# ADEM

## TECHNICAL REPORT

# PORTERSVILLE BAY

# WATER QUALITY STUDY

# JUNE - SEPTEMBER, 1991

DECEMBER, 1991

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
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## Introduction

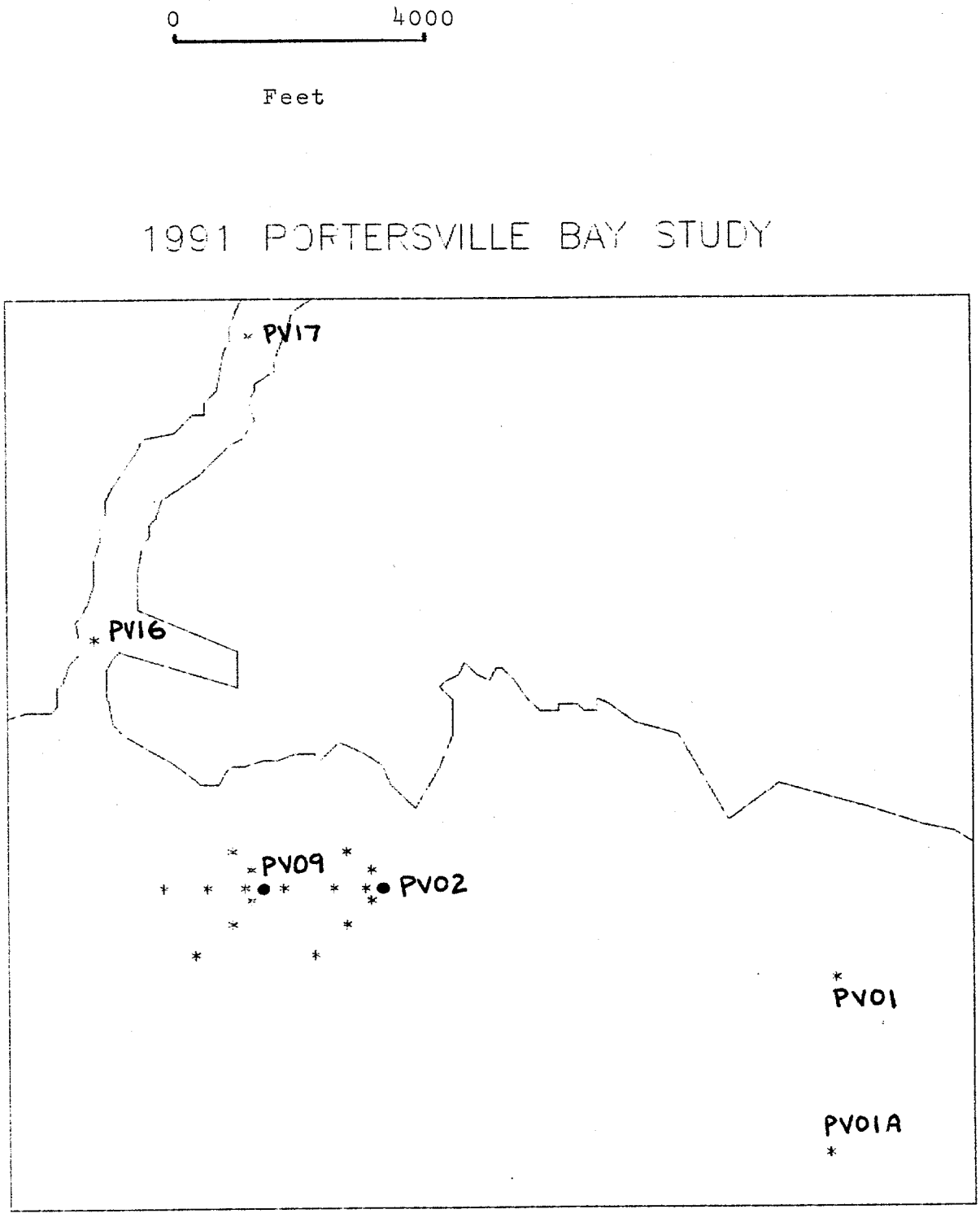
Personnel from the Mobile Branch Office, Field Operations Division, conducted water quality sampling in the vicinity of treated wastewater discharges to Portersville Bay and within lower Bayou La Batre. Sixteen locations were sampled once per month during the period June through September 1991 to characterize water quality in Bayou La Batre and Portersville Bay and to identify both the level and the areal extent of wastewater discharge influence. In addition, six additional locations were added in September to characterize water quality 400 feet from the discharge, an area that corresponds to ADEM's Discharge Information Zone regulations. Both Portersville Bay and Bayou La Batre are use classified within ADEM regulations as Fish and Wildlife. The conditions related to best usage of the waters are suitability for fish, aquatic life and wildlife propagation, including the propagation of shrimp and crabs.

The 1991 effort is a followup to work begun in 1987 and continued each year since. In 1987, background sampling was conducted to assess the water quality in both Portersville Bay and Bayou La Batre. At that time, seafood processing wastewaters were being discharged to Bayou La Batre and the Bayou La Batre Sewage Treatment Plant discharged treated wastewaters to Portersville Bay. In 1988, the seafood processors redirected their screened wastewater discharges to Portersville Bay via two discharge points.

## Sampling Collection and Methodology

A total of twenty-two sampling locations have been established for the 1991 study. The study area with sampling locations is illustrated in Figure 1., with a detailed illustration of the Portersville

Figure 1. 1991 Portersville Bay study sampling locations.

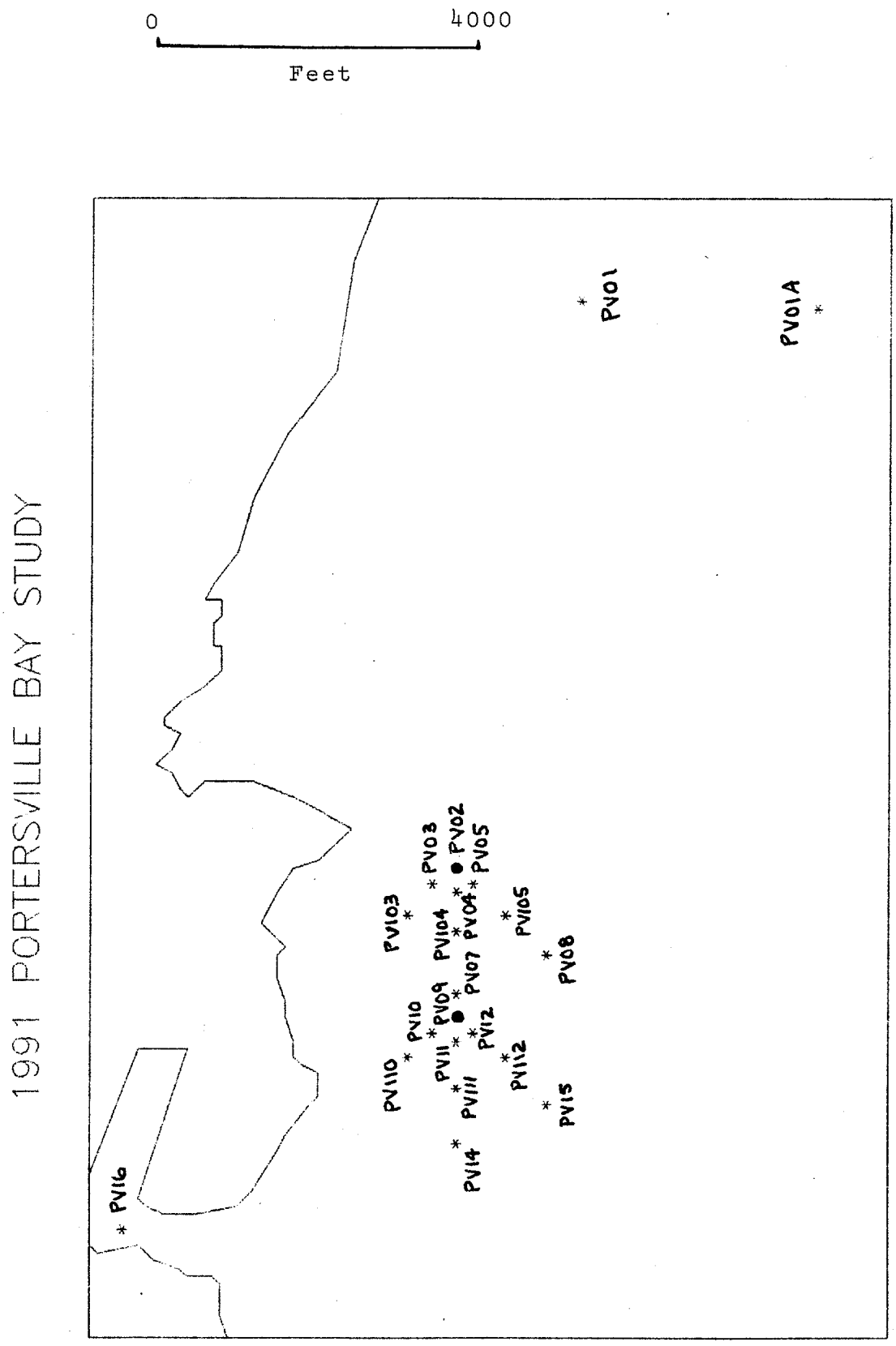


Bay sampling locations in Figure 2. Sampling locations are described as follows:

PV01 Approximately 3,500 ft. ESE of wastewater treatment facility (WWTF) discharge, north of navigation channel
PV01A Approximately 4,600 ft. SE of WWTF discharge, south of navigation channel
PV02 WWTF discharge point
PV03 150 ft. northwest of WWTF discharge
PV04 150 ft. west of WWTF discharge
PV05 150 ft. southwest of WWTF discharge
PV103 400 ft. northwest of WWTF discharge (Sept. only)
PV104 400 ft. west of WWTF discharge (Sept. only)
PV105 400 ft. southwest of WWTP discharge (Sept. only)
PV07 800 ft. west of WWTF discharge
PV08 800 ft. southwest of WWTF discharge
PV09 Seafood industries' discharge point (SFD)
PV10 150 ft. northwest of SFD discharge
PV11 150 ft. west of SFD discharge
PV12 150 ft. southwest of SFD discharge
PV110 400 ft. northwest of SFD discharge (Sept. only)
PV111 400 ft. west of SFD discharge (Sept. only)
PV112 400 ft. southwest of WWTF discharge (Sept. only)
PV14 800 ft. west of SFD discharge
PV15 800 ft. southwest of SFD discharge
PV16 Bayou La Batre, center of channel by channel marker, Red #16 (near mouth)
PV17 Approximately 0.5 miles upstream of mouth of Bayou La Batre, center of channel by Deep Sea Foods, Inc. and Steiner Shipyard

Water samples were collected June 24, July 25, August 29, and September 26, 1991. At each sampling location, vertical profiles of water temperature, dissolved oxygen, conductivity, and salinity were taken at 0.5 meter depth intervals or at surface, mid-depth, and bottom if water depth was less than 1 meter. In June and July, measurements were obtained using a Yellow Springs Instrument Model 33 Salinity-Conductivity-Temperature meter and Model 57 dissolved oxygen meter, along with an acceptable quality pH meter. Measurements in August and September were obtained using a Hydrolab Surveyor II, allowing for pH to be profiled during those two months. Also, approximate wind speed and wind direction are recorded and air temperature and secchi disk readings are reported.

Figure 2. Detail of 1991 Portersville Bay study sampling locations.



Surface water samples were taken at each sampling location and analyses conducted in the Mobile Branch Lab for the following parameters: $NH_3$-N, $NO_3$-N, $PO_4$-P, TKN, $BOD_5$, TSS, turbidity and fecal coliforms (at 6 stations only).

Sample collection procedures, chain-of-custody and in situ determinations were made in accordance with the Department's Standard Operating Procedures. Preservation and analyses were performed in accordance with Federal Register 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act, with the exception of $NH_3$-N, $NO_3$-N, TKN, and $PO_4$-P which were analyzed in accordance with methods specified in U.S. EPA 600/4-79-020, revised March 1983. A minimum of ten percent of the samples were collected in duplicate for quality control purposes and a minimum of ten percent of the analyses were conducted in duplicate for quality control purposes.

**Data Analysis**

Results of field determinations and laboratory analyses are presented in Table 1. The following discussion is based on the 1991 data, a comparison of 1991 and 1987 average concentrations, and isoline plots of these average concentrations generated by Surfer software. Surfer extropolates data values based on closest five known points. Averages referred to are arithmetic averages of data values at same depth/same location, during the study year.

