

THE GREAT BAY WATCH

ANNUAL REPORT

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by

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The volunteer monitors in the Great Bay Watch are recognized and gratefully acknowledged, for it is through their efforts that we all better understand and appreciate the Great Bay Estuary.

GREAT BAY EXTUARINE SYSTEM AND SITE LOCATIONS

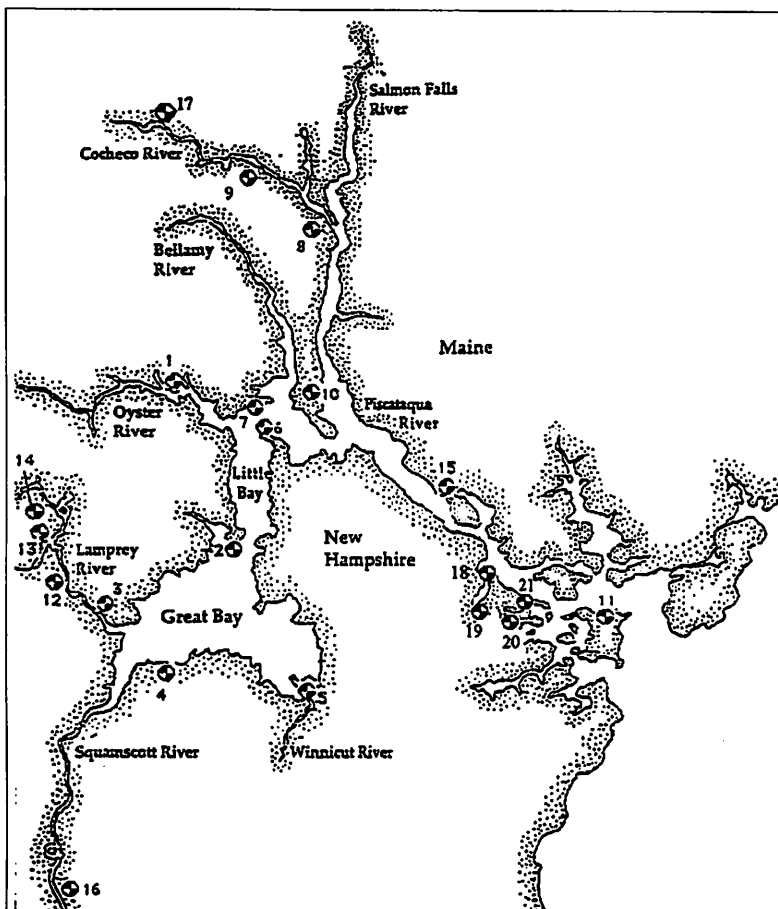


Table of Great Bay Watch Sites, locations, towns and year started

Site Name	Site #	Location	Town	Year Started	Comments
Peninsula (Smith's)	1	Oyster River	Durham	1990	
JEL	2	Great Bay	Durham	1990	
Lamprey River	3	Lamprey River	Newmarket	1990	New dock, Townes' 1997
Depot Road	4	Great Bay	Greenland/ Stratham	1990	High tide only as of 1993
Portsmouth Country Club	5	Winnacut River	Greenland/ Stratham	1990	
Fox Point	6	Little Bay	Newington	1990	
Cedar Point	7	Little Bay	Durham	1990	
Rakoskes'	8	Piscataqua River	Dover	1990	Inactive as of 1992
Neals'/Williams'	9	CochechoRiver	Dover	1990	
Clark's (Dube's)	10	Piscataqua River	Dover	1991	
Coastal Marine Lab	11	Piscataqua River	New Castle	1991	
STP	12	Lamprey River	Newmarket	1992	
Marina Falls Landing	13	Lamprey River	Newmarket	1992	
Fowler's (Essley's)	14	Lamprey River	Newmarket	1992	New owner, Essleys' 1997
Patten Yacht Yard Inc.	15	Piscataqua River	Eliot, Me	1993	
Exeter Town Docks	16	Squamscott River	Exeter	1994	
Dover Foot-Bridge	17	CochechoRiver	Dover	1996	
Maplewood Ave (NMP)	18	North Mill Pond	Portsmouth	1997	
Bartlett Ave. (NMP)	19	North Mill Pond	Portsmouth	1997	
Junkins Ave. (SMP)	20	South Mill Pond	Portsmouth	1997	
Pleasant Ave. (SMP)	21	South Mill Pond	Portsmouth	1997	

Executive Summary

The Great Bay Estuary is one of two major estuaries in New Hampshire. The watershed of the estuary involves eight rivers, Little Bay and Great Bay, and extends between Kingston, in Southern New Hampshire and southwestern Maine.

The Great Bay Watch (GBW) is a volunteer estuarine monitoring group of adults, teachers and students who sample and test several water quality parameters of the Great Bay Estuary, including dissolved oxygen, temperature, water transparency, salinity, pH and fecal coliform bacteria. The Watch has been in operation for the past eight years. Staff members and volunteers participate in local, regional and national conferences, demonstrations, exhibits and workshops, helping the public to make better informed decisions concerning their actions that may affect the estuary. The Environmental Protection Agency (EPA) has approved the Watch's Quality Assurance Quality Control (QAQC) plan, which ensures high quality data collection and management techniques. The Watch has been mainly funded through Cooperative Extension/ U.S. Department of Agriculture's (USDA) Hydrologic Unit program, which will be ending in September of 1998.

During the past year, the Great Bay Watch has taken on added duties. Several volunteers and the coordinator have participated with the New Hampshire Estuary Project's (NHEP) coastal shoreline surveys around most of Little Bay, and part of the Bellamy River. Rainfall characterization sampling was also conducted with volunteers, and assisted with data collection that was used to determine shellfish bed opening schedules. Training for these activities was done by scientists from Jackson Estuarine Laboratory, the New Hampshire Office of State Planning, and the New Hampshire Department of Health and Human Services. Some financial aid was recieved from NHEP, and some from the local communities. .

The data in this report has been presented both numerically and graphically. Comparisons between sites have been made comparing mean values, however further statistical analysis needs to be done. More rigorous methods may be employed to statistically detect and confirm trends in the data but, at the present time they go beyond the scope of this report.

The Great Bay Watch intends to continue its monitoring and educational program and is actively seeking sustained funding to support its efforts.

Changes in the Past Eight Years

All of the sites had a increase in the mean salinity levels at both high and low tide this year. The mean values ranged close to the averages measured in 1995. The 1996 season had an average rainfall that was 3.28 inches per month above the normal precipitation, and thus salinity readings were overall very low last year. The rainfall this year was either close to or below the normal precipitation, so the salinity readings were once again in the average range for each site.

The pH level increased during both low tide and high tide at almost all the sites this year. The high levels of precipitation last year caused pH levels to be low, so an increase this year was inevitable. Site 16 in Exeter had the largest increase in pH at low tide (7.1 in 1996 to 7.6 in 1997), and one of the highest jumps at high tide (7.6 in 1996 to 7.9 in 1997). The only sites at low tide that decreased were sites 7 in Durham, 9 in Dover, 11 in New Castle, and 15 in Eliot, ME. At high tide, sites 7 in Durham, 4 in Greenland, 9 and 17 in Dover, and 14 in Newmarket were the only sites that had a decrease in pH.

Changes in the mean values of percent saturation give a good indication of whether or not there are oxygen problems developing in the estuarine system. The percent saturation in almost all cases increased this year. The only sites which showed decreases were sites 1 in Durham, 4 in Greenland, 14 in Newmarket, and 15 in Eliot, ME at high tide, and sites 9 and 17 in Dover, and 3 in Newmarket at low tides. The geographic spatiality of the site suggests, that there is no one "problem area". Site 12, which had very low percent saturation at low tide in past years, had a very large increase this year at both low and high tides. The low tide average, although showed an increase of nearly 20% this year, was still below the class B standard of 75%. Most sites have kept their values well above the 75% standard, and most have experienced an increase over the seven years.

Most sites in the past have experienced a decrease in fecal coliform geometric means over the past six years, and the same holds true this year. Almost all sites had a decrease in their fecal coliform geometric mean value this year at both high tide and low tide. The only sites that increased their fecal coliform geometric mean value were sites 12 at the Newmarket Wastewater Treatment Plant, 14 in Newmarket, and 16 in Exeter, at low tide, and sites 7, in Durham, 12 at the Newmarket Wastewater Treatment Plant, 11 in New Castle, and 16 in Exeter at high tide.

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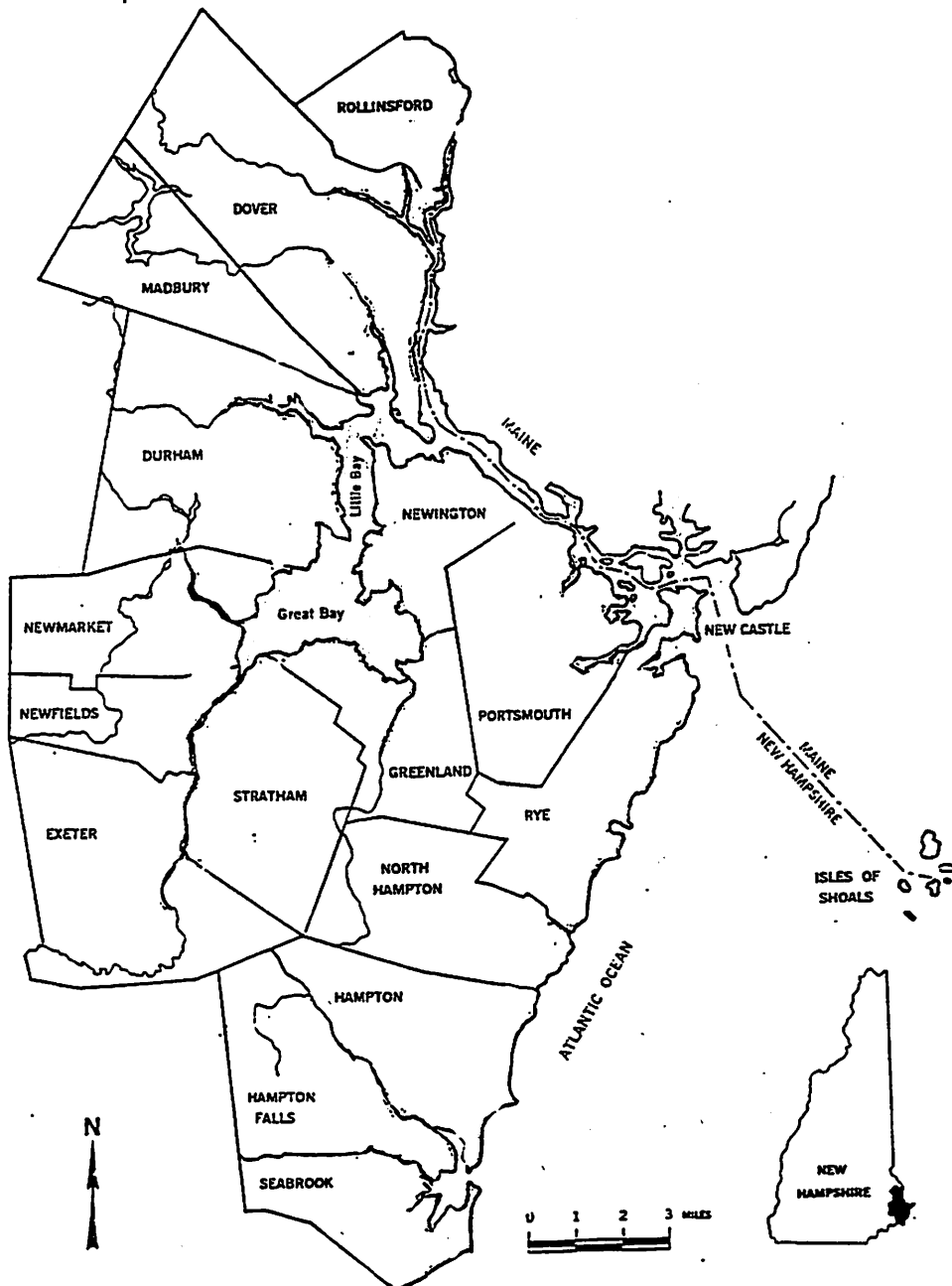
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A. The Great Bay Estuary and the Great Bay Watch

The Great Bay Estuary and where it is located

The Great Bay Estuary is one of two estuaries on the short coastline of New Hampshire. It is a complex embayment composed of the Piscataqua River, Little Bay, and Great Bay. It drains a watershed of 930 square miles, one-third of which is found in the state of Maine. Eight rivers, the Oyster, Cocheco, Bellamy, Salmon Falls, Lamprey, Squamscott, Winnicut, and the Piscataqua, flow into the estuary; the Piscataqua, also serves as part of the boundary between Maine and New Hampshire.

Map of Coastal New Hampshire



The Importance of Estuarine Ecosystems

The waters of the Great and Little Bays, and all the connected river areas are known as estuarine waters. An estuary is an area where freshwater mixes with sea water in a semi enclosed basin (Ketchum 1951). Most estuaries are tidal and contain many types of wetlands, including salt marshes, that until only recently were considered worthless parcels of land. Salt marshes are now known to play an important role in filtering the waters of the estuary, as well as serving as habitat for many species of organisms that are found only in this type of environment. Environmental damage to marshes that disrupts their function directly affects the waters of the bays. Now that more information has been discovered about estuarine water quality from both professional programs and volunteer programs like Great Bay Watch, preservation of estuarine waters, as well as wetlands habitats, are the top priority of statewide conservation efforts.

However, these conservation efforts are hindered by the increase in the local human population. The table below gives the census figures for the past 30 years, and a ten-year projection for the future growth of the population in the Great Bay communities. Marked increases in town populations every decade for the past 30 years, there is little doubt that populations will continue to increase. Increasing residential development creates pressures that strain the ecosystem and lower its ability to rebound from the pollutants and habitat destruction caused by human activities.

POPULATION GROWTH IN GREAT BAY COMMUNITIES					
	United States Census				Projection
	1960	1970	1980	1990	2000
Dover	19,131	20,850	22,377	25,042	30,534
Greenland	1,196	1,784	2,129	2,900	3,884
Madbury	556	704	987	1,400	1,658
Newfields	737	843	817	888	1,330
Newington	1,045	798	716	786	1,069
Newmarket	3,153	3,361	4,290	7,190	7,983
Stratham	1,033	1,512	2,507	5,000	5,992
Total	26,851	29,852	33,823	43,206	52,450

Source: 1960, 1970, 1980, 1990 U.S. Census, NH Office of State Planning, (for projections).

Water and sewage treatment facilities that serve the surrounding communities are feeling an increase in pressure from the many people that are building homes along the rivers and bays. The chart below shows the treatment levels and amounts of wastewater being processed each day in the towns bordering the Great Bay Estuary. Since 1982, the average daily flow of all the treatment facilities listed below has increased annually by 0.33 million gallons per day. However many of the wastewater treatment facilities have also upgraded their systems since 1982 to accommodate increased development pressures.

Community served	Treatment Level	Ave. Daily Flow Basis*	Receiving Water	Year Updated
New Hampshire				
Dover	Secondary	1.8 million	Cochecho River	1992
Durham	Secondary	1.3 million	Oyster River	1995
Exeter	Secondary	1.5 million	Squamscott River	1992
Newmarket	Secondary	0.85 million	Lamprey River	1993
Newington	Secondary	0.18 million	Piscataqua River	1995
Portsmouth (Pierce Is.)	Adv. primary	4.9 million	Portsmouth Harbor	1992
Pease AFB	Secondary	0.326 million	Piscataqua River	unknown
Rollinsford	Secondary	0.09 million	Salmon Falls River	unknown
Somersworth	Secondary	1.4 million	Salmon Falls River	unknown
Maine				
Berwick	Secondary	1.1 million	Salmon Falls River	unknown
South Berwick	Tertiary	.24 million	Salmon Falls River	unknown

* in gallons per day

Despite the fact that approximately 50% of the shellfish beds in Great Bay are closed because of pollution, this estuary is considered one of the region's most pristine by the National Environmental Protection Agency (EPA). Only through conservation efforts on the part of everyone, will the estuary uphold that title. The Great Bay Watch strives to involve citizens with conservation efforts aimed toward the whole Great Bay estuarine system, as well as to be conscious of how activities in their own backyards affect the Great Bay Estuary.

The Great Bay Watch

Currently, the Great Bay Watch is New Hampshire's most wide-ranging program for direct citizen involvement in monitoring estuarine waters. The Watch includes adults from all walks of life, as well as students and teachers from local high schools. The group was formed in 1990 with funding from NOAA, in response to the Great Bay National Estuarine Research Reserve Management Plan, which listed the formation of a citizen estuarine monitoring program as one of its objectives. The Great Bay Watch has been a part of the educational efforts of Cooperative Extension and Sea Grant of the University of New Hampshire for the past eight years. The number of monitors has tripled since then, and the Watch now samples at more than twice as many sites as when it began. The mission of the Great Bay Watch is to gather information about the state of the estuary and to increase knowledge and interest among its members and constituents for conserving this important ecosystem.

The Great Bay Watch has four specific objectives:

1. To establish a wide spatial array of data on the Great Bay estuarine system, make the data available to local and regional agencies, consulting firms, scientists, students, teachers, and add to Jackson Estuarine Laboratory's long-term estuarine data base;
2. To monitor the fecal coliform content of water sampled at all sites and report high variations in the results to appropriate individuals and agencies;
3. To bring the University research community, interested citizens, and high school students together in an educational program that develops an understanding of the estuarine system as an important natural resource to be conserved;
4. To augment regional, state, and national citizen water monitoring efforts.

The Great Bay Watch is managed by a coordinator and extension specialist from UNH/ME Sea Grant and UNH's Cooperative Extension. Currently, the Great Bay Watch has 89 adult members, including businessmen and women, doctors, librarians, secretaries, dentists, homemakers, planners, and retired engineers. More than 100 adults have been members of the Great Bay Watch over the past eight years, with 18 enrolled in the program since its beginning. Involvement of area high schools has grown from one school in 1990, to ten by 1997. During the past eight years, the monitors have driven thousands of miles and have given **80,806 volunteer hours** to the program.

This year the Watch expanded its activities, and diversified its program by training volunteers from both the Advocates of North Mill Pond, and Friends of the South End, to sample at North and South Mill Ponds. The Great Bay Watch also received a grant to participated with the New Hampshire Estuaries Project (NHEP) in conducting sanitary, shoreline and habitat surveys, and rainfall characterizations of the Bellamy River and East Little Bay.

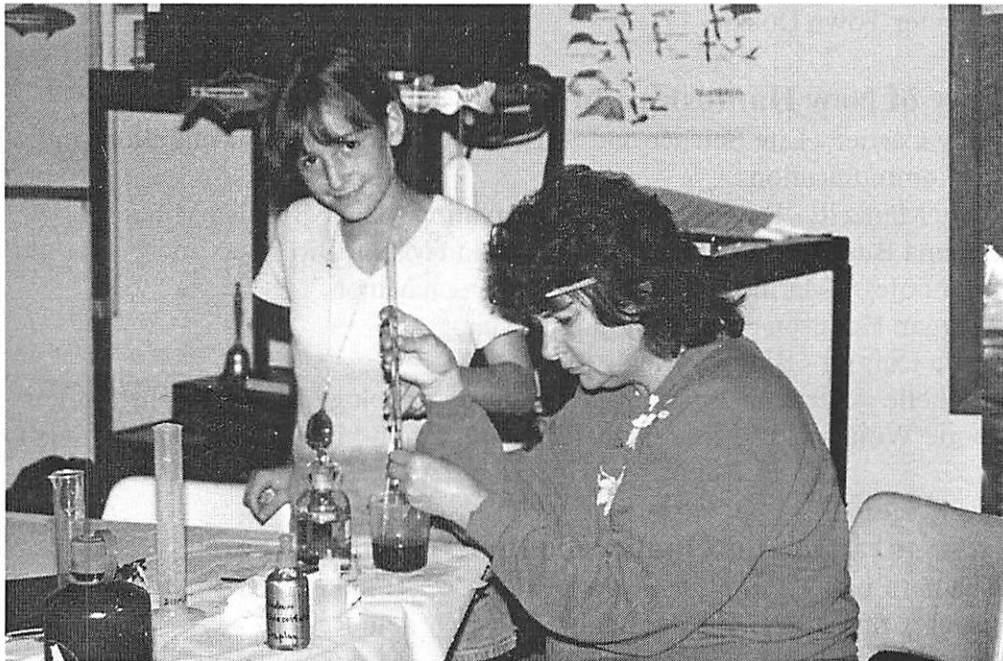
Why Monitoring is Important

In order to follow trends in the health of the Great Bay Estuary, monitoring programs have been implemented. With the information provided by volunteers, problems can be detected, and solved before they become critical. This information then can be used by local and state agencies to implement measures to protect the ecosystems.

Monitoring usually consists of repetitive measurements or observations of a system recorded over a period of time. Past scientific studies have shown that monitoring is very important in acquiring an ecological blueprint of a system. In general these studies have shown that:

- ⇒ Complex ecological systems require long term observation and study for optimal understanding.
- ⇒ A sequence of only 2 to 3 years of data can be very misleading about the direction of trends in environmental quality.
- ⇒ Environments have a “memory” or response time which varies greatly. It takes a certain amount of time to detect change - perhaps a decade for lakes, a century for soil.

It is for these reasons that the Great Bay Watch program is especially important. The database of information collected by volunteers over the past eight years presents an in-depth picture of the environmental state of the Great Bay Estuary is available to communities, scientists and environmental managers.



Denise Thomas and her daughter complete their dissolved oxygen test at the Great Bay Watch QA/QC session.

B. Participants and supporters

The volunteers and monitors of the Great Bay Watch

In 1997, the Great Bay Watch consisted of more than 89 active volunteers from 19 communities around the Great Bay estuarine waters. These monitors ranged from retired adults to high school students, and sampled four times a month at 20 different sites. A number of the members who are also trained UNH Marine Docents. Each Site team was composed of two to four members. The Quality Assurance/Quality Control (QA/QC) team for the 1997 season monitored both field and lab techniques. An additional 40 people provided support for the Great Bay Watch in many ways, ranging from the use of docks to office help, technical advice and financial contributions.

Schools

Seven area schools have activities involving the Great Bay Watch's monitoring program. The Oyster River High School, in Durham, has a program coordinated by Laura Parsons and Barbara Hopkins. They and their students help to sample at site 1 on the Oyster River. In Eliot, Maine, Marshwood High School's program, coordinated by Joyce Tugel and Jeff Gardner, helps to sample at site 15, Patten's Yacht Yard Inc. Two Schools in Exeter have programs involving site 16, the Exeter Town Docks: Phillips Exeter Academy, coordinated by Chris Matlack, and Exeter AREA High School, coordinated by Brian Wazlow and Sue Olson. New to the program last year were the St. Mary Academy's, seventh and eighth graders, in Dover. Their program is coordinated by Linda Scherf and they sample at site 17 on the recently built Dover foot-bridge. Back on the scene in 1997 were the students from St. Thomas Aquinas High School. Coordinated by Dr. William McGrew, the students sampled at site 10 on the Piscataqua River in Dover.

Home schooled families are also involved with the program, including the Blake family which sampled at site 2 at the Jackson Estuarine Laboratory, and Roskel Family at site 16 at the Exeter Town Docks .

University of New Hampshire Interns

Amy Carrier - Life Science and Agriculture Major with concentrations in Soil and Communications

Amy Manzelli - Environmental Conservation Major, Spanish Minor

Shanna Burt - Environmental Conservation Major, Biology Minor

Kim Foley - Marine Biology Major, Spanish Minor

Meggan Hodgson- General Biology Major

Carla Cuigini - Biology Major

Michelle Anderson - Marine and Freshwater Biology Major, English Minor

Jamie Wojtasnski - Environmental Conservation Major, Business Administration Minor.

Quality Assurance and Quality Control (QA/QC) Team

Shanna Burt

Damon Burt

Al Pratt

Claire Curtis

Dave Waltz

Ann Reid

Amy Manzelli

Jennifer Fox

The active Monitors in each town

Dover

- Site 9 Nell Neal, Leslie Molleur, William Kram, John Munson, Barbara Trow
- Site 10 Dr. William McGrew, and students of St. Thomas Aquinas High School
- Site 17 Linda Scherf, Barbara Trow and St. Mary Academy students

Durham

- Site 1 Barbara Hopkins, Laura Parsons, ORHS Students
- Site 2 Christine, Elise and Malorie Blake
- Site 7 Denise and George Thomas, Ibbby Lourie, Alice and Bob Briggs, Barbara Elkerton

Eliot, ME

- Site 15 Joyce Tugel, Jeff Gardner, and Marshwood High School students

Exeter

- Site 16 Jackie Roskel, Chris Matlack, Brian Wazlaw, Sue Olsen, Phillips Exeter Academy and Exeter Area High School students

Greenland

- Site 4 Liz Sizemore, Peggy Mullin, Karen Francis, Patty Warren, Ann Taylor
- Site 5 Barbara Baird, Don Chamberland, Susan McCarthy

New Castle

- Site 11 Lawrence Fahey, Clif Horrigan, Rachel & Jessica Williams

Newington

- Site 6 Barbara Hill, Peter Hetzler, Nancy Cauvet

Newmarket

Site 3 Mary Allard, Don Bassett
Site 12 Audrey Fortin, Owen Pope, Gail Alden
Site 13 Michael Mensh, Marilyn Young, Mike and
Sarah Litch
Site 14 Audrey Fortin, Owen Pope, Gail Alden

Portsmouth

Site 18 Steve and Tricia Miller
Site 19 Nancy Johnson, Ann Smith, Kathy Driscoll
Site 20 Ed Hibbard Mark Leonardi, Susan Manfull, Deb Richards,
Site 21 James Russ, David Tolson, Phil Wright, Lew Harriman

Alternate samplers

Jack and Jane Jette, Clarie Curtis, Amanda Archenhold,
Jennifer Fox, Lauren Jacoby, Jud Porter, Wes Tator, Gail
Alden, Jaime Wojtasnski

Laboratory Technicians Shanna Burt, Damon E. Burt, Amy Manzelli, Kim Foley,
Meggan Hodgson, Michelle Anderson, Carla Cuigini and
Dave Waltz, Jennifer Fox, Kurt Gable

Video and graphics

Jane Bennett, UNH Marine Docent and TIGA Videos

Office Support

Marion Gray

Technical Advisory Committee

The Great Bay Watch was also supported by the Technical Advisory Committee. They are:

Betsy (Franz) Stevens, Education Coordinator at Sandy Point Discovery Center for the Great Bay National Estuarine Research Reserve. Previously a teacher of biology at Skidmore College for 26 years, she now develops and delivers educational programs and opportunities at the Sandy Point Discovery Center, Great Bay National Research Reserve.

Dr. Steve Jones, Research Associate Professor, Jackson Estuarine Laboratory, University of New Hampshire. A bacteriologist in the Department of Natural Resources at UNH. He conducts research on the processes affecting nutrient and microbial non-point sources pollution in coastal areas; shellfish sanitation and processing; ecology of indigenous estuarine bacterial pathogens; bioremediation of toxic compounds, and microbiology of cultured finfish larvae.

Amy Lindsay, Chemistry Lab Supervisor, University of New Hampshire. Coordinator of UNH chemistry laboratory courses, she writes lab curricula at UNH. She has successfully written a grant to NSF for computerizing some laboratory lessons.

Chris Nash, Principal Planner, New Hampshire Office of State Planning. The Director of the New Hampshire Estuaries Project (part of the EPA's National Estuary Program), focusing in the areas of water quality, shellfish resources and environmental planning. A University of New Hampshire graduate with a Masters in Hydrology.

Jeff Schloss, Coordinator Lakes Lay Monitoring Program, Cooperative Extension, University of New Hampshire. A Research Scientist with UNH Freshwater Biology Group. He manages a volunteer monitoring program and its sampling protocol. He also works with watershed water quality monitoring and modeling; and applied limnology GIS applications for water quality analysis.

Joyce Tugel, Science Teacher, Marshwood High School in Eliot, Maine. A chemistry teacher for 7years. One of her main interests is incorporating "real life" science into the existing curriculum. Prior to becoming a teacher, she was a research scientist in environmental biogeochemistry for more than 10 years.

Dr. Michele Dionne, Research Director at Wells National Estuarine Research Reserve. Her research interests include fish ecology, aquatic plant-animal interactions, aquatic habitat structure, and ecological indications of aquatic habitats.

Grants Received

The Great Bay Watch program, including coordinators salary, and supplies, are all funded through grants. This report is also the result of work sponsored in part by the National Sea Grant College Program of the National Oceanic and Atmospheric Administration, Department of Commerce under grants to the University of New Hampshire/University of Maine Sea Grant College Program.

Other support in 1997 came from the:

1. New Hampshire Estuaries Project
2. Friends of the South End
3. Advocates of North Mill Pond
4. Odyssey House



Elise and Malorie Blake Joanne McLaughlin, , and Kim Foley helped to conduct Shoreline and habitat survey's this year with the Great Bay Watch.

C. Accomplishments for 1997

There are two sampling days per month scheduled on the weekday closest to the full moon and the new moon. Samples are collected at both the low and high tide of each sampling day. This allows the waters to be at both at their highest high and lowest low tides of the month, and the sampling will reflect the worse case scenario for early morning dissolved oxygen readings. Each site then has a specific time that the Watchers are to sample, reflecting the lowest possible tide and the highest possible tide of each specific area. The schedule on the following page is the 1997 sampling schedule, as each year's schedule is unique. The sampling schedule that the Great Bay Watch used was adapted using the Maine Geographic Calendar and Almanac, by DeLorme Maps in Freeport, Maine.

How the GBW Data is used

Eric Williams used the GBW data in the New Hampshire water quality report to Congress 305 (b), by the NH Department of Environmental Services.

Margaret Watkins used the GBW data in Department of Environmental Services research on point source identification in the New Hampshire seacoast.

The GBW Secchi disk and dissolved oxygen data were used by NOAA to develop and compile an assessment of eutrophication status in coastal New Hampshire.

Arnold Banner of the (USFWS) US Fish and Wildlife Service used salinity and temperature data from GBW to show seasonal variations of Great Bay for a Gulf of Maine Council on the updated Environment Mapping Project.

In 1997 the New Hampshire Estuaries Project used the Great Bay Watch data as part of the long term data sets to review for the technical characterization Report which will be utilized in the State of the Bay's Report.

Friends of the South End, a group concerned citizens from Portsmouth, helped to set up two sites at South Mill Pond, and will use the GBW data to make future resource plans for the pond which borders many properties of the volunteers who monitored.

Advocates of North Mill Pond, a newly organized group of active citizens who helped to set up two sites on North Mill Pond. The GBW data, as well as shoreline survey data will be used in a report analyzing the water quality and to continue their plans to revitalize, protect, and conserve the pond.

Data collected during the shoreline and habitat survey of the Bellamy River and East Little Bay will be analyzed as part of a report to the NHEP, and will be used as part of the decision making process to open more areas for shellfishing.

Great Bay Watch 1997 Sampling Season

Tidal and Sampling Times for 1997 Season																
		adjustment	23-Apr	6-May	22-May	5-Jun	23-Jun	7-Jul	21-Jul	4-Aug	19-Aug	3-Sep	18-Sep	2-Oct	17-Oct	3-Nov
Low			6:13 AM	5:15 AM	5:45 AM	5:51 AM	7:34 AM	7:41 AM	6:26 AM	6:38 AM	6:03 AM	6:42 AM	6:30 AM	6:08 AM	6:08 AM	6:17 AM
High			12:26 PM	11:30 AM	11:58 AM	12:06 PM	1:51 PM	1:55 PM	12:41 PM	12:50 PM	12:18 PM	12:52 PM	12:45 PM	12:18 PM	12:22 PM	12:28 PM
Site 1 - Peninsula - Oyster River	LOW	1:50	8:03	7:05	7:35	7:41	9:24	9:31	8:16	8:28	7:53	8:32	8:20	7:58	7:58	8:07
	HIGH	1:45	14:11	13:15	13:43	13:51	15:36	15:40	14:26	14:35	14:03	14:37	14:30	14:03	14:07	14:13
Site 2 - Jackson Laboratory	LOW	2:00	8:13	7:15	7:45	7:51	9:34	9:41	8:26	8:38	8:03	8:42	8:30	8:08	8:08	8:17
	HIGH	2:00	14:26	13:30	13:58	14:06	15:51	15:55	14:41	14:50	14:18	14:52	14:45	14:18	14:22	14:28
Site 3 - Lamprey River	LOW	3:00	9:13	8:15	8:45	8:51	10:34	10:41	9:26	9:38	9:03	9:42	9:30	9:08	9:08	9:17
	HIGH	2:40	15:06	14:10	14:38	14:46	16:31	16:35	15:21	15:30	14:58	15:32	15:25	14:58	15:02	15:08
Site 4 - Depot Road (Sandy Pt) *	LOW	2:45	8:58	8:00	8:30	8:36	10:19	10:26	9:11	9:23	8:48	9:27	9:15	8:53	8:53	9:02
	HIGH	2:45	15:11	14:15	14:43	14:51	16:36	16:40	15:26	15:35	15:03	15:37	15:30	15:03	15:07	15:13
Site 5 - Portsmouth Country Club	LOW	2:40	8:53	7:55	8:25	8:31	10:14	10:21	9:06	9:18	8:43	9:22	9:10	8:48	8:48	8:57
	HIGH	2:20	14:46	13:50	14:18	14:26	16:11	16:15	15:01	15:10	14:38	15:12	15:05	14:38	14:42	14:48
Site 6 - Fox Point	LOW	2:00	8:13	7:15	7:45	7:51	9:34	9:41	8:26	8:38	8:03	8:42	8:30	8:08	8:08	8:17
	HIGH	2:00	14:26	13:30	13:58	14:06	15:51	15:55	14:41	14:50	14:18	14:52	14:45	14:18	14:22	14:28
Site 7 - Cedar Point	LOW	1:50	8:03	7:05	7:35	7:41	9:24	9:31	8:16	8:28	7:53	8:32	8:20	7:58	7:58	8:07
	HIGH	1:55	14:21	13:25	13:53	14:01	15:46	15:50	14:36	14:45	14:13	14:47	14:40	14:13	14:17	14:23
Site 9 - Cochecho River	LOW	1:20	7:33	6:35	7:05	7:11	8:54	9:01	7:46	7:58	7:23	8:02	7:50	7:28	7:28	7:37
	HIGH	1:20	13:46	12:50	13:18	13:26	15:11	15:15	14:01	14:10	13:38	14:12	14:05	13:38	13:42	13:48
Site 10 - Piscataqua River	LOW	1:20	7:33	6:35	7:05	7:11	8:54	9:01	7:46	7:58	7:23	8:02	7:50	7:28	7:28	7:37
	HIGH	1:20	13:46	12:50	13:18	13:26	15:11	15:15	14:01	14:10	13:38	14:12	14:05	13:38	13:42	13:48
Site 11 - Coastal Marine Lab	LOW	0:16	6:29	5:31	6:01	6:07	7:50	7:57	6:42	6:54	6:19	6:58	6:46	6:24	6:24	6:33
	HIGH	0:16	12:42	11:46	12:14	12:22	14:07	14:11	12:57	13:06	12:34	13:08	13:01	12:34	12:38	12:44

Great Bay Watch 1997 Sampling Season

		adjustment	23-Apr	6-May	22-May	5-Jun	23-Jun	7-Jul	21-Jul	4-Aug	19-Aug	3-Sep	18-Sep	2-Oct	17-Oct	3-Nov
Site 12 - Newmarket STP	LOW	3:00	9:13	8:15	8:45	8:51	10:34	10:41	9:26	9:38	9:03	9:42	9:30	9:08	9:08	9:17
	HIGH	3:00	15:26	14:30	14:58	15:06	16:51	16:55	15:41	15:50	15:18	15:52	15:45	15:18	15:22	15:28
Site 13 - Marina Falls Landing	LOW	3:00	9:13	8:15	8:45	8:51	10:34	10:41	9:26	9:38	9:03	9:42	9:30	9:08	9:08	9:17
	HIGH	3:00	15:26	14:30	14:58	15:06	16:51	16:55	15:41	15:50	15:18	15:52	15:45	15:18	15:22	15:28
Site 14 - Fowler's Dock	LOW	3:00	9:13	8:15	8:45	8:51	10:34	10:41	9:26	9:38	9:03	9:42	9:30	9:08	9:08	9:17
	HIGH	3:00	15:26	14:30	14:58	15:06	16:51	16:55	15:41	15:50	15:18	15:52	15:45	15:18	15:22	15:28
Site 15 - Patten Yacht Yard, Inc.	LOW	1:00	7:13	6:15	6:45	6:51	8:34	8:41	7:26	7:38	7:03	7:42	7:30	7:08	7:08	7:17
	HIGH	1:00	13:26	12:30	12:58	13:06	14:51	14:55	13:41	13:50	13:18	13:52	13:45	13:18	13:22	13:28
Site 16 - Exeter Docks	LOW	2:50	9:03	8:05	8:35	8:41	10:24	10:31	9:16	9:28	8:53	9:32	9:20	8:58	8:58	9:07
	HIGH	3:10	15:36	14:40	15:08	15:16	17:01	17:05	15:51	16:00	15:28	16:02	15:55	15:28	15:32	15:38
Site 17 - Dover Foot Bridge	LOW	2:50	9:03	8:05	8:35	8:41	10:24	10:31	9:16	9:28	8:53	9:32	9:20	8:58	8:58	9:07
	HIGH	3:10	15:36	14:40	15:08	15:16	17:01	17:05	15:51	16:00	15:28	16:02	15:55	15:28	15:32	15:38
Site 18 - Maplewood Ave	LOW	1:16	7:29	6:31	7:01	7:07	8:50	8:57	7:42	7:54	7:19	7:58	7:46	7:24	7:24	7:33
(NMPA)	HIGH	1:16	13:42	12:46	13:14	13:22	15:07	15:11	13:57	14:06	13:34	14:08	14:01	13:34	13:38	13:44
Site 19 - Bartlett St.	LOW	1:16	7:29	6:31	7:01	7:07	8:50	8:57	7:42	7:54	7:19	7:58	7:46	7:24	7:24	7:33
(NMPA)	HIGH	1:16	13:42	12:46	13:14	13:22	15:07	15:11	13:57	14:06	13:34	14:08	14:01	13:34	13:38	13:44
Site 20 - Junkins Ave.	LOW	1:16	7:29	6:31	7:01	7:07	8:50	8:57	7:42	7:54	7:19	7:58	7:46	7:24	7:24	7:33
(FOSE)	HIGH	1:16	13:42	12:46	13:14	13:22	15:07	15:11	13:57	14:06	13:34	14:08	14:01	13:34	13:38	13:44
Site 21 - Pleasant St.	LOW	1:16	7:29	6:31	7:01	7:07	8:50	8:57	7:42	7:54	7:19	7:58	7:46	7:24	7:24	7:33
(FOSE)	HIGH	1:16	13:42	12:46	13:14	13:22	15:07	15:11	13:57	14:06	13:34	14:08	14:01	13:34	13:38	13:44

The major accomplishments of the GBW

A core of volunteers have been educated about the importance of conserving the estuary and its resources, and has provided a direct avenue for their active participation in the process. Several GBW members have become active participants of NHEP committees, and local conservation commissions.

Four new sites situated on North and South Mill ponds in Portsmouth were established, and joined the Great Bay Watch sampling network during the 1997 season.

In conjunction with the New Hampshire Estuaries Program, Great Bay Watch received a grant in 1997 to train volunteers and coordinate shoreline surveys including habitat structure and quality, organism distribution, and debris concentration.

Also included in the above mentioned grant were funds allocated to training for and execution of rainfall characterizations, which included temperature, salinity, dissolved oxygen, and fecal coliform testing for four consecutive days, and at four sites in East Little Bay during a storm event.

A series of lessons suitable for use in high school biology and chemistry classes were presented at the 1997 National Science Teachers Association meeting in New Orleans as part of the National Marine Educators Association.

Because of the Great Bay Watch's rigorous quality control efforts, it has achieved data results comparable to those collected by scientists from UNH's Jackson Estuarine Laboratory, the N.H. Office of State Planning and Department of Health and Human Services.

Participation in local, state, regional, and national events including conferences, workshops, and committees helped to focus public attention and interest on the vital roles of estuaries by exemplifying the Great Bay in particular.

The program has been expanded to include more school students and their teachers, and has given educational programs a more direct link to their communities. In Newmarket the conservation commission has formed a water quality committee and has offered to find more volunteers to work with the high school students.

Participation in the Great Bay Watch has provided science career-related information and experience for students and has been a direct influence on the choice of careers for several Great Bay Watch student interns and student volunteers.

In 1997, for the eighth year, Great Bay Watch created and published the GBW 1996 Annual Report, and revised its 1997 training manual. Both of which were distributed to Watchers, staff, communities, and were requested by numerous other water quality monitoring groups and agencies.

The Great Bay Watch produced a training video, "Processing Fecal Coliforms", which is being used by new laboratory volunteers and the schools that are part of the Great Bay Watch. It has been also requested by other schools, other monitoring groups and several science centers.

"Hands on" activities showing the methods of testing certain parameters were created and presented with the Great Bay Watch portable display on more than a dozen occasions during the 1997 season.

The Great Bay Watch data was used by Earnst Linder to help teach Math and Marine Science.

Jeff Schloss used the Great Bay Watch data in his volunteer management manual, and teaching workshops.

Presentations and participation:

The Great Bay Watch staff and volunteers presented, and participated in:

- 10th Annual Coastal Clean-up
- Advocates of North Mill Pond Meetings
- Board of Directors for the Great Bay Stewards
- Building a Sustainable Organization Workshop
- CochechoRiver Festival, Dover NH
- CochechoRiver Watershed advisory committee
- Editorial Team of the Gulf Guardian
- Great Bay Watch 8th Annual Meeting
- Gulf of Maine Coastal Network Quarterly meetings
- Gulf of Maine Marine Education Association Conference (GOMMEA)
- Kurt Gabel's E.C. Practicum of 100 intern hours
- National Marine Educators Association National Conference (NMEA)
- New Hampshire Seacoast Audubon Society meeting
- NHEP NH Estuarines Project Committees
- Odyssey House staff and students retraining and grant writing assistance
- Sea Grant Staff and Cooperators meetings
- Seacoast Science Center
- Secchi Dip-in
- Spring New Hampshire Science Teacher Association conference
- State Advisory Council meeting for UNH Cooperative Extension
- UNH Water Quality Round Table meeting
- United Way Day of Caring
- Wells National Estuarine Research Reserve Education Committee
- Women in Science fair at University of New Hampshire

Education and Training

Eight University of New Hampshire students were part-time interns at the Great Bay Watch. Students were involved in a number of different tasks including lab testing, QA/QC, field sampling, fecal coliform lab procedures, data input, budget and book keeping, split sampling, statistical analysis, office support, publications, and a multitude of other tasks during meetings.

Home schooled families were a new addition to our venue of volunteers two years ago. Two family of home schooled children were trained and joined the sampling team during the 1997 season as regular "Watchers".

Approximately 30 new members as well as 30 or more high school students were trained and worked as volunteers.

Forty-seven volunteers participated in both QA/QC sessions as part of our quality assurance program.

During monthly meetings for the GBW several speakers enthusiastically informed members about the following topics:

Henri Gaudette - metals in the sediments of Great Bay

Joanne McLaughlan - the Sanitary and Habitat Survey results

Vallana Winslow-Pratt - Importance of a shoreline survey and rainfall characterization

Peter Wellenberger - Great Bay National Research Reserve

Brian Doyle - 1.3 million dollar CICEET Grant

Kim Foley - her educational experiences at the Center for Marine Resources in the South Caicos, British West West Indies.

Sixteen new volunteers were organized and trained to sample at the four new site located on North and South Mill Ponds in Portsmouth.

Twenty-five volunteers were trained for shoreline survey and rainfall characterization sampling.

Future Plans:

A web-site home-page is being created by Great Bay Watchers in cooperation with the Estuary Net in conjunction with Wells National Estuarine Research Reserve. Mike Litch has added site 15's 1995 sampling year data to the Estuary Net web page, and is now working on designing an independent, Great Bay Watch web page.

The Great Bay Watch has applied for a new grant from the New Hampshire Coastal Program planning to help educate decision makers in the cities of Dover and Newmarket on the quality of the riverbodies in their area, so that well informed decisions can be made to better improve the waterways.

A grant to the Hubbard Foundation was also turned in to help fund the activities of the Great Bay Watch, and to help train, and buy supplies to start phytoplankton testing at selected Great Bay Watch sites. An YSI, dissolved oxygen, and salinity meter may also be purchased with money from the grant to improve the QA/QC techniques the Great Bay Watch has already in place.



Rachel and Elise Blake measure the transparency and depth with a secchi disk at Site 2, Jackson Estuarine Laboratory.

D: Water Quality Data and Analyses

The Water Quality Indicators that the Great Bay Watch monitors

The Great Bay Watch measures several water quality parameters to track the over-all health of the estuary. These indicators are standard in water quality studies, and the volunteers use measurement techniques that are commonly employed in monitoring programs throughout the country.

All surface waters in the state of NH are classified as "Class A" (highest quality, potential drinking water supply, discharge of sewage or wastes prohibited) or "Class B" (second highest quality, suitable for fishing, swimming, and other recreational uses) by the NH Department of Environmental Services. All NH tidal waters are Class B waters. General water quality standards for each class are established in state law (RSA 485-A:8), and provide guidelines to determine if water is "clean" or "polluted". Where applicable, the data are compared to those standards.

1997 Missing Data

All the missing data was replaced by an asterisk (*) in the spreadsheet. Specific anomalies are described in detail below by site number and tide (low and high).

Site 1:

5 / 22 / 97 Low No sampling done this day.

Site 3:

4 / 23 / 97 Low No dock, unable to take samples.
5 / 6 / 97 Low No dock, unable to take samples.
5 / 22 / 97 Low, High Depth not filled in.
9 / 3 / 97 High DO -no pillow 2 added.
10 / 17 / 97 Low No dock, unable to take samples.
11 / 3 / 97 Low No dock, unable to take samples.

Site 4:

8 / 4 / 97 High Transparency-eelgrass obscured view.

Site 6:

4 / 23 / 97 High Air temperature not recorded.
10 / 2 / 97 High pH not filled in.

Site 9:

5 / 22 / 97 High pH not recorded, meter malfunctioned.
6 / 23 / 97 Low pH not filled in.
9 / 3 / 97 Low No depth or transparency due to dam closure.

Site 11:		
5 / 6 / 97	High	No DO -the stopper was stuck on the bottle.
7 / 21 / 97	High	No DO -spilled the sample.
10 / 2 / 97	Low, High	pH not recorded, meter malfunctioned.
Site 12:		
7 / 7 / 97	High	Air temperature not filled in.
8 / 19 / 97	Low	Air temperature not filled in.
Site 14:		
4 / 23 / 97	High	Air temperature not filled in.
6 / 5 / 97	Low	Depth not filled in.
8 / 4 / 97	High	Salinity not filled in.
Site 15:		
4 / 23 / 97	High	DO not filled in.
6 / 5 / 97	High	No depth record-the current was too strong to read.
7 / 21 / 97	High	No depth record-the current was too strong to read.
Site 16:		
6 / 5 / 97	High	DO not filled in.
Site 17:		
7 / 21 / 97	Low	No DO recorded-bottle cracked while taking sample.
9 / 18 / 97	High	Transparency not recorded.
11 / 3 / 97	High	DO not filled in.
Site 18:		
4 / 23 / 97	High	No depth or transparency record-the current was too strong.
Site 19:		
10 / 17 / 97	Low	pH not filled in.
Site 21:		
10 / 2 / 97	Low	The tide gate was lifted, so there was no water to sample at low tide-no data was recorded.

The Great Bay Watch Field Data Sheets

The data sheets that the Great Bay Watch uses were re-designed in 1995 by David Waltz, and revised in 1996 by Damon Burt, in 1997, Shanna Burt added rainfall, and bird sightings. The front of the data sheet is strictly for the parameters that the Great Bay Watch tests, while the back of the sheet leaves room for personal observations. This section is extremely important, and gives the volunteers the chance to report anything that may have an effect on the quality of the water, such as, changes in water surface, pollution, adjacent land use, recreational activities, etc. A sample of the data sheet is found on the next two pages.

GREAT BAY WATCH FIELD DATA SHEET

Sampling Team (First, last and mid. in.)

- 1) _____
- 2) _____
- 3) _____
- 4) _____

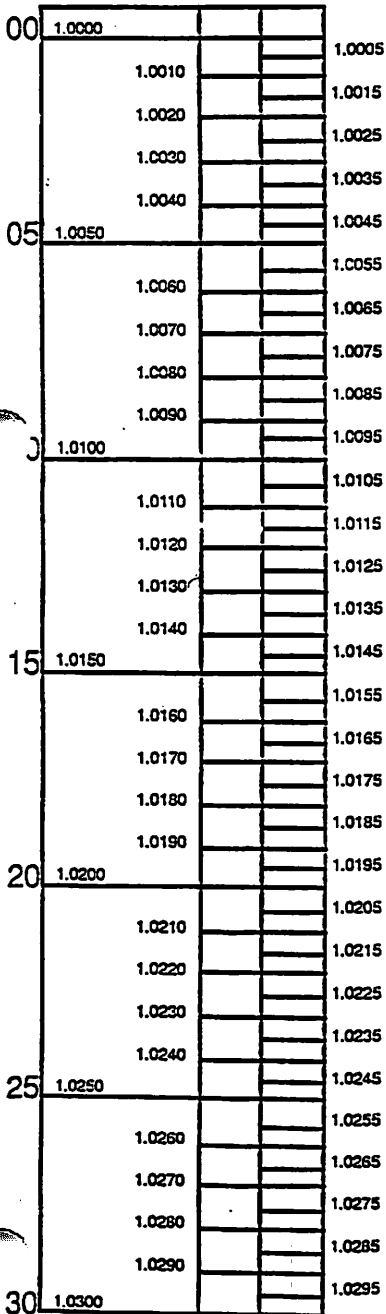
Day _____ Date _____

Tide _____ Time _____
(H/L) (Military)

Site Number: _____

Site Name: _____

Reading the Hydrometer



Air Temperature _____ °C

Transparency

_____ cm _____ cm _____ cm
disappear appear average

Water Depth _____ cm

Water Temperature _____ °C

Thermometer # _____

Salinity

Hydrometer # _____ °C
Water Temp (Jar) _____ °C
Density _____ g/cc
Salinity _____ ppt

pH _____

pH meter # _____

Dissolved Oxygen

Bottle # _____
Add Test 1 _____ and Test 2 _____
Test 3 if difference is >0.3ml _____

TOTAL D.O.: _____
mg/L (ppm)

Revised 3/03/96

(OVER)

GREAT BAY FIELD DATA SHEET

PLEASE DESCRIBE THE CONDITIONS AT YOUR SITE TODAY:

Water: Calm____Ripple____Waves____Whitecaps____

Weather: Clear____Partly Cloudy____Overcast____Fog/Haze____
Showers____Downpour____Snow____Other_____

Activities: Fishing____Oystering____Boating____Hunting____
Other_____

Fecal Coliform:

Person Taking Sample_____

Person Transporting Sample_____

PLEASE WRITE AN OBSERVATION NARRATIVE

Birds

Type_____#_____

Type_____#_____

Type_____#_____

Other_____

Rainfall in the
last 24 hours
was approximately
_____ in.

Time Spent Doing:

Field Work: 1)_____ 2)_____ 3)_____ 4)_____

Lab Work: 1)_____ 2)_____ 3)_____ 4)_____

Travel: 1)_____ 2)_____ 3)_____ 4)_____

Signature_____

(QA/QC Qualified)

Date:_____

TOTAL TIME_____(*Time from home and/or school and back counts!!!)

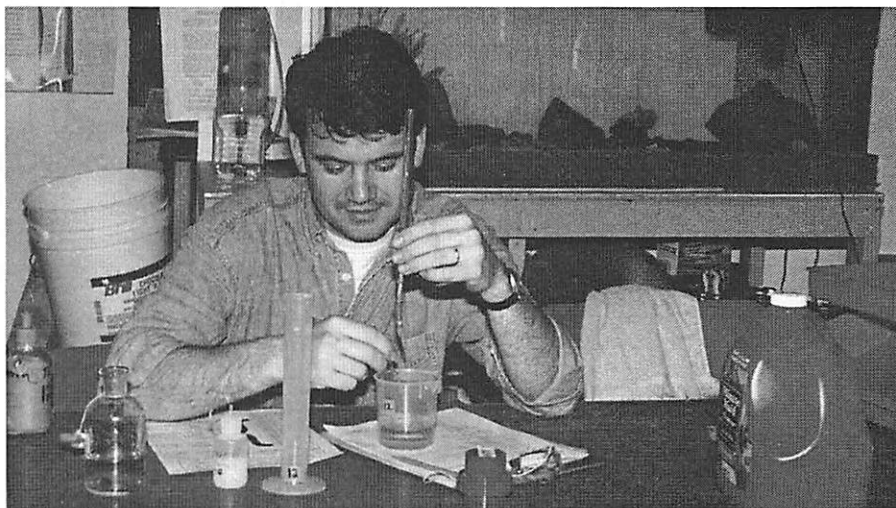
The Parameters

The following section consists of explanations of the parameters that the Great Bay Watch tests. The graphs of the data are grouped by site and are found in Appendix III. Each graph depicts the GBW data over time, starting when the site was first started, and continuing through the present 1997 sampling season. It should be noted that the GBW samples only during the months of April through November. No sampling is performed during the months of December through March. The observation # refers to the time at which the particular sample was taken (ie. 1= the first sampling at that particular site, 117= the last sampling day for sites 1-7 during 1997)

Water temperature is a basic measurement included in water quality studies not only because it influences biological activity, but also because it affects pH and dissolved oxygen readings. Warmer water temperatures slightly increase pH levels, and colder water has the potential of holding more dissolved oxygen. It should be noted however, that pH and dissolved oxygen levels are influenced by many other factors in addition to water temperature. Water temperature is a seasonal parameter with highs occurring in the late summer and lows in fall/early spring. Estuarine environments, such as Great Bay tend to exhibit cooler, less variable temperatures close to the ocean, and warmer, more variable temperatures in the inner estuary and tidal rivers. The GBW data represent these characteristics well.

Salinity is another parameter often measured in tidal areas. Aquatic life, including when and where different organisms can live in the estuary, is affected by varying levels in salinity. Estuaries are embayments where fresh water mixes with salt water; therefore salinity readings vary with the seasons and weather conditions, as well as the tides. Rain and snow melt cause rivers to swell, decreasing the salinity in the bay. As stream in-flow levels decrease and evaporation from the bay's surface increases during the summer months, salinity levels begin to rise. Salinity levels tend to drop again in mid to late fall as autumn rains increase river flows. This seasonal fluctuation is clearly reflected in the data from the GBW sites. Likewise, the data also reflects how current weather trends have affected the salinity levels. Density is measured with a hydrometer. Using the temperature and density readings, a chart is used to get a salinity reading expressed in parts per thousand (ppt: parts of dissolved solids per 1000 parts sea water).

Patrick Andrew completes
the dissolved oxygen
test at a Great Bay Watch
QA/QC sessions.



pH is a measure of the hydrogen ion (H⁺) concentration in water (H₂O). The pH scale ranges from 0.0 to 14.0, with acidic waters having pH readings less than 7.0, and basic (or alkaline) waters having pH readings of greater than 7.0. A pH of 7.0 is a neutral (neither acidic or basic) reading. Distilled water has a pH reading of 7.0. Open ocean waters tend to have a pH just over 8.0, while fresh water tends to be slightly acidic (less than 7.0). Estuarine waters, a mixture of fresh and salt water, tend to have pH readings between 6.5 and 8.5. The pH levels in the Great Bay may vary slightly over a year, but in general show little seasonal fluctuation. Large changes in pH can have a significant impact on estuarine life, and readings well above or well below the normal range may indicate pollution. Acid pollution is caused by the emissions of automobiles and coal-fired power plants that get released into the atmosphere and get incorporated into the water vapor, which is then returned to the earth as acid rain. New Hampshire standards for Class B waters specify that pH readings should be between 6.5 and 8.0, unless naturally occurring. pH is measured with an electronic "pocket" pH meter (Cole Parmer pH testr 2).

Dissolved oxygen (D.O.) is an important measure of the health of the estuary, as aquatic animals and plants require it for survival. Several factors affect the oxygen content of the water. Temperature (warm water holds less oxygen) and salinity (salty water holds less oxygen) significantly affect the amount of oxygen in the water. Wind and wave action, as well as photosynthesis in the water (by phytoplankton and submerged aquatic vegetation), can increase D.O. values. High turbidity (cloudiness of water), caused by increased suspended solids can block the light necessary for photosynthesis, and decrease the D.O. Excessive nutrient loading can result in a large amount of organic matter in the water. The decomposition of this material reduces the oxygen content in the water. The GBW samples in the early morning, at the lowest possible tide because these times tend to reflect "worst case" conditions. This occurs when neither photosynthesis activity nor colder high tide water are present to raise the oxygen levels.

While the overall oxygen content (in mg/L) in the water is important in assessing the health of a water body, it is also useful to look at dissolved oxygen in terms of "percent saturation." Percent saturation is the ratio of oxygen concentration that is in the water to the oxygen concentration that could be in the water, at given temperature and salinity. Expressing dissolved oxygen data in terms of percent saturation makes observations from different sites taken at different times of the day and year comparable to one another, and they are a better indicator of whether or not a particular water body is showing problems. One might expect that the highest obtainable percent saturation value to be 100 percent; however, "supersaturation" (values greater than 100 percent) can occur under certain conditions. Very high concentrations of oxygen are possible in areas with a great deal of aquatic vegetation (oxygen production through photosynthesis), or in areas subject to strong wind and wave action (addition of oxygen through "entrainment" of atmospheric oxygen into the water). New Hampshire standards for Class B waters specify that dissolved oxygen readings should be no less than 75 percent saturation, unless naturally occurring. Dissolved oxygen is measured with a Micro-Winkler titration kit and measurements are expressed in milligrams of oxygen per liter of water (mg/L).

