**The MAP3S Precipitation
Chemistry Network:
Third Periodic Summary Report
(July 1978 - December 1979)**

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THE MAP3S PRECIPITATION CHEMISTRY NETWORK:
THIRD PERIODIC SUMMARY REPORT
(JULY 1978 - DECEMBER 1979)*

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ABSTRACT

The MAP3S Precipitation Chemistry Network consists of eight collection sites in the northeastern United States. Precipitation event samples are collected by cooperating site operators, using specially developed sampling equipment. In this, the third periodic summary report, are listed field and concentration data for the period July 1, 1978 to December 31, 1979.

Over three years' samples have been collected at most of the sites, which went into operation between September 1976 and October 1978. Samples are chemically analyzed at a central laboratory for 13 pollutant species.

Weekly samples in addition to event samples were collected over a 1 1/2 year period at three sites. Analysis of one year's results indicates that there is little difference between the concentrations collected by the two methods in terms of seasonal precipitation-weighted means for all species except dissolved SO_2 . Event samples tend to average about 25% higher in SO_2 than weekly samples.

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PREFACE

The contributors to this report are the MAP3S Precipitation Chemistry Network site operators and laboratory organization personnel. The cooperating organizations and individuals are listed below. Inquiries should be directed to M. Terry Dana.

This report contains a listing of precipitation chemistry data collected during the period July 1, 1978 - December 31, 1979. It is the third of the planned annual summaries of the data collected during the MAP3S.

The primary objective of the project is to collect the concentration data and distribute them promptly; further analysis of the data and use of the data as an aid in precipitation chemistry research is generally left to the reader, but analyses and interesting applications of the results may appear in summary reports or in the open literature authored by the persons listed below. Other users of the data herein may credit: "The MAP3S Precipitation Chemistry Network."

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1.0 INTRODUCTION

The Multi-State Atmospheric Power Production Pollution Study (MAP3S) is a large scale atmospheric research effort, sponsored by the U.S. Environmental Protection Agency^(a) and involving the U.S. Department of Energy national laboratories, plus universities and contract research organizations throughout the United States.⁽¹⁾ The overall goal of the project is to develop the means for modeling and predicting the effects - of present and future pollutant emissions from power production processes - on atmospheric concentrations and precipitation chemistry. Because the short-to-medium term emphasis on electric power expansion is in the area of coal burning, and because of the density of such sources in the upper midwestern and northeastern United States, the MAP3S is concerned primarily with emissions resulting from coal burning, with research being focused on the northeastern United States.

The precipitation chemistry related projects in the MAP3S are divided into two areas of study: the basic mechanisms of removal of pollutants by precipitation (precipitation scavenging) and the continuous measurement of precipitation chemistry at ground level at established regional collection sites. The latter effort is the work of the MAP3S Precipitation Chemistry Network.

While the MAP3S as originally designed and subsequently conducted will terminate at the end of fiscal year 1980, the project will continue beyond that at the same or increased funding level, but with a modified emphasis. The outgrowth project, MAP3S/RAINE (Research on Acidity from Industrial Emissions), will be concerned more directly with pollutant deposition, reflecting an increased recognition of the "acid rain" problem. Under these circumstances, the MAP3S Precipitation Chemistry Network

(a) Primary sponsorship of the MAP3S was transferred from DOE to EPA on October 1, 1978; the major objectives of the MAP3S and the organizations involved did not change, but funding for the MAP3S Precipitation Chemistry Network sites continued from DOE through the end of fiscal year 1980.

operations remain of key importance, and they will be continued. Pending the outcome of a reassessment of national precipitation chemistry monitoring needs, the modus operandi of the MAP3S/PCN may change, but it is expected to remain as an atmospheric research oriented core (through its unique event sampling procedures) to any future national network of precipitation chemistry monitoring sites.

Table 1 is a summary of the objectives and general operational aspects of the MAP3S Network. These objectives, the rationale for institution of the Network, and a brief history of the Network are described in previous periodic summary reports ^(2,3) and a report on the first two years of the entire MAP3S.⁽¹⁾ This report is concerned with Network developments during the period since the second periodic summary report.⁽³⁾ These include network procedure changes, descriptions of special studies and data analyses, a summary of the external quality control system, and, most important, a complete listing of precipitation chemistry data for the period July 1, 1978 through December 31, 1979.

TABLE 1. Requirements and Objectives of the MAP3S Precipitation Chemistry Network

Need/Objective	Implementation
Regional Collection Sites	Careful selection to avoid urban and nearby source effects
Precipitation Event Sampling	Individual samples collected for each precipitation event (minimum of 24 hours duration)
Rapid Chemical Analysis and Reporting of Results	Samples delivered to laboratory promptly, chemical analyses performed, and data distributed to interested parties normally within two months of sample collection
Technical:	
Wet deposition-only samples	Use of automatic, wet deposition-only collectors
Preservation of sulfite and other volatile species	Use of specially-developed samplers which prevent desorption (funnel-and-bottle collector) and slow chemical reaction by on-site refrigeration
Future Monitoring of Precipitation Quality (beyond the MAP3S)	Establishment of a high-quality and stable network such that it may form a core for a permanent national or regional monitoring network

2.0 NETWORK PROCEDURES AND SITES

The first two summary reports^(2,3) contain full details of Network field and chemical procedures, and on special studies conducted during the first two years of operation. The purpose of this section is to update site information and procedural developments occurring up to January, 1980.

This report period is the first with essentially complete data collection from all eight Network sites^(a). The sites are located in Figure 1, and additional information appears in Table 2.

The primary sampling unit, that which was used for collection of the event sample data listed in the Appendix, was the Battelle-developed wet-only automatic collector. This collector is described in detail in the first summary report⁽²⁾.

The HASL^(b) collectors at site 1, 2, 3, 4, and 7 were used during the report period to collect weekly samples for comparison with concurrent event samples. Preliminary results of this comparison study, which continued until January 1, 1980, are described in Section 3. Two of the same type of collectors in use at the Penn State site (#3) for a major event sampling comparison study which ended in May 1979 were reassigned for weekly and event sampling comparison purposes during the summer of 1979.

As a result of the various Battelle-HASL collector comparison studies - event/event reported in the first summary report⁽²⁾, and weekly/event reported here, and due to the increasing difficulties with maintaining the Battelle collectors (which were not designed for long-term use), a gradual phaseout of use of the Battelle collectors for event sampling was begun January 1, 1980. At that time, Sites 1, 2, and 3 began using HASL collectors for event sampling, replacing the Battelle units. Sites 5, 6, and 8 are scheduled for replacement with commercially available versions of the HASL collector by mid-1980, and the remaining sites as equipment becomes available.

Chemical analysis details are listed in Table 3. The only change in

(a) The Oxford, Ohio site did not begin sample collection until Oct. 1, 1978

(b) Health and Safety Laboratory, now Environmental Measurements Laboratory

FIGURE 1: The MAP3S Precipitation Chemistry Network: Eight-Site Array

this area during the report period was the substitution of a different pH meter. With the exception of field pH and some of the SO₂ measurements for site 3 (which were done at Penn State), all chemical analyses whose results are listed in the Appendix were conducted at the Battelle, PNL laboratory using the methods listed in Table 3.

A third ion chromatograph was obtained during the report period; the addition of this unit allows continuous analyses for both cations and anions, even when one system is out of service.

TABLE 2. Network Site Details^(a)

Site No.	Name	Location		Elevation (m, msl)	Date of First Sample Collected
		Longitude	Latitude		
1	WHITEFACE	73°, 51.5'	44°, 23.5'	604	October 11, 1976
2	ITHACA	76°, 43'	42°, 23'	503	October 26, 1976
3	PENN STATE	77°, 57'	40°, 47'	396	September 22, 1976
4	VIRGINIA	78°, 32.5'	38°, 2.5'	171	December 12, 1976
5	ILLINOIS	88°, 22'	40°, 3'	213	November 20, 1977
6	BROOKHAVEN	72°, 53'	40°, 52'	24	February 9, 1978
7	LEWES DE	75°, 0'	38°, 46'	0	March 1, 1978
8	OXFORD OH	84°, 44'	39°, 32'	283	October 1, 1978

(a) See Preface for cooperating institutions and personnel

TABLE 3. Chemical Species and Analysis Details

Species	Method ^(a)	Instrument	Minimum Detection Limit ^(b) μmoles/l	Estimated Error ^(c)
H ⁺ (free)	Electrode	Fisher 230A, Combination Electrode	--	±0.05 pH units ^(d)
Conductivity	Bridge	Beckman RC-16C Bridge, Yellow- Springs 3403 Cell	--	±20%
SO ₃ ⁼	AWC	Technicon Auto Analyzer	0.1	±GO(MDL or 10%)
SO ₄ ⁼	IC	Dionex System 10 (Anion)	0.2	±GO(MDL or 10%)
NO ₂ ⁻	AWC	Technicon Auto Analyzer	0.05	±GO(MDL or 10%)
NO ₃ ⁻	IC	Dionex System 10 (Anion)	0.2	±GO(MDL or 10%)
Cl ⁻	IC	Dionex System 10 (Anion)	2	±GO(MDL or 10%)
PO ₄ ³⁻	IC	Dionex System 10 (Anion)	0.2	±GO(MDL or 10%)
NH ₄ ⁺	IC	Dionex System 10 (Cation)	0.6	±GO(MDL or 10%)
Na ⁺	IC	Dionex System 10 (Cation)	0.4	±GO(MDL or 10%)
K ⁺	IC	Dionex System 10 (Cation)	0.25	±GO(MDL or 10%)
Ca ⁺⁺	AA	Perkin-Elmer 306	0.25	±GO(MDL or 10%)
Mg ⁺⁺	AA	Perkin-Elmer 306	0.4	±GO(MDL or 10%)

(a) AWC = Automated Wet Chemistry; IC = Ion Chromatography; AA = Atomic Absorption Spectrophotometry

(b) Best Obtained--Some analysis sessions result in higher maximum detection limits. These are noted, where relevant, in the Appendix.

(c) MDL - Minimum detection limit; GO = "Greater Of"

(d) At pH = 4

3.0 SPECIAL STUDIES AND DATA ANALYSES

In addition to the regular sampling, analysis and reporting activities of the Network, several special studies were conducted. The major special study was the weekly/event sample comparison, preliminary results of which are described below. In addition, the study of the sulfur oxide compounds in MAP3S/PCN samples was completed (although measurements of SO_2 and $\text{SO}_4^{=}$ continue); these results are described in open literature publications (4,5). Also added this time are some seasonal and annual data collected on the Network to date.

WEEKLY/EVENT SAMPLE COMPARISONS

The major precipitation chemistry monitoring network in operation in the United States today is that of the National Atmospheric Deposition Program (NADP), under the sponsorship of the U.S. Department of Agriculture. This network employs weekly sampling using the commercial version of the HASL collector, so it is desirable to compare the measured concentrations from event samples to those from weekly samples at the same sites to determine if there may be differences in the deposition results from these two methods. The comparison study thus undertaken on the MAP3S Network is not the ideal one, since event samples were collected with the Battelle collector. Thus, any differences between the weekly sample concentrations and the weekly mean of event samples may be attributable to collector differences rather than time period (e.g., sample degradation) differences. The study is useful, however, as an attempt to determine what some of the collector differences may be, if any, and also to establish a relationship between results from the MAP3S Network sites and adjacent or intermediate NADP sites.

Weekly/event comparisons began about June, 1979 and were terminated January, 1980, except at the Penn State site (#3), where weekly/event comparisons with the same collector (HASL) began during the fall of 1979. The latter measurements will continue indefinitely. The sites participating in the weekly/event comparisons were Whiteface (#1), Ithaca (#2), and Virginia (#4). A few such samples were collected at Penn State and Lewes, DE (#7), but an insufficient number to analyze at present.

One year's data (July 1978-June 1979) have been examined to determine suitability for concentration comparisons. Of a total of 156 site-weeks possible during the year, many were eliminated from detailed analysis for one or more of the following reasons:

- missing events during week or missing weekly sample
- events overlapping weekly samples
- missing site data which leaves doubt as to event timing during week
- gross collection efficiency differences between the two collectors
- insufficient volume collected for analysis (one or more samples).

In general, only those weeks where the event(s) within them were clearly delineated, where the precipitation amounts associated with the events added up to that associated with the weekly sample, and where both collectors were equally efficient at collecting precipitation were analyzed to examine concentration comparisons. Table 4 is a list of the numbers of site-weeks surviving these tests, and the number of events during the weeks.

The concentrations of the event samples corresponding to the weekly samples were compared to the weekly sample concentrations by computing the ratio of difference between the weekly concentration (W) and the event concentration (EV) to the mean of the weekly concentration and the event concentration. In the cases of more than one event during the week, EV is the deposition-weighted mean of the event concentrations. Table 5 lists the numbers of weeks so treated and the numbers of weeks where the percent difference exceeded ten: "W<10" means weekly sample concentration greater than 10% less than the mean, and "W>10" means weekly sample concentration greater than 10% greater than the mean. The choice of species reflects concern about the volatile-precursor species (NH_4^+ , SO_2 , $\text{S}^{(a)}$) and any potential change in these that would affect H^+ . Nitrate is not shown on this table because its differences very closely parallel those of S. The sulfur compounds are only analyzed for the "SO₂ Season", that period of the year when non-zero SO₂ concentrations are measured (roughly mid-October to the end of April).

TABLE 4. Numbers of Site-Weeks Involved in Weekly/Event Comparison Analyses

	<u>Site 1</u>	<u>Site 2</u>	<u>Site 4</u>	<u>All</u>
Number of Analyzed Weeks	22	30	28	80
Number of Weeks With				
One Event	18	18	19	55
Two Events	4	11	7	22
Three Events	0	1	2	3

TABLE 5. Statistics for Weekly/Event Comparisons

<u>Season</u>	<u>H⁺</u>			<u>NH₄⁺</u>		
	<u>N</u>	<u>W<10^a</u>	<u>W>10</u>	<u>N</u>	<u>W<10</u>	<u>W>10</u>
Summer	22	3	7	23	3	9
Fall	16	0	4	16	1	7
Winter	17	3	5	15	8	3
Spring	22	4	5	19	6	6
All Year	77	10	21	73	18	25

<u>"SO₂ Season"</u>	<u>SO₂</u>			<u>S</u>		
	<u>N</u>	<u>W<10^a</u>	<u>W>10</u>	<u>N</u>	<u>W<10</u>	<u>W>10</u>
"SO ₂ Season"	24	10	7	24	6	5

In most cases, the number of weeks with $W>|\pm 10|$ is about one-half of the total for the period. Concentrations of NH_4^+ and H^+ generally appear to be significantly greater in the weekly samples more often in the summer and fall; no trends are apparent otherwise, except in the case of SO_2 , which has the most scatter (most weeks have >10% difference). The Table data are for all three sites combined since there appeared to be no site-specific trends except for the case of NH_4^+ at Whiteface (#1), which is apparent in the mean concentrations below.

Table 6 lists precipitation-weighted concentrations for the major species for weekly samples and for the precipitation-weighted means of event samples during the corresponding weeks. For comparison are listed the relevant mean concentrations for all event samples during the seasons (i.e., data from event tables in the Appendix). In most cases, the comparison data appear to be representative of the seasons as a whole. Also listed is the precipitation (as measured by the Battelle collector) for the comparison portion and for the total season. SO_2 is not reported for the summer because there were few, if any, measured values for either weekly or event samples.

Examination of the precipitation weighted means shows that as far as deposition in seasons is concerned, there are smaller differences between the two modes of collection than would appear from the Table 5 scatter data. Notable differences appear for all species at site 1 in the wintertime, and for SO_2 for all sites. It appears that the Battelle collector sampling on an event basis presents higher SO_2 concentrations than the HASL on a weekly basis by about 25% on an " SO_2 season" average. The differences with the other species are not significant, though H^+ concentrations from weekly samples are consistently slightly higher than those from event samples. The S and NO_3^- concentrations variations are quite close on the average. Sulfate (which is S- SO_2) is not significantly different from S, especially in seasons other than winter.

TABLE 6. Precipitation-Weighted Mean Concentrations for Seasons - Weekly/Event Comparisons

Site	Season	Concentrations ^b , $\mu\text{moles/l}$																
		P, cm^{a}		H^+			NH_4^+			SO_2			S^{c}			NO_3^-		
		W/EV ^d	ALL EV ^e	W	EV	ALL EV	W	EV	ALL EV	W	EV	ALL EV	W	EV	ALL EV	W	EV	ALL EV
12-	Summer ^f																	
	1	7.5	15.3	120	110	98	25	28	22				54	57	51	37	39	32
	2	20.6	26+(92)	98	100	96	24	23	19				50	46	42	34	29	27
	4	----	29.3+(92)	80	77	67	13	13	13				31	32	31	21	22	23
	ALL	----	70.6+	90	88	84	18	18	17				40	40	39	27	26	26
12-	Fall ^g																	
	1	8.5	20.5	61	54	56(92)	21	27	21(92)	.69	.94	.43(92)	25	25	27(92)	32	31	24(92)
	2	15.7	16.2+(82)	92	81	84	24	21	20	.89	1.1	1.3	37	37	34	33	36	37
	4 ^h	3.2	15.0	150	150	96	31	29	21(99)				44	44	39(99)	78	75	30(99)
	ALL	27.4	51.7+	88	80	76	24	24	21	.81	1.1	.81	34	34	33	38	39	30
12-	Winter ⁱ																	
	1	6.1	16.3	42	64	38	3.4	11	5.9	.97	.38	1.1	11	19	11	19	26	18
	2	7.1	19.4+(92)	51	46	61	4.8	4.8	5.0	3.5	4.6	3.7	15	14	19	25	22	29
	4	----	23.5+(88)	47	44	46	2.8	2.7	2.9				13	12	12	13	12	16
	ALL	----	59.2+	48	47	49	3.5	4.6	4.4	2.7	3.2		13	14	14	18	17	21
12-	Spring ^j																	
	1	16.9	23.2	53	51	53	8.1	8.1	14	.10	.07	.20	14	20	21	19	23	25
	2	12.7	20.9	78	78	76	18	23	15	.80	1.2	2.9(96)	35	37	29	35	32	30
	4	----	23.5(88)	49	48	46	8.4	9.2	2.9				17	17	12	17	17	16
	ALL	----	67.6+	59	58	58	11	13	10	.43	.59		22	24	20	23	23	23
12-	Year ^k																	
	1	39.0	75.3	66	66	60(98)	14	18	16(98)	.44 ^l	.38 ^l	.42(98) ^l	25	29	27(98)	26	29	25(98)
	2	56.1	82.3+(92)	80	77	80	18	18	15	1.7 ^l	2.3 ^l	1.9 ^l	35	34	32	32	30	30
	4	----	90.5+(97)	62	59	65	9.4	9.5	12				23	23	26	20	20	23
	ALL	----	248+	69	67	68	13	14	14	1.2 ^l	1.5 ^l		28	28	28	25	25	26

Footnotes

^aPrecipitation as actually collected by the Battelle collector^bSeasonal, Precipitation-weighted.

W = Weekly samples; EV = mean of event samples during weeks analyzed; ALL EV = mean of all event samples for all weeks. Number in () is percent of total precipitation represented by average; no () indicates 100%. Gaps indicate insufficient data for analysis

^cSum of SO_2 and $\text{SO}_4^{\#}$ ^dPrecipitation during analyzed weeks.^e+ = Not all precipitation was sampled; Number in () is percent of total time precipitation was sampled. No () indicates 100%.^fJuly-August, 1978, June 1979^gSeptember-November, 1978^hOnly 2 weeks analyzedⁱDecember 1978-February 1979^jMarch-May, 1979^kJuly 1978-June 1979^lSummer excluded

ANALYSES OF EVENT DATA

Monthly mean deposition-weighted concentrations for event samples have been calculated and are shown in Figures 2 to 6. Included are data from two years through June 1979. The user is cautioned to observe that some months at some sites are missing due to insufficient data collection. There is no reason to believe that averages for missing months should fall between those of the adjacent months. The lines are drawn only for ease in visualizing the trends with time for each site, and don't represent the mean concentration for any time period other than the particular month. The reader is also cautioned that deposition seasonal patterns may not necessarily appear the same as the concentration patterns, as precipitation amounts for months vary significantly throughout the year, and from year to year.

These monthly average data are combined to form seasonal and yearly average concentrations, shown in Tables 7 to 11. Any periods with significant missing data are not listed, and other restrictions on data shown are described in the footnotes.

FIGURE 2: Monthly Mean Deposition-Weighted Concentrations for H^+ , SO_2 and $SO_4^{=}$ ("Total Sulfur")

FIGURE 3: Monthly Mean₊ Deposition-Weighted Concentrations for NO₃⁻ and NH₄⁺

FIGURE 4: Monthly Mean Deposition-Weighted Concentrations Relative, for White Face, Ithaca, and Penn State

FIGURE 5: Monthly Mean Deposition-Weighted Concentrations Relative, for Virginia, Illinois, and Brookhaven

FIGURE 6: Monthly Mean Deposition-Weighted Concentrations Relative, for Delaware and Ohio.

TABLE 7. Deposition-weighted mean concentrations
for the Summer Season.^a

<u>Year</u>	<u>Site No.</u>	<u>H⁺ (pH)</u>	<u>NH₄⁺</u>	<u>S</u>	<u>NO₃⁻</u>
1977	1		13	34	22
1978	1	93 (4.03)	26	48	33
	2 ^b	110 (3.96)	22	47	29
	3	120 (3.92)	19	53	34
	4	75 (4.12)	17	37	26
	5	68 (4.17)	21	37	28
	6	60 (4.22)	22	26	24
	7	68 (4.17)	17	33	27

^a June-August. Based on complete or near complete (as indicated below) data for the season. Blank spaces indicate insufficient sample collection or chemical analyses during the period.

^b Samples collected during 92% of the season.

TABLE 8. Deposition-weighted mean concentrations
for the Fall Season.^a

Year	Site No.	Concentration, $\mu\text{moles/l}$				
		H^+ (pH)	NH_4^+	SO_2	S	NO_3^-
1977	1	42 (4.38)	9.2		17	19
	3	56 (4.26)	14		26	26
	4	48 (4.32)	11	0.29	25	25
1978	1 ^b	56 (4.25)	21	0.43	27	24
	2 ^c	84 (4.08)	20	1.3	34	37
	3	97 (4.01)	18	1.3	39	43
	4	96 (4.02)	21	0	39	30
	5 ^d	62 (4.21)	29	2.9	35	29
	6	64 (4.19)	12	1.0 ^e	27	22
	7					
	8 ^f	77 (4.11)	22	2.6	36	28

^a September-November. See note a of Table 7.

^b 92% of the collected precipitation represented

^c Samples collected during 82% of the season

^d Samples collected during 87% of the season

^e 56% of the collected precipitation represented

^f Samples collected during 67% of the season. No data from September.

TABLE 9. Deposition-weighted mean concentrations
for the Winter Season.^a

<u>Year</u>	<u>Site No.</u>	Concentration, $\mu\text{moles/l}$				
		<u>H⁺</u> (pH)	<u>NH₄⁺</u>	<u>SO₂</u>	<u>S</u>	<u>NO₃⁻</u>
1977-78	1	28 (4.56)	2.9		7.7	15
	2	34 (4.47)	2.4	1.4	10	19
	3	48 (4.32)	5.4	3.0	14	27
	4	48 (4.32)	7.0	1.0	17	20
	5	54 (4.24)	8.5	1.5	25	26
1978-79	1	38 (4.42)	5.9	1.1	11	18
	2 ^b	61 (4.21)	5.0	3.7	19	29
	3	53 (4.28)	5.9	5.5	15	23
	4 ^c	46 (4.34)	2.9		12	16
	5 ^d	81 (4.09)	14	6.7	27	29
	6	28 (4.56)	3.2	1.8	11	8.1
	7	37 (4.43)	5.5	0.82	15	16
	8	58 (4.24)	20	6.5	30	25

^a December-February. See note a of Table 7.

^b Samples collected during 92% of the season.

^c Samples collected during 88% of the season.

^d Samples collected during 44% of the season. No data from February.

TABLE 10. Deposition-weighted mean concentrations
for the Spring Season.^a

Year	Site No.	Concentration, $\mu\text{moles/l}$				
		H^+ (pH)	NH_4^+	SO_2	S	NO_3^-
1977	1	42 (4.37)	16		19	24
1978	1	52 (4.28)	13	0.20	25	27
	2	86 (4.07)	15	0.64	34	38
	3	64 (4.19)	14	0.33	26	28
	4	65 (4.19)	9.1	0.03	26	25
	5	45 (4.35)	28	1.4	32	30
1979	1	53 (4.28)	14	0.20	21	25
	2	76 (4.12)	15	2.9	29	30
	3	72 (4.14)	17	1.7	29	29
	4	63 (4.20)	13		24	24
	5	45 (4.35)	18	1.6	25	20
	6 ^b	46 (4.34)	27	0.61	24	24
	7 ^c	48 (4.32)	12	0.46	22	19
	8	63 (4.20)	27	4.3	33	25

^a March-May. See note a of Table 7.

^b 77% of the collected precipitation represented.

^c Samples collected during 50% of the season. April and part of May missing.

TABLE 11. Deposition-weighted mean concentrations
for the year (July-June).^a

Year	Site No.	Concentration, $\mu\text{moles/l}$				
		H^+ (pH)	NH_4^+	SO_2	S	NO_3^-
1977-1978	1	47 (4.33)	11		22	21
	2	57 (4.24)	13	0.83	29	27
	3	63 (4.20)	14		30	30
	4	57 (4.24)	11		28	25
1978-1979	1	60 (4.22)	16	0.42	27	25
	2 ^b	80 (4.10)	15	1.9	32	30
	3	76 (4.12)	13	2.7	29	30
	4 ^c	65 (4.19)	12		26	23
	5 ^d	61 (4.21)	21	1.7	30	25
	6 ^e	48 (4.32)	13	1.1	20	17
	7 ^f	60 (4.22)	11	0.47	24	24
	8 ^g					

^a See note a of Table 7.

^b Samples collected during 92% of the year.

^c Samples collected during 97% of the year.

^d Samples collected during 83% of the year. No data from February.

^e 93% of the collected samples represented.

^f Samples collected during 88% of the year. April and part of May missing.

^g Samples collected during 75% of the year. Site not operating until October.

4.0 AN EXTERNAL QUALITY ASSURANCE PROGRAM FOR THE MAP3S CHEMISTRY NETWORK*

INTRODUCTION

An external quality assurance program was initiated as part of the analytical effort under the MAP3S precipitation chemistry network in early 1978, and was terminated at the end of 1979. The objective was to obtain a quantitative evaluation of the performance of the analysts at Battelle Pacific Northwest Laboratories (PNL) during routine analysis of precipitation samples under conditions where the quality assurance samples would not be distinguished from regular samples.

As a first phase in the establishment of the external quality assurance program a laboratory intercomparison was made. A set of eight natural and artificial precipitation samples was analyzed repeatedly at the Environmental Measurements Laboratory (EML), and aliquots were then sent to a number of interested laboratories, including PNL. A major purpose of this intercomparison was to find if there were any systematic differences between results obtained by EML and PNL. A second purpose was to determine how the results from these two laboratories compared with those from other laboratories engaged in the analysis of precipitation samples.

The second phase in the external quality assurance program involved the submission of duplicate and reference samples to PNL by the sampling sites. Fictitious collection data were supplied with the reference samples and with one of each pair of duplicate samples so that they would not be recognized by the analysts as quality assurance samples. The reference samples had previously been analyzed at EML.

The results of measurements reported by PNL during the laboratory intercomparison showed generally good agreement with results reported by EML and with the median values of the results for all reporting laboratories. The results from duplicate samples analyzed by PNL showed good precision for measurements of all constituents except, perhaps, for Cl^- and K^+ . Except for analyses of NO_3^- and NH_4^+ , the results of

*This section was prepared by Herbert W. Feely and Donald C. Bogen of the U.S. Department of Energy, Environmental Measurements Laboratory

the analyses of reference samples showed good agreement between PNL and EML. Biological activity in the samples during storage or shipment apparently led to drastic changes in the NO_3^- and NH_4^+ concentrations in the reference samples.

LABORATORY INTERCALIBRATION

An intercomparison study of the analysis of precipitation samples was begun in early 1978 with the distribution of aliquots of each of eight samples to a number of laboratories which asked to participate in the intercomparison. Of the samples, four were composited bulk rainwater samples collected at Chester, NJ, and two were similar samples collected in New York City. The final two samples were doubly-deionized water to which known amounts of trace metals had been added. The trace metals used were certified reference standard solutions with a claimed accuracy of about 1%. The samples were filtered through 0.45 micrometer membrane filters, and were stored in opaque plastic drums.

A 250 ml aliquot of each of the eight samples was sent to each of the 27 laboratories which asked to participate in the study. Results were submitted by 25 laboratories, and a preliminary report of these was published as EML-341, "MAP3S Precipitation Chemistry Intercomparison Study", by D. C. Bogen, S. J. Nagourney and G.A. Welford on May 12, 1978. Some data from this report are summarized in Table 12.

In this table the results reported by PNL and those reported by EML are both compared to the median values of the results reported by all laboratories. Data are listed both for pH measurements and for H^+ concentrations calculated from them. The median values have been calculated as follows, using the SO_4^{2-} data from PNL as an example. The absolute value of the deviation of each PNL (and each EML) result from the corresponding median value for all reporting laboratories was divided by that median value and was multiplied by 100 percent to obtain a percent deviation. For PNL SO_4^{2-} results these varied from 1.8% to 4.5% for the six natural samples, with their rather elevated concentrations of SO_4^{2-} , but equaled 93% and 96% for the two artificial samples with their negligible concentrations of SO_4^{2-} . The median

of these eight values of percent deviation was 3.8%, and this is reported in Table 1, column 1. For some elements both the PNL and EML results deviated significantly from the median for all laboratories. These deviations need not mean that either PNL or EML data were poor, but might result from a median value which was overly influenced by poor results from several other laboratories. Consequently in the last column in Table 1 the median percent deviations of PNL and EML results from their common means are reported. To calculate these values only the PNL and EML results for each element were considered. For each element in each sample the mean of the PNL and EML results was calculated and the deviation of the PNL result from this mean was divided by the mean value and was multiplied by 100 percent. Again for SO_4^{2-} , these values ranged from 2.9% to 8.1% for the natural samples, and equaled 82% and 89% for the artificial samples. The median value of these percent deviations, 7.1%, is reported in column 3 of Table 12.

As a test of the internal consistency of the reported values, we have calculated the ratios of measured equivalents of cations to measured equivalents of anions. In Table 13 these ratios are given for each sample for the median values for the data from all laboratories, for the EML data and for the PNL data. Because PNL did not measure HCO_3^- or Br^- the cation/anion ratios for their data for some samples may be too high. Accordingly we have added a column of "adjusted PNL" data, calculated by adding the median reported concentrations of HCO_3^- and Br^- to the anions reported by PNL before calculating the cation/anion ratios.

Table 12. Results of some analyses by PNL and by EML of deposition samples during the MAP3S sponsored laboratory intercalibration. (pH units and micrograms per liter)

	Median % deviation of PNL results from the median value for all laboratories	Median % deviation of EML results from the median value for all laboratories	Median % deviation of PNL and EML results from their common mean
pH	1.0%	2.6%	1.7%
H ⁺	10.2	21.6	20.6
conductivity	2.8	7.1	5.2
SO ₄ ²⁻	3.8	19.1	7.1
NO ₃ ⁻	12.3	10.9	6.7
Cl ⁻	11.9	13.6	6.0
NH ₄ ⁺	15.2	28.0	16.1
Na ⁺	8.0	7.9	4.1
K ⁺	4.9	3.4	5.3
Ca ²⁺	14.4	10.6	10.9
Mg ²⁺	3.6	6.5	2.8

Table 13. Ratios of measured equivalents of cations to measured equivalents of anions

<u>Sample</u>	<u>Medians</u>	<u>EML</u>	<u>PNL</u>	<u>Adjusted PNL*</u>
A	0.92	1.02	0.84	0.79
B	1.08	1.21	1.34	1.04
C	1.20	1.19	1.85	1.21
D	0.98	0.93	0.96	0.96
E	0.94	0.91	0.96,	0.83
F	0.95	0.88	0.80	0.75
G	1.03	0.89	1.03	1.03
H	1.11	1.03	0.99	0.99

*Median values of the concentrations of HCO_3^- and Br^- were added to the anion concentrations reported by PNL to obtain these "adjusted PNL" cation/anion ratios.

THE ANALYSIS OF DUPLICATE SAMPLES

Periodically throughout the period of this quality assurance program EML contacted MAP3S sampling sites and asked them to submit duplicate samples to the analytical group at PNL for analysis. Duplicates were prepared at the sites by taking water that was left over after a regular sample had been sent to PNL, placing it in a regular shipping bottle, filling in fictitious collection data on the shipping data form, and sending it to PNL as though it were a regular sample. Where possible the duplicate samples were submitted as parts of two separate shipments of samples so that they would be analyzed at different times.

Table 14 lists some results of the analysis of duplicate samples by PNL. The data for each constituent are divided into three sets on the basis of concentration. The concentrations are given as micromoles per liter, except for pH and conductivity. The pH results are given in pH units, and in micromoles of H^+ per liter, calculated from them. The conductivities are given in microsiemens per centimeter. Following each concentration range is listed the number of samples represented by it. Listed next is the median value for these samples of the percent deviation of each result for a duplicate sample from the mean of the duplicate and original analysis. Thus five duplicate pairs had SO_4^{2-} concentrations ranging between 22 and 15 micromoles liter⁻¹. The values of percent deviation from the mean for these five samples ranged from 0.0% to 8.6%, with a median value of 2.3%.

Table 14. Results of analyses of duplicate samples*

<u>pH range</u>	<u>H⁺ range</u>	<u>No.</u>	<u>% dev.</u>	<u>Conductivity</u>	<u>No.</u>	<u>% dev.</u>
3.9 - 4.2	130 - 63	5	1.9%	66 - 30	5	4.2%
4.2 - 4.5	63 - 30	6	3.6	30 - 19	6	1.9
4.5 - 5.3	30 - 7	5	4.6	19 - 5	5	3.3
<u>SO₄²⁻ range</u>	<u>No.</u>	<u>% dev.</u>		<u>NO₃⁻ range</u>	<u>No.</u>	<u>% dev.</u>
60 - 22	6	0.4%		57 - 25	6	0.9%
22 - 15	5	2.3		23 - 13	5	0.0
14 - 7	6	3.3		9 - 3	6	2.6
<u>Cl⁻ range</u>	<u>No.</u>	<u>% dev.</u>		<u>NH₄⁺ range</u>	<u>No.</u>	<u>% dev.</u>
42 - 10	5	7.1%		28 - 15	5	5.0%
10 - 4	6	23.		12 - 6	6	3.0
3 - 1	5	12.		6 - 1	5	7.1
<u>Na⁺ range</u>	<u>No.</u>	<u>% dev.</u>		<u>K⁺ range</u>	<u>No.</u>	<u>% dev.</u>
38 - 8	5.	4.8%		5.5 - 1.0	5	37.%
6 - 1.7	6	3.2		0.9 - 0.8	5	12.
1.3 - 0.4	5	20.		0.7 - 0.4	5	18.
<u>Ca²⁺ range</u>	<u>No.</u>	<u>% dev.</u>		<u>Mg²⁺ range</u>	<u>No.</u>	<u>% dev.</u>
16 - 1.9	6	1.2%		4.3 - 2.0	4	3.2%
1.6 - 1.0	5	6.2		1.5 - 0.8	5	4.2
1.0 - 0.5	6	8.5		0.7 - 0.4	4	7.7

*Concentrations are: pH units, μ siemen cm^{-1} ; No.: number of duplicate analyses used to calculate average; % dev.: median percent deviation from the mean.

THE ANALYSIS OF REFERENCE SAMPLES

A series of reference samples was prepared and analyzed in replicate at EML. Portions of these samples were then sent to the sampling sites of the MAP3S precipitation chemistry network to be submitted, with fictitious collection information, to the PNL analytical group. The results obtained by PNL were then compared with those obtained by EML.

The original two reference samples consisted of precipitation collected at Chester, NJ. The concentrations of the various constituents being measured in these samples were considered to be high compared to the concentrations measured routinely in samples from the MAP3S network. Consequently a series of reference samples was prepared by diluting the original samples with double-deionized water. Initially the original samples were not considered part of the series. Soon, however, complaints were received from the sampling sites that the relatively high pH values of the diluted samples made them unrepresentative of natural samples collected at the sites. Thereafter, the original, undiluted reference samples were used in place of the more dilute members of the series.

The reference samples were analyzed at EML using procedures described in HASL-300, the Health and Safety Laboratory Procedures Manual, J. H. Harley, editor, 1972. The pH was measured using a pH meter with a universal glass electrode and a Ag/AgCl reference electrode. Conductivity was measured using a conductivity cell and Wheatstone bridge. Na^+ and K^+ were measured by both atomic absorption and atomic emission. Ca^{2+} and Mg^{2+} were analyzed by atomic absorption. NH_4^+ was analyzed by colorimetry using a Technician auto-analyzer technique. SO_4^{2-} , NO_3^- , Cl^- and ionic phosphate were analyzed by ion chromatography, SO_3^{2-} and NO_2^- , which are analyzed routinely by PNL, were not measured by EML.

During the storage of the samples at EML it was possible for changes to occur in the composition of the samples, especially as a result of biological activity within the samples. Repeated analyses were performed to determine whether this was occurring, however, and generally discernible effects were few. Presumably a biochemical equilibrium was rapidly reached in the samples. The samples were placed in air-tight bottles, however, for shipment to the sites and from there to PNL. It is possible that a shift in biochemical equilibrium occurred within the samples when the aerobic conditions of the storage drums were replaced by the anaerobic conditions of the shipping bottles. In any event, the NH_4^+ and NO_3^- data obtained by PNL for the samples bear no resemblance to the data obtained by EML. Other properties of the samples, and especially the pH and conductivity, probably also were affected by the hypothesized biochemical reactions.

Table 15 summarizes the results of the analyses of the reference samples by PNL and EML. Except for K^+ , the data were subdivided into groups with higher or lower concentrations. These groups were generally divided at one of the same concentrations used to divide the data for duplicates in Table 3. Following the range values is listed the number of samples in the group. Following this is given the median value for these samples of the percent deviation of each PNL result from the mean of the PNL and EML results for that sample.

Table 15. Results of analyses of reference samples*

<u>pH range</u>	<u>H⁺ range</u>	<u>No.</u>	<u>% dev.</u>	<u>Conductivity</u>	<u>No.</u>	<u>% dev.</u>
4.1 - 4.8	80 - 15	7	20%	35 - 10	7	13%
4.8 - 5.7	15 - 2	9	7	10 - 2	9	9
<u>SO₄²⁻ range</u>	<u>No.</u>	<u>% dev.</u>		<u>Cl⁻ range</u>	<u>No.</u>	<u>% dev.</u>
25 - 21	4	2.3%		22 - 10	7	11%
12 - 1	12	7.5		10 - 1	9	13
<u>Na⁺ range</u>	<u>No.</u>	<u>% dev.</u>		<u>K⁺ range</u>	<u>No.</u>	<u>% dev.</u>
22 - 10	7	4.9%		4 - 0	16	13%
7 - 1	9	9.3%				
<u>Ca²⁺ range</u>	<u>No.</u>	<u>% dev.</u>		<u>Mg²⁺ range</u>	<u>No.</u>	<u>% dev.</u>
16 - 2	9	6.7%		7 - 2	7	2.7%
2 - 0.5	7	2.9%		2 - 0	9	8.2%

*Concentrations are: pH units, μ siemen cm^{-1} , μ mole liter⁻¹; No.: number of analyses of reference samples used to calculate average; % dev.: median percent deviation from the mean

DISCUSSION AND CONCLUSIONS

The results of this external quality assurance program have been encouraging, and have indicated that the data from the routine operation of the MAP3S precipitation chemistry network should be acceptably precise and accurate.

In general the results of the laboratory intercomparison study showed that measurements made on precipitation samples by PNL gave results which were consistent with those obtained by other competent laboratories. No important systematic differences were evident between results obtained by PNL and those obtained by EML, so reasonable agreement between the laboratories would be expected for reference samples later analyzed by both.

Analyses by PNL of duplicate samples generally gave good agreement. As might be expected the percent deviations usually were highest for the samples containing the lower concentrations, and for the elements which were present in lower concentrations.

For most elements the agreement between PNL and EML analyses of reference samples was good. The only clear exceptions to this were NO_3^- and NH_4^+ , which probably were affected by biochemical reactions in the samples during the shipment from EML to the sampling sites. Presumably these reactions affected the pH and conductivity also, and perhaps other ion concentrations, but such effects were less evident.

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APPENDIX

DATA FOR JULY 1, 1978-December 31, 1979

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APPENDIX

INTRODUCTION AND LEGEND

The results of the field data collection and chemical analyses of precipitation samples collected on the MAP3S Network from July 1, 1978 through December 31, 1979, are listed in the following tables. The total collection of data is tabulated under four separate groupings:

- event samples
- weekly samples
- external quality control samples
- internal quality control samples.

Each of these groups has data listed on two types of tables. The first of these tables shows data availability. Each row represents a date, which is the date of collection^(a) of one or more samples. The appearance of an "S" in a column indicates that a sample was collected on that date at the site heading the column.

The second table is the chronological list of field and chemistry data. Each row corresponds to a collection^a date and a site (which are written on each page to the left of the data columns), and each column to a "species". Since there are 28 "species" and room for only seven columns per page, this table is divided into four sub-tables, as described in Table 16.

(a) It is important to note that this date is not necessarily the date of the occurrence of precipitation.

