Great Bay Estuarine Field Program
1975 Data Report

Part 3: Nutrient Chemistry

UNH Sea Grant
Technical Report UNH-SG-159

Sea Grant Marine Advisory Program
University of New Hampshire
Kingsbury Hall
Durham, New Hampshire 03824

GREAT BAY ESTUARINE FIELD PROGRAM

1975 Data Report

Part 3: Nutrient Chemistry

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Report No.: UNH-SG-159

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Introduction

This report summarizes the nutrient data obtained from water samples collected in the Great Bay Estuary system during July, August and September, 1975. The data sets include quasi-synoptic chemical and physical data for several locations over a tidal cycle. The purpose of this study was to provide the necessary data to aid in the development of a dispersion model of the estuary and to estimate nutrient fluxes within the estuary. The data are also being used in an investigation of the processes which affect the distribution of these chemical parameters in estuarine systems.

The station locations are given in Figure 1. For each cruise there was a main station location with three or four sample sites at which hydrographic data (currents, salinity and temperature) and chemical data were collected. The hydrographic data are reported in Parts 1 and 2 of this report (Swenson, Brown and Trask, 1977).

The secondary station locations were sampled at varying time intervals during the sampling period with a boat sampling more than one location. Current data were generally not collected at these secondary sites. A list of these sampling locations is given in Table 1.

Sample Collection

The R/V Jere A. Chase was used at the main stations. Samples for temperature, salinity and nutrient analysis were pumped on board using a 24-volt submersible pump (Benthos Model #5013) and plastic hose. Sample bottles were filled from a 5-port manifold with an inset thermometer. The pump and hose were lowered to the surface depth (between 10 to 20 cm below the surface) and the hose allowed to flush. All bottles for an individual depth were filled

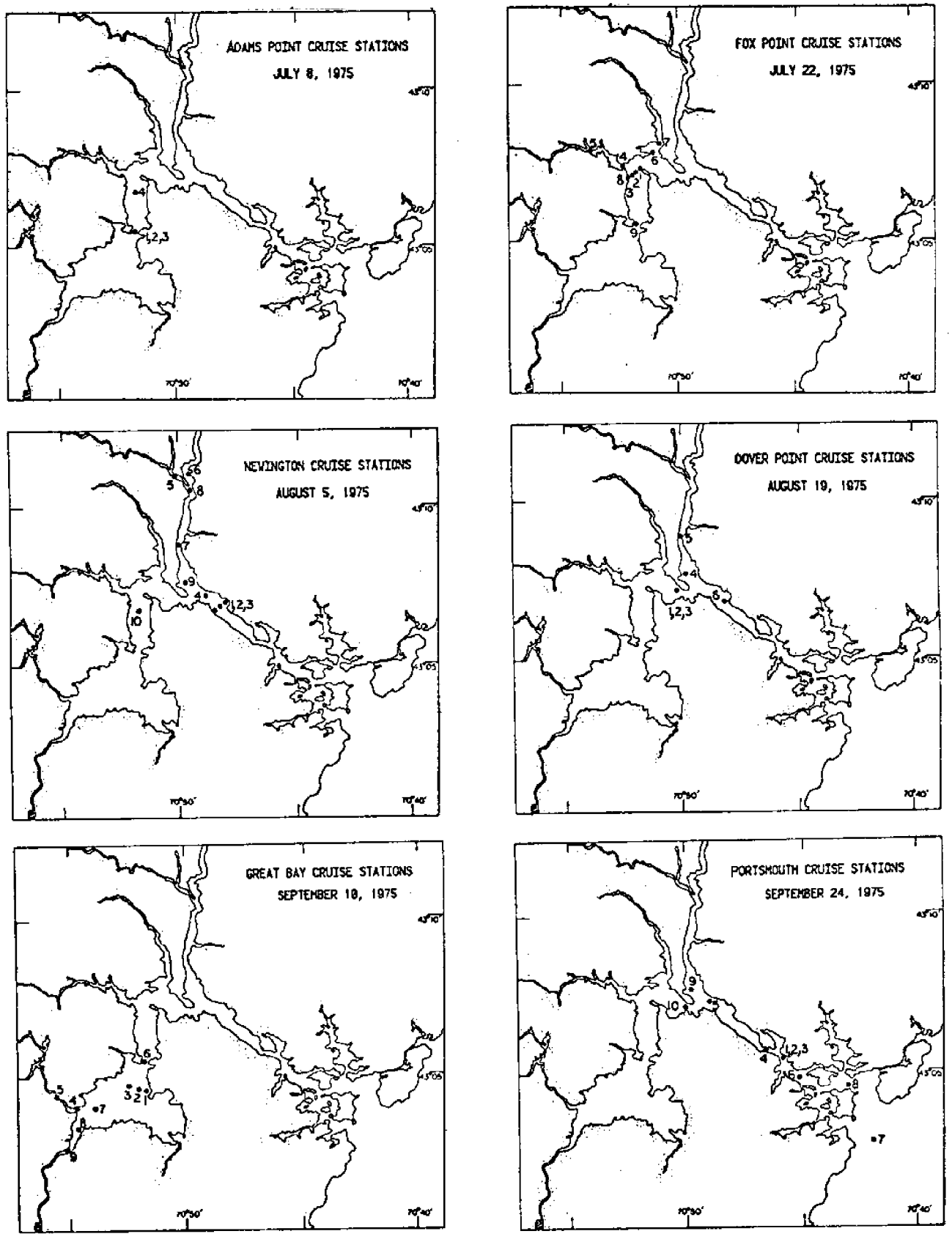

Fig. 1. Station location maps for all cruises.

Table 1. List of cruise names, dates, station locations and station numbers for July-September, 1975. See Figure 1 for actual station locations.

	Cruise Name, Date, Station Locations	Station Numbers	No. of Samples
A	Adams Point Cruise - 7/8/75		
	1. Adams Point	1, 2, 3	142
	2. Little Bay	4	34
B	Fox Point Cruise - 7/22/75		
	1. Fox Point	1, 2, 3, 8	115
	2. Bellamy River	6, 7	69
	3. Oyster River	4, 5	56
	4. Furber Strait	9	51
C	Newington Cruise - 8/5/75		
	1. Newington	1, 2, 3	102
	2. Atlantic Terminal	4	22
	3. Cocheco River	5	6
	4. Salmon Falls River	6	6
	5. Sturgeon Creek	7	21
	6. Piscat. Junction	8	18
	7. Piscataqua R.	9	28
	8. Little Bay	10	27
D	Dover Point Cruise - 8/19/75		
	1. Dover Point	1, 2, 3	93
	2. Piscat. River	4	52
	3. Sturgeon Creek	5	16
	4. Frankfort I.	6	47
E	Great Bay Cruise - 9/10/75		
	1. Great Bay	1, 2, 3	93
	2. Moody Pt.	4	24
	3. Power Line	5	8
	4. Furber Strait	6	24
	5. Squamscott R.	7	34
F	Portsmouth Cruise - 9/24/75		
	1. Portsmouth (Piscat. River)*	1, 2, 3	85
	2. Power Plant	4	16
	3. Atlantic Terminal	5	39
	4. Memorial Bridge	6	24
	5. 2KR	7	6
	6. Salamander Point	8	21
	7. Piscat. R. (Can 17)	9	26
	8. Marinas	10	32

*Data not yet available

within 1-2 min and then the hose was lowered to the next depth. Because of high currents at certain times of the tide, wire angles were measured for all depths and the actual depth was calculated. The calculated depth was approximated by the cosine of wire angle X hose length. Each station consisted of five to six depths that were sampled over a six to eight minute period.

Sampling at the secondary stations was done from the following vessels: JO Boat (from the R/V Ferrell), R/V Explorer (UNH), the R/V Microboat (UNH), and a Normandeau Associates, Inc. boat. Samples were obtained using either an on-board 12-volt pump (Simer Model No. BW85) and hose or a standard sampling bottle such as a Niskin, Van Dorn or Nansen bottle.

Sample Handling and Analysis

Samples for salinity analysis were collected in 250-ml linear polyethylene bottles rinsed three times with the sample. Salinities were analyzed within several days of collection using a Guildline Autosal salinometer (Model 8400).

Unfiltered samples for nutrient analysis were collected in acid-washed, sample-rinsed, linear polyethylene bottles and preserved with mercuric chloride (final concentration 100 ppm). They were immediately cooled on ice and kept refrigerated until analysis (within 2-3 days). The suspended matter was allowed to settle during storage and the analyses were made on the supernatent using a 2-channel Technicon AutoAnalyzer and the following Technicon methods: phosphate (TIS, 1973a), silicate (TIS, 1973b), nitrate (TIS, 1972), and nitrite (TIS, 1973c). These methods and their modifications are described in detail by Glibert and Loder (1977a). All nutrient and salinity samples were run in random order. Nutrient standards were made up in distilled deionized water because of the varying salinities of the estuary. Blank and salinity corrections were applied to the data, as described by Loder and

Glibert (1977).

Errors and variability due to our sampling and analysis methods are described in detail by Glibert and Loder (1975), Glibert (1976), and Glibert and Loder (1977b). A summary of analyses and replicate sampling variability is given in Table 2.

Data Presentation

The data for each of the six cruises are presented in three parts: 1) location map for each cruise's stations, 2) lists of data for each station and 3) graphs of salinity vs. nutrients for each station (appendices A through F).

The data lists include row number (to facilitate editing), station number, sample depth in meters, time in hours (when sampling started), temperature in degrees (C), salinity in ppt., sigma-t [as computed using equations of Cox et al. (1970)], and the following nutrients: phosphate, reactive silicate, nitrate and nitrite, all in µg-atoms/liter. The above described calculations and data listings were made on the Department of Earth Sciences, Tektronix 4051 computer graphics system.

Plots of salinity vs. each nutrient are presented for almost every sampling location (a few are combined, e.g., Fox Point Cruise, Oyster River, stations 8 and 9). This was done so that initial estimates could be made of the nature of the processes affecting the nutrient distributions at different locations. The amount of scatter and/or deviation from linearity of the nutrient concentration vs. salinity is suggestive of various controlling processes. These may range from simple conservative mixing of two end-members to the mixing of several end-members of varying composition with a third end-member, while biological processes are changing the nutrient composition.

A linear regression line and appropriate statistics are included for

Table 2. Analysis and replicate sampling variability for various chemical parameters of samples collected in the Great Bay Estuary, New Hampshire, during the summer months.

parameter (units)	salinity (°/oo)	NO_2-N (µm)	NO_3-N (µm)	PO_4-P (µm)	SiO_2-Si (µm)
range of method used	0-40	0-2	0-5	0-5	0-50
approx. sample conc. range	28-30	0.1-0.4	0.1-1.0	1.0-2.0	4.0-7.0
analysis variability[a]	-	0.009 (2.6%)	0.05 (1.2%)	0.02 (1.7%)	0.08 (1.4%)
replicate sampling variability[b]	0.003 (0.01%)	0.002 (0.7%)	0.04 (0.8%)	0.01 (1.0%)	0.43 (6.4%)

[a] Based on the average standard deviations of 9-10 replicate runs of the same samples.

[b] Based on the average standard deviations of numerous sets of replicate samples run at the same time.

nearly all plots for reference, even though it is not significant for some plots. A high correlation coefficient (r) generally suggests that the mixing and nutrient distribution processes are conservative. A low value of r may mean that the data are scattered about a linear trend or may follow a non-linear distribution. In this case, mixing still may be conservative, but several sources are mixing (e.g., Newington cruise, 8/5/75) or there is so much scatter that any salinity-nutrient relationship is meaningless (e.g., Fox Point cruise, silicate, 7/22/75). Here biological processes and sampling and analytical variability combine to reduce any significant salinity-nutrient relationships. For a more detailed discussion of much of this data see: Glibert, 1976 and Thornton, 1976.

On some plots several data points have been deleted from the regression in order to make the estimate of the remaining data more significant. These points were removed at the discretion of the person plotting because they fell outside the main trend of the data. This could have happened for various reasons: the data may represent different stations; the sample may have been contaminated, or a number of other possibilities.

The plots were made using a Tektronix 4051 graphics computer with a Tektronix 4622 Interactive plotter. All programs and plotting software were written by the senior author.

Acknowledgments

It took a great number of people to collect the samples for analyses, reduce the data after the analyses and complete this data report. We wish to thank all of the following people who played some role in the production of this report: Beth Chiquoine, Lee Petruk, Norm Giroux, Steve Allan, Kathy Arata, Karen Chytalo, Ken Davis, Joseph Dineen, Arlene O'Donnell,

Janis Fales, Tom Grimes, Dan Herlihy, Suzy Loder and Sue Murray were all volunteers on one or more cruises and helped in sample collection. Mark Hagopian, Chris Emerick and Tim Norell were laboratory technicians who helped collect samples as well as run some analyses. Susan Calef helped with sampling, washed many bottles and reduced data.

Jeffrey Thornton was a graduate research assistant on the project and helped analyze samples as well as run the initial data keypunching with the help of Erick Swenson. Sharon Bown helped with data organization. Dr. Robert Carrier wrote a "bottle-sort program" for us to help match the approximately 1500 analyses per cruise with the appropriate location, time and depth. Dr. Arthur Mathieson provided advice and the services of personnel of the Jackson Estuarine Laboratory. The personnel of the R/V Ferrell collected samples for us and provided space for us on some cruises. Several members of Normandeau Associates, Inc., also collected samples for us. We had enjoyable cooperation with Dr. Wendell Brown's physical oceanography group during all phases of the field program. Captain Ned McIntosh on the R/V Jere Chase helped our repetitive anchoring and sampling scheme run smoothly.

Preparation of this report was carried out with the help of laboratory assistants Peter Harvey and Jane Hislop who spent many hours worrying over notebooks of data to make the data lists as accurate as possible and more hours keypunching the data. Alicia Presti aided in putting together the data sheets. Kathy Langone helped with the final keypunching. Graduate research assistant Gordon Smith helped with production of the graphs on a plotter lent to us by Maureen Scriven of Tektronix.

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References Cited

Cox, R.A., M. J. McCartney and F. Culkin. 1970. The specific gravity/salinity/temperature relationship in natural seawater. Deep-Sea Res. 17 : 679-689.

Glibert, P.M. 1976. Nutrient flux studies in the Great Bay estuary, New Hampshire. MS Thesis, University of New Hampshire, 89 pp.

Glibert, P.M. and T.C. Loder. 1975. Sampling and analytical variability in estuarine nutrient chemistry. The Third Annual International Estuarine Research Conference, Galveston, Texas, October, 1975.

Glibert, P.M. and T.C. Loder. 1977a. Automated analysis of nutrients in seawater : A manual of techniques. WHOI Technical Report No. 77-47.

Glibert, P.M. and T.C. Loder. 1977b. Distributions of chemical parameters in an estuarine system. I. Analytical and short-term variability. (In prep.).

Loder, T.C. and P.M. Glibert. 1977. Blank and salinity corrections for automated nutrient analysis of estuarine and seawaters. In: Advances in automated analysis, v. 2. Proc. Technicon International Congress, 1976. also avail. as Rept. #UNH-SG-JR-101.

Swenson, E., W. Brown and R. Trask. 1977. Great Bay Estuarine field program, 1975 Data Report, Part 1: Currents and sea level; Part 2: Salinity, temperature and density. Rept. #UNH-SG-157 and 158.

Thornton, J.A. 1976. The distribution of reactive silicate in the Piscataqua River estuary of New Hampshire-Maine. MS Thesis, University of New Hampshire, 66 pp.

Technicon Industrial Systems. 1972. Nitrate and nitrite in water and seawater. Industrial Method No. 158-71W.

Technicon Industrial Systems. 1973[a]. Nitrite in water and seawater. Industrial Method No. 161-71W.

Technicon Industrial Systems. 1973[b]. Orthophosphate in water and seawater. Industrial Method No. 155-71W.

Technicon Industrial Systems. 1973[c]. Silicates in water and seawater. Industrial Method No. 186-72W.

APPENDIX A

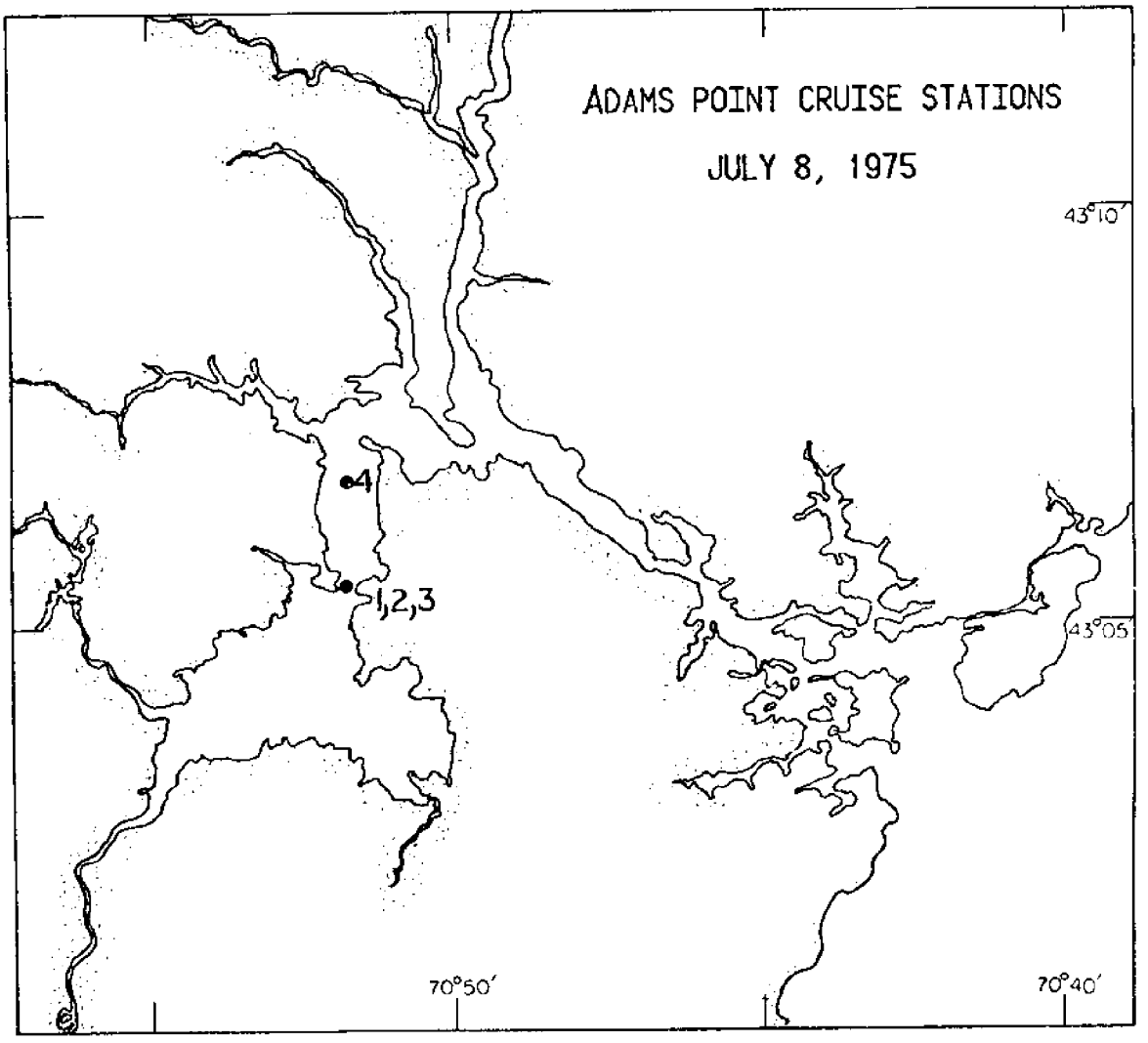


Fig. A-1. Station locations for Adams Point cruise.

1, 2, 3	Adams Point
4	Little Bay

CORRECTED DATA LIST: ADAMS POINT 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	2	0.1	933	22.3	---	---	1.13	9.56	0.312	1.48
2	2	2	933	22.5	27.43	18.38	1.13	10.03	0.335	1.41
3	2	3	933	22.4	27.64	18.57	1.18	9.52	0.325	1.29
4	2	5.7	933	22.3	27.76	18.68	1.13	9.10	0.314	1.45
5	2	7.4	933	22.2	27.69	18.66	1.07	35.95	0.324	1.82
6	2	9.1	933	22.1	27.63	18.64	1.07	9.52	0.314	1.50
7	3	0.1	958	22.4	27.54	18.49	1.12	9.62	0.314	1.45
8	3	1.9	958	22.2	27.59	18.58	1.11	9.41	0.325	1.42
9	3	3.9	958	22.3	27.68	18.62	1.22	9.62	0.314	1.53
10	3	5.7	958	22	27.69	18.71	0.97	9.41	0.345	2.18
11	3	7.5	958	22.2	27.72	18.68	1.09	9.00	0.335	1.52
12	3	9.1	958	22.2	27.71	18.67	1.00	9.00	0.324	1.36
13	1	0.1	1014	22	27.75	18.76	1.09	8.89	0.314	1.43
14	1	1.9	1014	22	27.73	18.74	1.15	9.20	0.335	1.52
15	1	3.9	1014	22	27.77	18.77	1.18	8.89	0.324	1.41
16	1	5.7	1014	22	27.79	18.79	1.14	9.62	0.335	1.40
17	1	7.4	1014	22	27.84	18.82	1.08	8.89	0.314	1.42
18	1	9.1	1014	22	27.81	18.80	1.04	8.68	0.314	0.53
19	2	0.1	1031	22.3	27.86	18.76	1.13	8.89	0.334	0.51
20	2	2	1031	22	27.75	18.76	1.10	9.00	0.324	1.52
21	2	3.9	1031	22	27.9	18.87	1.13	19.93	0.334	1.45
22	2	5.7	1031	22	27.91	18.88	1.00	21.18	0.324	1.41

CORRECTED DATA LIST: ADAMS POINT 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
23	2	7.4	1031	22	27.89	18.86	1.00	8.50
0.303	1.40							
24	2	9.1	1031	22	27.9	18.87	1.10	8.60
0.324	1.46							
25	3	0.1	1204	22	27.77	18.77	1.07	9.10
0.314	1.52							
26	3	2	1204	21.9	27.99	18.97	0.98	6.29
0.344	1.50							
27	3	4	1204	21.5	28.06	19.13	1.09	7.96
0.313	1.62							
28	3	5.9	2104	21.3	28.09	19.20	1.08	8.06
0.324	0.78							
29	3	7.8	1204	21.3	28.09	19.20	1.09	7.75
0.313	1.76							
30	3	9.7	1204	21.2	28.11	19.24	0.94	7.85
0.324	1.61							
31	2	0.1	1226	21.9	27.99	18.97	0.98	8.50
0.324	1.48							
32	2	2	1226	21.5	28.19	19.22	1.03	7.85
0.334	1.47							
33	2	4	1226	21.3	28.26	19.33	1.04	8.06
0.334	1.80							
34	2	5.9	1226	21.2	28.22	19.33	1.02	7.85
0.334	1.81							
35	2	7.8	1226	21.2	28.23	19.33	---	7.59
0.334	1.59							
36	2	9.6	1226	21.1	28.23	19.36	0.99	7.75
0.334	1.59							
37	2	11.6	1226	21.1	---	---	1.04	88.53
0.344	1.78							
38	1	0.1	1242	21.8	27.97	18.98	0.97	8.37
0.324	1.52							
39	1	2	1242	21.8	28.04	19.03	0.98	8.06
0.313	1.55							
40	1	4	1242	21.2	28.19	19.30	1.01	7.54
0.323	1.79							
41	1	6	1242	21.2	28.18	19.30	0.77	7.96
0.334	1.83							
42	1	7.9	1242	21.1	28.23	19.36	1.03	7.33
0.313	1.76							
43	1	9.8	1242	21	28.26	19.41	1.01	13.17
0.313	1.62							
44	2	0.1	1448	24.3	27.67	18.06	1.04	9.20
0.304	1.43							
45	2	1.9	1448	23	27.84	18.55	0.98	8.79
0.303	1.33							

CORRECTED DATA LIST: ADAMS POINT 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
46	2	3.8	1448	23	---	---	1.11	9.10	0.313	1.40
47	2	7.3	1448	22.5	28.03	18.83	1.32	9.41	0.334	1.73
48	3	0.1	1508	23	27.84	18.55	1.11	8.68	0.334	1.45
49	3	2	1508	23	27.79	18.51	1.13	9.00	0.324	1.52
50	3	4	1508	23	27.81	18.53	1.13	9.20	0.345	1.44
51	3	5.9	1508	22.9	27.83	18.57	1.07	9.41	0.355	1.52
52	3	7.6	1508	22.9	27.88	18.61	---	---	---	---
53	2	0.1	1525	23.7	27.59	18.17	1.09	10.04	0.314	1.19
54	32	2	1525	23.5	27.69	18.30	0.96	10.04	0.324	1.17
55	2	3.9	1525	23.1	27.77	18.47	1.04	9.10	0.324	0.47
56	2	7.3	1525	23	27.86	18.57	1.06	9.52	0.324	1.92
57	2	8.7	1525	22.5	27.99	18.80	1.05	8.06	0.334	1.53
58	2	9.8	1525	22.5	28	18.81	1.28	8.37	0.334	1.54
59	2	12.1	1525	22.5	27.96	18.78	0.89	8.58	0.324	1.48
60	1	0.1	1558	23.9	27.34	17.92	1.26	9.62	0.325	1.25
61	1	1.9	1558	23.8	27.39	17.99	1.05	9.83	0.346	1.13
62	1	3.7	1558	23.7	27.48	18.08	1.00	9.31	0.315	1.23
63	1	5.3	1558	23.6	27.55	18.17	1.27	9.72	0.335	1.33
64	1	6.5	1558	23.2	27.68	18.38	1.08	8.89	0.324	1.49
65	1	7.4	1558	23.2	27.69	18.38	1.02	9.00	0.324	1.29
66	2	0.1	1618	23.9	27.55	18.08	1.02	9.72	0.325	1.03
67	2	2	1618	23.8	27.57	18.12	1.42	9.72	0.335	1.10
68	2	3.9	1618	23.6	27.67	18.26	1.10	9.20	0.345	1.19

CORRECTED DATA LIST: ADAMS POINT 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
69	2	5.8	1618	23.3	27.66	18.33	1.08	9.72	0.335	1.42
70	2	7.5	1618	23.1	27.72	18.43	1.12	9.00	0.335	0.50
71	2	9	1618	22.9	27.79	18.54	1.09	9.10	0.335	1.57
72	2	10.5	1618	23	27.82	18.54	1.33	9.31	0.365	1.36
73	2	12.4	1618	23	27.82	18.54	1.14	17.53	0.334	1.78
74	3	0.1	1811	23.5	27.41	18.09	0.98	10.03	0.335	1.02
75	3	2	1811	23.5	27.43	18.10	1.21	10.24	0.335	1.00
76	3	4	1811	23.3	27.45	18.17	1.24	10.24	0.356	0.96
77	3	6	1811	23	27.6	18.37	1.31	9.62	0.356	0.54
78	3	7.9	1811	23	27.57	18.35	1.15	20.03	0.356	1.29
79	2	0.1	1826	23.9	27.34	17.92	1.03	11.59	0.325	0.76
80	2	2	1826	23.5	27.34	18.04	1.10	10.55	0.346	0.97
81	2	4	1826	23.2	27.45	18.20	1.14	9.51	0.356	1.16
82	2	5.9	1826	23.2	27.48	18.22	1.15	10.14	0.345	1.22
83	2	7.8	1826	23.2	27.47	18.22	1.17	9.72	0.345	2.80
84	2	9.8	1826	23.1	27.49	18.26	1.00	10.24	0.046	1.44
85	1	0.1	1847	23.6	27.36	18.02	0.91	8.89	0.274	1.00
86	1	2	1847	23.6	27.37	18.03	0.98	10.35	0.335	1.02
87	1	4	1847	23.4	27.37	18.09	1.15	12.84	0.346	1.28
88	1	5.9	1847	23.4	27.49	18.18	0.28	10.04	0.345	1.75
89	1	7.9	1847	23.2	27.29	18.08	1.00	10.55	0.336	1.14
90	1	9.8	1847	23.2	27.46	18.21	0.81	9.83	0.346	1.17
91	2	0.1	1901	23.8	27.29	17.91	1.08	11.80	0.315	0.77

CORRECTED DATA LIST: ADAMS POINT 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
92	2	2	1901	23.5	27.37	18.06	1.01	10.55	0.335	1.00
93	2	4	1901	23.3	27.44	18.17	1.08	10.03	0.346	1.08
94	2	6	1901	23.3	27.44	18.17	1.16	10.24	0.346	1.19
95	2	8	1901	23.2	27.44	18.19	0.86	7.85	0.232	1.61
96	2	10	1901	23.1	27.43	18.21	0.93	10.03	0.346	1.16
97	2	12	1901	23.1	27.43	18.21	1.08	10.03	0.346	1.14
98	1	0.1	2013	23	27.43	18.24	1.07	10.14	0.325	1.11
99	1	2	2013	23	---	---	1.13	10.76	0.314	1.10
100	1	4	2013	23	27.44	18.25	1.04	9.72	0.335	0.36
101	1	6	2013	23	27.71	18.45	1.07	10.07	0.314	1.13
102	1	8	2013	23	27.49	18.29	0.28	10.04	0.335	1.47
103	2	0.1	2027	23	27.46	18.27	1.14	12.12	0.325	1.15
104	2	2	2027	23	27.47	18.27	1.08	23.04	0.325	1.29
105	2	4	2027	23	27.48	18.28	1.05	10.76	0.325	1.34
106	2	5.9	2027	23	27.53	18.32	1.25	9.62	0.335	1.17
107	2	7.8	2027	23	27.54	18.33	1.09	10.24	0.335	1.22
108	2	9.7	2027	23	27.55	18.33	1.28	13.37	0.335	1.21
109	2	11.5	2027	23	27.56	18.34	1.03	12.22	0.345	1.19
110	3	0.1	2045	22.9	27.49	18.32	1.10	10.24	0.315	1.22
111	3	2	2045	22.92	27.57	18.37	---	---	---	---
112	3	4	2045	22.9	27.53	18.35	1.23	9.52	0.345	1.33
113	3	5.9	2045	22.8	27.54	18.38	0.30	9.83	0.335	1.44
114	3	7.9	2045	22.8	27.59	18.42	1.16	9.93	0.242	1.29

CORRECTED DATA LIST: ADAMS POINT 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
115	2	0.1	2057	22.7	27.57	18.43	1.04	9.41
0.325	1.29							
116	2	2	2057	22.6	27.57	18.46	1.02	9.31
0.325	1.13							
117	2	3.9	2057	22.7	27.59	18.45	1.05	9.31
0.325	1.15							
118	2	5.8	2057	22.7	27.64	18.48	1.09	9.62
0.335	1.18							
119	2	7.8	2057	22.5	27.68	18.57	1.16	10.04
0.324	1.76							
120	2	9.6	2057	22.5	27.71	18.59	1.10	9.10
0.335	1.30							
121	2	0.1	2115	22.7	27.59	18.45	0.96	9.31
0.335	1.17							
122	1	2	2115	22.7	27.72	18.54	1.16	9.52
0.314	1.38							
123	1	3.9	2115	22.3	27.72	18.65	1.08	9.00
0.335	1.32							
124	1	5.9	2115	22.2	27.79	18.73	1.09	9.62
0.345	1.31							
125	1	7.8	2115	22.2	27.76	18.71	1.10	9.00
0.335	1.32							
126	1	9.7	2115	22.2	27.77	18.72	1.16	9.00
0.335	0.51							
127	2	0.1	2139	22.1	27.83	18.79	1.22	8.68
0.345	1.43							
128	2	2	2139	22.1	27.85	18.81	1.01	9.10
0.334	0.50							
129	2	4	2139	22	27.85	18.83	1.29	9.00
0.376	1.56							
130	2	5.9	2139	22	27.85	18.83	1.21	9.20
0.345	1.43							
131	2	7.7	2139	22	27.85	18.83	0.38	9.31
0.334	1.12							
132	2	9.6	2139	22	27.86	18.84	1.20	9.10
0.345	0.49							
133	2	11.1	2139	22	27.88	18.86	0.38	9.20
0.334	0.56							
134	2	0.1	2139	22.1	27.87	18.82	1.16	9.00
0.345	1.41							
135	2	2	2139	22.1	27.83	18.79	1.13	10.04
0.334	0.50							
136	2	9.6	2139	22	27.85	18.83	1.19	9.41
0.355	1.56							
137	3	0.1	2200	22.1	27.75	18.73	1.08	9.00
0.335	1.50							

CORRECTED DATA LIST: ADAMS POINT 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
138	3	2	2200	22.1	27.84	18.88	1.16	9.73	0.345	1.34
139	3	3.9	2200	22	27.89	18.86	0.28	9.52	0.345	1.63
140	3	5.8	2200	22	27.89	18.86	1.32	9.20	0.334	1.44
141	3	7.7	2200	22	27.88	18.86	1.10	9.73	0.345	1.09
142	3	9.3	2200	22	27.89	18.86	1.04	8.58	0.345	1.60

CORRECTED DATA LIST: LITTLE BAY 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
1	1	0.1	1038	21.7	27.97	19.00	1.18	10.06	0.355	0.36
2	1	1.6	1038	---	27.97	---	1.09	10.14	0.324	1.56
3	1	4.9	1038	22.45	27.99	18.82	1.23	8.27	0.313	1.55
4	1	0.1	1224	20.9	28.43	19.56	1.05	7.23	0.333	1.00
5	1	2	1224	20.9	28.48	19.60	0.98	6.92	0.323	1.81
6	1	3.9	1224	22.7	28.49	19.12	0.85	6.92	0.333	1.57
7	1	11.8	1224	22.73	28.49	19.12	0.97	6.60	0.302	1.64
8	1	0.1	1310	21.2	28.26	19.36	0.88	7.44	0.334	1.63
9	1	2	1310	---	28.33	---	0.99	7.12	0.323	1.58
10	1	3.9	1310	24.79	28.6	18.61	0.84	6.92	0.302	1.48
11	1	0.1	1450	22.2	27.74	18.78	1.07	8.79	0.324	1.83
12	1	1.7	1450	---	28.16	---	0.90	7.64	0.334	1.73
13	1	3.5	1450	26.45	28.25	17.86	1.05	7.85	0.313	1.65
14	1	8.7	1450	25.91	28.59	18.28	0.96	6.60	0.312	1.52
15	1	0.1	1530	22.7	27.88	18.66	1.12	8.79	0.334	1.55
16	1	2	1530	---	27.94	---	1.06	8.89	0.334	1.50
17	1	4	1530	24.3	27.96	18.27	1.09	8.48	0.324	1.57
18	1	10	1530	23.96	28.32	18.64	0.85	6.60	0.272	1.72
19	1	0.1	1830	23.2	27.52	18.25	1.10	11.70	0.335	1.16
20	1	2	1830	---	28.6	---	1.35	9.42	0.323	1.21
21	1	4	1830	22.05	27.52	18.57	1.11	9.52	0.314	1.23
22	1	10	1830	22	27.51	18.58	1.15	9.52	0.335	1.21

CORRECTED DATA LIST: LITTLE BAY 7/8/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	1	0.1	1030	22.5	27.48	18.42	1.02	10.04	0.026	1.47
24	1	2	1905	---	27.49	---	1.10	12.04	0.335	0.88
25	1	4	1905	21.07	27.49	18.81	1.06	10.76	0.325	1.21
26	1	10	1905	21.12	27.49	18.79	1.07	10.04	0.325	1.21
27	1	0.1	1905	22.3	27.55	18.52	1.06	9.72	0.314	0.44
28	1	2	2030	---	27.56	---	0.92	9.20	0.345	1.22
29	1	4	2030	19.99	27.65	19.21	1.07	24.09	0.314	1.28
30	1	8	2030	19.74	27.81	19.39	1.00	8.79	0.324	1.66
31	1	0.1	2215	21.7	27.95	18.99	0.74	8.16	0.334	1.78
32	1	1.8	2215	---	28.01	---	1.12	8.27	0.334	1.65
33	1	3.5	2215	19.47	28.04	19.63	1.25	8.48	0.344	0.64
34	1	7.1	2215	19.33	28.18	19.77	1.07	7.96	0.334	0.63

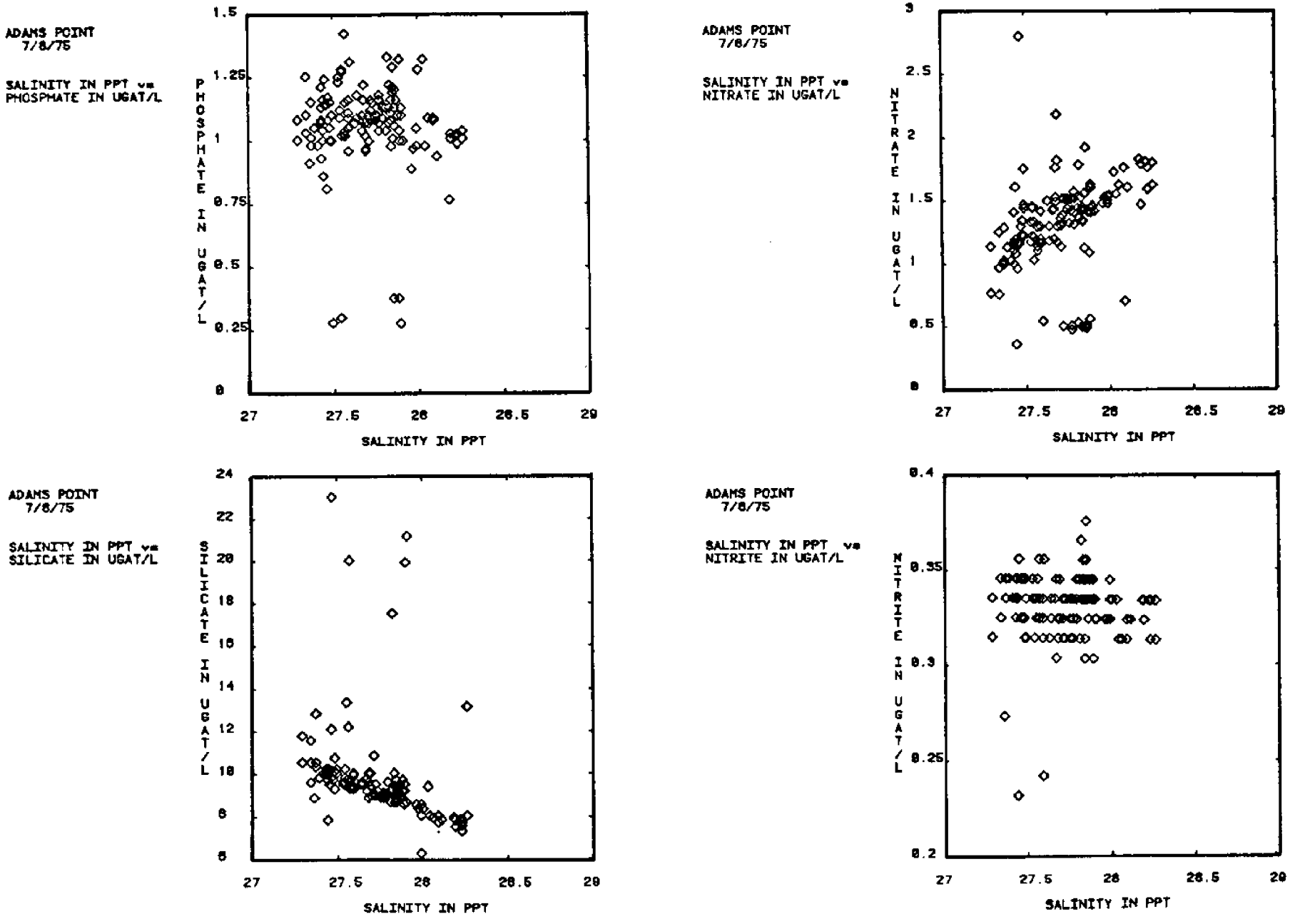


Fig. A-2. Salinity-nutrient plots for Adams Point, Adams Point cruise.

