | 9 | 2570 | 339 | 373 | 20 | 0.056 | 1.29 | 0.04 | 0.204 | 0.177 | 548 | 61.5 |
| 15 | 07/01/96 | 16:30 | 1 | 2410 | 328 | 339 | 30 | 0.01 | 2.44 | 0.02 | 0.263 | 0.195 | 489 | 58.3 |
| 16 | 07/01/96 | 16:31 | 4 | 2410 | 331 | 341 | 31 | 0.01 | 2.25 | 0.02 | 0.226 | 0.196 | 490 | 58.4 |
| 17 | 07/01/96 | 16:32 | 9 | 2400 | 327 | 356 | 21 | 0.054 | 2.59 | 0.03 | 0.259 | 0.219 | 482 | 57.5 |
| 18 | 08/05/96 | 14:30 | 1 | 2290 | 325 | 320 | 38 | 0.01 | 1.63 | 0.02 | 0.247 | 0.225 | 481 | 58.2 |
| 19 | 08/05/96 | 14:30 | 4 | 2300 | 327 | 322 | 38 | 0.01 | 1.38 | 0.02 | 0.255 | 0.224 | 491 | 59.4 |
| 20 | 08/05/96 | 14:30 | 9 | 2300 | 331 | 337 | 33 | 0.069 | 1.52 | 0.02 | 0.278 | 0.259 | 493 | 59.5 |
| 21 | 09/03/96 | 16:15 | 1 | 2310 | 337 | 316 | 47 | 0.01 | 1.7 | 0.02 | 0.244 | 0.217 | 472 | 57.8 |
| 22 | 09/03/96 | 16:15 | 4 | 2310 | 336 | 317 | 46 | 0.01 | 1.79 | 0.02 | 0.245 | 0.21 | 471 | 58 |
| 23 | 09/03/96 | 16:15 | 9 | 2310 | 332 | 338 | 33 | 0.083 | 1.74 | 0.02 | 0.296 | 0.245 | 456 | 56.1 |
| 24 | 09/30/96 | 15:00 | 1 | 2400 | 335 | 354 | 27 | 0.01 | 1.63 | 0.08 | 0.279 | 0.254 | 511 | 61.8 |
| 25 | 09/30/96 | 15:00 | 5 | 2400 | 337 | 354 | 28 | 0.01 | 1.53 | 0.08 | 0.263 | 0.242 | 477 | 58.1 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 14 | 95.9 | 358 | 50.2 | 0.021 | 0.035 | 162 | 668 | 1600 | . | . | 12.6 | 50.1 |
| 15 | 83.3 | 306 | 44.4 | 0.012 | 0.002 | 147 | 740 | 1580 | . | . | 11.7 | 47 |
| 16 | 83.6 | 306 | 44.6 | 0.007 | 0.002 | 149 | 742 | 1580 | . | . | 11.8 | 46.8 |
| 17 | 82.2 | 305 | 44 | 0.007 | 0.011 | 145 | 733 | 1560 | . | . | 11.8 | 46.1 |
| 18 | 81.6 | 301 | 43.6 | 0.007 | 0.002 | 149 | 688 | 1520 | . | . | 8.8 | 57.6 |
| 19 | 83.3 | 307 | 44.4 | 0.009 | 0.002 | 140 | 710 | 1540 | . | . | 9.57 | 57.8 |
| 20 | 83.7 | 308 | 44.5 | 0.007 | 0.058 | 148 | 714 | 1560 | . | . | 9.73 | 60.5 |
| 21 | 79.7 | 293 | 42.4 | 0.011 | 0.002 | 146 | 714 | 1540 | . | . | 10.4 | 53.6 |
| 22 | 79.2 | 290 | 42.1 | 0.024 | 0.002 | 146 | 718 | 1540 | . | . | 10.3 | 52.8 |
| 23 | 76.8 | 283 | 40.8 | 0.037 | 0.003 | 146 | 700 | 1500 | . | . | 10 | 53.2 |
| 24 | 86.6 | 322 | 47.5 | 0.088 | 0.002 | 143 | 616 | 1480 | . | . | 9.28 | 65.1 |
| 25 | 80.7 | 297 | 44 | 0.084 | 0.002 | 156 | 577 | 1420 | . | . | 11.2 | 55 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 14 | . | . | 0.02 | 0.33 | 7.75 | 22.4 | . | 5.19 | . | . | 18.4 |
| 15 | . | . | < 0.02 | < 0.2 | 5.35 | < 0.2 | . | 4.51 | . | . | 20.6 |
| 16 | . | . | < 0.02 | < 0.2 | 5.42 | < 0.2 | . | 4.53 | . | . | 22.3 |
| 17 | . | . | < 0.02 | < 0.2 | 5.14 | < 0.36 | . | 4.84 | . | . | 20.3 |
| 18 | . | . | < 0.02 | < 0.2 | 4.08 | < 0.2 | . | 0.89 | . | . | 12.3 |
| 19 | . | . | < 0.02 | < 0.2 | 4.08 | < 0.2 | . | 2.08 | . | . | 12.1 |
| 20 | . | . | < 0.02 | < 0.2 | 4.53 | < 0.2 | . | 2.48 | . | . | 17.2 |
| 21 | . | 367 | < 0.02 | < 0.2 | 4.46 | 0.63 | . | 1.53 | . | . | 23.7 |
| 22 | . | 374 | < 0.02 | 0.21 | 5.3 | < 0.2 | . | 1.54 | . | . | 30.6 |
| 23 | . | 376 | < 0.02 | 0.24 | 8.31 | 1.99 | . | 1.42 | . | . | 23.5 |
| 24 | . | . | < 0.02 | < 0.2 | 6.2 | 4.26 | . | 0.67 | . | . | 32.2 |
| 25 | . | . | < 0.02 | 0.25 | 5.52 | 1.16 | . | 2.12 | . | . | 25 |

CREEL BAY (380222)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 26 | 09/30/96 | 15:00 | 9 | 2400 | 333 | 350 | 28 | 0.01 | 1.55 | 0.08 | 0.284 | 0.238 | 492 | 59.7 |
| 27 | 03/04/97 | 15:30 | 1 | 2560 | 397 | 442 | 21 | 0.071 | 2 | 0.26 | 0.231 | 0.224 | 616 | 82.8 |
| 28 | 03/04/97 | 15:30 | 5 | 2530 | 381 | 424 | 20 | 0.096 | 1.98 | 0.25 | 0.234 | 0.222 | 506 | 69.5 |
| 29 | 03/04/97 | 15:30 | 9 | 2580 | 391 | 478 | 1 | 0.01 | 1.84 | 0.41 | 0.33 | 0.296 | 649 | 85.1 |
| 30 | 05/14/97 | 10:30 | 1 | 2170 | 299 | 320 | 22 | 0.026 | 1.65 | 0.06 | 0.244 | 0.261 | 464 | 60.9 |
| 31 | 05/14/97 | 10:30 | 4 | 2180 | 310 | 334 | 22 | 0.024 | 1.61 | 0.06 | 0.243 | 0.266 | 510 | 66.1 |
| 32 | 05/14/97 | 10:30 | 10 | 2210 | 314 | 336 | 23 | 0.04 | 1.64 | 0.07 | 0.258 | 0.254 | 511 | 66.3 |
| 33 | 07/08/97 | 11:30 | 1 | 2100 | 307 | 334 | 20 | 0.01 | 1.52 | 0.03 | 0.293 | 0.241 | 456 | 61.4 |
| 34 | 07/08/97 | 11:30 | 5 | 2100 | 313 | 342 | 20 | 0.01 | 1.43 | 0.03 | 0.327 | 0.252 | 434 | 58.4 |
| 35 | 07/08/97 | 11:30 | 10 | 2120 | 308 | 338 | 19 | 0.01 | 1.42 | 0.04 | 0.289 | 0.282 | 446 | 60.1 |
| 36 | 08/05/97 | 18:30 | 1 | 2090 | 312 | 324 | 28 | 0.042 | 1.54 | 0.02 | 0.273 | 0.253 | 541 | 72 |
| 37 | 08/05/97 | 18:30 | 5 | 2090 | 312 | 324 | 28 | 0.01 | 1.61 | 0.02 | 0.238 | 0.235 | 432 | 58.5 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 26 | 83.2 | 307 | 45.4 | 0.072 | 0.002 | 152 | 707 | 1560 | . | . | 10.6 | 59.4 |
| 27 | 99.3 | 357 | 54.2 | 0.106 | 0.013 | 150 | 749 | 1730 | . | . | 13.1 | 60.7 |
| 28 | 80.8 | 293 | 44.7 | 0.092 | 0.002 | 147 | 774 | 1640 | . | . | 13.8 | 61.6 |
| 29 | 106 | 384 | 57.5 | 0.103 | 0.027 | 151 | 851 | 1870 | . | . | 13.6 | 58.6 |
| 30 | 75.8 | 278 | 40.8 | 0.109 | 0.031 | 135 | 687 | 1460 | 121 | 1.44 | 13.3 | 48.8 |
| 31 | 83.9 | 306 | 45.3 | 0.128 | 0.036 | 137 | 690 | 1520 | 136 | 1.41 | 14.5 | 49.5 |
| 32 | 84 | 308 | 45.5 | 0.124 | 0.039 | 138 | 698 | 1530 | 123 | 1.46 | 14.1 | 52.2 |
| 33 | 73.6 | 264 | 40.3 | 0.099 | 0.002 | 129 | 647 | 1400 | 75 | < 1 | 11 | 57.9 |
| 34 | 69.9 | 250 | 37.9 | 0.13 | 0.003 | 128 | 645 | 1380 | 94 | < 1 | 10.4 | 55.5 |
| 35 | 71.9 | 258 | 39.3 | 0.128 | 0.007 | 129 | 647 | 1390 | 86 | < 1 | 11.2 | 60.3 |
| 36 | 87.7 | 317 | 49.4 | 0.031 | 0.022 | 133 | 669 | 1520 | 54 | < 1 | 10.4 | 55.1 |
| 37 | 69.5 | 247 | 37.9 | 0.037 | 0.023 | 131 | 663 | 1400 | 55 | < 1 | 10.7 | 55.7 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 26 | . | . | < 0.02 | < 0.2 | 5.23 | 6.85 | . | 1.95 | . | . | 28 |
| 27 | . | . | < 0.02 | 1.95 | 11.6 | 0.47 | . | 6.53 | . | . | 29.8 |
| 28 | . | . | < 0.02 | 1.99 | 11.5 | < 0.2 | . | 7.26 | . | . | 39.5 |
| 29 | . | . | < 0.02 | 0.36 | 8.72 | 0.44 | . | 6.42 | . | . | 38 |
| 30 | < 0.2 | 326 | < 0.02 | 0.49 | 8.32 | 0.7 | 3.47 | 3.99 | < 0.04 | < 0.03 | 3.65 |
| 31 | < 0.2 | 367 | < 0.02 | 0.57 | 8.29 | 0.7 | 3.51 | 4.15 | < 0.04 | < 0.03 | 4.37 |
| 32 | < 0.2 | 365 | < 0.02 | 0.53 | 8.33 | 0.66 | 3.52 | 4.52 | < 0.04 | < 0.03 | 3.44 |
| 33 | < 1 | 292 | < 1 | 1.46 | 8.21 | 8.88 | 3.77 | 2.44 | < 1 | < 1 | 8.94 |
| 34 | < 1 | 278 | < 1 | 1.28 | 8.06 | < 1 | 3.84 | 2.61 | < 1 | < 1 | 12.5 |
| 35 | < 1 | 311 | < 1 | 1.17 | 8.11 | 5.38 | 3.92 | 3.61 | < 1 | < 1 | 10.4 |
| 36 | < 1 | 345 | < 1 | < 1 | 6.85 | < 1 | 3.79 | 2.74 | < 1 | < 1 | 3.21 |
| 37 | < 1 | 308 | < 1 | < 1 | 6.39 | < 1 | 3.42 | 3.21 | < 1 | < 1 | 8.34 |

CREEL BAY (380222)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 38 | 08/05/97 | 18:30 | 10 | 2100 | 309 | 324 | 26 | 0.074 | 1.86 | 0.02 | 0.254 | 0.262 | 442 | 59.7 |
| 39 | 09/02/97 | 16:30 | 1 | 2100 | 313 | 317 | 32 | 0.01 | 1.83 | 0.02 | 0.356 | 0.295 | 462 | 63 |
| 40 | 09/02/97 | 16:30 | 5 | 2110 | 316 | 327 | 29 | 0.028 | 1.47 | 0.02 | 0.302 | 0.284 | 465 | 63.3 |
| 41 | 09/02/97 | 16:30 | 10 | 2110 | 316 | 329 | 28 | 0.034 | 1.45 | 0.02 | 0.309 | 0.304 | 462 | 63.1 |
| 42 | 10/07/97 | 10:40 | 1 | 2190 | 322 | 349 | 22 | 0.03 | 1.5 | 0.11 | 0.296 | 0.232 | 464 | 62.5 |
| 43 | 10/07/97 | 10:42 | 6 | 2160 | 319 | 343 | 23 | 0.01 | 1.3 | 0.11 | 0.29 | 0.221 | 469 | 63.2 |
| 44 | 10/07/97 | 10:45 | 11 | 2180 | 326 | 349 | 24 | 0.01 | 1.59 | 0.11 | 0.295 | 0.232 | 472 | 63.6 |
| 45 | 05/19/98 | 13:00 | 1 | 2150 | 338 | 376 | 18 | 0.144 | 1.87 | 0.08 | 0.747 | 0.252 | 483 | 67.7 |
| 46 | 05/19/98 | 13:05 | 5 | 2150 | 317 | 352 | 17 | 0.141 | 1.56 | 0.35 | 0.872 | 0.262 | 465 | 65.1 |
| 47 | 05/19/98 | 13:10 | 11 | 2160 | 331 | 371 | 16 | 0.157 | 1.85 | 0.09 | 0.827 | 0.259 | 472 | 66.1 |
| 48 | 07/07/98 | 12:00 | 1 | 2120 | 360 | 303 | 67 | 0.01 | 1.02 | 0.02 | 0.343 | 0.187 | 485 | 68.5 |
| 49 | 07/07/98 | 12:05 | 7 | 2150 | 362 | 328 | 56 | 0.045 | 1.14 | 0.04 | 0.398 | 0.223 | 488 | 68.6 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 38 | 71.2 | 255 | 38.9 | 0.033 | 0.041 | 133 | 667 | 1410 | 68 | < 1 | 10.9 | 58 |
| 39 | 74.1 | 266 | 40.4 | 0.047 | 0.016 | 138 | 636 | 1410 | < 50 | < 1 | 10.4 | 62.3 |
| 40 | 74.6 | 268 | 40.7 | 0.067 | 0.017 | 138 | 640 | 1420 | 53 | < 1 | 10.5 | 64 |
| 41 | 74 | 266 | 40.5 | 0.058 | 0.019 | 139 | 640 | 1410 | 102 | < 1 | 10.1 | 62.7 |
| 42 | 74.7 | 269 | 41.5 | 0.139 | 0.002 | 130 | 652 | 1430 | 157 | < 2 | 10.6 | 56.5 |
| 43 | 75.6 | 270 | 41.7 | 0.119 | 0.002 | 135 | 654 | 1430 | 84 | < 1 | 10.7 | 57.8 |
| 44 | 76 | 271 | 41.9 | 0.159 | 0.002 | 136 | 656 | 1440 | 108 | < 1 | 10.7 | 58.6 |
| 45 | 76.3 | 286 | 42.1 | 0.037 | 0.002 | 154 | 585 | 1420 | < 50 | < 1 | 10.2 | 58.9 |
| 46 | 73.4 | 271 | 40.3 | 0.035 | 0.002 | 137 | 586 | 1370 | < 50 | < 1 | 9 | 56.3 |
| 47 | 74.5 | 273 | 41.2 | 0.033 | 0.002 | 138 | 586 | 1380 | < 50 | < 1 | 9.45 | 57.9 |
| 48 | 76.3 | 265 | 40.1 | 0.016 | 0.002 | 120 | 591 | 1380 | 75 | < 1 | 9.64 | 64.9 |
| 49 | 77 | 269 | 40.6 | 0.037 | 0.014 | 121 | 598 | 1390 | 82 | < 1 | 9.97 | 65.8 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 38 | < 1 | 332 | < 1 | < 1 | 7.12 | 2.07 | 4.18 | 2.96 | < 1 | < 1 | 2.28 |
| 39 | < 1 | 295 | < 1 | < 1 | 8.48 | 2.12 | 3.7 | 2.54 | < 1 | < 1 | 16.9 |
| 40 | < 1 | 305 | < 1 | < 1 | 8.36 | 1.46 | 4.48 | 1.98 | < 1 | < 1 | 16.5 |
| 41 | < 1 | 303 | < 1 | < 1 | 8.22 | 1.03 | 3.87 | 2.23 | < 1 | < 1 | 14.3 |
| 42 | < 1 | 283 | < 1 | < 1 | 9.12 | 4.52 | 4.31 | 3.65 | < 1 | < 1 | 22.9 |
| 43 | < 1 | 281 | < 1 | < 1 | 6.94 | 7.28 | 3.49 | 3.85 | < 1 | < 1 | 25.6 |
| 44 | < 1 | 288 | < 1 | < 1 | 6.93 | 10.2 | 4.03 | 3.64 | < 1 | < 1 | 17.3 |
| 45 | < 1 | 281 | < 1 | < 1 | 4.4 | < 1 | 4.22 | 2.42 | < 1 | < 1 | 7.22 |
| 46 | < 1 | 293 | < 1 | < 1 | 2.47 | < 1 | 4 | 1.3 | < 1 | < 1 | 1.7 |
| 47 | < 1 | 297 | < 1 | < 1 | 2.32 | 1.42 | 4.31 | 1.46 | < 1 | < 1 | 7.02 |
| 48 | < 1 | 300 | < 1 | < 1 | 3.19 | < 1 | 3.94 | 1.34 | < 1 | < 1 | 3.46 |
| 49 | < 1 | 294 | < 1 | < 1 | 3.18 | < 1 | 4.14 | 1.45 | < 1 | < 1 | < 1 |

CREEL BAY (380222)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 50 | 07/07/98 | 12:10 | 11 | 2190 | 362 | 350 | 45 | 0.199 | 1.21 | 0.04 | 0.417 | 0.29 | 480 | 66.9 |
| 51 | 08/03/98 | 14:40 | 1 | 2130 | 323 | 339 | 27 | 0.023 | 1.32 | 0.02 | 0.587 | 0.275 | 447 | 62.1 |
| 52 | 08/03/98 | 14:45 | 5 | 2130 | 324 | 339 | 28 | 0.014 | 1.32 | 0.02 | 0.6 | 0.264 | 447 | 62.2 |
| 53 | 08/03/98 | 14:50 | 11 | 2120 | 330 | 344 | 29 | 0.014 | 1.33 | 0.02 | 0.583 | 0.265 | 423 | 58.9 |
| 54 | 09/08/98 | 13:10 | 1 | 2080 | 350 | 354 | 36 | 0.01 | 1.52 | 0.02 | 0.454 | 0.272 | 534 | 74.1 |
| 55 | 09/08/98 | 13:15 | 5 | 2110 | 346 | 351 | 35 | 0.01 | 1.5 | 0.02 | 0.397 | 0.297 | 516 | 71.6 |
| 56 | 09/08/98 | 13:20 | 11 | 2110 | 342 | 351 | 33 | 0.02 | 1.49 | 0.02 | 0.362 | 0.286 | 501 | 69.6 |
| 57 | 10/20/98 | 10:45 | 1 | 2090 | 346 | 372 | 25 | 0.055 | 1.22 | 0.11 | 0.347 | 0.277 | 474 | 66.4 |
| 58 | 10/20/98 | 10:50 | 6 | 2090 | 342 | 365 | 26 | 0.055 | 1.28 | 0.11 | 0.397 | 0.271 | 467 | 65 |
| 59 | 10/20/98 | 10:55 | 11 | 2100 | 341 | 364 | 26 | 0.058 | 1.15 | 0.11 | 0.339 | 0.278 | 468 | 65 |
| 60 | 02/23/99 | 16:30 | 1 | 2250 | 390 | 435 | 20 | 0.078 | 1.4 | 0.18 | 0.358 | 0.476 | 530 | 74.7 |
| 61 | 02/23/99 | 16:35 | 5 | 2250 | 384 | 426 | 21 | 0.069 | 1.36 | 0.18 | 0.345 | 0.473 | 579 | 81.8 |
| 62 | 02/23/99 | 16:40 | 11 | 2260 | 386 | 429 | 21 | 0.122 | 1.34 | 0.2 | 0.343 | 0.497 | 517 | 72.6 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 50 | 75.9 | 265 | 39.6 | 0.041 | 0.189 | 124 | 612 | 1400 | 67 | < 1 | 10.5 | 66.9 |
| 51 | 70.9 | 251 | 37.8 | 0.007 | 0.002 | 117 | 586 | 1320 | < 50 | < 1 | 10.7 | 64.3 |
| 52 | 70.8 | 251 | 37.8 | 0.01 | 0.002 | 126 | 628 | 1370 | < 50 | < 1 | 10.5 | 63.4 |
| 53 | 67.1 | 243 | 36.7 | 0.023 | 0.002 | 123 | 614 | 1340 | < 50 | < 1 | 10.5 | 63.5 |
| 54 | 84.7 | 302 | 45.9 | 0.007 | 0.052 | 124 | 627 | 1470 | < 50 | < 1 | 11.7 | 64.4 |
| 55 | 82 | 299 | 44.3 | 0.007 | 0.046 | 122 | 619 | 1450 | < 50 | < 1 | 11.5 | 64 |
| 56 | 79.4 | 273 | 43 | 0.007 | 0.042 | 124 | 630 | 1430 | < 50 | < 1 | 11.1 | 61.5 |
| 57 | 74.8 | 260 | 39.8 | 0.072 | 0.009 | 127 | 650 | 1430 | 65 | < 1 | 10.8 | 67 |
| 58 | 74.1 | 258 | 39.3 | 0.826 | 0.006 | 129 | 659 | 1430 | 73 | < 1 | 10.5 | 64.3 |
| 59 | 74.2 | 258 | 39 | 0.079 | 0.002 | 128 | 655 | 1430 | 74 | < 1 | 10.3 | 67.2 |
| 60 | 83.3 | 283 | 43.9 | 0.007 | 0.002 | 135 | 675 | 1530 | < 50 | < 1 | 11.4 | 70.1 |
| 61 | 91 | 317 | 45.3 | 0.007 | 0.002 | 139 | 682 | 1590 | < 50 | < 1 | 11.5 | 71.1 |
| 62 | 81.6 | 281 | 42.8 | 0.009 | 0.002 | 135 | 672 | 1520 | 58 | < 1 | 11.5 | 71.3 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 50 | < 1 | 279 | < 1 | < 1 | 3.42 | < 1 | 3.81 | 1.51 | < 2 | < 1 | 1.2 |
| 51 | < 1 | 289 | < 1 | < 1 | 2.32 | < 1 | 3.64 | 2.34 | < 1 | < 1 | 1.25 |
| 52 | < 1 | 280 | < 1 | < 1 | 2.51 | < 1 | 3.73 | 2.23 | < 1 | < 1 | 1.87 |
| 53 | < 1 | 280 | < 1 | < 1 | 2.19 | < 1 | 3.61 | 2.39 | < 1 | < 1 | 1.04 |
| 54 | < 1 | 286 | < 1 | < 1 | 3.3 | < 1 | 4.11 | 1.86 | < 2 | < 1 | 3.53 |
| 55 | < 1 | 283 | < 1 | < 1 | 2.73 | < 1 | 3.52 | 1.69 | < 1 | < 1 | < 1 |
| 56 | < 1 | 273 | < 1 | < 1 | 2.4 | < 1 | 3.3 | 1.71 | < 1 | < 1 | < 1 |
| 57 | < 1 | 285 | < 1 | < 1 | 2.45 | < 1 | 3.26 | 1.27 | < 1 | < 1 | 3.19 |
| 58 | < 1 | 277 | < 1 | < 1 | 3.32 | < 1 | 3.8 | < 1 | < 1 | < 1 | 3.86 |
| 59 | < 1 | 281 | < 1 | < 1 | 3.12 | < 1 | 3.66 | < 1 | < 1 | < 1 | 3.19 |
| 60 | < 1 | 308 | < 1 | < 1 | 2.51 | < 1 | 7.35 | 1.57 | < 1 | < 1 | 4.31 |
| 61 | < 1 | 281 | < 1 | < 1 | 2.63 | < 1 | 4.13 | 1.68 | < 1 | < 1 | 6.89 |
| 62 | < 1 | 294 | < 1 | < 1 | 2.67 | < 1 | 5.51 | 1.71 | < 1 | < 1 | 3.42 |

EAST BAY (380234)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 63 | 03/15/95 | 14:20 | 1 | 4480 | 454 | 502 | 26 | 0.18 | 2.25 | 0.736 | 0.253 | 0.216 | 776 | 55.3 |
| 64 | 05/15/95 | 17:35 | 1 | 4780 | 411 | 429 | 36 | 0.023 | 1.75 | 0.096 | 0.191 | 0.135 | 858 | 61.7 |
| 65 | 05/15/95 | 17:35 | 6 | 4810 | 429 | 446 | 38 | 0.048 | 1.81 | 0.12 | 0.2 | 0.139 | 876 | 60.9 |
| 66 | 07/27/95 | 10:00 | 1 | 4790 | 435 | 432 | 49 | 0.18 | 2.19 | 0.014 | 0.269 | 0.254 | 800 | 60 |
| 67 | 07/27/95 | 10:00 | 7 | 4790 | 434 | 434 | 47 | 0.385 | 2.15 | 0.01 | 0.277 | 0.265 | 868 | 63.9 |
| 68 | 10/03/95 | 15:00 | 1 | 4820 | 449 | 457 | 45 | 0.01 | 2.41 | 0.075 | 0.297 | 0.267 | 981 | 74.7 |
| 69 | 10/03/95 | 15:00 | 6 | 4890 | 462 | 468 | 47 | 0.017 | 2.26 | 0.068 | 0.287 | 0.261 | 1040 | 75 |
| 70 | 03/26/96 | 14:30 | 1 | 3140 | 397 | 438 | 23 | 0.01 | 1.89 | 0.07 | 0.172 | 0.173 | 655 | 72.8 |
| 71 | 03/26/96 | 14:30 | 4 | 5080 | 458 | 494 | 32 | 0.01 | 2.51 | 0.45 | 0.301 | 0.339 | 924 | 73.4 |
| 72 | 03/26/96 | 14:30 | 7 | 3190 | 404 | 446 | 23 | 0.01 | 1.86 | 0.09 | 0.165 | 0.196 | 688 | 72.8 |
| 73 | 05/20/96 | 13:24 | 1 | 4180 | 407 | 405 | 45 | 0.016 | 2.31 | 0.02 | 0.243 | 0.193 | 746 | 57.9 |
| 74 | 05/20/96 | 13:24 | 3 | 4190 | 400 | 397 | 45 | 0.018 | 2.41 | 0.02 | 0.232 | 0.199 | 715 | 55.6 |
| 75 | 05/20/96 | 13:24 | 7 | 4230 | 416 | 414 | 46 | 0.02 | 2.56 | 0.02 | 0.242 | 0.202 | 765 | 59.2 |
| 76 | 07/02/96 | 10:00 | 1 | 4300 | 418 | 425 | 42 | 0.03 | 2.48 | 0.03 | 0.298 | 0.261 | 753 | 60.7 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 63 | 155 | 609 | 79.4 | 0.113 | 0.009 | 330 | 1590 | 3090 | . | . | 16 | 40.5 |
| 64 | 171 | 739 | 93.7 | 0.104 | 0.013 | 379 | 1580 | 3270 | . | . | 21 | 38.1 |
| 65 | 176 | 773 | 97 | 0.104 | 0.013 | 376 | 1570 | 3310 | . | . | 21.2 | 41.3 |
| 66 | 158 | 688 | 86.7 | 0.114 | 0.017 | 377 | 1780 | 3410 | . | . | 17.6 | 39.3 |
| 67 | 172 | 742 | 92.4 | 0.159 | 0.019 | 373 | 1900 | 3610 | . | . | 18.1 | 42.8 |
| 68 | 193 | 893 | 108 | 0.175 | 0.017 | 362 | 1700 | 3600 | . | . | 24.3 | 52.4 |
| 69 | 207 | 898 | 112 | 0.175 | 0.019 | 363 | 1690 | 3620 | . | . | 24 | 53.9 |
| 70 | 115 | 420 | 61.6 | 0.057 | 0.012 | 207 | 1140 | 2260 | . | . | 16.8 | 55 |
| 71 | 180 | 787 | 98.1 | 0.077 | 0.012 | 372 | 1800 | 3590 | . | . | 25.7 | 49.7 |
| 72 | 123 | 431 | 63.5 | 0.073 | 0.017 | 205 | 1120 | 2260 | . | . | 15.4 | 57.2 |
| 73 | 146 | 626 | 77.6 | 0.022 | 0.002 | 292 | 1300 | 2750 | . | . | 23.6 | 50.9 |
| 74 | 140 | 597 | 74.1 | 0.007 | 0.002 | 294 | 1390 | 2790 | . | . | 27.1 | 42.9 |
| 75 | 150 | 647 | 80 | 0.019 | 0.002 | 299 | 1400 | 2890 | . | . | 25.7 | 44.9 |
| 76 | 146 | 631 | 80.2 | 0.027 | 0.002 | 321 | 1570 | 3060 | . | . | 17.9 | 46 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 63 | . | . | < 0.2 | 2.36 | < 14 | 0.8 | . | 0.9 | . | . | < 9 |
| 64 | . | . | < 0.2 | 1.35 | < 14 | 2.3 | . | < 0.2 | . | . | 14 |
| 65 | . | . | < 0.2 | 1.36 | < 14 | 2.7 | . | < 0.2 | . | . | < 9 |
| 66 | . | 643 | < 0.2 | 1.02 | < 14 | 3.5 | . | 5.2 | . | . | < 9 |
| 67 | . | 676 | < 0.2 | 1.35 | < 14 | 4.2 | . | 4.4 | . | . | 12 |
| 68 | . | . | < 0.02 | < 0.2 | 6.84 | < 0.2 | . | 5.63 | . | . | 1.37 |
| 69 | . | . | < 0.02 | < 0.2 | 6.39 | < 0.2 | . | 5.74 | . | . | 14.4 |
| 70 | . | 397 | < 0.02 | 0.58 | 8.42 | 1.7 | . | 6.4 | . | . | 7.68 |
| 71 | . | 707 | 0.45 | < 0.2 | 10.7 | < 0.2 | . | 9.93 | . | . | < 0.2 |
| 72 | . | 423 | < 0.02 | 1.93 | 9.31 | 2.11 | . | 4.97 | . | . | 11.6 |
| 73 | . | . | 0.35 | < 0.2 | 27.8 | 8.72 | . | 16.9 | . | . | 83.2 |
| 74 | . | . | 0.25 | < 0.2 | 27.4 | 4.5 | . | 24.2 | . | . | 44 |
| 75 | . | . | 0.18 | < 0.2 | 25.4 | 3.55 | . | 22.2 | . | . | 30.5 |
| 76 | . | . | 0.33 | < 0.2 | 25 | 23 | . | < 0.2 | . | . | 71.7 |

EAST BAY (380234)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 77 | 07/02/96 | 10:01 | 4 | 4310 | 423 | 431 | 42 | 0.012 | 2.98 | 0.03 | 0.322 | 0.254 | 883 | 70 |
| 78 | 07/02/96 | 10:02 | 8 | 4460 | 427 | 444 | 38 | 0.119 | 2.62 | 0.06 | 0.308 | 0.282 | 879 | 68.3 |
| 79 | 08/06/96 | 13:30 | 1 | 4130 | 432 | 397 | 64 | 0.01 | 2.03 | 0.02 | 0.286 | 0.295 | 750 | 61.3 |
| 80 | 08/06/96 | 13:30 | 4 | 4120 | 462 | 363 | 99 | 0.01 | 1.99 | 0.02 | 0.276 | 0.276 | 744 | 60.7 |
| 81 | 08/06/96 | 13:30 | 8 | 4130 | 462 | 358 | 101 | 0.01 | 2.01 | 0.02 | 0.285 | 0.247 | 762 | 62.9 |
| 82 | 09/04/96 | 10:15 | 1 | 4280 | 439 | 393 | 70 | 0.03 | 2.52 | 0.02 | 0.34 | 0.233 | 940 | 74.7 |
| 83 | 09/04/96 | 10:15 | 4 | 4260 | 439 | 391 | 71 | 0.01 | 2.59 | 0.02 | 0.276 | 0.231 | 939 | 74.5 |
| 84 | 09/04/96 | 10:15 | 8 | 4260 | 444 | 390 | 75 | 0.025 | 2.96 | 0.02 | 0.343 | 0.232 | 940 | 74.6 |
| 85 | 10/02/96 | 13:00 | 1 | 4320 | 436 | 419 | 56 | 0.01 | 2.21 | 0.04 | 0.29 | 0.232 | 763 | 63.3 |
| 86 | 10/02/96 | 13:00 | 4 | 4320 | 443 | 425 | 57 | 0.01 | 2.28 | 0.03 | 0.286 | 0.24 | 738 | 61.4 |
| 87 | 10/02/96 | 13:00 | 8 | 4350 | 446 | 429 | 57 | 0.051 | 2.28 | 0.03 | 0.294 | 0.23 | 739 | 61.8 |
| 88 | 03/05/97 | 9:00 | 1 | 3670 | 472 | 517 | 29 | 0.037 | 2.31 | 0.33 | 0.32 | 0.291 | 842 | 95 |
| 89 | 03/05/97 | 9:00 | 5 | 4540 | 455 | 480 | 37 | 0.01 | 2.28 | 0.33 | 0.323 | 0.29 | 748 | 64 |
| 90 | 03/05/97 | 9:00 | 8 | 4560 | 465 | 497 | 35 | 0.01 | 2.34 | 0.35 | 0.365 | 0.344 | 940 | 78.2 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 77 | 172 | 749 | 96.8 | 0.027 | 0.002 | 317 | 1630 | 3290 | . | . | 17.3 | 44.3 |
| 78 | 172 | 765 | 96.7 | 0.061 | 0.002 | 336 | 1770 | 3470 | . | . | 25 | 45.4 |
| 79 | 145 | 626 | 78.9 | 0.067 | 0.002 | 301 | 1440 | 2910 | . | . | 18.9 | 49.4 |
| 80 | 144 | 611 | 78.2 | 0.065 | 0.002 | 267 | 1590 | 3030 | . | . | 19.6 | 45.9 |
| 81 | 147 | 637 | 80.2 | 0.258 | 0.012 | 299 | 1670 | 3170 | . | . | 19.9 | 50.3 |
| 82 | 183 | 789 | 101 | 0.094 | 0.002 | 330 | 1710 | 3450 | . | . | 21.9 | 46 |
| 83 | 183 | 790 | 101 | 0.112 | 0.002 | 328 | 1730 | 3470 | . | . | 22.1 | 45.8 |
| 84 | 183 | 785 | 101 | 0.093 | 0.002 | 329 | 1700 | 3440 | . | . | 22.4 | 46.7 |
| 85 | 147 | 638 | 81.9 | 0.253 | 0.004 | 289 | 1370 | 2850 | . | . | 18.1 | 72.9 |
| 86 | 142 | 618 | 79.1 | 0.291 | 0.005 | 312 | 1390 | 2870 | . | . | 17 | 56 |
| 87 | 142 | 620 | 78.7 | 0.292 | 0.011 | 304 | 952 | 2430 | . | . | 22.2 | 50.3 |
| 88 | 147 | 583 | 81.8 | 0.091 | 0.012 | 251 | 1170 | 2610 | . | . | 27.4 | 62.1 |
| 89 | 143 | 648 | 81 | 0.091 | 0.002 | 344 | 1590 | 3150 | . | . | 33.8 | 49 |
| 90 | 181 | 796 | 101 | 0.094 | 0.014 | 343 | 1610 | 3390 | . | . | 32.7 | 48.1 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 77 | . | . | < 0.02 | < 0.2 | 6.89 | < 0.2 | . | < 0.2 | . | . | 24.1 |
| 78 | . | . | < 0.02 | < 0.2 | 7.39 | < 0.2 | . | 13.3 | . | . | 23.9 |
| 79 | . | . | < 0.02 | < 0.2 | 15.7 | 2.46 | . | 7.24 | . | . | 141 |
| 80 | . | . | < 0.02 | < 0.2 | 10.2 | < 0.2 | . | 6.94 | . | . | 55.8 |
| 81 | . | . | < 0.02 | < 0.2 | 7.87 | < 0.2 | . | 6.5 | . | . | 33.2 |
| 82 | . | 644 | < 0.02 | < 0.2 | 4.83 | < 0.2 | . | 4.83 | . | . | 13.8 |
| 83 | . | 624 | < 0.02 | < 0.2 | 4.63 | < 0.2 | . | 4.62 | . | . | 9.62 |
| 84 | . | 621 | < 0.02 | < 0.2 | 5.56 | < 0.2 | . | 4.87 | . | . | 14.5 |
| 85 | . | . | < 0.02 | < 0.2 | 3.28 | 151 | . | < 0.2 | . | . | 59.2 |
| 86 | . | . | < 0.02 | < 0.2 | 2.29 | 2.08 | . | < 0.2 | . | . | 16.3 |
| 87 | . | . | < 0.02 | < 0.2 | 4.31 | < 0.2 | . | 3.85 | . | . | 23.6 |
| 88 | . | . | < 0.02 | < 0.2 | 5.97 | < 0.2 | . | 22.9 | . | . | 38.7 |
| 89 | . | . | < 0.02 | < 0.2 | 8.75 | < 0.2 | . | 27.1 | . | . | 40.9 |
| 90 | . | . | < 0.02 | < 0.2 | 7.78 | < 0.2 | . | 26.6 | . | . | 71.4 |