The Great Bay Estuary appears to have healthy levels of dissolved oxygen, indicating that it is not experiencing significant "eutrophication" as are some of the estuaries in the country. Most sites showed average percent saturation values well above the Class B standard of 75%, although some sites showed at least one value below the standard of 75%. These values typically occurred at low tide, but all sites showed acceptable levels of oxygen at high tide, indicating the observed oxygen depletion are not persistent throughout the day. Annual means suggest that Site 12 at the Newmarket Wastewater Water Treatment Plant, and Site 20 on South Mill Pond in Portsmouth are potential low tide areas of concern. Values below the Class B standard below 75% at high tide, although there have been only thirty-three occurrences at different sites in the past eight years, could indicate potential problems within in the area. Low saturation levels less than 75% could indicate potential environmental sources, but others may be due to possible sampling error. While GBW volunteers only sample from the water surface, the measurements are likely to be good indicators of the oxygen content in the entire water column. The physical characteristics of the estuary, such as relatively shallow depths and strong tidal currents, ensure good mixing of surface and bottom waters, especially in Great and Little bays and in the Piscataqua River. This mixing is certainly a factor in preventing persistent low oxygen conditions.

Transparency (Secchi depth) measurements are used as a measure of the clarity of the water. Estuarine waters are naturally turbid from suspended sediments and/or nutrients that cause increased phytoplankton growth. Turbidity tends to be higher (less secchi depth) in the tidal rivers and inner estuary, decreasing somewhat closer to the ocean, farther away from the sources of turbidity. Excessive turbidity may indicate problems in the estuary. Erosion from shorelines and upland areas increases the turbidity of the water, as can plankton blooms caused by high levels of nutrients. Highly turbid water decreases the amount of light penetrating through the water column, thus reducing photosynthesis and lowering dissolved oxygen levels. If the water where the photosynthesis is taking place has less than 1% of the normal light levels that are found at the surface, plants are not able to sustain growth. High turbidity caused by sedimentation, can also affect the living resources of the estuary. For example, oyster larvae require a clean substrate on which to settle, and deposition of sediment on these substrates can reduce larval settlement and growth. The mean transparency for each site is discussed in the site descriptions. However because of that fact that the water is so low at some sites during low tide, only high tide transparency readings are discussed.

Fecal coliform bacteria are used as an indicator of human sewage pollution. While fecal coliform bacteria are found in the feces of all warm-blooded animals, their presence indicates that other bacteria and viruses may be present, more dangerous to humans. Their presence in high numbers can indicate pollution from improperly treated sewage effluent, waste discharges from boats, improperly functioning or failed septic systems, untreated urban storm water, runoff from agricultural operations, feces from wildlife, or other sources. New Hampshire water quality standards for tidal waters utilize enterococci, another kind of bacterial indicator to determine if waters are safe for swimming. State standards for tidal shellfish waters, however, do specify acceptable levels of fecal coliform bacteria. While direct application of GBW data to shellfish water standards would not be appropriate, these standards can be used to give a general sense of contamination in the estuary. Fecal coliform tests are performed using the membrane filtration (plate count) method.

Note: In a set of bacterial data, the average value is calculated by computing the geometric mean, rather than the arithmetic mean. This is the conventional manner by which bacterial averages are reported. Unlike the arithmetic mean, the geometric mean more accurately reflects the nature, or “middle road” of a data set that has a great deal of variability in the observations (as is often the case with bacterial data). For example, consider a set of bacterial data comprised of 10 observations, with eight of the observations equaling two colonies per 100 ml and two observations equaling 500 colonies per 100 ml (indicative of a relatively clean water with occasionally high bacterial levels, perhaps caused by wildlife defecating near the site). The arithmetic mean or average of this data set would be 102 colonies per 100 ml, which does not reflect the fact that most of the observations are quite low. The geometric mean of this data set would be 6 colonies per 100 ml; thus, the geometric mean is a better representation of the bacterial data set. For sites which indicate minimal variability, we also look at the median (the middle number when all observations are ordered in increasing order) as an average measure of the bacterial counts.

In order to calculate geometric means for the GBW data, some adjustments to the data were necessary. First, on several of the sample dates, there were no fecal coliforms detected (0 colonies per 100 ml of water sample). Zero values cannot be used in calculating geometric means, so these observations were changed to have fecal coliform counts of one colony per 100 ml. According to Standard Methods for the Examination of Water and Wastewater, 17th Edition, for fecal coliform procedures a colony count between 20-60 is preferred, if a 100 ml of sample produced a too numerous to count (TNTC) then 60 was entered as the count. When a 10 ml or 1 ml water samples were used as the dilution and count was TNTC, 600 and 6000 respectively were reported since these would be the calculations for colonies per 100 ml. In the case of high values, the adjustment utilizes the minimum number of colonies known to be present. By these methods we are prevented from overestimating high counts that could not be documented. When calculating the medians for the GBW data, adjustments to those observations which were too numerous to accurately count were calculated using the same manner implemented for the determination of geometric means. Zero values for calculating the median were not changed.



Barbara Hopkins and Pat Gaudet sample at site 1 in Durham.

1997 Table of Fecal Coliform Geometric Means vs. Medians

Site Name	Site #	Low Tide		High Tide	
		Geometric Mean	Median	Geometric Mean	Median
Peninsula	1	15.8	26	2.3	1
JEL	2	2.7	2	2.7	2
Lamprey River	3	63.3	78	17.6	22
Depot Road	4	*	*	5.8	4
PCC	5	59.41	98	5.7	7
Fox Point	6	2.2	1	2.3	2.5
Cedar Point	7	6.9	5	5.3	4
Neal	9	109.1	144	21.5	30
Clark's (Dube's)	10	14.8	18	3.0	0
CML	11	1.8	1	3.0	1
STP	12	6.8	9	41.9	61
Marina Falls Landing	13	91.3	120	66.5	90
Fowler's Dock (Essley's)	14	10.7	12	7.4	8
Patten's Yacht Yard Inc.	15	3.0	4	1.7	1.5
Exeter Docks	16	221.3	310	116.1	150
Dover Foot Bridge	17	258.2	430	202.9	255
Maplewood Ave (NMP)	18	68.1	65	2.2	0
Bartlett Ave (NMP)	19	325.4	510	43.8	65
Junkins Ave (SMP)	20	10.7	10	57.3	0
Pleasant Ave (SMP)	21	11.0	10	2.3	0

* There is no sampling at site 4 at low tide.

Some of the most commonly asked questions that we hear are “Are the bacteria levels in the estuary too high?”, “Is it safe to swim in the Great Bay?” and “Are the shellfish safe to eat?” It is important for the reader to understand the intended purpose of the Great Bay Watch when asking these questions. The volunteers’ data are useful for giving generalized information about water quality in the Great Bay Estuary, identifying “hot spots” where state/local regulators should investigate further, and tracking changes in the estuary’s water quality over time. GBW monitoring and data might also prove useful in locating the sources or activities that are creating the pollution that impacts shellfish beds. Many of the above questions are specific “regulatory” issues that are best answered by the regulators themselves. For example, state regulations for determining if tidal waters are safe for swimming use enterococci as a bacterial indicator, not fecal coliform, and direct comparisons between the two cannot be made. Determining if waters are safe for shellfishing is a complicated process that involves much more than taking water samples. Real and potential shoreline sources of pollution must be evaluated and other factors that affect the performance of the pollution sources and their effects on shellfish beds (hydrographic, meteorological, and other influences) must be determined. Furthermore, water samples must be tested by a laboratory, certified by the U. S. Food and Drug Administration, using specific analytical methods that are different from those used by the Great Bay Watch. Thus, it would

be inappropriate for one to use the bacterial data generated by GBW to make a definitive conclusion on the safety of shellfish beds.

However, GBW data can be viewed in the context of water quality standards for shellfishing to get a general sense of how clean or polluted the waters of the estuary are. Shellfish water regulations state that for an area to be classified as "Approved" (harvesting can occur at any time, regardless of weather conditions or other factors), the geometric mean of several samples should not exceed 14 fecal coliform colonies per 100 ml, and not more than 10 percent of the samples should have counts that exceed 43 fecal coliform colonies per 100 ml. Shellfish water criteria are very strict. Although many of the sites would not meet the "Approved" classification, waters determined to be unfit for shellfish harvesting are not necessarily severely polluted and may be perfectly safe for other activities, such as swimming.

There were nine sites within the twenty site GBW network that had a greater geometric mean than 14 colonies per hundred at low tide. Only six of these of these nine sites had a high geometric mean at high tide. These were sites 3 and 13, on the Lamprey river, 9 and 17 on the Cochecho River, 16, on the Squamscott River in Exeter, and 19, on North Mill Pond. There were two sites that had higher geometric means at high tide than they did at low tide. These were sites 12, located at the Sewage Treatment Plant on the Lamprey river, and site 20 at South Mill Pond.

Despite these numbers, the geometric means at all the GBW sites have decreased steadily over the years. The same is true for this year. All the sites (1-17) have decreased except site 12 located at the Sewage Treatment Plant on the Lamprey River and 16, on the Squamscott River in Exeter.



James Russ, David Tolson, and Phil Wright sample at site 21 on the South Mill Pond in Portsmouth.

E. The general characteristics of each Great Bay Watch site
Map of the Great Bay Watch Site Locations

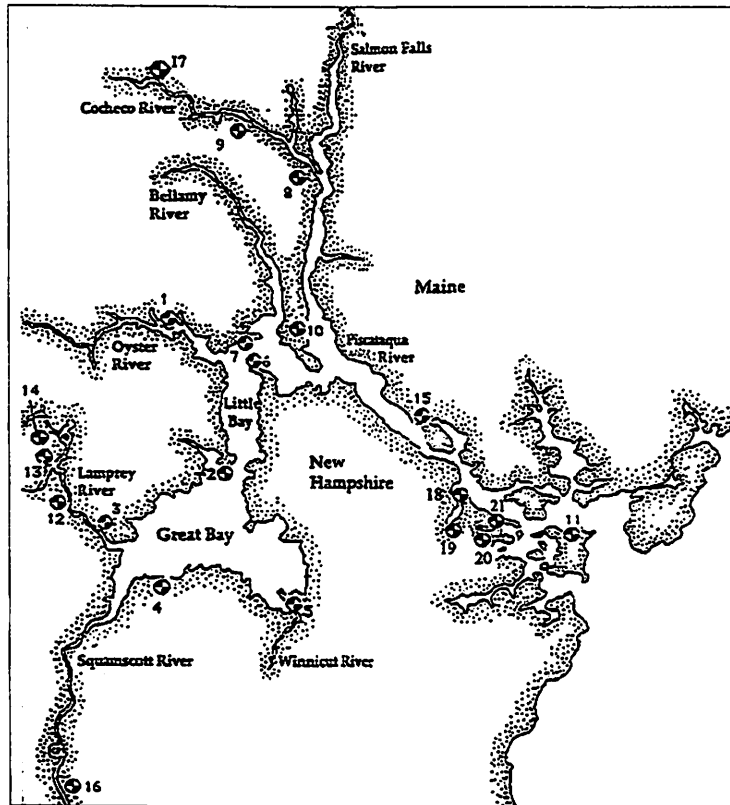


Table of Great Bay Watch Sites, locations, towns and year started

Site Name	Site #	Location	Town	Year Started	Comments
Peninsula (Smith's)	1	Oyster River	Durham	1990	
JEL	2	Great Bay	Durham	1990	
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Portsmouth Country Club	5	Winnacut River	Greenland/ Stratham	1990	
Fox Point	6	Little Bay	Newington	1990	
Cedar Point	7	Little Bay	Durham	1990	
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Neals'/Williams'	9	CochechoRiver	Dover	1990	
Clark's (Dube's)	10	Piscataqua River	Dover	1991	
Coastal Marine Lab	11	Piscataqua River	New Castle	1991	
STP	12	Lamprey River	Newmarket	1992	
Marina Falls Landing	13	Lamprey River	Newmarket	1992	
Fowler's (Essley's)	14	Lamprey River	Newmarket	1992	New owner, Essleys' 1997
Patten Yacht Yard Inc.	15	Piscataqua River	Eliot, Me	1993	
Exeter Town Docks	16	Squamscott River	Exeter	1994	
Dover Foot-Bridge	17	CochechoRiver	Dover	1996	
Maplewood Ave (NMP)	18	North Mill Pond	Portsmouth	1997	
Bartlett Ave. (NMP)	19	North Mill Pond	Portsmouth	1997	
Junkins Ave. (SMP)	20	South Mill Pond	Portsmouth	1997	
Pleasant Ave. (SMP)	21	South Mill Pond	Portsmouth	1997	

Town Descriptions

The purpose of this section is to generally characterize each site in the sampling network, and to compare the sites as you move from the ocean to the rivers. A brief description is given, as well as descriptive statistics for each parameter, utilizing all of the data in each site's records (Appendix I). The sites are grouped by their municipal location in order to provide a picture of the quality of the estuarine water in each town. Graphs of the overall means are included at the end of this section. Please refer to the map on the previous page 30 to help visualize the placement water flow through the sites.

Qualitative analyses of differences among the various estuarine environments in the sampling site network are made. Graphs of the means for all parameters follow the written descriptions of all the sites. This gives a representation of all the data collected at each site by town, which shows the variability of the data over distance as well as to indicate potential observations of unusually high or low values that may suggest a problem or a change in natural system function.

Site Descriptions:

New Castle:

One site is monitored by GBW volunteers in the town of New Castle. Staff members of the New Hampshire Coastal Program also sample once a month and the data is compiled as a Quality Assurance/Quality Control (QA/QC) split with GBW data.

Site 11: Coastal Marine Lab (Piscataqua River)

Located at the U.S. Coast Guard station and the UNH Coastal Marine Lab in New Castle, Site 11 is not far from where the Piscataqua River meets the Atlantic Ocean. Because of this close proximity to the ocean the water temperatures at site 11 are the coldest, (low tide average = 12.5°C, high tide average = 13.5°C), and the salinity is the highest, (low tide average = 29.5 ppt, high tide average = 28.9 ppt) of all our sites. The pH at this site was also one of the highest, with out much variation averaging at 7.7 at low tide and 7.8 at high tide. The dissolved oxygen was very good at this site, and thus the dissolved oxygen percent saturation was well above the Class B standard of 75% with none of the readings falling below this level. The transparency at low tide was 85% of the depth, and at high tide was 67% of the depth. This is extremely clear when the average low and high tide depths were 360.8 cm and 535.0 cm respectively.

Portsmouth:

The GBW monitors four sites in the city of Portsmouth. Two Sites are located on South Mill Pond, two sites are located on North Mill Pond. Both ponds are tidal, however both have tide gates that need to be lifted with each tide.

Site 18: Maplewood Ave: (NMP)

North Mill Pond is located on the west side of the Piscataqua River just up river from South Mill Pond. The city of Portsmouth salt piles are located adjacent to the pond. Site 18 samples at a floating dock on the eastern side of Maplewood Ave. bridge near Cindy Ann cleaners. Because of this sites proximity to the ocean, and the influence of the ocean water in the tide, this site had one of the coldest temperature readings, (low tide average = 13.3°C, high tide average = 14.4°C), and one of the highest salinity (low tide average = 26.9 ppt, high tide average = 28.0 ppt) The pH at 18 as well as at 19 was very stable, 18 having a low tide average of 7.7, and a high tide average of 7.9. The dissolved oxygen and dissolved oxygen percent saturation were very good at both low and high tide averaging at 85.3% for low tide and 100.2% at high tide. All readings at both tides were above the class B standard of 75%. The average transparency was 216 cm at high tide, 91% of the average depth.

Site 19: Bartlett Ave: (NMP)

Site 19 is located at the far end of North Mill Pond near Ricci's Supply Company Inc. The temperatures at site 19 were slightly higher than at site 18 on the other side of the pond, (low tide average = 14.0°C, high tide average = 16.4°C) however the average salinity was markedly lower, (low tide average = 2.1 ppt, high tide average = 11.3 ppt) The pH at 19 as well as at 18 was very stable, 19 having a low tide average of 7.6, and a high tide average of 7.7. As was at site 18, site 19 did very well in its dissolved oxygen and dissolved oxygen percent saturation values. There was only one low tide value below the Class B standard of 75%. The average transparency was 78.7 cm at high tide, 98% of the average depth.



Steve and Tricia Miller sample at Site 18 on North Mill Pond in Portsmouth.

Site 20: Junkins Ave: (SMP)

South Mill Pond is also located on the West side of the Piscataqua River, just as it meets the ocean. This pond is also tidal, but has manual flood gates. The flood gates were rarely opened with the tides, there is a small spill way, so transparency and depth readings do not change. Because of the flood gates, one must take the high and low tide difference very liberally and see them both equally for an overall picture of the quality of the pond. Site 20 is located next to the South playground at Portsmouth Junior High School. The temperature at site 20 was about midrange of all the sites in the GBW network. Low tide averaged at 16.0°C, and high tide averaged at 18.7°C. These values were slightly warmer than at site 21. The salinity at sites 20 and 21 were very close (Site 20 low tide = 24.9ppt, high tide = 27.4ppt) The average pH at low and high tide was 7.4 and 7.7 respectively. The dissolved oxygen percent saturation was quite different between the two sites on South Mill Pond. The high tide values were well above the Class B standard of 75%, site 20 averaging at 92.5%, however, site 20 routinely had low tide levels below the class B standard. The Low tide average was only 67.3%.

Site 21: Pleasant Ave: (SMP)

Site 21 samples off of the bridge over the out flow of the pond on Pleasant Ave, near Route 1-B. The temperature at site 21 was about midrange of all the sites in the GBW network. Low tide averaged at 15.4°C, and high tide averaged at 15.8°C. These values were slightly cooler than at site 20. The salinity at sites 20 and 21 were very close (Site 21 low tide = 27.4ppt, high tide = 29.0 ppt). pH was slightly higher at site 21 than at site 20 with a low tide average of 7.7, and a high tide average of 7.8. The dissolved oxygen percent saturation was quite different between the two sites on South Mill Pond. The high tide values were well above the Class B standard of 75%, site 21 averaging at 97.8%; however, the low tide value was quite a bit lower averaging at 88.9%.

Eliot, Maine:

The GBW monitors from Marshwood High School monitor one site in the town of Eliot.

Site 15: Patten Yacht Yard Inc. (Piscataqua River)

Site 15 is located in the lower Piscataqua River at the dock of the Patten Yacht Yard, Inc., in South Eliot, two miles up river of site 11, CML. Site 15 is another site that is quite close to the ocean. Therefore the temperature readings are quite low (low tide average = 13.5°C, high tide average = 12.6°C) and the salinity readings are quite high, (low tide average = 25.5ppt, high tide average = 30.0ppt). The pH at this site was very stable and averaged at 7.7 at low tide and 7.8 at high tide, similar to the averages of site 11, at the Coast Guard Station. The dissolved oxygen percent saturation was well over the class B standard of 75% at both high tide and low tide, with averages of 94.9%, and 95.2% respectively. The high tide transparency at this site, off the dock was 427.3 cm, 64% of the depth.

Dover:

The GBW monitors three sites in the city over Dover. Two are located on the CochechoRiver while the other is on the Piscataqua River.

Site 9: Neal (CochechoRiver)

Site 9 is located at the Neal/Williams property, near the mouth of Fresh Creek on the CochechoRiver and upstream of the Dover Wastewater Treatment Facility, and site 10, and below site 17 at the Dover Foot-Bridge. The water temperature at this site averaged right in between the averages of sites 10 and 17, (low tide average = 16.1°C, high tide average = 17.6°C). This was expected, as the water will be warmer is one moves more inland, and away from the ocean. The salinity also averaged in between the averages of sites 10 and 17, (low tide average = 7.11ppt, high tide average = 11.7ppt) however the difference was much greater. The pH at site 9 was quite a bit lower than those of sites 10 and 17 averaging at 7.1, and 7.3 for low and high tide. The average dissolved oxygen percent saturation was above the class B standard of 75 % for both low and high tide, (low tide = 85.4% and high tide = 95.8%), and only one low tide sample was measured below 75% saturation. The transparency at this site was 27.3 cm on average at high tide, only 8% of the depth.

Site 10: Clark's (Piscataqua River)

Site 10 is located at the Clark's property (moved from Dube's next door) off Dover Point Rd. This site is up river from site 15, and downstream of Site 9, below the outfall to the Dover Wastewater Treatment Facility and of Sturgeon Creek. The creek empties into the Piscataqua River from the Maine side. The diluting effects of the Piscataqua River were apparent when comparing this site's data to Site 9. The water temperature as expected is warmer than site 15, as it is farther inland. (low tide average = 15.5°C, high tide average = 16.3°C). Also as expected the salinity is lower than 15, yet higher than 9. (low tide average = 17.8ppt, high tide average = 24.0ppt). Site 10 pH had a low tide average of 7.6, and a high tide average of 7.7, higher than both sites 9 and 17. All of the sample measurements of dissolved oxygen percent saturation were above the class B standard of 75%. The low tide average was 91.2%, and the high tide average was 100.2%. The transparency at site 10 at high tide averaged at 87.1 cm, 29% of the depth.

Site 17: Dover Foot-Bridge (CochechoRiver)

Site 17 was started in August of 1996, and is sampled off of the new Dover footbridge, near Central Ave. in downtown Dover. This sampling season is the first complete sampling season, therefore only a few comparisons can be made. This site is located upstream of sites 9 and 10. Site 17 had the highest temperature and the lowest salinity of all the Dover sites as prescribed by the landscape of rivers. The temperature had a low tide average of 17.4°C, and a high tide average of 18.5°C. The salinity averaged at 1.9 ppt at low tide, and 2.2 at high tide. The pH was fairly moderate with a low tide average of 7.6, and a high tide average of 7.4. The dissolved oxygen percent saturation was very good at this site. There was only one value below the class B standard of 75% saturation, which occurred at low tide. The averages for low and high tide were 99.5%, and 100.8% respectively.

Newington:

The GBW covers one site in the town of Newington.

Site 6: Fox Point (Little Bay)

Site 6 is located at Fox Point, where Little Bay's north-south orientation takes a sharp bend to the east. The mouth of the Oyster River is located just to the west, while the mouth of the Bellamy River is just to the north. Site 7, Cedar Point is directly across Little Bay from site 6. So the two sites should have very similar parameter values. The temperature at this site averaged at 15.1°C at low tide and 13.6°C at high tide. A bit lower than the average temperatures right across the bay at site 7. The salinity however was quite similar. (low tide average = 25.4ppt, high tide average = 27.4 ppt) The pH readings were also different than those taken across the bay averaging at 7.5 at both low and high tide. These reading were one of the highest of all the sites in the GBW network this year. The dissolved oxygen percent saturation was well above the class B standard of 75% averaging at 99.0% at low tide and 99.6% at high tide. The values were similar at site 7, across the bay. The high tide average transparency was 173.6 cm, with an average depth of 381.8 cm.

Durham:

The GBW monitors three sites in the town of Durham; one on the Oyster River, one on Great Bay and one on Little Bay.

Site 7: Cedar Point (Little Bay)

Site 7 is located at the Roshalt's dock on Cedar Point, across Little Bay from Fox Point (Site 6). This site sits on the north shore of Little Bay between the mouths of the Oyster and Bellamy river's. The temperature at this site averaged at 16.2°C at low tide and 15.7°C at high tide. A bit higher than the average temperatures right across the bay at site 6. The salinity however was quite similar. (low tide average = 26.1 ppt, high tide average = 26.9 ppt) As mentioned in the above paragraph, the pH was different at this site than at the one directly across the bay. The average pH at both low and high tide was 7.9. The dissolved oxygen percent saturation was well above the class B standard of 75% averaging at 97.3% at low tide and 96.3% at high tide. The values were similar at site 6, across the bay. The high tide average transparency was 77.1 cm, with an average depth of 180.5 cm.

Site 1: Peninsula (Oyster River)

Site 1 is located at the Smith's dock, just upstream of Bunker Creek on the north bank of the Oyster River. This site monitors the waters closer to the river's tidal mouth than to the tidal dam in downtown Durham. This site is located downstream of the Durham Wastewater Treatment Facility. This site is also in very close proximity to sites 6 and 7. The water temperature at this site averaged at 17.0 °C at both low and high tide. Slightly higher than sites 6 and 7. The salinity had a low tide average of 21.5 ppt, and a high tide average 24.9 ppt. The pH averaged at 7.6 at low tide and 7.9 at high tide. The high tide dissolved oxygen percent saturation was very similar to sites 6 and 7, averaging at 99.8%, however the low tide dissolved oxygen percent saturation was quite a bit lower averaging at 83.9%. There were two low tide values below the class B standard of 75%. The average transparency was 146.8 cm at high tide, 45% of the depth.

Site 2: Jackson Estuarine Laboratory (Great/Little Bay)

Site 2 is located at the Jackson Estuarine Laboratory on Adams Point, approximately where Little Bay and Great Bay meet, at the eastern tip of the Great Bay. Comparing site 2 with sites 4&5 located around the bay in Greenland, one can get an overall picture of the quality of Great Bay. The average low tide temperature was 15.6°C and the average high tide temperature was 15.3°C. Slightly cooler than sites 4 and 5, as it is closer to the ocean water inflow. The salinity had a low tide average of 24.8 ppt, and a high tide average of 26.5 ppt. The pH of sites 2, 4 and 5 were very similar at both tides. Site 2 had a low tide pH average of 7.7, and a high tide average of 7.7. The high tide dissolved oxygen percent saturation was also very similar among the three sites, averaging at site 2 at 104.3%. The low tide dissolved oxygen percent saturation was also very good at this site, averaging at 101.0%

Greenland:

The GBW watch collects water quality data at two sites in the town of Greenland.

Site 4: Depot Road, Sandy Point, GBNERR, (Great Bay, Greenland)

Site 4 is located on the southern shore of Great Bay at the Great Bay National Estuarine Research Reserve's Sandy Point Discovery Center. Because of the extensive mud flats exposed at low tide at this location, samples can only be collected at high tide. The average high tide temperature was 17.9°C. Slightly warmer than sites 2 and 5, as it is farthest from the ocean water inflow. The salinity had a high tide average of 23.7 ppt. The pH of sites 2, 4 and 5 were very similar at both tides. Site 4 had a high tide average of 7.7. The high tide dissolved oxygen percent saturation was also very similar between the three sites, averaging at site 4 at 99.7%.

Site 5: Portsmouth Country Club (Winnicut River)

Site 5 is located at the mouth of the Winnicut River. This site is located on the east bank of the river at the Portsmouth Country Club. The County Clubs #4 fairway leads down to where GBW volunteers sample. The average low tide temperature was 16.1°C and the average high tide temperature was 18.3°C. Temperatures that were midway between those at sites 4 and 2, as it is geographical between the two. . The salinity had a low tide average of only 10.2 ppt , yet the a high tide average was 21.6 ppt. The pH of sites 2, 4 and 5 were very similar at both tides. Site 5 had a low tide pH average of 7.5, and a high tide average of 7.8. The high tide dissolved oxygen percent saturation was also similar between the three sites, averaging at site 5 at 103.4%. However, the low tide dissolved oxygen percent saturation was quite a bit lower at this site averaging at 80.3. There were six values below the Class B standard of 75%.

Newmarket:

The GBW monitors four sites in the town of Newmarket. All sites are located on the Lamprey River.

Site 3: Towne's (Lamprey River) formerly Weinerts' dock

Of the four GBW sites on the Lamprey River, Site 3, which was located at the Weinert's dock, and is now moved one lot downstream to Townes, is closest to the river's tidal mouth. The water temperature at this site was the highest on the Lamprey River averaging at low tide at 19.1°C, and at high tide at 18.3°C. The salinity at this site had a low tide average of 15.1 ppt and a high tide average of 14.2 ppt. The Lamprey river sites had the lowest overall pH of all the riverine sampling sites. Site 3 had a low tide average of 7.4, and a high tide average of 7.5. The dissolved oxygen percent saturation at site 3 was supersaturated at high tide with an average of 104.3%. The low tide average was lower at 88.4%, however there were no values below the class B standard of 75%. The average high tide transparency for site 3 was 97.8 cm, with an average depth of 298.6 cm.

Site 12: Newmarket Water Treatment Plant (Lamprey River)

Site 12 is located on the shoreline just below the Newmarket Wastewater Treatment Facility and downtown Newmarket on the Lamprey River. Substantial mud flats require that low tide samples be taken close to the treatment plant's outlet, thus low tide values are a good indication of the performance of that facility. The average water temperature at this site was the highest at high tide of all the Lamprey river sites, even though the site is not the farthest up river. The high tide average was 19.2°C, and the low tide averaged at 17.7°C. The salinity as prescribed was quite a bit lower than site three, as this site is farther up river. (Low tide average = 0.5ppt, high tide average = 6.2 ppt). The pH at this site was quite low, overall. The low tide average of 7.0 was the lowest of all the sites in the GBW network. The high tide average was also one of the lowest at 7.2. The dissolved oxygen percent saturation at site 12 was very variable between low tide and high tide. The high tide values were well above the class B standard of 75%, averaging at 96.9%. However, the low tide average was 68.6, and every reading, except two were measured below 75% saturation. The high tide average transparency was 89.7cm, 72% of the depth.

Site 13: Marina Falls Landing at Newmarket (Lamprey River)

Site 13 is located at small boat docking facility upstream of the Town Docks in downtown Newmarket also on the Lamprey River. This site is upstream from Site 12 and just downstream of the dam marking head-of-tide. The average temperature at site 13 was relatively high, as is to be expected at an up river site. (low tide average = 17.2 °C, high tide average = 18.5°C). The salinity at this site was also predictably low, because of its geographic location, averaging at 4.6 ppt at low tide, and at 5.5ppt at high tide. The pH was higher than at site 12, just down stream, but lower than at site 14 just up stream, averaging at 7.3 at low tide, and 7.4. The dissolved oxygen percent saturation at site 13 was the highest on average of all the sites on the Lamprey River. The low tide averaged at 93.7%, and the high tide averaged at 108.1%. There were no values below the class B standard of 75% saturation.

Site 14: Fowler's (Lamprey River)

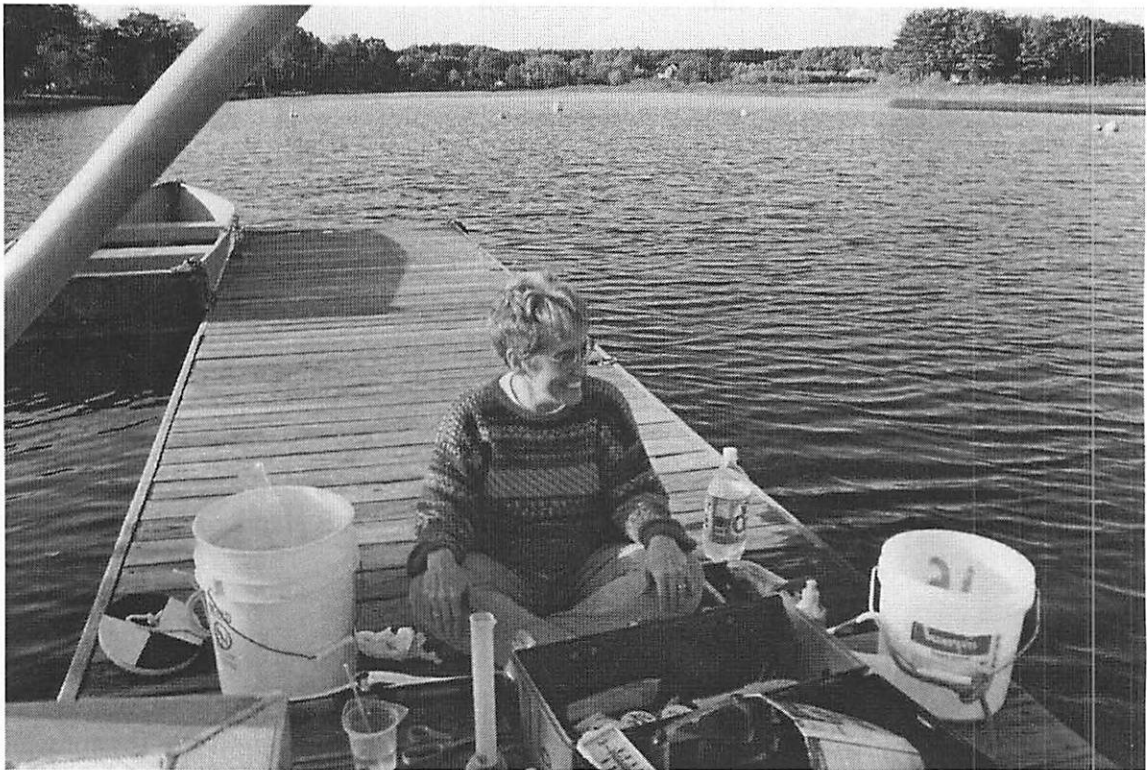
Site 14, the only fresh water site in the Great Bay Watch, is just upstream of the tidal dam (and upstream of downtown Newmarket) at the Fowler's dock, on the Lamprey River; therefore it had little to no salinity readings. The water temperature at site 14 averaged at A.M. reading at 17.5°C, and at P.M. reading at 18.3°C. As already mentioned, there were little to no salinity readings, (A.M. reading average = 0.5 ppt, and P.M. reading average = 0.8 ppt). The pH at this site averaged at A.M. reading at 7.2, and at P.M. reading at 7.1. Site 14 had one of the lowest dissolved oxygen percent saturation averages of all the sites on the Lamprey river. The A.M. reading average was 86.4% Only site 12 had a lower value at A.M. reading . The P.M. reading average was 89.7%. Only two readings, one A.M. reading , and one P.M. reading , fell below the class B standard of 75%, and they were both measured on the same day.

Exeter:

GBW monitors from the Roskel family, and students and teachers from Exeter AREA High School and Phillips Exeter Academy cover the one site in the town of Exeter.

Site 16: Exeter Town Docks (Squamscott River, Exeter, N.H.)

This site, on the Squamscott River, is located downstream of the tidal dam in downtown Exeter and just upstream from the crew docks at Phillips Exeter Academy and was added to the program in 1994. The temperatures at site 16 were one of the highest, as it is one of the furthest up stream site on the GBW network. (Low tide average = 17.2°C, high tide average = 19.3°C) As prescribed by this location, the salinity was also one of the lowest. (Low tide average = 4.4ppt, high tide average = 7.5ppt) The low tide average pH at this site was 7.6, and the high tide average was 7.9. The dissolved oxygen percent saturation at high tide was one of the highest of all the sites in the GBW network this year, averaging at 148.6%. The low tide value showed a marked difference averaging at 94.8%.



Sue Olson samples at Site 16 at the Exeter town docks.

GREAT BAY EXTUARINE SYSTEM AND SITE LOCATIONS

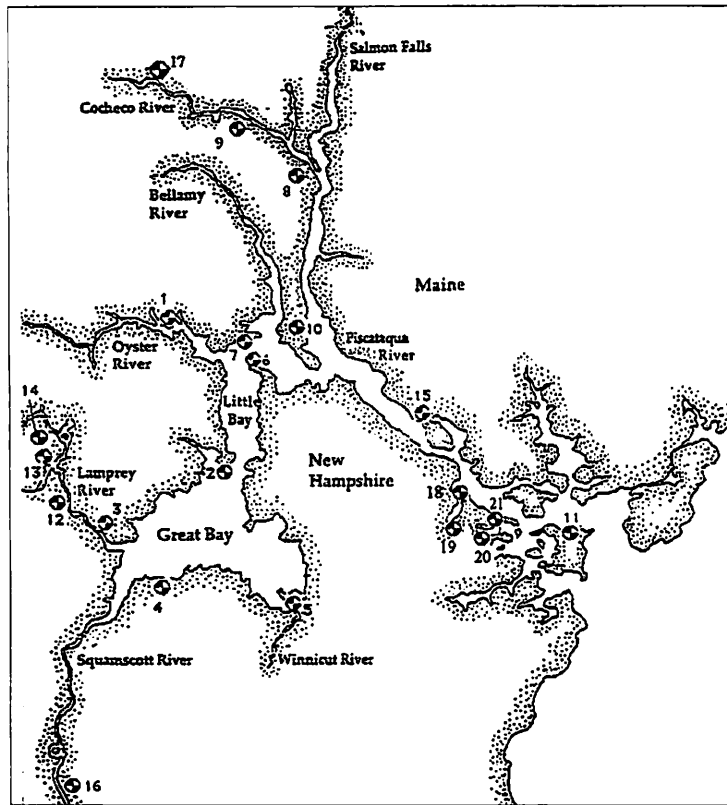


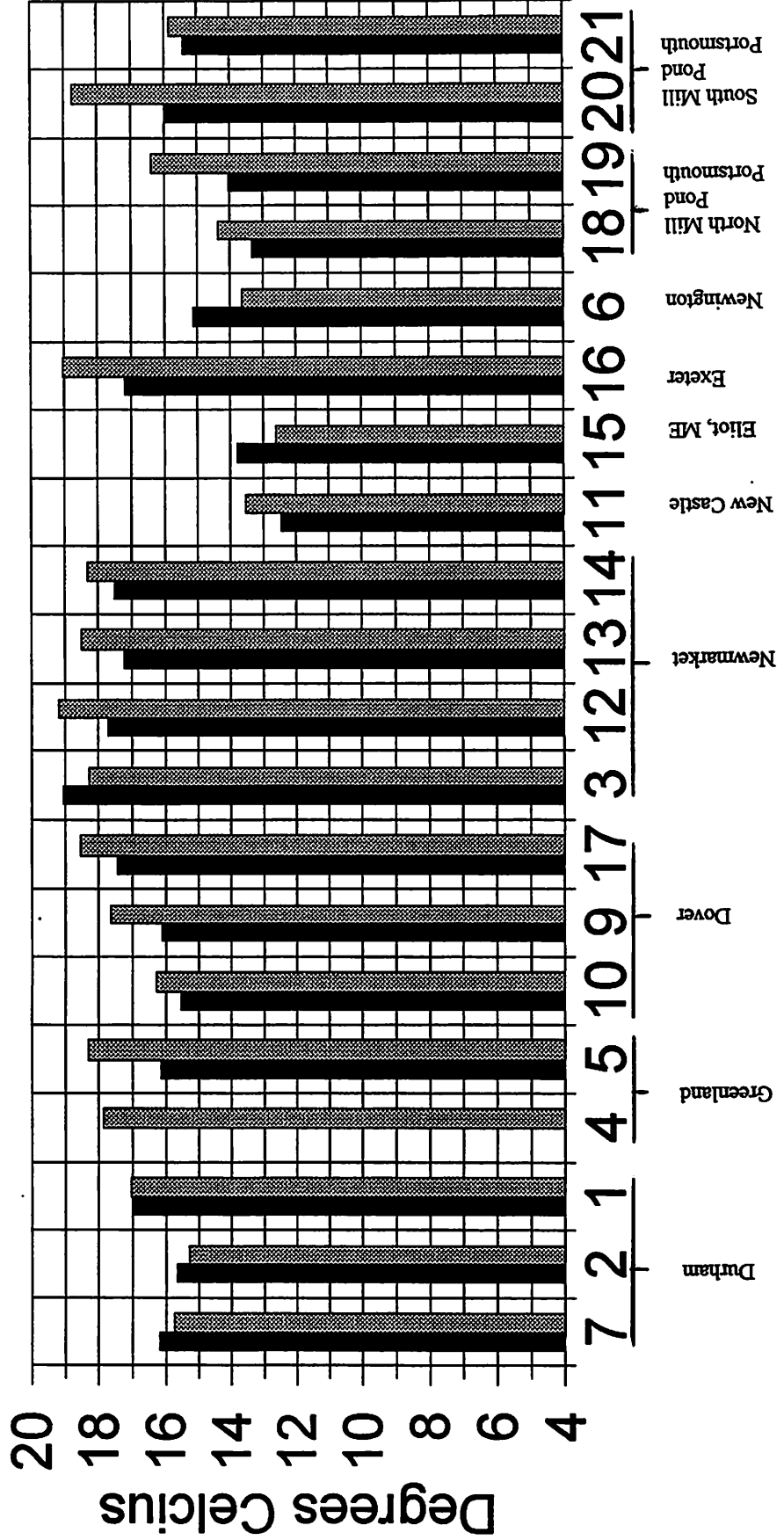
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Mean Water Temperature

1997

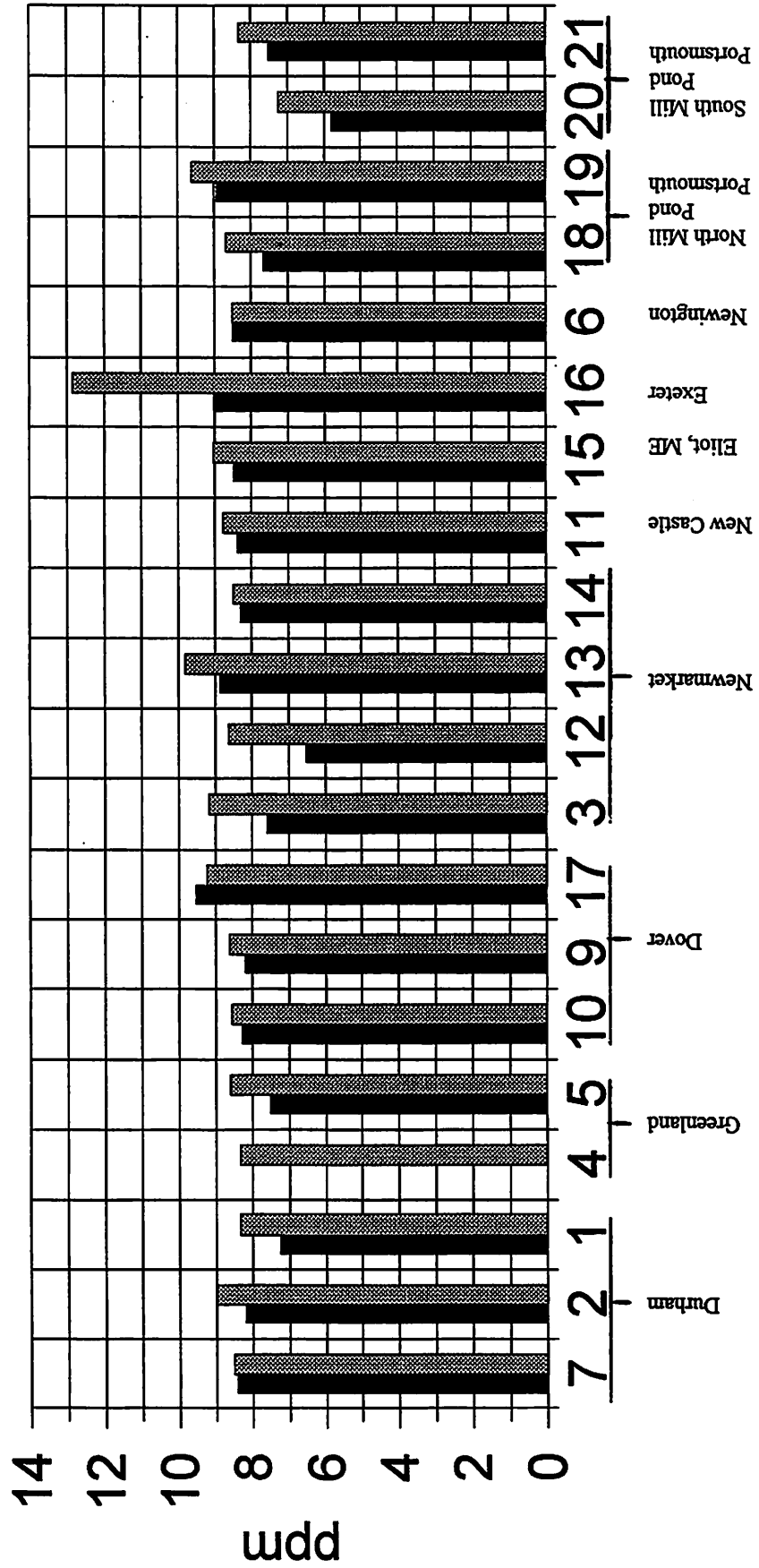
Low Tide High Tide



Mean Dissolved Oxygen

1997

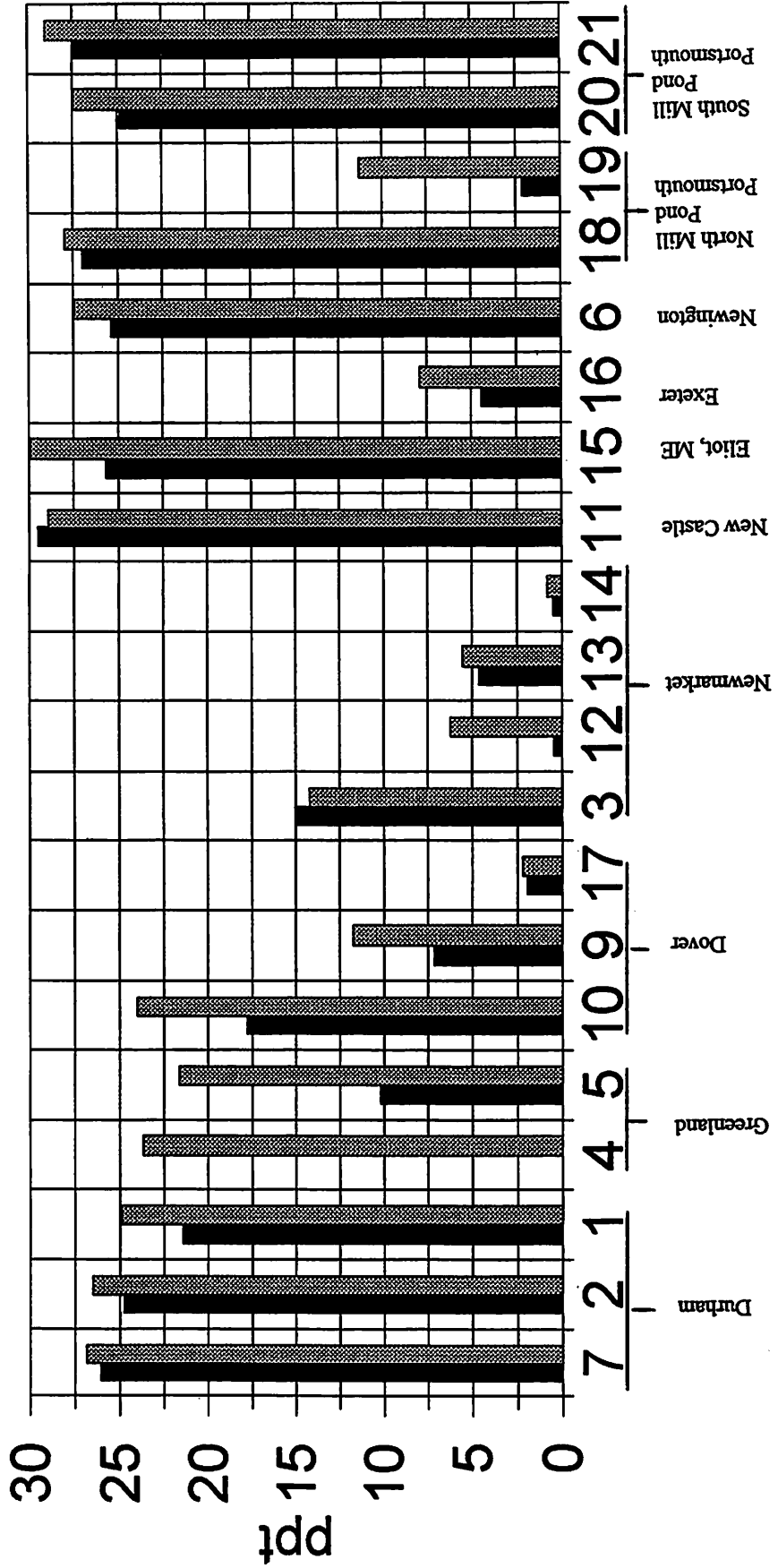
Low Tide High Tide



Mean Salinity

1997

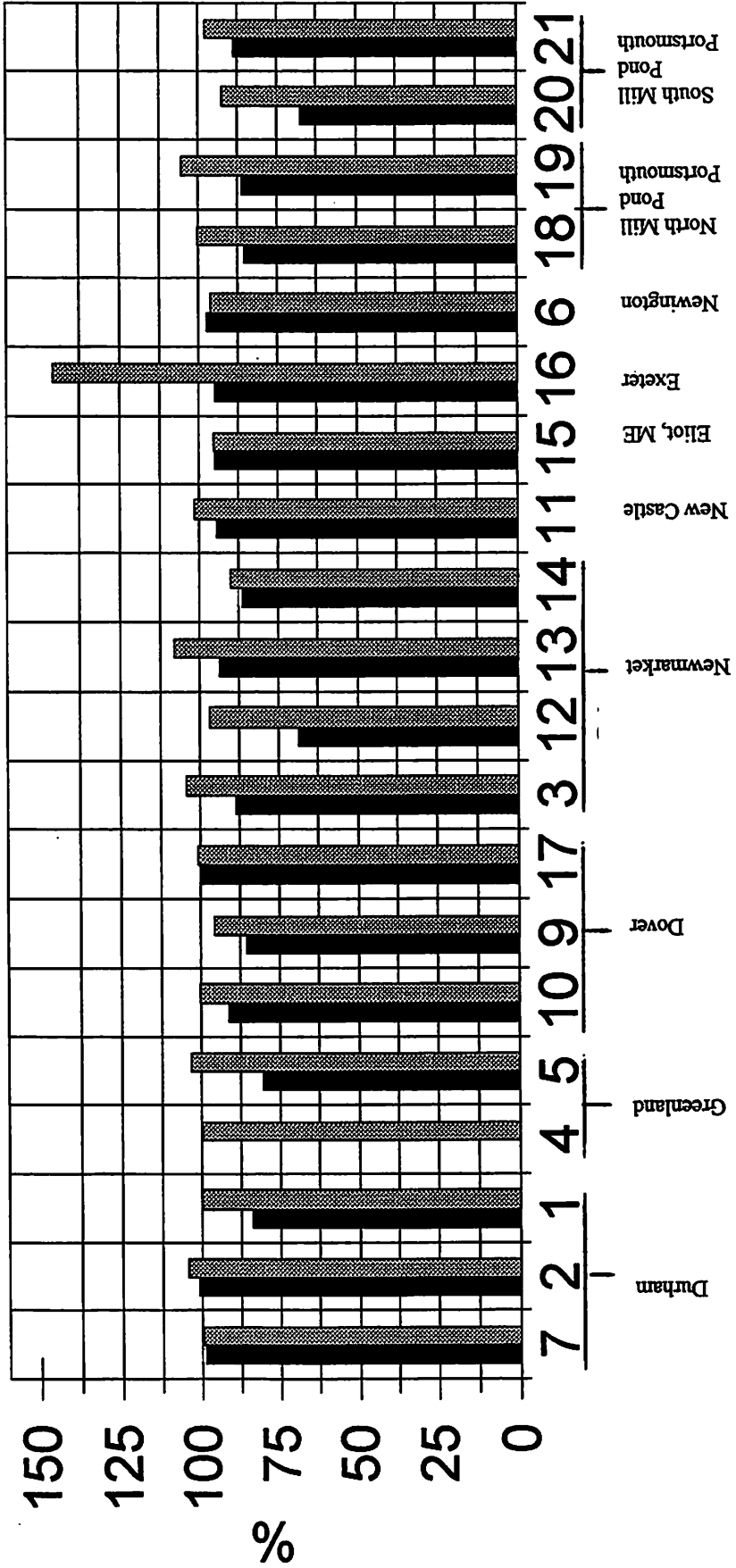
Low Tide High Tide



Mean DO Percent Saturation

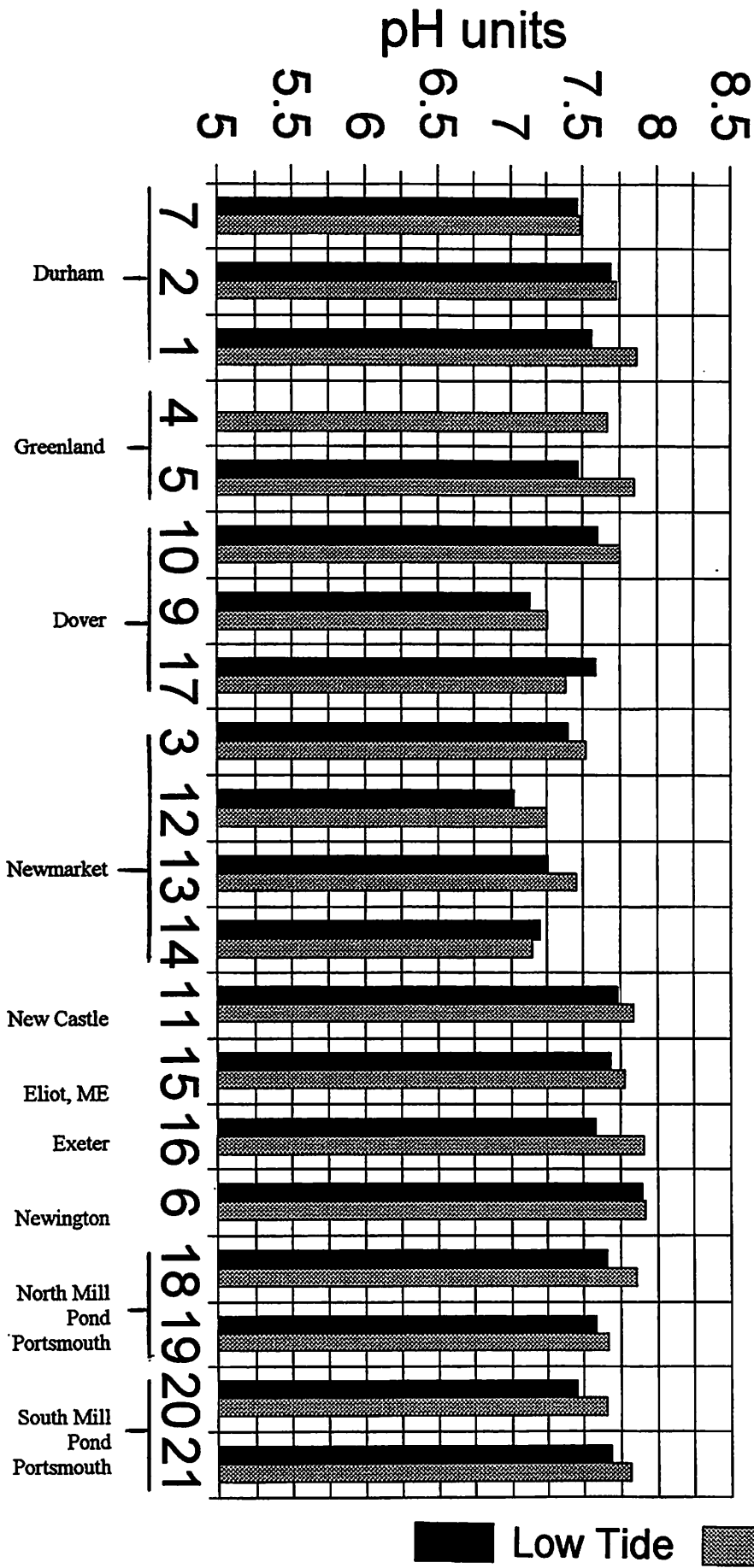
1997

Low Tide High Tide



Mean pH

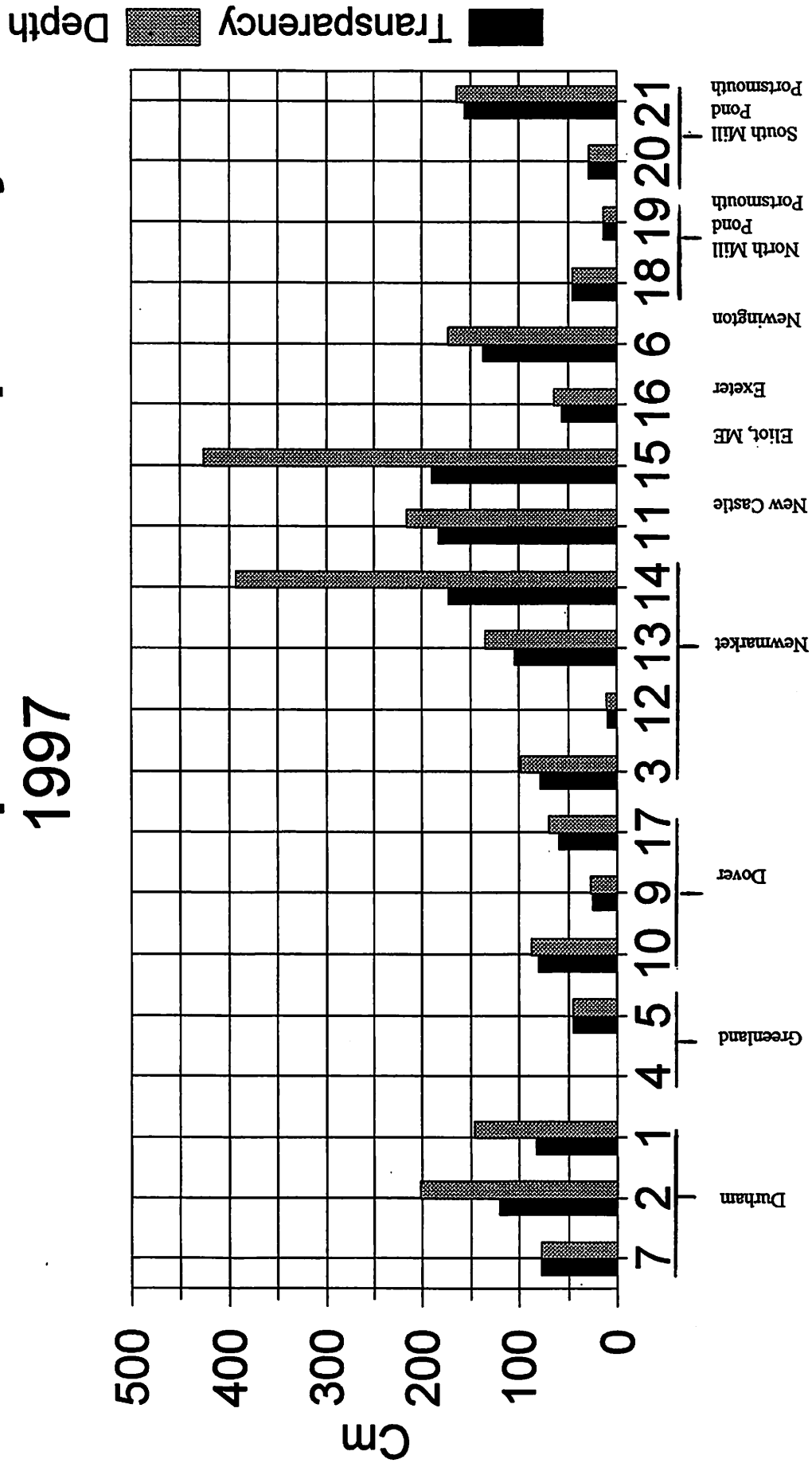
1997



Low Tide High Tide

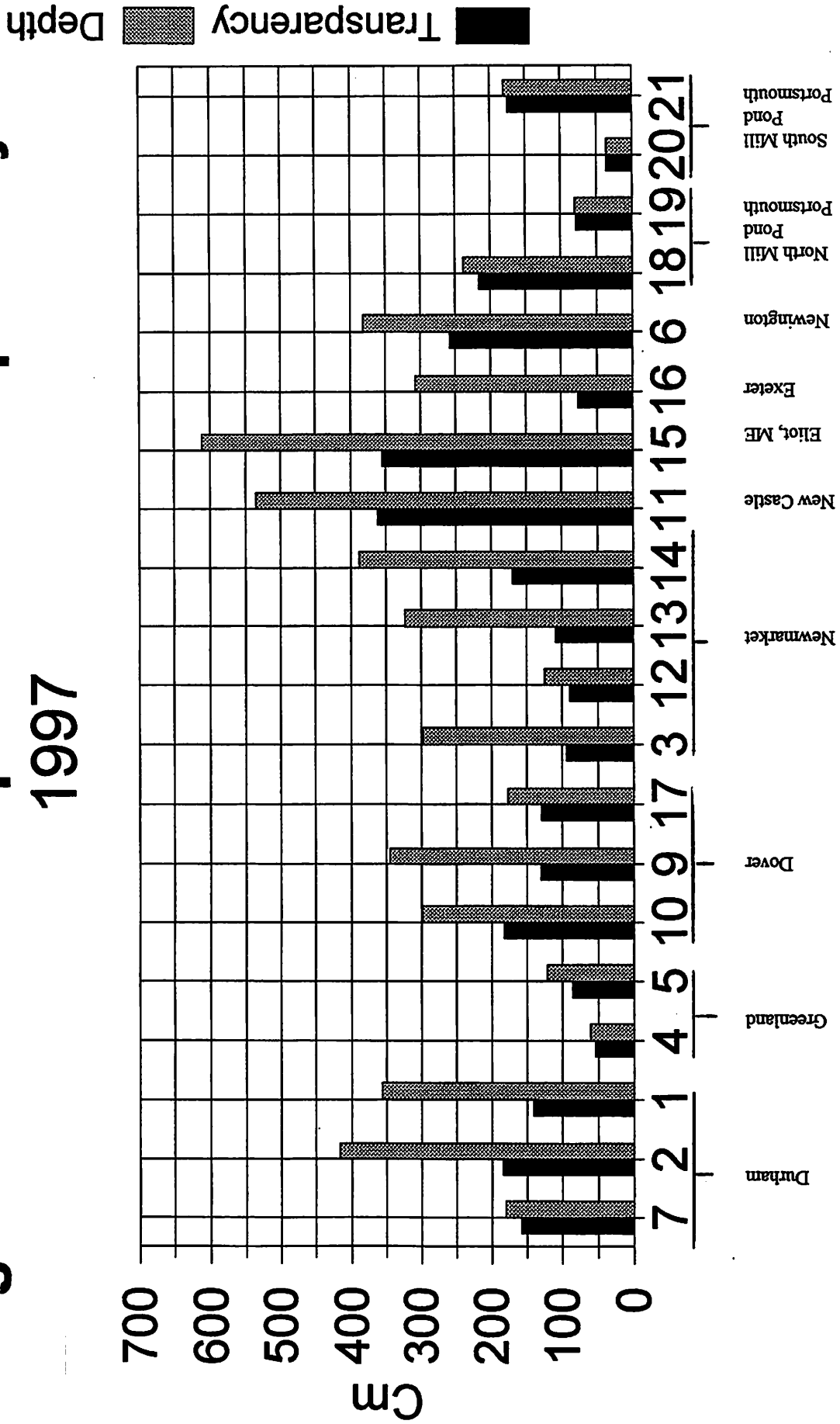
Low Tide Mean Depth and Transparency

1997



High Tide Mean Depth and Transparency

1997



G: Quality Assurance/Quality Control Analyses

The accuracy and precision of the data collected by volunteers

The GBW's work on Quality Assurance and Quality Control (QA/QC) has been focused on two areas. First, we have been testing volunteer monitors at QA/QC sessions since 1992. Second, we have utilized QA/QC teams to validate the volunteers' data through the use of split field sampling.