**Dissolved Oxygen**

Mid-depth dissolved oxygen was greater than or equal to 5.0 mg/l at Portersville Bay sampling locations on 91% of all dates and times sampled in 1991. Five stations sampled August 29, 1991 experienced

D.O.'s between 4.07 mg/1 and 5.0 mg/1. The D.O. standard for Fish and Wildlife use classified waterbodies is 5.0 mg/1 except where natural phenomena cause the value to be depressed. Figures 3 and 4 illustrate average D.O. concentrations in Portersville Bay during 1991 and 1987, respectively. Generally D.O. concentrations are fairly consistent and high throughout Portersville Bay. On average, 1991 D.O.'s tend to rise to the west of the seafood outfall. All D.O. concentrations were determined in morning or mid-day. No night or early morning concentrations were determined.

No D.O. sags existed near the seafood outfall (PV09) during the dates and times sampled in 1991. In August, a D.O. sag of approximately 1.0 mg/1 existed at the STP outfall ( PV02, with a low of 4.45 mg/1) and extended west of the STP outfall. On that date, however, D.O.'s at and west of the seafood wastewater discharge exceeded 5.0 mg/1 at all stations but one.

1991 D.O. concentrations at 5 feet in Bayou La Batre ranged between a low of 2.12 mg/1 and a high of 6.60 mg/1. Average 5 feet depth D.O. concentration in 1991 (based on all four monthly sample concentrations) was 4.27 mg/1 at sampling location PV16 and 4.33 mg/1 at sampling location PV17. In contrast, the 1987 average 5 feet depth D.O. concentration at PV16 was 4.10 mg/1 and at PV17 was 1.08 mg/1. Based on the sample results for the days and times sampled, D.O. concentrations at 5 feet depth in Bayou La Batre have increased significantly between 1987 and 1991.

**$BOD_5$**

Figures 5 and 6 illustrate average surface $BOD_5$ in Portersville Bay during 1991 and 1987, respectively. Most obvious in 1991 is the

Figure 3. Contour interval = 0.5 mg/1
Maximum conc. = 6.65 mg/1
Minimum conc. = 4.26 mg/1

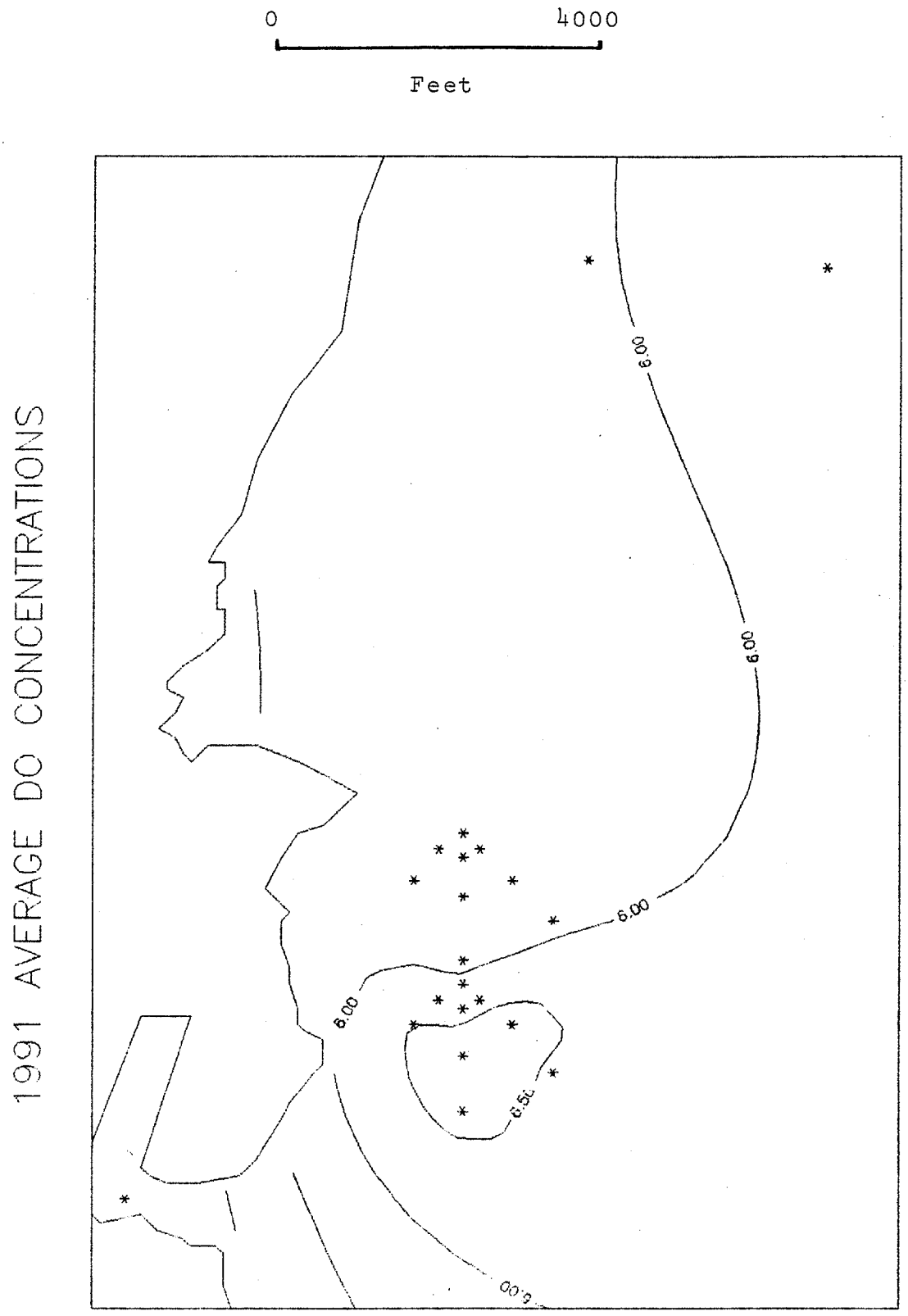


Figure 4. Contour interval = 0.5 mg/1
Maximum conc. = 8.18 mg/1
Minimum conc. = 4.1 mg/1

0 4000

Feet

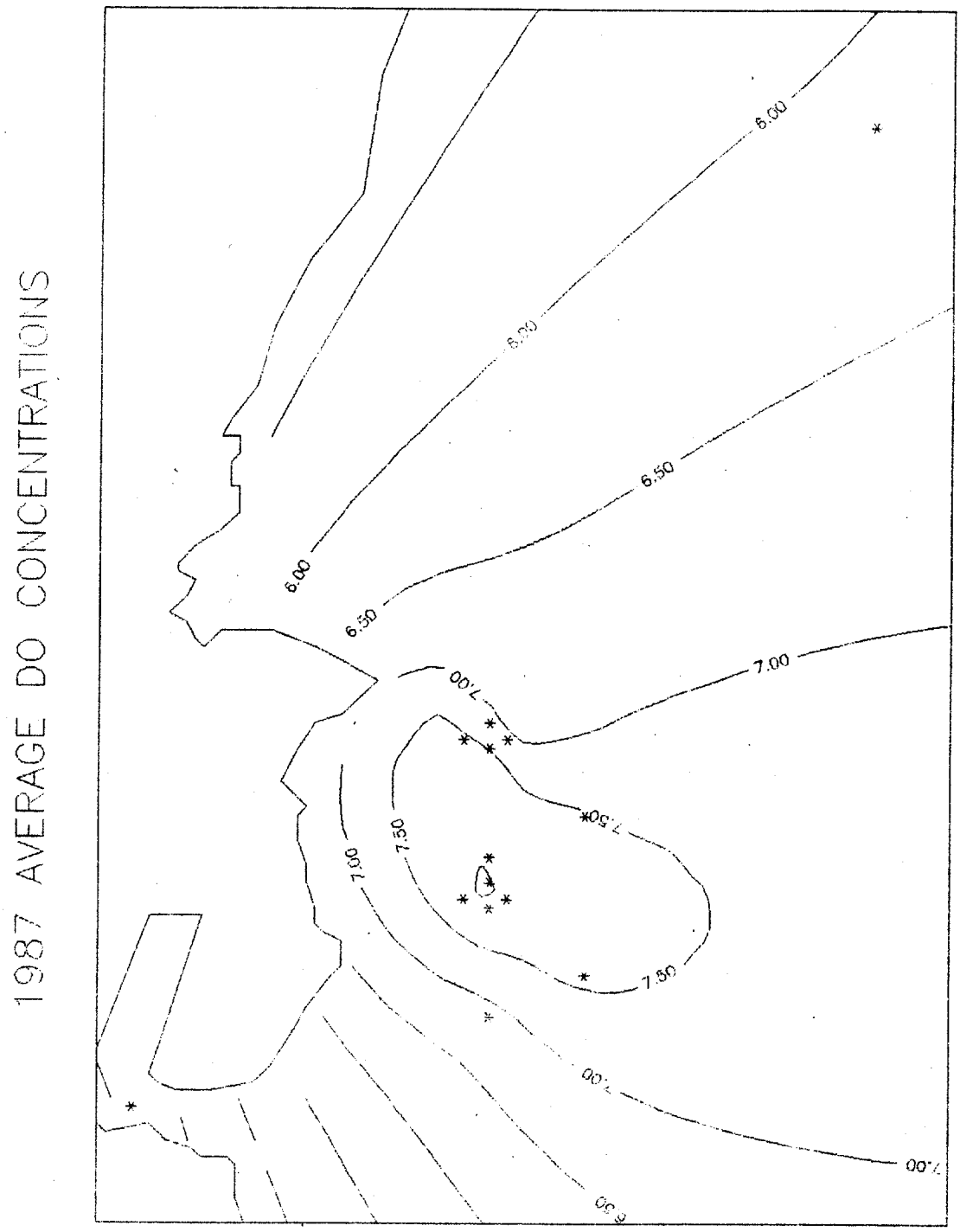


Figure 5. Contour interval = 10.0 mg/1
Maximum conc. = 90.78 mg/1
Minimum conc. = 2.63 mg/1