EAST BAY (380234)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 91 | 05/15/97 | 11:00 | 1 | 3860 | 388 | 397 | 38 | 0.01 | 2.16 | 0.02 | 0.257 | 0.216 | 734 | 66.6 |
| 92 | 05/15/97 | 11:00 | 4 | 3850 | 421 | 427 | 43 | 0.01 | 2.11 | 0.02 | 0.262 | 0.291 | 735 | 66.8 |
| 93 | 05/15/97 | 11:00 | 9 | 3860 | 393 | 399 | 40 | 0.024 | 2.27 | 0.02 | 0.271 | 0.293 | 740 | 67.1 |
| 94 | 07/08/97 | 13:30 | 1 | 3410 | 388 | 397 | 38 | 0.01 | 1.95 | 0.02 | 0.309 | 0.261 | 680 | 67.8 |
| 95 | 07/08/97 | 13:30 | 4 | 3450 | 398 | 417 | 34 | 0.041 | 1.95 | 0.03 | 0.286 | 0.261 | 655 | 64.5 |
| 96 | 07/08/97 | 13:30 | 9 | 3460 | 393 | 415 | 32 | 0.01 | 1.91 | 0.04 | 0.294 | 0.278 | 650 | 64 |
| 97 | 08/05/97 | 11:45 | 1 | 3350 | 391 | 378 | 49 | 0.01 | 2.03 | 0.02 | 0.219 | 0.234 | 752 | 75.1 |
| 98 | 08/05/97 | 11:45 | 5 | 3340 | 385 | 372 | 48 | 0.01 | 2.07 | 0.02 | 0.217 | 0.223 | 766 | 76.1 |
| 99 | 08/05/97 | 11:45 | 9 | 3380 | 390 | 376 | 49 | 0.083 | 2.22 | 0.02 | 0.234 | 0.231 | 775 | 76.4 |
| 100 | 09/03/97 | 11:45 | 1 | 3290 | 393 | 378 | 50 | 0.029 | 1.98 | 0.02 | 0.277 | 0.254 | 612 | 63.7 |
| 101 | 09/03/97 | 11:45 | 5 | 3320 | 389 | 371 | 51 | 0.01 | 2 | 0.02 | 0.64 | 0.261 | 618 | 64.4 |
| 102 | 09/03/97 | 11:45 | 9 | 3310 | 388 | 372 | 50 | 0.01 | 1.89 | 0.02 | 0.268 | 0.263 | 617 | 64.2 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 91 | 138 | 598 | 76.9 | 0.118 | 0.002 | 292 | 1500 | 2910 | 105 | < 1 | 19.7 | 50.7 |
| 92 | 138 | 590 | 76.9 | 0.125 | 0.002 | 289 | 1480 | 2900 | 110 | 11.2 | 25 | 49.1 |
| 93 | 139 | 596 | 77.3 | 0.132 | 0.002 | 295 | 1490 | 2900 | 144 | 3.52 | 23.5 | 46.6 |
| 94 | 124 | 504 | 68 | 0.126 | 0.002 | 248 | 1180 | 2430 | 88 | < 1 | 18.4 | 56.1 |
| 95 | 120 | 490 | 66.2 | 0.13 | 0.002 | 256 | 1220 | 2460 | 98 | < 1 | 17.9 | 54.3 |
| 96 | 119 | 487 | 65.4 | 0.106 | 0.002 | 255 | 1210 | 2440 | 80 | < 1 | 17.9 | 54.7 |
| 97 | 137 | 570 | 78.2 | 0.045 | 0.015 | 278 | 1200 | 2570 | 60 | < 1 | 15 | 51.2 |
| 98 | 140 | 583 | 79.5 | 0.049 | 0.015 | 249 | 1150 | 2510 | 74 | 1.2 | 15.7 | 54 |
| 99 | 142 | 602 | 81 | 0.035 | 0.024 | 260 | 1200 | 2600 | 59 | < 1 | 15.8 | 55.3 |
| 100 | 110 | 448 | 60.4 | 0.12 | 0.011 | 252 | 1110 | 2280 | 84 | < 1 | 15.5 | 60.5 |
| 101 | 111 | 456 | 61.3 | 0.114 | 0.011 | 244 | 1120 | 2290 | 76 | < 1 | 15.3 | 57.7 |
| 102 | 111 | 457 | 61.5 | 0.116 | 0.012 | 242 | 1110 | 2280 | 100 | < 1 | 14.6 | 57.7 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 91 | < 1 | 616 | < 1 | < 1 | 14.1 | < 1 | 3.39 | 7.28 | < 1 | < 1 | < 1 |
| 92 | < 1 | 604 | < 1 | < 1 | 17.7 | < 1 | 4.82 | 12.2 | 3.3 | < 1 | < 1 |
| 93 | < 1 | 605 | < 1 | < 1 | 18.2 | < 1 | 4.31 | 10.9 | < 1 | < 1 | < 1 |
| 94 | < 1 | 540 | < 1 | 3.3 | 14.8 | < 1 | 5.22 | 6.12 | < 1 | < 1 | 13.1 |
| 95 | < 1 | 540 | < 1 | 1.04 | 16.5 | < 1 | 3.89 | 5.67 | < 1 | < 1 | 14.8 |
| 96 | < 1 | 557 | < 1 | < 1 | 13.8 | < 1 | 4.16 | 6.14 | < 1 | < 1 | 12.7 |
| 97 | < 1 | 484 | < 1 | < 1 | 10.3 | < 1 | 3.27 | 5.68 | < 1 | < 1 | 3.16 |
| 98 | < 1 | 476 | < 1 | 1.14 | 10.9 | < 1 | 3.53 | 4.96 | < 1 | < 1 | 4.15 |
| 99 | < 1 | 505 | < 1 | < 1 | 10.6 | < 1 | 3.46 | 5.38 | < 1 | < 1 | 5.92 |
| 100 | < 1 | 452 | < 1 | 1.4 | 12.3 | 1.68 | 3.98 | 2.53 | < 1 | < 1 | 14.7 |
| 101 | < 1 | 456 | < 1 | 1.84 | 12 | 1.21 | 3.9 | 2.71 | < 1 | < 1 | 14.6 |
| 102 | < 1 | 481 | < 1 | < 1 | 11.4 | 1.34 | 3.9 | < 1 | < 1 | < 1 | 15.1 |

EAST BAY (380234)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 103 | 10/08/97 | 8:30 | 1 | 3330 | 398 | 399 | 43 | 0.027 | 1.62 | 0.1 | 0.281 | 0.216 | 646 | 67.3 |
| 104 | 10/08/97 | 8:30 | 5 | 3360 | 398 | 399 | 43 | 0.01 | 1.78 | 0.11 | 0.283 | 0.216 | 651 | 67.9 |
| 105 | 10/08/97 | 8:30 | 9 | 3360 | 395 | 395 | 43 | 0.01 | 1.67 | 0.1 | 0.264 | 0.208 | 658 | 68.9 |
| 106 | 05/20/98 | 9:00 | 1 | 3150 | 392 | 409 | 34 | 0.099 | . | . | . | 0.223 | 615 | 68.2 |
| 107 | 05/20/98 | 9:05 | 4 | 3160 | 379 | 398 | 32 | 0.106 | . | . | . | 0.237 | 610 | 67.9 |
| 108 | 05/20/98 | 9:10 | 9 | 3100 | 401 | 419 | 35 | 0.129 | . | . | . | 0.224 | 602 | 66.5 |
| 109 | 07/07/98 | 9:00 | 1 | 3280 | 432 | 360 | 82 | 0.01 | 1.59 | 0.02 | 0.276 | 0.179 | 640 | 69.9 |
| 110 | 07/07/98 | 9:05 | 5 | 3270 | 422 | 351 | 81 | 0.01 | 1.52 | 0.02 | 0.36 | 0.169 | 635 | 69.5 |
| 111 | 07/07/98 | 9:10 | 10 | 3270 | 431 | 357 | 83 | 0.01 | 1.96 | 0.02 | 0.376 | 0.163 | 636 | 69.9 |
| 112 | 08/04/98 | 12:45 | 1 | 3400 | 402 | 401 | 44 | 0.064 | 1.78 | 0.02 | 0.265 | 0.3 | 605 | 64.1 |
| 113 | 08/04/98 | 12:50 | 5 | 3410 | 400 | 407 | 40 | 0.142 | 1.77 | 0.02 | 0.292 | 0.302 | 710 | 74.9 |
| 114 | 08/04/98 | 12:55 | 10 | 3410 | 406 | 414 | 40 | 0.164 | 1.79 | 0.02 | 0.32 | 0.301 | 581 | 61.2 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 103 | 116 | 473 | 64.5 | 0.922 | 0.014 | 254 | 1130 | 2350 | 392 | < 1 | 16.7 | 68.5 |
| 104 | 117 | 477 | 65.1 | 0.819 | 0.013 | 257 | 1150 | 2380 | 337 | < 1 | 16.8 | 68.4 |
| 105 | 118 | 472 | 65.7 | 0.902 | 0.014 | 255 | 1140 | 2360 | 404 | < 1 | 16.8 | 69.9 |
| 106 | 108 | 460 | 60.7 | 0.075 | 0.002 | 207 | 999 | 2140 | < 50 | < 1 | 13.9 | 55.2 |
| 107 | 107 | 453 | 60.4 | 0.154 | 0.002 | 208 | 994 | 2120 | 56 | < 1 | 14 | 54.3 |
| 108 | 106 | 446 | 59 | 0.118 | 0.002 | 210 | 1020 | 2150 | 57 | < 1 | 13.8 | 53.3 |
| 109 | 113 | 461 | 60.9 | 0.055 | 0.004 | 210 | 993 | 2170 | 79 | < 1 | 14.7 | 65.4 |
| 110 | 112 | 450 | 59.7 | 0.047 | 0.003 | 213 | 1010 | 2170 | 60 | < 1 | 14.8 | 62.1 |
| 111 | 112 | 455 | 60.5 | 0.045 | 0.004 | 219 | 1040 | 2220 | 91 | < 1 | 14.7 | 60.5 |
| 112 | 108 | 445 | 58.9 | 0.035 | 0.037 | 232 | 1090 | 2240 | < 50 | < 1 | 16.4 | 64.7 |
| 113 | 127 | 534 | 70.3 | 0.016 | 0.042 | 225 | 1060 | 2330 | < 50 | < 1 | 16.7 | 65.2 |
| 114 | 104 | 426 | 56.4 | 0.017 | 0.054 | 230 | 1070 | 2190 | < 50 | < 1 | 16.9 | 66.8 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 103 | < 1 | 483 | < 1 | 1.28 | 11.7 | 6.32 | 4.31 | 6.01 | < 1 | < 1 | 18 |
| 104 | < 1 | 471 | < 1 | 1.19 | 11 | 6.49 | 4.32 | 6.18 | < 1 | < 1 | 23.3 |
| 105 | < 1 | 458 | < 1 | 1.28 | 11 | 7.15 | 4.44 | 6.16 | < 1 | < 1 | 31 |
| 106 | < 1 | 461 | < 1 | < 1 | 5.89 | < 1 | 3.63 | 2.08 | < 1 | < 1 | < 1 |
| 107 | < 1 | 475 | < 1 | < 1 | 2.44 | < 1 | 3.7 | 2.02 | < 1 | < 1 | < 1 |
| 108 | < 1 | 479 | < 1 | < 1 | 2.32 | < 1 | 3.47 | 1.6 | < 1 | < 1 | < 1 |
| 109 | < 1 | 467 | < 1 | < 1 | 5.17 | < 1 | 4.16 | 2.19 | < 1 | < 1 | 1.41 |
| 110 | < 1 | 463 | < 1 | < 1 | 6.2 | < 1 | 3.84 | 2.23 | < 1 | < 1 | < 1 |
| 111 | < 1 | 466 | < 1 | < 1 | 6.05 | < 1 | 4.2 | 2.24 | < 1 | < 1 | 1.11 |
| 112 | < 1 | 368 | < 1 | < 1 | 3.47 | < 1 | 3.93 | 2.88 | < 1 | < 1 | 2.76 |
| 113 | < 1 | 395 | < 1 | < 1 | 4.03 | < 1 | 3.82 | 3.39 | < 1 | < 1 | 1.5 |
| 114 | < 1 | 428 | < 1 | < 1 | 4.5 | < 1 | 3.82 | 3.6 | < 1 | < 1 | 3.93 |

EAST BAY (380234)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 115 | 09/10/98 | 8:10 | 1 | 3390 | 422 | 412 | 51 | 0.01 | 2.23 | 0.02 | 0.459 | 0.29 | 648 | 68.3 |
| 116 | 09/10/98 | 8:15 | 5 | 3390 | 426 | 416 | 51 | 0.01 | 2.21 | 0.02 | 0.454 | 0.256 | 670 | 70.4 |
| 117 | 09/10/98 | 8:20 | 9 | 3390 | 413 | 404 | 49 | 0.01 | 2.08 | 0.02 | 0.44 | 0.253 | 670 | 70.6 |
| 118 | 10/20/98 | 11:45 | 1 | 3480 | 415 | 405 | 50 | 0.01 | 1.78 | 0.02 | 0.292 | 0.212 | 672 | 69.5 |
| 119 | 10/20/98 | 11:50 | 5 | 3470 | 431 | 420 | 52 | 0.01 | 1.6 | 0.02 | 0.27 | 0.366 | 671 | 69.3 |
| 120 | 10/20/98 | 11:55 | 10 | 3490 | 420 | 409 | 51 | 0.01 | 1.58 | 0.02 | 0.273 | 0.246 | 698 | 71.9 |
| 121 | 02/24/99 | 11:45 | 1 | 3720 | 473 | 484 | 46 | 0.057 | 1.97 | 0.13 | 0.318 | 0.413 | 794 | 82.3 |
| 122 | 02/24/99 | 11:50 | 5 | 3740 | 480 | 486 | 49 | 0.087 | 1.91 | 0.08 | 0.39 | 0.495 | 787 | 81.1 |
| 123 | 02/24/99 | 11:55 | 9 | 3820 | 468 | 480 | 45 | 0.139 | 2.03 | 0.07 | 0.367 | 0.492 | 793 | 80.1 |
| 124 | 05/26/99 | 14:00 | 1 | 3100 | 406 | 420 | 37 | 0.174 | 1.89 | 0.05 | 0.278 | 0.244 | 667 | 72.4 |
| 125 | 05/26/99 | 14:05 | 6 | 3140 | 404 | 420 | 36 | 0.168 | 1.64 | 0.05 | 0.286 | 0.255 | 648 | 69.9 |
| 126 | 05/26/99 | 14:10 | 11 | 3190 | 408 | 421 | 38 | 0.107 | 1.59 | 0.05 | 0.301 | 0.28 | 668 | 71.4 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 115 | 116 | 487 | 64.1 | 0.032 | 0.054 | 238 | 1150 | 2380 | 50 | < 1 | 16.7 | 65.4 |
| 116 | 120 | 486 | 66 | 0.034 | 0.053 | 234 | 1150 | 2380 | 50 | < 1 | 16.9 | 66 |
| 117 | 120 | 481 | 66.4 | 0.031 | 0.054 | 235 | 1140 | 2360 | 55 | < 1 | 16.8 | 66.4 |
| 118 | 121 | 492 | 64.4 | 0.138 | 0.022 | 254 | 1230 | 2480 | 111 | < 1 | 16.4 | 70.1 |
| 119 | 121 | 486 | 64.5 | 0.127 | 0.023 | 256 | 1240 | 2500 | 105 | < 1 | 16.3 | 69 |
| 120 | 126 | 509 | 67.4 | 0.159 | 0.026 | 252 | 1210 | 2490 | 118 | < 1 | 17.5 | 71.2 |
| 121 | 143 | 581 | 71.7 | 0.007 | 0.002 | 277 | 1310 | 2750 | 64 | < 1 | 18.2 | 69.5 |
| 122 | 142 | 576 | 76.2 | 0.007 | 0.002 | 274 | 1290 | 2730 | 51 | < 1 | 18.8 | 70.8 |
| 123 | 144 | 596 | 76.8 | 0.009 | 0.009 | 283 | 1330 | 2790 | 51 | < 1 | 19.2 | 69.5 |
| 124 | 118 | 469 | 64.4 | 0.007 | 0.011 | 249 | 1120 | 2340 | 75 | < 1 | 16.3 | 59.5 |
| 125 | 115 | 459 | 61.7 | 0.007 | 0.011 | 236 | 1070 | 2260 | 50 | < 1 | 15.9 | 57.6 |
| 126 | 119 | 476 | 64.6 | 0.033 | 0.022 | 234 | 1100 | 2310 | 88 | < 1 | 16.2 | 60.2 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 115 | < 1 | 409 | < 1 | < 1 | 4.57 | < 1 | 3.53 | 2.94 | < 1 | < 1 | 2.1 |
| 116 | < 1 | 447 | < 1 | < 1 | 4.47 | < 1 | 3.58 | 3.28 | < 1 | < 1 | 1.3 |
| 117 | < 1 | 437 | < 1 | < 1 | 4.56 | < 1 | 3.63 | 3.11 | < 1 | < 1 | 1.49 |
| 118 | < 1 | 492 | < 1 | < 1 | 6.28 | < 1 | 4.17 | 1.57 | < 1 | < 1 | 5.36 |
| 119 | < 1 | 504 | < 1 | < 1 | 6.68 | < 1 | 3.87 | 1.64 | < 1 | < 1 | 3.66 |
| 120 | < 1 | 524 | < 1 | < 1 | 6.18 | < 1 | 4.24 | 1.8 | < 1 | < 1 | 4.57 |
| 121 | < 1 | 536 | < 1 | < 1 | 3.89 | < 1 | 4.4 | 3.47 | < 1 | < 1 | 5.22 |
| 122 | < 1 | 527 | < 1 | < 1 | 4.03 | < 1 | 4.4 | 3.55 | < 1 | < 1 | 4.65 |
| 123 | < 1 | 534 | < 1 | < 1 | 4.26 | < 1 | 4.32 | 4.48 | < 1 | < 1 | 5.23 |
| 124 | < 1 | 452 | < 1 | < 1 | 8.26 | < 1 | 3.43 | 3.44 | < 1 | < 1 | 4.39 |
| 125 | < 1 | 458 | < 1 | < 1 | 5.91 | < 1 | 3.78 | 3.17 | < 1 | < 1 | 6.32 |
| 126 | < 1 | 476 | < 1 | < 1 | 5.93 | < 1 | 3.52 | 2.86 | < 1 | < 1 | 5.84 |

EAST BAY (380234)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 127 | 08/03/99 | 12:30 | 1 | 3310 | 427 | 417 | 51 | 0.01 | 1.47 | 0.02 | 0.289 | 0.3 | 706 | 75 |
| 128 | 08/03/99 | 12:40 | 5 | 3320 | 428 | 425 | 48 | 0.01 | 1.58 | 0.02 | 0.305 | 0.282 | 717 | 76.3 |
| 129 | 08/03/99 | 12:50 | 11 | 3320 | 435 | 431 | 49 | 0.01 | 1.46 | 0.02 | 0.299 | 0.284 | 701 | 74.5 |
| 130 | 10/12/99 | 8:40 | 1 | 3350 | 409 | 391 | 53 | 0.01 | 1.51 | 0.02 | 0.186 | 0.176 | 716 | 77.3 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 127 | 126 | 495 | 66.1 | 0.032 | 0.03 | 247 | 1110 | 2380 | < 50 | < 2 | 17.7 | 63.4 |
| 128 | 128 | 502 | 67.3 | 0.033 | 0.034 | 223 | 995 | 2250 | < 50 | < 2 | 18.1 | 65.4 |
| 129 | 125 | 496 | 65.7 | 0.027 | 0.037 | 247 | 1060 | 2330 | < 50 | < 2 | 17.7 | 61.7 |
| 130 | 266 | 1280 | 142 | 1.36 | 0.088 | 570 | 2780 | 5450 | 1120 | < 1 | 27.6 | 79.1 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 127 | < 1 | 458 | < 1 | < 1 | 6.23 | < 1 | 8.75 | 3.48 | < 1 | < 1 | 11.3 |
| 128 | < 1 | 468 | < 1 | < 1 | 3.82 | < 1 | 3.34 | 3.8 | < 1 | < 1 | < 1 |
| 129 | < 1 | 464 | < 1 | < 1 | 3.69 | < 1 | 3.39 | 3.47 | < 1 | < 1 | < 1 |
| 130 | < 1 | 948 | < 1 | 1.46 | 14.3 | < 1 | 6.81 | 8.4 | < 3 | < 1 | 9.76 |

EAST BAY-NEAR BLACK TIGER BAY (380237)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 132 | 05/20/96 | 14:15 | 1 | 4720 | 451 | 457 | 46 | 0.023 | 2.32 | 0.02 | 0.288 | 0.206 | 829 | 61.8 |
| 133 | 05/20/96 | 14:15 | 3 | 4720 | 455 | 460 | 47 | 0.034 | 2.83 | 0.02 | 0.272 | 0.212 | 850 | 63.4 |
| 134 | 05/20/96 | 14:15 | 7 | 4750 | 451 | 455 | 47 | 0.035 | 2.21 | 0.03 | 0.272 | 0.22 | 834 | 62.1 |
| 135 | 07/02/96 | 9:00 | 1 | 4650 | 446 | 449 | 47 | 0.019 | 3.91 | 0.04 | 0.322 | 0.26 | 900 | 68.6 |
| 136 | 07/02/96 | 9:01 | 4 | 4650 | 442 | 446 | 46 | 0.025 | 3.73 | 0.03 | 0.298 | 0.26 | 820 | 63.1 |
| 137 | 07/02/96 | 9:03 | 8 | 4660 | 442 | 456 | 41 | 0.2 | 3.05 | 0.05 | 0.326 | 0.284 | 815 | 62.8 |
| 138 | 08/06/96 | 13:30 | 1 | 4440 | 440 | 421 | 57 | 0.072 | 2.42 | 0.02 | 0.315 | 0.284 | 819 | 64.1 |
| 139 | 08/06/96 | 13:30 | 5 | 4430 | 444 | 424 | 58 | 0.083 | 2.22 | 0.02 | 0.28 | 0.278 | 833 | 65.1 |
| 140 | 08/06/96 | 13:30 | 8 | 4440 | 447 | 424 | 60 | 0.09 | 2.35 | 0.02 | 0.283 | 0.286 | 788 | 61.7 |
| 141 | 09/04/96 | 11:00 | 1 | 4450 | 448 | 415 | 65 | 0.01 | 2.22 | 0.02 | 0.258 | 0.179 | 1010 | 79.7 |
| 142 | 09/04/96 | 11:00 | 4 | 4460 | 445 | 411 | 65 | 0.038 | 2.25 | 0.02 | 0.259 | 0.222 | 990 | 78.5 |
| 143 | 09/04/96 | 11:00 | 8.5 | 4450 | 443 | 411 | 64 | 0.01 | 2.61 | 0.02 | 0.27 | 0.236 | 971 | 77.2 |
| 144 | 10/02/96 | 11:00 | 1 | 4540 | 443 | 427 | 56 | 0.01 | 2.25 | 0.02 | 0.281 | 0.244 | 777 | 62.3 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 132 | 164 | 704 | 88 | 0.037 | 0.002 | 328 | 1580 | 3200 | . | . | 30.1 | 48.5 |
| 133 | 168 | 734 | 90.7 | 0.047 | 0.002 | 338 | 1740 | 3410 | . | . | 31.2 | 48.5 |
| 134 | 165 | 715 | 87.9 | 0.014 | 0.002 | 339 | 1650 | 3290 | . | . | 31.7 | 44.1 |
| 135 | 177 | 783 | 99.1 | 0.039 | 0.002 | 346 | 1840 | 3580 | . | . | 20.2 | 51.6 |
| 136 | 161 | 703 | 88.7 | 0.025 | 0.002 | 354 | 1710 | 3350 | . | . | 19.7 | 48.3 |
| 137 | 160 | 699 | 88 | 0.043 | 0.014 | 356 | 1740 | 3370 | . | . | 20 | 48.4 |
| 138 | 160 | 700 | 87.6 | 0.066 | 0.002 | 320 | 1200 | 2800 | . | . | 21.2 | 50.7 |
| 139 | 163 | 713 | 88.8 | 0.073 | 0.002 | 318 | 1620 | 3240 | . | . | 21.3 | 50.2 |
| 140 | 154 | 672 | 84.1 | 0.064 | 0.002 | 319 | 1440 | 3000 | . | . | 20.8 | 47.1 |
| 141 | 196 | 857 | 109 | 0.086 | 0.002 | 345 | 1840 | 3700 | . | . | 23.1 | 43.7 |
| 142 | 193 | 842 | 107 | 0.09 | 0.002 | 346 | 1800 | 3640 | . | . | 23.6 | 46.6 |
| 143 | 189 | 822 | 105 | 0.104 | 0.002 | 348 | 1780 | 3590 | . | . | 22.8 | 50.4 |
| 144 | 151 | 661 | 83.8 | 0.258 | 0.006 | 326 | 1630 | 3180 | . | . | 19.2 | 49.8 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 132 | . | . | < 0.02 | < 0.2 | 41.4 | 13.7 | . | 16.8 | . | . | 54.6 |
| 133 | . | . | < 0.02 | < 0.2 | 30.7 | 3.98 | . | 17.5 | . | . | 43.8 |
| 134 | . | . | < 0.02 | < 0.2 | 30 | 2.66 | . | 21.7 | . | . | 41.6 |
| 135 | . | . | 1.45 | < 0.2 | 196 | 178 | . | < 0.2 | . | . | 309 |
| 136 | . | . | < 0.02 | < 0.2 | 11.2 | < 0.2 | . | < 0.2 | . | . | 27.6 |
| 137 | . | . | < 0.02 | < 0.2 | 8.19 | < 0.2 | . | < 0.2 | . | . | 17.2 |
| 138 | . | . | < 0.02 | < 0.2 | 14.8 | 2.11 | . | 7.41 | . | . | 32.2 |
| 139 | . | . | < 0.02 | < 0.2 | 9.4 | < 0.2 | . | 7.87 | . | . | 19.9 |
| 140 | . | . | < 0.02 | < 0.2 | 6.48 | < 0.2 | . | 8.56 | . | . | 10.6 |
| 141 | . | 636 | < 0.02 | < 0.2 | 4.19 | < 0.2 | . | 6.08 | . | . | 11.7 |
| 142 | . | 636 | < 0.02 | < 0.2 | 5.08 | < 0.2 | . | 6.02 | . | . | 20.4 |
| 143 | . | 602 | < 0.02 | < 0.2 | 5.51 | < 0.2 | . | 4.64 | . | . | 12.2 |
| 144 | . | . | < 0.02 | < 0.2 | 3.09 | < 0.2 | . | < 0.2 | . | . | 24 |

EAST BAY-NEAR BLACK TIGER BAY (380237)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 145 | 10/02/96 | 11:00 | 4 | 4540 | 455 | 436 | 59 | 0.01 | 2.31 | 0.05 | 0.319 | 0.246 | 799 | 64.3 |
| 146 | 10/02/96 | 11:00 | 9 | 4560 | 451 | 430 | 59 | 0.01 | 2.29 | 0.05 | 0.285 | 0.264 | 942 | 75.7 |
| 147 | 03/05/97 | 11:00 | 1 | 4650 | 479 | 501 | 41 | 0.01 | 2.29 | 0.45 | 0.298 | 0.279 | 931 | 79.4 |
| 148 | 03/05/97 | 11:00 | 5 | 4680 | 479 | 504 | 40 | 0.01 | 2.4 | 0.3 | 0.308 | 0.301 | 946 | 80.4 |
| 149 | 03/05/97 | 11:00 | 8 | 4690 | 479 | 505 | 39 | 0.01 | 2.5 | 0.34 | 0.326 | 0.304 | 929 | 78.7 |
| 150 | 05/15/97 | 11:30 | 1 | 3900 | 395 | 401 | 40 | 0.037 | 2.15 | 0.06 | 0.29 | 0.302 | 733 | 65.9 |
| 151 | 05/15/97 | 11:30 | 5 | 3900 | 402 | 410 | 40 | 0.031 | 2.15 | 0.06 | 0.242 | 0.234 | 728 | 65.5 |
| 152 | 05/15/97 | 11:30 | 9 | 3900 | 400 | 409 | 39 | 0.03 | 2.15 | 0.06 | 0.266 | 0.284 | 738 | 66.3 |
| 153 | 07/08/97 | 12:45 | 1 | 3760 | 409 | 426 | 36 | 0.027 | 2.18 | 0.03 | 0.373 | 0.272 | 698 | 65.3 |
| 154 | 07/08/97 | 12:45 | 5 | 3770 | 414 | 432 | 36 | 0.01 | 2.02 | 0.04 | 0.297 | 0.255 | 694 | 65.2 |
| 155 | 07/08/97 | 12:45 | 9 | 3770 | 418 | 437 | 36 | 0.011 | 2.08 | 0.04 | 0.293 | 0.256 | 705 | 66.4 |
| 156 | 02/24/99 | 13:00 | 1 | 3830 | 493 | 496 | 52 | 0.075 | 1.95 | 0.05 | 0.334 | 0.491 | 822 | 83.5 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 145 | 155 | 682 | 86.5 | 0.292 | 0.008 | 310 | 1570 | 3140 | . | . | 19.4 | 51.3 |
| 146 | 183 | 793 | 101 | 0.069 | 0.002 | 322 | 1730 | 3480 | . | . | 22 | 70.6 |
| 147 | 178 | 785 | 100 | 0.096 | 0.002 | 352 | 1660 | 3450 | . | . | 35.6 | 53 |
| 148 | 181 | 802 | 101 | 0.099 | 0.003 | 351 | 1800 | 3610 | . | . | 33.9 | 52.8 |
| 149 | 178 | 778 | 99.2 | 0.1 | 0.009 | 353 | 1680 | 3460 | . | . | 33 | 50.7 |
| 150 | 138 | 590 | 76.3 | 0.108 | 0.002 | 297 | 1520 | 2930 | 130 | 2.39 | 23 | 46.1 |
| 151 | 137 | 589 | 76.2 | 0.097 | 0.002 | 304 | 1530 | 2940 | 131 | 1.91 | 24.6 | 46.3 |
| 152 | 139 | 593 | 76.9 | 0.115 | 0.002 | 11.7 | 1590 | 2720 | 108 | 1.57 | 24 | 46.9 |
| 153 | 130 | 543 | 72 | 0.082 | 0.002 | 280 | 1330 | 2670 | 75 | < 1 | 19.5 | 56.7 |
| 154 | 129 | 541 | 71.4 | 0.075 | 0.002 | 280 | 1330 | 2670 | 56 | < 2 | 19.4 | 52.2 |
| 155 | 131 | 550 | 72.5 | 0.078 | 0.002 | 281 | 1330 | 2680 | 67 | < 1 | 20.1 | 57.4 |
| 156 | 149 | 609 | 80.1 | 0.007 | 0.002 | 285 | 1350 | 2850 | 55 | < 1 | 20.1 | 71.6 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 145 | . | . | < 0.02 | < 0.2 | 8.44 | 1.49 | . | < 0.2 | . | . | 31.5 |
| 146 | . | . | 0.17 | 0.76 | 9.23 | 7.37 | . | 6.85 | . | . | 29.9 |
| 147 | . | . | < 0.02 | < 0.2 | 7.05 | < 0.2 | . | 29.6 | . | . | 51.4 |
| 148 | . | . | < 0.02 | < 0.2 | 8.77 | < 0.2 | . | 29.1 | . | . | 48.7 |
| 149 | . | . | < 0.02 | < 0.2 | 6.51 | < 0.2 | . | 26.2 | . | . | 40.9 |
| 150 | < 1 | 637 | < 1 | < 1 | 16.1 | < 1 | 4.09 | 10.3 | < 1 | < 1 | < 1 |
| 151 | < 1 | 669 | < 1 | < 1 | 21.9 | < 1 | 5.05 | 12.7 | < 1 | < 1 | < 1 |
| 152 | < 1 | 645 | < 1 | < 1 | 18.3 | < 1 | 4.81 | 11.5 | < 1 | < 1 | < 1 |
| 153 | < 1 | 564 | < 1 | 1.27 | 14.3 | < 1 | 3.67 | 6.31 | < 1 | < 1 | 12.8 |
| 154 | < 1 | 572 | < 1 | < 1 | 17.8 | < 1 | 4.42 | 7.43 | < 1 | < 1 | 12.1 |
| 155 | < 1 | 586 | < 1 | < 1 | 23.1 | < 1 | 4.15 | 7.96 | < 1 | < 1 | 14.9 |
| 156 | < 1 | 586 | < 1 | < 1 | 4.58 | < 1 | 4.34 | 4.92 | < 1 | < 1 | 4.6 |

EAST BAY-NEAR BLACK TIGER BAY (380237)
(continued)

| OBS | Date Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 157 | 02/24/99 13:05 | 5 | 3840 | 478 | 478 | 52 | 0.093 | 1.97 | 0.04 | 0.321 | 0.478 | 815 | 82.2 |
| 158 | 02/24/99 13:10 | 10 | 3840 | 486 | 488 | 52 | 0.096 | 2.06 | 0.06 | 0.324 | 0.237 | 793 | 80.1 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 157 | 148 | 602 | 79.1 | 0.007 | 0.002 | 286 | 1350 | 2840 | 54 | 1.29 | 19.9 | 70.5 |
| 158 | 144 | 591 | 77 | 0.007 | 0.002 | 285 | 1360 | 2830 | 60 | < 1 | 19.8 | 68.6 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 157 | < 1 | 590 | < 1 | < 1 | 4.66 | < 1 | 4.26 | 5.34 | < 1 | < 1 | 4.42 |
| 158 | < 1 | 566 | < 1 | < 1 | 4.4 | < 1 | 3.97 | 6.04 | < 1 | < 1 | 3.82 |