TABLE 16. Legend for Data Tables

Sub-Table	Column	Species	Units
1	1	Time Removed Time of Day (on date at left) that sample was collected.	GMT or "Z"
	2	Sample Time Total time that collector container was in the field	hours
	3	Down Time Total time <u>prior to current sample period</u> during which the collector was out of service	hours
	4	Precipitation Time Duration of precipitation as recorded by the site rainguage - not necessarily consecutive hours	hours
	5	Lid Open Number of times the collector opened during the sample period (Battelle collector only)	(none)
	6	Arrival Date Date sample arrived at the laboratory	Month. Date of Month
	7	Q.C./P.E. CODE Code identifying quality control sample (Q.C. tables only), or indicating date and time of day of <u>end</u> of precipitation	See Table 13
2	1	Sample Volume Volume of sample as measured immediately after collection	ml
	2	Predicted Volume Volume for sample predicted on the basis of precipitation amount measured by the rainguage. [area of collectors: Battelle-490 cm ² ; HASL-640 cm ²]	ml
	3	Field pHT Temperature at which field pH measurement was made	C

TABLE 16. (continued)

Sub-Table	Column	Species	Units
3	4	Field pH	pH units
	5	Lab pH	pH units
	6	H ⁺ (a)	μmoles/l
		Free hydrogen ion concentration calculated from Lab pH (H ⁺ = 10 ^{-pH})	
	7	Conductivity ^(a)	μmho/cm
	1	SO ₂ Sulfite or dissolved SO ₂ measured in separate, tetrachloromercurate- fixed aliquots	μmoles/l
	2	SO ₄ ⁼ "Total Sulfur" measured as sulfate - this is normally the sum of SO ₂ and SO ₄ ⁼	μmoles/l
	3	NO ₂ ⁻	μmoles/l
	4	NO ₃ ⁻	μmoles/l
	5	Cl ⁻	μmoles/l
4	6	PO ₄ ³⁻	μmoles/l
	7	Anion Sum The sum of the equivalents for all the cations: $2[SO_4^{=}] + [NO_2^{-}] +$ $+ [NO_3^{-}] + [Cl^{-}] + 3[PO_4^{3-}]$ $+ [unoxidized SO_2]$	μeq/l
	1	NH ₄ ⁺	μmoles/l
	2	Na ⁺	μmoles/l
	3	K ⁺	μmoles/l
	4	Al ³⁺	μmoles/l

TABLE 16. (continued)

<u>Sub-Table</u>	<u>Column</u>	<u>Species</u>	<u>Units</u>
	5	Ca^{++}	$\mu\text{moles/l}$
	6	Mg^{++}	$\mu\text{moles/l}$
	7	Cation Sum $\left([\text{H}^+] + [\text{NH}_4^+] + [\text{Na}^+] + [\text{K}^+] + 3[\text{Al}^{3+}] + 2[\text{Ca}^{++}] + 2[\text{Mg}^{++}] \right)$	$\mu\text{eq/l}$

Table 17 identifies the Q.C./P.E. codes (Sub-Table 1, Column 7), and Table 18 lists the special symbols found in the data tables. The latter are also found at the foot of the individual tables below.

TABLE 17. Q.C./P.E. Codes (Sub-Table 1, Column 7)

<u>Q.C. Code</u>	AB.CD
	A = 1 for Internal 2 for External
	B = 1 for Analyst Blind 2 for Analyst Not Blind
	C = 1 for Blank 2 for Standard Solution(s) 3 for Duplicate 4 for Non-Network Site Sample
	D = Site Number
<u>P.E. Code</u>	DDTT
	MM = Date of month of end of precipitation + 40
	TT = Hour of day of end of precipitation, Z
	TT = 99 means unknown

TABLE 18. Special Data Table Codes

<u>Code</u>	<u>Explanation</u>
NSC	No Sample Collected
ISA	Insufficient Sample for Analysis
NAP	No Analysis Performed
MOE	Malfunction or Operator Error
RPC	Rejected - Probable Contamination

The first group of tables is for the event samples, almost exclusively collected by the Battelle collector. Each month of the year is separated, but each of the four sub-tables runs completely through the period without interruption.

The second group of tables lists the data from the weekly samples. These were collected only at Sites 1, 2, and 4 (Whiteface, Ithaca, and Virginia) for the entire year, and beginning May 24 for Site 3 (Penn State). These samples were all collected using the HASL or HASL-type collector, therefore there is no "Lid Open" data. These are arranged chronologically throughout the year by each sub-table, broken into three month blocks.

Following are listings of quality control sample data. The first are those which were administered externally - all of the chemical analyses were done with the analysts blind (see Section 4.0). The last group are internal quality control samples which were non-blind duplicate analyses of selected samples. There may be some samples listed in this section which refer to event samples not listed in the regular event samples. These would be duplicate analyses of external quality control samples, which may or may not be included for the date indicated, depending on whether the sample was a reference sample or duplicate. Since only a limited number of species were routinely rerun, certain tables which are blank (contain only NAP's) are not reproduced here. Only part of the internal quality control samples are listed here, since there are many reanalyses of samples with identical dates; the computer program only allows one quality control sample per date.

SAMPLES AVAILABLE

W H I T H A C A S T A T E S T A I A S I N O I S R O K H A V E N D E S E W E S D E

1 JUL 1978
2 JUL 1978
3 JUL 1978
4 JUL 1978
5 JUL 1978
6 JUL 1978
9 JUL 1978
11 JUL 1978
13 JUL 1978
15 JUL 1978
17 JUL 1978
18 JUL 1978
22 JUL 1978
24 JUL 1978
25 JUL 1978
26 JUL 1978
27 JUL 1978
28 JUL 1978
30 JUL 1978
31 JUL 1978

-	-	-	-	-	S	-	-
-	-	-	-	-	S	-	-
-	-	-	-	-	S	-	S
-	S	-	-	-	-	-	-
-	-	-	-	S	-	-	S
-	S	-	-	S	S	-	-
-	-	S	-	-	S	-	S
-	-	-	-	S	-	-	-
-	S	-	-	S	-	-	-
-	-	S	-	-	-	-	-
-	-	-	-	S	-	-	S
-	-	-	-	-	S	-	-
-	-	S	-	-	-	-	-
-	S	S	S	-	-	S	-
-	-	-	S	-	S	-	-
S	-	-	-	S	-	-	S

SAMPLES AVAILABLE

		W	I	P	V	I	B	L
		H	I	E	N	S	T	A
		T	F	A	C	E	S	I
		A	C	E	S	I	N	O
		C	A	I	S	A	V	E
		A	C	A	I	S	E	C
1	AUG 1978	-	-	S	S	-	S	S
2	AUG 1978	S	-	-	-	S	-	S
3	AUG 1978	-	-	-	S	-	S	-
4	AUG 1978	S	-	S	-	-	S	-
5	AUG 1978	-	-	-	S	-	S	-
6	AUG 1978	-	-	-	-	-	S	-
7	AUG 1978	-	S	-	-	S	S	-
8	AUG 1978	-	S	S	S	-	S	S
10	AUG 1978	S	S	S	-	-	-	-
11	AUG 1978	-	-	-	-	-	-	S
12	AUG 1978	-	-	-	S	S	S	-
14	AUG 1978	-	-	-	-	-	-	S
15	AUG 1978	-	-	S	-	-	-	-
16	AUG 1978	-	-	-	-	S	-	-
17	AUG 1978	S	-	-	-	S	-	-
18	AUG 1978	S	-	-	-	-	-	-
21	AUG 1978	S	S	-	-	-	-	-
28	AUG 1978	-	-	-	S	-	-	-
29	AUG 1978	-	S	S	-	-	S	-
30	AUG 1978	S	-	-	S	-	-	-
31	AUG 1978	-	S	-	-	-	-	S

SAMPLES AVAILABLE

	W	I	P	V	I	E	L
1 SEP 1978	-	-	S	-	-	S	S
2 SEP 1978	-	-	-	S	-	-	-
4 SEP 1978	-	S	S	-	-	S	-
6 SEP 1978	S	-	-	-	-	-	-
8 SEP 1978	S	-	-	-	-	-	-
9 SEP 1978	-	S	-	-	-	-	-
11 SEP 1978	-	-	S	-	-	S	-
12 SEP 1978	S	-	-	-	-	-	-
13 SEP 1978	-	S	S	-	-	S	S
15 SEP 1978	-	-	S	S	S	-	-
16 SEP 1978	-	-	-	-	S	S	-
17 SEP 1978	-	-	-	-	S	-	-
18 SEP 1978	S	-	-	-	-	-	-
19 SEP 1978	-	S	S	-	-	-	-
22 SEP 1978	-	-	-	-	S	-	-
23 SEP 1978	-	-	-	-	-	S	-
25 SEP 1978	S	-	S	-	-	-	-
26 SEP 1978	-	-	-	S	-	-	-
28 SEP 1978	-	-	S	-	-	-	-
29 SEP 1978	S	-	-	-	-	-	-

SAMPLES AVAILABLE

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			W	I	P	V	I	B	L	O
			H	T	E	L	L	R	E	X
			I	A	N	R	I	O	W	F
			T	C	S	G	N	K	E	O
			F	A	T	I	H	A	S	R
			A		S	N	V		D	D
			C							H
1	OCT	1978	-	-	-	-	-	S	-	S
2	OCT	1978	-	-	-	-	S	-	S	-
3	OCT	1978	-	-	-	S	S	-	-	-
4	OCT	1978	S	-	-	-	-	-	-	S
5	OCT	1978	-	S	S	-	S	-	-	-
6	OCT	1978	S	-	S	S	-	S	-	-
9	OCT	1978	-	S	S	-	-	S	-	-
10	OCT	1978	-	-	-	-	S	-	-	-
11	OCT	1978	-	-	-	-	S	-	-	-
12	OCT	1978	-	-	S	-	-	-	-	S
13	OCT	1978	-	-	-	-	S	-	-	-
14	OCT	1978	-	-	S	-	S	S	-	S
15	OCT	1978	-	S	-	-	-	-	S	-
16	OCT	1978	S	-	-	-	-	-	-	-
17	OCT	1978	-	-	S	S	-	-	S	-
19	OCT	1978	-	-	-	S	-	-	-	-
20	OCT	1978	S	S	S	-	-	S	-	-
23	OCT	1978	-	-	-	-	S	-	-	-
24	OCT	1978	S	S	S	-	-	S	-	S
25	OCT	1978	-	-	-	-	-	-	S	-
26	OCT	1978	-	-	-	-	S	-	-	-
27	OCT	1978	-	S	S	-	-	S	-	S
30	OCT	1978	S	-	-	-	-	-	-	-

SAMPLES AVAILABLE

	H	I	P	V	I	B	L	O
	T	A	N	R	L	R	E	X
	E	C		G	I	O	H	F
	F	A		I	N	K	A	O
	A			N	O		V	D
	G			T	I		E	
	E			A	S			H
6 NOV 1978	-	-	-	-	-	-	S	-
7 NOV 1978	-	-	-	-	S	-	-	-
8 NOV 1978	S	S	S	-	-	-	-	-
9 NOV 1978	-	-	-	-	-	-	S	-
14 NOV 1978	-	-	S	S	S	-	-	-
15 NOV 1978	-	-	S	-	S	-	-	-
16 NOV 1978	S	-	-	-	-	S	-	-
17 NOV 1978	-	-	-	-	S	-	S	-
18 NOV 1978	-	-	S	-	-	S	-	S
19 NOV 1978	-	S	-	-	-	-	-	-
21 NOV 1978	S	-	-	S	-	-	-	-
22 NOV 1978	-	S	-	-	-	-	-	-
23 NOV 1978	-	-	-	-	S	-	-	-
24 NOV 1978	-	-	S	-	-	S	-	-
26 NOV 1978	-	S	-	S	-	-	S	-
27 NOV 1978	-	-	-	-	S	-	-	-
28 NOV 1978	-	S	-	S	-	S	-	S
29 NOV 1978	-	-	S	-	-	-	S	-
30 NOV 1978	-	-	S	-	-	S	S	-

SAMPLES AVAILABLE

		W	I	P	V	I	B	L	O
		H	T	E	I	L	R	E	X
		I	H	N	R	I	O	W	F
		E	A	S	G	N	K	E	O
		F	C	T	I	O	H	S	R
		A	A	A	N	I	V	L	D
		C				S			H
2 DEC 1978	-	-	-	-	S	-	-	-	-
4 DEC 1978	-	S	-	-	-	-	-	-	S
5 DEC 1978	-	-	-	S	-	S	S	-	-
6 DEC 1978	S	-	-	-	-	-	-	S	-
7 DEC 1978	-	-	-	-	S	-	-	-	-
9 DEC 1978	-	S	-	-	-	-	-	-	S
11 DEC 1978	-	-	-	S	-	S	S	S	-
12 DEC 1978	S	S	-	-	S	-	-	-	-
17 DEC 1978	-	-	S	-	-	-	S	-	S
19 DEC 1978	-	S	-	-	-	S	-	-	-
21 DEC 1978	-	S	-	-	S	-	S	S	S
22 DEC 1978	-	-	-	S	-	-	-	-	-
25 DEC 1978	-	-	-	-	-	-	S	-	-
26 DEC 1978	S	-	-	-	S	-	-	S	-
27 DEC 1978	-	-	-	-	-	-	-	-	S
28 DEC 1978	-	-	-	-	-	S	-	-	-

 

SAMPLES AVAILABLE

		W	I	D	V	E	L	O
		H	T	E	I	R	E	X
		I	H	N	R	O	W	F
		T	A	S	G	K	E	J
		E	C	T	I	H	S	R
		F	A	S	N	A	D	O
		A						H
2 FEB 1979	-	-	-	-	-	-	-	S
4 FEB 1979	-	S	-	-	-	-	-	-
5 FEB 1979	S	-	-	-	-	-	-	-
6 FEB 1979	-	-	-	-	S	-	-	-
6 FEB 1979	-	-	-	S	-	S	-	-
9 FEB 1979	-	S	-	-	-	S	-	S
13 FEB 1979	-	-	-	S	S	-	-	S
14 FEB 1979	-	-	-	-	-	S	-	-
16 FEB 1979	S	-	-	S	-	-	-	-
17 FEB 1979	-	-	-	-	-	-	-	S
19 FEB 1979	-	S	-	-	-	-	-	S
20 FEB 1979	-	-	-	S	-	-	-	-
22 FEB 1979	-	-	-	S	-	S	-	-
27 FEB 1979	-	-	-	S	-	-	-	S
28 FEB 1979	S	S	-	S	-	S	-	-

SAMPLES AVAILABLE

	H	I	P	V	I	B	L	O
1 MAR 1979	-	-	-	-	S	-	-	-
2 MAR 1979	-	-	S	-	-	-	-	S
3 MAR 1979	-	-	-	S	-	-	-	-
4 MAR 1979	-	-	-	-	S	-	-	-
5 MAR 1979	-	-	-	-	-	-	-	S
6 MAR 1979	-	S	S	-	-	-	-	-
7 MAR 1979	-	-	-	S	-	-	S	-
8 MAR 1979	S	-	-	-	S	-	-	-
10 MAR 1979	-	-	-	S	S	-	-	-
11 MAR 1979	-	-	-	-	-	S	-	S
12 MAR 1979	-	-	S	-	-	-	S	-
14 MAR 1979	-	-	-	-	-	-	-	S
15 MAR 1979	S	S	S	-	S	S	S	-
18 MAR 1979	-	-	-	-	S	-	-	-
19 MAR 1979	-	-	-	-	S	-	-	-
20 MAR 1979	-	-	-	-	S	-	-	-
21 MAR 1979	-	-	-	-	-	-	-	S
24 MAR 1979	-	-	-	-	S	-	-	-
25 MAR 1979	-	-	-	-	S	S	-	-
26 MAR 1979	-	-	S	-	-	-	S	S
27 MAR 1979	-	S	-	S	-	-	-	-
28 MAR 1979	S	-	-	-	-	-	-	-
29 MAR 1979	-	S	-	-	-	S	-	-
30 MAR 1979	-	-	-	-	S	-	-	-

SAMPLES AVAILABLE

		W	I	P	V	I	B	L	O
		H	T	E	I	L	R	E	X
		I	H	N	R	I	O	W	F
		T	A	S	G	N	K	E	O
		E	C		I	O	H	S	R
		F	A		N	I	A	D	D
		A			T	I	V		H
		G			A		N		
		E			T				
1 APR 1979	-	-	S	-	-	-	-	-	-
3 APR 1979	-	-	S	-	-	-	S	-	S
4 APR 1979	S	-	-	S	-	-	S	-	-
5 APR 1979	-	-	-	S	-	-	S	-	S
6 APR 1979	-	-	-	-	S	-	-	-	-
9 APR 1979	-	-	-	-	-	-	-	-	S
10 APR 1979	S	S	S	S	S	-	S	S	-
13 APR 1979	-	-	-	S	-	S	-	-	S
16 APR 1979	-	-	-	-	-	-	S	-	-
17 APR 1979	-	S	S	S	S	S	S	-	-
19 APR 1979	S	-	-	-	-	-	-	-	-
22 APR 1979	-	-	-	-	-	S	-	-	S
24 APR 1979	-	-	-	-	S	S	-	-	-
25 APR 1979	-	-	-	-	-	S	-	-	-
26 APR 1979	-	-	-	-	-	S	-	-	-
27 APR 1979	-	-	-	-	-	-	S	-	-
28 APR 1979	-	-	-	S	-	S	-	-	S
29 APR 1979	-	-	-	-	-	-	S	-	-
30 APR 1979	-	-	-	-	S	S	-	-	-

SAMPLES AVAILABLE

	W	I	P	V	I	E	L	R	L	O	X
	H	I	E	I	L	S	R	O	K	H	A
	T	F	N	R	I	N	O	V	E	S	D
	A	C	S	G	I	S	A	N	O	R	H
	C	A	T	I	A	S	E	D	O		
	E										
1 MAY 1979	S	S	-	-	-	-	-	-	-	-	-
4 MAY 1979	-	-	-	-	S	S	-	-	-	-	-
5 MAY 1979	-	-	S	-	-	-	-	-	-	S	-
7 MAY 1979	-	S	-	S	-	-	-	-	-	-	-
9 MAY 1979	S	-	-	-	-	-	-	-	-	-	-
11 MAY 1979	-	S	S	-	-	-	-	-	-	-	-
13 MAY 1979	-	-	-	-	S	S	-	-	-	S	-
14 MAY 1979	-	S	S	-	S	S	S	-	-	-	-
15 MAY 1979	-	-	-	S	S	S	S	-	-	-	-
16 MAY 1979	-	S	S	S	-	-	-	-	-	-	-
18 MAY 1979	S	-	-	-	-	-	-	-	-	-	-
19 MAY 1979	-	-	-	-	-	S	-	-	-	-	-
22 MAY 1979	-	S	S	S	-	-	-	-	-	-	-
24 MAY 1979	-	-	S	-	-	-	S	-	-	-	-
25 MAY 1979	-	-	-	-	-	-	S	-	-	-	-
26 MAY 1979	-	-	-	-	-	-	-	-	-	S	-
28 MAY 1979	-	-	-	-	-	-	-	-	-	S	-
29 MAY 1979	-	S	-	S	S	S	S	S	S	-	-
30 MAY 1979	-	-	S	-	-	-	S	S	S	-	-
31 MAY 1979	S	-	S	-	-	-	S	-	-	-	-

SAMPLES AVAILABLE

		W	I	P	V	I	B	L	O
		H	T	E	S	L	R	E	X
		I	F	N	I	I	O	S	F
		A	A	S	R	N	K	E	O
		C	C	T	G	O	H	D	D
		E		A	I	I	A		H
1 JUN 1979	-	-	-	-	-	-	-	S	-
2 JUN 1979	-	-	-	-	S	-	-	-	-
4 JUN 1979	-	-	-	S	-	-	-	-	-
5 JUN 1979	-	-	-	-	S	-	S	S	-
6 JUN 1979	-	-	-	S	-	-	S	-	-
7 JUN 1979	-	-	-	S	-	-	-	-	-
8 JUN 1979	-	-	-	-	-	-	-	-	S
9 JUN 1979	-	-	-	S	-	S	-	-	-
10 JUN 1979	-	S	-	-	S	S	-	-	-
11 JUN 1979	-	-	-	S	-	-	-	-	S
12 JUN 1979	-	S	-	-	S	-	S	S	-
13 JUN 1979	S	-	-	-	-	-	-	-	-
14 JUN 1979	-	-	-	-	-	S	-	-	-
18 JUN 1979	-	-	-	S	S	-	S	-	-
19 JUN 1979	-	-	-	-	-	-	-	S	S
21 JUN 1979	-	-	-	-	-	S	-	-	S
22 JUN 1979	-	-	-	S	-	-	-	-	S
24 JUN 1979	-	-	-	-	-	-	-	-	S
25 JUN 1979	-	S	-	-	S	-	-	-	-
26 JUN 1979	S	-	-	-	-	-	-	S	-
28 JUN 1979	-	-	-	S	-	-	-	-	-
29 JUN 1979	S	S	-	S	-	S	-	-	-
30 JUN 1979	-	-	-	-	S	-	-	-	-

SAMPLES AVAILABLE

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	H	I	P	V	I	B	L	O
1 JUL 1979	-	-	-	-	-	-	-	S
2 JUL 1979	-	-	S	-	S	S	-	-
3 JUL 1979	-	S	-	-	-	S	S	-
5 JUL 1979	-	-	S	-	-	S	S	S
6 JUL 1979	S	-	-	S	S	-	-	-
9 JUL 1979	-	-	-	-	S	-	-	S
10 JUL 1979	-	-	-	-	-	-	-	S
11 JUL 1979	-	S	S	-	-	S	-	-
12 JUL 1979	-	-	-	-	-	-	S	-
13 JUL 1979	-	-	S	-	-	-	-	-
14 JUL 1979	-	-	-	-	S	-	-	S
16 JUL 1979	-	-	-	S	-	S	-	-
17 JUL 1979	S	-	S	-	-	-	S	-
18 JUL 1979	-	S	-	-	-	-	-	-
19 JUL 1979	-	-	-	-	-	-	S	-
20 JUL 1979	-	-	S	-	-	-	-	-
21 JUL 1979	-	-	-	S	-	-	-	-
22 JUL 1979	-	-	-	-	-	-	S	-
24 JUL 1979	-	S	S	-	-	-	S	-
25 JUL 1979	-	-	S	-	S	-	-	-
26 JUL 1979	-	-	S	S	-	S	-	S
27 JUL 1979	-	S	-	-	-	S	-	-
29 JUL 1979	-	-	S	-	-	-	-	S
30 JUL 1979	S	-	-	-	-	S	S	S
31 JUL 1979	-	S	-	S	S	-	S	-

SAMPLES AVAILABLE

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SAMPLES AVAILABLE

E
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2 SEP 1979	-	-	-	-	-	S	S	-
3 SEP 1979	-	S	S	-	-	-	S	-
4 SEP 1979	-	-	-	S	-	-	S	-
6 SEP 1979	S	-	S	-	-	S	S	-
7 SEP 1979	-	S	S	S	-	-	-	-
8 SEP 1979	-	-	-	S	-	-	-	-
10 SEP 1979	S	-	-	-	-	-	-	-
11 SEP 1979	S	-	-	-	-	-	-	-
15 SEP 1979	-	S	S	S	-	S	S	-
17 SEP 1979	S	-	-	-	-	-	-	-
20 SEP 1979	-	-	S	-	-	-	-	-
21 SEP 1979	S	-	-	-	-	-	-	-
22 SEP 1979	-	S	-	-	-	-	-	-
23 SEP 1979	-	-	S	S	-	S	S	S
26 SEP 1979	-	-	-	-	-	-	S	-
29 SEP 1979	-	S	-	-	-	-	-	S
30 SEP 1979	-	-	S	-	S	-	-	-

SAMPLES AVAILABLE

W I P V I E L O

H I E T F A C E

T I H A C A

N S T A T E

R G I N I A

L I N O I S

R O K H A V E N

E W E S D E

X F O R D O H

1 OCT 1979	-	-	-	S	-	-	-	-
2 OCT 1979	-	-	S	-	-	-	S	S
3 OCT 1979	-	-	-	-	-	S	S	-
4 OCT 1979	-	S	S	-	-	-	-	-
5 OCT 1979	-	-	-	-	-	-	-	S
6 OCT 1979	-	S	S	S	-	S	S	-
8 OCT 1979	-	-	S	-	-	-	-	-
9 OCT 1979	S	-	-	S	-	-	-	-
10 OCT 1979	-	S	-	-	-	-	-	S
11 OCT 1979	-	-	S	-	-	-	S	-
12 OCT 1979	-	-	-	-	-	S	-	S
13 OCT 1979	-	S	-	-	-	S	-	-
14 OCT 1979	-	-	S	-	-	-	-	-
15 OCT 1979	-	S	-	-	-	-	S	-
16 OCT 1979	S	-	-	-	-	-	-	S
18 OCT 1979	-	-	S	-	S	-	-	S
20 OCT 1979	-	-	-	S	-	-	-	-
23 OCT 1979	-	-	-	-	S	-	-	-
24 OCT 1979	S	S	-	-	-	-	-	S
25 OCT 1979	-	-	S	-	-	-	S	-
28 OCT 1979	-	S	S	-	-	-	-	S
29 OCT 1979	S	-	-	-	-	S	-	-

SAMPLES AVAILABLE

	H	I	P	V	I	B	L	O
1 NOV 1979	-	-	-	-	S	-	-	-
2 NOV 1979	-	-	-	-	-	-	-	S
3 NOV 1979	-	S	-	-	-	S	-	-
4 NOV 1979	-	-	S	-	-	-	S	-
7 NOV 1979	-	-	-	-	-	-	-	S
8 NOV 1979	S	S	S	-	-	-	-	-
10 NOV 1979	-	-	-	-	-	-	-	S
11 NOV 1979	-	-	S	-	-	S	-	-
12 NOV 1979	-	-	-	-	-	-	S	-
13 NOV 1979	S	-	S	-	-	S	-	-
14 NOV 1979	-	S	-	-	-	S	S	-
15 NOV 1979	S	-	S	-	-	-	-	-
16 NOV 1979	-	-	S	-	-	-	-	S
19 NOV 1979	S	-	-	-	-	-	-	-
20 NOV 1979	-	S	-	-	-	-	-	-
26 NOV 1979	-	-	-	S	-	S	-	S
27 NOV 1979	S	S	S	-	-	S	S	S
29 NOV 1979	-	-	-	-	-	-	-	S

SAMPLES AVAILABLE

[illegible]

DATA FROM 1 JUL 1978 TO 31 JUL 1978

		Z	HOURS	HOURS	HOURS		MO. DA	
1 JUL 1978	ILLINOIS	1900.00	20.50	0.00	1.50	6.00	ISA	4108.00
2 JUL 1978	ILLINOIS	1700.00	22.00	0.00	11.30	3.00	7.17	4213.00
3 JUL 1978	ILLINOIS	1.00	7.00	0.00	.67	2.00	7.17	4221.00
	LEWES DE	1430.00	236.00	0.00	24.00	28.00	8.21	NAP
4 JUL 1978	ITHACA	1300.00	289.00	0.00	25.00	5.00	7.18	4410.00
	PENN STATE	1400.00	96.00	0.00	39.00	MOE	7.10	4413.00
5 JUL 1978	VIRGINIA	2000.00	141.00	0.00	56.00	2.00	8.22	4417.00
6 JUL 1978	LEWES DE	NAP	NAP	0.00	NAP	NAP	8.21	NAP
9 JUL 1978	ITHACA	1200.00	119.00	0.00	3.00	3.00	.18	4823.00
	VIRGINIA	1330.00	95.50	0.00	5.00	5.00	8.22	4901.00
	ILLINOIS	1330.00	157.50	0.00	1.10	14.00	7.17	4911.00
11 JUL 1978	WHITEFACE	1430.00	306.00	0.00	6.00	7.00	7.26	4903.00
	PENN STATE	1330.00	167.00	0.00	.25	3.00	7.10	5018.00
	VIRGINIA	2100.00	49.50	0.00	1.00	1.00	8.22	5101.00
	LEWES DE	1730.00	NAP	0.00	NAP	12.00	8.21	NAP
13 JUL 1978	ITHACA	1600.00	106.00	0.00	7.00	6.00	7.18	5314.00
	ILLINOIS	1300.00	90.50	5.00	23.70	50.00	8.08	5311.00
15 JUL 1978	PENN STATE	1600.00	100.00	.50	4.10	4.00	7.19	5501.00
	VIRGINIA	1730.00	92.50	0.00	1.00	1.00	8.22	5414.00
	BROOKHAVEN	1930.00	240.00	0.00	13.00	1.00	8.11	5518.00
	LEWES DE	1630.00	95.00	1.00	9.00	9.00	8.21	NAP
17 JUL 1978	ITHACA	1300.00	93.00	0.00	2.00	4.00	8.08	5503.00
	BROOKHAVEN	1400.00	42.00	0.00	9.50	1.00	8.11	5709.00

DATA FROM 1 JUL 1978 TO 31 JUL 1978 (CONT.)

		Z	HOURS	HOURS	HOURS		MO.CA	
18 JUL 1978	WHITEFACE	1530.00	169.00	0.00	4.00	15.00	7.26	5718.00
	VIRGINIA	2130.00	76.00	0.00	14.50	2.00	8.22	5618.00
22 JUL 1978	ITHACA	1300.00	96.00	0.00	1.00	2.00	8.08	6123.00
24 JUL 1978	WHITEFACE	1500.00	143.50	0.00	8.00	10.00	9.07	6323.00
	PENN STATE	1430.00	213.50	0.00	.33	3.00	7.28	6401.00
25 JUL 1978	VIRGINIA	2030.00	167.00	0.00	2.00	NAP	8.22	6501.00
	LEWES DE	1600.00	242.00	0.00	8.00	12.00	8.21	NAP
26 JUL 1978	ILLINOIS	1630.00	315.00	0.00	1.00	1.00	8.08	6620.00
27 JUL 1978	ITHACA	1400.00	121.00	0.00	1.00	4.00	8.08	6709.00
28 JUL 1978	WHITEFACE	1700.00	98.00	0.00	8.00	14.00	9.07	6726.00
	ITHACA	1600.00	26.00	0.00	2.00	3.00	8.08	6808.00
	PENN STATE	1430.00	96.00	0.00	2.60	12.00	8.04	6808.00
	BROOKHAVEN	1900.00	269.00	0.00	1.10	1.00	9.29	6815.00
30 JUL 1978	PENN STATE	1400.00	47.50	0.00	1.60	7.00	8.04	6921.00
	ILLINOIS	2330.00	103.00	0.00	3.80	48.00	8.08	6702.00
31 JUL 1978	WHITEFACE	1700.00	72.00	0.00	10.00	31.00	9.07	7014.00
	VIRGINIA	1230.00	136.00	0.00	28.00	13.00	8.22	7009.00
	LEWES DE	1730.00	145.50	0.00	5.00	49.00	8.21	NAP

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 AUG 1978 TO 31 AUG 1978

		Z I M E	HOURS S A F E	HOURS D O W N	HOURS P R E C I P I T A T I O N	HOURS L I D O P E N	HOURS A R J A T E	HOURS Q C P E C O G E
1 AUG 1978	PENN STATE	1500.00	24.00	0.00	3.10	6.00	8.08	7116.00
	VIRGINIA	2030.00	32.00	0.00	2.50	3.00	10.09	4103.00
	BROOKHAVEN	1330.00	101.50	0.00	NAP	3.00	8.11	4110.00
	LEWES DE	1300.00	19.50	0.00	5.00	6.00	8.21	NAP
2 AUG 1978	WHITEFACE	2000.00	51.00	0.00	4.00	4.00	9.07	4105.00
	ILLINOIS	2130.00	78.00	0.00	NAP	24.00	8.08	NAP
	LEWES DE	2000.00	31.00	0.00	NAP	NAP	11.01	NAP
3 AUG 1978	VIRGINIA	1530.00	43.00	0.00	12.00	3.00	10.09	4208.00
	BROOKHAVEN	1830.00	53.00	0.00	1.00	2.00	8.11	4315.00
4 AUG 1978	WHITEFACE	1700.00	45.00	0.00	5.00	6.00	9.07	4406.00
	PENN STATE	1430.00	71.50	0.00	1.80	42.00	8.10	4408.00
	BROOKHAVEN	1800.00	23.50	0.00	NAP	1.00	NAP	4415.00
5 AUG 1978	VIRGINIA	2100.00	53.50	0.00	3.00	3.00	10.09	4420.00
	BROOKHAVEN	1430.00	20.50	0.00	NAP	2.00	8.11	4513.00
6 AUG 1978	BROOKHAVEN	1730.00	27.00	0.00	NAP	3.00	8.11	4605.00
7 AUG 1978	ITHACA	1330.00	65.00	172.00	14.00	4.00	8.21	4622.00
	ILLINOIS	1630.00	115.00	0.00	2.20	11.00	8.29	4711.00
	BROOKHAVEN	1700.00	23.50	0.00	NAP	5.00	8.11	4710.00
8 AUG 1978	ITHACA	1300.00	89.00	0.00	7.00	6.00	8.21	4800.00
	PENN STATE	1330.00	95.00	0.00	1.00	10.00	8.15	4723.00
	VIRGINIA	2130.00	72.50	0.00	12.30	11.00	10.09	4810.00
	BROOKHAVEN	1330.00	20.50	0.00	NAP	1.00	8.11	4800.00
	LEWES DE	2000.00	144.00	0.00	NAP	NAP	11.01	NAP

DATA FROM 1 AUG 1978 TO 31 AUG 1978 (CONT.)

		Z	HOURS	HOURS	HOURS		MO.DA	
10 AUG 1978	WHITEFACE	1400.00	141.00	0.00	4.00	5.00	9.07	4918.00
	ITHACA	1500.00	50.00	0.00	9.00	6.00	8.21	5031.00
	PENN STATE	1400.00	48.50	0.00	2.10	4.00	8.15	5011.00
11 AUG 1978	LEWES DE	2000.00	72.00	0.00	3.00	2.00	11.01	5199.00
12 AUG 1978	VIRGINIA	1600.00	90.50	0.00	4.50	7.00	10.09	5023.00
	ILLINOIS	1430.00	118.00	0.00	16.00	NAP	8.29	5209.00
	BROOKHAVEN	1900.00	101.50	0.00	NAP	2.00	9.29	5218.00
14 AUG 1978	LEWES DE	2000.00	72.00	0.00	8.00	14.00	MOE	5499.00
15 AUG 1978	PENN STATE	1300.00	117.00	0.00	2.30	12.00	8.22	5212.00
16 AUG 1978	ILLINOIS	1330.00	139.50	0.00	1.10	NAP	8.29	5606.00
17 AUG 1978	WHITEFACE	1900.00	173.00	0.00	3.00	NAP	9.07	5707.00
	ILLINOIS	1930.00	30.00	NAP	3.70	3.00	9.31	5719.00
18 AUG 1978	WHITEFACE	1930.00	24.50	0.00	5.00	NAP	9.07	5812.00
21 AUG 1978	WHITEFACE	1800.00	70.50	0.00	4.00	NAP	9.07	6010.00
	ITHACA	1200.00	261.00	0.00	1.00	3.00	9.07	6001.00
28 AUG 1978	VIRGINIA	2100.00	389.00	0.00	2.30	12.00	10.09	6802.00
29 AUG 1978	ITHACA	1500.00	195.00	0.00	2.00	5.00	9.07	6907.00
	PENN STATE	1330.00	335.50	0.00	1.10	15.00	9.05	6907.00
	BROOKHAVEN	1730.00	406.50	0.00	NAP	2.00	9.29	6904.00
30 AUG 1978	WHITEFACE	1230.00	210.50	0.00	22.00	24.00	9.12	6901.00
	VIRGINIA	2200.00	49.00	0.00	4.50	15.00	10.09	7001.00
31 AUG 1978	ITHACA	1900.00	52.00	0.00	20.00	4.00	9.07	7119.00
	LEWES DE	1900.00	407.00	0.00	2.00	6.00	11.01	7199.00

DATA FROM 1 SEP 1978 TO 29 SEP 1978

		1 M V D	1 I E	1 I M E	1 I M E	1 P E N	1 A T E	1 O D E
		T I M E	S A M P L E	O W N E R	P R E C I P I T A T I O N	L I D E N T I F I C A T I O N	A R R I V E L I M E N T	O C C U R R E N C E
		Z	HOURS	HOURS	HOURS		MO. DA	
1 SEP 1978	PENN STATE	1300.00	71.00	0.00	9.70	36.00	9.07	7114.00
	BROOKHAVEN	1630.00	71.00	0.00	NAP	6.00	9.29	NAP
	LEWIS DE	2000.00	23.00	0.00	4.00	5.00	11.01	NAP
2 SEP 1978	VIRGINIA	1100.00	61.00	0.00	10.80	6.00	10.09	4104.00
4 SEP 1978	ITHACA	1300.00	90.00	0.00	2.00	3.00	9.07	4318.00
	PENN STATE	1500.00	74.00	0.00	.70	2.00	9.08	4411.00
	BROOKHAVEN	1400.00	69.50	0.00	NAP	1.00	9.29	NAP
6 SEP 1978	WHITEFACE	1200.00	167.50	0.00	9.00	22.00	9.12	4408.00
8 SEP 1978	WHITEFACE	1600.00	52.00	0.00	14.00	MOE	MOE	4717.00
9 SEP 1978	ITHACA	1600.00	123.00	0.00	10.00	4.00	9.28	4904.00
11 SEP 1978	PENN STATE	1400.00	167.00	0.00	.20	3.00	9.18	5101.00
	BROOKHAVEN	1330.00	167.50	0.00	NAP	2.00	9.29	NAP
12 SEP 1978	WHITEFACE	1330.00	99.50	52.00	17.00	17.00	10.04	5214.00
13 SEP 1978	ITHACA	1300.00	93.00	0.00	4.00	3.00	9.28	5221.00
	PENN STATE	1300.00	47.00	0.00	1.30	15.00	9.18	5301.00
	BROOKHAVEN	1330.00	48.00	0.00	NAP	2.00	9.29	NAP
	LEWIS DE	1330.00	287.50	0.00	5.00	2.00	11.01	NAP
15 SEP 1978	PENN STATE	1900.00	54.00	0.00	2.10	7.00	9.21	5209.00
	VIRGINIA	1630.00	317.50	0.00	2.00	5.00	10.09	5301.00
	ILLINOIS	2200.00	390.50	238.00	8.50	19.00	9.21	5413.00
16 SEP 1978	ILLINOIS	2200.00	24.00	0.00	2.00	2.00	9.21	5611.00
	BROOKHAVEN	2000.00	78.50	0.00	NAP	3.00	9.29	NAP
17 SEP 1978	ILLINOIS	1900.00	21.00	0.00	7.40	2.00	9.21	5712.00

DATA FROM 1 SEP 1978 TO 29 SEP 1978 (CONT.)

		Z	HOURS	HOURS	HOURS	HOURS	MO. DA	
18 SEP 1978	WHITEFACE	1800.00	142.50	0.00	7.00	10.00	10.04	5609.00
19 SEP 1978	ITHACA	1200.00	67.00	0.00	28.00	9.00	9.28	5912.00
	PENN STATE	1400.00	91.00	0.00	7.50	11.00	9.22	5907.00
22 SEP 1978	ILLINOIS	1400.00	115.00	0.00	ISA	NAP	ISA	NAP
23 SEP 1978	BROOKHAVEN	1600.00	164.00	0.00	NAP	1.00	9.29	NAP
25 SEP 1978	WHITEFACE	1730.00	167.50	0.00	11.00	16.00	10.04	6515.00
	PENN STATE	1400.00	144.00	0.00	1.00	12.00	9.28	6210.00
26 SEP 1978	VIRGINIA	2130.00	269.00	0.00	2.00	3.00	10.09	6305.00
28 SEP 1978	PENN STATE	1300.00	71.00	0.00	.10	1.00	10.09	6807.00
29 SEP 1978	WHITEFACE	2000.00	98.50	0.00	5.00	7.00	10.24	6814.00

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NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RFC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 OCT 1978 TO 30 OCT 1978

		T I M E	S A M P L E	D O S E	P R E C I P I T A T I O N	L I Q U I D	A R A I S	G R O U N D
		Z	HOURS	HOURS	HOURS		10.0A	
1 OCT 1978	BROOKHAVEN	2130.00	197.50	0.00	NAP	2.00	11.39	NAP
	OXFORD OH	2000.00	215.00	0.00	20.00	NAP	10.31	4112.00
2 OCT 1978	ILLINOIS	1600.00	242.00	0.00	1.00	2.30	10.10	4214.00
	LEWES DE	1930.00	456.00	0.00	24.00	16.00	11.01	NAP
3 OCT 1978	VIRGINIA	1130.00	154.00	0.00	1.00	1.00	ISA	4117.00
	ILLINOIS	1330.00	22.50	0.00	4.00	1.00	10.10	4308.00
4 OCT 1978	WHITEFAGL	1330.00	113.50	0.00	6.00	3.00	10.24	4120.00
	OXFORD OH	2130.00	73.50	0.00	6.50	NAP	10.31	4323.00
5 OCT 1978	ITHACA	1300.00	41.00	3+4.00	14.00	6.00	10.25	4508.00
	PENN STATE	1300.00	164.00	0.00	3.30	1.00	10.09	4410.00
	ILLINOIS	1530.00	50.00	0.00	1.10	2.00	ISA	4508.00
6 OCT 1978	WHITEFACE	1830.00	53.00	0.00	15.00	20.00	10.24	4616.00
	PENN STATE	1330.00	24.50	0.00	.10	2.00	10.17	4610.00
	VIRGINIA	2030.00	81.70	0.00	8.00	14.00	12.27	4606.00
	BROOKHAVEN	1730.00	116.00	0.00	6.00	NAP	11.39	NAP
8 OCT 1978	ITHACA	1300.00	96.10	0.00	7.00	4.00	10.25	4821.00
	PENN STATE	1330.00	72.00	0.00	.10	6.00	10.17	4820.00
	BROOKHAVEN	1530.00	70.00	0.00	1.00	5.00	ISA	NAP
10 OCT 1978	ILLINOIS	1900.00	122.50	0.00	.50	2.00	ISA	5017.00
11 OCT 1978	ILLINOIS	1300.00	19.00	0.00	14.10	4.00	11.03	5111.00
12 OCT 1978	PENN STATE	1300.00	71.50	0.00	.30	4.00	10.17	5209.00
	OXFORD OH	2030.00	191.50	0.00	6.30	6.00	10.31	5119.00
13 OCT 1978	ILLINOIS	0100.00	56.00	0.00	1.50	6.00	11.33	5304.00

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		Z	HOURS	HOURS	HOURS		40.00	
14 OCT 1978	PENN STATE	1730.00	52.00	0.00	12.00	10.00	10.10	5413.00
	ILLINOIS	1300.00	16.00	0.00	1.90	1.00	ISA	5409.00
	BROOKHAVEN	1830.00	123.00	0.00	6.00	1.00	11.09	NAP
	OXFORD OH	1430.00	42.50	0.00	16.30	17.00	10.31	5312.00
15 OCT 1978	ITHACA	1600.00	147.00	0.00	28.00	3.00	10.25	5504.00
	LEWES DE	1600.00	308.50	0.00	8.00	6.00	11.01	NAP
16 OCT 1978	WHITEFACE	1830.00	240.00	0.00	44.00	51.00	10.24	5422.00
17 OCT 1978	PENN STATE	1300.00	67.50	0.00	7.40	15.00	10.20	5703.00
	VIRGINIA	1400.00	257.50	0.00	.50	14.00	ISA	5212.00
	LEWES DE	1430.00	46.50	0.00	NAP	NAP	11.31	NAP
19 OCT 1978	VIRGINIA	2200.00	56.00	0.00	2.00	NAP	ISA	5913.00
20 OCT 1978	WHITEFACE	1430.00	92.00	0.00	9.00	6.00	11.14	5923.00
	ITHACA	1600.00	74.00	46.00	8.00	7.00	10.25	6008.00
	PENN STATE	1330.00	72.00	0.00	.10	3.00	11.02	6008.00
	BROOKHAVEN	1500.00	140.50	0.00	2.50	5.00	11.09	6011.00
23 OCT 1978	ILLINOIS	1900.00	222.00	0.00	NAP	3.00	ISA	NAP
24 OCT 1978	WHITEFACE	1230.00	94.00	3.00	6.00	4.00	11.14	6322.00
	ITHACA	1600.00	96.00	0.00	7.00	3.00	11.14	6321.00
	PENN STATE	1300.00	95.50	0.00	.50	4.00	11.02	6322.00
	BROOKHAVEN	1300.00	94.00	0.00	1.00	1.00	ISA	6401.00
	OXFORD OH	1730.00	237.00	0.00	6.00	11.00	12.13	6322.00
25 OCT 1978	LEWES DE	1500.00	192.50	0.00	NAP	NAP	12.29	NAP
26 OCT 1978	ILLINOIS	1930.00	71.50	0.00	11.90	25.00	11.03	6602.00

T I M E
 R V D
 S A M P L E
 D O W N T I M E
 P R E C
 L I O P E N
 A R R D A T E
 Q C / P E C O D

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NSC MEANS NO SAMPLE COLLECTED
ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
NAP MEANS NO ANALYSIS PERFORMED
YOE MEANS MALFUNCTION OR OPERATOR ERROR
POC MEANS REJECTED--POB. CONTAMINATION

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DATA FROM 6 NOV 1978 TO 30 NOV 1978

		Z	HOURS	HOURS	HOURS		NO. DA	
6 NOV 1978	LEWES DE	1900.00	292.00	0.00	6.00	2.00	12.29	4619.00
7 NOV 1978	ILLINOIS	1730.00	254.00	0.00	12.00	2.00	11.28	4703.00
8 NOV 1978	WHITEFACE	1800.00	214.00	0.00	8.00	17.00	11.14	4806.00
	ITHACA	1400.00	287.00	0.00	4.00	2.00	11.14	4801.00
	PENN STATE	1430.00	289.50	0.00	7.20	6.00	11.21	4800.00
9 NOV 1978	LEWES DE	1430.00	67.50	0.00	18.00	14.00	12.29	4814.00
14 NOV 1978	PENN STATE	1400.00	143.50	0.00	.90	10.00	11.21	5405.00
	VIRGINIA	1300.00	615.00	0.00	14.50	NAP	12.27	5314.00
	ILLINOIS	1700.00	167.50	0.00	11.50	5.00	11.28	5409.00
15 NOV 1978	PENN STATE	1330.00	23.50	0.00	1.90	5.00	11.21	5421.00
	ILLINOIS	1630.00	23.50	0.00	1.00	2.00	11.28	5514.00
16 NOV 1978	WHITEFACE	1700.00	191.00	0.00	12.30	17.30	11.28	5423.00
	BROOKHAVEN	1630.00	481.00	0.00	9.70	8.00	1.12	NAP
17 NOV 1978	ILLINOIS	1830.00	50.00	0.00	11.30	1.00	11.28	5716.00
	LEWES DE	1500.00	192.50	0.00	NAP	NAP	12.29	NAP
18 NOV 1978	PENN STATE	1630.00	75.00	0.00	9.60	9.00	11.27	5802.00
	BROOKHAVEN	1330.00	45.00	0.00	10.80	4.00	1.12	NAP
	OXFORD OH	1500.00	528.00	0.00	25.00	NAP	12.13	5612.00
19 NOV 1978	ITHACA	2200.00	272.00	0.00	7.00	3.00	12.07	5921.00
21 NOV 1978	WHITEFACE	2000.00	51.00	0.00	19.00	23.00	11.28	5823.00
	VIRGINIA	1400.00	159.00	0.00	58.50	NAP	12.27	5808.00
22 NOV 1978	ITHACA	1300.00	53.00	0.00	11.00	7.00	12.07	6121.00
23 NOV 1978	ILLINOIS	2030.00	146.00	0.00	8.00	40.00	12.27	6306.00

DATA FROM 5 NOV 1978 TO 30 NOV 1978 (CONT.)