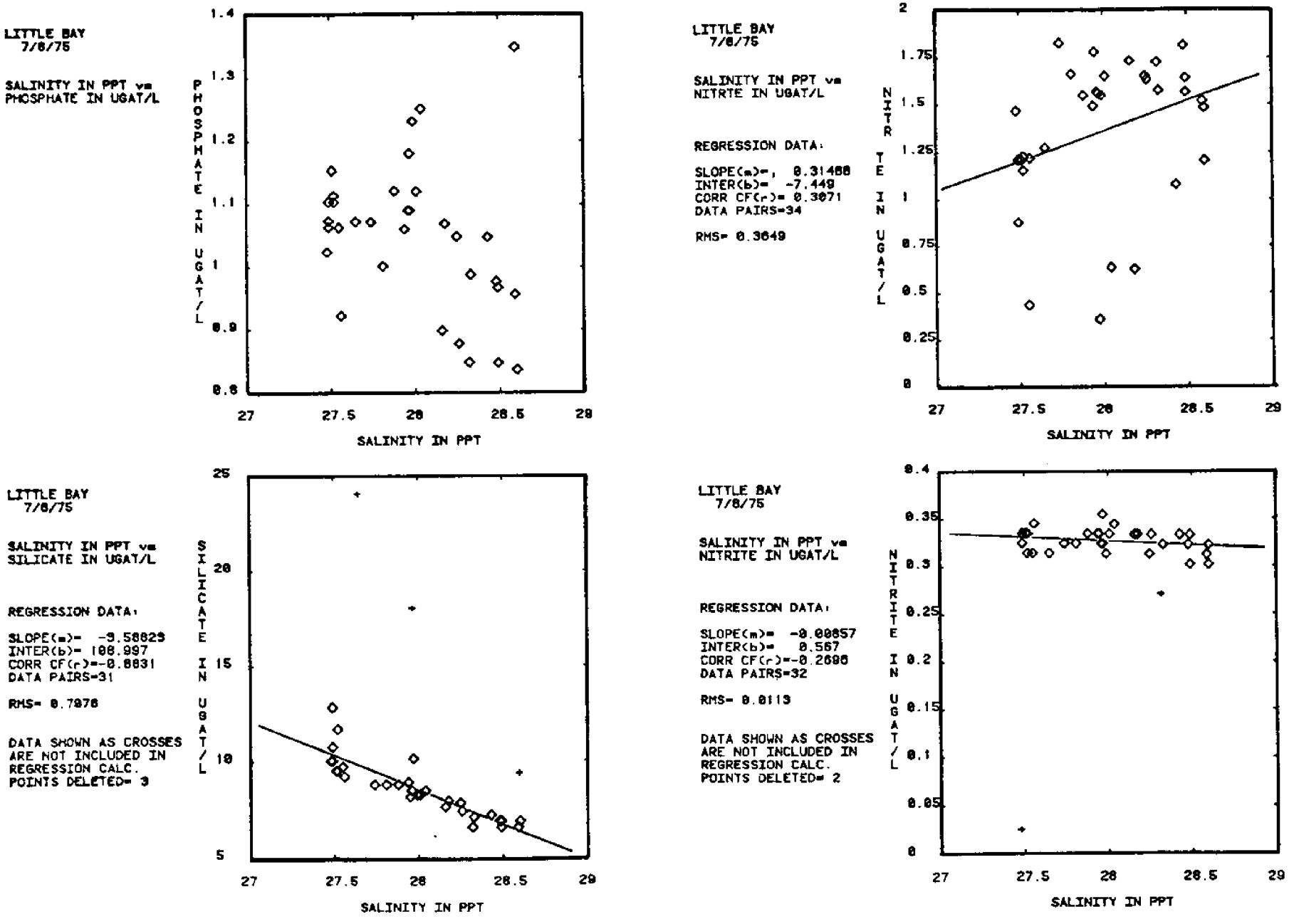


Fig. A-3. Salinity-nutrient plots for Little Bay, Adams Point cruise.

APPENDIX B

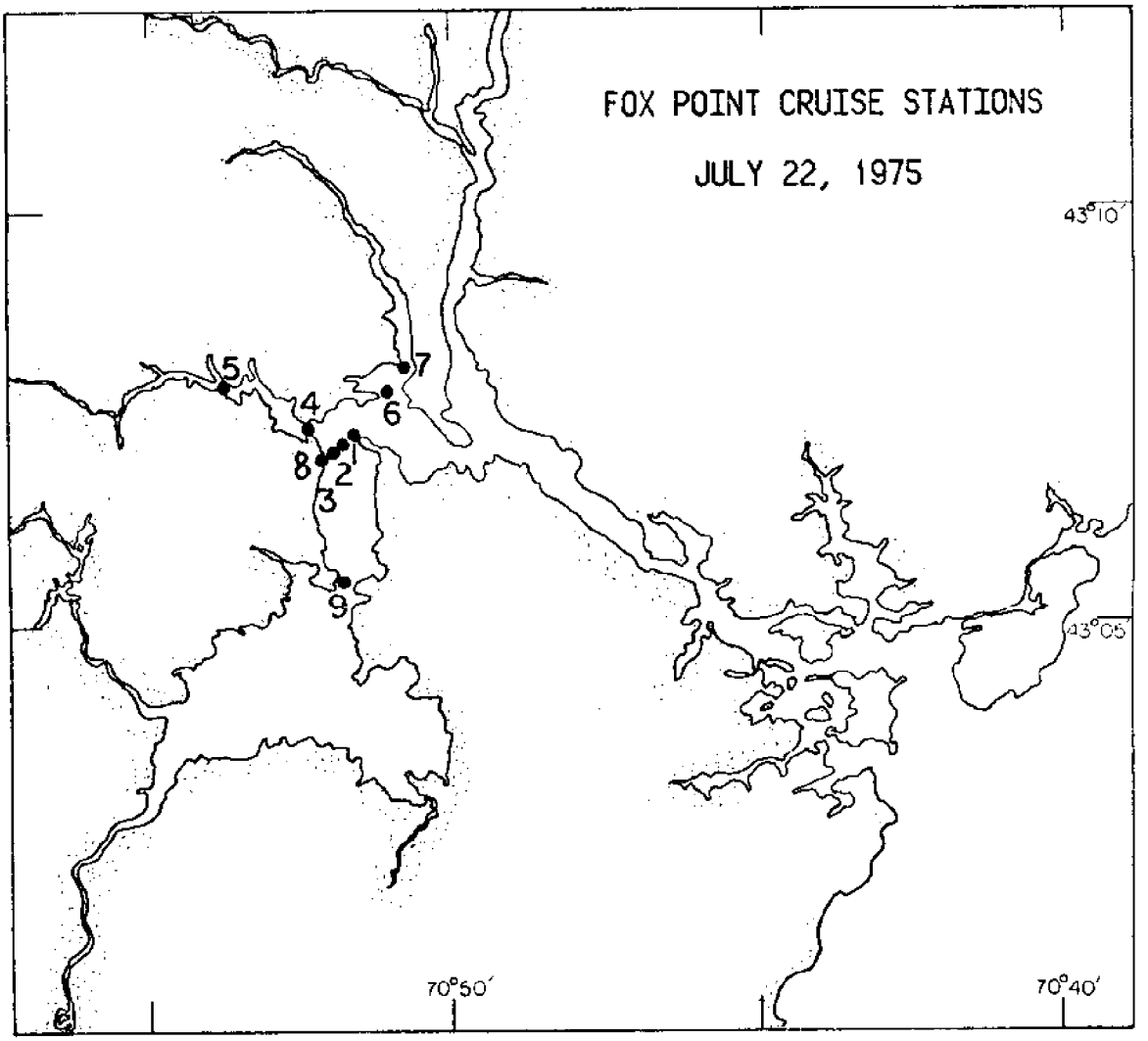


Fig. B-1. Station locations for Fox Point cruise.

1, 2, 3, 8	Fox Point
6, 7	Bellamy River
4, 5	Oyster River
9	Furber Strait

CORRECTED DATA LIST: FOX POINT 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
1	1	0.1	922	21.52	28.53	19.47	0.51	4.46
0.083	0.02							
2	1	2	922	21.39	28.55	19.52	0.58	4.77
0.094	0.13							
3	1	4	922	21.39	28.56	19.53	---	---
---	0.00							
4	1	6	922	21.39	28.52	19.50	0.61	4.90
0.074	0.10							
5	1	8	922	21.34	28.56	19.55	0.57	12.86
0.103	0.10							
6	2	0.1	957	21.92	28.38	19.25	0.56	16.81
0.054	0.00							
7	2	2	957	---	28.43	---	0.56	4.98
0.061	0.03							
8	2	4	957	21.52	28.51	19.46	0.57	5.79
0.082	0.06							
9	2	6	957	21.5	28.51	19.47	0.57	6.43
0.076	0.07							
10	2	8	957	21.4	28.55	19.52	0.58	4.78
0.094	0.10							
11	2	10	957	21.4	28.55	19.52	0.58	5.44
0.125	0.07							
12	3	0	1016	21.7	28.44	19.36	0.53	3.75
0.020	0.06							
13	3	2	1016	21.52	29.31	20.06	0.58	5.70
0.059	0.06							
14	3	4	1016	21.5	28.55	19.50	0.51	4.93
0.187	0.03							
15	3	6	1016	21.39	28.52	19.50	0.61	5.14
0.066	0.07							
16	3	8	1016	21.32	28.54	19.54	0.60	7.35
0.070	0.13							
17	2	0.1	1033	21	28.63	19.69	0.71	15.03
0.230	0.29							
18	2	2	1033	20.81	28.66	19.76	0.28	5.69
0.138	0.00							
19	2	4	1033	20.73	28.67	19.79	0.65	5.22
0.174	0.42							
20	2	6	1033	20.7	28.67	19.80	0.73	7.02
0.193	0.51							
21	2	8	1033	20.65	28.69	19.83	0.70	5.44
0.147	0.54							
22	2	10	1033	20.7	28.71	19.83	0.59	6.15
0.189	0.57							

CORRECTED DATA LIST: FOX POINT 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	2	12	1033	20.6	28.74	19.88	0.71	5.14	0.154	0.64
24	1	0.1	1230	18.15	29.31	20.92	0.58	5.50	0.210	1.05
25	1	2	1230	18.2	29.37	20.96	0.60	5.56	0.206	1.19
26	1	4	1230	17.95	29.54	21.14	0.55	5.21	0.170	1.28
27	1	6	1230	17.7	29.57	21.23	0.56	5.61	0.235	1.23
28	1	8	1230	17.6	29.56	21.24	0.59	5.29	0.265	1.28
29	1	10	1230	17.38	29.61	21.33	0.53	6.16	0.228	1.31
30	2	0.1	1255	19.09	29.61	20.92	0.60	27.75	0.191	1.14
31	2	2	1255	18.47	29.34	20.87	0.68	24.80	0.274	1.05
32	2	4	1255	18.26	29.38	20.95	0.54	5.65	0.282	1.15
33	2	6	1255	18	29.45	21.06	0.73	5.69	0.209	1.23
34	2	8	1255	17.76	29.54	21.19	0.51	5.41	0.281	1.27
35	2	10	1255	17.69	29.51	21.18	0.55	5.38	0.301	1.12
36	2	12	1255	17.21	29.68	21.43	0.60	6.54	0.332	1.31
37	2	14	1255	17	29.71	21.50	0.57	9.75	0.213	1.29
38	3	0.1	1341	18.8	29.31	20.76	0.56	5.07	0.253	0.89
39	3	2	1341	18.16	29.48	21.05	0.67	10.35	0.267	1.21
40	3	4	1341	17.46	29.62	21.32	0.63	7.58	0.292	1.22
41	3	6	1341	17.32	29.65	21.38	---	4.89	0.192	0.36
42	3	8	1341	17.15	29.69	21.45	0.51	6.48	0.311	1.21
43	2	0.1	1418	20.46	29.06	20.15	0.48	5.44	0.162	0.31
44	2	2	1418	20.73	28.88	19.95	0.56	6.78	0.128	0.15
45	2	4	1418	19.65	29.14	20.42	0.57	26.10	0.228	0.55

CORRECTED DATA LIST: FOX POINT 7/22/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

46	2	6	1418	19.15	29.23	20.62	0.58	5.38
0.183	0.73							
47	2	8	1418	18.7	29.31	20.79	0.57	10.03
0.231	0.73							
48	2	10	1418	18.09	29.48	21.07	0.56	4.91
0.247	1.03							
49	3	0.1	1545	20.8	28.92	19.96	0.61	5.44
0.127	0.15							
50	3	2	1545	20.29	28.99	20.15	0.62	5.35
0.051	0.00							
51	3	4	1545	19.6	29.14	20.44	0.59	17.10
0.172	0.58							
52	3	6	1545	19.02	29.27	20.68	0.10	4.56
0.139	0.40							
53	3	8	1545	18.83	29.3	20.75	0.59	3.70
0.108	1.00							
54	2	0.1	1607	20.5	29.04	20.13	0.50	5.52
0.203	0.31							
55	2	2	1607	20.02	29.09	20.29	0.49	6.70
0.162	0.33							
56	2	4	1607	19.6	29.14	20.44	---	---
---	0.00							
57	2	6	1607	19.46	29.15	20.48	0.56	6.81
0.154	0.51							
58	2	8	1607	19.39	29.14	20.49	0.62	5.21
0.192	0.58							
59	2	10	1607	19.29	29.14	20.51	0.58	5.40
0.194	0.65							
60	2	12	1607	19	29.18	20.62	0.56	6.24
0.168	0.71							
61	2	14	1607	18.9	29.23	20.68	0.56	6.28
0.084	0.92							
62	1	0.1	1641	20.69	28.79	19.89	0.58	5.31
0.091	0.31							
63	1	2	1641	20.72	28.77	19.87	0.52	5.64
0.134	0.23							
64	1	4	1641	---	28.71	---	0.53	5.58
0.123	0.17							
65	1	6	1641	20.62	28.79	19.91	0.57	5.26
0.144	0.32							
66	1	7.9	1641	20.72	28.76	19.86	0.57	5.62
0.144	0.29							
67	1	9.8	1641	20.62	28.77	19.89	0.60	5.63
0.170	0.28							
68	8	0.1	1718	22.49	28.39	19.11	1.01	10.95
0.090	0.00							

CORRECTED DATA LIST: FOX POINT 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
69	8	2	1718	22.45	28.4	19.13	0.49	5.63	0.127	0.00
70	8	3.9	1718	22.3	28.47	19.22	0.53	5.65	0.059	0.00
71	8	6	1718	21.79	28.53	19.40	0.51	16.49	0.077	0.13
72	1	0.1	1733	21.96	28.48	19.32	0.55	5.39	0.082	0.00
73	1	2	1733	21.99	28.49	19.32	0.67	5.31	0.102	0.03
74	1	3.9	1733	22	28.46	19.29	0.55	5.65	0.081	0.01
75	1	5.9	1733	21.96	28.49	19.33	0.57	5.52	0.086	0.07
76	1	7.6	1733	21.85	28.49	19.36	0.65	5.58	0.103	0.08
77	1	9.5	1733	21.8	28.52	19.39	0.49	5.92	0.075	0.11
78	2	0.1	1755	21.36	28.64	19.60	0.52	7.04	0.165	0.07
79	2	2	1755	21.35	28.63	19.60	0.58	5.47	0.119	0.15
80	2	4	1755	21.39	28.59	19.55	0.55	5.30	0.122	0.10
81	2	6	1755	21	28.72	19.76	0.64	9.15	0.156	0.31
82	2	8	1755	21.25	28.71	19.68	0.65	7.08	0.120	0.43
83	2	10	1755	20.89	28.74	19.80	0.10	20.27	0.109	0.31
84	8	0.1	1937	23.5	28.12	18.62	0.43	6.88	0.053	0.00
85	8	2	1937	23.5	28.15	18.65	0.26	16.89	0.078	0.00
86	8	4	1937	23.5	28.16	18.65	1.19	7.14	0.056	0.00
87	8	6	1937	23.18	28.22	18.79	0.48	9.33	0.076	0.00
88	1	0.1	1950	23.43	28.17	18.68	0.42	12.06	0.064	0.00
89	1	2	1950	23.46	28.15	18.66	0.53	6.04	0.065	0.00
90	1	4	1950	23.47	28.16	18.66	0.52	5.33	0.064	0.00
91	1	6	1950	22.62	28.37	19.06	0.39	6.37	0.097	0.00
92	1	8	1950	22.22	28.46	19.23	0.54	5.33	0.104	0.00

CORRECTED DATA LIST: FOX POINT 7/22/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

93	2	0.1	2012	23.45	28.17	18.67	0.42	---
---	0.00							
94	2	2	2012	23.14	28.23	18.81	0.45	10.21
0.054	0.00							
95	2	4	2012	22.81	28.29	18.94	0.46	5.34
0.053	0.00							
96	2	6	2012	22.46	28.35	19.08	1.79	11.57
0.060	0.01							
97	2	10	2012	22.45	28.35	19.09	0.63	5.35
0.052	0.00							
98	2	10	2012	22.45	28.35	19.09	0.63	5.35
0.052	0.00							
99	2	12	2115	22.35	28.42	19.17	0.48	10.88
0.057	0.00							
100	2	0	2115	22.2	28.41	19.20	0.48	8.65
0.062	0.00							
101	2	2	2115	22.13	28.42	19.23	0.48	5.06
0.103	0.03							
102	2	4	2115	22.13	28.47	19.27	0.58	9.94
0.072	0.05							
103	2	6	2115	22.03	28.47	19.29	0.50	5.10
0.093	0.03							
104	2	8	2115	21.84	28.5	19.37	0.50	14.58
0.093	0.12							
105	2	9.8	2115	21.79	28.54	19.41	0.51	5.53
0.103	0.04							
106	1	0.1	2141	20.76	28.69	19.80	0.50	5.13
0.101	0.25							
107	1	2	2141	20.84	28.67	19.76	1.03	5.22
0.195	0.25							
108	1	4	2141	20.86	28.68	19.76	0.49	31.28
0.132	0.22							
109	1	5.8	2141	20.9	28.67	19.74	0.18	4.32
0.078	0.06							
110	1	7.8	2141	20.81	28.68	19.78	0.49	5.20
0.106	0.25							
111	1	9.5	2141	20.95	28.67	19.73	0.52	5.19
0.103	0.26							
112	8	0.1	2204	20.47	28.75	19.92	0.54	5.11
0.147	0.26							
113	8	2	2204	20.5	28.47	19.70	0.56	16.55
0.129	0.27							
114	8	3.9	2204	20.5	28.47	19.70	0.48	2.98
0.069	0.33							
115	8	5.9	2204	20.41	28.75	19.93	0.49	18.25
0.151	0.30							

CORRECTED DATA LIST: BELLAMY RIVER 7/22/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

1	6	0.1	820	23.5	27.19	17.92	1.18	14.30
0.248	0.50							
2	6	1	820	22.5	27.31	18.29	1.08	13.61
0.230	0.45							
3	6	2	820	22.2	28.46	19.24	0.57	5.07
0.086	0.07							
4	6	0.1	850	22.5	28.45	19.15	0.57	5.10
0.082	0.00							
5	6	1	850	22.2	28.47	19.25	0.59	5.31
0.077	0.01							
6	6	2	850	22	28.45	19.29	0.62	5.69
0.066	0.06							
7	7	0.1	900	23	27.22	18.08	1.11	13.94
0.164	0.18							
8	8	0.1	900	23.5	26.34	17.28	1.50	18.97
0.213	0.23							
9	9	0.1	900	24	25.67	16.64	1.59	21.53
0.247	0.32							
10	10	0.1	900	24.3	25.04	16.08	1.84	24.65
0.315	0.68							
11	6	0.1	1020	22	28.96	19.67	0.60	5.51
0.226	0.77							
12	6	1	1020	20.5	29.02	20.11	0.62	5.45
0.229	0.84							
13	6	3	1020	20.2	29.08	20.24	0.55	5.47
0.207	0.86							
14	6	0.1	1050	20.5	29.24	20.28	0.58	5.33
0.242	0.65							
15	6	1	1050	20.2	29.14	20.28	0.60	5.43
0.236	0.85							
16	6	3	1050	20	29.11	20.31	0.59	5.24
0.244	0.91							
17	7	0.1	1100	23.2	28.45	18.96	0.54	7.05
0.051	0.02							
18	8	0.1	1100	22.5	28.52	19.20	0.62	6.67
0.088	0.06							
19	9	0.1	1100	24.9	27.19	17.52	0.98	14.31
0.188	0.20							
20	10	0.1	1100	26	25.33	15.81	1.57	25.47
0.383	0.48							
21	6	0.1	1220	19.5	29.51	20.74	0.56	5.05
0.211	1.14							
22	6	1	1220	19	29.51	20.87	0.62	5.65
0.232	1.11							

CORRECTED DATA LIST: BELLAMY RIVER 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	6	2	1220	19	29.46	20.83	0.59	5.21	0.254	1.04
24	6	3	1220	19	29.5	20.86	0.65	5.53	0.249	1.20
25	6	4	1220	18.3	29.63	21.13	0.39	---	---	1.27
26	6	0.1	1250	19.3	29.52	20.80	1.05	5.01	0.260	1.05
27	6	1	1250	19	29.49	20.85	0.58	6.19	0.265	1.07
28	6	2	1250	18.9	29.56	20.93	0.67	15.61	0.175	1.70
29	6	3	1250	18.2	29.66	21.18	0.57	5.14	0.278	1.22
30	6	4	1250	18	29.72	21.27	0.60	6.31	0.233	1.43
31	6	0.1	1420	23	28.93	19.37	0.46	6.73	0.099	0.81
32	6	1	1420	22	28.99	19.69	0.48	6.63	0.118	0.02
33	6	2	1420	20.5	29.28	20.31	0.45	5.47	0.232	0.29
34	6	3	1420	19.5	29.35	20.62	0.55	15.43	0.209	0.51
35	6	4	1420	19.2	---	---	0.57	5.32	0.217	0.57
36	6	0.1	1450	23.9	28.58	18.86	0.54	6.98	0.074	0.00
37	6	1	1450	22.5	28.72	19.35	0.50	6.22	0.095	0.00
38	6	2	1450	20.9	29.34	20.25	0.55	5.96	0.164	0.36
39	6	4	1450	19	29.58	20.92	0.55	5.59	0.216	0.73
40	7	0.1	1500	21.5	29.15	19.95	0.45	5.81	0.094	0.08
41	8	0.1	1500	25	28	18.10	0.65	---	---	0.00
42	9	0.1	1515	26	27.31	17.29	0.91	13.01	0.085	0.00
43	10	0.1	1520	25.5	26.64	16.93	1.11	33.53	0.054	0.00
44	6	0.1	1620	24	28.44	18.72	0.98	8.13	0.073	0.00
45	6	1	1620	23	28.57	19.10	0.63	12.75	0.095	0.00

CORRECTED DATA LIST: BELLAMY RIVER 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
46	6	2	1620	22.5	28.7	19.34	0.72	12.26
0.068	0.00							
47	6	4	1620	21	29.23	20.14	0.51	5.00
0.203	0.32							
48	6	0.1	1650	24	28.39	18.68	0.68	14.97
0.081	0.00							
49	6	1	1650	23	28.38	18.96	0.65	8.06
0.065	0.00							
50	6	2	1650	22.5	28.39	19.10	0.64	14.65
0.095	0.00							
51	6	4	1650	20.9	29.23	20.17	0.57	5.65
0.173	0.37							
52	7	0.1	1705	23	28.55	19.09	0.58	7.00
0.069	1.55							
53	8	0.1	1710	25.1	27.14	17.43	1.12	14.18
0.069	0.00							
54	9	0.1	1720	26	25.62	16.02	1.27	20.00
0.005	0.00							
55	10	0.1	1730	26.2	24.16	14.87	1.57	25.73
0.121	0.00							
56	6	0.1	1930	24	27.00	17.70	0.58	5.59
0.222	0.75							
57	6	1	1930	23	27.58	18.36	0.09	11.74
0.061	0.00							
58	6	2	1930	22.9	28.17	18.83	0.84	8.07
0.102	0.00							
59	6	0.1	2000	22.8	28.14	18.83	0.58	7.03
0.092	0.00							
60	6	1	2000	22.8	28.14	18.83	0.58	7.03
0.092	0.00							
61	6	2	2000	22.1	2.62	-0.12	0.89	5.90
0.178	0.06							
62	6	3	2000	22	28.49	19.32	0.63	5.47
0.107	0.05							
63	6	0.1	2120	21.9	28.58	19.41	0.56	9.02
0.110	0.01							
64	6	1	2120	21.9	28.58	19.41	0.48	5.07
0.106	0.00							
65	6	2	2120	21.9	28.59	19.42	0.53	5.29
0.194	0.00							
66	6	0.1	2150	21.2	28.62	19.63	0.51	4.95
0.121	0.12							
67	6	1	2150	21.1	28.64	19.67	0.15	6.18
0.157	0.53							
68	6	2	2150	21	28.68	19.73	0.57	4.96
0.165	0.31							
69	6	4	2150	20.8	28.72	19.81	---	---
---	---							

CORRECTED DATA LIST: OYSTER RIVER 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	4	0.1	825	---	28.14	---	0.54	5.98	0.060	0.17
2	4	2	825	22.3	---	---	0.62	5.21	0.042	0.04
3	4	4	825	22.5	28.22	18.98	0.61	6.30	0.038	0.26
4	4	6	825	22	28.27	19.15	0.59	5.54	0.053	0.00
5	4	0.1	855	---	28.25	---	0.57	5.60	0.057	0.00
6	4	2	855	22.2	28.2	19.04	0.59	7.57	0.056	0.02
7	4	4	855	22.3	28.25	19.05	0.54	2.78	0.079	0.09
8	4	6	855	21.8	28.28	19.21	0.53	5.36	0.050	0.02
9	5	0.1	945	---	22.87	---	1.79	24.11	0.209	0.18
10	4	0.1	1050	---	28.65	---	0.54	5.49	0.105	0.14
11	4	2	1050	21.2	28.65	19.65	0.58	7.52	0.085	0.17
12	4	4	1050	21.3	28.72	19.68	0.64	30.33	0.186	0.16
13	4	6	1050	20	28.71	20.01	0.54	5.51	0.195	0.24
14	5	0.1	1120	---	26.34	---	1.11	10.27	0.058	0.03
15	4	0.1	1220	---	29.09	---	0.54	5.12	0.168	0.63
16	4	4	1220	19.4	29.17	20.51	0.55	5.68	0.180	0.87
17	4	8	1220	19.6	29.17	20.46	0.58	5.08	0.184	0.83
18	4	12	1220	19.2	29.2	20.58	0.54	5.39	0.194	0.86
19	4	0.1	1255	---	29.17	---	0.64	5.62	0.186	1.16
20	4	4	1255	19.1	29.42	20.77	0.58	5.23	0.244	0.70
21	4	8	1255	19.1	29.28	20.67	0.51	5.64	0.295	0.84
22	4	12	1255	18.5	29.42	20.92	0.52	5.54	0.206	1.07

CORRECTED DATA LIST: OYSTER RIVER 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	4	0.1	1425	---	---	---	0.47	6.90	0.142	0.30
24	4	4	1425	17.5	---	---	0.52	5.41	0.224	1.24
25	4	8	1425	17.5	---	---	0.54	6.80	0.315	1.18
26	4	12	1425	17	---	---	0.55	5.55	0.296	1.17
27	4	0.1	1455	---	28.94	---	0.53	5.71	0.105	0.16
28	4	2	1455	---	29.18	---	0.56	5.47	0.161	0.35
29	4	6	1455	---	29.43	---	0.50	5.98	0.298	0.69
30	4	10	1455	---	29.64	---	0.57	5.83	0.216	1.21
31	5	0.1	1525	---	20.96	---	1.36	24.99	0.077	0.07
32	4	0.1	1620	---	28.7	---	0.47	5.62	0.093	0.07
33	4	2	1620	---	28.73	---	0.56	5.47	0.184	0.51
34	4	6	1620	---	29.33	---	0.49	5.47	.279	0.51
35	4	10	1620	---	28.36	---	0.57	5.19	0.193	0.82
36	4.	0.1	1700	---	28.68	---	0.49	7.46	0.092	0.09
37	4	2	1700	20.6	29.01	20.08	0.45	8.76	0.150	0.07
38	4	4	1700	19	29.26	20.68	0.53	5.89	0.142	0.49
39	4	8	1700	19	29.3	20.71	0.48	5.52	0.141	0.52
40	5	0.1	1700	---	20.13	---	3.56	30.60	0.117	0.01
41	4	0.1	1920	---	28.08	---	0.55	5.86	0.078	0.00
42	4	1.9	1920	22.5	28.23	18.98	0.48	5.56	0.066	0.52
43	4	3.9	1920	23	28.44	19.00	0.46	5.74	0.072	0.07
44	4	7.7	1920	---	28.52	---	0.53	5.24	0.054	0.00
45	4	0.1	2000	---	28.36	---	0.55	5.23	0.064	0.18

CORRECTED DATA LIST: OYSTER RIVER 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
46	4	2	2000	22.4	28.39	19.13	0.51	6.07
0.054	0.00							
47	4	4	2000	22.9	28.44	19.03	0.44	7.30
0.086	0.00							
48	4	6	2000	22.2	28.49	19.26	0.46	5.15
0.073	0.42							
49	4	0.1	2120	---	28.52	---	0.50	6.03
0.077	0.00							
50	4	2	2120	22.1	28.5	19.30	0.51	6.52
0.054	0.01							
51	4	4	2120	22.1	28.5	19.30	0.46	6.28
0.076	0.01							
52	4	6	2120	21.9	28.55	19.39	0.49	---
---	0.00							
53	4	0.1	2150	---	28.49	---	0.51	5.95
0.058	0.00							
54	4	2	2150	21.8	28.55	19.42	0.47	4.96
0.128	0.00							
55	4	4	2150	22	28.6	19.48	0.47	12.50
0.071	0.01							
56	4	6	2150	21.9	28.55	19.39	0.58	5.09
0.087	0.07							

CORRECTED DATA LIST: FURBER STRAIT 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	9	0.1	917	23	27.89	18.59	0.61	5.65	0.064	0.00
2	9	2	917	22.45	27.88	18.73	0.61	9.37	0.083	0.00
3	9	4	917	22.45	27.91	18.76	0.48	5.68	0.049	0.26
4	9	7.8	917	22.45	28.08	18.88	0.62	7.34	0.048	0.02
5	9	0.1	1012	22.22	28.22	19.05	0.59	5.44	0.278	0.00
6	9	2	1012	21.85	28.29	19.21	0.59	5.66	0.061	0.05
7	9	4	1012	21.82	28.32	19.24	0.59	5.18	0.078	0.07
8	9	7.6	1012	21.75	28.32	19.25	0.53	5.53	0.066	0.49
9	9	0.1	1117	22.02	28.36	19.21	0.49	5.16	0.057	0.00
10	9	2	1117	21.62	28.59	19.49	0.60	5.10	0.057	0.01
11	9	4	1117	21.6	28.42	19.37	0.61	4.97	0.077	0.00
12	9	7.5	1117	21.52	28.43	19.40	0.59	6.38	0.064	0.01
13	9	0.1	1147	22	28.43	19.27	0.49	5.12	0.047	0.00
14	9	2	1147	21.91	28.5	19.35	0.67	5.27	0.095	0.03
15	9	3.8	1147	21.22	28.53	19.55	0.57	5.74	0.110	0.09
16	9	2	1317	20.85	28.69	19.77	0.57	5.16	0.127	0.09
17	9	4	1317	20.67	28.71	19.84	0.52	---	---	0.17
18	9	8	1317	21	28.71	19.75	0.55	5.27	0.127	0.33
19	9	0.1	1349	21.5	28.57	19.51	0.52	5.16	0.090	0.00
20	9	2	1349	22.25	28.59	19.32	0.57	6.40	0.075	0.00
21	9	8	1349	21.39	28.78	19.70	0.58	6.05	0.135	0.34
22	9	0.1	1517	23.31	28.21	18.74	0.48	6.85	0.041	0.41

CORRECTED DATA LIST: FURBER STRAIT 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SI02	10.NO2	11.NO3
23	9	2	1517	22.97	28.23	18.85	0.56	5.74	0.270	0.00
24	9	7.8	1517	20.42	28.58	19.80	0.57	5.21	0.108	0.07
25	9	0.1	1547	23.6	28.19	18.65	0.53	5.69	0.051	0.00
26	9	2	1547	23.15	28.22	18.80	0.51	5.45	0.062	---
27	9	7.8	1547	23.63	28.51	18.88	0.51	5.39	0.072	0.00
28	9	0.1	1747	24.85	27.93	18.32	0.45	6.34	0.062	0.00
29	9	2	1747	23.9	27.99	18.41	0.48	6.23	0.054	0.00
30	9	4	1747	23.5	28.12	18.62	0.44	5.53	0.042	0.00
31	9	7.7	1747	23.85	28.22	18.82	0.47	5.63	0.056	0.00
32	9	0.1	1817	24.1	27.77	18.19	0.48	6.37	0.063	0.00
33	9	2	1817	24.15	27.77	18.17	0.61	6.62	0.058	0.00
34	9	4	1817	23.85	28.01	18.44	0.48	6.32	0.041	0.00
35	9	7.7	1817	23.55	28.08	18.58	0.50	6.60	0.036	0.00
36	9	0.1	1917	24.47	27.09	17.57	0.51	7.59	0.039	0.00
37	9	2	1917	24.29	27.76	18.13	0.52	6.66	0.067	0.00
38	9	4	1917	24.11	27.8	18.21	0.58	6.32	0.056	0.00
39	9	8	1917	23.5	27.92	18.47	0.54	5.86	0.047	0.00
40	9	0.1	1947	24.38	27.17	17.66	0.51	7.55	0.067	0.00
4141	9	2	1947	24.3	27.54	17.96	0.60	6.93	0.052	0.00
42	9	4	1947	24.3	27.63	18.03	0.46	7.15	0.088	0.00
43	9	8	1947	23.52	27.83	18.40	0.51	6.44	0.077	0.00
44	9	0.1	2117	23.95	27.73	18.20	0.42	5.84	0.043	0.39
45	9	2	2117	23.79	27.93	18.40	0.43	6.49	0.101	0.00

CORRECTED DATA LIST: FURBER STRAIT 7/22/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
46	9	4	2117	23.75	---	---	0.40	5.40
0.047	0.00							
47	9	7.8	2117	23.42	28.09	18.62	0.47	5.29
0.051	0.00							
48	9	0.1	2155	23.27	27.79	18.44	0.40	8.87
0.043	0.00							
49	9	2	2155	22.7	28.32	19.00	0.42	4.77
0.068	0.00							
50	9	4	2155	22.5	28.37	19.09	0.56	4.57
0.038	0.16							
51	9	7.5	2155	22.42	28.38	19.12	0.57	5.38
0.104	0.00							

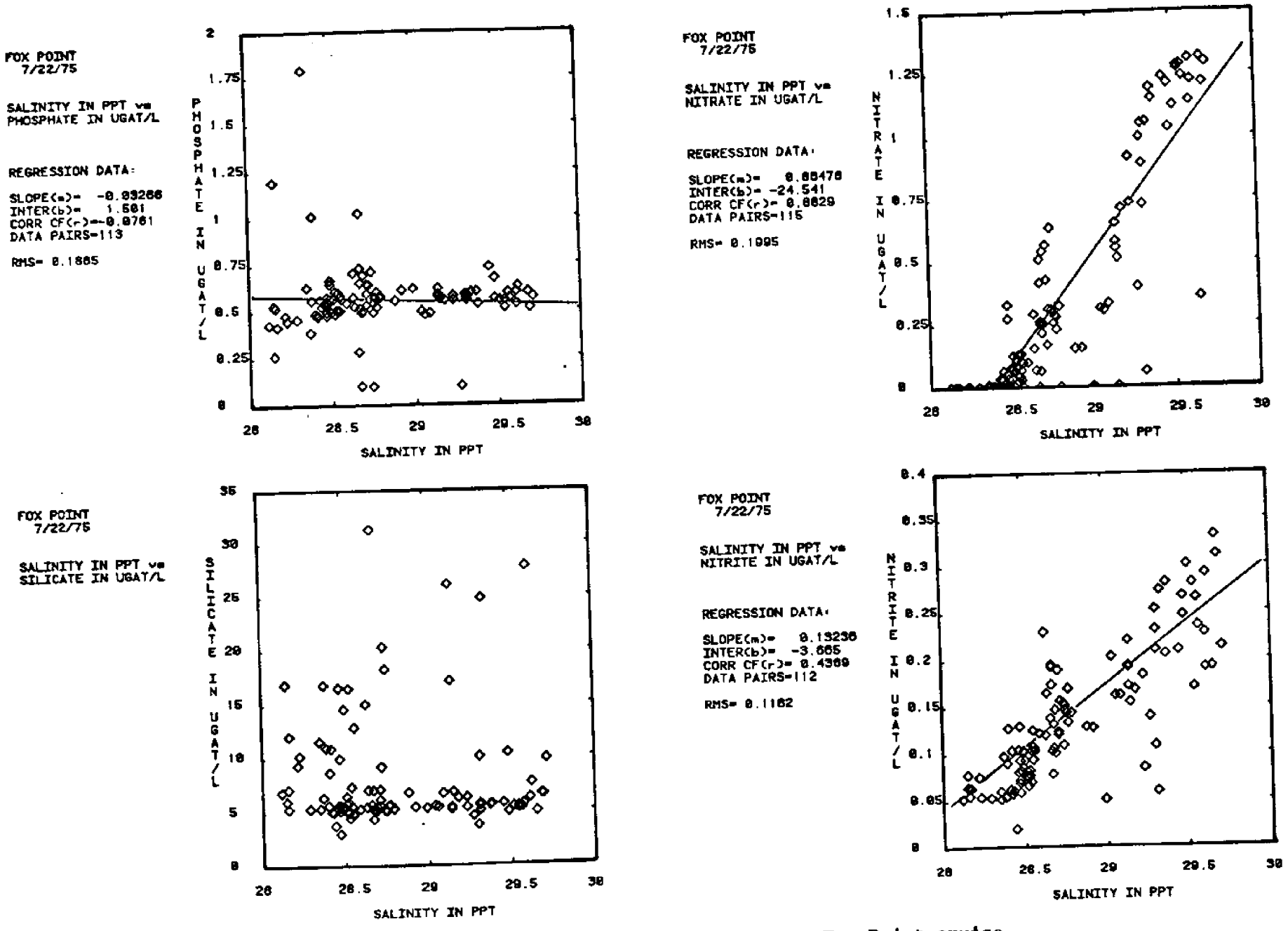


Fig. B-2. Salinity-nutrient plots for Fox Point, Fox Point cruise.