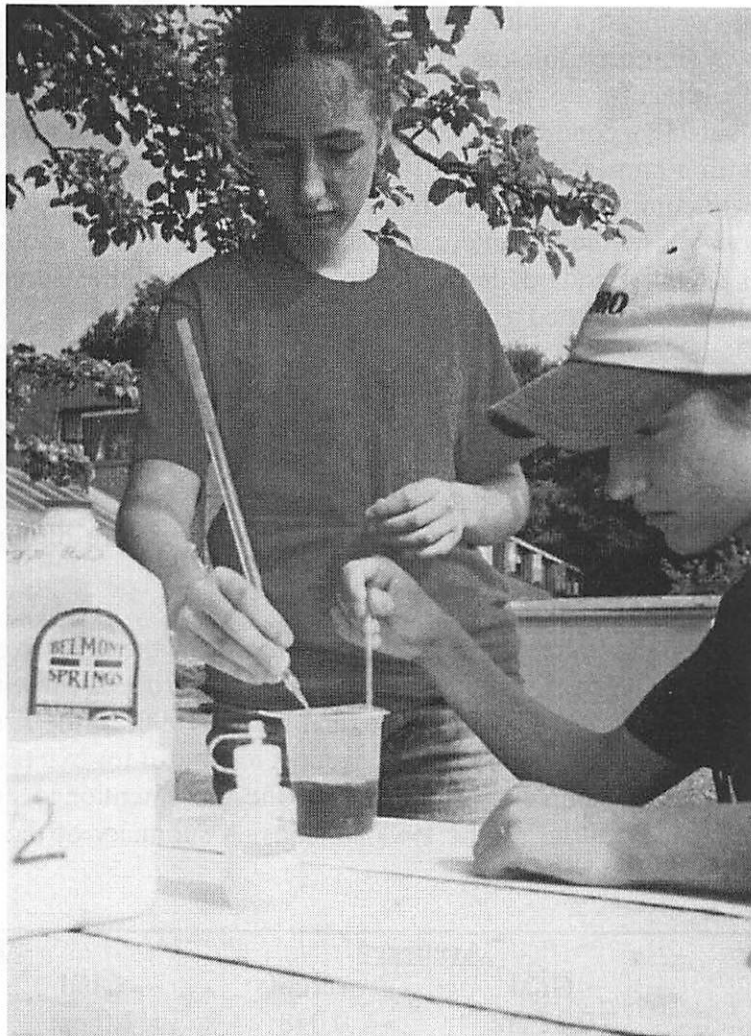
There are two factors which are of primary interest when evaluating the quality of data collected by volunteer monitors. The first is **accuracy**, or how close on average, the volunteers' measurements are to the true value of the characteristic being measured. Accuracy is evaluated by conducting experiments in which the monitors take measurements from a sample with a known value. A difference between the average monitor estimate and the actual value is computed and reported as the level of accuracy. The second factor is **precision**, or how close the volunteer measurements are to one another. The variation, usually reported as the standard deviation, in the volunteers' measurements for a single sample is calculated and reported as the level of precision.

Two years ago we made a few key changes to our QA/QC procedures in order to control for external factors which may influence the water samples being tested. First we designed a covered container to hold the water for dissolved oxygen sampling to try to control fluctuating dissolved oxygen levels. We also used our incubator for water temperature testing in order to keep a constant water temperature throughout the six hour session.

Both accuracy and precision have been evaluated for the GBW volunteers. We have held a total of ten QA/QC sessions to date; two were held in 1992, three were held in 1993, one was held in 1994, two were held in 1995, and two in 1996. In the first 1995 session we found that there was a need to modify our procedures to control for external influences which were affecting the water samples. This prompted the aforementioned procedural changes, which were also carried out during the 1997 sessions. A summary of the results of the two 1997 sessions can be found below.

	<u>Accuracy</u>		<u>Precision</u>	
	Goal	Actual	Goal	Actual
Salinity Test 1	0.82 ppt	0.048	1.0 ppt	0.75
Salinity Test 2	0.82 ppt	0.038	1.0 ppt	0.75
Salinity Test 3	0.82 ppt	0.938	1.0 ppt	0.51
pH	0.1 pH units	0.084	0.1 pH units	0.13
Dissolved Oxygen	0.3 mg/L	0.285	0.9 mg/L	1.29
Water Temperature	0.5°C	0.132	1°C	1.88

The results from the previous page are very encouraging, Calculations for accuracy show that the values the volunteers obtained in their measurements were very close to the known values. In all cases except for the third salinity test, the volunteers were below the preset GBW goal. The precision results were within the GBW QA/QC requirements. The calculations show very small variation in the results that the volunteers obtained. These tests indicate that the volunteers are capable of accurately measuring these water quality characteristics. Nevertheless the issue of the accuracy and precision of the volunteers will continue to be addressed, and tested by the GBW QA/QC sessions.



Elise and Malorie Blake complete their dissolved oxygen test at Site 2 at Jackson Estuarine Laboratory in Durham.

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Appendix I

Site Data

Site 1 - Peninsula

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECA	FECA	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H	
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/1	CFU/1	cm	cm			0c	0c	
90	1	04/08/90			4.0	6.5	11.3	12.9	9.2	15.8	91.63	116.04	6.9	7.6	*	*	*	*	113.0	*	*	-2.00	9.50
90	1	04/25/90			9.5	10.0	9.2	8.5	13.2	17.8	87.43	84.06	6.8	8.2	*	*	25.0	120.0	*	*	7.00	11.00	
90	1	05/09/90			11.0	18.0	8.6	8.4	11.5	17.9	83.73	98.45	7.2	7.5	*	*	50.0	110.0	*	*	9.50	26.00	
90	1	05/24/90			11.0	12.5	7.7	5.4	12.2	17.6	75.28	56.37	7.3	7.6	*	*	85.0	135.0	*	*	6.00	11.00	
90	1	06/08/90			17.5	19.5	5.3	8.2	17.4	22.0	61.32	101.35	7.4	7.7	*	*	70.0	135.0	*	*	16.00	21.00	
90	1	06/22/90			18.5	19.5	5.7	8.0	18.8	24.4	67.81	100.31	7.2	7.7	*	*	75.0	130.0	*	*	16.00	26.00	
90	1	07/06/90			21.0	22.0	5.3	7.4	24.0	26.5	68.19	88.43	7.3	7.8	*	*	60.0	115.0	*	*	12.00	23.00	
90	1	07/21/90			23.0	24.5	5.7	7.3	28.2	30.0	77.98	103.65	7.5	7.8	*	*	80.0	120.0	*	*	21.00	29.00	
90	1	08/06/90			24.0	23.0	5.9	7.2	27.2	30.2	81.67	99.70	7.3	7.7	*	*	105.0	145.0	*	*	21.00	21.00	
90	1	08/20/90			20.0	24.0	5.8	7.3	22.0	28.9	72.38	102.08	*	7.8	*	*	60.0	160.0	*	*	12.00	20.00	
90	1	09/03/90			22.0	22.5	5.8	6.8	22.5	26.0	75.35	90.99	7.2	7.7	*	*	110.0	155.0	*	*	16.00	22.50	
90	1	09/18/90			14.5	16.5	6.2	7.3	26.1	29.8	71.17	89.31	7.5	7.0	*	*	103.0	235.0	*	*	5.50	10.00	
90	1	10/04/90			13.0	16.0	7.8	8.3	26.5	31.0	87.02	101.33	*	7.8	*	*	125.0	230.0	*	*	6.00	23.00	
90	1	10/18/90			13.0	16.0	5.8	6.9	17.8	24.0	61.29	80.60	7.4	7.5	*	*	102.0	168.0	*	*	10.00	21.00	
90	1	11/02/90			7.5	*	8.7	*	13.2	*	78.87	*	7.2	*	*	*	*	*	*	*	6.00	*	
91	1	04/14/91	JS MF JF PS MS BF		7.50	10.50	13.40	10.80	15.80	8.40	123.47	102.06	7.60	7.90	*	*	90.00	115.00	*	*	0.00	11.00	
91	1	04/27/91	PS BF JS		12.00	13.00	8.40	9.50	10.30	16.30	83.04	99.47	7.40	7.80	*	*	75.00	95.00	*	*	14.00	24.50	
91	1	05/13/91	JS MF JF		15.50	17.50	7.20	8.30	13.70	18.30	78.27	96.53	*	7.50	*	*	40.00	75.00	*	*	12.00	24.00	
91	1	05/27/91	PS MS		18.00	19.00	5.60	7.80	19.40	23.70	66.21	96.47	6.60	7.00	*	*	80.00	130.00	*	*	14.00	19.00	
91	1	08/11/91	MF BF MS PS		21.00	21.00	5.65	7.30	24.20	27.70	72.78	96.03	7.20	7.70	*	*	60.00	130.00	*	*	21.00	28.00	
91	1	06/25/91	AR MS PS		20.00	22.00	6.10	8.25	25.90	28.90	77.92	111.33	6.80	7.80	*	*	75.00	140.00	*	*	19.00	31.50	
91	1	07/10/91	MF JF MS PS		19.00	20.00	5.60	8.70	28.90	31.80	71.49	115.23	7.20	7.70	*	*	85.00	110.00	*	*	12.00	35.00	
91	1	07/26/91	MS PS		22.50	21.50	5.60	7.60	28.60	31.60	76.11	103.32	7.50	7.60	*	*	85.00	135.00	*	*	22.00	24.00	
91	1	08/08/91	MF JF		21.50	21.00	4.20	8.60	30.40	32.10	56.68	116.23	7.40	7.90	*	*	80.00	135.00	*	*	20.00	26.00	
91	1	08/24/91	MS PS JS		20.00	22.00	4.20	6.20	8.60	13.90	48.57	76.70	6.50	7.20	*	*	65.00	90.00	*	*	17.00	21.50	
91	1	09/07/91	JT MF JF		19.00	21.00	5.20	7.30	21.20	25.00	63.36	94.49	*	*	*	*	120.00	135.00	*	*	18.00	24.00	
91	1	09/22/91	MS PS		14.00	17.00	6.10	7.90	19.60	28.90	66.57	95.84	6.70	7.20	*	*	120.00	250.00	*	*	3.00	15.00	
91	1	10/06/91	MS PS		15.00	15.00	7.60	7.90	10.80	20.60	80.41	88.58	6.80	7.20	*	*	65.00	140.00	*	*	16.00	18.50	
91	1	10/22/91	PS MS		9.50	*	8.80	*	14.80	*	84.45	*	6.80	*	*	*	65.00	*	*	*	1.00	*	
91	1	11/06/91	PS MS	BF	6.50	9.00	9.40	8.30	19.60	23.50	86.64	83.20	7.20	7.40	*	*	150.00	240.00	*	*	3.00	*	
92	1	04/17/92	MS PS	MS	5.00	6.50	10.60	8.70	13.00	21.60	90.29	81.24	6.80	7.70	*	*	100.00	140.00	*	*	1.00	9.00	
92	1	05/02/92	MS PS	MS PS	12.50	12.00	8.75	10.70	13.90	20.30	89.33	112.36	6.70	7.50	*	*	85.00	100.00	*	*	11.00	18.00	
92	1	05/16/92	PS JS	PS	14.50	14.00	7.80	9.40	18.00	23.30	85.18	104.94	7.20	7.70	*	*	100.00	*	*	*	10.00	16.50	
92	1	05/31/92	PS JS	PS MS RB	17.50	16.50	5.80	8.00	22.60	26.30	69.21	95.74	7.20	7.50	*	*	60.00	120.00	*	*	13.50	16.00	
92	1	06/14/92	PS JS	PS MS	20.00	21.00	5.80	7.60	18.00	21.80	70.71	96.53	7.10	*	*	*	60.00	120.00	*	*	21.00	29.00	
92	1	06/28/92	PS	KG	20.00	21.50	6.00	7.70	25.40	28.20	76.41	102.53	7.00	7.80	130	2	65.00	150.00	*	*	15.00	30.00	
92	1	07/13/92	MS PS	JJ JJ	21.00	21.70	6.90	*	28.20	29.80	91.05	*	6.70	7.80	55	3	90.00	155.00	*	*	22.00	34.00	
92	1	07/28/92	MS PS	CN JJ	20.70	20.70	6.60	7.20	25.20	28.60	84.73	94.36	7.10	7.70	172	4	95.00	140.00	*	*	14.00	27.00	
92	1	08/10/92	MS PS	JB KG	19.70	21.70	5.40	7.50	25.90	29.80	68.32	100.84	7.40	7.70	54	9	125.00	150.00	*	*	17.50	26.50	
92	1	08/27/92	MS PS	JB	22.20	22.20	5.70	7.70	23.90	29.10	74.66	104.03	6.80	7.90	340	4	125.00	155.00	*	*	22.00	29.00	
92	1	09/11/92	MS PS	MS	18.70	18.20	5.70	7.60	27.10	29.40	71.28	95.49	7.30	7.30	74	16	130.00	230.00	*	*	19.00	22.00	
92	1	09/25/92	MS PS	MS	12.30	13.30	7.20	8.70	25.90	30.70	78.33	99.74	7.20	7.60	33	0	130.00	200.00	*	*	14.00	17.00	
92	1	10/10/92	PS JS	JB KG	12.30	12.80	8.20	8.70	17.00	28.80	84.38	97.47	7.10	7.50	TNTC	198	30.00	182.00	*	*	16.50	21.00	
92	1	10/24/92	JS CN	JB	8.30	9.05	8.30	8.70	25.90	27.80	82.61	89.72	7.80	7.70	10	10	170.00	300.00	*	*	10.00	15.00	
92	1	11/09/92	MS PS	MS PS	1.30	5.30	10.60	10.80	14.10	25.60	81.93	99.91	7.00	7.20	50	110	*	385.00	*	*	-7.00	2.00	
93	1	04/21/93	BH EC NW DT	EO BC EG L	*	14.00	9.10	11.90	3.50	10.30	64.17	122.90	7.20	8.10	200	100	40.00	80.00	170.00	380.00	15.00	19.00	
93	1	05/06/93	BH EC DT	BC GC CR L	16.50	18.00	6.70	8.50	12.20	19.00	73.71	100.26	7.00	7.50	170	*	52.50	95.00	133.00	370.00	18.00	27.00	
93	1	05/20/93	BH NW	LP BC EO	13.50	14.00	6.40	7.60	14.00	22.30	66.81	84.32	7.20	7.40	170	20	87.50	90.00	168.00	365.00	15.00	15.00	
93	1	08/03/93	EO CR BH	EG BC LP	14.00	15.50	7.20	8.30	22.00	27.70	79.74	98.22	7.50	7.70	20	0	65.00	95.00	125.00	375.00	15.00	23.00	
93	1	08/23/93	EO BH	LP NW	20.00	18.00	6.36	7.90	25.80	28.20	81.19	98.52	7.60	7.90	110	10	73.00	110.00	150.00	365.00	20.50	26.00	
93	1	07/06/93	EO BH	NW LP	23.00	22.50	5.60	8.00	27.50	29.80	76.29	109.52	7.50	7.90	20	0	102.50	155.00	146.00	365.00	25.20	33.00	
93	1	07/22/93	EC PPC LP	EC LP	20.50	18.00	5.50	7.50	28.90	31.20	72.21	95.31	7.30	7.80	20	10	97.50	138.00	135.00	370.00	25.00	24.50	
93	1	08/03/93	DT LP	LP KP	23.00	23.00	5.10	7.80	27.10	31.50	69.32	108.86	7.20	7.70	*	*	123.00	158.00	140.00	345.00	23.00	30.00	
93	1	08/19/93	NW DT BH	EO BH EFG	23.00	23.00	4.70	7.05	28.00	31.20	64.22	98.21	7.30	7.30	120	0	110.00	190.00	153.00	383.00	19.00	22.50	
93	1	08/02/93	LP	DT BH	22.00	22.50	4.50	7.30	31.00	31.10	61.51	100.73	7.40	7.80	50	20	122.00	230.00	155.00	350.00	19.00	25.90	
93	1	09/20/93	LP	NW DT BH	16.00	15.50	6.70	7.77	29.00	32.90	80.76	95.08	7.70	7.80	40	0	118.00	230.00	130.00	385.00	14.00	15.00	
93	1	10/04/93	GC CR LP	EO DT BH	14.00	16.50	6.50	8.46	28.80	30.90	75.14	104.23	7.40	7.70	10	0	105.00	230.00	165.00	363.00	15.00	24.00	

93	1	10/18/93	EF EC LP	DT CR BH	12.00	12.00	6.69	8.00	28.10	31.10	73.83	90.05	7.10	7.90	10	0	100.00	305.00	165.00	405.00	16.50	21.50
93	1	11/09/93	EF BH	EC NW LP	6.50	6.00	10.25	9.52	22.30	28.50	96.15	92.03	7.90	7.90	15	4	130.00	315.00	130.00	340.00	11.00	0.50
94	1	04/28/94	EC GC LP TS	EC GC LP K	8.00	8.40	9.40	10.90	13.10	20.00	86.20	104.38	7.10	8.00	30	3	45.00	112.50	120.00	355.00	5.00	7.50
94	1	05/10/94	NW JL LP	JL BH	12.00	13.50	8.20	9.22	8.50	16.70	80.22	97.81	7.40	7.80	30	12	72.50	137.50	165.00	355.00	14.00	16.50
94	1	05/25/94	LP EO TT BC	EC TS DJ JL	15.00	14.50	7.10	8.80	13.90	7.55	76.48	90.42	7.20	7.60	100	11	140.00	127.50	300.00	375.00	12.00	14.50
94	1	06/09/94	LP CR JL	DT EF BH	18.00	18.00	6.10	7.83	9.20	25.90	86.03	96.27	7.40	7.80	170	6	102.00	130.00	110.00	325.00	18.00	26.00
94	1	06/23/94	BH DH JL EC	DJ LP	20.50	20.00	6.50	7.70	26.10	29.60	83.90	100.60	7.50	7.80	9	180	96.50	150.00	120.00	255.00	19.50	26.50
94	1	07/11/94	BH NW	JT BH	23.50	24.10	6.05	8.00	27.60	30.80	83.21	113.01	7.60	7.90	110	0	102.50	192.50	147.00	350.00	21.80	29.80
94	1	07/25/94	LP KM	NW BH DH	24.50	24.50	4.80	7.03	28.60	30.20	67.59	89.93	7.30	7.80	34	10	98.00	155.00	145.00	350.00	24.00	28.80
94	1	08/09/94	BH JT DJ DH	LP EC KP	22.10	22.50	5.93	7.90	29.10	30.90	80.12	108.88	7.60	8.00	14	2	149.00	122.50	155.00	455.00	20.00	27.00
94	1	08/22/94	LP KM JB	EC KP LP	22.00	19.00	5.20	7.00	24.60	29.20	86.39	89.53	7.20	7.80	TNTC	9	98.00	163.00	135.00	350.00	20.00	17.00
94	1	09/07/94	LP	BH JF BC	15.50	18.00	7.20	7.70	26.50	30.20	84.56	97.24	7.50	7.80	44	1	83.00	218.70	140.00	385.00	12.00	23.50
94	1	09/21/94	BH BM	JB KP LP	16.70	19.00	7.70	9.70	27.90	31.20	83.07	125.63	7.60	7.80	20	0	98.50	205.00	140.00	347.00	14.90	28.00
94	1	10/08/94	DJ EC LP	JF JL GC JB	11.50	13.00	8.20	9.13	20.50	25.60	85.27	101.27	8.20	7.80	15	1	63.00	150.00	120.00	365.00	6.00	19.50
94	1	10/20/94	JB BM BH	NW JL LP	13.00	13.00	8.06	9.50	26.80	29.40	90.09	107.99	8.20	8.10	*	0	108.50	190.00	179.00	380.00	15.50	16.00
94	1	11/07/94	EG BH	LP KP JL	10.00	11.00	7.84	8.10	14.90	28.90	76.16	87.95	7.60	7.80	52	7	25.00	100.00	60.00	170.00	8.20	13.00
95	1	04/18/95	GC RJ LP	BH JB CB	10.00	10.00	10.50	11.10	17.50	22.50	103.64	113.08	7.60	8.00	1	0	123.00	165.00	133.00	355.00	13.00	12.00
95	1	05/01/95	LP CM	JL CJ BH	10.50	11.00	8.90	10.25	17.20	25.10	86.67	108.56	7.70	8.30	1	9	80.00	132.50	150.00	350.00	9.00	10.00
95	1	05/15/95	EC CB LP	BH AW RQ	13.00	11.00	7.30	9.20	20.40	25.00	78.37	97.38	6.80	7.80	32	1	60.00	129.00	125.00	375.00	10.00	8.00
95	1	05/30/95	RJ NW LP	JT CJ CG B	17.50	17.90	5.80	7.80	19.40	24.80	87.90	94.33	7.20	7.90	35	0	62.50	146.00	125.00	345.00	21.00	31.30
95	1	06/13/95	LC BM ST LP	ET CG CJ B	18.00	17.50	4.95	7.60	22.70	27.20	59.69	93.28	7.20	7.70	NA	6	82.50	127.50	125.00	360.00	22.50	17.50
95	1	06/27/95	EC LP BM	BH RJ	21.50	21.50	6.00	8.12	25.80	29.00	78.75	108.65	7.70	7.90	57	1	101.00	155.00	135.00	330.00	18.00	21.80
95	1	07/12/95	LP	LP AW	20.50	22.00	4.70	7.55	27.80	30.80	81.29	103.07	7.40	7.80	54	NV	92.50	130.00	155.00	355.00	21.50	24.50
95	1	07/27/95	RQ AR	LP CG RJ	24.50	26.50	4.40	6.80	22.70	29.50	59.86	99.62	7.70	8.00	88	0	90.00	157.50	135.00	330.00	24.30	33.00
95	1	08/10/95	BAH JL	LP BM JB	22.10	25.00	5.15	7.40	25.30	28.90	88.01	105.30	7.50	7.90	160	1	142.00	77.00	150.00	350.00	14.50	28.50
95	1	08/28/95	ET LP CM	RJ ET BH	19.50	20.00	7.10	7.45	28.90	30.20	91.50	97.70	8.00	7.70	NV	NV	101.00	139.50	138.00	355.00	18.00	26.00
95	1	09/11/95	BH RG EB	AW DJ CG C	16.00	18.50	8.60	*	29.60	30.70	104.05	*	7.60	7.90	22	1	61.00	185.00	130.00	360.00	17.00	29.50
95	1	09/26/95	BH BM AW	CB LP	14.50	15.00	6.50	7.50	29.00	32.40	76.01	90.58	7.70	7.80	40	0	55.00	183.00	145.00	380.00	16.50	14.00
95	1	10/10/95	ET ST BH	AW BM LP	13.50	16.00	6.61	7.75	28.20	30.60	75.33	94.37	7.60	7.70	20	0	90.00	150.00	155.00	370.00	11.50	18.00
95	1	10/26/95	BM CG LP	CJ BH DM B	12.00	13.50	6.40	9.45	21.80	26.20	67.84	106.32	7.50	7.60	30	0	84.50	182.50	132.00	386.00	7.00	16.50
95	1	11/09/95	BM LP EB NW	ET EB BH	5.00	6.30	6.90	9.25	9.80	16.70	57.61	82.68	7.00	7.30	110	80	*	122.50	*	165.00	7.50	-1.00
96	1	04/18/96	BH ET EB	LP BM	7.20	9.00	11.30	11.30	1.60	7.40	94.4	102.5	6.6	6.60	80	20	35.00	65.00	190.00	345.00	12.50	21.00
96	1	05/06/96	NW RJ MH	AW LP	11.00	10.00	8.30	9.30	9.40	21.60	79.8	94.2	6.80	7.10	30	100	67.50	140.00	155.00	330.00	5.00	11.00
96	1	05/20/96	ET BH		16	17	7.2	8.9	7.4	15.4	76.31	100.77	6.6	7.2	700	10	108.50	115.00	185.00	360.00	21	34
96	1	06/03/96	CB AW BH		18	17.5	6.8	7.9	16.3	21.2	78.96	93.48	7.2	7.6	50	27	49.00	107.50	120.00	345.00	19	18
96	1	06/17/96	BH KP EB		22.5	22.5	5.7	7.8	20	25.2	73.65	103.88	7	7.6	44	2	80.00	112.50	145.00	330.00	29	26
96	1	07/01/96	EB KP LP		19	20	5.1	7.8	25	27	63.57	110.3	7	6.9	108	1	70.00	148.00	145.00	350.00	18.5	27
96	1	07/15/96	DJ BH		20.5	23	6.6	7.1	8.9	16.3	77.19	90.68	6.9	7.4	120	410	68.00	87.00	110.00	345.00	19	24
96	1	07/30/96	BH BH DM		22	21	5.4	7.4	20.4	25.4	69.3	142.72	5.1	7.1	*	*	82.50	132.00	120.00	360.00	18.5	23
96	1	08/14/96	BH		21	23	5.4	8.9	25.4	27.6	70.28	121.33	7.2	7.6	280	4	118.00	142.50	150.00	335.00	16.5	26
96	1	08/29/96	AW BH		20	21	5.2	6.9	27.6	30	67.11	92.05	7.5	7.8	70	0	91.00	142.00	140.00	385.00	16.2	27
96	1	09/16/96	DJ LP		18.5	19	5.5	6.8	29.4	30.2	69.78	87.52	7.6	8	8	6	135.00	187.00	195.00	377.00	16	20.5
96	1	09/30/96	LP		15.5	16	6.7	7.9	26.4	30.3	78.64	96.01	7.8	7.9	18	0	78.00	203.00	135.00	370.00	17	22.5
96	1	10/15/96	BH RG DJ		8	12	8.2	8.6	25.3	28.5	81.29	95.16	7.8	8	8	6	50.00	142.50	140.00	355.00	6.5	12
96	1	10/29/96	AW AB GS AC		9	11	8.3	8.6	5.5	12.2	74.48	84.08	6.9	7.5	38	16	54.00	48.00	164.00	375.00	10	12
96	1	11/06/96													14	10	*	*	*	*	*	*
97	1	04/23/97	BH	LP	9	11.5	9.5	10.4	2.3	6.4	83.7	99.4	7.4	7.2	1	0	68.00	82.50	175.00	365.00	12.00	14.50
97	1	05/06/97	BH, DM, KG,	LH, AL, LP	11	11	8.4	9.3	9.6	16	80.9	93	7.4	7.6	12	153	37.00	70.00	150.00	360.00	12.00	10.00
97	1	05/22/97		RG, LP	*	13.00	*	9.30	*	21.18	*	100.3	*	7.80	*	*	100.00	*	345.00	*	19.00	
97	1	06/05/97	AL, BH	KW, AW, R	15.50	15.00	11.50	9.20	18.30	24.60	128.4	105.7	7.60	8.00	*	*	73.00	123.00	140.00	360.00	17.00	16.00
97	1	06/23/97	BH, KP, EB	LP, BH, DM	22.50	22.50	5.70	7.75	20.00	25.25	102.9	103.2	7.00	7.60	56	2	80.00	112.50	145.00	330.00	29.00	26.00
97	1	07/07/97	JJ, JJ	LP, AR	24.00	22.00	6.60	8.00	28.20	29.20	91.9	108.2	7.70	7.90	26	2	60.00	102.00	125.00	338.00	26.00	28.00
97	1	07/21/97	BH, GS, DM	DM, KP, LP	22.00	20.00	6.50	7.30	24.30	26.40	85.3	93.5	7.80	7.80	25	*	65.00	135.00	145.00	350.00	21.00	18.50
97	1	08/04/97	KP, EB, LP	BH, DS, BH	22.50	21.00	7.00	7.91	27.20	28.90	94.3	104.8	7.80	7.90	28	1	70.00	150.00	130.00	360.00	20.00	24.50
97	1	08/19/97	BH	LP, DS, LP	21.00	21.50	5.52	6.90	28.35	29.20	72.9	92.4	7.40	7.90	40	3	107.50	190.00	125.00	365.00	19.00	27.00
97	1	09/03/97	JF	JF	20.50	20.00	4.90	6.80	26.25	29.00	63.3	88.5	7.00	8.00	6	0	135.00	160.00	160.00	365.00	16.00	20.00
97	1	09/18/97	AL, BH	BB, LP	19.00	20.00	6.00	7.60	27.45	29.75	75.9	99.4	7.70	8.10	*	*	103.00	182.50	140.00	315.00	17.50	28.00
97	1	10/02/97	KW, LP, LP	BH, AL	12.00	15.00	7.60	8.25	27.15	30.45	83.4	98.4	8.00	8.10	11	0	105.00	197.50	150.00	345.00	8.00	19.00
97	1	10/17/97	LSP	BH, BH	11.50	13.50	7.00	8.48	27.75	30.30	76.2	98.0	7.90	8.2								

Site 2 - JEL

YEAR	SITE	DATE	SAMPLER-	SAMPLER-	WTEMP-	WTEMP-	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FEC	FECA	LP-L	LP-H	DEPTH-	DEPTH-H	ATEMP-	ATEMP-
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/	CFU/	cm	cm	cm	cm	0c	0c
90	2	04/08/90			5.0	5.2	10.8	10.7	13.2	18.3	92.11	94.28	7.5	6.8	*	*	75.0	90.0	*	*	5.0	9.0
90	2	04/25/90			8.5	11.0	9.5	8.1	18.4	21.7	91.10	83.53	7.4	7.8	*	*	90.0	105.0	*	*	9.0	11.5
90	2	05/09/90			13.0	12.0	9.0	9.0	21.6	23.0	97.34	96.12	*	7.2	*	*	105.0	110.0	*	*	11.0	23.0
90	2	05/25/90			10.1	12.0	8.5	9.2	18.8	19.0	84.59	95.83	7.5	7.5	*	*	95.0	95.0	*	*	4.4	16.0
90	2	06/08/90			17.5	17.0	8.5	8.0	21.8	23.8	100.94	95.22	7.3	7.6	*	*	95.0	120.0	*	*	23.0	22.0
90	2	06/22/90			18.5	18.0	7.2	7.6	26.1	28.0	89.48	94.68	*	*	*	*	105.0	140.0	*	*	19.0	28.0
90	2	07/06/90			20.5	21.0	7.9	7.3	26.0	27.4	101.91	95.88	7.9	*	*	*	140.0	135.0	*	*	22.0	26.0
90	2	07/21/90			24.0	20.0	6.6	7.3	29.5	30.4	92.82	95.85	*	6.9	*	*	100.0	155.0	*	*	24.0	26.0
90	2	08/06/90			24.0	22.5	6.2	7.1	26.2	30.2	86.34	97.43	7.4	7.1	*	*	90.0	150.0	*	*	23.0	23.0
90	2	08/19/90			20.0	22.0	7.2	8.0	27.2	30.4	92.89	108.95	7.8	*	*	*	100.0	110.0	*	*	14.0	19.0
90	2	09/04/90			20.0	22.0	6.5	7.7	25.5	25.5	82.83	101.81	7.7	7.1	*	*	100.0	165.0	*	*	13.0	22.0
90	2	09/18/90			14.0	16.0	7.6	7.4	29.5	30.0	88.26	89.76	7.4	7.5	*	*	130.0	175.0	*	*	6.0	13.0
90	2	10/04/90			13.0	15.0	7.7	7.7	29.4	31.6	87.53	92.51	7.9	7.6	*	*	180.0	180.0	*	*	10.0	15.0
90	2	10/18/90			14.0	15.0	7.4	7.3	23.0	24.8	82.46	83.98	7.7	7.5	*	*	135.0	130.0	*	*	15.0	23.0
90	2	11/02/90			*	10.0	*	8.8	*	22.5	*	89.65	*	7.6	*	*	*	150.0	*	*	*	19.0
91	2	04/13/91	WP JH SJ		8.0	8.5	10.3	10.8	20.5	22.4	98.95	106.25	8.3	8.1	*	*	60.0	125.0	*	*	2.0	10.0
91	2	04/23/91	WP		7.5	*	9.3	*	15.8	*	85.87	*	*	*	*	*	35.0	*	*	*	10.0	*
91	2	04/27/91	WP JH SJ		11.0	12.0	9.4	10.3	14.8	17.5	93.35	106.31	7.5	7.5	*	*	70.0	120.0	*	*	19.0	25.0
91	2	05/13/91	JJ AR BP		15.0	14.5	7.8	7.6	17.0	21.3	85.57	84.67	7.3	7.6	*	*	65.0	86.0	*	*	19.0	25.0
91	2	05/28/91	JH SJ DJ		18.0	18.0	6.1	7.8	24.0	25.4	74.62	95.12	7.7	7.6	*	*	105.0	150.0	*	*	16.0	30.0
91	2	06/12/91	JH WP		19.0	19.0	7.2	7.9	26.8	29.1	90.74	100.98	7.8	7.4	*	*	100.0	145.0	*	*	18.0	26.0
91	2	06/25/91	JT		20.5	19.5	7.7	7.8	28.9	29.3	100.57	100.77	7.9	7.9	*	*	83.0	125.0	*	*	16.5	29.0
91	2	07/11/91	JT WP		19.5	18.5	6.4	7.4	29.7	31.5	82.37	95.63	7.8	7.8	*	*	121.0	150.0	*	*	18.5	26.0
91	2	07/26/91	JH SJ WP		22.0	22.0	6.8	8.1	31.1	31.8	93.00	111.26	7.8	7.4	*	*	110.0	185.0	*	*	22.0	24.0
91	2	08/09/91	SJ WP		22.0	20.0	7.2	7.4	31.8	31.2	98.90	97.65	7.9	7.8	*	*	130.0	190.0	*	*	19.0	26.0
91	2	08/25/91	JT JH		20.0	21.0	6.1	6.9	13.5	16.6	72.49	85.05	6.8	7.4	*	*	110.0	90.0	*	*	17.0	23.0
91	2	09/08/91	BP		18.0	18.0	7.1	7.1	25.1	26.9	86.87	87.21	7.7	7.7	*	*	110.0	140.0	*	*	18.0	24.0
91	2	09/23/91	BP SJ		15.0	16.0	7.5	7.5	27.2	23.1	87.59	87.13	7.5	7.6	*	*	180.0	250.0	*	*	12.0	19.0
91	2	10/06/91			13.0	16.0	7.3	8.0	20.3	21.5	78.32	92.04	7.1	6.5	*	*	100.0	150.0	*	*	5.0	12.0
91	2	10/23/91	SJ BP BG		10.0	12.0	8.9	8.6	20.8	22.9	89.19	91.79	7.8	7.6	*	*	145.0	190.0	*	*	5.0	15.0
91	2	11/06/91	BG BP	BG BP	8.0	9.0	9.0	9.0	23.1	26.8	87.94	92.20	7.5	7.6	*	*	175.0	205.0	*	*	0.0	9.0
92	2	04/16/92	MS BP	MS BP	7.0	7.0	11.4	11.4	20.8	23.5	107.18	109.10	8.0	8.1	*	*	75.0	127.0	*	*	3.0	8.0
92	2	05/01/92	MS BP	MS BP	12.0	11.0	10.7	10.3	17.8	20.8	110.12	106.14	8.0	7.9	*	*	80.0	90.0	*	*	13.0	17.0
92	2	05/15/92	MS BP	MS BP	13.5	14.0	8.8	9.7	21.4	24.7	96.07	108.68	7.8	7.8	*	*	90.0	135.0	*	*	12.0	14.0
92	2	05/31/92	BP	BP	18.0	15.5	8.1	8.7	26.3	27.4	95.39	102.76	7.8	7.7	*	*	100.0	140.0	*	*	13.5	16.0
92	2	06/15/92	BP	BP	19.5	20.5	7.1	7.6	22.2	23.4	87.86	96.53	7.7	7.8	*	*	80.0	120.0	*	*	19.0	21.0
92	2	06/30/92	MS BP	MS BP	20.0	20.0	8.1	7.9	28.0	29.5	104.15	103.15	7.8	7.7	*	*	105.0	152.0	*	*	22.0	26.0
92	2	07/13/92	MS	MS	20.4	20.5	7.7	7.5	29.3	31.5	100.42	100.06	7.8	7.8	3	1	125.0	200.0	*	*	23.0	28.0
92	2	07/29/92	MS BP	MS BP	20.4	20.0	6.6	7.5	28.0	30.2	85.39	98.35	7.6	7.9	1	3	95.0	160.0	*	*	18.0	27.0
92	2	08/13/92	BP	MS BP	20.0	19.0	7.0	8.0	32.5	30.2	93.12	102.32	7.8	7.7	29	1	150.0	210.0	*	*	16.0	19.0
92	2	08/27/92	MS BP	MS BP	21.4	19.9	7.1	7.1	27.7	29.1	93.40	91.61	7.6	7.9	8	2	180.0	190.0	*	*	22.0	25.0
92	2	09/11/92	MS BP	MS BP	20.5	19.0	7.0	7.6	29.1	30.2	92.02	97.82	7.5	7.8	4	2	200.0	265.0	*	*	18.0	22.0
92	2	09/25/92	BP	BP	14.0	16.0	8.4	8.6	30.4	31.1	98.12	105.08	7.8	7.8	4	1	150.0	195.0	*	*	1.0	15.0
92	2	10/11/92	MS BP	MS BP	15.5	16.0	8.7	9.0	31.1	30.2	105.22	108.70	7.9	7.9	5	10	260.0	380.0	*	*	17.0	17.0
92	2	10/25/92	BP	MS	11.5	11.5	9.1	8.9	28.5	29.8	99.61	98.26	8.0	7.6	10	0	195.0	200.0	*	*	8.0	9.0
92	2	11/09/92	MS BP	MS BP	6.0	9.0	10.3	9.8	25.6	27.7	97.62	101.00	7.9	7.9	30	30	230.0	370.0	*	*	-2.0	3.5
93	2	04/21/93	MS BP	BP NP MS	10.0	11.5	10.6	11.2	7.3	10.9	98.40	109.87	7.1	*	10	10	65.0	75.0	250.0	450.0	18.0	20.0
93	2	05/06/93	BP NP MS	MS	14.5	13.5	11.7	11.2	17.0	20.2	127.01	121.37	7.2	7.8	*	30	85.0	90.0	225.0	460.0	36.0	25.0
93	2	05/20/93	BP MS	MS BP	13.5	13.5	7.5	8.0	23.3	23.3	82.85	88.37	6.7	7.5	0	10	90.0	110.0	245.0	460.0	12.0	18.0
93	2	06/03/93	BP NP MS	BP NP MS	13.5	12.5	7.8	8.3	24.9	27.5	87.04	92.21	7.4	7.5	10	0	55.0	115.0	205.0	440.0	13.0	25.0
93	2	06/23/93	NP BP	NP BP	18.0	17.5	7.4	7.5	27.2	28.9	91.71	93.03	*	7.6	20	20	55.0	100.0	210.0	540.0	20.0	30.0
93	2	07/08/93	ML BP	ML BP	21.0	20.5	7.2	8.0	29.9	31.2	96.00	106.53	7.8	7.6	*	0	135.0	177.5	240.0	440.0	26.0	31.0
93	2	07/22/93	ML NP	NP ML	20.5	18.5	6.8	8.0	30.3	31.2	90.05	102.63	7.7	7.8	0	0	117.0	155.0	230.0	470.0	22.0	25.0
93	2	08/03/93	BP	BP	21.0	21.0	6.9	7.9	30.7	33.1	91.78	106.76	7.7	7.9	*	*	140.0	130.0	250.0	430.0	25.0	30.0
93	2	08/19/93	BP MS	BP MS	21.0	20.0	5.9	7.0	32.4	31.6	79.89	92.60	7.7	7.7	0	0	135.0	170.0	220.0	470.0	24.0	29.0
93	2	09/02/93	BP MS	BP MS	21.5	22.5	6.0	8.2	32.5	31.9	82.03	113.71	7.9	8.0	0	2	160.0	290.0	240.0	440.0	20.0	26.0
93	2	09/20/93	BP MS	BP MS	14.5	14.5	7.1	8.0	31.4	31.4	84.33	95.01	7.7	7.8	1	0	200.0	250.0	240.0	465.0	15.0	15.0

93	2	10/04/93	BP MS	BP MS	13.5	14.5	7.9	8.2	30.1	30.1	91.15	96.57	7.8	7.9	10	0	140.0	260.0	260.0	455.0	16.0	22.0
93	2	10/18/93	BP MS	BP MS	10.0	10.0	8.2	8.8	30.9	30.9	88.29	94.75	7.8	7.9	10	3	250.0	230.0	250.0	490.0	17.0	20.0
93	2	11/09/93	BP MS	BP MS	*	*	10.5	9.3	*	*	*	*	7.9	7.9	8	6	230.0	460.0	230.0	460.0	10.5	5.0
94	2	04/26/94	JP BP	JP BP	8.0	7.5	9.9	10.2	18.4	22.2	83.84	87.91	7.6	7.8	4	33	105.0	130.0	210.0	250.0	2.0	13.0
94	2	05/10/94	JP BP	JP BP	12.0	12.0	8.9	8.9	17.8	19.0	92.03	92.71	7.8	7.8	15	14	123.0	163.0	230.0	230.0	*	18.0
94	2	05/25/94	JP BP MS	BP MS	14.0	12.0	7.9	8.7	19.3	21.7	86.05	91.63	7.7	7.6	5	2	105.0	137.0	225.0	465.0	12.0	15.0
94	2	06/09/94	BP	BP JP	17.0	17.0	8.0	8.3	24.0	25.6	95.34	99.89	7.6	7.6	2	*	130.0	168.0	225.0	420.0	19.0	24.0
94	2	06/23/94	BP MS	JP MS	20.0	18.0	6.4	7.6	29.5	30.2	83.57	95.97	7.6	7.8	12	7	127.0	165.0	215.0	445.0	21.0	29.0
94	2	07/11/94	BP MS	BP MS	22.0	20.6	6.8	7.8	28.1	28.0	81.87	102.47	7.8	7.8	3	3	152.0	177.0	260.0	405.0	24.0	27.0
94	2	07/25/94	BP MS	BP MS	23.5	22.0	5.7	6.5	29.8	30.4	79.43	88.52	7.8	*	1	3	116.0	150.0	230.0	480.0	24.0	29.0
94	2	08/08/94	BP MS	BP MS	21.0	20.5	6.5	8.0	31.7	30.2	87.63	105.88	7.9	7.7	2	1	125.0	135.0	235.0	440.0	20.0	28.0
94	2	08/22/94	MS JP	MS JP	19.5	18.0	6.5	7.4	30.9	30.7	84.81	93.74	7.5	7.6	*	*	150.0	175.0	240.0	485.0	19.5	16.5
94	2	09/07/94	BP MS	BP MS	15.0	16.0	7.4	7.8	29.0	30.6	87.42	94.98	7.8	7.8	2	1	162.0	155.0	235.0	480.0	14.0	23.0
94	2	09/21/94	BP MS	BP MS	16.0	16.5	8.4	9.2	30.3	30.6	102.09	113.13	8.4	8.4	1	1	165.0	270.0	245.0	470.0	17.0	23.0
94	2	10/08/94	BP MS	BP MS	12.0	13.0	9.6	8.0	24.2	28.1	103.31	90.17	8.4	8.4	1	2	122.0	145.0	225.0	475.0	9.0	13.0
94	2	10/20/94	JP BP	JP BP	12.0	14.0	10.2	9.0	27.8	29.5	112.35	104.52	8.4	*	0	0	177.5	255.0	245.0	465.0	13.0	11.0
94	2	11/07/94	BP MS	MS BP	11.0	11.0	8.0	8.4	27.7	29.1	88.18	91.33	8.3	7.5	14	3	42.5	75.0	225.0	425.0	9.0	12.0
95	2	04/18/95	BP	BP JP	8.0	8.0	10.5	10.4	21.7	22.3	101.66	101.09	7.8	7.8	0	0	128.5	131.0	215.0	310.0	10.0	11.0
95	2	05/01/95	JP BP	JP BP	10.0	9.5	10.0	9.7	23.6	26.1	102.60	99.99	8.0	7.8	2	0	120.0	185.0	220.0	430.0	7.0	9.0
95	2	05/15/95	JP BP	JP BP	8.0	6.0	8.6	8.5	25.2	26.4	85.20	81.00	7.8	7.8	2	0	105.0	145.0	220.0	455.0	8.0	6.0
95	2	05/30/95	BP JJ	AM JJ	16.0	15.0	7.0	7.9	25.1	25.6	82.33	91.34	7.8	7.7	2	4	122.5	135.0	230.0	420.0	20.0	27.0
95	2	06/13/95	WP LP	WP	17.0	16.0	6.5	7.4	26.4	27.7	78.62	88.46	7.6	7.8	5	1	105.0	152.5	230.0	445.0	20.0	17.0
95	2	06/27/95	WP LP	JB WP	21.0	22.0	7.1	8.4	27.4	28.5	93.23	113.08	8.0	8.0	2	0	97.5	140.0	220.0	415.0	17.0	18.0
95	2	07/12/95	WP LP	WP LP	19.0	18.0	7.7	7.8	29.5	29.5	98.67	98.07	7.8	7.9	4	2	105.0	170.0	225.0	445.0	18.0	23.0
95	2	07/27/95	WP LP	JAM ASR	24.0	23.5	6.5	7.2	29.8	30.2	91.27	100.57	7.8	7.2	0	2	135.0	150.0	230.0	425.0	23.0	30.0
95	2	08/10/95	WP LP	LP WP	23.0	21.0	6.9	7.1	28.6	28.8	84.63	84.60	7.6	7.8	0	0	127.5	192.5	215.0	455.0	20.0	28.0
95	2	08/28/95	LP WP	LP WP	19.0	19.0	7.0	7.7	30.8	30.3	80.43	99.17	7.9	7.9	NV	NV	163.0	170.0	240.0	440.0	19.0	21.0
95	2	09/11/95	WP LP	LP WP	16.5	16.5	7.0	7.2	31.6	31.2	86.63	88.87	7.8	7.8	0	0	145.0	200.0	215.0	455.0	14.5	21.0
95	2	09/28/95	LP WP	LP WP	15.0	15.0	7.3	7.8	31.0	31.8	87.36	93.83	7.9	8.0	7	4	185.0	215.0	245.0	460.0	19.0	15.0
95	2	10/10/95	BP JJ	BP LP	13.0	15.0	7.3	8.1	31.1	30.4	83.91	96.56	7.9	7.8	2	2	115.0	190.0	140.0	455.0	11.0	17.0
95	2	10/26/95	LP ASR	LP	12.0	12.0	7.8	7.8	26.5	28.0	85.19	88.03	8.0	7.8	8	20	165.0	150.0	230.0	475.0	13.0	14.0
95	2	11/09/95	LP, WP	LP WP	7.0	7.5	9.2	9.2	18.6	22.2	85.27	88.32	7.6	7.7	0	27	133.0	160.0	260.0	460.0	2.0	1.0
96	2	04/18/96	LP GV	LP GV	6	7	11	11.2	10.5	11.3	94.58	99.17	7.6	7.6	2	1	67.5	95.0	235.0	460.0	11	14
96	2	05/08/96	GV LP RB	GV LP	10	10	9.3	8.8	16.8	18.6	91.4	87.46	7.4	7.6	1	5	107.5	145.0	225.0	435.0	4	12
96	2	05/20/96	LP GV	LP GV	14	14	8.2	8.7	15.3	18.6	87.2	94.36	7.4	7.7	2	1	117.5	192.5	255.0	455.0	25	33
96	2	06/03/96	GV JJ	JJ GV	17	16	6.7	6.9	20.6	23.2	78.22	80.21	7.6	7.6	7	2	85	85.0	210.0	570.0	24.5	16
96	2	06/17/96	LP	LP JJ JJ	20.5	19	7.1	8	31.3	26.9	94.61	100.88	7.8	8.1	240	40	142.5	182.5	235.0	420.0	22	26
96	2	07/01/96	LP GV	LP GV	18	17.5	7	7.6	27.5	29.4	86.92	94.57	7.8	7.7	6	3	107.5	125.0	215.0	450.0	18	27
96	2	07/15/96	LP GV	LP GV	21	21	6.6	7.2	22.2	23.6	84.02	92.42	7.6	*	3	0	112.5	127.5	245.0	330.0	19	25
96	2	07/30/96	GV EB	EB GV	20	18	6.9	7.5	23.9	26.8	87.08	92.72	7.6	7.8	4	2	100.0	25.0	200.0	440.0	17.5	22
96	2	08/14/96	LP GV	GV	20	20	6.4	6.8	27.3	28.9	82.45	88.46	8.1	8	4	1	135.0	167.5	235.0	315.0	23	27
96	2	08/29/96	GV WP LP	GV WP	20	19	6.1	7.2	29.8	30.5	79.8	92.84	8.2	7.7	0	0	115.0	165.0	220.0	385.0	23	29
96	2	09/16/96	GV LP	JP GV	18	18	6.7	7.5	30.7	30.2	84.87	94.71	7.8	7.7	0	0	178.0	212.0	265.0	455.0	15	18
96	2	09/30/96	JP GV	GV LP	15	15	6.69	7.7	28.5	30.7	78.78	91.97	7.6	7.7	0	21	165.0	238.0	225.0	450.0	11	18
96	2	10/15/96	LP GV	LP GV	10	12	8.6	8	27.7	29.3	90.63	88.99	7.9	7.8	9	13	70.0	190.0	225.0	340.0	5	10
96	2	10/29/96	GV LP	LP SH WP	10	10.5	8.4	8.5	9.5	15.5	28.99	83.81	7.1	7.5	8	10.5	50.0	75.0	250.0	460.0	8.0	10.5
96	2	11/06/96	LP	AR	6	9	9.6	2.7	13.1	18.3	83.88	26.18	7.6	7.6	7	9	115.0	*	265.0	*	7.0	9.0
97	2	04/23/97	MB, EB, C	MB, EB, C	8	9	11.5	11.4	6	8.4	101.05	104.67	7.4	7.4	7	5	103.0	108.0	230.0	435.0	11.0	15.0
97	2	05/06/97	MB, EB, C	CB, RB	10	10	10.5	11.8	14.8	18.6	101.93	115.29	7.4	7.5	6	*	52.5	107.5	210.0	340.0	12.0	11.0
97	2	05/22/97	CB, EB	JJ, SJ, JJ	11.0	12.0	9.9	9.2	13.8	22.6	97.60	98.01	7.5	7.6	3	3	80.0	132.0	190.0	440.0	11.0	22.0
97	2	06/05/97	MB, EB, R	RB, EB	14.0	14.0	8.9	9.3	24.5	26.7	100.08	108.04	7.8	7.8	*	*	107.5	185.0	165.0	430.0	14.0	15.0
97	2	06/23/97	MB, EB, C	MB, EB	21.0	19.0	8.2	8.7	27.1	28.9	107.48	111.07	7.7	7.9	*	*	85.0	50.0	190.0	375.0	24.0	27.0
97	2	07/07/97	MB, EB, A	MB, EB	21.0	19.0	7.9	8.7	29.1	30.2	104.81	111.97	7.8	7.8	0	1	95.0	155.0	200.0	395.0	25.0	28.0
97	2	07/21/97	MB, EB	EB, MB, C	20.0	19.0	7.9	9.3	26.6	26.9	101.31	117.28	7.8	7.7	1	6	95.0	50.0	195.0	420.0	19.0	19.0
97	2	08/04/97	EB, MB, C	RB, MB, E	21.0	20.0	8.1	8.7	29.6	30.2	107.80	114.09	7.8	7.8	0	2	150.0	183.0	165.0	405.0	19.0	21.0
97	2	08/19/97	EB, EB, M	RB, CB	20.5	19.0	7.4	7.6	30.0	29.8	97.81	97.57	7.8	7.8	2	1	33.0	253.0	200.0	405.0	18.0	23.0
97	2	09/03/97	EB, MB, C	EB, MB, C	20.0	19.0	7.5	7.8	29.2	29.5	97.75	99.95	7.6	7.8	1	0	205.0	298.0	205.0	410.0	17.6	22.0
97	2	09/18/97	CB, MB, E	CB, MB, E	19.0	18.0	8.1	7.4	28.8	29.5	103.35	93.04	7.9	7.8	*	*	180.0	225.0	205.0	470.0	20.0	28.0
97	2	10/02/97	MB, EB, C	EB, MB, C	12.0	13.0	8.5	8.6	30.4	30.6	95.24	98.53	7.8	7.8	1	2	185.0	350.0	225.0	410.0	8.0	15.0
97	2	10/17/97	EB, CB, M	CB, BM	11.5	13.0	9.3	8.7	30.2	31.4	102.95	99.60	7.8	7.7	6	1	210.0	297.5	210.0	450.0	7.0	15.0
97	2	11/03/97	EB, MB, C	EB, MB, C	10.0	10.0	9.1	8.9	27.1	27.1	95.49	93.39	7.6	7.8	4100	TNTC	105.0	192.5	240.0	450.0	12.0	15.0