		Z	HOURS	HOURS	HOURS		10.00	
24 NOV 1978	PENN STATE	1330.00	141.00	0.00	4.70	MOE	12.04	6410.00
	BROOKHAVEN	1700.00	147.50	0.00	8.50	3.00	1.12	NAP
26 NOV 1978	ITHACA	1600.00	99.00	0.00	21.00	6.00	12.07	6506.00
	VIRGINIA	100.00	107.00	0.00	4.00	2.00	12.27	6320.00
	LEXES DE	1730.00	218.50	3.00	NAP	NAP	12.29	NAP
27 NOV 1978	ILLINOIS	1630.00	92.00	0.00	23.80	6.00	12.27	6714.00
28 NOV 1978	ITHACA	2000.00	52.00	0.00	39.00	9.00	12.07	6817.00
	VIRGINIA	1430.00	61.50	0.00	12.00	2.00	12.27	6797.00
	BROOKHAVEN	1500.00	94.00	0.00	10.00	1.00	1.12	NAP
	OXFORD OH	2000.00	245.00	3.00	25.00	NAP	12.13	6719.00
29 NOV 1978	PENN STATE	1500.00	121.50	0.00	7.30	MOE	12.11	6814.00
	LEXES DE	1400.00	68.50	0.00	45.00	8.00	12.29	NAP
30 NOV 1978	PENN STATE	2000.00	29.00	3.00	.70	MOE	12.11	7000.00
	BROOKHAVEN	1500.00	45.00	0.00	8.20	2.00	1.12	NAP
	LEXES DE	1530.00	25.50	0.00	6.00	4.00	12.29	NAP

NSD MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPD MEANS REJECTED--PROB. CONTAMINATION

DEC 1978

The figure consists of six line graphs arranged in two rows of three. Each graph plots the percentage of time spent in a specific state (represented by a letter) over time. The states are: T, I, M, R, V, D, S, A, P, N, J, W, E, L, O, P, R, A, C, G. The graphs show the following patterns:

- Graph 1 (top left): Shows a sequence of states T, I, M, R, V, D, with a peak in D.
- Graph 2 (top middle): Shows a sequence of states S, A, P, N, J, W, E, with a peak in E.
- Graph 3 (top right): Shows a sequence of states D, J, W, E, L, O, P, R, A, C, G, with a peak in E.
- Graph 4 (bottom left): Shows a sequence of states T, I, M, R, V, D, with a peak in D.
- Graph 5 (bottom middle): Shows a sequence of states S, A, P, N, J, W, E, with a peak in E.
- Graph 6 (bottom right): Shows a sequence of states D, J, W, E, L, O, P, R, A, C, G, with a peak in E.

		Z	HOURS	HOURS	HOURS		MO.DA	
2 DEC 1978	VIRGINIA	1400.00	95.50	0.00	7.00	NAP	12.27	7003.00
4 DEC 1978	ITHACA	1900.00	143.00	0.00	10.00	9.00	12.21	4320.00
	OXFORD OH	2130.00	145.50	0.00	23.00	11.00	12.13	4406.00
5 DEC 1978	PENN STATE	1400.00	114.00	0.00	11.50	MOE	12.11	4414.00
	ILLINOIS	1800.00	193.50	0.00	15.80	1.00	12.27	4308.00
	BROOKHAVEN	1630.00	121.50	0.00	13.20	5.00	1.12	NAP
6 DEC 1978	WHITEFACE	1530.00	355.50	0.00	44.00	NAP	12.20	4606.00
	LEWES DE	1400.00	142.50	0.00	25.00	27.00	12.29	4400.00
7 DEC 1978	VIRGINIA	1300.00	119.00	0.00	35.50	NAP	3.14	4509.00
9 DEC 1978	ITHACA	1400.00	115.00	0.00	12.00	2.00	12.21	4907.00
	OXFORD OH	2100.00	119.50	0.00	39.00	35.00	2.01	4903.00
11 DEC 1978	PENN STATE	1600.00	122.00	0.00	21.80	72.00	12.28	4922.00
	ILLINOIS	2200.00	148.00	0.00	16.20	2.00	12.27	4800.00
	BROOKHAVEN	1530.00	143.00	0.00	27.70	6.00	1.12	NAP
	LEWES DE	1500.00	121.00	0.00	NAP	NAP	1.17	NAP
12 DEC 1978	WHITEFACE	1630.00	147.00	0.00	13.00	NAP	1.12	5011.00
	ITHACA	1600.00	74.00	0.00	4.00	5.00	12.21	5001.00
	VIRGINIA	1400.00	121.00	0.00	12.50	NAP	3.14	4922.00
17 DEC 1978	PENN STATE	1500.00	157.00	0.00	2.40	10.00	12.22	5712.00
	BROOKHAVEN	1700.00	145.50	0.00	5.10	2.00	1.12	NAP
	OXFORD OH	1600.00	187.00	0.00	4.00	1.00	ISA	5621.00
19 DEC 1978	ITHACA	1700.00	169.00	0.00	12.00	4.00	1.12	5914.00
	ILLINOIS	1730.00	189.50	0.00	1.50	4.00	ISA	5914.00

DATA FROM 2 DEC 1978 TO 23 DEC 1978 (CONT.)

		Z	HOURS	HOURS	HOURS		40.0A	
21 DEC 1978	ITHACA	1400.00	45.00	0.00	8.00	5.00	1.12	6106.00
	VIRGINIA	1700.00	219.00	0.00	3.00	NAP	3.14	6010.00
	BROOKHAVEN	1600.00	95.00	0.00	15.10	1.00	1.12	NAP
	LEWES DE	2000.00	245.00	0.00	NAP	10.00	1.17	NAP
	OXFORD OH	2030.00	100.50	0.00	18.80	1.00	2.01	6023.00
22 DEC 1978	PENN STATE	1430.00	119.50	0.00	6.40	40.00	1.08	6106.00
25 DEC 1978	BROOKHAVEN	1930.00	99.50	0.00	12.60	1.00	1.12	NAP
26 DEC 1978	WHITEFACE	1430.00	332.00	0.00	71.00	NAP	1.12	6605.00
	VIRGINIA	1430.00	117.50	0.00	15.50	NAP	3.14	6508.00
27 DEC 1978	LEWES DE	1630.00	140.50	0.00	14.00	10.00	1.17	NAP
	OXFORD OH	1730.00	141.00	0.00	10.00	36.00	2.01	6405.00
28 DEC 1978	ILLINOIS	2100.00	219.50	0.00	ISA	NAP	ISA	ISA

NSD MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MCE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 JAN 1979 TO 31 JAN 1979

		<div> <div> <div>E</div> <div>M</div> <div>I</div> <div>T</div> </div> <div> <div>D</div> <div>V</div> <div>M</div> <div>R</div> </div> </div>	<div> <div> <div>E</div> <div>M</div> <div>I</div> <div>T</div> </div> <div> <div>P</div> <div>A</div> <div>M</div> <div>S</div> </div> </div>	<div> <div> <div>N</div> <div>H</div> <div>O</div> <div>D</div> </div> <div> <div>E</div> <div>M</div> <div>I</div> <div>T</div> </div> </div>	<div> <div> <div>C</div> <div>E</div> <div>R</div> <div>P</div> </div> <div> <div>E</div> <div>M</div> <div>I</div> <div>T</div> </div> </div>	<div> <div> <div>P</div> <div>E</div> <div>N</div> <div>O</div> </div> <div> <div>I</div> <div>D</div> <div>L</div> </div> </div>	<div> <div> <div>E</div> <div>A</div> <div>T</div> <div>J</div> </div> <div> <div>R</div> <div>K</div> <div>A</div> </div> </div>	<div> <div> <div>E</div> <div>O</div> <div>D</div> <div>C</div> </div> <div> <div>P</div> <div>E</div> <div>C</div> <div>Q</div> </div> </div>
		Z	HOURS	HOURS	HOURS		NO. DA	
2 JAN 1979	WHITEFACE	1800.00	171.50	0.00	22.00	NAP	1.22	4218.00
	ITHACA	1700.00	291.00	0.00	53.00	8.00	1.12	4205.00
3 JAN 1979	BROOKHAVEN	1800.00	214.50	0.00	24.10	17.00	1.12	NAP
	LEWES DE	1600.00	94.00	0.00	40.30	14.00	2.01	NAP
	OXFORD OH	1730.00	158.00	0.00	53.50	67.00	2.01	4121.00
4 JAN 1979	PENN STATE	1800.00	315.50	0.00	47.70	74.00	1.16	4221.00
	ILLINOIS	2100.00	144.00	0.00	95.50	2.00	3.05	4206.00
5 JAN 1979	ITHACA	1300.00	78.00	0.00	4.00	5.00	1.12	4502.00
	VIRGINIA	1700.00	242.50	0.00	61.00	NAP	3.14	4218.00
9 JAN 1979	WHITEFACE	1330.00	153.50	0.00	34.00	261.00	2.05	4818.00
	ITHACA	1200.00	95.00	0.00	30.00	6.00	2.09	4902.00
	PENN STATE	1330.00	115.50	0.00	29.60	21.00	1.16	4812.00
	VIRGINIA	1400.00	93.00	0.00	25.00	NAP	3.14	4805.00
	BROOKHAVEN	1600.00	140.50	0.00	12.50	10.00	2.12	4819.00
	LEWES DE	2000.00	315.50	0.00	32.00	13.00	2.01	NAP
	OXFORD OH	1530.00	142.00	0.00	22.00	43.00	2.01	4801.00
15 JAN 1979	WHITEFACE	1400.00	144.50	0.00	20.00	NAP	2.05	5421.00
	ITHACA	1400.00	146.00	0.00	12.00	4.00	2.09	5502.00
	PENN STATE	1630.00	58.50	0.00	17.00	318.00	1.16	5415.00
	BROOKHAVEN	1430.00	142.50	0.00	15.50	4.00	2.12	5412.00
16 JAN 1979	VIRGINIA	1400.00	168.00	0.00	22.50	NAP	3.14	5319.00
	LEWES DE	1500.00	153.00	0.00	40.00	31.00	2.01	NAP
	OXFORD OH	1500.00	157.50	0.00	NAP	378.00	2.01	NAP

DATA FROM 2 JAN 1979 TO 31 JAN 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		MO. DA	
18 JAN 1979	PENN STATE	1400.00	59.50	0.00	6.50	2.00	1.24	5721.00
	BROOKHAVEN	1630.00	74.00	0.00	4.20	1.00	2.12	5818.00
19 JAN 1979	WHITEFACE	1900.00	100.00	0.00	NAP	NAP	2.05	5915.00
21 JAN 1979	BROOKHAVEN	2230.00	78.00	0.00	NAP	NAP	2.12	NAP
22 JAN 1979	PENN STATE	1530.00	97.50	0.00	19.80	5.00	1.29	6113.00
	BROOKHAVEN	1530.00	17.00	0.00	NAP	NAP	2.12	6211.00
	OXFORD OH	2100.00	150.00	0.00	40.00	96.00	3.13	6203.00
23 JAN 1979	VIRGINIA	1300.00	167.00	0.00	36.50	NAP	3.14	6115.00
	LEWES DE	1700.00	170.00	0.00	26.00	18.00	2.01	NAP
25 JAN 1979	PENN STATE	1400.00	70.50	0.00	14.80	318.00	2.05	6502.00
	BROOKHAVEN	1430.00	71.00	0.00	10.80	4.00	2.12	NAP
26 JAN 1979	ITHACA	1800.00	96.00	172.00	42.00	NAP	2.09	NAP
	PENN STATE	1600.00	50.00	0.00	4.00	9.00	2.05	6602.00
	LEWES DE	1600.00	71.00	NAP	16.00	7.00	3.08	6399.00
27 JAN 1979	VIRGINIA	1530.00	98.50	0.00	12.00	NAP	3.14	6420.00
28 JAN 1979	BROOKHAVEN	1500.00	72.50	0.00	1.00	1.00	2.12	NAP
	OXFORD OH	1830.00	141.50	0.00	3.00	120.00	3.13	6415.00
29 JAN 1979	ITHACA	1200.00	66.00	0.00	NAP	NAP	3.06	6899.00
30 JAN 1979	VIRGINIA	1430.00	71.00	0.00	6.00	NAP	3.14	6811.00
31 JAN 1979	LEWES DE	2100.00	167.00	0.00	12.00	12.00	3.08	6799.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 FEB 1979 TO 28 FEB 1979

		Z	HOURS	HOURS	HOURS	10.0A	
2 FEB 1979	OXFORD OH	2300.00	124.50	0.00	NAP	57.00	3.13 4299.00
4 FEB 1979	ITHACA	2000.00	152.00	0.00	NAP	NAP	3.06 4499.00
5 FEB 1979	WHITEFACE	1700.00	647.00	0.00	65.00	NAP	2.21 5516.00
6 FEB 1979	VIRGINIA	1330.00	157.00	0.00	3.00	NAP	ISA 4316.00
8 FEB 1979	PENN STATE	1400.00	310.00	0.00	11.40	36.00	2.21 4801.00
	BROOKHAVEN	1500.00	254.00	0.00	18.40	1.00	3.22 4811.00
9 FEB 1979	ITHACA	1200.00	112.00	0.00	4.00	NAP	3.06 4800.00
	LEWES DE	2000.00	215.00	0.00	NAP	NAP	3.08 4799.00
	OXFORD OH	1600.00	161.00	0.00	36.00	80.00	3.13 4900.00
13 FEB 1979	PENN STATE	1330.00	119.50	0.00	12.90	21.00	2.26 5303.00
	VIRGINIA	1400.00	158.50	0.00	10.50	NAP	4.11 5222.00
	OXFORD OH	1600.00	96.00	0.00	8.30	138.00	3.13 5218.00
14 FEB 1979	LEWES DE	1500.00	115.00	0.00	NAP	NAP	3.08 5299.00
16 FEB 1979	WHITEFACE	1400.00	251.00	0.00	7.00	NAP	3.12 4818.00
	PENN STATE	1500.00	73.50	0.00	17.00	18.00	3.02 5614.00
	BROOKHAVEN	1730.00	194.50	0.00	19.10	1.00	3.22 5609.00
17 FEB 1979	OXFORD OH	1800.00	98.00	0.00	4.30	317.00	3.13 5419.00
19 FEB 1979	ITHACA	1400.00	242.00	0.00	NAP	NAP	3.06 5899.00
	OXFORD OH	1600.00	46.00	0.00	5.50	NAP	3.13 5721.00
20 FEB 1979	PENN STATE	2030.00	101.50	0.00	5.80	45.00	3.02 MOE
22 FEB 1979	PENN STATE	1430.00	42.00	0.00	MOE	143.00	3.02 MOE
	BROOKHAVEN	1600.00	142.50	0.00	6.00	1.00	3.22 6123.00
	LEWES DE	1900.00	136.00	0.00	MOE	NAP	3.08 NAP

R V G
 S A M F
 D H N
 P E C
 L I O
 A R
 Q C P

2	HOURS	HOURS	HOURS	40.0A
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		Z	HOURS	HOURS	HOURS		MO.DA	
1 MAR 1979	ILLINOIS	2130.00	29.50	1291.00	16.30	25.00	3.20	4110.00
2 MAR 1979	PENN STATE	1000.00	71.50	0.00	3.00	3.00	3.13	4203.00
	OXFORD OH	1500.00	73.00	0.00	.30	22.00	3.13	4207.00
3 MAR 1979	VIRGINIA	2359.00	74.50	0.00	5.00	NAP	4.11	4120.00
4 MAR 1979	ILLINOIS	1800.00	60.50	0.00	22.20	4.00	3.20	4410.00
5 MAR 1979	OXFORD OH	1930.00	76.50	0.00	16.80	30.00	3.13	4413.00
6 MAR 1979	ITHACA	1700.00	145.00	0.00	42.00	NAP	4.05	4522.00
	PENN STATE	1400.00	92.00	0.00	30.50	NAP	3.13	4605.00
7 MAR 1979	VIRGINIA	1500.00	87.00	0.00	21.00	NAP	4.11	4601.00
	LEWES DE	1500.00	166.00	0.00	5.00	NAP	5.18	4639.00
8 MAR 1979	WHITEFACE	1630.00	180.50	0.00	29.00	NAP	3.27	4714.00
	ILLINOIS	2030.00	98.50	0.00	6.30	3.00	3.20	4800.00
10 MAR 1979	VIRGINIA	1530.00	72.50	0.00	1.50	10.00	6.25	4820.00
	ILLINOIS	1530.00	43.00	0.00	ISA	ISA	ISA	ISA
11 MAR 1979	BROOKHAVEN	2000.00	287.50	NAP	13.10	2.00	3.22	5105.00
	OXFORD OH	1930.00	144.00	0.00	.50	20.00	4.21	5005.00
12 MAR 1979	PENN STATE	1400.00	144.00	0.00	5.30	2.00	3.22	5022.00
	LEWES DE	1530.00	120.50	0.00	8.00	3.00	5.18	5199.00
14 MAR 1979	OXFORD OH	2130.00	74.00	0.00	12.30	7.00	4.21	5406.00
15 MAR 1979	WHITEFACE	1700.00	168.50	0.00	15.00	NAP	3.27	5506.00
	ITHACA	1400.00	213.00	0.00	6.00	5.00	4.05	5499.00
	PENN STATE	1500.00	73.00	0.00	3.30	5.00	3.22	5415.00
	ILLINOIS	1600.00	120.50	0.00	ISA	1.00	ISA	ISA

DATA FROM 1 MAR 1979 TO 30 MAR 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		MO.DA	
	BROOKHAVEN	1500.00	91.00	0.00	3.10	2.00	3.22	5421.00
	LEWES DE	1500.00	71.50	0.00	6.00	6.00	5.18	5418.00
18 MAR 1979	ILLINOIS	1630.00	72.50	0.00	ISA	10.00	ISA	ISA
19 MAR 1979	ILLINOIS	2030.00	28.00	0.00	4.50	2.00	4.02	5911.00
20 MAR 1979	ILLINOIS	2030.00	24.00	0.00	ISA	11.00	ISA	ISA
21 MAR 1979	OXFORD OH	1630.00	163.00	0.00	1.80	8.00	4.21	6005.00
24 MAR 1979	ILLINOIS	1830.00	94.00	0.00	32.30	3.00	4.02	6415.00
25 MAR 1979	ILLINOIS	1600.00	21.50	0.00	ISA	NAP	ISA	ISA
	BROOKHAVEN	1700.00	242.00	0.00	3.30	2.00	4.25	6506.00
26 MAR 1979	PENN STATE	1530.00	264.50	0.00	14.80	10.00	4.03	6517.00
	LEWES DE	1400.00	263.00	0.00	12.00	11.00	5.18	6699.00
	OXFORD OH	1730.00	121.00	0.00	72.00	145.00	4.21	6523.00
27 MAR 1979	ITHACA	1200.00	286.00	0.00	16.00	6.00	4.05	6605.00
	VIRGINIA	1700.00	391.50	18.00	26.00	0.00	6.25	6520.00
28 MAR 1979	WHITEFACE	2000.00	315.00	0.00	16.00	NAP	4.11	6618.00
29 MAR 1979	ITHACA	1600.00	52.00	0.00	8.00	2.00	4.05	6910.00
	BROOKHAVEN	1830.00	97.50	0.00	4.60	2.00	4.25	6915.00
30 MAR 1979	ILLINOIS	1530.00	119.50	0.00	123.00	4.00	4.21	7016.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 APR 1979 TO 30 APR 1979 (CONT.)

	Z	HOURS	HOURS	HOURS	L	NO. DA	
PENN STATE	1430.00	92.00	0.00	8.80	19.00	4.26	5716.00
VIRGINIA	1300.00	160.00	0.00	21.50	8.00	6.25	5405.00
ILLINOIS	1630.00	92.00	0.00	.10	1.00	ISA	5417.00
BROOKHAVEN	1630.00	23.00	0.00	8.60	4.00	4.25	5705.00
19 APR 1979 WHITEFACE	1730.00	219.50	0.00	30.00	23.00	5.01	5622.00
22 APR 1979 ILLINOIS	1430.00	118.00	0.00	3.10	1.00	5.07	6115.00
OXFORD OH	1500.00	217.00	0.00	4.00	85.00	5.30	6203.00
24 APR 1979 VIRGINIA	1300.00	168.00	0.00	2.50	7.00	6.25	6300.00
ILLINOIS	1630.00	50.00	0.00	19.60	3.00	5.07	6416.00
25 APR 1979 ILLINOIS	1630.00	24.00	0.00	23.80	21.00	5.07	6516.00
26 APR 1979 ILLINOIS	2130.00	29.00	0.00	3.50	3.00	5.07	6612.00
27 APR 1979 BROOKHAVEN	1500.00	238.50	0.00	16.40	7.00	6.13	6715.00
28 APR 1979 PENN STATE	1900.00	268.50	0.00	19.00	8.00	5.08	6717.00
ILLINOIS	1300.00	44.50	0.00	4.00	NAP	5.07	6720.00
OXFORD OH	1700.00	146.00	0.00	2.00	45.00	5.30	6803.00
29 APR 1979 BROOKHAVEN	1600.00	49.00	0.00	5.60	5.00	6.13	6905.00
30 APR 1979 VIRGINIA	1730.00	149.50	0.00	7.00	15.00	6.25	6621.00
ILLINOIS	1900.00	49.00	0.00	22.50	8.00	ISA	6921.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 MAY 1979 TO 31 MAY 1979

		Z	HOURS	HOURS	HOURS		MO. DA	
1 MAY 1979	WHITEFACE	2030.00	291.00	0.00	20.00	NAP	5.17	4110.00
	ITHACA	1200.00	332.00	0.00	6.00	2.00	5.08	6903.00
4 MAY 1979	ILLINOIS	1600.00	93.00	0.00	13.40	2.00	5.22	4307.00
	BROOKHAVEN	1430.00	118.50	0.00	19.10	7.00	6.13	4406.00
5 MAY 1979	PENN STATE	1500.00	164.00	0.00	7.80	40.00	5.30	4501.00
	OXFORD OH	2000.00	171.00	0.00	42.00	183.00	5.30	4423.00
7 MAY 1979	ITHACA	1200.00	144.00	0.00	4.00	4.00	6.04	4518.00
	VIRGINIA	1730.00	168.00	0.00	15.50	NAP	7.23	4511.00
9 MAY 1979	WHITEFACE	1800.00	183.50	0.00	17.00	17.00	5.17	4412.00
11 MAY 1979	ITHACA	1400.00	98.00	0.00	1.00	2.00	6.04	5021.00
	PENN STATE	1830.00	147.50	0.00	1.80	12.00	5.30	5108.00
13 MAY 1979	ILLINOIS	1300.00	213.00	0.00	26.30	17.00	5.22	5213.00
	OXFORD OH	1630.00	188.50	0.00	6.80	755.00	ISA	5222.00
14 MAY 1979	ITHACA	1200.00	70.00	0.00	2.00	2.00	6.04	5314.00
	PENN STATE	1400.00	67.50	0.00	2.10	NAP	5.30	5312.00
	ILLINOIS	1930.00	54.50	0.00	.50	4.00	ISA	5321.00
	BROOKHAVEN	1500.00	240.50	0.00	13.50	4.00	6.13	5408.00
15 MAY 1979	VIRGINIA	2100.00	195.50	0.00	19.00	NAP	7.23	5412.00
	ILLINOIS	1500.00	19.50	0.00	5.90	26.00	5.22	5502.00
	BROOKHAVEN	1430.00	23.50	0.00	18.90	2.00	6.13	5507.00
16 MAY 1979	ITHACA	1400.00	50.00	0.00	4.00	3.00	6.04	5600.00
	PENN STATE	2030.00	54.00	0.00	1.20	NAP	5.30	5601.00
	VIRGINIA	1300.00	16.00	0.00	1.50	NAP	7.23	5523.00

DATA FROM 1 MAY 1979 TO 31 MAY 1979 (CONT.)

		TIME T	TIME S	TIME D	TIME P	TIME L	TIME A	TIME Q
		Z	HOURS	HOURS	HOURS		MOJA	
18 MAY 1979	WHITEFACE	2000.00	218.00	0.00	8.00	9.00	6.12	5316.00
19 MAY 1979	BROOKHAVEN	1630.00	100.00	0.00	8.40	7.00	6.13	5914.00
22 MAY 1979	ITHACA	1400.00	144.00	0.00	2.00	MOE	MOE	6118.00
	PENN STATE	1700.00	140.50	0.00	2.40	20.00	5.30	6114.00
	VIRGINIA	1330.00	144.50	0.00	6.00	NAP	7.23	6001.00
24 MAY 1979	PENN STATE	1600.00	47.00	0.00	23.40	8.00	6.11	6413.00
	BROOKHAVEN	1400.00	115.50	0.00	10.10	6.00	6.13	6412.00
25 MAY 1979	BROOKHAVEN	1330.00	28.50	0.00	5.60	3.00	6.13	6513.00
26 MAY 1979	OXFORD OH	2230.00	318.00	0.00	20.80	249.00	7.24	6520.00
28 MAY 1979	OXFORD OH	1630.00	42.00	0.00	11.80	91.00	7.24	6713.00
29 MAY 1979	ITHACA	1200.00	166.00	0.00	34.00	NAP	6.04	NAP
	VIRGINIA	1330.00	72.00	0.00	16.00	NAP	7.23	6509.00
	ILLINOIS	1600.00	337.00	0.00	8.80	1.00	6.19	6714.00
	BROOKHAVEN	1330.00	91.00	0.00	NAP	1.00	6.13	6911.00
	LEWIS DE	1630.00	NAP	1000.00	NAP	NAP	7.02	NAP
30 MAY 1979	PENN STATE	1530.00	143.50	0.00	13.20	52.00	6.11	7006.00
	BROOKHAVEN	1330.00	24.00	0.00	2.50	1.00	6.13	7010.00
	LEWIS DE	1700.00	24.50	0.00	NAP	NAP	7.02	NAP
31 MAY 1979	WHITEFACE	1330.00	305.50	0.00	60.00	19.00	6.12	7020.00
	PENN STATE	1400.00	22.50	0.00	2.20	10.00	6.11	7102.00
	BROOKHAVEN	1500.00	25.50	0.00	.30	NAP	6.13	7106.00

NSC MEANS NO SAMPLE COLLECTED
ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
NAP MEANS NO ANALYSIS PERFORMED
MOE MEANS MALFUNCTION OF OPERATOR REPORT
PDE MEANS RESULTED--PROB. CONTAMINATION

DATA FROM 1 JUN 1979 TO 30 JUN 1979

		Z	HOURS	HOURS	HOURS		MO. DA	
1 JUN 1979	LEWES DE	2000.00	51.00	0.00	NAP	NAP	7.02	NAP
2 JUN 1979	VIRGINIA	1500.00	73.50	0.00	10.50	NAP	7.23	4108.00
4 JUN 1979	PENN STATE	1330.00	95.50	0.00	9.50	21.00	6.11	4411.00
5 JUN 1979	VIRGINIA	1700.00	74.00	0.00	28.50	NAP	7.23	4404.00
	BROOKHAVEN	1400.00	121.00	0.00	.30	1.00	6.13	4422.00
	LEWES DE	1630.00	92.50	0.00	NAP	NAP	7.02	NAP
6 JUN 1979	PENN STATE	1330.00	43.00	0.00	.40	4.00	ISA	4523.00
	BROOKHAVEN	1300.00	23.00	0.00	1.30	1.00	6.13	4601.00
7 JUN 1979	PENN STATE	1530.00	26.00	0.00	.60	1.00	ISA	4614.00
8 JUN 1979	OXFORD OH	1630.00	264.00	0.00	5.30	111.00	7.24	4723.00
9 JUN 1979	PENN STATE	1630.00	49.00	0.00	2.10	19.00	6.26	4900.00
	ILLINOIS	1630.00	264.50	0.00	12.00	25.00	6.19	4906.00
10 JUN 1979	ITHACA	1200.00	286.00	0.00	3.00	4.00	7.10	4823.00
	VIRGINIA	1800.00	121.00	0.00	4.00	NAP	7.23	4906.00
	ILLINOIS	1830.00	26.00	0.00	.90	1.00	6.19	5014.00
11 JUN 1979	PENN STATE	1730.00	49.00	0.00	1.00	12.00	6.26	5113.00
	OXFORD OH	1930.00	75.00	0.00	.10	3.00	7.24	5020.00
12 JUN 1979	ITHACA	1200.00	46.00	0.00	7.00	7.00	7.10	5117.00
	VIRGINIA	1300.00	43.00	0.00	4.00	NAP	7.23	5103.00
	BROOKHAVEN	1330.00	144.50	0.00	1.60	1.00	ISA	5200.00
	LEWES DE	1530.00	167.00	0.00	NAP	NAP	7.02	NAP
13 JUN 1979	WHITEFACE	1400.00	312.50	0.00	21.00	19.00	6.27	5302.00
14 JUN 1979	ILLINOIS	2000.00	97.50	0.00	1.00	3.00	7.17	5314.00

DATA FROM 1 JUN 1979 TO 30 JUN 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		MO. DA	
14 JUN 1979	PENN STATE	1600.00	166.50	0.00	1.30	3.00	ISA	5816.00
	VIRGINIA	1600.00	147.00	0.00	10.50	NAP	7.23	5712.00
	BROOKHAVEN	1300.00	143.50	0.00	1.60	1.00	9.13	5722.00
19 JUN 1979	LEWES DE	1500.00	167.50	0.00	NAP	NAP	7.02	NAP
	OXFORD OH	2200.00	194.50	0.00	7.00	57.00	7.24	5912.00
21 JUN 1979	ILLINOIS	1530.00	163.50	0.00	1.00	3.00	7.17	6013.00
	OXFORD OH	1430.00	40.50	0.00	11.00	32.00	7.24	6109.00
22 JUN 1979	PENN STATE	1600.00	94.00	0.00	.80	4.00	ISA	6201.00
	OXFORD OH	1500.00	24.50	0.00	.30	4.00	ISA	6214.00
24 JUN 1979	OXFORD OH	1830.00	51.50	0.00	2.50	3.00	7.24	6412.00
25 JUN 1979	ITHACA	1200.00	312.00	0.00	11.00	9.00	7.10	6313.00
	VIRGINIA	1600.00	169.00	0.00	4.50	NAP	9.19	6419.00
26 JUN 1979	WHITEFACE	1300.00	311.00	0.00	20.00	6.00	7.19	6421.00
	LEWES DE	1430.00	167.50	0.00	NAP	NAP	7.02	NAP
28 JUN 1979	PENN STATE	1830.00	146.50	0.00	1.50	2.00	ISA	6815.00
29 JUN 1979	WHITEFACE	1400.00	67.00	0.00	5.00	3.00	7.19	6822.00
	ITHACA	1200.00	96.00	0.00	3.00	NAP	7.10	6822.00
	PENN STATE	1900.00	23.50	0.00	.30	2.00	7.12	6822.00
	ILLINOIS	1630.00	193.00	0.00	1.00	3.00	7.17	6915.00
30 JUN 1979	VIRGINIA	2030.00	124.50	0.00	2.50	NAP	9.19	7019.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 JUL 1979 TO 31 JUL 1979

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		Z	HOURS	HOURS	HOURS		MO.DA	
1 JUL 1979	OXFORD OH	1800.00	167.50	0.00	35.00	107.00	7.24	7013.00
2 JUL 1979	PENN STATE	1330.00	67.50	0.00	5.80	13.00	7.12	4207.00
	ILLINOIS	2000.00	75.50	0.00	1.00	3.00	7.17	7021.00
	BROOKHAVEN	1400.00	337.00	0.00	6.20	4.30	9.13	4102.00
3 JUL 1979	ITHACA	1200.00	96.00	0.00	2.00	NAP	7.10	7004.00
	BROOKHAVEN	1300.00	23.00	0.00	1.00	1.00	9.13	4218.00
	LEWES DE	1630.00	170.00	0.00	NAP	NAP	8.27	NAP
5 JUL 1979	PENN STATE	1330.00	72.00	0.00	3.50	MOE	7.12	4422.00
	BROOKHAVEN	1400.00	49.00	0.00	4.50	2.30	9.13	4501.00
	LEWES DE	1530.00	47.00	0.00	NAP	NAP	8.27	NAP
	OXFORD OH	1930.00	97.50	0.00	16.00	34.00	8.16	4414.00
6 JUL 1979	WHITEFACE	2000.00	170.00	0.00	32.00	MOE	7.19	4522.00
	VIRGINIA	1900.00	142.50	0.00	2.00	NAP	9.19	4417.00
	ILLINOIS	1600.00	92.00	0.00	2.50	4.30	7.17	4406.00
9 JUL 1979	ILLINOIS	1800.00	74.00	0.00	3.50	1.00	7.17	4816.00
	OXFORD OH	2100.00	97.50	0.00	7.90	28.00	8.16	4903.00
10 JUL 1979	OXFORD OH	1700.00	20.00	0.00	7.70	6.00	ISA	5010.00
11 JUL 1979	ITHACA	1200.00	192.00	0.00	1.00	NAP	ISA	5100.00
	PENN STATE	1300.00	115.00	0.00	3.30	6.00	7.27	5016.00
	BROOKHAVEN	1800.00	148.00	0.00	15.00	6.00	9.13	NAP
12 JUL 1979	LEWES DE	1830.00	171.00	0.00	NAP	NAP	8.27	NAP
13 JUL 1979	PENN STATE	1330.00	48.50	0.00	.70	1.00	ISA	5221.00
14 JUL 1979	ILLINOIS	1530.00	117.50	0.00	4.00	5.00	8.06	5408.00

DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		MO. DA	
	OXFORD OH	1630.00	95.50	0.00	29.50	MOE	8.16	5401.00
16 JUL 1979	VIRGINIA	1800.00	239.00	0.00	1.00	NAP	9.19	5501.00
	BROOKHAVEN	1430.00	116.50	0.00	MOE	MOE	ISA	NAP
17 JUL 1979	WHITEFACE	1430.00	258.50	0.00	7.00	3.00	8.03	5607.00
	PENN STATE	1300.00	95.50	0.00	.70	3.00	7.27	5700.00
	LEWES DE	1500.00	116.50	0.00	NAP	NAP	ISA	NAP
18 JUL 1979	ITHACA	1200.00	168.00	0.00	4.00	NAP	7.31	5806.00
19 JUL 1979	LEWES DE	1500.00	48.00	0.00	NAP	NAP	8.27	NAP
20 JUL 1979	PENN STATE	1800.00	76.50	0.00	.30	1.00	7.27	5806.00
21 JUL 1979	VIRGINIA	1700.00	119.00	0.00	6.00	NAP	9.19	6111.00
22 JUL 1979	LEWES DE	1600.00	73.00	0.00	NAP	NAP	8.27	NAP
24 JUL 1979	ITHACA	1600.00	148.00	0.00	5.00	NAP	7.31	6404.00
	PENN STATE	1300.00	91.00	0.00	1.80	1.00	8.10	6322.00
	LEWES DE	1630.00	48.50	0.00	NAP	NAP	8.27	NAP
25 JUL 1979	PENN STATE	1330.00	24.50	0.00	1.40	2.00	8.10	6509.00
	ILLINOIS	2300.00	77.00	0.00	5.80	21.00	8.06	6507.00
	BROOKHAVEN	1430.00	216.00	0.00	1.30	1.00	ISA	6417.00
	LEWES DE	1530.00	23.00	0.00	NAP	NAP	8.27	NAP
26 JUL 1979	PENN STATE	1330.00	24.00	0.00	.80	NAP	8.10	6602.00
	VIRGINIA	2130.00	124.50	0.00	12.00	NAP	9.19	6612.00
	BROOKHAVEN	1500.00	24.50	0.00	1.80	2.00	ISA	6518.00
	OXFORD OH	2230.00	294.00	0.00	67.50	MOE	8.16	6616.00
27 JUL 1979	ITHACA	1100.00	67.00	0.00	8.00	NAP	7.31	6702.00

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DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		Z	HOURS	HOURS	HOURS	L	MO. OA	
	BROOKHAVEN	1330.00	22.50	0.00	2.00	2.00	9.13	6703.00
29 JUL 1979	PENN STATE	2300.00	81.50	0.00	5.60	28.00	8.10	6918.00
	OXFORD OH	2030.00	70.00	0.00	21.00	MOE	8.16	6802.00
30 JUL 1979	WHITEFACE	2000.00	317.50	0.00	8.00	9.30	8.03	6712.00
	BROOKHAVEN	1330.00	72.00	0.00	5.80	2.00	9.13	7009.00
	LEWES DE	1430.00	119.00	0.00	NAP	NAP	MOE	NAP
	OXFORD OH	2130.00	25.00	0.00	.10	MOE	ISA	7011.00
31 JUL 1979	ITHACA	1300.00	98.00	0.00	4.00	NAP	9.10	7106.00
	VIRGINIA	1330.00	112.00	0.00	4.00	NAP	9.19	7000.00
	ILLINOIS	1630.00	137.50	0.00	8.00	12.00	8.06	7100.00
	LEWES DE	1930.00	29.00	0.00	NAP	NAP	ISA	NAP

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 AUG 1979 TO 30 AUG 1979

		Z	HOURS	HOURS	HOURS		MO. DA	
1 AUG 1979	ITHACA	1200.00	23.00	0.00	2.00	NAP	9.10	4102.00
	PENN STATE	1730.00	66.50	0.00	1.30	12.00	8.10	4104.00
	ILLINOIS	2100.00	28.50	0.00	15.30	25.00	9.19	4118.00
2 AUG 1979	WHITEFACE	1900.00	71.00	0.00	4.00	NAP	8.20	4119.00
	PENN STATE	1400.00	20.50	0.00	1.00	11.00	8.10	4119.00
	OXFORD OH	1530.00	66.00	0.00	15.70	MOE	8.16	4207.00
3 AUG 1979	ITHACA	1200.00	48.00	0.00	1.00	NAP	9.10	NAP
	PENN STATE	1830.00	28.50	0.00	.50	4.00	ISA	4311.00
	BROOKHAVEN	1430.00	97.00	0.00	.10	1.00	ISA	4219.00
	LEWES DE	1530.00	68.00	0.00	NAP	NAP	8.27	NAP
4 AUG 1979	BROOKHAVEN	1500.00	24.50	0.00	7.10	4.00	9.13	4414.00
5 AUG 1979	BROOKHAVEN	1330.00	22.50	0.00	4.00	1.00	9.13	4418.00
6 AUG 1979	WHITEFACE	1830.00	95.50	0.00	4.00	2.00	8.20	4603.00
	VIRGINIA	1800.00	148.50	0.00	2.00	NAP	9.13	4601.00
7 AUG 1979	BROOKHAVEN	1330.00	48.00	0.00	2.30	2.00	9.13	4711.00
	LEWES DE	1900.00	99.50	0.00	NAP	NAP	8.27	NAP
8 AUG 1979	PENN STATE	1330.00	115.00	0.00	1.00	15.00	9.10	4810.00
10 AUG 1979	BROOKHAVEN	1530.00	74.00	0.00	1.30	1.00	9.13	5013.00
11 AUG 1979	PENN STATE	1930.00	78.00	0.00	9.20	23.00	9.10	5117.00
	BROOKHAVEN	30.00	9.00	0.00	2.60	2.00	9.13	NAP
13 AUG 1979	WHITEFACE	1700.00	166.50	0.00	11.00	2.00	8.20	5021.00
	PENN STATE	1330.00	42.00	0.00	10.80	18.00	9.10	5312.00
	BROOKHAVEN	1500.00	62.50	0.00	36.80	3.00	9.13	5308.00