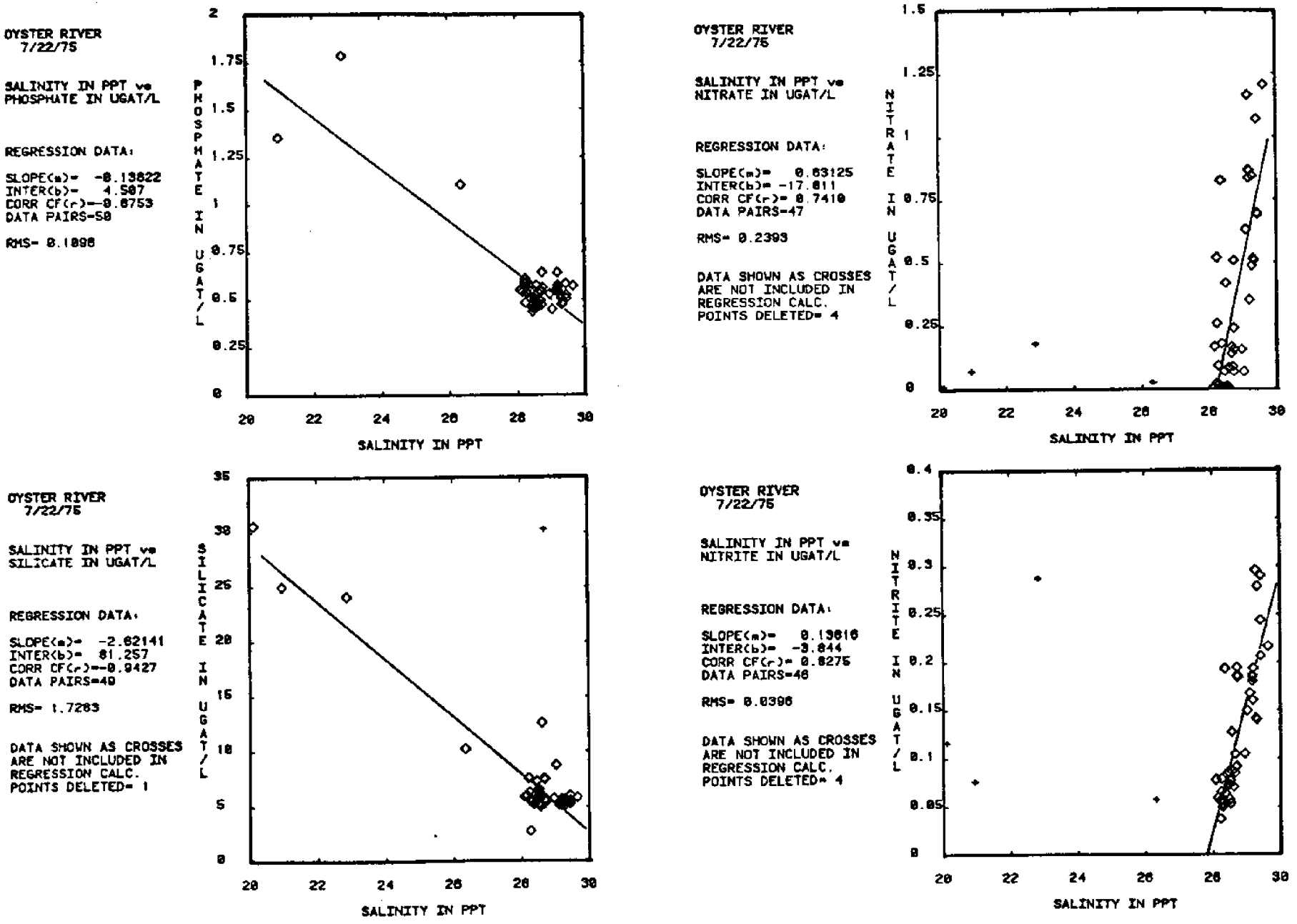


Fig. B-4. Salinity-nutrient plots for Oyster River, Fox Point cruise.

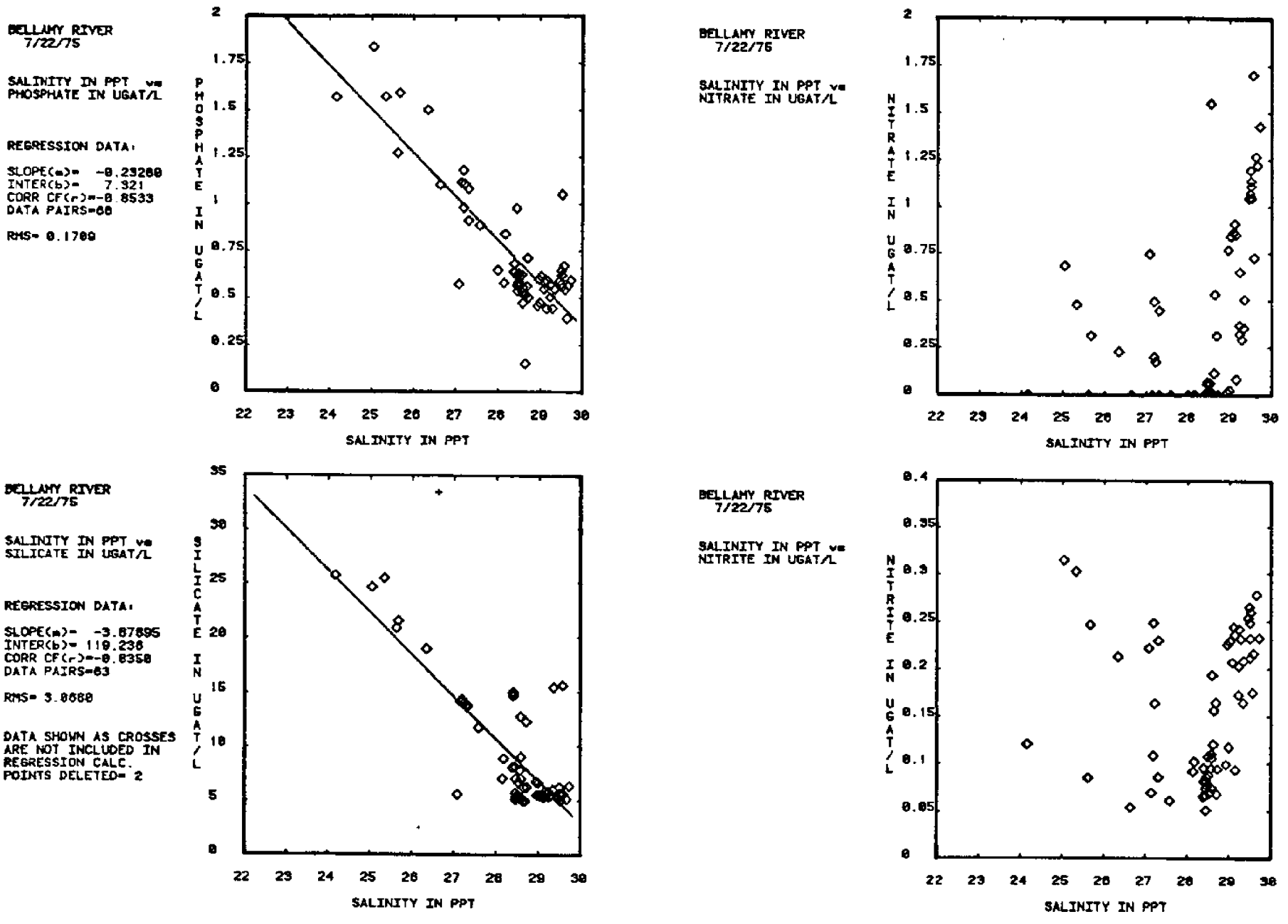


Fig. B-3. Salinity-nutrient plots for Bellamy River, Fox Point cruise.

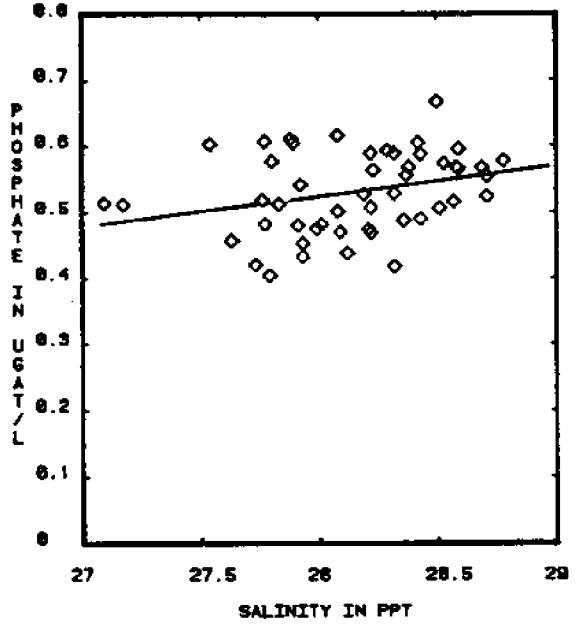
FURBER STRAIT
7/22/75

SALINITY IN PPT vs
PHOSPHATE IN UGAT/L

REGRESSION DATA:

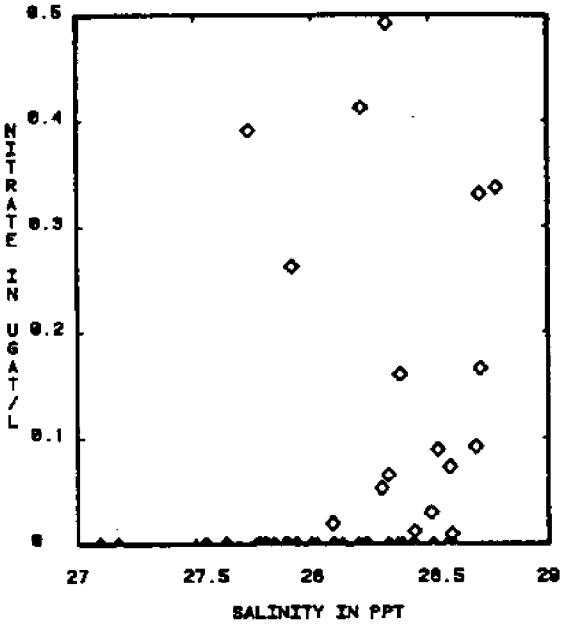
SLOPE(m)= 0.04547
INTER(b)= -0.758
CORR CF(r)= 0.2815
DATA PAIRS=58

RMS= 0.0583



FURBER STRAIT
7/22/75

SALINITY IN PPT vs
NITRATE IN UGAT/L



FURBER STRAIT
7/22/75

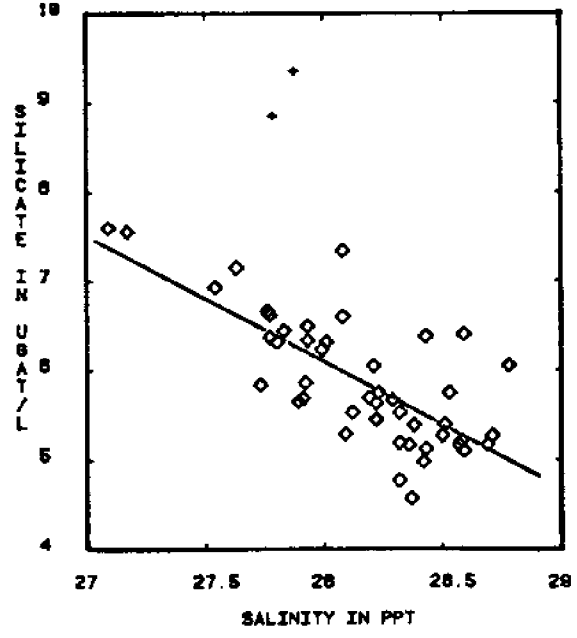
SALINITY IN PPT vs
SILICATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -1.42889
INTER(b)= 45.875
CORR CF(r)=-0.7363
DATA PAIRS=47

RMS= 0.4877

DATA SHOWN AS CROSSES
ARE NOT INCLUDED IN
REGRESSION CALC.
POINTS DELETED= 2



FURBER STRAIT
7/22/75

SALINITY IN PPT vs
NITRITE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= 0.03254
INTER(b)= -0.047
CORR CF(r)= 0.4874
DATA PAIRS=47

RMS= 0.0215

DATA SHOWN AS CROSSES
ARE NOT INCLUDED IN
REGRESSION CALC.
POINTS DELETED= 2

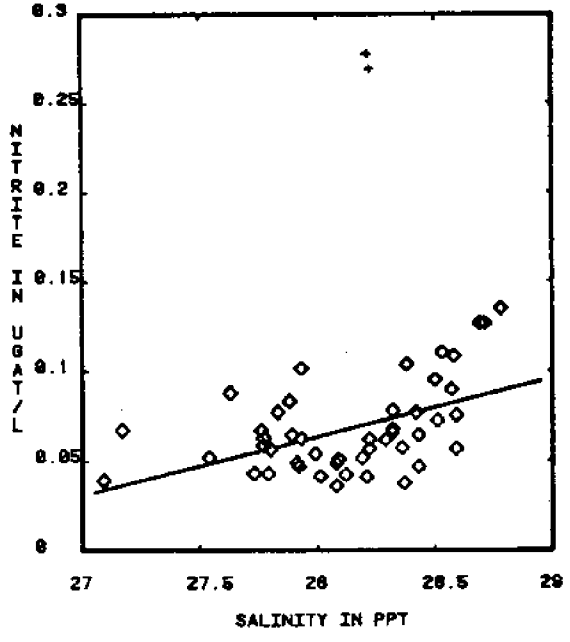


Fig. B-5. Salinity-nutrient plots for Furber Strait, Fox Point cruise.

APPENDIX C

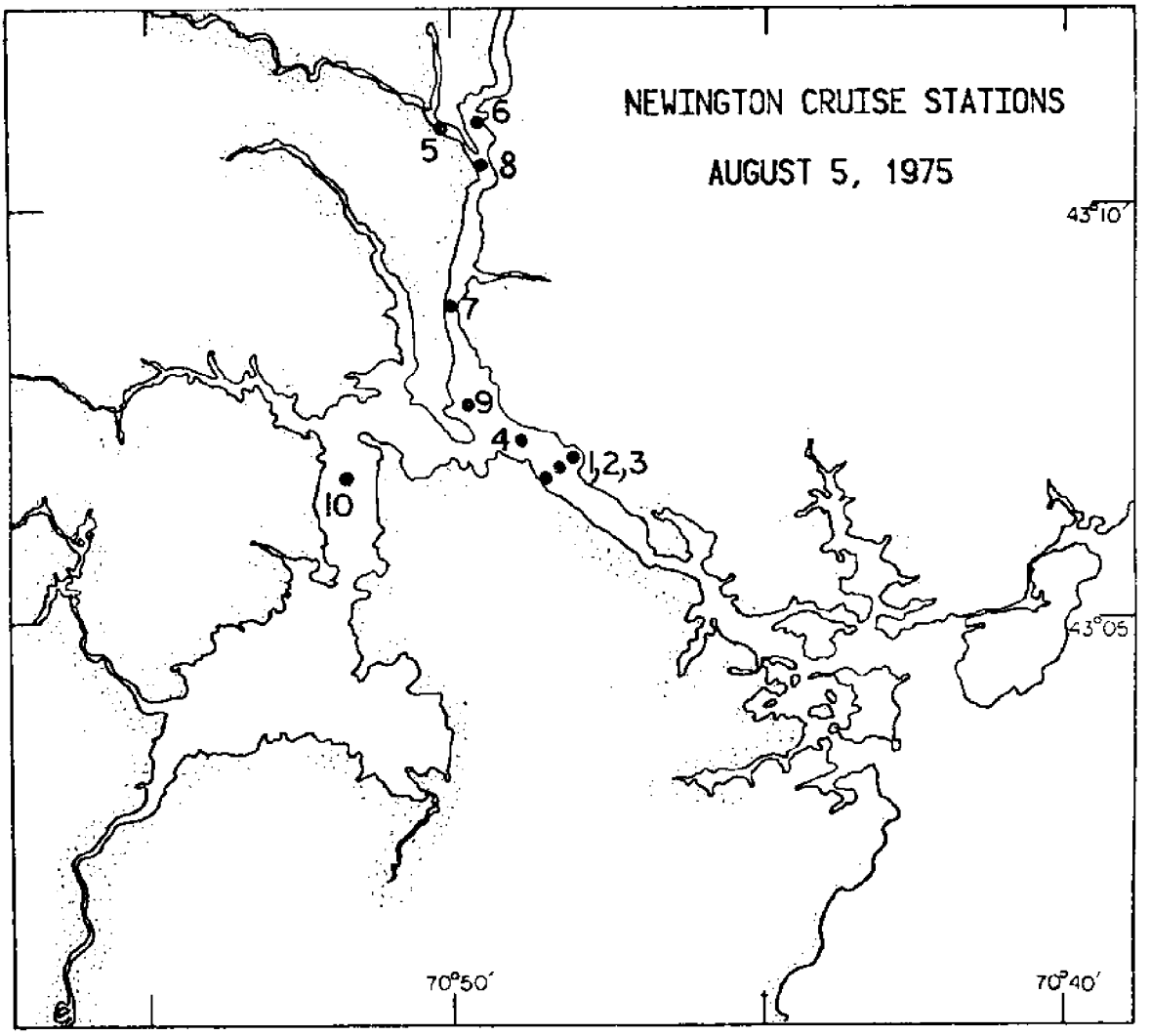


Fig. C-1. Station locations for Newington cruise.

1, 2, 3	Newington
4	Atlantic Terminal
5	Cocheco River
6	Salmon Falls River
7	Sturgeon Creek
8	Piscat. Junction
9	Piscataqua R.
10	Little Bay

CORRECTED DATA LIST: NEWINGTON 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
1	1	0.1	937	18.1	30.42	21.78	0.85	4.07
0.199	0.81							
2	1	1.9	937	18.1	30.52	21.86	0.79	3.66
0.181	0.76							
3	1	3.7	937	17.9	30.5	21.89	0.80	3.71
0.184	0.76							
4	1	5.1	937	17.9	30.57	21.94	0.74	3.50
0.175	0.72							
5	1	6.7	937	17.8	30.6	21.99	2.47	3.54
0.186	0.69							
6	1	8.1	937	17.8	30.6	21.99	0.72	3.33
0.186	0.67							
7	1	8.5	937	17.7	30.62	22.03	0.73	3.27
0.184	0.64							
8	2	0.1	957	17.8	30.71	22.07	0.68	2.88
0.145	0.55							
9	2	1.9	957	17.6	30.75	22.15	0.64	3.03
0.138	0.52							
10	2	3.5	957	17.5	30.73	22.16	0.65	2.75
0.165	0.48							
11	2	6.4	957	17.4	30.6	22.08	0.71	2.65
0.154	0.48							
12	2	9.3	957	17.3	30.77	22.24	0.62	2.60
0.152	0.55							
13	3	0.1	1040	17.6	30.77	22.17	0.67	2.75
0.142	0.50							
14	3	2	1040	17.5	30.75	22.17	0.60	2.65
0.154	0.45							
15	3	4	1040	17.5	30.74	22.17	0.62	2.68
0.135	0.49							
16	3	6	1040	17.5	30.76	22.18	0.63	2.62
0.132	0.49							
17	3	9.7	1040	17.5	30.75	22.17	0.62	2.64
0.135	0.49							
18	2	0.1	1059	17.6	30.8	22.19	0.61	2.41
0.125	0.43							
19	2	2	1059	17.6	30.8	22.19	0.59	2.44
0.149	0.38							
20	2	3.9	1059	17.6	30.8	22.19	0.60	2.44
0.137	0.39							
21	2	5.7	1059	17.3	30.85	22.30	0.58	2.14
0.115	0.35							
22	2	7.5	1059	17.2	30.85	22.32	0.61	4.75
0.117	0.34							

CORRECTED DATA LIST: NEWINGTON 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2
10.NO2	11.NO3							
23	2	9.3	1059	17.2	30.87	22.34	0.58	2.20
0.107	0.35							
24	2	11	1059	17.2	30.85	22.32	0.57	2.23
0.125	0.35							
25	1	0.1	1235	18	30.7	22.02	0.64	2.91
0.153	0.50							
26	1	2	1235	18	30.71	22.02	0.63	2.80
0.159	0.50							
27	1	4	1235	18	30.72	22.03	0.61	2.74
0.139	0.49							
28	1	6	1235	18	30.73	22.04	0.64	2.68
0.134	0.49							
29	2	0.1	1252	20	30.09	21.05	0.91	5.10
0.226	0.84							
30	2	1.9	1252	18.2	30.54	21.85	0.75	3.42
0.164	0.64							
31	2	3.7	1252	18	30.61	21.95	0.70	3.18
0.154	0.57							
32	2	5.3	1252	17.8	30.75	22.10	0.63	2.71
0.132	0.47							
33	2	6.7	1252	17.6	30.75	22.15	0.65	2.73
0.137	0.48							
34	2	8	1252	17.6	30.77	22.17	0.62	2.66
0.128	0.44							
35	3	0.1	1316	18	30.65	21.98	0.73	3.07
0.160	0.87							
36	3	1.9	1316	18	30.63	21.96	0.72	3.18
0.158	0.79							
37	3	3.8	1316	18	30.61	21.95	0.72	3.33
0.179	0.80							
38	3	5.6	1316	18	30.57	21.92	0.80	3.22
0.161	0.80							
39	2	0.1	1340	18.7	30.34	21.57	1.33	0.64
0.171	0.86							
40	2	1.8	1340	18.6	30.36	21.61	0.85	4.16
0.222	0.76							
41	2	3.4	1340	18.6	30.36	21.61	0.85	4.16
0.209	0.78							
42	2	4.7	1340	18.6	29.77	21.16	0.86	4.16
0.229	0.77							
43	2	5.1	1340	18.5	30.34	21.62	0.86	4.19
0.194	0.81							
44	1	0.1	1527	19.8	30.17	21.17	0.88	4.97
0.208	0.84							
45	1	2	1527	19.8	30.17	21.17	0.94	4.64
0.211	0.84							

CORRECTED DATA LIST: NEWINGTON 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
46	1	4	1527	19.8	30.14	21.14	0.90	4.99	0.215	0.85
47	1	6	1527	19.6	30.15	21.20	0.96	4.97	0.214	0.87
48	2	0.1	1543	19.9	29.87	20.91	0.98	5.75	0.229	0.96
49	2	1.6	1543	20	29.88	20.90	0.97	5.87	0.229	0.95
50	2	3	1543	20	29.87	20.89	1.00	6.00	0.230	0.96
51	2	5.2	1543	20	29.85	20.87	0.98	5.94	0.250	0.94
52	3	0.1	1607	20	29.96	20.96	0.97	5.78	0.234	0.97
53	3	1.9	1607	20	29.98	20.97	1.01	5.66	0.229	0.94
54	3	3.9	1607	20	30.03	21.01	1.02	5.76	0.227	0.95
55	3	5.8	1607	19.7	30.05	21.10	1.04	5.49	0.224	0.91
56	2	0.1	1622	20.4	29.74	20.69	1.04	6.30	0.267	0.92
57	2	1.8	1622	20.3	29.74	20.71	1.05	6.29	0.239	0.94
58	2	3.6	1622	20.2	29.75	20.75	1.04	6.28	0.235	0.95
59	2	5.2	1622	20.2	29.75	20.75	1.02	6.31	0.235	0.94
60	2	5.7	1622	20.2	29.75	20.75	1.03	6.32	0.231	0.96
61	1	0.1	1750	20.9	29.61	20.46	1.11	6.52	0.237	0.94
62	1	2	1750	20.75	29.6	20.49	1.09	6.56	0.262	0.92
63	1	4	1750	20.72	29.61	20.50	1.06	6.67	0.263	0.93
64	2	0.1	1800	20.87	29.59	20.45	1.13	6.81	0.239	0.93
65	2	2	1800	20.82	29.68	20.53	1.11	7.45	0.258	0.91
66	2	4	1800	20.78	29.63	20.50	1.14	6.82	0.255	0.93
67	2	8	1800	20.62	29.71	20.61	1.04	6.56	0.251	0.93
68	2	10	1800	20.54	29.77	20.67	1.04	6.38	0.235	0.97

CORRECTED DATA LIST: NEWINGTON 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
69	2	12	1800	20.48	29.81	20.72	1.05	6.25	0.252	0.98
70	3	0.1	1818	20.78	29.62	20.50	1.16	6.73	0.236	1.16
71	3	2	1818	20.69	29.68	20.56	1.14	6.62	0.232	1.16
72	3	4	1818	20.58	29.78	20.67	1.14	6.52	2.971	1.08
73	3	6	1818	20.55	30.35	21.11	1.17	6.41	0.231	1.18
74	2	0.1	1834	20.57	29.7	20.61	1.07	6.30	0.256	0.92
75	2	2	1834	20.38	29.78	20.72	1.08	6.09	0.247	0.93
76	2	3.8	1834	20.3	29.79	20.75	1.08	6.04	0.255	0.92
77	2	5.6	1834	20.21	29.85	20.82	1.02	6.00	0.232	0.97
78	2	7.3	1834	20.21	29.86	20.83	1.00	5.97	0.237	0.96
79	2	8.7	1834	20.22	29.83	20.80	1.00	5.95	0.233	0.94
80	2	10.4	1834	20.2	29.87	20.84	1.03	5.92	0.230	0.94
81	1	0.1	2006	19.62	30.03	21.11	0.97	5.13	0.241	1.02
82	1	2	2006	19.55	30.06	21.15	0.96	5.32	0.240	1.03
83	1	3.9	2006	19.5	30.06	21.16	0.95	5.10	0.252	1.01
84	1	5.8	2006	19.39	30.11	21.23	0.93	4.91	0.237	1.00
85	1	7.7	2006	19.3	30.14	21.27	0.96	4.84	0.250	0.98
86	2	0.1	2023	18.59	30.45	21.68	0.83	3.84	0.198	0.82
87	2	1.7	2023	18.5	30.45	21.70	0.81	3.79	0.196	0.81
88	2	3.2	2023	18.5	30.45	21.70	0.82	3.77	0.194	1.04
89	2	5.5	2023	18.42	30.48	21.75	0.80	3.70	0.190	0.77
90	3	0.1	2050	18.6	30.41	21.65	0.81	3.88	0.199	0.83
91	3	2	2050	18.6	30.43	21.67	0.83	3.88	0.199	0.80
92	3	3.9	2050	18.6	30.4	21.64	0.80	3.99		

CORRECTED DATA LIST: NEWINGTON 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
									0.203	0.85
93	3	5.9	2050	18.6	30.38	21.63	0.86	3.94	0.195	0.82
94	3	7.7	2050	18.6	29.31	20.81	0.87	4.02	0.206	0.84
95	2	0.1	2111	18.12	30.6	21.91	0.78	3.30	0.175	0.66
96	2	1.8	2111	18.09	30.61	21.93	0.73	3.21	0.169	0.68
97	2	3.3	2111	18.05	30.62	21.94	0.71	3.15	0.170	0.64
98	2	5.2	2111	18	30.69	22.01	0.76	3.16	0.164	0.63
99	2	0.1	2150	17.64	30.77	22.16	0.64	2.52	0.131	0.46
100	2	1.6	2150	17.62	30.84	22.21	0.65	2.48	0.139	0.44
101	2	3.3	2150	17.52	29.57	21.27	0.60	2.42	0.130	0.43
102	2	5.7	2150	17.56	30.85	22.24	0.62	2.47	0.130	0.44

CORRECTED DATA LIST: ATLANTIC TERMINAL 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	4	0.1	830	18.9	30.04	21.29	1.09	5.57	0.219	1.59
2	4	2	830	18.89	30.04	21.30	1.06	5.31	0.209	0.98
3	4	7.9	830	18.89	30.08	21.33	1.01	12.98	0.277	1.00
4	4	0.1	1030	17.78	30.58	21.98	0.81	3.33	0.139	0.59
5	4	2	1030	17.2	30.57	22.11	0.78	3.59	0.139	0.58
6	4	8	1030	17.55	30.67	22.10	0.74	3.07	0.129	0.56
7	4	0.1	1230	18.5	30.34	21.62	0.88	4.74	0.154	0.72
8	4	2	1230	18.2	30.51	21.82	0.79	3.59	0.145	0.58
9	4	8	1230	17.63	30.69	22.10	0.69	2.91	0.126	0.53
10	4	0.1	1430	19.1	30.14	21.32	1.00	5.00	0.190	0.86
11	4	1.9	1430	18.91	30.16	21.38	0.88	5.26	0.186	0.85
12	4	7.7	1430	18.9	30.19	21.41	0.95	5.05	0.188	0.85
13	4	0.1	1630	20.5	29.61	20.56	1.18	6.82	0.203	0.97
14	4	2	1630	20.55	29.59	20.53	1.14	6.82	0.208	0.95
15	4	7.9	1630	20.53	29.6	20.55	1.12	6.82	0.203	0.87
16	4	0.1	1830	20.7	29.58	20.49	1.19	6.98	0.201	0.94
17	4	2	18.3	20.75	29.59	20.48	1.06	6.93	0.209	0.95
18	4	8	1830	20.69	29.64	20.53	1.12	7.14	0.206	0.92
19	4	0.1	2030	19.35	30.11	21.24	1.04	5.05	0.204	1.01
20	4	1.9	2030	19.35	30.11	21.24	1.00	5.15	0.200	1.00
21	4	8	2030	19.15	---	---	0.98	5.57	0.197	1.21
22	4	7.7	2030	19.15	30.18	21.34	0.98	5.57	0.197	0.97

CORRECTED DATA LIST: COCHECO RIVER 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	5	0.1	955	24.5	22.00	13.80	2.65	21.29	0.302	2.57
2	5	0.1	1150	26.1	15.35	8.32	4.49	44.50	1.005	---
3	5	0.1	1355	27.5	13.42	6.48	5.13	49.97	1.185	---
4	5	0.1	1545	28	11.75	5.09	5.29	56.35	1.766	---
5	5	0.1	1745	28	13.48	6.38	5.00	50.00	1.924	---
6	5	0.1	2000	26	19.46	11.42	3.49	31.54	0.876	4.10

CORRECTED DATA LIST: SALMON FALLS RIVER 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	6	0.1	1015	24	23.81	15.24	2.21	16.91	0.341	1.53
2	6	0.1	1210	25.9	22.36	13.61	2.30	20.82	0.452	1.73
3	6	0.1	1410	28	18.59	10.17	2.38	28.45	0.587	3.19
4	6	0.1	1600	26	20.21	11.98	2.20	25.29	0.558	2.59
5	6	0.1	1800	26.1	19.26	11.24	2.42	27.70	0.549	3.20
6	6	0.1	2015	25	22.75	14.16	2.37	20.56	0.505	2.33

CORRECTED DATA LIST: STURGEON CREEK 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	7	0.1	845	22	27.34	18.45	1.56	10.45	0.367	0.96
2	7	2	845	20.1	28.92	20.14	1.40	8.91	0.220	1.00
3	7	4	845	21.1	28.99	19.93	1.43	17.04	0.217	1.00
4	7	0	1030	21.3	29.33	20.14	1.28	7.89	0.447	0.86
5	7	2	1030	20.7	29.58	20.49	1.24	7.61	0.214	1.40
6	7	4	1030	20.5	29.59	20.55	1.23	9.17	0.219	1.09
7	7	0.1	1230	25	27.4	17.65	1.49	10.53	0.264	1.08
8	7	2	1230	21.2	29.35	20.18	1.24	7.66	0.212	1.01
9	7	4	1230	20.9	29.61	20.46	1.24	7.40	0.230	1.14
10	7	0.1	1430	25.1	25.46	16.17	1.86	14.34	0.320	1.33
11	7	2	1430	23.9	25.23	16.34	1.76	12.83	0.396	1.17
12	7	4	1430	23	27.38	18.20	1.66	11.29	0.270	1.17
13	7	0.1	1630	26	23.1	14.14	2.23	19.59	0.428	2.18
14	7	2	1630	25	23.69	14.87	2.19	18.22	0.444	1.90
15	7	4	1630	24.9	23.9	15.05	2.19	18.00	0.416	1.80
16	7	0.1	1830	24.9	24.2	15.28	2.06	---	0.364	1.79
17	7	2	1830	24	25.88	16.80	1.80	13.82	0.356	1.33
18	7	4	1830	23.2	26.39	17.40	1.79	13.14	0.340	1.02
19	7	0.1	2040	22.9	27.41	18.26	1.52	11.17	0.297	1.23
20	7	2	2040	22	28.96	19.67	1.37	8.92	0.254	1.03
21	7	4	2040	21.8	29.21	19.91	1.31	8.37	0.245	1.02