EAST DEVILS LAKE (380235)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 159 | 05/16/95 | 9:00 | 1 | 9900 | 562 | 546 | 69 | 0.035 | 2.97 | 0.034 | 0.176 | 0.073 | 1770 | 74.5 |
| 160 | 07/26/95 | 11:30 | 1 | 9650 | 563 | 525 | 80 | 0.033 | 3.21 | 0.011 | 0.148 | 0.13 | 1820 | 80.3 |
| 161 | 07/26/95 | 11:30 | 6 | 9630 | 565 | 527 | 80 | 0.204 | 3.17 | 0.007 | 0.159 | 0.128 | 1700 | 74.8 |
| 162 | 07/26/95 | 11:30 | 11 | 9690 | 564 | 564 | 61 | 0.376 | 3.44 | 0.008 | 0.259 | 0.25 | 1530 | 67.4 |
| 163 | 10/03/95 | 17:30 | 1 | 9920 | 575 | 562 | 69 | 0.041 | 3.77 | 0.01 | 0.213 | 0.179 | 1780 | 75 |
| 164 | 05/20/96 | 9:00 | 1 | 8980 | 544 | 516 | 73 | 0.012 | 2.73 | 0.02 | 0.181 | 0.115 | 1660 | 67.5 |
| 165 | 05/20/96 | 9:00 | 8 | 9180 | 545 | 527 | 68 | 0.013 | 3.01 | 0.1 | 0.183 | 0.145 | 1600 | 64.5 |
| 166 | 05/20/96 | 9:00 | 12 | 10300 | 621 | 650 | 53 | 0.162 | 3.4 | 0.44 | 0.229 | 0.22 | 1570 | 58 |
| 167 | 07/02/96 | 13:00 | 1 | 9270 | 554 | 528 | 73 | 0.055 | 4.34 | 0.06 | 0.216 | 0.187 | 1540 | 66.6 |
| 168 | 07/02/96 | 13:01 | 6 | 9290 | 562 | 542 | 71 | 0.099 | 2.86 | 0.06 | 1.04 | 0.173 | 1710 | 76.5 |
| 169 | 07/02/96 | 13:02 | 12 | 9880 | 592 | 615 | 53 | 0.433 | 4.2 | 0.02 | 0.464 | 0.406 | 1610 | 68 |
| 170 | 08/06/96 | 16:00 | 1 | 8950 | 599 | 469 | 129 | 0.01 | 3.3 | 0.02 | 0.214 | 0.179 | 1540 | 64.8 |
| 171 | 08/06/96 | 16:00 | 6 | 8940 | 603 | 474 | 129 | 0.01 | 3.18 | 0.02 | 0.209 | 0.173 | 1460 | 61 |
| 172 | 08/06/96 | 16:00 | 12 | 9090 | 609 | 507 | 116 | 0.513 | 3.86 | 0.02 | 0.411 | 0.292 | 1540 | 65.5 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 159 | 385 | 1940 | 200 | 0.044 | 0.016 | 858 | 3770 | 7570 | . | . | 28.1 | 29.4 |
| 160 | 393 | 1960 | 200 | 0.03 | 0.018 | 867 | 4280 | 8120 | . | . | 25.3 | 30.5 |
| 161 | 367 | 1800 | 189 | 0.026 | 0.013 | 906 | 4530 | 8210 | . | . | 25.3 | 29.7 |
| 162 | 331 | 1610 | 169 | 0.024 | 0.145 | 877 | 4130 | 7520 | . | . | 20.2 | 28.2 |
| 163 | 386 | 2070 | 217 | 0.053 | 0.019 | 840 | 4230 | 8160 | . | . | 40.2 | 42.1 |
| 164 | 362 | 1840 | 190 | 0.007 | 0.002 | 741 | 4120 | 7650 | . | . | 42.6 | 36.8 |
| 165 | 350 | 1790 | 182 | 0.007 | 0.002 | 779 | 3900 | 7390 | . | . | 40.6 | 38.3 |
| 166 | 347 | 1770 | 181 | 0.007 | 0.002 | 899 | 4540 | 8170 | . | . | 43.7 | 36.5 |
| 167 | 333 | 1700 | 177 | 0.007 | 0.002 | 788 | 4120 | 7520 | . | . | 43 | 34.7 |
| 168 | 370 | 1810 | 212 | 0.007 | 0.002 | 776 | 4040 | 7620 | . | . | 39.2 | 30 |
| 169 | 350 | 1800 | 186 | 0.007 | 0.221 | 835 | 4610 | 8210 | . | . | 46.7 | 36.5 |
| 170 | 334 | 1690 | 175 | 0.007 | 0.002 | 701 | 3970 | 7300 | . | . | 36.6 | 36.4 |
| 171 | 317 | 1610 | 167 | 0.007 | 0.002 | 686 | 3910 | 7110 | . | . | 37.6 | 36.1 |
| 172 | 335 | 1710 | 177 | 0.007 | 0.126 | 630 | 4000 | 7280 | . | . | 42.1 | 39.4 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 159 | . | . | < 0.2 | 1.23 | < 14 | < 0.2 | . | < 0.2 | . | . | < 9 |
| 160 | . | 1250 | 0.22 | 1.74 | < 14 | 3.6 | . | < 0.2 | . | . | < 9 |
| 161 | . | 1200 | 0.29 | 2 | < 14 | 5.1 | . | < 0.2 | . | . | < 9 |
| 162 | . | 1120 | < 0.2 | 1 | < 14 | 3.6 | . | 5.8 | . | . | < 9 |
| 163 | . | . | < 0.02 | 0.31 | 24.1 | < 0.2 | . | 14.7 | . | . | 39.1 |
| 164 | . | . | < 0.02 | < 0.2 | 70.8 | 16.2 | . | 22.9 | . | . | 166 |
| 165 | . | . | < 0.02 | < 0.2 | 51.3 | 13.1 | . | 19.2 | . | . | 68.6 |
| 166 | . | . | < 0.02 | < 0.2 | 68.7 | 10.3 | . | 21.1 | . | . | 138 |
| 167 | . | . | < 0.02 | < 0.2 | 22.1 | < 0.2 | . | 23.7 | . | . | 27.7 |
| 168 | . | . | < 0.02 | < 0.2 | 19.9 | < 0.2 | . | 21.5 | . | . | 24.5 |
| 169 | . | . | < 0.02 | < 0.2 | 23.8 | < 0.2 | . | 26.9 | . | . | 22.8 |
| 170 | . | . | < 0.02 | < 0.2 | 20.5 | < 0.2 | . | 14.8 | . | . | 23 |
| 171 | . | . | < 0.02 | < 0.2 | 20.4 | < 0.2 | . | 16.5 | . | . | 23.2 |
| 172 | . | . | < 0.02 | < 0.2 | 23.4 | < 0.2 | . | 17.8 | . | . | 34.2 |

EAST DEVILS LAKE (380235)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 173 | 09/03/96 | 18:00 | 1 | 9070 | 575 | 527 | 86 | 0.062 | 3.72 | 0.02 | 0.232 | 0.2 | 1430 | 61.7 |
| 174 | 09/03/96 | 18:00 | 6 | 9080 | 575 | 529 | 85 | 0.108 | 3.72 | 0.02 | 0.198 | 0.363 | 1410 | 65 |
| 175 | 09/03/96 | 18:00 | 12.5 | 9110 | 580 | 549 | 78 | 0.324 | 4.82 | 0.02 | 0.268 | 0.253 | 1480 | 63.5 |
| 176 | 10/02/96 | 10:00 | 1 | 9370 | 575 | 562 | 69 | 0.151 | 3.72 | 0.06 | 0.351 | 0.214 | 1440 | 66.9 |
| 177 | 10/02/96 | 10:00 | 6 | 9380 | 579 | 560 | 72 | 0.219 | 3.45 | 0.05 | 0.255 | 0.216 | 1390 | 63.8 |
| 178 | 10/02/96 | 10:00 | 12 | 9380 | 585 | 566 | 73 | 0.01 | 3.91 | 0.04 | 0.269 | 0.232 | 1460 | 67.1 |
| 179 | 03/05/97 | 12:00 | 1 | 9820 | 610 | 616 | 63 | 0.243 | 3.84 | 0.26 | 0.276 | 0.261 | 1720 | 80.9 |
| 180 | 03/05/97 | 12:00 | 7 | 9820 | 606 | 616 | 61 | 0.231 | 4.08 | 0.27 | 0.276 | 0.24 | 1540 | 73.2 |
| 181 | 03/05/97 | 12:00 | 12 | 9910 | 620 | 639 | 58 | 0.258 | 4.22 | 0.4 | 0.337 | 0.286 | 1490 | 71.2 |
| 182 | 05/15/97 | 13:45 | 1 | 8920 | 533 | 545 | 52 | 0.042 | 3.42 | 0.51 | 0.284 | 0.312 | 1610 | 73.9 |
| 183 | 05/15/97 | 13:45 | 6 | 8920 | 528 | 541 | 51 | 0.056 | 3.38 | 0.51 | 0.293 | 0.306 | 1630 | 74.6 |
| 184 | 05/15/97 | 13:45 | 13 | 8950 | 545 | 553 | 55 | 0.051 | 3.48 | 0.51 | 0.257 | 0.267 | 1620 | 73.8 |
| 185 | 07/16/97 | 9:35 | 1 | 8380 | 544 | 510 | 76 | 0.01 | 4.07 | 0.02 | 0.223 | 0.185 | 1400 | 70 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 173 | 311 | 1570 | 164 | 0.007 | 0.002 | 816 | 3760 | 7030 | . | . | 34.9 | 40.5 |
| 174 | 302 | 1490 | 165 | 0.012 | 0.007 | 824 | 3660 | 6850 | . | . | 43.5 | 38 |
| 175 | 320 | 1630 | 168 | 0.007 | 0.02 | 813 | 3660 | 7000 | . | . | 40.6 | 37.6 |
| 176 | 310 | 1540 | 171 | 0.073 | 0.002 | 749 | 3480 | 6660 | . | . | 37.6 | 39.5 |
| 177 | 298 | 1470 | 164 | 0.063 | 0.002 | 756 | 3670 | 6770 | . | . | 34.1 | 71.4 |
| 178 | 314 | 1570 | 174 | 0.029 | 0.002 | 760 | 3300 | 6540 | . | . | 35.4 | 38.2 |
| 179 | 368 | 1860 | 200 | 0.267 | 0.002 | 860 | 4460 | 8200 | . | . | 39.7 | 41.2 |
| 180 | 330 | 1730 | 182 | 0.275 | 0.002 | 857 | 4240 | 7780 | . | . | 41.4 | 40.8 |
| 181 | 319 | 1680 | 176 | 0.236 | 0.023 | 868 | 3820 | 7310 | . | . | 41 | 41.3 |
| 182 | 347 | 1820 | 190 | 0.05 | 0.006 | 903 | 4200 | 7860 | 76 | 2.26 | 43 | 40.5 |
| 183 | 351 | 1840 | 192 | 0.057 | 0.011 | 861 | 4010 | 7650 | 78 | 2.25 | 41.9 | 42.5 |
| 184 | 348 | 1800 | 189 | 0.007 | 0.002 | 784 | 3800 | 7330 | 79 | 2.2 | 42 | 41 |
| 185 | 297 | 1500 | 161 | 0.007 | 0.002 | 742 | 3640 | 6740 | < 50 | < 1 | 35.6 | 42.5 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 173 | . | 1230 | < 0.02 | < 0.2 | 18.4 | < 0.2 | . | 6.69 | . | . | 10.4 |
| 174 | . | 1270 | < 0.02 | < 0.2 | 15.6 | < 0.2 | . | 15.7 | . | . | 19.8 |
| 175 | . | 1260 | < 0.02 | < 0.2 | 15.1 | < 0.2 | . | 13 | . | . | 36.1 |
| 176 | . | . | < 0.02 | < 0.2 | 17.4 | < 0.2 | . | 9.96 | . | . | 34.8 |
| 177 | . | . | < 0.02 | < 0.2 | 18 | 5.76 | . | 7.83 | . | . | 57.2 |
| 178 | . | . | < 0.02 | < 0.2 | 21.5 | 53.3 | . | 8.52 | . | . | 55.3 |
| 179 | . | . | < 0.02 | < 0.2 | 20.8 | < 0.2 | . | 19.1 | . | . | 55 |
| 180 | . | . | < 0.02 | < 0.2 | 20.1 | < 0.2 | . | 22.1 | . | . | 67.3 |
| 181 | . | . | < 0.02 | < 0.2 | 19.5 | < 0.2 | . | 20.6 | . | . | 43.8 |
| 182 | < 1 | 1080 | < 1 | < 1 | 48.7 | < 1 | 5.44 | 21.1 | < 1 | < 1 | < 1 |
| 183 | < 1 | 1080 | < 1 | < 1 | 42.3 | < 1 | 4.59 | 20.5 | < 1 | < 1 | < 1 |
| 184 | < 1 | 1120 | < 1 | < 1 | 41.5 | < 1 | 4.62 | 20 | < 1 | < 1 | < 1 |
| 185 | < 1 | 1040 | < 1 | 1.51 | 34.6 | < 1 | 3.64 | 11.6 | 1.63 | < 1 | 14.7 |

EAST DEVILS LAKE (380235)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 186 | 07/16/97 | 9:35 | 8 | 8320 | 540 | 521 | 68 | 0.01 | 4.02 | 0.05 | 0.183 | 0.191 | 1560 | 78.7 |
| 187 | 07/16/97 | 9:35 | 14 | 8510 | 555 | 572 | 52 | 0.01 | 4.2 | 0.12 | 0.284 | 0.249 | 1400 | 68.6 |
| 188 | 08/05/97 | 9:30 | 1 | 8210 | 536 | 482 | 85 | 0.01 | 3.12 | 0.02 | 0.186 | 0.157 | 1550 | 80 |
| 189 | 08/05/97 | 9:30 | 8 | 8320 | 544 | 503 | 79 | 0.098 | 3.23 | 0.02 | 0.169 | 0.157 | 1580 | 80.3 |
| 190 | 08/05/97 | 9:30 | 14 | 8480 | 544 | 563 | 50 | 0.238 | 3.61 | 0.04 | 0.283 | 0.259 | 1570 | 79 |
| 191 | 09/03/97 | 9:30 | 1 | 8310 | 543 | 517 | 72 | 0.088 | 3.26 | 0.03 | 0.255 | 0.224 | 1400 | 68.9 |
| 192 | 09/03/97 | 9:30 | 10 | 8250 | 548 | 529 | 69 | 0.166 | 3.07 | 0.02 | 0.314 | 0.232 | 1410 | 70.6 |
| 193 | 09/03/97 | 9:30 | 14 | 8290 | 556 | 569 | 54 | 0.552 | 3.74 | 0.02 | 0.357 | 0.362 | 1410 | 70.1 |
| 194 | 05/20/98 | 14:30 | 1 | 8020 | 574 | 603 | 48 | 0.058 | 3.43 | 0.57 | 0.266 | 0.256 | 1390 | 77.4 |
| 195 | 05/20/98 | 14:40 | 7 | 8100 | 539 | 559 | 49 | 0.065 | 3.17 | 0.56 | 0.499 | 0.273 | 1380 | 77.2 |
| 196 | 05/20/98 | 14:45 | 14 | 8140 | 553 | 570 | 52 | 0.089 | 3.1 | 0.56 | 0.474 | 0.271 | 1370 | 75.8 |
| 197 | 07/07/98 | 14:00 | 1 | 7530 | 584 | 540 | 85 | 0.01 | 2.46 | 0.37 | 0.361 | 0.272 | 1350 | 78.3 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 186 | 332 | 1650 | 176 | 0.04 | 0.002 | 790 | 3880 | 7230 | 94 | < 1 | 34.6 | 40.7 |
| 187 | 298 | 1490 | 160 | 0.007 | 0.015 | 711 | 3570 | 6630 | 64 | < 1 | 36.1 | 40 |
| 188 | 328 | 1650 | 179 | 0.018 | 0.002 | 721 | 3580 | 6860 | < 50 | < 1 | 35.5 | 49.1 |
| 189 | 335 | 1670 | 183 | 0.009 | 0.002 | 740 | 3720 | 7060 | 59 | < 1 | 34.7 | 45.9 |
| 190 | 334 | 1700 | 183 | 0.007 | 0.217 | 753 | 3680 | 7060 | < 50 | < 1 | 39 | 47.1 |
| 191 | 298 | 1540 | 165 | 0.059 | 0.046 | 728 | 3510 | 6640 | < 50 | < 5 | 42.1 | 47.3 |
| 192 | 299 | 1540 | 165 | 0.022 | 0.071 | 726 | 3490 | 6620 | < 50 | < 5 | 36.7 | 45.2 |
| 193 | 299 | 1540 | 165 | 0.026 | 0.308 | 699 | 3370 | 6480 | 766 | < 5 | 35.4 | 44.8 |
| 194 | 290 | 1510 | 159 | 0.007 | 0.002 | 659 | 3270 | 6310 | < 50 | < 5 | 32.3 | 59.4 |
| 195 | 289 | 1520 | 160 | 0.007 | 0.002 | 671 | 3280 | 6330 | < 50 | < 5 | 33 | 51.2 |
| 196 | 286 | 1520 | 159 | 0.007 | 0.002 | 668 | 3280 | 6330 | < 50 | < 5 | 33.9 | 51.4 |
| 197 | 280 | 1400 | 151 | 0.007 | 0.002 | 565 | 2790 | 5620 | < 50 | < 5 | 29.8 | 51.3 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 186 | < 1 | 1070 | < 1 | 1.23 | 31.1 | < 1 | 4.5 | 10.7 | 1.24 | < 1 | 156 |
| 187 | < 1 | 1070 | < 1 | 1.43 | 31.1 | < 1 | 4.02 | 14.3 | 1.17 | < 1 | 18.6 |
| 188 | < 1 | 1140 | < 1 | < 1 | 29.7 | < 1 | 3.88 | 17.7 | < 1 | < 1 | 2.66 |
| 189 | < 1 | 1140 | < 1 | < 1 | 29.8 | < 1 | 4.01 | 15.7 | < 1 | < 1 | 1.36 |
| 190 | < 1 | 1150 | < 1 | < 1 | 35.3 | < 1 | 4.68 | 20.1 | < 1 | < 1 | 4.35 |
| 191 | < 5 | 1280 | < 5 | < 5 | 44.8 | < 5 | 20.4 | 15.4 | 6.69 | < 5 | 30.1 |
| 192 | < 5 | 1220 | < 5 | < 5 | 43.9 | < 5 | 16.3 | 9.17 | < 5 | < 5 | 33.8 |
| 193 | < 5 | 1210 | < 5 | < 5 | 43.7 | 3.17 | 26.6 | < 5 | < 5 | < 5 | 32.2 |
| 194 | < 5 | 1100 | < 5 | < 5 | 7.02 | 13.7 | < 5 | 6.19 | 7.89 | < 5 | < 5 |
| 195 | < 5 | 1020 | < 5 | < 5 | 11.2 | < 5 | 5.28 | 7.01 | 5.07 | < 5 | < 5 |
| 196 | < 5 | 1070 | < 5 | < 5 | 11.5 | < 5 | < 5 | 8.62 | < 5 | < 5 | < 5 |
| 197 | < 5 | 1070 | < 5 | < 5 | 12.7 | < 1 | < 5 | 8.13 | < 5 | < 5 | < 5 |

EAST DEVILS LAKE (380235)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 198 | 07/07/98 | 14:10 | 7 | 7680 | 567 | 531 | 79 | 0.07 | 3.1 | 0.42 | 0.336 | 0.265 | 1400 | 80.5 |
| 199 | 07/07/98 | 14:15 | 14 | 7810 | 567 | 505 | 92 | 0.111 | 3.13 | 0.44 | 0.4 | 0.271 | 1410 | 80.3 |
| 200 | 08/04/98 | 14:40 | 1 | 7390 | 536 | 490 | 81 | 0.01 | 3.1 | 0.02 | 0.326 | 0.22 | 1310 | 76.7 |
| 201 | 08/04/98 | 14:45 | 7 | 7350 | 531 | 504 | 71 | 0.042 | 3.02 | 0.02 | 0.311 | 0.254 | 1180 | 69.6 |
| 202 | 08/04/98 | 14:50 | 14 | 7650 | 542 | 574 | 43 | 0.379 | 3.17 | 0.1 | 0.396 | 0.369 | 1250 | 69.9 |
| 203 | 10/21/98 | 8:45 | 1 | 7230 | 561 | 571 | 56 | 0.174 | 2.77 | 0.21 | 0.325 | 0.272 | 1350 | 82.5 |
| 204 | 10/21/98 | 8:50 | 7 | 7160 | 545 | 551 | 56 | 0.183 | 3.38 | 0.2 | 0.4 | 0.27 | 1300 | 79.1 |
| 205 | 10/21/98 | 8:55 | 14 | 7190 | 562 | 568 | 58 | 0.177 | 2.77 | 0.19 | 0.345 | 0.278 | 1300 | 79 |
| 206 | 02/24/99 | 13:45 | 1 | 7510 | 601 | 628 | 52 | 0.162 | 3.16 | 0.46 | 0.336 | 0.294 | 1450 | 87.3 |
| 207 | 02/24/99 | 13:50 | 7 | 7490 | 587 | 609 | 53 | 0.119 | 2.9 | 0.46 | 0.354 | 0.485 | 1430 | 85.5 |
| 208 | 02/24/99 | 13:55 | 14 | 7500 | 592 | 623 | 49 | 0.079 | 2.91 | 0.49 | 0.356 | 0.505 | 1430 | 86.6 |
| 209 | 05/26/99 | 10:00 | 1 | 6750 | 543 | 559 | 51 | 0.068 | 2.66 | 0.48 | 0.537 | 0.317 | 1300 | 82.9 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 198 | 292 | 1440 | 154 | 0.058 | 0.002 | 602 | 2960 | 5870 | 101 | < 5 | 31.9 | 55.8 |
| 199 | 293 | 1450 | 155 | 0.021 | 0.002 | 630 | 3080 | 6030 | 74 | < 5 | 31.7 | 52.2 |
| 200 | 271 | 1330 | 148 | 0.007 | 0.002 | 568 | 2780 | 5500 | < 50 | < 5 | 164 | 289 |
| 201 | 245 | 1240 | 134 | 0.007 | 0.002 | 603 | 2930 | 5540 | < 50 | < 5 | 158 | 291 |
| 202 | 261 | 1320 | 141 | 0.007 | 0.175 | 629 | 3070 | 5820 | < 50 | < 5 | 161 | 309 |
| 203 | 277 | 1330 | 147 | 0.097 | 0.002 | 606 | 2950 | 5730 | 146 | < 5 | 30.7 | 60.6 |
| 204 | 267 | 1290 | 141 | 0.021 | 0.002 | 603 | 2920 | 5630 | 22800 | < 5 | 30 | 57.9 |
| 205 | 267 | 1280 | 141 | 0.039 | 0.002 | 614 | 2970 | 5690 | 155 | < 5 | 29.5 | 56.1 |
| 206 | 299 | 1460 | 162 | 0.007 | 0.002 | 631 | 3080 | 6080 | 81 | < 5 | 36.6 | 79.7 |
| 207 | 295 | 1430 | 157 | 0.007 | 0.002 | 649 | 3060 | 6030 | 94 | < 5 | 33.8 | 59.4 |
| 208 | 296 | 1430 | 158 | 0.007 | 0.002 | 632 | 3050 | 6010 | 113 | < 5 | 33.6 | 59.1 |
| 209 | 265 | 1280 | 144 | 0.041 | 0.018 | 573 | 2760 | 5430 | 113 | < 1 | 31.4 | 59.4 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 198 | < 5 | 1140 | < 5 | < 5 | 29.3 | < 5 | 33.8 | 8.9 | < 5 | < 5 | 15.7 |
| 199 | < 5 | 1120 | < 5 | < 5 | 18.9 | < 5 | 7.19 | 9.02 | < 5 | < 5 | < 5 |
| 200 | < 5 | 972 | < 5 | < 5 | 52.1 | < 5 | 25.3 | 56.8 | < 5 | < 5 | 24.1 |
| 201 | < 5 | 913 | < 5 | < 5 | 43.1 | < 5 | 19.7 | 57.4 | < 5 | < 5 | 17.2 |
| 202 | < 5 | 941 | < 5 | < 5 | 45.5 | < 5 | 18.8 | 56 | < 5 | < 5 | 35.9 |
| 203 | < 5 | 1160 | < 5 | < 5 | 14.2 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| 204 | < 5 | 1150 | < 5 | < 5 | 14.8 | < 5 | 5.17 | < 5 | < 5 | < 5 | 10.1 |
| 205 | < 5 | 1130 | < 5 | < 5 | 13.3 | < 5 | < 5 | < 5 | < 5 | < 5 | < 5 |
| 206 | < 5 | 1210 | < 5 | < 5 | 9.66 | < 5 | < 5 | 14.8 | < 5 | < 5 | < 5 |
| 207 | < 5 | 1130 | < 5 | < 5 | 12.8 | < 5 | 6.36 | 12.3 | < 5 | < 5 | < 5 |
| 208 | < 5 | 1160 | < 5 | < 5 | 13.4 | < 5 | 7.03 | 13 | < 5 | < 5 | 5.94 |
| 209 | < 1 | 1070 | < 1 | < 1 | 10.9 | < 1 | 4.68 | 12.8 | < 1 | < 1 | 4.62 |

EAST DEVILS LAKE (380235)
(continued)

| OBS | Date Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 210 | 05/26/99 10:05 | 7 | 6770 | 544 | 564 | 49 | 0.071 | 2.71 | 0.49 | 0.504 | 0.312 | 1300 | 82.8 |
| 211 | 05/26/99 10:10 | 15 | 6810 | 551 | 583 | 44 | 0.117 | 2.78 | 0.49 | 0.363 | 0.332 | 1290 | 82.2 |
| 212 | 08/03/99 9:00 | 1 | 6720 | 558 | 520 | 79 | 0.01 | 2.28 | 0.02 | 0.283 | 0.242 | 1330 | 81.1 |
| 213 | 08/03/99 9:05 | 8 | 6720 | 560 | 521 | 80 | 0.01 | 2.38 | 0.02 | 0.272 | 0.248 | 1340 | 83 |
| 214 | 08/03/99 9:10 | 16 | 6750 | 568 | 588 | 52 | 0.755 | 2.93 | 0.02 | 0.41 | 0.382 | 1350 | 82.5 |
| 215 | 10/12/99 11:45 | 1 | 6710 | 526 | 538 | 51 | 0.01 | 2.75 | 0.12 | 0.259 | 0.224 | 1320 | 90.3 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 210 | 265 | 1280 | 144 | 0.046 | 0.024 | 562 | 2740 | 5400 | 117 | < 1 | 32.1 | 57.5 |
| 211 | 263 | 1270 | 144 | 0.15 | 0.053 | 578 | 2810 | 5480 | 177 | < 5 | 32.2 | 55 |
| 212 | 273 | 1300 | 143 | 0.041 | 0.033 | 555 | 2690 | 5380 | < 50 | < 5 | 34.1 | 57.5 |
| 213 | 275 | 1310 | 144 | 0.034 | 0.035 | 551 | 2670 | 5370 | < 50 | < 5 | 35 | 58.1 |
| 214 | 277 | 1310 | 146 | 0.03 | 0.611 | 551 | 2670 | 5380 | < 50 | < 5 | 37.7 | 62.2 |
| 215 | 266 | 1280 | 142 | 1.36 | 0.088 | 570 | 2780 | 5450 | 1120 | < 1 | 27.6 | 79.1 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 210 | < 1 | 1080 | < 1 | < 1 | 17.7 | < 1 | 4.73 | 13.7 | < 1 | < 1 | 9.76 |
| 211 | < 5 | 1050 | < 5 | < 5 | 14.9 | < 5 | < 5 | 10.2 | < 5 | < 5 | < 5 |
| 212 | < 5 | 1070 | < 5 | < 5 | 24 | < 5 | 7.16 | 13.6 | < 5 | < 5 | < 5 |
| 213 | < 5 | 1080 | < 5 | < 5 | 7.91 | < 5 | < 5 | 16.1 | < 5 | < 5 | < 5 |
| 214 | < 5 | 1060 | < 5 | < 5 | 329 | < 5 | < 5 | 16.1 | < 5 | < 5 | < 5 |
| 215 | < 1 | 948 | < 1 | 1.46 | 14.3 | < 1 | 6.81 | 8.4 | < 3 | < 1 | 9.76 |

EAST MINNEWAUKAN FLATS (380251)

| OBS | Date Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 215 | 10/02/95 13:30 | 1 | 1180 | 282 | 344 | 1 | 0.01 | 1.38 | 0.038 | 0.128 | 0.135 | 417 | 78.9 |
| 216 | 03/25/96 14:15 | 1 | 1630 | 387 | 472 | 1 | 0.164 | 2.24 | 0.4 | 0.241 | 0.252 | 515 | 93.3 |
| 217 | 05/22/96 9:30 | 1 | 1210 | 253 | 291 | 9 | 0.025 | 1.21 | 0.02 | 0.143 | 0.123 | 312 | 55 |
| 218 | 05/22/96 9:30 | 3 | 1220 | 260 | 303 | 7 | 0.017 | 1.39 | 0.02 | 0.157 | 0.132 | 306 | 53.8 |
| 219 | 07/01/96 13:30 | 1 | 1330 | 264 | 284 | 19 | 0.01 | 1.38 | 0.03 | 0.232 | 0.193 | 358 | 60.6 |
| 220 | 07/01/96 13:31 | 3 | 1330 | 270 | 289 | 20 | 0.01 | 1.34 | 0.02 | 0.207 | 0.19 | 354 | 60 |
| 221 | 08/06/96 10:00 | 1 | 1430 | 292 | 299 | 28 | 0.01 | 1.27 | 0.02 | 0.3 | 0.296 | 358 | 59.1 |
| 222 | 08/06/96 10:00 | 3 | 1420 | 287 | 294 | 28 | 0.01 | 1.3 | 0.02 | 0.292 | 0.295 | 374 | 61.8 |
| 223 | 09/03/96 15:00 | 1 | 1480 | 303 | 285 | 42 | 0.01 | 1.59 | 0.02 | 0.285 | 0.232 | 385 | 63.7 |
| 224 | 10/01/96 9:00 | 1 | 1600 | 315 | 324 | 30 | 0.01 | 1.64 | 0.02 | 0.195 | 0.15 | 415 | 67.6 |
| 225 | 10/01/96 9:00 | 4 | 1600 | 317 | 324 | 31 | 0.01 | 1.78 | 0.02 | 0.182 | 0.152 | 409 | 66.3 |
| 226 | 03/04/97 10:00 | 1 | 2020 | 402 | 491 | 1 | 0.353 | 2.61 | 0.1 | 0.251 | 0.232 | 584 | 96.2 |
| 227 | 03/04/97 10:00 | 4 | 2020 | 393 | 480 | 1 | 0.413 | 2.44 | 0.05 | 0.288 | 0.255 | 465 | 76.4 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 215 | 53.3 | 119 | 24.4 | 0.083 | 0.023 | 50 | 361 | 858 | . | . | 5.84 | 75.1 |
| 216 | 68.4 | 162 | 31.6 | 0.108 | 0.463 | 71.5 | 390 | 1050 | . | . | 8.48 | 104 |
| 217 | 42.3 | 106 | 20.4 | 0.041 | 0.002 | 53.3 | 252 | 682 | . | . | 6.21 | 63.1 |
| 218 | 41.7 | 105 | 20.3 | 0.043 | 0.002 | 54.3 | 234 | 666 | . | . | 6.09 | 62.7 |
| 219 | 50.3 | 137 | 24.9 | 0.045 | 0.007 | 59.2 | 319 | 811 | . | . | 6.38 | 68.1 |
| 220 | 49.6 | 135 | 24.5 | 0.049 | 0.008 | 57.9 | 315 | 805 | . | . | 6.53 | 66.8 |
| 221 | 51.2 | 147 | 25.8 | 0.171 | 0.102 | 72.4 | 384 | 916 | . | . | 6.77 | 68.3 |
| 222 | 53.3 | 154 | 26.9 | 0.17 | 0.105 | 73.5 | 377 | 920 | . | . | 6.98 | 75 |
| 223 | 54.9 | 159 | 28.1 | 0.052 | 0.065 | 75.2 | 365 | 929 | . | . | 8.04 | 71.6 |
| 224 | 59.7 | 178 | 31.2 | 0.119 | 0.028 | 80.7 | 412 | 1020 | . | . | 6.91 | 78.1 |
| 225 | 59.1 | 175 | 30.9 | 0.111 | 0.027 | 79.7 | 357 | 960 | . | . | 6.85 | 74.9 |
| 226 | 83.4 | 247 | 42.4 | 0.1 | 0.364 | 116 | 524 | 1350 | . | . | 9.26 | 92.7 |
| 227 | 66.5 | 202 | 34.1 | 0.11 | 0.302 | 104 | 537 | 1260 | . | . | 8.78 | 90.1 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 215 | . | . | < 0.02 | < 0.2 | 2.31 | 0.27 | . | 1.14 | . | . | 11.9 |
| 216 | . | 181 | < 0.02 | 0.43 | 4.23 | 2.3 | . | 1.98 | . | . | 11 |
| 217 | . | . | < 0.02 | < 0.2 | 4.12 | 1.5 | . | 2.98 | . | . | 14.8 |
| 218 | . | . | < 0.02 | < 0.2 | 4.88 | 3.02 | . | 2.87 | . | . | 23 |
| 219 | . | . | < 0.02 | 0.28 | 3.44 | 1.88 | . | 2.2 | . | . | 33.1 |
| 220 | . | . | < 0.02 | 0.22 | 3.66 | < 0.2 | . | 2.82 | . | . | 25.4 |
| 221 | . | . | < 0.02 | 0.27 | 3.96 | 0.3 | . | 1.17 | . | . | 20.1 |
| 222 | . | . | < 0.02 | < 0.2 | 2.81 | < 0.2 | . | 1.18 | . | . | 21.1 |
| 223 | . | 221 | < 0.02 | 0.42 | 4.19 | 1.01 | . | 1.13 | . | . | 23.8 |
| 224 | . | . | < 0.02 | 0.26 | 3.46 | 2.7 | . | 0.65 | . | . | 39.9 |
| 225 | . | . | < 0.02 | 0.41 | 3.28 | 3.18 | . | 0.65 | . | . | 19.5 |
| 226 | . | . | < 0.02 | 0.85 | 5.29 | < 0.2 | . | 3.88 | . | . | 37.3 |
| 227 | . | . | < 0.02 | 1.15 | 14.8 | < 0.2 | . | 4.33 | . | . | 51.3 |

EAST MINNEWAUKAN FLATS (380251)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 228 | 05/15/97 | 9:30 | 1 | 1470 | 263 | 264 | 28 | 0.01 | 1.45 | 0.02 | 0.169 | 0.14 | 384 | 61.6 |
| 229 | 05/15/97 | 9:30 | 4 | 1550 | 272 | 269 | 31 | 0.034 | 1.44 | 0.02 | 0.189 | 0.194 | 388 | 61.2 |
| 230 | 07/07/97 | 14:45 | 1 | 1450 | 271 | 313 | 9 | 0.142 | 1.89 | 0.04 | 0.259 | 0.224 | 349 | 57.6 |
| 231 | 07/07/97 | 14:45 | 5 | 1450 | 270 | 307 | 11 | 0.134 | 1.8 | 0.05 | 0.249 | 0.211 | 367 | 60.9 |
| 232 | 08/04/97 | 12:00 | 1 | 1360 | 267 | 257 | 34 | 0.01 | 2.4 | 0.02 | 0.371 | 0.25 | 337 | 57.8 |
| 233 | 08/04/97 | 12:00 | 5 | 1350 | 268 | 278 | 24 | 0.063 | 1.56 | 0.02 | 0.328 | 0.279 | 399 | 68.4 |
| 234 | 09/02/97 | 13:00 | 1 | 1370 | 271 | 284 | 23 | 0.01 | 2.04 | 0.03 | 0.331 | 0.325 | 354 | 62.1 |
| 235 | 09/02/97 | 13:00 | 5 | 1430 | 277 | 299 | 19 | 0.05 | 1.69 | 0.07 | 0.276 | 0.284 | 348 | 59.9 |
| 236 | 10/06/97 | 13:45 | 1 | 1550 | 293 | 333 | 12 | 0.01 | 1.35 | 0.16 | 0.211 | 0.124 | 391 | 65.7 |
| 237 | 10/06/97 | 13:45 | 5 | 1530 | 288 | 327 | 12 | 0.01 | 1.29 | 0.15 | 0.203 | 0.128 | 375 | 62.8 |
| 238 | 05/20/98 | 12:00 | 1 | 1630 | 288 | 329 | 11 | 0.122 | . | . | . | 0.232 | 396 | 65.5 |
| 239 | 05/20/98 | 12:05 | 5 | 1630 | 298 | 340 | 12 | 0.118 | . | . | . | 0.242 | 397 | 65.8 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 228 | 55.8 | 170 | 28.9 | 0.056 | 0.055 | 79.8 | 425 | 980 | 70 | 0.42 | 6.82 | 63.9 |
| 229 | 57.1 | 179 | 29.7 | 0.078 | 0.057 | 86.1 | 457 | 1030 | 71 | 0.43 | 7.04 | 63.9 |
| 230 | 49.9 | 151 | 27.1 | 0.222 | 0.082 | 73.3 | 397 | 920 | 242 | < 2 | 7.57 | 64.9 |
| 231 | 52.3 | 156 | 27.7 | 0.232 | 0.087 | 73 | 397 | 930 | 206 | < 1 | 7.41 | 65.7 |
| 232 | 46.9 | 136 | 25.2 | 0.139 | 0.089 | 67.3 | 376 | 871 | 72 | < 1 | 6.97 | 70.7 |
| 233 | 55.4 | 162 | 30.3 | 0.047 | 0.13 | 73.4 | 393 | 945 | < 50 | < 1 | 6.91 | 71.7 |
| 234 | 48.3 | 140 | 25.8 | 0.077 | 0.063 | 62.5 | 364 | 867 | < 50 | < 2 | 8.45 | 74.4 |
| 235 | 48.2 | 141 | 25.6 | 0.097 | 0.067 | 79.4 | 379 | 901 | 75 | < 1 | 7.74 | 75.9 |
| 236 | 55.1 | 163 | 29.6 | 0.314 | 0.012 | 80 | 420 | 991 | 175 | < 1 | 7.23 | 77.8 |
| 237 | 52.9 | 161 | 28.5 | 0.247 | 0.012 | 80.5 | 420 | 980 | 173 | < 1 | 6.96 | 70.2 |
| 238 | 56.5 | 182 | 30.3 | 0.013 | 0.009 | 80.4 | 445 | 1030 | < 50 | < 1 | 6.82 | 68.9 |
| 239 | 56.5 | 186 | 30.6 | 0.03 | 0.01 | 85.4 | 445 | 1050 | < 50 | < 1 | 6.55 | 69.6 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 228 | < 0.2 | 230 | < 0.02 | < 0.2 | 5.64 | < 0.2 | 3.42 | 2.32 | < 0.04 | < 0.03 | 4.17 |
| 229 | < 0.2 | 269 | < 0.02 | 2.28 | 5.78 | 2.93 | 4.06 | 2.4 | < 0.04 | < 0.03 | 4.06 |
| 230 | < 1 | 223 | < 1 | 3.82 | 8.22 | < 1 | 5.71 | 2.3 | < 1 | < 1 | 12.3 |
| 231 | < 1 | 233 | < 1 | 3.03 | 8.09 | < 1 | 7.24 | 1.98 | < 1 | < 1 | 18.4 |
| 232 | < 1 | 205 | < 1 | < 1 | 5.87 | < 1 | 4.26 | 1.52 | < 1 | < 1 | 2.79 |
| 233 | < 1 | 204 | < 1 | < 1 | 5.39 | < 1 | 3.73 | 1.63 | < 1 | < 1 | 3.59 |
| 234 | < 1 | 201 | < 1 | < 1 | 7.15 | 8.52 | 5.35 | 3.46 | 1.28 | < 1 | 17.3 |
| 235 | < 1 | 192 | < 1 | < 1 | 6.61 | 7.8 | 4.45 | 2.84 | < 1 | < 1 | 22.7 |
| 236 | < 1 | 212 | < 1 | < 1 | 5.05 | 4.59 | 3.59 | 2.11 | 1.13 | < 1 | 18.8 |
| 237 | < 1 | 192 | < 1 | < 1 | 5.76 | 6 | 3.63 | 1.74 | < 1 | < 1 | 26 |
| 238 | < 1 | 214 | < 1 | < 1 | 2.58 | < 1 | 4.1 | < 1 | < 1 | < 1 | < 1 |
| 239 | < 1 | 214 | < 1 | < 1 | 1.44 | < 1 | 4.1 | < 1 | < 1 | < 1 | < 1 |