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		MO. DA	
	LEWES DE	1630.00	141.50	0.00	NAP	NAP	8.27	NAP
14 AUG 1979	ITHACA	1600.00	269.00	0.00	4.00	NAP	9.10	5412.00
	VIRGINIA	1700.00	191.00	0.00	20.00	NAP	9.19	5219.00
15 AUG 1979	PENN STATE	1330.00	43.00	0.00	1.80	6.00	ISA	5514.00
16 AUG 1979	WHITEFACE	1400.00	69.00	0.00	24.00	7.00	9.12	5606.00
	ITHACA	1200.00	44.00	0.00	4.00	NAP	9.10	5603.00
	PENN STATE	1600.00	26.50	0.00	.50	2.00	ISA	5517.00
19 AUG 1979	PENN STATE	1600.00	72.00	0.00	6.40	NAP	9.10	5900.00
	VIRGINIA	2100.00	124.00	0.00	12.50	NAP	9.19	5901.00
	ILLINOIS	1500.00	426.00	0.00	18.00	8.00	9.19	5905.00
	BROOKHAVEN	1330.00	142.50	0.00	16.70	6.00	9.13	5906.00
	OXFORD OH	1630.00	409.00	18.00	MOE	61.00	10.26	5908.00
20 AUG 1979	WHITEFACE	1300.00	95.00	0.00	7.00	9.00	9.12	6009.00
21 AUG 1979	PENN STATE	1630.00	43.50	0.00	2.90	17.00	ISA	6113.00
	ILLINOIS	1500.00	43.00	0.00	61.40	10.00	9.19	6102.00
	OXFORD OH	0.00	31.50	0.00	MOE	51.00	10.26	MOE
22 AUG 1979	LEWES DE	1630.00	216.00	0.00	24.00	NAP	10.15	6199.00
24 AUG 1979	ITHACA	1800.00	78.00	120.00	2.00	NAP	9.10	6411.00
	VIRGINIA	2030.00	119.50	0.00	23.00	NAP	9.19	6120.00
	OXFORD OH	1600.00	83.00	0.00	.30	26.00	10.26	6319.00
25 AUG 1979	BROOKHAVEN	2100.00	151.50	0.00	1.00	1.00	9.13	6513.00
26 AUG 1979	PENN STATE	1830.00	122.00	0.00	1.80	69.00	9.10	6612.00
	LEWES DE	1500.00	94.50	0.00	1.00	NAP	ISA	6599.00

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		MO. DA	
27 AUG 1979	PENN STATE	1630.00	22.00	0.00	2.30	26.00	9.10	6702.00
	VIRGINIA	1430.00	66.00	0.00	4.00	NAP	9.27	6621.00
28 AUG 1979	WHITEFACE	1630.00	147.50	0.00	19.00	12.00	9.12	6716.00
	ITHACA	1800.00	96.00	0.00	2.00	NAP	9.10	6717.00
	VIRGINIA	1700.00	26.50	0.00	.50	NAP	9.27	6718.00
	BROOKHAVEN	1600.00	67.00	0.00	3.70	3.00	9.13	6813.00
	LEWES DE	1630.00	49.50	0.00	2.00	NAP	10.15	6799.00
29 AUG 1979	BROOKHAVEN	1730.00	25.50	0.00	5.30	2.00	9.13	6912.00
30 AUG 1979	WHITEFACE	1400.00	45.50	0.00	7.00	6.00	9.12	7011.00
	PENN STATE	1400.00	69.50	0.00	1.30	8.00	9.10	6921.00
	BROOKHAVEN	1500.00	21.50	0.00	2.00	1.00	ISA	7014.00
	LEWES DE	2000.00	51.50	0.00	5.00	NAP	10.15	6999.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 SEP 1979 TO 30 SEP 1979

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		Z	HOURS	HOURS	HOURS		MO.0A	
2 SEP 1979	BROOKHAVEN	2230.00	79.50	0.00	1.50	1.00	9.13	4217.00
	LEWES DE	1500.00	67.00	0.00	4.00	NAP	10.15	4299.00
3 SEP 1979	ITHACA	1400.00	140.00	0.00	3.00	NAP	9.10	4203.00
	PENN STATE	2130.00	103.50	0.00	5.00	18.00	10.08	4304.00
	LEWES DE	1400.00	23.00	0.00	4.50	NAP	10.15	4399.00
4 SEP 1979	VIRGINIA	1700.00	91.50	76.50	7.00	NAP	9.27	4403.00
	LEWES DE	2130.00	31.50	0.00	.30	NAP	ISA	4499.00
6 SEP 1979	WHITEFACE	1900.00	173.00	0.00	10.00	12.00	10.02	4619.00
	PENN STATE	1600.00	66.50	0.00	12.70	28.00	10.08	4611.00
	BROOKHAVEN	1800.00	91.50	0.00	9.10	5.00	9.13	4616.00
	LEWES DE	2100.00	47.50	0.00	16.00	NAP	10.15	4599.00
7 SEP 1979	ITHACA	1800.00	100.00	0.00	20.00	NAP	10.12	4719.00
	PENN STATE	1930.00	27.50	0.00	1.00	NAP	10.08	4712.00
	VIRGINIA	1630.00	71.50	0.00	2.50	NAP	9.27	4503.00
8 SEP 1979	VIRGINIA	1700.00	24.50	0.00	.50	NAP	9.27	4721.00
10 SEP 1979	WHITEFACE	1700.00	94.00	0.00	5.00	2.00	10.02	4714.00
11 SEP 1979	WHITEFACE	1900.00	26.00	0.00	3.00	3.00	10.02	5102.00
15 SEP 1979	ITHACA	1800.00	192.00	0.00	4.00	NAP	10.12	5419.00
	PENN STATE	1730.00	190.00	0.00	4.30	17.00	10.08	5519.00
	VIRGINIA	1830.00	169.50	0.00	17.00	NAP	9.27	5414.00
	BROOKHAVEN	1500.00	213.00	0.00	1.50	1.00	12.18	5503.00
	LEWES DE	1530.00	210.50	0.00	1.00	NAP	10.17	5499.00
17 SEP 1979	WHITEFACE	1300.00	138.00	0.00	7.00	3.00	10.02	5504.00

DATA FROM 2 SEP 1979 TO 30 SEP 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		MO.00	
20 SEP 1979	PENN STATE	1300.00	115.50	0.00	.30	5.00	ISA	5906.00
21 SEP 1979	WHITEFACE	1530.00	98.50	0.00	9.00	4.00	10.24	5915.00
22 SEP 1979	ITHACA	2000.00	170.00	0.00	3.00	NAP	10.12	6121.00
23 SEP 1979	PENN STATE	1800.00	77.00	0.00	6.10	90.00	10.08	6219.00
	VIRGINIA	1900.00	192.50	0.00	34.50	50.00	10.25	6216.00
	BROOKHAVEN	1630.00	193.50	0.00	15.00	1.00	12.18	6215.00
	LEWES DE	1630.00	193.00	0.00	24.00	NAP	10.17	6299.00
	OXFORD OH	1330.00	141.50	576.00	20.50	67.00	10.26	6206.00
26 SEP 1979	LEWES DE	1600.00	71.50	0.00	4.00	NAP	10.17	6599.00
29 SEP 1979	ITHACA	1800.00	166.00	0.00	12.00	NAP	10.12	6901.00
	OXFORD OH	1430.00	145.00	0.00	12.70	366.00	10.26	6814.00
30 SEP 1979	PENN STATE	2030.00	170.50	0.00	10.80	35.00	11.02	6908.00
	ILLINOIS	1630.00	72.50	961.50	1.50	6.00	11.27	6921.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 OCT 1979 TO 29 OCT 1979

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		Z	HOURS	HOURS	HOURS		10.00	
1 OCT 1979	VIRGINIA	1900.00	192.00	0.00	30.00	100.00	10.25	4117.00
2 OCT 1979	PENN STATE	1600.00	435.00	0.00	.20	3.00	ISA	4119.00
	LEWES DE	1530.00	143.50	0.00	60.00	NAP	10.17	4299.00
	OXFORD OH	2200.00	79.50	0.00	3.80	36.00	10.26	4207.00
3 OCT 1979	BROOKHAVEN	1930.00	56.50	186.50	2.20	1.00	12.18	4318.00
	LEWES DE	1900.00	27.50	0.00	2.00	NAP	10.17	4299.00
4 OCT 1979	ITHACA	1500.00	117.00	0.00	4.00	NAP	11.28	4322.00
	PENN STATE	1230.00	44.50	0.00	NAP	24.00	11.02	NAP
5 OCT 1979	OXFORD OH	1330.00	63.50	0.00	9.30	31.00	10.26	4414.00
6 OCT 1979	ITHACA	1900.00	28.00	0.00	15.00	NAP	11.28	4605.00
	PENN STATE	1830.00	54.00	0.00	NAP	NAP	11.02	NAP
	VIRGINIA	1700.00	67.00	51.00	18.00	NAP	11.05	4518.00
	BROOKHAVEN	1530.00	68.00	0.00	8.00	1.00	12.18	4602.00
	LEWES DE	1430.00	67.50	0.00	1.00	NAP	10.17	4599.00
8 OCT 1979	PENN STATE	1900.00	48.50	0.00	1.80	NAP	11.02	4723.00
9 OCT 1979	WHITEFACE	1800.00	434.50	0.00	34.00	17.00	10.24	4916.00
	VIRGINIA	1700.00	72.00	0.00	2.00	NAP	11.05	4902.00
10 OCT 1979	ITHACA	1700.00	94.00	0.00	15.00	NAP	11.28	4922.00
	OXFORD OH	1500.00	121.50	0.00	2.30	42.00	11.16	4917.00
11 OCT 1979	PENN STATE	1430.00	67.50	0.00	5.20	NAP	11.02	5019.00
	LEWES DE	1530.00	121.00	0.00	15.00	NAP	10.17	5099.00
12 OCT 1979	BROOKHAVEN	2000.00	148.50	0.00	2.30	1.00	12.18	5214.00
	OXFORD OH	2030.00	53.50	0.00	4.30	47.00	11.16	5214.00

DATA FROM 1 OCT 1979 TO 29 OCT 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		NO.0A	
13 OCT 1979	ITHACA	2100.00	76.00	0.00	6.00	NAP	11.21	5311.00
	BROOKHAVEN	1900.00	23.00	0.00	8.20	4.00	12.18	5317.00
14 OCT 1979	PENN STATE	1700.00	74.50	0.00	2.80	5.00	11.02	5305.00
15 OCT 1979	ITHACA	2330.00	50.50	0.00	7.00	NAP	11.21	5508.00
	LEWES DE	1500.00	95.50	0.00	12.00	NAP	12.04	5399.00
16 OCT 1979	WHITEFACE	1300.00	163.00	0.00	16.00	19.00	10.24	5603.00
	OXFORD OH	1830.00	94.00	0.00	1.30	31.00	11.16	5609.00
18 OCT 1979	PENN STATE	1330.00	92.50	0.00	1.00	NAP	11.02	5722.00
	ILLINOIS	1700.00	25.00	407.50	12.00	NAP	ISA	5806.00
	OXFORD OH	1530.00	45.00	0.00	1.30	49.00	11.16	5711.00
23 OCT 1979	ILLINOIS	1600.00	119.00	0.00	4.20	55.00	ISA	6220.00
24 OCT 1979	WHITEFACE	1800.00	197.00	0.00	17.00	NAP	12.04	6413.00
	ITHACA	1430.00	207.00	0.00	12.00	NAP	11.21	6410.00
	OXFORD OH	1830.00	147.00	0.00	24.00	85.00	11.16	6400.00
25 OCT 1979	PENN STATE	1400.00	168.50	0.00	5.00	114.00	11.02	6400.00
	LEWES DE	1630.00	241.50	0.00	2.00	NAP	12.04	6399.00
28 OCT 1979	ITHACA	1630.00	98.00	0.00	6.00	NAP	11.21	6808.00
	PENN STATE	2100.00	79.00	0.00	6.20	106.00	11.02	6814.00
	OXFORD OH	1700.00	94.50	0.00	5.00	19.00	11.16	6806.00
29 OCT 1979	WHITEFACE	1300.00	115.00	0.00	3.00	NAP	12.04	6616.00
	BROOKHAVEN	1430.00	379.50	0.00	4.50	1.00	12.18	6823.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 OBN MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 NOV 1979 TO 29 NOV 1979

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		TIME R M V D E	TIME T I M E	TIME D M N T I M E	TIME P R E C I M E	TIME L I D P E N	TIME A R D T E	TIME C P E O D E
		Z	HOURS	HOURS	HOURS		MOJA	
1 NOV 1979	ILLINOIS	1600.00	216.00	0.00	.25	3.00	11.27	7002.00
2 NOV 1979	OXFORD OH	1630.00	95.50	0.00	3.20	6.00	11.16	4213.00
3 NOV 1979	ITHACA	2300.00	150.50	0.00	12.00	NAP	11.21	4308.00
	BROOKHAVEN	2230.00	128.00	0.00	19.90	1.00	12.18	4321.00
4 NOV 1979	PENN STATE	1800.00	165.00	0.00	13.50	23.00	12.18	4306.00
	LEWES DE	2100.00	244.50	0.00	17.00	NAP	12.04	4399.00
7 NOV 1979	OXFORD OH	1330.00	117.00	0.00	10.30	73.00	11.16	4622.00
8 NOV 1979	WHITEFACE	1300.00	240.00	0.00	15.00	NAP	12.34	4722.00
	ITHACA	1300.00	110.00	0.00	16.00	NAP	RPC	4717.00
	PENN STATE	1400.00	92.00	0.00	5.00	19.00	ISA	4702.00
10 NOV 1979	OXFORD OH	2030.00	79.00	0.00	16.00	78.00	11.16	4922.00
11 NOV 1979	PENN STATE	2130.00	79.50	0.00	4.10	5.00	12.18	5012.00
	BROOKHAVEN	1730.00	187.00	0.00	25.60	9.00	12.18	5120.00
12 NOV 1979	LEWES DE	1400.00	185.00	0.00	60.00	NAP	12.04	5299.00
13 NOV 1979	WHITEFACE	1430.00	121.50	0.00	12.00	NAP	12.34	5015.00
	PENN STATE	1400.00	40.50	0.00	.70	5.00	12.18	5314.00
	BROOKHAVEN	.50	31.00	0.00	26.40	2.00	12.18	5222.00
14 NOV 1979	ITHACA	1900.00	150.00	0.00	31.00	NAP	11.21	5419.00
	BROOKHAVEN	1900.00	42.50	0.00	26.00	13.00	12.18	5411.00
	LEWES DE	1800.00	52.00	0.00	3.00	NAP	12.04	5399.00
15 NOV 1979	WHITEFACE	1800.00	51.50	0.00	5.00	NAP	MOE	5421.00
	PENN STATE	1400.00	48.00	0.00	.30	NAP	12.18	5413.00
16 NOV 1979	PENN STATE	1430.00	24.50	0.00	5.30	NAP	12.18	5305.00

DATA FROM 1 NOV 1979 TO 29 NOV 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		NO. DA	
	OXFORD OH	2300.00	146.50	0.00	ISA	5.00	ISA	ISA
19 NOV 1979	WHITEFACE	1700.00	95.00	0.00	7.00	NAP	12.04	5711.00
20 NOV 1979	ITHACA	1600.00	141.00	0.00	6.00	NAP	1.08	5699.00
26 NOV 1979	VIRGINIA	2200.00	1157.0	0.00	11.50	7.00	1.21	6614.00
	BROOKHAVEN	1500.00	284.00	0.00	1.20	1.00	12.18	6601.00
	OXFORD OH	1700.00	234.00	0.00	65.00	408.00	1.03	6605.00
27 NOV 1979	WHITEFACE	1400.00	189.00	0.00	33.00	NAP	12.18	6709.00
	ITHACA	1400.00	166.00	0.00	30.00	NAP	1.08	6705.00
	PENN STATE	1430.00	264.00	0.00	8.00	19.00	12.18	6613.00
	BROOKHAVEN	1330.00	22.50	0.00	5.80	7.00	12.18	6700.00
	LEWES DE	1730.00	311.50	0.00	26.00	NAP	12.04	6706.00
29 NOV 1979	OXFORD OH	2200.00	77.00	0.00	3.90	128.00	1.03	6806.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

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		Z	HOURS	HOURS	HOURS		MO.0A	
2 DEC 1979	OXFORD OH	2030.00	70.50	0.00	.50	6.00	1.03	4121.00
3 DEC 1979	WHITEFACE	1700.00	147.00	8.00	16.00	NAP	12.18	4208.00
	PENN STATE	1830.00	148.00	0.00	ISA	NAP	12.18	ISA
4 DEC 1979	ITHACA	1600.00	170.00	0.00	8.00	NAP	1.08	4299.00
6 DEC 1979	WHITEFACE	1330.00	68.50	0.00	5.00	NAP	12.18	4518.00
	VIRGINIA	2130.00	239.50	0.00	2.00	MOE	ISA	4622.00
7 DEC 1979	WHITEFACE	1600.00	26.50	0.00	5.00	NAP	12.18	4708.00
	ITHACA	1700.00	73.00	8.00	4.00	NAP	1.08	4706.00
	PENN STATE	1808.00	95.50	0.00	1.20	4.00	12.18	4705.00
	BROOKHAVEN	1508.00	241.50	0.00	8.00	1.00	12.18	4707.00
	OXFORD OH	1530.00	115.00	0.00	1.00	50.00	ISA	4615.00
8 DEC 1979	PENN STATE	2030.00	26.50	0.00	.20	5.00	ISA	4801.00
	LEWES DE	1700.00	263.50	0.00	7.00	NAP	1.21	4799.00
10 DEC 1979	WHITEFACE	1330.00	93.50	8.00	15.00	NAP	1.11	5009.00
14 DEC 1979	ITHACA	1800.00	169.00	0.00	15.00	NAP	1.08	5400.00
	PENN STATE	1830.00	142.00	0.00	MOE	3.00	12.26	MOE
	VIRGINIA	1500.00	185.50	0.00	8.50	MOE	1.21	5318.00
	BROOKHAVEN	1400.00	167.00	0.00	17.00	2.00	1.15	5323.00
	LEWES DE	1800.00	145.00	0.00	4.00	NAP	1.21	5316.00
	OXFORD OH	1830.00	171.00	8.00	23.80	158.00	1.03	5309.00
17 DEC 1979	WHITEFACE	1830.00	173.00	0.00	8.00	NAP	1.11	5707.00
	BROOKHAVEN	1500.00	73.00	0.00	5.50	3.00	1.15	5709.00
	LEWES DE	1900.00	121.00	8.00	3.80	NAP	1.21	5602.00

DATA FROM 2 DEC 1979 TO 28 DEC 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		MO.0A	
18 DEC 1979	ITHACA	1800.00	96.00	0.00	17.00	NAP	1.08	5818.00
19 DEC 1979	PENN STATE	1800.00	119.50	0.00	MOE	NAP	2.26	MOE
20 DEC 1979	ITHACA	1600.00	46.00	0.00	11.00	NAP	1.08	5922.00
	BROOKHAVEN	1630.00	73.50	0.00	6.60	1.00	1.15	5921.00
21 DEC 1979	VIRGINIA	1630.00	169.50	0.00	4.00	2.00	ISA	6022.00
	LEWES DE	1930.00	96.50	0.00	16.00	NAP	1.21	6009.00
23 DEC 1979	VIRGINIA	1930.00	51.00	0.00	2.00	2.00	ISA	6311.00
	ILLINOIS	1400.00	382.00	064.00	7.70	250.00	ISA	6219.00
	OXFORD OH	1900.00	216.50	0.00	24.00	263.00	2.06	6304.00
25 DEC 1979	ILLINOIS	1630.00	50.50	0.00	17.80	75.00	2.14	6421.00
	BROOKHAVEN	1800.00	121.50	0.00	12.90	4.00	1.15	6515.00
26 DEC 1979	PENN STATE	1800.00	168.00	0.00	MOE	NAP	2.26	MOE
	VIRGINIA	1500.00	67.50	0.00	11.00	1.00	1.21	6508.00
	OXFORD OH	1430.00	67.50	0.00	32.00	210.00	2.06	6508.00
27 DEC 1979	WHITEFACE	1500.00	236.50	0.00	28.00	NAP	1.11	6615.00
28 DEC 1979	LEWES DE	1900.00	167.50	0.00	30.00	NAP	1.21	6511.00

MSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 JUL 1978 TO 31 JUL 1978 (CONT.)

		ML	ML	C	F	L	UMOL/L	UMHO/CM
1 JUL 1978	ILLINOIS	17.00	420.00	25.00	3.47	ISA	ISA	ISA
2 JUL 1978	ILLINOIS	2059.00	3430.00	25.00	4.14	4.10	79.00	37.00
3 JUL 1978	ILLINOIS	459.00	1050.00	25.00	4.61	4.58	26.00	14.00
	LEWES DE	386.00	1550.00	22.00	3.96	4.07	85.00	NAP
4 JUL 1978	ITHACA	1380.00	1110.00	21.00	4.34	4.18	66.00	24.00
	PENN STATE	1265.00	1280.00	25.00	4.15	ISA	71.00	29.00
5 JUL 1978	VIRGINIA	1076.00	1090.00	24.00	3.73	3.70	170.00	NAP
6 JUL 1978	LEWES DE	1058.00	NAP	22.00	3.95	3.99	100.00	61.00
9 JUL 1978	ITHACA	130.00	90.00	16.00	3.77	NAP	170.00	72.00
	VIRGINIA	1110.00	1020.00	24.00	3.53	4.15	71.00	41.00
	ILLINOIS	525.00	550.00	25.00	3.89	3.84	140.00	60.00
11 JUL 1978	WHITEFACE	362.00	760.00	13.00	3.97	NAP	110.00	44.00
	PENN STATE	49.00	60.00	25.00	3.78	ISA	170.00	ISA
	VIRGINIA	41.00	50.00	24.00	4.00	4.08	83.00	ISA
	LEWES DE	600.00	NAP	22.00	3.79	3.95	110.00	48.00
13 JUL 1978	ITHACA	540.00	550.00	19.00	4.34	NAP	46.00	25.00
	ILLINOIS	1800.00	860.00	25.00	4.09	NAP	91.00	33.00
15 JUL 1978	PENN STATE	187.00	550.00	25.00	3.62	NAP	240.00	94.00
	VIRGINIA	290.00	330.00	24.00	4.19	4.24	58.00	31.00
	BROOKHAVEN	536.00	560.00	23.00	4.64	7.06	.10	NAP
	LEWES DE	755.00	780.00	22.00	3.90	4.71	20.00	12.00
17 JUL 1978	ITHACA	980.00	760.00	19.00	3.89	NAP	130.00	56.00
	BROOKHAVEN	536.00	510.00	23.00	4.54	4.69	20.00	NAP

Figure 1 consists of five diagrams, labeled (a) through (e), illustrating the development of the head and neck region in the embryo of the common carp. The diagrams show the progression of the head, eye, and jaw structures. Labels include V (ventral), L (lateral), O (ocular), P (pharyngeal), H (head), T (tail), D (dorsal), E (eye), I (intestine), F (fertilized), A (anus), B (branchial), C (caudal), N (notochord), and U (urostyle).

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NSC MEANS  NO SAMPLE COLLECTED
ISA MEANS  INSUFF. SAMPLE FOR ANALYSIS
NAP MEANS  NO ANALYSIS PERFORMED
MOE MEANS  MALFUNCTION OR OPERATOR ERROR
RPC MEANS  REJECTED--PROB. CONTAMINATION

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DATA FROM 1 AUG 1978 TO 31 AUG 1978 (CONT.)

		ML	ML	G	F	L	UMOL/L	UMHO/CM
1 AUG 1978	PENN STATE	1277.00	1050.00	25.00	4.11	NAP	78.00	33.00
	VIRGINIA	157.00	120.00	22.00	4.16	4.13	74.00	NAP
	BROOKHAVEN	398.00	360.00	23.00	3.75	3.84	140.00	NAP
	LEWES DE	353.00	NAP	24.00	3.84	4.01	98.00	45.00
2 AUG 1978	WHITEFACE	143.00	140.00	20.00	4.04	4.17	68.00	27.00
	ILLINOIS	2000.00	NAP	25.00	4.31	NAP	49.00	24.00
	LEWES DE	288.00	NAP	NAP	5.32	4.66	22.00	12.00
3 AUG 1978	VIRGINIA	166.00	300.00	22.00	3.86	3.86	140.00	61.00
	BROOKHAVEN	580.00	290.00	23.00	4.13	4.25	56.00	NAP
4 AUG 1978	WHITEFACE	308.00	610.00	24.00	3.96	4.11	78.00	33.00
	PENN STATE	1045.00	1000.00	25.00	3.92	NAP	120.00	47.00
	BROOKHAVEN	39.00	35.00	23.00	4.17	NAP	NAP	NAP
5 AUG 1978	VIRGINIA	1830.00	1820.00	23.00	4.46	4.45	35.00	16.00
	BROOKHAVEN	1548.00	1530.00	24.00	4.21	4.30	50.00	NAP
6 AUG 1978	BROOKHAVEN	357.00	270.00	24.00	4.28	4.45	35.00	NAP
7 AUG 1978	ITHACA	1330.00	1500.00	21.00	4.60	4.67	21.00	NAP
	ILLINOIS	125.00	125.00	25.00	4.25	4.26	55.00	35.00
	BROOKHAVEN	276.00	250.00	24.00	4.46	4.68	21.00	NAP
8 AUG 1978	ITHACA	340.00	460.00	23.00	4.05	4.08	83.00	40.00
	PENN STATE	1201.00	1140.00	25.00	4.36	4.41	39.00	NAP
	VIRGINIA	828.00	770.00	22.00	4.39	4.40	40.00	19.00
	BROOKHAVEN	119.00	130.00	24.00	4.00	ISA	100.00	ISA
	LEWES DE	1090.00	NAP	NAP	4.54	4.51	31.00	20.00

DATA FROM 1 AUG 1978 TO 31 AUG 1978 (CONT.)

		ML	ML	C	F	L	UMOL/L	UMHO/CM
10 AUG 1978	WHITEFACE	366.00	660.00	22.00	3.65	3.89	130.00	58.00
	ITHACA	1130.00	1120.00	17.00	3.80	3.92	120.00	63.00
	PENN STATE	120.00	130.00	25.00	4.02	4.23	59.00	ISA
11 AUG 1978	LEWES DE	266.00	75.00	NAP	4.07	4.33	47.00	27.00
12 AUG 1978	VIRGINIA	204.00	200.00	22.00	3.62	3.75	180.00	NAP
	ILLINOIS	755.00	780.00	25.00	3.87	3.88	130.00	72.00
	BROOKHAVEN	2107.00	2430.00	23.00	3.88	4.21	62.00	29.00
14 AUG 1978	LEWES DE	67.00	37.00	NAP	4.09	MOE	81.00	MOE
15 AUG 1978	PENN STATE	210.00	220.00	25.00	3.61	3.64	230.00	NAP
16 AUG 1978	ILLINOIS	1620.00	1810.00	25.00	4.37	4.43	37.00	21.00
17 AUG 1978	WHITEFACE	608.00	NAP	15.00	3.95	3.98	100.00	52.00
	ILLINOIS	170.00	410.00	25.00	3.86	3.90	130.00	71.00
18 AUG 1978	WHITEFACE	78.00	NAP	20.00	4.64	ISA	ISA	ISA
21 AUG 1978	WHITEFACE	375.00	NAP	20.00	4.14	4.44	36.00	16.00
	ITHACA	260.00	250.00	17.00	3.83	3.88	130.00	53.00
28 AUG 1978	VIRGINIA	2100.00	2100.00	24.00	4.02	4.12	76.00	41.00
29 AUG 1978	ITHACA	340.00	370.00	20.00	3.91	3.95	110.00	59.00
	PENN STATE	431.00	540.00	25.00	3.68	3.71	190.00	81.00
	BROOKHAVEN	102.00	120.00	25.00	4.03	3.93	120.00	66.00
30 AUG 1978	WHITEFACE	1631.00	1500.00	18.00	3.74	3.74	180.00	81.00
	VIRGINIA	234.00	210.00	24.00	4.38	4.38	42.00	NAP
31 AUG 1978	ITHACA	630.00	570.00	14.00	4.07	4.14	72.00	34.00
	LEWES DE	1135.00	1080.00	18.00	4.25	4.33	47.00	21.00

DATA FROM 1 SEP 1978 TO 29 SEP 1978 (CONT.)

		^P A S	^D R P	^D I F	^D I F	^P A L	^H U MOL/L	^H U MHO/CM
		ML	ML	C				
1 SEP 1978	PENN STATE	909.00	920.00	25.00	4.09	4.12	76.00	38.00
	BROOKHAVEN	769.00	700.00	23.00	4.20	4.10	79.00	40.00
	LEWES DE	1267.00	1250.00	15.00	4.29	4.38	42.00	20.00
2 SEP 1978	VIRGINIA	1770.00	1830.00	22.00	4.35	4.34	46.00	23.00
4 SEP 1978	ITHACA	310.00	300.00	17.00	3.90	3.94	110.00	57.00
	PENN STATE	212.00	200.00	25.00	4.32	4.40	40.00	18.00
	BROOKHAVEN	82.00	100.00	23.00	3.61	ISA	250.00	ISA
6 SEP 1978	WHITEFACE	162.00	240.00	22.00	3.98	4.12	76.00	37.00
8 SEP 1978	WHITEFACE	MOE	680.00	MOE	MOE	MOE	MOE	MOE
9 SEP 1978	ITHACA	290.00	300.00	18.00	4.12	4.21	62.00	38.00
11 SEP 1978	PENN STATE	33.00	25.00	25.00	3.71	ISA	190.00	ISA
	BROOKHAVEN	313.00	300.00	23.00	3.60	3.60	250.00	130.00
12 SEP 1978	WHITEFACE	1311.00	1180.00	11.00	3.67	4.10	79.00	NAP
13 SEP 1978	ITHACA	280.00	290.00	20.00	3.63	3.67	210.00	140.00
	PENN STATE	208.00	170.00	25.00	3.61	3.85	140.00	72.00
	BROOKHAVEN	1970.00	1830.00	23.00	3.90	3.91	120.00	59.00
	LEWES DE	779.00	470.00	16.00	3.82	3.77	170.00	75.00
15 SEP 1978	PENN STATE	978.00	840.00	25.00	4.37	4.45	35.00	17.00
	VIRGINIA	478.00	440.00	22.00	4.08	4.12	76.00	47.00
	ILLINOIS	111.00	120.00	25.00	4.41	4.41	39.00	27.00
16 SEP 1978	ILLINOIS	460.00	500.00	25.00	4.43	4.45	35.00	20.00
	BROOKHAVEN	30.00	50.00	22.00	3.94	ISA	110.00	ISA
17 SEP 1978	ILLINOIS	530.00	560.00	25.00	4.04	4.05	89.00	55.00

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DATA FROM 1 SEP 1978 TO 29 SEP 1978 (CONT.)

		V O L P H	V O L P H	F I E L D P H	F I E L D P H	L A E P H	(H I C O N O U C T	
		S M P A	P R E D	F I E L D	F I E L D	L A E P H	(H I C O N O U C T	
		ML	ML	C			UMOL/L	UMHO/CM
18 SEP 1978	WHITEFACE	565.00	930.00	20.00	3.60	4.68	21.00	21.00
19 SEP 1978	ITHACA	1000.00	1400.00	16.00	3.88	3.93	120.00	59.00
	PENN STATE	929.00	1410.00	25.00	3.56	3.83	130.00	60.00
22 SEP 1978	ILLINOIS	17.00	ISA	25.00	4.05	ISA	ISA	ISA
23 SEP 1978	BROOKHAVEN	149.00	150.00	22.00	3.80	ISA	160.00	ISA
25 SEP 1978	WHITEFACE	592.00	620.00	10.00	4.15	4.64	21.00	NAP
	PENN STATE	75.00	90.00	25.00	3.57	3.56	280.00	140.00
26 SEP 1978	VIRGINIA	506.00	600.00	22.00	3.75	3.81	150.00	NAP
28 SEP 1978	PENN STATE	22.00	13.00	25.00	ISA	3.59	260.00	ISA
29 SEP 1978	WHITEFACE	293.00	300.00	14.00	4.01	3.97	110.00	47.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
1 OCT 1978	BROOKHAVEN	1498.00	1470.00	25.00	4.54	4.79	16.30	23.00
	OXFORD OH	483.00	560.00	18.00	3.95	3.90	130.00	56.00
2 OCT 1978	ILLINOIS	45.00	25.00	25.00	4.31	4.25	56.00	NAP
	LEWES DE	2060.00	1130.00	18.00	4.75	4.71	20.30	13.00
3 OCT 1978	VIRGINIA	26.00	15.00	19.00	3.92	ISA	120.00	ISA
	ILLINOIS	360.00	360.00	25.00	4.11	4.11	78.00	39.00
4 OCT 1978	WHITEFACE	301.00	270.00	21.00	4.04	4.10	79.30	34.00
	OXFORD OH	258.00	320.00	14.00	4.10	3.99	100.00	47.00
5 OCT 1978	ITHACA	640.00	640.00	13.00	4.00	4.09	91.00	36.00
	PENN STATE	471.00	390.00	25.00	3.98	3.98	100.00	47.00
	ILLINOIS	15.00	10.00	25.00	4.12	ISA	76.00	ISA
6 OCT 1978	WHITEFACE	915.00	810.00	21.00	4.16	4.27	54.00	25.00
	PENN STATE	12.00	13.00	ISA	ISA	3.93	120.00	ISA
	VIRGINIA	995.00	830.00	19.00	3.88	3.97	110.30	43.00
	BROOKHAVEN	1926.00	1820.00	26.00	4.60	4.54	29.00	17.00
9 OCT 1978	ITHACA	110.00	140.00	19.00	4.20	4.20	63.00	28.00
	PENN STATE	10.00	13.00	ISA	ISA	4.24	58.00	ISA
	BROOKHAVEN	20.00	ISA	26.00	3.64	ISA	230.00	ISA
10 OCT 1978	ILLINOIS	3.00	3.00	25.00	5.79	ISA	1.60	21.00
11 OCT 1978	ILLINOIS	330.00	320.00	25.00	3.95	3.96	110.00	53.00
12 OCT 1978	PENN STATE	41.00	37.00	ISA	ISA	4.00	100.00	ISA
	OXFORD OH	307.00	400.00	12.00	4.26	4.13	74.00	44.00
13 OCT 1978	ILLINOIS	170.00	170.00	25.00	4.35	4.39	41.00	36.00

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		^L V	^L V	^H P	^H P	^H P		
		^P A S	^D R P	^L E F	^L E F	^B A L	⁺ H (	^U C N O C
		ML	ML	C			UMOL/L	UMHO/CM
14 OCT 1978	PENN STATE	933.00	920.00	25.00	4.08	4.10	79.00	35.00
	ILLINOIS	13.00	11.00	21.00	4.61	ISA	25.00	17.00
	BROOKHAVEN	1124.00	1070.00	25.00	4.43	5.02	9.60	5.80
	OXFORD OH	2147.00	2280.00	11.00	4.34	4.15	71.00	34.00
15 OCT 1978	ITHACA	2010.00	2180.00	13.00	4.17	4.26	52.00	23.00
	LEWES DE	587.00	290.00	15.00	4.30	4.07	85.00	44.00
16 OCT 1978	WHITEFACE	2084.00	2560.00	6.00	4.31	4.31	49.00	26.00
17 OCT 1978	PENN STATE	393.00	340.00	25.00	3.82	3.91	120.00	57.00
	VIRGINIA	11.00	15.00	19.00	3.70	ISA	200.00	ISA
	LEWES DE	926.00	NAP	16.00	4.43	4.24	58.00	ISA
19 OCT 1978	VIRGINIA	29.00	15.00	19.00	3.38	ISA	420.00	ISA
20 OCT 1978	WHITEFACE	275.00	270.00	22.00	4.02	4.03	93.00	46.00
	ITHACA	530.00	530.00	19.00	3.85	3.86	140.00	74.00
	PENN STATE	16.00	13.00	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	90.00	80.00	26.00	3.10	3.60	250.00	160.00
23 OCT 1978	ILLINOIS	23.00	NAP	25.00	4.12	ISA	76.00	56.00
24 OCT 1978	WHITEFACE	183.00	210.00	11.00	4.30	4.35	45.00	28.00
	ITHACA	280.00	320.00	16.00	4.12	4.19	66.00	33.00
	PENN STATE	17.00	25.00	ISA	ISA	3.90	130.00	ISA
	BROOKHAVEN	51.00	23.00	26.00	3.96	ISA	110.00	ISA
	OXFORD OH	72.00	100.00	16.00	4.21	4.13	74.00	ISA
25 OCT 1978	LEWES DE	138.00	NAP	16.00	3.79	3.54	290.00	130.00
26 OCT 1978	ILLINOIS	928.00	390.00	25.00	4.24	4.32	46.00	29.00

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		ML	ML	C			UPOL/L	UMHO/CM
27 OCT 1978	ITHACA	940.00	1030.00	15.00	4.21	4.27	54.00	26.00
	PENN STATE	555.00	490.00	25.00	4.26	4.28	52.00	25.00
	BROOKHAVEN	51.00	260.00	26.00	3.66	ISA	220.00	ISA
	OXFORD OH	320.00	450.00	15.00	4.14	4.04	91.00	53.00
30 OCT 1978	WHITEFACE	1505.00	1520.00	5.00	4.44	4.44	36.00	18.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 6 NOV 1978 TO 30 NOV 1978 (CONT.)

		ML	ML	C			JMOL/L	UMHO/CM
6 NOV 1978	LEWES DE	MOE	510.00	16.00	4.33	3.38	420.00	160.00
7 NOV 1978	ILLINOIS	419.00	430.00	25.00	3.90	3.88	130.00	67.00
8 NOV 1978	WHITEFACE	106.00	150.00	21.00	3.82	3.95	110.00	68.00
	ITHACA	205.00	230.00	17.00	3.95	3.95	110.00	53.00
	PENN STATE	196.00	170.00	25.00	3.61	3.63	230.00	120.00
9 NOV 1978	LEWES DE	98.00	120.00	16.00	3.46	MOE	350.00	MOE
14 NOV 1978	PENN STATE	35.00	40.00	25.00	3.58	3.55	290.00	ISA
	VIRGINIA	164.00	100.00	19.00	3.04	3.07	850.00	340.00
	ILLINOIS	861.00	970.00	25.00	4.65	4.65	22.00	16.00
15 NOV 1978	PENN STATE	45.00	40.00	25.00	3.61	ISA	250.00	ISA
	ILLINOIS	28.00	50.00	25.00	4.13	4.22	50.00	ISA
16 NOV 1978	WHITEFACE	304.00	350.00	12.00	3.91	3.86	140.00	63.00
	BROOKHAVEN	98.00	120.00	23.00	4.01	MOE	98.00	MOE
17 NOV 1978	ILLINOIS	800.00	760.00	25.00	4.41	4.31	49.00	21.00
	LEWES DE	1088.00	NAP	15.00	4.21	4.07	95.00	35.00
18 NOV 1978	PENN STATE	758.00	700.00	25.00	4.26	4.29	51.00	29.00
	BROOKHAVEN	1018.00	1150.00	25.00	4.51	4.38	42.00	31.00
	OXFORD OH	1491.00	1670.00	12.00	4.29	4.20	53.00	29.00
19 NOV 1978	ITHACA	640.00	650.00	13.00	4.22	4.28	52.00	22.00
21 NOV 1978	WHITEFACE	640.00	680.00	18.00	4.38	4.43	37.00	18.00
	VIRGINIA	2495.00	2500.00	19.00	3.97	4.14	72.00	28.00
22 NOV 1978	ITHACA	170.00	220.00	14.00	3.86	3.85	140.00	59.00
23 NOV 1978	ILLINOIS	340.00	370.00	25.00	4.12	4.13	74.00	41.00

DATA FROM 6 NOV 1978 TO 30 NOV 1978 (CONT.)

		^P S	^D P	^L F	^L F	^H L	^H J	^C C
		ML	ML	C			UMOL/L	UMHO/CM
24 NOV 1978	PENN STATE	410.00	350.00	25.00	3.63	3.57	270.00	110.00
	BROOKHAVEN	234.00	320.00	24.00	4.10	4.21	52.00	53.00
26 NOV 1978	ITHACA	370.00	390.00	13.00	3.83	3.89	130.00	60.00
	VIRGINIA	118.00	70.00	19.00	3.68	3.77	170.00	66.00
	LEWES DE	211.00	NAP	12.00	4.52	4.47	34.00	17.00
27 NOV 1978	ILLINOIS	310.00	340.00	25.00	4.07	4.08	93.00	42.00
28 NOV 1978	ITHACA	150.00	170.00	13.00	4.29	4.31	49.00	24.00
	VIRGINIA	765.00	740.00	20.00	3.95	4.08	93.00	38.00
	BROOKHAVEN	618.00	760.00	25.00	4.47	4.57	27.00	13.00
	OXFORD OH	439.00	600.00	13.00	4.32	4.13	74.00	38.00
29 NOV 1978	PENN STATE	429.00	390.00	25.00	4.21	4.18	56.00	32.00
	LEWES DE	1364.00	390.00	12.00	4.39	4.35	45.00	27.00
30 NOV 1978	PENN STATE	61.00	50.00	25.00	4.33	4.34	46.00	26.00
	BROOKHAVEN	810.00	700.00	24.00	4.29	4.30	50.00	19.00
	LEWES DE	1087.00	62.00	8.00	4.61	4.51	31.00	17.00

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 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 HOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 DEC 1978 TO 28 DEC 1978 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
2 DEC 1978	VIRGINIA	517.00	470.00	20.00	4.27	4.32	48.00	21.00
4 DEC 1978	ITHACA	370.00	370.00	15.00	3.98	4.00	100.00	46.00
	OXFORD OH	1697.00	1770.00	13.00	4.60	4.32	48.00	24.00
5 DEC 1978	PENN STATE	697.00	700.00	29.00	4.38	4.35	45.00	23.00
	ILLINOIS	442.00	550.00	25.00	3.99	4.03	93.00	43.00
	BROOKHAVEN	1191.00	1220.00	27.00	4.30	4.41	39.00	15.00
6 DEC 1978	WHITEFACE	156.00	1030.00	19.00	3.95	3.98	100.00	53.00
	LEWES DE	1505.00	250.00	12.00	4.48	4.43	37.00	19.00
7 DEC 1978	VIRGINIA	873.00	1100.00	24.00	4.34	4.48	33.00	12.00
9 DEC 1978	ITHACA	730.00	780.00	9.00	4.05	4.10	79.00	40.00
	OXFORD OH	1714.00	1970.00	10.00	4.24	4.37	43.00	23.00
11 DEC 1978	PENN STATE	1259.00	1180.00	25.00	4.48	4.37	43.00	16.00
	ILLINOIS	1041.00	1080.00	25.00	4.14	4.17	58.00	30.00
	BROOKHAVEN	2184.00	2780.00	22.00	4.30	4.26	55.00	24.00
	LEWES DE	1092.00	NAP	7.00	4.51	4.43	37.00	29.00
12 DEC 1978	WHITEFACE	478.00	630.00	21.00	4.15	4.19	55.00	24.00
	ITHACA	130.00	300.00	16.00	4.22	4.26	55.00	ISA
	VIRGINIA	677.00	1340.00	24.00	4.59	4.63	23.00	8.60
17 DEC 1978	PENN STATE	85.00	100.00	25.00	3.97	3.96	110.00	52.00
	BROOKHAVEN	34.00	80.00	24.00	4.08	ISA	93.00	ISA
	OXFORD OH	18.00	120.00	ISA	ISA	ISA	ISA	ISA
19 DEC 1978	ITHACA	90.00	370.00	15.00	4.01	4.01	98.00	43.00
	ILLINOIS	1.40	37.00	ISA	ISA	ISA	ISA	ISA

DATA FROM 2 DEC 1978 TO 28 DEC 1978 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
21 DEC 1978	ITHACA	520.00	540.00	15.00	4.19	4.05	99.00	35.00
	VIRGINIA	168.00	110.00	24.00	3.62	3.76	170.00	69.00
	BROOKHAVEN	20.00	820.00	NAP	NAP	4.24	58.00	28.00
	LEWES DE	591.00	NAP	8.00	4.10	4.06	87.00	38.00
	OXFORD OH	184.00	650.00	14.00	4.22	4.25	56.00	31.00
22 DEC 1978	PENN STATE	600.00	520.00	25.00	4.40	4.28	52.00	21.00
25 DEC 1978	BROOKHAVEN	1900.00	1870.00	25.00	4.62	4.53	30.00	21.00
26 DEC 1978	WHITEFACE	1221.00	3200.00	20.00	4.65	4.93	12.00	5.90
	VIRGINIA	1850.00	1840.00	24.00	4.29	4.40	40.00	15.00
27 DEC 1978	LEWES DE	1522.00	NAP	9.00	4.52	4.62	24.00	26.00
	OXFORD OH	179.00	190.00	28.00	4.15	4.21	52.00	36.00
28 DEC 1978	ILLINOIS	9.90	ISA	25.00	3.69	ISA	200.00	ISA

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NSC MEANS NO SAMPLE COLLECTED
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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 JAN 1979 TO 31 JAN 1979 (CONT.)