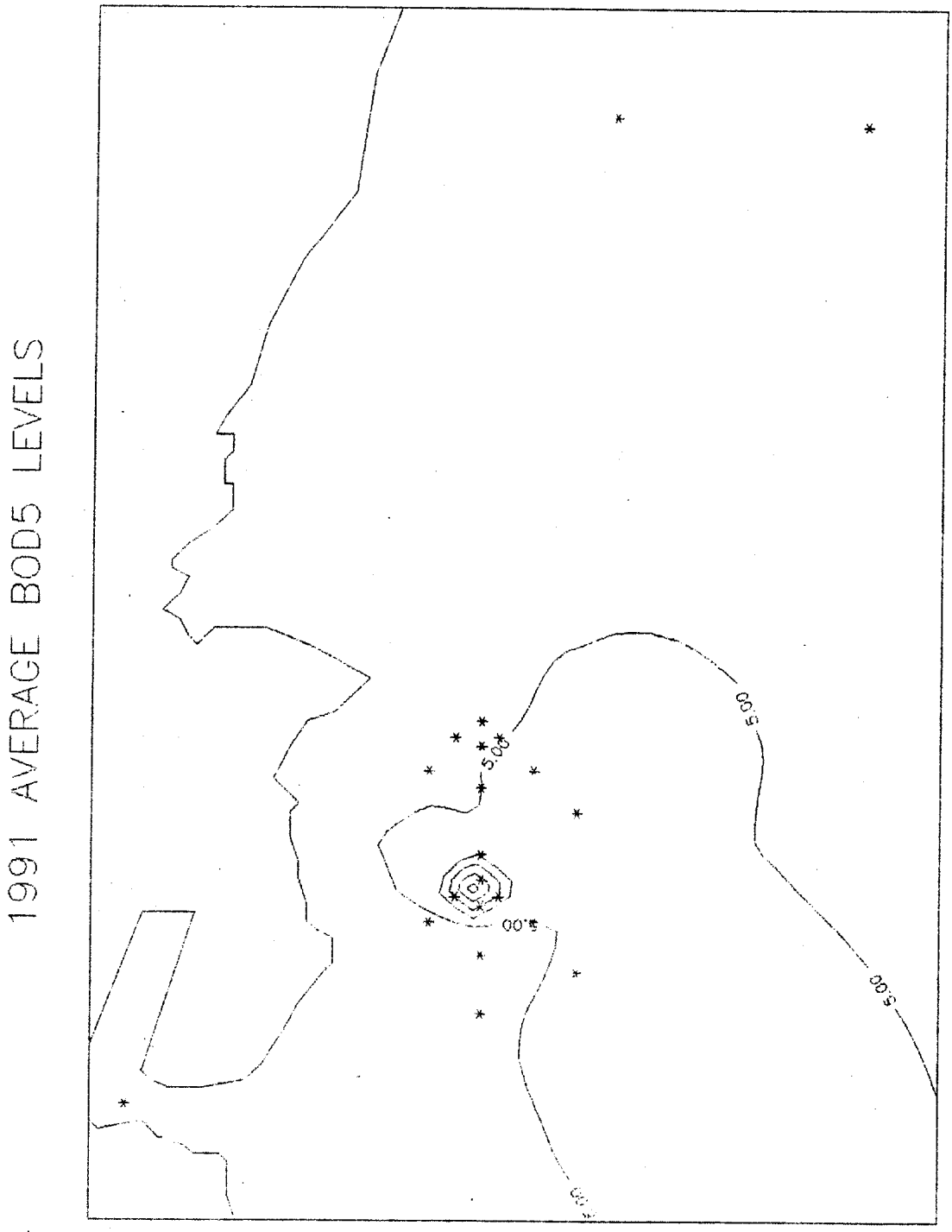
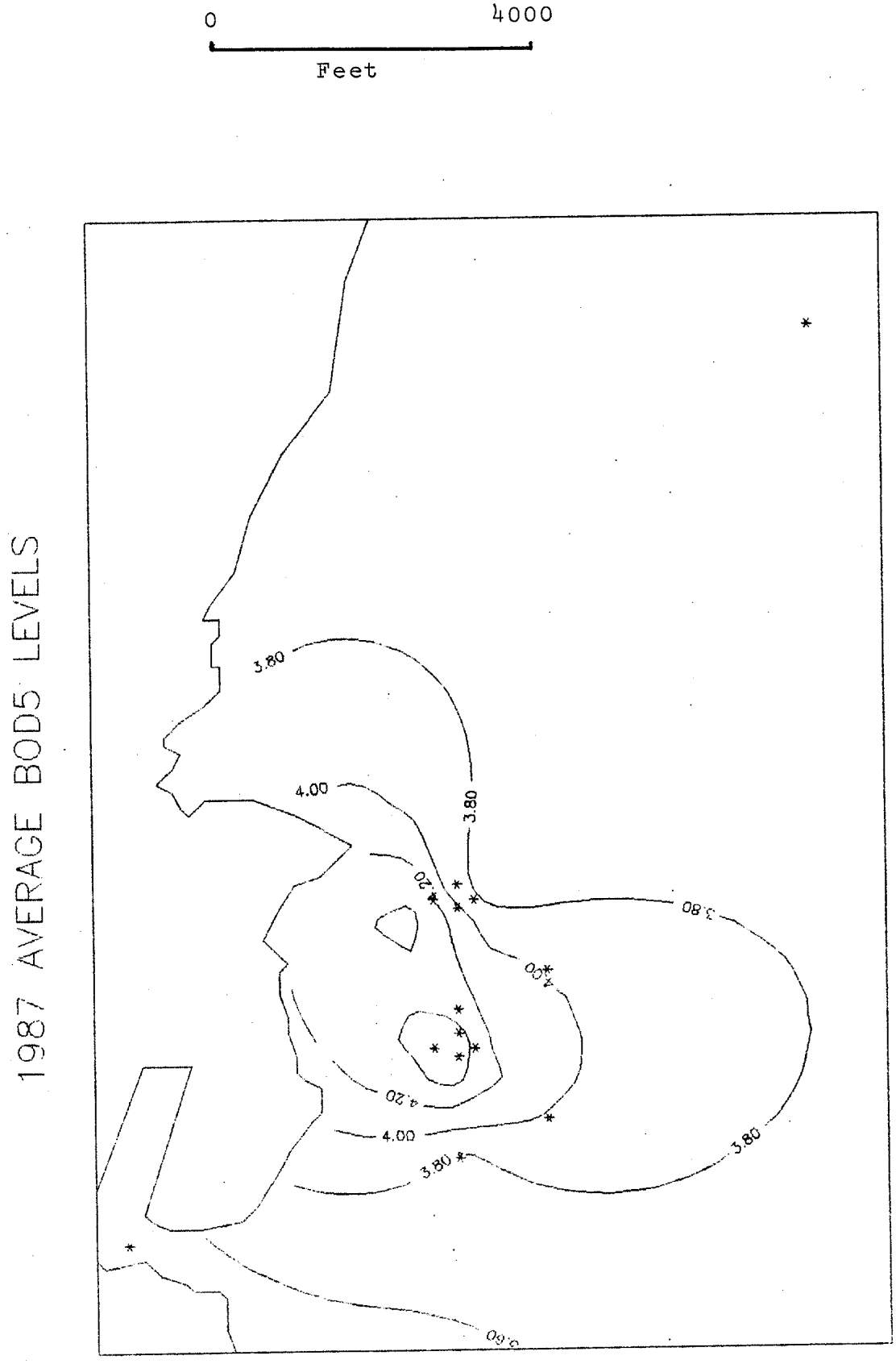


Figure 6. Contour interval = 0.2 mg/1
Maximum conc. = 4.75 mg/1
Minimum conc. = 3.50 mg/1



peak measurement at the seafood wastewater discharge represented by sampling location PV09. Peak measurements were 69.1 mg/l on June 24, 135 mg/l on July 25, 112 mg/l on August 29, and 47 mg/l on September 26. As was noted last year, surges of solids comprised of seafood parts were observed in the discharge. These 1991 $BOD_5$ measurements are in marked contrast to 1987 (pre-seafood wastewater discharge to Portersville Bay) $BOD_5$ measurements which never exceeded 6.0 mg/l in Portersville Bay on the dates and times sampled.

$BOD_5$ in Bayou La Batre ranged in the 1991 study from a low of 3.1 mg/l to a high of 6.6 mg/l. $BOD_5$ in Bayou La Batre when sampled in 1987 ranged from a low of less than 1.0 mg/l to a high of 5 mg/l. $BOD_5$ in Bayou La Batre is slightly higher in 1991 than in 1987.

**Nutrients**

$PO_4$-P

Figures 7 and 8 illustrate average phosphate concentrations in Portersville Bay for the dates and times sampled. As with $BOD_5$, $PO_4$-P peak concentrations in 1991 were in proximity to the seafood wastewater discharge (PV09) in Portersville Bay. A secondary and lower peak usually existed at the STP outfall (PV02) in 1991. Peak concentrations at the seafood outfall were 0.432 mg/l on June 24, 5.16 mg/l on July 25, 9.27 on August 29, and 0.728 mg/l on September 26. The variability in the peak concentrations noted above illustrates the wide range of discharge concentrations that can be anticipated. 1987 $PO_4$-P peak concentrations in Portersville Bay ranged from a low of $<0.05$ mg/l to 0.35 mg/l, obviously much lower than the 1991 peak concentrations.

Bayou La Batre concentrations in 1991 ranged between a low of 0.062 mg/l and a high of 0.094 mg/l. In 1987, $PO_4$-P concentrations

Figure 7. Contour interval = 0.5 mg/1
Maximum conc. = 3.90 mg/1
Minimum conc. = 0.05 mg/1

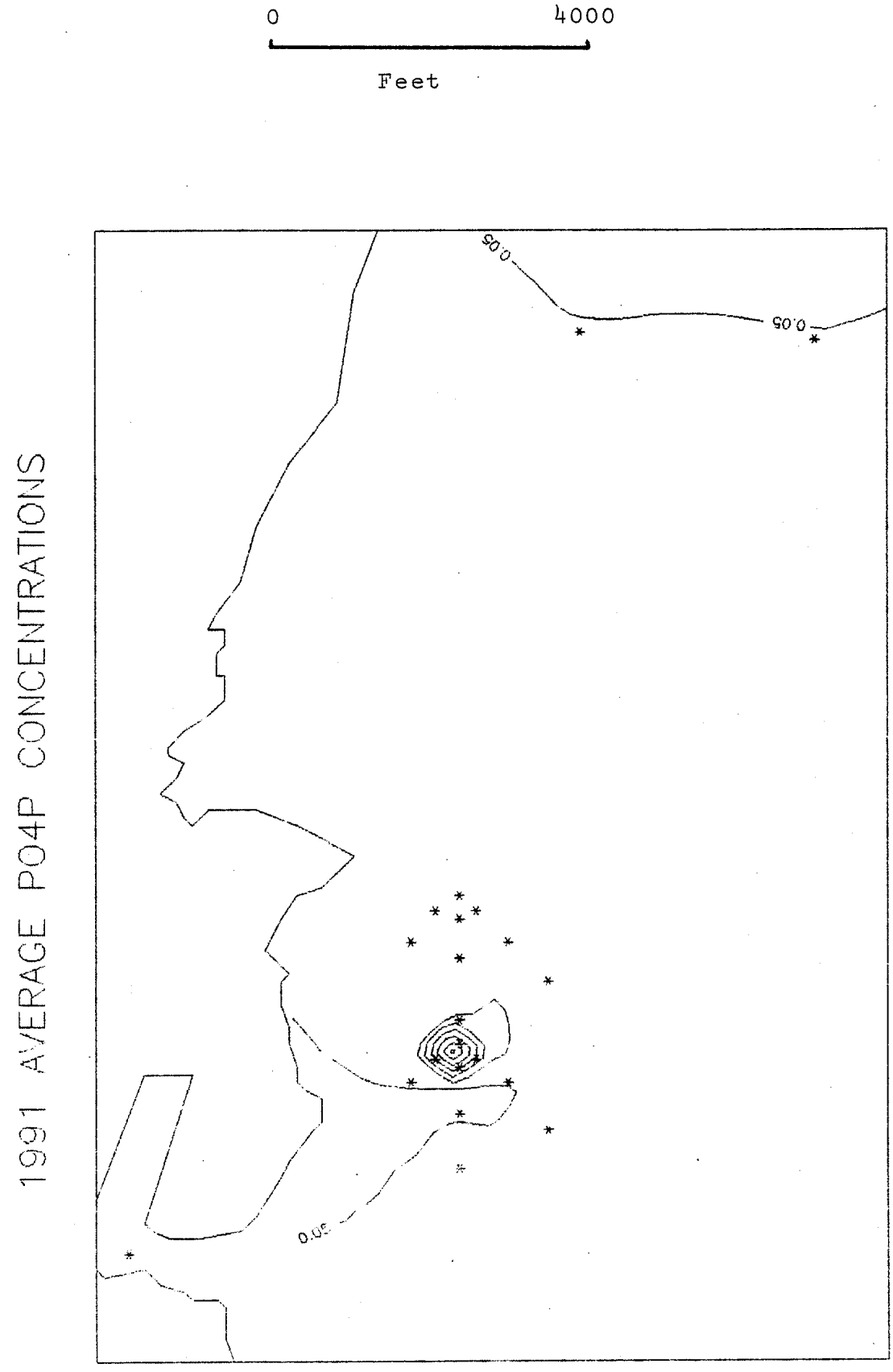
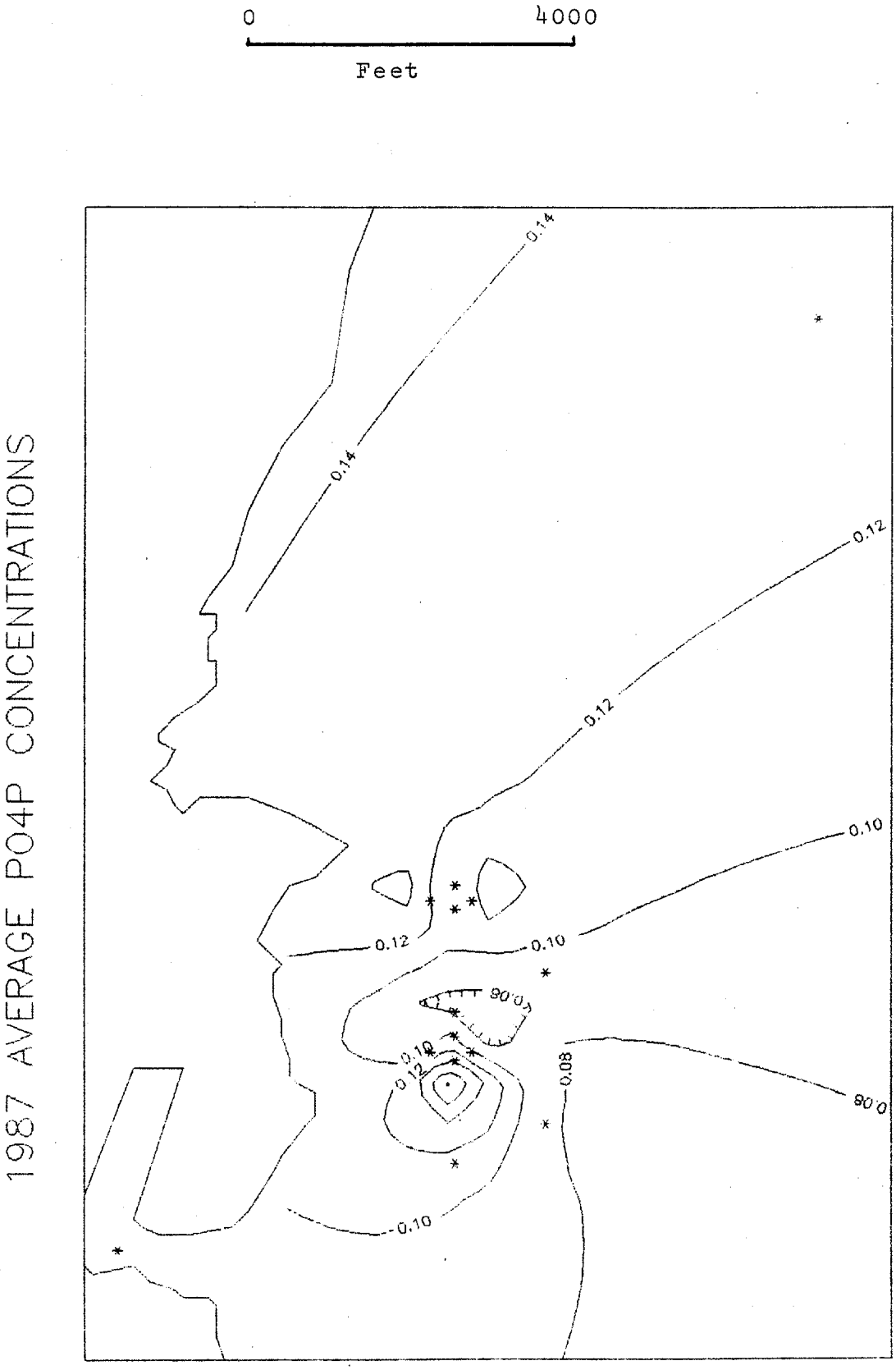


Figure 8. Contour interval = 0.02 mg/l
Maximum conc. = 0.25 mg/l
Minimum conc. = 0.07 mg/l



in Bayou La Batre ranged from a low of 0.06 mg/l to a high of 0.23 mg/l. Based on the sample results, $PO_4$-P concentrations in Bayou La Batre have decreased.