CORRECTED DATA LIST: PISCAT. JUNCTION 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	8	0.1	930	22.5	26.39	17.60	1.78	12.06	0.276	1.16
2	8	2	930	22.5	26.94	18.01	1.65	11.05	0.276	1.07
3	8	4	930	22.1	27.16	18.28	1.62	10.77	0.250	1.05
4	8	0.1	1130	26.5	23.64	14.39	2.19	19.23	0.373	1.64
5	8	2	1130	22.3	28.14	18.97	1.49	9.61	0.263	1.05
6	8	4	1130	21.9	28.56	19.40	1.29	9.01	0.221	1.02
7	8	6	1130	21.9	28.63	19.45	1.43	9.11	0.231	1.04
8	8	0.1	1330	26.1	21.74	13.09	2.55	22.51	0.549	2.64
9	8	2	1330	24.9	24.75	15.69	1.93	15.16	0.331	1.41
10	8	4	1330	24.9	25.23	16.05	1.91	14.87	0.343	1.35
11	8	6	1330	23.1	26.86	17.79	1.72	11.91	0.378	1.08
12	8	0.1	1530	26.9	20.65	12.84	2.99	26.81	0.597	3.83
13	8	2	1530	26	22.13	13.41	2.30	21.33	0.431	2.12
14	8	0.1	1730	26.3	20.82	11.75	2.79	27.61	0.638	3.49
15	8	2	1730	26	21.81	12.57	2.46	23.94	0.525	2.72
16	8	0.1	1930	24.9	23.87	15.83	2.19	18.41	0.419	1.91
17	8	2	1930	24.9	20.58	12.57	2.22	17.92	0.468	1.91
18	8	4	1930	24.9	24.83	15.15	2.19	17.74	0.418	1.89

CORRECTED DATA LIST: PISCATAQUA R. 8/5/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

1	1	0.1	835	19.6	29.73	20.88	1.18	6.64
0.207	1.07							
2	1	1.5	835	20.04	29.74	20.78	1.17	6.53
0.208	1.06							
3	1	4	835	21.7	29.8	20.39	1.18	7.01
0.229	1.07							
4	1	6	835	20.05	29.79	20.81	1.24	8.53
0.205	1.14							
5	1	0.1	1030	19.7	30.26	21.26	1.02	4.87
0.182	0.86							
6	1	2	1030	23.2	30.26	20.32	1.13	4.86
0.177	0.95							
7	1	4	1030	22.6	30.3	20.52	1.00	4.88
0.178	0.95							
8	1	6	1030	22.4	30.31	20.58	1.05	4.85
0.177	0.95							
9	1	0.1	1230	28.1	29.68	18.42	1.11	0.48
0.181	0.98							
10	1	1	1230	22.3	30.28	20.59	0.98	4.71
0.177	0.87							
11	1	3	1230	21.5	30.46	20.94	0.98	0.27
0.147	0.83							
12	1	7	1230	19.5	30.38	21.40	0.92	4.27
0.157	0.85							
13	1	0.1	1430	23.2	28.8	19.22	1.25	7.98
0.206	0.95							
14	1	0.09	1430	22.9	28.98	19.44	1.32	7.80
0.212	1.00							
15	1	2.8	1430	21.6	29.66	20.31	1.22	6.74
0.211	1.11							
16	1	5.2	1430	20.3	29.96	20.88	1.15	0.47
0.197	1.08							
17	1	0.1	1630	27.4	26.93	16.58	1.72	11.40
0.265	1.23							
18	1	1.5	1630	25.6	27.54	17.58	1.63	0.91
0.237	1.14							
19	1	3	1630	22.6	28.36	19.05	1.42	9.11
0.239	1.00							
20	1	4.5	1630	22.8	28.13	18.83	1.51	9.35
0.235	1.08							
21	1	0.1	1830	24.1	27.95	18.32	1.59	9.83
0.239	1.09							
22	1	1.5	1830	22.7	29.31	19.74	1.27	8.66

CORRECTED DATA LIST: PISCATAQUA R. 8/5/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SI02
10.NO2 11.NO3

0.200	1.11							
23	1	3	1830	22.8	29.45	19.82	1.34	7.71
0.215	0.98							
24	1	4.5	1830	22	29.46	20.05	1.34	0.64
0.205	1.05							
25	1	0.1	2030	20.3	29.9	20.83	1.11	0.48
0.198	1.02							
26	1	2	2030	20.3	29.95	20.87	1.23	0.46
0.199	1.11							
27	1	4	2030	20.2	29.87	20.84	1.17	6.15
0.224	1.10							
28	1	6	2030	20.2	29.88	20.84	1.19	0.45
0.204	1.11							

CORRECTED DATA LIST: LITTLE BAY 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	1	1.9	930	19.6	29.84	20.97	1.22	6.31	0.199	1.03
2	1	3.9	930	21.2	29.85	20.56	1.15	6.33	0.206	1.02
3	1	7.9	930	20.2	30.04	20.97	1.15	0.43	0.182	1.08
4	1	11.8	930	20	30.17	21.12	1.02	5.25	0.188	1.00
5	1	0.1	1130	20.8	29.94	20.73	1.06	6.21	0.187	0.94
6	1	4	1130	28.9	30.15	18.52	1.04	5.25	0.169	0.90
7	1	8	1130	31.5	30.26	17.76	0.93	4.99	0.167	0.87
8	1	12	1130	30	30.41	18.36	0.92	4.18	0.148	0.78
9	1	0.1	1330	22	30.34	20.71	1.00	0.29	0.155	0.85
10	1	1.8	1330	20.5	30.35	21.12	0.99	0.31	0.155	0.87
11	1	5.5	1330	20	30.34	21.24	0.93	0.30	0.150	0.84
12	1	9.2	1330	19.6	30.38	21.38	0.97	4.29	0.190	0.79
13	1	0.09	1530	25	29.77	19.43	1.25	6.96	0.207	0.96
14	1	0.09	1530	22.4	29.86	20.24	1.20	6.56	0.202	0.93
15	1	0.09	1530	21.9	29.93	20.43	1.19	0.50	0.184	1.00
16	1	0.09	1530	20.3	---	---	1.14	0.50	0.185	1.01
17	1	0.09	1730	20.3	29.57	20.58	1.36	8.63	0.192	0.86
18	1	3.6	1730	21.5	29.65	20.33	1.33	0.65	0.173	0.86
19	1	7.3	1730	22.2	29.69	20.17	1.30	7.84	0.185	---
20	1	10.9	1730	21.6	29.7	20.34	1.32	7.69	0.193	1.09
21	1	0.07	1930	20.4	29.78	20.72	1.24	6.75	0.219	1.06
22	1	2.8	1930	---	29.84	---	1.14	0.50		

CORRECTED DATA LIST: LITTLE BAY 8/5/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
0.192	1.05									
23	1	5.7	1930	20	---	---	1.13	6.57	0.209	1.16
24	1	8.5	1930	20.9	29.78	20.59	1.19	6.35	0.216	1.13
25	1	0.1	2145	18.7	30.17	21.44	1.08	0.35	0.176	0.98
26	1	3.9	2145	18.8	30.18	21.43	1.08	5.00	0.195	0.95
27	1	7.9	2145	19.6	30.31	21.32	0.97	0.30	0.165	0.89

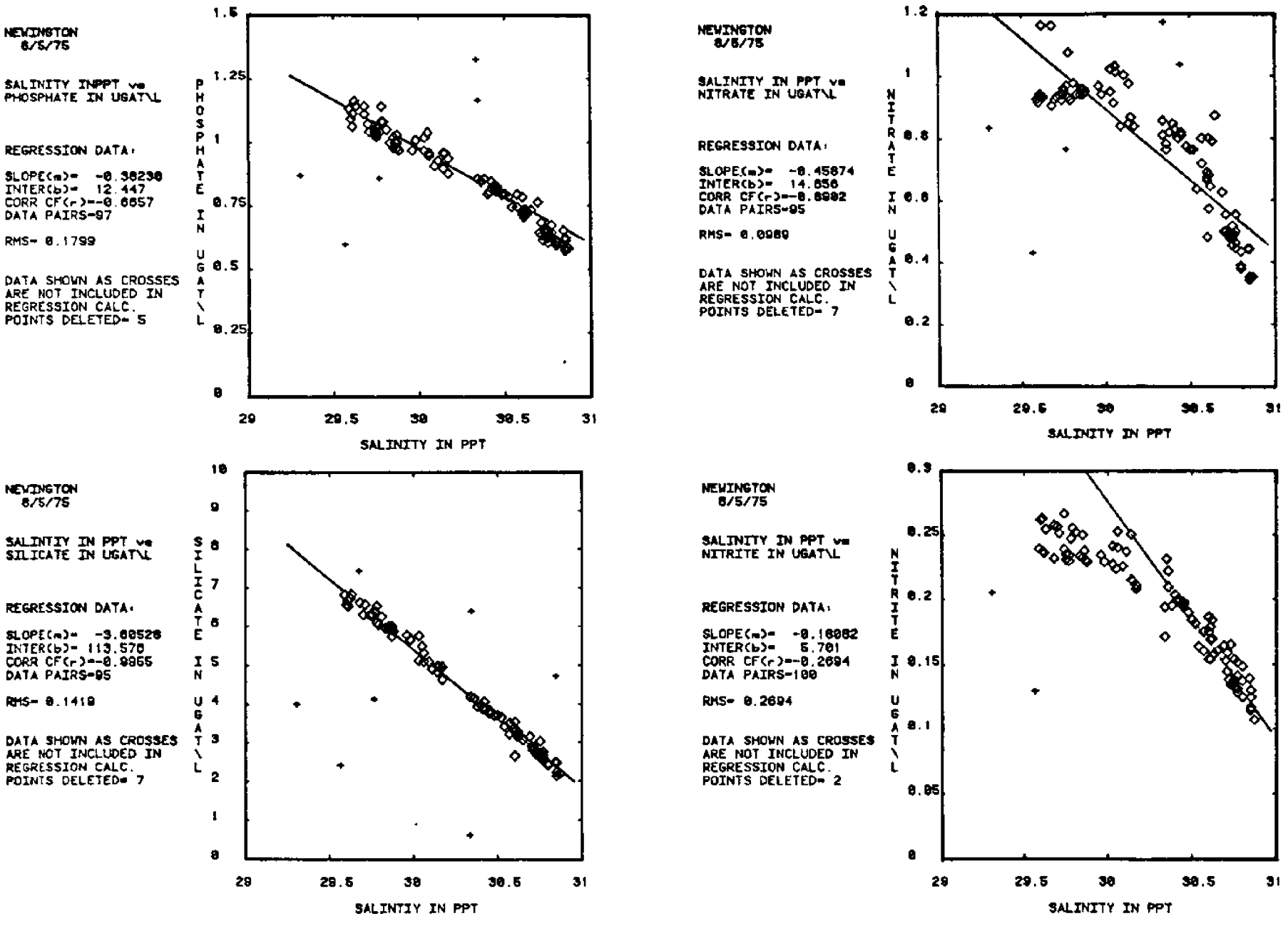


Fig. C-2. Salinity-nutrient plots for Newington, Newington cruise.

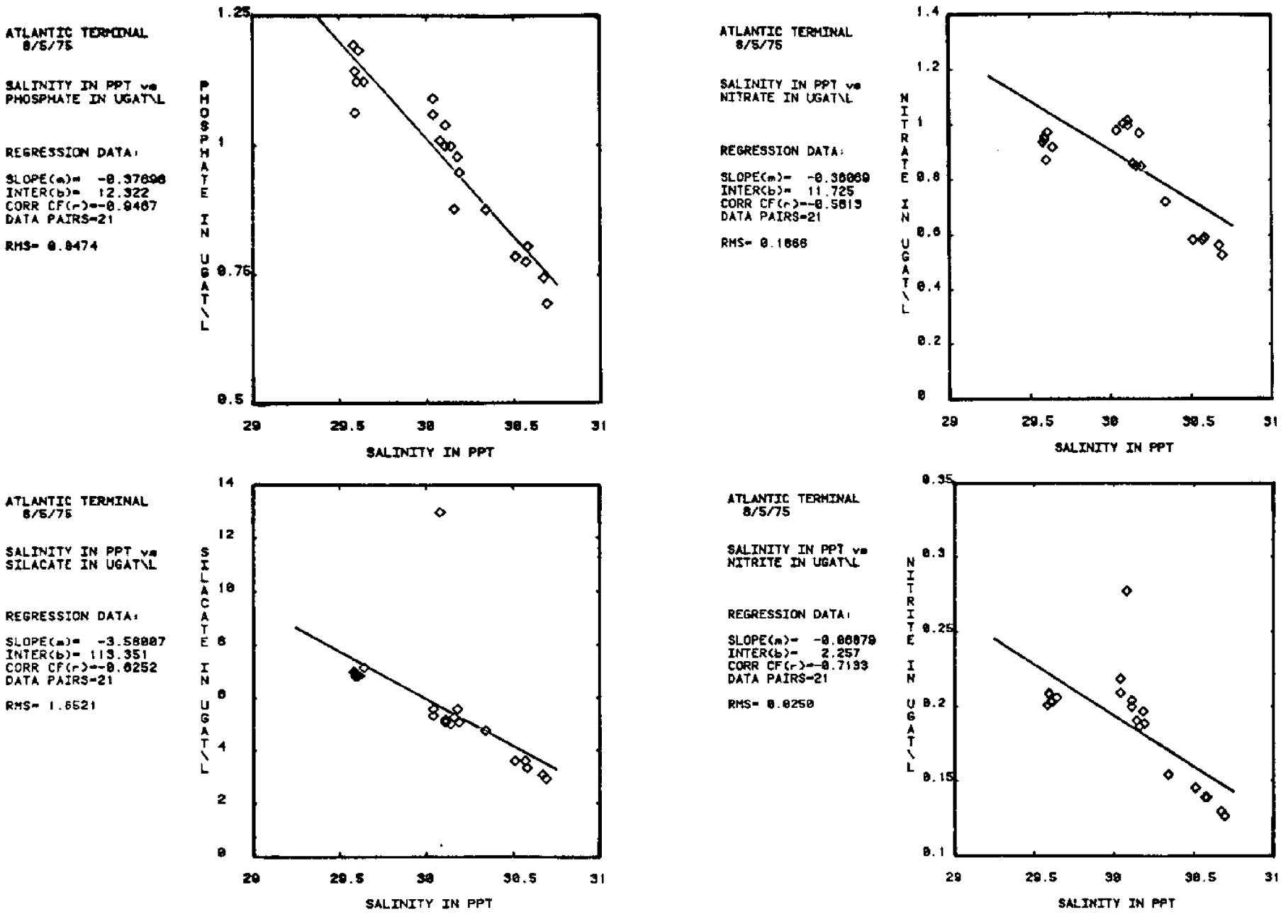


Fig. C-3. Salinity-nutrient plots for Atlantic Terminal, Newington cruise.

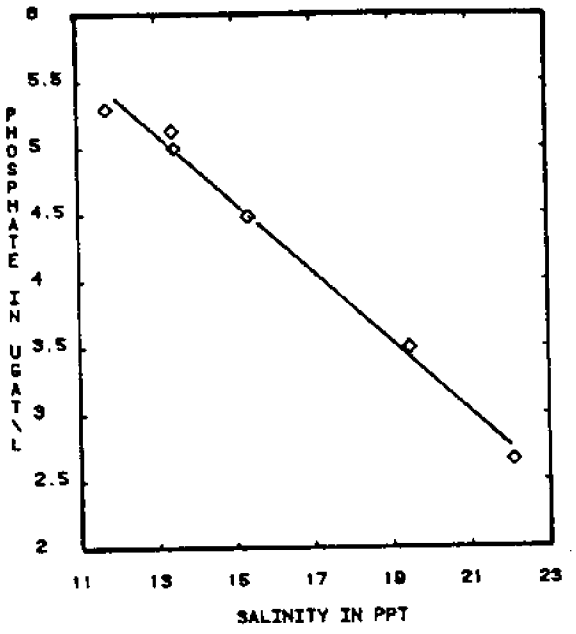
COCHECO RIVER
8/5/75

SALINITY IN PPT vs
PHOSPHATE IN UGAT\L

REGRESSION DATA:

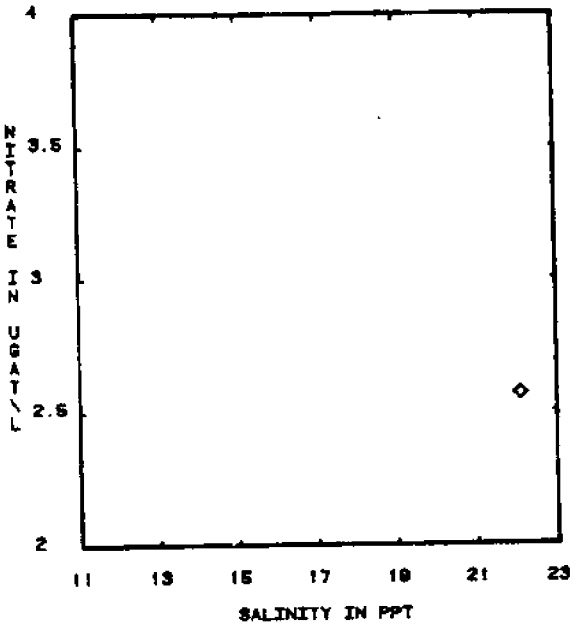
SLOPE(a)= -0.26185
INTER(b)= 8.512
CORR CF(r)=-0.9955
DATA PAIRS=6

RMS= 0.0017



COCHECO RIVER
8/5/75

SALINITY IN PPT vs
NITRATE IN UGAT\L



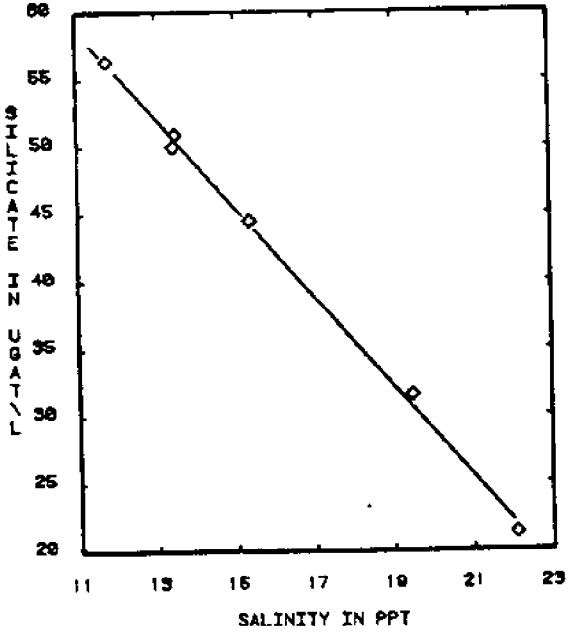
COCHECO RIVER
8/5/75

SALINITY IN PPT vs
SILICATE IN UGAT\L

REGRESSION DATA:

SLOPE(a)= -3.32679
INTER(b)= 95.398
CORR CF(r)=-0.9989
DATA PAIRS=6

RMS= 0.5686



COCHECO RIVER
8/5/75

SALINITY IN PPT vs
NITRITE IN UGAT\L

REGRESSION DATA:

SLOPE(m)= -0.13255
INTER(b)= 3.287
CORR CF(r)=-0.8681
DATA PAIRS=6

RMS= 0.2511

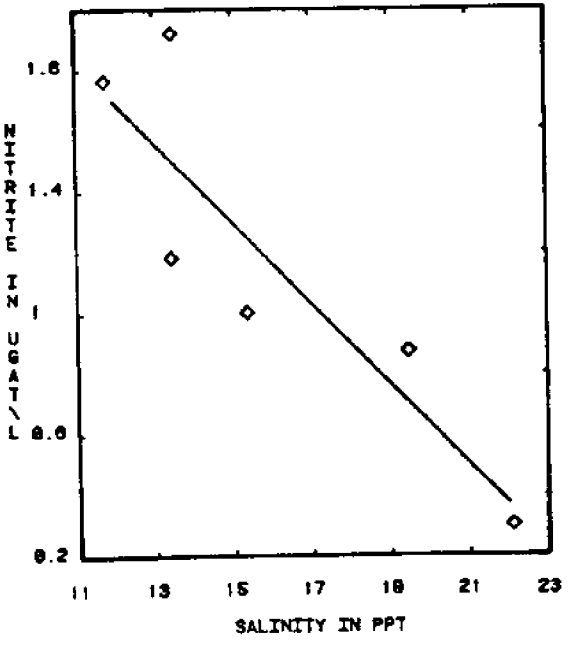


Fig. C-4. Salinity-nutrient plots for Cocheco River, Newington cruise.

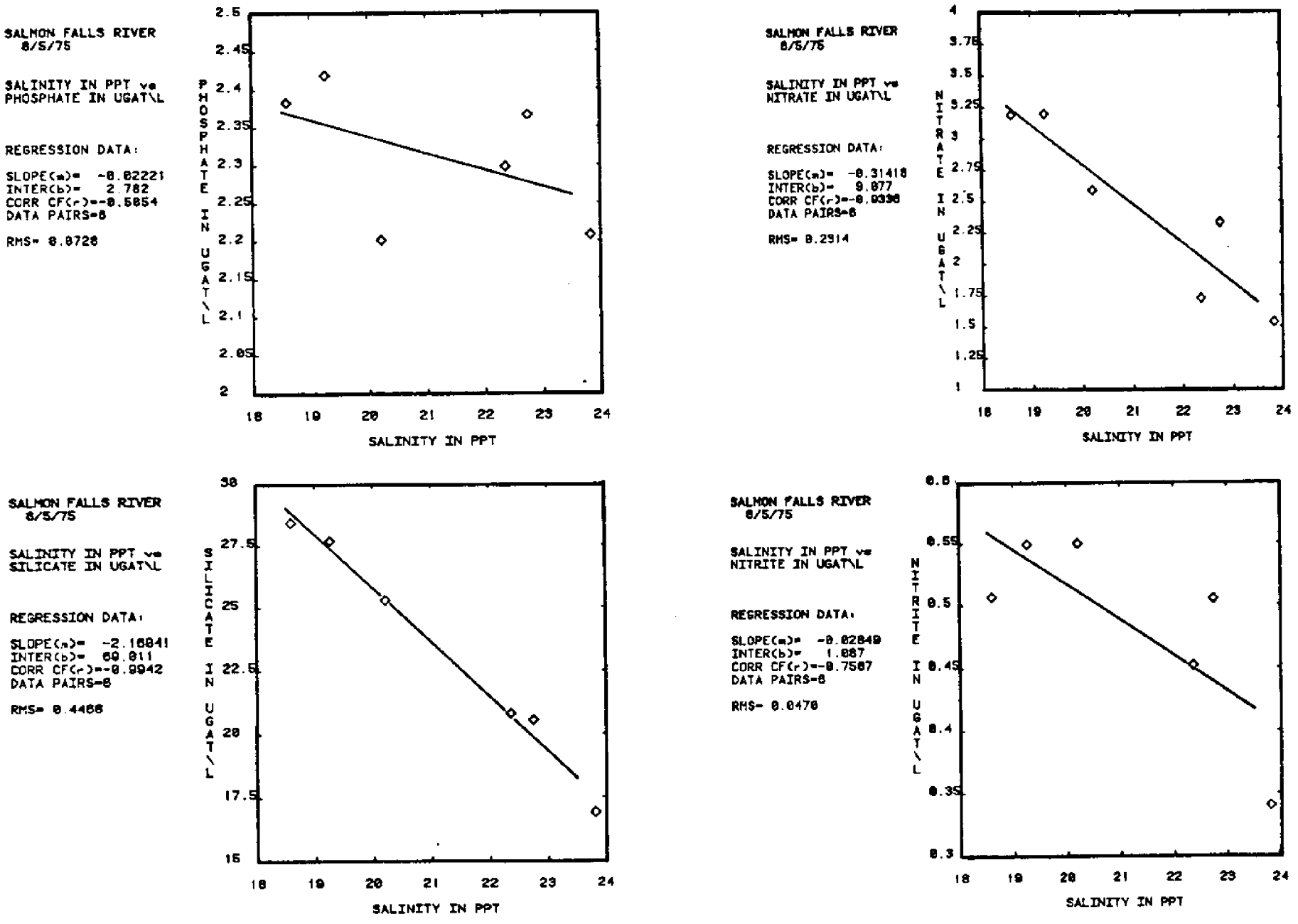


Fig. C-5. Salinity-nutrient plots for Salmon Falls River, Newington cruise.

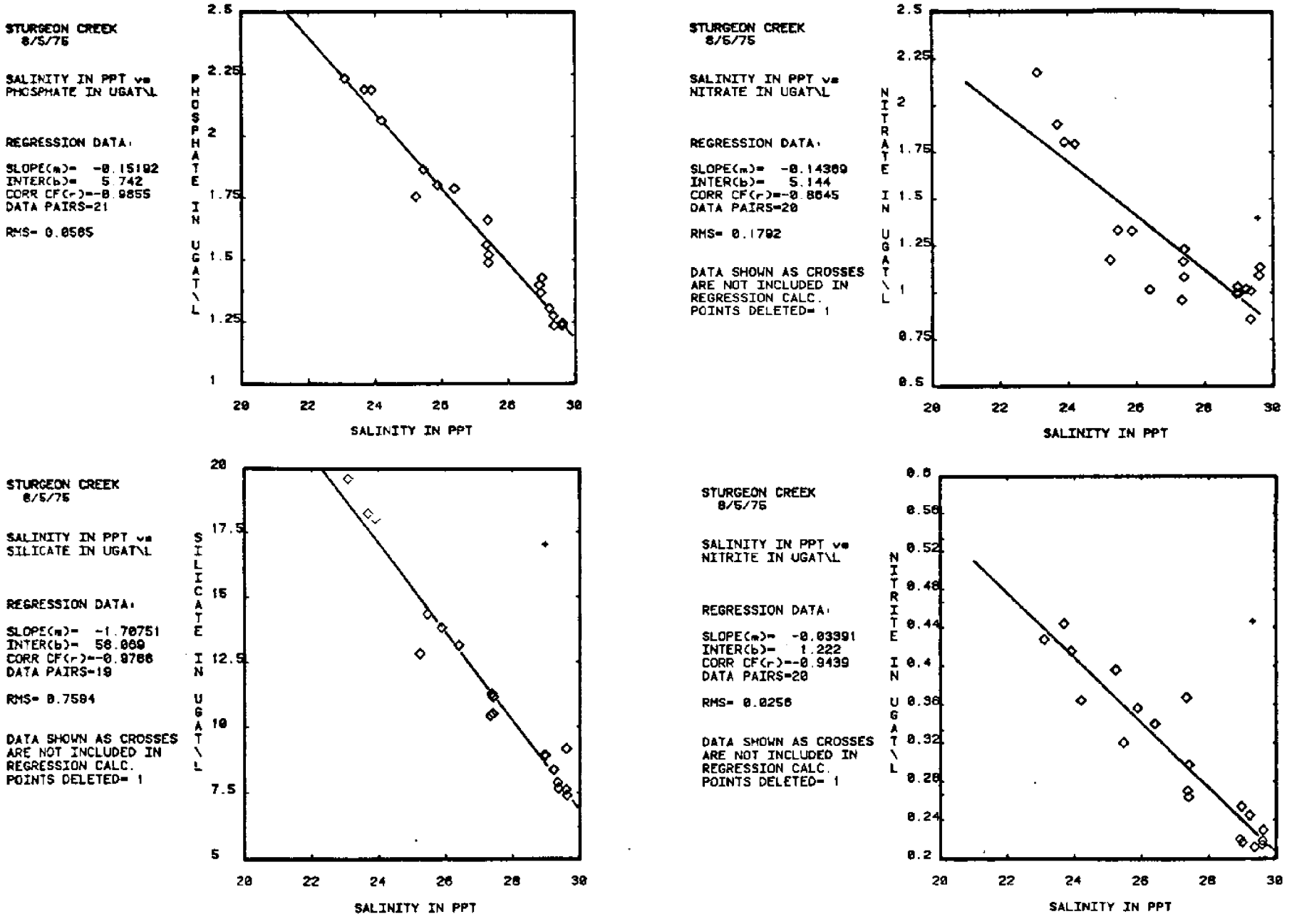


Fig. C-6. Salinity-nutrient plots for Sturgeon Creek, Newington cruise.

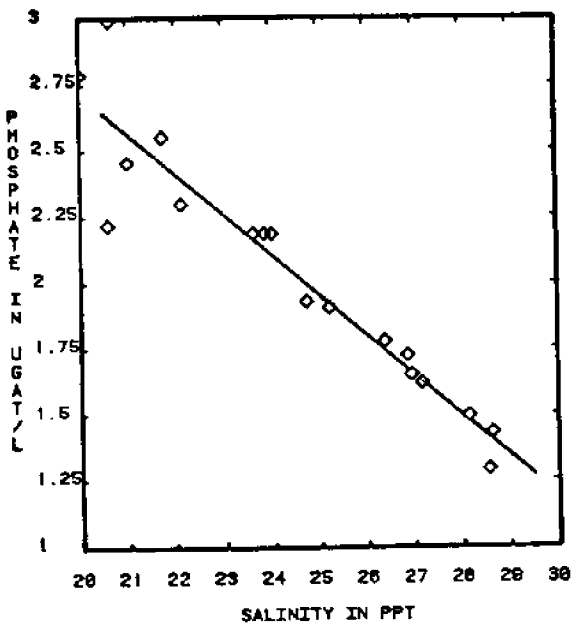
PISCAT. JUNCTION
8/5/75

SALINITY IN PPT vs
PHOSPHATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.15314
INTER(b)= 5.765
CORR CF(r)=-0.9491
DATA PAIRS=18

RMS= 0.1458



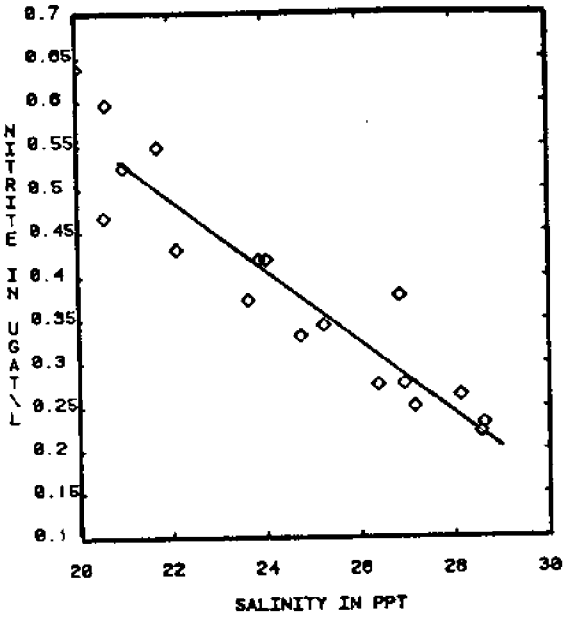
PISCAT. JUNCTION
8/5/75

SALINITY IN PPT vs
NITRITE IN UGAT\L

REGRESSION DATA:

SLOPE(m)= -0.04881
INTER(b)= 1.387
CORR CF(r)=-0.9366
DATA PAIRS=18

RMS= 0.0436



PISCAT. JUNCTION
8/5/75

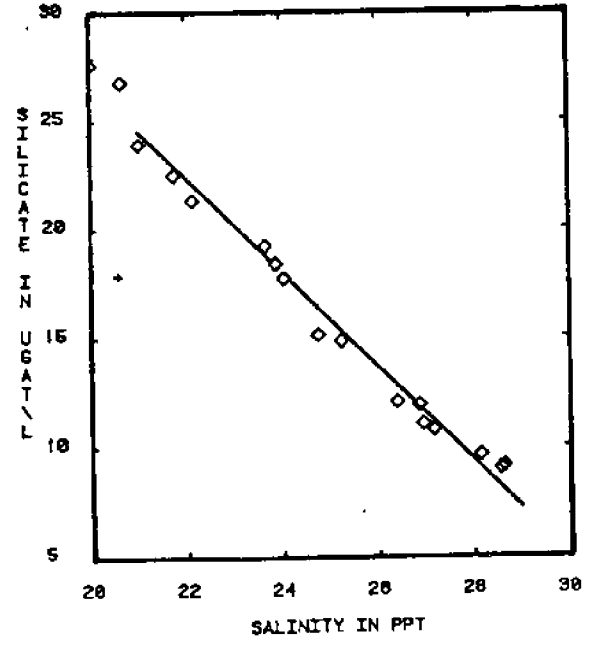
SALINITY IN PPT vs
SILICATE IN UGAT\L

REGRESSION DATA:

SLOPE(m)= -2.16785
INTER(b)= 78.045
CORR CF(r)=-0.9921
DATA PAIRS=17

RMS= 0.7595

DATA SHOWN AS CROSSES
ARE NOT INCLUDED IN
REGRESSION CALC.
POINTS DELETED= 1



PISCAT. JUNCTION
8/5/75

SALINITY IN PPT vs
NITRATE IN UGAT\L

REGRESSION DATA:

SLOPE(m)= -0.28938
INTER(b)= 8.936
CORR CF(r)=-0.9243
DATA PAIRS=17

RMS= 0.3311

DATA SHOWN AS CROSSES
ARE NOT INCLUDED IN
REGRESSION CALC.
POINTS DELETED= 1

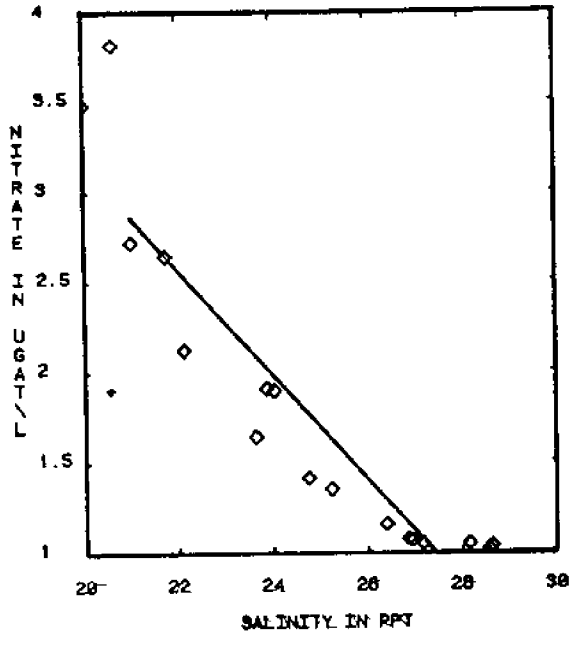


Fig. C-7. Salinity-nutrient plots for Piscat. Junction, Newington cruise.