EAST MINNEWAUKAN FLATS (380251)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 240 | 07/06/98 | 12:30 | 1 | 1680 | 335 | 315 | 46 | 0.01 | 1.49 | 0.1 | 0.58 | 0.191 | 416 | 68.4 |
| 241 | 07/06/98 | 12:35 | 6 | 1680 | 347 | 318 | 52 | 0.01 | 1.06 | 0.1 | 0.412 | 0.188 | 412 | 67.8 |
| 242 | 08/04/98 | 9:10 | 1 | 1770 | 317 | 346 | 20 | 0.022 | 1.39 | 0.03 | 1 | 0.342 | 405 | 64.7 |
| 243 | 08/04/98 | 9:15 | 5 | 1770 | 313 | 341 | 20 | 0.015 | 1.36 | 0.03 | 1.05 | 0.342 | 407 | 65.1 |
| 244 | 09/10/98 | 9:45 | 1 | 1790 | 340 | 356 | 29 | 0.01 | 1.55 | 0.02 | 0.646 | 0.297 | 456 | 73.2 |
| 245 | 09/10/98 | 9:50 | 5 | 1790 | 330 | 348 | 27 | 0.01 | 1.43 | 0.02 | 0.585 | 0.354 | 460 | 74.2 |
| 246 | 10/20/98 | 9:00 | 1 | 1790 | 337 | 367 | 22 | 0.029 | 1.26 | 0.02 | 0.342 | 0.211 | 436 | 70.2 |
| 247 | 10/20/98 | 9:05 | 5 | 1780 | 329 | 355 | 23 | 0.033 | 1.12 | 0.02 | 0.281 | 0.195 | 446 | 71.8 |
| 248 | 02/23/99 | 12:45 | 1 | 2040 | 404 | 457 | 18 | 0.146 | 1.67 | 0.03 | 0.251 | 0.335 | 558 | 88.7 |
| 249 | 02/23/99 | 12:50 | 5 | 2050 | 399 | 450 | 18 | 0.089 | 1.43 | 0.03 | 0.318 | 0.46 | 536 | 84 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 240 | 59.6 | 187 | 30.2 | 0.059 | 0.003 | 81.1 | 431 | 1060 | 104 | < 1 | 7.99 | 76.1 |
| 241 | 59 | 182 | 29.8 | 0.081 | 0.004 | 80.9 | 431 | 1060 | 111 | < 1 | 7.64 | 75.5 |
| 242 | 59.1 | 190 | 31.1 | 0.092 | 0.019 | 93.4 | 484 | 1110 | 81 | < 1 | 10.3 | 72.4 |
| 243 | 59.4 | 194 | 31.3 | 0.091 | 0.018 | 94.7 | 492 | 1130 | 78 | < 1 | 10.8 | 75.4 |
| 244 | 66.3 | 209 | 35.2 | 0.243 | 0.043 | 98.8 | 494 | 1180 | 181 | < 1 | 11.7 | 85 |
| 245 | 66.8 | 208 | 35.5 | 0.158 | 0.044 | 99.1 | 496 | 1180 | 100 | < 1 | 11.4 | 83.1 |
| 246 | 63.3 | 201 | 33 | 0.533 | 0.048 | 99.6 | 508 | 1180 | 370 | < 1 | 9.6 | 83.7 |
| 247 | 64.8 | 205 | 33.7 | 0.509 | 0.051 | 94.4 | 508 | 1180 | 343 | < 1 | 9.8 | 85.9 |
| 248 | 81.6 | 255 | 41.1 | 0.007 | 0.149 | 110 | 557 | 1380 | 51 | < 1 | 10.8 | 91.1 |
| 249 | 79.3 | 257 | 39.8 | 0.007 | 0.102 | 112 | 565 | 1380 | < 50 | < 1 | 11.3 | 95.9 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 240 | < 1 | 232 | < 1 | < 1 | 2.98 | < 1 | 3.84 | < 1 | < 2 | < 1 | < 1 |
| 241 | < 1 | 228 | < 1 | < 1 | 2.83 | < 1 | 3.77 | < 1 | < 1 | < 1 | < 1 |
| 242 | < 1 | 206 | < 1 | < 1 | 1.95 | < 1 | 3.74 | 1.3 | < 1 | < 1 | 1.33 |
| 243 | < 1 | 206 | < 1 | < 1 | 8.3 | < 1 | 3.78 | 1.98 | < 1 | < 1 | 2.01 |
| 244 | < 1 | 235 | < 1 | < 1 | 2.38 | < 1 | 3.72 | 1.5 | < 1 | < 1 | 2.93 |
| 245 | < 1 | 222 | < 1 | < 1 | 2.47 | < 1 | 3.68 | 1.48 | < 1 | < 1 | 1.59 |
| 246 | < 1 | 235 | < 1 | < 1 | 3.95 | < 1 | 4.22 | < 1 | < 1 | < 1 | 4.66 |
| 247 | < 1 | 237 | < 1 | < 1 | 2.8 | < 1 | 4.17 | 1.25 | < 1 | < 1 | 3.56 |
| 248 | < 1 | 254 | < 1 | < 1 | 2.51 | < 1 | 4.55 | 1.46 | < 1 | < 1 | 3.77 |
| 249 | < 1 | 249 | < 1 | < 1 | 2.68 | < 1 | 4.39 | 2.12 | < 1 | < 1 | 5.2 |

MAIN BAY (380233)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 250 | 09/02/93 | 15:45 | 6 | 2100 | 316 | 335 | 25 | 0.057 | 1.48 | 0.04 | 0.325 | 0.298 | 461 | 63 |
| 251 | 03/15/95 | 13:30 | 1 | 3060 | 356 | 424 | 5 | 0.214 | 1.69 | 0.593 | 0.225 | 0.225 | 601 | 57.6 |
| 252 | 03/15/95 | 13:30 | 8 | 3410 | 408 | 494 | 2 | 0.064 | 1.76 | 0.591 | 0.273 | 0.275 | 685 | 63.2 |
| 253 | 05/15/95 | 16:00 | 9 | 2830 | 340 | 380 | 17 | 0.046 | 1.46 | 0.419 | 0.255 | 0.19 | 581 | 61.3 |
| 254 | 07/25/95 | 16:30 | 1 | 2410 | 315 | 324 | 30 | 0.059 | 1.37 | 0.019 | 0.232 | 0.222 | 581 | 66.2 |
| 255 | 07/25/95 | 16:30 | 6 | 2420 | 317 | 332 | 27 | 0.014 | 1.39 | 0.025 | 0.229 | 0.213 | 505 | 59 |
| 256 | 07/25/95 | 16:30 | 11 | 2400 | 316 | 337 | 24 | 0.132 | 1.46 | 0.021 | 0.232 | 0.232 | 486 | 56.5 |
| 257 | 10/03/95 | 12:30 | 1 | 2560 | 336 | 359 | 25 | 0.01 | 1.68 | 0.005 | 0.226 | 0.202 | 644 | 68.3 |
| 258 | 10/03/95 | 12:30 | 10 | 2560 | 338 | 362 | 25 | 0.01 | 1.54 | 0.006 | 0.241 | 0.192 | 612 | 67 |
| 259 | 03/26/96 | 9:10 | 1 | 2730 | 386 | 433 | 19 | 0.01 | 1.79 | 0.04 | 0.151 | 0.148 | 631 | 71.4 |
| 260 | 03/26/96 | 9:10 | 5 | 2710 | 377 | 430 | 15 | 0.01 | 1.63 | 0.04 | 0.143 | 0.148 | 605 | 70.7 |
| 261 | 03/26/96 | 9:10 | 10 | 2940 | 376 | 449 | 5 | 0.01 | 1.71 | 0.1 | 0.31 | 0.344 | 639 | 66.3 |
| 262 | 05/20/96 | 15:45 | 1 | 2450 | 334 | 365 | 21 | 0.01 | 1.43 | 0.02 | 0.195 | 0.166 | 494 | 57.2 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 250 | 73.8 | 265 | 40.3 | 0.038 | 0.03 | 137 | 636 | 1410 | 50 | < 1 | 10.5 | 58.8 |
| 251 | 111 | 408 | 62.6 | 0.134 | 0.007 | 20.4 | 1020 | 1890 | . | . | 12 | 49.9 |
| 252 | 128 | 521 | 71.3 | 0.163 | 0.008 | 227 | 1170 | 2430 | . | . | 14 | 43.6 |
| 253 | 104 | 394 | 55.8 | 0.133 | 0.032 | 184 | 856 | 1860 | . | . | 14 | 47 |
| 254 | 101 | 369 | 53.5 | 0.064 | 0.014 | 165 | 930 | 1880 | . | . | 9.9 | 35.2 |
| 255 | 86.9 | 315 | 46 | 0.064 | 0.015 | 156 | 779 | 1630 | . | . | 11.2 | 41.1 |
| 256 | 83.7 | 305 | 45.1 | 0.061 | 0.021 | 147 | 761 | 1590 | . | . | 11.2 | 40.3 |
| 257 | 115 | 390 | 54.3 | 0.067 | 0.012 | 161 | 882 | 1870 | . | . | 12.4 | 52.8 |
| 258 | 108 | 411 | 54.4 | 0.074 | 0.013 | 161 | 880 | 1890 | . | . | 12.3 | 53 |
| 259 | 110 | 385 | 55.8 | 0.051 | 0.01 | 177 | 757 | 1790 | . | . | 15.1 | 55.7 |
| 260 | 104 | 358 | 53.1 | 0.051 | 0.011 | 174 | 988 | 1980 | . | . | 14.6 | 52.5 |
| 261 | 115 | 404 | 58.3 | 0.045 | 0.26 | 197 | 1040 | 2110 | . | . | 16.6 | 54.1 |
| 262 | 85.2 | 317 | 44.6 | 0.007 | 0.027 | 155 | 643 | 1500 | . | . | 13.3 | 51.6 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 250 | < 1 | 305 | < 1 | < 1 | 7.8 | 3.82 | 3.47 | 2.52 | < 1 | < 1 | 18.9 |
| 251 | . | . | 0.43 | 1.7 | < 14 | 2.3 | . | 1.8 | . | . | < 9 |
| 252 | . | . | < 0.2 | 1.42 | < 14 | 1.6 | . | 1.1 | . | . | < 9 |
| 253 | . | . | < 0.2 | 1.45 | < 14 | 4.6 | . | 0.6 | . | . | 14 |
| 254 | . | 264 | < 0.2 | 2.11 | < 14 | 2.7 | . | < 0.2 | . | . | 10 |
| 255 | . | 296 | < 0.2 | 1.48 | < 14 | 6.1 | . | 1.1 | . | . | 15 |
| 256 | . | 351 | < 0.2 | 1.17 | < 14 | 2.6 | . | 0.3 | . | . | < 9 |
| 257 | . | . | < 0.02 | 0.23 | 6.34 | 0.51 | . | 3.63 | . | . | 3.18 |
| 258 | . | . | < 0.02 | < 0.2 | 6.12 | 0.39 | . | 2.92 | . | . | 4.66 |
| 259 | . | 370 | < 0.02 | 0.45 | 7.34 | 2.32 | . | 6.19 | . | . | 8.33 |
| 260 | . | 341 | 0.03 | 0.32 | 7.06 | 2.03 | . | 5.25 | . | . | 5.93 |
| 261 | . | 394 | < 0.02 | 0.25 | 7.83 | 1.69 | . | 6.02 | . | . | 6.24 |
| 262 | . | . | < 0.02 | 0.41 | 7.48 | 3.99 | . | 7.42 | . | . | 6.88 |

MAIN BAY (380233)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 263 | 05/20/96 | 15:45 | 5 | 2500 | 337 | 363 | 24 | 0.016 | 1.55 | 0.02 | 0.198 | 0.17 | 520 | 59.7 |
| 264 | 05/20/96 | 15:44 | 11 | 2520 | 338 | 368 | 22 | 0.015 | 1.64 | 0.02 | 0.188 | 0.164 | 540 | 61.6 |
| 265 | 07/01/96 | 12:30 | 1 | 2330 | 320 | 332 | 29 | 0.01 | 1.73 | 0.02 | 0.217 | 0.193 | 472 | 57.1 |
| 266 | 07/01/96 | 12:30 | 6 | 2350 | 324 | 341 | 27 | 0.01 | 1.39 | 0.02 | 0.216 | 0.199 | 488 | 58.8 |
| 267 | 07/01/96 | 12:30 | 11 | 2390 | 327 | 359 | 20 | 0.084 | 1.47 | 0.04 | 0.254 | 0.235 | 485 | 57.6 |
| 268 | 08/05/96 | 14:00 | 1 | 2280 | 328 | 329 | 35 | 0.01 | 1.49 | 0.02 | 0.257 | 0.25 | 474 | 57.6 |
| 269 | 08/05/96 | 14:00 | 5 | 2300 | 326 | 331 | 33 | 0.01 | 1.42 | 0.02 | 0.256 | 0.242 | 496 | 60.3 |
| 270 | 08/05/96 | 14:00 | 11 | 2290 | 328 | 337 | 31 | 0.041 | 1.72 | 0.02 | 0.267 | 0.251 | 494 | 60 |
| 271 | 09/03/96 | 13:00 | 1 | 2310 | 330 | 318 | 42 | 0.01 | 1.62 | 0.02 | 0.262 | 0.241 | 600 | 72.1 |
| 272 | 09/03/96 | 13:00 | 6 | 2320 | 333 | 333 | 36 | 0.01 | 1.48 | 0.02 | 0.263 | 0.246 | 473 | 58.1 |
| 273 | 09/03/96 | 13:00 | 11 | 2330 | 327 | 332 | 33 | 0.044 | 1.54 | 0.02 | 0.255 | 0.262 | 595 | 71.6 |
| 274 | 09/30/96 | 13:00 | 1 | 2400 | 339 | 355 | 29 | 0.01 | 1.48 | 0.08 | 0.268 | 0.258 | 497 | 60.6 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 263 | 90 | 334 | 47.1 | 0.018 | 0.031 | 159 | 699 | 1590 | . | . | 12.8 | 64.5 |
| 264 | 93.7 | 352 | 49.2 | 0.025 | 0.036 | 160 | 706 | 1630 | . | . | 12.8 | 67.6 |
| 265 | 80.1 | 292 | 42.5 | 0.007 | 0.002 | 141 | 725 | 1530 | . | . | 9.97 | 51.1 |
| 266 | 82.8 | 305 | 44 | 0.007 | 0.002 | 147 | 726 | 1560 | . | . | 9.72 | 54.8 |
| 267 | 82.9 | 308 | 44.6 | 0.007 | 0.022 | 148 | 713 | 1550 | . | . | 10.1 | 56.8 |
| 268 | 80.1 | 296 | 42.7 | 0.007 | 0.006 | 123 | 648 | 1450 | . | . | 10.4 | 47.8 |
| 269 | 83.8 | 309 | 44.7 | 0.017 | 0.007 | 122 | 631 | 1450 | . | . | 10.7 | 51.2 |
| 270 | 83.7 | 306 | 44.5 | 0.007 | 0.015 | 122 | 645 | 1460 | . | . | 10.3 | 53 |
| 271 | 102 | 371 | 54.7 | 0.015 | 0.002 | 148 | 773 | 1720 | . | . | 11.1 | 49.9 |
| 272 | 79.7 | 291 | 42.5 | 0.023 | 0.002 | 146 | 758 | 1580 | . | . | 10.9 | 54.6 |
| 273 | 101 | 370 | 54.7 | 0.049 | 0.002 | 148 | 766 | 1710 | . | . | 10.6 | 47.5 |
| 274 | 83.9 | 309 | 45.6 | 0.09 | 0.002 | 144 | 643 | 1490 | . | . | 10.1 | 74.7 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 263 | . | . | < 0.02 | 0.58 | 7.86 | 5.24 | . | 5.85 | . | . | 9.23 |
| 264 | . | . | < 0.02 | 0.4 | 7.45 | 14.4 | . | 5.79 | . | . | 8.34 |
| 265 | . | . | < 0.02 | < 0.2 | 6.6 | < 0.2 | . | 3.32 | . | . | 20.6 |
| 266 | . | . | < 0.02 | < 0.2 | 5.38 | < 0.2 | . | 3.42 | . | . | 23 |
| 267 | . | . | < 0.02 | < 0.2 | 5.35 | < 0.2 | . | 3.88 | . | . | 24.5 |
| 268 | . | . | < 0.02 | < 0.2 | 5.3 | 0.76 | . | 2.6 | . | . | 13.3 |
| 269 | . | . | < 0.02 | < 0.2 | 5.62 | 1.41 | . | 2.9 | . | . | 14 |
| 270 | . | . | < 0.02 | < 0.2 | 5.04 | 0.2 | . | 2.55 | . | . | 10.4 |
| 271 | . | 350 | < 0.02 | < 0.2 | 4.93 | < 0.2 | . | 1.56 | . | . | 26.5 |
| 272 | . | 368 | < 0.02 | 0.64 | 8.15 | < 0.2 | . | 1.94 | . | . | 24.8 |
| 273 | . | 359 | < 0.02 | 0.22 | 4.69 | < 0.2 | . | 2.13 | . | . | 17.5 |
| 274 | . | . | < 0.02 | < 0.2 | 6.05 | 21 | . | 1.42 | . | . | 29.5 |

MAIN BAY (380233)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 275 | 09/30/96 | 13:00 | 6 | 2390 | 332 | 349 | 28 | 0.023 | 1.56 | 0.08 | 0.262 | 0.246 | 512 | 62.6 |
| 276 | 09/30/96 | 13:00 | 12 | 2390 | 337 | 353 | 29 | 0.01 | 1.55 | 0.09 | 0.282 | 0.268 | 484 | 59.1 |
| 277 | 03/04/97 | 17:30 | 1 | 2540 | 376 | 419 | 20 | 0.051 | 2.02 | 0.24 | 0.244 | 0.243 | 493 | 66.1 |
| 278 | 03/04/97 | 17:30 | 5 | 2520 | 377 | 424 | 18 | 0.037 | 1.69 | 0.27 | 0.799 | 0.22 | 479 | 63.3 |
| 279 | 03/04/97 | 17:30 | 10.5 | 2700 | 363 | 425 | 9 | 0.014 | 1.74 | 0.38 | 0.329 | 0.321 | 552 | 67.5 |
| 280 | 05/14/97 | 8:30 | 1 | 2320 | 335 | 368 | 20 | 0.029 | 1.74 | 0.11 | 0.281 | 0.304 | 528 | 67.6 |
| 281 | 05/14/97 | 8:30 | 6 | 2330 | 335 | 372 | 18 | 0.028 | 1.71 | 0.11 | 0.291 | 0.286 | 529 | 67.6 |
| 282 | 05/14/97 | 8:30 | 12 | 2330 | 333 | 360 | 23 | 0.022 | 1.7 | 0.11 | 0.28 | 0.297 | 529 | 67.4 |
| 283 | 07/08/97 | 10:45 | 1 | 2090 | 313 | 342 | 20 | 0.01 | 1.46 | 0.04 | 0.303 | 0.242 | 433 | 58.5 |
| 284 | 07/08/97 | 10:45 | 6 | 2070 | 307 | 336 | 19 | 0.01 | 1.48 | 0.04 | 0.282 | 0.239 | 440 | 59.5 |
| 285 | 07/08/97 | 10:45 | 13 | 2080 | 309 | 339 | 19 | 0.01 | 1.52 | 0.04 | 0.298 | 0.244 | 439 | 59.3 |
| 286 | 08/05/97 | 18:00 | 1 | 2050 | 310 | 309 | 34 | 0.01 | 1.63 | 0.02 | 0.223 | 0.229 | 533 | 71.8 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 275 | 86.4 | 318 | 47.1 | 0.089 | 0.002 | 151 | 630 | 1500 | . | . | 10.4 | 64 |
| 276 | 81.8 | 302 | 44.4 | 0.081 | 0.002 | 150 | 645 | 1490 | . | . | 9.47 | 59.9 |
| 277 | 79.7 | 293 | 44.2 | 0.079 | 0.006 | 150 | 686 | 1550 | . | . | 14.3 | 58.2 |
| 278 | 77.9 | 288 | 43.4 | 0.087 | 0.003 | 157 | 730 | 1590 | . | . | 14.3 | 57.5 |
| 279 | 93.2 | 365 | 51.2 | 0.105 | 0.237 | 171 | 786 | 1750 | . | . | 18.1 | 58.4 |
| 280 | 87.3 | 321 | 47.2 | 0.051 | 0.049 | 151 | 780 | 1660 | 83 | 3.27 | 13.4 | 54.1 |
| 281 | 87.4 | 322 | 47.4 | 0.06 | 0.05 | 156 | 762 | 1650 | 83 | 1.73 | 14.5 | 52.5 |
| 282 | 87.5 | 326 | 47.5 | 0.05 | 0.05 | 146 | 745 | 1620 | 87 | 1.6 | 14.8 | 52.3 |
| 283 | 69.8 | 249 | 38.2 | 0.06 | 0.002 | 127 | 642 | 1370 | 70 | < 1 | 10.7 | 51.4 |
| 284 | 70.8 | 253 | 38.6 | 0.065 | 0.003 | 127 | 640 | 1370 | 55 | < 1 | 10.6 | 54.8 |
| 285 | 70.6 | 253 | 38.6 | 0.073 | 0.002 | 127 | 641 | 1380 | 54 | < 1 | 11.1 | 53.9 |
| 286 | 85.8 | 307 | 48.2 | 0.021 | 0.011 | 129 | 662 | 1490 | < 50 | < 1 | 10.5 | 54.5 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 275 | . | . | < 0.02 | < 0.2 | 6.19 | 1.16 | . | 1.72 | . | . | 29.1 |
| 276 | . | . | < 0.02 | < 0.2 | 5.28 | 1.89 | . | 1.06 | . | . | 28.8 |
| 277 | . | . | < 0.02 | 0.39 | 5.1 | < 0.2 | . | 7.78 | . | . | 28.8 |
| 278 | . | . | < 0.02 | < 0.2 | 4.93 | < 0.2 | . | 8.28 | . | . | 25.1 |
| 279 | . | . | < 0.02 | 0.38 | 5.87 | < 0.2 | . | 8.6 | . | . | 56.7 |
| 280 | < 0.2 | 365 | < 0.02 | 0.63 | 10.4 | 1.3 | 3.85 | 4.37 | 0.66 | < 0.03 | 19.3 |
| 281 | < 0.2 | 362 | < 0.02 | 0.6 | 10.1 | < 0.2 | 3.49 | 4.67 | 0.11 | < 0.03 | 3.82 |
| 282 | < 0.2 | 379 | < 0.02 | 0.74 | 9.73 | < 0.2 | 3.45 | 4.75 | < 0.04 | < 0.03 | 5.34 |
| 283 | < 1 | 303 | < 1 | 1.03 | 8.74 | < 1 | 3.78 | 3.36 | < 1 | < 1 | 11.2 |
| 284 | < 1 | 311 | < 1 | < 1 | 9.06 | 1.37 | 3.95 | 3.61 | < 1 | < 1 | 11.2 |
| 285 | < 1 | 300 | < 1 | < 1 | 9.34 | < 1 | 3.86 | 3.69 | < 1 | < 1 | 10.6 |
| 286 | < 1 | 309 | < 1 | < 1 | 6.63 | < 1 | 3.62 | 3.43 | < 1 | < 1 | 9.98 |

MAIN BAY (380233)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 287 | 08/05/97 | 18:00 | 7 | 2050 | 307 | 308 | 33 | 0.01 | 1.61 | 0.02 | 0.225 | 0.235 | 535 | 71.7 |
| 288 | 08/05/97 | 18:00 | 12 | 2090 | 305 | 311 | 30 | 0.01 | 1.66 | 0.02 | 0.215 | 0.229 | 527 | 70.1 |
| 289 | 09/02/97 | 15:45 | 1 | 2080 | 311 | 319 | 30 | 0.022 | 1.56 | 0.03 | 0.332 | 0.306 | 461 | 63.3 |
| 290 | 09/02/97 | 15:45 | 13 | 2140 | 315 | 338 | 23 | 0.092 | 1.59 | 0.05 | 0.335 | 0.3 | 453 | 61.5 |
| 291 | 10/07/97 | 9:00 | 1 | 2160 | 324 | 353 | 21 | 0.01 | 1.34 | 0.15 | 0.312 | 0.248 | 470 | 63.2 |
| 292 | 10/07/97 | 9:02 | 7 | 2170 | 318 | 344 | 22 | 0.01 | 1.61 | 0.16 | 0.311 | 0.244 | 464 | 62.5 |
| 293 | 10/07/97 | 9:05 | 14 | 2160 | 324 | 351 | 22 | 0.011 | 1.45 | 0.15 | 0.308 | 0.249 | 467 | 62.8 |
| 294 | 05/19/98 | 14:00 | 1 | 2130 | 327 | 363 | 18 | 0.156 | 1.87 | 0.08 | 0.948 | 0.23 | 446 | 62.7 |
| 295 | 05/19/98 | 14:05 | 8 | 2130 | 325 | 360 | 18 | 0.173 | 1.71 | 0.23 | 0.99 | 0.24 | 474 | 66.7 |
| 296 | 05/19/98 | 14:10 | 13 | 2140 | 328 | 364 | 18 | 0.158 | 1.86 | 0.08 | 0.843 | 0.028 | 467 | 65.5 |
| 297 | 07/07/98 | 11:00 | 1 | 2130 | 359 | 304 | 66 | 0.01 | 1.08 | 0.02 | 0.359 | 0.193 | 482 | 67.9 |
| 298 | 07/07/98 | 11:05 | 7 | 2130 | 350 | 297 | 64 | 0.01 | 1.09 | 0.02 | 0.52 | 0.19 | 472 | 66.5 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 287 | 86.5 | 314 | 48.8 | 0.017 | 0.01 | 131 | 670 | 1510 | 57 | < 1 | 10.4 | 54.4 |
| 288 | 85.5 | 312 | 48 | 0.023 | 0.014 | 131 | 679 | 1510 | 55 | < 1 | 9.89 | 52.4 |
| 289 | 73.5 | 262 | 40.3 | 0.039 | 0.026 | 137 | 632 | 1400 | < 50 | < 1 | 10.6 | 59.3 |
| 290 | 72.7 | 260 | 39.6 | 0.029 | 0.035 | 138 | 630 | 1390 | < 50 | < 1 | 10.9 | 59.8 |
| 291 | 75.8 | 271 | 42 | 0.149 | 0.002 | 136 | 655 | 1440 | 124 | < 1 | 10.9 | 57.9 |
| 292 | 74.8 | 267 | 41.4 | 0.119 | 0.002 | 130 | 655 | 1420 | 92 | < 1 | 10.8 | 56.5 |
| 293 | 75.3 | 270 | 41.8 | 0.094 | 0.002 | 131 | 658 | 1440 | 82 | < 1 | 10.9 | 57.7 |
| 294 | 70.2 | 262 | 38.7 | 0.038 | 0.002 | 137 | 596 | 1360 | < 50 | < 1 | 8.93 | 57.5 |
| 295 | 74.7 | 279 | 41.6 | 0.087 | 0.002 | 137 | 588 | 1380 | < 50 | < 1 | 9.5 | 56.8 |
| 296 | 73.7 | 276 | 40.7 | 0.078 | 0.002 | 138 | 594 | 1390 | < 50 | < 1 | 9.57 | 58.7 |
| 297 | 76 | 266 | 40.1 | 0.017 | 0.002 | 122 | 599 | 1390 | 72 | < 1 | 9.64 | 64.2 |
| 298 | 74.4 | 264 | 39.2 | 0.016 | 0.002 | 121 | 602 | 1380 | 51 | < 1 | 9.49 | 63.9 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 287 | < 1 | 336 | < 1 | < 1 | 7.12 | < 1 | 3.66 | 3.18 | < 1 | < 1 | 2.21 |
| 288 | < 1 | 333 | < 1 | < 1 | 6.49 | 2.58 | 3.43 | 2.78 | < 1 | < 1 | 1.54 |
| 289 | < 1 | 296 | < 1 | < 1 | 8.31 | < 1 | 3.47 | 3.39 | < 1 | < 1 | 14.6 |
| 290 | < 1 | 304 | < 1 | < 1 | 7.79 | 2.21 | 3.31 | 2.6 | < 1 | < 1 | 18.2 |
| 291 | < 1 | 281 | < 1 | < 1 | 7.24 | 8.61 | 4.03 | 3.79 | < 1 | < 1 | 36.9 |
| 292 | < 1 | 281 | < 1 | < 1 | 7.08 | 6.21 | 3.58 | 3.5 | < 1 | < 1 | 28.1 |
| 293 | < 1 | 309 | < 1 | < 1 | 7.04 | 4.6 | 3.63 | 3.73 | < 1 | < 1 | 19.2 |
| 294 | < 1 | 301 | < 1 | < 1 | 2.41 | 2.1 | 4.63 | 1.26 | < 1 | < 1 | 7.91 |
| 295 | < 1 | 286 | < 1 | < 1 | 2.01 | < 1 | 3.48 | 1.44 | < 1 | < 1 | < 1 |
| 296 | < 1 | 294 | < 1 | < 1 | 1.92 | < 1 | 3.75 | 1.37 | < 1 | < 1 | < 1 |
| 297 | < 1 | 297 | < 1 | < 1 | 3.74 | < 1 | 4.35 | 1.43 | < 1 | < 1 | 1.02 |
| 298 | < 1 | 273 | < 1 | < 1 | 3.38 | < 1 | 5.05 | 1.4 | < 1 | < 1 | < 1 |

MAIN BAY (380233)
(continued)

| OBS | Date Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 299 | 07/07/98 11:10 | 13 | 2140 | 357 | 306 | 64 | 0.01 | 1.08 | 0.02 | 0.383 | 0.193 | 469 | 65.8 |
| 300 | 08/03/98 15:20 | 1 | 2120 | 325 | 342 | 27 | 0.033 | 1.31 | 0.02 | 0.717 | 0.276 | 460 | 64 |
| 301 | 08/03/98 15:25 | 6 | 2120 | 325 | 342 | 27 | 0.02 | 1.42 | 0.02 | 0.909 | 0.272 | 458 | 63.7 |
| 302 | 08/03/98 15:30 | 13 | 2120 | 327 | 346 | 26 | 0.04 | 1.3 | 0.02 | 0.857 | 0.279 | 446 | 62 |
| 303 | 09/08/98 14:00 | 1 | 2100 | 337 | 349 | 31 | 0.022 | 1.52 | 0.02 | 0.352 | 0.296 | 512 | 71.2 |
| 304 | 09/08/98 14:05 | 7 | 2080 | 351 | 362 | 33 | 0.025 | 1.53 | 0.02 | 0.344 | 0.282 | 517 | 72.1 |
| 305 | 09/08/98 14:10 | 12 | 2100 | 346 | 359 | 31 | 0.033 | 2.89 | 0.02 | 0.653 | 0.275 | 518 | 71.9 |
| 306 | 10/20/98 8:00 | 1 | 2130 | 340 | 360 | 27 | 0.075 | 1.46 | 0.07 | 0.368 | 0.262 | 500 | 70 |
| 307 | 10/20/98 8:05 | 7 | 2140 | 339 | 361 | 26 | 0.079 | 1.58 | 0.07 | 0.376 | 0.257 | 505 | 70.6 |
| 308 | 10/20/98 8:10 | 13 | 2120 | 329 | 349 | 26 | 0.085 | 1.43 | 0.08 | 0.376 | 0.272 | 464 | 64.9 |
| 309 | 02/24/99 10:20 | 1 | 2240 | 379 | 422 | 20 | 0.104 | 1.39 | 0.2 | 0.488 | 0.486 | 485 | 67.8 |
| 310 | 02/24/99 10:25 | 6 | 2240 | 376 | 418 | 20 | 0.085 | 1.4 | 0.19 | 0.536 | 0.289 | 562 | 78.8 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 299 | 73.9 | 262 | 38.9 | 0.023 | 0.002 | 123 | 615 | 1390 | 85 | < 1 | 9.51 | 64.1 |
| 300 | 72.9 | 256 | 38.8 | 0.007 | 0.012 | 119 | 597 | 1340 | < 50 | < 1 | 11.1 | 61.7 |
| 301 | 72.6 | 260 | 38.6 | 0.007 | 0.012 | 116 | 586 | 1330 | < 50 | < 1 | 11 | 61.2 |
| 302 | 70.8 | 251 | 37.7 | 0.007 | 0.009 | 119 | 602 | 1340 | < 50 | < 1 | 11.1 | 63.6 |
| 303 | 81.2 | 283 | 43.9 | 0.007 | 0.037 | 125 | 632 | 1440 | < 50 | < 1 | 11.3 | 62.7 |
| 304 | 81.8 | 286 | 44.2 | 0.007 | 0.038 | 122 | 624 | 1440 | < 50 | < 1 | 11.4 | 63.4 |
| 305 | 82.1 | 285 | 44.6 | 0.007 | 0.037 | 121 | 615 | 1430 | < 50 | < 1 | 11.3 | 62.4 |
| 306 | 79.1 | 280 | 42.6 | 0.069 | 0.012 | 128 | 652 | 1460 | 61 | < 1 | 11 | 63.3 |
| 307 | 79.8 | 283 | 42.8 | 0.083 | 0.011 | 125 | 640 | 1450 | 64 | < 1 | 10.7 | 63.3 |
| 308 | 73.3 | 258 | 39.1 | 0.075 | 0.01 | 131 | 666 | 1430 | 64 | < 1 | 10.8 | 64.3 |
| 309 | 76.7 | 260 | 39.9 | 0.007 | 0.002 | 140 | 674 | 1490 | < 50 | < 1 | 11.3 | 67.9 |
| 310 | 88.7 | 312 | 44.2 | 0.007 | 0.002 | 137 | 685 | 1570 | 72 | < 1 | 11.4 | 73.5 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 299 | < 1 | 292 | < 1 | < 1 | 3.1 | < 1 | 3.82 | 1.18 | < 1 | < 1 | < 1 |
| 300 | < 1 | 258 | < 1 | < 1 | 2.95 | < 1 | 3.88 | 1.86 | < 1 | < 1 | < 2.74 |
| 301 | < 1 | 271 | < 1 | < 1 | 2.24 | < 1 | 3.81 | 1.74 | < 1 | < 1 | < 1.04 |
| 302 | < 1 | 241 | < 1 | < 1 | 2.35 | < 1 | 3.7 | 1.87 | < 1 | < 1 | < 1.76 |
| 303 | < 1 | 261 | < 1 | < 1 | 2.8 | < 1 | 3.53 | 1.75 | < 1 | < 1 | < 1.54 |
| 304 | < 1 | 267 | < 1 | < 1 | 2.6 | < 1 | 3.42 | 1.69 | < 1 | < 1 | < 2.36 |
| 305 | < 1 | 259 | < 1 | < 1 | 3.15 | < 1 | 3.37 | 1.42 | < 1 | < 1 | < 1 |
| 306 | < 1 | 294 | < 1 | < 1 | 3.13 | < 1 | 3.66 | 1.13 | < 1 | < 1 | < 3.07 |
| 307 | < 1 | 293 | < 1 | < 1 | 6.29 | < 1 | 3.35 | 1.19 | < 1 | < 1 | < 4.14 |
| 308 | < 1 | 273 | < 1 | < 1 | 2.94 | < 1 | 3.2 | 1.56 | < 1 | < 1 | < 2.9 |
| 309 | < 1 | 290 | < 1 | < 1 | 2.53 | < 1 | 4.09 | 1.63 | < 1 | < 1 | < 3.45 |
| 310 | < 1 | 301 | < 1 | < 1 | 2.37 | < 1 | 4.02 | 1.71 | < 1 | < 1 | < 4.13 |