Nitrogen Series

Samples were taken for analysis of TKN, $NH_3$-N, and $NO_3N$. Generally, TKN concentration peaks were observed at the seafood wastewater outfall with secondary and much lower peaks observed at the STP outfall. The maximum 1991 TKN concentration in Portersville Bay was 21.88 mg/l, occurring at the seafood wastewater outfall on June 24. The maximum 1987 Portersville Bay TKN concentration was 1.5 mg/l. Figures 9 and 10 illustrate 1991 and 1987 average TKN concentrations in Portersville Bay on the dates and times sampled. Bayou La Batre maximum 1991 TKN concentration was 1.49 mg/l compared to 3 mg/l in 1987, indicating an improvement, but a comparison of average $PO_4$-P concentration during the two study periods indicates mixed results with no significant change.

$NH_3$-N concentrations also peaked at the seafood outfall. Maximum 1991 $NH_3$-N concentration in Portersville Bay was 3.18 mg/l, compared to a 1987 maximum concentration of 1 mg/l. $NH_3$-N maximum concentrations in Bayou La Batre were lower in 1991 than in 1987.

As in 1990, $NO_3$-N concentrations peaked at the STP outfall with no significant concentrations of $NO_3$-N measured at the seafood wastewater outfall.

**Fecal Coliform**

Fecal coliform samples were taken for the first time in 1990 at six sampling locations per sampling trip and this sampling was continued in 1991. In waterbodies having a Fish and Wildlife use classification, bacteria of the fecal coliform group shall not exceed a geometric mean

Figure 9. Contour interval = 1.0 mg/1
Maximum conc. = 10.50 mg/1
Minimum conc. = 0.47 mg/1

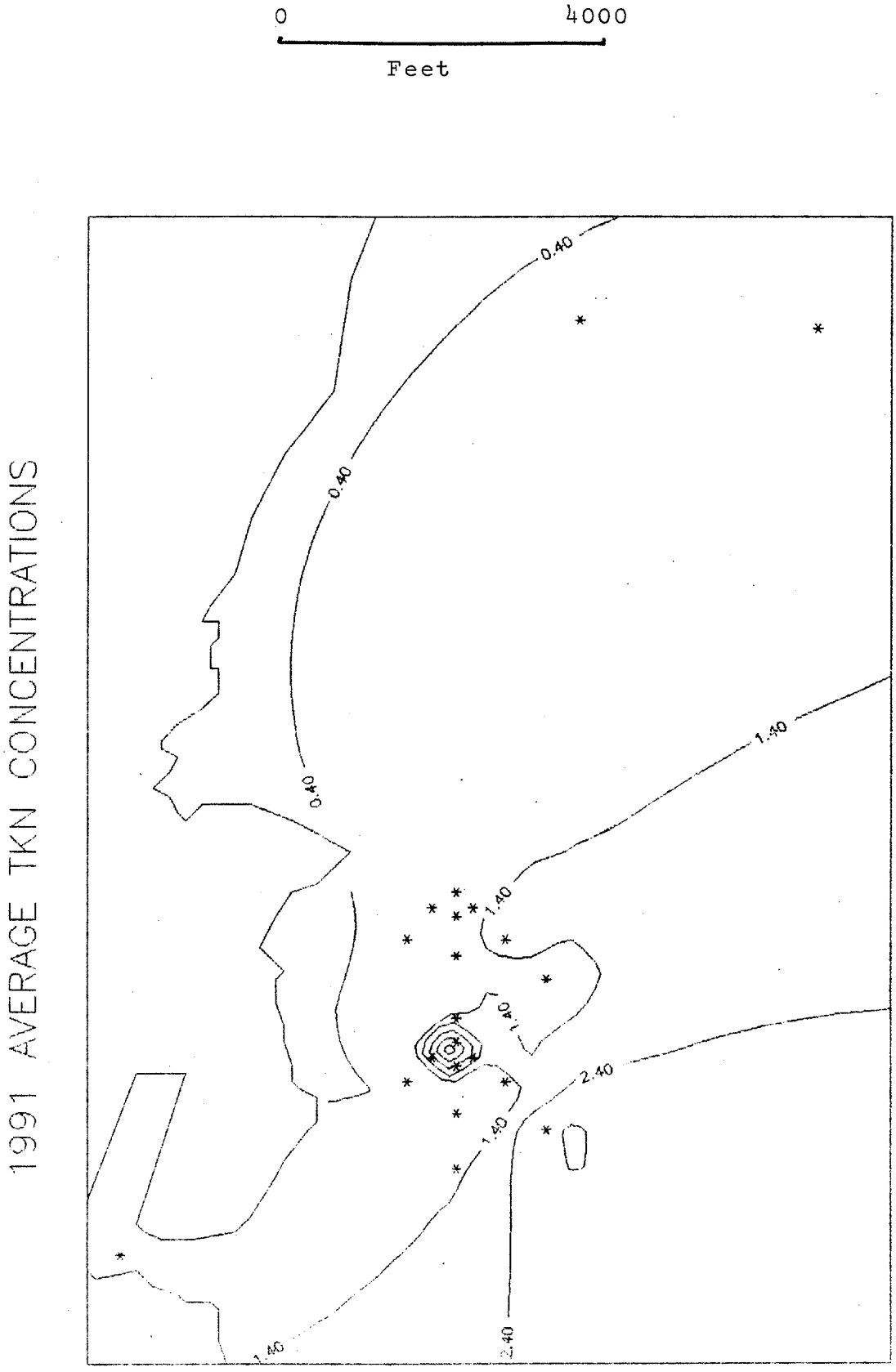
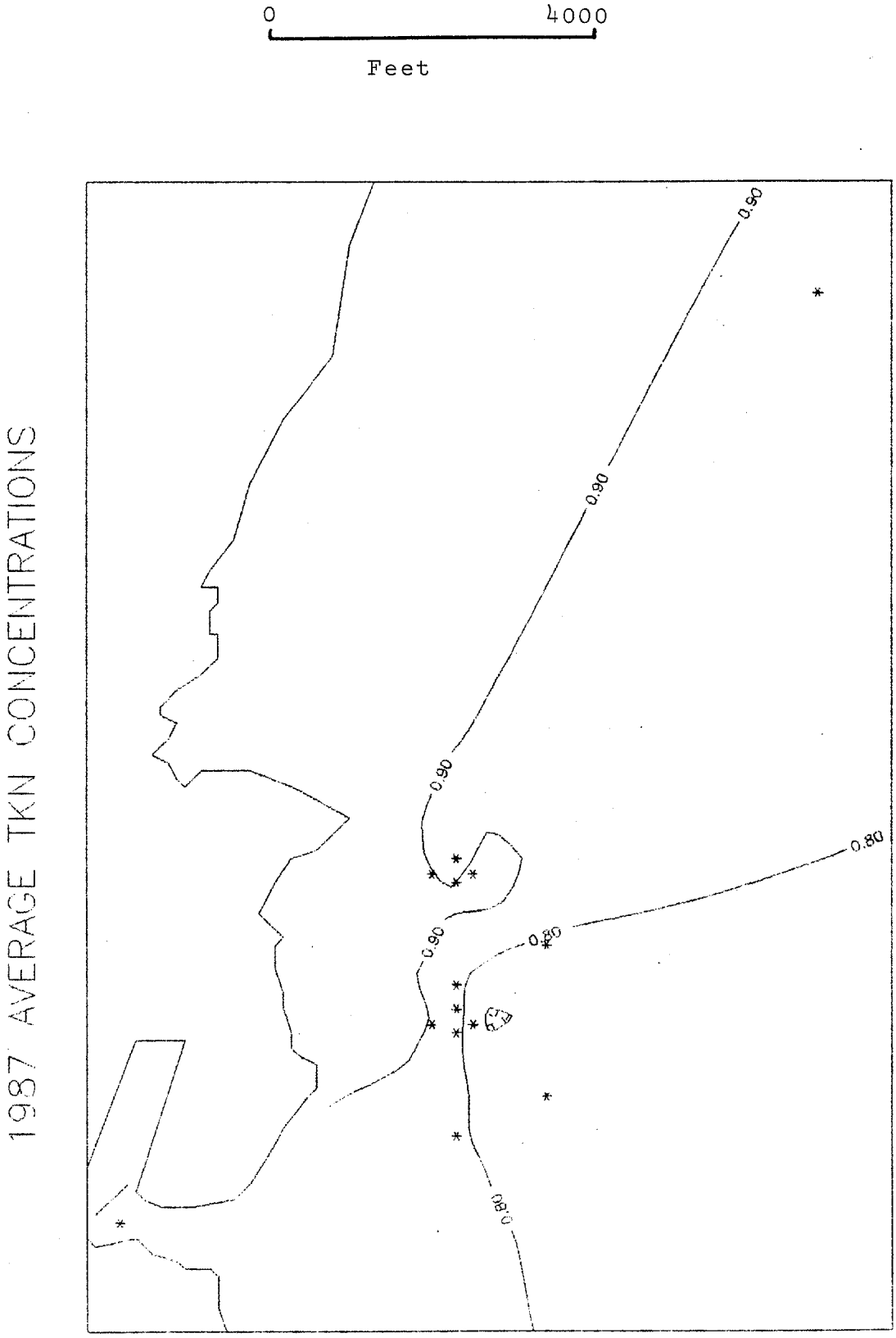


Figure 10. Contour interval = 0.1 mg/1
Maximum conc. = 1.00 mg/1
Minimum conc. = 0.65 mg/1