Site 3 - Lamprey River

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FEC	FECA	LP-L	LP-H	DEPTH-	DEPTH-	ATEMP	ATEM	
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/	CFU/	cm	cm	cm	CM	Oc	Oc	
90	3	04/08/90				5.5		12.2		3.4		99.23		7.2				125.0				5.0	
90	3	04/25/90			11.5	12.0	10.8	11.0	2.4	3.3	100.89	104.47	7.1	7.6			124.0	125.0			10.0	11.0	
90	3	05/09/90			11.0	12.5	10.4	10.2	1.8	2.0	95.73	97.24	7.2	7.3			110.0	115.0			8.0	16.0	
90	3	05/24/90			11.0	12.0	10.9	10.9	1.8	1.8	100.34	102.65	8.1	7.6			165.0	155.0			8.5	16.0	
90	3	06/08/90			17.5	19.0	8.4	8.0	6.8	4.5	91.51	88.72	7.2	7.3			85.0	90.0			14.5	23.0	
90	3	06/23/90			20.0	20.0	7.6	7.8	8.0	6.0	87.61	88.94	7.3	7.2			85.0	80.0			19.0	20.0	
90	3	07/07/90			21.0	23.0	7.8	7.8	9.8	7.9	92.57	95.15	7.2	7.1			70.0	65.0			18.0	28.0	
90	3	07/21/90			24.0	27.0	6.4	7.2	4.6	16.1	78.17	98.64	7.2	7.5			85.0	75.0			26.0	32.0	
90	3	08/06/90			24.0	24.0	6.9	7.4	11.9	19.2	87.61	97.82	7.3	7.6			115.0	90.0			23.5	22.0	
90	3	08/20/90			20.8	23.5	7.0	7.7	10.1	5.5	81.82	93.00	7.2	7.1			100.0	105.0			14.0	20.0	
90	3	09/04/90			20.0	22.5	7.4	8.0	6.7	4.6	84.70	95.00	7.0	7.1			110.0	100.0			14.0	22.5	
90	3	09/17/90			17.0	18.0	7.2	7.8	10.6	9.6	79.31	87.19	7.1	7.4			75.0	100.0			10.0	14.5	
90	3	10/04/90			13.5	15.5	8.1	8.6	15.7	9.8	85.42	91.42	7.6	7.2			70.0	105.0			4.0	14.0	
90	3	10/18/90			13.5	15.0	10.0	9.8	2.1	1.7	97.53	98.54	7.0	7.0			65.0	85.0			2.5	20.0	
90	3	11/02/90			6.0	7.5	12.0	12.2	1.4	2.2	97.71	103.57	7.3	7.0			90.0	100.0			0.0	14.0	
91	3	04/13/91	DB RA VE	DB RA VE	9.0	10.0	10.7	10.7	4.1	4.3	95.24	97.61	7.5	7.5				95.0			0.5	10.5	
91	3	04/27/91	DB BA VE S	DB BA VE SW	13.0	15.0	10.0	10.0	1.4	2.8	96.09	101.16	7.2	7.2			118.0	115.0			15.0	25.0	
91	3	05/14/91	DB MA	DB MA		17.5	8.4	8.6	4.1	3.5		92.01	7.0	7.0			70.0	100.0			17.0	16.0	
91	3	05/27/91	DM BA VE	DM BA VE	18.0	21.5	6.8	7.6	8.2	5.2	75.42	88.83	6.9	6.9			65.0	85.0			15.0	21.0	
91	3	06/12/91	DB MA	DB MA	21.0	25.0	6.8	7.7	13.1	7.9	82.19	97.45	7.1	7.1			50.0	60.0			22.0	29.5	
91	3	06/26/91	DB RA VE	DB RA VE	21.0	25.0	7.4	9.0	11.9	15.2	88.84	118.46	7.4	7.4			90.0	80.0			22.0	31.0	
91	3	07/10/91	DB MA VE	DB MA VE	19.0	22.0	7.0	7.2	20.4	18.8	84.89	91.56	7.6	7.6			80.0	70.0			19.0	28.0	
91	3	07/25/91	DB RA	DB RA	23.0	26.5	6.6	10.3	18.8	20.3	85.49	143.16	7.4	7.4			95.0	80.0			21.0	29.0	
91	3	08/09/91	DB MA	DB MA	22.0	23.0	6.2	6.7	25.0	28.5	81.74	91.83	7.4	7.4			75.0	85.0			20.0	23.0	
91	3	08/25/91	RA DB MA	RA DB MA	19.5	21.5	8.4	8.2	2.0	2.0	92.83	94.24	5.9	5.9			80.0	120.0			17.0	22.0	
91	3	09/08/91	RA VE	RA VE	18.0	22.0	6.3	7.8	10.8	7.0	70.89	92.94	7.2	7.2			70.0	100.0			16.0	26.0	
91	3	09/22/91	RA	RA	15.0	17.0	8.0	8.8	8.9	5.4	83.73	94.17	6.7	6.7			80.0	130.0			2.0	16.0	
91	3	10/06/91	RA	RA	15.0	15.0	9.0	9.2	5.6	2.4	92.46	92.86	7.2	7.2			80.0	130.0			16.0	18.0	
91	3	10/23/91	DB	DB	9.5	10.0	11.7	11.2	3.0	3.0	104.70	101.42	7.2	7.2			85.0	90.0			8.0	16.0	
91	3	11/05/91	DB	DB MA	8.0	8.0	9.4	10.8	6.8	2.9	82.99	93.20	7.2	7.2			110.0	110.0			0.0	7.0	
92	3	04/17/92		DB NE		6.5		12.2		3.4		101.76		7.0			90.0					8.0	
92	3	05/02/92	DB RA	DB RA	13.0	14.0	9.7	10.1	3.4	3.7	94.25	100.48	6.9	7.1			bsv	110.0			12.0	16.0	
92	3	05/18/92	DB MA	DB MA	15.5	17.5	8.4	8.7	5.8	3.7	87.30	93.18	7.1	7.1				120.0			12.0	17.5	
92	3	05/31/92	RA MA	RA MA	17.5	18.0	6.2	8.3	12.8	5.6	69.85	90.75	7.4	7.4			35.0	85.0			15.0	17.0	
92	3	06/14/92	VE RA DB	VE RA DB	21.0	24.0	6.9	7.7	6.3	4.8	80.35	94.14	7.0	7.0			80.0	105.0			21.0	31.0	
92	3	06/29/92	MA VE	MA	20.0	24.0	7.6	6.9	14.0	7.9	90.57	85.75	7.3	7.3			55.0	80.0			18.5	24.5	
92	3	07/13/92	MA VE	VE CN	21.0	24.0	7.1	7.1	9.8	8.0	84.26	88.28	7.2	7.3	358	359	70.0	75.0			24.0	30.0	
92	3	07/28/92	MA RA SM	MA RA	20.0	22.5	6.8	7.8	10.1	9.0	79.29	94.82	7.4	7.5	830	890	90.0	90.0			18.0	24.0	
92	3	08/11/92	MA DB	MA DB	20.0	23.0	6.7	7.8	10.1	7.2	78.13	94.80	7.0	7.1	300	200	95.0	95.0			18.0	27.0	
92	3	08/26/92	MA DB	MA DB	21.0	24.0	7.2	7.6	4.3	5.9	82.96	93.46	7.5	7.5	1020	360	90.0	100.0			18.0	28.0	
92	3	09/10/92	DB MA	DB MA	19.0	22.0	7.4	8.2	9.8	5.4	84.47	96.87	7.1	7.8	3100	2240	80.0	125.0			23.0	28.0	
92	3	09/25/92	DB MA	DB MA RA	14.5	16.5	8.0	7.6	19.7	23.0	88.27	89.12	7.6	7.8	NTV	NTV	105.0	105.0			2.0	12.0	
92	3	10/10/92	RA MA	RA MA	14.0	14.5	8.8	9.0	8.1	12.8	89.74	95.31	7.4	7.7	3840	2160	45.0	90.0			16.0	18.0	
92	3	10/24/92	RA MA VE	RA MA	9.0	10.0	10.0	10.7	9.4	4.5	91.82	97.73	7.5	7.3	50	50	70.0	125.0			7.0	15.0	
92	3	11/09/92		MA RA		4.5		12.6		1.4		98.72		7.2		90		110.0				2.0	
93	3	04/21/93	MA DB BC S	DB BC	12.5	13.5	10.3	10.7					7.4	7.7		50		130.0		130.0	17.0	22.0	
93	3	05/06/93	MA BC	MA BC	16.5	19.5		8.5	0.0	1.1		93.49	7.4	7.2		90		45.0		45.0	18.0	27.0	
93	3	05/20/93	DB MA BC	DB CC BC	15.5	16.5	8.6	8.8	5.0	2.5	88.99	91.72	7.1	6.9		1000		100.0		115.0	19.0	15.0	
93	3	06/03/93	MA BC	MA BC	15.0	17.5	7.8	8.5	8.6	3.0	81.50	90.70	6.8	7.0	230	100	45.0	65.0			32.0	14.0	22.0
93	3	06/23/93	MA BC	JJ JJ	21.5	23.5	6.3	7.8	15.8	12.3	78.03	98.34	7.3	7.7	270	330	50.0	50.0	125.0		370.0	22.0	25.0
93	3	07/06/93	JJ JJ DB	MA DB BC	24.5	29.5	7.2	9.8	15.1	15.5	93.86	139.66	7.4	8.2	100	100	15.0	75.0	135.0	235.0	28.0	30.0	
93	3	07/22/93	DB CC		23.5	22.5	6.4	7.2	9.4	2.5	79.43	84.57	7.6	7.9	200	50	75.0	95.0	85.0		380.0	24.0	25.0
93	3	08/03/93	DB BC	DB	24.0	27.5	7.4	10.8	13.7	18.8	94.88	151.46	7.3	7.8	470	100	110.0	100.0	135.0	220.0	23.0	31.5	
93	3	08/19/93	DB BC	BC DB MA	22.0	24.5	5.2	6.6	20.9	23.2	66.93	90.05	7.1	7.3	120	90	85.0	100.0	120.0		380.0	18.0	25.0
93	3	09/02/93	DB BC	DB BC	22.5	24.5	5.0	7.0	23.7	28.4	66.01	98.45	7.1	7.6			110.0	120.0	115.0	350.0	21.0	28.0	
93	3	09/20/93	BC AR	DB BC	14.5	16.5	6.6	5.6	19.8	22.2	72.86	65.35	7.4	7.3			120.0	135.0	115.0	280.0	14.0	15.0	

93	3	10/04/93	DB BC	MA BC MA	14.0	16.0	9.0	8.7	6.0	6.8	90.70	92.11	7.1	7.1	540	180	150.0	125.0	150.0	360.0	16.0	22.0
93	3	10/18/93	DB	DB BC	10.5	13.0	9.4	9.8	8.0	6.9	88.62	97.12	6.9	7.0	*	*	115.0	100.0	120.0	280.0	12.0	18.0
93	3	11/10/93	MA DB BC S	DB	5.5	5.5	11.7	11.9	6.3	2.5	96.83	96.28	7.0	7.3	*	*	110.0	125.0	120.0	240.0	12.0	-2.0
94	3	05/10/94	DB MA	DB MA	*	14.5	*	10.8	*	3.7	*	108.61	*	7.3	*	*	*	*	*	*	*	19.0
94	3	05/25/94	DB MA	DB MA	16.5	17.5	4.6	8.7	4.1	1.6	48.37	92.13	7.1	7.0	230	130	75.0	110.0	140.0	185.0	12.0	16.0
94	3	06/09/94	DB MA	DB MA	19.0	23.0	7.0	7.9	23.0	8.3	86.21	96.58	7.4	7.4	330	250	87.0	97.5	110.0	215.0	18.0	24.0
94	3	06/23/94	DB MA	DB MA	21.5	25.0	6.1	7.2	18.4	15.6	76.67	94.97	7.5	7.1	240	300	77.5	67.5	105.0	225.0	23.0	28.5
94	3	07/11/94	MA MA RA	MA MA RA	23.5	27.0	6.6	7.6	16.9	8.5	85.34	100.00	7.7	7.2	180	40	108.0	195.0	115.0	340.0	25.0	29.0
94	3	07/25/94	DB MA MA	DB MA	24.5	28.5	5.6	7.8	20.6	23.5	75.28	114.19	7.3	7.0	6400	20	92.5	87.5	110	255.0	24	*
94	3	08/09/94	DB MA MA S	DB MA	18	26	*	*	17	25.3	*	*	7.8	8.3	310	30	*	*	*	*	20	25
94	3	08/22/94	DB RA	DB RA	21.0	20.5	6.5	7.8	13.0	7.5	78.52	90.54	7.3	7.4	*	360	92.5	113.0	100.0	215.0	19.0	17.0
94	3	09/07/94	DM MA	DB MA	16.0	18.0	7.8	8.4	18.3	24.0	88.03	102.09	7.9	7.4	100	40	120.0	90.0	120.0	270.0	15.0	*
94	3	09/21/94	MA DB	MA DB SA	16.5	20.5	8.3	10.7	17.1	20.9	93.95	133.92	7.6	8.4	20	10	90.0	100.0	100.0	335.0	16.5	26.0
94	3	10/06/94	DB MA	MA AR MA SA	10.5	14.0	8.5	9.6	9.6	7.5	80.89	97.57	7.4	6.9	*	*	65.0	80.0	90.0	365.0	8.0	14.0
94	3	10/20/94	DB MA	DB MA MA SA	11.0	12.0	10.5	10.4	7.0	4.6	99.56	99.50	7.6	7.4	39	55	102.5	106.5	120.0	106.5	13.0	15.0
94	3	11/07/94	DB MA	DB MA	10.5	11.5	8.2	9.3	14.8	12.3	80.02	91.99	7.1	7.0	59	*	42.5	57.5	85.0	310.0	8.0	11.5
95	3	04/18/95	*	*	*	*	*	*	*	*	*	*	*	*	*	28	*	*	*	*	*	*
95	3	05/01/95	*	DB MA MA SA	*	12.5	*	10.8	*	2.7	*	103.36	*	7.1	*	*	*	BSV	*	55.0	*	12.0
95	3	05/15/95	*	DB	*	12.0	*	10.2	*	3.3	*	96.87	*	7.3	*	0	*	87.5	*	235.0	*	6.0
95	3	05/30/95	*	DB MA	*	18.0	*	8.5	*	4.8	*	92.53	*	7.4	*	240	*	82.5	*	210.0	*	24.0
95	3	06/13/95	DB MA	DB MA	20.0	21.0	6.4	7.6	13.4	6.3	76.01	88.50	7.4	7.1	0	400	77.5	82.5	105.0	360.0	17.0	*
95	3	06/27/95	DB	MA DB MA SA	25.0	21.0	7.0	8.6	12.4	18.6	90.74	107.22	7.1	7.6	700	120	52.5	67.5	140.0	325.0	17.0	20.0
95	3	07/12/95	DB MA	DB	20.5	25.5	5.7	7.2	21.5	25.8	71.59	101.48	7.1	7.1	200	17	53.0	62.5	85.0	235.0	17.0	28.0
95	3	07/27/95	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
95	3	08/10/95	DEB	DB	22.5	26.0	6.8	8.6	14.1	7.9	85.00	110.82	7.4	7.1	230	200	32.5	107.5	90.0	335.0	18.0	30.0
95	3	08/28/95	DB	DB	19.0	22.0	6.0	7.6	22.4	28.4	73.61	102.25	7.1	7.6	NV	NV	97.5	82.5	110.0	350.0	19.0	23.0
95	3	09/11/95	MA DB	MA DB	17.0	19.0	6.3	8.8	27.1	25.6	76.53	110.10	7.4	7.4	90	10	72.5	82.5	100.0	350.0	13.0	20.0
95	3	09/26/95	DB	MA	15.0	14.5	6.4	7.0	23.3	29.6	72.94	82.17	7.7	7.6	290	10	87.5	97.5	100.0	375.0	15.0	13.0
95	3	10/10/95	DB MA	DB MA	12.5	16.0	8.0	9.2	11.7	8.6	80.82	98.16	7.0	6.9	100	30	95.5	92.5	120.0	350.0	10.0	18.0
95	3	10/26/95	DB MA	DB MA	11.0	12.0	9.6	10.3	1.9	1.3	88.42	96.73	6.8	6.9	130	30	62.5	102.5	110.0	380.0	7.0	14.0
95	3	11/09/95	DB	DB, AM	6.0	4.0	13.5	13.0	0.2	2.2	109.16	101.03	7.6	6.9	0	10	97.5	*	145.0	*	0.0	0.0
96	3	04/18/96	DB MA	DB MA	6.0	7.0	12.3	12.8	0.2	0.2	99.5	106.1	7.2	7.1	60	*	*	97.5	*	*	5.0	12.5
96	3	05/06/96	DB MA	DB	12.5	12.5	10.6	10.7	0.6	1.4	100.3	101.7	7.8	7.3	140	20	127.0	152.5	127.0	325.0	3.0	7.0
96	3	05/20/96	DB MA	DB	17.5	18	9.7	9.6	2.8	2.2	103.39	103.05	7.7	7.3	110	80	152.5	152.5	165	330	22	32
96	3	06/03/96	DB	MA MA SA	18	17.5	8.9	4.5	3.55	2.45	96.23	47.87	7.1	7	90*	*	47.5	87.5	165	360	18	16
96	3	06/17/96	MA DB	DB MA MO S	23	25	7.8	7.9	10.9	3.4	94.22	97.67	7.1	7	198	190*	*	103*	*	335	21	25.5
96	3	07/01/96	MA MA MR E	*	20*	*	8.5*	14.7*	*	*	101.7*	*	*	*	192	114	68.5*	*	112.0*	*	20*	*
96	3	07/15/96	DB MA	MA MA	21	22	8.7	7.2	1.1	1.2	98.57	83.21	7	7.1	370	490	47.5	92.5	155.0*	*	19	24
96	3	07/30/96	MA MA DB	DB MA	21.5	23	8.9	7.2	11.3	4.8	107.51	86.4	7.1	7.2	90	200	63.0	67.5	105.0	330.0	20.5	20
96	3	08/14/96	DB	DB MA	21	26	7.5	8.6	11.7	12.6	89.94	113.61	7.1	7.4	410	190	77.5	82.5	90.0	340.0	18	25
96	3	08/29/96	DB	DB MA	21	25	6.3	7.4	22.9	22.2	80.53	101.28	7.4	7.5	102	18	62.5	82.5	100.0	325.0	19	28.5
96	3	09/16/96	DB MA	DB MA	18.5	19.5	6.7	8.4	18.8	21.2	79.71	103.34	7.2*	*	230	68	117.0	113.0	165.0	375.0	15	18
96	3	09/30/96	DB MA	DB MA	16	17	9.6	7	15.7	11.9	106.69	77.68	7.4	7.4	86	46	67.5	117.5	130.0	365.0	15	17.5
96	3	10/15/96	DB MA	DB MA	9.5	11	9.1	9.8	13.3	10.3	86.53	94.71	6.5	6.9	48	40	62.5	82.5	120.0	350.0	4	12
96	3	10/29/96	NO DOCK	NO DOCK	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
96	3	11/06/96	AR	NO DOCK	7*	*	12.4*	0.2*	*	102.8*	*	7.1	*	*	30	*	*	*	*	*	7*	*
97	3	04/23/97	*	DB, MA	*	11.0	*	11.5*	*	1.2	0.0	105.5*	*	7.3	*	NO	*	*	*	*	16.0	
97	3	05/06/97	*	DB	*	12.0	*	10.4	*	1.3	0.0	97.7	*	7.4	*	NO DOCK	*	*	*	*	11.0	
97	3	05/22/97	DB, JT	DB, GA	13.0	15.0	9.8	9.8	3.4	2.4	95.2	98.9	7.1	7.4	*	*	97.5	82.5	110.0	320.0	12.0	17.0
97	3	06/06/97	DB, JT	DB, JT	17.0	20.0	8.3	8.4	6.7	11.4	89.5	98.7	7.4	7.6	SAMPLE TA	92.5	77.5	115.0	330.0	16.0	21.0	
97	3	06/23/97	DB, MA, JT	DB, MA, JT	24.5	26.0	6.6	7.5	13.4	12.1	85.2	98.8	7.6	7.6	106	122	45.0	53.0	80.0	330.0	28.0	28.0
97	3	07/07/97	DB, MA	DB, MA	27.0	27.0	7.6	9.4	16.2	17.5	104.2	129.8	7.7	7.5	74	22	63.0	68.0	105.0	320.0	26.5	28.0
97	3	07/21/97	GA, MA	GA, MA	19.5	19.0	7.1	8.8	15.0	15.0	84.3	103.4	7.4	7.1	78	30	70.0	78.0	70.0	320.0	19.5	18.5
97	3	08/04/97	DB, MA, S.	DB, MA	19.5	20.0	8.3	9.7	16.6	23.3	99.4	122.0	7.1	8.3	158	24	97.0	83.0	110.0	313.0	20.0	22.0
97	3	08/19/97	DB, MA, S	DB, MA	21.0	24.0	5.9	7.6	26.1	28.2	76.9	105.8	7.4	7.4	88	2	47.0	67.0	80.0	340.0	19.0	23.0
97	3	09/03/97	DB, MA	DB, MA	19.0	21.0	6.8	NO D	18.4	19.0	81.5	0.0	7.6	7.4	20	10	77.5	122.5	115.0	320.0	15.0	20.0
97	3	09/18/97	DB, BA	DB, MA	19.0	22.0	6.9	8.2	15.0	18.8	81.1	104.3	7.3	7.6*	*	*	77.5	122.5	90.0	350.0	20.0	25.0
97	3	10/02/97	DB, MA	DB, MA, S	11.0	14.5	8.5	8.7	19.9	21.9	87.1	97.3	7.4	7.8	24	4	115.0	157.5	115.0	310.0	7.0	15.0
97	3	10/17/97	DB, MA	DB, MA	NO DOCK	14.5	NO D	8.8	NO DO	23.2	0.0	99.2	NO D	7.5	*	18	NO D	132.5	NO DOC	300.0	6.5	18.0
97	3	11/03/97	*	DB, MA, S	*	10.0	*	10.4	*	3.8	0.0	94.6	*	7.4	*	TNT	*	57.5	*	180.0	*	15.0

Site 4 - Depot Rd

YEAR	SITE	DATE	SAM	SAMPLER-H	WTE	WTEMP-H	DO-	DO-H	SAL-	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECA	FECAL-H	LP-L	LP-H	DEPTH	DEPTH-H	ATEMP	ATEMP-H	
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/1	CFU/100ML	cm	cm	cm	cm		oC	
90	4	04/08/90			5.1	8.1	9.5	11.7	11.2	11.0	80.26	105.93	7.5	7.9	*	*	BSV	BSV	*	*	6.2	16.0	
90	4	04/25/90			*	10.0	*	9.7	*	17.1	*	95.51	*	7.6	*	*	*	105.0	*	*	*	*	11.0
90	4	05/09/90			12.6	12.0	12.0	8.8	10.2	20.1	119.67	92.29	7.8	7.9	*	*	BSV	BSV	*	*	13.0	13.0	
90	4	05/24/90			13.0	13.0	6.3	10.8	15.2	15.8	65.95	112.33	7.2	7.7	*	*	BSV	BSV	*	*	9.5	13.5	
90	4	06/08/90			19.0	18.1	8.6	8.0	19.9	20.4	103.99	95.15	7.7	7.8	*	*	BSV	BSV	*	*	19.0	22.7	
90	4	06/22/90			19.0	22.0	7.7	7.5	24.3	25.2	95.33	98.73	7.6	7.7	*	*	*	85.0	*	*	19.0	31.0	
90	4	07/07/90			21.0	23.6	9.5	6.7	25.8	22.4	123.55	89.78	8.0	7.9	*	*	*	90.0	*	90.0	19.5	30.0	
90	4	07/20/90			23.0	25.9	8.4	8.6	28.9	29.3	115.40	123.72	8.0	7.9	*	*	*	*	*	*	24.1	37.0	
90	4	08/05/90			24.0	26.6	6.7	7.7	27.8	28.5	93.08	112.15	7.8	8.0	*	*	BSV	115.0	*	115.0	24.0	28.0	
90	4	08/20/90			19.0	21.5	7.5	8.2	24.0	18.4	92.93	103.07	7.6	7.8	*	*	*	120.0	*	120.0	14.5	19.0	
90	4	09/03/90			18.5	22.5	6.3	6.8	22.2	22.4	76.47	89.09	7.5	7.6	*	*	*	45.0	*	*	12.0	27.5	
90	4	09/18/90			11.5	15.0	8.5	7.0	27.1	25.6	92.19	80.93	7.8	7.6	*	*	*	95.0	*	*	7.0	16.5	
90	4	10/04/90			13.0	15.5	9.2	8.8	28.6	29.0	104.04	105.00	7.6	7.9	*	*	*	90.0	*	90.0	4.0	21.5	
90	4	10/18/90			14.0	16.1	7.0	7.5	19.9	21.2	76.53	86.13	7.4	7.6	*	*	*	95.0	*	95.0	16.0	20.3	
90	4	11/02/90			7.7	11.0	8.9	9.1	14.4	16.3	81.29	91.20	7.6	7.7	*	*	*	110.0	*	110.0	10.0	23.0	
91	4	04/14/91	LS F	LS FM EP EN	5.5	11.5	9.2	12.0	19.9	16.3	82.92	121.59	7.7	8.3	*	*	*	40.0	*	40.0	-4.0	12.0	
91	4	04/28/91	LS F	LS FM EP	10.0	14.5	9.0	9.2	12.7	13.3	86.27	97.71	7.6	7.8	*	*	*	4.0	*	*	9.5	14.0	
91	4	05/13/91	EP F	EP FM	14.0	18.0	7.6	7.8	15.0	15.2	80.67	90.00	7.5	6.9	*	*	*	70.0	*	70.0	14.0	33.0	
91	4	05/27/91	EP L	EP LS	17.0	19.5	8.2	8.2	21.4	22.0	96.19	101.35	7.7	7.7	*	*	BSV	40.0	*	40.0	12.0	19.0	
91	4	06/11/91	EP J	EP JJ LS BF	21.0	22.0	7.6	7.8	28.8	27.4	99.44	104.31	*	7.8	*	*	BSV	60.0	*	60.0	26.0	29.0	
91	4	06/26/91	LS E	LS EP	23.5	24.5	9.4	9.2	30.0	28.5	131.15	129.46	8.0	7.9	*	*	*	55.0	*	55.0	27.0	30.0	
91	4	07/10/91	EP A	EP AR	20.0	22.5	8.4	8.9	31.5	31.9	111.05	123.41	7.9	7.9	*	*	*	55.0	*	55.0	19.0	25.0	
91	4	07/25/91	EP L	EP LS	22.0	24.0	6.7	7.1	31.1	30.8	91.63	100.42	7.7	7.8	*	*	*	55.0	*	55.0	21.5	22.0	
91	4	08/09/91			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
91	4	08/24/91	FM L	FM LS	17.5	23.5	6.3	6.5	8.2	9.0	69.16	80.50	7.2	7.2	*	*	10.0	40.0	*	*	17.0	22.0	
91	4	09/08/91	FM	FM MM	17.0	23.0	5.4	8.0	*	*	*	*	7.4	7.8	*	*	*	*	*	*	14.0	24.0	
91	4	09/22/91	LS F	LS FM	10.0	18.0	7.0	8.7	23.4	24.0	71.73	105.73	7.3	7.8	*	*	*	*	*	*	4.0	19.0	
91	4	10/06/91	LS F	LS FM	15.0	16.0	7.3	7.7	16.7	19.0	79.94	87.26	7.6	7.6	*	*	*	120.0	*	120.0	15.0	20.0	
91	4	10/23/91	LS E	LS EP	8.0	12.0	8.8	9.2	18.0	19.5	83.20	96.13	7.8	7.8	*	*	*	80.0	*	80.0	4.0	15.0	
91	4	11/06/91	LS E	EP	*	9.0	*	9.3	*	23.5	*	93.23	*	7.8	*	*	50.0	*	50.0	*	11.0		
92	4	04/16/92	HM	PF PW	6.5	7.5	11.0	12.0	20.8	22.2	102.18	115.16	7.7	8.2	*	*	*	70.0	*	70.0	6.0	9.0	
92	4	05/02/92	PW	FM	12.5	12.5	8.8	10.1	14.8	16.1	90.33	104.48	7.8	8.3	*	*	*	BSV	*	*	16.0	15.5	
92	4	05/15/92			16.5	17.0	9.8	8.7	20.1	21.2	112.92	101.94	7.7	7.8	*	*	*	BSV	*	*	14.0	17.0	
92	4	06/01/92	PW	PW	12.0	12.0	7.5	8.0	15.0	24.0	76.24	85.99	7.7	7.6	*	*	*	*	*	*	10.0	10.5	
92	4	06/15/92	PW	PW	21.0	21.0	9.0	8.8	21.2	21.2	113.91	111.38	7.8	7.8	*	*	*	*	*	*	20.5	22.0	
92	4	06/29/92	PK P	PK PW LS	22.0	24.5	9.0	8.6	29.0	27.8	121.53	120.52	7.8	7.8	8.0	3	*	70.0	*	70.0	23.0	31.0	
92	4	07/14/92	PW	PW PK	20.0	19.5	8.2	7.3	29.4	30.2	106.97	94.83	8.0	7.9	4.0	2	*	*	*	*	21.0	18.0	
92	4	07/29/92	PW	JJ JJ	23.5	24.0	8.5	8.1	30.3	30.6	118.81	114.43	8.1	7.9	2.0	2	*	90.0	*	*	24.0	30.0	
92	4	08/12/92	PK P	PK LS	19.0	21.0	7.6	9.1	23.5	30.3	93.89	121.63	7.6	*	10.0	1	140.0	BSV	*	*	18.5	22.0	
92	4	08/26/92	PW	PW LS	21.5	25.5	6.6	8.6	27.8	26.9	87.67	121.99	7.6	8.0	22.0	4	*	BSV	*	*	23.0	30.0	
92	4	09/11/92	LS P	LS PW	19.0	22.0	7.2	8.6	30.8	29.9	93.02	116.76	7.8	8.0	8.0	9	*	*	*	*	20.0	23.0	
92	4	09/26/92	DW	DW JH	12.5	14.5	9.4	9.0	24.6	30.4	102.50	106.20	7.6	7.9	5.0	3	BSV	BSV	*	*	13.0	15.5	
92	4	10/10/92	PW	PK LS	14.0	15.0	7.2	8.5	27.1	30.7	82.33	101.52	7.6	8.0	*	18	BSV	BSV	*	*	18.0	23.0	
92	4	10/24/92	LS P	LS JJ	7.0	10.0	8.7	9.9	28.4	28.4	86.05	104.82	7.6	7.7	0.0	0	*	BSV	*	*	8.0	15.0	
92	4	11/09/92	*	PW LS	-7.5	3.5	10.1	11.3	23.5	24.3	*	99.35	7.8	7.9	0.0	0	*	*	*	*	-6.0	4.0	
93	4	04/21/93	*	LS PW	*	11.5	*	11.7	*	7.7	*	112.65	*	8.2	10.0	10	*	70.0	*	70.0	*	29.0	
93	4	05/06/93	*	LS PM	*	19.0	*	9.2	*	11.5	*	106.02	*	7.7	*	40	*	40.0	*	40.0	*	24.0	
93	4	05/20/93	*	PM PW	*	14.0	*	8.1	*	20.5	*	88.88	*	7.7	*	0	*	85.0	*	85.0	*	13.0	
93	4	06/03/93	*	LS AR	*	20.0	*	8.6	*	23.3	*	108.15	*	7.9	*	0	*	55.0	*	55.0	*	25.0	
93	4	06/23/93	*	LS	*	21.0	*	7.7	*	1.2	*	87.28	*	8.0	*	30	*	30.0	*	60.0	*	28.0	
93	4	07/06/93	*	JJ JJ LS	*	26.0	*	*	*	28.1	*	*	*	8.1	*	0	*	55.0	*	55.0	*	35.0	
93	4	07/22/93	*	LS PW	*	23.0	*	7.8	*	29.4	*	106.80	*	8.0	*	0	*	70.0	*	70.0	*	27.0	
93	4	08/03/93	*	LS PW	*	26.0	*	9.8	*	28.9	*	141.87	*	8.1	*	*	*	75.0	*	75.0	*	33.0	
93	4	08/19/93	*	PW	*	24.0	*	8.4	*	28.5	*	117.18	*	7.8	*	0	*	60.0	*	60.0	*	24.0	
93	4	09/02/93	*	LS KF	*	24.0	*	7.9	*	31.7	*	112.35	*	7.9	*	0	*	60.0	*	60.0	*	24.5	
97	4	11/03/97	*	LS, KF, PW	*	11.0	*	9.3	*	25.8	*	98.9	*	7.8	*	45	*	75.0	*	75.0	*	14.5	

93	4	09/20/93	*	LS PF KF	*	17.5	*	9.2	*	30.1	*	114.98	*	8.1	*	10	*	80.0	*	80.0	*	14.0
93	4	10/04/93	*	AT LS PW PF	*	17.5	*	9.8	*	29.2	*	121.79	*	8.0	*	TNTC	*	60.0	*	60.0	*	24.0
93	4	10/18/93	*	LS PW	*	16.0	*	10.1	*	27.5	*	120.59	*	8.0	*	240	*	40.0	*	40.0	*	12.0
93	4	11/09/93	*	LS AT KF	*	8.0	*	10.1	*	23.1	*	98.68	*	7.9	0.0	0	*	35.0	*	35.0	*	4.0
94	4	04/26/94	*	LS KF PM	*	9.0	*	11.2	*	19.6	*	109.49	*	7.9	*	1	*	55.0	*	55.0	*	8.0
94	4	05/10/94	*	LS KF AT PW	*	16.0	*	9.9	*	11.9	*	107.63	*	7.8	*	30	*	40.0	*	40.0	*	20.0
94	4	05/25/94	*	LS KF AT PW	*	16.0	*	9.4	*	18.3	*	106.08	*	7.6	*	1200	*	70.0	*	70.0	*	15.0
94	4	06/09/94	*	KF AT	*	22.0	*	9.5	*	24.3	*	124.73	*	7.0	*	*	*	25.0	*	25.0	*	29.0
94	4	06/23/94	*	LS KF PM AT	*	23.0	*	8.1	*	28.6	*	111.08	*	8.1	*	7	*	50.0	*	50.0	*	27.0
94	4	07/11/94	*	LS KF PW	*	27	*	8.6	*	30.9	*	128.12	*	8.1	*	9	*	50	*	50	*	28.0
94	4	07/25/94	*	PW PM KF	*	27.5	*	7.7	*	31.7	*	116.22	*	7.9	*	2	*	80.0	*	80.0	*	34.0
94	4	08/09/94	*	PM KF PW	*	26.5	*	8.8	*	31.1	*	130.15	*	8.2	*	1	*	45	*	45	*	29.0
94	4	08/22/94	*	LS KF	*	19	*	7.3	*	30.6	*	94.19	*	7.8	*	*	*	70	*	70	*	16.0
94	4	09/07/94	*	LS PM KF PW	*	18	*	9.8	*	31.3	*	124.62	*	8	*	*	*	85	*	85	*	28.0
94	4	09/21/94	*	KF AT PM PW	*	20	*	9.9	*	31.3	*	130.72	*	8.1	*	0	*	42	*	42	*	22.0
94	4	10/08/94	*	LS KF	*	13	*	12.5	*	24.2	*	137.42	*	8.5	*	2	*	88	*	88	*	13.0
94	4	10/20/94	*	LS AT KF	*	13	*	11.8	*	29.4	*	134.13	*	8.3	*	0	*	80	*	80	*	*
94	4	11/07/94	*	LS KF PW	*	9	*	9.7	*	23.6	*	97.30	*	*	*	15	*	15	*	50	*	10.0
95	4	04/18/95	*	LS KF AT	*	*	*	11.6	*	*	*	*	*	7.1	*	0	*	*	*	55.0	*	12.0
95	4	05/01/95	*	PG KF PW	*	13.0	*	10.6	*	21.6	*	114.65	*	7.8	*	0	*	BSV	*	45.0	*	10.0
95	4	05/15/95	*	PG KF PW	*	12.5	*	8.8	*	23.6	*	95.32	*	7.6	*	2	*	BSV	*	75.0	*	9.0
95	4	05/30/95	*	PM KF LS	*	23.0	*	*	*	20.1	*	*	*	7.6	*	50	*	*	*	35.0	*	27.0
95	4	06/13/95	*	LS AT KF PW	*	18.0	*	8.4	*	24.8	*	102.59	*	7.6	*	4	*	BSV	*	57.0	*	16.0
95	4	06/27/95	*	LS PM	*	23.0	*	8.7	*	28.8	*	119.45	*	7.9	*	11	*	BSV	*	25.0	*	25.0
95	4	07/12/95	*	LS PW KF	*	24.0	*	*	*	29.2	*	*	*	7.8	*	1	*	*	*	55.5	*	28.0
95	4	07/27/95	*	PM KF	*	29.5	*	8.7	*	28.5	*	133.20	*	8.0	*	NV	*	BSV	*	65.0	*	35.0
95	4	08/10/95	*	LS PM KF	*	25.5	*	9.0	*	27.3	*	127.96	*	8.0	*	1	*	BSV	*	65.0	*	32.0
95	4	08/28/95	*	LS KF PW	*	23.0	*	8.3	*	30.1	*	114.86	*	7.9	*	NV	*	BSV	*	65.0	*	23.0
95	4	09/11/95	*	PM AT	*	20.5	*	8.1	*	31.3	*	107.93	*	8.1	*	0	*	BSV	*	65.0	*	21.0
95	4	09/26/95	*	PM KF LS PW	*	15.0	*	7.5	*	30.4	*	89.41	*	7.7	*	1	*	BSV	*	55.0	*	15.0
95	4	10/10/95	*	LES KF MY PM	*	16.0	*	9.0	*	32.0	*	110.59	*	7.9	*	0	*	BSV	*	55.0	*	19.0
95	4	10/26/95	*	LES KF AT PM	*	12.5	*	9.3	*	24.2	*	101.15	*	7.8	*	0	*	BSV	*	80.0	*	1.5
95	4	11/09/95	*	LS KF MY PM	*	6.0	*	10.8	*	13.7	*	94.72	*	7.5	*	14	*	45.0	*	60.0	*	0.0
96	4	04/18/96	*	KF PM PW	*	11.5	*	10.7	*	2.0	*	99.7	*	7.5	*	20	*	25.0	*	60.0	*	14.0
96	4	05/06/96	*	KF PM	*	11.5	*	9.2	*	6.4	*	87.9	*	7.4	*	3	*	65.0	*	65.0	*	10.0
96	4	05/20/96	*	LS AT KF PW	*	20.5	*	8.8	*	10.9	*	104.06	*	7.6	*	11	*	65.0	*	65.0	*	31
96	4	06/03/96	*	LS KF PM PW	*	19	*	9.6	*	18.4	*	115.07	*	7.8	*	0	*	57.5	*	60.0	*	17
96	4	06/17/96	*	LS PM KF	*	25	*	10.1	*	24	*	139.67	*	8	*	0	*	45.0	*	45.0	*	23
96	4	07/01/96	*	LS KF	*	25	*	8.4	*	26.4	*	117.78	*	8	*	19	*	65.0	*	65.0	*	31.5
96	4	07/15/96	*	PM KF	*	24	*	7.9	*	18.6	*	104.08	*	7.8	*	276	*	65.0	*	65.0	*	27
96	4	07/30/96	*	LS KF	*	22.5	*	9.1	*	22.3	*	119.16	*	8	*	1	*	65.0	*	65.0	*	23
96	4	08/14/96	*	LS KF PW	*	25	*	8.2	*	26.8	*	115.25	*	8	*	4	*	45.0	*	45.0	*	30
96	4	08/29/96	*	PM PW	*	23.5	*	8.8	*	28.9	*	121.97	*	7.8	*	61	*	80.0	*	80.0	*	30
96	4	09/16/96	*	KF	*	19	*	8.3	*	29.5	*	106.36	*	7.8	*	5	*	80.0	*	80.0	*	23
96	4	09/30/96	*	LS PM KF	*	15.5	*	9.4	*	27	*	110.75	*	8	*	0	*	75.0	*	75.0	*	18
96	4	10/15/96	*	LS KF	*	9	*	10	*	21.7	*	99.08	*	8	*	600	*	50.0	*	50.0	*	12
96	4	10/29/96	*	KF PM PW	*	6.5	*	9.9	*	4.2	*	82.96	*	7.4	*	TNTC	*	10.0	*	85.0	*	12
96	4	11/06/96	*	PM KF PW	*	7.5	*	10.5	*	8.5	*	92.51	*	7.4	*	15	*	50.0	*	50.0	*	9
97	4	04/23/97	*	LS, PM, KF, P	*	11.5	*	10.6	*	5.9	*	101	*	7.8	*	8	*	70.0	*	70.0	*	17.0
97	4	05/06/97	*	LS, KF, PM	*	11	*	9.3	*	14.8	*	92.4	*	7.1	*	*	*	60.0	*	60.0	*	13.0
97	4	05/22/97	*	PM, KF	*	15.0	*	8.9	*	13.7	*	95.8	*	7.4	*	32	*	30.0	*	65.0	*	17.0
97	4	06/05/97	*	LS, KF, PM	*	17.0	*	9.1	*	20.7	*	106.3	*	7.8	*	*	*	50.0	*	50.0	*	16.0
97	4	06/23/97	*	KF	*	26.0	*	6.8	*	24.0	*	95.7	*	7.6	*	24	*	25.0	*	70.0	*	28.0
97	4	07/07/97	*	KF, PM	*	24.0	*	7.9	*	27.6	*	109.6	*	7.6	*	3	*	62.5	*	70.0	*	27.0
97	4	07/21/97	*	LS, KF	*	20.5	*	4.5	*	25.4	*	57.5	*	7.9	*	2	*	50.0	*	50.0	*	18.5
97	4	08/04/97	*	KF, LS	*	22.0	*	6.9	*	29.1	*	93.2	*	7.1	*	13	*	LOOSE	*	50.0	*	23.0
97	4	08/19/97	*	LS, PM, KF	*	23.5	*	9.0	*	29.0	*	124.8	*	8.5	*	1	*	85.0	*	85.0	*	29.0
97	4	09/03/97	*	KF, PM	*	19.0	*	7.6	*	27.6	*	96.2	*	7.0	*	0	*	60.0	*	60.0	*	22.0
97	4	09/18/97	*	LS, BS, PW	*	22.5	*	7.5	*	29.0	*	102.2	*	7.9	*	*	*	40.0	*	40.0	*	23.0
97	4	10/02/97	*	LS, KF	*	13.0	*	9.9	*	29.5	*	112.6	*	7.8	*	4	*	45.0	*	45.0	*	15.0
97	4	10/17/97	*	LS, PM, KF	*	14.0	*	9.4	*	29.5	*	109.2	*	8.0	*	3	*	65.0	*	65.0	*	17.0

Site 5 - Portsmouth Country Club

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECA	FECA	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H
					Oc	oC	ppm	ppm	ppt	ppt	%	%			CFU/1	CFU/	cm	cm	cm	cm	0c	0c
90	5	04/08/90			5.0	11.0	10.7	10.4	2.8	7.2	85.64	98.73	7.2	7.3	*	*	*	23.0	*	*	3.0	14.0
90	5	04/25/90			11.0	11.0	9.3	9.3	1.8	16.0	85.61	93.03	7.3	7.7	*	*	*	65.0	*	*	10.0	10.0
90	5	05/09/90			12.0	21.0	8.8	8.9	2.0	12.7	82.97	107.33	7.5	7.4	*	*	*	55.0	*	*	11.0	27.0
90	5	05/24/90			10.0	15.0	9.0	8.6	1.8	13.9	80.94	92.84	7.4	7.6	*	*	*	36.0	*	*	12.0	9.0
90	5	06/08/90			17.0	23.0	7.7	7.9	4.1	17.5	81.81	101.58	7.3	7.8	*	*	*	45.0	*	*	18.0	22.0
90	5	06/22/90			18.0	25.0	5.8	7.7	10.8	22.5	65.27	105.57	7.2	7.8	*	*	*	45.0	*	*	17.0	29.0
90	5	07/07/90			20.0	24.0	6.6	8.2	10.1	24.8	76.96	111.93	7.4	8.0	*	*	*	50.0	*	*	17.0	22.0
90	5	07/22/90			23.0	26.0	4.7	7.1	20.1	28.2	61.33	102.36	7.5	8.0	*	*	*	75.0	*	*	22.0	27.0
90	5	08/06/90			23.0	23.0	5.5	7.5	18.6	29.5	71.16	103.41	7.4	7.9	*	*	*	45.0	*	*	23.0	22.0
90	5	08/20/90			19.0	21.0	6.6	8.3	12.2	26.1	78.36	108.14	7.2	8.0	*	*	*	90.0	*	*	10.0	19.0
90	5	09/04/90			18.0	21.0	6.5	7.9	10.8	22.2	73.14	100.57	7.3	7.7	*	*	*	95.0	*	*	14.0	20.0
90	5	09/18/90			12.0	14.0	6.6	8.2	14.9	26.9	67.05	93.65	7.3	7.8	*	*	*	55.0	*	*	10.0	13.0
90	5	10/04/90			12.0	15.0	6.8	8.5	17.5	27.4	68.12	99.40	7.8	8.2	*	*	*	*	*	*	11.0	23.0
90	5	10/18/90			13.0	14.0	7.2	7.3	0.1	10.8	68.69	75.61	7.2	7.2	*	*	*	60.0	*	*	17.0	24.0
90	5	11/02/90			*	10.0	*	9.1	*	14.6	*	88.24	*	7.6	*	*	*	80.0	*	*	*	19.0
91	5	04/14/91	HJ SM LK BB	HJ SM LK BB	6.5	11.5	9.9	10.4	2.8	17.5	82.28	106.15	7.5	8.1	*	*	*	70.0	*	*	3.0	11.0
91	5	04/28/91	HJ LK BB	HJ LK BB	13.0	15.0	8.1	8.6	2.1	11.4	78.14	91.30	7.0	7.6	*	*	*	30.0	*	*	9.0	12.0
91	5	05/14/91	LK HJ BB	LK HJ BB	18.5	17.0	6.0	7.5	5.6	17.1	66.26	85.76	7.3	7.6	*	*	*	45.0	*	*	17.0	15.0
91	5	05/28/91	BB HJ LK	BB HJ LK	18.0	23.0	6.2	7.2	8.2	22.6	68.76	95.31	7.4	7.7	*	*	*	65.0	*	*	16.0	28.0
91	5	06/12/91	BB HJ LK	BB HJ LK	21.0	24.0	4.8	6.1	10.3	22.9	57.12	82.35	7.3	7.8	*	*	*	70.0	*	*	20.0	25.0
91	5	06/26/91	BB SM HJ LK	BB SM HJ LK	21.0	25.0	7.2	8.5	14.2	27.8	87.56	120.17	7.7	8.0	*	*	*	85.0	*	*	21.0	30.0
91	5	07/11/91	BB LK HJ	BB LK HJ	20.0	23.0	5.8	8.0	20.6	28.8	71.79	110.51	7.4	7.9	*	*	*	90.0	*	*	18.0	27.0
91	5	07/26/91	LK BB HJ	LK BB HJ	22.0	23.0	4.6	6.0	18.6	30.2	58.43	83.08	7.5	7.8	*	*	*	85.0	*	*	20.0	24.0
91	5	08/09/91	HJ SM LK	HJ SM LK	22.0	23.0	5.5	7.4	23.8	32.1	72.00	103.66	7.6	7.9	*	*	*	95.0	*	*	19.0	21.0
91	5	08/25/91	LK SN BB	LK SN BB	19.0	23.0	6.0	7.4	1.8	9.6	65.58	91.10	7.1	7.5	*	*	*	70.0	*	*	16.0	20.0
91	5	09/09/91	HJ RJ BB RH	HJ RJ BB RH	18.0	22.0	5.8	8.6	6.0	23.8	63.55	112.58	7.3	7.9	*	*	*	95.0	*	*	12.0	19.0
91	5	09/23/91	HJ LK BB	HJ LK BB	12.0	16.0	7.8	8.0	3.3	20.9	74.08	91.70	7.2	7.7	*	*	*	115.0	*	*	11.0	18.0
91	5	10/07/91	LK SM BB	LK SM BB	12.0	13.5	7.6	8.4	2.0	13.9	71.65	87.64	7.3	7.6	*	*	*	55.0	*	*	5.0	12.0
91	5	10/23/91	HJ LK SM	HJ LK SM	7.0	11.0	8.8	9.4	1.6	17.5	73.55	94.90	7.3	7.7	*	*	*	*	*	*	2.0	14.0
91	5	11/06/91	LK HJ BB	LK SM BB	5.0	6.0	9.2	9.5	5.2	22.0	74.69	87.89	7.7	7.8	*	*	*	*	*	*	0.0	7.0
92	5	04/16/92	LK SM HJ BB	SM BB	5.5	8.5	10.8	12.0	2.8	18.3	87.54	115.00	7.2	8.3	*	*	BSV	55.0	*	*	-2.0	2.0
92	5	05/02/92	LK HJ SM BB	LK HJ SM BB	12.5	14.5	8.6	9.8	2.1	15.3	82.03	105.31	7.4	8.1	*	*	BSV	90.0	*	*	11.0	13.0
92	5	05/16/92	LK SM BB	LK SM BB	13.5	15.5	7.3	8.5	6.7	18.7	73.05	95.17	7.4	7.8	*	*	BSV	65.0	*	*	8.0	14.0
92	5	06/01/92	SM BB	SM HJ BB	14.0	13.5	6.4	7.5	12.6	17.6	66.98	80.00	7.4	7.6	*	*	BSV	35.0	*	*	9.0	9.0
92	5	06/14/92	LK BB	LK BB	21.0	27.0	4.6	6.9	3.7	13.9	52.83	93.42	7.1	7.7	*	*	BSV	55.0	*	*	20.0	30.0
92	5	06/30/92	HJ LK SM	HJ LK SM	22.0	26.0	5.1	8.6	16.0	25.6	63.84	122.13	7.2	7.9	*	42	BSV	90.0	*	*	20.0	29.0
92	5	07/14/92	LK SM BB	LK SM BB	21.0	20.0	5.5	6.7	11.6	27.2	65.92	86.26	7.2	7.7	0	10	bsv	95.0	*	*	20.0	17.0
92	5	07/28/92	HJ BB LK	HJ BB LK	20.0	22.0	5.9	7.5	14.0	28.8	70.31	99.94	7.3	7.7	480	16	bsv	100.0	*	*	22.0	24.0
92	5	08/13/92	SM BB	SM BB	19.0	20.0	6.8	8.7	14.4	27.2	79.65	112.01	7.4	7.8	137	2	bsv	bsv	*	*	12.0	19.0
92	5	08/27/92	LK SM HJ BB	LK SM BB	22.5	24.0	4.5	6.2	16.0	26.0	56.85	85.22	7.2	7.6	560	15	bsv	125.0	*	*	20.0	26.5
92	5	09/11/92	LK SM HJ BB	LK SM HJ BB	20.0	21.0	5.1	7.1	12.7	27.4	60.33	93.23	7.2	7.7	390	8	bsv	bsv	*	*	18.0	22.0
92	5	09/28/92	SM HJ LK BB	SM HJ BB	12.0	14.0	7.4	8.7	17.5	28.5	76.38	101.03	7.5	7.9	90	5	bsv	nsv	*	*	11.0	15.0
92	5	10/11/92	HJ LK BB	HJ LK BB	13.0	14.0	6.2	7.7	10.5	28.5	62.73	88.84	7.1	7.5	540	42	bsv	bsv	*	*	13.0	17.0
92	5	10/25/92	SM BB	SM BB	9.0	9.0	8.1	8.8	9.3	26.0	74.33	89.67	7.2	7.6	200	0	bsv	bsv	*	*	7.0	8.0
92	5	11/09/92	LK SM BB	LK HJ SM BB	1.0	3.0	10.9	10.9	2.2	19.1	78.15	91.80	7.5	7.7	10	10	bsv	80.0	*	*	-6.0	2.0
93	5	04/21/93	BB HJ SM	BB HJ SM	13.5	15.5	8.8	11.2	1.1	4.4	85.35	115.51	7.3	8.2	180	330	*	57.5	*	100.0	15.0	20.0
93	5	05/06/93	HJ SM BB AR	HJ SM BB	17.0	18.5	7.6	7.9	1.8	15.5	79.75	92.21	7.4	7.5	*	*	40.0	47.5	40.0	70.0	19.0	29.0
93	5	05/20/93	BB DC	HJ BB DC	13.5	15.5	7.3	7.9	3.9	18.6	71.91	88.40	7.2	7.4	1100	0	35.0	62.5	35.0	110.0	11.5	13.0
93	5	06/03/93	HJ SM DC BB	HJ SM DC BB	14.0	17.5	6.6	7.8	10.3	23.2	68.16	93.41	7.4	7.6	240	10	30.0	27.5	30.0	125.0	14.0	22.0
93	5	06/23/93	SM BB DC	SM BB	19.5	21.5	6.2	6.9	15.6	26.8	73.83	90.44	7.3	7.6	*	*	30.0	27.5	30.0	120.0	20.0	24.0
93	5	07/06/93	SM BB DC	SM BB DC	24.5	28.0	7.2	7.6	19.8	15.7	96.35	105.71	7.4	7.7	350	0	35.0	102.5	35.0	115.0	24.0	34.0
93	5	07/22/93	BB DC	BB DC SM	21.5	22.5	5.5	7.0	24.3	32.3	71.54	97.30	7.3	7.7	200	0	45.0	55.0	45.0	75.0	22.0	25.0
93	5	08/03/93		BB DC SM	23.5	27.5	7.8	8.8	18.0	28.8	101.49	130.58	7.3	7.8	600	0	45.0	110.0	45.0	120.0	24.0	31.0
93	5	08/19/93	SM DC	SM DC BB	21.0	23.0	4.2	6.8	23.8	30.1	53.98	94.10	7.2	7.7	210	10	35.0	135.0	35.0	135.0	19.5	24.5
93	5	09/02/93	BB SM DC	BB SM DC	22.0	24.0	4.3	8.2	24.1	31.5	56.39	116.47	7.2	7.8	100	0	45.0	110.0	45.0	110.0	20.0	23.5
93	5	09/20/93	BB SM	BB SM DC	15.0	16.5	6.8	9.2	19.6	24.1	75.77	108.61	7.5	7.9	*	*	45.0	87.5	45.0	145.0	18.0	15.0
93	5	10/04/93	BB SM DC	BB SM DC	12.5	16.0	7.9	9.5	12.9	26.0	80.18	113.78	7.4	7.9	140	0	50.0	110.0	50.0	110.0	17.0	22.0