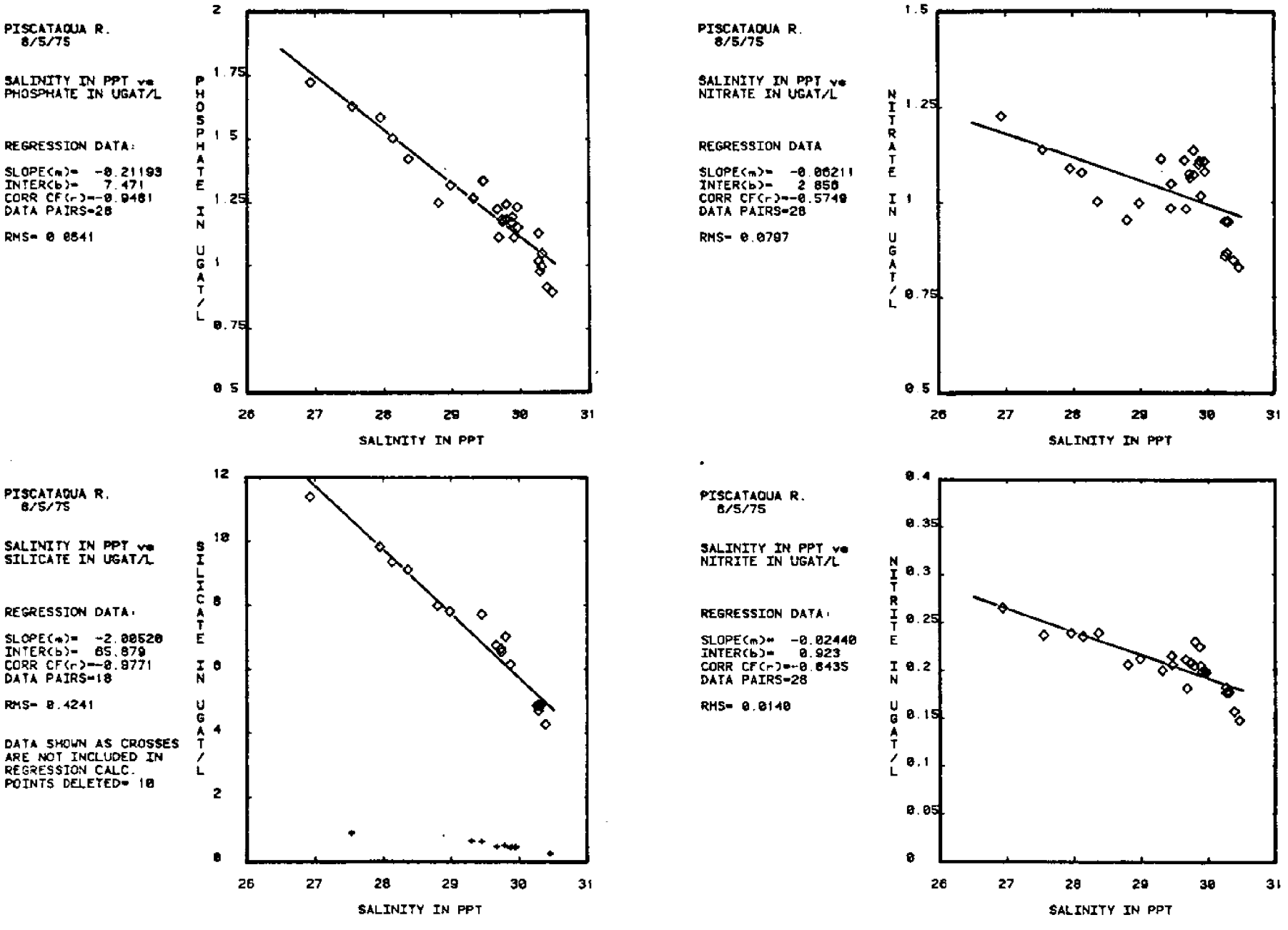


Fig. C-8. Salinity-nutrient plots for Piscataqua R., Newington cruise.

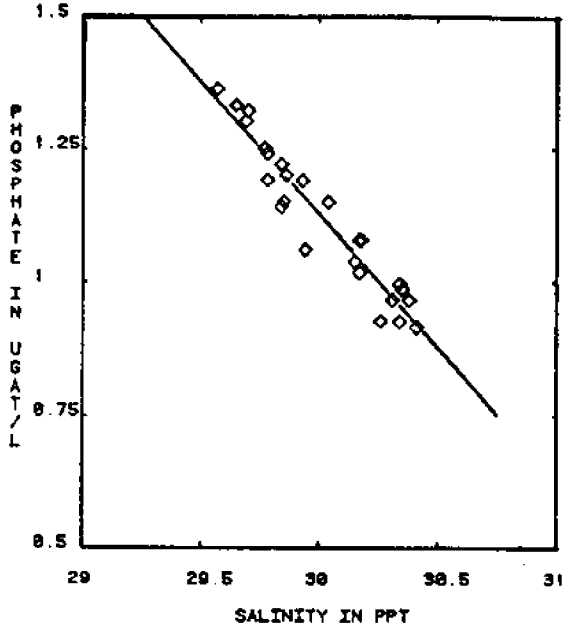
LITTLE BAY
8/5/75

SALINITY IN PPT vs
PHOSPHATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.58062
INTER(b)= 18.148
CORR CF(r)=-0.9571
DATA PAIRS=25

RMS= 0.0394



LITTLE BAY
8/5/75

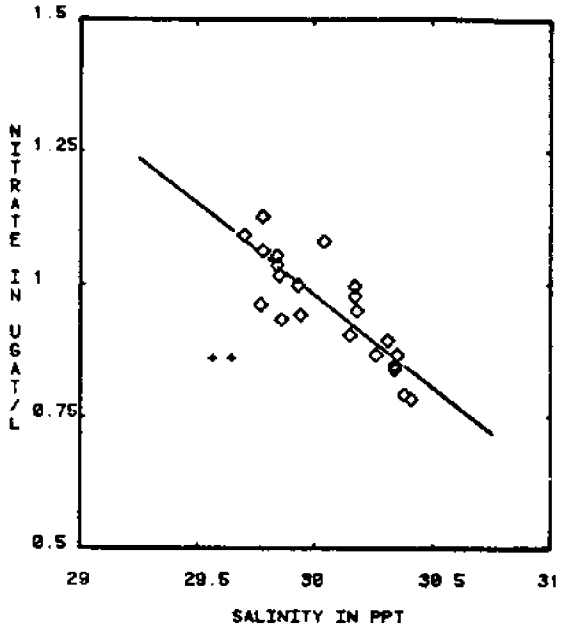
SALINITY IN PPT vs
NITRATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.34570
INTER(b)= 11.358
CORR CF(r)=-0.8430
DATA PAIRS=22

RMS= 0.0515

DATA SHOWN AS CROSSES
ARE NOT INCLUDED IN
REGRESSION CALC.
POINTS DELETED= 2



LITTLE BAY
8/5/75

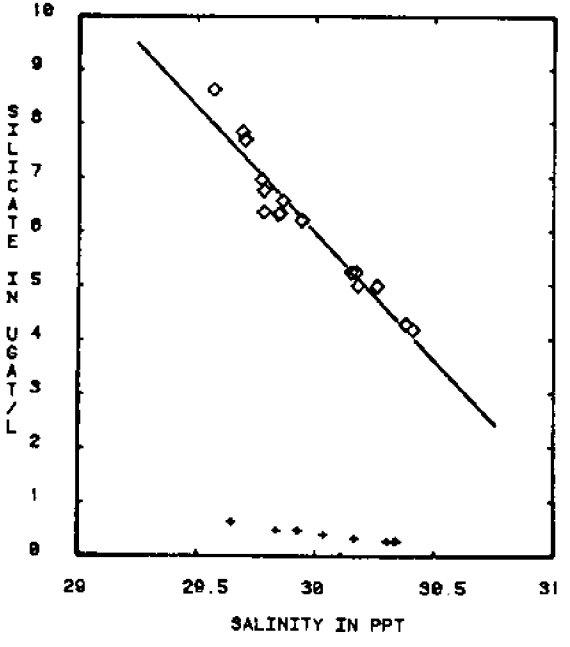
SALINITY IN PPT vs
SILICATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -4.70178
INTER(b)= 147.019
CORR CF(r)=-0.9673
DATA PAIRS=16

RMS= 0.3126

DATA SHOWN AS CROSSES
ARE NOT INCLUDED IN
REGRESSION CALC.
POINTS DELETED= 10



LITTLE BAY
8/5/75

SALINITY IN PPT vs
NITRITE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.05209
INTER(b)= 1.744
CORR CF(r)=-0.8942
DATA PAIRS=25

RMS= 0.0148

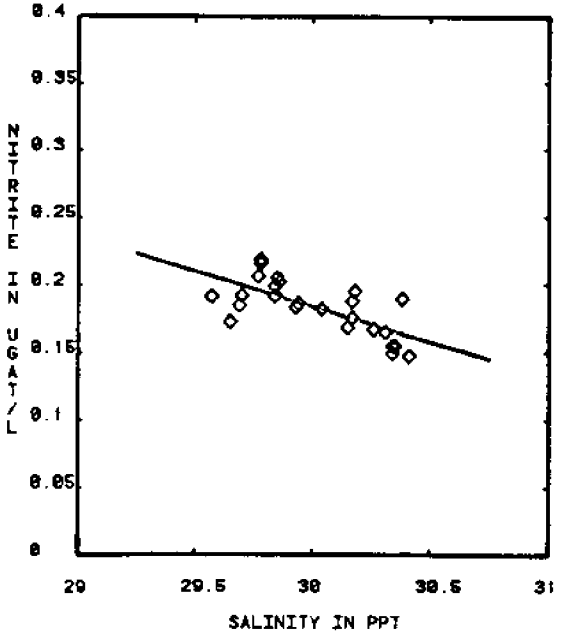


Fig. C-9. Salinity-nutrient plots for Little Bay, Newington cruise.

APPENDIX D

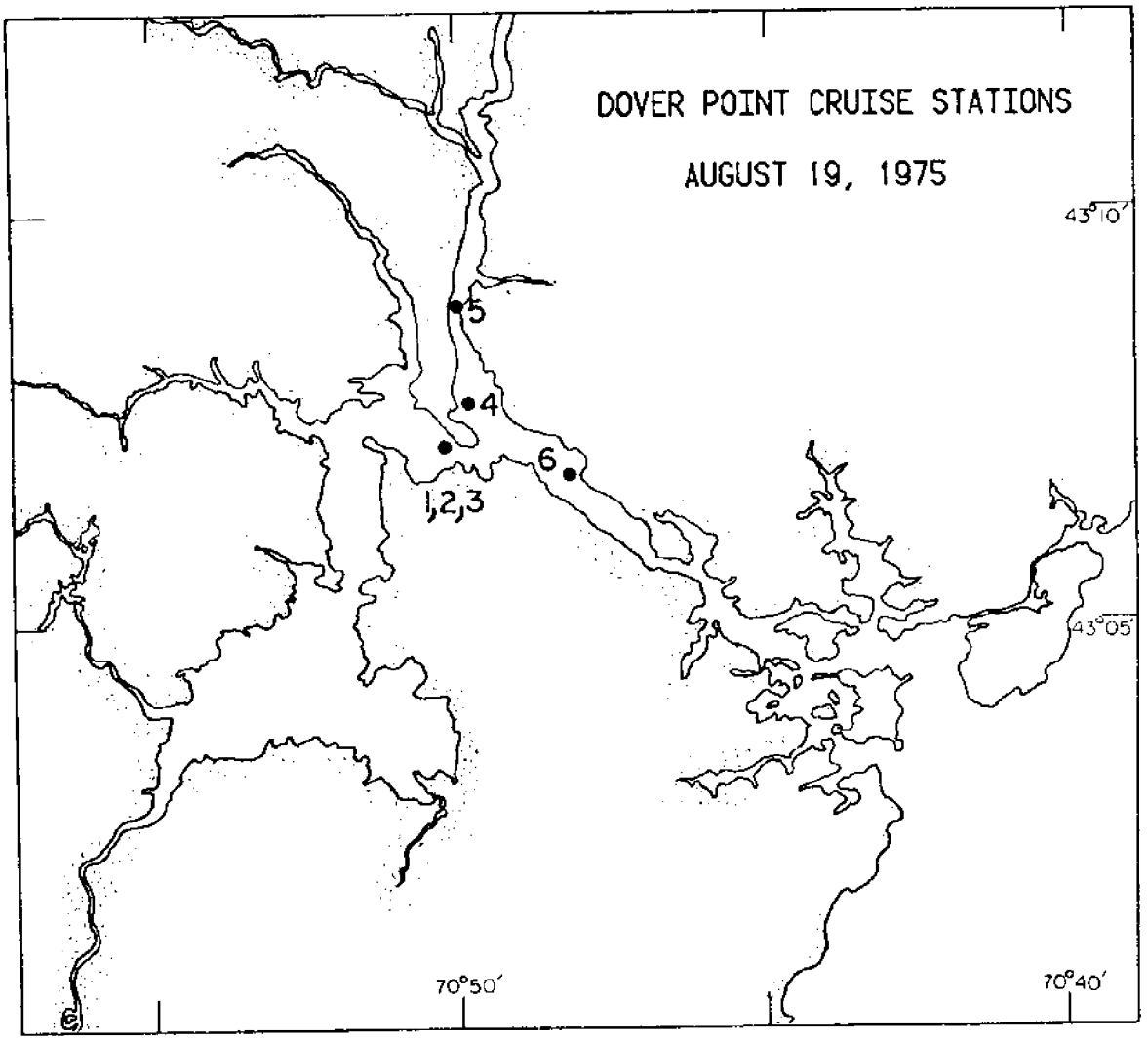


Fig. D-1. Station locations for Dover Point cruise.

1, 2, 3	Dover Point
4	Piscat. River
5	Sturgeon Creek
6	Frankfort I.

CORRECTED DATA LIST: DOVER POINT 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	2	0.1	1018	19.4	30.6	21.59	1.10	1.58	0.061	0.00
2	2	1.8	1018	19	30.61	21.70	0.70	2.00	0.113	0.17
3	2	3.3	1018	19	30.65	21.73	0.72	1.94	0.123	0.22
4	2	4.9	1018	19	30.63	21.72	0.77	2.30	0.118	0.22
5	1	0.1	838	20.7	29.97	20.78	0.90	2.12	0.059	0.15
6	1	2	838	20.8	29.97	20.76	0.95	2.20	0.073	0.02
7	1	4	838	20.8	29.97	20.76	0.91	2.25	0.067	0.15
8	1	8	838	20.8	30.27	20.98	0.90	2.30	0.074	0.14
9	1	18	838	20.8	29.98	20.76	0.91	2.40	0.075	0.19
10	2	0.1	924	19.9	30.36	21.29	0.75	1.87	0.083	0.29
11	2	1.8	924	19.9	30.39	21.31	0.77	1.96	0.093	0.25
12	2	3.1	924	19.8	30.39	21.33	0.75	2.02	0.085	0.27
13	2	5.7	924	19.8	30.39	21.33	0.76	1.89	0.091	0.29
14	2	6	924	19.6	30.4	21.39	0.75	1.99	0.087	0.28
15	3	0.1	952	19.9	30.37	21.29	0.77	1.97	0.085	0.09
16	3	2	952	20	30.36	21.26	0.76	1.96	0.080	0.29
17	3	3.9	952	19.9	30.38	21.30	0.75	1.96	0.083	0.28
18	3	5.6	952	19.9	29.98	21.00	0.78	1.90	0.102	0.25
19	2	0.1	1310	20.1	30.53	21.36	0.72	2.36	0.077	0.18
20	2	2	1310	20	30.54	21.40	0.70	2.24	0.089	0.12
21	2	4	1310	19.9	30.55	21.43	0.71	2.15	0.083	0.14
22	2	8	1310	19.8	30.61	21.50	0.70	2.17	0.084	0.20

CORRECTED DATA LIST: DOVER POINT 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	2	10	1310	19.8	30.61	21.50	0.69	2.06	0.092	0.20
24	3	0.1	1203	20.9	30.33	21.00	0.75	2.13	0.073	0.02
25	3	2	1203	20.5	30.38	21.14	0.75	2.29	0.076	0.00
26	3	4	1203	20	30.54	21.40	0.71	2.03	0.090	0.23
27	3	10	1203	19.9	30.55	21.43	0.71	2.20	0.100	0.25
28	2	0.1	1225	20	30.53	21.39	0.71	2.15	0.079	0.17
29	2	2	1225	19.8	30.63	21.52	0.67	2.25	0.089	0.24
30	2	4	1225	19.5	30.72	21.66	0.66	2.70	0.095	0.26
31	3	0.1	1253	20.4	30.51	21.27	0.70	2.07	0.085	0.06
32	3	2	1253	20.2	30.53	21.34	0.75	2.16	0.080	0.00
33	3	4	1253	20	30.56	21.41	0.71	1.95	0.102	0.01
34	3	10	1253	19.9	30.61	21.47	0.68	2.17	0.092	0.19
35	2	0.1	1617	21.3	30.19	20.79	0.79	1.50	0.043	0.00
36	2	2	1617	21.3	30.2	20.80	0.80	1.51	0.048	0.00
37	2	4	1617	21.1	30.23	20.87	0.78	1.74	0.037	0.00
38	2	7.7	1617	20.9	30.26	20.95	0.78	1.60	0.042	0.00
39	2	9.6	1617	20.9	30.26	20.95	0.79	1.71	0.038	0.00
40	2	0.1	1540	21	30.24	20.91	0.79	1.54	0.048	0.00
41	2	2	1540	21	30.26	20.92	0.78	1.56	0.053	0.00
42	2	4	1540	20	30.27	21.19	0.78	1.57	0.053	0.00
43	2	8	1540	20.7	30.3	21.03	0.75	1.60	0.056	0.00
44	2	9.8	1540	20.5	30.35	21.12	0.75	1.79	0.050	0.03
45	1	0.1	1514	21.5	30.29	20.81	0.82	5.09	0.055	0.00

CORRECTED DATA LIST: DOVER POINT 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
46	1	2	1514	20.5	30.37	21.14	0.76	1.99	0.049	0.00
47	1	4	1514	20.5	30.36	21.13	0.75	1.63	0.060	0.00
48	1	9.89	1514	20.2	30.49	21.31	0.75	2.23	0.068	0.10
49	3	0.1	1600	21	30.24	20.91	0.78	1.64	0.041	0.00
50	3	2	1600	21	30.24	20.91	0.77	1.74	0.040	0.00
51	3	4	1600	21	30.26	20.92	0.78	1.56	0.047	0.00
52	3	10	1600	20.9	30.26	20.95	0.79	1.57	0.058	0.00
53	3	12	1600	19.9	30.26	21.21	0.77	1.67	0.048	0.00
54	2	0.1	1845	22	29.98	20.44	0.91	1.60	0.029	0.00
55	2	2	1845	22	29.96	20.43	0.92	1.63	0.030	0.00
56	2	4	1845	21.8	30.03	20.53	0.91	1.98	0.030	0.00
57	2	8	1845	21.8	30.03	20.53	0.90	1.64	0.030	0.00
58	2	10	1845	21.8	30.03	20.53	0.90	1.48	0.054	0.00
59	2	12	1845	21.8	30.07	20.56	0.90	1.65	0.050	0.00
60	1	0.1	1755	21.8	30	20.51	0.91	1.54	0.049	0.00
61	1	2	1755	21.8	30.04	20.54	0.90	2.26	0.033	0.00
62	1	4	1755	21.8	30.05	20.55	0.76	1.89	0.092	0.29
63	1	10	1755	21.7	30.07	20.59	0.91	1.62	0.038	---
64	2	0.1	1809	21.9	29.96	20.45	0.90	1.58	0.026	0.00
65	2	2	1809	21.9	29.98	20.47	0.90	1.77	0.028	0.00
66	2	4	1809	21.9	30.01	20.49	0.91	1.48	0.049	0.00
67	2	8	1809	21.7	30.03	20.56	0.91	1.66	0.067	0.00
68	2	10	1809	21.6	30.08	20.63	0.87	1.59	0.037	0.00

CORRECTED DATA LIST: DOVER POINT 8/19/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

69	3	0.1	1830	22	29.94	20.41	0.93	1.79
0.038	0.00							
70	3	2	1830	21.9	29.96	20.45	0.91	1.66
0.038	0.00							
71	3	4	1830	21.9	29.99	20.48	0.91	2.08
0.040	0.00							
72	3	10	1830	21.9	30.01	20.49	0.90	1.67
0.053	0.00							
73	2	0.1	2100	20.4	30.34	21.14	0.79	1.51
0.057	0.00							
74	2	1.9	2100	20.5	30.37	21.14	0.80	1.68
0.069	0.04							
75	2	3.5	2100	20.5	30.37	21.14	0.77	1.28
0.078	0.00							
76	2	6.3	2100	20.2	30.4	21.24	0.77	1.51
0.074	0.05							
77	2	10	2100	20.2	30.4	21.24	0.78	1.56
0.075	0.00							
78	1	0.1	2009	21.5	29.95	20.55	0.88	1.97
0.056	0.01							
79	1	2	2009	21.5	29.96	20.56	0.90	2.03
0.055	0.04							
80	1	4	2009	21.5	29.98	20.58	0.91	1.85
0.065	0.00							
81	1	8	2009	21.5	30	20.59	0.90	1.77
0.063	0.01							
82	1	10	2009	21.5	30	20.59	0.95	1.88
0.049	0.00							
83	1	12	2009	21.5	30	20.59	0.91	1.76
0.047	0.00							
84	2	0.1	2022	20.9	---	---	0.83	1.55
0.053	0.00							
85	2	1.9	2022	20.9	30.17	20.88	0.83	1.53
0.043	0.01							
86	2	3.7	2022	20.9	30.23	20.93	0.83	1.46
0.067	0.00							
87	2	6.9	2022	20.8	30.23	20.95	0.83	1.53
0.053	0.00							
88	2	6.4	2022	20.8	30.24	20.96	0.81	1.57
0.046	0.01							
89	3	0.1	2045	20.0	30.23	20.95	1.11	1.58
0.061	0.00							
90	3	1.8	2045	20.8	30.21	20.94	0.82	2.01
0.056	0.00							
91	3	36	2045	20.8	30.24	20.96	0.81	1.53
0.049	0.02							
92	3	6.9	2045	20.9	30.23	20.93	0.82	1.69
0.057	0.00							
93	3	8.2	2045	20.8	30.22	20.94	0.84	1.70
0.055	0.02							

CORRECTED DATA LIST: PISCAT.-DOVER PT. 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
1	4	0.1	835	23.8	30.07	20.01	0.81	2.71	0.072	0.33
2	4	2	835	21.1	---	---	0.85	2.77	0.092	0.26
3	4	3.9	835	20.6	30.09	20.98	0.79	3.40	0.072	0.27
4	4	4.9	835	21.1	30.09	20.77	0.81	3.15	0.072	0.36
5	4	0.1	950	20.4	30.24	21.06	0.81	3.45	0.090	0.20
6	4	2	950	20.2	30.62	21.41	0.74	2.86	0.071	0.33
7	4	4	950	20.2	30.3	21.16	0.74	3.01	0.072	0.34
8	4	5	950	20.5	30.31	21.09	0.83	2.93	1.688	0.00
9	4	0.1	1030	20	30.36	21.26	0.70	2.89	0.082	0.34
10	4	2	1030	20.2	30.39	21.23	0.76	3.05	0.082	0.26
11	4	4	1030	20.1	30.42	21.28	0.74	2.69	0.092	0.30
12	4	5	1030	20.4	30.42	21.20	0.78	2.94	0.102	0.39
13	4	0.1	1130	29	30.61	18.83	0.62	2.91	0.102	0.38
14	4	2	1130	21.5	30.61	21.05	0.69	3.33	0.112	0.28
15	4	4	1130	21.6	30.62	21.03	0.69	3.39	0.129	0.28
16	4	5	1130	21.4	30.62	21.09	0.66	2.97	0.102	0.42
17	4	0.1	1230	30.4	30.49	18.29	0.70	3.26	0.092	0.10
18	4	1.9	1230	22.4	30.59	20.79	0.70	3.49	0.088	0.19
19	4	3.8	1230	23	30.68	20.69	0.68	3.23	0.101	0.23
20	4	4.8	2130	21.8	30.7	21.04	0.67	3.77	0.128	0.31
21	4	0.1	1330	28.7	30.32	18.71	0.68	3.16	0.068	0.00
22	4	2	1330	21.6	30.48	20.93	0.69	3.27	0.091	0.00

CORRECTED DATA LIST: PISCAT.-DOVER PT. 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	4	4	1330	22	30.64	20.94	0.68	3.62	0.105	0.13
24	4	5	1330	21.5	30.69	21.11	0.62	3.30	0.102	0.33
25	4	0.1	1430	27.8	29.8	18.61	0.84	3.16	0.062	0.00
26	4	2	1430	22.6	30.13	20.39	0.78	2.82	0.059	0.00
27	4	4	1430	23.1	30.37	20.43	0.69	3.80	0.071	0.10
28	4	5	1430	22.7	30.52	20.66	0.71	3.35	0.095	0.18
29	4	0.1	1535	23.4	28.94	19.27	1.07	5.68	0.139	0.03
30	4	1.9	1535	22.2	29.35	19.91	0.99	4.58	0.088	0.00
31	4	3.8	1535	22.6	29.78	20.13	0.86	4.36	0.052	0.05
32	4	4.7	1535	22.4	29.98	20.33	0.84	3.09	0.052	0.07
33	4	0.1	1630	---	28.18	---	1.27	8.18	0.220	0.64
34	4	2	1630	21.3	28.69	19.65	1.06	6.01	0.126	0.35
35	4	3.9	1630	21.8	28.97	19.73	1.01	5.43	0.095	0.25
36	4	4.9	1630	22.2	29.3	19.87	1.05	5.01	0.124	0.13
37	4	0.1	1730	20.6	27.25	18.75	1.46	10.20	0.343	1.17
38	4	2	1730	20.5	28.26	19.54	1.13	6.88	0.169	0.57
39	4	4	1730	20.6	29.03	20.10	1.11	4.81	0.127	0.14
40	4	5	1730	21.2	29.39	20.21	1.12	5.29	0.104	0.17
41	4	0	1830	20.6	27.43	18.88	1.40	9.67	0.294	0.17
42	4	2	1830	20.3	28.63	19.87	1.06	5.70	0.147	0.44
43	4	4	1830	20.6	29.17	20.20	0.96	4.66	0.115	0.29
44	4	5	1830	21.2	29.07	19.97	1.31	5.46	0.158	0.34
45	4	0.1	1930	19.5	29.39	20.65	1.02	4.05	0.094	0.14

CORRECTED DATA LIST: PISCAT.-DOVER PT. 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
46	4	1.9	1930	19.2	29.53	20.83	1.01	3.78	0.111	0.12
47	4	3.8	1930	19.4	29.98	21.12	0.87	2.79	0.059	0.09
48	4	4.7	1930	19.9	30.01	21.02	0.98	2.58	0.052	0.02
49	4	0.1	2030	18.8	30.16	21.41	0.77	2.44	0.062	0.13
50	4	1.9	2030	18.7	24.94	17.47	0.82	2.51	0.084	0.09
51	4	3.7	2030	19	30.16	21.36	0.78	3.00	0.074	0.11
52	4	4.6	2030	19.6	30.15	21.20	1.14	3.45	0.082	0.08

CORRECTED DATA LIST: STURGEON CR.-DOVER PT. 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.P04	9.Si02	10.N02	11.N03
1	5	0.1	915	20.7	26.9	18.46	1.61	12.11	0.359	1.67
2	5	1.6	915	20.4	28.66	19.87	1.13	6.82	0.188	0.87
3	5	3.2	915	20	28.96	20.20	1.11	7.00	0.165	0.78
4	5	4	915	---	29.13	---	1.06	5.72	0.146	0.64
5	5	0.1	1300	---	28.69	---	1.02	6.52	0.126	0.29
6	5	2	1300	25.1	29.74	19.38	0.82	4.17	0.052	0.05
7	5	4	1300	26.3	30.04	19.25	0.85	3.11	0.064	0.00
8	5	5	1300	22.3	30.05	20.41	0.68	2.89	0.071	0.00
9	5	0.1	1505	25.1	26.51	16.95	1.65	12.63	0.412	1.63
10	5	1.7	1505	24.8	26.88	17.32	1.44	11.37	0.357	1.62
11	5	3.5	1505	25.3	27.84	17.89	1.37	9.13	0.262	1.00
12	5	4.3	1505	24.9	28.7	18.66	1.17	6.31	0.170	0.62
13	5	0.1	1800	22.4	23.62	15.54	2.06	20.03	0.617	3.38
14	5	2	1800	22	24.15	16.04	1.91	16.59	0.582	3.07
15	5	4	1800	22	24.94	16.64	1.94	15.60	0.504	2.42
16	5	5	1800	22.1	25.14	16.76	2.02	16.65	0.503	2.35

CORRECTED DATA LIST: FRANKFORT I. 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
1	6	0.1	933	20	30.63	21.46	0.67	2.48	0.185	0.48
2	6	2	935	20	30.67	21.49	0.80	2.71	0.071	0.32
3	6	4	935	19.8	30.68	21.55	0.66	2.60	0.134	0.50
4	6	0.1	1030	19.2	30.77	21.77	0.63	2.58	0.117	0.52
5	6	2	1030	19	30.77	21.82	0.62	2.76	0.124	0.54
6	6	4	1030	18.9	30.85	21.91	0.60	2.95	0.137	0.55
7	6	8	1030	18.9	30.87	21.93	0.60	2.72	0.146	0.56
8	6	0.1	1130	19	30.96	21.97	0.57	2.92	0.124	0.61
9	6	2	1130	18.5	30.98	22.11	0.58	2.97	0.146	0.70
10	6	4	1130	18.3	30.97	22.15	0.59	2.89	0.132	0.61
11	6	8	1130	18	31.05	22.28	0.54	3.10	0.131	0.70
12	6	0.1	1230	21	30.47	21.88	0.75	2.87	0.082	0.18
13	6	2	1230	19.5	30.67	21.62	0.71	3.08	0.121	0.37
14	6	4	1230	18.5	30.94	22.08	0.62	3.74	0.125	0.48
15	6	8	1230	18	31.07	22.30	0.60	3.18	0.157	0.65
16	6	0.1	1330	20.5	30.57	21.29	0.65	2.84	0.084	0.28
17	6	2	1330	19.9	30.73	21.57	0.62	2.78	0.120	0.29
18	6	4	1330	19.5	30.76	21.69	0.62	3.07	0.127	0.38
19	6	8	1330	19	30.76	21.82	0.65	2.95	0.108	0.34
20	6	0.1	1430	21	30.6	21.18	0.66	2.76	0.120	0.24
21	6	2	1430	20.3	30.58	21.35	0.67	2.61	0.100	0.38
22	6	4	1430	20.3	30.58	21.35	0.65	2.71	0.085	0.28

CORRECTED DATA LIST: FRANKFORT I. 8/19/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SI02	10.NO2	11.NO3
23	6	8	1430	20.1	30.58	21.40	0.69	2.69	0.083	0.12
24	6	0.1	1530	21	30.44	21.06	0.68	2.79	0.094	0.18
25	6	2	1530	21	30.43	21.05	0.70	2.72	0.069	0.19
26	6	4	1530	21	30.42	21.04	0.74	2.82	0.091	0.05
27	6	8	1530	21	30.43	21.05	0.71	2.53	0.091	0.64
28	6	0.1	1630	21	30.18	20.86	0.76	2.58	0.075	0.11
29	6	2	1630	21.1	30.2	20.85	0.80	2.73	0.064	0.15
30	6	4	1630	21.1	30.2	20.85	0.78	2.80	0.075	0.12
31	6	8	1630	21.1	30.21	20.86	0.81	2.67	0.053	0.14
32	6	0.1	1730	21.5	30.03	20.61	0.80	2.69	0.076	0.11
33	6	2	1730	21.5	30.02	20.61	0.82	2.69	0.075	0.11
34	6	4	1730	21.5	30.01	20.60	0.85	2.81	0.054	0.02
35	6	8	1730	21.5	30.01	20.60	0.85	2.79	0.076	0.13
36	6	0.1	1830	21.9	30	20.48	0.82	2.61	0.055	0.13
37	6	2	1830	21.6	30.01	20.57	0.86	2.81	0.072	0.00
38	6	4	1830	21.6	30.01	20.57	0.86	2.71	0.059	0.05
39	6	8	1830	21.3	30.01	20.65	0.81	2.66	0.079	0.13
40	6	0.1	1930	21	30.17	20.85	0.81	2.18	0.057	0.00
41	6	2	1930	21.1	30.19	20.84	0.84	2.27	0.070	0.00
42	6	4	1930	21	30.25	20.91	0.77	2.12	0.069	0.09
43	6	8	1930	21	30.25	20.91	0.82	2.11	0.073	0.01
44	6	0.1	2030	20.5	30.42	21.18	0.72	2.05	0.067	0.18
45	6	2	2030	20.5	30.42	21.18	0.76	2.26	0.092	0.16
46	6	4	2030	20.5	30.46	21.21	0.71	2.26	0.103	0.19
47	6	8	2030	20.2	30.46	21.28	0.71	2.09	0.091	0.19

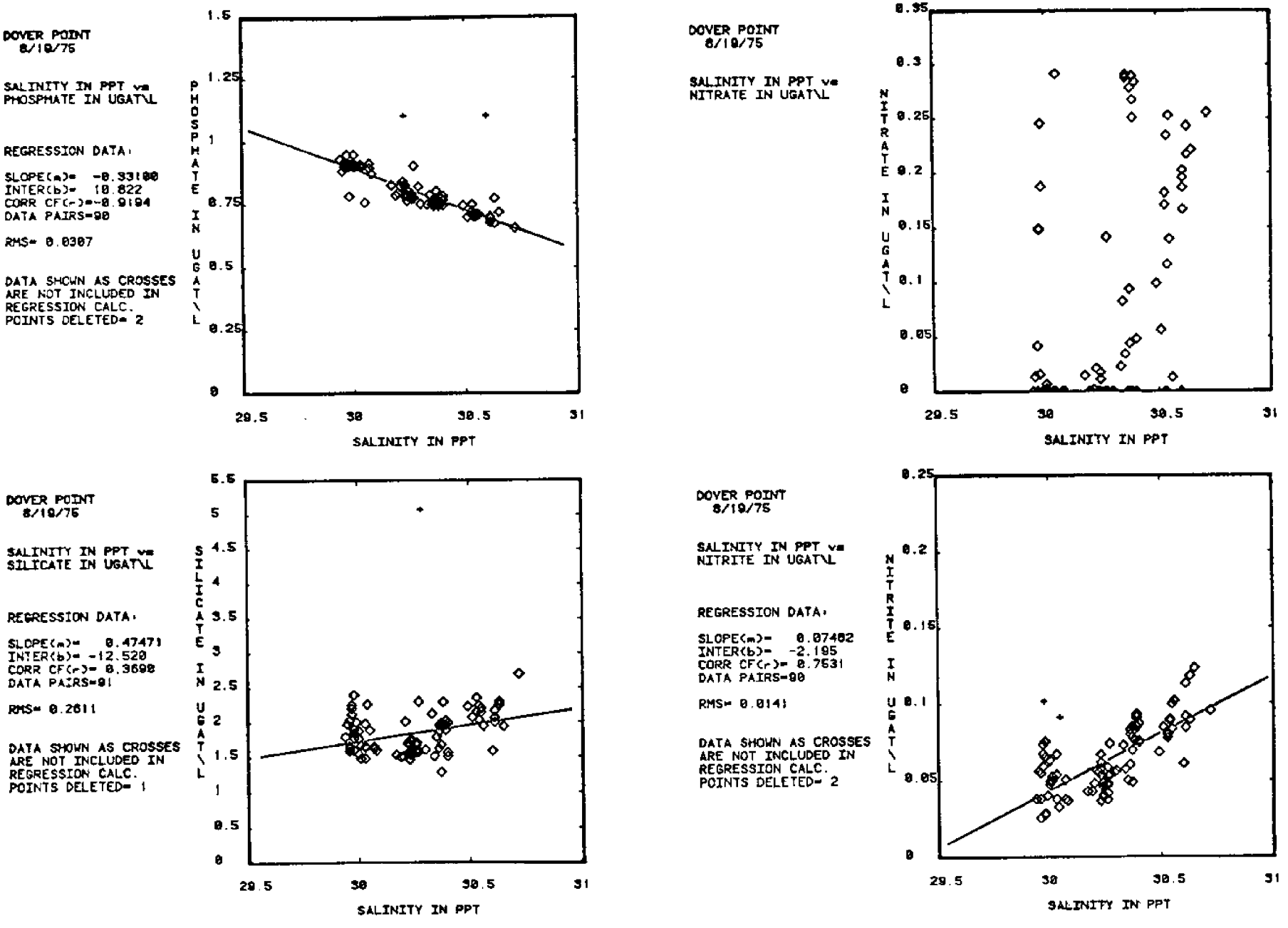


Fig. D-2. Salinity-nutrient plots for Dover Point, Dover Point cruise.