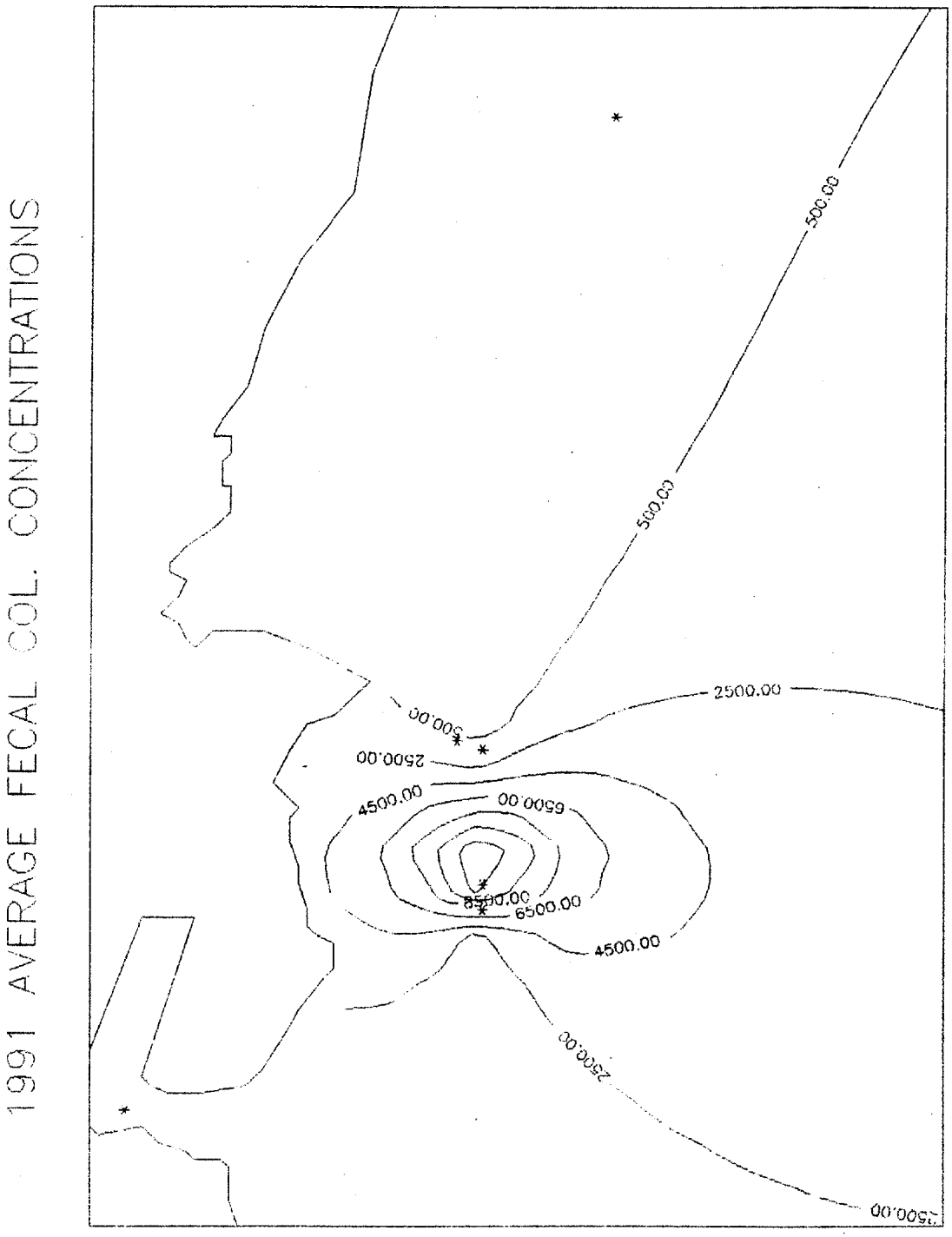
of 1000/100 ml on a monthly average value; nor exceed a maximum of 2000/100 ml in any sample. For incidental water contact and recreation during June through September, the bacterial quality of water is acceptable when a sanitary survey by the controlling health authorities reveals no source of dangerous pollution and when the geometric mean fecal coliform density does not exceed 100/100 ml in coastal waters. The maximum concentrations observed during 1991 were all at the Portersville Bay seafood outfall (PV09) at >1200 colonies/100 ml on June 24, 1991, >12000 colonies on July 25, >60,000 colonies on August 29, and 1600 colonies on September 26, indicating a significant commingling of untreated sewage with the seafood wastewater discharge. Average fecal coliform concentrations are illustrated in Figure 11. Fecal coliform concentrations at the seafood outfall far exceeded fecal coliform levels near the STP discharge (PV02). Fecal coliform levels in Bayou La Batre (as measured at station PV16) ranged from a minimum of 67 colonies to a high of 2100 colonies. 1991 fecal coliform concentrations in Bayou La Batre far exceeded 1990 concentrations.

**Summary**

The introduction of seafood wastewater discharges into Portersville Bay and removal of the discharges from Bayou La Batre has affected the water quality in both waterbodies. In Bayou La Batre, dissolved oxygen concentrations have increased significantly. However, Bayou La Batre still does not meet the water quality standard of 5.0 mg/l for D.O. at all times. $BOD_5$ concentrations have increased slightly in Bayou La Batre. $NH_3$ and TKN concentrations have been reduced, presumably due to some extent to the removal of seafood wastewater discharges. $NO_3$-N levels do not appear to be dependent on the presence or lack of seafood wastewater discharges. $PO_4$-P results were mixed

Figure 11. Contour interval = 2000 col/ 100 ml
Maximum conc. =18,700 col/ 100 ml
Minimum conc. = 42 col/ 100 ml

0 4000
Feet



and a trend is not obvious. Fecal coliform concentrations did not meet standards in Bayou La Batre.

Portersville Bay's water quality has changed also, especially in close proximity to the seafood wastewater outfall. Concentrations of $BOD_5$, $PO_4$-P, TKN, $NH_3$-N, and fecal coliform peaked at the wastewater outfall. Surges of solids comprised of seafood parts issue frequently from the seafood wastewater outfall and for this reason more effective screening of the wastewater is again recommended. Concentrations of these parameters are much higher in 1991 than in 1987 when seafood wastewater was not discharged to Portersville Bay. Dissolved oxygen levels tended to be high throughout the study period and exceeded standards 91% of the times sampled. No sags were noted in proximity to the seafood wastewater outfall and one sag was noted at the STP outfall in August. The lowest D.O. concentration measured in Portersville Bay was 4.07 mg/1. All sampling and field readings were taken in morning or mid-day so it is not known if the frequently high D.O. concentrations reported are representative of other times of day or night.

Fecal coliform concentrations were exceedingly high in proximity to the seafood wastewater outfall. For this reason, it is recommended that steps be taken to determine where untreated sewage is introduced to the seafood wastestream.

TABLE 1. 1991 PORTERSVILLE BAY WATER QUALITY DATA.

STATION: PV01 DATE: 062491 TIME: 1150

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 33.0 | 32.0 | 7.10 | 8.10 | 21300 | 11.4 | | <0.01 | <0.005 | 0.037 | 0.310 | 1.5 | 6 | 5.9 | 55 |
| 0.5 | | 31.2 | 7.10 | | 21100 | 11.2 | | | | | | | | | |
| 1.0 | | 31.0 | 7.20 | | 21000 | 11.1 | 0.8 | | | | | | | | |
| 1.5 | | 30.2 | 7.20 | | 20900 | 11.1 | | | | | | | | | |
| 2.0 | | 29.8 | 6.70 | | 20900 | 11.1 | | | | | | | | | |

STATION: PV01A DATE: 062491 TIME: 1206

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 31.0 | 31.0 | 7.00 | 8.00 | 21300 | 11.5 | | <0.01 | <0.005 | 0.041 | 0.610 | 2.0 | 8 | 6.9 | |
| 0.5 | | 31.0 | 7.00 | | 21100 | 11.4 | | | | | | | | | |
| 1.0 | | 30.5 | 6.90 | | 20900 | 11.3 | 0.8 | | | | | | | | |
| 1.5 | | 30.0 | 6.70 | | 20800 | 11.1 | | | | | | | | | |
| 2.0 | | 29.5 | 6.30 | | 20800 | 11.1 | | | | | | | | | |
| 2.5 | | 28.8 | 6.20 | | 20800 | 11.1 | | | | | | | | | |

STATION: PV02 DATE: 062491 TIME: 1216

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 32.0 | 30.8 | 7.20 | 8.10 | 21200 | 12.1 | | <0.01 | 0.006 | 0.020 | 0.260 | 2.0 | 7 | 6.8 | |
| 0.5 | | 31.0 | 7.20 | | 21200 | 12.0 | | | | | | | | | |
| 1.0 | | 31.2 | 7.20 | | 21200 | 12.0 | 0.8 | | | | | | | | |
| 1.5 | | 31.2 | 7.50 | | 21100 | 12.0 | | | | | | | | | |
| 1.9 | | 30.2 | 6.70 | | 21100 | 12.0 | | | | | | | | | |

STATION: PV03 DATE: 062491 TIME: 1223

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 30.0 | 31.0 | 7.30 | 8.10 | 21500 | 12.1 | | <0.01 | <0.005 | 0.039 | 0.470 | 2.0 | 4 | 6.9 | 14 |
| 0.5 | | 31.5 | 7.40 | | 21400 | 12.1 | | | | | | | | | |
| 1.0 | | 31.7 | 7.50 | | 21400 | 11.9 | 0.8 | | | | | | | | |

STATION: PV04 DATE: 062491 TIME: 1230

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 30.0 | 30.8 | 7.20 | 8.10 | 21000 | 11.9 | | <0.01 | 0.227 | 0.103 | 0.520 | 2.1 | 7 | 7.6 | 138 |
| 0.5 | | 31.1 | 7.20 | | 21100 | 12.0 | | | | | | | | | |
| 0.8 | | 31.1 | 7.30 | | 21300 | 12.1 | | | | | | | | | |
| 1.0 | | 31.5 | 7.30 | | 21200 | 12.0 | 1.0 | | | | | | | | |
| 1.5 | | 31.2 | 7.30 | | 21100 | 12.0 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV05 DATE:062491 TIME: 1240

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 30.8 | 7.10 | 8.10 | 21400 | 12.1 | | <0.01 | <0.005 | 0.025 | 2.110 | 1.6 | 8 | 6.9 | |
| 0.5 | | 31.3 | 7.10 | | 21400 | 12.1 | | | | | | | | | |
| 1.0 | | 31.2 | 7.30 | | 21200 | 12.0 | 0.9 | | | | | | | | |
| 1.5 | | 31.2 | 7.50 | | 21200 | 12.0 | | | | | | | | | |
| 1.8 | | 30.5 | 7.20 | | 21200 | 12.0 | | | | | | | | | |

STATION: PV07 DATE: 062491 TIME: 1249

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 31.1 | 7.20 | 8.10 | 21400 | 12.0 | | <0.01 | 0.253 | 0.102 | 0.710 | 1.8 | 8 | 7.0 | |
| 0.5 | | 31.1 | 7.30 | | 21400 | 12.1 | 0.7 | | | | | | | | |
| 1.0 | | 31.2 | 7.40 | | 21400 | 12.1 | | | | | | | | | |

STATION: PV08 DATE: 062491 TIME: 1256

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 30.0 | 30.8 | 7.20 | 8.10 | 21200 | 12.1 | | <0.01 | 0.036 | 0.027 | 1.120 | 1.9 | 8 | 6.3 | |
| 0.5 | | 31.0 | 7.30 | | 21300 | 12.1 | | | | | | | | | |
| 1.0 | | 31.0 | 7.70 | | 21200 | 12.0 | 0.9 | | | | | | | | |
| 1.5 | | 30.8 | 7.60 | | 21100 | 12.0 | | | | | | | | | |
| 2.0 | | 30.0 | 7.00 | | 21100 | 11.9 | | | | | | | | | |

STATION: PV09 DATE: 062491 TIME: 1309

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 30.0 | 30.6 | 7.40 | 7.30 | 21500 | 12.1 | 0.2 | 3.180 | 0.015 | 0.432 | 21.880 | >69 | 82 | 41.0 | >1200 |
| 0.5 | | 31.5 | 7.50 | | 21300 | 12.1 | | | | | | | | | |
| 0.6 | | 31.4 | 7.50 | | 21400 | 12.1 | | | | | | | | | |
| 1.0 | | 31.5 | 7.50 | | 21300 | 12.1 | | | | | | | | | |
| 1.2 | | 31.3 | 7.40 | | 21400 | 12.1 | | | | | | | | | |

STATION: PV10 DATE: 062491 TIME: 1318

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 31.8 | 7.80 | 8.20 | 21500 | 12.1 | | <0.01 | <0.005 | <0.005 | 0.570 | 1.9 | 10 | 8.5 | |
| 0.3 | | 31.8 | 7.90 | | 21400 | 12.1 | | | | | | | | | |
| 0.5 | | 31.8 | 7.90 | | 21500 | 12.2 | 0.5 | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV11 DATE: 062491 TIME: 1325

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 30.5 | 7.70 | 7.80 | 21100 | 11.9 | | 0.900 | 0.011 | 0.929 | 5.220 | >10 | 33 | 17.4 | >120 |
| 0.5 | | 31.5 | 7.80 | | 21000 | 11.9 | 0.4 | | | | | | | | |
| 1.1 | | 31.0 | 7.70 | | 21100 | 12.0 | | | | | | | | | |

STATION: PV12 DATE: 062491 TIME: 1335

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 30.2 | 8.00 | 8.20 | 20800 | 11.8 | | <0.01 | <0.005 | 0.006 | 0.480 | 2.9 | 4 | 7.3 | |
| 0.5 | | 31.2 | 8.00 | | 20600 | 11.7 | | | | | | | | | |
| 0.6 | | 31.5 | 8.00 | | 20700 | 11.8 | 0.8 | | | | | | | | |
| 1.0 | | 31.4 | 7.90 | | 20900 | 11.9 | | | | | | | | | |
| 1.2 | | 31.3 | 7.80 | | 21000 | 11.9 | | | | | | | | | |