93	5	10/18/93	BB DC	BB DC SM	11.5	14.0	7.4	8.5	13.9	28.5	73.90	98.08	7.5	7.8	*	45.0	27.5	45.0	*	18.0	18.0	
93	5	11/09/93	SM DC BB	SM DC	5.0	3.0	10.5	10.1	5.7	22.0	85.51	88.74	7.4	7.7	*	35.0	85.0	35.0	85.0	10.0	1.0	
94	5	04/28/94	BB DC SM	BB DC SM	8.0	8.0	9.0	10.4	1.8	17.0	77.09	97.71	7.3	8.0	60	12	*	72.5	*	115.0	5.0	7.0
94	5	05/10/94	BB DC SM	BB DC SM	14.0	16.0	8.3	8.8	1.0	10.6	81.35	84.98	7.3	7.6	100	60	*	27.5	*	110.0	14.0	18.0
94	5	05/25/94	BB DC SM	BB DC SM	15.0	15.5	6.5	7.9	4.9	17.0	66.52	84.23	7.3	7.5	TNTC	20	*	82.5	*	135.0	11.0	15.0
94	5	06/09/94	BB DC	BB DC SM	18.5	23	5.5	8.9	7.1	21.6	61.24	117.14	7.3	8.0	520	11	*	55.0	*	95.0	19.0	26.0
94	5	06/23/94	BB DC SM	BB DC SM	20.5	23.0	5.6	7.9	19.5	27.2	69.52	107.44	7.3	7.9	T	25	35.0	40.0	35.0	70.0	21.0	22.0
94	5	07/11/94	BB DC	DC SM	24.0	27.0	6.9	10.4	20.5	28.2	91.88	152.51	7.5	8.2	340	34	35.0	75.0	35.0	75.0	24.0	33.0
94	5	07/25/94	BB DC	DC SM	25.0	28.0	6.5	9.3	18.9	28.6	85.69	139.00	7.5	7.9	430	10	35.0	87.5	35.0	115.0	25.0	30.0
94	5	08/09/94	BB DC	BB DC SM	21.0	25.0	6.0	8.9	22.5	29.2	76.52	126.87	7.4	8.1	320	10	35.0	115.0	35.0	115.0	21.0	27.0
94	5	08/22/94	BB DC	BB DC	20.0	19.5	5.1	7.0	8.8	27.0	59.05	89.16	7.3	7.5	1000	0	35.0	90.0	35.0	90.0	19.0	16.0
94	5	09/07/94	BB DC SM	BB DC SM	14.5	17.0	6.8	9.6	15.7	29.2	73.25	118.16	7.3	8.1	*	*	35.0	100.0	35.0	100.0	15.0	21.0
94	5	09/21/94	BB DC SM	BB DC SM	16.0	19.5	8.5	11.5	13.2	28.5	93.10	147.83	7.8	8.4	57	1	25.0	105.0	25.0	105.0	16.0	23.0
94	5	10/06/94	BB DC	BB DC SM	9.5	13.0	7.9	11.4	3.1	20.3	70.73	122.31	7.3	8.4	110	2	35.0	62.5	35.0	100.0	8.0	14.0
94	5	10/20/94	BB DC SM	BB DC SM	11.0	13.0	7.3	10.4	8.4	25.5	69.78	115.28	7.4	8.3	33	3	35.0	75.0	35.0	130.0	19.0	16.0
94	5	11/07/94	BB SM	BB SM	9.0	9.0	8.3	9.0	13.4	27.4	78.07	92.57	7.4	7.7	260	10	35.0	18.5	35.0	*	8.0	11.0
95	5	04/18/95	BB SM	BB DC SM	10.0	12.5	10.8	11.1	1.2	18.8	96.33	116.73	7.6	8.0	22	NV	*	97.5	45.0	110.0	13.0	11.0
95	5	05/01/95	BB DC SM	BB DC SM	10.0	12.0	9.1	9.3	4.3	20.1	83.02	97.54	7.5	7.9	26	3	*	87.5	45.0	105.0	8.5	11.0
95	5	05/15/95	BB DC SM	BB DC SM	12.0	11.5	8.3	8.4	3.3	22.6	78.82	88.51	7.4	7.8	110	0	*	70.0	45.0	120.0	10.0	9.0
95	5	05/30/95	BB DC	BB DC	17.5	21.0	6.0	8.6	4.2	19.9	84.44	108.03	7.5	7.8	240	20	*	27.5	45.0	95.0	20.0	23.0
95	5	06/13/95	BB SM	DC SM BB	16.5	19.0	5.1	7.4	11.4	23.6	55.85	91.47	7.2	7.6	220	25	*	75.0	45.0	120.0	17.0	16.5
95	5	06/27/95	DC SM	DC SM	21.0	22.0	6.6	8.1	14.8	27.8	80.44	108.58	7.5	8.0	340	4	*	70.0	45.0	95.0	22.0	23.0
95	5	07/12/95	BB DC SM	BB DC SM	20.0	23.0	4.6	7.5	22.0	28.8	57.41	102.98	7.3	8.0	230	5	*	100.0	45.0	115.0	17.0	24.0
95	5	07/27/95	BB SM	BB DC SM	24.0	29.5	5.1	9.5	2.8	25.5	61.65	143.00	7.3	8.0	TNTC	NV	*	BSV	45.0	95.0	24.0	32.0
95	5	08/10/95	BB DC SM	BB SM	21.0	28.0	5.0	9.0	16.0	27.8	81.42	129.45	7.3	8.0	320	0	*	*	45.0	115.0	20.0	28.5
95	5	08/28/95	BB DC SM	BB DC SM	18.0	22.0	6.0	9.7	21.4	29.8	71.79	131.62	7.4	8.0	NV	NV	*	BSV	45.0	115.0	20.0	22.0
95	5	09/11/95	BB SM	BB SM DC	15.0	18.0	6.5	10.3	26.0	30.8	75.34	130.58	7.5	8.0	10	0	*	87.5	45.0	120.0	14.0	21.0
95	5	09/28/95	SM DC	BB DC SM	14.5	13.0	6.3	8.8	21.6	29.8	70.32	100.29	7.5	8.0	80	0	*	130.0	45.0	135.0	14.0	15.0
95	5	10/10/95	BB DC	BB DC SM	11.5	16.0	7.4	10.0	8.4	27.7	71.54	119.54	7.4	8.0	30	0	*	BSV	45.0	130.0	10.0	18.0
95	5	10/28/95	BB DC SM	BB DC SM	10.0	13.0	8.0	9.1	2.4	24.2	72.19	100.04	7.4	7.9	10	10	*	90.0	45.0	140.0	8.0	18.0
95	5	11/09/95	BB DC	BB DC	4.5	5.0	10.3	10.5	0.2	13.0	80.13	89.43	7.4	7.8	140	120	*	19.0	45.0	130.0	1.0	0.0
96	5	04/18/96	BB DC SM	BB DC SM	6.5	10.0	11.0	10.8	0.2	9.4	90.1	101.5	7.5	7.6	20	0	*	27.5	*	120.0	7.0	13.0
96	5	05/06/96	BB DC	BB JD DC	11.5	12	8.4	9.5	0.8	9	86.93	93.21	7.4	7.6	60	30	*	30.0	45.0	95.0	4.5	8.5
96	5	05/20/96	BB DC	DC SM	17.5	22	7.9	8	0.3	11.2	83.08	97.51	7.1	7.6	70	0	*	62.5	*	105.0	22	32
96	5	06/03/96	BB DC	BB DC SM	12.5	18.5	6.2	8.4	9	18.7	69.76	99.88	7.3	7.8	90	8	BSV	52.5	45.0	100.0	19	15
96	5	06/17/96	BB DC	DC SM	22	26	7.4	8.9	10.3	23.2	89.73	124.66	7.6	8	104	6	BSV	67.5	45.0	75.0	22	25
96	5	07/01/96	BB DC CC	DC SM JD	19	23.5	5.4	7.8	18.3	24.6	63.95	105.39	7.3	7.9	440	4	BSV	102.5	45.0	110.0	20	29.5
96	5	07/15/96	BB DC JD	DC SM JD	20	24	6.4	6.9	0.8	14.6	70.99	88.88	7.1	7.6	210	110	BSV	82.5	45.0	105.0	19.5	25
96	5	07/30/96	BB SM	BB DC SM	21	23	5	8.6	6.9	21.3	58.4	112.99	7.2	8	470	8	BSV	82.5	45.0	115.0	17.5	21
96	5	08/14/96	DC SM	DC SM JD	19	24	6.5	9	14	26	75.97	123.71	7.6	8	170	0	BSV	BSV	45.0	90.0	19	26
96	5	08/29/96	BB DC	BB DC	20	23.5	5.2	8.1	23	28.5	65.28	112	7.3	7.8	280	0	BSV	120.0	45.0	130.0	18	28
96	5	09/16/96	BB SM	BB SM	18	19	5.4	8.2	18.7	27.9	63.59	104.04	7.3	7.8	100	20	BSV	BSV	45.0	115.0	16	17
96	5	09/30/96	BB	BB DC SM	15	17.5	7	9	7.3	25.9	72.6	109.57	7.1	8	150	10	33.0	72.5	80.0	120.0	16	18
96	5	10/15/96	DC SM	BB DC SM	8	10	9.1	9.6	0.2	21.7	77.32	97.3	7.3	8	88	8	BSV	25.0	45.0	110.0	5	10
96	5	10/29/96	BB DC SM	BB DC SM	9	9	8.8	9.8	0.3	1.7	76.62	86.03	6.6	7.4	20	96	BSV	BSV	45.0	10.0	8	10
96	5	11/06/96	BB DC SM	BB DC SM	6.5	6.5	10.7	9.7	0.2	6.7	87.8	82.5	7.3	7.2	21	12	BSV	47.5	45.0	95.0	7.5	8
97	5	04/23/97	BB, DC	BB, DC	10.5	14.5	9.2	10	0.8	3.6	83.1	100.5	7.8	7.5	8	6	45.0	72.5	45.0	125.0	12.0	14.0
97	5	05/08/97	BB, DC	SM, DC	11.0	11.0	9.2	9.3	0.3	13.5	84.0	91.6	7.6	7.8	22	15	45.0	70.0	45.0	130.0	11.0	10.0
97	5	05/22/97	BB, DC	SM, DC	12.5	14.0	9.0	8.4	0.3	15.2	85.0	89.3	7.5	7.7	*	*	45.0	27.5	45.0	115.0	11.0	14.0
97	5	06/05/97	BB, DC	DC, SM	15.0	16.5	7.0	8.2	8.3	20.3	73.0	94.6	7.4	7.8	*	*	45.0	50.0	45.0	125.0	13.0	14.0
97	5	06/23/97	BB, SM, DC	BB, SM, DC	23.0	25.0	7.6	7.0	10.6	24.4	94.0	97.0	7.6	7.8	192	14	45.0	35.0	45.0	115.0	24.0	26.0
97	5	07/07/97	BB, DC, SM	BB, DC, SM	24.0	27.0	8.1	8.3	14.6	27.2	104.3	121.0	7.8	8.0	158	0	45.0	80.0	45.0	95.0	25.0	28.0
97	5	07/21/97	BB, DC, SM	BB, DC, SM	20.0	20.5	6.4	7.9	10.1	12.2	74.6	94.1	7.4	7.8	*	10	45.0	110.0	45.0	110.0	20.0	18.5
97	5	08/04/97	BB, DC, SM	BB, SM, DC	22.0	22.5	7.1	8.1	17.3	27.8	89.5	109.6	7.6	8.0	228	0	45.0	110.0	45.0	110.0	19.0	21.0
97	5	08/19/97	BB, SM, DC	BB, SM, DC	20.0	23.5	6.3	9.0	20.8	28.5	78.1	124.4	7.4	8.1	98	112	45.0	97.5	45.0	125.0	18.0	24.0
97	5	09/03/97	BB, SM, DC	BB, SM, DC	19.0	21.0	6.0	7.5	14.3	27.4	70.2	99.5	7.3	7.8	90	0	45.0	97.5	45.0	110.0	15.0	19.0
97	5	09/18/97	DC, JJ, JJ	DC, JJ, JJ	18.0	22.0	5.8	8.8	16.1	28.5	67.3	118.5	7.4	7.9	0	0	45.0	BSV	45.0	145.0	20.0	27.0
97	5	10/02/97	DC, SM	DC, BB, SM	9.0	12.5	8.2	9.4	10.0	27.5	75.5	104.4	7.3	8.0	28	0	45.0	80.0	45.0	105.0	6.0	14.0
97	5	10/17/97	BB, DC, SM	BB, DC, SM	11.0	13.5	7.1	9.2	18.5	29.5	72.1	105.7	7.6	8.0	190	8	45.0	BSV	45.0	150.0	6.0	14.0
97	5	11/03/97			11.0	13.0	8.0	9.3	0.6	17.7	73.1	98.2	6.9	7.7	570	110	45.0	80.0	45.0	135.0	17.0	13.5

Site 6 - Fox Pt

YEAR	SITE	DATE	SAMPLER	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECA	FECA	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP	ATEMP-H
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/1	CFU/1	cm	cm	cm	cm	0c	0c
90	6	04/08/90			4.5	5.5	11.2	10.8	17.3	21.4	97.17	98.31		7.9			106.0	205.0			-2.0	12.0
90	6	04/25/90			9.0	8.0	6.5	10.0	20.3	26.7	83.83	100.07	7.7	7.8			105.0	200.0			9.0	11.0
90	6	05/09/90			11.0	14.0	7.7	8.9	21.2	24.8	79.55	100.30	6.8	7.8			102.0	205.0			11.0	20.0
90	6	05/24/90			10.5	10.5	8.8	9.0	20.3	24.4	89.39	93.84	7.5	7.7			125.0	205.0			5.5	12.5
90	6	06/08/90			15.5	13.5	8.0	8.1	24.0	27.3	92.51	91.78	7.9				115.0	220.0			15.0	20.5
90	6	06/21/90			15.0	15.5	7.8	8.2	26.5	29.3	90.69	98.03	8.0	8.1			95.0	190.0			15.0	16.5
90	6	07/07/90			18.0	17.0	6.8	7.4	28.0	28.6	84.70	90.74		7.9			140.0	235.0			18.0	21.0
90	6	07/20/90			21.0	16.5	7.2	7.8	27.4	32.3	94.54	96.97	7.6	7.8				295.0			22.0	32.0
90	6	08/06/90				20.0		7.2		31.9		95.42		7.8			285.0					
90	6	08/20/90			20.0	18.0	6.8	7.2	28.8	31.2	88.30	91.50	7.6	8.1				295.0			15.0	19.0
90	6	09/04/90			20.0	18.0	6.8	6.8	26.9	30.4	87.39	85.88	7.8	7.8			125.0	290.0			13.0	19.0
90	6	09/18/90			16.0	15.0	7.4	6.8	29.8	32.3	89.65	82.07	7.6	7.7			100.0	300.0			8.0	13.0
90	6	10/04/90			14.0	13.5	7.6	7.4	30.8	32.9	89.01	86.97	7.7	7.9				330.0			9.0	22.0
90	6	10/18/90			15.0	14.0	7.6	7.2	25.9	30.4	88.04	84.10	7.7	7.7			110.0	300.0			19.0	24.5
90	6	11/02/90			9.0	11.0	8.9	8.3	20.2	29.5	87.34	90.48	7.4	7.9			130.0	330.0			3.5	14.5
91	6	04/13/91	BF JG BH	BF JG BH JT	8.0	8.5	10.3	10.8	20.5	25.4	88.95	109.37	7.6	7.4			90.0				5.0	17.0
91	6	04/27/91	DF BF BH	DF BF BH JG	11.0	10.5	9.8	9.9	18.7	23.5	99.67	102.63	7.8				70.0	160.0				
91	6	05/13/91	BH JJ	BH JJ	14.5	13.0	8.5	8.8	18.3	23.3	92.99	96.20	7.3	7.6			75.0	180.0			12.0	30.0
91	6	05/28/91	BH JJ BF	BH JJ BF	17.0	16.0	7.7	7.9	25.1	28.0	92.38	94.62	7.5	7.7			115.0	190.0			27.0	37.0
91	6	08/11/91	BH DF BF	BH DF BF	18.0	17.0	7.4	8.2	28.9	26.9	91.54	99.48	7.8	7.9			105.0	225.0			23.0	30.0
91	6	08/25/91	BH JJ	BH JJ	19.0	17.0	8.3	8.5	29.3	31.5	106.23	106.18	7.6	7.8			100.0	266.0			18.0	32.0
91	6	07/10/91	BH CC JJ	BH CC JJ	18.5	17.0	7.5	8.8	30.8	31.0	95.85	109.56	7.7	7.7			85.0	280.0			16.0	28.0
91	6	07/25/91	BH DF BF	BH DF BF	22.0	20.0	7.2	7.8	31.8	32.9	98.90	104.03	7.8				120.0	275.0			20.0	30.0
91	6	08/08/91	BH DF BF	BH DF BF	20.0	19.0	7.0	7.4	31.4	31.6	92.48	98.08	7.8	7.9			100.0	265.0			17.0	31.0
91	6	08/24/91	BH DF BF	BH DF BF	20.0	20.0	6.0	6.2	15.3	19.2	72.03	78.11	7.3	7.5			105.0	140.0			17.0	22.0
91	6	09/07/91	CC RF DF	CC RF DF	18.0	17.0	7.0	6.1	24.4	30.6	85.28	75.75	7.5	7.3			100.0	240.0			14.0	24.0
91	6	09/22/91	BH BF	BH BF	16.0	17.0	7.3	7.1	27.2	29.5	86.99	87.56	7.4	7.8			100.0	310.0			6.0	17.0
91	6	10/07/91	BH BF	BH BF	14.0	13.0	8.1	7.9	20.4	26.5	88.62	88.13	7.5	7.6			110.0	205.0			7.0	13.0
91	6	10/22/91	BH	BH	11.0	12.0	8.3	6.9	22.0	27.4	88.18	75.80	7.6	7.6							8.0	16.0
91	6	11/06/91	PG BH	BH PG	9.0	11.0	9.1	9.0	25.8	30.0	92.61	98.44	7.5	7.6			155.0	290.0			1.0	9.0
92	6	04/17/92	no data/sn	BH		5.0		10.7		28.4		100.92		7.6							2.0	4.0
92	6	05/02/92	BH	BH	11.0	9.0	10.6	8.7	20.0	24.5	108.69	87.78	7.6	8.0			100.0	145.0			10.0	20.0
92	6	05/15/92	BH CC	BH CC	13.0	12.0	9.1	9.3	22.9	26.7	99.23	101.71	7.7	7.8			95.0	200.0			12.0	20.0
92	6	06/01/92	CC AR	AR Newington	14.0	12.0	8.2	8.9	27.2	29.1	93.83	98.87	7.8	7.7			77.0	205.0			9.0	10.0
92	6	06/15/92	AR PO	AR PO	19.5	17.0	7.0	7.7	23.3	26.7	87.19	92.70	7.7	7.7			125.0	185.0			20.0	23.0
92	6	06/29/92	BH PO	LA MA BH	18.5	15.5	8.5	8.5	28.1	29.9	106.95	102.01	7.8	7.7	2	5					15.0	28.0
92	6	07/14/92	BH CS	BH PO	19.5	16.0	8.7	8.5	31.2	29.8	113.73	102.97	7.9	8.0	3	2					18.0	22.0
92	6	07/28/92	PO CS	PO CS	20.0	16.5	6.9	8.3	28.9	29.3	89.76	101.22	7.8	7.4	18	5					15.0	25.0
92	6	08/12/92	PO BH	PO BH	19.0	18.0	7.7	8.6	30.2	30.8	99.10	104.88	7.5	7.6	0	2					19.0	22.0
92	6	08/27/92	PO CS	PO DW	20.0	18.0	6.9	7.7	28.5	30.8	88.89	97.60	7.7	7.6	6	5					20.0	24.0
92	6	09/10/92	BH PO	BH PO	16.0	16.0	7.6	7.7	30.4	31.0	92.43	93.39	7.8	7.7	ntvd	5					20.0	27.0
92	6	09/26/92	BH PO	BH PO	14.0	13.0	8.1	8.1	30.2	32.7	94.49	94.10	7.8	7.8	5	2					10.0	15.0
92	6	10/11/92	BH	BH	13.0	12.0	9.0	8.1	30.4	31.8	102.98	91.61	7.4	7.7	28	11					12.0	17.0
92	6	10/25/92	PO BH	BH	14.0	9.0	8.1	7.8	30.2	31.4	94.49	82.43	7.8	7.7		30					10.0	8.0
92	6	11/09/92	JJ JJ	JJ JJ	5.0	6.0	11.6	9.1	25.6	16.2	107.31	81.08	6.5	6.7	20	0					-2.0	4.0
93	6	04/21/93	JP BP CC	JP BP CC	9.5	8.5	11.0	10.9	9.7	16.3	101.89	103.15	7.5	7.7	10	20	80.0	142.5	110.0	300.0	13.0	20.0
93	6	05/06/93	JP BP	JP BP BH	13.0	10.5	8.8	9.2	18.1	24.5	93.15	95.99	7.6	7.7	30	0	85.0	200.0	85.0	310.0	18.0	25.0
93	6	05/20/93	JP BH	JP BH	13.0	11.0	8.2	9.3	23.2	26.7	89.58	99.53	7.5	7.6		0	125.0	205.0	125.0	275.0	11.0	14.0
93	6	06/03/93	JP BP BH	JP BP BH	12.5	11.0	8.4	9.1	25.8	29.4	92.30	99.14	7.5	7.7	0	0	100.0	207.0	100.0	310.0	10.0	24.0
93	6	06/23/93	BH	NB CC ND BH	17.0	13.0	7.4	5.5	27.7	29.8	90.23	62.68	7.6	7.9	100	10	80.0	200.0	80.0	285.0	18.0	21.0
93	6	07/06/93	JP BP	JP BP	19.0	16.0	7.8	8.5	28.5	30.9	99.33	103.70	7.6	7.3	0	0	110.0	275.0	110.0	275.0	28.0	29.0
93	6	07/22/93	BH JP BP	BH JP BP	18.0	14.0	7.1	8.4	29.7	31.4	89.38	98.77	7.8	7.7	0	20	110.0	303.0	110.0	320.0	22.0	22.0
93	6	08/03/93	JP BP	JP BP	19.5	18.0	7.8	7.9	30.5	31.0	101.52	100.27	7.7	7.2			90.0	260.0	90.0	260.0	23.5	31.0
93	6	08/19/93	BH JP BP	BH JP BP	21.0	17.5	7.0	8.0	31.1	30.9	94.02	100.49	7.5	7.8	10	0	115.0	177.5	115.0	265.0	18.0	23.0
93	6	09/02/93	BP JP BH	BH JP	19.5	18.5	6.6	8.0	31.8	30.9	88.49	98.56	7.6	7.6	10	0	145.0	355.0	145.0	355.0	19.0	26.0
93	6	09/20/93	JB BP	JB BP	14.5	12.0	7.3	8.0	31.4	32.4	86.70	90.84	7.8	7.8	4	2	130.0	335.0	130.0	350.0	13.0	14.0
93	6	10/04/93	JB BP BH	JB BP	14.0	12.0	8.2	7.6	30.1	32.2	95.60	88.45	7.1	7.3	7	13	145.0	340.0	145.0	340.0	19.0	20.0

93	6	10/18/93	JB BP BH	JB BP	10.0	9.5	8.2	8.4	29.2	30.5	87.29	89.20	7.1	*	4	2	125.0	315.0	125.0	375.0	16.0	15.0
93	6	11/09/93	JP	JP	7.0	7.0	9.6	9.0	27.3	28.8	84.24	89.26	7.6	7.7	4	3	115.0	295.0	115.0	295.0	10.0	5.0
94	6	04/26/94	BH BT	BH BT	8.0	6.0	10.4	10.5	22.1	27.2	100.95	100.60	7.9	8.0	11	27	95.0	147.0	95.0	230.0	5.0	7.0
94	6	05/10/94	BH BT	BH BT	12.0	11.0	9.1	9.5	17.5	21.6	93.92	98.39	7.9	7.8	24	12	135.0	255.0	135.0	310.0	13.0	17.0
94	6	05/25/94	BH BT	BH BT	13.5	11.0	8.6	9.4	20.4	26.5	93.31	100.47	7.7	7.9	8	5	120.0	240.0	120.0	355.0	11.0	15.0
94	6	06/09/94	BT JJ	BT JJ	16.0	14.0	7.6	8.3	23.5	27.4	88.51	95.09	7.8	7.9	3	60	135.0	250.0	135.0	320.0	11.0	*
94	6	06/23/94	BH BT	BH BT	19.0	*	8.5	7.7	28.2	30.0	108.05	*	7.9	7.8	10	4	105.0	285.0	105.0	335.0	20.0	25.0
94	6	07/11/94	BH JJ	JJ JJ BM	22.0	18.0	*	7.8	33.4	31.2	*	99.12	7.0	7.0	2	5	120.0	320.0	120.0	320.0	23.0	27.0
94	6	07/25/94	BH BT	BH BT	22.0	16.0	6.5	7.6	30.4	30.3	88.52	92.37	7.8	7.9	1	4	115.0	295.0	115.0	335.0	29.0	29.0
94	6	08/09/94	BH BT	BH BT	20.0	18.0	7.4	7.8	30.2	30.6	97.04	98.75	*	7.9	2	2	115.0	285.0	115.0	335.0	20.0	27.0
94	6	08/22/94	JJ	BH	18.0	15.0	7.5	5.8	29.5	31.1	94.29	99.45	7.8	7.8	4	3	145.0	215.0	145.0	360.0	19.0	22.0
94	6	09/07/94	BT BH	BT BH	15.0	15.5	7.8	7.4	30.0	31.3	92.74	89.61	7.9	7.8	1	3	120.0	275.0	120.0	355.0	15.0	24.0
94	6	09/21/94	BH BT	BH BT	16.5	15.0	8.4	7.6	30.3	31.1	103.09	91.01	8.1	7.9	0	1	110.0	225.0	110.0	225.0	18.0	21.0
94	6	10/06/94	BH BT	BH BP	12.0	12.0	8.8	7.0	28.4	29.1	96.05	77.76	8.5	7.8	0	0	125.0	270.0	125.0	355.0	6.0	13.0
94	6	10/20/94	BH	AR SL	12.0	12.0	9.8	8.4	29.1	30.6	108.67	94.24	7.9	8.1	1	1	160.0	295.0	160.0	355.0	14.0	15.0
94	6	11/07/94	BH	DW BP	10.0	10.0	7.7	8.4	28.7	30.0	81.69	89.90	7.6	7.8	7	4	85.0	210.0	105.0	330.0	8.0	8.0
95	6	04/18/95	BT BH	BT	7.5	6.0	10.7	10.7	22.2	27.7	102.71	102.84	7.8	7.4	1	5	BSV	BSV	105.0	330.0	12.0	11.0
95	6	05/01/95	BH BT	BH BT	9.0	8.0	10.2	10.7	24.8	28.6	103.09	108.42	7.9	8.0	2	1	BSV	BSV	115.0	315.0	10.0	9.0
95	6	05/15/95	BT AR AB	BT AB	11.0	8.5	8.7	9.8	25.8	29.9	92.57	101.35	7.7	7.8	0	6	BSV	245.0	120.0	250.0	10.0	8.0
95	6	05/30/95	BT JJ	BH JJ	15.0	13.0	8.0	8.9	24.6	27.6	91.92	99.99	7.6	7.1	2	2	*	100.0	130.0	305.0	19.0	24.0
95	6	06/13/95	BH BT	BH BT DG	16.0	13.0	7.3	8.6	27.4	29.4	87.10	97.76	7.5	7.8	2	6	BSV	225.0	130.0	330.0	16.0	17.0
95	6	06/27/95	BT BH	BT BH	20.0	16.0	8.0	8.6	28.2	29.4	103.63	103.92	7.8	7.9	2	5	BSV	295.0	130.0	310.0	18.0	19.0
95	6	07/12/95	BH BT	BH JJ	18.0	14.0	7.0	8.8	29.2	30.5	87.84	102.66	7.4	7.7	5	3	BSV	310.0	100.0	360.0	17.0	23.0
95	6	07/27/95	BT DB	BT DG	22.0	20.0	8.4	7.5	30.2	32.4	87.05	99.71	7.6	7.9	4	5	BSV	290.0	125.0	315.0	23.0	30.0
95	6	08/10/95	BT BH	BT BH	21.5	18.5	7.1	7.6	29.0	29.6	95.00	98.52	7.6	7.8	na	4	BSV	252.5	110.0	335.0	17.0	28.0
95	6	08/28/95	BT DG	BT BH	18.0	16.0	7.0	7.8	29.9	30.0	88.23	94.81	7.7	7.9	NV	NV	BSV	295.0	120.0	335.0	18.0	21.0
95	6	09/11/95	BT BH	BT BH	16.0	14.0	7.2	7.6	31.3	31.8	88.07	89.48	7.7	7.8	1	1	BSV	BSV	110.0	340.0	15.0	18.0
95	6	09/28/95	BT BH	BT BH	14.0	13.5	8.0	7.8	30.8	31.4	93.69	90.77	7.7	7.5	2	3	BSV	BSV	130.0	355.0	14.0	14.0
95	6	10/10/95	BH BT	BH BT	13.0	14.0	7.5	7.8	31.4	30.8	86.38	91.35	7.6	7.8	0	0	BSV	350.0	130.0	350.0	9.0	17.0
95	6	10/26/95	BT DG	BT BH DG	12.0	12.0	8.0	7.0	26.4	29.1	87.32	77.76	7.8	7.8	6	2	BSV	273.0	125.0	355.0	3.0	13.0
95	6	11/09/95	BT DG	BT DG	7.0	8.0	9.2	9.0	19.3	24.6	85.66	88.81	7.3	7.6	16	16	BSV	150.0	185.0	350.0	4.0	1.0
96	6	04/18/96	BT RB EB	BT	8.0	7.0	11.3	11.4	10.5	0.2	102.0	94.5	*	7.6	28	50	82.5	95.0	115.0	355.0	10.0	12.0
96	6	05/06/96	BT BH	BT BH	10	9	9.7	9.9	17.3	22.3	95.63	98.47	7.7	8	0	6	BSV	210.0	115.0	315.0	9	8
96	6	05/20/96	BT BH	BT BH	13	11	8.5	9.6	16	21.7	88.84	99.49	7.6	7.8	3	*	82.0	202.5	150.0	340.0	18	30
96	6	06/03/96	BT BH	BH BT	16	12	8	9.1	21.8	25.5	92.2	98.75	7.7	8	0	3	BSV	105.0	100.0	330.0	18	16
96	6	06/17/96	BT RB EB	BT DG RB EB	19	16	7.5	8.3	25.9	29.7	94	100.46	8	8	1	2	BSV	272.5	140.0	320.0	22	26
96	6	07/01/96	*	BH BT	*	14	*	8.5	*	28.6	*	98.14	*	8.1	*	5	*	225.0	*	340.0	*	27
96	6	07/15/96	BH BT	BH BT	20	18.5	7.2	7.5	24	21.8	90.92	90.82	7.8	7.8	80	74	BSV	172.5	135.0	330.0	19	18
96	6	07/30/96	BT JJ JJ	BT DG	18	17.5	7.5	8.2	25.3	29.2	91.87	101.91	7.9	7.9	4	6	BSV	227.0	110.0	330.0	16	*
96	6	08/14/96	BH	BH	20	18	7.3	7.7	28.5	27.6	99.92	95.67	7.7	7.8	3	2	BSV	280.0	140.0	315.0	16	31
96	6	08/29/96	BH BT	BT DG	19	18	6.9	7.7	30.5	31.2	88.97	97.85	7.5	7.8	0	4	BSV	248.0	110.0	355.0	15	27
96	6	09/16/96	BT BH	BT BH HR DR	17	16	6.9	7.2	29	30.8	84.82	87.79	7.6	7.8	2	3	BSV	245.0	160.0	355.0	15	18
96	6	09/30/96	BH	BH	14	13	7.8	7.4	28.5	30.2	90	84.56	7.6	7.6	1	1	BSV	287.0	125.0	335.0	16	17
96	6	10/15/96	BH	JF DE	11	10	4.9	8.8	28.2	30	52.96	94.18	7.4	7.6	1	0	BSV	220.0	120.0	330.0	10	9
96	6	10/29/96	BH BT	BH	10	10	8.2	8.3	12	18	78.27	82.18	6.6	*	12	7	57.0	97.0	150.0	360.0	8	10
96	6	11/06/96	BH	BT	6	9	9.1	8.7	16.4	22.3	85.18	86.51	7.3	7.6	9	12	135.0	205.0	145.0	320.0	9	10
97	6	04/23/97	BH, NC, P	BH, NC, PH	8.0	9.0	10.3	10.2	7.4	15.1	91.3	96.9	7.8	7.8	6	2	95.0	145.0	185.0	280.0	13.0	
97	6	05/06/97	PH, NC, B	BH, PH, NC	10.0	8.0	9.6	9.7	15.9	23.6	93.8	95.1	7.8	7.8	1	1	85.0	155.0	110.0	430.0	10.0	10.0
97	6	05/22/97	BH, PH, N	BH, PH	11.5	10.0	9.1	9.4	20.1	23.8	94.4	96.6	7.9	7.8	*	*	110.0	175.0	200.0	430.0	12.0	16.0
97	6	06/05/97	BH, PH, N	PH, BH, NC	14.0	14.0	10.1	9.4	24.2	27.6	113.4	107.8	8.1	8.1	*	*	140.0	265.0	210.0	385.0	12.0	15.0
97	6	06/23/97	BH, PH, N	BH, PH, NC	20.0	16.0	7.6	8.6	27.3	28.2	97.9	103.1	8.0	8.0	3	1	107.5	210.0	185.0	325.0	22.0	29.0
97	6	07/07/97	NC, PH, A	NC, PH	19.5	16.5	7.4	8.7	29.3	30.2	95.6	106.7	7.8	7.5	0	5	112.0	240.0	115.0	445.0	28.0	25.0
97	6	07/21/97	BH, NC, P	BH, NC, PH	19.0	15.5	7.7	8.1	25.9	28.7	96.5	96.5	7.5	7.8	0	5	140.0	295.0	155.0	410.0	18.0	18.0
97	6	08/04/97	NC, PH, N	NC, PH	19.0	18.0	8.8	7.7	29.8	29.5	113.0	96.8	8.1	8.1	0	0	130.0	315.0	160.0	320.0	18.0	20.0
97	6	08/19/97	BH, NC, P	BH, NC, PH	19.0	15.0	7.4	8.0	30.5	30.7	95.4	95.5	8.0	8.0	3	1	160.0	300.0	160.0	385.0	15.0	20.0
97	6	09/03/97	BH	BH	19.0	17.0	7.1	6.2	28.6	30.3	90.4	76.8	7.9	7.9	0	2	165.0	353.0	165.0	380.0	16.0	19.0
97	6	09/18/97	NC, PH, B	NC, PH	18.5	18.0	8.0	7.5	29.5	28.6	101.5	93.8	7.8	8.1	*	*	150.0	287.5	150.0	400.0	17.0	24.0
97	6	10/02/97	NC, BH, P	PH, NC, BH	13.0	12.0	8.3	8.1	29.4	29.4	94.3	90.2	7.9	*	4	4	185.0	365.0	185.0	365.0	7.0	12.0
97	6	10/17/97	PH, NC, B	BH, NC, PH	11.0	12.0	8.5	8.6	30.9	31.2	93.5	96.9	8.0	8.0	1	3	190.0	372.5	190.0	380.0	4.0	13.0
97	6	11/03/97	BH, NC, P	NC, PH, BH	10.0	10.0	8.9	9.0	26.9	27.4	93.3	94.7	7.9	8.0	34	*	150.0	175.0	260.0	430.0	9.0	9.0

Site 7 - Cedar Pt

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL	FECAL-	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/1	CFU/10	cm	cm	cm	cm	0c	0c
90	7	05/24/90			10.0	12.0	8.8	8.6	16.5	20.1	86.33	90.20	7.5	7.7	*	*	*	370	*	*	9.5	15.0
90	7	06/07/90			17.0	17.0	7.5	8.5	23.9	*	89.32	*	7.8	8.1	*	*	175	*	*	*	15.0	18.0
90	7	06/21/90			19.0	16.0	8.2	8.8	26.7	28.2	103.28	81.55	7.9	7.8	*	*	205	400	*	*	16.0	16.5
90	7	07/07/90			19.0	19.0	6.8	6.9	28.1	28.2	86.39	87.71	7.7	7.8	*	*	130	195	*	*	16.0	23.5
90	7	07/21/90			20.0	18.0	7.5	6.6	*	31.4	*	83.98	7.6	7.8	*	*	140	235	*	*	23.0	28.0
90	7	08/08/90			22.5	20.5	6.3	6.9	30.4	31.5	88.56	92.06	7.9	7.9	*	*	135	245	*	*	22.5	23.0
90	7	08/20/90			19.0	19.0	7.1	6.0	30.5	29.8	91.55	77.03	7.9	7.9	*	*	*	240	*	*	13.0	23.0
90	7	09/04/90			19.0	20.0	6.3	7.1	25.6	27.8	78.19	92.00	7.9	7.9	*	*	*	215	*	*	13.0	20.0
90	7	09/18/90			15.0	15.0	7.6	5.7	31.1	30.4	91.01	67.95	7.7	7.8	*	*	175	270	*	*	6.0	14.0
90	7	10/04/90			14.0	14.5	*	5.3	30.4	31.2	*	62.87	7.7	7.7	*	*	120	250	*	*	9.0	17.5
90	7	10/18/90			13.0	14.5	6.6	6.6	23.5	26.7	72.24	76.05	7.5	7.8	*	*	150	195	*	*	3.5	18.0
90	7	11/02/90			8.0	10.5	9.2	7.8	18.2	25.1	87.10	81.70	7.7	7.9	*	*	*	290	*	*	11.0	15.0
91	7	04/14/91	MG MR IL DL	MG MR IL DL	7.5	9.0	10.9	10.6	22.6	25.0	104.91	107.31	7.9	7.9	*	*	*	260.0	*	*	2.0	14.0
91	7	04/28/91	MG MR IL	MG MR IL	12.0	11.0	9.1	9.3	18.8	22.0	94.68	96.05	7.6	7.7	*	*	100.0	135.0	*	*	5.0	18.0
91	7	05/14/91	IL MR	IL MR	14.0	13.5	7.9	8.3	19.1	23.3	85.40	91.69	7.7	7.7	*	*	95.0	165.0	*	*	13.0	27.0
91	7	05/29/91	DL MR ML IL	DL MR ML IL	16.5	16.5	8.3	8.5	25.0	28.6	99.01	103.20	7.1	*	*	*	260.0	*	*	*	15.0	31.0
91	7	06/11/91	IL MR MG	IL MR MG	19.0	18.0	7.3	6.2	27.7	29.4	92.51	77.65	7.7	7.7	*	*	165.0	250.0	*	*	19.5	29.0
91	7	06/25/91	DL IL MR ML	DL IL MR ML	18.5	17.5	7.0	7.3	29.3	31.2	88.74	91.88	7.8	7.2	*	*	210.0	325.0	*	*	15.0	22.0
91	7	07/11/91	MR MG IL ML	MR MG IL ML	18.0	17.0	6.8	7.4	28.6	31.2	85.01	92.25	7.7	7.5	*	*	175.0	290.0	*	*	18.0	29.5
91	7	07/26/91	MR MG IL ML	MR MG IL ML	21.5	20.0	7.0	7.8	31.5	33.3	95.11	101.62	7.6	7.6	*	*	165.0	285.0	*	*	22.0	24.0
91	7	08/09/91	MR MG IL ML	MR MG IL ML	19.5	19.0	7.0	7.3	31.8	31.2	91.85	94.55	7.4	7.5	*	*	175.0	255.0	*	*	18.0	23.0
91	7	08/25/91	MR MG DL	MR MG DL	20.0	21.0	5.8	6.4	16.6	19.6	70.15	80.25	6.9	7.3	*	*	120.0	145.0	*	*	20.0	21.0
91	7	09/10/91	MG JG	MG JG	18.0	18.0	7.0	7.2	26.7	28.5	88.49	89.96	7.0	6.8	*	*	180.0	270.0	*	*	14.0	30.0
91	7	09/22/91	MR RR DL	MR RR DL	14.0	17.0	7.0	7.0	27.4	23.4	80.20	83.12	7.0	7.1	*	*	255.0	340.0	*	*	2.0	22.0
91	7	10/07/91	MR IL DL	MR IL DL	13.0	13.0	7.2	7.4	21.3	25.6	77.73	82.08	7.1	7.2	*	*	140.0	200.0	*	*	4.5	19.0
91	7	10/23/91	IL MR	IL MR	10.0	12.0	8.5	8.5	22.4	26.0	86.03	91.99	7.1	7.3	*	*	225.0	335.0	*	*	3.0	13.0
91	7	11/06/91	IL MR	IL MR	8.0	10.0	8.5	8.3	25.8	28.8	84.55	88.11	7.2	7.3	*	*	200.0	265.0	*	*	-2.0	11.0
92	7	04/16/92	IL MR	MR MG	6.5	7.0	10.9	10.8	22.5	25.3	102.39	104.60	8.0	7.6	*	*	*	250	*	*	12.0	11.0
92	7	05/02/92	MR MG	IL MG	11.0	9.5	11.6	10.5	20.8	23.9	119.39	106.69	7.9	8.0	*	*	90	155	*	*	12.0	19.5
92	7	05/15/92	MR IL	MR MG	12.0	12.5	8.8	8.9	23.4	24.5	92.08	96.99	7.9	7.9	*	*	100	175	*	*	13.0	22.0
92	7	05/31/92	DL IL	MR MG	14.5	13.0	8.0	8.8	27.8	29.0	92.83	97.50	7.6	7.9	*	*	150	210	*	*	16.0	16.0
92	7	06/14/92	IL MG	IL MG	18.5	18.0	7.2	7.8	23.1	24.5	87.26	94.47	7.8	7.8	*	*	135	170	*	*	19.5	34.0
92	7	06/30/92	MR MG	MR MG	18.0	16.0	7.7	9.1	28.8	30.7	96.39	110.88	7.8	7.7	*	*	160	220	*	*	20.0	37.0
92	7	07/13/92	MR MG	MR RR	18.0	18.0	8.8	9.0	29.5	30.2	108.12	113.65	8.0	7.7	8	1	160	230	*	*	20.0	32.0
92	7	07/28/92	MR MG	IL MR	19.0	17.0	7.1	7.3	29.3	30.2	90.87	90.42	7.7	7.7	5	8	190	275	*	*	14.0	32.0
92	7	08/13/92	IL NR	IL NR	17.5	17.0	7.1	7.7	29.9	30.6	88.63	95.62	7.9	7.8	6	0	202	323	*	*	17.5	25.0
92	7	08/27/92	IL MG	MR DL	21.0	18.0	7.4	8.0	28.9	30.2	98.06	101.02	7.8	7.7	6	6	208	293	*	*	21.0	29.0
92	7	09/10/92	IL MR	IL MG	17.0	17.0	7.6	7.5	29.8	31.2	93.90	93.49	7.6	7.7	ntvd	13	220	295	*	*	20.0	29.5
92	7	09/25/92	IL MG	IL MR	14.0	13.0	7.9	8.3	30.6	31.1	92.40	95.41	7.7	7.5	3	4	105	365	*	*	3.0	12.0
92	7	10/10/92	MG MR	IL DL	13.0	13.0	8.2	8.0	30.2	31.5	93.70	92.20	7.8	7.8	44	8	295	445	*	*	13.0	20.0
92	7	10/25/92	IL MR	IL MG	10.0	9.0	8.3	7.9	28.8	30.5	87.58	82.97	7.7	7.8	10	70	160	345	*	*	6.0	13.0
92	7	11/09/92	IL DL	IL DL	*	7.5	*	8.8	*	29.0	*	88.41	*	7.8	*	10	*	500	*	*	*	9.5
93	7	04/21/93	IL MR	IL AR	9.0	9.5	10.7	10.9	9.7	13.9	98.42	104.03	7.2	7.4	*	100	30.0	155.0	30.0	210.0	19.0	23.0
93	7	05/06/93	EL MR	EL DL	13.5	11.0	8.0	9.2	17.0	23.6	84.49	95.98	7.2	7.4	0	10	75.0	232.5	75.0	295.0	18.0	26.5
93	7	05/20/93	EL MR MB	MR EL MB	13.5	13.5	8.0	8.4	23.6	26.2	88.54	94.51	7.6	7.4	0	100	117.0	200.0	520.0	630.0	12.0	20.0
93	7	06/03/93	EL MR	MR MB	12.5	13.5	8.2	9.4	27.2	30.1	90.92	108.45	7.6	7.6	0	0	105.0	115.0	455.0	*	9.5	29.0
93	7	06/23/93	MR EL MB	EL MR	17.5	16.0	7.3	8.2	28.2	29.5	90.15	98.55	7.5	7.5	10	0	115.0	285.0	565.0	630.0	20.5	26.5
93	7	07/06/93	MR MB AB	EL MB	19.5	18.0	7.5	8.1	30.3	30.3	97.49	101.72	7.3	7.1	0	200	72.5	330.0	435.0	630.0	26.0	35.0
93	7	07/22/93	AB MB	IL AB	18.5	16.5	6.8	8.7	29.9	30.9	88.52	107.18	7.6	7.8	2500	10	135.0	260.0	540.0	650.0	22.0	24.0
93	7	08/03/93	IL MB	IL MB AB	19.5	19.5	7.2	7.6	30.1	30.7	93.48	98.39	7.9	6.5	*	*	212.5	407.0	475.0	630.0	24.5	32.0
93	7	08/19/93	MB BB MR	MR	20.0	19.0	6.9	7.0	30.6	30.5	90.71	90.26	7.6	7.6	10	40	180.0	350.0	495.0	630.0	21.0	29.0
93	7	09/02/93	AB BB	EL MR	21.0	18.0	6.8	7.3	33.1	31.5	92.48	92.31	7.4	7.3	0	30	227.0	435.0	485.0	640.0	23.0	22.0
93	7	09/20/93	IL MR	IL DL	15.0	12.0	7.4	*	31.4	31.1	88.79	*	7.2	7.1	30	90	290.0	462.0	525.0	640.0	11.0	18.0
93	7	10/04/93	DL BB	IL AB	14.0	14.0	7.3	7.4	31.4	31.6	85.24	87.12	7.5	7.7	*	0	220.0	440.0	395.0	640.0	15.0	22.0
93	7	10/18/93	AB MB BB	AB MB	10.5	11.0	8.7	8.7	29.2	30.7	93.62	95.61	7.0	6.7	0	0	327.5	420.0	640.0	640.0	14.0	20.0
93	7	11/08/93	BB AB MR	BB AB	7.0	6.5	9.6	8.6	26.2	29.8	93.54	84.88	5.6	6.3	0	0	362.5	570.0	470.0	640.0	11.0	0.0
94	7	04/26/94	MR AB BB	MR BB AB	7.0	6.0	9.1	9.9	20.6	25.7	85.44	93.42	8.3	7.8	77	25	22.0	195.0	22.0	245.0	4.0	4.0
94	7	05/10/94	IL BB	IL BB	12.0	12.0	9.1	9.1	17.5	17.5	93.92	93.92	7.8	7.8	19	8	80.0	218.5	80.0	275.0	13.0	17.0
94	7	05/25/94	BB AB	IL AB BB	13.0	12.0	7.9	*	20.3	25.5	84.76	*	6.9	7.8	*	7	*	232.5	*	310.0	11.0	16.0
94	7	06/09/94	EL BB	IL BB	16.0	16.0	7.9	7.8	23.5	26.1	92.00	92.31	7.8	7.8	3	TNTC	90.0	175.0	90.0	175.0	16.0	30.0

94	7	08/23/94	IL AB BB	IL AB BB	18.0	18.0	7.1	7.9	27.9	29.0	88.38	94.62	7.6	7.8	730	180	70.0	290.0	70.0	290.0	20.0	30.0
94	7	07/11/94	AB BB	AB	20.5	19.0	7.2	7.3	30.0	30.2	95.17	93.31	7.7	7.8	4	5	88.0	185.0	88.0	185.0	20.0	32.0
94	7	07/25/94	BB AB	AB IL	21.0	20.0	9.4	7.0	30.2	31.5	125.56	92.54	7.3	7.9	4	4	90.0	250.0	90.0	300.0	24.0	32.0
94	7	08/09/94	IL BB	IL AB	19.5	18.5	7.6	7.9	29.6	32.5	98.36	102.18	7.9	7.9	0	1	85.0	277.0	85.0	310.0	21.0	30.0
94	7	08/22/94	IL AB	AB BB	18.0	18.0	6.8	6.9	30.6	33.9	86.09	85.84	7.7	7.6	5	TNTC	95.0	300.0	95.0	380.0	19.0	22.0
94	7	09/07/94	AB BB	AB	15.0	18.0	7.5	7.3	29.8	31.9	89.06	89.64	7.4	7.2	4	5	91.0	267.0	91.0	340.0	13.0	27.0
94	7	09/21/94	AB BB	AB	16.0	16.0	8.7	7.9	30.0	31.6	105.53	96.82	7.4	7.2	0	*	85.0	300.0	85.0	300.0	17.0	28.0
94	7	10/06/94	EL RB	EL RB	12.0	12.5	8.7	7.4	28.5	29.4	94.48	83.23	7.9	8.0	*	3	81.0	295.0	81.0	335.0	5.0	17.0
94	7	10/20/94	EL AB	EL AB	12.0	12.0	8.8	8.5	31.7	30.8	98.89	95.49	8.0	7.4	5	1	115.0	302.5	115.0	340.0	14.0	15.5
94	7	11/07/94	EL BB	EL AB	11.0	11.0	8.2	8.1	28.1	31.5	88.57	89.49	7.9	7.8	81	11	78.0	280.0	78.0	300.0	5.0	12.0
95	7	04/18/95	ROB NHW SET	TAB DJ CG	7.0	7.0	10.6	10.6	22.8	28.5	100.94	103.48	7.9	7.9	0	0	*	300.0	75.0	300.0	13.0	14.0
95	7	05/01/95	AB LC JL	BB AB EB BC	8.5	8.5	8.9	10.1	24.1	27.3	88.54	102.63	7.3	7.1	0	NV	*	*	65.0	260.0	8.0	11.0
95	7	05/15/95	EL RJ ST	EL ET	10.0	9.0	8.4	8.3	25.7	28.6	87.37	86.06	*	7.9	16	4	60.0	207.5	60.0	285.0	12.0	9.5
95	7	05/30/95	EL CG CJ	EL ET	14.5	14.5	8.7	8.0	25.4	28.0	99.43	92.95	7.7	7.9	NV	88	70.0	250.0	70.0	250.0	21.0	25.5
95	7	06/13/95	BB AB	BB AB	15.5	14.5	7.1	8.0	28.6	29.2	83.44	93.67	7.5	7.7	4	17	100.0	220.0	100.0	315.0	17.0	18.0
95	7	06/27/95	AB BB	AB BB	18.5	17.5	8.5	8.2	28.8	29.2	107.42	101.91	7.5	7.9	2	10	115.0	295.0	115	295.0	17.0	23.0
95	7	07/12/95	AB BB	AB BB	16.5	15.0	8.0	8.7	29.5	29.8	97.88	103.31	7.3	7.9	6	17	*	237.5	100.0	320.0	16.0	27.0
95	7	07/27/95	BB CB	AB BB	21.0	20.0	7.3	7.1	28.6	29.1	97.15	92.48	7.8	7.9	TNTC	29	*	287.5	112.0	295.0	23.0	34.0
95	7	08/10/95	AB BB	AB BB EB	20.0	19.5	6.9	7.3	28.3	29.3	89.43	94.31	7.8	7.8	1	0	BSV	292.5	110.0	315.0	16.0	30.0
95	7	08/28/95	BB IL	RB AB	17.5	16.0	7.2	7.8	30.5	30.2	90.19	94.71	7.8	7.9	NV	NV	BSV	BSV	115.0	315.0	17.5	25.0
95	7	09/11/95	RB EL	AB SS	15.0	16.5	7.2	8.4	30.6	31.9	85.94	104.15	7.8	7.8	8	0	BSV	BSV	103.0	320.0	13.0	22.0
95	7	09/28/95	RB EL	EL RB	13.5	13.0	7.6	7.8	30.2	30.6	87.74	89.37	7.8	7.8	5	2	BSV	315.0	120.0	345.0	14.0	15.0
95	7	10/10/95	RB EL	RB EL	13.0	14.0	7.7	7.6	30.0	30.4	87.87	88.78	7.8	8.0	2	0	BSV	BSV	120.0	330.0	8.5	21.0
95	7	10/28/95	RB EL	RB EL	11.0	11.5	7.9	8.0	26.4	28.8	84.38	87.74	7.8	7.9	11	23	115.0	307.0	115.0	350.0	6.0	16.0
95	7	11/09/95	RB EL AB	BB AB IL	12.0	7.0	9.3	8.8	20.0	24.4	97.48	84.72	7.8	7.8	26	25	140.0	195.0	140.0	330.0	0.0	1.5
96	7	04/18/96	EL GT	EL GT DT	5.5	7.5	11.4	11.0	9.2	13.4	96.0	99.99	7.6	7.7	100	24	20.0	107.5	20.0	215.0	5.5	15.0
96	7	05/08/96	GT EL	EL GT CT	9.0	9.5	9.2	9.6	20.2	22.2	90.3	96.5	7.7	7.8	103	1	BSV	BSV	40.0	245.0	5.0	11.0
96	7	05/20/96	GT DT	GT DT LT	14	13	9	9.1	16.6	20.2	96.45	97.58	7.6	7.8	48	10	BSV	195.0	85.0	270.0	22	33.5
96	7	06/03/96	EL DT	EL GT	17	14	8.2	8.7	22.7	25.9	96.95	98.73	7.8	7.9	19	5	BSV	188.0	60.0	280.0	19.5	19
96	7	06/17/96	EL DT	EL GT	19	18	7.8	8.3	25.9	27.2	97.76	102.87	7.5	7.8	11	8	BSV	240.0	80.0	265.0	23.5	28
96	7	07/01/96	JJ DT	JJ JJ GT	18	16	7.2	8.3	27.9	29.2	89.62	100.17	7.7	7.7	9	10	BSV	210.0	70.0	280.0	20	30
96	7	07/15/96	DT EL	EL DT	20	19.5	7	7.5	20.8	22.8	86.02	93.14	7.4	7.8	134	*	BSV	165.0	85.0	285.0	20	27
96	7	07/30/96	EL JM	EL JM	18	17	7.1	8	25.9	27.2	88.68	97.24	7.7	7.7	9	3	BSV	215.0	65.0	290.0	19.5	30.5
96	7	08/14/96	EL DT	SH	19	19.5	7	5.4	28.5	28.5	89.15	69.42	7.6	7.7	4	3	BSV	225.0	85.0	265.0	16.5	28
96	7	08/29/96	EL DT	EL DT	18.5	19	7.5	7.5	29.5	30.2	95.19	96.53	7.6	8	3	4	BSV	192.5	70.0	210.0	15	32
96	7	09/16/96	EL DT	EL GT	17	17	7.4	7.3	29.7	30.6	91.37	90.65	7.7	7.9	43	17	BSV	255.0	115.0	305.0	16	20
96	7	09/30/96	BB BE	GT AB BE	15	14	8.3	7.9	29.1	30.6	98.12	92.4	7.9	7.7	54	1	BSV	BSV	80.0	300.0	17	18
96	7	10/15/96	EL DT	GT RC	10.5	11.5	8.9	8.6	28.8	30	95.52	95.07	7.9	7.8	36	4	BSV	BSV	70.0	280.0	6	10
96	7	10/29/96	GT DT EL	GT DT EL	10	11	8.4	8.4	14.2	20.1	81.25	86.18	7.1	7.7	9	12	BSV	120.0	100.0	305.0	8	11
96	7	11/06/96	EL GT	EL GT	9	10	9.2	9.2	17	21.1	88.48	92.89	7.7	7.7	29	2	BSV	175.0	25.0	185.0	11	9
97	7	04/23/97	RB, BE	BE, JM, AA, J	8.5	9.5	10.7	11.8	8.1	13.5	96.3	112.3	7.1	7.7	TNTC	4	25.0	142.5	25.0	220.0	9.0	15.0
97	7	05/06/97	GT, BE	EL, BE	8.5	9.0	11.0	9.3	18.3	22.3	105.4	92.5	7.0	6.9	29	32	20.0	138.0	20.0	220.0	10.0	20.0
97	7	05/22/97	GT, EL	DT, BE	11.0	11.0	9.0	9.2	21.8	23.9	93.3	96.7	7.6	7.0	10	6	45.0	150.0	45.0	250.0	10.0	19.0
97	7	06/05/97	GT, IL	BE, JJ, JJ	14.0	14.0	8.8	10.1	25.6	27.9	99.7	116.1	7.8	7.3	*	*	80.0	270.0	80.0	280.0	13.0	16.0
97	7	06/23/97	EL, BE	EL, GT	19.5	17.0	8.1	8.4	27.7	28.9	103.6	103.2	7.6	8.0	3	19	95.0	177.5	95.0	305.0	27.0	30.0
97	7	07/07/97	GT, DT	IL, AB	19.0	16.5	7.3	8.2	30.2	28.2	94.0	99.3	7.4	7.8	13	2	95.0	252.5	95.0	290.0	27.0	30.0
97	7	07/21/97	EL	EL, DT	19.5	17.0	7.2	7.6	26.4	27.8	91.3	92.7	7.4	7.6	7	3	85.0	225.0	85.0	300.0	20.0	20.0
97	7	08/04/97	GT, DT	IL, BE	20.0	17.0	7.9	7.9	28.5	30.8	102.5	98.2	7.6	7.4	4	5	105.0	300.0	105.0	300.0	20.0	27.0
97	7	08/19/97	DT, RB	DT, SB	19.5	17.0	7.6	8.0	29.6	31.0	98.4	99.6	7.3	7.4	2	4	85.0	262.5	85.0	320.0	15.0	25.0
97	7	09/03/97	EL, BE	EL, DT	19.0	19.0	7.1	7.0	29.5	29.8	91.0	89.9	8.1	7.7	3	58	115.0	285.0	115.0	305.0	19.0	22.0
97	7	09/18/97	DT, BE	IL, BE	18.5	18.0	7.4	7.2	30.8	30.8	94.7	91.3	7.5	7.8	*	*	95.0	293	95.0	340.0	17.0	29.5
97	7	10/02/97	DT, GT	BE, IL	13.5	16.0	8.0	7.8	30.7	31.3	92.7	95.4	7.4	*7.8	3	0	115.0	295.0	115.0	295.0	8.5	24.0
97	7	10/17/97	GT, DT	BE, JK	21.0	18.0	9.2	9.0	32.6	33.0	124.7	115.7	7.4	7.0	5	0	105.0	330.0	105.0	330.0	2.0	15.5
97	7	11/03/97	IL, BE	IL, BE	15.0	15.0	8.4	8.7	25.3	28.5	96.9	102.5	7.1	7.4	*	*	25.0	206.0	25.0	220.0	9.0	16.5