MAIN BAY (380233)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 311 | 02/24/99 | 10:30 | 14 | 2350 | 401 | 453 | 18 | 0.142 | 1.4 | 0.24 | 0.457 | 0.329 | 568 | 77.2 |
| 312 | 05/25/99 | 15:00 | 1 | 2000 | 338 | 368 | 22 | 0.108 | 1.47 | 0.13 | 0.475 | 0.296 | 502 | 72.6 |
| 313 | 05/25/99 | 15:05 | 7 | 2000 | 358 | 392 | 22 | 0.11 | 1.41 | 0.13 | 0.461 | 0.312 | 503 | 72.4 |
| 314 | 05/25/99 | 15:10 | 14 | 2010 | 338 | 372 | 20 | 0.112 | 1.46 | 0.13 | 0.49 | 0.292 | 502 | 72.5 |
| 315 | 08/02/99 | 15:30 | 1 | 1920 | 339 | 329 | 42 | 0.01 | 1.16 | 0.02 | 0.296 | 0.258 | 479 | 70.5 |
| 316 | 08/02/99 | 15:35 | 7 | 1920 | 344 | 337 | 41 | 0.01 | 1.13 | 0.02 | 0.303 | 0.258 | 474 | 69.6 |
| 317 | 08/02/99 | 15:40 | 14 | 1920 | 342 | 338 | 39 | 0.01 | 1.06 | 0.02 | 0.3 | 0.271 | 492 | 72.7 |
| 318 | 10/12/99 | 13:20 | 1 | 1970 | 319 | 331 | 29 | 0.01 | 1.16 | 0.02 | 0.212 | 0.244 | 493 | 72.4 |
| 319 | 10/12/99 | 13:25 | 6 | 1970 | 320 | 328 | 31 | 0.01 | 1.27 | 0.02 | 0.265 | 0.226 | 489 | 71.8 |
| 320 | 10/12/99 | 13:30 | 13 | 1960 | 317 | 326 | 30 | 0.01 | 1.12 | 0.02 | 0.212 | 0.216 | 488 | 71.7 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 311 | 91.2 | 331 | 45 | 0.007 | 0.043 | 149 | 726 | 1660 | 62 | < 1 | 12.1 | 71.6 |
| 312 | 77.9 | 262 | 41.3 | 0.007 | 0.002 | 121 | 607 | 1390 | 56 | < 1 | 10.1 | 65.2 |
| 313 | 78.2 | 261 | 41.7 | 0.007 | 0.002 | 137 | 614 | 1420 | 60 | < 1 | 10 | 65.4 |
| 314 | 78 | 262 | 41.5 | 0.007 | 0.007 | 132 | 610 | 1400 | 86 | < 1 | 10.2 | 66 |
| 315 | 73.5 | 242 | 37.9 | 0.012 | 0.034 | 110 | 562 | 1300 | < 50 | < 2 | 10.4 | 64.4 |
| 316 | 72.8 | 240 | 37.6 | 0.008 | 0.034 | 109 | 562 | 1300 | < 50 | < 2 | 10.4 | 64.3 |
| 317 | 75.4 | 250 | 38.9 | 0.012 | 0.04 | 109 | 561 | 1310 | < 50 | < 2 | 11.1 | 63.6 |
| 318 | 75.8 | 254 | 39.8 | 0.011 | 0.01 | 119 | 605 | 1360 | < 50 | < 1 | 9.83 | 68 |
| 319 | 75.2 | 250 | 39.4 | 0.012 | 0.01 | 117 | 595 | 1340 | 56 | < 1 | 9.76 | 65.6 |
| 320 | 75.1 | 251 | 39.4 | 0.013 | 0.01 | 119 | 601 | 1350 | 55 | < 1 | 9.78 | 65.5 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 311 | < 1 | 307 | < 1 | < 1 | 2.36 | < 1 | 4.1 | 1.87 | < 1 | < 1 | 5.33 |
| 312 | < 1 | 287 | < 1 | < 1 | 2.9 | < 1 | 6.88 | 2.42 | < 1 | < 1 | 7.97 |
| 313 | < 1 | 293 | < 1 | < 1 | 2.73 | < 1 | 4.47 | 1.97 | < 1 | < 1 | 7.86 |
| 314 | < 1 | 290 | < 1 | < 1 | 2.82 | < 1 | 4.64 | 2.48 | < 1 | < 1 | 3.69 |
| 315 | < 1 | 250 | < 1 | < 1 | 1.78 | < 1 | 3.5 | 1.28 | < 1 | < 1 | 6.31 |
| 316 | < 1 | 248 | < 1 | < 1 | 1.63 | < 1 | 3.43 | 1.46 | < 1 | < 1 | 4.56 |
| 317 | < 1 | 258 | < 1 | < 1 | 1.76 | < 1 | 3.34 | 1.93 | < 1 | < 1 | 4.43 |
| 318 | < 1 | 281 | < 1 | < 1 | 2.57 | < 1 | 3.92 | 1.2 | < 1 | < 1 | 4.05 |
| 319 | < 1 | 271 | < 1 | < 1 | 2.74 | < 1 | 4.06 | 1.13 | < 1 | < 1 | 4.75 |
| 320 | < 1 | 272 | < 1 | < 1 | 2.64 | < 1 | 3.96 | 1.39 | < 1 | < 1 | 3.97 |

PELICAN LAKE (385029)

| OBS | Date Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 321 | 05/26/99 12:00 | 1 | 702 | 210 | 256 | 1 | 0.262 | 1.28 | 0.22 | 0.261 | 0.25 | 263 | 55.1 |
| 322 | 05/26/99 12:05 | 5 | 702 | 202 | 247 | 1 | 0.252 | 1.36 | 0.21 | 0.27 | 0.245 | 260 | 54.6 |
| 323 | 08/03/99 10:50 | 1 | 864 | 252 | 259 | 24 | 0.01 | 1.03 | 0.02 | 0.374 | 0.334 | 334 | 69.1 |
| 324 | 08/03/99 10:55 | 5 | 864 | 249 | 259 | 22 | 0.01 | 0.95 | 0.02 | 0.367 | 0.335 | 313 | 64.8 |
| 325 | 10/12/99 9:40 | 1 | 932 | 260 | 317 | 1 | 0.01 | 1.14 | 0.26 | 0.189 | 0.153 | 386 | 81.1 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 321 | 30.4 | 44.1 | 14.4 | 0.129 | 0.09 | 18.6 | 155 | 447 | 125 | < 1 | 4.18 | 57 |
| 322 | 30 | 43.5 | 14.3 | 0.093 | 0.088 | 18.7 | 155 | 441 | 113 | < 1 | 4 | 57 |
| 323 | 39.2 | 64.9 | 17.5 | 0.099 | 0.162 | 25.8 | 195 | 564 | < 50 | < 2 | 6.78 | 68.9 |
| 324 | 36.7 | 60.8 | 16.4 | 0.094 | 0.152 | 25.7 | 194 | 549 | 55 | < 2 | 5.64 | 64.8 |
| 325 | 44.5 | 54.4 | 16.4 | 0.604 | 0.16 | 20.9 | 219 | 596 | 388 | < 1 | 5.11 | 98.1 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 321 | < 1 | 72 | < 1 | < 1 | 1.44 | < 1 | 3.51 | < 1 | < 1 | < 1 | 4.23 |
| 322 | < 1 | 72 | < 1 | < 1 | 1.11 | < 1 | 3.32 | < 1 | < 1 | < 1 | 8.01 |
| 323 | < 1 | 116 | < 1 | < 1 | < 1 | < 1 | 3.43 | < 1 | < 1 | < 1 | < 1 |
| 324 | < 1 | 106 | < 1 | < 1 | < 1 | < 1 | 4.05 | < 1 | < 1 | < 1 | 7.85 |
| 325 | < 1 | 86 | < 1 | < 1 | 1.39 | < 1 | 5.96 | < 1 | < 1 | < 1 | 5.56 |

SIX MILE BAY (380221)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 326 | 03/15/95 | 13:00 | 1 | 1040 | 118 | 130 | 7 | 0.258 | 1.44 | 0.778 | 0.136 | 0.115 | 216 | 24.2 |
| 327 | 03/15/95 | 11:20 | 5 | 3220 | 387 | 472 | 1 | 0.01 | 1.69 | 0.653 | 0.263 | 0.251 | 615 | 58.3 |
| 328 | 05/15/95 | 15:00 | 6 | 1820 | 252 | 253 | 27 | 0.027 | 1.35 | 0.198 | 0.118 | 0.069 | 416 | 54.5 |
| 329 | 07/25/95 | 15:00 | 1 | 2270 | 305 | 330 | 21 | 0.09 | 1.62 | 0.008 | 0.298 | 0.253 | 423 | 50.5 |
| 330 | 07/25/95 | 15:00 | 4 | 2280 | 305 | 330 | 21 | 0.035 | 1.37 | 0.034 | 0.268 | 0.258 | 447 | 53.6 |
| 331 | 07/25/95 | 15:00 | 7 | 2310 | 304 | 331 | 20 | 0.129 | 1.44 | 0.045 | 0.292 | 0.255 | 464 | 55.8 |
| 332 | 10/03/95 | 12:00 | 1 | 2410 | 335 | 370 | 19 | 0.01 | 1.75 | 0.087 | 0.216 | 0.197 | 551 | 69 |
| 333 | 10/03/95 | 12:00 | 6 | 2400 | 331 | 365 | 19 | 0.04 | 1.74 | 0.083 | 0.225 | 0.19 | 616 | 68.7 |
| 334 | 03/26/96 | 16:00 | 1 | 2660 | 378 | 425 | 18 | 0.01 | 1.67 | 0.11 | 0.19 | 0.201 | 592 | 74 |
| 335 | 03/26/96 | 16:00 | 3 | 2660 | 381 | 430 | 17 | 0.01 | 1.73 | 0.11 | 0.209 | 0.201 | 591 | 74.4 |
| 336 | 03/26/96 | 16:00 | 6 | 2660 | 385 | 440 | 15 | 0.01 | 1.6 | 0.19 | 0.29 | 0.302 | 615 | 76.6 |
| 337 | 05/21/96 | 13:30 | 1 | 1870 | 274 | 286 | 24 | 0.01 | 1.31 | 0.02 | 0.174 | 0.131 | 380 | 51.6 |
| 338 | 05/21/96 | 13:30 | 3 | 1880 | 278 | 289 | 25 | 0.01 | 1.28 | 0.02 | 0.169 | 0.128 | 380 | 51.5 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 326 | 37.9 | 135 | 19.1 | 0.295 | 0.02 | 62 | 288 | 638 | . | . | 4.7 | 28.7 |
| 327 | 114 | 437 | 58.7 | 0.181 | 0.016 | 215 | 1110 | 2230 | . | . | 13.1 | 50.9 |
| 328 | 68.1 | 227 | 35.8 | 0.128 | 0.028 | 107 | 482 | 1130 | . | . | 11 | 43.4 |
| 329 | 72.1 | 264 | 38.5 | 0.038 | 0.046 | 135 | 697 | 1440 | . | . | 10.4 | 38 |
| 330 | 76 | 281 | 41.2 | 0.055 | 0.051 | 142 | 740 | 1520 | . | . | 10.7 | 39.3 |
| 331 | 78.8 | 292 | 42.5 | 0.048 | 0.055 | 141 | 745 | 1540 | . | . | 11.3 | 38.9 |
| 332 | 92.1 | 334 | 50.1 | 0.265 | 0.025 | 151 | 859 | 1760 | . | . | 12.8 | 56 |
| 333 | 108 | 354 | 51.4 | 0.21 | 0.02 | 144 | 829 | 1750 | . | . | 12 | 56.5 |
| 334 | 99 | 325 | 50.4 | 0.054 | 0.052 | 164 | 950 | 1890 | . | . | 11.4 | 64.7 |
| 335 | 98.3 | 319 | 51.2 | 0.048 | 0.053 | 161 | 922 | 1860 | . | . | 11.2 | 64.9 |
| 336 | 103 | 331 | 59.7 | 0.084 | 0.105 | 160 | 928 | 1890 | . | . | 11.6 | 67.2 |
| 337 | 60.9 | 207 | 32.4 | 0.041 | 0.018 | 110 | 458 | 1090 | . | . | 8.36 | 48.2 |
| 338 | 61.1 | 207 | 32.6 | 0.047 | 0.017 | 109 | 456 | 1090 | . | . | 8.54 | 47 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 326 | . | . | 0.74 | 2.1 | < 14 | 4.7 | . | 9.7 | . | . | < 9 |
| 327 | . | . | < 0.2 | 2.24 | < 14 | 4.1 | . | 6.7 | . | . | < 9 |
| 328 | . | . | < 0.2 | 1.57 | < 14 | 3.8 | . | 0.4 | . | . | 10 |
| 329 | . | 308 | < 0.2 | 1.87 | < 14 | < 0.2 | . | 2.4 | . | . | < 9 |
| 330 | . | 298 | < 0.2 | 1.62 | < 14 | 2.2 | . | 1.2 | . | . | < 9 |
| 331 | . | 305 | < 0.2 | 1.97 | < 14 | 2.9 | . | 0.9 | . | . | 14 |
| 332 | . | . | < 0.02 | 0.21 | 4.95 | 0.4 | . | 2.72 | . | . | 17.3 |
| 333 | . | . | < 0.02 | 0.33 | 5.62 | 0.51 | . | 2.95 | . | . | 3.45 |
| 334 | . | 336 | < 0.02 | < 0.2 | 6.83 | 1.72 | . | 3.2 | . | . | 11.4 |
| 335 | . | 326 | < 0.02 | < 0.2 | 6.86 | 1.55 | . | 3.01 | . | . | 9.21 |
| 336 | . | 322 | < 0.02 | < 0.2 | 7.39 | 0.68 | . | 2.53 | . | . | 8.68 |
| 337 | . | . | < 0.02 | < 0.2 | 6.25 | 2.34 | . | 2.01 | . | . | 13.3 |
| 338 | . | . | < 0.02 | 0.24 | 5.97 | 1.5 | . | 2.85 | . | . | 12.4 |

SIX MILE BAY (380221)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 339 | 05/21/96 | 13:30 | 7 | 1920 | 282 | 294 | 25 | 0.01 | 1.43 | 0.02 | 0.18 | 0.126 | 507 | 68.3 |
| 340 | 07/01/96 | 15:30 | 1 | 1830 | 273 | 288 | 22 | 0.01 | 1.24 | 0.03 | 0.27 | 0.244 | 396 | 56.3 |
| 341 | 07/01/96 | 15:33 | 4 | 1990 | 286 | 296 | 26 | 0.01 | 1.74 | 0.02 | 0.244 | 0.216 | 426 | 57.4 |
| 342 | 07/01/96 | 15:35 | 7 | 2230 | 312 | 342 | 19 | 0.01 | 1.66 | 0.02 | 0.266 | 0.24 | 445 | 56.6 |
| 343 | 08/05/96 | 14:30 | 1 | 2060 | 313 | 305 | 38 | 0.01 | 1.33 | 0.02 | 0.266 | 0.24 | 441 | 57.5 |
| 344 | 08/05/96 | 14:30 | 4 | 2060 | 311 | 303 | 38 | 0.01 | 1.35 | 0.02 | 0.267 | 0.236 | 463 | 60.2 |
| 345 | 08/05/96 | 14:30 | 7 | 2080 | 311 | 307 | 36 | 0.01 | 1.63 | 0.02 | 0.261 | 0.235 | 458 | 59.5 |
| 346 | 09/03/96 | 14:00 | 1 | 2180 | 326 | 303 | 47 | 0.078 | 1.79 | 0.02 | 0.247 | 0.228 | 456 | 58.8 |
| 347 | 09/03/96 | 14:00 | 4 | 2180 | 323 | 307 | 43 | 0.148 | 1.73 | 0.02 | 0.283 | 0.23 | 452 | 57.9 |
| 348 | 09/03/96 | 14:00 | 7 | 2210 | 330 | 323 | 39 | 0.184 | 1.66 | 0.02 | 0.292 | 0.237 | 455 | 58.8 |
| 349 | 09/30/96 | 14:00 | 1 | 2250 | 332 | 365 | 20 | 0.056 | 1.55 | 0.19 | 0.296 | 0.276 | 494 | 63.8 |
| 350 | 09/30/96 | 14:00 | 4 | 2250 | 331 | 357 | 23 | 0.079 | 1.62 | 0.18 | 0.28 | 0.274 | 478 | 61.7 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 339 | 81.7 | 281 | 43.6 | 0.012 | 0.002 | 108 | 598 | 1350 | . | . | 1.46 | 29.6 |
| 340 | 62.1 | 212 | 33.4 | 0.087 | 0.081 | 97.2 | 525 | 1150 | . | . | 10.4 | 51.3 |
| 341 | 68.7 | 240 | 36.8 | 0.058 | 0.057 | 112 | 592 | 1280 | . | . | 10.2 | 48.7 |
| 342 | 73.8 | 265 | 39.5 | 0.036 | 0.143 | 131 | 679 | 1430 | . | . | 10.8 | 48.8 |
| 343 | 72.2 | 256 | 38.6 | 0.012 | 0.016 | 126 | 547 | 1290 | . | . | 9.13 | 52.1 |
| 344 | 75.9 | 270 | 40.6 | 0.012 | 0.017 | 128 | 536 | 1300 | . | . | 9.29 | 57.4 |
| 345 | 75.1 | 268 | 40.1 | 0.007 | 0.02 | 130 | 654 | 1420 | . | . | 8.8 | 58.4 |
| 346 | 75.2 | 269 | 40 | 0.062 | 0.002 | 137 | 692 | 1470 | . | . | 11 | 55.4 |
| 347 | 74.6 | 268 | 39.7 | 0.04 | 0.002 | 137 | 675 | 1450 | . | . | 10.9 | 52.5 |
| 348 | 74.9 | 270 | 39.9 | 0.068 | 0.002 | 140 | 684 | 1470 | . | . | 10.9 | 54.8 |
| 349 | 81.2 | 290 | 44.2 | 0.18 | 0.002 | 133 | 565 | 1380 | . | . | 9.24 | 78.5 |
| 350 | 78.6 | 284 | 42.8 | 0.18 | 0.002 | 130 | 548 | 1350 | . | . | 8.73 | 198 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 339 | . | . | < 0.02 | 0.32 | 29.5 | 3.14 | . | 0.54 | . | . | 49.5 |
| 340 | . | . | < 0.02 | 0.28 | 4.14 | < 0.2 | . | 4.57 | . | . | 20 |
| 341 | . | . | < 0.02 | 0.51 | 4.47 | < 0.2 | . | 3.69 | . | . | 24.1 |
| 342 | . | . | < 0.02 | < 0.2 | 4.53 | < 0.2 | . | 4.12 | . | . | 17.6 |
| 343 | . | . | < 0.02 | < 0.2 | 3.81 | < 0.2 | . | 1.63 | . | . | 7.44 |
| 344 | . | . | < 0.02 | < 0.2 | 4.12 | 0.38 | . | 1.97 | . | . | 17.1 |
| 345 | . | . | < 0.02 | < 0.2 | 5.96 | 0.52 | . | 1.21 | . | . | 10.9 |
| 346 | . | 348 | < 0.02 | 0.51 | 9.7 | < 0.2 | . | 2.15 | . | . | 32.9 |
| 347 | . | 355 | < 0.02 | 0.52 | 10.9 | < 0.2 | . | 1.94 | . | . | 20.5 |
| 348 | . | 337 | < 0.02 | 0.47 | 8.2 | < 0.2 | . | 2.06 | . | . | 47.8 |
| 349 | . | . | < 0.02 | < 0.2 | 6.09 | 1.1 | . | 0.98 | . | . | 36.4 |
| 350 | . | . | < 0.02 | < 0.2 | 5.04 | 68.5 | . | 0.92 | . | . | 45.8 |

SIX MILE BAY (380221)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 351 | 09/30/96 | 14:00 | 7 | 2270 | 329 | 355 | 23 | 0.08 | 1.66 | 0.16 | 0.293 | 0.264 | 484 | 61.9 |
| 352 | 03/04/97 | 14:00 | 1 | 2490 | 370 | 440 | 6 | 0.01 | 1.7 | 0.5 | 0.303 | 0.282 | 650 | 85.6 |
| 353 | 03/04/97 | 14:00 | 4 | 2480 | 368 | 431 | 9 | 0.01 | 1.76 | 0.43 | 0.293 | 0.294 | 599 | 78.9 |
| 354 | 03/04/97 | 14:00 | 7 | 2480 | 356 | 435 | 1 | 0.01 | 1.56 | 0.42 | 0.322 | 0.294 | 597 | 75.7 |
| 355 | 05/14/97 | 9:30 | 1 | 1250 | 215 | 236 | 13 | 0.061 | 1.29 | 0.29 | 0.286 | 0.294 | 315 | 51.9 |
| 356 | 05/14/97 | 9:30 | 4 | 1270 | 217 | 241 | 12 | 0.02 | 1.29 | 0.28 | 0.28 | 0.284 | 319 | 52.4 |
| 357 | 05/14/97 | 9:30 | 8 | 1300 | 217 | 239 | 13 | 0.023 | 1.36 | 0.25 | 0.286 | 0.3 | 362 | 55.9 |
| 358 | 07/08/97 | 10:00 | 1 | 1900 | 295 | 330 | 15 | 0.01 | 1.54 | 0.06 | 0.315 | 0.299 | 421 | 59.5 |
| 359 | 07/08/97 | 10:00 | 5 | 1910 | 296 | 329 | 16 | 0.01 | 1.29 | 0.06 | 0.29 | 0.26 | 408 | 57.7 |
| 360 | 07/08/97 | 10:00 | 9 | 1910 | 297 | 328 | 17 | 0.01 | 1.42 | 0.06 | 0.294 | 0.27 | 407 | 57.5 |
| 361 | 08/04/97 | 13:00 | 1 | 1840 | 292 | 300 | 28 | 0.01 | 1.72 | 0.02 | 0.315 | 0.256 | 467 | 66.5 |
| 362 | 08/04/97 | 13:00 | 5 | 1940 | 301 | 312 | 27 | 0.061 | 1.59 | 0.02 | 0.29 | 0.258 | 499 | 69.4 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 351 | 80.1 | 289 | 43.8 | 0.205 | 0.002 | 130 | 558 | 1360 | . | . | 8.79 | 87.7 |
| 352 | 106 | 388 | 58.9 | 0.107 | 0.014 | 146 | 777 | 1790 | . | . | 13.9 | 56.5 |
| 353 | 97.6 | 368 | 53.9 | 0.1 | 0.011 | 144 | 748 | 1710 | . | . | 13 | 52.9 |
| 354 | 99 | 369 | 54.1 | 0.11 | 0.064 | 149 | 752 | 1720 | . | . | 13.6 | 53.7 |
| 355 | 45 | 145 | 25.8 | 0.415 | 0.036 | 64.6 | 348 | 812 | 302 | 1.4 | 8.5 | 44.5 |
| 356 | 45.8 | 148 | 26.3 | 0.368 | 0.036 | 65.3 | 352 | 823 | 277 | 1.64 | 8.45 | 44.3 |
| 357 | 54 | 184 | 30.5 | 0.32 | 0.039 | 68.7 | 367 | 893 | 252 | 1.38 | 10 | 47.4 |
| 358 | 66.1 | 229 | 36.3 | 0.053 | 0.006 | 112 | 569 | 1250 | 55 | < 1 | 11 | 52.7 |
| 359 | 64.1 | 221 | 35.1 | 0.048 | 0.005 | 112 | 572 | 1240 | 59 | < 1 | 10.7 | 50.7 |
| 360 | 64 | 220 | 35.1 | 0.09 | 0.009 | 112 | 573 | 1240 | 55 | < 2 | 10.1 | 52.2 |
| 361 | 73.1 | 258 | 41.2 | 0.03 | 0.033 | 111 | 574 | 1300 | 61 | < 1 | 9.79 | 53.1 |
| 362 | 79 | 279 | 44.5 | 0.035 | 0.04 | 117 | 609 | 1380 | 82 | < 1 | 9.53 | 56.1 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 351 | . | . | < 0.02 | < 0.2 | 5.2 | 1.59 | . | 0.67 | . | . | 43.9 |
| 352 | . | . | < 0.02 | 1.1 | 7.95 | < 0.2 | . | 5.89 | . | . | 30 |
| 353 | . | . | < 0.02 | 0.77 | 10.8 | 0.58 | . | 5.88 | . | . | 44.5 |
| 354 | . | . | < 0.02 | 0.79 | 11.6 | < 0.2 | . | 6.24 | . | . | 50.6 |
| 355 | < 0.2 | 210 | < 0.02 | 3.35 | 5.92 | 3.28 | 4.53 | 2.74 | < 0.04 | < 0.03 | 4.34 |
| 356 | < 0.2 | 169 | < 0.02 | 0.79 | 5.9 | 1.59 | 4.08 | 2.54 | < 0.04 | < 0.03 | 6.67 |
| 357 | < 0.2 | 256 | < 0.02 | 0.84 | 6.52 | 0.56 | 3.65 | 2.95 | < 0.04 | < 0.03 | 3.47 |
| 358 | < 1 | 280 | < 1 | 1.88 | 8.67 | < 1 | 3.79 | 3.13 | < 1 | < 1 | 16.3 |
| 359 | < 1 | 254 | < 1 | 1.7 | 7.52 | < 1 | 3.85 | 3.26 | < 1 | < 1 | 18.8 |
| 360 | < 1 | 270 | < 1 | 1.32 | 9.59 | < 1 | 4.4 | 2.7 | < 1 | < 1 | 21.4 |
| 361 | < 1 | 288 | < 1 | < 1 | 6.28 | < 1 | 3.62 | 2.97 | < 1 | < 1 | 3.21 |
| 362 | < 1 | 300 | < 1 | < 1 | 6.5 | 1.16 | 3.85 | 2.84 | < 1 | < 1 | 4.03 |

SIX MILE BAY (380221)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 363 | 08/04/97 | 13:00 | 9 | 2040 | 304 | 333 | 19 | 0.198 | 1.75 | 0.02 | 0.344 | 0.301 | 527 | 71.3 |
| 364 | 09/02/97 | 15:00 | 1 | 1820 | 290 | 301 | 26 | 0.035 | 1.84 | 0.04 | 0.354 | 0.318 | 400 | 58.3 |
| 365 | 09/02/97 | 15:00 | 4 | 1820 | 295 | 309 | 25 | 0.072 | 1.91 | 0.05 | 0.352 | 0.33 | 410 | 59.5 |
| 366 | 09/02/97 | 15:00 | 9 | 1850 | 295 | 313 | 23 | 0.083 | 1.71 | 0.06 | 0.34 | 0.331 | 417 | 60.5 |
| 367 | 10/07/97 | 9:40 | 1 | 1950 | 309 | 341 | 18 | 0.01 | 1.37 | 0.19 | 0.31 | 0.26 | 444 | 63 |
| 368 | 10/07/97 | 9:42 | 5 | 1970 | 307 | 338 | 18 | 0.01 | 1.43 | 0.2 | 0.31 | 0.261 | 437 | 61.9 |
| 369 | 10/07/97 | 9:45 | 10 | 1980 | 304 | 336 | 17 | 0.01 | 1.46 | 0.19 | 0.314 | 0.231 | 432 | 61.3 |
| 370 | 05/19/98 | 15:00 | 1 | 1890 | 301 | 329 | 19 | 0.047 | 1.73 | 0.1 | 0.926 | 0.22 | 423 | 62.9 |
| 371 | 05/19/98 | 15:05 | 5 | 1860 | 303 | 331 | 19 | 0.038 | 1.63 | 0.09 | 0.755 | 0.197 | 419 | 61.9 |
| 372 | 05/19/98 | 15:10 | 9 | 1920 | 286 | 349 | 1 | 0.047 | 1.64 | 0.1 | 0.887 | 0.221 | 432 | 63 |
| 373 | 07/07/98 | 10:30 | 1 | 1940 | 340 | 279 | 67 | 0.01 | 1.48 | 0.02 | 0.417 | 0.194 | 441 | 64.9 |
| 374 | 07/07/98 | 10:35 | 5 | 1980 | 343 | 285 | 66 | 0.136 | 1.18 | 0.02 | 0.391 | 0.203 | 459 | 67.1 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 363 | 84.7 | 306 | 47.7 | 0.031 | 0.118 | 126 | 665 | 1480 | 87 | < 1 | 9.9 | 54.7 |
| 364 | 61.9 | 212 | 33.7 | 0.072 | 0.025 | 116 | 540 | 1200 | 104 | < 1 | 9.19 | 70.6 |
| 365 | 63.5 | 218 | 34.7 | 0.075 | 0.029 | 114 | 537 | 1210 | 70 | < 2 | 9.76 | 58.3 |
| 366 | 64.7 | 223 | 35.4 | 0.101 | 0.033 | 116 | 540 | 1220 | 113 | < 1 | 10.2 | 59.6 |
| 367 | 69.7 | 241 | 38.8 | 0.21 | 0.006 | 118 | 581 | 1300 | 147 | < 1 | 9.93 | 60.1 |
| 368 | 68.5 | 237 | 38.1 | 0.233 | 0.006 | 119 | 585 | 1300 | 132 | < 1 | 9.97 | 60.4 |
| 369 | 67.8 | 233 | 37.7 | 0.194 | 0.005 | 118 | 580 | 1280 | 141 | < 1 | 9.6 | 58.5 |
| 370 | 64.5 | 233 | 35.8 | 0.042 | 0.011 | 102 | 546 | 1230 | < 50 | < 1 | 8.34 | 55.3 |
| 371 | 64.2 | 231 | 35.4 | 0.04 | 0.011 | 101 | 535 | 1210 | < 50 | < 1 | 8.6 | 56.3 |
| 372 | 66.8 | 243 | 37 | 0.044 | 0.002 | 107 | 560 | 1250 | < 50 | < 1 | 8.59 | 55.7 |
| 373 | 67.7 | 232 | 35.4 | 0.053 | 0.012 | 105 | 545 | 1260 | 67 | < 1 | 9.09 | 61.3 |
| 374 | 70.8 | 240 | 36.8 | 0.018 | 0.006 | 108 | 561 | 1290 | 59 | < 1 | 9.21 | 63 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 363 | < 1 | 275 | < 1 | 1.69 | 6.26 | < 1 | 3.35 | 2.75 | < 1 | < 1 | 2.91 |
| 364 | < 1 | 259 | < 1 | < 1 | 6.85 | 1.18 | 3.49 | 2.15 | < 1 | < 1 | 15.4 |
| 365 | < 1 | 251 | < 1 | < 1 | 7.54 | 1.09 | 3.51 | 2.14 | < 1 | < 1 | 18.9 |
| 366 | < 1 | 254 | < 1 | < 1 | 7.57 | < 1 | 3.61 | 2.57 | < 1 | < 1 | 16.4 |
| 367 | < 1 | 251 | < 1 | < 1 | 6.74 | 7.39 | 3.92 | 3.4 | < 1 | < 1 | 28.3 |
| 368 | < 1 | 261 | < 1 | < 1 | 6.07 | 5.33 | 4.03 | 3.45 | < 1 | < 1 | 21.8 |
| 369 | < 1 | 264 | < 1 | < 1 | 6 | 7.94 | 3.53 | 3.03 | < 1 | < 1 | 28.2 |
| 370 | < 1 | 251 | < 1 | < 1 | 2.34 | < 1 | 3.78 | 1.35 | < 1 | < 1 | 1.22 |
| 371 | < 1 | 257 | < 1 | < 1 | 1.99 | < 1 | 4.11 | 1.04 | < 1 | < 1 | < 1 |
| 372 | < 1 | 260 | < 1 | < 1 | 1.82 | < 1 | 3.52 | < 1 | < 1 | < 1 | < 1 |
| 373 | < 1 | 269 | < 1 | < 1 | 3.31 | < 1 | 3.74 | 1.42 | < 2 | < 1 | < 1 |
| 374 | < 1 | 282 | < 1 | < 1 | 3.28 | < 1 | 3.79 | 1.08 | < 1 | < 1 | < 1 |

SIX MILE BAY (380221)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 375 | 07/07/98 | 10:40 | 10 | 2060 | 358 | 329 | 53 | 0.098 | 1.15 | 0.04 | 0.46 | 0.261 | 471 | 68 |
| 376 | 08/03/98 | 13:30 | 1 | 1990 | 325 | 350 | 23 | 0.085 | 1.39 | 0.03 | 0.824 | 0.341 | 428 | 61.3 |
| 377 | 08/03/98 | 13:35 | 5 | 1990 | 314 | 336 | 23 | 0.101 | 1.47 | 0.03 | 0.755 | 0.306 | 414 | 59.3 |
| 378 | 08/03/98 | 13:40 | 9 | 1980 | 315 | 338 | 23 | 0.114 | 1.44 | 0.03 | 0.804 | 0.305 | 424 | 60.8 |
| 379 | 09/08/98 | 15:00 | 1 | 1960 | 324 | 333 | 31 | 0.01 | 1.33 | 0.02 | 0.412 | 0.29 | 454 | 64.8 |
| 380 | 09/08/98 | 15:05 | 5 | 1980 | 333 | 344 | 31 | 0.523 | 1.38 | 0.02 | 0.434 | 0.284 | 463 | 66.3 |
| 381 | 09/08/98 | 15:10 | 9 | 1990 | 340 | 346 | 34 | 0.01 | 1.19 | 0.02 | 0.433 | 0.303 | 483 | 68.9 |
| 382 | 10/19/98 | 12:00 | 1 | 2060 | 412 | 448 | 27 | 0.081 | 1.5 | 0.02 | 0.409 | 0.438 | 472 | 67.3 |
| 383 | 10/19/98 | 12:05 | 5 | 2050 | 341 | 369 | 23 | 0.065 | 1.41 | 0.11 | 0.288 | 0.426 | 473 | 67.4 |
| 384 | 10/19/98 | 12:10 | 9 | 2050 | 339 | 369 | 22 | 0.062 | 1.47 | 0.11 | 0.307 | 0.421 | 481 | 68.6 |
| 385 | 02/23/99 | 14:20 | 1 | 2190 | 380 | 442 | 11 | 0.154 | 1.51 | 0.3 | 0.398 | 0.469 | 506 | 72.5 |
| 386 | 02/23/99 | 14:25 | 5 | 2180 | 388 | 445 | 14 | 0.222 | 1.54 | 0.26 | 0.373 | 0.536 | 527 | 75.3 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 375 | 73.2 | 253 | 38.2 | 0.034 | 0.151 | 115 | 572 | 1340 | 82 | < 1 | 9.95 | 64.8 |
| 376 | 66.8 | 233 | 35.5 | 0.007 | 0.011 | 115 | 585 | 1290 | < 50 | < 1 | 11.2 | 63.1 |
| 377 | 64.5 | 224 | 34.2 | 0.007 | 0.01 | 114 | 582 | 1270 | < 50 | < 1 | 10.6 | 61.9 |
| 378 | 66 | 229 | 34.9 | 0.007 | 0.012 | 114 | 578 | 1270 | < 50 | < 1 | 10.7 | 64.3 |
| 379 | 71 | 244 | 37.8 | 0.007 | 0.029 | 111 | 583 | 1310 | < 50 | < 1 | 11.4 | 64.6 |
| 380 | 72.2 | 244 | 38.7 | 0.007 | 0.031 | 110 | 585 | 1320 | < 50 | < 1 | 11 | 63 |
| 381 | 75.4 | 257 | 40.6 | 0.013 | 0.035 | 112 | 583 | 1340 | < 50 | < 1 | 11 | 65 |
| 382 | 73.8 | 256 | 39.4 | 0.143 | 0.014 | 120 | 622 | 1430 | 74 | < 1 | 10.9 | 61.8 |
| 383 | 74 | 255 | 39.5 | 0.091 | 0.013 | 121 | 618 | 1380 | 68 | < 1 | 10.6 | 62.6 |
| 384 | 75.3 | 262 | 40.3 | 0.098 | 0.014 | 120 | 610 | 1380 | 73 | < 1 | 10.5 | 65.3 |
| 385 | 78.8 | 261 | 40.4 | 0.007 | 0.002 | 130 | 663 | 1480 | 53 | < 1 | 11.1 | 72.5 |
| 386 | 82.3 | 274 | 42.7 | 0.007 | 0.002 | 128 | 658 | 1500 | < 50 | < 1 | 10.8 | 69.6 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 375 | < 1 | 277 | < 1 | < 1 | 3.18 | < 1 | 3.81 | 1.46 | < 1 | < 1 | < 1 |
| 376 | < 1 | 240 | < 1 | < 1 | 2.63 | < 1 | 3.88 | 3.28 | < 1 | < 1 | 4.82 |
| 377 | < 1 | 229 | < 1 | < 1 | 2.24 | < 1 | 3.58 | 2.69 | < 1 | < 1 | < 1 |
| 378 | < 1 | 254 | < 1 | < 1 | 2.04 | < 1 | 3.61 | 2.66 | < 1 | < 1 | 2.46 |
| 379 | < 1 | 256 | < 1 | < 1 | 2.32 | < 1 | 3.27 | 1.84 | < 1 | < 1 | < 1 |
| 380 | < 1 | 257 | < 1 | < 1 | 2.19 | < 1 | 3.46 | 1.73 | < 1 | < 1 | 1.12 |
| 381 | < 1 | 256 | < 1 | < 1 | 2.45 | < 1 | 3.31 | 1.58 | < 1 | < 1 | 1.17 |
| 382 | < 1 | 272 | < 1 | < 1 | 3.3 | < 1 | 3.58 | 1.26 | < 1 | < 1 | 3.46 |
| 383 | < 1 | 275 | < 1 | < 1 | 3.3 | < 1 | 3.81 | 1.28 | < 1 | < 1 | 2.02 |
| 384 | < 1 | 282 | < 1 | < 1 | 3.12 | < 1 | 3.47 | 1.12 | < 1 | < 1 | 2.61 |
| 385 | < 1 | 314 | < 1 | < 1 | 2.61 | < 1 | 4.56 | 2.04 | < 1 | < 1 | 7.49 |
| 386 | < 1 | 303 | < 1 | < 1 | 2.36 | < 1 | 3.94 | 1.81 | < 1 | < 1 | 4.73 |