		<div>ML</div>	<div>ML</div>	<div>C</div>	<div>4.29</div>	<div>4.52</div>	<div>JHOL/L</div>	<div>UMHO/CM</div>
2 JAN 1979	WHITEFACE	1028.00	800.00	12.00	4.29	4.52	30.00	17.00
	ITHACA	1910.00	3530.00	15.00	4.81	4.84	14.00	5.80
3 JAN 1979	BROOKHAVEN	2079.00	2290.00	NAP	NAP	4.82	15.00	7.30
	LEWES DE	1594.00	NAP	14.00	4.91	4.92	12.00	9.40
	OXFORD OH	1235.00	1850.00	10.00	4.32	4.34	46.00	24.00
4 JAN 1979	PENN STATE	3415.00	3320.00	25.00	4.59	4.42	38.00	16.00
	ILLINOIS	862.00	1890.00	24.00	3.81	4.05	19.00	37.00
5 JAN 1979	ITHACA	95.00	260.00	19.00	4.04	3.95	110.00	35.00
	VIRGINIA	2000.00	2080.00	23.00	4.32	4.48	33.00	14.00
9 JAN 1979	WHITEFACE	1323.00	1130.00	20.00	4.17	4.48	33.00	15.00
	ITHACA	960.00	1620.00	15.00	4.16	4.21	52.00	31.00
	PENN STATE	1397.00	1280.00	25.00	4.32	4.23	59.00	24.00
	VIRGINIA	965.00	1020.00	23.00	4.06	4.13	74.00	28.00
	BROOKHAVEN	1668.00	2430.00	25.00	4.60	4.83	15.00	14.00
	LEWES DE	1889.00	NAP	12.00	4.44	4.50	32.00	20.00
	OXFORD OH	699.00	250.00	19.00	4.70	4.68	21.00	11.00
15 JAN 1979	WHITEFACE	909.00	810.00	19.00	4.33	4.55	28.00	13.00
	ITHACA	140.00	550.00	15.00	4.32	4.44	36.00	17.00
	PENN STATE	596.00	520.00	25.00	4.12	4.11	78.00	38.00
	BROOKHAVEN	2075.00	2450.00	24.00	5.20	5.23	5.00	4.00
16 JAN 1979	VIRGINIA	574.00	640.00	22.00	4.04	4.10	72.00	26.00
	LEWES DE	419.00	460.00	17.00	4.67	4.65	22.00	22.00
	OXFORD OH	112.00	NAP	14.00	3.96	ISA	113.00	ISA

DATA FROM 2 JAN 1979 TO 31 JAN 1979 (CONT.)

		^P S	^D P	^L F	^L F	^H L	^H J	^C C
		ML	ML	C			JMOL/L	UMHO/CM
18 JAN 1979	PENN STATE	378.00	420.00	25.00	4.19	4.21	52.00	35.00
	BROOKHAVEN	95.00	230.00	23.00	3.74	ISA	130.00	ISA
19 JAN 1979	WHITEFACE	240.00	460.00	17.00	4.19	4.32	48.00	24.00
21 JAN 1979	BROOKHAVEN	2172.00	4180.00	23.00	4.61	4.66	22.00	12.00
22 JAN 1979	PENN STATE	1434.00	1200.00	25.00	4.72	4.71	20.00	12.00
	BROOKHAVEN	66.00	66.00	23.00	4.05	ISA	89.00	ISA
	OXFORD OH	182.00	440.00	18.00	4.40	4.43	37.00	69.00
23 JAN 1979	VIRGINIA	NAP	2950.00	22.00	4.28	4.40	41.00	14.00
	LEWES DE	MOE	2000.00	5.00	4.48	4.52	30.00	20.00
25 JAN 1979	PENN STATE	1814.00	1620.00	25.00	4.50	4.51	31.00	14.00
	BROOKHAVEN	2152.00	2920.00	23.00	4.62	4.65	22.00	17.00
26 JAN 1979	ITHACA	820.00	3040.00	15.00	4.24	4.35	45.00	24.00
	PENN STATE	32.00	62.00	ISA	ISA	4.22	50.00	ISA
	LEWES DE	1339.00	NAP	12.00	4.73	4.68	21.00	28.00
27 JAN 1979	VIRGINIA	1770.00	1930.00	24.00	4.26	4.31	49.00	18.00
28 JAN 1979	BROOKHAVEN	92.00	180.00	24.00	4.34	ISA	46.00	ISA
	OXFORD OH	421.00	50.00	20.00	4.20	ISA	53.00	ISA
29 JAN 1979	ITHACA	520.00	630.00	20.00	3.96	3.94	110.00	49.00
30 JAN 1979	VIRGINIA	521.00	570.00	24.00	4.23	4.27	54.00	16.00
31 JAN 1979	LEWES DE	240.00	NAP	10.00	4.14	4.02	36.00	35.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 FEB 1979 TO 28 FEB 1979 (CONT.)

		ML	ML	C			JHOL/L	UMHO/CM
2 FEB 1979	OXFORD OH	96.00	120.00	22.00	3.97	ISA	110.00	ISA
4 FEB 1979	ITHACA	250.00	350.00	17.00	3.95	4.01	90.00	46.00
5 FEB 1979	WHITEFACE	1886.00	2130.00	19.00	4.54	4.67	21.00	8.30
6 FEB 1979	VIRGINIA	6.00	64.00	ISA	ISA	ISA	ISA	ISA
8 FEB 1979	PENN STATE	390.00	320.00	25.00	4.44	4.32	48.00	20.00
	BROOKHAVEN	330.00	550.00	24.00	4.81	5.02	7.10	9.30
9 FEB 1979	ITHACA	440.00	450.00	22.00	4.30	4.30	50.00	22.00
	LEWES DE	382.00	NAP	19.00	4.34	4.41	39.00	ISA
	OXFORD OH	242.00	290.00	22.00	4.29	4.13	74.00	30.00
13 FEB 1979	PENN STATE	185.00	220.00	25.00	4.08	4.12	76.00	32.00
	VIRGINIA	1600.00	1620.00	24.00	4.16	4.35	45.00	18.00
	OXFORD OH	200.00	200.00	17.00	3.84	3.71	130.00	83.00
14 FEB 1979	LEWES DE	241.00	NAP	12.00	4.06	3.95	110.00	43.00
16 FEB 1979	WHITEFACE	138.00	110.00	19.00	4.29	4.37	43.00	16.00
	PENN STATE	334.00	MOE	25.00	3.84	3.82	150.00	62.00
	BROOKHAVEN	63.00	35.00	27.00	3.99	ISA	100.00	ISA
17 FEB 1979	OXFORD OH	152.00	75.00	15.00	3.63	3.58	250.00	110.00
19 FEB 1979	ITHACA	560.00	560.00	15.00	3.99	3.96	110.00	44.00
	OXFORD OH	177.00	160.00	21.00	4.07	3.83	150.00	48.00
20 FEB 1979	PENN STATE	513.00	MOE	25.00	4.78	4.57	27.00	11.00
22 FEB 1979	PENN STATE	159.00	MOE	25.00	4.27	4.01	98.00	34.00
	BROOKHAVEN	437.00	510.00	26.00	4.06	4.15	71.00	35.00
	LEWES DE	1520.00	1870.00	9.00	4.32	4.23	59.00	29.00

DATA FROM 2 FEB 1979 TO 28 FEB 1979 (CONT.)

		ML	ML	C			JMOL/L	UMHO/CM
27 FEB 1979	PENN STATE	2112.00	2150.00	25.00	4.09	4.02	96.00	39.00
	OXFORD OH	2155.00	NAP	12.00	4.38	4.25	56.00	27.00
28 FEB 1979	WHITEFACE	625.00	1030.00	18.00	3.92	3.90	130.00	45.00
	ITHACA	1980.00	2110.00	17.00	4.20	4.20	53.00	29.00
	VIRGINIA	MOE	4590.00	24.00	4.12	4.20	53.00	20.00
	LEWES DE	630.00	5500.00	12.00	4.61	4.57	27.00	26.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 MAR 1979 TO 30 MAR 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
1 MAR 1979	ILLINOIS	NAP	240.00	25.00	3.94	3.91	170.00	51.00
2 MAR 1979	PENN STATE	88.00	150.00	25.00	3.71	3.61	250.00	97.00
	OXFORD OH	52.00	25.00	18.00	4.30	ISA	50.00	ISA
3 MAR 1979	VIRGINIA	119.00	50.00	24.00	3.60	3.62	240.00	85.00
4 MAR 1979	ILLINOIS	2104.00	2200.00	25.00	4.59	4.42	38.00	14.00
5 MAR 1979	OXFORD OH	352.00	240.00	15.00	4.37	4.32	48.00	21.00
6 MAR 1979	ITHACA	2460.00	2300.00	15.00	4.04	4.15	71.00	31.00
	PENN STATE	2188.00	2548.00	25.00	4.22	4.12	76.00	31.00
7 MAR 1979	VIRGINIA	MOE	2280.00	24.00	4.39	4.60	25.00	13.00
	LEWES DE	2129.00	4480.00	17.00	4.83	4.60	25.00	11.00
8 MAR 1979	WHITEFACE	1523.00	980.00	18.00	4.10	4.30	50.00	22.00
	ILLINOIS	51.00	64.00	25.00	4.21	4.02	96.00	ISA
10 MAR 1979	VIRGINIA	143.00	110.00	24.00	3.64	3.90	130.00	86.00
	ILLINOIS	.70	ISA	ISA	ISA	ISA	ISA	ISA
11 MAR 1979	BROOKHAVEN	391.00	420.00	26.00	3.97	4.00	100.00	46.00
	OXFORD OH	57.00	40.00	17.00	3.99	ISA	100.00	ISA
12 MAR 1979	PENN STATE	160.00	170.00	25.00	3.90	3.85	180.00	61.00
	LEWES DE	484.00	500.00	10.00	4.30	4.25	56.00	32.00
14 MAR 1979	OXFORD OH	96.00	60.00	13.00	4.18	4.10	79.00	45.00
15 MAR 1979	WHITEFACE	725.00	510.00	19.00	3.85	4.00	100.00	46.00
	ITHACA	110.00	170.00	18.00	3.82	3.85	140.00	89.00
	PENN STATE	127.00	130.00	25.00	4.12	4.14	100.00	40.00
	ILLINOIS	9.00	ISA	25.00	4.12	ISA	76.00	ISA

DATA FROM 1 MAR 1979 TO 30 MAR 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/GM
	BROOKHAVEN	269.00	290.00	26.00	4.20	4.20	63.00	33.00
	LEWES DE	168.00	120.00	10.00	4.41	4.45	35.00	22.00
18 MAR 1979	ILLINOIS	21.00	ISA	25.00	3.85	ISA	140.00	ISA
19 MAR 1979	ILLINOIS	1225.00	2350.00	25.00	4.23	4.22	60.00	29.00
20 MAR 1979	ILLINOIS	2.50	ISA	25.00	5.39	ISA	4.10	ISA
21 MAR 1979	OXFORD OH	205.00	190.00	17.00	4.05	4.00	100.00	56.00
24 MAR 1979	ILLINOIS	1300.00	2740.00	25.00	4.23	4.25	56.00	29.00
25 MAR 1979	ILLINOIS	.40	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	49.00	50.00	24.00	4.77	ISA	17.00	ISA
26 MAR 1979	PENN STATE	1782.00	1810.00	25.00	4.71	4.60	25.00	13.00
	LEWES DE	1587.00	1680.00	19.00	5.07	4.75	18.00	32.00
	OXFORD OH	796.00	360.00	13.00	4.35	4.30	50.00	23.00
27 MAR 1979	ITHACA	660.00	780.00	10.00	4.08	4.25	56.00	33.00
	VIRGINIA	2008.00	2450.00	24.00	4.57	4.65	22.00	12.00
28 MAR 1979	WHITEFACE	706.00	560.00	7.00	4.12	4.15	71.00	32.00
29 MAR 1979	ITHACA	350.00	360.00	19.00	3.97	3.95	110.00	46.00
	BROOKHAVEN	58.00	60.00	27.00	3.87	ISA	130.00	ISA
30 MAR 1979	ILLINOIS	410.00	710.00	25.00	4.15	4.15	71.00	32.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

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DATA FROM 1 APR 1979 TO 30 APR 1979 (CONT.)

	ML	ML	C	F	L	UMOL/L	UMHO/CM
PENN STATE	343.00	490.00	25.00	4.21	4.05	89.00	41.00
VIRGINIA	1178.00	1160.00	24.00	4.05	4.10	79.00	38.00
ILLINOIS	20.00	20.00	25.00	6.22	ISA	.60	ISA
BROOKHAVEN	150.00	12.00	25.00	3.70	3.70	200.00	93.00
19 APR 1979 WHITEFACE	1139.00	1080.00	19.00	4.27	4.45	35.00	16.00
22 APR 1979 ILLINOIS	146.00	170.00	25.00	4.32	4.25	56.00	29.00
OXFORD OH	32.00	370.00	NAP	NAP	5.10	7.90	2.90
24 APR 1979 VIRGINIA	143.00	100.00	24.00	3.45	3.55	280.00	180.00
ILLINOIS	1634.00	1330.00	25.00	4.39	4.35	45.00	22.00
25 APR 1979 ILLINOIS	172.00	340.00	25.00	4.18	4.10	79.00	39.00
26 APR 1979 ILLINOIS	658.00	750.00	25.00	4.48	4.45	35.00	24.00
27 APR 1979 BROOKHAVEN	2146.00	2160.00	27.00	4.60	4.60	25.00	14.00
28 APR 1979 PENN STATE	646.00	870.00	25.00	4.36	4.25	56.00	31.00
ILLINOIS	152.00	190.00	25.00	4.54	4.50	32.00	32.00
OXFORD OH	340.00	550.00	11.00	4.28	4.15	71.00	48.00
29 APR 1979 BROOKHAVEN	318.00	150.00	26.00	3.98	4.05	89.00	51.00
30 APR 1979 VIRGINIA	1080.00	920.00	24.00	4.29	4.35	45.00	26.00
ILLINOIS	12.00	15.00	25.00	4.13	ISA	74.00	50.00

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DATA FROM 1 MAY 1979 TO 31 MAY 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
1 MAY 1979	WHITEFACE	1912.00	1510.00	19.00	4.31	4.57	27.00	11.00
	ITHACA	1080.00	1190.00	21.00	4.29	4.27	54.00	28.00
4 MAY 1979	ILLINOIS	388.00	390.00	25.00	4.34	4.35	45.00	32.00
	BROOKHAVEN	193.00	250.00	26.00	3.81	4.05	89.00	68.00
5 MAY 1979	PENN STATE	539.00	500.00	25.00	4.25	4.10	79.00	36.00
	OXFORD OH	1033.00	1590.00	18.00	4.23	4.25	56.00	30.00
7 MAY 1979	ITHACA	360.00	370.00	22.00	4.28	4.15	71.00	27.00
	VIRGINIA	459.00	370.00	24.00	4.13	4.12	76.00	34.00
9 MAY 1979	WHITEFACE	521.00	470.00	19.00	3.83	3.90	130.00	60.00
11 MAY 1979	ITHACA	60.00	70.00	27.00	3.84	ISA	140.00	ISA
	PENN STATE	307.00	300.00	25.00	3.99	3.85	140.00	60.00
13 MAY 1979	ILLINOIS	282.00	310.00	25.00	5.84	5.50	3.20	13.00
	OXFORD OH	1.00	140.00	ISA	ISA	ISA	ISA	ISA
14 MAY 1979	ITHACA	80.00	90.00	22.00	3.74	3.73	190.00	95.00
	PENN STATE	91.00	110.00	25.00	4.29	4.15	71.00	32.00
	ILLINOIS	2.00	310.00	25.00	4.63	ISA	23.00	27.00
	BROOKHAVEN	536.00	600.00	22.00	4.20	4.35	45.00	25.00
15 MAY 1979	VIRGINIA	1800.00	1710.00	24.00	4.25	4.25	56.00	23.00
	ILLINOIS	450.00	470.00	25.00	4.97	5.05	0.90	18.00
	BROOKHAVEN	1103.00	1080.00	25.00	4.24	4.60	25.00	16.00
16 MAY 1979	ITHACA	65.00	70.00	20.00	3.38	3.40	400.00	160.00
	PENN STATE	205.00	240.00	25.00	4.05	3.85	140.00	78.00
	VIRGINIA	65.00	50.00	24.00	3.61	ISA	250.00	ISA

DATA FROM 1 MAY 1979 TO 31 MAY 1979 (CONT.)

		^P ^A ^S ML	^D ^E ^R ML	^T ^H ^P ^L ^E ^I ^F C	^H ^P ^L ^E ^I ^F	^H ^P ^L ^E ^I ^F	^H ^P ^L ^E ^I ^F UMOL/L	^H ^P ^L ^E ^I ^F UMHO/CM
18 MAY 1979	WHITEFACE	223.00	210.00	22.00	3.79	4.05	89.00	57.00
19 MAY 1979	BROOKHAVEN	297.00	120.00	26.00	4.51	6.40	.40	30.00
22 MAY 1979	ITHACA	60.00	60.00	20.00	3.71	MOE	190.00	MOE
	PENN STATE	116.00	140.00	25.00	3.90	ISA	130.00	ISA
	VIRGINIA	776.00	640.00	25.00	4.33	4.23	51.00	22.00
24 MAY 1979	PENN STATE	3140.00	3680.00	25.00	4.38	4.30	50.00	24.00
	BROOKHAVEN	990.00	1370.00	25.00	3.47	4.20	63.00	41.00
25 MAY 1979	BROOKHAVEN	718.00	80.00	26.00	4.55	5.75	1.80	12.00
26 MAY 1979	OXFORD OH	482.00	610.00	15.00	4.76	4.78	17.00	12.00
28 MAY 1979	OXFORD OH	385.00	630.00	14.00	4.19	4.14	72.00	34.00
29 MAY 1979	ITHACA	2250.00	2550.00	18.00	4.20	4.20	63.00	30.00
	VIRGINIA	1420.00	1250.00	20.00	4.15	4.15	71.00	34.00
	ILLINOIS	270.00	400.00	25.00	6.32	6.05	RPC	RPC
	BROOKHAVEN	27.00	150.00	23.00	3.37	ISA	430.00	ISA
	LEWES DE	2123.00	5040.00	14.00	4.28	4.35	45.00	27.00
30 MAY 1979	PENN STATE	698.00	790.00	25.00	4.09	3.95	110.00	65.00
	BROOKHAVEN	370.00	430.00	23.00	3.73	4.05	RPC	RPC
	LEWES DE	298.00	300.00	20.00	3.82	3.95	110.00	62.00
31 MAY 1979	WHITEFACE	2119.00	3020.00	17.00	4.03	4.40	40.00	25.00
	PENN STATE	32.00	50.00	ISA	ISA	3.45	350.00	210.00
	BROOKHAVEN	42.00	NAP	23.00	3.48	ISA	330.00	ISA

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DATA FROM 1 JUN 1979 TO 30 JUN 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
1 JUN 1979	LEWES DE	2184.00	5000.00	12.00	4.36	4.50	32.00	18.00
2 JUN 1979	VIRGINIA	1660.00	1590.00	25.00	4.36	4.30	50.00	22.00
4 JUN 1979	PENN STATE	52.00	NAP	2.50	3.85	3.80	160.00	110.00
5 JUN 1979	VIRGINIA	MOE	7100.00	28.00	4.04	4.01	98.00	69.00
	BROOKHAVEN	374.00	1750.00	23.00	3.84	4.65	RPC	RPC
	LEWES DE	2011.00	2500.00	15.00	4.45	4.55	28.00	19.00
6 JUN 1979	PENN STATE	13.00	25.00	25.00	ISA	ISA	ISA	ISA
	BROOKHAVEN	299.00	290.00	23.00	3.46	3.80	RPC	RPC
7 JUN 1979	PENN STATE	16.00	25.00	25.00	ISA	ISA	ISA	ISA
8 JUN 1979	OXFORD OH	613.00	1110.00	18.00	4.10	4.22	60.00	25.00
9 JUN 1979	PENN STATE	1905.00	1800.00	25.00	4.60	4.55	28.00	16.00
	ILLINOIS	124.00	120.00	25.00	5.11	5.05	RPC	RPC
10 JUN 1979	ITHACA	245.00	250.00	16.00	3.87	3.90	130.00	74.00
	VIRGINIA	37.00	15.00	28.00	4.09	ISA	NAP	ISA
	ILLINOIS	155.00	160.00	25.00	4.63	4.60	25.00	14.00
11 JUN 1979	PENN STATE	358.00	360.00	25.00	4.20	4.05	89.00	49.00
	OXFORD OH	36.00	40.00	ISA	ISA	ISA	ISA	ISA
12 JUN 1979	ITHACA	1430.00	1430.00	17.00	4.29	4.35	45.00	21.00
	VIRGINIA	219.00	230.00	28.00	4.10	4.00	100.00	31.00
	BROOKHAVEN	21.00	50.00	23.00	3.40	ISA	400.00	ISA
	LEWES DE	919.00	1310.00	16.00	3.91	4.00	100.00	53.00
13 JUN 1979	WHITEFACE	612.00	510.00	22.00	4.00	4.25	56.00	31.00
14 JUN 1979	ILLINOIS	130.00	140.00	25.00	4.32	4.38	42.00	35.00

DATA FROM 1 JUN 1979 TO 30 JUN 1979 (CONT.)

		^S ^A ^M ^P ML	^P ^R ^E ^D ML	^F ^I ^E ^L ^D C	^F ^I ^E ^L ^D ISA	^L ^A ^B ^P ^H ISA	⁽ ^H ⁺ UMOL/L	^C ^O ^N ^D ^U ^C ^T UMHO/CM
18 JUN 1979	PENN STATE	.20	ISA	ISA	ISA	ISA	ISA	ISA
	VIRGINIA	1360.00	1310.00	28.00	4.63	4.65	22.00	12.00
	BROOKHAVEN	269.00	330.00	23.00	3.54	5.11	7.80	7.00
19 JUN 1979	LEWES DE	138.00	190.00	15.00	4.13	4.25	56.00	29.00
	OXFORD OH	603.00	860.00	15.00	4.64	3.90	130.00	64.00
21 JUN 1979	ILLINOIS	112.00	100.00	25.00	4.12	4.22	60.00	40.00
	OXFORD OH	731.00	810.00	18.00	4.37	4.21	62.00	30.00
22 JUN 1979	PENN STATE	33.00	50.00	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	15.00	25.00	ISA	ISA	ISA	ISA	ISA
24 JUN 1979	OXFORD OH	214.00	250.00	18.00	4.48	4.39	41.00	22.00
25 JUN 1979	ITHACA	1060.00	1150.00	21.00	4.10	4.10	79.00	49.00
	VIRGINIA	223.00	240.00	22.00	3.75	3.64	230.00	77.00
26 JUN 1979	WHITEFACE	103.00	320.00	21.00	3.79	3.92	120.00	62.00
	LEWES DE	838.00	1680.00	15.00	3.88	4.05	89.00	43.00
28 JUN 1979	PENN STATE	26.00	40.00	ISA	ISA	ISA	ISA	ISA
29 JUN 1979	WHITEFACE	1806.00	1230.00	21.00	3.93	4.21	62.00	36.00
	ITHACA	250.00	250.00	18.00	3.49	3.55	290.00	140.00
	PENN STATE	405.00	350.00	25.00	3.98	3.80	160.00	84.00
	ILLINOIS	284.00	290.00	25.00	4.47	4.64	23.00	26.00
30 JUN 1979	VIRGINIA	227.00	240.00	23.00	3.88	3.86	140.00	65.00

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DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
1 JUL 1979	OXFORD OH	941.00	1100.00	16.00	4.03	3.80	160.00	60.00
2 JUL 1979	PENN STATE	2196.00	2150.00	25.00	4.19	4.10	79.00	47.00
	ILLINOIS	446.00	470.00	25.00	4.46	4.40	40.00	25.00
	BROOKHAVEN	165.00	140.00	24.00	3.99	4.35	45.00	23.00
3 JUL 1979	ITHACA	210.00	210.00	24.00	3.61	3.55	280.00	140.00
	BROOKHAVEN	47.00	35.00	25.00	3.57	ISA	270.00	ISA
	LEWES DE	895.00	1180.00	22.00	4.19	4.25	56.00	25.00
5 JUL 1979	PENN STATE	347.00	360.00	25.00	4.19	4.20	63.00	34.00
	BROOKHAVEN	79.00	NAP	23.00	3.71	4.15	71.00	42.00
	LEWES DE	107.00	160.00	15.00	3.38	3.49	320.00	150.00
	OXFORD OH	1162.00	1260.00	15.00	4.33	4.14	72.00	30.00
6 JUL 1979	WHITEFACE	1538.00	1750.00	23.00	3.96	4.16	69.00	27.00
	VIRGINIA	226.00	150.00	23.00	3.91	3.90	130.00	56.00
	ILLINOIS	394.00	370.00	25.00	4.12	4.20	63.00	32.00
9 JUL 1979	ILLINOIS	271.00	250.00	25.00	3.78	3.80	160.00	81.00
	OXFORD OH	248.00	250.00	17.00	3.99	3.70	200.00	81.00
10 JUL 1979	OXFORD OH	17.00	40.00	ISA	ISA	ISA	ISA	ISA
11 JUL 1979	ITHACA	20.00	25.00	22.00	3.64	ISA	230.00	ISA
	PENN STATE	350.00	320.00	25.00	4.30	4.35	45.00	16.00
	BROOKHAVEN	232.00	220.00	25.00	3.74	5.70	2.00	8.00
12 JUL 1979	LEWES DE	245.00	120.00	15.00	4.70	4.71	20.00	10.00
13 JUL 1979	PENN STATE	.90	ISA	ISA	ISA	ISA	ISA	ISA
14 JUL 1979	ILLINOIS	614.00	650.00	25.00	4.09	4.08	83.00	40.00

DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
	OXFORD OH	2184.00	2178.00	16.00	4.26	4.15	71.00	26.00
16 JUL 1979	VIRGINIA	177.00	150.00	23.00	3.51	3.55	280.00	120.00
	BROOKHAVEN	20.00	50.00	27.00	3.29	ISA	510.00	ISA
17 JUL 1979	WHITEFACE	523.00	350.00	24.00	3.81	3.89	130.00	51.00
	PENN STATE	69.00	90.00	25.00	3.82	3.70	200.00	68.00
	LEWES DE	30.00	ISA	21.00	4.50	ISA	32.00	ISA
18 JUL 1979	ITHACA	650.00	560.00	16.00	3.92	3.84	140.00	62.00
19 JUL 1979	LEWES DE	479.00	680.00	17.00	3.75	3.69	200.00	91.00
20 JUL 1979	PENN STATE	143.00	160.00	25.00	3.81	3.62	240.00	110.00
21 JUL 1979	VIRGINIA	150.00	90.00	23.00	3.75	3.70	200.00	84.00
22 JUL 1979	LEWES DE	169.00	120.00	19.00	3.79	3.76	170.00	68.00
24 JUL 1979	ITHACA	1990.00	1938.00	25.00	3.96	3.90	130.00	49.00
	PENN STATE	271.00	250.00	25.00	4.19	3.95	110.00	65.00
	LEWES DE	586.00	870.00	20.00	4.43	4.40	40.00	18.00
25 JUL 1979	PENN STATE	48.00	60.00	ISA	ISA	3.72	190.00	70.00
	ILLINOIS	2138.00	3920.00	25.00	4.20	4.09	81.00	34.00
	BROOKHAVEN	15.00	10.00	27.00	3.78	ISA	170.00	ISA
	LEWES DE	613.00	1000.00	15.00	4.24	4.12	76.00	27.00
26 JUL 1979	PENN STATE	212.00	160.00	25.00	3.99	3.80	160.00	57.00
	VIRGINIA	236.00	190.00	23.00	4.18	4.15	71.00	32.00
	BROOKHAVEN	14.00	10.00	27.00	3.71	ISA	150.00	ISA
	OXFORD OH	2135.00	2610.00	16.00	4.07	3.98	100.00	49.00
27 JUL 1979	ITHACA	610.00	600.00	22.00	4.07	4.00	100.00	40.00

DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		ML	ML	C	F	L	UMOL/L	UMHO/CM
	BROOKHAVEN	220.00	200.00	27.00	4.16	RPC	RPC	RPC
29 JUL 1979	PENN STATE	1281.00	1280.00	25.00	4.32	4.17	68.00	23.00
	OXFORD OH	1924.00	1980.00	17.00	4.20	4.10	79.00	35.00
30 JUL 1979	WHITEFACE	1046.00	630.00	18.00	3.95	4.10	79.00	26.00
	BROOKHAVEN	93.00	90.00	27.00	3.43	ISA	370.00	ISA
	LEWES DE	200.00	120.00	15.00	4.00	MOE	100.00	MOE
	OXFORD OH	ISA	12.00	ISA	ISA	ISA	ISA	ISA
31 JUL 1979	ITHACA	1020.00	970.00	14.00	3.94	3.92	120.00	52.00
	VIRGINIA	655.00	620.00	23.00	4.12	4.04	91.00	38.00
	ILLINOIS	1616.00	2200.00	25.00	4.29	4.44	36.00	29.00
	LEWES DE	20.00	ISA	20.00	4.78	ISA	17.00	ISA

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

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		ML	ML	C	F	L	UMOL/L	UMHO/CM
1 AUG 1979	ITHACA	420.00	400.00	1.50	3.91	3.89	130.00	48.00
	PENN STATE	188.00	190.00	25.00	3.80	3.63	230.00	97.00
	ILLINOIS	463.00	1710.00	25.00	4.58	4.43	37.00	20.00
2 AUG 1979	WHITEFACE	211.00	160.00	25.00	3.98	4.13	74.00	30.00
	PENN STATE	223.00	220.00	25.00	3.80	3.60	250.00	97.00
	OXFORD OH	620.00	410.00	15.00	4.06	3.90	130.00	45.00
3 AUG 1979	ITHACA	95.00	90.00	19.00	3.97	ISA	110.00	ISA
	PENN STATE	1.60	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	1.00	50.00	22.00	ISA	ISA	ISA	ISA
	LEWES DE	466.00	500.00	15.00	3.86	3.83	150.00	64.00
4 AUG 1979	BROOKHAVEN	182.00	190.00	22.00	3.73	3.90	130.00	62.00
5 AUG 1979	BROOKHAVEN	2076.00	4000.00	22.00	3.84	3.99	100.00	44.00
6 AUG 1979	WHITEFACE	1064.00	860.00	24.00	4.03	4.12	76.00	25.00
	VIRGINIA	149.00	110.00	23.00	4.01	3.93	120.00	56.00
7 AUG 1979	BROOKHAVEN	204.00	160.00	22.00	3.53	ISA	300.00	ISA
	LEWES DE	170.00	250.00	15.00	3.78	3.73	190.00	75.00
8 AUG 1979	PENN STATE	1094.00	420.00	25.00	4.10	3.96	110.00	49.00
10 AUG 1979	BROOKHAVEN	113.00	120.00	26.00	3.45	ISA	350.00	ISA
11 AUG 1979	PENN STATE	777.00	2180.00	25.00	3.80	3.62	240.00	91.00
	BROOKHAVEN	299.00	990.00	20.00	3.65	3.94	110.00	57.00
13 AUG 1979	WHITEFACE	1157.00	720.00	21.00	4.09	RPC	RPC	RPC
	PENN STATE	813.00	870.00	25.00	4.40	4.49	32.00	13.00
	BROOKHAVEN	2125.00	1400.00	20.00	3.83	4.15	71.00	36.00

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		^L V	^L V	^T P	^H P	^H P	^C U	^T C
		^P M S	^D E P	^D L E I F	^D L E I F	^R A L	⁺ H (	^C U N O C
		ML	ML	C			UMOL/L	UMHO/CM
	LEWES DE	1402.00	4230.00	15.00	4.10	4.04	91.00	57.00
14 AUG 1979	ITHACA	920.00	920.00	19.00	3.91	3.95	140.00	51.00
	VIRGINIA	1170.00	1070.00	23.00	4.13	4.07	85.00	35.00
15 AUG 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
16 AUG 1979	WHITEFACE	915.00	510.00	21.00	4.26	4.64	23.00	12.00
	ITHACA	50.00	110.00	20.00	4.03	ISA	NAP	ISA
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
19 AUG 1979	PENN STATE	202.00	540.00	25.00	3.77	3.55	280.00	100.00
	VIRGINIA	1145.00	1080.00	23.00	3.94	3.96	110.00	52.00
	ILLINOIS	240.00	2850.00	25.00	4.57	4.40	40.00	31.00
	BROOKHAVEN	360.00	400.00	22.00	3.40	3.64	230.00	100.00
	OXFORD OH	397.00	MOE	17.00	4.36	4.40	40.00	22.00
20 AUG 1979	WHITEFACE	82.00	240.00	23.00	3.89	3.99	100.00	58.00
21 AUG 1979	PENN STATE	ISA	220.00	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	27.00	7700.00	25.00	4.22	ISA	60.00	ISA
	OXFORD OH	993.00	MOE	14.00	4.01	4.00	100.00	53.00
22 AUG 1979	LEWES DE	306.00	190.00	19.00	3.93	3.94	110.00	56.00
24 AUG 1979	ITHACA	60.00	60.00	22.00	4.02	ISA	NAP	ISA
	VIRGINIA	806.00	720.00	23.00	3.85	3.85	140.00	58.00
	OXFORD OH	2103.00	1210.00	15.00	4.07	4.00	100.00	49.00
25 AUG 1979	BROOKHAVEN	102.00	110.00	25.00	3.85	ISA	140.00	ISA
26 AUG 1979	PENN STATE	171.00	440.00	25.00	3.99	3.89	130.00	47.00
	LEWES DE	24.00	ISA	18.00	4.27	ISA	54.00	ISA

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
27 AUG 1979	PENN STATE	1811.00	NAP	25.00	4.10	4.05	89.00	37.00
	VIRGINIA	200.00	140.00	23.00	4.22	4.20	63.00	25.00
28 AUG 1979	WHITEFACE	2008.00	1210.00	22.00	4.10	4.28	52.00	21.00
	ITHACA	1090.00	1250.00	23.00	4.15	4.03	93.00	34.00
	VIRGINIA	322.00	300.00	23.00	4.27	4.26	55.00	26.00
	BROOKHAVEN	146.00	330.00	25.00	3.66	ISA	220.00	ISA
	LEWES DE	986.00	930.00	18.00	4.06	4.20	63.00	35.00
29 AUG 1979	BROOKHAVEN	896.00	760.00	24.00	4.28	4.75	18.00	10.00
30 AUG 1979	WHITEFACE	1354.00	900.00	21.00	4.06	4.10	79.00	31.00
	PENN STATE	987.00	940.00	25.00	4.11	4.00	100.00	35.00
	BROOKHAVEN	41.00	20.00	24.00	3.67	ISA	210.00	ISA
	LEWES DE	799.00	770.00	20.00	4.38	4.35	45.00	19.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 SEP 1979 TO 30 SEP 1979 (CONT.)

		^P ^M ^A ^S ML	^D ^E ^R ^P ML	^L ^E ^I ^F C	^L ^E ^I ^F C	^H ^A ^L C	^H ^I ^C J O N C UMOL/L	^H ^I ^C J O N C UMHOL/GM
2 SEP 1979	BROOKHAVEN	176.00	140.00	23.00	3.95	4.15	71.00	27.00
	LEWES DE	165.00	250.00	20.00	4.35	4.38	42.00	21.00
3 SEP 1979	ITHACA	930.00	980.00	22.00	4.11	4.10	79.00	32.00
	PENN STATE	2166.00	1980.00	25.00	4.31	4.32	48.00	23.00
	LEWES DE	118.00	110.00	15.00	4.74	4.76	17.00	13.00
4 SEP 1979	VIRGINIA	2000.00	2150.00	23.00	4.12	4.00	100.00	40.00
	LEWES DE	6.00	13.00	23.00	4.73	ISA	19.00	ISA
6 SEP 1979	WHITEFACE	3595.00	2330.00	22.00	4.51	4.85	14.00	8.00
	PENN STATE	2141.00	2140.00	25.00	4.34	4.83	15.00	6.00
	BROOKHAVEN	444.00	470.00	23.00	4.42	4.75	18.00	81.00
	LEWES DE	2083.00	2300.00	15.00	5.09	5.00	10.00	23.00
7 SEP 1979	ITHACA	3160.00	3430.00	22.00	5.22	5.07	8.50	4.00
	PENN STATE	37.00	50.00	ISA	ISA	3.64	230.00	130.00
	VIRGINIA	MOE	4860.00	23.00	5.09	4.89	13.00	6.00
8 SEP 1979	VIRGINIA	72.00	40.00	23.00	3.89	3.87	140.00	69.00
10 SEP 1979	WHITEFACE	1419.00	910.00	18.00	4.19	4.35	45.00	19.00
11 SEP 1979	WHITEFACE	440.00	320.00	16.00	4.05	4.15	71.00	35.00
15 SEP 1979	ITHACA	1080.00	1080.00	22.00	4.59	4.35	45.00	14.00
	PENN STATE	448.00	590.00	25.00	4.51	4.50	32.00	16.00
	VIRGINIA	709.00	620.00	23.00	NAP	4.40	40.00	21.00
	BROOKHAVEN	73.00	70.00	22.00	5.54	MOE	2.90	MOE
	LEWES DE	482.00	470.00	15.00	4.90	4.94	11.00	8.00
17 SEP 1979	WHITEFACE	1151.00	780.00	21.00	4.39	4.83	15.00	6.00

DATA FROM 2 SEP 1979 TO 30 SEP 1979 (CONT.)

		ML	ML	G			UMOL/L	UMHO/GM
20 SEP 1979	PENN STATE	9.00	25.00	ISA	ISA	ISA	ISA	ISA
21 SEP 1979	WHITEFACE	415.00	260.00	21.00	4.27	4.50	32.00	16.00
22 SEP 1979	ITHACA	280.00	300.00	21.00	3.97	3.99	100.00	45.00
23 SEP 1979	PENN STATE	1439.00	NAP	25.00	4.48	4.52	30.00	14.00
	VIRGINIA	MOE	6820.00	24.00	4.27	4.26	55.00	26.00
	BROOKHAVEN	1956.00	1930.00	23.00	4.24	4.45	35.00	23.00
	LEWES DE	2083.00	2300.00	15.00	4.36	4.84	14.00	9.00
	OXFORD OH	1397.00	660.00	15.00	4.30	4.28	52.00	21.00
26 SEP 1979	LEWES DE	219.00	290.00	22.00	4.83	4.85	14.00	23.00
29 SEP 1979	ITHACA	730.00	810.00	22.00	4.35	4.31	49.00	19.00
	OXFORD OH	806.00	310.00	13.00	4.57	4.55	28.00	13.00
30 SEP 1979	PENN STATE	825.00	1430.00	25.00	4.20	4.31	49.00	30.00
	ILLINOIS	160.00	190.00	25.00	4.23	5.49	3.20	42.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 OCT 1979 TO 29 OCT 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
1 OCT 1979	VIRGINIA	MOE	1990.00	24.00	4.21	4.23	59.00	30.00
2 OCT 1979	PENN STATE	1.30	13.00	ISA	ISA	ISA	ISA	ISA
	LEWES DE	769.00	830.00	15.00	4.57	4.80	16.00	43.00
	OXFORD OH	893.00	930.00	13.00	4.06	4.10	79.00	43.00
3 OCT 1979	BROOKHAVEN	1574.00	1600.00	23.00	4.16	4.28	52.00	35.00
	LEWES DE	797.00	800.00	15.00	4.39	4.48	33.00	18.00
4 OCT 1979	ITHACA	630.00	690.00	22.00	4.14	4.09	91.00	35.00
	PENN STATE	1977.00	1850.00	25.00	4.24	4.29	51.00	26.00
5 OCT 1979	OXFORD OH	532.00	MOE	14.00	4.34	4.50	32.00	19.00
6 OCT 1979	ITHACA	2900.00	3110.00	22.00	4.16	4.11	78.00	31.00
	PENN STATE	2312.00	2220.00	25.00	4.21	4.41	39.00	19.00
	VIRGINIA	881.00	1770.00	25.00	4.58	4.55	28.00	13.00
	BROOKHAVEN	194.00	210.00	23.00	4.29	4.61	25.00	19.00
	LEWES DE	190.00	210.00	15.00	4.97	4.95	11.00	12.00
8 OCT 1979	PENN STATE	132.00	150.00	25.00	4.28	5.89	1.30	27.00
9 OCT 1979	WHITEFACE	4267.00	2500.00	20.00	4.16	4.35	45.00	21.00
	VIRGINIA	39.00	60.00	25.00	4.18	4.17	58.00	23.00
10 OCT 1979	ITHACA	430.00	450.00	21.00	4.23	4.22	50.00	27.00
	OXFORD OH	232.00	50.00	15.00	4.15	4.30	50.00	40.00
11 OCT 1979	PENN STATE	197.00	250.00	25.00	3.99	4.03	93.00	57.00
	LEWES DE	1624.00	1730.00	15.00	4.25	4.22	50.00	52.00
12 OCT 1979	BROOKHAVEN	1032.00	410.00	26.00	4.28	4.57	27.00	6.00
	OXFORD OH	138.00	110.00	16.00	4.86	5.13	7.40	18.00

DATA FROM 1 OCT 1979 TO 29 OCT 1979 (CONT.)