STATION: PV14 DATE: 062491 TIME: 1350

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 30.5 | 7.60 | 8.20 | 20300 | 11.5 | | 0.160 | 0.104 | 0.160 | 1.850 | 8.3 | 20 | 11.1 | |
| 0.4 | | 31.2 | 7.70 | | 20200 | 11.3 | | | | | | | | | |
| 0.5 | | 31.2 | 7.90 | | 20600 | 11.7 | 0.6 | | | | | | | | |
| 0.8 | | 31.5 | 8.00 | | 20800 | 11.8 | | | | | | | | | |

STATION: PV15 DATE: 062491 TIME: 1357

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 30.5 | 8.20 | 8.30 | 20400 | 11.5 | | <0.01 | 0.052 | 0.046 | 0.620 | 3.0 | 7 | 7.8 | |
| 0.5 | | 31.2 | 8.20 | | 20400 | 11.6 | | | | | | | | | |
| 1.0 | | 31.2 | 8.10 | | 20600 | 11.7 | 0.8 | | | | | | | | |

STATION: PV16 DATE: 062491 TIME: 1411

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 30.0 | 29.0 | 4.90 | 6.80 | 11300 | 6.2 | | 0.120 | 0.053 | 0.067 | 1.230 | 3.6 | 8 | 12.3 | >600 |
| 0.5 | | 29.2 | 4.60 | | 11400 | 6.3 | 0.5 | | | | | | | | |
| 1.0 | | 29.0 | 4.10 | | 11800 | 6.4 | | | | | | | | | |
| 1.5 | | 28.6 | 4.00 | | 12300 | 6.8 | | | | | | | | | |
| 2.0 | | 28.7 | 3.90 | | 14100 | 6.8 | | | | | | | | | |
| 2.5 | | 28.7 | 4.10 | | 14800 | 8.1 | | | | | | | | | |
| 3.0 | | 28.6 | 4.20 | | 15900 | 8.9 | | | | | | | | | |
| 3.5 | | 28.6 | 4.60 | | 18100 | 10.2 | | | | | | | | | |
| 4.0 | | 28.8 | 4.80 | | 19000 | 10.6 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV17 DATE: 062491 TIME: 1427

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 29.4 | 4.70 | 6.70 | 10000 | 5.4 | | 0.160 | 0.052 | 0.080 | 1.490 | 3.6 | 12 | 14.6 | |
| 0.5 | | 29.5 | 4.60 | | 10000 | 5.4 | 0.5 | | | | | | | | |
| 1.0 | | 29.2 | 4.10 | | 10500 | 5.9 | | | | | | | | | |
| 1.5 | | 29.0 | 3.60 | | 10700 | 5.9 | | | | | | | | | |
| 2.0 | | 28.4 | 3.50 | | 13100 | 6.0 | | | | | | | | | |
| 2.5 | | 28.3 | 3.70 | | 14000 | 7.8 | | | | | | | | | |
| 3.0 | | 28.6 | 3.90 | | 15700 | 8.6 | | | | | | | | | |
| 3.5 | | 28.8 | 3.80 | | 18300 | 10.0 | | | | | | | | | |

STATION: PV01 DATE: 072591 TIME: 1014

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 29.8 | 5.90 | 8.20 | 33800 | 19.6 | | <0.01 | <0.005 | 0.060 | 0.430 | 2.1 | 19 | 12.6 | 11 |
| 0.5 | | 29.8 | 5.90 | | 33500 | 19.4 | | | | | | | | | |
| 1.0 | | 29.8 | 5.90 | | 33500 | 19.4 | 0.7 | | | | | | | | |
| 1.5 | | 29.8 | 5.90 | | 33500 | 19.4 | | | | | | | | | |
| 2.0 | | 29.8 | 5.90 | | 33500 | 19.4 | | | | | | | | | |
| 2.3 | | 29.8 | 5.90 | | 33500 | 19.4 | | | | | | | | | |

STATION: PV01A DATE: 072591 TIME: 0951

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 29.0 | 5.70 | 8.10 | 33200 | 20.0 | | <0.01 | <0.005 | 0.071 | 0.390 | 1.4 | 28 | 14.9 | |
| 0.5 | | 29.3 | 5.60 | | 33200 | 19.2 | 0.5 | | | | | | | | |
| 1.0 | | 29.3 | 5.60 | | 33200 | 19.2 | | | | | | | | | |
| 1.5 | | 29.1 | 5.60 | | 33200 | 19.1 | | | | | | | | | |
| 2.0 | | 29.2 | 5.60 | | 31900 | 18.5 | | | | | | | | | |

STATION: PV02 DATE: 072591 TIME: 1036

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.4 | 6.00 | 8.30 | 32600 | 18.8 | | <0.01 | 1.840 | 0.362 | 1.260 | 3.4 | 16 | 9.2 | |
| 0.5 | | 29.4 | 5.90 | | 32200 | 18.6 | | | | | | | | | |
| 1.0 | | 29.4 | 5.80 | | 32200 | 18.9 | 1.0 | | | | | | | | |
| 1.5 | | 29.4 | 5.60 | | 33500 | 19.4 | | | | | | | | | |
| 2.0 | | 29.6 | 5.60 | | 33200 | 19.4 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV03 DATE: 072591 TIME: 1047

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 30.0 | 6.40 | 8.30 | 32000 | 18.7 | | <0.01 | <0.005 | 0.059 | 0.490 | 3.8 | 21 | 10.9 | 12 |
| 0.4 | | 29.5 | 6.50 | | 32300 | 18.9 | | | | | | | | | |
| 0.5 | | 29.5 | 6.50 | | 32300 | 18.8 | | | | | | | | | |
| 0.8 | | 29.5 | 6.50 | | 32300 | 18.8 | 0.8 | | | | | | | | |

STATION: PV04 DATE: 072591 TIME: 1056

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 29.4 | 6.10 | 8.30 | 32800 | 18.8 | | <0.01 | <0.005 | 0.062 | 0.490 | 1.1 | 17 | 8.0 | 6 |
| 0.5 | | 29.5 | 6.00 | | 33000 | 19.2 | | | | | | | | | |
| 1.0 | | 29.6 | 5.90 | | 33100 | 19.1 | 0.8 | | | | | | | | |
| 1.5 | | 29.7 | 5.60 | | 34000 | 19.7 | | | | | | | | | |

STATION: PV05 DATE: 072591 TIME: 1104

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.4 | 6.40 | 8.30 | 33000 | 19.1 | | <0.01 | <0.005 | 0.058 | 0.910 | 3.1 | 16 | 8.9 | |
| 0.5 | | 29.4 | 6.40 | | 33000 | 19.1 | 0.7 | | | | | | | | |
| 1.0 | | 29.4 | 6.20 | | 33100 | 19.1 | | | | | | | | | |
| 1.5 | | 29.4 | 6.00 | | 33700 | 19.6 | | | | | | | | | |
| 2.0 | | 29.8 | 6.00 | | 33900 | 19.8 | | | | | | | | | |

STATION: PV07 DATE: 072591 TIME: 1114

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.4 | 6.40 | 8.30 | 32900 | 19.2 | | | | | | | | | |
| 0.5 | | 29.5 | 6.50 | | 32700 | 19.0 | 0.7 | <0.01 | <0.005 | 0.057 | 0.670 | 3.8 | 15 | 6.9 | |
| 1.0 | | 29.5 | 5.80 | | 33700 | 19.1 | | | | | | | | | |

STATION: PV08 DATE: 072591 TIME: 1122

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 29.2 | 6.00 | 8.30 | 33100 | 19.1 | | <0.01 | <0.005 | 0.107 | 0.850 | 5.2 | 14 | 9.0 | |
| 0.5 | | 29.9 | 6.00 | | 33100 | 19.1 | 0.7 | | | | | | | | |
| 1.0 | | 29.8 | 6.00 | | 33200 | 19.2 | | | | | | | | | |
| 1.5 | | 29.8 | 6.00 | | 33200 | 19.3 | | | | | | | | | |
| 2.0 | | 29.8 | 5.70 | | 33800 | 19.6 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV09 DATE: 072591 TIME: 1131

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.2 | 6.70 | 7.50 | 31100 | 17.6 | | 2.390 | 0.017 | 5.160 | 12.760 | 135.0 | 70 | 33.0 | >12000 |
| 0.5 | | 29.3 | 5.50 | | 32100 | 18.4 | 0.5 | | | | | | | | |
| 1.0 | | 29.8 | 5.40 | | 33600 | 19.4 | | | | | | | | | |

STATION: PV10 DATE: 072591 TIME: 1139

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.4 | 5.90 | 8.30 | 32800 | 18.9 | | <0.01 | <0.005 | 0.056 | 0.340 | 3.1 | 21 | 11.1 | |
| 0.5 | | 29.8 | 6.00 | | 32700 | 18.9 | | | | | | | | | |
| 0.9 | | 29.7 | 5.90 | | 32800 | 19.2 | 0.7 | | | | | | | | |

STATION: PV11 DATE: 072591 TIME: 1147

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 29.2 | 5.00 | 8.20 | 32500 | 18.9 | | 0.130 | <0.005 | 0.291 | 1.280 | 8.4 | 23 | 12.4 | 580 |
| 0.5 | | 29.8 | 5.20 | | 32900 | 19.1 | 0.6 | | | | | | | | |
| 1.0 | | 29.8 | 5.20 | | 32900 | 19.1 | | | | | | | | | |

STATION: PV12 DATE: 072591 TIME: 1155

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.8 | 5.50 | 8.30 | 32800 | 18.9 | | 0.140 | <0.005 | 0.319 | 2.230 | 10.2 | 22 | 10.3 | |
| 0.5 | | 29.9 | 5.50 | | 32600 | 18.9 | 0.7 | | | | | | | | |
| 1.0 | | 29.8 | 5.00 | | 33100 | 19.2 | | | | | | | | | |

STATION: PV14 DATE: 072591 TIME: 1203

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.6 | 5.90 | 8.30 | 32900 | 19.1 | | <0.01 | <0.005 | 0.065 | 1.310 | 3.2 | 12 | 7.3 | |
| 0.5 | | 29.9 | 5.90 | | 32800 | 19.1 | 0.6 | | | | | | | | |
| 0.9 | | 29.9 | 6.00 | | 33000 | 19.1 | | | | | | | | | |

STATION: PV15 DATE: 072591 TIME: 1211

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 29.8 | 5.30 | 8.30 | 32900 | 19.1 | | | | | | | | | |
| 0.5 | | 30.0 | 5.30 | | 32900 | 19.1 | 0.6 | 0.150 | <0.005 | 0.360 | 12.380 | 10.4 | 14 | 12.7 | |
| 1.0 | | 30.0 | 5.40 | | 33100 | 19.1 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV16 DATE: 072591 TIME: 1247

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 31.0 | 31.0 | 6.30 | 8.30 | 30200 | 17.0 | | <0.01 | <0.005 | 0.066 | 0.990 | 3.1 | 16 | 6.1 | 67 |
| 0.5 | | | 6.10 | | | | | | | | | | | | |
| 1.0 | | | 5.50 | | | | 0.8 | | | | | | | | |
| 1.5 | | | 5.10 | | | | | | | | | | | | |
| 2.0 | | | 4.80 | | | | | | | | | | | | |
| 2.5 | | | 4.80 | | | | | | | | | | | | |
| 3.0 | | | 4.40 | | | | | | | | | | | | |
| 3.5 | | | 4.00 | | | | | | | | | | | | |
| 4.0 | | | 3.70 | | | | | | | | | | | | |
| 4.5 | | | 3.70 | | | | | | | | | | | | |

STATION: PV17 DATE: 072591 TIME: 1232

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 30.0 | 30.0 | 7.80 | 8.40 | 29000 | 16.2 | | <0.01 | <0.005 | 0.062 | 0.450 | 6.6 | 13 | 6.3 | |
| 0.5 | | 30.2 | 7.30 | | 29200 | 16.5 | 0.7 | | | | | | | | |
| 1.0 | | 30.3 | 6.70 | | 29300 | 16.5 | | | | | | | | | |
| 1.5 | | 30.3 | 6.60 | | 29400 | 16.6 | | | | | | | | | |
| 2.0 | | 30.3 | 5.70 | | 30300 | 17.0 | | | | | | | | | |
| 2.5 | | 30.3 | 4.80 | | 31000 | 17.6 | | | | | | | | | |
| 3.0 | | 30.3 | 4.50 | | 31800 | 17.9 | | | | | | | | | |
| 3.5 | | 30.1 | 4.20 | | 32200 | 18.4 | | | | | | | | | |
| 3.8 | | 30.1 | 4.00 | | 32200 | 18.4 | | | | | | | | | |