SIX MILE BAY (380221)
(continued)

| OBS | Date | Time | Depth Conductivity (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|------------------------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 387 | 02/23/99 | 14:30 | 9 | 2200 | 387 | 436 | 18 | 0.093 | 1.42 | 0.22 | 0.356 | 0.502 | 577 | 82.5 |
| 388 | 05/25/99 | 15:35 | 1 | 1670 | 301 | 368 | 1 | 0.175 | 1.45 | 0.22 | 0.442 | 0.265 | 423 | 65.3 |
| 389 | 05/25/99 | 15:40 | 5 | 1710 | 301 | 331 | 18 | 0.152 | 1.47 | 0.2 | 0.371 | 0.288 | 434 | 66 |
| 390 | 05/25/99 | 15:45 | 10 | 1920 | 329 | 402 | 1 | 0.129 | 1.42 | 0.17 | 0.436 | 0.301 | 472 | 69.3 |
| 391 | 08/02/99 | 14:00 | 1 | 1900 | 344 | 349 | 35 | 0.01 | 1.32 | 0.02 | 0.355 | 0.315 | 470 | 69.8 |
| 392 | 08/02/99 | 14:05 | 5 | 1900 | 337 | 350 | 30 | 0.024 | 1.18 | 0.02 | 0.348 | 0.319 | 473 | 70.1 |
| 393 | 08/02/99 | 14:10 | 10 | 1920 | 341 | 363 | 26 | 0.093 | 1.22 | 0.02 | 0.366 | 0.34 | 477 | 70.5 |
| 394 | 10/11/99 | 13:15 | 1 | 1930 | 318 | 340 | 24 | 0.01 | 1.14 | 0.09 | 0.234 | 0.263 | 494 | 73.5 |
| 395 | 10/11/99 | 13:20 | 5 | 1930 | 315 | 336 | 24 | 0.01 | 1.11 | 0.09 | 0.23 | 0.225 | 484 | 72 |
| 396 | 10/11/99 | 13:25 | 10 | 1930 | 313 | 333 | 24 | 0.01 | 1.11 | 0.09 | 0.229 | 0.253 | 490 | 72.9 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 387 | 90 | 311 | 44.8 | 0.007 | 0.002 | 132 | 664 | 1560 | < 50 | < 1 | 11.1 | 70.9 |
| 388 | 63.1 | 201 | 33.8 | 0.02 | 0.006 | 93.3 | 490 | 1130 | 82 | < 1 | 8.3 | 61.4 |
| 389 | 65.3 | 210 | 35.2 | 0.023 | 0.003 | 96.4 | 504 | 1160 | 109 | < 1 | 8.41 | 62.5 |
| 390 | 72.6 | 242 | 38.7 | 0.007 | 0.003 | 108 | 578 | 1310 | 68 | < 1 | 9.37 | 66.7 |
| 391 | 71.9 | 239 | 37.1 | 0.024 | 0.1 | 108 | 553 | 1290 | < 50 | < 2 | 10.5 | 65 |
| 392 | 72.4 | 239 | 37.4 | 0.017 | 0.099 | 108 | 555 | 1290 | < 50 | < 2 | 10.6 | 64.5 |
| 393 | 73.1 | 242 | 37.8 | 0.014 | 0.119 | 109 | 556 | 1290 | < 50 | < 2 | 10.7 | 65.1 |
| 394 | 75.5 | 251 | 39.6 | 0.024 | 0.01 | 116 | 589 | 1340 | 66 | < 1 | 9.51 | 67.4 |
| 395 | 73.9 | 244 | 38.8 | 0.027 | 0.01 | 112 | 574 | 1310 | 64 | < 1 | 9.61 | 66.5 |
| 396 | 74.8 | 248 | 39.3 | 0.034 | 0.01 | 113 | 577 | 1310 | 73 | < 1 | 9.48 | 68.3 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 387 | < 1 | 308 | < 1 | < 1 | 2.4 | < 1 | 14.3 | 1.74 | < 1 | < 1 | 3.66 |
| 388 | < 1 | 224 | < 1 | < 1 | 2.89 | < 1 | 4.88 | 2.17 | < 1 | < 1 | 11.4 |
| 389 | < 1 | 238 | < 1 | < 1 | 2.12 | < 1 | 4.24 | 2.06 | < 1 | < 1 | 4.59 |
| 390 | < 1 | 263 | < 1 | < 1 | 3.85 | < 1 | 4.13 | 1.99 | < 1 | < 1 | 2.31 |
| 391 | < 1 | 248 | < 1 | < 1 | 1.72 | < 1 | 3.64 | 1.23 | < 1 | < 1 | < 1 |
| 392 | < 1 | 237 | < 1 | < 1 | 1.76 | < 1 | 4.37 | 1.44 | < 1 | < 1 | < 1 |
| 393 | < 1 | 245 | < 1 | < 1 | 1.75 | < 1 | 3.5 | 1.27 | < 1 | < 1 | < 1 |
| 394 | < 1 | 269 | < 1 | < 1 | 2.86 | < 1 | 4.03 | 1.55 | < 1 | < 1 | 3.31 |
| 395 | < 1 | 260 | < 1 | < 1 | 2.88 | < 1 | 4.16 | 1.27 | < 3 | < 1 | 2.74 |
| 396 | < 1 | 262 | < 1 | < 1 | 3.67 | < 1 | 4.1 | 1.16 | < 2 | < 1 | 3.13 |

WEST BAY (380232/380236)

| OBS | Date Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 397 | 05/15/95 14:02 | 4 | 1700 | 283 | 346 | 1 | 0.075 | 1.32 | 0.059 | 0.104 | 0.066 | 411 | 59.5 |
| 398 | 07/25/95 15:45 | 1 | 1500 | 259 | 280 | 18 | 0.01 | 1.26 | 0.008 | 0.215 | 0.188 | 367 | 56.4 |
| 399 | 07/25/95 15:45 | 3 | 1500 | 259 | 279 | 18 | 0.01 | 1.21 | 0.007 | 0.216 | 0.203 | 340 | 52.6 |
| 400 | 07/25/95 15:45 | 5 | 1500 | 259 | 279 | 18 | 0.052 | 1.26 | 0.009 | 0.225 | 0.202 | 439 | 66.5 |
| 401 | 10/03/95 11:00 | 1 | 1760 | 303 | 360 | 5 | 0.01 | 1.5 | 0.005 | 0.169 | 0.139 | 485 | 72.4 |
| 402 | 10/03/95 11:00 | 4 | 1740 | 305 | 358 | 7 | 0.01 | 1.57 | 0.019 | 0.165 | 0.124 | 491 | 73.8 |
| 403 | 03/25/96 14:45 | 1 | 2100 | 353 | 431 | 1 | 0.01 | 1.87 | 0.27 | 0.269 | 0.253 | 508 | 70.4 |
| 404 | 03/25/96 14:45 | 3 | 2420 | 369 | 450 | 1 | 0.01 | 1.79 | 0.32 | 0.266 | 0.26 | 578 | 78.1 |
| 405 | 05/21/96 12:30 | 1 | 1870 | 299 | 328 | 18 | 0.021 | 1.39 | 0.02 | 0.176 | 0.139 | 392 | 54.1 |
| 406 | 05/21/96 12:30 | 5 | 1860 | 298 | 329 | 17 | 0.016 | 1.44 | 0.02 | 0.179 | 0.141 | 392 | 54.1 |
| 407 | 07/01/96 14:30 | 1 | 1760 | 296 | 313 | 24 | 0.01 | 1.51 | 0.02 | 0.239 | 0.206 | 412 | 59.8 |
| 408 | 07/01/96 14:31 | 3 | 1760 | 295 | 315 | 22 | 0.01 | 1.38 | 0.02 | 0.226 | 0.207 | 414 | 60.1 |
| 409 | 07/01/96 14:32 | 5 | 1770 | 297 | 322 | 20 | 0.01 | 1.4 | 0.05 | 0.238 | 0.226 | 409 | 58.4 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 397 | 63.8 | 188 | 30.9 | 0.082 | 0.02 | 93 | 416 | 1020 | . | . | 5.5 | 44 |
| 398 | 54.9 | 164 | 28.3 | 0.088 | 0.056 | 76.1 | 423 | 960 | . | . | 9.2 | 40.8 |
| 399 | 50.6 | 152 | 25.6 | 0.102 | 0.052 | 71 | 416 | 924 | . | . | 8.5 | 36.8 |
| 400 | 66.4 | 198 | 33.5 | 0.132 | 0.073 | 86.2 | 507 | 1110 | . | . | 8.6 | 40.9 |
| 401 | 73.8 | 218 | 36.2 | 0.244 | 0.032 | 93.1 | 600 | 1280 | . | . | 9.05 | 59.6 |
| 402 | 74.5 | 228 | 36.7 | 0.213 | 0.032 | 94.4 | 601 | 1290 | . | . | 9.22 | 60.4 |
| 403 | 80.7 | 250 | 39.4 | 0.11 | 0.437 | 127 | 562 | 1350 | . | . | 9.44 | 75.2 |
| 404 | 93 | 296 | 47.1 | 0.108 | 0.374 | 151 | 662 | 1550 | . | . | 12.5 | 68.3 |
| 405 | 62.3 | 208 | 32.1 | 0.037 | 0.003 | 108 | 465 | 1110 | . | . | 7.94 | 55.5 |
| 406 | 62.4 | 209 | 32.3 | 0.026 | 0.004 | 108 | 429 | 1070 | . | . | 7.61 | 55.4 |
| 407 | 63.8 | 208 | 33.2 | 0.027 | 0.002 | 94.8 | 474 | 1110 | . | . | 9.31 | 57.7 |
| 408 | 64.1 | 209 | 33.2 | 0.023 | 0.002 | 94.8 | 501 | 1140 | . | . | 9.19 | 58 |
| 409 | 64 | 211 | 33.4 | 0.033 | 0.002 | 93.5 | 498 | 1140 | . | . | 9.6 | 54.8 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 397 | . | . | < 0.2 | 1.42 | < 14 | 2.4 | . | < 0.2 | . | . | 22 |
| 398 | . | 211 | < 0.2 | 1.56 | < 14 | 3.6 | . | 0.3 | . | . | < 9 |
| 399 | . | 185 | 0.43 | 1.65 | < 14 | 2.7 | . | 0.4 | . | . | 13 |
| 400 | . | 193 | < 0.2 | 1.64 | < 14 | 3.1 | . | 0.8 | . | . | < 9 |
| 401 | . | . | < 0.02 | 0.31 | 3.57 | 0.68 | . | 1.81 | . | . | 7.06 |
| 402 | . | . | < 0.02 | 0.28 | 4.54 | 1.38 | . | 2.21 | . | . | 35.4 |
| 403 | . | 230 | 0.04 | 0.33 | 5.51 | 3.08 | . | 2.66 | . | . | 11.2 |
| 404 | . | 297 | < 0.02 | 0.21 | 6.56 | 2.92 | . | 4.53 | . | . | 24.3 |
| 405 | . | . | < 0.02 | < 0.2 | 6.06 | 2.02 | . | 2.88 | . | . | 7.52 |
| 406 | . | . | < 0.02 | 0.27 | 6.8 | 2.7 | . | 2.4 | . | . | 15.5 |
| 407 | . | . | < 0.02 | 0.22 | 4.19 | < 0.2 | . | 3.57 | . | . | 24.1 |
| 408 | . | . | < 0.02 | < 0.2 | 5.09 | < 0.2 | . | 3.65 | . | . | 23 |
| 409 | . | . | < 0.02 | < 0.2 | 4 | < 0.2 | . | 3.98 | . | . | 22.4 |

WEST BAY (380232/380236)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 410 | 08/06/96 | 10:30 | 1 | 1720 | 305 | 316 | 28 | 0.01 | 1.26 | 0.02 | 0.27 | 0.271 | 433 | 64.2 |
| 411 | 08/06/96 | 10:30 | 5 | 1720 | 305 | 316 | 28 | 0.01 | 1.3 | 0.02 | 0.27 | 0.276 | 407 | 60.2 |
| 412 | 09/03/96 | 15:30 | 1 | 1730 | 315 | 303 | 40 | 0.01 | 1.7 | 0.02 | 0.281 | 0.238 | 395 | 60.2 |
| 413 | 09/03/96 | 15:30 | 5 | 1790 | 316 | 319 | 33 | 0.01 | 1.68 | 0.02 | 0.281 | 0.252 | 417 | 62.3 |
| 414 | 10/01/96 | 10:30 | 1 | 1800 | 319 | 329 | 30 | 0.01 | 1.47 | 0.02 | 0.164 | 0.124 | 412 | 62.8 |
| 415 | 10/01/96 | 10:30 | 5 | 1800 | 324 | 331 | 32 | 0.022 | 1.47 | 0.02 | 0.153 | 0.13 | 406 | 61.5 |
| 416 | 03/04/97 | 11:00 | 1 | 2360 | 414 | 467 | 19 | 0.121 | 2.14 | 0.09 | 0.158 | 0.143 | 507 | 76.9 |
| 417 | 03/04/97 | 11:00 | 5 | 2380 | 389 | 449 | 13 | 0.038 | 1.76 | 0.23 | 0.244 | 0.238 | 454 | 61.9 |
| 418 | 05/15/97 | 8:15 | 1 | 1710 | 283 | 291 | 27 | 0.01 | 1.55 | 0.02 | 0.228 | 0.249 | 441 | 66.7 |
| 419 | 05/15/97 | 8:15 | 5 | 1710 | 284 | 296 | 25 | 0.01 | 1.69 | 0.02 | 0.208 | 0.23 | 443 | 66.8 |
| 420 | 07/08/97 | 9:00 | 1 | 1530 | 277 | 318 | 10 | 0.177 | 1.61 | 0.05 | 0.253 | 0.223 | 369 | 59.1 |
| 421 | 07/08/97 | 9:00 | 7 | 1510 | 278 | 321 | 9 | 0.18 | 2.08 | 0.06 | 0.239 | 0.25 | 359 | 58 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 410 | 66.3 | 214 | 34.4 | 0.057 | 0.06 | 96.9 | 452 | 1110 | . | . | 9.76 | 64.6 |
| 411 | 62.3 | 201 | 32.4 | 0.053 | 0.057 | 96.8 | 505 | 1140 | . | . | 8.98 | 60.9 |
| 412 | 59.5 | 191 | 30.9 | 0.055 | 0.068 | 95.8 | 448 | 1080 | . | . | 8.94 | 59.8 |
| 413 | 63.4 | 207 | 33.1 | 0.057 | 0.116 | 99.3 | 475 | 1130 | . | . | 9.68 | 61.1 |
| 414 | 62 | 200 | 32.8 | 0.237 | 0.031 | 94.9 | 443 | 1090 | . | . | 7.64 | 69.4 |
| 415 | 61.2 | 196 | 32.3 | 0.218 | 0.031 | 96.2 | 494 | 1140 | . | . | 7.52 | 68.9 |
| 416 | 76.4 | 253 | 40.8 | 0.119 | 0.138 | 131 | 626 | 1450 | . | . | 10.9 | 75.3 |
| 417 | 72.8 | 265 | 39.8 | 0.086 | 0.132 | 136 | 616 | 1430 | . | . | 13 | 55.9 |
| 418 | 66.7 | 216 | 34.9 | 0.065 | 0.053 | 97.8 | 504 | 1160 | 85 | 1.37 | 9.67 | 56.9 |
| 419 | 67.1 | 219 | 35.1 | 0.087 | 0.062 | 98.5 | 513 | 1170 | 85 | 0.58 | 8.01 | 64.1 |
| 420 | 53.8 | 165 | 28.8 | 0.104 | 0.039 | 79.6 | 427 | 981 | 88 | < 1 | 7.92 | 59.8 |
| 421 | 52.1 | 160 | 27.8 | 0.1 | 0.043 | 77.9 | 418 | 962 | 81 | < 1 | 7.72 | 60.1 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 410 | . | . | < 0.02 | < 0.2 | 3.64 | < 0.2 | . | 2.2 | . | . | 17.9 |
| 411 | . | . | < 0.02 | < 0.2 | 2.98 | < 0.2 | . | 1.77 | . | . | 19 |
| 412 | . | 268 | < 0.02 | 0.5 | 3.51 | 1.18 | . | 0.84 | . | . | 19.7 |
| 413 | . | 281 | < 0.02 | 0.27 | 4.9 | < 0.2 | . | 1.75 | . | . | 23.9 |
| 414 | . | . | < 0.02 | 0.41 | 4.26 | 2.35 | . | 0.56 | . | . | 36.8 |
| 415 | . | . | < 0.02 | 0.59 | 4.04 | 2 | . | 1.1 | . | . | 25.5 |
| 416 | . | . | < 0.02 | 1.08 | 11.4 | 0.95 | . | 5.31 | . | . | 49.7 |
| 417 | . | . | 1.42 | 1.34 | 9.72 | 0.27 | . | 6.1 | . | . | 48.3 |
| 418 | < 0.2 | 293 | < 0.02 | 0.76 | 6.99 | 0.81 | 3.6 | 3.34 | < 0.04 | < 0.03 | 2.19 |
| 419 | < 0.2 | 256 | < 0.02 | < 0.2 | 8.17 | 0.82 | 4.27 | 2.75 | < 0.04 | < 0.03 | 7.33 |
| 420 | < 1 | 197 | < 1 | 1.7 | 6.92 | < 1 | 4.19 | 2.04 | < 1 | < 1 | 10.1 |
| 421 | < 1 | 210 | < 1 | < 1 | 30.4 | < 1 | 4.29 | 2.38 | < 1 | < 1 | 18.2 |

WEST BAY (380232/380236)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 422 | 08/04/97 | 12:15 | 1 | 1540 | 281 | 278 | 32 | 0.01 | 1.75 | 0.02 | 0.381 | 0.295 | 433 | 68.8 |
| 423 | 08/04/97 | 12:15 | 6 | 1570 | 282 | 300 | 22 | 0.046 | 1.66 | 0.02 | 0.365 | 0.322 | 355 | 56.6 |
| 424 | 09/02/97 | 13:20 | 1 | 1600 | 287 | 318 | 16 | 0.01 | 1.67 | 0.05 | 0.314 | 0.3 | 373 | 60.8 |
| 425 | 09/02/97 | 13:20 | 6 | 1610 | 283 | 319 | 13 | 0.01 | 1.6 | 0.05 | 0.311 | 0.297 | 378 | 61.3 |
| 426 | 10/06/97 | 12:40 | 1 | 1650 | 299 | 339 | 13 | 0.01 | 1.36 | 0.13 | 0.248 | 0.218 | 404 | 64.3 |
| 427 | 10/06/97 | 12:40 | 7 | 1690 | 296 | 339 | 11 | 0.01 | 1.3 | 0.13 | 0.237 | 0.179 | 407 | 64.9 |
| 428 | 05/20/98 | 10:45 | 1 | 1740 | 306 | 351 | 11 | 0.167 | . | . | . | 0.218 | 393 | 62.5 |
| 429 | 05/20/98 | 10:45 | 7 | 1810 | 303 | 354 | 8 | 0.13 | . | . | . | 0.227 | 410 | 63.7 |
| 430 | 07/06/98 | 13:00 | 1 | 1780 | 352 | 299 | 64 | 0.01 | 1.07 | 0.04 | 0.449 | 0.186 | 423 | 66.9 |
| 431 | 07/06/98 | 13:05 | 7 | 1780 | 343 | 347 | 35 | 0.022 | 1.09 | 0.12 | 0.502 | 0.233 | 434 | 69 |
| 432 | 08/04/98 | 10:25 | 1 | 1810 | 308 | 331 | 22 | 0.047 | 1.56 | 0.03 | 0.77 | 0.352 | 411 | 64.2 |
| 433 | 08/04/98 | 10:30 | 8 | 1810 | 311 | 335 | 22 | 0.043 | 1.2 | 0.03 | 0.707 | 0.352 | 422 | 66.1 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 422 | 63.5 | 201 | 35.2 | 0.032 | 0.113 | 85.3 | 467 | 1090 | < 50 | < 1 | 7.66 | 64.9 |
| 423 | 52 | 165 | 28.4 | 0.037 | 0.16 | 86.9 | 453 | 1010 | < 50 | < 1 | 8.07 | 68.6 |
| 424 | 53.7 | 169 | 29.2 | 0.07 | 0.046 | 92.2 | 440 | 1020 | 74 | < 1 | 8.53 | 71.1 |
| 425 | 54.7 | 171 | 29.4 | 0.101 | 0.063 | 93.3 | 443 | 1020 | 82 | < 1 | 8.58 | 74.5 |
| 426 | 59.2 | 187 | 32.3 | 0.14 | 0.005 | 88 | 468 | 1080 | 89 | < 1 | 8.24 | 65.6 |
| 427 | 59.5 | 189 | 32.3 | 0.17 | 0.007 | 91.5 | 471 | 1090 | 131 | < 1 | 8.29 | 68 |
| 428 | 57.5 | 193 | 31 | 0.019 | 0.011 | 89.5 | 477 | 1100 | < 50 | < 1 | 6.96 | 66.8 |
| 429 | 60.9 | 212 | 33 | 0.04 | 0.011 | 94.2 | 495 | 1140 | < 50 | < 1 | 7.29 | 66.9 |
| 430 | 62.2 | 200 | 31.7 | 0.017 | 0.002 | 89.7 | 470 | 1130 | 58 | < 1 | 8.1 | 69.8 |
| 431 | 63.6 | 205 | 32.6 | 0.048 | 0.022 | 89.7 | 470 | 1140 | 100 | < 1 | 8.72 | 68.9 |
| 432 | 60.8 | 199 | 32 | 0.038 | 0.037 | 98.9 | 511 | 1150 | < 50 | < 1 | 10.8 | 72.4 |
| 433 | 62.4 | 203 | 32.9 | 0.045 | 0.039 | 99 | 509 | 1160 | < 50 | < 1 | 11 | 73 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 422 | < 1 | 229 | < 1 | < 1 | 5.01 | 1.15 | 3.89 | 1.58 | < 1 | < 1 | 3.65 |
| 423 | < 1 | 245 | < 1 | < 1 | 4.51 | < 1 | 3.14 | 1.86 | < 1 | < 1 | 2.6 |
| 424 | < 1 | 223 | < 1 | < 1 | 6.36 | < 1 | 3.57 | 2.59 | < 1 | < 1 | 14.6 |
| 425 | < 1 | 228 | < 1 | < 1 | 6.73 | 1.02 | 3.73 | 2.7 | < 1 | < 1 | 22.1 |
| 426 | < 1 | 217 | < 1 | < 1 | 5.63 | 2.42 | 3.59 | 2.34 | < 1 | < 1 | 19.7 |
| 427 | < 1 | 200 | < 1 | < 1 | 5.59 | 3.85 | 3.51 | 2.43 | < 1 | < 1 | 15.7 |
| 428 | < 1 | 227 | < 1 | < 1 | 2.01 | < 1 | 4.05 | < 1 | < 1 | < 1 | < 1 |
| 429 | < 1 | 248 | < 1 | < 1 | 1.58 | < 1 | 3.9 | < 1 | < 1 | < 1 | < 1 |
| 430 | < 1 | 236 | < 1 | < 1 | 3.3 | < 1 | 3.55 | 1.02 | < 1 | < 1 | 1.16 |
| 431 | < 1 | 240 | < 1 | < 1 | 2.65 | < 1 | 3.55 | < 1 | < 1 | < 1 | < 1 |
| 432 | < 1 | 207 | < 1 | < 1 | 1.74 | < 1 | 3.58 | 1.31 | < 1 | < 1 | 5.14 |
| 433 | < 1 | 204 | < 1 | < 1 | 2.04 | < 1 | 3.61 | 1.56 | < 1 | < 1 | 3.04 |

WEST BAY (380232/380236)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 434 | 09/09/98 | 9:00 | 1 | 1860 | 337 | 358 | 26 | 0.021 | 1.4 | 0.04 | 0.482 | 0.352 | 486 | 75.2 |
| 435 | 09/09/98 | 9:10 | 7 | 1860 | 339 | 363 | 25 | 0.021 | 1.47 | 0.04 | 0.497 | 0.355 | 481 | 74.8 |
| 436 | 10/20/98 | 10:15 | 1 | 1850 | 337 | 371 | 20 | 0.038 | 1.15 | 0.06 | 0.39 | 0.229 | 445 | 70 |
| 437 | 10/20/98 | 10:20 | 6 | 1810 | 334 | 365 | 21 | 0.04 | 1.08 | 0.06 | 0.282 | 0.427 | 446 | 70.2 |
| 438 | 02/24/99 | 9:00 | 1 | 2120 | 403 | 451 | 20 | 0.095 | 1.38 | 0.05 | 0.316 | 0.431 | 579 | 88.1 |
| 439 | 02/24/99 | 9:05 | 8 | 2160 | 384 | 469 | 1 | 0.16 | 1.44 | 0.16 | 0.437 | 0.543 | 477 | 69.8 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 434 | 72.4 | 236 | 38.8 | 0.057 | 0.053 | 97 | 524 | 1250 | < 50 | < 1 | 11.6 | 72.7 |
| 435 | 71.5 | 229 | 38.2 | 0.054 | 0.055 | 97 | 523 | 1240 | < 54 | < 1 | 11.5 | 73.1 |
| 436 | 65.6 | 210 | 34.3 | 0.31 | 0.037 | 98.5 | 529 | 1210 | 226 | < 1 | 9.96 | 79.4 |
| 437 | 65.7 | 214 | 34.4 | 0.31 | 0.038 | 99.4 | 529 | 1210 | 226 | < 1 | 10.1 | 82.6 |
| 438 | 87.1 | 285 | 42.6 | 0.007 | 0.013 | 123 | 622 | 1490 | < 50 | < 1 | 10.6 | 88.1 |
| 439 | 73.4 | 244 | 37.2 | 0.007 | 0.107 | 125 | 627 | 1410 | 60 | < 1 | 11.1 | 74 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 434 | < 1 | 234 | < 1 | < 1 | 2.36 | < 1 | 3.63 | 1.37 | < 1 | < 1 | 2.61 |
| 435 | < 1 | 230 | < 1 | < 1 | 2.25 | < 1 | 3.41 | 1.41 | < 1 | < 1 | < 1 |
| 436 | < 1 | 244 | < 1 | < 1 | 2.36 | < 1 | 3.81 | 1.12 | < 1 | < 1 | 2.99 |
| 437 | < 1 | 249 | < 1 | < 1 | 2.34 | < 1 | 3.7 | 1.15 | < 1 | < 1 | 3.46 |
| 438 | < 1 | 265 | < 1 | < 1 | 2.3 | < 1 | 4.31 | 1.6 | < 1 | < 1 | 4.28 |
| 439 | < 1 | 269 | < 1 | < 1 | 2.8 | < 1 | 4.05 | 1.92 | < 1 | < 1 | 4.88 |

WEST BAY-SOUTHWEST (384160)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 440 | 08/04/97 | 14:00 | 1 | 1360 | 268 | 236 | 45 | 0.01 | 1.68 | 0.02 | 0.269 | 0.173 | 407 | 68.7 |
| 441 | 09/02/97 | 14:00 | 1 | 1440 | 278 | 291 | 24 | 0.05 | 1.87 | 0.07 | 0.262 | 0.238 | 357 | 61.6 |
| 442 | 10/06/97 | 13:15 | 1 | 1580 | 294 | 331 | 14 | 0.01 | 1.35 | 0.11 | 0.191 | 0.122 | 394 | 65.8 |
| 443 | 05/20/98 | 11:15 | 1 | 1620 | 308 | 342 | 17 | 0.098 | . | . | . | 0.206 | 410 | 68.1 |
| 444 | 07/06/98 | 13:30 | 1 | 1700 | 342 | 312 | 52 | 0.01 | 1.24 | 0.08 | 0.404 | 0.205 | 419 | 68.2 |
| 445 | 08/04/98 | 10:00 | 1 | 1750 | 314 | 341 | 21 | 0.021 | 1.53 | 0.02 | 0.851 | 0.322 | 408 | 65.9 |
| 446 | 09/10/98 | 9:55 | 1 | 1790 | 329 | 351 | 25 | 0.01 | 1.37 | 0.03 | 0.485 | 0.318 | 438 | 69.7 |
| 447 | 10/20/98 | 10:00 | 1 | 1800 | 343 | 370 | 24 | 0.032 | 1.12 | 0.02 | 0.278 | 0.383 | 445 | 71.5 |
| 448 | 02/23/99 | 9:05 | 1 | 2120 | 418 | 462 | 24 | 0.056 | 1.49 | 0.02 | 0.298 | 0.404 | 575 | 90.1 |
| 449 | 05/25/99 | 14:00 | 1 | 1600 | 326 | 355 | 21 | 0.133 | 1.91 | 0.11 | 0.492 | 0.317 | 436 | 71.7 |
| 450 | 08/02/99 | 13:00 | 1 | 1640 | 325 | 320 | 38 | 0.01 | 1.24 | 0.02 | 0.315 | 0.276 | 456 | 73.9 |
| 451 | 10/11/99 | 11:45 | 1 | 1730 | 310 | 318 | 30 | 0.01 | 1.1 | 0.02 | 0.178 | 0.161 | 454 | 73.3 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 440 | 57.1 | 167 | 30.8 | 0.112 | 0.015 | 71.6 | 386 | 944 | 85 | < 1 | 6.91 | 67.4 |
| 441 | 49.4 | 146 | 26.1 | 0.337 | 0.045 | 67.9 | 382 | 902 | 166 | < 1 | 7.75 | 89.6 |
| 442 | 55.8 | 169 | 30.1 | 0.334 | 0.021 | 82 | 424 | 1010 | 206 | < 1 | 7.73 | 75.8 |
| 443 | 58.2 | 188 | 31.2 | 0.03 | 0.015 | 79.3 | 440 | 1050 | < 50 | < 1 | 6.43 | 71.4 |
| 444 | 60.3 | 190 | 30.7 | 0.083 | 0.009 | 84.4 | 447 | 1090 | 113 | < 1 | 7.99 | 73.3 |
| 445 | 59.2 | 186 | 31 | 0.363 | 0.05 | 93.4 | 486 | 1110 | 255 | < 1 | 10.5 | 81 |
| 446 | 64.1 | 198 | 33.4 | 0.175 | 0.042 | 99.3 | 495 | 1160 | 124 | < 1 | 11.3 | 80.5 |
| 447 | 64.8 | 206 | 33.7 | 0.504 | 0.042 | 95.6 | 516 | 1190 | 350 | < 1 | 9.78 | 85.4 |
| 448 | 84.9 | 268 | 42.8 | 0.007 | 0.068 | 118 | 595 | 1450 | 55 | < 1 | 11.7 | 98 |
| 449 | 62.4 | 188 | 32 | 0.054 | 0.011 | 85.9 | 449 | 1090 | 108 | < 1 | 7.99 | 73.1 |
| 450 | 65.9 | 199 | 33.3 | 0.21 | 0.066 | 85.5 | 452 | 1110 | 167 | < 2 | 9.92 | 77.3 |
| 451 | 65.8 | 204 | 33.5 | 0.218 | 0.031 | 94.7 | 485 | 1140 | 198 | < 1 | 8.37 | 74.6 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 440 | < 1 | 222 | < 1 | < 1 | 4.08 | < 1 | 3.7 | 1.81 | < 1 | < 1 | 2.63 |
| 441 | < 1 | 198 | < 1 | < 1 | 5.65 | 1.64 | 4.99 | 1.65 | < 1 | < 1 | 22.7 |
| 442 | < 1 | 207 | < 1 | < 1 | 5.37 | 4.12 | 3.74 | 2.04 | < 1 | < 1 | 37.5 |
| 443 | < 1 | 211 | < 1 | < 1 | 1.36 | < 1 | 10.4 | < 1 | < 1 | < 1 | 1.75 |
| 444 | < 1 | 227 | < 1 | < 1 | 2.29 | < 1 | 3.84 | < 1 | < 1 | < 1 | 1.74 |
| 445 | < 1 | 217 | < 1 | < 1 | 1.8 | < 1 | 3.93 | 1.57 | < 1 | < 1 | < 1 |
| 446 | < 1 | 223 | < 1 | < 1 | 2.18 | < 1 | 3.51 | 1.38 | < 1 | < 1 | 2.31 |
| 447 | < 1 | 239 | < 1 | < 1 | 2.47 | < 1 | 4.08 | 1.02 | < 1 | < 1 | 3.86 |
| 448 | < 1 | 281 | < 1 | < 1 | 2.73 | < 1 | 4.53 | 2.36 | < 1 | < 1 | 8.72 |
| 449 | < 1 | 215 | < 1 | < 1 | 3.47 | < 1 | 4.36 | 2.03 | < 1 | < 1 | 3.2 |
| 450 | < 1 | 219 | < 1 | < 1 | 2.36 | < 1 | 5.06 | 1.34 | < 1 | < 1 | 1.91 |
| 451 | < 1 | 233 | < 1 | < 1 | 2.63 | < 1 | 4.33 | 1.77 | < 1 | < 1 | 4.05 |