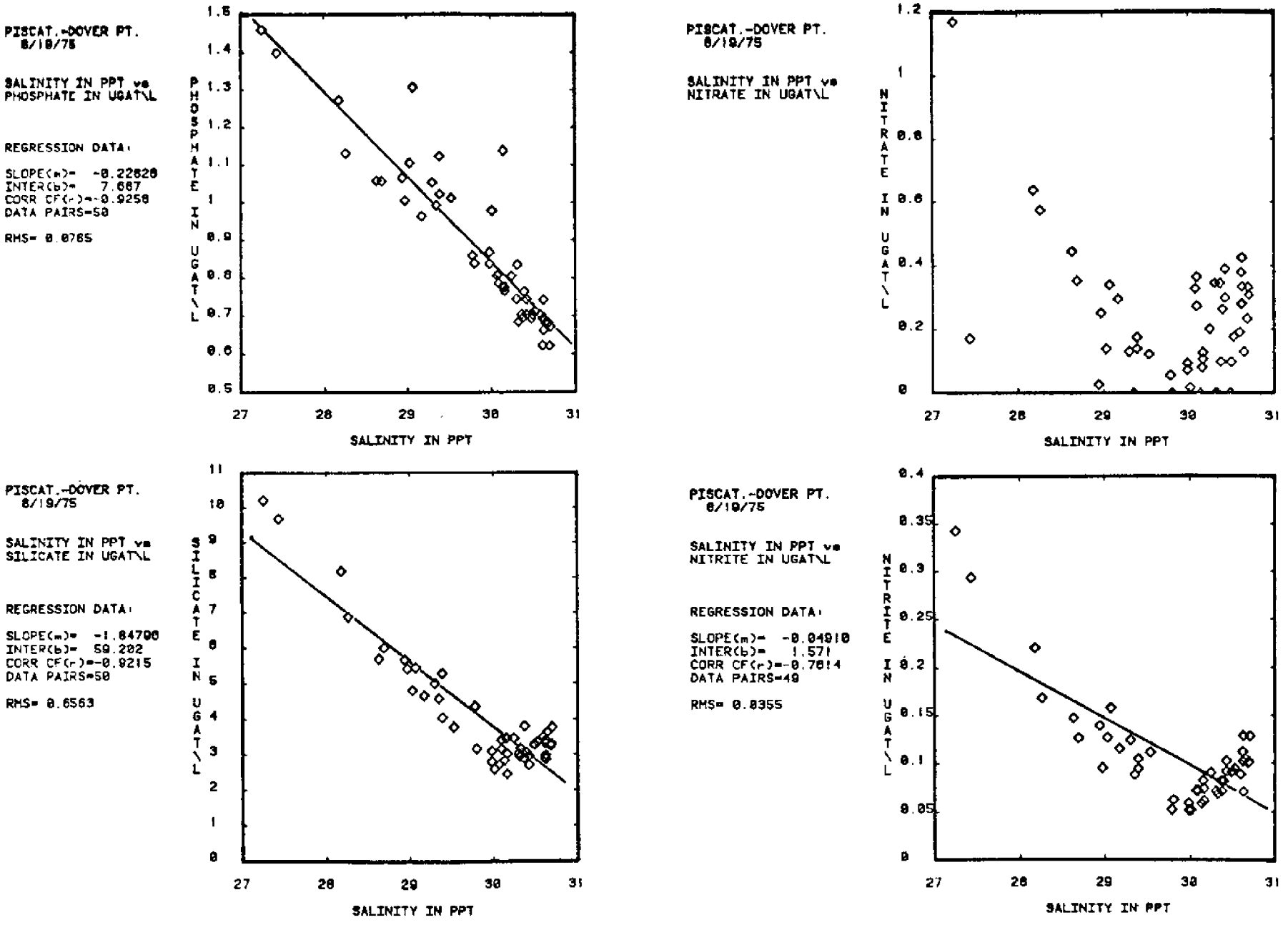
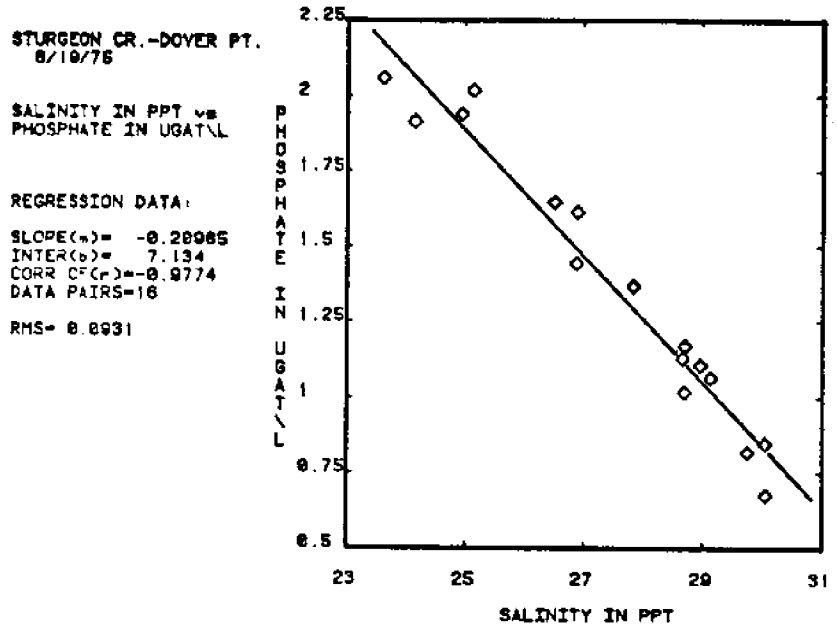
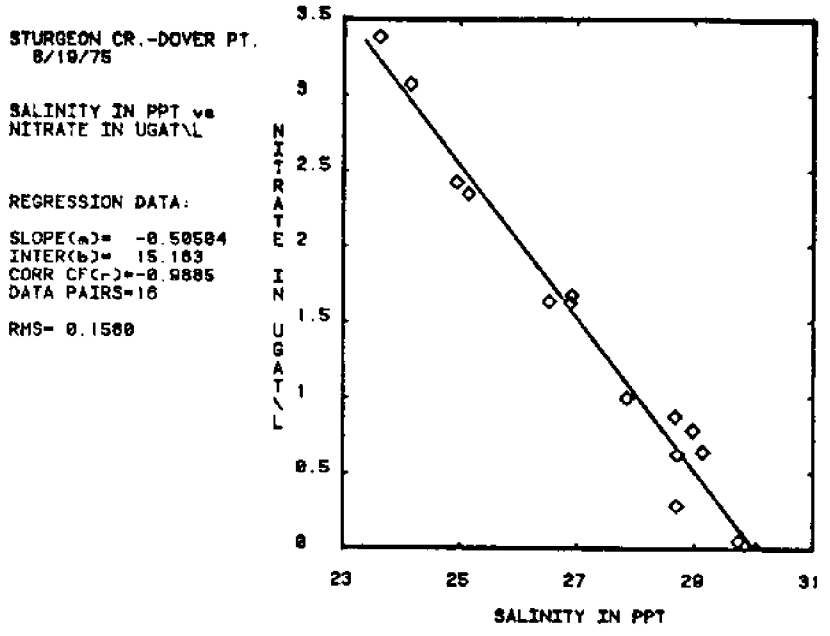
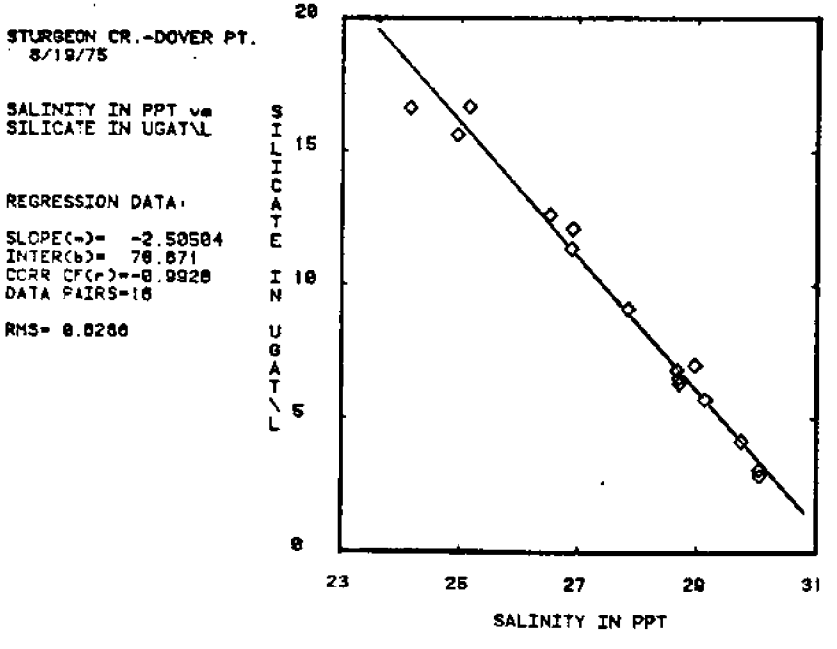


Fig. D-3. Salinity-nutrient plots for Piscat.-Dover Pt., Dover Point cruise.







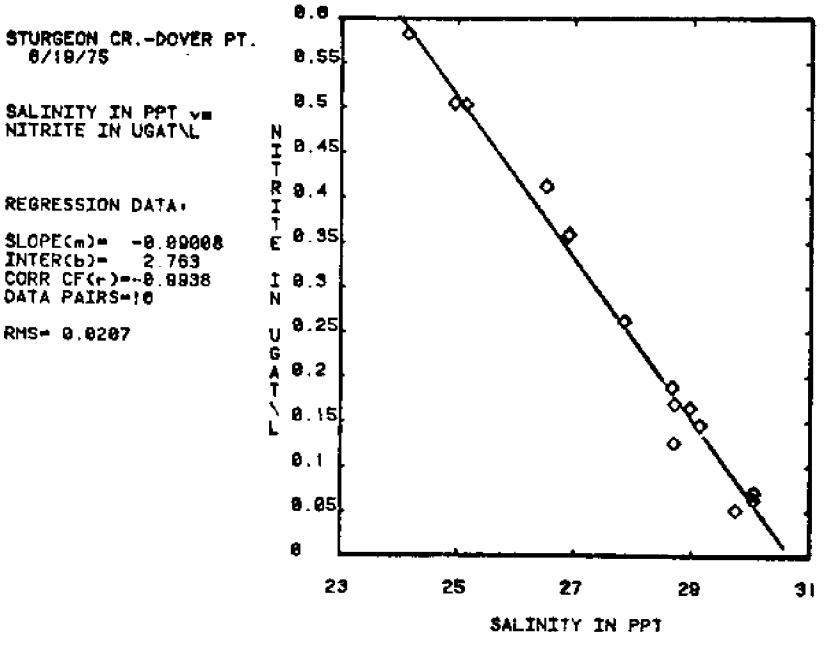


Fig. D-4. Salinity-nutrient plots for Sturgeon Cr.-Dover Pt., Dover Point cruise.

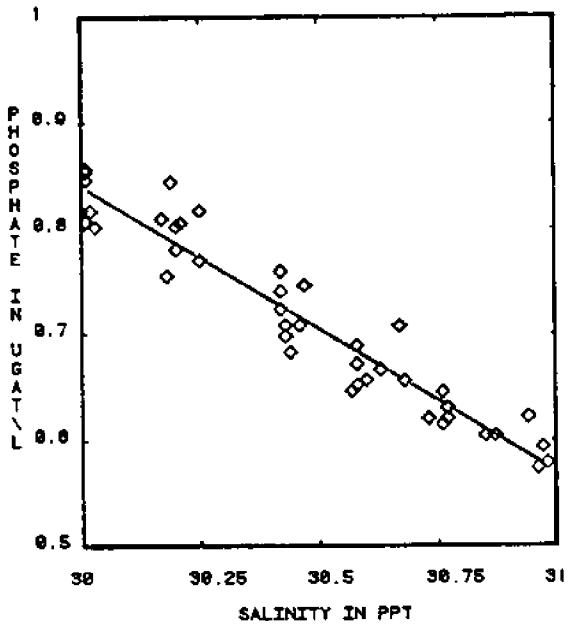
FRANKFORT I.
8/19/75

SALINITY IN PPT vs
PHOSPHATE IN UGAT\L

REGRESSION DATA:

SLOPE(m)= -0.27035
INTER(b)= 8.951
CORR CF(r)=-0.9628
DATA PAIRS=44

RMS= 0.0234



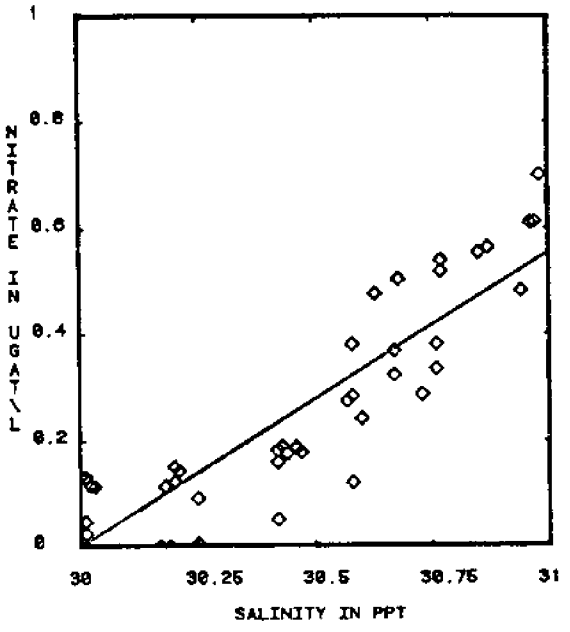
FRANKFORT I.
8/19/75

SALINITY IN PPT vs
NITRATE IN UGAT\L

REGRESSION DATA:

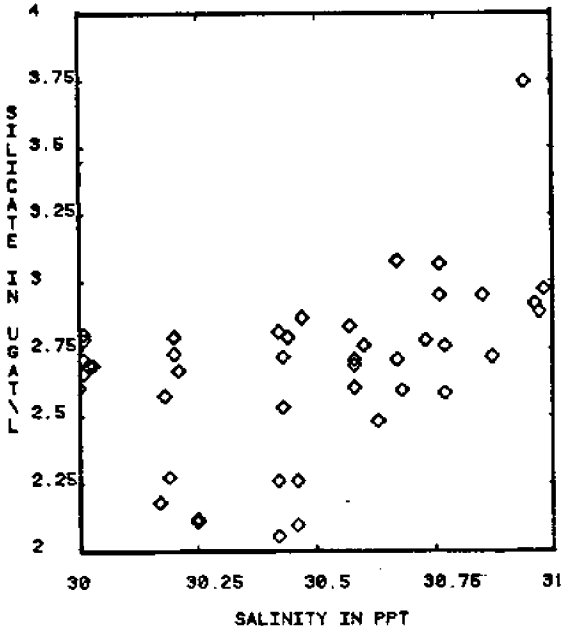
SLOPE(m)= 0.55408
INTER(b)= -16.848
CORR CF(r)= 0.8827
DATA PAIRS=44

RMS= 0.0987



FRANKFORT I.
8/19/75

SALINITY IN PPT vs
SILICATE IN UGAT\L



FRANKFORT I.
8/19/75

SALINITY IN PPT vs
NITRITE IN UGAT\L

REGRESSION DATA:

SLOPE(m)= 0.07582
INTER(b)= -2.217
CORR CF(r)= 0.8632
DATA PAIRS=45

RMS= 0.0135

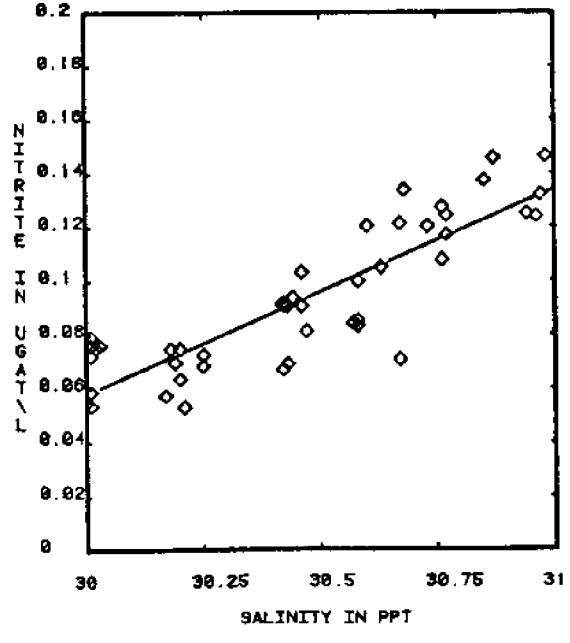


Fig. D-5. Salinity-nutrient plots for Frankfort I., Dover Point cruise.

APPENDIX E

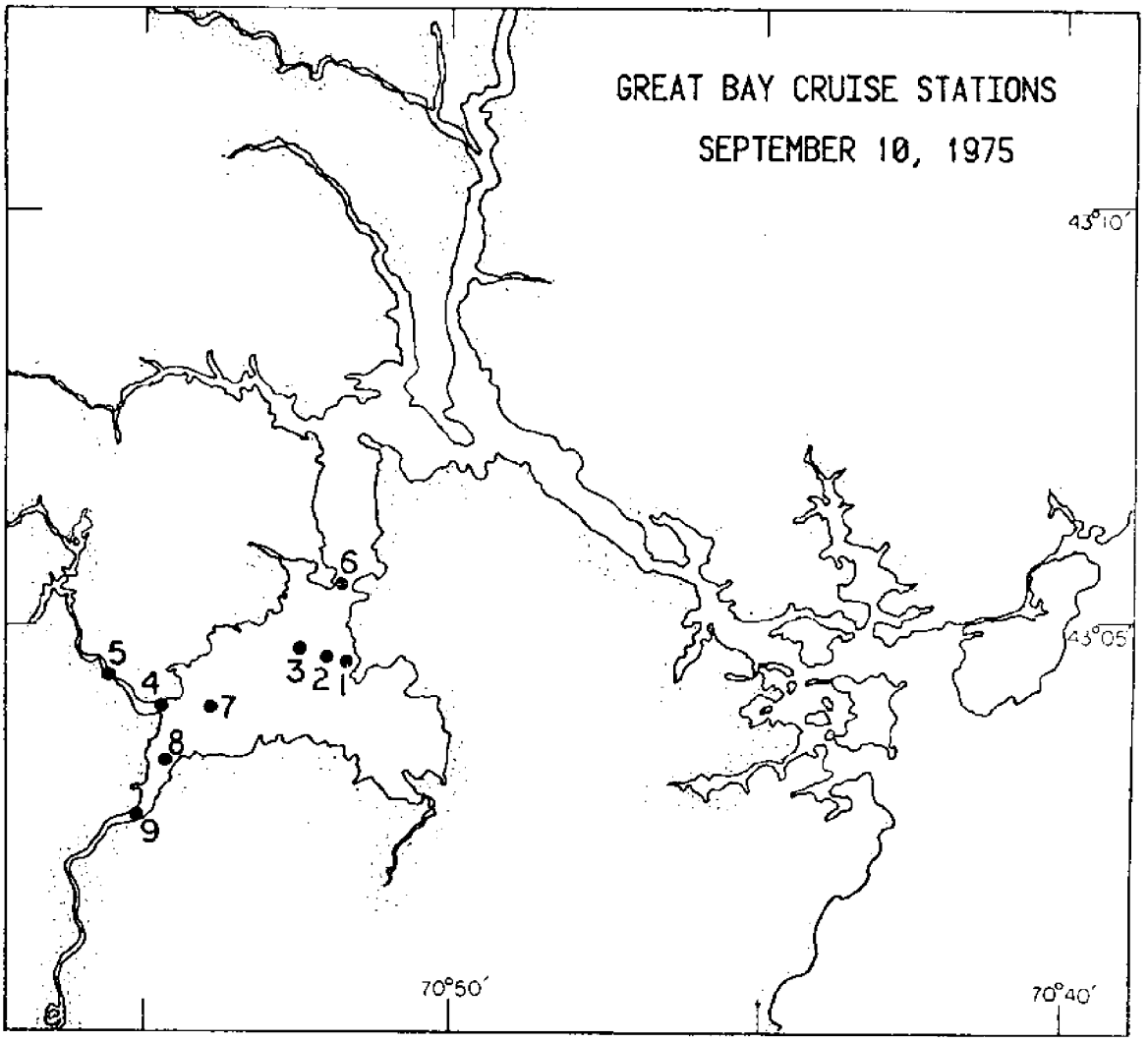


Fig. E-1. Station locations for Great Bay cruise.

1, 2, 3	Great Bay
4	Moody Pt.
5	Power Line
6	Furber Strait
7	Squamscott R.

CORRECTED DATA LIST: GREAT BAY 9/10/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

1	2	3	4	5	6	7	8	9
1	1	0.1	828	17.2	28.87	20.81	1.27	10.57
0.357	2.29							
2	1	2	828	17.2	29.01	20.92	1.24	10.00
0.342	2.38							
3	1	4	828	17.3	29	20.89	1.23	9.88
0.353	2.52							
4	2	0.1	854	17.2	28.96	20.88	1.24	10.30
0.354	2.35							
5	2	2	854	17.2	28.96	20.88	1.28	10.17
0.350	2.50							
6	2	4	854	17.2	28.95	20.87	1.25	10.20
0.366	2.40							
7	2	8	854	17.1	28.96	20.90	1.25	10.36
0.344	2.31							
8	3	0.1	913	17.2	29.22	21.08	1.19	9.43
0.353	2.51							
9	3	2	913	17.1	28.21	20.33	1.19	9.58
0.360	2.46							
10	3	4	913	17	29.23	21.13	1.14	9.38
0.354	2.46							
11	2	0.1	929	17.1	28.81	20.79	1.25	10.52
0.349	2.39							
12	2	2	929	17	28.79	20.80	1.25	10.63
0.356	2.26							
13	2	4	929	17	28.82	20.82	1.28	10.57
0.350	2.28							
14	2	8	929	17	28.84	20.83	1.27	11.01
0.350	2.33							
15	2	10	929	17	28.82	20.82	1.25	10.72
0.349	2.30							
16	3	0.1	1123	17.4	28.22	20.27	---	3.18
0.145	---							
17	3	2	1123	17.8	28.26	20.21	1.31	12.53
0.366	2.35							
18	2	0.1	1138	17.4	28.16	20.22	1.42	13.24
0.365	2.14							
19	2	2	1138	17.3	28.19	20.27	1.41	10.57
0.367	2.09							
20	2	4	1138	17.2	28.23	20.32	1.39	20.62
0.370	1.99							
21	2	8	1138	17	28.25	20.38	1.38	12.60
0.359	2.09							
22	1	0.1	1045	17	28.44	20.53	1.40	12.78
0.354	2.00							

CORRECTED DATA LIST: GREAT BAY 9/10/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	1	2	1045	17	28.48	20.56	1.43	12.66	0.357	2.01
24	1	4	1045	17	28.48	20.56	1.54	12.14	0.363	2.08
25	2	0.1	1102	17.1	28.13	20.27	1.38	13.17	0.397	2.28
26	2	2	1102	17	28.17	20.32	1.38	12.91	0.373	2.16
27	2	4	1102	17	28.26	20.39	1.39	12.84	0.357	3.05
28	2	8	1102	16.89	28.42	20.72	1.48	13.05	0.368	1.85
29	2	10	1102	16.9	28.28	20.43	1.39	13.17	0.380	2.05
30	1	0.1	1254	17.5	28.76	20.66	1.29	11.02	0.352	2.28
31	1	2	1254	17.5	28.81	20.69	1.27	11.11	0.352	2.31
32	1	4	1254	17.5	28.79	20.68	1.31	10.94	0.353	2.29
33	2	0.1	1308	17.5	30	21.60	1.24	10.66	0.340	2.31
34	2	2	1308	17.5	28.85	20.73	1.25	10.83	0.357	2.18
35	2	4	1308	17.5	28.87	20.74	1.30	11.15	0.378	2.33
36	2	8	1308	17.5	28.86	20.73	1.25	10.73	0.354	2.31
37	2	10	1308	17.5	28.86	20.73	1.27	10.73	0.363	2.31
38	3	0.1	1334	17.5	28.88	20.75	1.25	10.56	0.345	2.44
39	3	2	1334	17.5	28.87	20.74	1.21	10.57	0.351	2.26
40	3	4	1334	17.5	28.88	20.75	1.24	10.56	0.344	2.33
41	2	0.1	1347	17.5	19	13.23	1.26	10.35	0.370	2.49
42	2	2	1347	17.5	29.01	20.85	1.21	10.26	0.351	2.32
43	2	4	1347	17.5	29.01	20.85	1.22	10.31	0.337	2.46
44	2	8	1347	17.5	29.06	20.89	1.24	10.21	0.353	2.61
45	2	10	1347	17.5	29.01	20.85	1.23	10.47	0.366	2.43

CORRECTED DATA LIST: GREAT BAY 9/10/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
46	1	0.1	1508	17.5	29.22	21.01	1.26	9.74	0.368	2.63
47	1	2	1508	17.5	29.22	21.01	1.27	9.51	0.351	2.73
48	1	4	1508	17.5	29.22	21.01	1.19	9.59	0.364	2.46
49	2	0.1	1523	17.5	29.25	21.03	1.20	9.52	0.351	2.62
50	2	2	1523	17.5	29.26	21.04	1.22	9.52	0.358	2.77
51	2	4	1523	17.5	29.29	21.06	1.18	9.39	0.358	2.77
52	2	8	1523	17.3	29.31	21.12	1.21	---	---	2.75
53	2	10	1523	17.2	29.29	21.13	1.17	9.22	0.364	2.71
54	3	0.1	1543	17.5	29.29	21.06	1.20	9.23	0.354	2.78
55	3	2	1543	17.5	29.29	21.06	1.50	9.56	0.372	2.78
56	3	4	1543	17.5	29.3	21.07	1.23	9.20	0.359	2.78
57	2	0.1	1557	17.7	29.27	21.00	1.23	9.64	0.363	2.69
58	2	2	1557	17.7	29.26	20.99	1.19	9.51	0.377	2.70
59	2	4	1557	17.5	29.32	21.08	1.21	9.27	0.364	2.78
60	2	8	1557	17.5	29.34	21.10	1.15	9.13	0.362	2.83
61	1	0.1	1708	16.09	29.11	21.24	1.21	10.20	0.352	2.58
62	1	2	1708	17.8	29.24	20.95	1.20	9.59	0.053	3.09
63	1	4	1708	17.4	29.26	21.06	1.18	9.17	0.368	2.84
64	2	0.1	1730	17	29.61	21.42	1.19	8.65	0.374	3.23
65	2	2	1730	17.1	29.59	21.38	1.16	8.96	0.369	3.06
66	2	4	1730	17.1	29.58	21.38	1.17	8.70	0.889	---
67	2	8	1730	17	29.73	21.51	1.15	8.49	0.380	2.80
68	2	10	1730	16.9	29.65	21.47	1.08	8.34	0.376	3.07

CORRECTED DATA LIST: GREAT BAY 9/10/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
69	3	0.1	1755	17	29.52	21.35	1.12	9.12
0.369	3.35							
70	3	2	1755	17	29.53	21.36	1.15	8.79
0.366	2.97							
71	3	4	1755	16.8	29.58	21.44	1.12	8.50
0.365	3.13							
72	2	0.1	1812	17.2	29.44	21.25	1.16	9.22
0.370	2.85							
73	2	2	1812	17	29.52	21.35	1.13	8.96
0.362	3.32							
74	2	4	1812	16.9	29.64	21.47	1.12	8.60
0.373	3.07							
75	2	8	1812	16.8	29.72	21.55	1.14	8.70
0.394	3.14							
76	2	10	1812	16.8	29.75	21.57	1.10	8.34
0.379	3.14							
77	2	11.5	1812	16.8	29.64	21.49	1.06	8.25
0.370	3.06							
78	1	0.1	1928	17.1	29.32	21.18	1.19	9.43
0.363	2.76							
79	1	2	1928	17.1	29.38	21.22	1.19	9.69
0.390	2.85							
80	1	4	1928	17	29.38	21.25	1.06	9.35
0.365	2.95							
81	2	0.1	1946	17.3	29.02	20.90	1.21	10.51
0.360	2.53							
82	2	2	1946	17	29.33	21.21	1.16	9.85
0.388	---							
83	2	4	1946	17	---	---	1.19	9.44
0.370	2.96							
84	2	8	1946	17	29.43	21.28	1.17	9.51
0.370	2.96							
85	2	10	1946	17	29.31	21.19	1.18	8.90
0.366	3.06							
86	3	0.1	2004	17.1	29.16	21.05	1.19	10.11
0.369	2.70							
87	3	2	2004	17.1	29.21	21.09	1.17	9.76
0.351	2.46							
88	3	4	2004	17.1	29.23	21.11	1.18	9.74
0.387	2.72							
89	2	0.1	2026	18	28.7	20.49	1.30	12.01
0.366	2.30							
90	2	2	2026	17.5	29.01	20.85	1.21	10.47
0.365	2.57							
91	2	4	2026	17.3	29.05	20.92	1.22	10.78
0.382	2.58							
92	2	8	2026	17.1	29.26	21.13	1.18	10.00
0.388	2.99							
93	2	10	2026	17.1	29.16	21.05	1.21	9.48
0.360	2.80							

CORRECTED DATA LIST: MOODY PT., POWER LINE 9/10/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	4	0	800	16.25	28.42	20.68	1.38	12.08	0.369	2.08
2	4	2	800	21.5	28.26	19.28	1.27	12.57	0.376	2.55
3	5	0	830	14.45	19.76	14.43	1.81	34.54	0.450	2.94
4	5	2	830	15.5	20.63	14.89	1.88	31.61	0.528	3.26
5	4	0	905	15.7	26.46	19.30	1.57	17.77	0.428	2.20
6	4	2	905	19.1	27.48	19.30	1.35	12.03	0.379	2.07
7	4	0	1000	17	23.53	16.79	1.65	25.51	0.435	2.80
8	4	2	1000	24.8	27.51	17.79	1.46	15.00	0.399	2.16
9	4	0	1100	16.25	20.91	14.95	1.74	32.12	0.435	2.81
10	4	2	1100	18.8	23.54	16.38	1.75	25.65	0.438	2.71
11	5	0	1130	18.9	20.88	14.34	1.80	32.88	0.499	3.20
12	5	1.5	1130	18.6	18.38	12.52	1.36	43.99	0.392	3.16
13	4	0	1200	19.25	20.11	13.68	1.80	34.02	0.430	2.79
14	4	1.5	1200	19.9	20.73	13.99	1.81	31.12	0.438	2.71
15	4	0	1300	22.25	23.09	15.18	2.06	30.90	0.730	---
16	4	1.5	1300	23	23.29	15.13	2.85	33.30	0.792	---
17	4	0	1400	25.55	26.34	16.70	1.66	19.17	0.458	2.56
18	4	1.5	1400	24	26.57	17.32	1.74	18.91	0.482	2.40
19	5	0	1430	19.1	20.69	14.15	2.03	32.98	0.437	2.97
20	5	2	1430	19.5	20.99	14.29	1.78	31.52	0.441	2.78
21	4	0	1500	18.2	28.23	20.09	1.33	13.57	0.376	2.05
22	4	2	1500	18	28.26	20.16	1.29	12.86	0.372	2.09

CORRECTED DATA LIST: MOODY PT., POWER LINE 9/10/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	4	0	1600	18.3	28.53	20.29	1.22	12.98	0.366	2.18
24	4	2	1600	18	28.58	20.40	1.30	11.54	0.359	2.08
25	4	0	1700	17.6	28.36	20.33	1.35	13.30	0.364	2.09
26	4	2	1700	16.5	28.51	20.69	1.24	12.00	0.360	2.09
27	5	0	1730	19.1	19.04	12.91	2.09	37.49	0.474	3.17
28	5	2	1730	19.5	22.94	15.76	1.60	18.16	0.468	2.40
29	4	0	1800	18.8	27.85	19.65	1.43	14.92	0.393	2.17
30	4	2	1800	17.8	28.37	20.29	1.19	10.92	0.354	2.19
31	4	0	1900	17.7	28.36	20.31	1.34	12.87	0.369	1.78
32	4	2	1900	17.2	28.61	20.61	1.24	10.92	0.356	2.23

CORRECTED DATA LIST: FURBER STRAIT 9/10/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	6	0.1	805	16	28.93	21.13	1.24	10.48	0.355	2.30
2	6	4.6	820	17	28.99	20.95	1.20	10.16	0.365	2.44
3	6	0.1	900	17	28.79	20.80	1.19	19.70	0.349	2.21
4	6	4.7	900	16.8	28.87	20.90	1.22	11.54	0.361	2.34
5	6	0.1	1000	17.6	28.77	20.64	1.29	12.86	0.379	2.29
6	6	4.6	1000	17.2	29.71	21.45	1.22	14.41	0.363	2.29
7	6	0.1	1045	18	29.64	21.21	1.27	11.04	0.353	2.19
8	6	6.9	1045	17.7	29.18	20.93	1.30	11.31	0.351	2.17
9	6	0	1200	18.2	28.86	20.57	1.23	10.40	0.358	2.23
10	6	6.1	1200	18.1	28.86	20.59	1.24	11.59	0.368	2.28
11	6	0	1300	18.8	28.86	20.42	1.20	11.62	0.388	2.26
12	6	5.7	1300	18.4	28.93	20.57	1.20	10.29	0.361	2.73
13	6	0	1400	19	29.53	20.88	1.18	10.97	0.380	2.47
14	6	3.4	1400	18.6	29.34	20.84	1.19	6.86	0.359	2.54
15	6	0	1500	18.75	29.31	20.78	1.17	9.95	0.374	2.72
16	6	4.8	1500	18	29.34	20.98	1.16	12.53	0.366	1.83
17	6	0	1600	18.7	29.43	20.88	1.19	14.76	0.381	1.78
18	6	4	1600	18	29.54	21.13	1.15	34.93	0.391	1.81
19	6	0	1700	18	29.65	21.22	1.09	9.42	0.386	2.04
20	6	6.6	1700	17.3	29.65	21.38	1.06	8.91	0.402	3.12
21	6	0	1800	17	29.83	21.59	1.05	8.20	0.364	3.46
22	6	8	1800	17	29.95	21.68	1.06	7.65	0.369	3.57
23	6	0	1900	17.2	29.26	21.11	1.17	9.27	0.348	2.96
24	6	5.1	1900	17.2	29.46	21.26	1.15	8.68	0.359	3.19

CORRECTED DATA LIST: SQUAMSCOTT R. 9/10/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

1	2	3	4	5	6	7	8	9
1	7	0	900	17.2	27.45	19.73	1.32	13.66
0.395	2.26							
2	7	2	900	17.2	27.89	20.06	1.32	11.35
0.381	2.09							
3	9	0	1010	19	---	---	3.42	57.18
1.675	---							
4	9	2	1010	18.6	17.66	11.98	3.03	48.66
1.426	9.61							
5	8	0	1030	18.3	19.38	13.34	2.80	43.09
1.252	8.55							
6	8	2	1030	18.3	19.29	13.28	2.85	43.36
1.270	8.54							
7	7	0	1110	18	23.63	16.64	2.19	28.21
0.825	5.21							
8	7	1.5	1110	18	23.6	16.61	2.21	28.44
0.811	5.23							
9	8	0	1130	---	15.54	---	3.40	56.03
1.673	---							
10	8	2	1130	---	15.48	---	3.44	56.24
1.675	---							
11	9	0	1145	---	11.69	---	4.03	67.34
2.056	---							
12	9	1.5	1145	---	11.75	---	4.22	66.67
2.043	---							
13	7	0	1200	---	22.06	---	2.32	33.28
0.931	6.00							
14	7	2	1200	---	22.88	---	2.09	28.04
0.764	4.77							
15	7	1300	0	18.8	27.06	19.05	1.54	15.54
0.428	2.17							
16	7	2	1300	18.6	27.11	19.14	1.60	15.40
0.429	2.29							
17	7	0	1400	18	28.49	20.33	1.32	11.42
0.385	2.04							
18	7	2	1400	17.9	28.49	20.36	1.35	11.57
0.391	1.99							
19	8	0	1425	19.1	25.91	18.11	1.84	20.78
0.560	3.20							
20	8	2	1425	18.8	26.58	18.69	1.62	15.32
0.448	2.38							
21	9	0	1445	20	20.29	13.64	2.66	40.66
1.179	7.86							
22	9	2	1445	19.5	21.17	14.42	2.46	34.10
0.986	6.48							

CORRECTED DATA LIST: SQUAMSCOTT R. 9/10/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
23	7	0	1530	17.5	28.88	20.75	1.22	10.19	0.387	2.14
24	7	2	1530	17.5	28.88	20.75	1.23	9.96	0.375	2.16
25	7	0	1600	17.4	28.99	20.86	1.24	9.75	0.381	2.32
26	7	2	1600	17.3	28.99	20.88	1.24	9.61	0.365	2.26
27	7	0	1715	17.5	29.18	20.98	1.18	9.46	0.402	2.44
28	7	2	1715	17.5	29.26	21.04	1.17	8.98	0.378	2.44
29	8	0	1740	19.5	26.51	18.47	1.64	17.48	0.467	2.55
30	8	2	1740	17.9	27.63	19.70	1.25	10.69	0.378	2.11
31	7	0	1800	17.3	29.29	21.11	1.19	8.87	0.384	2.49
32	7	2	1800	17.5	29.29	21.06	1.21	9.01	0.378	2.53
33	7	0	1900	17.5	26.64	19.04	1.58	17.79	0.462	2.48
34	7	2	1900	17	27.96	20.16	1.18	8.91	0.376	2.56

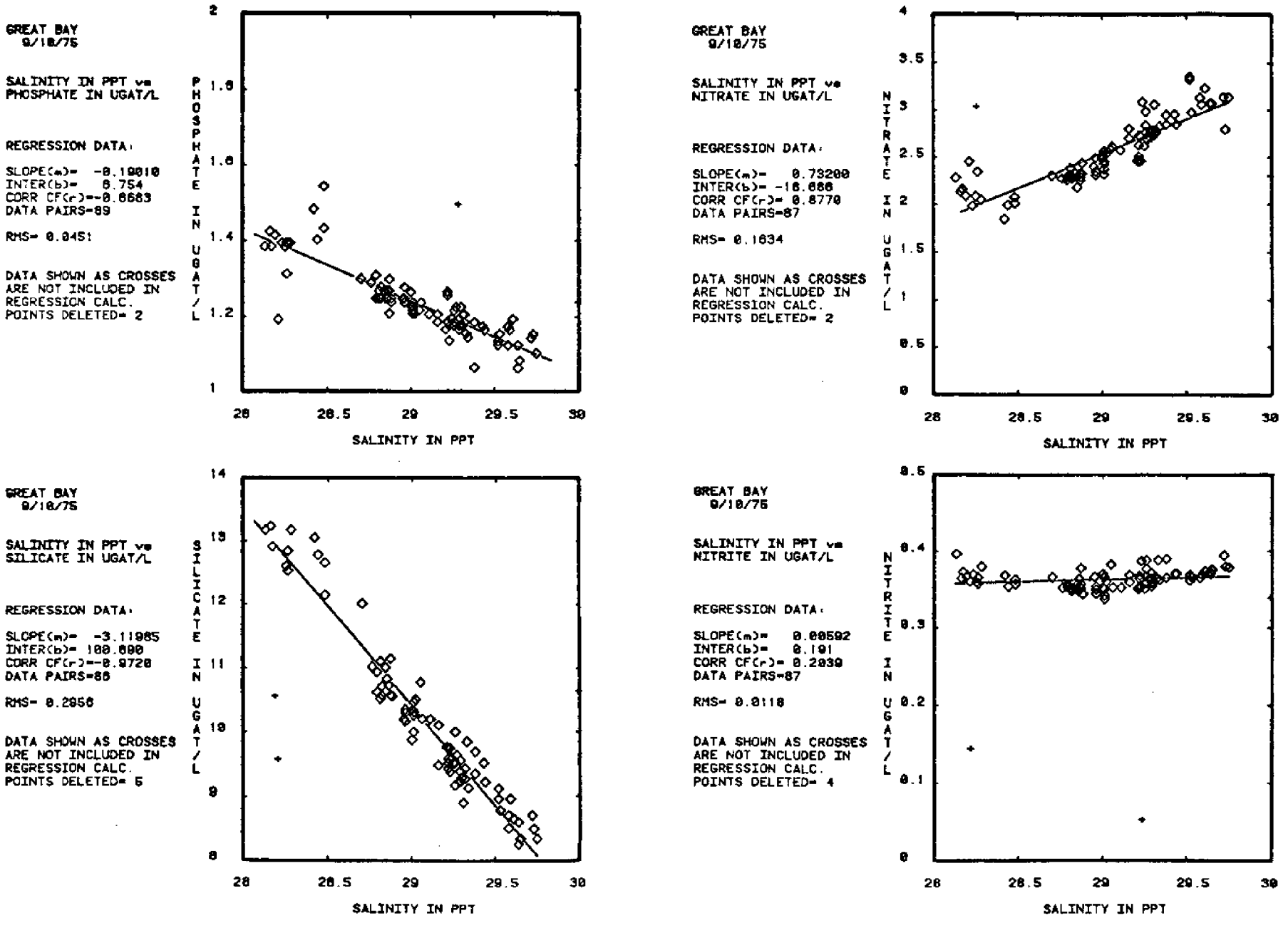


Fig. E-2. Salinity-nutrient plots for Great Bay, Great Bay cruise.