STATION: PV01 DATE: 082991 TIME: 1027

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 28.9 | 6.56 | 7.97 | 29900 | 18.4 | | <0.01 | <0.005 | 0.036 | 0.430 | 2.8 | 15 | 8.3 | 24 |
| 0.5 | | 28.9 | 6.47 | 7.98 | 30900 | 18.7 | 0.5 | | | | | | | | |
| 1.0 | | 28.9 | 5.31 | 7.94 | 33300 | 20.7 | | | | | | | | | |
| 1.5 | | 28.9 | 4.88 | 7.89 | 33400 | 20.8 | | | | | | | | | |
| 2.0 | | 28.9 | 4.75 | 7.89 | 33300 | 20.8 | | | | | | | | | |

STATION: PV01A DATE: 082991 TIME: 1035

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.0 | 6.84 | 8.04 | 28600 | 16.8 | | <0.01 | <0.005 | 0.037 | 0.470 | 2.9 | 11 | 7.9 | |
| 0.5 | | 29.0 | 6.52 | 8.02 | 29600 | 18.3 | 0.5 | | | | | | | | |
| 1.0 | | 28.9 | 3.02 | 7.74 | 33800 | 21.1 | | | | | | | | | |
| 1.2 | | 28.9 | 2.93 | 7.70 | 33900 | 21.2 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV02 DATE: 082991 TIME: 1051

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 28.7 | 6.08 | 7.86 | 28900 | 17.4 | | 0.010 | 3.210 | 0.533 | 1.170 | 4.4 | 22 | 13.8 | |
| 0.5 | | 29.0 | 5.41 | 7.94 | 32800 | 20.4 | 0.4 | | | | | | | | |
| 1.0 | | 28.8 | 4.45 | 7.85 | 33200 | 20.7 | | | | | | | | | |
| 1.5 | | 28.8 | 4.20 | 7.83 | 33300 | 20.7 | | | | | | | | | |
| 1.8 | | 28.8 | 4.15 | 7.82 | 33300 | 20.7 | | | | | | | | | |

STATION: PV03 DATE: 082991 TIME: 1102

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.6 | 6.29 | 7.94 | 29900 | 18.6 | | <0.01 | <0.005 | 0.069 | 0.680 | 4.4 | 22 | 10.8 | 20 |
| 0.2 | | 29.3 | 5.31 | 7.96 | 31100 | 19.1 | | | | | | | | | |
| 0.5 | | 29.2 | 4.90 | 7.90 | 32800 | 20.4 | 0.4 | | | | | | | | |

STATION: PV04 DATE: 082991 TIME: 1110

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 33.0 | 29.4 | 6.17 | 7.98 | 30800 | 19.1 | | <0.01 | <0.005 | 0.076 | 0.910 | 5.2 | 43 | 10.6 | 103 |
| 0.5 | | 28.9 | 5.22 | 7.92 | 32600 | 20.3 | 0.5 | | | | | | | | |
| 0.7 | | 28.9 | 5.02 | 7.92 | 32900 | 20.4 | | | | | | | | | |
| 1.0 | | 28.8 | 4.49 | 7.86 | 33200 | 20.6 | | | | | | | | | |
| 1.4 | | 28.8 | 4.27 | 7.84 | 33200 | 20.7 | | | | | | | | | |

STATION: PV05 DATE: 082991 TIME: 1119

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 32.0 | 29.4 | 6.25 | 7.99 | 30800 | 19.0 | | <0.01 | 0.026 | 0.075 | 0.510 | 2.4 | 18 | 9.7 | |
| 0.5 | | 29.2 | 5.74 | 7.98 | 32000 | 19.8 | 0.3 | | | | | | | | |
| 1.0 | | 28.8 | 4.30 | 7.85 | 33200 | 20.7 | | | | | | | | | |
| 1.5 | | 28.8 | 4.15 | 7.83 | 33300 | 20.7 | | | | | | | | | |
| 1.8 | | 28.8 | 4.06 | 7.83 | 33400 | 20.8 | | | | | | | | | |

STATION: PV07 DATE: 082991 TIME: 1128

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 33.0 | 29.6 | 6.17 | 7.97 | 30600 | 18.9 | | 0.030 | <0.005 | 0.203 | 0.650 | 6.9 | 22 | 11.4 | |
| 0.5 | | 29.1 | 4.71 | 7.90 | 32400 | 20.2 | 0.5 | | | | | | | | |
| 1.0 | | 28.9 | 4.39 | 7.85 | 33200 | 20.7 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV08 DATE: 082991 TIME: 1134

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 33.0 | 29.4 | 6.50 | 8.02 | 30600 | 18.8 | | 0.010 | <0.005 | 0.180 | 0.690 | 8.3 | 28 | 11.8 | |
| 0.5 | | 29.1 | 5.71 | 7.98 | 32100 | 19.9 | 0.4 | | | | | | | | |
| 1.0 | | 28.8 | 4.07 | 7.83 | 33200 | 20.7 | | | | | | | | | |
| 1.5 | | 28.7 | 3.57 | 7.74 | 33400 | 20.8 | | | | | | | | | |
| 2.0 | | 28.7 | 3.43 | 7.74 | 33400 | 20.9 | | | | | | | | | |

STATION: PV09 DATE: 082991 TIME: 1146

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 35.0 | 28.5 | 3.74 | 7.27 | 29500 | 18.6 | 0.2 | 2.920 | <0.005 | 9.270 | 6.650 | 112.0 | 36 | 26.0 | >60000 |
| 0.5 | | 29.2 | 5.10 | 7.73 | 31300 | 19.4 | | | | | | | | | |
| 0.9 | | 28.9 | 4.80 | 7.87 | 33100 | 20.6 | | | | | | | | | |

STATION: PV10 DATE: 082991 TIME: 1153

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 34.0 | 30.2 | 6.70 | 8.00 | 30000 | 18.5 | | <0.01 | <0.005 | 0.114 | 0.670 | 6.8 | 22 | 10.3 | |
| 0.3 | | 29.5 | 5.33 | 7.89 | 31300 | 19.7 | | | | | | | | | |
| 0.5 | | 29.5 | 5.42 | 7.92 | 31800 | 19.8 | 0.4 | | | | | | | | |

STATION: PV11 DATE: 082991 TIME: 1206

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 33.0 | 30.0 | 6.38 | 7.93 | 30000 | 18.5 | | 0.080 | 0.027 | 0.347 | 1.000 | 11.0 | 37 | 11.8 | 7600 |
| 0.5 | | 29.5 | 5.58 | 7.89 | 30500 | 18.6 | 0.5 | | | | | | | | |
| 0.9 | | 29.0 | 4.97 | 7.87 | 33100 | 20.6 | | | | | | | | | |

STATION: PV12 DATE: 082991 TIME: 1216

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 34.0 | 29.7 | 5.49 | 7.84 | 30400 | 18.7 | | 0.070 | <0.005 | 0.328 | 1.520 | 11.0 | 35 | 12.2 | |
| 0.5 | | 28.9 | 4.89 | 7.90 | 33100 | 20.7 | 0.3 | | | | | | | | |
| 1.1 | | 28.9 | 4.28 | 7.82 | 33300 | 20.8 | | | | | | | | | |

STATION: PV14 DATE: 082991 TIME: 1228

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 34.0 | 30.5 | 6.46 | 7.89 | 27200 | 16.4 | | <0.01 | <0.005 | 0.107 | 0.820 | 3.0 | 15 | 11.3 | |
| 0.3 | | 30.0 | 6.98 | 8.05 | 30100 | 18.5 | | | | | | | | | |
| 0.5 | | 29.9 | 7.01 | 8.04 | 30400 | 18.8 | 0.5 | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV15 DATE: 082991 TIME: 1237

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 36.0 | 30.5 | 6.18 | 7.70 | 26300 | 16.0 | | 0.020 | 0.040 | 0.116 | 0.750 | 7.0 | 27 | 12.5 | |
| 0.5 | | 29.2 | 5.25 | 7.99 | 31900 | 19.9 | 0.4 | | | | | | | | |
| 0.9 | | 28.9 | 4.17 | 7.80 | 33200 | 20.7 | | | | | | | | | |

STATION: PV16 DATE: 082991 TIME: 1252

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 34.0 | 30.3 | 4.84 | 6.84 | 13840 | 7.6 | | 0.150 | 0.042 | 0.084 | 1.010 | 4.3 | 8 | 11.2 | 2100 |
| 0.5 | | 28.5 | 3.73 | 6.82 | 18900 | 10.9 | 0.5 | | | | | | | | |
| 1.0 | | 28.5 | 2.73 | 7.04 | 27400 | 16.8 | | | | | | | | | |
| 1.5 | | 28.7 | 2.12 | 7.37 | 30500 | 18.8 | | | | | | | | | |
| 2.0 | | 28.8 | 2.46 | 7.53 | 34300 | 21.4 | | | | | | | | | |
| 2.5 | | 28.8 | 2.31 | 7.56 | 35700 | 22.5 | | | | | | | | | |
| 3.0 | | 28.8 | 2.05 | 7.57 | 36500 | 23.3 | | | | | | | | | |
| 3.5 | | 28.8 | 1.82 | 7.56 | 37000 | 23.3 | | | | | | | | | |
| 4.0 | | 28.8 | 1.55 | 7.54 | 37400 | 23.7 | | | | | | | | | |
| 4.5 | | 28.8 | 1.51 | 7.52 | 37400 | 23.1 | | | | | | | | | |

STATION: PV17 DATE: 082991 TIME: 1311

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 33.0 | 30.5 | 4.50 | 6.90 | 13880 | 7.7 | | 0.120 | 0.034 | 0.094 | 0.750 | 3.6 | 19 | 11.8 | |
| 0.5 | | 28.4 | 3.18 | 6.78 | 19300 | 11.2 | 0.5 | | | | | | | | |
| 1.0 | | 28.1 | 2.67 | 6.87 | 23000 | 13.1 | | | | | | | | | |
| 1.5 | | 28.4 | 2.52 | 7.07 | 27100 | 16.4 | | | | | | | | | |
| 2.0 | | 28.5 | 2.30 | 7.29 | 30100 | 18.6 | | | | | | | | | |
| 2.5 | | 28.6 | 2.03 | 7.35 | 31700 | 19.7 | | | | | | | | | |
| 3.0 | | 28.6 | 1.83 | 7.40 | 33300 | 20.7 | | | | | | | | | |
| 3.5 | | 28.7 | 1.43 | 7.43 | 35100 | 22.1 | | | | | | | | | |
| 3.8 | | 28.7 | 1.33 | 7.44 | 35600 | 22.3 | | | | | | | | | |

STATION: PV01 DATE: 092691 TIME: 1040

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 23.5 | 24.3 | 5.63 | 7.71 | 37200 | 23.4 | | <0.01 | <0.005 | 0.079 | 0.720 | 4.1 | 18 | 12.4 | >120 |
| 0.5 | | 24.2 | 5.38 | 7.78 | 37300 | 23.6 | 0.6 | | | | | | | | |
| 1.0 | | 24.0 | 5.46 | 7.81 | 37600 | 23.8 | | | | | | | | | |
| 1.5 | | 24.0 | 5.53 | 7.83 | 37600 | 23.8 | | | | | | | | | |
| 1.8 | | 24.0 | 5.51 | 7.83 | 37700 | 23.8 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV01A DATE: 092691 TIME: 1052

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 23.0 | 24.4 | 5.87 | 7.83 | 37200 | 23.6 | | <0.01 | <0.005 | 0.066 | 0.510 | 4.2 | 24 | 8.8 | |
| 0.5 | | 24.5 | 5.83 | 7.85 | 37500 | 23.7 | 0.7 | | | | | | | | |
| 1.0 | | 24.3 | 5.88 | 7.88 | 38200 | 24.3 | | | | | | | | | |
| 1.3 | | 24.2 | 5.86 | 7.89 | 38300 | 24.3 | | | | | | | | | |

STATION: PV02 DATE: 092691 TIME: 1103

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 23.5 | 24.5 | 5.54 | 7.77 | 35200 | 22.2 | | <0.01 | 2.982 | 0.543 | 0.520 | 3.4 | 24 | 14.5 | |
| 0.5 | | 24.5 | 5.35 | 7.83 | 37200 | 23.6 | 0.5 | | | | | | | | |
| 0.8 | | 24.3 | 5.24 | 7.86 | 37600 | 23.8 | | | | | | | | | |
| 1.0 | | 24.3 | 5.24 | 7.84 | 37600 | 23.8 | | | | | | | | | |
| 1.5 | | 24.3 | 5.13 | 7.84 | 37600 | 23.8 | | | | | | | | | |

STATION: PV03 DATE: 092691 TIME: 1113

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 24.0 | 24.9 | 5.42 | 7.81 | 36500 | 23.0 | | <0.01 | <0.005 | 0.077 | 0.510 | 4.2 | 25 | 14.7 | >120 |
| 0.2 | | 24.7 | 5.11 | 7.83 | 36800 | 23.2 | | | | | | | | | |
| 0.3 | | 24.6 | 5.04 | 7.83 | 37300 | 23.6 | 0.3 | | | | | | | | |