Site 9 - Cochecho River

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL	FECAL	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H
					oc	ppm	ppm	ppt	ppt	%	%	%			CFU/1	CFU/1	cm				oc	
91	9	04/14/81	NN JH	NN JH	9.0	11.0	10.2	9.2	3.5	6.2	80.47	84.38	7.1	7.0	*	*	*	*	*	*	*	*
91	9	04/28/81	AR JH	AR JH	13.0	14.0	8.0	9.0	2.8	5.0	87.16	92.19	7.4	7.2	*	*	*	*	*	*	*	*
91	9	05/13/81	NN JHCC	NN JHCC	16.0	18.0	8.3	8.2	3.2	5.8	85.95	89.75	7.1	6.9	*	*	*	*	*	*	*	*
91	9	05/27/81	JH NN	JH NN	18.0	21.0	5.8	6.0	7.6	11.6	84.11	71.92	7.0	7.2	*	*	*	*	*	*	*	*
91	9	08/11/81	JH JJ NN	JH JJ NN	18.5	23.0	4.6	5.8	9.9	4.6	52.48	67.13	7.1	7.2	*	*	*	*	*	*	*	*
91	9	08/28/81	NN JH	NN JH	19.5	22.5	7.3	10.0	9.3	19.1	83.92	127.91	7.4	7.8	*	*	*	*	*	*	*	*
91	9	07/11/81	NN JH	NN JH	19.5	21.0	6.3	6.9	18.8	24.5	75.46	88.40	7.2	7.5	*	*	*	*	*	*	*	*
91	9	07/28/81	NN JH	NN JH	23.5	23.0	5.8	6.3	18.0	25.4	75.46	84.77	7.5	7.8	*	*	*	*	*	*	*	*
91	9	08/09/81	JH NN CN	JH NN CN	21.5	21.5	6.7	7.0	19.5	27.2	84.75	92.65	7.4	7.8	*	*	*	*	*	*	*	*
91	9	08/25/81	NN JH	NN JH	18.0	21.0	7.0	6.3	2.1	3.4	78.64	72.24	6.9	6.9	*	*	*	*	*	*	*	*
91	9	09/07/81	NN JH	NN JH	18.0	22.0	6.0	7.9	7.2	13.6	68.18	97.57	6.8	6.8	*	*	*	*	*	*	*	*
91	9	09/23/81	NN JH	NN JH	14.5	17.0	7.1	7.7	6.3	10.6	72.44	84.82	7.2	7.0	*	*	*	*	*	*	*	*
91	9	10/06/81	NN JH	NN JH	15.0	15.0	8.5	8.0	3.0	5.1	86.08	81.96	7.0	7.0	*	*	*	*	*	*	*	*
91	9	10/22/81	JH SJ NN	JH SJ NN	10.0	11.0	10.0	8.9	2.2	4.8	90.14	83.33	7.3	7.0	*	*	*	*	*	*	*	*
91	9	11/05/81	NN JH	NN JH	7.0	8.0	10.0	10.0	4.8	6.7	85.15	88.23	7.2	7.0	*	*	*	*	*	*	*	*
92	9	04/16/82	NN SS	NN SS	5.5	6.0	11.2	11.9	5.4	8.0	92.19	100.76	7.3	6.9	*	*	*	*	*	*	*	*
92	9	05/02/82	JH NN	JH NN	11.0	12.5	9.4	9.5	4.8	6.3	88.01	92.76	7.0	7.0	*	*	*	*	*	*	*	*
92	9	05/16/82	NN	NN	15.0	15.5	8.5	8.4	6.3	9.2	87.67	88.46	7.4	7.3	*	*	*	*	*	*	*	*
92	9	06/01/82	NN	NN	14.0	13.5	7.6	8.1	8.9	14.5	78.31	84.81	7.1	7.3	*	*	*	*	*	*	*	*
92	9	06/14/82	NN	NN	19.5	22.5	6.4	6.5	7.0	11.5	72.65	80.09	7.1	7.1	*	*	*	*	*	*	*	*
92	9	06/29/82	NN	NN	17.5	22.0	6.7	6.5	11.1	19.5	74.76	82.89	6.7	7.5	*	*	*	*	*	*	*	*
92	9	07/14/82	NN	NN	20.5	20.0	6.7	7.2	17.9	20.5	82.41	88.44	7.6	7.8	*	*	*	*	*	*	*	*
92	9	07/29/82	NN	NN	20.5	22.0	7.1	9.1	15.3	19.1	86.05	115.92	7.5	7.5	*	*	*	*	*	*	*	*
92	9	08/12/82	NN	NN	20.5	22.0	6.5	8.3	9.8	16.7	76.40	104.30	7.0	7.4	*	*	*	*	*	*	*	*
92	9	08/27/82	CC JJ	SS	22.0	25.0	6.9	8.4	8.8	17.4	83.51	111.91	6.8	7.5	22	150	*	*	*	*	*	*
92	9	09/10/82	SS	SS	19.0	23.0	8.3	8.1	9.2	16.1	84.43	103.33	6.9	6.4	1010	n/d	*	*	*	*	*	*
92	9	09/26/82	NN	NN	14.5	16.0	8.0	8.6	12.6	20.3	84.62	98.22	7.0	7.6	*	*	*	*	*	*	*	*
92	9	10/11/82	SS	NN	13.0	14.0	8.2	8.4	7.9	9.4	81.73	86.30	7.0	7.1	*	*	*	*	*	*	*	*
92	9	10/24/82	NN	NN	9.0	10.5	10.2	8.6	6.8	13.5	92.23	83.77	7.0	7.1	*	*	*	*	*	*	*	*
92	9	11/06/82	SS	SS	3.0	5.0	11.3	11.5	5.4	5.9	87.20	93.76	6.6	6.9	170	50	*	*	*	*	*	*
93	9	04/21/83	NN JM	NN JM	10.0	11.5	10.1	10.2	0.0	0.0	88.92	94.02	7.1	7.2	20	70	17.0	180.0	*	*	*	*
93	9	05/06/83	NN JM	NN JM	17.0	17.0	8.9	8.5	0.0	2.9	92.50	89.73	7.1	7.0	420	100	24.0	250.0	*	*	*	*
93	9	05/20/83	NN JM	NN JM	15.0	15.0	7.8	7.6	4.7	9.9	79.73	80.00	7.0	6.9	250	140	20.0	400.0	*	*	*	*
93	9	06/04/83	NN JM	NN JM	15.0	17.0	8.1	8.0	5.9	10.8	83.36	88.22	6.9	7.0	240	100	20.0	180.0	*	*	*	*
93	9	06/23/83	JM BK	JM BK	21.0	20.5	6.5	7.9	14.0	18.3	78.96	97.39	7.0	7.3	600	100	*	*	*	*	*	*
93	9	07/06/83	JM	JM	24.0	26.5	7.5	8.2	12.8	20.4	85.69	114.04	7.6	7.6	*	*	*	*	*	*	*	*
93	9	07/23/83	NN JM	NN JM	22.0	22.0	6.8	7.2	18.5	24.9	86.33	94.86	7.1	7.6	310	40	*	*	*	*	*	*
93	9	08/19/83	NN JM	NN JM	23.0	26.0	7.3	9.5	12.4	21.1	91.24	131.50	7.3	7.7	*	*	*	*	*	*	*	*
93	9	09/02/83	NN	NN	22.0	24.0	5.3	*	15.4	21.7	66.12	*	7.1	7.5	470	10	*	*	*	*	*	*
93	9	09/20/83	JM	JM	22.0	22.0	5.6	8.8	20.0	25.2	71.71	116.15	7.4	7.5	180	100	40.0	195.0	*	*	*	*
93	9	10/04/83	JM	JM	15.5	16.0	7.0	9.6	17.0	24.5	77.58	112.49	7.3	7.8	320	30	*	*	*	*	*	*
93	9	10/18/83	JM	JM	12.5	15.0	8.5	9.9	8.4	15.4	84.03	107.56	7.1	7.6	440	80	*	*	*	*	*	*
93	9	11/09/83	JM	JM	9.5	11.5	*	8.7	4.3	13.3	*	86.57	7.0	7.3	600	120	*	*	*	*	*	*
94	9	01/09/84	JM IL	JM IL	6.0	2.0	11.1	11.0	3.8	5.0	91.66	82.45	6.9	7.5	170	60	*	*	*	*	*	*
94	9	04/26/84	NN	NN	9.0	9.0	10.2	10.1	1.6	5.4	89.49	90.58	7.3	7.3	210	38	30.0	13.0	*	*	*	*
94	9	05/10/84	BK JM	BK JM	11.5	12.0	10.1	9.5	0.0	3.4	93.09	90.27	*	7.1	80	130	*	*	*	*	*	*
94	9	05/25/84	AR JJ JJ	RJ BK	16.0	15.0	8.2	8.0	2.4	5.0	84.54	81.91	6.9	7.3	210	70	10.0	110.0	*	*	*	*
94	9	06/09/84	NN	NN	17.0	20.0	7.3	7.2	7.0	14.5	78.81	86.04	7.3	7.5	220	38	30.0	145.0	*	*	*	*
94	9	06/23/84	JM	RJ CC JM	21.0	22.0	5.8	6.6	13.0	20.9	70.06	84.95	7.1	7.2	420	50	*	*	*	*	*	*
94	9	07/11/84	NN	NN	23.5	25.0	6.8	8.3	13.9	20.9	86.48	112.76	7.9	7.9	400	20	20.0	120.0	*	*	*	*
94	9	07/25/84	JM	JM	24.0	25.0	7.4	6.7	13.6	*	84.83	*	7.7	7.7	70	10	*	*	*	*	*	*
94	9	08/09/84	BK CC	BK	20.5	23.0	7.5	7.7	15.6	25.5	91.05	103.67	7.7	7.8	600	0	*	*	*	*	*	*
94	9	08/22/84	NN	NN	20.5	20.0	7.2	8.1	8.8	16.6	84.17	97.96	7.3	7.3	*	*	40.0	130.0	*	*	*	*
94	9	08/06/84	WK	WK	15.0	17.5	7.8	10.6	14.1	24.0	84.12	127.56	7.7	7.4	TNTC	46	*	*	*	*	*	*
94	9	09/21/84	JM SO	BK JM	16.0	19.0	8.0	10.7	8.9	18.1	85.50	128.78	7.5	8.7	130	0	*	*	*	*	*	*
94	9	10/06/84	NN	NN	11.0	14.0	7.6	9.0	8.1	13.9	72.53	94.92	6.9	7.8	169	11	20.0	95.0	*	*	*	*
94	9	10/20/84	NN	NN	11.0	12.0	8.9	9.1	7.0	4.6	84.39	87.06	7.2	7.5	110	90	40.0	205.0	*	*	*	*
94	9	11/07/84	NN JM	NN JM	9.5	10.0	8.0	8.8	10.7	17.1	84.25	86.65	6.9	7.5	360	30	*	*	*	*	*	*
95	9	04/19/85	BK JM	LM NN	10.0	9.0	10.9	10.4	1.9	8.1	88.09	94.76	7.1	7.2	26	11	BSV	117.5	*	*	*	*

Site 10 - Piscataqua River

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL	FECAL	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H
			oc		oc	ppm	ppm	ppt	ppt	%	%	%			CFU/	CFU/	cm	cm	cm	cm	oc	oc
91	10	07/11/81	JJ JB PB CC	JJ JB PB CC	20.5	26.0	7.1	7.8	25.5	29.1	91.31	113.05	7.6	7.9	*	*	*	*	*	*	21.0	27.0
91	10	07/28/81	JB JJ CC	JB JJ CC	23.0	23.0	6.9	9.6	27.4	31.5	93.95	133.98	7.7	7.5	*	*	*	*	*	*	21.0	23.0
91	10	08/09/81	JJ KG	JJ KG	21.0	22.0	7.7	7.9	28.9	33.2	102.04	109.46	7.7	7.4	*	*	*	*	*	*	19.0	25.0
91	10	08/24/81	JJ JB	JJ JB	20.0	23.0	7.4	7.8	8.0	3.5	85.30	92.97	7.0	6.9	*	*	130.0	130.0	*	*	16.0	28.0
91	10	09/07/81	JJ PB	JJ PB	19.0	20.0	7.2	8.8	17.6	25.9	85.90	112.40	7.4	6.9	*	*	180.0	180.0	*	*	19.0	25.0
91	10	08/23/81	JJ JJ	JJ JJ	15.0	16.0	6.2	7.5	14.5	28.1	67.02	88.78	6.9	6.9	*	*	*	*	*	*	14.0	18.0
91	10	10/07/81	AR TD	AR TD	12.0	13.5	8.2	7.6	6.6	23.5	80.32	84.06	7.4	7.8	*	*	170.0	170.0	*	*	5.0	15.0
91	10	10/23/81	KG	KG	9.0	12.5	8.2	8.8	8.3	20.3	84.42	89.40	7.4	7.7	*	*	24.0	24.0	*	*	5.0	16.0
91	10	11/06/81	KG	AR SM	6.0	8.5	9.0	9.0	14.2	21.4	79.18	87.97	7.4	7.4	*	*	54.0	54.0	*	*	2.0	8.5
92	10	04/16/82	BW RW	BW RW	5.5	6.5	11.2	11.2	10.3	22.2	94.97	105.00	7.3	8.1	*	*	80	80	*	*	0.0	6.0
92	10	05/01/82	BW RW	BW RW	10.5	14.5	10.0	10.3	6.7	15.4	94.67	110.75	7.5	7.6	*	*	210	210	*	*	7.0	24.0
92	10	05/15/82	BW RW	BW RW	15.5	14.5	8.7	9.4	13.9	21.0	94.69	104.54	7.4	7.7	*	*	65	65	*	*	11.0	14.0
92	10	06/01/82	BW RW	BW RW	14.5	13.5	7.6	8.3	18.2	24.6	83.10	92.44	7.6	7.8	*	*	55	55	*	*	9.0	9.0
92	10	06/15/82	JJ JJ	JJ JJ	20.5	21.5	6.8	7.6	14.8	20.0	82.18	96.41	7.2	7.6	*	*	80	80	*	*	18.0	23.0
92	10	06/30/82	BW RW	BW RW	21.5	18.5	8.0	8.2	25.2	28.6	104.62	103.50	8.1	7.9	*	*	85	85	*	*	32.0	29.0
92	10	07/14/82	BW RW	BW RW	19.4	17.4	8.0	8.3	23.1	28.4	98.59	101.65	7.7	7.9	38	21	110	110	*	*	18.0	28.5
92	10	07/29/82	BW RW	BW RW	20.4	19.4	7.9	8.7	22.1	30.0	98.65	111.83	7.8	7.9	4	2	70	180	*	*	16.0	30.0
92	10	08/12/82	BW RW	BW RW	20.4	20.4	8.7	7.5	22.7	30.0	113.18	98.23	7.6	7.8	7	76	235	235	*	*	15.0	34.0
92	10	08/27/82	BW RW	BW RW	22.4	20.4	8.1	22.1	31.6	90.98	107.15	7.7	7.7	25	4	200	200	*	*	20.0	26.0	
92	10	09/10/82	BW RW	BW RW	18.9	20.4	7.5	8.1	23.0	30.8	90.56	99.48	7.4	7.5	*	*	270	270	*	*	11.0	18.0
92	10	09/26/82	BW RW	BW RW	13.4	13.4	8.3	7.8	23.0	30.8	90.56	99.48	7.4	7.5	*	*	95	300	*	*	13.0	16.0
92	10	10/11/82	BW RW	BW RW	14.4	14.4	8.1	8.3	20.4	28.2	88.82	95.58	7.3	7.7	304	80	95	300	*	*	13.0	16.0
92	10	10/24/82	BW RW	BW	6.4	9.4	8.5	9.0	18.4	29.0	80.57	93.57	7.2	7.6	0	0	160	160	*	*	5.0	5.0
92	10	11/09/82	BW RW	BW RW	4.4	5.4	9.8	10.6	14.8	21.6	82.32	95.45	7.2	7.4	*	*	255	255	*	*	-8.0	6.0
93	10	04/21/83	HB KM KM	MS KM BM	10.0	11.5	10.2	11.1	0.3	6.0	90.70	105.35	7.1	7.6	30	0	110.0	110.0	*	*	235.0	12.5
93	10	05/06/83	MS KM BM	RW KK BM	15.5	15.5	8.0	8.6	6.3	18.3	83.59	96.17	10.0	7.0	140	0	250.0	250.0	*	*	250.0	25.0
93	10	05/20/83	JD JB BM	BM MC KM	13.5	13.0	7.1	8.0	14.7	22.7	74.74	87.45	7.4	7.8	0	0	60.0	60.0	*	*	11.0	14.0
93	10	06/03/83	JC SC	MC KM BM	14.0	15.5	7.7	8.3	14.7	24.8	81.38	95.99	7.6	8.0	40	0	160.0	160.0	*	*	9.0	22.0
93	10	06/23/83	BM	KM HB BM	19.0	18.0	6.7	7.7	20.5	26.6	80.84	95.08	7.7	7.9	60	10	90.0	90.0	*	*	315.0	19.0
93	10	07/08/83	BM	BM	21.5	20.0	6.6	8.1	23.8	29.2	85.65	105.31	7.6	8.0	10	0	90.0	215.0	*	*	90.0	33.0
93	10	08/03/83	BM WM	BM WM	21.0	18.5	7.0	7.9	26.1	28.4	91.33	99.46	7.6	7.9	0	0	75.0	220.0	*	*	21.0	24.5
93	10	08/19/83	BM	BM	20.0	21.0	7.4	8.1	23.7	29.3	96.68	107.60	7.4	7.6	*	*	95.0	280.0	*	*	310.0	22.0
93	10	09/02/83	BM	BM	21.5	21.0	6.0	7.6	24.8	30.4	77.76	101.37	7.5	7.6	20	0	80.0	270.0	*	*	345.0	28.0
93	10	09/20/83	JC JD SB	BM	20.5	20.5	6.7	7.9	26.9	29.9	86.38	104.75	7.7	7.8	10	4	110.0	310.0	*	*	16.0	21.5
93	10	10/04/83	JC JD JC	KK MS	15.0	15.0	7.6	7.9	25.6	29.7	87.87	93.75	7.6	7.6	30	100	95.0	315.0	*	*	14.0	14.5
93	10	11/09/83	JM MC BM	CM MC BM	10.0	11.0	7.6	8.3	18.3	30.8	75.39	90.72	7.1	7.8	50	5	105.0	320.0	*	*	16.5	21.5
94	10	04/26/84	JC MM JM	JC KC MM JM	7.5	7.0	9.1	9.8	14.2	24.1	80.77	94.16	7.4	8.0	38	17	110.0	285.0	*	*	320.0	17.0
94	10	05/10/84	JC KK BM	BM SC JC BS	13.0	15.0	9.5	9.5	4.8	7.6	93.03	99.01	7.3	7.9	21	20	30.0	140.0	*	*	4.5	7.0
94	10	05/25/84	BM	SC KM	15.0	14.0	8.4	8.4	10.0	21.7	88.26	92.41	7.6	7.9	46	7	90.0	142.5	*	*	11.0	15.9
94	10	06/09/84	BM KM MM	BM MS	16.7	17.5	7.6	8.2	18.5	22.9	86.74	97.55	7.6	7.8	26	0	90.0	213.0	*	*	14.1	27.0
94	10	06/23/84	BM	BM	20.5	19.5	7.1	7.7	22.2	29.0	88.91	98.90	7.6	7.9	29	3	70.0	182.5	*	*	18.0	28.0
94	10	07/11/84	CM BM	CM BM	23.0	22.0	7.3	7.7	24.7	28.6	87.15	106.41	7.8	7.9	20	1	90.0	250.0	*	*	18.0	31.0
94	10	07/25/84	CM BM	AR SL	24.5	22.0	6.4	7.0	24.7	29.8	88.08	94.98	7.7	8.5	10	1	90.0	287.0	*	*	315.0	30.0
94	10	08/09/84	JC BM CM	BM KM JC	21.5	21.5	7.6	7.9	25.2	29.1	98.39	106.17	7.7	8.0	2	2	85.0	207.5	*	*	21.0	26.0
94	10	08/22/84	BM JC	JC BM	19.5	16.5	6.4	7.2	23.3	29.2	80.09	87.14	7.9	7.9	30	7	90.0	245.0	*	*	320.0	18.0
94	10	09/07/84	KM HS BM	MS BM	15.5	17.0	8.9	7.6	26.1	30.8	104.27	93.86	8.1	7.9	*	*	95.0	222.5	*	*	325.0	11.5
94	10	09/21/84	BM MM BS	BM	16.5	17.5	8.8	8.9	23.8	31.3	115.48	112.08	8.3	8.3	8	0	75.0	305.0	*	*	305.0	23.0
94	10	10/06/84	BM MM BS	BM	12.0	13.0	7.7	8.3	18.8	26.8	79.90	92.77	7.9	8.0	19	0	75.0	200.0	*	*	340.0	6.0
94	10	10/20/84	BM	BM SC SC	12.5	12.5	8.6	9.0	17.7	29.5	89.83	101.30	7.9	8.1	11	5	115.0	330.0	*	*	115.0	15.0
94	10	11/07/84	BM	BM BS	10.0	10.5	8.0	8.0	18.6	28.9	79.71	86.35	7.6	7.8	33	2	75.0	170.0	*	*	300.0	15.0
95	10	04/18/85	JDM JAM	JDM JAM	8.5	8.5	10.6	10.6	23.2	23.2	104.83	104.83	7.8	7.8	1	1	*	*	*	*	8.0	10.0
95	10	05/01/85	JDM JAM	JDM JAM	10.0	10.0	10.3	10.3	22.4	22.4	104.86	104.86	7.4	7.4	3	3	*	*	*	*	205.0	11.0
95	10	05/15/85	JDM JAM	JDM JAM	11.0	11.0	9.0	9.0	26.4	26.4	86.13	86.13	7.6	7.6	0	0	*	*	*	*	235.0	8.0
95	10	05/30/85	JDM JAM	JDM JAM	17.0	17.0	7.7	7.7	23.0	23.0	91.21	91.21	7.4	7.4	4	4	*	*	*	*	200.0	25.0
95	10	06/13/85	JDM JAM	JDM JAM	18.0	16.5	6.3	7.5	18.6	26.4	74.14	89.81	7.0	7.4	11	3	BSV	157.5	*	*	300.0	15.0
95	10	06/27/85	JDM JAM	JDM JAM	21.0	21.0	7.7	8.3	22.4	26.2	98.14	108.20	7.2	7.6	NV	4	192.5	192.5	*	*	260.0	16.0
95	10	07/12/85	JDM JAM	JDM JAM	20.0	19.0	6.1	7.5	25.3	29.6	77.84	96.17	6.9	7.4	10	1	BSV	147.5	*	*	290.0	17.0

95	10	07/27/95	JM JM BE	JAM JDM BE	24.0	24.0	6.5	6.8	24.0	28.9	88.31	95.09	7.4	7.4	TNTC	5	BSV	195.0	75.0	265.0	23.0	35.0	
95	10	08/10/95	JDM JAM	JDM BE	21.0	24.0	5.3	6.7	22.6	29.2	67.63	93.86	7.2	7.4	11	2	BSV	227.5	55.0	300.0	15.0	28.0	
95	10	08/29/95	JM JM BE	JM JM BE	19.0	19.0	8.5	7.8	26.6	30.8	106.99	100.77	7.6	7.8	NV	NV	BSV	197.5	65.0	290.0	17.0	31.0	
95	10	09/11/95	JDM BTE	JJ BTE	15.5	17.0	8.6	7.8	27.8	31.6	101.84	97.48	8.0	7.3	6	0	BSV	170.0	60.0	200.0	14.0	21.0	
95	10	09/28/95	JM JM BE	JAM ADM	14.0	14.0	7.9	8.1	26.8	30.8	90.22	94.87	7.1	7.6	8	5	BSV	212.5	75.0	315.0	14.0	15.0	
95	10	10/10/95	JM JM	JM JM BE	12.0	15.0	8.8	7.9	23.2	30.2	94.10	94.05	7.1	7.8	23	0	BSV	245.0	80.0	285.0	10.0	18.0	
95	10	10/28/95	JM BE	JM BM	11.0	13.0	7.9	7.7	11.4	27.4	76.87	86.40	6.4	7.1	TNTC	5	BSV	170.0	70.0	320.0	8.0	14.0	
95	10	11/09/95	JM JM	JM JM	4.5	5.0	10.7	9.4	5.3	15.4	85.81	81.29	7.1	7.0	0	83	BSV	157.5	100.0	305.0	2.0	4.0	
96	10	04/18/96	BB BE	BB AB	7.0	8.0	13.1	11.9	0.2	1.1	108.6	101.6	7.2	7.1	180	9	35.0	55.0	100.0	320.0	4.0	13.0	
96	10	05/08/96	BB AB BE	AB	10.0	12.0	9.8	9.6	5.4	11.6	90.0	95.6	7.0	7.4	30	0	52.5	172.5	57.0	265.0	3.0	9.0	
96	10	05/20/96	BB	AB		14	21	8.9	9	5	13.6	89.19	109.08	7.2	7.4	80	40	BSV	162.5	100.0	280.0	18	34
96	10	06/03/96	RB BE	AB	17.5	15.5	7.6	8.8	12.2	22	85.33	98.23	7.1	7.7	20	10	BSV	112.5	45.0	290.0	14	11	
96	10	06/17/96	AB BB	AC KF	21	21.5	7.2	8	16.3	24	88.6	103.88	7.4	8	38	4	BSV	185.0	75.0	260.0	22	NOTHER	
96	10	07/01/96	BB AB BE	BB BE	19	21	6.7	7.9	18.4	26.8	80.29	103.33	7.4	7.6	20	6	BSV	175.0	60.0	300.0	18	24	
96	10	07/15/96	RB AB MB B	RB AB MB	19.5	21.5	8.2	7.9	2	3.1	90.62	91.32	6.9	6.2	1700	1460	42.5	52.5	90.0	300.0	20	30	
96	10	07/30/96	BB	BB	19.5	20	6.9	8.1	15.9	24.6	82.31	102.66	7.4	7.8	30	0	BSV	165.0	53.0	300.0	18	24	
96	10	08/14/96	AB BB BE	BB AB BE	20.5	24	7.1	7.9	20.8	27.9	88.81	109.81	7.5	6.9	0	0	BSV	177.5	88.0	270.0	16	27	
96	10	08/29/96	BE BB	BB BE	19.5	21	7.4	6.9	23.8	30.2	92.45	92.17	7.7	7.7	14	0	*	255.0	60.0	320.0	14	28	
96	10	09/16/96	AB RB BE	AB BE	18	17	6.5	7.3	24.7	29.9	79.33	90.25	7.4	7.8	0	0	*	257.0	110.0	310.0	15.5	21	
96	10	09/30/96	BM DT DC	BM CT JB	25.5	15	8	7.8	27.1	29.4	113.61	90.02	7.8	7.9	20	20	BSV	215.0	85.0	315.0	11.5	14.5	
96	10	10/15/96	BM	BM DT	10	12	8.8	8.5	20.4	28.5	88.46	94.05	7.8	7.7	30	0	BSV	230.0	75.0	300.0	0.5	5.5	
96	10	10/29/96	AB BS BM	CM JS DR	9	10.5	9.3	8.5	4.2	12.8	82.82	82.45	7.2	7.2	70	50	63.0	80.0	105.0	320.0	3	9	
96	10	11/06/96	JB PH BM	BM	8	7	9.6	9.4	10	13.1	86.39	83.71	7.3	9.2	10	20	BSV	120.0	115.0	275.0	7	4	
97	10	04/23/97	JF, MH	AA, BT	8.0	11.5	11.1	10.7	1.1	6.5	94.8	102.3	7.5	7.1	40	12	115.0	120.0	115.0	275.0	7.0	4.0	
97	10	05/06/97	BM	BM	10.0	10.0	9.6	9.4	5.6	16.5	88.2	91.8	7.4	7.8	38	4	47.5	80.0	75.0	310.0	10.0	10.0	
97	10	05/22/97	BS, BM, JB	DL, JB	11.5	13.2	8.8	9.1	10.4	19.8	86.1	97.3	7.4	7.6	*	*	80.0	110.0	80.0	290.0	9.0	19.5	
97	10	06/05/97	BM	DT, SN, BM	14.5	14.5	8.5	8.9	17.4	24.6	92.2	101.0	7.7	7.9	*	*	90.0	162.5	90.0	310.0	10.0	20.0	
97	10	06/23/97	BM	BM	21.5	20.0	7.5	8.1	20.6	27.9	95.5	104.1	7.7	7.8	6	*	70.0	155.0	70.0	300.0	23.5	26.0	
97	10	07/07/97	BM	BM	21.5	21.0	9.5	9.1	19.9	26.2	120.4	120.1	8.0	8.0	*	*	80.0	187.5	80.0	285.0	24.0	28.0	
97	10	07/21/97	BM	BM	20.5	19.0	6.8	7.5	15.3	26.3	82.4	94.2	7.6	7.8	20	8	60.0	185.0	60.0	305.0	20.0	22.0	
97	10	08/04/97	SB, DB	AM, AA	17.0	20.5	7.3	8.4	24.6	30.2	87.3	111.2	7.7	8.2	18	0	90.0	250.0	90.0	250.0	17.0	28.5	
97	10	08/19/97	BM	BM	20.5	20.5	7.1	7.6	24.6	30.2	90.8	100.6	7.7	7.9	6	0	60.0	220.0	60.0	320.0	15.0	23.0	
97	10	09/03/97	BM	BM	20.0	20.0	6.9	7.4	22.7	27.2	86.5	94.6	7.8	7.8	7	0	120.0	230.0	120.0	300.0	20.0	18.0	
97	10	09/16/97	BM, SN, CM	BM, LD, KD, S	19.0	19.5	6.9	7.3	23.6	29.6	85.3	94.5	7.7	7.8	*	*	85.0	212.5	85.0	345.0	16.0	23.0	
97	10	10/02/97	BM	BM	12.0	13.0	8.1	8.2	23.7	30.6	86.9	93.9	7.7	7.8	8	0	100.0	275.0	100.0	275.0	0.0	14.0	
97	10	10/17/97	RB, MB, JW	RB, JW	12.0	14.0	8.3	8.6	20.7	30.8	87.4	100.7	7.6	7.9	30	0	80.0	310.0	80.0	345.0	5.0	14.0	
97	10	11/03/97	BM, CM, DT	BM	9.5	11.0	9.5	9.7	19.1	7.8	93.6	91.9	6.9	7.1	*	TNTC	42.5	52.5	115.0	260.0	11.0	11.0	

Site 11- CML

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL	FECA	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-	ATEMP-H
					°C	°C	ppm	ppm	ppt	ppt	%	%	CFU/1	CFU/1	cm	cm	cm	cm	°C	°C		
91	11	04/13/91	PH JC SD	PH JC SD	6.1	6.2	10.4	10.5	27.8	26.8	100.06	99.85	7.4	7.5							5.8	8.0
91	11	04/28/91	SD PH	SD PH	8.0	8.8	9.1	9.1	25.1	23.9	90.09	90.41	7.6	7.5							7.5	8.6
91	11	05/13/91	PH JC SD	PH JC SD	9.1	9.0	8.2	7.2	27.0	25.8	83.60	73.27	7.2	7.4			250.0	185.0			21.0	16.0
91	11	05/27/91	PH JC SD	PH JC SD	11.8	12.5	8.5	8.2	28.8	28.0	93.23	91.39	7.6	7.5							13.0	16.0
91	11	06/12/91	JC PH	JC PH		10.5		8.4		29.5		90.57										22.5
91	11	06/26/91	JC SD MP	JC SD MP	13.0	13.2	7.1	7.4	30.7	29.8	81.40	84.34	7.8	7.7				180.0			25.0	25.0
91	11	07/10/91	JC SD	JC SD	13.5	13.0	7.4	8.2	30.8	30.0	85.77	83.58	7.1	7.7							21.5	22.0
91	11	07/25/91	PH	PH		12.0		8.6		29.5		95.79		7.7								24.0
91	11	08/09/91	SD JC	SD JC	16.0	16.5	8.8	7.0	30.0	29.5	82.48	85.47	7.7	7.7							20.0	22.5
91	11	08/26/91	JC SD	JC SD	16.5	17.0	7.0	6.7	27.2	25.5	84.24	80.58		7.6				126.0			19.0	19.0
91	11	09/08/91	PH	PH	15.5	15.5	7.1	7.0	27.2	28.1	83.76	83.05	7.7	7.5			198.0				22.0	19.0
91	11	09/23/91	JC DM	JC DM	14.5	14.0	7.8	7.7	28.5	27.9	90.92	88.50	7.5	7.6				180.0			14.0	17.0
91	11	10/07/91	JC DM	JC DM	11.0	11.5	9.0	8.6	29.0	27.2	97.79	93.34	7.4	7.5				120.0			10.0	15.5
91	11	10/22/91	SD SG	JC SD SG	9.0	10.5	9.0	8.3	28.5	28.5	93.25	87.74	7.2	7.6							11.0	12.0
91	11	11/06/91	JC DM	PH	10.0	9.0	8.3	7.8	29.0	27.0	88.23	80.01	7.0	7.4							6.0	7.0
92	11	04/15/92	PH JC	PH	5.0	4.5	11.6	11.2	26.5	24.0	107.98	101.23					188.0	188.0				13.5
92	11	05/13/92	SD SG	SD SG	8.0	7.5	9.8	10.0	25.0	24.0	96.96	97.14	7.0	7.4								
92	11	06/17/92	JC PH	JC PH	11.5	12.0	8.8	8.2	27.0	24.5	95.38	88.42	7.9	7.9			bsv	bsv				
92	11	06/29/92	CN DW	CN DW	13.7	14.2	10.2	8.5	31.1	31.4	118.62	89.94	7.9	8.1	3	3	bsv	bsv			19.5	20.0
92	11	07/14/92	DQ CN SQ	DQ CN SQ	14.2	14.7	7.9	5.8	30.6	31.3	94.25	68.84	7.8	7.7	1	5	bsv	475.0			14.0	16.7
92	11	07/28/92	DQ	CN DQ	16.7	15.2	8.5	8.4	31.2	29.9	104.92	99.22	6.9	7.0	5	4	bsv	335.0	340.0		21.0	23.0
92	11	08/12/92	DQ SQ	CN	15.0	14.7	8.4	8.7	29.0	30.4	99.24	102.04	7.8	7.9	6	0	bsv	425.0	235.0		17.0	28.0
92	11	08/26/92	DW CN		15.2		8.5		29.8		100.34		8.2		2	2	bsv		235.0		20.0	
92	11	09/10/92	CN	CN JG	15.2	14.7	8.5	8.1	30.3	31.5	100.66	95.67	8.2	8.1	21	7	bsv	445.0	285.0		19.0	18.0
92	11	09/25/92	CN DQ	CN	13.2	11.7	8.3	8.6	31.1	30.1	95.41	95.14	8.0	8.1	2	3	bsv	370.0	180.0		12.0	14.0
92	11	10/11/92	JG DQ	JG DQ	12.2	12.2	7.9	7.9	31.5	30.9	88.60	88.81	7.8	7.8	8	1	bsv	495.0	230.0		12.0	15.0
92	11	10/25/92	JG DQ	JG AR DQ	9.7	10.2	8.6	7.9	30.3	30.3	90.67	84.72	7.8	7.7	14	20	bsv	485.0	180.0		6.0	6.0
92	11	11/09/92	JG	JG	12.7	7.7	8.9	8.5	32.1	29.2	101.91	85.51	7.8	7.9		0	bsv	500.0	230.0		0.0	-2.0
93	11	04/21/93	JG	JG	5.5	6.5	9.8	10.7	22.8	19.3	77.74	98.43	7.4	7.3	0	0	230.0	315.0	230.0	490.0	9.0	12.5
93	11	05/06/93	JG	JG	9.0	11.0	9.9	7.5	23.3	22.7	99.11	78.22	7.3	7.3	0	0	180.0	280.0	180.0	520.0	13.5	22.0
93	11	05/20/93	JG	JG	9.0	9.5	8.5	9.1	25.8	27.2	86.50	94.52	7.5	7.4	10	0	840.0	385.0	640.0	485.0	10.0	13.5
93	11	06/03/93	JG	JG	9.5	10.0	4.7	6.2	28.5	27.4	49.24	55.20	7.4	7.1	0	0	600.0	270.0	600.0	510.0	10.0	16.0
93	11	06/23/93	JG	JG	12.5	14.5	6.5	6.7	29.1	28.3	72.97	77.99	7.4	7.1	20	0	200.0	335.0	200.0	510.0	11.0	24.0
93	11	07/06/93	JG	JG	15.5	15.5	6.0	7.8	30.1	28.8	72.10	92.95	7.2	6.8	0	0	210.0	410.0	210.0	500.0	18.5	24.5
93	11	07/22/93	JG	JG	14.5	16.5	7.1	5.1	30.9	30.4	84.05	62.63	7.4	7.1	0	0	185.0	410.0	185.0	535.0	17.0	26.0
93	11	08/03/93	JJ JJ	JJ JJ	18.0	18.0	7.9	8.8					7.0	6.8			220.0	460.0	220.0	500.0	18.0	26.0
93	11	08/19/93	JG	JG	17.5	18.5	8.0	4.7	32.2	32.5	101.33	60.79	7.4	6.8	10	0	180.0	450.0	180.0	550.0	18.0	23.0
93	11	09/02/93			16.5	18.5	7.9	7.9	29.3	31.2	96.34	101.35	7.9	6.8			235.0	430.0	235.0	500.0	15.0	20.0
93	11	09/20/93	JJ JJ	JJ JJ	10.0	12.0	8.2	8.4	31.8	32.7	88.83	95.58	7.2	7.2	13	9	210.0	535.0	210.0	535.0	8.0	12.0
93	11	10/04/93	JJ JJ	JJ JJ	12.0	12.0	8.0	8.1	32.2	32.0	90.72	91.73	7.1	7.1	19	1	235.0	385.0	235.0	505.0	14.0	24.0
93	11	10/18/93			9.0	9.5			32.9	31.6					5	2						
93	11	11/09/93	CC	CC	8.0	7.0	8.9	9.1	30.1	31.0	91.14	91.64										
94	11	03/21/94	CN	CN	4.0	4.0	11.9	12.3	26.0	22.0	107.71	108.34	6.0				330.0	420.0	330.0	480.0	6.0	5.0
94	11	04/26/94	CN	CN	6.8	7.8	10.4	10.4	26.0	26.0	100.00	102.38	7.7	8.0			230.0	385.0	230.0	590.0	6.0	7.0
94	11	04/26/94	DW AP	DW	9.5	6.0	10.7	10.0		27.3		95.88	8.0	8.0	36	14	220.0	335.0	220.0	565.0	9.5	8.0
94	11	05/10/94	JG AP	DW	9.0	11.0	9.3	9.0	26.0	23.9	94.77	94.59	8.1	7.9	7	8	215.0	250.0	215.0	530.0	13.5	21.0
94	11	05/18/94	KC SW CN	KC CN	9.5	8.9	9.5	9.6	25.0	23.0	97.25	94.82	8.1	7.8			315.0	390.0	315.0	565.0	13.0	9.0
94	11	05/25/94	JG AP	JJ JG	10.5	10.0		8.9	27.7	27.7		93.79	8.1	8.1	2	2	185.0	510.0	185.0	540.0	11.0	19.0
94	11	06/09/94	JG AP	JG	10.5	12.0	8.2	8.4	30.2	29.4	88.83	93.50	8.1	7.9	51	4	195.0	435.0	195.0	480.0	12.0	22.0
94	11	06/23/94	JG AP	JG	12.0	13.0	8.0	8.6	30.6	30.8	89.76	98.66	8.1	7.9	TNTC	9	170.0	435.0	170.0	510.0	17.0	24.5
94	11	07/11/94	JG	JG	16.0	16.0	7.8	7.7	31.6	31.9	95.59	94.55	8.0	7.8	6	0	210.0	470.0	210.0	500.0	20.0	24.0
94	11	07/25/94	JG	JG	14.0	14.5	7.5	7.5	31.1	31.3	88.01	89.02	7.8	7.8	6	1	200.0	475.0	200.0	500.0	17.0	22.5
94	11	08/09/94	DW AP	DW DM	16.5	17.0	7.8	8.9	34.2	33.2	95.65	112.38	8.0	7.8	0	1	200.0	455.0	200.0	510.0	15.5	25.0
94	11	08/22/94	JG AP	JG	15.0	15.0	7.3	7.4	31.3	31.1	87.53	88.61	8.0	7.9	10	4	190.0	445.0	190.0	490.0	18.5	17.0
94	11	09/07/94	AP	AP JJ	14.5	15.5	7.3	7.3	31.1	33.2	86.53	89.50	8.1	8.1	4	1	195.0	427.5	195.0	545.0	11.0	20.0
94	11	09/21/94	AP	AP	14	15	7	7.4	32.1	31.6	82.69	88.90	8.0	8.1	0	1	215.0	397.5	215.0	495.0	12.5	21.0
94	11	10/06/94	AP	AP	11.0	12.5	6.7	7.4	31.5	30.8	74.03	83.89	8.0	7.9	4	0	185.0	282.5	185.0	530.0	6.0	13.0
94	11	10/20/94	AP	AP	11.5	12.0	8.4	8.2	31.7	31.9	93.93	92.80	8.1	8.0	3	0	252.5	357.5	305.0	505.0	13.0	15.0
94	11	11/07/94	AP	AP	10.5	10.5	7.7	8.0	31.5	31.5	84.15	87.43	8.0	8.0	5	3	147.5	245.0	230.0	525.0	7.0	11.0
95	11	04/18/95	J1 AP MA DS	DS MA AP	5.5	6.0	10.5	10.2	28.8	28.0	100.50	98.27	8.0	7.9	0	0	BSV	BSV	170.0	545.0	5.5	13.0

95	11	05/01/95	DS JI AP	DS MA	5.6	8.0	10.1	10.5	29.4	29.8	97.08	107.30	8.0	8.0	1	0	BSV	435.0	270.0	535.0	*	5.0	
95	11	05/15/95	J I AP	MA DS AP	10.5	8.5	9.8	9.7	29.2	29.2	105.48	99.84	8.0	8.0	5	1	BSV	500.0	220.0	580.0	8.5	10.5	
95	11	05/30/95	JMI JLI	DS MA	11.0	14.0	9.0	9.0	29.4	28.2	98.05	103.64	7.8	7.8	4	4	BSV	251.0	280.0	525.0	18.0	23.0	
95	11	06/13/95	J I AP	DS MA	12.0	13.0	8.8	8.8	29.9	30.1	98.27	100.49	7.9	7.9	11	12	BSV	307.5	200.0	565.0	14.0	17.0	
95	11	06/27/95	J I AP	DS MA	14.0	15.5	8.8	8.7	30.2	29.8	102.68	104.21	7.9	7.9	3	0	BSV	305.0	280.0	410.0	14.0	17.0	
95	11	07/12/95	J I JI	DS MA	13.0	14.0	8.7	8.5	30.6	32.1	99.88	100.40	7.7	7.8	2	4	BSV	487.5	220.0	570.0	15.0	25.0	
95	11	07/27/95	J I JI	AR AM	18.0	18.5	8.2	7.9	30.6	31.0	103.81	101.22	7.8	7.9	20	1	BSV	420.0	280.0	500.0	21.0	28.0	
95	11	08/10/95	J I JI	DS MA AP	17.5	19.0	7.4	7.4	30.6	30.8	92.78	95.60	7.8	7.8	0	0	BSV	415.0	240.0	570.0	18.0	26.0	
95	11	08/28/95	DS AP	J I JI	15.0	15.5	7.4	8.1	32.0	31.9	89.11	98.47	7.6	7.8	3	0	BSV	415.0	270.0	560.0	15.0	28.0	
95	11	09/11/95	DEB	JMM ASR	13.5	15.0	7.4	8.0	30.5	31.8	85.60	96.24	7.4	7.7	0	1	BSV	387.5	250.0	560.0	8.5	17.0	
95	11	09/28/95	AP CC	AP	13.5	13.5	7.6	7.8	31.4	32.0	88.44	91.13	8.0	7.9	3	2	220.0	470.0	265.0	585.0	14.0	15.0	
95	11	10/10/95	AP	AP	13.0	13.5	7.6	7.5	31.8	30.8	87.77	86.93	*	*	3	0	BSV	390.0	280.0	575.0	7.0	17.0	
95	11	10/26/95	AP	AP	11.0	12.0	7.4	7.7	29.6	31.0	80.73	86.62	8.0	7.9	8	1	237.5	345.0	260.0	600.0	6.0	15.0	
95	11	11/09/95	AJM AP	AP	8.0	8.0	8.7	8.7	27.8	26.8	87.70	87.00	7.9	7.8	19	8	117.5	277.5	150.0	650.0	-2.0	1.5	
96	11	04/18/96	JW JP RW D	DEB SAH	6.0	8.0	10.7	10.9	19.3	15.5	97.3	101.5	7.8	8.0	20	0	92.5	123.5	150.0	550.0	2.0	10.0	
96	11	05/06/96	JP JW JS DE	JS RW JW	8.0	9.0	9.4	9.6	26.5	23.5	93.9	98.2	7.7	7.8	2	1	195.0	317.5	250.0	*	3.0	7.0	
96	11	05/20/96	JS RW JW J	JS RW JW	11	9.5	9.4	9.5	25.1	23	99.56	95.99	7.8	7.9	8	0	272.5	297.0	385.0	410.0	17	30	
96	11	06/03/96	JS DE RW	JS JW RW	13	14	8.9	8.8	26.8	28.2	99.48	100.05	7.9	8	1	2	187.5	225.0	215.0	440.0	18	13	
96	11	06/17/96	JS DE	JS	15	16	8.8	9.1	29.2	28.8	104.09	109.54	7.9	8	3	1	BSV	BSV	150.0	470.0	17	25	
96	11	07/01/96	JS DE JW	JS	14	16	8.5	8.7	29	29.4	98.39	105.13	7.8	7.9	5	2	BSV	445.0	180.0	530.0	16	21	
96	11	07/15/96	*	JS JP JW	*	19	*	7.7	*	25.6	*	96.33	*	7.8	*	7	*	330.0	*	500.0	*	21	
96	11	07/30/96	JW RW	MM JG KD	16	18	8.2	8	28.7	29.8	98.65	100.77	7.8	8	2	0	BSV	395.0	205.0	435.0	17	24	
96	11	08/14/96	JS JP	RW CC	16	17	8	8.4	30.5	30.7	97.35	104.38	9	7.4	2	1	BSV	430.0	240.0	500.0	14	22	
96	11	08/28/96	JS RW	JW JP JS	17	19.5	7.5	7.8	30.3	30.9	92.96	101.77	7.8	7.8	2	1	BSV	420.0	180.0	435.0	15	23.5	
96	11	09/16/96	JW JS	JW JS	7	7	7.2	7.6	28.3	30.2	71.16	76.11	8	7.8	3	2	BSV	395.0	290.0	520.0	16	20	
96	11	09/30/96	DE JS	JS JW	14	14	7.7	7.9	30.2	30.5	89.83	92.34	7.8	7.9	2	0	BSV	406.0	220.0	535.0	14	23	
96	11	10/15/96	JS DE JW	JS JW	11	12	8.4	8.4	30.2	31.1	92	94.56	7.8	7.8	0	100	BSV	395.0	220.0	440.0	5	10	
96	11	10/29/96	JS JW	JS JW	11	11	8.3	8.4	24.5	22.5	87.57	87.5	7.8	7.6	15	12	175.0	165.0	235.0	530.0	7	12	
96	11	11/06/96	RW	JS RW	10	9	3.7	8.3	27.7	24.7	38.99	83.86	*	*	2	3	270.0	262.5	300.0	470.0	10	11	
97	11	04/23/97	LF, JW	RW	7.0	10.0	3.2	9.8	23.3	18.2	30.6	97.8	7.8	7.9	2	0	17.5	225.0	355.0	505.0	6.0	14.0	
97	11	05/06/97	LF, JF, JW	RW, JW	7.5	8.0	9.7	*	25.2	26.5	95.0	0.0	7.8	7.8	4	2	167.0	250.0	205.0	520.0	9.0	10.0	
97	11	05/22/97	JS	KW, JW	8.0	11.0	10.4	9.7	28.5	26.4	105.3	88.4	7.7	7.9	5	1	BSV	208.0	220.0	490.0	10.0	17.0	
97	11	06/05/97	RW, LF	AR, JW	12.0	15.0	10.1	9.3	29.1	28.9	112.2	109.8	8.0	8.0	*	*	BSV	330.0	120.0	560.0	12.0	15.0	
97	11	06/23/97	JS	JS, JW, AA	14.0	16.0	9.4	9.4	29.0	28.4	108.8	112.9	7.8	7.9	0	1	BSV	295.0	205.0	520.0	23.0	28.0	
97	11	07/07/97	JS	AM	14.0	15.5	9.1	9.1	30.1	31.3	106.1	110.2	7.8	8.0	1	1	BSV	427.5	230.0	525.0	19.5	31.5	
97	11	07/21/97	JS	LF, JW	14.0	6.0	8.4	*	30.5	28.2	98.2	0.0	7.8	7.8	3	3	BSV	BSV	195.0	545.0	16.0	21.0	
97	11	08/04/97	LF	RW	16.0	16.0	7.7	8.8	31.3	30.3	94.2	107.0	7.1	7.8	0	*	BSV	400.0	160.0	500.0	18.0	21.0	
97	11	08/19/97	LF, JF	LF, JF	15.0	17.5	8.0	7.4	30.5	31.1	94.8	93.1	8.0	7.8	1	0	BSV	475	200.0	540.0	15.0	22.0	
97	11	09/03/97	JF, CH	LF, CH	18.0	18.0	7.7	7.5	32.1	30.8	98.4	95.1	8.0	7.8	0	1	BSV	507.5	150.0	540.0	20.0	21.5	
97	11	09/18/97	LF, CH	LF, CH	17.0	18.0	8.5	8.5	31.0	31.2	105.8	108.0	7.7	7.8	*	*	BSV	417.5	195.0	565.0	16.0	27.0	
97	11	10/02/97	LF, CH	LF, CH	10.0	13.0	7.6	8.0	31.3	31.9	82.1	92.4	*	*	4	0	BSV	432.5	265.0	540.0	5.0	15.0	
97	11	10/17/97	LF, CH	LF, CH	11.0	14.0	8.7	9.1	31.5	31.5	96.1	107.0	7.8	7.8	1	9	BSV	342.5	245.0	595.0	7.0	15.0	
97	11	11/03/97	LF, CH	CH, JH	11.0	11.5	8.7	8.7	30.0	29.7	95.2	96.0	7.4	7.6	*	*	3100	197.5	195.0	275.0	545.0	8.0	15.0

Site 12 - Sewage Treatment Plant

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL-L	FECAL-H	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H
					oc	oC	PPM	ppm	ppt	ppt	%	%	CFU/10	CFU/10	cm	cm	cm	cm	0c	0c		
92	12	04/14/92	RD CB CY	RD	7.5	6.0	9.6	12.4	4.3	3.5	82.07	102.21	7.5	7.4	*	*	bsv	bsv	*	*	1.5	2.5
92	12	05/01/92	AR CY CB	CY CD	11.5	10.5	9.1	9.1	4.1	3.9	85.83	83.79	7.5	7.3	*	*	BSV	BSV	*	*	12.0	19.0
92	12	05/15/92	AR JF	KM	14.0	17.5	7.8	9.7	1.6	1.5	76.21	102.67	7.5	7.3	*	*	bsv	bsv	*	*	12.0	15.0
92	12	06/01/92	CY AF	AF CY	16.0	15.0	6.9	9.0	3.8	3.0	72.10	91.14	7.2	7.1	*	*	20	80	*	*	8.0	10.0
92	12	06/03/92	JF RC RM	JF CB RC	22.0	25.0	6.4	8.2	9.6	5.5	77.33	101.86	6.7	7.3	*	*	bsv	85	*	*	26.0	32.0
92	12	06/15/92	KB JF	KB JF	19.0	23.0	6.5	8.0	3.7	4.2	71.77	95.70	7.0	7.1	*	*	*	*	*	*	29.0	22.0
92	12	06/30/92	JF RC RM	JF CB RC	22.0	25.0	6.4	8.2	9.6	5.5	77.3	102.5	6.7	7.3	2	23	*	85	*	*	26.0	32.0
92	12	07/13/92	JF RN RC SC	RM JF CB RC	22.5	25.0	7.5	6.5	8.1	5.9	90.73	81.41	7.1	7.0	456	288	bsv	bsv	*	*	24.0	33.0
92	12	07/28/92	SC CS JF	RM CB JF SC	21.0	23.5	4.6	6.6	3.9	7.3	52.89	105.55	7.2	7.1	30	460	bsv	bsv	*	*	22.0	25.0
92	12	08/13/92	RC CB RM JF	RM JF CB RC	21.0	22.0	6.3	8.2	5.1	4.7	72.90	96.51	7.6	7.6	0	200	bsv	bsv	*	*	22.0	25.0
92	12	08/27/92	RC SC CB JF	RC SC KC JF	22.0	25.0	8.4	8.4	3.3	4.5	98.14	104.44	7.0	7.2	1650	40	bsv	bsv	*	*	21.0	30.0
92	12	09/11/92	RC JF SC RM	AF JF	21.0	20.0	5.7	8.0	3.3	5.1	85.33	90.78	7.1	7.0	670	4670	bsv	bsv	*	*	20.0	24.0
92	12	09/25/92	RC RM SC CS	RM RC SC	17.0	18.0	7.2	8.4	3.2	2.9	76.13	90.51	6.4	6.0	160	20	bsv	bsv	*	*	5.0	16.0
92	12	10/12/92	RC KW SC	RC SC	18.0	14.5	6.3	8.9	4.3	4.6	68.40	89.95	7.4	7.2	100	330	*	*	*	*	14.0	18.0
92	12	10/26/92	RC	CS	12.0	11.0	9.3	10.8	5.9	1.3	89.63	99.14	7.2	7.0	*	90	bsv	bsv	*	*	7.0	11.0
92	12	11/09/92	RC CS	RM RD MA SA	13.0	10.0	10.1	10.0	3.4	5.5	98.14	91.88	7.0	7.1	30	30	*	bsv	*	*	15.0	*
93	12	04/21/93	CB RD KB	CB RC KW	12.0	12.0	7.6	11.0	2.4	2.7	71.81	104.12	7.3	7.1	70	100	bsv	bsv	20.0	22.0	18.0	31.0
93	12	05/06/93	AS CB RM	KB CB KW	14.5	19.0	6.4	9.1	3.1	3.7	64.15	100.48	7.3	7.3	40	560	*	40.0	*	*	40.0	21.0
93	12	05/20/93	CB RC	AS SC	17.0	17.0	5.6	9.1	3.5	3.2	59.31	96.22	*	7.1	100	380	30.0	75.0	30.0	75.0	16.0	18.0
93	12	06/03/93	AS SC RC	RC KB	16.5	19.0	6.6	7.5	1.8	5.1	88.53	83.44	6.8	6.8	100	160	*	*	*	*	20.0	21.0
93	12	06/23/93	KB	KB FB	20.0	21.5	5.1	9.2	1.4	7.0	56.75	108.57	6.8	6.8	10	500	*	*	*	*	30.0	27.0
93	12	07/06/93	CS RC	RC CS	28.0	25.0	7.9	10.9	16.0	17.8	106.30	145.54	7.3	7.4	10	30	*	*	*	*	30.0	36.0
93	12	07/22/93	KB RM	RC RN	23.0	23.0	6.2	8.1	17.7	23	101.69	107.47	6.9	7.3	10	80	*	*	*	*	20.0	24.0
93	12	08/03/93	RC	KB CS	25.0	26.0	8.3	10.4	18.5	16.1	111.26	140.02	7.2	7.0	130	600	*	*	*	*	28.0	32.0
93	12	08/19/93	JF SC	HP JF	22.0	23.5	4.7	6.8	1.8	8.8	54.49	84.13	7.1	7.3	0	2300	*	*	*	*	20.0	33.0
93	12	09/02/93	SC HP AR	JN KF JF	23.0	24.5	5.1	6.4	0.9	22.5	59.98	86.97	6.9	7.0	0	60	*	BSV	*	*	30.5	39.5
93	12	09/20/93	AR JJ	KB AF	17.0	16.5	6.4	7.5	25.4	20.2	76.93	86.47	7.1	7.4	80	800	bsv	bsv	bsv	bsv	18.0	18.5
93	12	10/04/93	BC AR	AR JJ	17.0	15.0	7.9	9.2	3.4	1.3	83.62	92.31	7.2	7.1	*	150	20.0	90.0	20.0	90.0	22.0	22.0
93	12	10/18/93	RC KB CB	KB CS	15.5	16.0	6.8	10.0	4.4	5.4	70.13	104.81	7.3	7.1	*	*	30.0	90.0	30.0	350.0	19.5	21.0
93	12	11/09/93	KF SC HP	SC RC MF	13.0	8.5	4.5	9.4	0.3	1.9	42.98	81.62	7.0	7.4	*	*	bsv	*	bsv	*	11.0	17.0
94	12	04/26/94	DC KF RC	RM RC PK KF	11.5	11.0	5.1	10.6	0.7	0.6	47.19	96.92	7.4	7.0	*	*	*	*	*	*	10.0	8.0
94	12	05/10/94	DC KF HP AT	HP AF JF	14.0	15.0	5.6	10.5	1.0	0.2	54.89	104.72	6.9	7.3	10	30	*	*	*	*	21.0	20.0
94	12	05/25/94	KF RC DC SS	KF RC HP DF	15.0	10.0	8.2	8.7	1.2	0.6	82.23	77.72	6.8	6.9	20	160	6.0	6.0	6.0	6.0	13.0	11.0
94	12	06/09/94	RC HP AF	DF RC HP	17.5	21.0	4.7	10.3	0.6	4.0	49.51	118.49	7.1	6.9	90	220	6.0	6.0	6.0	6.0	17.0	27.0
94	12	06/23/94	SD RM	SD PC DC	19.5	23.5	3.3	4.8	1.1	3.1	36.30	57.63	7.3	7.1	0	590	6.0	6.0	6.0	6.0	25.0	28.0
94	12	07/11/94	CS KF RM SD	CS PC SD	22.0	27.0	4.1	7.3	0.3	8.3	47.16	95.95	7.1	7.8	10	100	5.0	5.0	5.0	5.0	24.0	30.5
94	12	07/25/94	CS JN	JN CS	24.0	28.0	3.6	6.6	1.9	11.4	43.36	89.72	6.9	7.4	1690	1	*	*	*	*	28.0	33.0
94	12	08/09/94	PC KF SD	KF MD SD	22.5	25.5	6.9	9.3	7.0	12.0	82.98	121.37	7.1	7.8	*	*	*	*	*	*	22.0	29.0
94	12	08/22/94	KF DC CS	RM AR	22.0	20.5	7.7	8.0	1.4	2.3	89.08	90.32	7.4	7.4	*	*	*	10.0	*	10.0	19.0	17.0
94	12	09/07/94	AR JJ	AF PC DF DC	21.0	20.0	5.3	8.0	1.4	2.4	59.57	89.49	7.2	7.6	0	0	*	*	*	*	18.0	25.0
94	12	09/21/94	JN PC DC CS	RM HP SD	20.5	21.0	4.9	8.9	1.1	2.4	54.97	101.52	6.9	7.0	*	*	*	*	*	*	18.0	24.0
94	12	10/06/94	MG SS KR SD	KF DC SS	17.0	14.0	16.5	9.1	0.6	2.4	172.03	89.89	7.1	7.1	*	*	*	*	*	*	13.0	14.0
94	12	10/20/94	SS RL BB	RL SS SD	16.0	13.0	7.0	10.0	0.0	0.0	71.24	95.35	7.1	7.1	*	*	*	*	*	*	15.0	15.0
94	12	11/07/94	SS AF		16.0	*	*	*	0.0	*	*	*	7.3	*	*	*	0.5	*	0.5	*	10.0	*
95	12	04/18/95	AF AP	AP	11.5	11.0	4.4	10.9	9.5	0.0	42.32	99.33	7.2	7.4	*	6	*	*	3.0	45.0	19.0	18.0
95	12	05/01/95	AF KF	AF JF	13.0	13.0	4.6	9.7	0.5	0.0	43.98	92.49	7.3	7.3	NV	33	*	*	*	*	65.0	9.5
95	12	05/15/95	AF AR	PC AF SS	14.5	13.0	4.1	9.7	0.0	0.8	40.40	92.88	6.9	7.0	0	0	*	*	*	*	10.0	*
95	12	05/30/95	AF KF	AF OP	18.0	17.0	4.4	8.0	0.3	1.0	46.76	83.59	*	*	*	190	BSV	45.0	3.0	60.0	22.0	25.0
95	12	06/13/95	AF AC	AC AF	19.0	19.5	8.0	8.7	0.6	1.2	86.89	95.74	6.9	7.1	0	570	*	*	*	*	90.0	19.5
95	12	06/27/95	AF AC	AF AC JO	21.0	24.0	4.0	7.9	0.0	3.8	45.06	96.09	7.1	7.6	470	TNTC	*	BSV	*	*	50.0	21.0
95	12	07/12/95	AF	AF AC JAM	22.0	25.0	5.2	6.7	0.8	8.9	59.97	85.24	7.3	6.9	1	650	BSV	70.0	5.0	95.0	18.5	26.0
95	12	07/27/95	OP AF	AF	23.5	29.0	1.9	3.7	1.2	7.4	22.59	50.12	6.9	6.4	50	TNTC	*	*	*	*	50.0	26.0
95	12	08/10/95	AF OP	AF OP	23.0	26.5	3.4	7.8	1.6	3.2	40.13	98.97	6.9	6.9	10	NV	*	*	<5.0	90.0	21.0	31.0
95	12	08/28/95	JMM JAM	JMM AF	21.5	22.0	3.8	6.0	0.8	16.8	43.40	75.44	7.2	7.3	0	80	BSV	62.5	*	90.0	21.5	24.0
95	12	09/11/95	AF JM	JF	19.5	20.0	4.4	11.7	0.6	22.2	48.27	146.18	7.1	7.4	10	10	BSV	BSV	<5.0	50.0	16.0	24.0
95	12	09/26/95	AF JM	AM AF	18.5	15.5	4.6	6.4	0.5	23.5	49.43	73.78	7.4	7.3	0	70	BSV	BSV	10.0	50.0	15.0	14.0
95	12	10/10/95		AF AC	*	16.5	*	9.3	*	1.5	*	96.41	*	7.3	NA	40	*	92.5	*	100.0	*	22.0
95	12	10/26/95	AF GC DB	AF AC	16.0	13.0	5.5	9.6	0.0	0.4	55.97	91.74	6.9	6.9	0	30	*	50.0	*	65.0	12.0	13.5
95	12	11/09/95	AF RP	AC	14.0	6.0	6.4	11.6	0.0	0.0	62.39	93.69	7.1	7.2	0	160	BSV	55.0	10.0	70.0	4.0	-2.0
96	12	04/18/96	JD AR AF	JD AF OPF	7.0	9.0	11.9	12.5	0.5	0.0	98.8	108.7	7.3	6.9	50	50	60.0	82.5	65.0	90.0	18.0	22.0
96	12	05/06/96	JF EC KM ED	DP EC KF	13	12	7.2	10	0.6	0	68.88	93.24	7	6.9	40	40	BSV	BSV	5.0	5.0	12	12