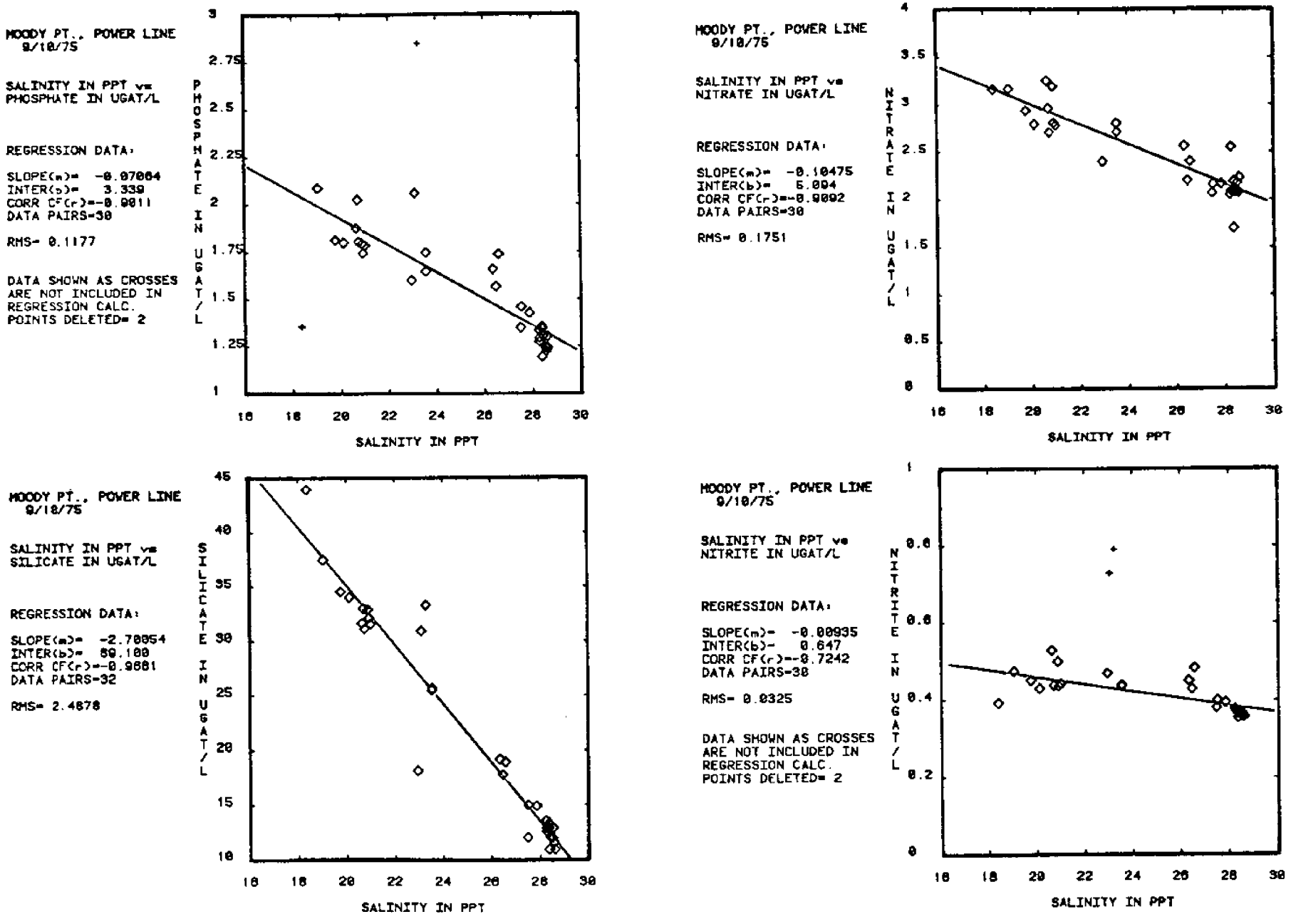


Fig. E-3. Salinity-nutrient plots for Moody Pt., Power Line, Great Bay cruise.

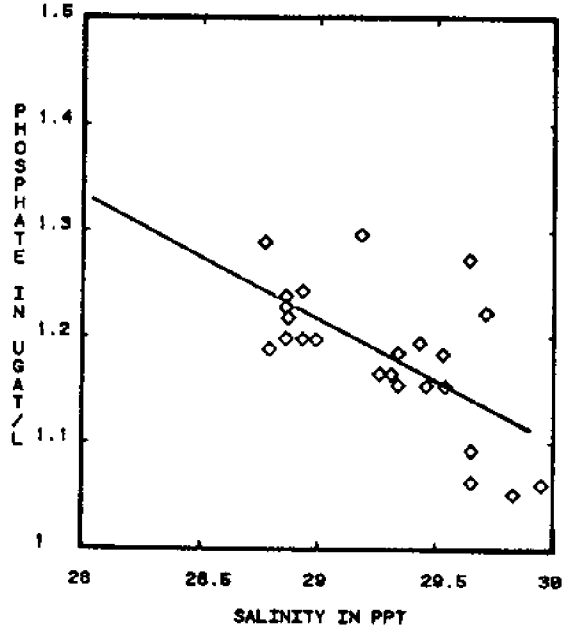
FURBER STRAIT
9/10/75

SALINITY IN PPT vs
PHOSPHATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.11664
INTER(b)= 4.599
CORR CF(r)=-0.6364
DATA PAIRS=24

RMS= 0.0586



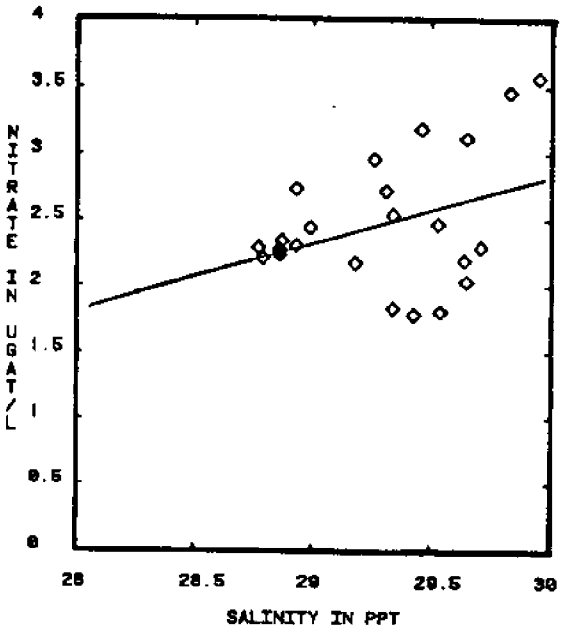
FURBER STRAIT
9/10/75

SALINITY IN PPT vs
NITRATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= 0.50808
INTER(b)= -12.409
CORR CF(r)= 0.3791
DATA PAIRS=24

RMS= 0.4435



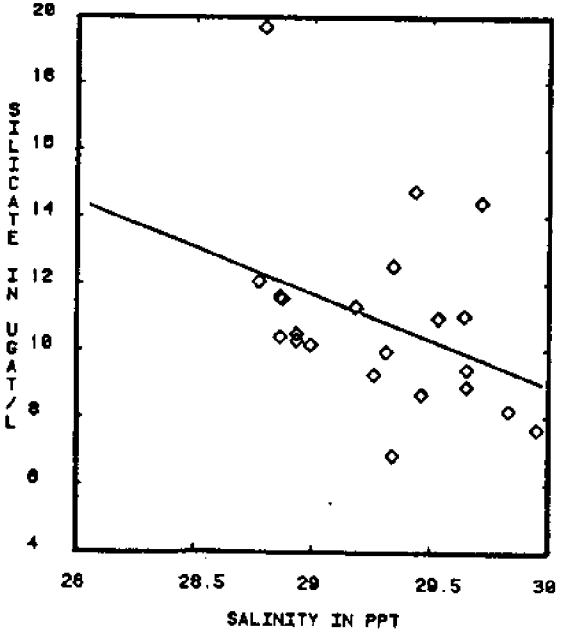
FURBER STRAIT
9/10/75

SALINITY IN PPT vs
SILICATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -2.77862
INTER(b)= 92.270
CORR CF(r)=-0.3799
DATA PAIRS=23

RMS= 2.4427



FURBER STRAIT
9/10/75

SALINITY IN PPT vs
NITRITE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= 0.01025
INTER(b)= 0.068
CORR CF(r)= 0.2628
DATA PAIRS=24

RMS= 0.0135

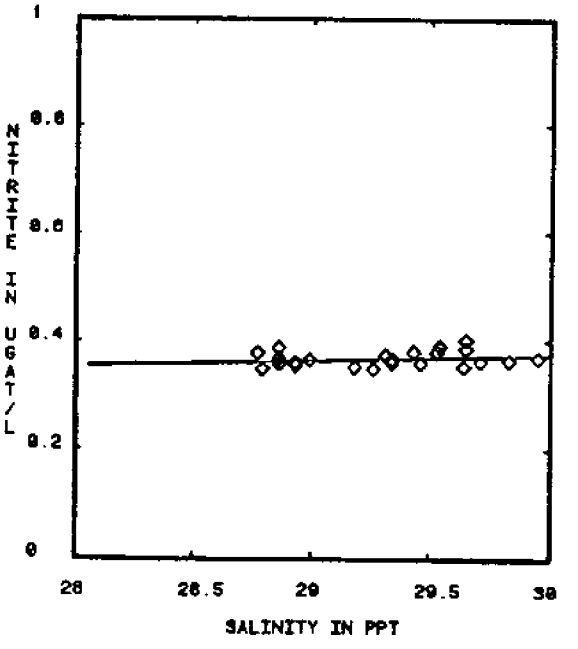


Fig. E-4. Salinity-nutrient plots for Furber Strait, Great Bay cruise.

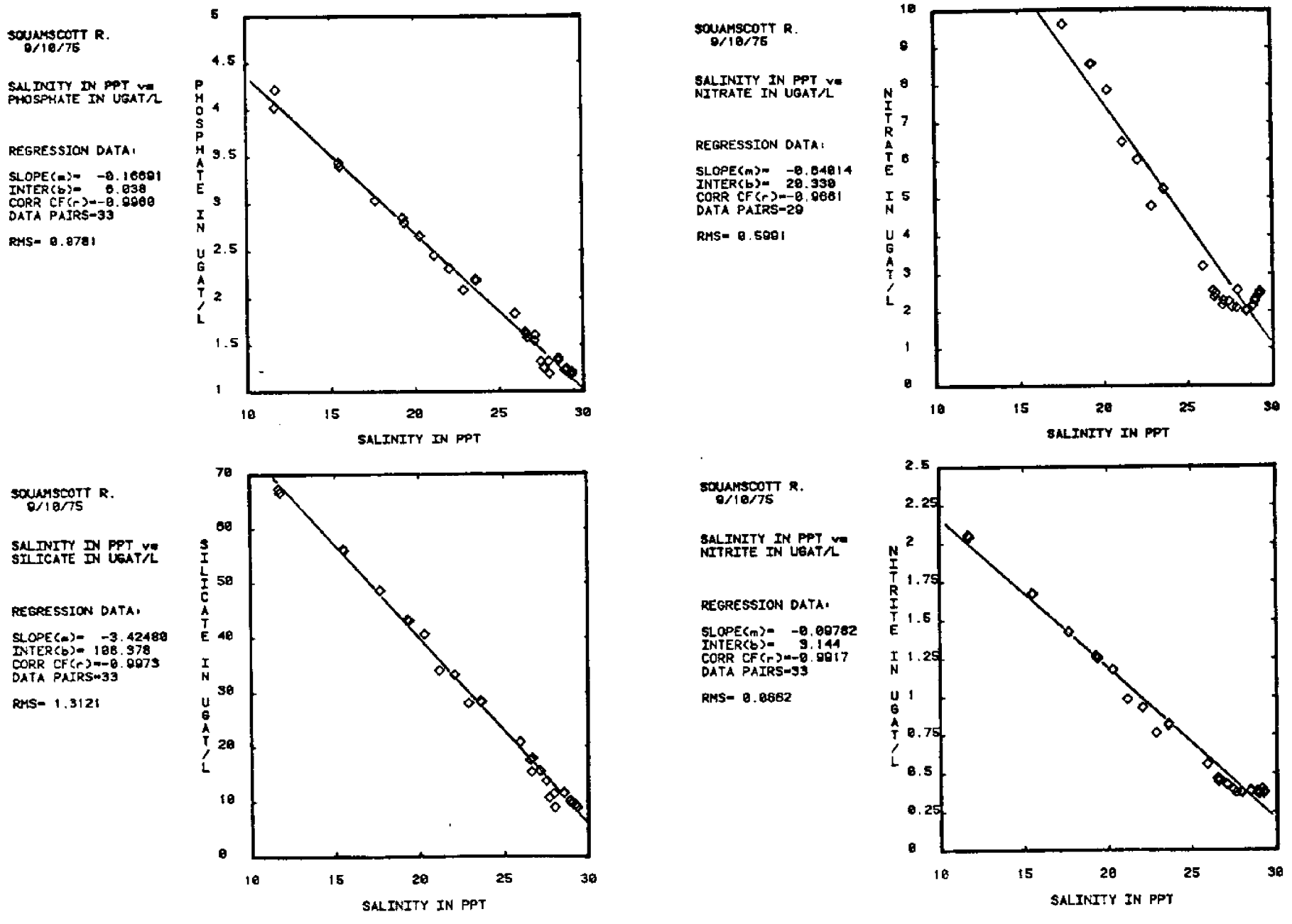


Fig. E-5. Salinity-nutrient plots for Squamscott R., Great Bay cruise.

APPENDIX F

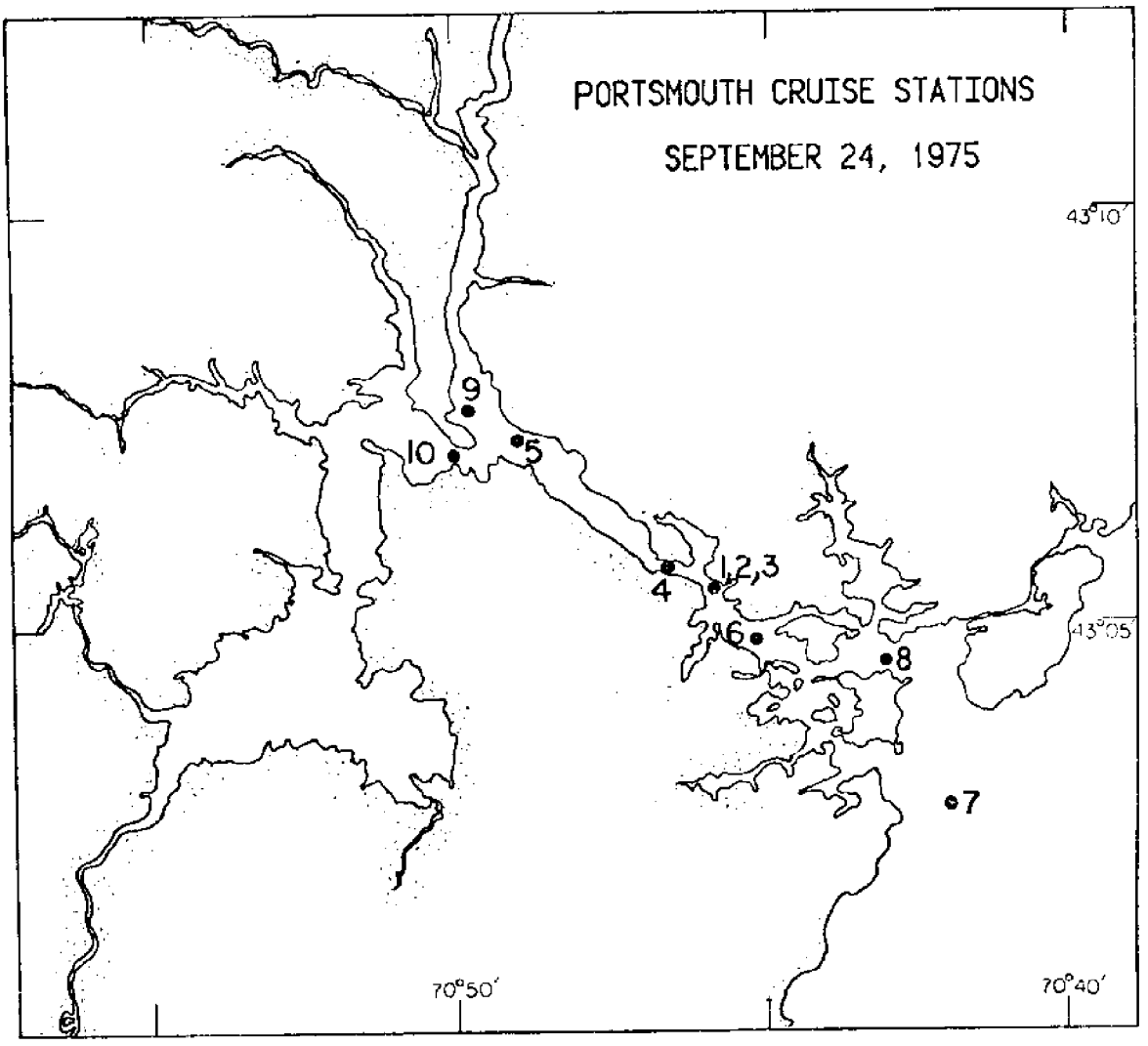


Fig. F-1. Station locations for Portsmouth cruise.

1, 2, 3	Portsmouth (Piscat. River)*
4	Power Plant
5	Atlantic Terminal
6	Memorial Bridge
7	2KR
8	Salamander Point
9	Piscat. R. (Can 17)
10	Marinas

*Data not yet available

CORRECTED DATA LIST: POWER PLANT 9/24/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	4	0.1	900	14.43	30.52	22.68	0.96	9.28	0.416	4.49
2	4	7	900	14.36	30.45	22.64	0.98	9.24	0.421	4.47
3	4	0.1	1010	14.42	30.11	22.37	0.98	9.47	0.423	4.55
4	4	7	1010	14.33	30.12	22.39	1.00	9.59	0.421	4.55
5	4	0.1	1103	14.28	30.37	22.60	0.94	8.96	0.413	4.55
6	4	7	1103	14.2	30.59	22.78	1.00	10.05	0.423	4.51
7	4	0.1	1145	13.97	30.55	22.80	0.91	8.41	0.409	4.47
8	4	7	1145	13.91	30.96	23.13	0.92	8.35	0.401	4.48
9	4	0.1	1302	12.78	31.13	23.48	0.85	7.61	0.363	4.31
10	4	7	1302	12.64	31.07	23.46	0.85	7.81	0.367	4.39
11	4	0.1	1400	12.82	31.17	23.51	0.71	6.25	0.303	3.48
12	4	7	1400	12.58	30.99	23.41	0.82	7.09	0.334	3.91
13	4	0.1	1500	12.93	31.14	23.46	0.74	6.73	0.314	3.69
14	4	7	1500	12.31	31.24	23.66	0.77	6.78	0.313	3.77
15	4	0.1	1600	12.33	31.2	23.62	0.68	6.17	0.297	3.49
16	4	7	1600	12.31	31.46	23.83	0.71	6.55	0.302	3.55

CORRECTED DATA LIST: ATLANTIC TERMINAL 9/24/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

1	5	0.1	815	14.4	29.99	22.28	1.17	9.38
0.527	4.38							
2	5	2	815	14.7	29.99	22.22	1.03	9.37
0.465	4.52							
3	5	8	815	15	30.12	22.25	1.07	9.27
0.429	4.41							
4	5	0.1	915	14.8	29.56	21.87	0.93	10.59
0.539	4.97							
5	5	2	915	14.8	29.95	22.17	1.15	9.61
0.442	4.37							
6	5	8	915	14.7	29.99	22.22	1.07	9.60
0.437	4.36							
7	5	0.1	1015	14.9	29.77	22.01	1.14	9.96
0.478	4.55							
8	5	2	1015	14.2	29.85	22.21	1.07	9.88
0.456	4.45							
9	5	8	1015	14.3	30.07	22.36	1.06	9.31
0.434	4.36							
10	5	0.1	1115	14.2	30.14	22.44	1.07	8.87
0.442	4.55							
11	5	2	1115	13.2	30.16	22.65	1.03	8.84
0.432	4.41							
12	5	8	1115	13.5	30.17	22.60	1.05	8.97
0.460	4.42							
13	5	0.1	1215	13	30.35	22.84	1.06	8.30
0.441	4.44							
14	5	2	1215	12.9	30.47	22.95	0.97	8.06
0.418	4.36							
15	5	8	1215	13	30.47	22.93	0.99	8.27
0.417	4.45							
16	5	0.1	1315	13.5	30.56	22.90	1.07	7.89
0.414	4.31							
17	5	2	1315	12.7	30.77	23.22	0.96	7.28
0.389	4.20							
18	5	8	1315	12.8	30.84	23.25	0.92	7.44
0.382	4.27							
19	5	0.1	1415	12	30.8	23.37	0.93	7.57
0.405	4.23							
20	5	2	1415	12.4	30.82	23.32	0.90	7.38
0.394	4.18							
21	5	8	1415	12.6	31.04	23.45	0.93	6.62
0.347	3.96							
22	5	0.1	1515	12.8	30.99	23.37	0.84	6.41
0.345	3.68							

CORRECTED DATA LIST: ATLANTIC TERMINAL 9/24/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	5	2	1515	12.6	31.01	23.42	0.79	6.34	0.355	3.78
24	5	8	1515	12.8	31.14	23.49	0.84	6.01	0.320	3.44
25	5	0.1	1615	12.5	31.05	23.47	1.07	6.46	0.369	3.57
26	5	1.9	1615	13	30.94	23.29	1.08	6.48	0.340	3.75
27	5	7.7	1615	13	31.23	23.52	0.97	5.85	0.300	3.50
28	5	0.1	1715	13.2	30.58	22.98	1.04	7.53	0.389	4.06
29	5	1.9	1715	12.9	30.85	23.24	0.87	6.95	0.367	3.91
30	5	7.5	1715	13	30.91	23.27	0.85	6.72	0.350	3.93
31	5	0.1	1815	14	30.72	22.92	0.95	7.27	0.391	4.24
32	5	1.9	1815	13	30.7	23.11	0.89	7.27	0.393	4.12
33	5	7.7	1815	13.1	30.72	23.10	0.91	7.20	0.386	4.11
34	5	0.1	1915	---	30.39	---	0.99	8.00	0.420	4.38
35	5	2	1915	12.9	30.37	22.87	1.00	8.28	0.414	4.37
36	5	8	1915	13	30.49	22.95	0.99	8.13	0.417	4.40
37	5	0	2015	14	29.93	22.32	1.09	9.16	0.469	4.60
38	5	1.9	2015	12.9	29.98	22.57	1.15	9.12	0.464	4.51
39	5	7.7	2015	13.8	30.06	22.46	1.05	9.06	0.441	4.57

CORRECTED DATA LIST: MEMORIAL BRIDGE 9/24/75

1.ROW # 2.STA # 3.DEPTH 4.TIME 5.TEMP 6.SAL 7.SIG-t 8.PO4 9.SiO2
10.NO2 11.NO3

1	6	0.1	810	14.9	30.71	22.73	0.97	7.56
0.387	4.16							
2	6	4	810	14.9	30.73	22.74	0.98	7.45
0.387	4.16							
3	6	10	810	14.5	30.69	22.80	0.97	7.51
0.388	4.13							
4	6	0.1	915	14.5	30.49	22.64	1.01	8.13
0.487	4.27							
5	6	4	915	14.5	30.48	22.64	1.02	8.08
0.422	4.24							
6	6	10	915	14.8	30.49	22.58	1.02	8.15
0.510	4.15							
7	6	0.1	1045	14.3	30.59	22.76	1.05	7.87
0.405	4.23							
8	6	4	1045	14.3	30.61	22.78	0.97	7.82
0.393	4.26							
9	6	10	1045	14.1	30.64	22.84	1.00	7.84
0.436	4.20							
10	6	0.1	1215	13.1	31.06	23.37	0.90	6.77
0.417	4.10							
11	6	4	1215	13.1	31.09	23.39	0.90	8.19
0.357	4.07							
12	6	10	1215	13.1	31.07	23.37	0.89	7.05
0.414	4.09							
13	6	0.1	1400	13	31.42	23.66	0.69	4.89
0.254	2.96							
14	6	4	1400	12.9	31.41	23.68	0.70	4.94
0.260	2.98							
15	6	10	1400	12.9	31.43	23.69	0.68	4.97
0.322	2.93							
16	6	0.1	1515	13	31.41	23.66	0.67	5.00
0.266	3.02							
17	6	4	1515	13	31.44	23.68	0.68	5.00
0.261	3.02							
18	6	10	1515	13	31.44	23.68	0.67	4.89
0.262	3.01							
19	6	0.1	1645	13	31.37	23.62	0.70	5.34
0.309	3.12							
20	6	4	1645	13	31.38	23.63	0.73	5.11
0.293	3.12							
21	6	10	1645	13	31.38	23.63	0.71	5.36
0.296	3.13							
22	6	0.1	1815	13	31.17	23.47	0.81	5.84
0.322	3.48							
23	6	4	1815	13	31.17	23.47	0.79	5.78
0.308	3.45							
24	6	10	1815	13	31.16	23.46	0.83	9.42
0.417	3.39							

CORRECTED DATA LIST: 2KR 9/24/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2
10.NO2	11.NO3							
1	7	0.1	845	15	31.43	23.26	0.61	4.54
0.295	2.51							
2	7	4	845	12.1	31.62	23.99	0.81	6.36
0.334	4.44							
3	7	10	845	11.9	31.71	24.10	0.84	7.04
0.346	5.10							
4	7	0.1	1150	14	31.36	23.42	0.52	3.27
0.145	1.49							
5	7	4	1150	13.9	31.57	23.60	0.76	6.31
0.329	4.85							
6	7	10	1150	11.9	31.82	24.10	0.81	7.15
0.486	5.48							

CORRECTED DATA LIST: SALAMANDER POINT 9/24/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SIO2	10.NO2	11.NO3
1	8	0.1	830	14.1	30.94	23.07	0.93	7.09	0.367	4.10
2	8	4	830	14	30.96	23.11	0.87	6.93	0.392	3.98
3	8	10	830	13.5	31.16	23.36	0.91	6.82	0.414	3.89
4	8	0.1	1000	14.1	30.76	22.93	0.99	7.59	0.434	4.14
5	8	4	1000	14	30.86	23.03	0.93	7.19	0.371	4.11
6	8	10	1000	13.5	31.08	23.30	0.91	6.88	0.363	3.97
7	8	0.1	1130	13.3	31.14	23.39	0.92	6.56	0.359	4.02
8	8	4	1130	13.1	31.18	23.46	0.86	6.46	0.348	3.98
9	8	10	1130	13	31.22	23.51	0.90	6.55	0.425	3.93
10	8	0.1	1430	13	31.29	23.56	0.75	5.26	0.299	3.20
11	8	4	1430	13	31.37	23.62	0.71	5.05	0.267	3.08
12	8	10	1430	13	31.37	23.62	0.70	5.08	0.269	3.04
13	8	0.1	1600	13.1	31.38	23.61	0.56	3.64	0.214	1.80
14	8	4	1600	13.1	31.41	23.64	0.58	4.16	0.211	2.24
15	8	10	1600	13.1	31.51	23.71	---	---	---	---
16	8	0.1	1730	13	31.25	23.53	0.77	5.98	0.380	3.33
17	8	4	1730	14	31.28	23.36	0.79	5.66	0.345	3.20
18	8	10	1730	14	31.3	23.37	0.97	5.85	0.299	3.58
19	8	0.1	1900	13	31.16	23.46	0.80	6.04	0.312	3.39
20	8	4	1900	13	31.24	23.52	1.14	5.99	0.340	3.40
21	8	10	1900	13	31.28	23.56	0.81	5.84	0.314	3.43

CORRECTED DATA LIST: PISCAT.R.(CAN 17) 9/24/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	9	0.1	805	15.5	27.15	19.87	1.53	14.81	0.781	6.97
2	9	2	805	14.8	27.38	20.19	1.47	14.47	0.753	6.83
3	9	3	805	14.5	28.49	21.11	1.30	12.45	0.617	5.70
4	9	0.1	925	14.7	26.56	19.59	1.61	15.87	0.857	7.49
5	9	2	925	15	27.48	20.23	1.46	14.62	0.740	6.66
6	9	4	925	15	28.49	21.00	1.34	12.60	0.607	5.61
7	9	0.1	1045	13.9	26.74	19.88	1.55	15.55	0.813	6.79
8	9	2	1045	14.4	29.41	21.83	1.17	10.66	0.497	4.84
9	9	4	1045	14.2	29.7	22.10	1.14	10.27	0.463	4.64
10	9	0.1	1215	14.8	30.1	22.28	1.08	8.88	0.434	4.47
11	9	1.9	1215	13.7	30.14	22.54	1.08	8.88	0.436	4.44
12	9	3.8	1215	13.5	30.14	22.58	1.07	9.02	0.425	4.48
13	9	5.6	1215	13.8	30.31	22.65	1.09	8.90	0.431	4.49
14	9	0.1	1345	12.8	30.35	22.88	1.84	8.44	0.422	4.49
15	9	2	1345	13	30.45	22.91	1.01	8.45	0.407	4.42
16	9	4	1345	13.3	30.37	22.79	1.05	8.39	0.414	4.42
17	9	0.1	1515	14	29.99	22.36	1.07	8.96	0.430	4.52
18	9	2	1515	12.8	30.65	23.11	0.95	7.58	0.401	4.23
19	9	4	1515	13.8	30.77	23.00	0.94	7.31	0.385	4.24
20	9	6	1515	12.8	30.74	23.18	0.95	7.46	0.396	4.23
21	9	0.1	1645	13.2	30.45	22.88	0.98	7.92	0.400	4.31
22	9	2	1645	13.3	30.7	23.05	0.99	7.59	0.396	4.24

CORRECTED DATA LIST: PISCAT.R.(CAN 17) 9/24/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	9	4	1645	13.5	30.67	22.99	0.94	7.61	0.381	4.22
24	9	0.1	1815	13.3	29.03	21.76	1.17	10.99	0.540	5.26
25	9	1.9	1815	13.8	29.91	22.34	1.06	9.38	0.452	4.64
26	9	3.8	1815	13.9	30.57	22.83	1.01	8.08	0.401	4.35

CORRECTED DATA LIST: MARINAS 9/24/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
1	10	0.1	856	14.5	29.99	22.26	1.09	9.80	0.417	4.29
2	10	1.9	856	14	30.03	22.39	1.11	9.58	0.429	4.26
3	10	5.6	856	14.4	30.04	22.32	1.09	10.16	0.416	4.27
4	10	11.3	856	14.3	30.08	22.37	1.04	9.38	0.408	4.25
5	10	0.1	1000	15.2	29.75	21.93	1.12	10.32	0.424	4.25
6	10	4	1000	14	29.77	22.19	1.12	10.24	0.428	4.20
7	10	6	1000	14.2	29.89	22.24	1.10	10.16	0.421	4.19
8	10	10	1000	14.3	29.89	22.22	1.12	10.11	0.428	4.27
9	10	0.1	1130	15	30.01	22.17	0.92	7.40	0.375	4.02
10	10	1	1130	13.4	29.99	22.48	1.10	9.32	0.437	4.50
11	10	3	1130	13.8	29.9	22.33	1.15	9.99	0.455	4.50
12	10	5	1130	---	29.91	---	1.10	9.64	0.442	4.50
13	10	0.1	1300	---	30.33	---	1.06	---	---	4.35
14	10	0.9	1300	---	30.44	---	1.01	8.81	0.414	4.44
15	10	2.7	1300	---	30.42	---	1.05	8.29	0.413	4.47
16	10	4.5	1300	---	30.46	---	1.01	8.12	0.416	4.45
17	10	0.1	1441	14	30.59	22.82	0.97	7.82	0.394	4.31
18	10	1.3	1441	12.7	30.59	23.08	0.97	8.09	0.395	4.32
19	10	3.9	1441	13.2	30.6	22.99	0.97	8.37	0.407	4.32
20	10	6.4	1441	13	30.7	23.11	0.93	7.56	0.391	4.28
21	10	0.1	1600	13.9	30.53	22.88	0.98	7.76	0.391	4.23
22	10	2	1600	13	30.7	23.11	0.95	7.52	0.401	4.10

CORRECTED DATA LIST: MARINAS 9/24/75

1.ROW #	2.STA #	3.DEPTH	4.TIME	5.TEMP	6.SAL	7.SIG-t	8.PO4	9.SiO2	10.NO2	11.NO3
23	10	6	1600	13.4	30.73	23.05	0.93	7.30	0.364	4.10
24	10	10	1600	13.3	30.75	23.09	0.91	7.48	0.374	4.01
25	10	0.1	1730	13.6	30.73	23.01	0.96	7.34	0.387	4.14
26	10	1.9	1730	11.8	30.72	23.35	0.93	7.35	0.377	4.25
27	10	5.6	1730	13.1	30.74	23.12	0.93	7.25	0.367	4.06
28	10	9.4	1730	13.2	30.76	23.12	0.94	8.12	0.373	4.03
29	10	0.1	1900	14	31.28	23.36	1.02	8.38	0.405	4.30
30	10	1.5	1900	12.6	30.33	22.90	1.03	8.55	0.409	4.38
31	10	4.6	1900	12.7	31.16	23.52	1.03	8.76	0.412	4.42
32	10	7.7	1900	12.2	30.34	22.98	1.02	8.46	0.415	4.33

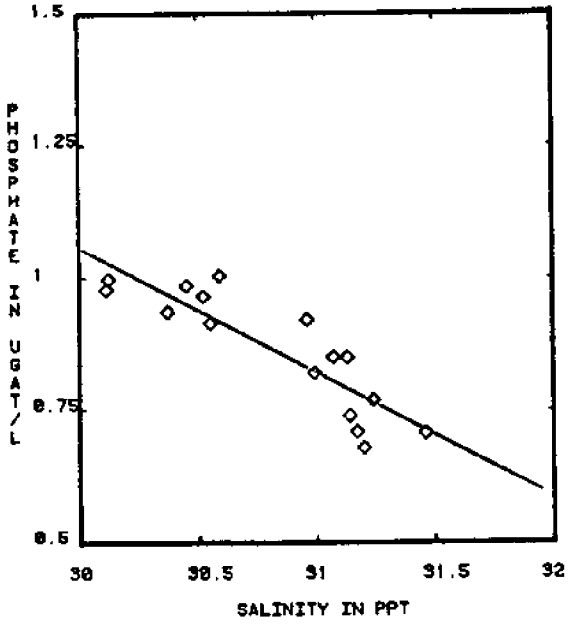
POWER PLANT
9/24/75

SALINITY IN PPT vs
PHOSPHATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.23608
INTER(b)= 0.139
CORR CF(r)=-0.8778
DATA PAIRS=16

RMS= 0.0533



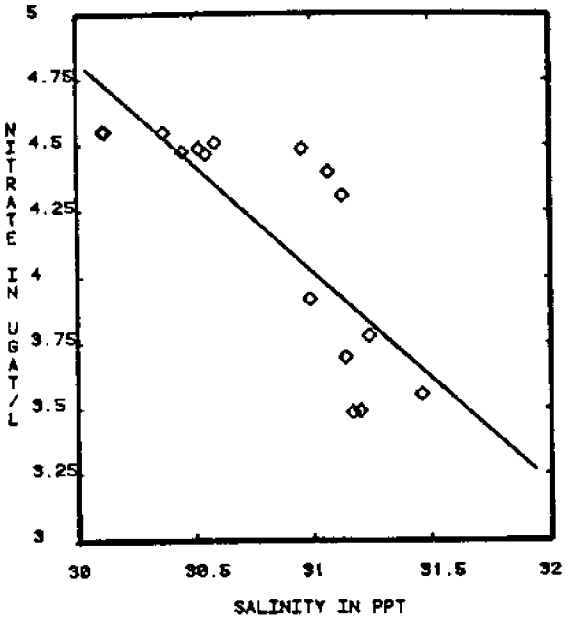
POWER PLANT
9/24/75

SALINITY IN PPT vs
NITRATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.80632
INTER(b)= 28.016
CORR CF(r)=-0.7994
DATA PAIRS=16

RMS= 0.2495



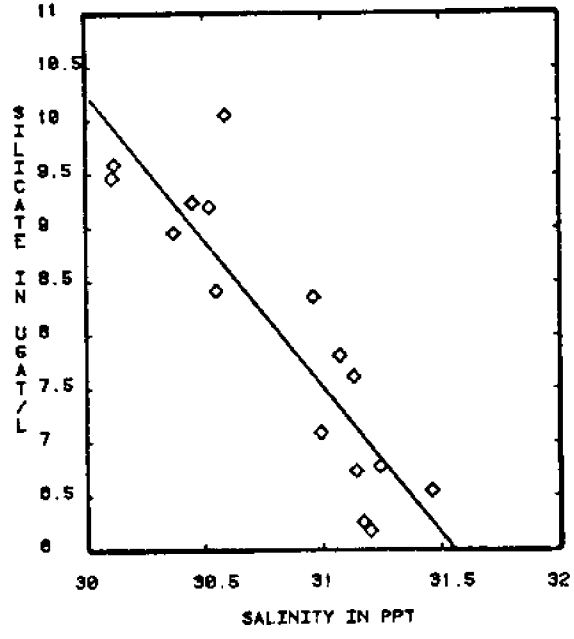
POWER PLANT
9/24/75

SALINITY IN PPT vs
SILICATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -2.73515
INTER(b)= 92.385
CORR CF(r)=-0.8882
DATA PAIRS=16

RMS= 0.5824



POWER PLANT
9/24/75

SALINITY IN PPT vs
NITRITE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.11883
INTER(b)= 4.035
CORR CF(r)=-0.9083
DATA PAIRS=16

RMS= 0.0225

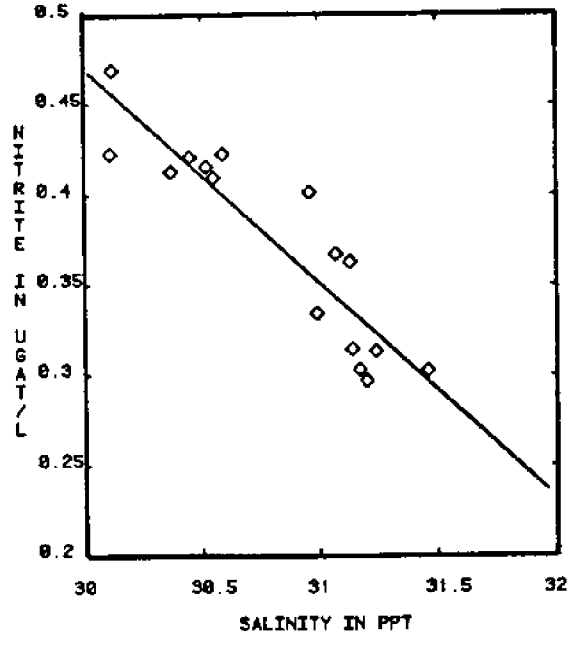


Fig. F-3. Salinity-nutrient plots for Power Plant, Portsmouth cruise.