WEST MINNEWAUKAN FLATS (380250)

| OBS | Date Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 452 | 10/02/95 14:00 | 2 | 1170 | 280 | 342 | 1 | 0.01 | 1.51 | 0.042 | 0.138 | 0.117 | 419 | 79.4 |
| 453 | 03/25/96 14:00 | 1 | 1510 | 372 | 454 | 1 | 0.01 | 1.43 | 0.05 | 0.107 | 0.27 | 484 | 88.2 |
| 454 | 05/22/96 9:45 | 1 | 1350 | 267 | 308 | 9 | 0.023 | 1.4 | 0.02 | 0.171 | 0.127 | 327 | 54.4 |
| 455 | 05/22/96 9:45 | 3 | 1360 | 268 | 311 | 8 | 0.022 | 1.4 | 0.02 | 0.162 | 0.129 | 319 | 52.9 |
| 456 | 07/01/96 13:15 | 1 | 1440 | 279 | 300 | 20 | 0.01 | 1.52 | 0.04 | 0.202 | 0.181 | 353 | 57.5 |
| 457 | 07/01/96 13:15 | 4 | 1400 | 274 | 300 | 17 | 0.01 | 1.58 | 0.02 | 0.199 | 0.182 | 353 | 58.6 |
| 458 | 08/06/96 9:30 | 1 | 1440 | 291 | 303 | 26 | 0.01 | 1.34 | 0.02 | 0.28 | 0.24 | 381 | 63.2 |
| 459 | 08/06/96 9:30 | 3 | 1430 | 292 | 306 | 25 | 0.01 | 1.34 | 0.02 | 0.275 | 0.27 | 379 | 62.9 |
| 460 | 09/03/96 14:45 | 1 | 1500 | 308 | 295 | 40 | 0.01 | 1.55 | 0.02 | 0.289 | 0.242 | 378 | 62.6 |
| 461 | 09/03/96 14:45 | 3 | 1510 | 309 | 300 | 38 | 0.01 | 1.49 | 0.02 | 0.278 | 0.242 | 386 | 63.6 |
| 462 | 10/01/96 9:30 | 1 | 1670 | 322 | 328 | 32 | 0.01 | 1.6 | 0.02 | 0.152 | 0.13 | 397 | 62.7 |
| 463 | 10/01/96 9:30 | 3 | 1670 | 321 | 327 | 32 | 0.01 | 1.63 | 0.02 | 0.149 | 0.128 | 402 | 63.6 |
| 464 | 05/15/97 9:00 | 1 | 1490 | 270 | 267 | 31 | 0.01 | 1.49 | 0.02 | 0.176 | 0.192 | 392 | 62.8 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 452 | 53.7 | 112 | 23.7 | 0.091 | 0.027 | 47.3 | 362 | 849 | . | . | 5.38 | 74.8 |
| 453 | 64 | 147 | 30.3 | 0.088 | 0.537 | 65.4 | 355 | 976 | . | . | 7.82 | 109 |
| 454 | 46.4 | 128 | 22.8 | 0.025 | 0.002 | 66.2 | 271 | 751 | . | . | 6.32 | 63.3 |
| 455 | 45.3 | 126 | 22.2 | 0.028 | 0.002 | 66.5 | 291 | 766 | . | . | 6.13 | 64.2 |
| 456 | 50.8 | 148 | 25.6 | 0.051 | 0.012 | 69 | 356 | 876 | . | . | 6.89 | 63.1 |
| 457 | 50.2 | 143 | 25.1 | 0.054 | 0.019 | 63.5 | 340 | 846 | . | . | 6.53 | 66.9 |
| 458 | 54.2 | 156 | 27.1 | 0.119 | 0.076 | 73.8 | 381 | 932 | . | . | 7.26 | 72.6 |
| 459 | 54 | 155 | 27.1 | 0.112 | 0.073 | 74.8 | 355 | 906 | . | . | 7.08 | 73.9 |
| 460 | 53.9 | 158 | 27.6 | 0.105 | 0.078 | 79.2 | 393 | 961 | . | . | 8.33 | 70.7 |
| 461 | 55.2 | 161 | 28.2 | 0.081 | 0.102 | 71.7 | 361 | 928 | . | . | 8.24 | 75 |
| 462 | 58.3 | 176 | 30.3 | 0.135 | 0.024 | 88.8 | 424 | 1030 | . | . | 6.84 | 75.1 |
| 463 | 59 | 180 | 30.7 | 0.14 | 0.025 | 87 | 389 | 1000 | . | . | 6.8 | 77.4 |
| 464 | 57.1 | 172 | 29.1 | 0.078 | 0.064 | 81.4 | 431 | 997 | 91 | 0.49 | 6.57 | 67.8 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 452 | . | . | < 0.02 | < 0.2 | 2.12 | < 0.2 | . | < 0.2 | . | . | 10.6 |
| 453 | . | 175 | < 0.02 | < 0.2 | 4.34 | 3.59 | . | 3.21 | . | . | 11.6 |
| 454 | . | . | < 0.02 | < 0.2 | 4.59 | 3.14 | . | 2.56 | . | . | 30.4 |
| 455 | . | . | < 0.02 | < 0.2 | 4.45 | 1.77 | . | 2.2 | . | . | 7 |
| 456 | . | . | < 0.02 | < 0.2 | 3.09 | < 0.2 | . | 2.33 | . | . | 24.4 |
| 457 | . | . | < 0.02 | 0.21 | 3.29 | < 0.2 | . | 2.08 | . | . | 29.8 |
| 458 | . | . | < 0.02 | < 0.2 | 2.9 | < 0.2 | . | 1.63 | . | . | 17.7 |
| 459 | . | . | < 0.02 | < 0.2 | 2.6 | 0.57 | . | 1.38 | . | . | 12.3 |
| 460 | . | 220 | < 0.02 | 0.28 | 3.17 | < 0.2 | . | 1.32 | . | . | 22.5 |
| 461 | . | 222 | < 0.02 | 0.44 | 5.96 | < 0.2 | . | 0.81 | . | . | 17.7 |
| 462 | . | . | < 0.02 | 0.25 | 3.3 | 0.58 | . | 0.49 | . | . | 19.8 |
| 463 | . | . | < 0.02 | 0.51 | 3.95 | 1.94 | . | 0.3 | . | . | 27.3 |
| 464 | < 0.2 | 250 | < 0.02 | < 0.2 | 5.65 | < 0.2 | 4.06 | 2.01 | < 0.04 | < 0.03 | < 0.2 |

WEST MINNEWAUKAN FLATS (380250)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 465 | 05/15/97 | 9:00 | 5 | 1490 | 268 | 270 | 28 | 0.01 | 1.4 | 0.02 | 0.181 | 0.175 | 391 | 62.8 |
| 466 | 07/07/97 | 15:30 | 1 | 1310 | 255 | 289 | 11 | 0.058 | 1.46 | 0.08 | 0.276 | 0.258 | 340 | 59.2 |
| 467 | 07/07/97 | 15:30 | 5 | 1310 | 262 | 297 | 11 | 0.06 | 1.63 | 0.08 | 0.275 | 0.275 | 339 | 58.9 |
| 468 | 08/04/97 | 11:30 | 1 | 1360 | 267 | 263 | 31 | 0.01 | 1.79 | 0.02 | 0.307 | 0.249 | 342 | 58.8 |
| 469 | 08/04/97 | 11:30 | 5 | 1370 | 268 | 270 | 28 | 0.01 | 1.56 | 0.02 | 0.295 | 0.253 | 354 | 60.1 |
| 470 | 09/02/97 | 14:15 | 1 | 1430 | 279 | 284 | 28 | 0.053 | 2.04 | 0.05 | 0.306 | 0.244 | 363 | 62.1 |
| 471 | 09/02/97 | 14:15 | 5 | 1420 | 276 | 292 | 22 | 0.178 | 1.95 | 0.08 | 0.274 | 0.249 | 372 | 64.4 |
| 472 | 10/06/97 | 14:00 | 1 | 1560 | 292 | 336 | 10 | 0.01 | 1.39 | 0.16 | 0.208 | 0.118 | 402 | 67.5 |
| 473 | 10/06/97 | 14:00 | 5 | 1560 | 294 | 341 | 9 | 0.01 | 1.31 | 0.16 | 0.201 | 0.132 | 396 | 66.3 |
| 474 | 05/20/98 | 11:30 | 1 | 1670 | 301 | 341 | 13 | 0.109 | . | . | . | 0.227 | 398 | 65.4 |
| 475 | 05/20/98 | 11:35 | 6 | 1670 | 300 | 346 | 10 | 0.11 | . | . | . | 0.22 | 407 | 66.7 |
| 476 | 07/06/98 | 12:00 | 1 | 1690 | 314 | 351 | 16 | 0.01 | 1.13 | 0.05 | 0.416 | 0.287 | 395 | 64.9 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 465 | 56.9 | 174 | 29.4 | 0.071 | 0.065 | 80.8 | 431 | 997 | 62 | 0.45 | 6.28 | 66.7 |
| 466 | 46.6 | 132 | 24.4 | 0.443 | 0.127 | 62.7 | 352 | 832 | 358 | < 1 | 6.66 | 68.6 |
| 467 | 46.5 | 131 | 24.4 | 0.443 | 0.126 | 62.9 | 353 | 835 | 301 | < 1 | 6.74 | 67.8 |
| 468 | 47.4 | 138 | 25.6 | 0.08 | 0.074 | 67.8 | 377 | 876 | 67 | < 1 | 7.2 | 68.8 |
| 469 | 49.6 | 143 | 26 | 0.094 | 0.094 | 71.6 | 412 | 924 | 85 | < 1 | 7.22 | 73.9 |
| 470 | 50.4 | 148 | 26.6 | 0.19 | 0.047 | 67.4 | 382 | 906 | 127 | < 1 | 7.68 | 86.7 |
| 471 | 51.3 | 151 | 27.3 | 0.361 | 0.078 | 67.5 | 381 | 910 | 198 | < 1 | 7.76 | 90.8 |
| 472 | 56.8 | 170 | 30.6 | 0.377 | 0.02 | 80.4 | 422 | 1000 | 221 | < 1 | 7.11 | 75 |
| 473 | 55.9 | 166 | 30.1 | 0.35 | 0.02 | 82.3 | 430 | 1010 | 242 | < 1 | 7.12 | 74.2 |
| 474 | 57.1 | 189 | 31.1 | 0.027 | 0.011 | 83.1 | 459 | 1070 | < 50 | < 1 | 6.63 | 68.7 |
| 475 | 58.3 | 193 | 31.5 | 0.044 | 0.014 | 83.2 | 459 | 1070 | < 50 | < 1 | 6.66 | 70 |
| 476 | 56.6 | 178 | 28.8 | 0.101 | 0.002 | 80.7 | 428 | 1030 | 104 | 1.76 | 7.62 | 98.9 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 465 | < 0.2 | 232 | < 0.02 | < 0.2 | 5.2 | 0.85 | 4.06 | 1.98 | < 0.04 | < 0.03 | 2.72 |
| 466 | < 1 | 212 | < 1 | 5.08 | 7.69 | 4.27 | 7.3 | 1.85 | < 1 | < 1 | 12.9 |
| 467 | < 1 | 209 | < 1 | 2.45 | 5.67 | < 1 | 4.75 | 1.63 | < 1 | < 1 | 14.4 |
| 468 | < 1 | 208 | < 1 | < 1 | 5.5 | 1.06 | 3.84 | 1.62 | < 1 | < 1 | 9.19 |
| 469 | < 1 | 244 | < 1 | < 1 | 6.03 | 1.55 | 3.97 | 1.55 | < 1 | < 1 | 6.56 |
| 470 | < 1 | 200 | < 1 | < 1 | 6.06 | 1.61 | 3.61 | 2.03 | < 1 | < 1 | 22.4 |
| 471 | < 1 | 187 | < 1 | < 1 | 5.68 | 1.39 | 3.87 | 1.58 | < 1 | < 1 | 14.7 |
| 472 | < 1 | 215 | < 1 | 1.16 | 5.63 | 7.81 | 4.39 | 2.1 | < 1 | < 1 | 30.1 |
| 473 | < 1 | 208 | < 1 | < 1 | 5.71 | 5.47 | 4.12 | 2.4 | < 1 | < 1 | 26.3 |
| 474 | < 1 | 217 | < 1 | < 1 | 1.21 | < 1 | 4.33 | < 1 | < 1 | < 1 | < 1 |
| 475 | < 1 | 218 | < 1 | < 1 | 1.69 | < 1 | 4.13 | < 1 | < 1 | < 1 | < 1 |
| 476 | < 1 | 218 | < 1 | < 1 | 2.22 | < 1 | 3.53 | < 1 | < 1 | < 1 | 1.55 |

WEST MINNEWAUKAN FLATS (380250)
(continued)

| OBS | Date | Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/ Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------|-------|--------------|-----------------------------------|-------------------------------|-------------------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---|-----------------------------|--------------|
| 477 | 07/06/98 | 12:40 | 5 | 1690 | 334 | 312 | 47 | 0.01 | 1.4 | 0.06 | 0.373 | 0.173 | 409 | 67.2 |
| 478 | 08/04/98 | 9:30 | 1 | 1750 | 307 | 336 | 19 | 0.042 | 1.4 | 0.03 | 1 | 0.338 | 407 | 65.9 |
| 479 | 08/04/98 | 9:35 | 5 | 1750 | 312 | 342 | 19 | 0.041 | 1.36 | 0.03 | 0.776 | 0.338 | 392 | 63.5 |
| 480 | 09/10/98 | 9:30 | 1 | 1790 | 329 | 341 | 30 | 0.012 | 2.12 | 0.02 | 0.779 | 0.313 | 457 | 73.2 |
| 481 | 09/10/98 | 9:35 | 5 | 1790 | 339 | 353 | 30 | 0.01 | 1.67 | 0.02 | 0.618 | 0.293 | 442 | 71 |
| 482 | 10/20/98 | 9:30 | 1 | 1830 | 335 | 366 | 21 | 0.032 | 1.23 | 0.06 | 0.357 | 0.263 | 447 | 71.2 |
| 483 | 10/20/98 | 9:35 | 5 | 1830 | 329 | 359 | 21 | 0.032 | 1.33 | 0.05 | 0.39 | 0.261 | 438 | 69.7 |
| 484 | 02/23/99 | 9:55 | 1 | 2100 | 423 | 465 | 25 | 0.026 | 1.55 | 0.02 | 0.298 | 0.427 | 535 | 84.3 |
| 485 | 02/23/99 | 10:00 | 5 | 2090 | 422 | 474 | 20 | 0.037 | 1.5 | 0.02 | 0.311 | 0.419 | 563 | 89.1 |
| 486 | 05/25/99 | 13:15 | 1 | 1570 | 322 | 355 | 19 | 0.183 | 1.53 | 0.11 | 0.391 | 0.289 | 439 | 72.7 |
| 487 | 05/25/99 | 13:20 | 6 | 1600 | 317 | 348 | 19 | 0.171 | 1.46 | 0.11 | 0.371 | 0.29 | 438 | 71.6 |
| 488 | 08/02/99 | 12:15 | 1 | 1630 | 333 | 340 | 33 | 0.01 | 1.38 | 0.02 | 0.325 | 0.296 | 436 | 71.1 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|--------------|--------------|-------------|--------------|--------------|--------------|-------------------|---------------|--------------|--------------|--------------|--------------|
| 477 | 58.5 | 182 | 29.6 | 0.172 | 0.012 | 80.8 | 430 | 1050 | 151 | < 1 | 7.62 | 101 |
| 478 | 58.8 | 187 | 30.9 | 0.122 | 0.005 | 94.1 | 487 | 1110 | 87 | < 1 | 10.1 | 77.8 |
| 479 | 56.6 | 180 | 29.5 | 0.12 | 0.004 | 93.3 | 486 | 1100 | 97 | < 1 | 9.84 | 75.8 |
| 480 | 66.7 | 212 | 35.3 | 0.186 | 0.027 | 99.7 | 497 | 1180 | 134 | < 1 | 11.5 | 81.8 |
| 481 | 64.3 | 204 | 33.9 | 0.196 | 0.026 | 99.7 | 496 | 1170 | 136 | < 1 | 11.1 | 80.1 |
| 482 | 65.4 | 212 | 34.2 | 0.426 | 0.041 | 104 | 520 | 1210 | 300 | < 1 | 9.95 | 82.1 |
| 483 | 64 | 208 | 33.4 | 0.468 | 0.041 | 103 | 521 | 1200 | 339 | < 1 | 9.97 | 80.6 |
| 484 | 78.8 | 247 | 39.5 | 0.007 | 0.053 | 115 | 579 | 1400 | 57 | < 1 | 11 | 87.8 |
| 485 | 82.8 | 262 | 42 | 0.007 | 0.041 | 116 | 581 | 1430 | < 50 | < 1 | 11 | 88.6 |
| 486 | 62.5 | 187 | 32.1 | 0.024 | 0.018 | 83 | 442 | 1070 | 79 | < 1 | 8.36 | 72 |
| 487 | 62.9 | 189 | 32.3 | 0.043 | 0.023 | 86 | 449 | 1080 | 96 | < 1 | 7.99 | 71.3 |
| 488 | 62.7 | 190 | 31.7 | 0.138 | 0.088 | 85.4 | 448 | 1090 | 137 | < 2 | 9.26 | 73.2 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 477 | < 1 | 231 | < 1 | < 1 | 2.83 | < 1 | 3.93 | < 1 | < 1 | < 1 | 1.11 |
| 478 | < 1 | 198 | < 1 | < 1 | 1.83 | < 1 | 3.68 | 1.4 | < 1 | < 1 | 2.19 |
| 479 | < 1 | 181 | < 1 | < 1 | 3.74 | < 1 | 3.78 | 1.4 | < 1 | < 1 | < 1 |
| 480 | < 1 | 221 | < 1 | < 1 | 2.39 | < 1 | 3.79 | 1.31 | < 1 | < 1 | 2.78 |
| 481 | < 1 | 224 | < 1 | < 1 | 2.99 | < 1 | 3.71 | 1.42 | < 1 | < 1 | 1.05 |
| 482 | < 1 | 235 | < 1 | < 1 | 2.86 | < 1 | 4.15 | 1.07 | < 1 | < 1 | 3.68 |
| 483 | < 1 | 232 | < 1 | < 1 | 3.57 | < 1 | 4.31 | 1.23 | < 1 | < 1 | 3.93 |
| 484 | < 1 | 267 | < 1 | < 1 | 2.73 | < 1 | 4.33 | 1.47 | < 1 | < 1 | 3.55 |
| 485 | < 1 | 247 | < 1 | < 1 | 2.63 | < 1 | 4.76 | 1.37 | < 1 | < 1 | 4.03 |
| 486 | < 1 | 227 | < 1 | < 1 | 3.35 | < 1 | 4.53 | 2.8 | < 1 | < 1 | 2.07 |
| 487 | < 1 | 215 | < 1 | < 1 | 2.35 | < 1 | 6.99 | 1.66 | < 1 | < 1 | 10.2 |
| 488 | < 1 | 212 | < 1 | < 1 | 3.79 | < 1 | 4.91 | 1.48 | < 1 | < 1 | 1.15 |

WEST MINNEWAUKAN FLATS (380250)
(continued)

| OBS | Date Time | Depth (M) | Lab Conductivity (umhos/cm) | Total Alkalinity (mg/L) | Bicarbonate Alkalinity (mg/L) | Carbonate Alkalinity (mg/L) | Total Ammonia as N (mg/L) | TKN as N (mg/L) | Nitrate/Nitrite as N (mg/L) | Total Phosphorus as P (mg/L) | Dissolved Phosphorus as P (mg/L) | Total Hardness (mg/L) | Ca (mg/L) |
|-----|----------------|-----------|-----------------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-----------------|-----------------------------|------------------------------|----------------------------------|-----------------------|-----------|
| 489 | 08/02/99 12:20 | 6 | 1640 | 334 | 345 | 31 | 0.01 | 1.31 | 0.02 | 0.319 | 0.287 | 443 | 72 |
| 490 | 10/11/99 12:20 | 1 | 1710 | 315 | 322 | 31 | 0.01 | 1.03 | 0.02 | 0.185 | 0.149 | 454 | 73.3 |
| 491 | 10/11/99 12:25 | 5 | 1710 | 313 | 319 | 31 | 0.01 | 1.11 | 0.02 | 0.188 | 0.194 | 459 | 74.3 |

| OBS | Mg (mg/L) | Na (mg/L) | K (mg/L) | Fe (ug/L) | Mn (ug/L) | Cl (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Al (ug/L) | Sb (ug/L) | As (ug/L) | Ba (ug/L) |
|-----|-----------|-----------|----------|-----------|-----------|-----------|----------------|------------|-----------|-----------|-----------|-----------|
| 489 | 64 | 194 | 32.4 | 0.167 | 0.102 | 85.4 | 450 | 1100 | 138 | < 2 | 9.64 | 75.4 |
| 490 | 65.7 | 202 | 33.6 | 0.219 | 0.035 | 93.7 | 481 | 1140 | 196 | < 1 | 8.46 | 73.4 |
| 491 | 66.5 | 205 | 34 | 0.237 | 0.037 | 93.8 | 477 | 1140 | 217 | < 1 | 8.49 | 73.9 |

| OBS | Be (ug/L) | B (ug/L) | Cd (ug/L) | Cr (ug/L) | Cu (ug/L) | Pb (ug/L) | Ni (ug/L) | Se (ug/L) | Ag (ug/L) | Tl (ug/L) | Zn (ug/L) |
|-----|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 489 | < 1 | 215 | < 1 | < 1 | 2.34 | < 1 | 4.86 | 1.65 | < 1 | < 1 | 18.7 |
| 490 | < 1 | 251 | < 1 | < 1 | 2.67 | < 1 | 3.98 | 1.73 | < 1 | < 1 | 4.97 |
| 491 | < 1 | 232 | < 1 | < 1 | 2.78 | < 1 | 4.16 | 1.42 | < 1 | < 1 | 3.76 |

Appendix B

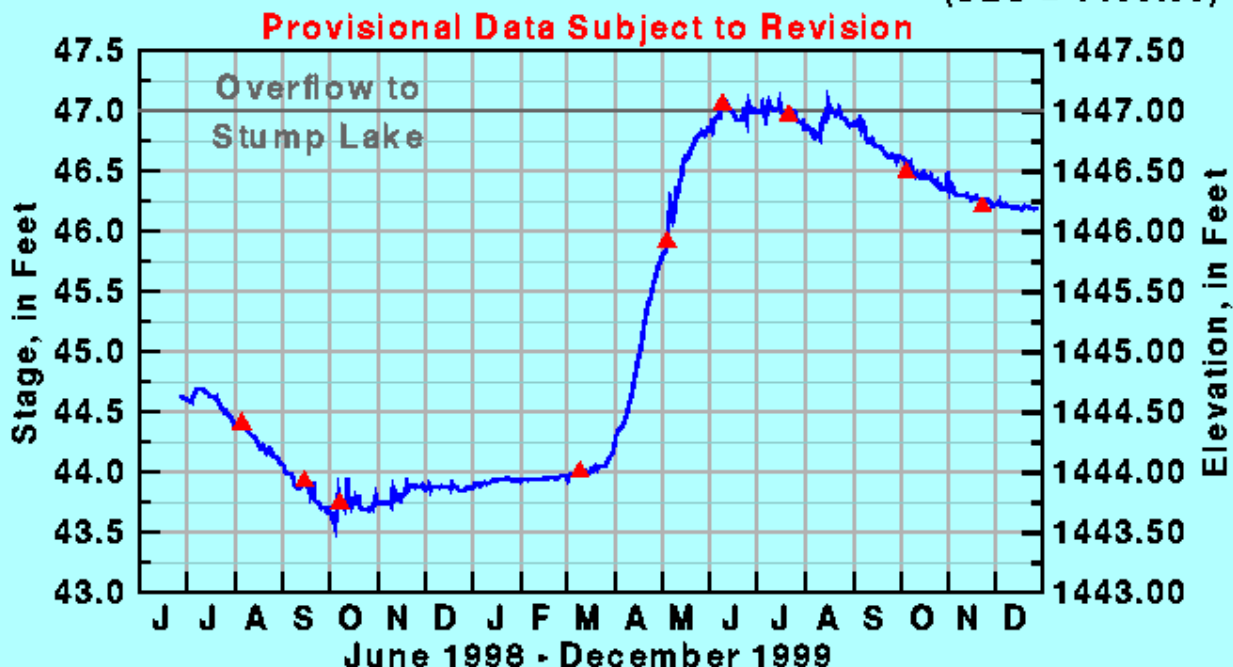
Devils Lake Inflow

USGS Hydrographs

Provisional Data

05056500 DEVILS LAKE NEAR DEVILS LAKE, ND

(SLC = 1400.00)



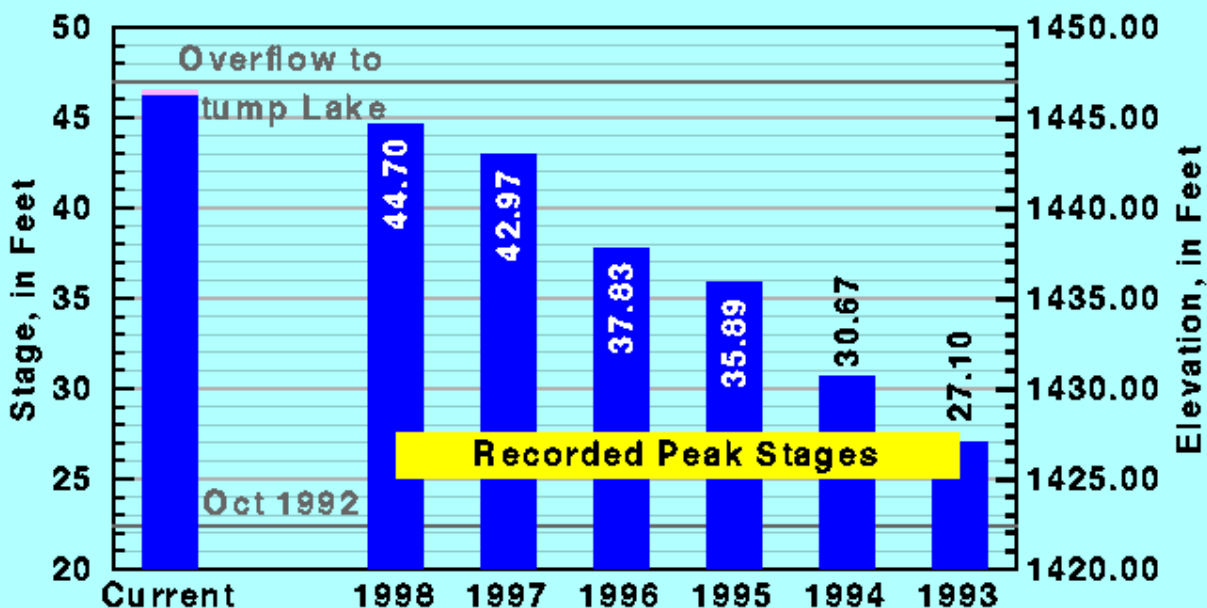
Daily Mean Stage: 46.18 as of 1999.12.28



Station Operated by the Bismarck, ND Office

05056500 DEVILS LAKE NEAR DEVILS LAKE, ND

(SLC = 1400.00)



Current Stage: 46.20 as of 1999.12.29 03:00:00



Recent Maximum Stage: 46.52 at 1999.10.12 03:00:00

Station Operated by the Bismarck, ND Office

Appendix C

Dissolved Oxygen, Specific Conductance, Temperature and pH Data

| 380221 | | SIX MILE BAY | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|--------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Depth (m) | Mar-95 | May-95 | Jul-96 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 | |
| 1 | 9.4 | 11.8 | 8.75 | 7.96 | 10.42 | 12.73 | 11.08 | 10.53 | 9.62 | 8.65 | 18.12 | 8.41 | 7.6 | 8.74 | 8.65 | 10.86 | 9.42 | 8.03 | 9.11 | 11.47 | 10.44 | 9.46 | 8.7 | 9.93 | |
| 2 | 9 | 11.9 | 8.75 | 7.87 | 9.71 | 12.73 | 10.96 | 10.24 | 7.94 | 8.52 | 14.16 | 8.34 | 6.8 | 8.53 | 8.54 | 10.81 | 8.51 | 7.97 | 8.96 | 11.41 | 10.37 | 9.4 | 8.71 | 9.83 | |
| 3 | 8.6 | 11.8 | 8.6 | 7.82 | 9.46 | 12.69 | 10.8 | 9.98 | 7.54 | 8.35 | 12.12 | 8.06 | 6.3 | 7.03 | 8.49 | 10.75 | 8.3 | 7.9 | 8.9 | 11.33 | 9.83 | 9.35 | 8.7 | 9.79 | |
| 4 | 8.2 | 11.8 | 7.8 | 7.78 | 9.15 | 12.64 | 10.77 | 9.76 | 7.4 | 8.3 | 10.46 | 8.13 | 6.05 | 6.93 | 8.46 | 10.7 | 8.1 | 7.8 | 8.83 | 11.24 | 9.89 | 9.18 | 8.72 | 9.76 | |
| 5 | 7.2 | 11.8 | 7.15 | 7.78 | 8.69 | 12.59 | 8.57 | 9.61 | 7.29 | 8.35 | 9.12 | 8.04 | 5.95 | 6.84 | 8.45 | 10.63 | 8.04 | 7.77 | 8.79 | 11.16 | 9.84 | 9.11 | 8.96 | 9.75 | |
| 6 | | 11.5 | 4.1 | 7.67 | 5.29 | 12.57 | 6.82 | 9.43 | 6.15 | 8.4 | 6.15 | 8.01 | 5.6 | 6.78 | 8.43 | 10.56 | 7.97 | 7.71 | 8.49 | 11.09 | 9.43 | 9.06 | 9.19 | 9.75 | |
| 7 | | 10.8 | 2.3 | 7.35 | 5.1 | 11.75 | 6.22 | 8.81 | 3.49 | 8.45 | 4.64 | | 7.96 | 3.4 | 6.51 | 8.42 | 10.46 | 7.77 | 7.75 | 8.4 | 11.05 | 8.81 | 9 | 9.77 | 9.72 |
| 8 | | | | | | | | | | | | | 7.92 | 2.7 | 6.21 | 8.41 | 10.03 | 7.53 | 7.55 | 8.31 | 10.98 | 8.81 | 8.9 | 10.2 | 9.71 |
| 9 | | | | | | | | | | | | 4.95 | 1.55 | 6.15 | 8.4 | 5.17 | 2.76 | 7.36 | 8.14 | 10.87 | 7.7 | 7.88 | 10.28 | 9.69 | |
| 10 | | | | | | | | | | | | | | | 8.4 | | 1.28 | | | | 3.59 | 6.45 | 9.09 | 9.09 | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 380222 | | CREEL BAY | | | | | | | | | | | | | | | | | | | | | | | |
| Depth (m) | Mar-95 | May-95 | Jul-95 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | | | | |
| 1 | 10.4 | 11 | 8.4 | 7.94 | 12.39 | 11.48 | 11.88 | 10.13 | 10.37 | 9.47 | 13.2 | 9.1 | 6.95 | 9.21 | 8.71 | 9.59 | 9.14 | 9.03 | 8.57 | 11.45 | 9.99 | | | | |
| 2 | 10.3 | 11 | 8.3 | 7.91 | 11.92 | 11.42 | 11.82 | 10.06 | 10.34 | 8.95 | 12.7 | 8.98 | 6.9 | 9.17 | 8.63 | 9.54 | 8.93 | 8.93 | 8.51 | 11.31 | 9.92 | | | | |
| 3 | 10.2 | 11 | 8.25 | 7.88 | 11.9 | 11.38 | 11.8 | 9.96 | 9.56 | 9.23 | 12.95 | 8.77 | 6.9 | 9.09 | 8.56 | 9.5 | 8.17 | 8.86 | 8.43 | 11.21 | 9.95 | | | | |
| 4 | 10.2 | 11 | 8.15 | 7.87 | 11.89 | 11.37 | 11.55 | 9.72 | 9.08 | 8.88 | 12.21 | 8.59 | 6.9 | 8.29 | 8.52 | 9.47 | 8.07 | 8.83 | 8.35 | 11.13 | 9.96 | | | | |
| 5 | 10.4 | 10.8 | 8.15 | 7.87 | 11.88 | 11.43 | 11.3 | 9.45 | 8.17 | 8.77 | 12.03 | 8.43 | 6.8 | 8.12 | 8.49 | 9.45 | 7.94 | 8.77 | 8.27 | 11.06 | 9.86 | | | | |
| 6 | 10.4 | 10.8 | 8.05 | 7.86 | 11.87 | 11.39 | 10.64 | 8.09 | 6.96 | 8.67 | 11.7 | 8.35 | 6.5 | 7.86 | 8.45 | 9.41 | 7.08 | 8.72 | 8.19 | 11 | 9.83 | | | | |
| 7 | 9.7 | 10.8 | 8.1 | 7.86 | 11.49 | 11.06 | 9.12 | 7.64 | 6.74 | 8.57 | 10.7 | 8.28 | 5.7 | 7.52 | 8.43 | 9.38 | 5.78 | 8.64 | 8.13 | 10.95 | 9.76 | | | | |
| 8 | 8.8 | 10.8 | 8 | 7.84 | 9.49 | 9.81 | 8.783 | 6.87 | 4.39 | 8.49 | 7.88 | 8.17 | 5.3 | 7.43 | 8.4 | 9.32 | 4.16 | 8.57 | 8.05 | 10.92 | 9.7 | | | | |
| 9 | | | 6.9 | 7.46 | 4.54 | 7.81 | 7.48 | 4.17 | 4.39 | 8.48 | 5.1 | 8.09 | 4.1 | 7.4 | 8.37 | 8.15 | 3.53 | 8.52 | 7.98 | 10.89 | 9.67 | | | | |
| 10 | | | | | | | | | | | | 7.9 | 3.65 | 7.38 | 8.35 | 7.88 | 2.48 | 8.42 | 7.86 | 10.85 | 8.85 | | | | |
| 11 | | | | | | | | | | | | | | | 6.42 | 7.45 | 2.52 | 8.33 | 7.81 | 10.77 | 6.92 | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 380233 | | MAIN BAY | | | | | | | | | | | | | | | | | | | | | | | |
| Depth (m) | Mar-95 | May-95 | Jul-95 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 | |
| 1 | 10.4 | 9.8 | 8.4 | 8.76 | 12.26 | 11.98 | 11.16 | 9.7 | 10.17 | 9.7 | 15 | 8.42 | 8.5 | 9.14 | 9.07 | 9.54 | 8.39 | 8.7 | 8.75 | 11.3 | 9.86 | 10.05 | 13.03 | 11.14 | |
| 2 | 10.2 | 9.9 | 8.4 | 8.74 | 12.04 | 12.01 | 11.08 | 9.46 | 9.47 | 9.57 | 13.4 | 8.35 | 8.5 | 9.03 | 8.91 | 9.46 | 8.31 | 8.55 | 8.68 | 11.22 | 9.95 | 10.08 | 11.8 | 11.04 | |
| 3 | 10.2 | 10.2 | 8.3 | 8.65 | 11.87 | 12.02 | 11.03 | 9.3 | 8.78 | 9.4 | 12.7 | 8.28 | 8.5 | 8.01 | 8.85 | 9.41 | 8.27 | 8.49 | 8.62 | 11.18 | 10.03 | 10.01 | 11.6 | 11 | |
| 4 | 10.1 | 10.2 | 8.2 | 8.6 | 11.86 | 12.06 | 10.89 | 9.08 | 8.52 | 9.3 | 12.1 | 8.22 | 8.45 | 7.7 | 8.8 | 9.38 | 8.17 | 8.4 | 8.55 | 11.12 | 9.91 | 9.94 | 11.5 | 11 | |
| 5 | 9.7 | 10 | 8 | 8.57 | 11.77 | 12 | 10.65 | 8.87 | 8.36 | 9.22 | 11.66 | 8.17 | 8.3 | 7.44 | 8.74 | 9.36 | 8.06 | 8.36 | 8.5 | 11.06 | 10.05 | 9.84 | 11.8 | 11 | |
| 6 | 9.2 | 10 | 8 | 8.56 | 11.57 | 11.85 | 10.48 | 8.83 | 7.72 | 9.15 | 11.24 | 8.11 | 8 | 7.3 | 8.72 | 9.33 | 7.98 | 8.31 | 8.27 | 11 | 10.05 | 9.71 | 12.03 | 11 | |
| 7 | 8.4 | 10 | 7.7 | 8.54 | 11.35 | 11.85 | 10.28 | 8.12 | 7.61 | 9.09 | 10.74 | 8.06 | 8 | 7.21 | 8.7 | 9.31 | 7.87 | 8.23 | 8.23 | 10.96 | 9.92 | 9.61 | 12.2 | 11 | |
| 8 | 6.4 | 10 | 7.6 | 8.53 | 10.48 | 11.74 | 9.7 | 7.91 | 6.42 | 9.02 | 9.98 | 8.02 | 7.85 | 7.15 | 8.68 | 9.29 | 7.78 | 8.13 | 8.17 | 10.92 | 9.78 | 9.53 | 12.3 | 11 | |
| 9 | 7.1 | 10 | 7.4 | 8.53 | 7.64 | 1.7 | 8.95 | 7.88 | 5.9 | 8.93 | 9.13 | 8 | 7.7 | 7.09 | 8.68 | 9.28 | 7.68 | 7.99 | 8.11 | 10.88 | 9.6 | 9.48 | 12.46 | 11 | |
| 10 | | 10 | 2.2 | 8.52 | 4.63 | 11.61 | 6.98 | 7.8 | 5.47 | 8.88 | 6.87 | 7.99 | 7.6 | 7.05 | 8.67 | 9.27 | 7.49 | 7.72 | 8.06 | 10.85 | 9.36 | 9.43 | 12.66 | 10.99 | |
| 11 | | 10 | 0.9 | 8.29 | 3.96 | 10.83 | 6.25 | 5.87 | 5.26 | 8.85 | 5.84 | 7.99 | 7.5 | 7.01 | 8.67 | 9.26 | 7.4 | 7.74 | 8 | 10.83 | 8.63 | 9.37 | 13.1 | 10.99 | |
| 12 | | | | | | | 5.93 | | | 8.81 | | 7.82 | 7.3 | 6.89 | 8.66 | 9.23 | 7.28 | 7.64 | 7.98 | 10.81 | 6.72 | 9.33 | 13.35 | 10.99 | |
| 13 | | | | | | | | | | | | | | | 6.6 | 8.65 | 9.05 | 7.19 | 7.39 | | 10.8 | 5.31 | 9.27 | 13.6 | 10.98 |
| 14 | | | | | | | | | | | | | | | 8.64 | | | | | | 1.31 | 9.18 | 9.67 | | |
| 380234 | | EAST BAY | | | | | | | | | | | | | | | | | | | | | | | |
| Depth (m) | Mar-95 | May-95 | Jul-95 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 | |
| 1 | 7.6 | 11 | 8.05 | 8.9 | 11.95 | 12.3 | 10.17 | 9.59 | 7.54 | 10.72 | 17.5 | 11.97 | 6.85 | 7.34 | 9.68 | 9.65 | 8.68 | 9.1 | 8.25 | 12.34 | 8.72 | 10.9 | 11.93 | 11.49 | |

DEVILS LAKE SPECIFIC CONDUCTANCE (uS/cm).