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		ML	ML	C	F	L	UMOL/L	UMHO/CM
13 OCT 1979	ITHACA	140.00	190.00	22.00	4.04	4.06	87.00	48.00
	BROOKHAVEN	390.00	60.00	26.00	4.11	4.25	74.00	32.00
14 OCT 1979	PENN STATE	312.00	360.00	25.00	4.09	4.09	81.00	52.00
15 OCT 1979	ITHACA	115.00	180.00	22.00	4.07	4.07	85.00	49.00
	LEWES DE	273.00	170.00	18.00	4.02	3.97	110.00	47.00
16 OCT 1979	WHITEFACE	899.00	490.00	11.00	4.24	4.34	46.00	23.00
	OXFORD OH	215.00	220.00	15.00	3.95	3.99	100.00	55.00
18 OCT 1979	PENN STATE	24.00	60.00	ISA	ISA	3.93	100.00	83.00
	ILLINOIS	4.50	85.00	25.00	5.08	ISA	8.30	ISA
	OXFORD OH	20.00	40.00	ISA	ISA	ISA	ISA	ISA
23 OCT 1979	ILLINOIS	16.00	660.00	25.00	5.85	ISA	1.40	ISA
24 OCT 1979	WHITEFACE	1098.00	850.00	21.00	3.91	MOE	120.00	MOE
	ITHACA	495.00	620.00	22.00	4.25	4.23	59.00	30.00
	OXFORD OH	183.00	850.00	15.00	4.45	4.59	26.00	19.00
25 OCT 1979	PENN STATE	409.00	710.00	25.00	4.50	4.46	35.00	14.00
	LEWES DE	73.00	60.00	18.00	4.52	4.31	49.00	26.00
28 OCT 1979	ITHACA	255.00	360.00	22.00	4.06	4.02	96.00	47.00
	PENN STATE	368.00	350.00	25.00	4.18	4.10	79.00	43.00
	OXFORD OH	114.00	70.00	18.00	4.10	4.22	60.00	51.00
29 OCT 1979	WHITEFACE	156.00	70.00	20.00	3.89	MOE	130.00	MOE
	BROOKHAVEN	193.00	190.00	25.00	3.69	3.90	130.00	82.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 NOV 1979 TO 29 NOV 1979 (CONT.)

V O L V O L T P H P H P H C T

		ML	ML	C			UMOL/L	UMHO/CM
1 NOV 1979	ILLINOIS	27.00	210.00	25.00	7.12	ISA	.10	ISA
2 NOV 1979	OXFORD OH	896.00	MOE	13.00	4.49	4.50	32.00	17.00
3 NOV 1979	ITHACA	1050.00	1370.00	22.00	4.42	4.31	49.00	19.00
	BROOKHAVEN	2090.00	930.00	24.00	4.66	4.92	12.00	13.00
4 NOV 1979	PENN STATE	1929.00	1570.00	25.00	4.61	4.32	49.00	19.00
	LEWES DE	976.00	1180.00	18.00	4.83	4.51	31.00	19.00
7 NOV 1979	OXFORD OH	21.00	25.00	ISA	ISA	ISA	ISA	ISA
8 NOV 1979	WHITEFACE	908.00	630.00	13.00	4.13	MOE	74.00	MOE
	ITHACA	60.00	190.00	22.00	3.59	RPC	260.00	RPC
	PENN STATE	ISA	40.00	ISA	ISA	ISA	ISA	ISA
10 NOV 1979	OXFORD OH	1118.00	MOE	12.00	4.22	4.60	25.00	27.00
11 NOV 1979	PENN STATE	359.00	320.00	25.00	4.15	3.96	110.00	40.00
	BROOKHAVEN	539.00	530.00	25.00	4.18	4.39	41.00	23.00
12 NOV 1979	LEWES DE	1345.00	3870.00	17.00	4.36	4.49	32.00	17.00
13 NOV 1979	WHITEFACE	785.00	490.00	21.00	3.82	4.10	79.00	31.00
	PENN STATE	12.00	50.00	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	1296.00	1230.00	25.00	4.49	4.65	22.00	13.00
14 NOV 1979	ITHACA	120.00	500.00	15.00	3.86	3.82	150.00	70.00
	BROOKHAVEN	187.00	210.00	25.00	3.91	3.96	110.00	47.00
	LEWES DE	225.00	250.00	18.00	4.58	4.51	31.00	32.00
15 NOV 1979	WHITEFACE	85.00	60.00	21.00	3.95	MOE	110.00	MOE
	PENN STATE	20.00	10.00	ISA	ISA	ISA	ISA	ISA
16 NOV 1979	PENN STATE	113.00	120.00	25.00	4.22	4.07	85.00	33.00

DATA FROM 1 NOV 1979 TO 29 NOV 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
	OXFORD OH	6.00	ISA	ISA	ISA	ISA	ISA	ISA
19 NOV 1979	WHITEFACE	127.00	150.00	18.00	4.13	4.40	40.00	17.00
20 NOV 1979	ITHACA	230.00	220.00	24.00	4.08	4.09	81.00	36.00
26 NOV 1979	VIRGINIA	MOE	860.00	22.00	4.59	4.59	26.00	19.00
	BROOKHAVEN	170.00	190.00	27.00	4.26	MOE	55.00	MOE
	OXFORD OH	MOE	4460.00	12.00	4.10	4.40	40.00	21.00
27 NOV 1979	WHITEFACE	2105.00	2610.00	18.00	4.21	4.87	13.00	9.00
	ITHACA	4080.00	4420.00	21.00	4.53	4.70	20.00	12.00
	PENN STATE	3502.00	3340.80	25.00	4.85	4.88	13.00	6.00
	BROOKHAVEN	198.00	260.00	28.00	4.56	4.63	23.00	31.00
	LEWES DE	996.00	1050.00	19.00	4.75	4.70	21.00	23.00
29 NOV 1979	OXFORD OH	363.00	350.00	17.00	4.24	4.38	42.00	29.00

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DATA FROM 2 DEC 1979 TO 28 DEC 1979 (CONT.)

		ML	ML	C	F	L	UMOL/L	UMHO/CM
2 DEC 1979	OXFORD OH	11.00	12.00	ISA	ISA	ISA	ISA	ISA
3 DEC 1979	WHITEFACE	1198.00	360.00	21.00	4.00	4.21	62.00	32.00
	PENN STATE	20.00	ISA	ISA	ISA	ISA	ISA	ISA
4 DEC 1979	ITHACA	145.00	190.00	22.00	4.11	4.14	72.00	36.00
6 DEC 1979	WHITEFACE	101.00	140.00	19.00	4.05	4.50	32.00	21.00
	VIRGINIA	10.00	ISA	NAP	4.38	ISA	42.00	ISA
7 DEC 1979	WHITEFACE	371.00	260.00	20.00	3.80	4.05	89.00	44.00
	ITHACA	245.00	270.00	22.00	4.11	4.10	79.00	43.00
	PENN STATE	83.00	100.00	25.00	3.99	3.91	120.00	55.00
	BROOKHAVEN	997.00	1100.00	25.00	4.66	4.74	18.00	10.00
	OXFORD OH	11.00	ISA	ISA	ISA	ISA	ISA	ISA
8 DEC 1979	PENN STATE	9.00	12.00	ISA	ISA	ISA	ISA	ISA
	LEWES DE	527.00	540.00	10.00	4.74	4.71	20.00	11.00
10 DEC 1979	WHITEFACE	334.00	600.00	19.00	4.07	4.27	54.00	27.00
14 DEC 1979	ITHACA	750.00	830.00	22.00	4.23	4.27	54.00	30.00
	PENN STATE	507.00	NOE	25.00	4.49	4.46	35.00	18.00
	VIRGINIA	447.00	440.00	22.00	4.50	4.57	27.00	11.00
	BROOKHAVEN	954.00	900.00	25.00	4.16	4.30	50.00	23.00
	LEWES DE	966.00	960.00	12.00	4.64	4.60	25.00	13.00
	OXFORD OH	572.00	500.00	17.00	4.31	4.40	40.00	19.00
17 DEC 1979	WHITEFACE	263.00	150.00	20.00	3.95	3.99	100.00	46.00
	BROOKHAVEN	137.00	80.00	25.00	3.99	ISA	100.00	ISA
	LEWES DE	105.00	120.00	10.00	4.13	4.13	74.00	34.00

DATA FROM 2 DEC 1979 TO 28 DEC 1979 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
18 DEC 1979	ITHACA	190.00	240.00	22.00	4.28	4.27	54.00	27.00
19 DEC 1979	PENN STATE	50.00	MOE	ISA	ISA	4.48	33.00	39.00
20 DEC 1979	ITHACA	460.00	510.00	22.00	4.34	4.30	50.00	22.00
	BROOKHAVEN	54.00	180.00	25.00	5.00	ISA	10.00	ISA
21 DEC 1979	VIRGINIA	0.00	50.00	ISA	ISA	ISA	ISA	ISA
	LEWES DE	37.00	60.00	10.00	3.82	ISA	150.00	ISA
23 DEC 1979	VIRGINIA	30.00	20.00	21.00	4.24	ISA	50.00	ISA
	ILLINOIS	12.00	360.00	25.00	7.40	ISA	.04	ISA
	OXFORD OH	868.00	960.00	19.00	4.14	4.20	63.00	33.00
25 DEC 1979	ILLINOIS	42.00	1230.00	25.00	4.48	ISA	33.00	ISA
	BROOKHAVEN	1251.00	1290.00	26.00	4.30	4.40	40.00	23.00
26 DEC 1979	PENN STATE	3279.00	MOE	25.00	4.52	4.50	32.00	15.00
	VIRGINIA	538.00	500.00	23.00	4.25	4.31	49.00	27.00
	OXFORD OH	1266.00	1410.00	17.00	4.25	4.39	41.00	25.00
27 DEC 1979	WHITEFACE	2585.00	1400.00	18.00	4.13	4.43	37.00	18.00
28 DEC 1979	LEWES DE	245.00	250.00	10.00	4.80	4.84	14.00	11.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 JUL 1978 TO 31 JUL 1978 (CONT.)

		2 0 S (	4 0 S (	2 0 N (	3 0 N (	1 0 C (	4 0 P (	0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 JUL 1978	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
2 JUL 1978	ILLINOIS	< .10	35.00	.42	25.00	4.50	< .20	100.00
3 JUL 1978	ILLINOIS	< .10	10.00	.20	12.00	4.00	< .20	36.00
	LEWES DE	< .20	46.00	< .08	37.00	120.00	< .20	250.00
4 JUL 1978	ITHACA	< .10	16.00	.20	22.00	2.50	< .20	57.00
	PENN STATE	< .20	25.00	.21	13.00	1.90	< .20	65.00
5 JUL 1978	VIRGINIA	< .20	74.00	.16	84.00	20.00	< .20	250.00
6 JUL 1978	LEWES DE	< .20	53.00	.14	37.00	65.00	< .20	210.00
9 JUL 1978	ITHACA	< .10	74.00	.06	37.00	4.40	< .20	190.00
	VIRGINIA	< .20	39.00	< .08	26.00	8.50	.72	110.00
	ILLINOIS	< .10	66.00	.72	60.00	7.00	< .20	200.00
11 JUL 1978	WHITEFACE	< .10	49.00	.15	27.00	5.50	< .20	130.00
	PENN STATE	< .20	69.00	.18	77.00	12.00	< .20	230.00
	VIRGINIA	< .20	39.00	< .08	48.00	10.00	< .10	140.00
	LEWES DE	< .20	48.00	< .08	37.00	15.00	< .20	150.00
13 JUL 1978	ITHACA	< .10	19.00	.23	24.00	2.40	< .20	65.00
	ILLINOIS	< .20	36.00	.43	37.00	6.00	< .20	120.00
15 JUL 1978	PENN STATE	.25	95.00	.20	68.00	11.00	< .20	270.00
	VIRGINIA	< .20	32.00	< .08	17.00	8.30	< .10	39.00
	BROOKHAVEN	< .20	40.00	.65	16.00	42.00	19.00	200.00
	LEWES DE	< .20	13.00	< .08	10.00	10.00	< .20	46.00
17 JUL 1978	ITHACA	< .20	58.00	.19	26.00	2.90	< .20	150.00
	BROOKHAVEN	< .20	8.60	< .08	11.00	4.40	< .20	33.00

DATA FROM 1 JUL 1978 TO 31 JUL 1978 (CONT.)

		0 S	2 S	4 S	2 N	3 N	0 C	4 P	0 N
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 JUL 1978	WHITEFACE	< .10	97.00	.18	82.00	19.00	< .20	300.00	
	VIRGINIA	< .20	58.00	.13	32.00	8.10	< .10	160.00	
22 JUL 1978	ITHACA	< .20	63.00	.18	32.00	3.50	< .20	160.00	
24 JUL 1978	WHITEFACE	< .20	88.00	< .08	45.00	8.50	< .10	230.00	
	PENN STATE	.19	42.00	.25	26.00	4.50	< .20	110.00	
25 JUL 1978	VIRGINIA	< .20	22.00	.29	13.00	5.20	< .10	63.00	
	LEWES DE	< .20	16.00	.10	19.00	29.00	< .20	80.00	
26 JUL 1978	ILLINOIS	< .20	42.00	.10	29.00	4.30	< .20	120.00	
27 JUL 1978	ITHACA	< .20	87.00	.21	57.00	5.50	< .20	240.00	
28 JUL 1978	WHITEFACE	< .20	56.00	< .08	64.00	7.00	< .10	190.00	
	ITHACA	< .20	42.00	.28	35.00	2.80	.86	120.00	
	PENN STATE	.61	81.00	.14	47.00	7.90	< .20	220.00	
	BROOKHAVEN	.54	46.00	.31	42.00	7.60	< .20	140.00	
30 JUL 1978	PENN STATE	.42	51.00	< .08	50.00	7.30	< .20	160.00	
	ILLINOIS	< .20	26.00	.17	31.00	3.60	< .20	87.00	
31 JUL 1978	WHITEFACE	< .20	10.00	< .50	8.90	2.40	< .10	31.00	
	VIRGINIA	< .20	31.00	.10	38.00	7.50	< .10	110.00	
	LEWES DE	< .20	110.00	< .08	110.00	39.00	< .20	370.00	

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 NAP MEANS NO ANALYSIS PERFORMED
 MUE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 AUG 1978 TO 31 AUG 1978 (CONT.)

		2 0 S (	2 0 S (	2 0 N (	3 0 N (	2 0 C (	4 0 P (	0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 AUG 1978	PENN STATE	< .13	32.00	.18	25.00	1.70	< .20	91.00
	VIRGINIA	< .20	27.00	< .08	33.00	3.60	< .10	91.00
	BROOKHAVEN	< .20	59.00	.35	73.00	30.00	< .20	220.00
	LEWES DE	< .20	48.00	< .08	33.00	12.00	< .20	140.00
2 AUG 1978	WHITEFACE	< .20	24.00	.12	28.00	6.20	< .10	82.00
	ILLINOIS	< .20	23.00	.33	13.00	3.00	< .20	62.00
	LEWES DE	< .20	7.30	< .05	6.70	5.80	< .10	29.00
3 AUG 1978	VIRGINIA	< .20	54.00	< .08	56.00	4.10	< .10	170.00
	BROOKHAVEN	< .20	25.00	.27	22.00	8.10	< .20	80.00
4 AUG 1978	WHITEFACE	< .20	36.00	< .08	28.00	4.80	< .10	100.00
	PENN STATE	.38	60.00	< .08	31.00	5.00	< .20	160.00
	BROOKHAVEN	NAP	NAP	NAP	NAP	NAP	NAP	NAP
5 AUG 1978	VIRGINIA	< .20	16.00	< .08	8.70	1.10	< .10	42.00
	BROOKHAVEN	< .20	18.00	.28	19.00	4.60	< .20	60.00
6 AUG 1978	BROOKHAVEN	< .20	15.00	.22	15.00	12.00	< .20	57.00
7 AUG 1978	ITHACA	< .20	9.40	< .08	6.70	3.30	< .20	29.00
	ILLINOIS	< .20	34.00	< .08	57.00	7.40	< .10	130.00
	BROOKHAVEN	< .20	7.50	.22	15.00	27.00	< .20	57.00
8 AUG 1978	ITHACA	< .20	35.00	.10	26.00	6.10	< .20	100.00
	PENN STATE	.31	16.00	.21	13.00	3.00	< .20	48.00
	VIRGINIA	< .20	15.00	< .08	19.00	5.40	< .10	54.00
	BROOKHAVEN	< .20	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .20	12.00	< .05	21.00	25.00	.38	71.00

DATA FROM 1 AUG 1978 TO 31 AUG 1978 (CONT.)

		2 0 S (	4 0 S (	2 0 N (	3 0 N (	1 0 C (	4 0 P (	0 N I A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
10 AUG 1978	WHITEFACE	< .20	79.00	.18	36.00	5.40	< .10	200.00
	ITHACA	< .20	72.00	.12	25.00	4.10	< .20	170.00
	PENN STATE	4.10	26.00	.13	33.00	4.10	1.30	93.00
11 AUG 1978	LEWES DE	< .20	31.00	< .05	21.00	12.00	3.00	100.00
12 AUG 1978	VIRGINIA	< .20	85.00	< .08	45.00	4.50	< .10	220.00
	ILLINOIS	< .20	67.00	.27	50.00	10.00	< .10	190.00
	BROOKHAVEN	< .20	23.00	.13	20.00	7.30	< .20	73.00
14 AUG 1978	LEWES DE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
15 AUG 1978	PENN STATE	.44	110.00	.24	75.00	10.00	< .20	300.00
16 AUG 1978	ILLINOIS	< .20	17.00	.55	10.00	2.40	< .10	47.00
17 AUG 1978	WHITEFACE	< .20	58.00	.58	24.00	3.70	< .10	140.00
	ILLINOIS	< .20	60.00	.50	49.00	6.80	< .10	180.00
18 AUG 1978	WHITEFACE	< .20	ISA	ISA	ISA	ISA	ISA	ISA
21 AUG 1978	WHITEFACE	< .20	16.00	.09	11.00	1.20	< .20	44.00
	ITHACA	< .20	62.00	.20	37.00	5.40	< .20	170.00
28 AUG 1978	VIRGINIA	< .20	45.00	< .08	14.00	45.00	< .10	150.00
29 AUG 1978	ITHACA	< .20	65.00	.18	36.00	3.40	< .20	170.00
	PENN STATE	< .20	88.00	.11	44.00	5.10	< .10	230.00
	BROOKHAVEN	< .20	61.00	.29	34.00	65.00	< .20	220.00
30 AUG 1978	WHITEFACE	< .20	82.00	.34	56.00	5.80	< .10	230.00
	VIRGINIA	< .20	19.00	.11	16.00	4.00	< .10	58.00
31 AUG 1978	ITHACA	< .20	25.00	.12	19.00	2.10	< .20	71.00
	LEWES DE	< .20	20.00	.17	15.00	3.40	< .10	59.00

DATA FROM 1 SEP 1978 TO 29 SEP 1978 (CONT.)

		² ₀ S	⁴ ₀ S	² ₀ N	³ ₀ N	⁻ _L C	⁴ ₀ P	⁰ _N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 SEP 1978	PENN STATE	.75	35.00	.16	28.00	3.30	< .20	100.00
	BROOKHAVEN	< .20	27.00	.28	31.00	8.30	< .20	94.00
	LEWES DE	< .20	18.00	.13	14.00	14.00	< .20	64.00
2 SEP 1978	VIRGINIA	< .20	23.00	.11	14.00	2.10	< .10	62.00
4 SEP 1978	ITHACA	< .20	62.00	< .08	37.00	5.60	< .20	170.00
	PENN STATE	.20	14.00	< .08	16.00	1.80	< .10	46.00
	BROOKHAVEN	< .20	91.00	.56	93.00	14.00	< .20	290.00
6 SEP 1978	WHITEFACE	< .20	37.00	.14	36.00	6.70	< .10	120.00
8 SEP 1978	WHITEFACE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
9 SEP 1978	ITHACA	< .20	45.00	.16	25.00	6.70	< .20	120.00
11 SEP 1978	PENN STATE	ISA	90.00	.16	110.00	12.00	< .10	300.00
	BROOKHAVEN	< .20	130.00	.17	110.00	69.00	< .20	440.00
12 SEP 1978	WHITEFACE	< .20	48.00	.09	21.00	2.60	< .10	120.00
13 SEP 1978	ITHACA	< .20	100.00	< .08	65.00	6.10	< .20	280.00
	PENN STATE	< .20	67.00	.08	36.00	4.80	< .10	170.00
	BROOKHAVEN	.26	55.00	.33	39.00	14.00	< .20	160.00
	LEWES DE	< .20	71.00	< .05	45.00	17.00	< .20	200.00
15 SEP 1978	PENN STATE	< .20	18.00	.15	11.00	6.20	< .10	53.00
	VIRGINIA	< .20	53.00	.11	32.00	4.90	< .10	140.00
	ILLINOIS	.51	43.00	< .08	17.00	11.00	1.90	120.00
16 SEP 1978	ILLINOIS	.33	21.00	.23	9.70	4.90	< .10	57.00
	BROOKHAVEN	< .20	ISA	ISA	ISA	ISA	ISA	ISA
17 SEP 1978	ILLINOIS	< .20	63.00	.15	49.00	11.00	< .10	190.00

DATA FROM 1 SEP 1978 TO 29 SEP 1978 (CONT.)

		2 0 S	4 0 S	2 0 N	3 0 N	1 0 C	4 0 P	0 I N S U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 SEP 1978	WHITEFACE	1.50	22.00	.76	35.00	3.00	.60	85.00
19 SEP 1978	ITHACA	< .20	43.00	.24	46.00	5.80	< .20	150.00
	PENN STATE	< .20	61.00	.11	44.00	7.80	< .20	170.00
22 SEP 1978	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
23 SEP 1978	BROOKHAVEN	< .20	72.00	.33	58.00	29.00	< .20	230.00
25 SEP 1978	WHITEFACE	< .20	28.00	.61	19.00	3.40	.46	80.00
	PENN STATE	.82	130.00	ISA	91.00	16.00	< .20	370.00
26 SEP 1978	VIRGINIA	< .20	88.00	.11	31.00	4.00	< .10	210.00
28 SEP 1978	PENN STATE	ISA	130.00	ISA	150.00	17.00	< .20	430.00
29 SEP 1978	WHITEFACE	1.60	47.00	.14	48.00	3.60	< .20	150.00

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 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		2 0 S	4 0 S	2 0 N	3 0 N	4 0 C	4 0 P	4 0 I N
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 OCT 1978	BROOKHAVEN	NAP	11.00	.08	5.30	NAP	< .20	NAP
	OXFORD OH	4.70	57.00	.23	31.00	4.10	< .10	150.00
2 OCT 1978	ILLINCIS	.30	56.00	.25	37.00	4.90	< .20	150.00
	LEWES DE	< .20	8.60	.17	6.20	22.00	< .20	46.00
3 OCT 1978	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINCIS	< .20	42.00	.37	31.00	3.10	< .20	120.00
4 OCT 1978	WHITEFACE	< .20	33.00	.14	20.00	4.50	< .20	91.00
	OXFORD OH	< .20	45.00	.30	35.00	4.50	< .10	130.00
5 OCT 1978	ITHACA	1.30	32.00	.16	38.00	4.90	< .20	110.00
	PENN STATE	2.60	44.00	.29	48.00	5.40	< .20	140.00
	ILLINCIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
6 OCT 1978	WHITEFACE	< .20	20.00	.22	19.00	1.60	< .20	61.00
	PENN STATE	ISA	50.00	ISA	52.00	6.00	< .20	160.00
	VIRGINIA	< .20	41.00	.10	33.00	6.30	< .20	120.00
	BROOKHAVEN	< .20	15.00	< .08	8.50	31.00	< .20	70.00
9 OCT 1978	ITHACA	NAP	22.00	< .05	26.00	3.10	< .20	73.00
	PENN STATE	.56	31.00	ISA	27.00	9.40	< .20	98.00
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA
10 OCT 1978	ILLINCIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
11 OCT 1978	ILLINOIS	< .20	50.00	.36	55.00	7.50	< .20	160.00
12 OCT 1978	PENN STATE	.70	42.00	.22	47.00	5.90	< .20	140.00
	OXFORD OH	3.10	42.00	.26	44.00	8.20	< .10	140.00
13 OCT 1978	ILLINOIS	.43	56.00	.35	56.00	7.30	< .20	180.00

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		² S	⁴ S	² N	³ N	¹ C	⁴ P	⁰ A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
14 OCT 1978	PENN STATE	2.20	36.00	< .05	27.00	3.50	< .20	100.00
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	< .20	4.10	< .08	3.70	8.80	< .20	21.00
	OXFORD OH	< .20	34.00	.21	25.00	3.10	< .10	96.00
15 OCT 1978	ITHACA	1.50	18.00	.12	18.00	1.80	< .10	56.00
	LEWES DE	< .20	46.00	.24	34.00	18.00	< .20	140.00
16 OCT 1978	WHITEFACE	< .20	21.00	.08	19.00	2.40	< .20	64.00
17 OCT 1978	PENN STATE	3.40	39.00	.29	92.00	8.70	< .20	180.00
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	1.90	21.00	ISA	29.00	31.00	< .20	100.00
19 OCT 1978	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
20 OCT 1978	WHITEFACE	6.50	30.30	.14	70.00	5.20	< .20	140.00
	ITHACA	3.00	58.00	.35	120.00	9.00	< .10	250.00
	PENN STATE	.71	150.00	.41	280.00	37.00	< .20	620.00
	BROOKHAVEN	1.30	100.00	.45	240.00	51.00	< .20	490.00
23 OCT 1978	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
24 OCT 1978	WHITEFACE	< .20	26.00	.10	19.00	8.80	< .20	80.00
	ITHACA	.50	32.00	.12	19.00	5.70	< .20	87.00
	PENN STATE	.51	58.00	ISA	46.00	7.20	< .20	170.00
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	< .20	54.00	.27	48.00	5.30	< .20	160.00
25 OCT 1978	LEWES DE	.63	94.00	.19	120.00	180.00	< .20	490.00
26 OCT 1978	ILLINOIS	.21	27.00	.49	20.00	4.90	< .20	79.00

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		2 0 S	4 0 S	2 0 N	3 0 N	L C	0 P	0 N I A	M U S
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L	
27 OCT 1978	ITHACA	3.30	21.00	.15	20.00	4.50	< .20	67.00	
	PENN STATE	1.30	19.00	< .05	20.00	2.60	< .20	61.00	
	BROOKHAVEN	< .20	ISA	ISA	ISA	ISA	ISA	ISA	
	OXFORD OH	.30	54.00	< .08	46.00	4.40	< .20	160.00	
30 OCT 1978	WHITEFACE	.52	14.00	.09	14.00	2.20	< .20	44.00	

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 6 NOV 1978 TO 30 NOV 1978 (CONT.)

		0 S	0 S	0 N	0 N	0 C	0 P	0 A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	JMOL/L	JEQ/L
6 NOV 1978	LEWES DE	< .20	89.00	< .08	230.00	40.00	< .20	450.00
7 NOV 1978	ILLINOIS	.22	68.00	.29	56.00	12.00	< .20	200.00
8 NOV 1978	WHITEFACE	.69	56.00	.36	65.00	9.40	< .20	190.00
	ITHACA	.62	43.00	.08	46.00	7.60	< .20	140.00
	PENN STATE	1.40	110.00	.11	140.00	12.00	< .20	370.00
9 NOV 1978	LEWES DE	1.00	MOE	MOE	MOE	MOE	MOE	MOE
14 NOV 1978	PENN STATE	1.30	110.00	.18	190.00	16.00	< .20	430.00
	VIRGINIA	< .20	250.00	.19	530.00	77.00	< .20	1100.00
	ILLINOIS	< .20	16.00	.25	16.00	3.20	< .20	52.00
15 NOV 1978	PENN STATE	1.30	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	35.00	.30	15.00	6.00	< .20	91.00
16 NOV 1978	WHITEFACE	< .20	54.00	.09	60.00	6.80	< .20	170.00
	BROOKHAVEN	.51	MOE	MOE	MOE	MOE	MOE	MOE
17 NOV 1978	ILLINOIS	11.00	18.00	.21	13.00	2.50	< .20	52.00
	LEWES DE	2.00	26.00	.18	28.00	37.00	< .20	120.00
18 NOV 1978	PENN STATE	.86	21.00	.28	24.00	3.70	< .20	70.00
	BROOKHAVEN	< .20	22.00	< .08	8.80	110.00	< .20	170.00
	OXFORD OH	5.40	27.00	.15	16.00	7.70	< .20	80.00
19 NOV 1978	ITHACA	1.00	15.00	.15	19.00	2.60	< .20	52.00
21 NOV 1978	WHITEFACE	< .20	12.00	.08	21.00	6.70	< .20	52.00
	VIRGINIA	< .20	25.00	.30	23.00	5.70	< .20	79.00
22 NOV 1978	ITHACA	< .20	31.00	< .08	77.00	1.10	< .20	140.00
23 NOV 1978	ILLINOIS	15.00	49.00	< .08	25.00	11.00	< .20	130.00

DATA FROM 6 NOV 1978 TO 30 NOV 1978 (CONT.)

		2 0 S	4 0 S	2 0 N	3 0 N	L C	4 0 P	0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
24 NOV 1978	PENN STATE	4.60	64.00	.20	140.00	12.00	< .20	280.00
	BROOKHAVEN	< .20	34.00	.20	15.00	200.00	< .20	280.00
26 NOV 1978	ITHACA	.86	40.00	.09	62.00	6.40	< .20	150.00
	VIRGINIA	< .20	42.00	.29	87.00	21.00	< .20	190.00
	LEWES DE	.89	13.00	.23	9.30	15.00	< .20	51.00
27 NOV 1978	ILLINOIS	7.20	23.00	.33	54.00	3.90	< .20	100.00
28 NOV 1978	ITHACA	.88	16.00	< .08	19.00	2.40	< .20	53.00
	VIRGINIA	< .20	28.00	.24	34.00	4.90	< .20	95.00
	BROOKHAVEN	< .20	9.70	.18	7.20	35.00	< .20	62.00
	OXFORD OH	7.20	28.00	.19	38.00	3.00	< .20	100.00
29 NOV 1978	PENN STATE	2.40	22.00	.12	35.00	5.80	< .20	85.00
	LEWES DE	.63	14.00	.17	19.00	76.00	< .20	120.00
30 NOV 1978	PENN STATE	.41	12.00	.17	47.00	7.50	< .20	79.00
	BROOKHAVEN	7.00	12.00	.33	20.00	6.70	< .20	52.00
	LEWES DE	2.30	9.30	.21	11.00	19.00	< .20	49.00

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NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 DEC 1978 TO 28 DEC 1978 (CONT.)

		2 0 S (	4 0 S (	2 0 N (	3 0 N (	1 0 C (	4 0 P (	0 I N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
2 DEC 1978	VIRGINIA	< .20	15.00	.23	12.00	3.80	< .20	46.00
4 DEC 1978	ITHACA	4.50	32.00	.19	51.00	5.60	< .20	120.00
	OXFORD OH	13.00	24.00	< .08	8.10	2.20	< .20	76.00
5 DEC 1978	PENN STATE	8.70	13.00	.15	23.00	4.90	< .20	65.00
	ILLINOIS	4.00	35.00	.42	38.00	7.70	< .20	120.00
	BROOKHAVEN	6.30	13.00	.16	10.00	7.10	< .20	47.00
6 DEC 1978	WHITEFACE	2.00	42.00	< .08	54.00	3.60	< .20	140.00
	LEWES DE	< .20	16.00	.17	17.00	17.00	< .20	66.00
7 DEC 1978	VIRGINIA	MOE	9.10	.16	8.00	1.80	< .20	28.00
9 DEC 1978	ITHACA	7.90	27.00	.17	29.00	8.80	< .20	97.00
	OXFORD OH	11.00	19.00	< .08	12.00	4.70	< .20	55.00
11 DEC 1978	PENN STATE	5.40	11.00	.19	15.00	3.50	< .20	41.00
	ILLINOIS	8.60	20.00	.50	31.00	3.80	< .20	76.00
	BROOKHAVEN	7.00	22.00	.40	19.00	1.20	< .20	65.00
	LEWES DE	4.00	16.00	.21	12.00	99.00	< .20	140.00
12 DEC 1978	WHITEFACE	7.40	17.00	.13	23.00	3.60	< .20	68.00
	ITHACA	.12	12.00	< .08	44.00	20.00	< .20	88.00
	VIRGINIA	MOE	7.20	< .08	4.90	1.90	< .20	21.00
17 DEC 1978	PENN STATE	3.90	33.00	.29	95.00	13.00	< .20	170.00
	BROOKHAVEN	1.70	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	ISA	ISA	ISA	ISA	ISA	ISA	ISA
19 DEC 1978	ITHACA	.44	31.00	.14	97.00	18.00	< .20	180.00
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA

DATA FROM 2 DEC 1978 TO 28 DEC 1978 (CONT.)

		0 S (	0 S (	0 N (	0 N (	0 C (	0 P (	0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
21 DEC 1978	ITHACA	20.00	26.00	< .08	21.00	3.10	< .20	96.00
	VIRGINIA	MOE	44.00	.20	85.00	8.10	< .20	180.00
	BROOKHAVEN	2.00	22.00	.28	21.00	16.00	< .20	81.00
	LEWES DE	< .20	29.00	.22	29.00	13.00	< .20	100.00
	OXFORD OH	4.10	47.00	.13	19.00	4.80	< .20	120.00
22 DEC 1978	PENN STATE	12.00	14.00	.18	21.00	5.10	< .20	54.00
25 DEC 1978	BROOKHAVEN	1.50	12.00	.21	12.00	71.00	< .20	110.00
26 DEC 1978	WHITEFACE	< .20	4.00	.10	7.90	2.40	< .20	18.00
	VIRGINIA	MOE	13.00	.17	9.50	.98	< .20	37.00
27 DEC 1978	LEWES DE	< .20	13.00	.13	9.10	120.00	< .20	160.00
	OXFORD OH	6.00	31.00	< .08	28.00	6.50	< .20	97.00
28 DEC 1978	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 JAN 1979 TO 31 JAN 1979 (CONT.)

		² S	⁴ S	² N	³ N	¹ C	⁴ P	⁰ A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
2 JAN 1979	WHITEFACE	3.60	10.00	.12	16.00	2.20	< .20	38.00
	ITHACA	.41	4.00	.11	5.70	1.50	< .20	15.00
3 JAN 1979	BROOKHAVEN	< .20	5.10	.13	5.00	11.00	< .20	26.00
	LEWES DE	< .20	7.50	< .08	3.40	20.00	< .20	38.00
	OXFORD OH	2.80	22.00	.10	17.00	9.70	< .20	71.00
4 JAN 1979	PENN STATE	1.40	11.00	< .08	15.00	2.80	< .20	40.00
	ILLINOIS	5.90	32.00	.10	23.00	13.00	< .20	100.00
5 JAN 1979	ITHACA	.65	13.00	< .08	69.00	3.30	< .20	98.00
	VIRGINIA	MOE	10.00	.28	9.00	14.00	< .20	43.00
9 JAN 1979	WHITEFACE	.33	5.50	< .08	26.00	6.30	< .20	44.00
	ITHACA	10.00	17.00	< .08	34.00	4.80	< .20	73.00
	PENN STATE	11.00	11.00	< .08	29.00	5.70	< .20	NAP
	VIRGINIA	MOE	17.00	.14	25.00	8.30	< .20	67.00
	BROOKHAVEN	< .15	9.10	.16	6.10	31.00	< .20	56.00
	LEWES DE	1.10	12.00	.15	19.00	22.00	< .20	65.00
	OXFORD OH	< .20	5.50	< .08	15.00	6.60	< .20	33.00
15 JAN 1979	WHITEFACE	.49	10.00	.14	10.00	1.40	< .20	32.00
	ITHACA	2.40	15.00	.14	13.00	3.30	< .20	46.00
	PENN STATE	9.60	26.00	.12	41.00	6.50	< .20	103.00
	BROOKHAVEN	< .15	2.40	.11	1.80	3.60	< .20	10.00
16 JAN 1979	VIRGINIA	MOE	19.00	.10	20.00	1.80	< .20	60.00
	LEWES DE	< .15	12.00	.14	9.80	67.00	< .20	100.00
	OXFORD OH	3.00	ISA	ISA	ISA	ISA	ISA	ISA

DATA FROM 2 JAN 1979 TO 31 JAN 1979 (CONT.)

		² S (	⁴ S (	² N (	³ N (	⁻ C (	⁴ P (	^N A (
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 JAN 1979	PENN STATE	.54	25.00	.20	41.00	7.40	< .20	99.00
	BROOKHAVEN	2.50	ISA	ISA	ISA	ISA	ISA	ISA
19 JAN 1979	WHITEFACE	< .30	5.20	.08	43.00	3.50	< .20	57.00
21 JAN 1979	BROOKHAVEN	.45	12.00	.15	3.50	9.70	< .20	37.00
22 JAN 1979	PENN STATE	8.00	8.10	.29	13.00	6.50	< .20	36.00
	BROOKHAVEN	12.00	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	6.50	170.00	.15	110.00	35.00	4.20	500.00
23 JAN 1979	VIRGINIA	MOE	11.00	< .08	6.60	2.90	< .20	32.00
	LEWES DE	< .15	15.00	.13	7.90	38.00	< .20	76.00
25 JAN 1979	PENN STATE	6.20	9.70	.15	12.00	3.20	< .20	35.00
	BROOKHAVEN	.90	12.00	.10	6.60	34.00	< .20	65.00
26 JAN 1979	ITHACA	3.50	17.00	.08	19.00	10.00	< .20	63.00
	PENN STATE	< .20	19.00	.10	35.00	5.00	< .20	78.00
	LEWES DE	< .30	14.00	< .08	7.30	150.00	< .20	190.00
27 JAN 1979	VIRGINIA	MOE	14.00	.13	11.00	7.70	< .20	47.00
28 JAN 1979	BROOKHAVEN	5.80	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	3.20	ISA	ISA	ISA	ISA	ISA	ISA
29 JAN 1979	ITHACA	.42	46.00	.13	37.00	7.20	< .20	140.00
30 JAN 1979	VIRGINIA	MOE	6.30	.17	20.00	.69	< .20	34.00
31 JAN 1979	LEWES DE	4.80	15.00	.21	54.00	7.00	< .20	91.00

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 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 FEB 1979 TO 28 FEB 1979 (CONT.)

		² S	⁴ S	² N	³ N	⁻ C	⁴ P	⁰ A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
2 FEB 1979	OXFORD OH	.79	ISA	ISA	ISA	ISA	ISA	ISA
4 FEB 1979	ITHACA	< .30	28.00	.08	82.00	25.00	1.10	170.00
5 FEB 1979	WHITEFACE	< .15	6.00	< .08	7.30	1.40	< .20	21.00
6 FEB 1979	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
8 FEB 1979	PENN STATE	< .20	8.80	.14	25.00	7.10	< .20	50.00
	BROOKHAVEN	.42	7.00	.11	15.00	18.00	< .20	47.00
9 FEB 1979	ITHACA	< .30	8.20	.03	38.00	8.30	< .20	63.00
	LEWES DE	.68	17.00	.13	36.00	140.00	< .20	210.00
	OXFORD OH	< .30	12.00	.18	50.00	13.00	< .20	87.00
13 FEB 1979	PENN STATE	< .40	6.50	.25	64.00	8.10	< .20	85.00
	VIRGINIA	< .20	4.40	< .08	30.00	3.50	< .20	42.00
	OXFORD OH	.49	56.00	.29	140.00	19.00	< .20	270.00
14 FEB 1979	LEWES DE	< .30	12.00	.10	61.00	24.00	< .20	110.00
16 FEB 1979	WHITEFACE	< .30	5.40	.12	27.00	3.80	< .20	42.00
	PENN STATE	14.00	45.00	.08	60.00	7.80	< .20	170.00
	BROOKHAVEN	.38	ISA	ISA	ISA	ISA	ISA	ISA
17 FEB 1979	OXFORD OH	14.00	120.00	.20	120.00	17.00	< .20	380.00
19 FEB 1979	ITHACA	NAP	17.00	.39	72.00	28.00	< .20	130.00
	OXFORD OH	< .50	28.00	.29	65.00	13.00	< .20	140.00
20 FEB 1979	PENN STATE	.65	4.90	.12	12.00	4.80	< .20	27.00
22 FEB 1979	PENN STATE	17.00	30.00	< .08	21.00	4.60	< .20	94.00
	BROOKHAVEN	< .20	34.00	.13	15.00	38.00	< .20	120.00
	LEWES DE	1.90	20.00	.15	20.00	62.00	< .20	120.00

DATA FROM 2 FEB 1979 TO 28 FEB 1979 (CONT.)

		² S	⁴ S	² N	³ N	⁻ C	⁴ P	⁰ I N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
27 FEB 1979	PENN STATE	3.90	27.00	< .08	37.00	3.50	< .20	95.00
	OXFORD OH	5.30	35.00	.12	24.00	5.50	< .20	100.00
28 FEB 1979	WHITEFACE	< .30	41.00	.13	38.00	5.00	< .20	130.00
	ITHACA	.79	24.00	.15	20.00	3.50	< .20	72.00
	VIRGINIA	MOE	17.00	.17	12.00	1.50	< .20	48.00
	LEWES DE	< .30	27.00	.09	12.00	73.00	< .20	140.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 MAR 1979 TO 30 MAR 1979 (CONT.)

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		2 0 S (	4 0 S (	2 0 N (	3 0 N (	1 0 C (	4 0 P (	0 I N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 MAR 1979	ILLINOIS	1.10	55.00	< .08	62.00	5.30	< .20	180.00
2 MAR 1979	PENN STATE	.76	70.00	.27	130.00	14.00	< .20	280.00
	OXFORD OH	7.10	ISA	ISA	ISA	ISA	ISA	ISA
3 MAR 1979	VIRGINIA	MOE	68.00	< .08	70.00	15.00	< .20	220.00
4 MAR 1979	ILLINOIS	3.20	14.00	.16	10.00	1.70	< .20	40.00
5 MAR 1979	OXFORD OH	< .30	20.00	.26	23.00	4.20	< .20	68.00
6 MAR 1979	ITHACA	8.50	23.00	.09	26.00	6.10	< .20	78.00
	PENN STATE	< .40	32.00	.15	24.00	20.00	< .20	110.00
7 MAR 1979	VIRGINIA	MOE	9.40	< .08	7.40	13.00	< .20	39.00
	LEWES DE	.54	9.00	< .08	3.70	9.50	< .20	31.00
8 MAR 1979	WHITEFACE	.39	11.00	.23	25.00	1.90	< .20	49.00
	ILLINOIS	1.60	28.00	.27	60.00	5.00	< .20	120.00
10 MAR 1979	VIRGINIA	MOE	38.00	.30	120.00	4.40	< .20	200.00
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
11 MAR 1979	BROOKHAVEN	9.50	33.00	.20	54.00	12.00	< .20	130.00
	OXFORD OH	7.70	ISA	ISA	ISA	ISA	ISA	ISA
12 MAR 1979	PENN STATE	6.10	49.00	< .08	54.00	5.90	< .20	160.00
	LEWES DE	6.10	23.00	.16	30.00	30.00	< .20	110.00
14 MAR 1979	OXFORD OH	< .20	46.00	.16	51.00	4.80	< .20	150.00
15 MAR 1979	WHITEFACE	2.20	38.00	.36	54.00	3.00	< .20	130.00
	ITHACA	1.60	100.00	.22	96.00	15.00	< .20	310.00
	PENN STATE	1.00	36.00	.08	50.00	9.50	< .20	130.00
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA

DATA FROM 1 MAR 1979 TO 30 MAR 1979 (CONT.)