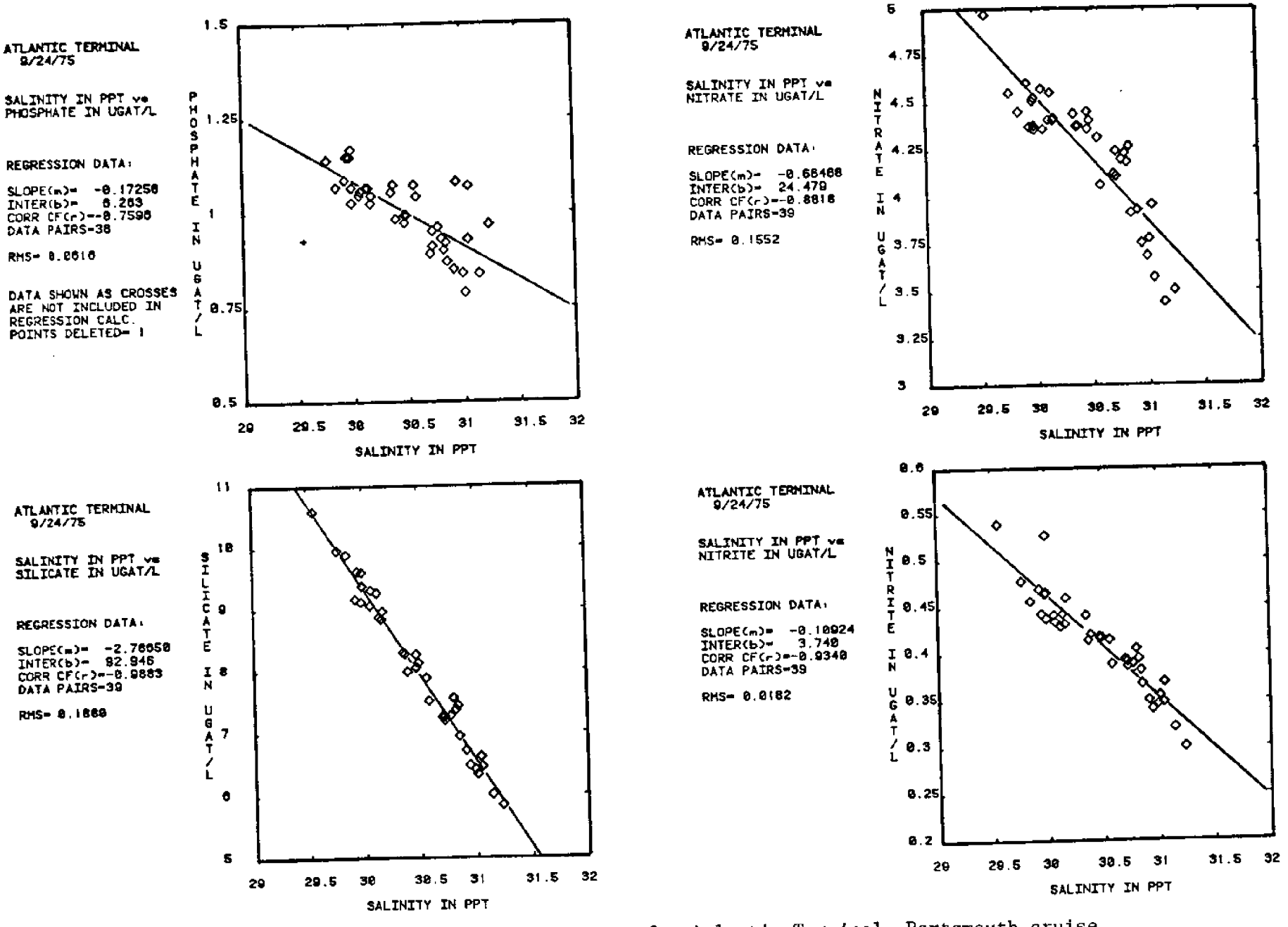
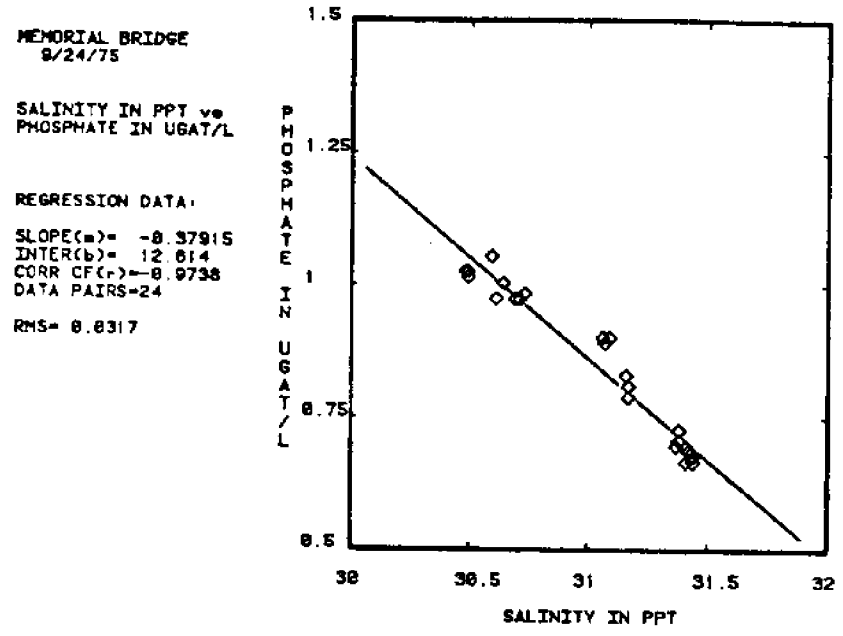
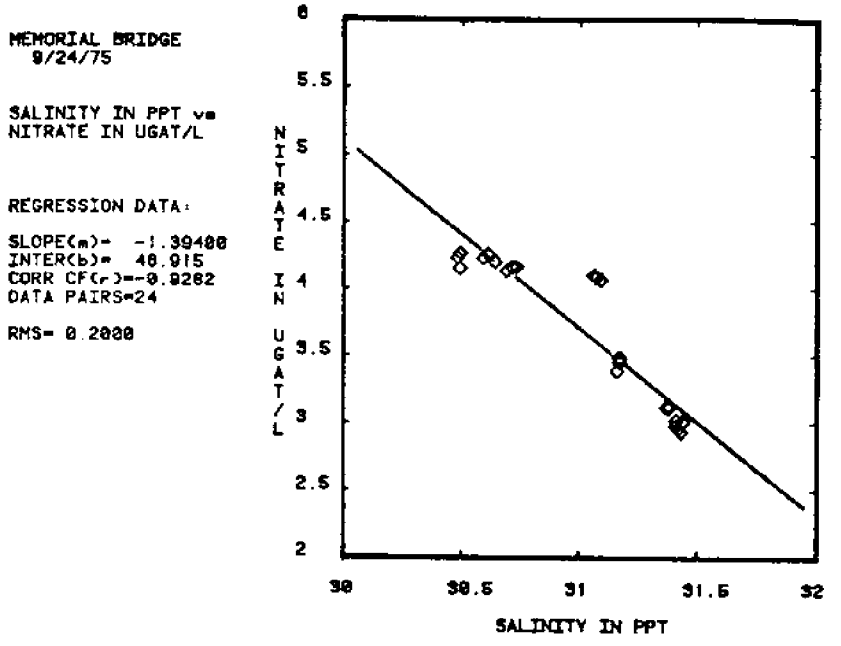
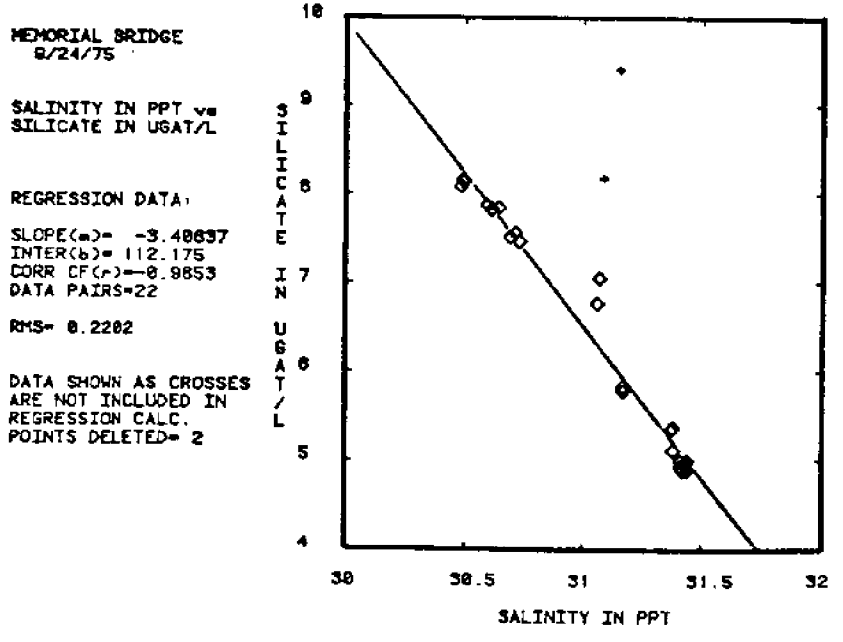


Fig. F-4. Salinity-nutrient plots for Atlantic Terminal, Portsmouth cruise.







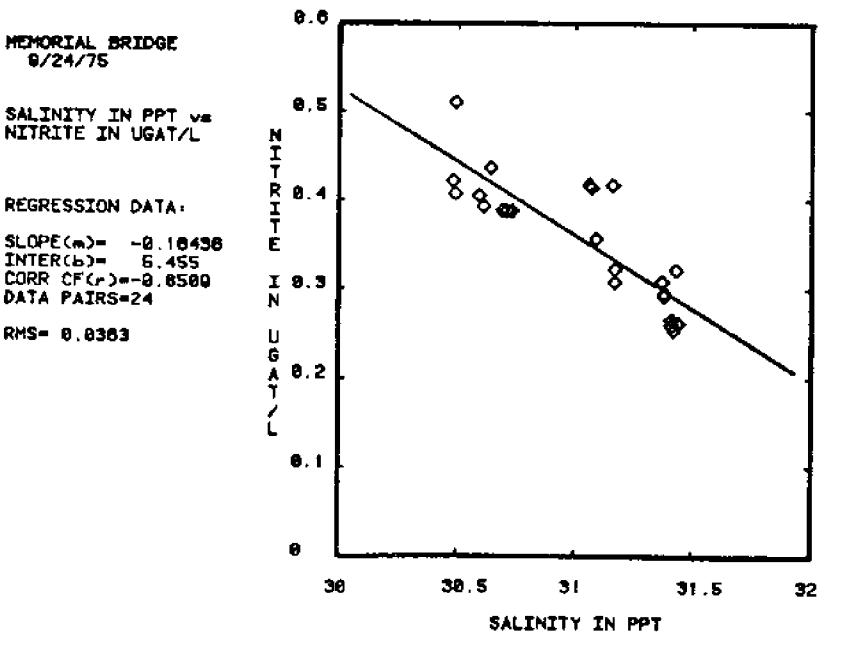


Fig. F-5. Salinity-nutrient plots for Memorial Bridge, Portsmouth cruise.

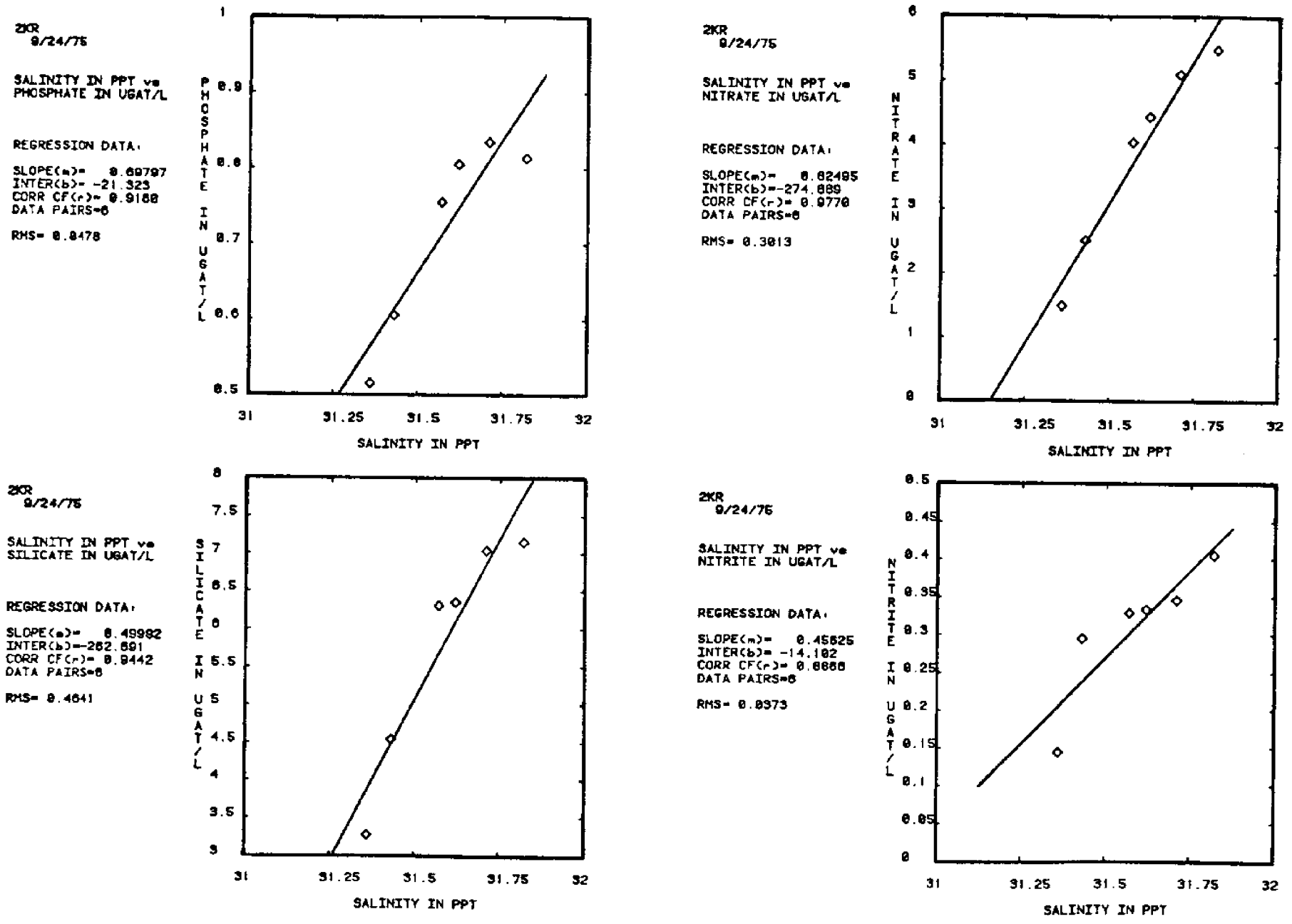


Fig. F-6. Salinity-nutrient plots for 2KR, Portsmouth cruise.

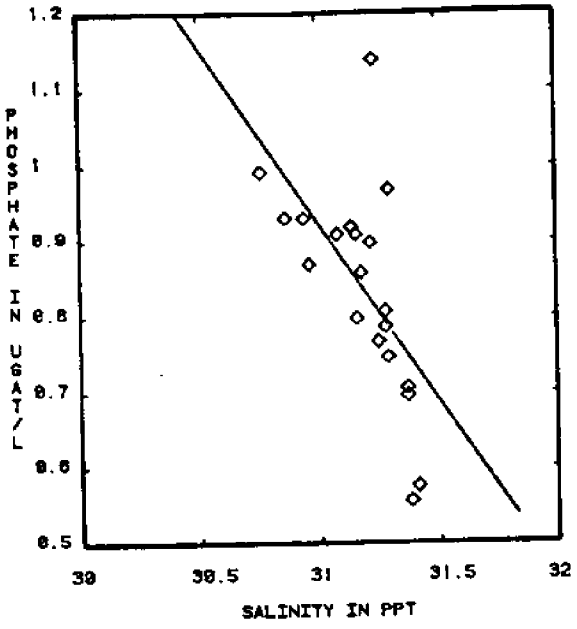
SALAMANDER POINT
9/24/75

SALINITY IN PPT vs
PHOSPHATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.46948
INTER(b)= 15.478
CORR CF(r)=-0.8031
DATA PAIRS=20

RMS= 0.1092



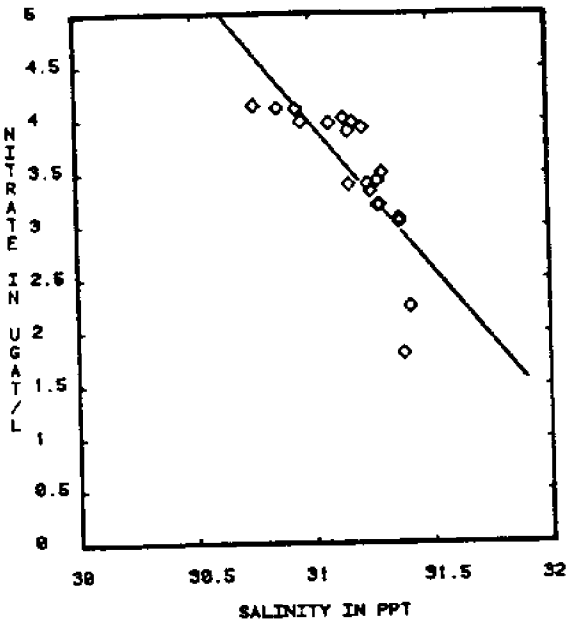
SALAMANDER POINT
9/24/75

SALINITY IN PPT vs
NITRATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -2.67486
INTER(b)= 88.888
CORR CF(r)=-0.7670
DATA PAIRS=20

RMS= 0.3936



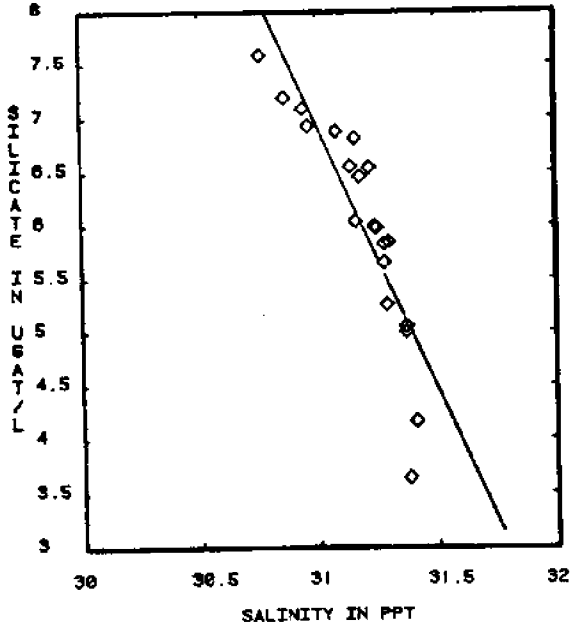
SALAMANDER POINT
9/24/75

SALINITY IN PPT vs
SILICATE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -4.91236
INTER(b)= 159.201
CORR CF(r)=-0.8679
DATA PAIRS=20

RMS= 0.4946



SALAMANDER POINT
9/24/75

SALINITY IN PPT vs
NITRITE IN UGAT/L

REGRESSION DATA:

SLOPE(m)= -0.26530
INTER(b)= 8.684
CORR CF(r)=-0.7617
DATA PAIRS=20

RMS= 0.0397

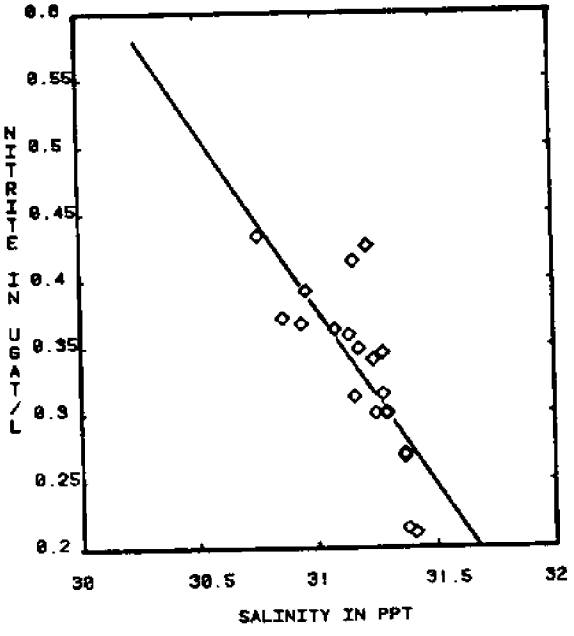


Fig. F-7. Salinity-nutrient plots for Salamander Point, Portsmouth cruise.

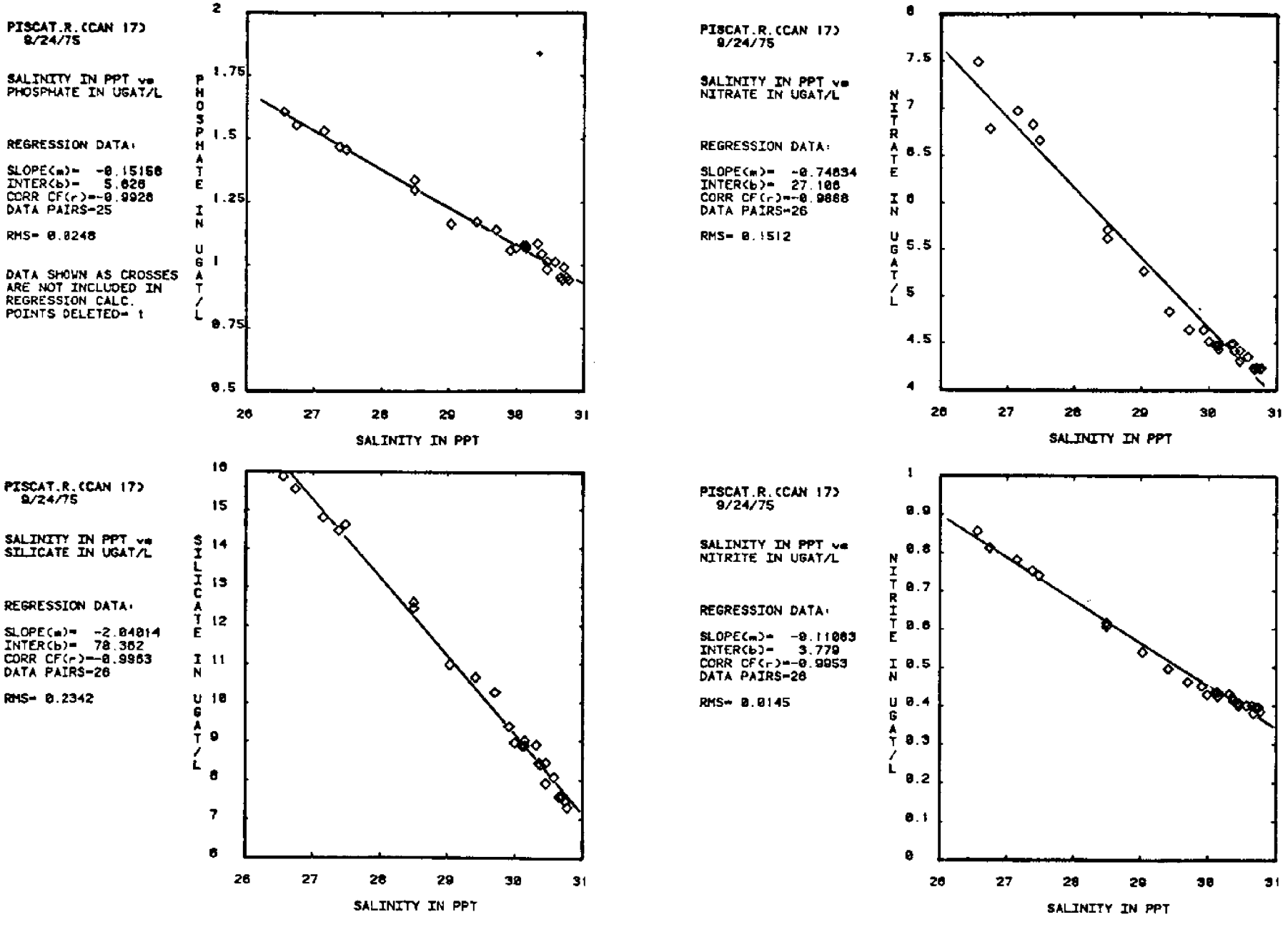
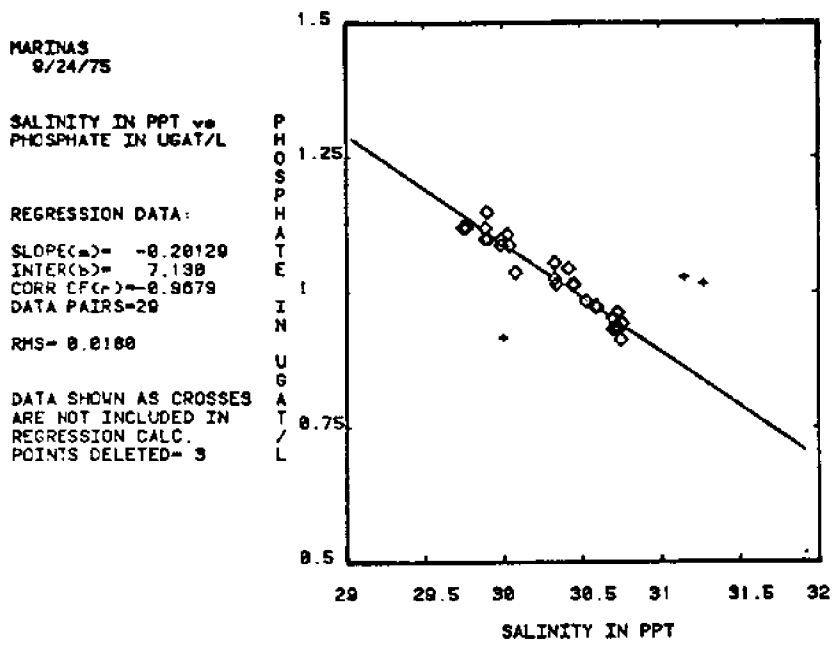
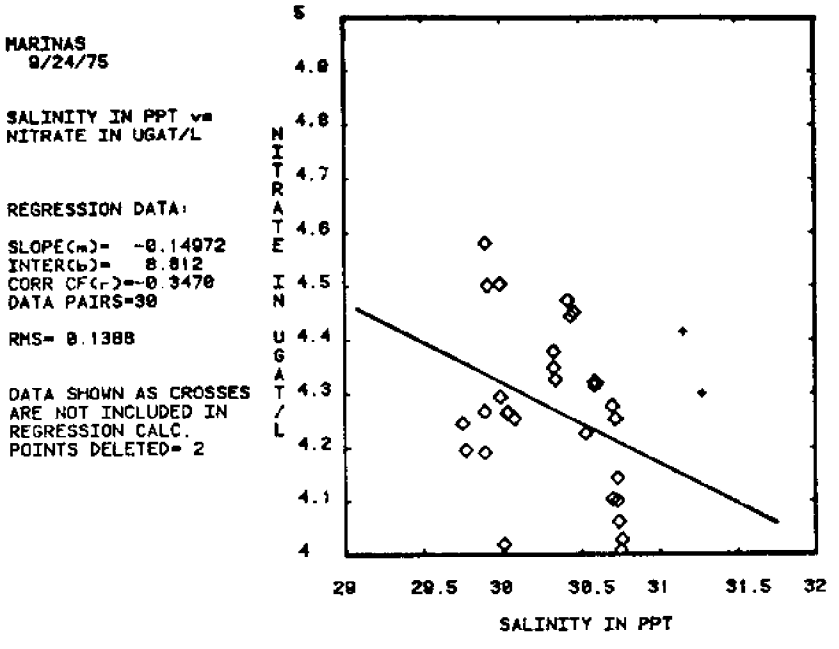
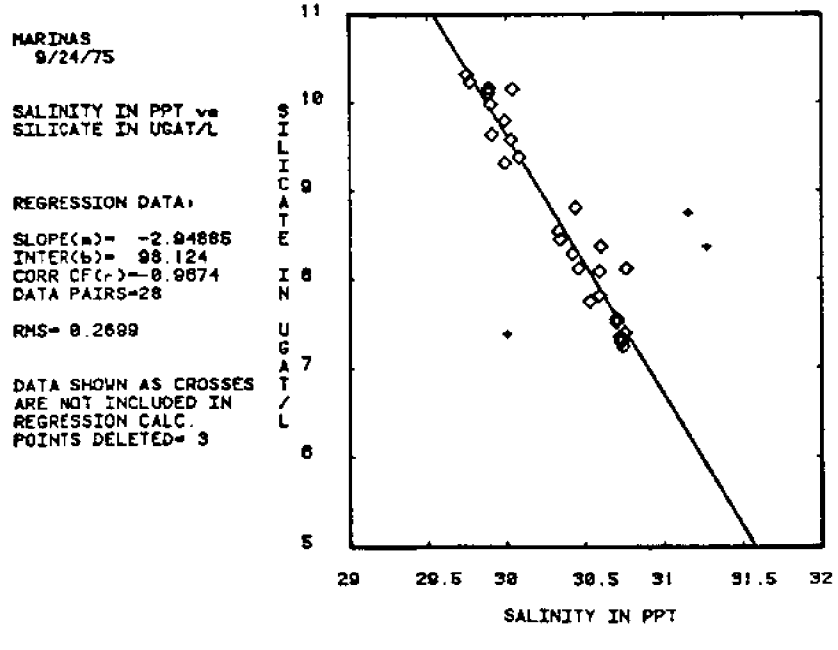


Fig. F-8. Salinity-nutrient plots for Piscat. R. (Can 17), Portsmouth cruise.







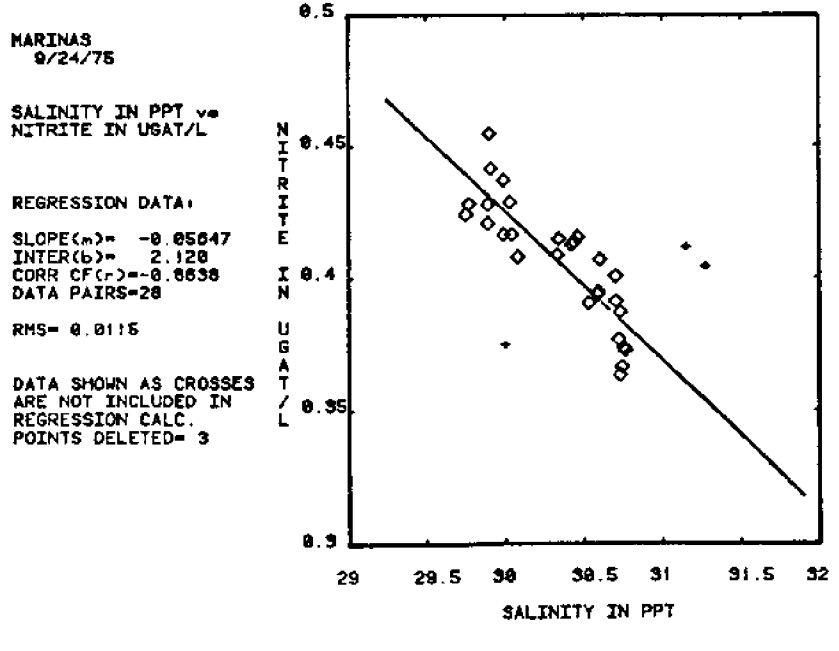


Fig. F-9. Salinity-nutrient plots for Marinas, Portsmouth cruise.