380251

EAST MINNEWAUKAN FLATS

| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 1577 | 1150 | 1525 | 1283 | 1523 | 1521 | 1914 | 1482 | 1470 | 1410 | 1543 | 1492 | 1617 | 1744 | 1825 | 1814 | 2017 |
| 2 | 1582 | 1158 | 1459 | 1534 | 1544 | 1533 | 1878 | 1552 | 1469 | 1413 | 1550 | 1495 | 1615 | 1743 | 1824 | 1813 | 2017 |
| 3 | 1851 | 1176 | 1489 | 1544 | 1558 | 1544 | 1926 | 1562 | 1468 | 1441 | 1556 | 1502 | 1612 | 1742 | 1825 | 1813 | 2009 |
| 4 | | | | | | 1542 | 2040 | 1566 | 1469 | 1442 | 1556 | 1515 | 1611 | 1742 | 1825 | 1813 | 2005 |
| 5 | | | | | | | | | 1470 | 1441 | 1555 | 1520 | 1611 | 1743 | 1825 | 1813 | 2029 |
| 6 | | | | | | | | | | | | | 1611 | | | | 2026 |
| 7 | | | | | | | | | | | | | | | | | |

380250

WEST MINNEWAUKAN FLATS

| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 1434 | 1306 | 1723 | 1429 | 1523 | 1655 | 1489 | 1330 | 1444 | 1553 | 1541 | 1657 | 1728 | 1832 | 1841 | 2065 | 1567 | 1596 | 1750 |
| 2 | 1655 | 1310 | 1485 | 1429 | 1528 | 1654 | 1488 | 1330 | 1446 | 1553 | 1540 | 1657 | 1728 | 1832 | 1840 | 2057 | 1574 | 1597 | |
| 3 | | 1315 | 1467 | 1429 | 1532 | 1654 | 1498 | 1331 | 1446 | 1555 | 1540 | 1657 | 1727 | 1832 | 1840 | 2058 | 1581 | 1598 | |
| 4 | | | 1468 | | 1534 | | 1504 | 1332 | 1448 | 1556 | 1540 | 1655 | 1727 | 1832 | 1840 | 2049 | 1589 | 1598 | |
| 5 | | | | | | | 1507 | 1334 | 1449 | 1556 | 1539 | 1651 | 1726 | 1832 | 1840 | 2042 | 1591 | 1600 | |
| 6 | | | | | | | | | 1445 | | 1539 | | | | | | 1590 | 1600 | |
| 7 | | | | | | | | | | | | | | | | | | | |

380236

WEST BAY

| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 2233 | 1795 | 1710 | 1624 | 1778 | 1775 | 2074 | 1716 | 1556 | 1616 | 1678 | 1607 | 1712 | 1788 | 1910 | 1864 | 2054 |
| 2 | 2368 | 1794 | 1710 | 1624 | 1819 | 1774 | 2195 | 1716 | 1551 | 1621 | 1677 | 1602 | 1708 | 1787 | 1908 | 1864 | 2055 |
| 3 | 2474 | 1793 | 1714 | 1624 | 1823 | 1774 | 2276 | 1718 | 1543 | 1617 | 1677 | 1635 | 1707 | 1788 | 1907 | 1863 | 2055 |
| 4 | | 1774 | 1716 | 1624 | 1823 | 1774 | 2330 | 1718 | 1535 | 1624 | 1676 | 1640 | 1707 | 1787 | 1908 | 1863 | 2061 |
| 5 | | 1796 | 1719 | 1624 | 1823 | 1773 | 2351 | 1718 | 1534 | 1628 | 1675 | 1648 | 1707 | 1787 | 1907 | 1863 | 2068 |
| 6 | | | | | | | | | 1537 | 1629 | 1674 | 1658 | 1668 | 1787 | 1909 | 1863 | 2119 |
| 7 | | | | | | | | | 1543 | | 1675 | 1674 | 1663 | 1787 | 1906 | 1864 | 2128 |
| 8 | | | | | | | | | | | | | | 1740 | | | 2158 |
| 9 | | | | | | | | | | | | | | | | | |

384160

SOUTHWEST WEST BAY

| Depth (m) | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 1445 | 1557 | 1497 | 1635 | 1729 | 1826 | 1822 | 2060 | 1579 | 1596 | 1735 |
| 2 | 1448 | 1554 | 1495 | 1633 | 1729 | 1826 | 1821 | 2059 | 1566 | 1595 | |
| 3 | | | 1494 | | | | | 2139 | 1594 | | |
| 4 | | | | | | | | | | | |

380221

SIX MILE BAY

| | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 2603 | 1802 | 2091 | 1909 | 2219 | 2231 | 2325 | 1206 | 1940 | 1869 | 1983 | 1742 | 1884 | 1966 | 2045 | 2051 | 2245 | 1657 | 1862 | 1981 |
| 2 | 2616 | 1803 | 2036 | 2073 | 2220 | 2234 | 2313 | 1242 | 1941 | 1868 | 1984 | 1742 | 1892 | 1966 | 2045 | 2051 | 2244 | 1654 | 1850 | |
| 3 | 2615 | 1806 | 2008 | 2163 | 2220 | 2236 | 2356 | | 1942 | 1869 | 1980 | 1743 | 1908 | 1966 | 2045 | 2050 | 2244 | 1684 | 1863 | |
| 4 | 2609 | 1807 | 1826 | 2311 | 2220 | 2241 | 2329 | 1257 | 1945 | 1869 | 1979 | 1744 | 1901 | 1965 | 2045 | 2051 | 2245 | 1712 | 1866 | |
| 5 | 2601 | 1815 | 2117 | 2149 | 2231 | 2250 | 2312 | | 1947 | 1868 | 1979 | 1747 | 1894 | 1965 | 2045 | 2050 | 2271 | 1719 | 1868 | |
| 6 | 2507 | 1872 | 2374 | 2253 | 2247 | 2257 | 2327 | 1273 | 1947 | 1871 | 1978 | 1750 | 1907 | 1965 | 2045 | 2050 | 2296 | 1720 | 1866 | |
| 7 | 2505 | 2114 | 2673 | 1995 | 2256 | 2270 | 2350 | | 1947 | 1879 | 1976 | 1760 | 1912 | 1965 | 2044 | 2052 | 2291 | 1721 | 1865 | |
| 8 | | | | | | | | 1522 | 1951 | 1891 | 1975 | 1788 | 1929 | 1968 | 2044 | 2051 | 2286 | 1791 | 1868 | |
| 9 | | | | | | | | | 1986 | 1901 | 1976 | 1841 | 1886 | 1974 | 2047 | 2020 | 2297 | 1918 | 1874 | |
| 10 | | | | | | | | | | | 1975 | | 1862 | | | | 2306 | 1955 | 1880 | |
| 11 | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | |
| 380222 | | | | | | | | | | | | | | | | | | | | |
| CREEL BAY | | | | | | | | | | | | | | | | | | | | |
| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 |
| 1 | 2623 | 2336 | 2621 | 2194 | 2357 | 2383 | 2409 | 2197 | 2147 | 2148 | 2172 | 1984 | 2033 | 2095 | 2176 | 2128 | 2312 | | | |
| 2 | 2688 | 2336 | 2041 | 2192 | 2356 | 2384 | 2398 | 2198 | 2147 | 2148 | 2172 | 1982 | 2020 | 2095 | 2176 | 2128 | 2313 | | | |
| 3 | 2698 | 2337 | 2100 | 2189 | 2356 | 2384 | 2407 | | 2145 | 2149 | 2172 | 1979 | 2014 | 2095 | 2176 | 2128 | 2313 | | | |
| 4 | 2698 | 2338 | 3015 | 2183 | 2355 | 2384 | 2419 | 2199 | 2146 | 2150 | 2172 | 1978 | 2013 | 2095 | 2175 | 2128 | 2314 | | | |
| 5 | 2700 | 2361 | 2663 | 2177 | 2354 | 2384 | 2436 | | 2146 | 2149 | 2172 | 1976 | 2009 | 2095 | 2176 | 2128 | 2311 | | | |
| 6 | 2710 | 2403 | 2076 | 2166 | 2354 | 2384 | 2441 | 2203 | 2147 | 2148 | 2172 | 1976 | 1996 | 2095 | 2176 | 2128 | 2324 | | | |
| 7 | 2714 | 2481 | 1853 | 2162 | 2351 | 2385 | 2426 | | 2148 | 2148 | 2172 | 1975 | 1951 | 2095 | 2174 | 2128 | 2325 | | | |
| 8 | 2724 | 2562 | 2634 | 2158 | 2354 | 2386 | 2431 | 2217 | 2150 | 2148 | 2172 | 1979 | 1942 | 2095 | 2175 | 2128 | 2325 | | | |
| 9 | | 2680 | 2759 | 2158 | 2352 | 2396 | 2465 | | 2154 | 2149 | 2172 | 1989 | 1933 | 2095 | 2175 | 2128 | 2331 | | | |
| 10 | | | | | | | | 2241 | 2158 | 2151 | 2172 | 1989 | 1941 | 2097 | 2174 | 2129 | 2341 | | | |
| 11 | | | | | | | | | | | 2169 | 1991 | 1938 | 2098 | 2175 | 2130 | 2340 | | | |
| 12 | | | | | | | | | | | | | | 2097 | | | | | | |
| 380233 | | | | | | | | | | | | | | | | | | | | |
| MAIN BAY | | | | | | | | | | | | | | | | | | | | |
| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 |
| 1 | 2707 | 2371 | 2269 | 2269 | 2349 | 2376 | 2416 | 2366 | 2135 | 2129 | 2167 | 1967 | 2021 | 2093 | 2167 | 2136 | 2218 | 1990 | 1866 | 1998 |
| 2 | 2690 | 2373 | 2376 | 2272 | 2349 | 2377 | 2416 | 2366 | 2135 | 2129 | 2167 | 1965 | 2010 | 2093 | 2166 | 2137 | 2213 | 1985 | 1871 | |
| 3 | 2677 | 2375 | 2340 | 2276 | 2354 | 2377 | 2408 | | 2134 | 2132 | 2167 | 1966 | 2005 | 2094 | 2165 | 2137 | 2212 | 1987 | 1870 | |
| 4 | 2679 | 2391 | 2284 | 2278 | 2357 | 2376 | 2395 | 2314 | 2135 | 2137 | 2167 | 1967 | 2004 | 2093 | 2165 | 2136 | 2214 | 1987 | 1866 | |
| 5 | 2677 | 2409 | 2331 | 2281 | 2359 | 2376 | 2390 | | 2133 | 2140 | 2166 | 1966 | 2002 | 2092 | 2164 | 2137 | 2214 | 1986 | 1856 | |
| 6 | 2671 | 2429 | 1693 | 2282 | 2361 | 2376 | 2390 | 2366 | 2131 | 2141 | 2166 | 1967 | 2002 | 2093 | 2164 | 2137 | 2215 | 1987 | 1859 | |
| 7 | 2675 | 2442 | 1594 | 2282 | 2361 | 2376 | 2399 | | 2132 | 2144 | 2166 | 1966 | 1999 | 2094 | 2165 | 2136 | 2214 | 1987 | 1862 | |
| 8 | 2708 | 2443 | 2204 | 2282 | 2367 | 2377 | 2455 | 2367 | 2134 | 2155 | 2166 | 1967 | 1999 | 2093 | 2166 | 2136 | 2214 | 1987 | 1866 | |
| 9 | 2816 | 2432 | 2553 | 2279 | 2361 | 2376 | 2519 | | 2134 | 2154 | 2166 | 1967 | 1994 | 2093 | 2164 | 2137 | 2213 | 1987 | 1872 | |
| 10 | 3595 | 2448 | 2213 | 2280 | 2362 | 2377 | 2617 | 2315 | 2133 | 2154 | 2166 | 1968 | 1978 | 2094 | 2165 | 2137 | 2211 | 1990 | 1870 | |
| 11 | | 2458 | 2138 | 2278 | 2365 | 2377 | | | 2132 | 2153 | 2166 | 1967 | 1979 | 2094 | 2165 | 2136 | 2208 | 1989 | 1871 | |
| 12 | | | | | | 2377 | | 2367 | 2132 | 2155 | 2166 | 1968 | 1979 | 2095 | 2163 | 2137 | 2242 | 1990 | 1879 | |
| 13 | | | | | | | | | 2129 | 2154 | 2165 | 1969 | 1978 | 2094 | | 2136 | 2365 | 1991 | 1888 | |
| 14 | | | | | | | | | | | 2165 | | | | | | 2535 | 1981 | 1913 | |
| 380234 | | | | | | | | | | | | | | | | | | | | |
| EAST BAY | | | | | | | | | | | | | | | | | | | | |
| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 |
| 1 | 3061 | 4092 | 3749 | 3958 | 4362 | 4278 | 3501 | 3905 | 3540 | 3382 | 3378 | 2915 | 3143 | 3340 | 3490 | 3521 | 3717 | 3062 | 3249 | 3450 |

DEVILS LAKE pH LEVELS.

380251

EAST MINNEWAUKAN FLATS

| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 8.11 | 8.62 | 9.08 | 9.11 | 8.7 | 8.35 | 7.69 | 8.76 | 8.1 | 8.54 | 8.35 | 8.12 | 7.62 | 8.12 | 8.72 | 7.52 | 8.1 |
| 2 | 8.05 | 8.63 | 9.05 | 9.11 | 8.65 | 8.35 | 7.69 | 8.72 | 8.09 | 8.55 | 8.32 | 8.09 | 7.61 | 8.11 | 8.71 | 7.51 | 8.11 |
| 3 | | 8.65 | 9 | 9.1 | 8.63 | 8.35 | 7.68 | 8.71 | 8.1 | 8.49 | 8.31 | 8.07 | 7.61 | 8.1 | 8.69 | 7.5 | 8.13 |
| 4 | | | | | | 8.27 | 7.57 | 8.71 | 8.1 | 8.48 | 8.3 | 8.05 | 7.61 | 8.09 | 8.69 | 7.5 | 8.14 |
| 5 | | | | | | | | | 8.08 | 8.48 | 8.28 | 8.03 | 7.6 | 8.07 | 8.69 | 7.5 | 8.08 |
| 6 | | | | | | | | | | | | | 7.59 | | | | 8.04 |
| 7 | | | | | | | | | | | | | | | | | |

380250

WEST MINNEWAUKAN FLATS

| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | Oct-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 8.17 | 8.7 | 9.04 | 9.03 | 8.74 | 8.4 | 8.72 | 8.14 | 8.59 | 8.33 | 8.17 | 7.69 | 8.06 | 8.79 | 7.5 | 8.19 | 8.26 |
| 2 | 7.83 | 8.71 | 9.03 | 9.04 | 8.68 | 8.4 | 8.72 | 8.14 | 8.57 | 8.3 | 8.07 | 7.69 | 8.05 | 8.77 | 7.5 | 8.2 | 8.28 |
| 3 | | 8.71 | 8.99 | 9.04 | 8.66 | 8.4 | 8.71 | 8.13 | 8.54 | 8.28 | 8.05 | 7.68 | 8.04 | 8.76 | 7.5 | 8.2 | 8.28 |
| 4 | | | 8.92 | | 8.62 | | 8.7 | 8.13 | 8.53 | 8.25 | 8.04 | 7.68 | 8.03 | 8.76 | 7.51 | 8.21 | 8.28 |
| 5 | | | | | | | 8.7 | 8.12 | 8.72 | 8.24 | 8.02 | 7.65 | 8.03 | 8.73 | 7.52 | 8.13 | 8.28 |
| 6 | | | | | | | | | | | 8.01 | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |

380236

WEST BAY

| Depth (m) | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 8.29 | 8.87 | 9.06 | 9.09 | 8.72 | 8.4 | 7.59 | 8.61 | 8.1 | 8.41 | 8.13 | 8.29 | 7.71 | 8.14 | 8.62 | 7.57 | 7.83 |
| 2 | 8.19 | 8.87 | 9.05 | 9.07 | 8.65 | 8.4 | 7.62 | 8.6 | 8.11 | 8.38 | 8.15 | 8.22 | 7.71 | 8.12 | 8.59 | 7.57 | 7.94 |
| 3 | 8.5 | 8.87 | 9.03 | 9.09 | 8.61 | 8.4 | 7.66 | 8.59 | 8.1 | 8.35 | 8.17 | 8.16 | 7.7 | 8.12 | 8.6 | 7.57 | 7.99 |
| 4 | | 8.87 | 9.01 | 9.08 | 8.58 | 8.4 | 7.69 | 8.59 | 8.1 | 8.34 | 8.17 | 8.12 | 7.69 | 8.1 | 8.59 | 7.59 | 8.04 |
| 5 | | 8.86 | 8.99 | 9.08 | 8.56 | 8.4 | 7.75 | 8.59 | 8.11 | 8.33 | 8.18 | 8.1 | 7.68 | 8.09 | 8.59 | 7.58 | 8.03 |
| 6 | | | | | | | | | 8.09 | 8.31 | 8.18 | 8.07 | 7.54 | 8.08 | 8.6 | 7.59 | 8.09 |
| 7 | | | | | | | | | 8.09 | | 8.19 | 8.04 | 7.4 | 8.08 | 8.58 | 7.58 | 8.11 |
| 8 | | | | | | | | | | | | | | 8.02 | | | 7.84 |
| 9 | | | | | | | | | | | | | | | | | |

SOUTHWEST WEST BAY

384160

| Depth (m) | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | Oct-99 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 8.6 | 8.36 | 8.22 | 7.73 | 7.68 | 8.86 | 7.54 | 7.84 | 8.4 |
| 2 | 8.53 | 8.36 | 8.19 | 7.7 | 7.58 | 8.52 | 7.53 | 7.9 | |
| 3 | | | 8.15 | | | | | 7.9 | |
| 4 | | | | | | | | | |

380221

SIX MILE BAY

DEVILS LAKE TEMPERATURE PROFILE (°C)

380251

EAST MINNEWAUKAN FLATS

Depth (m)

| | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 12.01 | 1.09 | 14.443 | 23.085 | 22.356 | 21.89 | 9.47 | 0.56 | 8.6 | 17.97 | 24.4 | 20.22 | 13.86 | 16.45 | 20.86 | 22.28 | 19.17 | 6.3 | 0.14 |
| 2 | 11.94 | 3.42 | 14.436 | 22.788 | 22.364 | 21.81 | 9.5 | 2.06 | 8.58 | 17.97 | 24.2 | 20.06 | 13.75 | 16.07 | 20.83 | 22.28 | 19.16 | 6.3 | 0.67 |
| 3 | | 5.11 | 14.168 | 22.212 | 22.366 | 21.73 | 9.54 | 3.22 | 8.51 | 17.98 | 24 | 19.97 | 13.6 | 15.94 | 20.78 | 22.28 | 19.15 | 6.29 | 1.27 |
| 4 | | | | | | | 9.61 | 4.06 | 8.49 | 17.97 | 23.9 | 19.95 | 13.56 | 15.91 | 20.76 | 22.28 | 19.14 | 6.29 | 2.01 |
| 5 | | | | | | | | | | 17.96 | 23.6 | 19.97 | 13.56 | 15.85 | 20.74 | 22.28 | 19.14 | 6.29 | 2.91 |
| 6 | | | | | | | | | | | | | | | 20.71 | | | | 3.12 |
| 7 | | | | | | | | | | | | | | | | | | | |

380250

WEST MINNEWAUKAN FLATS

Depth (m)

| | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | May-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 11.95 | 1.47 | 14.378 | 22.996 | 22.685 | 22.23 | 9.55 | 8.73 | 18.02 | 24.3 | 20.2 | 14.21 | 16.14 | 21.74 | 22.39 | 19.05 | 6.77 | 0.05 | 14.56 | 22.3 |
| 2 | 11.86 | 3.25 | 14.294 | 22.99 | 22.679 | 21.93 | 9.56 | 8.76 | 18.01 | 24.2 | 19.93 | 13.72 | 16.09 | 21.73 | 22.39 | 19.05 | 6.78 | 0.36 | 14.19 | 22.29 |
| 3 | 11.8 | | 14.42 | 22.376 | 22.672 | 21.89 | 9.55 | 8.76 | 18 | 24.1 | 19.91 | 13.65 | 15.93 | 21.73 | 22.38 | 19.05 | 6.78 | 0.58 | 13.94 | 22.25 |
| 4 | | | | 22.148 | | 21.81 | | 8.75 | 17.99 | 24 | 19.9 | 13.62 | 15.88 | 21.71 | 22.37 | 19.05 | 6.78 | 1.18 | 13.8 | 22.24 |
| 5 | | | | | | | | 8.76 | 17.97 | 24 | 19.89 | 13.62 | 15.79 | 21.71 | 22.34 | 19.05 | 6.78 | 2.32 | 13.75 | 22.22 |
| 6 | | | | | | | | | | | | | 15.75 | | | | | | 13.73 | 22.21 |
| 7 | | | | | | | | | | | | | | | | | | | | |

380236

WEST BAY

Depth (m)

| | Mar-95 | May-95 | Jul-95 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 1 | 10 | 7.9 | 11.856 | 0.91 | 13.077 | 22.512 | 22.079 | 22.2 | 10.52 | 0.39 | 8.61 | 17.92 | 25.4 | 20.6 | 14.1 | 16.33 | 20.74 | 22.49 | 19.61 | 7.1 | 0.14 |
| 2 | 3 | 10 | 7.8 | 11.843 | 3.72 | 13.071 | 22.183 | 22.08 | 21.96 | 10.52 | 1.22 | 8.61 | 17.88 | 25 | 20.34 | 14.04 | 15.94 | 20.61 | 22.47 | 19.61 | 7.11 | 0.73 |
| 3 | | 10 | 7.65 | 11.829 | 3.51 | 13.07 | 21.935 | 22.08 | 21.77 | 10.52 | 2.15 | 8.61 | 17.82 | 24.6 | 20.2 | 14.03 | 15.6 | 20.53 | 22.46 | 19.63 | 7.11 | 1.16 |
| 4 | | 10 | 7.35 | 11.828 | 4.09 | 13.093 | 21.81 | 22.07 | 21.7 | 10.52 | 2.73 | 8.61 | 17.77 | 24.3 | 20.16 | 14.01 | 15.49 | 20.5 | 22.46 | 19.63 | 7.11 | 1.44 |
| 5 | | 10 | | | | 13.056 | 21.688 | 22.08 | 21.65 | 10.53 | 3.4 | 8.61 | 17.77 | 24.1 | 20.05 | 13.99 | 15.41 | 20.48 | 22.45 | 19.63 | 7.11 | 1.95 |
| 6 | | | | | | | | | | | | | 17.77 | 24 | 20 | 13.98 | 15.24 | 19.62 | 22.45 | 19.62 | 7.11 | 2.32 |
| 7 | | | | | | | | | | | | | 17.77 | | | 13.98 | 15.01 | 19.3 | 22.45 | 19.62 | 7.11 | 2.9 |
| | | | | | | | | | | | | | | | | | | | 22.41 | | | 3.97 |

384160

SOUTHWEST WEST BAY

Depth (m)

| | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | Oct-99 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 25 | 19.55 | 13.74 | 16.76 | 20.54 | 22.11 | 19.31 | 6.14 | 0.38 | 15.2 | 22.7 | |
| 2 | 24.8 | 18.83 | 13.44 | 16.16 | 20.54 | 22.11 | 19.29 | 6.15 | 0.68 | 14.5 | 22.6 | |
| 3 | | | | 16.09 | | | | | 1.67 | | 22.48 | |
| 4 | | | | | | | | | | | | |

380221

SIX MILE BAY

| | | Depth (m) | | | | | | | | | | | | | | | | | | | | | | | | |
|----|------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--|
| | | Mar-95 | May-95 | Jul-95 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | |
| 1 | 0 | 9.75 | 22.8 | 12.83 | 0.835 | 11.238 | 21.762 | 22.825 | 22.73 | 12.34 | 0.216 | 8.6 | 18.4 | 23.8 | 21.21 | 14.28 | 14.21 | 21.05 | 22.4 | 20.76 | 8.11 | 0.08 | 12.69 | 22.1 | | |
| 2 | 0 | 9.8 | 22.8 | 12.797 | 1.478 | 11.226 | 21.403 | 22.625 | 22.59 | 12.31 | 0.738 | 8.6 | 18.37 | 23.4 | 21.01 | 14.28 | 14.19 | 20.84 | 22.38 | 20.75 | 8.1 | 0.4 | 12.23 | 21.9 | | |
| 3 | 1 | 9.8 | 22.8 | 12.795 | 1.552 | 11.232 | 21.36 | 22.524 | 22.55 | 12.28 | 1.08 | 8.33 | 18.33 | 23.4 | 20.58 | 14.28 | 14.16 | 20.77 | 22.37 | 20.74 | 8.11 | 0.43 | 11.66 | 21.8 | | |
| 4 | 1.5 | 9.8 | 22.1 | 12.792 | 1.759 | 11.193 | 21.135 | 22.47 | 22.54 | 12.2 | 2.06 | 8.59 | 18.31 | 23.2 | 20.57 | 14.28 | 14.13 | 20.72 | 22.36 | 20.76 | 8.11 | 0.42 | 1.73 | 21.75 | | |
| 5 | 3 | 9.8 | 21.9 | 12.757 | 2.455 | 11.171 | 19.934 | 22.435 | 22.49 | 12.18 | 3.31 | 8.29 | 18.29 | 23.2 | 20.57 | 14.28 | 14.12 | 20.67 | 22.33 | 20.75 | 8.1 | 0.44 | 11.66 | 21.72 | | |
| 6 | | 9.5 | 21.3 | 12.737 | 3.519 | 11.06 | 18.967 | 22.379 | 22.31 | 12.14 | 3.97 | 8.54 | 18.27 | 23.1 | 20.55 | 14.28 | 14.1 | 20.55 | 22.32 | 20.75 | 8.09 | 0.45 | 11.62 | 21.7 | | |
| 7 | | | 20.3 | 12.74 | | | 9.99 | 18.925 | 22.124 | 21.92 | 12.09 | 4.34 | 18.26 | 22.7 | 20.54 | 14.29 | 14.1 | 20.39 | 22.3 | 20.71 | 8.09 | 0.89 | 11.58 | 21.66 | | |
| 8 | | | | | | | | | | | | | 8.3 | 18.21 | 22.6 | 20.52 | 14.3 | 13.88 | 20.2 | 22.26 | 20.69 | 8.9 | 1.94 | 11.14 | 21.5 | |
| 9 | | | | | | | | | | | | | | 17.93 | 22.2 | 20.45 | 14.3 | 12.59 | 17.85 | 22.21 | 20.63 | 8.11 | 3.2 | 10.47 | 21.3 | |
| 10 | | | | | | | | | | | | | | | | | 14.31 | | 17.82 | | | 3.9 | 9.21 | 21.05 | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 380222 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | CREEL BAY | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Depth (m) | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Mar-95 | May-95 | Jul-95 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | |
| 1 | 0 | 11 | 22.8 | 13.48 | 0.473 | 10.439 | 22.075 | 22.799 | 23.16 | 13.26 | 0.174 | 6.88 | 18.61 | 23.6 | 21.53 | 14.71 | 13.74 | 20.67 | 22.52 | 21.26 | 8.81 | 0 | | | | |
| 2 | 0 | 11 | 22.8 | 13.5 | 0.927 | 10.403 | 21.998 | 22.756 | 22.83 | 13.13 | 0.44 | 6.85 | 18.59 | 23.6 | 21.45 | 14.72 | 13.71 | 20.35 | 22.52 | 21.26 | 8.82 | 0 | | | | |
| 3 | 0 | 11 | 22.6 | 13.494 | 0.881 | 10.384 | 21.597 | 22.685 | 22.53 | 13.09 | 0.47 | 6.84 | 18.42 | 23.6 | 21.33 | 14.72 | 13.65 | 20.12 | 22.52 | 21.26 | 8.81 | 0 | | | | |
| 4 | 0 | 11 | 22.6 | 13.495 | 0.886 | 10.33 | 21.454 | 22.548 | 22.45 | 13.05 | 0.51 | 6.84 | 18.4 | 23.6 | 20.97 | 14.72 | 13.62 | 20.11 | 22.51 | 21.26 | 8.81 | 0 | | | | |
| 5 | 0 | 10.8 | 22.5 | 13.494 | 0.879 | 9.369 | 21.334 | 22.431 | 22.33 | 13.03 | 0.54 | 6.83 | 18.39 | 23.5 | 20.81 | 14.72 | 13.55 | 19.93 | 22.51 | 21.26 | 8.8 | 0 | | | | |
| 6 | 0 | 10.8 | 22.5 | 13.494 | 0.827 | 8.308 | 20.802 | 22.179 | 22.04 | 12.98 | 0.78 | 6.82 | 18.38 | 23.4 | 20.76 | 14.71 | 13.5 | 19.58 | 22.51 | 21.25 | 8.8 | 0 | | | | |
| 7 | 1 | 10.8 | 22.4 | 13.491 | 1.174 | 7.507 | 19.478 | 22.09 | 21.77 | 12.93 | 1.61 | 6.83 | 18.37 | 23.1 | 20.73 | 14.71 | 13.46 | 18.2 | 22.49 | 21.24 | 8.8 | 0 | | | | |
| 8 | 1 | 10.8 | 22.4 | 13.49 | 1.77 | 6.462 | 18.895 | 21.969 | 21.44 | 12.83 | 2.61 | 6.76 | 18.37 | 23 | 20.71 | 14.71 | 13.08 | 17.8 | 22.48 | 21.22 | 8.8 | 0 | | | | |
| 9 | | | | | | 5.578 | 18.57 | 21.802 | 21.37 | 12.35 | 3.68 | 6.67 | 18.38 | 22.7 | 20.67 | 14.71 | 12.43 | 17.59 | 22.47 | 21.22 | 8.79 | 0.02 | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 380233 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | MAIN BAY | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Depth (m) | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Mar-95 | May-95 | Jul-95 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | |
| 1 | 0 | 7.5 | 22.2 | 13.452 | 0.197 | 9.232 | 20.631 | 21.861 | 22.06 | 13.13 | -0.2 | 6.25 | 18.3 | 24.3 | 21.04 | 14.65 | 13.25 | 20.14 | 22.37 | 20.86 | 9.26 | 0 | 12.56 | 23.01 | | |
| 2 | 0 | 7.2 | 22.2 | 13.367 | 0.352 | 9.163 | 20.445 | 21.759 | 21.84 | 13.28 | -0.13 | 6.25 | 18.23 | 24.1 | 20.91 | 14.66 | 13.22 | 19.88 | 22.32 | 20.86 | 9.26 | 0 | 11.65 | 22.7 | | |
| 3 | 0 | 7.2 | 22.2 | 13.36 | 0.581 | 9.144 | 20.338 | 21.633 | 21.71 | 13.28 | 0.25 | 6.24 | 18.21 | 24 | 20.64 | 14.67 | 13.2 | 19.79 | 22.25 | 20.84 | 9.26 | 0 | 11.33 | 22.7 | | |
| 4 | 0 | 7 | 22.1 | 13.358 | 0.634 | 8.95 | 20.094 | 21.571 | 21.65 | 13.28 | 0.71 | 6.24 | 18.19 | 24 | 20.43 | 14.67 | 13.19 | 19.76 | 22.24 | 20.84 | 9.26 | 0 | 11.23 | 22.66 | | |
| 5 | 0 | 7 | 22 | 13.358 | 0.769 | 8.853 | 19.965 | 21.454 | 21.599 | 13.28 | 1.11 | 6.24 | 18.15 | 24 | 20.4 | 14.67 | 13.19 | 19.74 | 22.22 | 20.84 | 9.26 | 0 | 11.18 | 22.5 | | |
| 6 | 0.25 | 7 | 22 | 13.358 | 0.994 | 8.735 | 19.867 | 21.355 | 21.51 | 13.27 | 1.51 | 6.24 | 18.11 | 24 | 20.37 | 14.67 | 13.14 | 19.73 | 22.17 | 20.85 | 9.26 | 0 | 11.15 | 22.5 | | |
| 7 | 1 | 7 | 22 | 13.358 | 1.367 | 8.386 | 19.751 | 21.311 | 21.48 | 13.27 | 1.89 | 6.24 | 18.06 | 24 | 20.34 | 14.67 | 13.15 | 19.63 | 22.12 | 20.84 | 9.26 | 0 | 11.13 | 22.4 | | |
| 8 | 1 | 7 | 22 | 13.356 | 1.87 | 8.261 | 19.551 | 21.268 | 21.23 | 13.27 | 2.23 | 6.24 | 18.03 | 24 | 20.31 | 14.66 | 13.14 | 19.51 | 22.07 | 20.84 | 9.26 | 0 | 11.12 | 22.2 | | |
| 9 | 1 | 7 | 21.9 | 13.355 | 2.43 | 7.991 | 19.139 | 21.242 | 21.15 | 13.27 | 2.69 | 6.25 | 18.01 | 23.8 | 20.3 | 14.66 | 13.13 | 19.42 | 22.05 | 20.84 | 9.26 | 0 | 11.11 | 22.16 | | |
| 10 | | 7 | 21 | 13.355 | 2.827 | 7.775 | 18.456 | 21.231 | 21.13 | 13.27 | 3.27 | 6.25 | 18 | 23.7 | 20.29 | 14.66 | 13.11 | 19.27 | 22.04 | 20.84 | 9.27 | 0.25 | 11.11 | 21.95 | | |
| 11 | | | | | | 7.707 | 18.393 | 21.028 | 21.11 | 13.27 | 3.62 | 6.25 | 17.98 | 23.5 | 20.28 | 14.66 | 13.09 | 19.02 | 22.01 | 20.84 | 9.26 | 0.6 | 11.1 | 21.9 | | |
| 12 | | | | | | | | | | | | 6.25 | 17.98 | 23.5 | 20.28 | 14.66 | 13.08 | 18.94 | 22 | 20.84 | 9.26 | 0.84 | 11.08 | 21.8 | | |
| 13 | | | | | | | | | | | | | 17.9 | 23.4 | 20.28 | 14.66 | 12.99 | 18.85 | 21.99 | | | 9.26 | 2.32 | 11.05 | 21.7 | |
| 14 | | | | | | | | | | | | | | | | | | 14.66 | | | | | 3.1 | 11 | 20.7 | |
| | | 380234 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | EAST BAY | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Depth (m) | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Mar-95 | May-95 | Jul-95 | Oct-95 | Mar-96 | May-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 | Mar-97 | May-97 | Jul-97 | Aug-97 | Sep-97 | Oct-97 | May-98 | Jul-98 | Aug-98 | Sep-98 | Oct-98 | Feb-99 | May-99 | Aug-99 | |
| 1 | | 0.25 | 9 | 22.3 | 12.663 | 0.294 | 10.63 | 21.74 | 22.484 | 21.77 | 11.03 | -0.03 | 7.54 | 18.66 | 23.9 | 20.01 | 14.61 | 14.13 | 20.63 | 22.77 | 20.09 | 8.09 | 0.06 | 13.16 | 22.38 | |