STATION: PV04 DATE: 092691 TIME: 1129

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 25.0 | 24.8 | 5.32 | 7.84 | 36900 | 23.3 | | <0.01 | <0.005 | 0.065 | 0.550 | 4.7 | 21 | 16.5 | >240 |
| 0.5 | | 24.6 | 5.42 | 7.87 | 37700 | 23.8 | 0.5 | | | | | | | | |
| 0.6 | | 24.5 | 5.29 | 7.88 | 37800 | 23.9 | | | | | | | | | |
| 1.0 | | 24.5 | 5.32 | 7.88 | 37900 | 24.0 | | | | | | | | | |
| 1.2 | | 24.5 | 5.23 | 7.88 | 38000 | 24.1 | | | | | | | | | |

STATION: PV05 DATE: 092691 TIME: 1148

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 25.0 | 24.9 | 5.45 | 7.88 | 37200 | 23.5 | | <0.01 | <0.005 | 0.067 | 0.530 | 3.7 | 34 | 15.2 | |
| 0.5 | | 24.8 | 5.38 | 7.88 | 37300 | 23.5 | 0.5 | | | | | | | | |
| 0.8 | | 24.7 | 5.26 | 7.89 | 37900 | 23.9 | | | | | | | | | |
| 1.0 | | 24.7 | 5.16 | 7.89 | 38300 | 24.3 | | | | | | | | | |
| 1.5 | | 24.6 | 5.10 | 7.89 | 38400 | 24.3 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV103 DATE: 092691 TIME: 1122

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 27.0 | 25.0 | 5.66 | 7.83 | 36500 | 23.0 | | <0.01 | <0.005 | 0.079 | 0.530 | 4.1 | 20 | 15.4 | |
| 0.1 | | 24.9 | 5.67 | 7.85 | 36800 | 23.2 | | | | | | | | | |
| 0.2 | | 25.0 | 5.64 | 7.83 | 36700 | 23.3 | 0.2 | | | | | | | | |

STATION: PV104 DATE: 092691 TIME: 1137

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 25.0 | 25.0 | 5.46 | 7.85 | 36800 | 23.6 | | <0.01 | <0.005 | 0.088 | 0.540 | 4.6 | 22 | 13.5 | |
| 0.5 | | 24.7 | 5.50 | 7.86 | 37500 | 23.7 | | | | | | | | | |
| 0.6 | | 24.6 | 5.38 | 7.88 | 37900 | 24.0 | 0.6 | | | | | | | | |
| 1.0 | | 24.6 | 5.31 | 7.87 | 38200 | 24.2 | | | | | | | | | |
| 1.2 | | 24.6 | 5.28 | 7.87 | 38200 | 24.2 | | | | | | | | | |

STATION: PV105 DATE: 092691 TIME: 1158

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 24.5 | 25.0 | 4.60 | 7.76 | 36800 | 23.2 | | 0.240 | <0.005 | 0.507 | 2.250 | 14.0 | 31 | 18.7 | 230 |
| 0.5 | | 25.0 | 5.05 | 7.81 | 37100 | 23.4 | 0.3 | | | | | | | | |
| 0.9 | | 24.8 | 5.41 | 7.89 | 38100 | 24.1 | | | | | | | | | |
| 1.0 | | 24.9 | 5.55 | 7.92 | 38100 | 24.2 | | | | | | | | | |
| 1.5 | | 24.7 | 5.44 | 7.92 | 38400 | 24.4 | | | | | | | | | |
| 1.8 | | 24.7 | 5.46 | 7.92 | 38400 | 24.4 | | | | | | | | | |

STATION: PV07 DATE: 092691 TIME: 1208

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 25.5 | 25.1 | 4.72 | 7.77 | 37100 | 23.5 | | 0.190 | <0.005 | 0.387 | 1.280 | 13.0 | 37 | 22.0 | |
| 0.5 | | 24.6 | 5.08 | 7.88 | 38400 | 24.3 | 0.3 | | | | | | | | |
| 0.6 | | 24.6 | 5.19 | 7.90 | 38400 | 24.3 | | | | | | | | | |
| 1.0 | | 24.6 | 5.20 | 7.90 | 38400 | 24.4 | | | | | | | | | |
| 1.2 | | 24.6 | 5.16 | 7.90 | 38400 | 24.4 | | | | | | | | | |

STATION: PV08 DATE: 092691 TIME: 1217

| DEPTH | AIR | WATER | D.O. | PH | COND. | SALINITY | SECCHI | NH3N | NO3N | PO4P | TKN | BOD5 | TSS | TURBIDITY | FECALS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| METERS | DEG C | DEG C | MG/L | S.U.'S | MMHO/CM | P.P.T. | METERS | MG/L | MG/L | MG/L | MG/L | MG/L | MG/L | N.T.U.'S | COL/100ML |
| S | 25.0 | 25.1 | 5.89 | 7.91 | 37000 | 23.3 | | <0.01 | <0.005 | 0.084 | 0.380 | 4.0 | 21 | 13.1 | |
| 0.5 | | 25.1 | 5.84 | 7.92 | 37800 | 24.0 | 0.5 | | | | | | | | |
| 1.0 | | 24.8 | 5.79 | 7.94 | 38400 | 24.4 | | | | | | | | | |
| 1.5 | | 24.7 | 5.68 | 7.94 | 38500 | 24.5 | | | | | | | | | |
| 2.1 | | 24.7 | 5.66 | 7.93 | 38500 | 24.5 | | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV09 DATE: 092691 TIME: 1253

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 26.0 | 25.4 | 6.08 | 7.80 | 35100 | 21.7 | | 0.530 | <0.005 | 0.728 | 0.720 | 47.0 | 47 | 24.0 | 1600 |
| 0.5 | | 25.6 | 5.89 | 7.87 | 35800 | 22.5 | 0.4 | | | | | | | | |
| 1.0 | | 24.9 | 5.40 | 7.91 | 38300 | 24.3 | | | | | | | | | |

STATION: PV10 DATE: 092691 TIME: 1302

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 27.0 | 25.8 | 6.06 | 7.89 | 35400 | 22.3 | | <0.01 | <0.005 | 0.073 | 0.450 | 3.6 | 25 | 10.7 | |
| 0.3 | | 25.7 | 6.00 | 7.90 | 35900 | 22.6 | | | | | | | | | |
| 0.6 | | 25.1 | 5.55 | 7.92 | 37700 | 23.9 | 0.5 | | | | | | | | |

STATION: PV11 DATE: 092691 TIME: 1315

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 26.0 | 25.9 | 6.19 | 7.89 | 35400 | 22.2 | | <0.01 | <0.005 | 0.079 | 0.440 | 3.8 | 28 | 10.5 | 183 |
| 0.4 | | 25.9 | 6.40 | 7.89 | 35500 | 22.3 | | | | | | | | | |
| 0.8 | | 24.9 | 5.75 | 7.94 | 38400 | 24.4 | | | | | | | | | |

STATION: PV12 DATE: 092691 TIME: 1334

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 27.0 | 25.8 | 6.42 | 7.94 | 36200 | 22.9 | | <0.01 | <0.005 | 0.074 | 0.520 | <2 | 18 | 11.6 | |
| 0.5 | | 25.5 | 6.71 | 7.99 | 36900 | 23.3 | 0.6 | | | | | | | | |
| 1.1 | | 24.8 | 5.62 | 7.94 | 38500 | 24.4 | | | | | | | | | |

STATION: PV110 DATE: 092691 TIME: 1308

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 26.0 | 25.9 | 6.41 | 7.90 | 35800 | 22.6 | | <0.01 | <0.005 | 0.067 | 0.530 | 3.8 | 10 | 11.4 | |
| 0.3 | | 25.7 | 6.54 | 7.91 | 35500 | 22.3 | | | | | | | | | |
| 0.6 | | 25.4 | 6.26 | 7.95 | 36900 | 23.1 | 0.5 | | | | | | | | |

STATION: PV111 DATE: 092691 TIME: 1327

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 27.0 | 25.5 | 6.76 | 7.97 | 36700 | 23.1 | | <0.01 | <0.005 | 0.070 | 0.410 | 4.1 | 34 | 17.6 | |
| 0.3 | | 25.5 | 6.76 | 7.97 | 36600 | 23.1 | | | | | | | | | |
| 0.5 | | 25.5 | 6.78 | 7.97 | 36700 | 23.1 | 0.4 | | | | | | | | |

TABLE 1 (CONT.). 1991 PORTERSVILLE BAY WATER QUALITY DATA

STATION: PV112 DATE: 092691 TIME: 1340

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 27.0 | 25.6 | 6.93 | 7.99 | 36700 | 23.2 | | <0.01 | <0.005 | 0.058 | 0.490 | 4.3 | 21 | 13.3 | |
| 0.7 | | 25.6 | 6.94 | 8.00 | 36700 | 23.2 | 0.5 | | | | | | | | |
| 1.3 | | 24.6 | 5.84 | 7.95 | 38300 | 24.4 | | | | | | | | | |

STATION: PV14 DATE: 092691 TIME: 1347

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 27.0 | 25.9 | 6.00 | 7.90 | 35200 | 22.2 | | <0.01 | <0.005 | 0.066 | 0.520 | 4.3 | 24 | 13.2 | |
| 0.3 | | 25.9 | 6.01 | 7.90 | 35300 | 22.2 | | | | | | | | | |
| 0.6 | | 25.7 | 6.54 | 7.95 | 36200 | 22.8 | 0.5 | | | | | | | | |

STATION: PV15 DATE: 092691 TIME: 1400

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 27.0 | 25.8 | 6.68 | 7.97 | 36200 | 22.7 | | <0.01 | <0.005 | 0.088 | 1.090 | 4.3 | 24 | 12.4 | |
| 0.7 | | 25.8 | 6.63 | 7.97 | 36100 | 22.7 | 0.5 | | | | | | | | |
| 1.3 | | 24.3 | 5.70 | 7.94 | 38000 | 24.1 | | | | | | | | | |

STATION: PV16 DATE: 092691 TIME: 1435

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 28.0 | 26.9 | 5.71 | 7.80 | 31800 | 19.7 | | 0.090 | <0.005 | 0.069 | 0.710 | 4.6 | 19 | 7.1 | 920 |
| 0.5 | | 26.2 | 5.70 | 7.84 | 33100 | 20.4 | | | | | | | | | |
| 1.0 | | 25.2 | 5.89 | 7.90 | 35700 | 22.4 | 0.8 | | | | | | | | |
| 1.5 | | 24.8 | 5.85 | 7.93 | 37000 | 23.3 | | | | | | | | | |
| 2.0 | | 24.6 | 5.55 | 7.92 | 37400 | 23.6 | | | | | | | | | |
| 2.5 | | 24.5 | 5.73 | 7.93 | 37200 | 23.4 | | | | | | | | | |
| 3.0 | | 24.4 | 5.62 | 7.93 | 37600 | 23.9 | | | | | | | | | |
| 3.5 | | 24.4 | 5.51 | 7.92 | 37800 | 23.9 | | | | | | | | | |
| 4.0 | | 24.3 | 5.55 | 7.92 | 37800 | 23.9 | | | | | | | | | |

STATION: PV17 DATE: 092691 TIME: 1416

| DEPTH METERS | AIR DEG C | WATER DEG C | D.O. MG/L | PH S.U.'S | COND. MMHO/CM | SALINITY P.P.T. | SECCHI METERS | NH3N MG/L | NO3N MG/L | PO4P MG/L | TKN MG/L | BOD5 MG/L | TSS MG/L | TURBIDITY N.T.U.'S | FECALS COL/100ML |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | 28.0 | 26.9 | 4.78 | 7.68 | 30900 | 19.0 | | 0.120 | <0.005 | 0.084 | 0.620 | 4.2 | 11 | 6.8 | |
| 0.5 | | 26.8 | 5.15 | 7.70 | 31200 | 19.3 | | | | | | | | | |
| 1.0 | | 26.5 | 5.35 | 7.81 | 32400 | 20.2 | 0.8 | | | | | | | | |
| 1.5 | | 25.5 | 4.58 | 7.75 | 34700 | 21.7 | | | | | | | | | |
| 2.0 | | 24.9 | 4.49 | 7.77 | 35400 | 22.2 | | | | | | | | | |
| 2.5 | | 24.7 | 4.47 | 7.80 | 36600 | 23.1 | | | | | | | | | |
| 3.0 | | 24.6 | 4.53 | 7.81 | 36900 | 23.3 | | | | | | | | | |
| 3.5 | | 24.4 | 4.65 | 7.84 | 37600 | 23.8 | | | | | | | | | |
| 3.8 | | 24.4 | 4.63 | 7.83 | 37600 | 23.8 | | | | | | | | | |