96	12	05/20/96	DB AM	JM AC	16	18	5.2	9.3	0	0	52.92	88.67	6.6	7.3	10	110	BSV	BSV	5.0	90.0	26	29	
96	12	06/03/96	DB RB EB	KF DB	18	18	4.5	8.9	0	0.5	47.74	94.68	6.9	7.1	3	180	BSV	BSV	10.0	95.0	27	18	
96	12	06/17/96	AC DB	SH AM	20	26	2.8	7.6	0.6	1.8	31.03	84.9	6.8	7.5	20	170	BSV	BSV	5.0	75.0	29	31	
96	12	07/01/96	DB	AM KF	19.5	26	4	7.3	*	3.8	43.74	82.09	6.5	7.3	4	210	BSV	87.5	5.0	105.0	22	28	
96	12	07/15/96	KF AF	AF KF	20	22.5	5.4	8.4	*	0.2	59.65	97.47	7.1	7.2	10	440	BSV	BSV	30.0	85.0	23	26.5	
96	12	07/30/96	AF BP	AF BP	21	23	4.3	8.3	0	1.6	48.44	97.96	7.1	7.3	0	260	BSV	82.5	<5	105.0	25	24	
96	12	08/14/96	AF AA ZA	AF AA ZA	22	25	2.5	7.3	0.1	6.8	28.15	91.86	7.3	7.3	50	108	BSV	47.5	10.0	85.0	22	34	
96	12	08/29/96	AF	AA ZA	21.5	24	3.1	6.6	0	14.1	35.26	84.81	6.6	7	0	128	BSV	55.0	5.0	100.0	24	29	
96	12	09/18/96	NO DOCK	NO DOCK	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
96	12	09/30/96	PA ED KM NK	PA AA	28	16	1.3	4.3	3.2	4.5	16.94	44.85	*	*	0	0	BSV	72.5	30.0	100.0	20	15	
96	12	10/15/96	NK KM ED KF	PA	16	12	2.8	7	0.5	5.9	28.57	67.47	7.1	7	0	20	BSV	80.0	<30	110.0	8	15	
96	12	10/29/96	ED KM KF PA	PA KM KF	14	10	5.5	9.6	0.8	0.6	53.85	85.76	7	7.3	2	2	BSV	80.0	30.0	150.0	7	9	
96	12	11/06/96	KM PA KF PA	KM PA KF ED	14	8	5.4	10.8	0.8	0	52.87	91.66	7	7.4	0	0	BSV	65.0	40.0	70.0	11	8	
97	12	04/23/97	ED KM KF	KM, KF, HH, P	11.0	11.0	10.0	10.9	0.3	0.3	91.3	89.5	7.3	7.2	24	6	20.0	110.0	20.0	150.0	15.0	14.0	
97	12	05/06/97	PA, HH	PA, HH	12.5	12.0	7.4	10.0	0.0	0.6	69.8	93.5	6.9	7.1	4	70	5.0	100.0	5.0	150.0	14.0	14.0	
97	12	05/22/97	HH, KM, KF, PA	KF, KM, PA	13.0	15.0	6.9	10.2	0.4	0.0	65.9	101.6	7.2	7.7	2	64	10.0	120.0	10.0	170.0	13.0	17.0	
97	12	06/05/97	ED, NK, KM, HH	AF, OP	16.0	18.5	6.5	9.0	1.9	1.8	66.8	97.4	7.1	6.9	14	140	20.0	85.0	20.0	85.0	16.0	16.0	
97	12	06/23/97	AF, OP, AA	OP, AF	22.0	25.0	5.9	7.4	1.4	6.9	68.3	93.2	7.0	7.0	10	310	5.0	67.5	5.0	90.0	30.0	28.0	
97	12	07/07/97	OP, RP	OP, AF	21.0	25.0	6.8	8.1	0.0	6.8	99.1	101.9	7.2	7.1	*	*	5.0	53.5	5.0	65.0	23.0	*	
97	12	07/21/97	OP, RP	OP, AF	21.0	21.0	6.8	9.1	1.8	3.1	77.3	104.2	7.5	7.3	24	58	5.0	90.0	5.0	100.0	20.0	19.0	
97	12	08/04/97	OP, RP	AM	22.0	22.5	5.8	8.8	0.1	7.7	66.6	106.2	6.8	8.0	8	126	5.0	95.0	5.0	100.0	20.0	32.0	
97	12	08/19/97	AF, OP	AF, OP	21.5	23.0	6.0	8.6	0.0	12.9	68.2	107.8	7.1	7.1	6	20	2.5	45.0	5.0	70.0	*	23.0	
97	12	09/03/97	AR, SJ	MA, AR	21.0	21.5	5.8	7.9	0.0	13.9	65.3	96.8	6.9	7.3	10	1	5.0	92.5	5.0	105.0	16.0	20.5	
97	12	09/18/97	BS, AB	AB	20.0	22.0	6.2	8.3	0.0	7.8	68.5	99.3	7.1	7.3	*	*	5.0	60.0	20.0	75.0	23.0	28.0	
97	12	10/02/97	AM, AR	JW, MA	16.0	17.0	6.1	7.9	0.0	13.8	62.1	88.6	6.9	7.4	0	10	5.0	82.0	5.0	82.0	14.0	14.0	
97	12	10/17/97	KG, JW	AF, OP	16.0	24.0	2.6	9.5	0.6	11.4	26.0	120.3	6.5	7.1	2	29	5.0	115.0	5.0	115.0	8.0	16.0	
97	12	11/03/97	AA, CC	AF, OP	15.0	11.0	6.5	5.1	0.0	0.0	64.8	46.5	6.8	7.0	15	TNTC	30.0	35.0	30.0	85.0	15.0	19.0	

Site 13 - Marina Falls Landing

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECA	FECA	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/	CFU/100ML	cm	cm				oC
92	13	04/17/92	BD AF KB	KB	7.0	7.0	12.2	12.4	1.6	1.6	101.55	103.83	7.3	7.3			bsv	bsv			1.5	2.5
92	13	05/01/92	RC RD	RC RD	11.0	14.0	10.8	10.6	1.5	1.7	98.79	103.81	7.1	7.5			bsv	220			15.0	21.0
92	13	05/15/92	CB		8.0	18.0	9.8	9.9	1.7	0.5	79.93	101.03	7.5	7.4			bsv	165			13.0	16.0
92	13	06/01/92	CY SC	CY SC	18.5	18.0	8.8	9.2	5.3	2.6	93.14	94.96	6.9	7.1			bsv	120			10.5	11.0
92	13	06/15/92	RC AF KC	RC	21.0	21.8	7.5	8.3	3.9	2.1	88.23	94.88	7.1	7.3			90	120			22.5	27.0
92	13	06/30/92	JF CS	JF RC RM	22.0	24.0	7.5	7.1	5.2	2.0	88.51	85.80	6.9	7.3	70	70	100	135			26.0	
92	13	07/13/92	JF RM RC SC	RM JF CB RC	23.0	25.0	7.4	7.4	4.7	2.0	88.16	90.83	7.3	7.3	590	480	100	70			24.0	31.0
92	13	07/28/92	SC CS JF	RM RC JF SC	21.0	23.0	7.2	8.2	5.1	4.5	83.31	98.25	7.0	7.1	670	290	120	90			22.0	27.0
92	13	08/13/92	RC KC CB RM JF	KC JF RC RM	21.0	22.0	12.2	5.4	2.6	2.6	139.31	62.86	7.8	7.5	0	100	130	140			19.5	21.0
92	13	08/27/92	RC SC KC CB JF	RC SC KC JF	22.0	24.0	10.1	8.4	6.6	3.5	120.08	102.01	6.7	7.2	80	40	bsv	170			22.0	29.0
92	13	09/11/92	RC JF SC RM	CB	18.5	19.5	9.0	8.3	4.1	5.9	98.59	93.66	7.0	7.0	720	390	bsv	215			20.0	24.0
92	13	09/25/92	RM RC SC CB	SC RM RC CS	14.0	18.0	8.5	9.1	7.5	1.6	86.39	97.37	5.7	6.6	130	160	30	170			5.0	16.0
92	13	10/12/92	RM CS	KW RC	12	15	8.5	11.5	5.8	1.7	81.88	115.83	7.1	7.3	280	230	bsv	160			19	21
92	13	10/28/92	RC CS SC	CS	8.0	9.0	12.6	10.9	4.3	0.0	109.62	94.77	6.9	7.1	70	60	125	140			8.0	11.0
92	13	11/09/92	AR RM	AR RM	3.0	4.0	13.8	12.5	0.1	4.7	103.16	98.81	7.3	7.3	30	60	145	95			-2.0	9.0
93	13	04/21/93	RC KW KB CB	CB SC	13.0	12.0	11.1	10.8	1.0	2.8	108.43	101.81			70	90					0.8	25.0
93	13	05/06/93	KB CB	KB KW AS	18.0		8.9	8.2	2.4	3.4	95.64		7.8	7.0	180	47					21.0	26.0
93	13	05/20/93	SC RC CB	RC AS	18.5	16.0	8.9	9.2	1.9	1.8	92.47	79.31			350	160					11.0	15.0
93	13	06/03/93	CB SC RC AS	CB RC	18.5	17.5	8.8	9.1	0.8	2.2	89.95	98.68	7.0	7.1	280	230	105.0	120.0	115.0	310.0	21.0	28.0
93	13	06/23/93	CS AS	JF KD AS	25.0	23.5	8.5	7.4	8.2	4.7	107.75	89.59	7.3	6.9	1700	430	40.0	80.0	60.0	330.0	30.0	26.0
93	13	07/06/93	CS RC	RC CS	25.5	28.0	7.4	8.4	5.7	3.2	94.68	92.44	7.3	7.4	800	1100	100.0	80.0	170.0	310.0	30.0	35.0
93	13	07/22/93	CS	KB CS	22.5	22.0	8.9	7.5	9.9	4.5	108.72	88.18	7.1	7.5	1500	1600	120.0	120.0	170.0	320.0	28.0	27.0
93	13	08/03/93	RC RM	RC CS	25.0	24.5	8.9	8.1	5.1	5.4	111.00	103.03	7.6	7.1	500	220	130.0	90.0	160.0	315.0	27.0	32.0
93	13	08/19/93	KB AS	JF RC	22.0	24.0	6.6	7.3	8.4	7.4	79.23	89.88	7.3	7.4	900	320	95.0	120.0	95.0	370.0	27.0	27.5
93	13	09/02/93	RM HP CS	CS HP	23.5	25.0	7.4	7.0	14.2	8.8	94.27	89.01	7.5	7.3	510	280	180.0	180.0	180.0	320.0	28.5	39.5
93	13	09/20/93	KB JN	MS JN RM	18.0	16.0	8.1	8.1	9.9	13.8	90.69	89.03	7.3	7.0	430	400	120.0	60.0	120.0	355.0	17.0	15.0
93	13	10/04/93	AR BC	JJ AR	15.0	14.0	9.6	9.8	1.3	2.7	96.32	98.98	7.3	7.2		130	190.0	195.0	190.0	320.0	22.0	21.0
93	13	10/18/93	KE JN AR CB	KB CS	11.5	13.0	9.9	10.8	3.9	1.1	93.27	105.92	7.3	7.3			110.0	130.0	180.0	370.0	20.0	19.0
93	13	11/09/93	JF HP KF	SC RC MF	6.0	6.0	12.5	12.0	3.2	1.9	102.86	97.99	6.8	7.0			bsv	130.0	bsv	130.0	16.0	10.0
94	13	04/26/94	RM PC SD	SD KB JN DC	11.0	11.0	11.4	10.8	0.7	0.0	104.29	98.42	7.4	6.9			112.0	287.5	112.0	350.0	10.5	10.0
94	13	05/10/94	SS AF	SS MT SC	12.5	14.5	10.5	9.7	1.2	0.0	99.66	95.59	7.0	7.1	150	100	130.0	155.0	130.0	320.0	15.0	20.0
94	13	05/25/94	DF AF SD	PC AF HP SD	17.5	17.5	9.6	9.0	1.6	0.0	101.67	94.50	7.3	6.9	160	70	105.0	75.0	105.0	355.0	13.0	16.0
94	13	06/09/94	CS DF SD	DC KF SD AF	20.0	21.0	8.0	7.5	5.1	1.6	90.22	85.19	7.8	7.4	290	160	100.0	140.0	100.0	295.0	26.0	29.0
94	13	06/23/94	JF RM SD	SD PC KF SS	22.5	25.5	7.2	8.0	4.2	2.4	85.32	99.29	7.4	7.1	400	320	90.0	100.0	90.0	340.0	25.0	28.0
94	13	07/11/94	DC AF JN	KF DC AF	25.0	28.5	7.0	7.3	8.9	8.0	89.06	94.95	7.9	7.1	360	250	100.0	112.5	100.0	330.0	25.0	26.5
94	13	07/25/94	CS JN	CS RM PC	28.0	28.0	6.1	7.0	1.4	3.2	76.02	91.22	7.5		18	0	105.0	90.0	105.0	345.0	27.0	34.0
94	13	08/09/94	PC SD	KF MD SD	23.0	25.0	7.5	7.8	7.1	0.8	91.10	95.16	7.4	7.4			82.0	90.0	100.0	300.0	26.0	30.0
94	13	08/22/94	KF DC CS	AF CS	21.0	21.0	7.5	8.0	5.3	2.1	88.87	91.11	7.6	7.3			120.0	160.0	120.0	335.0	19.0	20.0
94	13	09/07/94	AR JJ	CS DF	18.0	19.0	8.6	8.0	6.1	2.1	94.29	87.58	7.6	7.3	0	0	130.0	160.0	130.0	350.0	16.0	24.0
94	13	09/21/94	KF HP SS	DF HP SD	19.5	19.5	7.8	10.0	10.1	1.9	90.06	110.45	7.5	7.6			115.0	192.5	120.0	320.0	21.0	27.0
94	13	10/06/94	BL JN RL BC AF	BL RL RG AF J	12.0	13.0	11.1	9.4	2.4	1.9	104.89	90.58	6.7	7.1				152.5		340.0	9.0	18.0
94	13	10/20/94	AF RG	RL SS AF	10.5	12.0	10.7	10.8	5.8	0.0	99.60	100.70	6.9	6.9			147.5	120.0	155.0	350.0	17.0	14.0
94	13	11/07/94	RL HH SD		11.0		9.8		4.8		91.76		7.0								10.0	
95	13	04/18/95	BS DB MA	BS MA	11.0	9.0	11.1	11.5	1.4	0.5	101.95	100.27	7.7	7.5	0	19	BSV	202.5	120.0	335.0	15.0	12.0
95	13	05/01/95	DB BS	DB BS	12.0	11.0	10.4	10.4	3.3	0.6	98.77	95.09	7.4	7.8	30	0	BSV	145.0	115.0	310.0	12.5	19.0
95	13	05/15/95	BS JM	BS DB	12.0	13.0	9.6	10.2	1.3	0.4	90.16	97.48	7.7	8.1	0	0	97.5	142.5	100.0	340.0	11.0	10.0
95	13	05/30/95	BS AA MM	BS MM	18.0	19.0	8.7	8.3	1.3	1.2	92.94	90.44	7.6	7.2	125	110	BSV	120.0	115.0	300.0	21.0	24.5
95	13	06/13/95	BS MM	BS JM	20.0	19.0	7.3	7.8	6.8	3.2	83.60	85.90	7.5	7.6	0	230	BSV	117.5	95.0	335.0	21.5	18.0
95	13	06/27/95	BS MM	BS MM	22.0	25.0	7.5	7.6	7.2	3.6	89.46	94.06	7.1	6.9	950	630	112.5	105.0	120.0	295.0	19.5	23.0
95	13	07/12/95	BS JM	BS DB	21.5	25.5	5.8	6.6	7.6	6.2	88.67	83.54	7.5	7.4	230	640	BSV	87.5	85.0	330.0	21.0	26.5
95	13	07/27/95	BS DB	BS DB	28.5	29.0	6.4	7.1	4.0	2.2	81.54	93.68	7.2	7.7	220	130	BSV	115.0	125.0	300.0	28.0	35.0
95	13	08/10/95	BS MM	BS	22.0	25.0	7.2	7.5	2.5	1.7	83.77	91.92	7.8	7.6	NV	NV	BSV	132.5	95.0	330.0	22.0	31.0
95	13	08/28/95	BS	BS AR	21.5	22.5	7.6	7.6	4.2	9.4	88.36	92.59	7.4	7.4	440	400	BSV	100.0	105.0	325.0	22.0	22.0
95	13	09/11/95	JJ JJ	JF	17.0	20.0	8.1	11.7	11.6	7.6	89.73	134.58	6.9	7.0	360	120		80.0	50.0	295.0	15.0	23.0
95	13	09/28/95	JJ JJ MM MY	MM JJ SB	16.0	15.5	5.3	9.3	29.2	28.0	63.96	110.27	7.8	8.2	500	TNTC	67.5	77.5	110.0	255.0	15.0	12.0
95	13	10/10/95	MM JM	MM SB	14.0	15.0	8.8	9.2	4.4	2.4	87.89	92.88	7.4	7.1	110	50	BSV	137.5	115.0	340.0	15.0	18.0
95	13	10/26/95	DB GC		12.0		10.6		5.9		102.16		7.4		30		115.0		145.0		10.0	
95	13	11/09/95	MM DB	MM DB	6.5	5.0	12.3	12.9	2.2	0.0	101.87	101.57	7.5	7.1	180	80	BSV	107.5	110.0	310.0	2.5	1.0
96	13	04/18/96	MY SL ML	ML SB MY	8.0	7.0	12.4	12.0	0.0	1.7	100.15	100.35	7.3	7.5	50	30	57.5	85.0	220.0	325.0	8.0	14.0
96	13	05/09/96	ML MM MY	SB MY MM	12.0	12.5	10.8	10.5	0.6	0.0	101.03	99.00	7.1	7.0	40	40	BSV	182.5	170.0	330.0	6.0	8.5

96	13	05/20/96	MM ML	SB MM	16	17.5	9.3	8.9	3.2	0.8	96.3	93.85	7.4	7.4	110	60	BSV	145.0	185.0	340.0	26	34
96	13	06/03/96	GA MY	GA MY SB	18.5	18	8.7	9.1	2.8	0	84.84	96.55	7	7	240	100	BSV	175.0	100.0	235.0	26	17
96	13	06/17/96	MM	SB MM	24	24	7.2	7.8	4.2	1.4	87.76	93.7	7.3	7.2	190	140	BSV	140.0	120.0	315.0	27	23
96	13	07/01/96	MY	MY SB	21	24.5	7.5	7.8	7.3	0.8	91.32	84.28	7.2	7.5	470	370	BSV	105.0	100.0	335.0	21	34
96	13	07/15/96	MM GA	EB SB MM GA	21	22	8.3	7.7	0	0.2	93.5	88.53	7.4	7.1	320	560	70.0	87.5	165.0	335.0	23	27
96	13	07/30/96	MM MY	MM MY	21.5	22.5	7.7	8.1	5.3	1.8	90.05	94.69	7.1	7.2	120	98	BSV	140.0	95.0	340.0	21	31
96	13	08/14/96	MM MY	SB MY	23	25.5	7.5	8.5	6.8	3	90.96	105.82	7.4	7.1	410	290	110.0	100.0	125.0	320.0	24	34
96	13	08/29/96	JJ JJ	JJ JJ	24	27	6.1	7.5	15.8	9.2	79.03	99.04	6.9	7	TNTC	430	87.5	95.0	95.0	350.0	22	30
96	13	09/18/96	MY ML SL KR	SL ML KR	18.5	20	7.5	11.8	8.4	10.5	84.11	137.9	6.5	7.7	280	400	127.0	112.5	140.0	*	17.5	19
96	13	09/30/96	MY	MM	16	15.5	9.7	11	8.5	4.5	103.44	113.51	7.1	7.4	290	104	112.0	107.0	120.0	330.0	20	18
96	13	10/15/96	MM ML MY	MM MY ML SL	9.5	10	11	10.5	3.8	1.2	98.89	94.11	6.7	6.9	30	50	80.0	107.5	105.0	330.0	10	11
96	13	10/29/96	SL	SL	10	8	11	10.7	0.6	0.6	98.26	91.12	7.2	6.5	0	10	82.2	TOO D	100.0	TOO DAR	11	9
96	13	11/06/96	MY SL CB	MY SL CB	6	7	13	12.5	0.1	0.1	105.05	103.57	8.2	7.1	100	0	BSV	175.0	115.0	270.0	THERM M	6
97	13	04/23/97	SL, AA, JM	SL, AA	10.0	12.0	11.4	11.9	0.0	0.6	101.49	111.32	6.9	7.0	4	18	200.0	175.0	200.0	360.0	15.0	19.0
97	13	05/08/97	ML, MY	ML, MY	12.0	12.0	10.4	10.8	0.0	0.3	98.97	100.87	6.9	7.2	20	90	135.0	200.0	135.0	250.0	13.5	12.0
97	13	05/22/97	MM, MY	MM, MY	14.0	15.0	10.1	10.0	0.0	1.0	98.46	100.17	7.6	7.5	*	*	120.0	137.5	120.0	320.0	14.0	19.0
97	13	06/05/97	GA, MY	MY, GA	17.0	18.0	8.5	8.6	3.5	0.7	89.99	91.58	7.1	7.3	190	92	117.5	120.0	125.0	340.0	16.5	20.0
97	13	06/23/97	MM	MM	23.5	25.0	7.3	7.8	4.9	2.8	88.47	93.87	7.6	7.8	268	210	90.0	75.0	90.0	230.0	27.0	29.0
97	13	07/07/97	MM, MY	MM, MY	25.0	24.5	7.5	8.0	3.8	2.6	92.81	97.59	7.1	7.3	*	*	85.0	85.0	120.0	320.0	28.0	26.0
97	13	07/21/97	MM, MY	MM, MY	22.0	21.5	7.8	7.8	4.0	2.5	91.47	89.88	7.4	7.1	780	196	130.0	130.0	90.0	330.0	22.0	20.0
97	13	08/04/97	MM, MY	MM, MY	23.0	23.5	9.2	14.0	16.2	16.3	117.43	180.43	7.8	8.5	64	46	92.5	77.5	130.0	320.0	22.0	23.0
97	13	08/19/97	GA, MY	GA, MY	21.0	23.5	7.8	8.8	6.4	12.8	90.88	123.75	7.3	7.4	220	310	52.5	75.0	90.0	340.0	24.0	25.0
97	13	09/03/97	GA, MM, MY	GA, MM	19.0	21.0	8.1	8.7	3.2	15.6	89.20	118.89	7.3	8.0	220	10	120.0	107.5	120.0	330.0	17.5	20.0
97	13	09/18/97	MM, SL	SL	19.0	24.0	8.0	9.0	6.0	6.0	89.44	110.73	7.4	7.8	62	12	100.0	1.0	100.0	360.0	23.0	28.0
97	13	10/02/97	SL, MY	MY, SL	11.5	15.0	8.3	9.3	5.8	10.2	79.02	98.06	7.0	7.3	50	20	130.0	115.0	130.0	315.0	8.9	16.0
97	13	10/17/97	SL, ML	SL, ML	14.0	14.0	8.6	9.6	11.0	5.7	89.18	96.55	7.1	7.4	*	*	110.0	140.0	110.0	375.0	10.0	15.0
97	13	11/03/97	SL, MY	SL, MY	10.0	10.0	10.9	11.3	0.0	0.0	97.04	100.60	7.1	7.2	TNTC	TNTC	15.0	85.0	330.0	330.0	12.0	15.5

Site 14 - Fowler's

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL	FECAL-	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/10	CFU/100	cm	cm	cm	cm	Oc	Oc
92	14	04/17/92	AF RC	CB CB LI	6.5	5.8	11.8	11.8	2.2	3.0	97.73	95.75	7.0	7.0	*	*	240	240	*	*	3.0	2.5
92	14	05/01/92	KM SC KB	SC KM	11.5	14.0	10.5	9.9	3.3	2.8	98.58	98.00	7.5	7.3	*	*	190	250	*	*	18.0	20.0
92	14	05/15/92	KB AF	KB AF	17.0	19.0	8.7	9.2	2.8	1.8	91.79	100.56	7.3	7.3	*	*	240	235	*	*	14.0	17.0
92	14	06/01/92	KM	KM	16.0	16.0	8.6	8.7	2.8	2.8	88.88	89.89	7.3	7.2	*	*	180	150	*	*	11.0	10.0
92	14	06/15/92	KB AF JF	KB AF JF	21.0	24.0	6.5	7.1	0.3	3.2	73.34	86.09	6.7	6.9	*	*	105	150	*	*	23.0	20.0
92	14	06/30/92	JF RC RM	JF CS	22.0	25.0	8.0	7.8	3.5	3.7	93.57	95.96	7.3	6.9	18	133	100	125	*	*	21.0	30.0
92	14	07/13/92	JF RM RC SC	RM JF CD RC SC	24.0	26.0	6.9	7.9	3.2	5.7	83.66	100.64	7.4	7.5	24	78	170	130	*	*	25.0	28.0
92	14	07/28/92	SC CS JF	RM JF RC SC CB	22.0	24.5	*	7.6	3.3	3.2	*	93.00	7.3	7.3	0	30	110	120	*	*	19.0	*
92	14	08/13/92	RC KC CB RM JF	KM JF RC RM	21.0	23.0	6.9	8.7	4.3	4.1	79.50	104.02	7.3	7.7	0	0	205	180	*	*	21.0	24.0
92	14	08/27/92	RC CB KC SC RM JF	RC SC KC JF	24.0	25.0	*	7.5	3.2	3.8	*	92.30	7.5	7.4	30	30	210	190	*	*	22.0	27.0
92	14	09/11/92	RC JF SC RM CS	*	20.0	22.0	8.3	8.3	3.2	2.6	93.24	96.62	7.3	7.4	10	10	210	300	*	*	20.0	24.0
92	14	09/25/92	RM RC SC CS	RM RC	16.0	19.0	5.9	9.8	2.5	2.6	60.86	107.58	6.2	7.0	50	10	210	210	*	*	10.0	16.0
92	14	10/12/92	*	*	14.0	15.0	8.5	*	3.5	3.0	84.47	*	7.3	7.2	100	130	125	150	*	*	19.0	20.0
92	14	10/26/92	RC	RM RC LP	8.0	9.0	11.5	11.0	5.0	0.7	100.46	96.02	7.1	7.4	30	840	150	140	*	*	6.0	16.0
92	14	11/09/92	RM AR EW	RM AR	4.0	4.5	9.6	10.7	2.8	1.4	74.87	83.83	7.5	7.3	60	60	135	150	*	*	-2.5	4.5
93	14	04/23/93	AS RC	CB CB	14.0	13.0	10.6	10.1	1.0	0.3	103.90	96.47	7.5	7.1	60	80	210.0	200.0	370.0	280.0	20.0	31.0
93	14	05/08/93	RC CB	SC RC CB	18.0	18.0	9.5	8.8	3.4	2.3	102.64	108.48	7.0	6.9	11	420	165.0	190.0	380.0	370.0	25.0	22.0
93	14	05/20/93	RC	RC KW AS	15.5	17.0	8.5	8.0	3.1	1.9	87.04	83.99	7.5	7.6	50	340	205.0	120.0	325.0	310.0	15.0	18.0
93	14	06/03/93	SC RC CB AS	RC SC	15.5	18.5	8.8	8.6	2.1	2.1	89.62	93.20	7.5	7.2	10	20	185.0	155.0	300.0	300.0	17.0	21.0
93	14	06/23/93	JF HP	HP AS	21.5	22.5	7.1	8.5	3.2	2.2	82.11	99.88	7.5	7.2	10	90	140.0	17.0	350.0	290.0	30.0	25.0
93	14	07/06/93	CS RC	RC CS	25.0	25.0	7.2	8.9	2.7	1.8	88.70	109.13	7.3	7.3	10	30	180.0	170.0	330.0	240.0	30.0	36.0
93	14	07/22/93	CS	RC	25.0	23.5	7.8	7.5	1.0	2.1	95.26	89.58	7.2	7.3	0	10	150.0	150.0	360.0	300.0	23.0	27.0
93	14	08/03/93	AS	CS AS	24.5	27.0	7.0	8.1	2.7	3.2	85.44	103.71	7.4	7.2	40	10	190.0	170.0	280.0	290.0	34.0	32.0
93	14	08/19/93	HP KB	JF HP	21.0	24.5	6.1	6.9	1.3	2.3	69.18	84.04	6.9	6.9	*	18	330.0	230.0	405.0	350.0	20.0	27.5
93	14	09/02/93	SC HP	CS JF	22.5	25.5	7.4	7.5	0.6	1.3	86.06	92.57	7.2	7.7	100	200	210.0	225.0	290.0	285.0	25.5	31.0
93	14	09/20/93	KB JN RC	KB JN HP RM	19.0	15.0	7.2	8.2	0.9	0.3	78.33	81.83	7.3	7.1	30	30	220.0	180.0	310.0	250.0	16.0	16.5
93	14	10/04/93	AR BC	BC MA MA	13.5	14.5	8.8	9.4	0.3	0.0	84.98	92.63	7.1	7.1	*	0	220.0	230.0	320.0	335.0	21.0	20.0
93	14	10/18/93	AR KR RM JN	KB CS	11.0	15.0	10.7	10.1	1.3	1.3	98.22	101.34	7.2	6.9	*	*	120.0	90.0	320.0	350.0	18.5	21.0
93	14	11/09/93	KF SC HP	CB RC	6.5	9.5	12.0	12.8	0.5	0.5	98.41	112.93	7.0	7.1	*	*	190.0	210.0	350.0	300.0	13.0	9.0
94	14	04/26/94	JN PC SD	SD DC KB	10.0	10.5	9.4	3.3	0.8	0.7	84.06	29.84	7.5	6.9	*	*	290.0	265.0	360.0	505.0	8.0	10.0
94	14	05/10/94	AF SS SD	HP AF	13.0	16.0	8.9	9.3	0.0	0.0	84.87	94.65	7.1	6.9	160	40	*	150.0	*	175.0	16.0	19.5
94	14	05/25/94	AF DF HP SD	PC HP DF HP	18.0	18.0	8.2	8.2	0.0	0.6	87.00	87.28	7.3	6.9	20	30	240.0	170.0	355.0	340.0	13.0	16.0
94	14	06/09/94	RC HP JN CS	DC KF SD	19.0	23.0	9.6	8.0	1.1	0.6	104.55	93.93	7.8	7.6	40	0	212.5	195.0	315.0	310.0	17.0	21.0
94	14	06/23/94	AF JF	AF HP	23.0	26.0	6.5	8.0	0.3	2.9	76.20	100.46	7.7	7.3	10	20	217.5	210.0	330.0	325.0	21.0	21.0
94	14	07/11/94	AF JN	CS DC SD	25.0	29.0	9.0	7.8	0.8	0.7	109.80	102.15	8.2	7.4	10	0	165.0	177.5	330.0	350.0	23.0	29.0
94	14	07/25/94	CS JN	CS RM PC	25.0	28.0	6.3	6.8	6.6	2.3	79.19	88.22	7.5	7.2	32	30	197.5	145.0	330.0	310.0	25.0	*
94	14	08/09/94	RM SD	KF MD SD	23.0	26.0	5.9	6.2	1.6	1.5	69.63	77.30	7.2	7.0	*	*	155.0	85.0	225.0	320.0	24.0	29.0
94	14	08/22/94	DC CS	AR	22.0	22.0	7.4	7.3	0.1	2.1	84.46	84.76	7.4	7.5	*	*	207.5	230.0	335.0	330.0	18.0	18.0
94	14	09/07/94	AR JJ	AF PC DF	17.0	18.0	6.0	6.2	0.8	0.7	62.62	68.02	6.3	7.1	0	0	170.0	166.0	225.0	345.0	18.0	24.0
94	14	09/21/94	KF HP SS	DF HP SD	18.0	22.5	7.3	7.3	0.5	0.0	77.66	84.64	7.2	7.2	*	*	200.0	177.0	380.0	335.0	18.0	27.0
94	14	10/06/94	BL JN KL RG AF	BL RL RG AF JN	13.0	15.5	9.1	9.1	0.0	0.2	86.77	91.73	6.8	7.1	*	*	142.5	175.0	340.0	350.0	8.0	18.0
94	14	10/20/94	SS AF	SS RL AF	14.0	*	8.6	9.3	0.8	1.0	84.20	*	6.8	6.9	*	*	132.5	165.0	370.0	345.0	15.0	15.0
94	14	11/07/94	RL HP SD	*	12.0	*	8.1	*	0.0	*	75.52	*	7.2	*	*	*	145.0	*	330.0	*	9.0	*
95	14	04/18/95	AF AP	AF	10.0	12.0	11.0	10.8	0.6	0.6	98.26	101.03	7.3	7.2	NV	0	235.0	225.0	330.0	375.0	19.0	15.0
95	14	05/01/95	AF SH	AF JJ	10.0	13.0	10.2	10.4	0.0	0.0	90.81	99.17	7.4	6.8	*	4	210.0	152.5	360.0	400.0	8.0	12.0
95	14	05/15/95	AF OP	BG PC	14.0	13.5	9.5	9.7	0.0	0.4	92.61	93.72	7.6	6.8	*	0	192.5	160.0	*	390.0	10.0	10.0
95	14	05/30/95	AF RP	AF RP	18.0	20.5	7.8	8.1	0.3	1.1	82.89	90.87	7.6	7.4	*	9	120.0	152.0	465.0	500.0	21.0	27.0
95	14	06/13/95	AF AC	AF AC	19.0	19.0	6.9	7.4	0.3	0.6	74.83	80.38	7.1	6.9	0	8	130.0	165.0	450.0	450.0	16.5	15.0
95	14	06/27/95	AF AC	AF AC JO	22.5	24.0	7.8	8.9	1.2	2.0	91.00	107.25	7.1	7.3	8	10	135.0	140.0	410.0	390.0	17.5	19.0
95	14	07/12/95	AF	AF AC	22.0	25.0	5.2	6.4	1.1	1.8	60.06	78.48	7.4	7.4	9	6	140.0	147.5	425.0	445.0	15.0	25.0
95	14	07/27/95	AF OP	AF	25.0	30.0	6.6	7.2	1.4	3.2	80.77	97.13	6.9	7.4	13	13	195.0	175.0	430.0	370.0	24.0	32.0
95	14	08/10/95	AF OP	AF OP	21.0	25.5	7.7	8.0	1.6	2.4	87.47	99.29	7.2	*	NV	NV	180.0	182.5	370.0	370.0	29.0	31.0
95	14	08/28/95	AF BP OP	AF JMM	19.0	22.0	7.5	6.6	0.6	0.8	81.46	76.10	*	7.1	0	10	80.0	155.0	350.0	340.0	17.0	23.0
95	14	09/11/95	AF JM	AF	17.0	19.5	5.5	6.3	0.2	0.8	57.22	69.18	7.3	7.1	0	1	147.5	155.0	275.0	245.0	13.0	*
95	14	09/26/95	AF JM	AF AC	15.5	15.5	6.3	7.5	0.0	0.0	63.43	75.52	7.2	7.0	10	40	155.0	140.0	345.0	345.0	13.5	16.0
95	14	10/10/95	*	AF AC	*	16.0	*	7.8	*	0.2	*	79.47	*	7.2	NA	20	*	140.0	*	375.0	*	22.0
95	14	10/26/95	AF	AF AC	12.0	12.5	9.6	9.6	0.0	0.0	89.51	90.51	7.3	7.2	30	30	145.0	155.0	360.0	300.0	5.0	19.0
95	14	11/09/95	AF RP	AF RP	5.0	5.0	11.7	11.6	0.0	0.0	92.12	91.33	7.3	7.1	400	140	107.5	107.5	450.0	450.0	-1.0	1.0
96	14	04/18/96	AF AA ZA	AF AKC	5.5	7.0	11.5	12.0	0.9	0.5	92.2	99.7	6.7	7.1	0	0	90.0	90.0	CURRENT	CURRENT	9.0	16.5
96	14	05/06/96	NK EL KF DP	NK KM JF	12	12	8.8	10.5	0.7	0.7	82.37	*	7.8	6.9	10	18	180.0	197.5	350.0	480.0	5.5	11
96	14	05/20/96	AF AA	AF AA	16	17.5	8.9	8.9	1.6	1.1	91.36	93.95	7.1	7.1	84	40	77.5	170.0				

96	14	07/01/98	AA AF	AA ZA	21	25.5	8.8	9.4	0.8	1	99.54	115.84*	8.8	16	40	142.5	175.5	410.0	370.0	21	30	
96	14	07/15/98	AA ZA RP	AF KF	20	21.5	8.1	7.6	0	1.5	89.47	87.12	7.1	6.8	570	480	85.0	87.5	445.0	410.0	21	21
96	14	07/30/98	AA RP	AA ZA AF	22	24	8.1	8.4	0.8	0.6	93.39	100.5	7.3	7.5	10	10	175.0	137.5	385.0	380.0	21	22
96	14	08/14/98	AF OP	AF AA ZA	22	24	5.8	7	0.1	0.7	68.65	83.79	7	7.1	0	0	147.5	155.0	385.0	370.0	19	30
96	14	08/29/98	AF BP AM	JG	22.5	24.3	7	6.3	0.2	0.7	81.24	77.92	7	7.2	0	0	137.5	165.0	365.0	370.0	19.5	27
96	14	09/16/98	AF RP	AA ZA	18	19	4.9	6.2	0.3	0	52.07	67.13	6.5	7.2	0	10	187.5	170.0	335.0	365.0	15	14
96	14	09/30/98	AF RP KR	KR	15	17	6.7	9.4	0	0.9	66.75	98.14	7.3	7.3	30	340	195.0	175.0	340.0	480.0	16	20
96	14	10/15/98	KR	KR	9	10	10.1	9.9	0.2	0	87.9	88.14	7.7	7.2	0	0	100.0	97.5	400.0	370.0	5	*
96	14	10/29/98	AF RP	AF KR OP	8	9	10	10.3	0.2	0.5	84.97	89.81	7.2	7.3	0	20	95.0	87.0	430.0	435.0	9	11
96	14	11/06/98	AF OP	JR GA ED	6	6	12	11.7	0.1	0	96.97	94.49	6.7	7.6	20	20	165.0	145.0	415.0	335.0	6	10
97	14	04/23/97	OP, MM, AF	MM, OP, AF	10.0	10.5	10.8	10.8	0.2	0.6	96.3	97.6	7.2	7.0	10	8	200.0	207.5	485.0	480.0	17.0	*
97	14	05/06/97	AF, OP	AF, OP	11.5	11.0	10	10.0	0.3	0.0	92.3	91.1	7.1	7.1	4	2	210.0	230.0	450.0	440.0	12.0	10.0
97	14	05/22/97	OP, GA	AF, OP	13.0	14.0	9.7	9.5	0.7	0.3	92.9	92.8	7.2	7.1	54	48	160.0	145.0	475.0	440.0	12.0	16.0
97	14	08/05/97	ED, NK, KM, HH	OP, AF	17.0	20.0	8.4	8.9	1.5	0.0	88.0	98.3	7.4	7.1	14	8	175.0	205.0	*	400.0	18.0	16.5
97	14	08/23/97	AF, OP	AF, OP	23.5	25.5	9	8.3	1.2	2.4	107.0	103.0	7.3	7.4	16	20	165.0	67.5	390.0	385.0	39.0	25.0
97	14	07/07/97	OP, RP	AF, OP	23.5	24.0	6.9	7.4	0.5	2.0	81.7	89.2	7.5	6.8	*	*	167.5	180.0	380.0	370.0	27.0	25.5
97	14	07/21/97	OP, AF	AF, OP	22.0	22.5	6.8	7.3	0.0	1.1	78.1	85.1	7.0	7.2	12	6	185.0	155.0	380.0	375.0	19.0	19.0
97	14	08/04/97	OP, RP	AM	22.5	23.0	7.6	7.8	*	1.6	88.1	92.1	7.1	7.2	8	14	177.5	190.0	385.0	380.0	20.0	28.0
97	14	08/19/97	AF, FP	AF, O	22.0	23.5	7.0	6.7	0.1	0.0	80.4	79.2	7.1	6.7	20	20	207.5	225.0	380.0	350.0	17.5	23.0
97	14	09/03/97	JJ, JJ	JJ, JJ	22.0	23.0	7.9	8.0	1.5	2.2	91.4	94.7	7.3	7.2	0	0	180.0	205.0	325.0	315.0	16.0	22.0
97	14	09/18/97	MA, JF	JF, MA	20.0	20.0	8.1	8.5	0.0	0.3	89.5	94.0	7.5	7.5	2	4	210.0	197.5	245.0	260.0	21.0	26.5
97	14	10/02/97	JJ, WT	WT, GA	14.0	15.0	5.9	6.5	0.4	0.6	57.6	65.0	7.1	6.9	12	8	182.5	173.5	320.0	385.0	8.0	16.5
97	14	10/17/97	SL, ML	SL, ML	13.0	14.0	8.6	9.0	0.0	0.0	82.0	87.7	7.4	7.3	100	4	132.5	127.5	435.0	435.0	10.0	15.0
97	14	11/03/97	AA, CC	AF, OP	11.0	10.5	9.3	10.1	0.0	0.0	84.7	91.0	6.8	7.5	*	*	67.5	65.0	480.0	435.0	14.0	19.5

Site 15 - Patten Yacht Yard

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL-	FECAL-	LP-L	LP-H	DEPTH-	DEPTH-	ATEMP-L	ATEMP-H
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/10	CFU/10	cm	cm	cm	cm	oC	oC
93	15	04/21/93	It,students	TEAM 4	8.5	6.0	11.0	10.4	13.5	27.5	102.31	99.85	7.7	7.9	10	0	115.0	415.0	420.0	617.0	14.5	16.0
93	15	05/06/93	JF AS SM	MV DV BS SS	12.0	10.0	9.1	10.8	7.9	28.8	88.72	114.65	7.4	7.7	30	*	120.0	370.0	350.0	660.0	18.0	24.0
93	15	05/20/93	JH JU	JF SH	12.0	9.0	9.2	9.6	25.8	30.7	100.03	100.97	7.6	7.7	10	*	145.0	320.0	450.0	610.0	11.5	20.0
93	15	06/03/93	MH HF DH	JH MH SS	12.5	9.0	9.1	9.6	26.8	29.8	100.64	100.35	8.0	7.6	10	0	135.0	385.0	375.0	720.0	10.0	20.0
93	15	06/23/93	LB AS	JT	18.5	12.5	8.1	9.3	29.5	31.1	98.90	105.78	7.8	7.6	30	0	160.0	395.0	375.0	720.0	17.0	25.0
93	15	07/06/93	MV JS BS EB	HF JG EB	17.5	16.5	8.9	9.0	33.5	31.8	111.51	109.83	*	7.9	0	10	175.0	445.0	380.0	510.0	27.0	28.0
93	15	07/22/93	CT SM	JT KS MV	18.5	14.5	8.0	9.4	30.1	31.9	99.99	110.89	8.2	7.1	0	20	195.0	265.0	375.0	657.0	19.0	23.0
93	15	08/03/93	MV SS JH	MH BS	18.5	17.0	*	8.1	32.3	30.6	*	100.59	7.8	9.5	*	*	340.0	435.0	390.0	600.0	22.0	32.0
93	15	08/19/93	DH RR HF	JH TE	18.0	17.0	7.9	8.3	29.7	32.3	99.45	104.20	7.9	8.0	0	10	210.0	475.0	390.0	600.0	20.0	21.0
93	15	09/02/93	HF	HF	16.0	15.5	3.3	3.7	32.3	31.1	40.63	44.75	7.8	7.9	0	0	315.0	460.0	420.0	615.0	16.0	23.5
93	15	09/20/93	CT JS JT	JT JS MV	13.5	12.5	8.0	8.4	30.1	32.7	92.30	96.57	7.9	8.0	3	3	320.0	480.0	405.0	635.0	12.0	16.0
93	15	10/04/93	JH TF	JF MM	13.0	13.0	8.5	7.9	31.4	31.9	97.90	91.29	8.0	7.8	20	50	370.0	540.0	430.0	640.0	15.0	20.0
93	15	10/18/93	JS JC	KS AS	11.0	10.0	8.9	8.4	30.9	32.7	97.94	91.56	7.7	7.9	6	4	280.0	415.0	415.0	670.0	14.0	16.0
93	15	11/09/93	JG DH RR	JT BA	8.0	7.5	8.7	8.2	29.4	31.4	88.66	83.75	7.8	7.7	4	1	390.0	610.0	390.0	610.0	13.0	2.0
94	15	04/28/94	JH SH JT	MH JT MR. MAZ	7.0	7.0	10.6	10.5	22.2	30.8	100.57	105.59	7.5	6.9	15	21	195.0	385.0	390.0	545.0	6.0	9.0
94	15	05/10/94	MV BH LR JT	DH RR JT	11.5	9.0	9.3	9.9	20.3	24.7	96.59	100.02	7.8	7.7	18	5	117.0	370.0	410.0	600.0	14.0	15.0
94	15	05/25/94	KS MM AL JT	MV KS PT	12.5	10.5	10.2	11.5	24.3	26.4	111.01	121.48	7.5	7.7	5	8	173.0	435.0	390.0	665.0	11.0	17.0
94	15	06/09/94	JS MH JG	MV SS SH	14.0	12.5	7.9	9.7	26.6	30.4	90.05	109.82	7.5	7.5	4	1	230.0	402.5	400.0	730.0	18.0	25.0
94	15	06/23/94	BA JT	DH MH RR JT	16.0	13.5	7.7	9.1	29.2	30.8	92.32	105.48	7.7	7.8	7	1	205.0	510.0	380.0	620.0	15.0	23.0
94	15	07/11/94	JH SH TS	KS JH	17.5	17.0	*	3.3	29.6	32.5	*	40.85	7.8	7.8	*	4	222.5	525.0	410.0	625.0	22.0	27.0
94	15	07/25/94	JG EB	JH KS EB	19.0	15.0	6.8	9.8	23.5	30.7	84.00	117.05	7.9	7.8	3	6	260.0	435.0	415.0	600.0	25.0	25.0
94	15	08/09/94	MH KS	MV TE	18.0	17.0	8.4	8.0	29.8	31.8	105.81	99.98	7.4	7.8	4	0	207.5	320.0	390.0	390.0	25.0	25.0
94	15	08/22/94	JH SH	JT JS	17.0	14.0	7.4	7.5	31.6	30.8	92.48	87.84	7.6	7.8	8	9	240.0	375.0	400.0	375.0	20.0	17.0
94	15	09/07/94	SS	SS	14.5	15.0	7.5	8.2	30.8	31.9	88.73	98.71	8.0	8.0	5	2	300.0	320.0	400.0	660.0	12.5	23.0
94	15	09/21/94	MH AH	JG CT DS	16.0	15.0	7.8	8.4	32.1	32.1	95.90	101.25	7.3	8.0	3	3	282.0	275.0	450.0	275.0	16.0	23.0
94	15	10/06/94	JT JS	JH JS JG	12.0	12.0	12.8	7	28.9	33.4	142.01	80.02	8.0	7.9	7	0	185.0	345.0	375.0	680.0	6.0	15.0
94	15	10/20/94	MV KS JT	MH JS JG JT	12.0	12.0	8.8	8.8	30.8	32.9	98.86	100.26	7.5	7.9	2	2	281.0	340.0	428.0	680.0	15.0	16.0
94	15	11/07/94	JF	JT KS	11.0	*	9.7	8.6	30.6	31.7	106.53	*	8.0	7.5	0	0	*	*	*	*	8.0	14.0
95	15	04/18/95	PZ JP JT	JG	8.0	6.0	10.5	10.5	24.7	29.5	103.68	102.21	8.0	7.9	1	0	205.0	490.0	380.0	630.0	6.0	10.0
95	15	05/01/95	DAS JMS	MMH AWP JBJ	8.0	8.2	10.8	10.8	2.0	33.9	91.00	113.55	8.0	8.0	0	1	224.0	542.5	*	607.0	8.0	13.0
95	15	05/15/95	SS JT	JG JMS BDS	12.0	8.0	9.1	10.5	26.5	30.6	99.39	107.89	7.6	8.0	2	2	155.0	415.0	375.0	720.0	10.0	8.0
95	15	05/30/95	BM MM JT	HC JG	13.0	10.5	8.3	9.5	25.9	30.3	92.24	102.99	7.1	8.0	5	0	155.0	440.0	400.0	795.0	16.5	27.0
95	15	08/13/95	JG BM ME	MH JG	14.5	11.5	7.7	9.7	27.3	28.6	89.07	106.25	8.1	8.0	3	6	177.5	400.0	380.0	640.0	16.0	20.0
95	15	08/27/95	JP MH JG	JT SS JG	17.0	15.0	8.3	9.0	27.7	31.1	101.20	107.77	8.1	8.0	2	1	235.0	455.0	410.0	600.0	15.0	18.0
95	15	07/12/95	MM JT	JT JP PZ	16.0	14.0	7.9	9.8	30.0	30.3	95.83	114.40	7.7	7.4	1	0	193.0	*	365.0	*	16.0	21.0
95	15	07/27/95	JT MS		21.0	*	8.6	*	38.1	*	120.74	*	7.7	*	10	na	265.0	*	460.0	*	22.0	*
95	15	08/10/95	MH JG	JT JG	18.0	17.0	6.8	7.8	27.9	17.4	84.64	89.35	7.8	7.8	0	3	320.0	308.0	380.0	700.0	17.0	*
95	15	08/28/95	JT	JT	17.0	15.0	7.3	8.1	31.0	30.3	90.88	96.50	7.4	7.8	6	0	252.5	332.5	440.0	610.0	15.0	23.0
95	15	09/11/95	BM MM JT	JG	14.0	13.5	3.9	7.4	31.1	30.3	45.77	85.49	7.4	6.8	4	1	237.5	485.0	410.0	650.0	9.0	19.0
95	15	09/26/95	MM DK KD JG	JP PZ JT	14.0	*	7.9	8.1	31.1	31.1	92.70	*	8.4	8.1	3	5	296.5	440.0	406.0	635.0	15.0	14.0
95	15	10/10/95	JG	BM JG	13.5	13.5	7.5	7.5	30.7	31.4	86.87	87.27	7.8	7.3	2	1	280.0	425.0	420.0	700.0	8.0	18.0
95	15	10/26/95	MM JT JS	JG	11.5	11.0	7.7	7.8	27.2	29.6	83.57	85.09	7.8	7.8	10	3	202.5	385.0	371.0	695.0	5.5	15.0
95	15	11/09/95	JG	JT	8.0	7.0	8.8	7.8	20.8	29.4	84.71	77.68	7.6	7.6	3	0	155.0	*	450.0	*	1.0	3.0
96	15	04/18/96	JG JM AM	JT	6.5	5.0	11.3	10.4	11.7	26.1	99.1	96.5	7.5	8.0	55	17	55.0	177.5	440.0	690.0	5.0	14.0
96	15	05/06/96	JT JP PZ	MH TK JG	8	8	9.4	9.8	24.7	26.6	92.82	98	7.4	8	1	4	232.0	340.0	*	650	8	6
96	15	05/20/96	JG DK CM	SH JM	10.5	11	9.5	9.4	21.8	25.8	97.42	100.01	7.9	7.8	4	3	200.0	312.5	445	575	14	25
96	15	06/03/96	JT CS JM AM	JP PZ JG	14	10	9	9.9	24.8	29.4	101.43	105.52	7.7	7.3	4	0	107.5	402.5	380	600	12	16
96	15	06/17/96	AM TK JG	JT CM DK	15.5	14	8.4	9.7	28.7	29.8	100.04	112.87	8	7.9	1	3	235.0	415.0	420	610	20	30
96	15	07/01/96	MM JT	AM CS DK	16.5	14	8.3	8.8	28.4	29.5	100.84	102.19	7.6	7.8	1	3	145.0	355.0	390	CURRE	17	26
96	15	07/15/96	JP JT	TK MH AM JT	18	16	7.7	8	22.7	28.1	92.85	95.88	7.1	7.8	0	35	140.0	290.0	430	655	19	25
96	15	07/30/96	JG	MM JG KD	18	15	7.6	8.8	26.8	29.3	93.96	104.16	7.8	7.8	*	*	155.0	411.5	390	641	18	27
96	15	08/14/96	JG	JG	17	15	7.3	8.1	29	29.5	89.74	96	7.9	7.8	0	0	235.0	475.0	430	620	15	25
96	15	08/29/96	JG	JT	17	18	7.3	7.7	30.3	30.3	90.48	97.3	8	7.7	1	3	240.0	405.0	400	500	16	28
96	15	09/16/96	JT KD	JG AM JM	16	16	8.5	7.1	29.5	30	102.78	86.12	8.2	7.8	4	0	305.0	390.0	490	680	18	19
96	15	09/30/96	JT	AM TK MH JG	13	14	7.5	7.5	29.2	29.5	85.14	87.1	7.7	7.8	0	0	308.0	407.5	490	760	12	17
96	15	10/15/96	SH DB MH	KF MH	9	10.5	6.1	8.8	28	30.3	82.99	83.23	7.8	7.7	200	0	190.0	380.0	400	CURRE	5	14
96	15	10/28/96	AM JM CS JG	JT JP PZ	10	10	8	8.8	15.4	27.4	77.95	103.07	7.2	7.4	23	9	80.0	210.0	450	CURRE	7	11
96	15	11/06/96	KF	AM TK JG MH	9	9	3.7	8.1	19.7	23.5	36.2	81.2	7.8	7.4	0	2	195.0	155.0	450	710	11	6
97	15	04/23/97	JG	JG	8.0	7.0	10.6	*	9.3	25.7	95.0	0.0	7.3	7.8	8	6	100.0	280.0	470.0	680.0	8.0	15.0

97	15	05/08/97	JG, AM, JV	JT, MK, KG	9.5	8.0	9.7	10.1	17.1	25.9	94.4	100.5	7.8	8.0	1	0	102.5	178.0	425.0	500+	11.0	13.0
97	15	05/22/97	JW, MS, JT	NG, KM, JG	10.0	8.0	9.1	10.1	21.9	30.4	92.3	103.6	8.0	7.8	0	2	118.0	200.0	390.0	800.0	9.0	14.0
97	15	08/05/97	TB, KG, JG	JW, JT, GM	12.5	12.0	8.9	9.8	28.2	28.5	88.0	108.2	7.8	8.1	0	0	185.0	382.5	435.0	*	14.0	15.0
97	15	08/23/97	JK, CS, AD, JT	JG, KM, NG, SN	13.0	17.0	9.5	8.3	29.2	26.8	107.8	100.5	7.7	7.9	4	2	315.0	145.0	670.0	400.0	27.0	22.0
97	15	07/07/97	JW, GM, KS, JT	SW, JT, BR	17.0	13.0	8.9	9.7	28.4	28.8	109.0	109.2	7.8	7.8	*	*	192.5	420.0	415.0	630.0	19.0	26.0
97	15	07/21/97	JT	CD, MK, JT	18.0	13.5	7.3	11.1	28.8	28.9	90.3	127.1	7.7	7.7	7	1	173.0	435.0	355.0	*	18.0	17.0
97	15	08/04/97	JG, KM	JG, JV	18.0	16.0	7.9	8.4	29.8	29.2	98.8	101.4	7.9	7.6	8	*	200.0	435.0	400.0	665.0	18.0	23.0
97	15	08/19/97	JG	GM, JW, JG, KS	17.0	14.0	8.0	8.3	31.0	32.7	99.6	98.4	7.8	7.8	2	0	250.0	475.0	390.0	DID NO	15.0	21.0
97	15	09/03/97	SB, BD	CC	18.5	17.5	8.9	7.8	31.4	31.9	88.6	98.6	7.6	8.0	0	*	195.0	*	440.0	*	19.0	21.5
97	15	09/18/97	JW, JT	JG	17.0	15.5	7.3	8.4	30.8	32.9	90.8	102.8	7.8	7.8	*	*	212.5	450.0	330.0	750.0	18.0	27.0
97	15	10/02/97	KG, CD, MV, JT	GM, JG	12.0	11.0	7.8	7.9	30.6	34.5	87.5	89.1	7.8	7.4	12	*	302.5	480.0	420.0	760.0	6.0	15.0
97	15	10/17/97	KM, TB, NG, SW	JG, JV, NG, AD	12.0	13.0	8.1	8.9	31.7	31.9	91.5	102.8	7.5	7.8	4	3	288.0	515.0	410.0	765.0	5.0	16.0
97	15	11/03/97	JW, JT	JG	10.5	11.0	8.5	8.7	17.0	31.5	84.6	96.1	7.5	7.6	*	*	67.0	215.0	420.0	660.0	10.0	14.0