		2 0 S (	4 0 S (	2 0 N (	3 0 N (	1 L C (	4 0 P (	0 N I A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	BROOKHAVEN	.51	30.00	.25	27.00	39.00	< .20	130.00
	LEWES DE	< .20	27.00	.19	19.00	8.30	< .20	62.00
18 MAR 1979	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
19 MAR 1979	ILLINOIS	2.20	28.00	.20	16.00	13.00	< .20	85.00
20 MAR 1979	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
21 MAR 1979	OXFORD OH	4.98	44.00	< .08	71.00	20.00	< .20	180.00
24 MAR 1979	ILLINOIS	1.00	23.00	.09	27.00	3.90	< .20	77.00
25 MAR 1979	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	< .20	ISA	ISA	ISA	ISA	ISA	ISA
26 MAR 1979	PENN STATE	2.10	9.70	.13	12.00	10.00	< .20	42.00
	LEWES DE	< .20	14.00	< .08	8.20	170.00	< .20	210.00
	OXFORD OH	2.50	24.00	.15	15.00	3.20	< .20	66.80
27 MAR 1979	ITHACA	1.30	22.00	.25	30.00	4.90	< .20	79.00
	VIRGINIA	MOE	9.10	.13	7.50	5.90	< .20	32.00
28 MAR 1979	WHITEFACE	< .20	22.00	.12	26.00	22.00	< .20	92.00
29 MAR 1979	ITHACA	6.30	34.00	.33	51.00	3.60	< .20	120.00
	BROOKHAVEN	.32	ISA	ISA	ISA	ISA	ISA	ISA
30 MAR 1979	ILLINOIS	4.40	35.00	.21	17.00	3.10	< .20	90.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 APR 1979 TO 30 APR 1979 (CONT.)

		2 0 S (	4 0 S (	2 0 N (	3 0 N (	1 0 C (	4 0 P (	0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 APR 1979	ITHACA	< .20	60.00	.24	49.00	9.10	< .20	180.00
3 APR 1979	ITHACA	< .20	58.00	< .08	65.00	20.00	< .20	200.00
	BROOKHAVEN	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	OXFORD OH	.61	29.00	.11	6.20	38.00	< .20	100.00
4 APR 1979	WHITEFACE	< .20	34.00	.30	31.00	4.20	< .20	100.00
	PENN STATE	3.60	31.00	< .08	37.00	6.20	< .20	110.00
	BROOKHAVEN	6.90	42.00	< .08	31.00	6.50	< .20	120.00
5 APR 1979	PENN STATE	4.10	24.00	< .08	17.00	1.40	< .20	66.00
	BROOKHAVEN	.19	17.00	.15	8.70	23.00	< .20	66.00
	OXFORD OH	25.00	38.00	.12	19.00	3.20	< .20	98.00
6 APR 1979	VIRGINIA	MOE	35.00	.11	26.00	6.10	< .20	100.00
9 APR 1979	OXFORD OH	.79	41.00	.22	40.00	5.80	< .20	130.00
10 APR 1979	WHITEFACE	< .20	12.00	.12	18.00	.77	< .20	43.00
	ITHACA	1.90	21.00	.21	28.00	2.20	< .20	72.00
	PENN STATE	9.80	42.00	.22	68.00	5.40	< .20	160.00
	VIRGINIA	MOE	22.00	.25	18.00	< .40	< .20	62.00
	BROOKHAVEN	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	LEWES DE	< .20	37.00	.09	34.00	31.00	< .20	140.00
13 APR 1979	PENN STATE	2.60	46.00	< .08	32.00	8.30	< .20	130.00
	ILLINOIS	.29	41.00	.82	36.00	20.00	< .20	140.00
	OXFORD OH	< .20	46.00	< .08	29.00	10.00	< .20	130.00
16 APR 1979	BROOKHAVEN	RPC	RPC	RPC	RPC	RPC	RPC	RPC
17 APR 1979	ITHACA	NAP	86.00	< .08	23.00	3.00	< .20	200.00

DATA FROM 1 APR 1979 TO 30 APR 1979 (CONT.)

	0 S (	2 0 S (	2 0 N (	3 0 N (	0 L C (	4 0 P (	4 0 I N A (
	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
PENN STATE	NAP	35.00	.17	52.00	10.00	< .20	130.00
VIRGINIA	MOE	28.00	.20	30.00	5.20	< .20	91.00
ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
BROOKHAVEN	.23	34.00	.23	140.00	20.00	< .20	230.00
19 APR 1979 WHITEFACE	< .20	14.00	.16	14.00	1.00	< .20	43.00
22 APR 1979 ILLINOIS	.26	34.00	.36	36.00	4.20	.17	110.00
OXFORD OH	< .20	5.00	< .08	1.50	.46	< .20	14.00
24 APR 1979 VIRGINIA	MOE	180.00	.14	170.00	17.00	3.10	560.00
ILLINOIS	.26	26.00	.26	17.00	5.10	< .20	74.00
25 APR 1979 ILLINOIS	< .20	26.00	.17	23.00	6.70	< .20	82.00
26 APR 1979 ILLINOIS	< .20	14.00	.14	15.00	1.30	< .20	44.00
27 APR 1979 BROOKHAVEN	< .20	12.00	< .07	7.20	15.00	< .20	46.00
28 APR 1979 PENN STATE	< .30	34.00	.14	25.00	12.00	< .20	110.00
ILLINOIS	2.40	40.00	.39	41.00	5.60	< .20	130.00
OXFORD OH	1.80	53.00	.22	59.00	8.40	< .20	170.00
29 APR 1979 BROOKHAVEN	< .20	37.00	.11	48.00	20.00	< .20	140.00
30 APR 1979 VIRGINIA	< .20	20.00	.23	17.00	6.30	< .20	64.00
ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 MAY 1979 TO 31 MAY 1979 (CONT.)

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		² S (	⁴ S (	² N (	³ N (	¹ C (	⁴ P (	⁰ N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 MAY 1979	WHITEFACE	< .20	9.60	.14	11.00	2.90	< .20	33.00
	ITHACA	< .20	31.00	.12	17.00	2.70	< .20	82.00
4 MAY 1979	ILLINOIS	2.50	44.00	.26	22.00	5.50	< .20	120.00
	BROOKHAVEN	< .20	66.00	< .07	77.00	46.00	< .20	260.00
5 MAY 1979	PENN STATE	< .30	32.00	.19	26.00	2.30	< .20	93.00
	OXFORD OH	.69	34.00	.19	21.00	2.90	< .20	92.00
7 MAY 1979	ITHACA	NAP	22.00	.16	16.00	1.50	< .20	62.00
	VIRGINIA	MOE	24.30	< .08	28.00	1.80	< .20	76.00
9 MAY 1979	WHITEFACE	< .20	46.00	.41	74.00	4.60	< .20	170.00
11 MAY 1979	ITHACA	< .20	72.00	.08	83.00	11.00	< .20	240.00
	PENN STATE	< .30	51.00	.17	62.00	5.40	< .20	170.00
13 MAY 1979	ILLINOIS	< .20	18.00	.70	26.00	5.60	< .20	68.00
	OXFORD OH	ISA	ISA	ISA	ISA	ISA	ISA	ISA
14 MAY 1979	ITHACA	< .20	72.00	.11	83.00	4.10	< .20	230.00
	PENN STATE	< .30	34.00	< .08	41.00	2.30	< .20	110.00
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	< .20	23.00	.12	23.00	12.00	1.40	97.00
15 MAY 1979	VIRGINIA	MOE	17.00	.10	19.00	3.60	< .20	57.00
	ILLINOIS	.31	30.00	.60	37.00	6.10	< .20	100.00
	BROOKHAVEN	< .20	17.00	.26	17.00	2.50	< .20	54.00
16 MAY 1979	ITHACA	< .20	200.00	.09	210.00	20.00	< .20	630.00
	PENN STATE	.63	64.00	.17	71.00	9.90	< .20	210.00
	VIRGINIA	MOE	110.00	.10	63.00	5.20	< .20	290.00

DATA FROM 1 MAY 1979 TO 31 MAY 1979 (CONT.)

		0 2 S (	0 4 S (	0 2 N (	0 3 N (	0 L C (	0 4 P (	0 N I A (
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 MAY 1979	WHITEFACE	.34	80.00	.11	67.00	5.00	.60	230.00
19 MAY 1979	BROOKHAVEN	< .20	33.00	.32	14.00	39.00	3.40	130.00
22 MAY 1979	ITHACA	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	PENN STATE	< .30	67.00	.15	93.00	14.00	< .20	240.00
	VIRGINIA	< .20	13.00	.10	18.00	7.30	< .20	51.00
24 MAY 1979	PENN STATE	< .30	19.00	.17	15.00	3.00	< .20	56.00
	BROOKHAVEN	< .20	45.00	< .07	35.00	10.00	< .20	140.00
25 MAY 1979	BROOKHAVEN	< .20	9.50	.15	7.60	36.00	< .20	63.00
26 MAY 1979	OXFORD OH	< .30	14.00	.11	16.00	2.90	< .20	47.00
28 MAY 1979	OXFORD OH	9.60	25.00	< .08	24.00	2.60	< .20	76.00
29 MAY 1979	ITHACA	< .20	24.00	.17	25.00	3.30	< .20	77.00
	VIRGINIA	< .20	22.00	.13	20.00	1.40	< .20	66.00
	ILLINOIS	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	BROOKHAVEN	.33	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .20	21.00	.12	22.00	11.00	< .20	75.00
30 MAY 1979	PENN STATE	< .40	44.00	< .07	57.00	7.70	< .20	160.00
	BROOKHAVEN	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	LEWES DE	< .20	53.00	.20	45.00	40.00	< .20	190.00
31 MAY 1979	WHITEFACE	< .20	22.00	.15	18.00	1.80	< .20	64.00
	PENN STATE	< .40	280.00	< .07	250.00	1.80	.34	810.00
	BROOKHAVEN	.66	ISA	ISA	ISA	ISA	ISA	ISA

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 JUN 1979 TO 30 JUN 1979 (CONT.)

		0 2 S (	0 4 S (	0 2 N (	0 3 N (	0 L C (	0 4 P (	0 N I A (
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 JUN 1979	LEWES DE	< .20	15.00	.16	7.60	2.50	< .20	40.00
2 JUN 1979	VIRGINIA	< .20	14.00	.26	15.00	2.50	< .20	46.00
4 JUN 1979	PENN STATE	< .40	160.00	.10	150.00	7.50	< .20	480.00
5 JUN 1979	VIRGINIA	< .20	39.00	.21	19.00	2.00	< .20	99.00
	BROOKHAVEN	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	LEWES DE	< .20	11.00	< .07	7.70	24.00	< .20	54.00
6 JUN 1979	PENN STATE	< .40	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	RPC	RPC	RPC	RPC	RPC	RPC	RPC
7 JUN 1979	PENN STATE	< .40	ISA	ISA	ISA	ISA	ISA	ISA
8 JUN 1979	OXFORD OH	< .30	26.00	.09	18.00	4.60	< .20	75.00
9 JUN 1979	PENN STATE	< .40	12.00	.18	6.20	.67	< .20	31.00
	ILLINOIS	RPC	RPC	RPC	RPC	RPC	RPC	RPC
10 JUN 1979	ITHACA	< .20	57.00	< .08	19.00	4.90	< .20	140.00
	VIRGINIA	ISA	23.00	.09	58.00	7.40	< .20	110.00
	ILLINOIS	< .20	19.00	.33	7.20	2.40	< .20	48.00
11 JUN 1979	PENN STATE	< .40	52.00	.18	20.00	3.60	< .20	130.00
	OXFORD OH	< .30	ISA	ISA	ISA	ISA	ISA	ISA
12 JUN 1979	ITHACA	< .20	21.00	.18	13.00	< .60	< .20	55.00
	VIRGINIA	< .20	22.00	.11	23.00	4.50	< .20	72.00
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .20	52.00	< .06	22.00	110.00	< .20	240.00
13 JUN 1979	WHITEFACE	< .20	28.00	< .07	22.00	.86	< .20	79.00
14 JUN 1979	ILLINOIS	< .20	41.00	.43	44.00	2.00	< .20	130.00

DATA FROM 1 JUN 1979 TO 30 JUN 1979 (CONT.)

		2 S (	4 S (	2 N (	3 N (	1 C (	4 P (	0 N (
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 JUN 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	VIRGINIA	< .20	3.30	.12	5.60	7.00	< .20	29.00
	BPOOKHAVEN	< .30	3.00	NAP	7.50	5.20	< .20	19.00
19 JUN 1979	LEWES DE	< .20	32.00	< .08	26.00	35.00	< .20	130.00
	OXFORD OH	< .30	66.00	.19	50.00	7.30	< .20	190.00
21 JUN 1979	ILLINOIS	< .20	44.00	.30	36.00	9.70	< .20	130.00
	OXFORD OH	< .30	32.00	< .08	19.00	3.60	< .20	87.00
22 JUN 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	ISA	ISA	ISA	ISA	ISA	ISA	ISA
24 JUN 1979	OXFORD OH	< .30	22.00	.19	23.00	3.00	< .20	70.00
25 JUN 1979	ITHACA	< .20	40.00	.27	43.00	1.80	< .20	130.00
	VIRGINIA	MOE	75.00	NAP	72.00	6.80	NAP	230.00
26 JUN 1979	WHITEFACE	< .20	76.00	< .08	60.00	5.90	< .20	220.00
	LEWES DE	< .20	42.00	.50	31.00	13.00	< .20	130.00
28 JUN 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
29 JUN 1979	WHITEFACE	< .20	36.00	.22	18.00	5.50	< .20	100.00
	ITHACA	< .20	120.00	.35	110.00	9.70	< .20	360.00
	PENN STATE	< .40	67.00	.20	39.00	4.40	< .20	160.00
	ILLINOIS	< .20	30.00	.44	32.00	5.70	< .20	98.00
30 JUN 1979	VIRGINIA	MOE	54.00	NAP	46.00	7.40	NAP	160.00

NSD MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 PRD MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		² S	⁴ S	² N	³ N	¹ C	⁴ P	⁰ A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 JUL 1979	OXFORD OH	< .30	78.00	.16	66.00	6.40	< .20	230.00
2 JUL 1979	PENN STATE	< .40	40.00	< .08	35.00	2.40	< .20	120.00
	ILLINOIS	< .20	23.00	.40	30.00	.63	< .20	77.00
	BROOKHAVEN	< .30	21.00	.27	23.00	38.00	< .20	100.00
3 JUL 1979	ITHACA	< .20	140.00	.30	97.00	6.50	< .20	380.00
	BROOKHAVEN	.45	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .30	21.00	.28	19.00	14.00	< .20	75.00
5 JUL 1979	PENN STATE	< .40	29.00	.20	15.00	< .60	< .20	73.00
	BROOKHAVEN	NAP	47.00	.12	53.00	33.00	2.40	190.00
	LEWES DE	< .30	130.00	.12	130.00	86.00	< .20	480.00
	OXFORD OH	< .30	32.00	.18	27.00	3.30	< .20	95.00
6 JUL 1979	WHITEFACE	< .20	28.00	.10	18.00	12.00	< .20	86.00
	VIRGINIA	MOE	54.00	.17	43.00	5.90	< .20	160.00
	ILLINOIS	< .20	30.00	.23	31.00	5.20	< .20	96.00
9 JUL 1979	ILLINOIS	< .20	62.00	.39	38.00	1.50	< .20	160.00
	OXFORD OH	< .30	86.00	.11	53.00	32.00	< .20	260.00
10 JUL 1979	OXFORD OH	ISA	ISA	ISA	ISA	ISA	ISA	ISA
11 JUL 1979	ITHACA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	PENN STATE	< .40	17.00	.16	21.00	3.90	< .20	59.00
	BROOKHAVEN	< .30	5.00	.23	15.00	14.00	< .20	39.00
12 JUL 1979	LEWES DE	< .30	4.50	.13	11.00	20.00	< .20	40.00
13 JUL 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
14 JUL 1979	ILLINOIS	< .30	59.00	< .08	47.00	8.30	< .20	170.00

DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		2 0 S (	4 0 S (	2 0 N (	3 0 N (	L C (	4 0 P (	N I O A UEQ/L
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
	OXFORD OH	< .30	28.00	.15	14.00	3.80	< .20	74.00
16 JUL 1979	VIRGINIA	MOE	140.00	.13	89.00	11.00	< .20	370.00
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA
17 JUL 1979	WHITEFACE	< .30	48.00	.18	37.00	3.40	< .20	140.00
	PENN STATE	< .40	89.00	.24	57.00	6.90	< .20	240.00
	LEWES DE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
18 JUL 1979	ITHACA	< .30	56.00	.19	51.00	5.30	< .20	170.00
19 JUL 1979	LEWES DE	< .30	110.00	.18	64.00	32.00	< .20	320.00
20 JUL 1979	PENN STATE	< .40	96.00	.52	110.00	15.00	< .20	320.00
21 JUL 1979	VIRGINIA	MOE	85.00	.12	74.00	11.00	< .20	260.00
22 JUL 1979	LEWES DE	< .30	55.00	.15	41.00	21.00	< .20	170.00
24 JUL 1979	ITHACA	< .30	65.00	< .08	25.00	16.00	< .20	170.00
	PENN STATE	< .40	33.00	.22	27.00	20.00	< .20	110.00
	LEWES DE	< .30	11.00	.36	17.00	17.00	< .20	56.00
25 JUL 1979	PENN STATE	< .40	53.00	.36	65.00	10.00	< .20	180.00
	ILLINOIS	< .30	34.00	.16	18.00	5.00	< .20	91.00
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .30	21.00	.39	24.00	7.50	< .20	74.00
26 JUL 1979	PENN STATE	< .40	51.00	.13	41.00	9.90	< .20	150.00
	VIRGINIA	MOE	23.00	.25	28.00	13.00	< .20	87.00
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	< .30	49.00	.12	26.00	7.60	< .20	130.00
27 JUL 1979	ITHACA	< .30	37.00	< .08	26.00	2.90	< .20	100.00

DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		0 S 2)	0 S 4 =	0 N 2)	0 N 3)	0 L C)	0 P 4)	0 N I A N U S M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	BROOKHAVEN	RPC	RPC	RPC	RPC	RPC	RPC	RPC
29 JUL 1979	PENN STATE	< .60	25.00	.18	15.00	8.30	< .20	74.00
	OXFORD OH	< .30	39.00	.17	25.00	11.00	< .20	110.00
30 JUL 1979	WHITEFACE	< .30	29.00	.40	21.00	11.00	< .20	90.00
	BROOKHAVEN	.40	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD OH	ISA	ISA	ISA	ISA	ISA	ISA	ISA
31 JUL 1979	ITHACA	< .30	43.00	.11	19.00	3.50	< .20	110.00
	VIRGINIA	MOE	43.00	.42	20.00	2.70	< .20	110.00
	ILLINOIS	< .30	33.00	.17	20.00	79.00	< .20	100.00
	LEWES DE	ISA	ISA	ISA	ISA	ISA	ISA	ISA

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		² S (	⁴ S (	² N (	³ N (	¹ C (	⁴ P (	⁰ N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 AUG 1979	ITHACA	< .30	35.00	< .08	40.00	7.70	< .20	120.00
	PENN STATE	< .60	95.00	.20	59.00	11.00	< .20	260.00
	ILLINOIS	< .30	26.00	< .08	21.00	3.40	< .20	76.00
2 AUG 1979	WHITEFACE	< .30	41.00	.17	17.00	2.80	< .20	100.00
	PENN STATE	< .60	87.00	.24	67.00	10.00	< .20	250.00
	OXFORD OH	< .30	50.00	.12	27.00	7.80	< .20	130.00
3 AUG 1979	ITHACA	< .30	49.00	.17	31.00	3.60	< .20	130.00
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .30	66.00	.22	41.00	23.00	< .20	200.00
4 AUG 1979	BROOKHAVEN	< .30	38.00	.09	64.00	77.00	< .20	220.00
5 AUG 1979	BROOKHAVEN	< .30	36.00	.37	35.00	7.40	< .20	110.00
6 AUG 1979	WHITEFACE	< .30	34.00	.12	17.00	4.60	< .20	90.00
	VIRGINIA	< .30	62.00	< .08	39.00	9.80	< .20	170.00
7 AUG 1979	BROOKHAVEN	< .30	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .30	90.00	.10	52.00	32.00	< .20	260.00
8 AUG 1979	PENN STATE	< .60	49.00	.13	39.00	4.90	< .20	140.00
10 AUG 1979	BROOKHAVEN	< .30	ISA	ISA	ISA	ISA	ISA	ISA
11 AUG 1979	PENN STATE	< .60	92.00	< .08	33.00	4.90	< .20	220.00
	BROOKHAVEN	< .30	58.00	.10	36.00	21.00	< .20	170.00
13 AUG 1979	WHITEFACE	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	PENN STATE	< .30	9.20	.21	9.30	5.20	< .20	33.00
	BROOKHAVEN	< .30	29.00	.12	20.00	42.00	< .20	120.00

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		² ₀ S (	⁴ ₀ S (	² ₀ N (	³ ₀ N (	¹ ₀ C (	⁴ ₀ P (	⁰ N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	LEWES DE	< .30	39.00	.25	25.00	130.00	< .20	230.00
14 AUG 1979	ITHACA	< .30	75.00	.22	25.00	8.20	< .20	180.00
	VIRGINIA	< .30	33.00	.15	28.00	6.30	< .20	100.00
15 AUG 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
16 AUG 1979	WHITEFACE	< .30	13.00	.12	8.80	2.60	< .20	38.00
	ITHACA	ISA	100.00	< .08	39.00	13.00	< .20	250.00
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
19 AUG 1979	PENN STATE	< .30	99.00	< .08	67.00	8.00	< .20	270.00
	VIRGINIA	< .30	61.00	.14	36.00	6.60	< .20	160.00
	ILLINOIS	< .30	51.00	.25	51.00	8.50	< .20	160.00
	BROOKHAVEN	< .30	94.00	.31	82.00	42.00	< .20	310.00
	OXFORD OH	< .20	20.00	.36	30.00	3.60	< .20	74.00
20 AUG 1979	WHITEFACE	< .30	67.00	< .08	49.00	15.00	.92	200.00
21 AUG 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	< .30	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	< .20	52.00	.10	26.00	4.90	< .20	130.00
22 AUG 1979	LEWES DE	< 3.00	47.00	.11	44.00	48.00	< .20	190.00
24 AUG 1979	ITHACA	ISA	46.00	< .08	55.00	7.00	< .20	150.00
	VIRGINIA	< .30	69.00	.12	40.00	7.40	< .20	190.00
	OXFORD OH	1.10	46.00	.10	23.00	33.00	< .20	150.00
25 AUG 1979	BROOKHAVEN	< .30	ISA	ISA	ISA	ISA	ISA	ISA
26 AUG 1979	PENN STATE	< .30	50.00	.18	47.00	13.00	< .20	160.00
	LEWES DE	ISA	ISA	ISA	ISA	ISA	ISA	ISA

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		2 S (UMOL/L	4 S (UMOL/L	2 N (UMOL/L	3 N (UMOL/L	L C (UMOL/L	4 P (UMOL/L	N I O A UEQ/L
27 AUG 1979	PENN STATE	< .30	37.00	.17	23.00	2.80	< .20	100.00
	VIRGINIA	< .30	21.00	.23	29.00	6.80	< .20	78.00
28 AUG 1979	WHITEFACE	< .30	20.00	.22	12.00	2.30	< .20	55.00
	ITHACA	< .30	36.00	.32	25.00	3.50	< .20	100.00
	VIRGINIA	< .30	25.00	.44	3.80	7.30	< .20	62.00
	BROOKHAVEN	1.30	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .30	36.00	.23	25.00	13.00	< .20	110.00
29 AUG 1979	BROOKHAVEN	< .30	6.30	.15	9.80	13.00	< .20	36.00
30 AUG 1979	WHITEFACE	< .30	28.00	< .08	17.00	2.30	< .20	75.00
	PENN STATE	< .30	40.00	.28	23.00	4.60	< .20	110.00
	BROOKHAVEN	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .30	14.00	.23	20.00	6.00	< .20	54.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 SEP 1979 TO 30 SEP 1979 (CONT.)

		2 0 S	4 0 S	2 0 N	3 0 N	- L C	4 0 P	0 I N
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	JMOL/L	JMOL/L	UEQ/L
2 SEP 1979	BROOKHAVEN	< .30	29.00	.18	22.00	15.00	< .20	95.00
	LEWES DE	< .30	18.00	< .08	14.00	9.90	< .20	60.00
3 SEP 1979	ITHACA	< .30	33.00	.27	16.00	3.60	< .20	86.00
	PENN STATE	< .30	28.00	.09	14.00	3.90	< .20	74.00
	LEWES DE	< .30	11.00	.13	13.00	17.00	< .20	52.00
4 SEP 1979	VIRGINIA	< .30	34.00	.15	22.00	8.90	< .20	39.00
	LEWES DE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
6 SEP 1979	WHITEFACE	< .30	8.10	< .08	6.10	6.20	< .20	29.00
	PENN STATE	< .30	5.40	.21	4.40	2.40	< .20	18.00
	BROOKHAVEN	< .30	39.00	.20	15.00	540.00	< .20	630.00
	LEWES DE	< .30	13.00	.11	4.10	150.00	< .20	180.00
7 SEP 1979	ITHACA	< .30	3.70	.15	2.50	.13	< .20	11.00
	PENN STATE	NAP	150.00	.21	190.00	25.00	.40	520.00
	VIRGINIA	< .30	4.40	.15	3.60	4.40	< .20	17.00
8 SEP 1979	VIRGINIA	< .30	100.00	.14	45.00	12.00	< .20	260.00
10 SEP 1979	WHITEFACE	< .30	25.00	.10	5.50	16.00	< .20	72.00
11 SEP 1979	WHITEFACE	< .30	35.00	.09	23.00	7.70	< .20	100.00
15 SEP 1979	ITHACA	< .30	15.00	.12	11.00	2.30	< .20	43.00
	PENN STATE	< .30	14.00	.09	11.00	4.10	< .20	43.00
	VIRGINIA	< .30	22.00	.17	13.00	21.00	< .20	78.00
	BROOKHAVEN	< .30	MOE	MOE	MOE	MOE	MOE	MOE
	LEWES DE	< .30	8.00	.15	5.10	12.00	< .40	33.00
17 SEP 1979	WHITEFACE	< .30	5.40	.14	4.70	3.20	< .20	19.00

DATA FROM 2 SEP 1979 TO 30 SEP 1979 (CONT.)

		2 0 S (	4 0 S (	2 0 N (	3 0 N (	1 C (	4 0 P (	0 I A (
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
20 SEP 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
21 SEP 1979	WHITEFACE	< .30	18.00	.16	9.86	3.60	< .40	50.00
22 SEP 1979	ITHACA	< .30	48.00	.25	33.00	8.40	< .20	140.00
23 SEP 1979	PENN STATE	< .30	18.00	.22	11.00	2.00	< .20	39.00
	VIRGINIA	< .30	28.00	.10	14.00	8.20	< .20	78.00
	BROOKHAVEN	< .30	22.00	< .10	11.00	35.00	< .20	90.00
	LEWES DE	< .30	7.50	.12	8.00	24.00	< .40	47.00
	OXFORD OH	.20	13.00	.17	27.00	8.30	< .20	74.00
26 SEP 1979	LEWES DE	< .30	12.00	.11	8.70	160.00	< .40	190.00
29 SEP 1979	ITHACA	< .30	14.00	.09	16.00	3.30	< .20	47.00
	OXFORD OH	3.60	13.00	.20	11.00	3.60	< .20	41.00
30 SEP 1979	PENN STATE	< .20	32.00	.17	30.00	5.10	< .20	99.00
	ILLINOIS	< .30	99.00	1.50	86.00	9.10	< .20	290.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 OCT 1979 TO 29 OCT 1979 (CONT.)

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		0 2 S (	0 4 S (	0 2 N (	0 3 N (	0 L C (	0 4 P (	0 N I A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 OCT 1979	VIRGINIA	< .30	22.00	.22	30.00	7.80	< .20	82.00
2 OCT 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .30	20.00	.23	14.00	17.00	< .40	71.00
	OXFORD OH	< .20	41.00	.20	31.00	5.20	< .20	120.00
3 OCT 1979	BROOKHAVEN	< .30	34.00	.20	16.00	82.00	< .20	170.00
	LEWES DE	< .30	21.00	.26	18.00	19.00	< .40	79.00
4 OCT 1979	ITHACA	< .30	37.00	.25	28.00	3.70	< .20	110.00
	PENN STATE	6.30	22.00	.11	22.00	9.10	< .20	76.00
5 OCT 1979	OXFORD OH	< .20	18.00	.24	19.00	3.20	< .20	58.00
6 OCT 1979	ITHACA	.70	32.00	.26	24.00	20.00	< .20	110.00
	PENN STATE	6.10	16.00	.18	12.00	1.60	< .20	50.00
	VIRGINIA	< .20	16.00	.17	8.40	1.40	< .20	42.00
	BROOKHAVEN	< .30	15.00	< .10	18.00	54.00	< .20	100.00
	LEWES DE	< .30	11.00	.12	6.50	39.00	< .40	68.00
8 OCT 1979	PENN STATE	4.10	45.00	.63	43.00	16.00	< .20	150.00
9 OCT 1979	WHITEFACE	< .30	28.00	< .08	15.00	7.50	< .20	79.00
	VIRGINIA	ISA	48.00	ISA	38.00	5.10	< .20	140.00
10 OCT 1979	ITHACA	2.00	24.00	.24	28.00	7.10	< .20	83.00
	OXFORD OH	< .30	53.00	.33	59.00	6.40	< .20	170.00
11 OCT 1979	PENN STATE	.26	47.00	.13	76.00	11.00	< .20	180.00
	LEWES DE	< .30	36.00	.26	36.00	30.00	< .40	140.00
12 OCT 1979	BROOKHAVEN	< .30	27.00	.22	26.00	79.00	< .20	160.00
	OXFORD OH	1.20	27.00	.51	38.00	5.30	< .20	98.00

DATA FROM 1 OCT 1979 TO 29 OCT 1979 (CONT.)

		2 0 S	4 0 S	2 0 N	3 0 N	4 0 L	4 0 P	0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
13 OCT 1979	ITHACA	2.30	40.00	.11	60.00	4.00	< .20	140.00
	BROOKHAVEN	.61	30.00	.10	42.00	34.00	< .20	140.00
14 OCT 1979	PENN STATE	1.70	36.00	.14	79.00	4.90	< .20	160.00
15 OCT 1979	ITHACA	.80	42.00	.38	97.00	6.50	< .20	190.00
	LEWES DE	< .30	48.00	.28	52.00	14.00	< .20	160.00
16 OCT 1979	WHITEFACE	1.00	19.00	.11	30.00	2.10	< .20	70.00
	OXFORD OH	< .30	68.00	.14	38.00	7.90	< .20	180.00
18 OCT 1979	PENN STATE	NAP	51.00	ISA	130.00	18.00	< .20	250.00
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	< .30	ISA	ISA	ISA	ISA	ISA	ISA
23 OCT 1979	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
24 OCT 1979	WHITEFACE	.31	MOE	MOE	MOE	MOE	MOE	MOE
	ITHACA	2.40	39.00	< .10	21.00	6.30	< .20	110.00
	OXFORD OH	3.50	32.00	.15	18.00	4.20	< .20	86.00
25 OCT 1979	PENN STATE	1.60	18.00	< .10	13.00	5.20	< .20	54.00
	LEWES DE	< .30	26.00	.17	20.00	34.00	< .20	110.00
28 OCT 1979	ITHACA	1.30	49.00	.23	28.00	6.30	< .20	130.00
	PENN STATE	4.30	34.00	< .10	55.00	4.70	< .20	130.00
	OXFORD OH	.50	82.00	.42	78.00	12.00	< .20	250.00
29 OCT 1979	WHITEFACE	< .30	MOE	MOE	MOE	MOE	MOE	MOE
	BROOKHAVEN	.92	69.00	.29	92.00	180.00	< .20	410.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 DDC MEANS DEFLECTED--PROB. CONTAMINATION

DATA FROM 1 NOV 1979 TO 29 NOV 1979 (CONT.)

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 NOV 1979	ILLINOIS	2.50	ISA	ISA	ISA	ISA	ISA	ISA
2 NOV 1979	OXFORD OH	2.00	16.00	.13	12.00	5.10	< .20	49.00
3 NOV 1979	ITHACA	3.70	20.00	.29	14.00	7.70	< .20	62.00
	BROOKHAVEN	< .30	8.10	< .10	5.60	38.00	< .20	60.00
4 NOV 1979	PENN STATE	NAP	89.00	.10	90.00	60.00	< .20	330.00
	LEWES DE	3.80	16.00	.12	6.20	66.00	< .20	100.00
7 NOV 1979	OXFORD OH	1.30	ISA	ISA	ISA	ISA	ISA	ISA
8 NOV 1979	WHITEFACE	1.20	MOE	MOE	MOE	MOE	MOE	MOE
	ITHACA	RPC	RPC	RPC	RPC	RPC	RPC	RPC
	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
10 NOV 1979	OXFORD OH	4.80	23.00	.22	19.00	3.10	< .20	68.00
11 NOV 1979	PENN STATE	.92	44.00	.17	64.00	7.10	< .20	160.00
	BROOKHAVEN	.80	19.00	.23	27.00	15.00	< .20	80.00
12 NOV 1979	LEWES DE	< .30	14.00	.26	13.00	14.00	< .20	55.00
13 NOV 1979	WHITEFACE	NAP	25.00	.13	34.00	2.20	< .20	86.00
	PENN STATE	2.10	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	.92	9.60	.19	12.00	11.00	< .20	42.00
14 NOV 1979	ITHACA	1.00	66.00	.24	62.00	6.70	< .20	200.00
	BROOKHAVEN	< .30	49.00	< .10	28.00	51.00	< .20	180.00
	LEWES DE	< .30	20.00	.14	8.10	150.00	< .20	200.00
15 NOV 1979	WHITEFACE	MOE	MOE	MOE	MOE	MOE	MOE	MOE
	PENN STATE	ISA	62.00	.19	66.00	13.00	< .20	210.00
16 NOV 1979	PENN STATE	5.60	22.00	.14	50.00	6.90	< .20	100.00

DATA FROM 1 NOV 1979 TO 29 NOV 1979 (CONT.)

		2 0 S	4 0 S	2 0 N	3 0 N	L C	4 0 P	N I O S
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	OXFORD OH	ISA	ISA	ISA	ISA	ISA	ISA	ISA
19 NOV 1979	WHITEFACE	NAP	10.00	.11	41.00	4.50	< .20	66.00
20 NOV 1979	ITHACA	3.40	23.00	.22	46.00	9.20	< .20	100.00
26 NOV 1979	VIRGINIA	< .20	15.00	.13	11.00	59.00	< .20	120.00
	BROOKHAVEN	< .30	MOE	MOE	MOE	MOE	MOE	MOE
	OXFORD OH	2.20	20.00	.17	15.00	3.90	< .20	59.00
27 NOV 1979	WHITEFACE	< .30	9.20	< .10	9.60	2.50	< .20	31.00
	ITHACA	NAP	10.00	.12	8.60	4.20	< .20	33.00
	PENN STATE	< .30	6.50	.14	4.10	14.00	< .20	31.00
	BROOKHAVEN	< .30	21.00	< .10	6.30	190.00	< .20	240.00
	LEWES DE	< .30	13.00	< .10	5.30	130.00	< .20	160.00
29 NOV 1979	OXFORD OH	2.20	30.00	.31	45.00	11.00	< .20	120.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 DEC 1979 TO 28 DEC 1979 (CONT.)

		² S	⁴ S	² N	³ N	⁻ C	⁴ P	⁰ N
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
2 DEC 1979	OXFORD OH	.78	ISA	ISA	ISA	ISA	ISA	ISA
3 DEC 1979	WHITEFACE	1.50	23.00	.21	50.00	9.70	< .20	110.00
	PENN STATE	ISA	21.00	.17	120.00	16.00	< .20	180.00
4 DEC 1979	ITHACA	< .20	18.00	.30	64.00	6.90	< .20	110.00
6 DEC 1979	WHITEFACE	3.00	16.00	< .10	41.00	4.80	< .20	78.00
	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
7 DEC 1979	WHITEFACE	2.00	24.00	.31	93.00	8.50	< .20	150.00
	ITHACA	1.60	30.00	.48	80.00	11.00	< .20	150.00
	PENN STATE	3.40	54.00	.56	86.00	17.00	< .20	210.00
	BROOKHAVEN	< .30	10.00	.13	7.70	11.00	< .20	39.00
	OXFORD OH	ISA	ISA	ISA	ISA	ISA	ISA	ISA
8 DEC 1979	PENN STATE	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	.94	8.40	.16	5.30	4.90	< .20	27.00
10 DEC 1979	WHITEFACE	< .30	16.00	< .10	54.00	4.50	< .20	91.00
14 DEC 1979	ITHACA	NAP	26.00	.19	25.00	13.00	< .20	90.00
	PENN STATE	3.00	21.00	.27	2.00	4.30	< .20	49.00
	VIRGINIA	< .20	9.00	.32	8.90	5.30	< .20	33.00
	BROOKHAVEN	3.40	18.00	.23	19.00	16.00	< .20	71.00
	LEWES DE	2.00	10.00	.19	11.00	42.00	< .20	73.00
	OXFORD OH	1.40	21.00	.26	28.00	6.20	< .20	69.00
17 DEC 1979	WHITEFACE	.55	31.00	< .10	49.00	5.00	< .20	120.00
	BROOKHAVEN	19.00	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	< .30	30.00	.15	27.00	43.00	< .20	130.00

DATA FROM 2 DEC 1979 TO 28 DEC 1979 (CONT.)

		2 S (	4 S (	2 N (	3 N (	L C (	4 P (	0 N I A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 DEC 1979	ITHACA	< .20	7.70	< .10	38.00	44.00	< .20	97.00
19 DEC 1979	PENN STATE	ISA	15.00	.25	120.00	34.00	< .20	180.00
20 DEC 1979	ITHACA	< .20	3.50	.18	38.00	5.00	< .20	51.00
	BROOKHAVEN	< .30	6.30	ISA	17.00	38.00	< .20	68.00
21 DEC 1979	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	LEWES DE	.50	ISA	ISA	ISA	ISA	ISA	ISA
23 DEC 1979	VIRGINIA	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	OXFORD OH	8.00	30.00	.19	26.00	4.90	< .20	91.00
25 DEC 1979	ILLINOIS	1.70	ISA	ISA	ISA	ISA	ISA	ISA
	BROOKHAVEN	NAP	18.00	< .10	12.00	34.00	< .20	82.00
26 DEC 1979	PENN STATE	2.40	14.00	< .10	22.00	4.40	< .20	54.00
	VIRGINIA	< .20	22.00	.33	20.00	38.00	< .20	100.00
	OXFORD OH	1.20	27.00	.18	19.00	7.00	< .20	60.00
27 DEC 1979	WHITEFACE	.04	11.00	< .10	11.00	2.20	< .20	35.00
28 DEC 1979	LEWES DE	< .20	9.50	.14	4.50	38.00	< .20	62.00

NSC MEANS NO SAMPLE COLLECTED
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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 JUL 1978 TO 31 JUL 1978 (CONT.)