Site 16 - Exeter

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP-L	WTEMP-H	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL-L	FECAL-H	LP-L	LP-H	DEPTH-L	DEPTH-H	ATEMP-L	ATEMP-H
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/10	CFU/10	cm	cm	cm	cm	oC	oC
94	16	04/28/94	CM	*	10.0	10.5	10.8	10.3	1.8	0.6	95.22	93.08	8.0	7.3	112	80	87.0	157.5	87.0	310.0	6.0	8.0
94	16	05/10/94	CM CK CJ LD	CM TK GM KT	14.0	15.0	9.5	8.1	1.2	0.2	93.22	90.76	7.3	7.1	200	110	100.0	123.5	100.0	307.0	16.0	18.0
94	16	05/25/94	CM CS SS CW	CM BW	18.0	18.0	8.3	8.2	1.6	0.3	88.81	87.14	7.8	7.3	400	200	95.0	118.0	95.0	332.0	11.5	17.0
94	16	06/09/94	CM	BW	18.5	23.0	13.2	9.2	0.5	1.6	141.84	108.58	7.6	7.4	110	300	85.0	105.0	85.0	270.0	17.0	28.0
94	16	06/23/94	BW	BW	23.5	25.5	8.6	13.1	2.9	5.1	103.14	164.88	7.5	8.5	TNTC	TNTC	30.0	37.5	60.0	300.0	22.0	29.5
94	16	07/11/94	CM JW AS	CM MA LD YT	26.0	28.5	9.6	11.2	1.9	2.3	119.94	146.56	7.8	8.1	380	100	40.5	47.5	60.0	294.0	25.0	28.0
94	16	07/25/94	CM JW	CM HB AD	26.5	29.5	7.8	9.3	2.9	10.9	98.82	129.36	7.6	8.9	500	300	48.5	34.5	67.0	297.0	29.0	32.5
94	16	08/09/94	BP	BP	23.0	27.0	14.3	19.0	7.2	11.3	173.80	253.70	9.1	9.5	200	130	35.0	35.0	70.0	300.0	22.0	27.0
94	16	08/22/94	BP	BP	21.0	20.5	8.3	7.7	1.0	0.8	93.99	86.25	7.8	7.4	*	*	70.0	90.0	70.0	300.0	18.0	15.0
94	16	09/07/94	CM	BW	16.0	19.0	7.8	9.8	1.5	1.9	77.97	107.18	7.6	7.5	*	*	76.0	66.5	90.0	320.0	14.0	21.0
94	16	09/21/94	CM	BW	18.0	19.5	8.2	15.4	1.9	7.2	87.88	175.01	7.7	8.8	*	*	52.5	38.0	57.0	295.0	16.0	20.0
94	16	10/06/94	AR JJ	CM	11.0	13.0	10.3	9.8	0.7	0.7	94.23	93.81	7.3	7.3	110	50	95.0	61.5	95.0	330.0	7.0	14.0
94	16	10/20/94	CM MK	BW	11.0	11.5	7.4	7.7	0.6	4.6	67.66	72.83	7.3	7.0	*	*	72.5	75.0	90.0	320.0	16.0	15.0
94	16	11/07/94	CM AG	BW	9.0	9.0	8.3	11.2	0.5	0.5	72.37	97.66	7.2	7.2	*	*	30.0	50.0	85.0	290.0	5.0	8.0
95	16	04/18/95	PS BW	CM SK AS LP	10.0	11.0	10.8	11.2	0.5	1.9	96.42	103.15	7.8	8.0	0	30	BSV	172.5	70.0	275.0	11.0	11.0
95	16	05/01/95	PS	CM SK AS CL	12.5	12.5	11.4	10.7	0.6	*	107.84	*	7.8	8.0	NV	NV	BSV	155.0	50.0	270.0	13.0	12.5
95	16	05/15/95	PS	BW	14.0	13.5	9.4	9.8	0.8	0.8	92.04	94.89	7.8	7.4	NV	NV	BSV	87.5	60.0	310.0	11.0	10.0
95	16	05/30/95	AS TN MD LP	MH CM PG	18.0	18.0	8.3	8.8	1.3	0.3	88.67	93.51	7.5	8.0	340	90	BSV	92.5	50.0	245.0	23.0	24.5
95	16	06/13/95	PS	CM	18.5	18.0	9.1	11.6	0.5	0.9	97.79	123.66	7.2	7.3	1120	NA	BSV	57.5	75.0	73.0	21.0	16.0
95	16	06/27/95	JJ JJ	JJ AM	22.0	22.5	8.4	7.5	2.2	0.8	97.58	87.32	7.6	7.3	TNTC	790	45.0	85.0	90.0	170.0	20.0	20.0
95	16	07/12/95	CM	CM	21.0	24.5	6.1	8.1	13.6	14.8	73.93	105.42	7.6	7.7	550	150	42.5	40.0	59.0	290.0	20.0	26.5
95	16	07/27/95	AJM CC	CM	27.0	26.5	7.2	8.0	0.0	0.8	90.71	100.29	7.4	7.7	1500	160	22.5	64.5	70.0	245.0	25.0	35.0
95	16	08/10/95	CM AND FRIEN	CM AND FRIE	23.0	26.0	8.2	15.7	5.1	7.9	98.58	202.30	7.8	8.9	NV	NV	38.5	32.5	56.0	285.0	21.0	35.0
95	16	08/28/95	*	BW	*	23.5	*	16.4	*	15.0	*	209.84	*	8.6	NA	120	*	40.0	*	295.0	*	18.0
95	16	09/11/95	PS	PS	*	*	11.1	9.8	*	*	*	*	*	*	210	50	77.5	53.5	100.0	300.0	13.5	22.5
95	16	09/28/95	CM	CM	13.0	14.5	8.5	11.7	9.8	16.7	85.65	126.78	7.4	7.8	1400	440	44.0	69.0	72.0	311.0	15.0	16.0
95	16	10/10/95	CM	CM	13.0	15.0	10.5	9.8	0.7	0.7	100.51	98.01	7.8	7.3	250	50	BSV	100.0	61.0	305.0	12.0	18.0
95	16	10/26/95	PS SC	PS	12.5	13.0	9.8	9.6	0.6	0.7	92.71	91.89	7.2	7.2	400	60	BSV	57.5	105.0	315.0	15.0	21.0
95	16	11/09/95	PS	CM	4.0	3.5	9.8	12.1	0.8	0.0	75.53	91.59	7.6	7.6	180	0	BSV	112.5	105.0	295.0	4.0	-1.0
96	16	04/18/96	CM GL SC	WB CM	7.0	9.0	11.3	11.2	0.2	0.5	93.7	97.7	7.4	7.2	40	10	111.0	140.0	160.0	300.0	6.0	11.0
96	16	05/06/96	CM	BB BW	12	12	10.1	9.5	0.6	2.1	94.48	89.62	7.8	7.7	105	48	BSV	140.0	95.0	330.0	4	9
96	16	05/20/96	CM	PS CM	17	22	8.4	9.5	0.6	2	87.58	110.24	7.8	7.8	100	50	BSV	123.0	100.0	295.0	24	34
96	16	06/03/96	CM	CM	20	19	8.6	9	0.8	0.3	95.39	97.6	7.4	7.8	150	140	BSV	90.0	70.0	289.0	23	17
96	16	06/17/96	PS	PS BB	24.5	32	8.8	9.1	2	3.8	107.02	*	7.4	7.8	430	180	BSV	97.5	85.0	275.0	30	32
96	16	07/01/96	CM	CM	21	26	8.4	8.1	1.2	1.4	95.22	100.94	7.8	7.8	1200	500	37.5	62.5	63.0	270.0	21	31
96	16	07/15/96	CM KC	CM KC ND NJ	21.5	23.5	7	7.2	1.2	0.5	80.11	85.29	7.8	7.8	900	400	75.0	120.0	90.0	295.0	23	32
96	16	07/30/96	CM	*	22	*	9.7	*	0.2	*	164.32	*	7.4	*	*	200	BSV	*	54.0	*	22.5	*
96	16	08/14/96	PS	PS	21	27	7.4	9.2	1.9	3.6	84.19	118.04	6.9	7.6	1100	100	BSV	65.0	70.0	275.0	25	36
96	16	08/29/96	CM	CM	22	26	8.6	15	10.9	14.1	104.65	199.71	8	8.6	960	100	48.5	57.5	63.0	305.0	19	27
96	16	09/16/96	CM	AR KF	18	19	7.5	8.6	4.2	7.1	81.38	96.72	7.5	7.6	320	450	53.5	52.5	95.0	340.0	17	17
96	16	09/30/96	CM	JR	16	16	9.4	13.5	0	1.5	95.67	138.51	7.8	7.6	200	220	41.5	65.0	70.0	315.0	13	18.5
96	16	10/15/96	CM	JR	10	11	9.8	10.8	0.3	0.3	85.59	96.76	7.8	7.4	0	0	BSV	80.0	35.0	290.0	3	8
96	16	10/29/96	CM	CM	9	9.5	11.6	9.5	0	0.3	100.86	83.69	7.8	7.3	100	0	72.5	65.5	85.0	328.0	8	5
96	16	11/06/96	BW JR AR	EB RB	6	6	11.8	12	0.2	0.1	93.8	96.97	7.4	7.4	0	0	BSV	115.0	65.0	240.0	4	8
97	16	04/23/97	CM, WS, AAA	CM, WS, AAA	10.5	12.0	10.4	10.0	0.0	0.0	93.7	93.2	7.3	7.4	50	0	98.0	159.5	98.0	324.0	11.0	19.0
97	16	05/06/97	CM, WS	CM, WS, AAA	12.0	12.0	9.6	10.0	1.3	1.3	90.2	93.9	7.7	7.6	20	60	100.0	157.0	100.0	317.0	12.0	12.0
97	16	05/22/97	CM, AAA	CM, WS, AAA	13.0	14.5	9.4	9.2	0.4	0.5	89.8	90.9	7.6	7.6	*	*	70.0	140.5	70.0	185.0	12.0	11.0
97	16	06/05/97	CM, WS, AAA	BW	16.0	18.0	9.9	*	0.6	0.3	101.1	0.0	7.7	8.0	80	40	82.0	112.5	82.0	305.0	11.0	12.0
97	16	06/23/97	JR, AD	JR, AD	24.5	25.0	8.0	10.2	0.8	1.2	96.7	124.7	7.5	7.6	760	*	100.0	120.0	100.0	540.0	26.0	27.5
97	16	07/07/97	JR, AD, ED	JR, AD, ED	26.0	26.5	9.0	15.0	0.2	6.8	111.5	193.9	7.3	8.6	*	*	16.0	97.5	16.0	242.0	30.0	29.5
97	16	07/21/97	CO, EO	CO, EO	22.0	22.0	8.1	9.9	11.9	11.6	99.1	120.9	7.3	7.2	170	280	45.0	23.0	45.0	280.0	23.0	22.0
97	16	08/04/97	JR, AD	JR, AD	22.5	24.5	8.6	17.1	8.8	12.1	104.4	219.3	7.6	8.8	780	360	50.0	37.5	50.0	275.0	20.0	21.0
97	16	08/19/97	JR, ED, AD, AA	JR, ED, AD	23.0	25.0	4.0	16.6	12.0	14.9	49.9	218.1	8.9	7.7	880	tmc	4.0	12.5	75.0	305.0	25.0	21.0
97	16	09/03/97		SO, EO		22.0		13.7		13.2	0.0	168.8	*	*	*	8800		31.0		310.0		22.5
97	16	09/18/97	CM	CO, SO	20.5	23.0	8.5	13.0	4.4	22.9	97.0	172.3	7.5	*	*	*	30.0	32.5	30.0	300.0	20.0	32.0
97	16	10/02/97	JR, AD, ED	JR, ED, AD	13.0	15.5	11.3	17.9	11.8	11.8	115.2	192.5	7.9	8.7	310	30	54.0	45.0	54.0	255.0	13.0	14.0
97	16	10/17/97	CM	CO	10.5	15.0	10.1	14.2	5.1	13.1	93.6	152.2	7.2	8.4	340	150	50.0	42.5	50.0	345.0	8.0	15.0
97	16	11/03/97	JR, ED, AD	CM	10.0	11.5	10.2	10.2	0.3	0.6	91.0	94.3	6.9	7.3	*	*	38.0	59.0	65.0	312.0	11.0	14.0

Site 17 - Dover Foot Bridge

YEAR	SITE	DATE	SAMPLER-L	SAMPLER-H	WTEMP	WTEMP	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL- CFU/10	FECAL- CFU/10	LP-L cm	LP-H cm	DEPTH- cm	DEPTH- cm	ATEMP- 0c	ATEMP- 0c
					oC	oC	ppm	ppm	ppt	ppt	%	%										
96	17	04/18/96	*	*	*	*	*	*	*	*	*	*									*	*
96	17	05/06/96	*	*	*	*	*	*	*	*	*	*									*	*
96	17	05/20/96	*	*	*	*	*	*	*	*	*	*									*	*
96	17	06/03/96	*	*	*	*	*	*	*	*	*	*									*	*
96	17	06/17/96	*	*	*	*	*	*	*	*	*	*									*	*
96	17	07/01/96	*	*	*	*	*	*	*	*	*	*									*	*
96	17	07/15/96	*	*	*	*	*	*	*	*	*	*									*	*
96	17	07/30/96	*	*	*	*	*	*	*	*	*	*									*	*
96	17	08/14/96	LS MS JT	LS MS MC	21.5	24	6.4	7	2.5	3	73.75	84.79	7.2	7.2	30	4840	BSV	175	55	210	16.5	29
96	17	08/29/96	MS MR JT	MC MS LS	23	24	13.2	7.8	1.4	2	155.63	93.99	7.5	7.3	680	770	BSV	97.5	45	215	18	28
96	17	09/16/96	MC MS EA	LS MS	19.5	18.5	7	8.8	0.3	3.1	76.67	95.88	7.1	6.9	1400	4800	BSV	117.5	15	200	20	22
96	17	09/30/96	EB RB BT	BT DG	16.5	16	10.1	9.6	2	0.9	104.99	98.18	7.3	7.3	900	600	BSV	172.5	20	185	17	*
96	17	10/15/96	BT MS MC	LS	10	10.5	11.2	10.2	0	0	99.71	91.87	8	7.3	1500	800	BSV	268	35	280	7	10
96	17	10/29/96	KB MS MS	LS MS	11	11	10.8	11	0.2	0.6	98.53	100.58	7.8	8	100	300	BSV	185	105	220	12	11
96	17	11/06/96	MS LS	JT MS MP	6	8	12.6	12.2	0.2	0.2	101.88	98.65	8	7.8	400	280	BSV	172.5	80	185	9	14
97	17	04/23/97	LS, PS, BT	LS, LS	15	16	11.5	12.3	1	1.9	115.19	126.47	7.6	7.6	10	40	130	75	130	190	13.5	15
97	17	05/06/97	MS, LS	PS, LS	16	17	10.3	10.6	0.6	1.5	105.16	111.05	8	7.4	50	90	95	140	95	140	11	16
97	17	05/22/97	PS, PC, MS,	MS, JT, BT	16	13.5	10.1	10.1	1.9	1.4	103.85	98.12	8	7.8	100	150	90	165	90	185	12	10
97	17	06/05/97	PS, EA, TP,	MS, JT, BT	7	18	8.9	9.3	0.1	0.85	73.74	89.12	7.6	7.5	260	250	65	180	65	180	12	17
97	17	06/23/97	PS, RP, LS	LS, PS, RP	24	24	8.6	8.6	0.8	3.1	103.00	116.34	7.4	7.2	650	650	50	125	50	130	26	25
97	17	07/07/97	PS, LS, BT	LS	24	24	8.9	8.6	3.1	3.1	107.88	104.22	7.4	7.6			55	65	55	150	27	26
97	17	07/21/97	BT, LS	BT, DG	22.5	21.5	*	7	6.05	1.2	0.00	80.11	7.7	7.6	400	1200	50	107.5	50	170	23	20
97	17	08/04/97	AM, AA	KF	22.5	23	9.2	8.5	3.4	0.3	108.56	99.65	8.1	7.5	780	360	45	140	45	175	22	20.5
97	17	08/19/97	LS, BT	BT, DG, SJ,	22	23	8.4	8.9	2.5	1.6	97.73	105.04	7.5	6.9	880	TNTC	30	105	30	170	18	25
97	17	09/03/97	SA, EA, PS,	PS, LS	20	20	7.7	8.1	3.4	3.1	88.59	90.94	7.1	7.2	750		30	135	30	185	18	24
97	17	09/18/97	RP, PS, EA,	LS, PS	20	21	9.5	8.4	0.8	1.8	105.38	95.52	7.2	7.2	150	20	27	*	27	205	21	26.7
97	17	10/02/97	SA, PS	LS, PS	13	15	10.4	8.7	2	10.2	100.27	91.73	7.4	6.9	730		35	155	35	155	10	16
97	17	10/17/97	SA, RP, PS	JF, TH	11.5	12.5	10.2	9.75	1.275	0.325	94.68	92.09	7.2	7.2	460	260	70	240	70	260	8	17
97	17	11/03/97	JF	JF	10.5	11	10.1	*	0	0.3	90.97	0.00	8	7.8			STRON	40	200	150	13	15

Site 18 - Maplewood

YEAR	SITE	DATE	SAMPL	SAMPL	WTEMP	WTEMP	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL-L	FECA	LP-L	LP-H	DEPTH-	DEPTH-	ATEMP	ATEMP
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/100	CFU/1	cm	cm	cm	cm	oC	oC
97	18	04/23/97	SM, TM	TM, SM	8	9.5	9.9	10.4	13.9	17.1	91.24	101.23	7.4	7.8	180	10	90	*	90	*	9	15
97	18	05/06/97	TM, SM	TM	8	8.5	9	8.9	22.7	23.5	87.71	88.19	7.6	7.8	40	10	15	205	15	280	8	9
97	18	05/22/97	TM, SM	TM, SM	8	11	8.7	9.6	24.7	24.5	85.91	101.29	7.6	7.8	*	*	22	167.5	22	265	9	17
97	18	06/05/97	TM, SM	TM, SM	12	14	8	9.5	27.15	28.2	87.74	109.40	7.3	7.9	60	0	28	250	28	280	10	18
97	18	06/23/97	TM, SM	TM, SM	18	17	8.2	8.9	28.9	29.2	102.71	109.54	7.8	7.8	150	10	20	192.5	20	250	22	28
97	18	07/07/97	TM, SM	TM, SM	16	17	8.7	7.7	30.3	29.9	105.73	95.20	7.8	7.6	*	*	250	33	250	33	29	26
97	18	07/21/97	TM, SM	TM, SM	17	17	6.8	8.2	29	28.35	83.59	100.39	7.7	7.8	70	0	20	215	20	215	18	17
97	18	08/04/97	TM, SM	TM, SM	18	17.5	6.6	8.4	28.6	30.6	82.51	105.32	7.8	8.1	TNTC	*	20	245	20	245	18	25
97	18	08/19/97	TM, SM	TM, SM	16.5	16	6.3	8.2	30.3	30.45	77.32	99.75	7.8	7.9	110	0	30	270	30	270	16	22
97	18	09/03/97	SM, TM	AM, JM	18.5	19	6.1	7.9	30.15	31.2	77.74	102.32	7.7	7.8	30	0	30	245	30	245	17.5	19
97	18	09/18/97	TM, SM	TM, SM	17	18	6.2	7.6	30.4	30.2	76.89	95.97	7.8	8.1	*	*	30	270	30	270	17.5	29
97	18	10/02/97	TM, SM	TM, SM	9	12.5	7.4	8.5	29.9	30	77.40	95.98	7.8	7.9	30	0	30	225	30	225	9	18
97	18	10/17/97	TM, SM	TM, SM	10.5	13	7.5	8.9	29.35	31.5	80.79	102.58	7.6	8	40	0	30	275	30	275	5	17
97	18	11/09/97	TM, SM	TM, SM	10	11	7.6	8.7	22.3	27.1	77.32	93.35	7.5	7.7	*	*	25	215	25	235	8	14.5

Site 19 - Bartlett Ave.

YEAR	SITE	DATE	SAMPL	SAMPL	WTEMP	WTEMP	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL-	FECAL-	LP-L	LP-H	DEPTH-	DEPTH-	ATEMP	ATEMP
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/10	CFU/10	cm	cm	cm	cm	0c	0c
97	19	04/23/97	NJ, AS	NJ, AS	8	11	10.4	10.8	1.1	12.7	88.82	103.94	7.4	7.5	22	10	22	83	22	83	12	14
97	19	05/06/97	AS, NJ	AS	9	10	9.5	11.2	2	2.6	83.54	101.19	7.5	7.6	50	10	17	88	17	88	10	11
97	19	05/22/97	NJ, AS	AS, KD	11	14	9.4	11.8	1.9	7.9	86.58	120.20	7.2	7.6	*	*	25	60	25	60	12	18
97	19	06/05/97	CJ, KD	KD, CJ	13	15	7.9	9	0.3	1.5	75.45	90.40	7.8	6.9	170	100	20	75	20	75	11	17
97	19	06/23/97	NJ, BJ	NJ, BJ	20.5	23	7.7	7.3	1.1	2.2	86.38	86.43	8	7.9	450	370	12.5	78	12.5	78	26.5	27.5
97	19	07/07/97	AS, NJ	EH, ML	18	24	8.8	10.8	2.1	13.5	94.41	138.32	7.8	8.2	760	210	10	55	10	55	23	29
97	19	07/21/97	NJ, KD	NJ, AS	18	19	8	9.1	9.6	25.6	89.42	113.85	7.7	8.1	510	280	10	75	10	75	19	20
97	19	08/04/97	NJ, KD	NJ, KD	19	21	8.4	8.9	1.8	2	91.82	101.31	7.8	7.8	TNTC	*	10	65	10	65	19	21
97	19	08/19/97	AS, KD	AS, KD	16	21	8.6	9.8	1.5	17.95	88.23	121.73	7.1	7.6	TNTC	200	5	72.5	5	95	15	28
97	19	09/03/97	AS, KD	AS, KD	19	19	8.9	9.1	1.35	13	97.05	105.76	8.1	7.6	510	30	10	65	10	65	21	21
97	19	09/18/97	AS, SK	AS	16	19	8.8	8.9	2.2	7.6	90.63	100.37	7.6	7.8	*	*	10	110	10	110	18	28
97	19	10/02/97	NJ, KD	KD	9	12	10.6	10.7	1.6	22	93.00	113.56	7.5	7.8	220	0	5	60	5	60	4	16
97	19	10/17/97	KD, NJ	AR, JC	10	12	9.9	9.1	1.8	28.1	89.04	100.43	INVALID	7.8	1030	20	10	125	15	125	5	16.5
97	19	11/03/97		SM, TM	11	11.5	8.3	8.5	1.15	1.475	76.12	78.99	7.1	7.1	*	*	25	90	25	90	8	14.5

Site 20 - Junkins Ave.

YEAR	SITE	DATE	SAMPL	SAMPL	WTEMP	WTEMP	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL-	FECAL-	LP-L	LP-H	DEPTH-	DEPTH-	ATEMP	ATEMP
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/10	CFU/10	cm	cm	cm	cm	0c	0c
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/10	CFU/10	cm	cm	cm	cm	0c	0c
97	20	04/23/97	DR, ML	JR, BR	9	16	3.3	1.3	15.3	5.1	31.40	13.60	7.3	6.9	TNTC	TNTC	35	30	35	30	9	16
97	20	05/06/97	ML, DR	JR, DR	11	12	7.6	7.17	24.4	25.3	80.13	77.71	7.4	7.6	0	0	25	40	25	40	10	10
97	20	05/22/97	ML, DR	JR, DR	12	16	6.6	8.7	24.4	25.1	71.12	102.33	7.4	7.8	30	10	30	25	30	25	10	16
97	20	06/05/97	EH, DR	JR, DR	15	17	8.2	9.3	2.15	28.55	82.65	114.00	7.1	7.78	10	10	33	45	33	45	11	15
97	20	06/23/97	ML, EH	DR, SM	21	22	4.4	8.3	29.5	29.6	58.52	112.48	7.6	7.8	10	0	35	20	35	20	23	27
97	20	07/07/97	EH, ML	DR, JR	22.5	27	4.8	6.1	30.8	31.5	66.11	91.20	7.4	7.7	0	0	25	15	25	15	23	26
97	20	07/21/97	EH, ML	EH	21	21	7.2	8.3	28	27.9	94.89	109.32	8	8.1	250	180	35	32	35	32	19	20
97	20	08/04/97	ML, EH	JR, DR	23	25	4.4	7.2	29.1	30.9	60.52	103.68	7.4	7.7	TNTC	*	30	27	30	27	18	21
97	20	08/19/97	JR, DR	JR, DR	21	21	5.3	9.3	30.2	30.8	70.79	124.68	7.6	7.8	0	0	25	50	25	50	17	22
97	20	09/03/97	DR, ML	DR, JR	22	23	4.2	5.5	28.5	29.75	56.54	75.95	7.4	7.6	0	0	30	30	30	30	20.5	20
97	20	09/18/97	ML, DR	DR, JR	17	21	6	7.3	31.2	32.8	74.79	99.09	7.5	7.6	*	*	35	60	35	60	17	27
97	20	10/02/97	ML, DR	DR, JR	8	12.5	6.1	7.9	31.6	31.9	63.11	90.34	7.4	7.8	0	0	0	25	0	25	5	15
97	20	10/17/97	ML, DR	DR	11	14	5.7	7.5	31.5	32.1	62.98	88.59	7.3	7.6	40	0	35	60	35	60	11	15
97	20	11/03/97	EH, ML	JR, DR	10	15	7.3	7.6	11.35	23	69.41	86.46	7.6	7.4	*	*	30	40	30	40	8	17

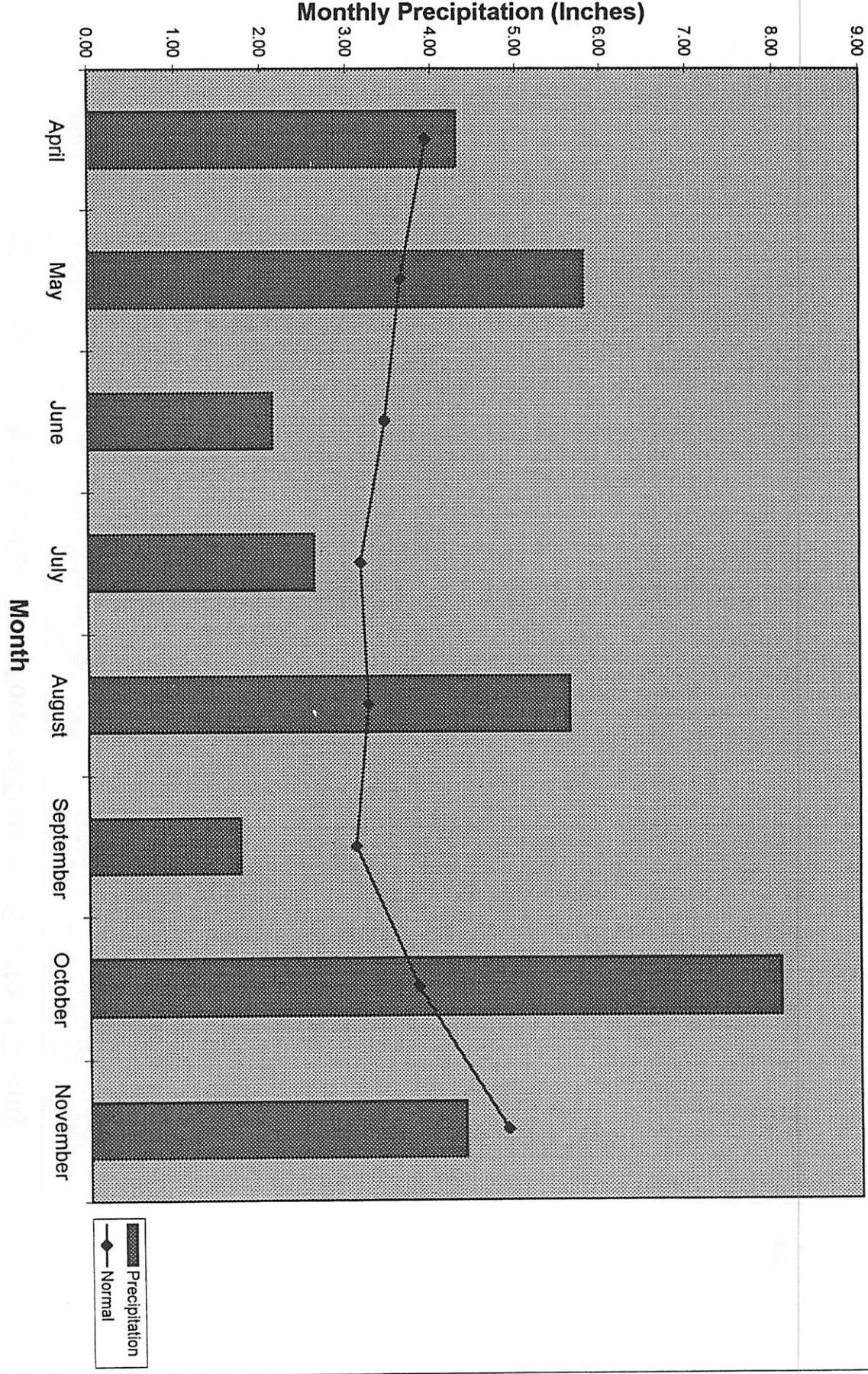
Site 21 - Pleasant Ave.

YEAR	SITE	DATE	SAMPL	SAMPL	WTEMP	WTEMP	DO-L	DO-H	SAL-L	SAL-H	SAT-L	SAT-H	pH-L	pH-H	FECAL-L	FECAL-H	LP-L	LP-H	DEPTH-	DEPTH-	ATEMP	ATEMP
					oC	oC	ppm	ppm	ppt	ppt	%	%			CFU/100	CFU/100	cm	cm	cm	cm	0c	0c
97	21	04/23/97	PW, JR	PW, LH	6.5	15	5.9	4.9	4.75	14.2	49.60	52.87	7.2	7.1	TNTC	40	147.5	172.5	165	172.5	11	16
97	21	05/06/97	PW, AN	JR, DR	9.5	9.4	8.8	9.1	25.3	25.8	90.26	92.61	7.6	7.8	0		145	190	145	190	9	10
97	21	05/22/97	LH, AN	LW, SM	11	12.5	8.4	9.6	25.7	26.5	89.32	105.96	7.7	8.1	10	0	137.5	137.5	150	155	9.5	15
97	21	06/05/97	PW, AN	LH, SM	14	14	8.6	8.9	28.8	29.35	99.42	103.28	7.9	7.9	*	*	195	160	195	160	10	16
97	21	06/23/97	DR, PW	DR, JR	21	16.5	7.1	9.2	30.9	30.6	95.25	113.13	7.8	8	10	10	152.5	190	175	190	22	34
97	21	07/07/97	PW, AN	LH, SM	22	23.5	7.8	8.3	31.5	33.5	106.94	118.30	7.7	7.8	*	0	165	163	165	163	22.5	29
97	21	07/21/97	PW, JK	JR	19	17.5	7.7	8.9	30.1	29.2	99.04	110.60	7.9	8.1	0	0	185	155	185	170	19	19
97	21	08/04/97	PW, CH	LH, CH	21	20	6.5	8.1	31.2	31.5	87.36	107.08	7.6	7.8	6	*	165	157.5	165	160	19	21
97	21	08/19/97	PW, AN	LH, SM	18	16.5	6.65	8.1	31.25	31.45	84.54	100.14	7.8	7.8	90	0	145	170	145	170	15.5	25
97	21	09/03/97	PW, LH	LH	21	21.5	7.8	8.3	30.2	30.92	104.19	112.37	8	7.8	0	0	138	168	138	168	19	21
97	21	09/18/97	PW, AN	LH	18	18	6.8	8.2	31.9	32.2	86.80	104.87	7.6	7.8	*	*	145	220	145	220	16	27
97	21	10/02/97		LH		12		7.9		32.5	0.00	89.77		7.8	*	0		184		184		13.5
97	21	10/17/97	PW, AN	LH	11	13	7.2	8.7	33.45	32.75	80.61	101.11	7.6	7.8	70	10	180	225	180	225	5	16
97	21	11/03/97	PW, DR	LH	8.5	12.5	8.4	8.3	21.65	26.2	82.24	91.44	7.5	7.8	*	*	127.5	147.5	185	195	8.5	16

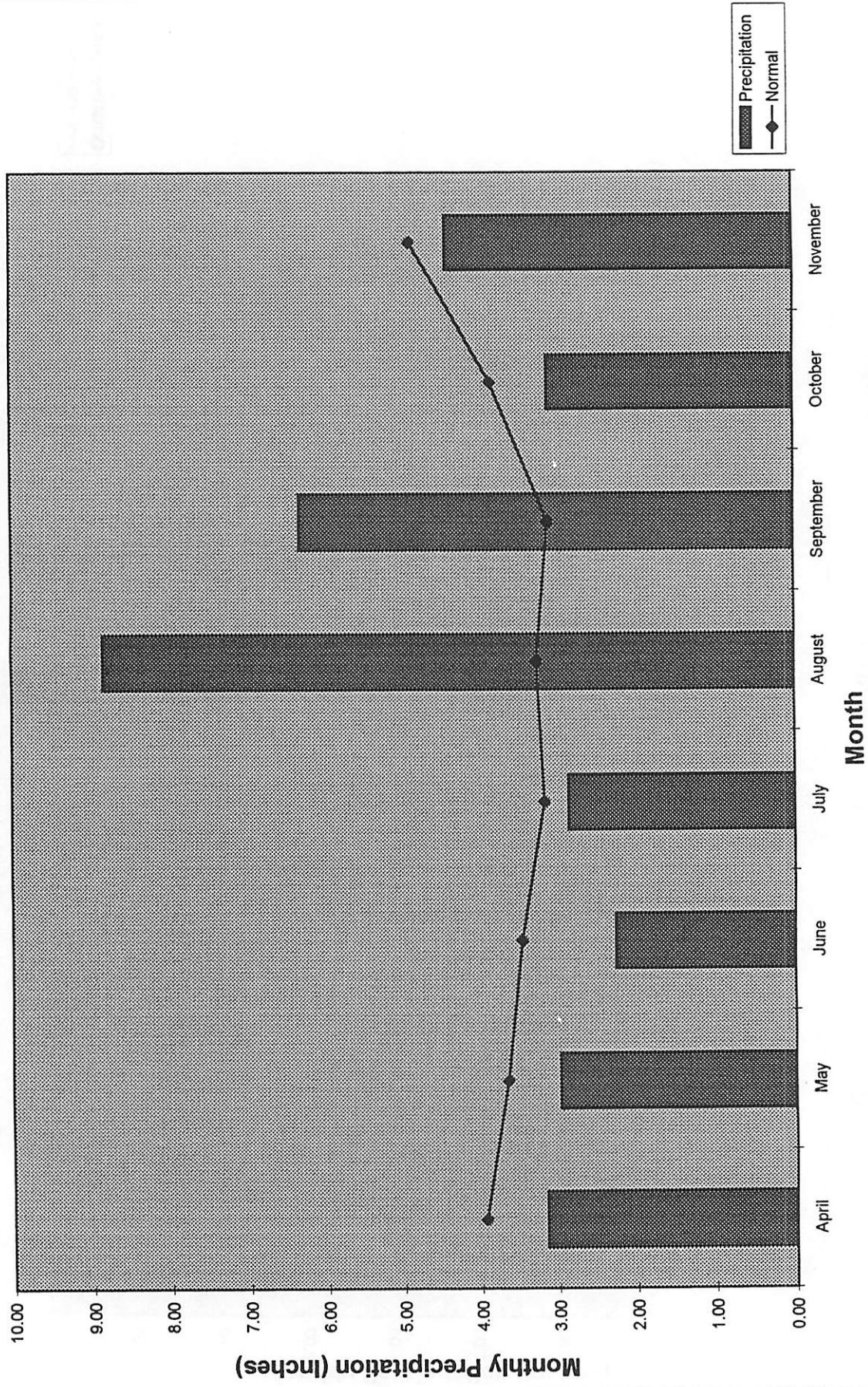
Appendix II

Graphs of Monthly precipitation 1990-1997

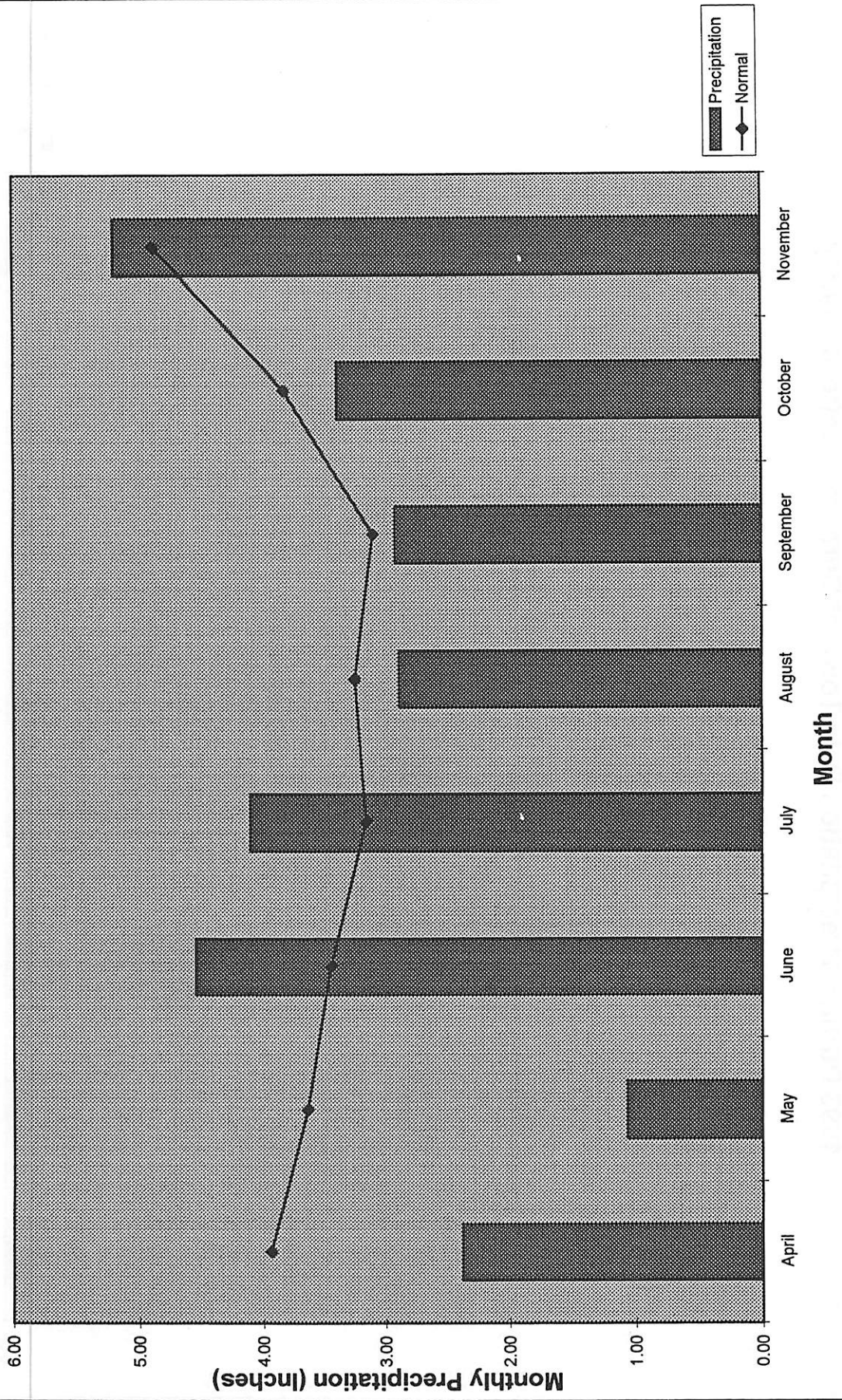
1990 Durham Precipitation Data Town of Durham, Stafford County



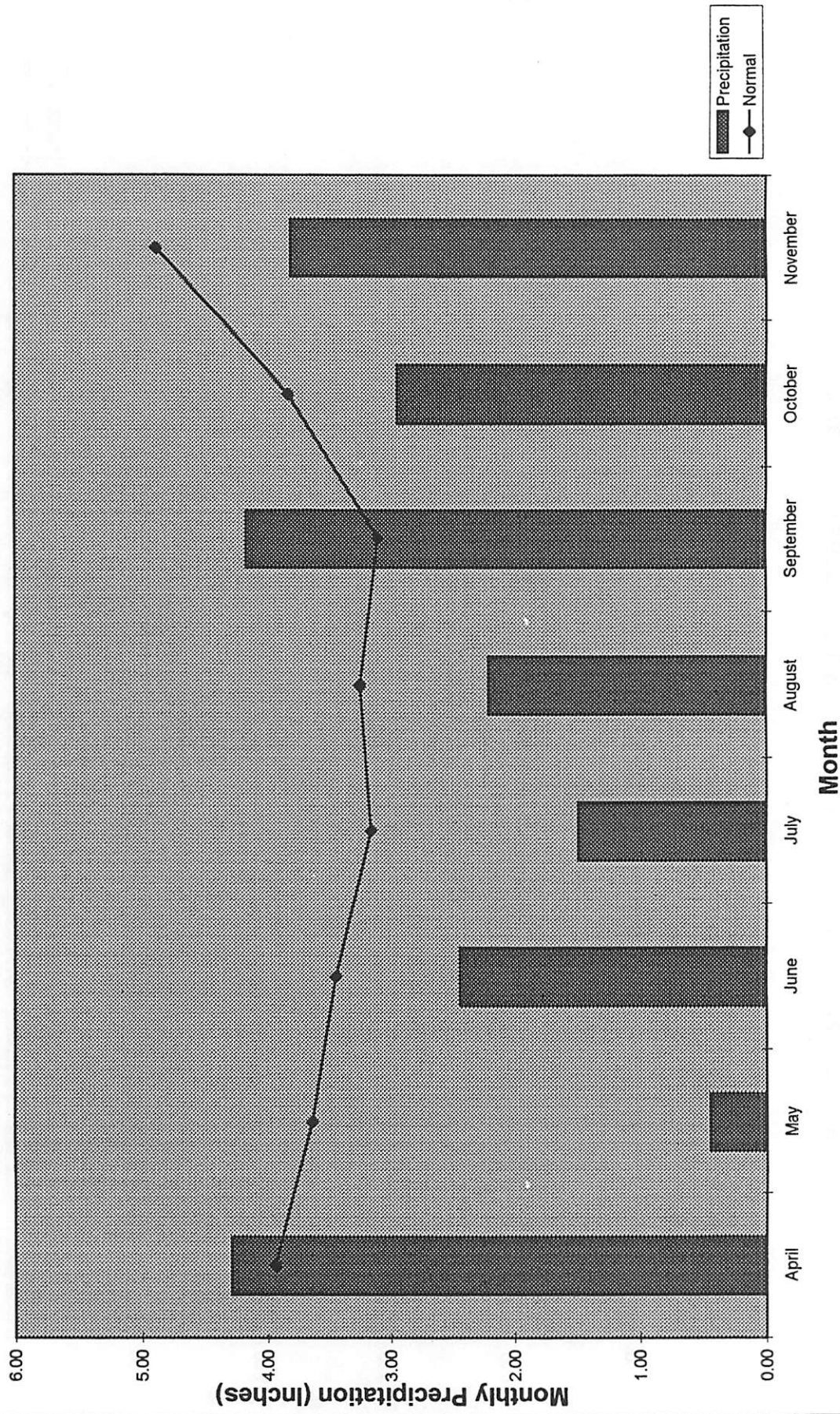
1991 Durham Precipitation Data Town of Durham, Strafford County



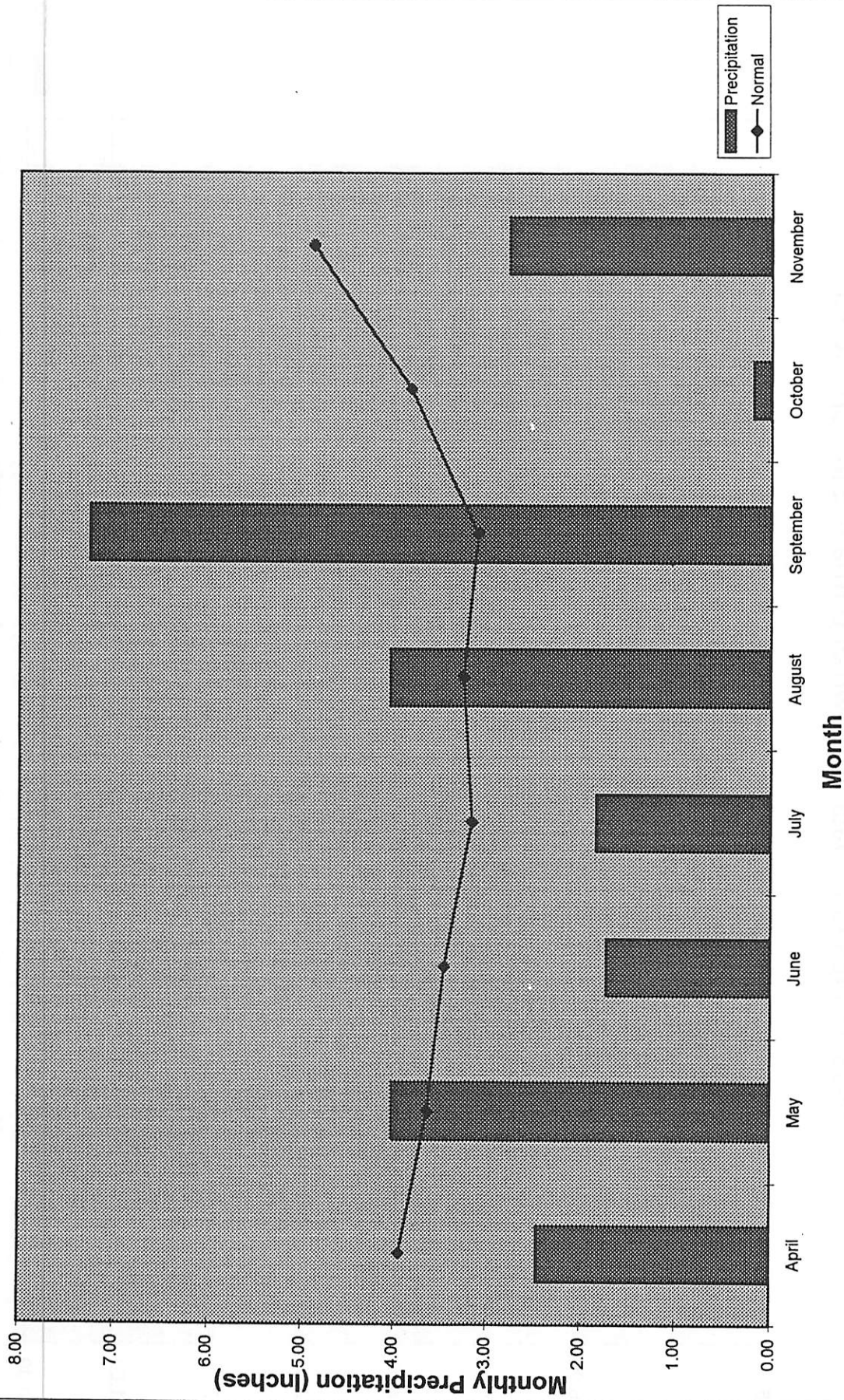
1992 Durham Precipitation Data Town of Durham, Strafford County



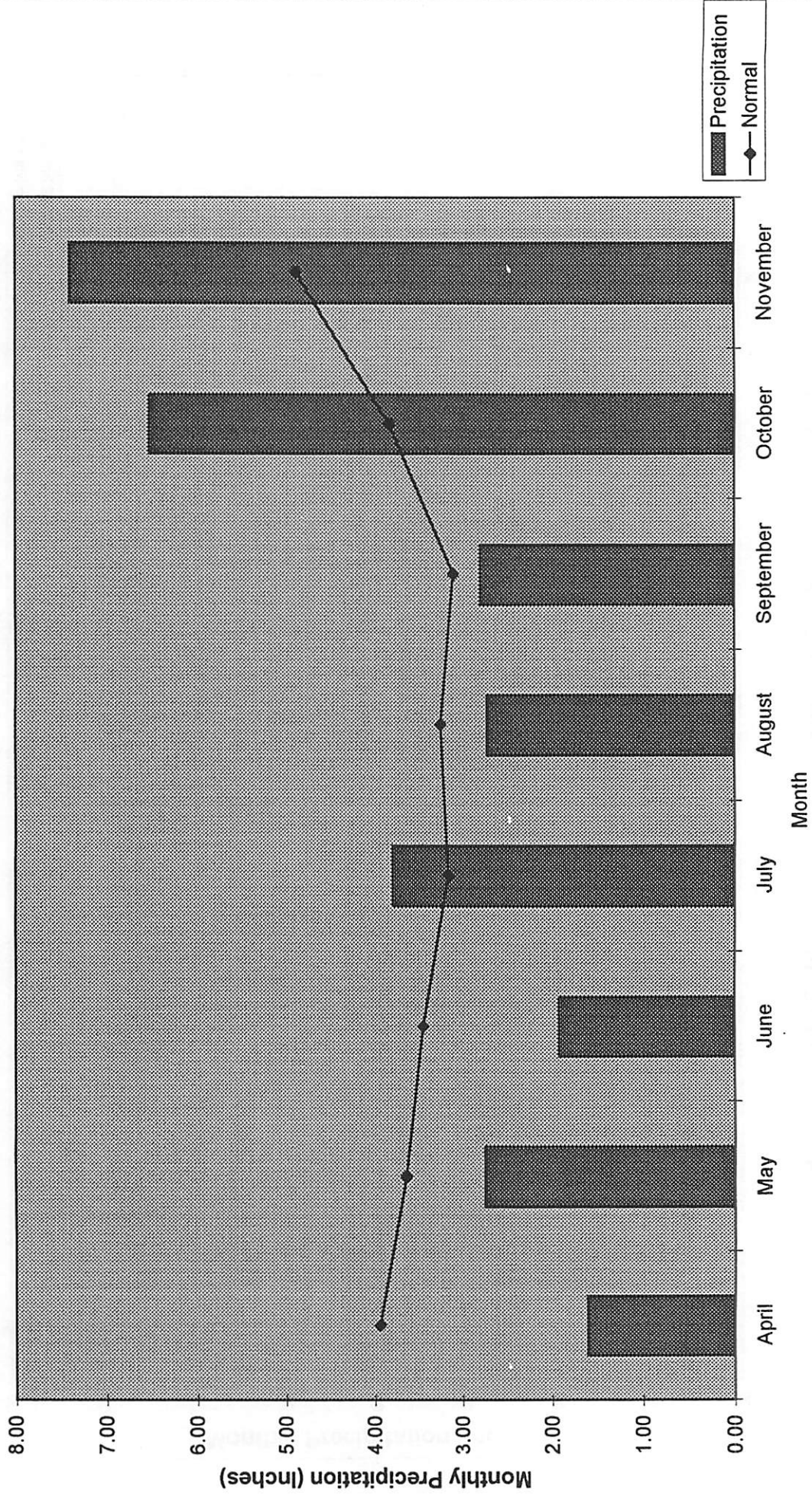
1993 Durham Precipitation Data Town of Durham, Strafford County



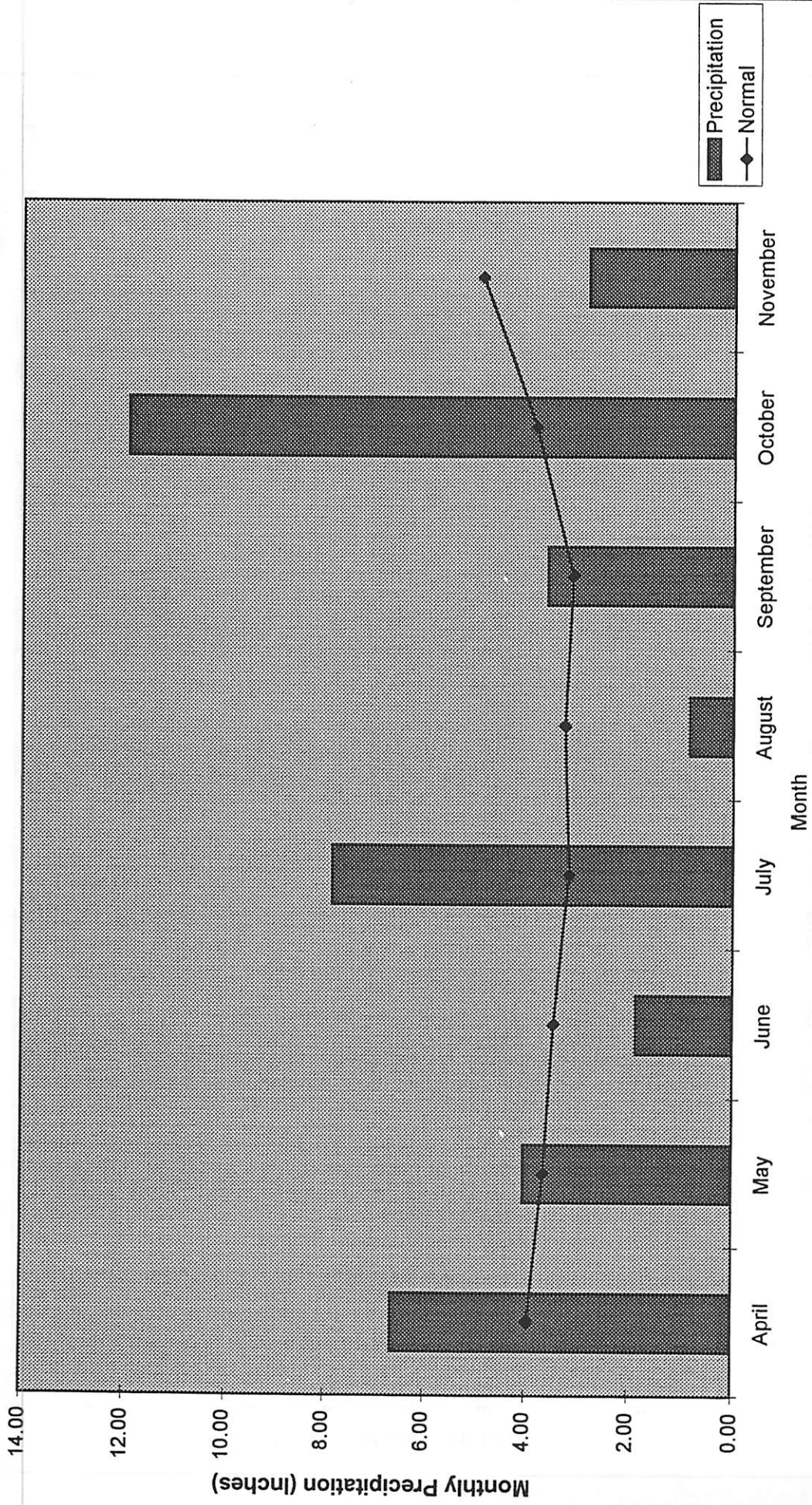
1994 Durham Precipitation Data Town of Durham, Strafford County



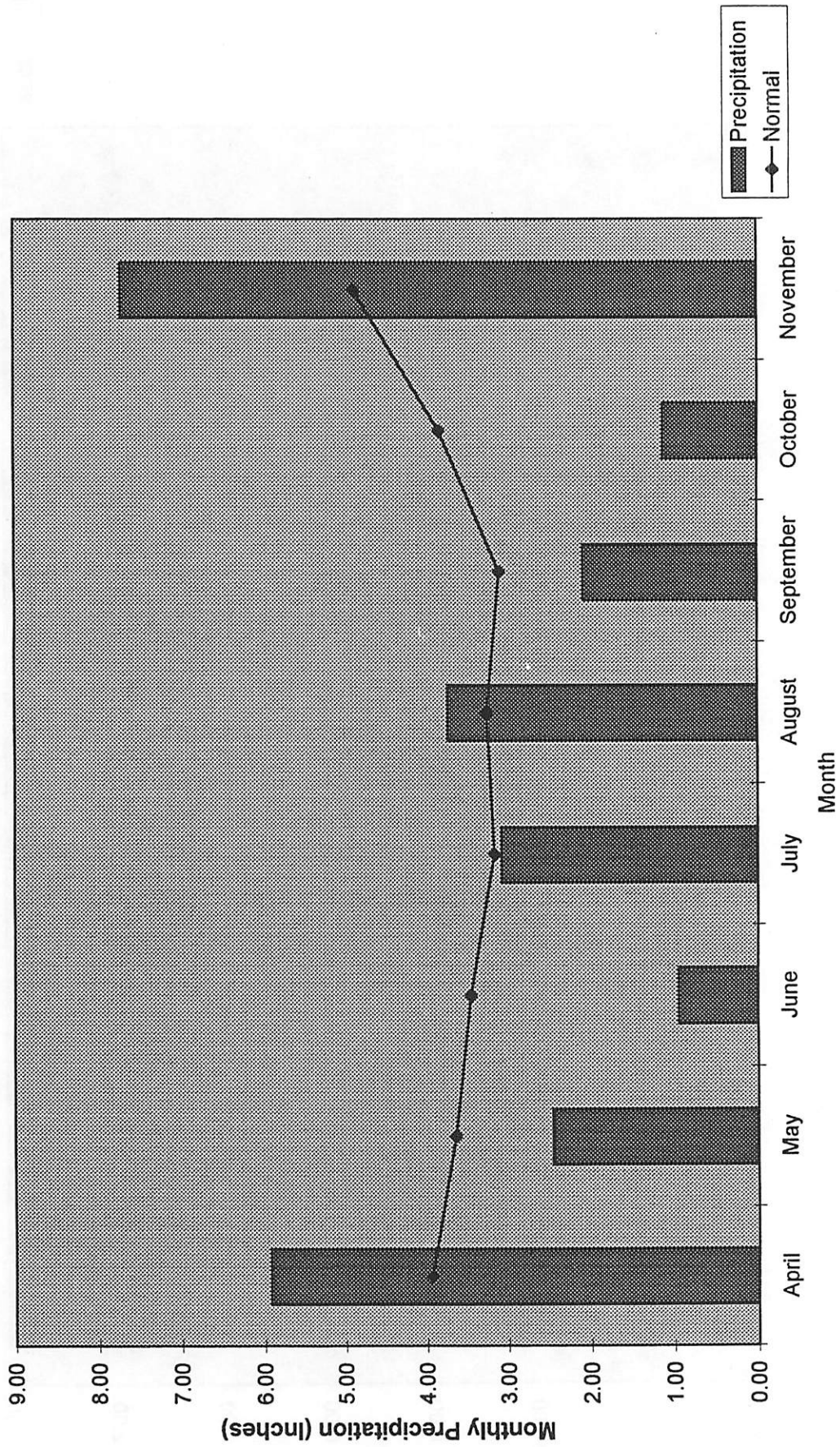
1995 Precipitation Data for Town of Durham, Strafford County



1996 Precipitation Data for Town of Durham, Strafford County



1997 Precipitation Data for the Town of Durham, Strafford County



Appendix III
Time series graphs of data 1990-1997
Sites 1-21

Order of the graphs per site:

Low and High Tide Salinity
Low and High Tide Dissolved Oxygen
Low Tide Water and Air Temperature
High Tide Water and Air Temperature
Low and High Tide pH
Low and High Tide Dissolved Oxygen Percent Saturation

Graphs for
Site 1 - 21
are oversize
and were not
scanned.

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