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 JUL 1978	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
2 JUL 1978	ILLINOIS	27.00	.82	.67	NAP	5.60	.58	120.00
3 JUL 1978	ILLINOIS	11.00	< .40	< .25	NAP	1.30	< .20	40.00
	LEWES DE	26.00	100.00	2.50	NAP	3.60	11.00	240.00
4 JUL 1978	ITHACA	3.50	1.10	< .25	NAP	.90	< .20	73.00
	PENN STATE	2.70	.11	< .25	NAP	.50	.12	75.00
5 JUL 1978	VIRGINIA	38.00	11.00	1.00	NAP	4.10	2.40	240.00
6 JUL 1978	LEWES DE	30.00	59.00	2.10	NAP	3.40	6.60	210.00
9 JUL 1978	ITHACA	28.00	1.20	.90	NAP	4.40	1.10	210.00
	VIRGINIA	19.00	.98	.66	NAP	3.00	.53	99.00
	ILLINOIS	40.00	1.90	.96	NAP	17.00	2.30	230.00
11 JUL 1978	WHITEFACE	23.00	1.20	.58	NAP	4.30	1.10	150.00
	PENN STATE	21.00	3.80	1.00	NAP	13.00	3.90	230.00
	VIRGINIA	20.00	3.90	1.70	NAP	12.00	2.40	140.00
	LEWES DE	16.00	7.20	.71	NAP	3.10	1.30	140.00
13 JUL 1978	ITHACA	3.60	.74	< .26	NAP	.95	.29	53.00
	ILLINOIS	32.00	2.10	.90	NAP	12.00	1.60	140.00
15 JUL 1978	PENN STATE	38.00	.87	.79	NAP	6.20	.86	290.00
	VIRGINIA	17.00	1.10	1.30	NAP	2.50	.62	84.00
	BROOKHAVEN	180.00	26.00	34.00	NAP	6.60	11.00	280.00
	LEWES DE	5.00	2.30	.30	NAP	< .37	.37	28.00
17 JUL 1978	ITHACA	23.00	1.20	.49	NAP	2.80	.53	160.00
	BROOKHAVEN	4.00	.89	.33	NAP	.55	< .20	27.00

DATA FROM 1 JUL 1978 TO 31 JUL 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 JUL 1978	WHITEFACE	60.00	5.90	13.00	NAP	16.00	5.60	270.00
	VIRGINIA	30.00	.89	.78	NAP	1.70	.41	160.00
22 JUL 1978	ITHACA	17.00	1.70	< .25	NAP	3.40	.82	200.00
24 JUL 1978	WHITEFACE	54.00	2.60	2.00	NAP	12.00	3.10	240.00
	PENN STATE	11.00	1.40	.37	NAP	6.20	1.30	120.00
25 JUL 1978	VIRGINIA	9.60	.77	< .25	NAP	2.00	.37	59.00
	LEWES DE	3.70	17.00	.59	NAP	1.50	2.20	71.00
26 JUL 1978	ILLINOIS	42.00	1.40	1.40	NAP	4.10	1.10	120.00
27 JUL 1978	ITHACA	34.00	1.50	.83	NAP	5.50	.82	250.00
28 JUL 1978	WHITEFACE	19.00	2.80	5.20	NAP	13.00	6.00	160.00
	ITHACA	27.00	.74	.94	NAP	3.40	.86	150.00
	PENN STATE	21.00	.99	< .25	NAP	3.60	.58	220.00
	BROOKHAVEN	22.00	2.10	.89	NAP	4.10	1.30	170.00
30 JUL 1978	PENN STATE	12.00	.64	6.30	NAP	14.00	2.80	150.00
	ILLINOIS	20.00	1.00	.43	NAP	6.60	1.00	84.00
31 JUL 1978	WHITEFACE	3.10	1.50	.51	NAP	.75	< .40	33.00
	VIRGINIA	12.00	1.10	.50	NAP	6.20	1.00	99.00
	LEWES DE	43.00	26.00	1.50	NAP	8.70	4.40	340.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 AUG 1978 TO 31 AUG 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 AUG 1978	PENN STATE	11.00	< .40	< .25	NAP	.82	< .20	91.00
	VIRGINIA	8.20	1.60	.85	NAP	2.70	.70	92.00
	BROOKHAVEN	32.00	19.00	1.00	NAP	2.40	2.00	210.00
	LEWES DE	28.00	6.40	.55	NAP	1.70	1.10	140.00
2 AUG 1978	WHITEFACE	2.50	2.90	.70	NAP	.97	< .40	76.00
	ILLINOIS	6.20	7.30	< .25	NAP	2.60	.41	68.00
	LEWES DE	2.90	3.10	< .25	NAP	.47	.49	30.00
3 AUG 1978	VIRGINIA	14.00	1.60	.79	NAP	1.50	.37	160.00
	BROOKHAVEN	11.00	5.10	.46	NAP	.97	.49	76.00
4 AUG 1978	WHITEFACE	7.90	< .40	.31	NAP	.60	< .40	87.00
	PENN STATE	17.00	1.40	.49	NAP	3.20	.66	150.00
	BROOKHAVEN	NAP	NAP	NAP	NAP	NAP	NAP	NAP
5 AUG 1978	VIRGINIA	1.80	< .40	< .25	NAP	< .25	< .20	37.00
	BROOKHAVEN	2.80	1.30	< .25	NAP	.57	.29	56.00
6 AUG 1978	BROOKHAVEN	2.30	5.20	.46	NAP	1.70	.82	48.00
7 AUG 1978	ITHACA	< .60	< .40	< .25	NAP	1.50	.74	26.00
	ILLINOIS	2.30	.67	.51	NAP	23.00	9.00	120.00
	BROOKHAVEN	5.00	24.00	1.90	NAP	1.40	20.00	59.00
8 AUG 1978	ITHACA	9.00	.70	.30	NAP	.60	.16	35.00
	PENN STATE	4.50	.70	.50	NAP	.65	< .20	46.00
	VIRGINIA	2.00	2.70	< .25	NAP	1.40	.82	49.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	3.40	16.00	3.50	NAP	3.50	3.00	67.00

DATA FROM 1 AUG 1978 TO 31 AUG 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
10 AUG 1978	WHITEFACE	47.00	1.90	< .30	NAP	3.10	.99	130.00
	ITHACA	49.00	.56	.70	NAP	3.70	.82	180.00
	PENN STATE	22.00	2.40	1.60	NAP	1.40	.45	89.00
11 AUG 1978	LEWES DE	28.00	6.00	3.90	NAP	1.60	3.20	95.00
12 AUG 1978	VIRGINIA	23.00	2.40	1.50	NAP	6.40	1.60	220.00
	ILLINOIS	32.00	.92	.62	NAP	8.90	2.20	190.00
	BROOKHAVEN	9.50	3.70	.82	NAP	.92	.99	80.00
14 AUG 1978	LEWES DE	MOE	MOE	MOE	NAP	MOE	MOE	MOE
15 AUG 1978	PENN STATE	52.00	.90	.69	NAP	6.50	1.00	300.00
16 AUG 1978	ILLINOIS	7.80	2.60	.41	NAP	4.10	.78	57.00
17 AUG 1978	WHITEFACE	18.00	.87	.37	NAP	3.40	.74	130.00
	ILLINOIS	25.00	3.90	.91	NAP	16.00	2.40	200.00
18 AUG 1978	WHITEFACE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
21 AUG 1978	WHITEFACE	3.00	1.10	.64	NAP	1.30	< .40	43.00
	ITHACA	18.00	2.20	.77	NAP	5.50	1.20	160.00
28 AUG 1978	VIRGINIA	17.00	.76	.84	NAP	4.40	.62	100.00
29 AUG 1978	ITHACA	37.00	2.10	1.50	NAP	3.00	.82	160.00
	PENN STATE	23.00	1.60	.83	NAP	4.00	.49	220.00
	BROOKHAVEN	42.00	45.00	3.20	NAP	3.40	6.80	230.00
30 AUG 1978	WHITEFACE	46.00	1.30	NAP	NAP	3.90	.95	240.00
	VIRGINIA	5.90	2.10	.85	NAP	6.20	1.20	66.00
31 AUG 1978	ITHACA	6.20	< .40	< .25	NAP	1.50	< .40	81.00
	LEWES DE	8.60	1.60	< .25	NAP	.50	.37	59.00

DATA FROM 1 SEP 1978 TO 29 SEP 1978 (CONT.)

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 SEP 1978	PENN STATE	18.00	.55	< .25	NAP	7.00	.41	110.00
	BROOKHAVEN	7.20	2.50	< .25	NAP	.62	.91	92.00
	LEWES DE	12.00	7.50	.52	NAP	.67	1.10	66.00
2 SEP 1978	VIRGINIA	7.90	.76	1.80	NAP	1.80	.58	61.00
4 SEP 1978	ITHACA	47.00	1.20	5.70	NAP	8.80	2.70	190.00
	PENN STATE	2.70	< .40	.31	NAP	2.30	.49	49.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	3.40	1.80	ISA
6 SEP 1978	WHITEFACE	20.00	3.50	4.10	NAP	4.20	1.50	120.00
8 SEP 1978	WHITEFACE	MOE	MOE	MOE	NAP	MOE	MOE	MOE
9 SEP 1978	ITHACA	< .60	< .40	< .25	NAP	4.30	1.20	73.00
11 SEP 1978	PENN STATE	52.00	3.80	NAP	NAP	33.00	12.00	340.00
	BROOKHAVEN	86.00	70.00	3.20	NAP	12.00	11.00	460.00
12 SEP 1978	WHITEFACE	37.00	.72	.85	NAP	3.40	.53	130.00
13 SEP 1978	ITHACA	67.00	1.10	1.50	NAP	12.00	3.50	310.00
	PENN STATE	24.00	1.00	NAP	NAP	5.40	1.10	160.00
	BROOKHAVEN	24.00	10.00	< .25	NAP	1.80	2.10	160.00
	LEWES DE	28.00	8.90	1.20	NAP	2.30	1.80	220.00
15 SEP 1978	PENN STATE	3.90	3.40	.56	NAP	.95	.74	46.00
	VIRGINIA	31.00	1.70	5.00	NAP	9.30	2.10	140.00
	ILLINOIS	53.00	3.40	NAP	NAP	4.10	2.20	110.00
16 SEP 1978	ILLINOIS	11.00	.66	NAP	NAP	1.70	< .40	50.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
17 SEP 1978	ILLINOIS	43.00	7.00	NAP	NAP	15.00	2.80	180.00

DATA FROM 1 SEP 1978 TO 29 SEP 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 SEP 1978	WHITEFACE	55.00	.55	2.40	NAP	2.30	.95	86.00
19 SEP 1978	IITHACA	25.00	1.60	.69	NAP	3.50	1.00	160.00
	PENN STATE	36.00	30.00	NAP	NAP	4.70	1.10	210.00
22 SEP 1978	ILLINCIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
23 SEP 1978	BROOKHAVEN	43.00	27.00	3.90	NAP	2.80	3.70	250.00
25 SEP 1978	WHITEFACE	67.00	2.30	2.70	NAP	3.30	1.20	100.00
	PENN STATE	54.00	5.30	4.20	NAP	11.00	4.30	370.00
26 SEP 1978	VIRGINIA	41.00	2.60	1.30	NAP	4.40	.95	210.00
28 SEP 1978	PENN STATE	120.00	2.60	5.10	NAP	17.00	4.30	430.00
29 SEP 1978	WHITEFACE	11.00	1.40	1.30	NAP	3.50	.74	130.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPD MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		H N	A N	K K	L A	A C	G M	T A C
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 OCT 1978	BROOKHAVEN	2.20	100.00	2.00	NAP	3.50	10.00	150.00
	OXFORD OH	30.00	1.10	1.70	NAP	4.60	.91	170.00
2 OCT 1978	ILLINOIS	87.00	2.30	4.30	NAP	13.00	2.20	180.00
	LEWES DE	3.90	18.00	.52	NAP	.30	2.00	47.00
3 OCT 1978	VIRGINIA	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	ILLINOIS	29.00	.74	< .25	NAP	6.70	.95	120.00
4 OCT 1978	WHITEFACE	7.10	2.90	.88	NAP	.97	.53	93.00
	OXFORD OH	29.00	1.10	.65	NAP	5.20	1.00	140.00
5 OCT 1978	ITHACA	17.00	22.00	1.00	NAP	1.50	.62	130.00
	PENN STATE	32.00	1.30	2.60	NAP	3.10	.31	140.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
6 OCT 1978	WHITEFACE	4.00	.61	.38	NAP	.67	< .20	60.00
	PENN STATE	26.00	3.20	3.40	NAP	8.00	1.20	170.00
	VIRGINIA	26.00	3.20	2.50	NAP	3.20	.86	150.00
	BROOKHAVEN	4.30	20.30	.29	NAP	.97	2.20	60.00
9 OCT 1978	ITHACA	12.00	1.20	.61	NAP	2.80	.74	84.00
	PENN STATE	29.00	2.00	3.00	NAP	7.30	1.40	110.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
10 OCT 1978	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
11 OCT 1978	ILLINOIS	26.00	2.10	1.50	NAP	9.40	1.40	160.00
12 OCT 1978	PENN STATE	16.00	3.70	< .25	NAP	9.40	2.10	140.00
	OXFORD OH	28.00	5.70	.86	NAP	15.00	3.00	140.00
13 OCT 1978	ILLINOIS	74.00	5.70	2.80	NAP	22.00	6.00	180.00

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		H N	A N	K	L A	A C	G M	O T C
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
14 OCT 1978	PENN STATE	14.00	2.00	16.00	NAP	3.00	.49	120.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	BROOKHAVEN	1.20	5.20	.41	NAP	.47	.45	18.00
	OXFORD OH	18.00	2.10	.48	NAP	4.20	.78	100.00
15 OCT 1978	ITHACA	7.00	.49	.25	NAP	1.00	.21	62.00
	LEWES DE	38.00	9.50	1.10	NAP	2.80	1.90	140.00
16 OCT 1978	WHITEFACE	4.20	1.10	1.50	NAP	5.10	4.60	75.00
17 OCT 1978	PENN STATE	12.00	.96	1.20	NAP	9.00	1.00	150.00
	VIRGINIA	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	16.00	32.00	1.50	NAP	2.60	3.30	120.00
19 OCT 1978	VIRGINIA	ISA	ISA	ISA	NAP	ISA	ISA	ISA
20 OCT 1978	WHITEFACE	34.00	.97	1.70	NAP	1.80	.37	130.00
	ITHACA	71.00	1.50	1.70	NAP	9.40	1.70	240.00
	PENN STATE	170.00	9.20	5.50	NAP	31.00	4.40	ISA
	BROOKHAVEN	130.00	39.00	4.10	NAP	19.00	9.10	480.00
23 OCT 1978	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
24 OCT 1978	WHITEFACE	21.00	5.30	4.40	NAP	3.70	.78	85.00
	ITHACA	18.00	.51	.75	NAP	1.20	.21	88.00
	PENN STATE	41.00	2.10	1.80	NAP	9.10	1.40	260.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	83.00	2.60	3.30	NAP	10.00	2.10	190.00
25 OCT 1978	LEWES DE	61.00	160.00	5.30	NAP	12.00	16.00	570.00
26 OCT 1978	ILLINOIS	28.00	1.30	.83	NAP	3.70	.66	87.00

DATA FROM 1 OCT 1978 TO 30 OCT 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
27 OCT 1978	ITHACA	6.70	.45	.50	NAP	.75	< .20	63.00
	PENN STATE	8.20	.62	.44	NAP	1.40	< .20	64.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	67.00	3.10	2.60	NAP	3.60	.62	176.00
30 OCT 1978	WHITEFACE	6.90	.58	.66	NAP	1.70	.21	48.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 6 NOV 1978 TO 30 NOV 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	JHOL/L	UEQ/L
6 NOV 1978	LEWES DE	46.00	23.00	2.70	NAP	11.00	6.10	530.00
7 NOV 1978	ILLINOIS	52.00	3.10	3.90	NAP	7.80	1.60	210.00
8 NOV 1978	WHITEFACE	60.00	3.40	2.20	NAP	11.00	1.60	200.00
	ITHACA	22.00	.45	1.10	NAP	1.40	.33	140.00
	PENN STATE	59.00	3.50	1.30	NAP	16.00	1.80	330.00
9 NOV 1978	LEWES DE	MOE	MOE	MOE	NAP	MOE	MOE	MOE
14 NOV 1978	PENN STATE	130.00	5.20	1.60	NAP	7.50	1.30	430.00
	VIRGINIA	200.00	80.00	11.00	NAP	28.00	11.00	1200.00
	ILLINOIS	24.00	2.30	1.00	NAP	4.10	.70	59.00
15 NOV 1978	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	ILLINOIS	20.00	4.80	3.30	NAP	6.80	1.40	100.00
16 NOV 1978	WHITEFACE	77.00	5.90	3.90	NAP	5.30	1.20	240.00
	BROOKHAVEN	MOE	MOE	MOE	NAP	MOE	MOE	MOE
17 NOV 1978	ILLINOIS	8.50	.84	.44	NAP	1.40	.25	62.00
	LEWES DE	11.00	34.00	< .25	NAP	1.70	4.20	140.00
18 NOV 1978	PENN STATE	5.00	1.80	< .25	NAP	3.00	.33	64.00
	BROOKHAVEN	7.30	110.00	3.90	NAP	2.50	10.00	190.00
	OXFORD OH	12.00	5.70	.56	NAP	1.50	.95	86.00
19 NOV 1978	ITHACA	9.10	1.70	.85	NAP	.77	.21	66.00
21 NOV 1978	WHITEFACE	3.00	3.60	1.30	NAP	1.50	.25	48.00
	VIRGINIA	10.00	3.70	.34	NAP	.95	.45	89.00
22 NOV 1978	ITHACA	30.00	2.00	2.60	NAP	2.00	.45	180.00
23 NOV 1978	ILLINOIS	28.00	1.10	2.30	NAP	4.80	.86	120.00

DATA FROM 6 NOV 1978 TO 30 NOV 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
24 NOV 1978	PENN STATE	10.00	5.10	4.00	NAP	2.60	.62	300.00
	BROOKHAVEN	7.60	190.00	4.60	NAP	4.30	16.00	300.00
26 NOV 1978	ITHACA	27.00	2.80	2.70	NAP	3.60	.91	170.00
	VIRGINIA	28.00	17.00	1.70	NAP	2.50	2.40	230.00
	LEWES DE	5.50	9.60	< .25	NAP	1.50	1.20	55.00
27 NOV 1978	ILLINOIS	30.00	.82	.65	NAP	1.20	< .20	120.00
28 NOV 1978	ITHACA	2.60	1.40	.67	NAP	2.10	.29	59.00
	VIRGINIA	16.00	1.70	.55	NAP	.62	.21	100.00
	BROOKHAVEN	2.40	29.00	1.40	NAP	.90	3.10	68.00
	OXFORD OH	21.00	.44	.74	NAP	1.20	.33	99.00
29 NOV 1978	PENN STATE	9.40	1.40	2.50	NAP	1.50	.25	83.00
	LEWES DE	4.20	71.00	1.20	NAP	1.50	6.70	140.00
30 NOV 1978	PENN STATE	7.20	3.00	1.40	NAP	9.30	1.70	80.00
	BROOKHAVEN	3.00	3.70	.62	NAP	.62	.66	60.00
	LEWES DE	3.80	16.00	.51	NAP	.47	1.90	54.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 DEC 1978 TO 28 DEC 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
2 DEC 1978	VIRGINIA	2.40	2.90	< .25	NAP	.47	.58	55.00
4 DEC 1978	ITHACA	12.00	2.19	1.00	NAP	3.60	.95	120.00
	OXFORD OH	41.00	.52	< .25	NAP	1.10	< .20	92.00
5 DEC 1978	PENN STATE	9.20	3.30	.93	NAP	1.30	.41	62.00
	ILLINOIS	23.00	5.30	1.40	NAP	4.80	.82	130.00
	BROOKHAVEN	3.50	5.00	< .25	NAP	.70	.78	50.00
6 DEC 1978	WHITEFACE	30.00	1.30	1.70	NAP	2.70	.78	140.00
	LEWES DE	5.30	15.00	1.50	NAP	2.30	2.30	68.00
7 DEC 1978	VIRGINIA	1.10	.69	< .25	NAP	.52	< .40	36.00
9 DEC 1978	ITHACA	8.40	.57	.74	NAP	2.30	.70	96.00
	OXFORD OH	5.70	.85	< .25	NAP	1.10	.25	52.00
11 DEC 1978	PENN STATE	1.70	.60	.43	NAP	1.40	.29	49.00
	ILLINOIS	15.00	2.00	.89	NAP	3.60	.37	94.00
	BROOKHAVEN	5.80	8.70	1.00	NAP	.40	1.00	73.00
	LEWES DE	6.20	100.00	1.80	NAP	1.90	8.80	170.00
12 DEC 1978	WHITEFACE	3.60	.79	.63	NAP	1.30	.29	73.00
	ITHACA	1.80	1.90	.46	NAP	3.90	.49	68.00
	VIRGINIA	.77	1.40	.33	NAP	.52	< .40	27.00
17 DEC 1978	PENN STATE	18.00	5.80	2.10	NAP	10.00	2.10	160.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	ISA	0.00	ISA	NAP	ISA	ISA	ISA
19 DEC 1978	ITHACA	28.00	13.00	2.40	NAP	19.00	4.10	190.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA

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DATA FROM 2 DEC 1978 TO 28 DEC 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
21 DEC 1978	IITHACA	6.70	< .40	.67	NAP	1.70	.53	100.00
	VIRGINIA	36.00	3.70	1.90	NAP	7.10	1.30	230.00
	BROOKHAVEN	11.00	13.00	1.20	NAP	2.40	2.10	92.00
	LEWES DE	12.00	11.00	.92	NAP	1.50	1.40	120.00
	OXFORD OH	14.00	1.60	.96	NAP	2.10	1.40	80.00
22 DEC 1978	PENN STATE	6.20	2.30	1.20	NAP	1.80	.37	66.00
25 DEC 1978	BROOKHAVEN	6.60	65.00	1.80	NAP	1.70	6.30	120.00
26 DEC 1978	WHITEFACE	3.00	.96	.65	NAP	1.70	.41	21.00
	VIRGINIA	3.00	.54	< .25	NAP	< .25	< .40	43.00
27 DEC 1978	LEWES DE	4.30	120.00	2.70	NAP	2.80	10.00	180.00
	OXFORD OH	22.00	3.30	1.40	NAP	3.60	.82	97.00
28 DEC 1978	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 JAN 1979 TO 31 JAN 1979 (CONT.)

		(N H)	(N A)	(K)	(A L)	(C A)	(M G)	(C A T I O N S U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
2 JAN 1979	WHITEFACE	1.60	1.30	.34	NAP	.35	< .20	34.00
	ITHACA	2.80	.55	< .25	NAP	.57	.29	19.00
3 JAN 1979	BROOKHAVEN	1.30	8.90	< .25	NAP	.32	1.10	28.00
	LEWES DE	5.20	16.00	.39	NAP	.87	2.00	39.00
	OXFORD OH	7.40	5.50	.69	NAP	.65	.82	62.00
4 JAN 1979	PENN STATE	6.10	1.80	.51	NAP	.67	.29	48.00
	ILLINOIS	8.80	3.50	.98	NAP	3.80	.86	110.00
5 JAN 1979	ITHACA	6.60	3.00	.82	NAP	.80	.25	120.00
	VIRGINIA	2.10	11.00	.49	NAP	.80	1.50	51.00
-191- 9 JAN 1979	WHITEFACE	2.10	.75	1.60	NAP	.50	.21	39.00
	ITHACA	3.30	5.20	.67	NAP	.27	.25	72.00
	PENN STATE	6.50	1.80	1.20	NAP	.72	.33	71.00
	VIRGINIA	5.70	3.90	.37	NAP	.30	.66	86.00
	BROOKHAVEN	1.90	24.00	.81	NAP	.77	2.80	49.00
	LEWES DE	5.60	15.00	.64	NAP	1.20	2.10	59.00
	OXFORD OH	1.30	4.20	.60	NAP	1.80	.45	31.00
15 JAN 1979	WHITEFACE	7.50	< .40	< .25	NAP	.25	< .20	36.00
	ITHACA	3.90	.90	< .25	NAP	.52	.25	43.00
	PENN STATE	6.90	2.70	.61	NAP	2.40	.53	94.00
	BROOKHAVEN	< .60	2.60	< .25	NAP	< .25	.45	9.40
16 JAN 1979	VIRGINIA	1.40	1.80	2.10	NAP	< .25	< .40	85.00
	LEWES DE	2.10	58.00	2.50	NAP	1.80	6.50	110.00
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA

DATA FROM 2 JAN 1979 TO 31 JAN 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEG/L
18 JAN 1979	PENN STATE	14.00	2.10	1.50	NAP	3.10	.74	87.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
19 JAN 1979	WHITEFACE	2.50	.54	< .25	NAP	.70	.29	53.00
21 JAN 1979	BROOKHAVEN	2.40	7.30	.68	NAP	.40	1.10	35.00
22 JAN 1979	PENN STATE	3.80	.89	3.10	NAP	1.20	.62	31.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	87.00	58.00	46.00	NAP	6.30	11.00	270.00
23 JAN 1979	VIRGINIA	1.70	.85	< .25	NAP	< .25	< .40	42.00
	LEWES DE	< .60	34.00	.33	NAP	1.50	4.00	76.00
25 JAN 1979	PENN STATE	2.10	2.90	< .25	NAP	.47	.29	37.00
	BROOKHAVEN	2.70	29.00	1.20	NAP	.87	3.40	64.00
26 JAN 1979	ITHACA	4.40	6.20	.54	NAP	.90	.91	59.00
	PENN STATE	5.60	2.20	.85	NAP	1.90	.53	74.00
	LEWES DE	1.60	170.00	3.30	NAP	3.60	15.00	230.00
27 JAN 1979	VIRGINIA	3.90	5.80	< .25	NAP	.65	.95	62.00
28 JAN 1979	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
29 JAN 1979	ITHACA	12.00	1.50	.92	NAP	1.20	.58	130.00
30 JAN 1979	VIRGINIA	< .60	< .40	< .25	NAP	.57	< .40	55.00
31 JAN 1979	LEWES DE	4.50	4.80	.58	NAP	1.00	.82	110.00

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 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 FEB 1979 TO 28 FEB 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
2 FEB 1979	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
4 FEB 1979	ITHACA	21.00	13.00	2.00	NAP	11.00	3.20	160.00
5 FEB 1979	WHITEFACE	5.50	1.40	.72	NAP	.30	.21	30.00
6 FEB 1979	VIRGINIA	ISA	ISA	ISA	NAP	ISA	ISA	ISA
8 FEB 1979	PENN STATE	2.50	.86	.32	NAP	2.30	.45	57.00
	BROOKHAVEN	5.60	17.00	3.90	NAP	6.00	3.10	54.00
9 FEB 1979	ITHACA	2.30	3.90	.28	NAP	4.40	1.10	68.00
	LEWES DE	9.00	110.00	12.00	NAP	7.10	11.00	210.00
	OXFORD OH	7.30	5.00	.51	NAP	4.60	1.20	99.00
13 FEB 1979	PENN STATE	1.40	1.60	.52	NAP	7.40	.41	95.00
	VIRGINIA	1.20	1.10	< .25	NAP	.75	< .40	48.00
	OXFORD OH	70.00	13.00	1.70	NAP	8.30	2.30	300.00
14 FEB 1979	LEWES DE	6.60	22.00	1.30	NAP	3.00	2.80	150.00
16 FEB 1979	WHITEFACE	1.80	1.90	.35	NAP	1.10	< .40	49.00
	PENN STATE	17.00	2.10	< .25	NAP	3.40	.74	180.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
17 FEB 1979	OXFORD OH	70.00	11.00	7.80	NAP	6.90	2.30	370.00
19 FEB 1979	ITHACA	5.50	12.00	< .25	NAP	9.10	2.10	150.00
	OXFORD OH	7.80	4.40	1.20	NAP	2.60	.91	170.00
20 FEB 1979	PENN STATE	< .60	.74	< .25	NAP	1.10	.21	30.00
22 FEB 1979	PENN STATE	4.20	2.60	.97	NAP	2.30	.45	110.00
	BROOKHAVEN	8.10	37.00	2.10	NAP	2.10	3.70	130.00
	LEWES DE	7.90	65.00	2.40	NAP	2.30	6.30	150.00

DATA FROM 2 FEB 1979 TO 23 FEB 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
27 FEB 1979	PENN STATE	9.40	2.40	< .25	NAP	1.60	.37	110.00
	OXFORD OH	16.00	9.80	4.80	NAP	3.60	1.60	97.00
28 FEB 1979	WHITEFACE	23.00	3.90	.53	NAP	1.90	.53	160.00
	ITHACA	1.10	2.00	.99	NAP	1.70	.58	72.00
	VIRGINIA	2.50	< .50	< .25	NAP	< .50	< .40	66.00
	LEWES DE	4.00	79.00	3.10	NAP	1.30	7.40	130.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 MAR 1979 TO 30 MAR 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 MAR 1979	ILLINOIS	17.00	2.40	.89	NAP	7.50	1.40	160.00
2 MAR 1979	PENN STATE	39.00	7.60	3.30	NAP	16.00	2.40	330.00
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
3 MAR 1979	VIRGINIA	25.00	11.00	1.40	NAP	8.00	1.90	300.00
4 MAR 1979	ILLINOIS	3.80	.76	.51	NAP	3.30	.49	51.00
5 MAR 1979	OXFORD OH	9.30	2.20	1.10	NAP	7.20	1.30	77.00
6 MAR 1979	ITHACA	8.40	3.40	< .40	NAP	.85	.53	85.00
	PENN STATE	13.00	18.00	< .25	NAP	1.70	2.10	110.00
7 MAR 1979	VIRGINIA	5.70	16.00	1.20	NAP	1.10	1.50	53.00
	LEWES DE	2.60	7.20	< .40	NAP	1.10	1.00	39.00
8 MAR 1979	WHITEFACE	2.10	.45	.44	NAP	.95	< .40	55.00
	ILLINOIS	35.00	.61	< .50	NAP	ISA	ISA	130.00
10 MAR 1979	VIRGINIA	10.00	.80	.53	NAP	2.20	.58	140.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
11 MAR 1979	BROOKHAVEN	17.00	7.70	1.90	NAP	5.20	1.20	140.00
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
12 MAR 1979	PENN STATE	18.00	1.30	.88	NAP	3.20	.82	170.00
	LEWES DE	14.00	23.00	1.60	NAP	2.60	2.90	110.00
14 MAR 1979	OXFORD OH	61.00	1.70	.98	NAP	9.50	2.60	170.00
15 MAR 1979	WHITEFACE	32.00	< .50	6.50	NAP	2.10	.53	140.00
	ITHACA	120.00	NAP	NAP	NAP	23.00	6.30	320.00
	PENN STATE	29.00	3.70	2.60	NAP	8.80	2.20	130.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA

DATA FROM 1 MAR 1979 TO 30 MAR 1979 (CONT.)

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	BROOKHAVEN	2.20	3.70	< .40	NAP	5.80	4.50	90.00
	LEWES DE	38.00	8.40	2.00	NAP	2.40	1.40	91.00
18 MAR 1979	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
19 MAR 1979	ILLINOIS	8.50	11.00	.71	NAP	5.40	1.90	95.00
20 MAR 1979	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
21 MAR 1979	OXFORD OH	41.00	19.00	4.10	NAP	10.00	3.50	190.00
24 MAR 1979	ILLINOIS	15.00	.68	1.90	NAP	4.10	.86	84.00
25 MAR 1979	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
26 MAR 1979	PENN STATE	5.30	7.00	1.20	NAP	2.00	.95	45.00
	LEWES DE	2.30	170.00	3.50	NAP	8.30	18.00	250.00
	OXFORD OH	13.00	1.30	< .40	NAP	4.40	1.10	75.00
27 MAR 1979	ITHACA	12.00	2.10	< .40	NAP	2.30	.86	77.00
	VIRGINIA	3.60	6.30	.37	NAP	1.30	.78	37.00
28 MAR 1979	WHITEFACE	13.00	20.00	1.10	NAP	2.10	2.50	110.00
29 MAR 1979	ITHACA	9.90	1.20	.41	NAP	6.30	1.20	140.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
30 MAR 1979	ILLINOIS	16.00	2.70	.65	NAP	2.60	.70	97.00

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DATA FROM 1 APR 1979 TO 30 APR 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 APR 1979	ITHACA	34.00	4.30	1.40	NAP	6.10	1.30	190.00
3 APR 1979	ITHACA	31.00	13.00	2.60	NAP	11.00	2.60	230.00
	BROOKHAVEN	RPC	RPC	RPC	NAP	RPC	RPC	RPC
	OXFORD OH	26.00	4.30	.56	NAP	7.20	1.90	110.00
4 APR 1979	WHITEFACE	17.00	2.60	.59	NAP	3.20	.82	120.00
	PENN STATE	35.00	6.40	.75	NAP	5.50	1.10	130.00
	BROOKHAVEN	11.00	3.80	1.30	NAP	9.50	2.30	130.00
5 APR 1979	PENN STATE	8.50	1.90	.40	NAP	1.10	< .40	64.00
	BROOKHAVEN	14.00	19.00	6.60	NAP	1.40	2.60	83.00
	OXFORD OH	5.90	< .40	< .30	NAP	1.00	.41	98.00
6 APR 1979	VIRGINIA	16.00	5.90	.74	NAP	2.70	1.00	100.00
9 APR 1979	OXFORD OH	30.00	2.20	1.30	NAP	9.20	1.50	130.00
10 APR 1979	WHITEFACE	9.00	.91	2.90	NAP	1.30	.41	52.00
	ITHACA	11.00	1.20	.53	NAP	1.10	.41	86.00
	PENN STATE	29.00	3.00	2.70	NAP	11.00	2.30	190.00
	VIRGINIA	9.10	1.30	.59	NAP	2.50	.58	65.00
	BROOKHAVEN	RPC	RPC	RPC	NAP	RPC	RPC	RPC
	LEWES DE	20.00	29.00	2.00	NAP	3.80	3.90	160.00
13 APR 1979	PENN STATE	20.00	5.10	1.90	NAP	14.00	1.80	140.00
	ILLINOIS	24.00	26.00	3.20	NAP	59.00	7.80	190.00
	OXFORD OH	27.00	5.90	2.10	NAP	12.00	1.80	130.00
16 APR 1979	BROOKHAVEN	RPC	RPC	RPC	NAP	RPC	RPC	RPC
17 APR 1979	ITHACA	61.00	2.20	1.80	NAP	9.60	2.80	160.00

DATA FROM 1 APR 1979 TO 30 APR 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	PENN STATE	26.00	5.70	3.40	NAP	6.70	1.70	140.00
	VIRGINIA	19.00	4.40	.69	NAP	1.00	.70	110.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	BROOKHAVEN	52.00	10.00	2.30	NAP	3.00	2.30	270.00
19 APR 1979	WHITEFACE	13.00	.78	.32	NAP	2.10	.53	55.00
22 APR 1979	ILLINOIS	48.00	3.80	1.70	NAP	10.00	2.00	130.00
	OXFORD OH	1.10	.60	< .30	NAP	.82	< .40	11.00
24 APR 1979	VIRGINIA	140.00	8.00	9.30	NAP	21.00	7.20	500.00
	ILLINOIS	27.00	4.90	3.30	NAP	2.80	1.30	88.00
25 APR 1979	ILLINOIS	5.60	2.10	.66	NAP	2.10	.86	94.00
26 APR 1979	ILLINOIS	12.00	< .40	1.20	NAP	2.10	.53	54.00
27 APR 1979	BROOKHAVEN	6.20	14.00	.47	NAP	1.60	2.20	53.00
28 APR 1979	PENN STATE	16.00	11.00	1.80	NAP	3.40	1.90	96.00
	ILLINOIS	7.40	.95	4.10	NAP	14.00	2.50	77.00
	OXFORD OH	83.00	6.00	2.30	NAP	9.20	2.80	190.00
29 APR 1979	BROOKHAVEN	20.00	16.00	1.10	NAP	3.00	3.00	140.00
30 APR 1979	VIRGINIA	10.00	8.00	.62	NAP	1.50	1.20	69.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA

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DATA FROM 1 MAY 1979 TO 31 MAY 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 MAY 1979	WHITEFACE	4.90	1.60	1.10	NAP	1.90	.41	39.00
	ITHACA	6.80	1.60	.52	NAP	1.50	.41	66.00
4 MAY 1979	ILLINOIS	31.00	1.30	1.80	NAP	5.20	1.20	92.00
	BROOKHAVEN	50.00	42.00	7.20	NAP	14.00	9.10	230.00
5 MAY 1979	PENN STATE	15.00	1.30	.81	NAP	2.60	.74	100.00
	OXFORD OH	30.00	.70	3.50	NAP	2.70	1.30	98.00
7 MAY 1979	ITHACA	4.40	.51	< .40	NAP	2.80	.74	83.00
	VIRGINIA	6.90	1.30	.99	NAP	2.20	.74	91.00
9 MAY 1979	WHITEFACE	23.00	1.40	1.00	NAP	6.10	1.40	170.00
11 MAY 1979	ITHACA	27.00	1.70	2.70	NAP	23.00	7.70	240.00
	PENN STATE	19.00	1.50	1.70	NAP	8.10	1.60	180.00
13 MAY 1979	ILLINOIS	54.00	1.70	2.50	NAP	13.00	4.10	96.00
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
14 MAY 1979	ITHACA	43.00	1.60	.75	NAP	2.60	.86	240.00
	PENN STATE	45.00	1.30	2.00	NAP	3.50	.99	130.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	BROOKHAVEN	35.00	8.60	6.70	NAP	2.00	2.30	100.00
15 MAY 1979	VIRGINIA	9.10	1.40	.86	NAP	1.30	< .40	70.00
	ILLINOIS	57.00	1.10	2.40	NAP	17.00	3.40	110.00
	BROOKHAVEN	27.00	.70	1.10	NAP	.80	< .40	56.00
16 MAY 1979	ITHACA	120.00	1.80	7.20	NAP	18.00	3.90	570.00
	PENN STATE	48.00	.75	2.00	NAP	17.00	2.40	230.00
	VIRGINIA	84.00	2.20	9.60	NAP	11.00	3.90	NAP

DATA FROM 1 MAY 1979 TO 31 MAY 1979 (CONT.)

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 MAY 1979	WHITEFACE	85.00	2.30	16.00	NAP	13.00	4.90	230.00
19 MAY 1979	BROOKHAVEN	120.00	40.00	11.00	NAP	4.50	5.30	190.00
22 MAY 1979	ITHACA	MOE	MOE	MOE	NAP	MOE	MOE	MOE
	PENN STATE	20.00	5.10	2.60	NAP	8.70	2.10	NAP
	VIRGINIA	3.90	4.60	1.90	NAP	1.10	.62	65.00
24 MAY 1979	PENN STATE	9.40	.47	.89	NAP	.92	< .40	63.00
	BROOKHAVEN	46.00	7.50	1.90	NAP	2.20	1.40	130.00
25 MAY 1979	BROOKHAVEN	25.00	35.00	9.00	NAP	2.20	4.70	85.00
26 MAY 1979	OXFORD OH	48.00	.55	1.40	NAP	3.60	1.10	67.00
28 MAY 1979	OXFORD OH	13.00	< .40	.51	NAP	2.50	.58	92.00
29 MAY 1979	ITHACA	14.00	< .40	.42	NAP	1.30	< .40	80.00
	VIRGINIA	11.00	.46	2.00	NAP	1.50	.53	88.00
	ILLINOIS	RPC	RPC	RPC	NAP	RPC	RPC	RPC
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	16.00	9.30	.90	NAP	1.30	1.50	76.00
30 MAY 1979	PENN STATE	24.00	.74	1.40	NAP	8.50	1.50	160.00
	BROOKHAVEN	RPC	RPC	RPC	NAP	RPC	RPC	RPC
	LEWES DE	38.00	36.00	1.90	NAP	5.50	5.00	210.00
31 MAY 1979	WHITEFACE	17.00	1.10	.69	NAP	1.30	.45	62.00
	PENN STATE	160.00	3.30	7.20	NAP	44.00	13.00	640.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 JUN 1979 TO 30 JUN 1979 (CONT.)

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 JUN 1979	LEWES DE	6.30	1.80	.46	NAP	< .50	< .40	40.00
2 JUN 1979	VIRGINIA	7.10	1.90	.64	NAP	.85	< .40	62.00
4 JUN 1979	PENN STATE	30.00	2.10	2.30	NAP	98.00	2.60	390.00
5 JUN 1979	VIRGINIA	14.00	.99	.69	NAP	.75	< .40	110.00
	BROOKHAVEN	RPC	RPC	RPC	NAP	RPC	RPC	RPC
	LEWES DE	1.40	23.00	.86	NAP	.82	2.80	61.00
6 JUN 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	BROOKHAVEN	RPC	RPC	RPC	NAP	RPC	RPC	RPC
7 JUN 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
8 JUN 1979	OXFORD OH	20.00	2.80	.59	NAP	16.00	.74	88.00
9 JUN 1979	PENN STATE	6.20	1.10	.40	NAP	1.00	< .40	38.00
	ILLINOIS	RPC	RPC	RPC	NAP	RPC	RPC	RPC
10 JUN 1979	ITHACA	24.00	2.80	1.50	NAP	12.00	3.70	190.00
	VIRGINIA	32.00	5.00	3.60	NAP	6.70	4.30	NAP
	ILLINOIS	15.00	1.90	.88	NAP	4.50	1.70	55.00
11 JUN 1979	PENN STATE	35.00	1.60	1.30	NAP	2.10	.53	130.00
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
12 JUN 1979	ITHACA	11.00	.61	.53	NAP	.92	< .40	59.00
	VIRGINIA	12.00	2.50	1.50	NAP	1.50	.53	120.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	26.00	140.00	5.40	NAP	4.30	11.00	300.00
13 JUN 1979	WHITEFACE	19.00	.73	1.00	NAP	3.40	1.00	86.00
14 JUN 1979	ILLINOIS	47.00	1.50	2.20	NAP	17.00	4.30	130.00

DATA FROM 1 JUN 1979 TO 30 JUN 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 JUN 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	VIRGINIA	2.80	5.60	< .40	NAP	.65	.78	34.00
	BROOKHAVEN	5.90	4.90	1.00	NAP	2.10	1.30	26.00
19 JUN 1979	LEWES DE	22.00	32.00	1.90	NAP	6.50	5.10	140.00
	OXFORD OH	47.00	4.00	1.60	NAP	13.00	3.50	210.00
21 JUN 1979	ILLINOIS	37.00	12.00	2.60	NAP	23.00	6.10	170.00
	OXFORD OH	18.00	2.30	.78	NAP	6.40	2.30	100.00
22 JUN 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
24 JUN 1979	OXFORD OH	15.00	.99	.62	NAP	7.80	2.90	79.00
25 JUN 1979	ITHACA	33.00	.93	1.10	NAP	5.30	1.60	130.00
	VIRGINIA	32.00	1.20	1.30	NAP	5.60	1.40	280.00
26 JUN 1979	WHITEFACE	48.00	5.40	6.40	NAP	22.00	6.50	240.00
	LEWES DE	19.00	9.90	1.30	NAP	3.20	1.30	130.00
28 JUN 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
29 JUN 1979	WHITEFACE	2.30	1.50	1.70	NAP	1.50	< .40	70.00
	ITHACA	48.00	1.60	1.40	NAP	12.00	3.20	360.00
	PENN STATE	32.00	.60	1.10	NAP	2.70	.66	200.00
	ILLINOIS	52.00	1.60	11.00	NAP	17.00	5.00	130.00
30 JUN 1979	VIRGINIA	28.00	4.40	1.20	NAP	4.00	1.40	180.00

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DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		N	N	K	A	C	M	C
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 JUL 1979	OXFORD OH	45.00	1.10	1.70	NAP	15.00	3.80	240.00
2 JUL 1979	PENN STATE	26.00	1.60	.65	NAP	2.00	.49	110.00
	ILLINOIS	37.00	1.30	2.30	NAP	11.00	3.40	110.00
	BROOKHAVEN	21.00	39.00	14.00	NAP	3.00	4.90	130.00
3 JUL 1979	ITHACA	55.00	1.10	1.80	NAP	6.10	1.70	360.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	14.00	11.00	.91	NAP	2.00	2.10	90.00
5 JUL 1979	PENN STATE	9.60	.66	.71	NAP	3.60	.70	83.00
	BROOKHAVEN	58.00	19.00	13.00	NAP	7.60	6.20	190.00
	LEWES DE	60.00	50.00	3.90	NAP	10.00	8.00	470.00
	OXFORD OH	12.00	.60	.59	NAP	5.20	1.50	99.00
6 JUL 1979	WHITEFACE	11.00	11.00	9.10	NAP	1.90	.53	110.00
	VIRGINIA	19.00	1.30	1.20	NAP	5.20	2.10	160.00
	ILLINOIS	27.00	6.00	2.00	NAP	13.00	2.40	130.00
9 JUL 1979	ILLINOIS	14.00	1.60	1.50	NAP	3.20	.62	180.00
	OXFORD OH	26.00	4.00	3.00	NAP	4.80	1.40	240.00
10 JUL 1979	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
11 JUL 1979	ITHACA	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	PENN STATE	12.00	2.80	.81	NAP	3.10	.86	68.00
	BROOKHAVEN	33.00	14.00	3.50	NAP	2.90	2.20	63.00
12 JUL 1979	LEWES DE	1.60	17.00	.52	NAP	.82	2.10	44.00
13 JUL 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
14 JUL 1979	ILLINOIS	39.00	3.50	5.60	NAP	19.00	3.40	180.00

DATA FROM 1 JUL 1973 TO 31 JUL 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	OXFORD OH	7.10	.52	.44	NAP	.75	< .40	80.00
16 JUL 1979	VIRGINIA	37.00	1.10	1.80	NAP	2.20	.86	330.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
17 JUL 1979	WHITEFACE	30.00	3.70	4.20	NAP	2.50	.66	170.00
	PENN STATE	49.00	12.00	13.00	NAP	12.00	2.10	300.00
	LEWES DE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
18 JUL 1979	ITHACA	34.00	1.30	1.50	NAP	8.30	2.50	200.00
19 JUL 1979	LEWES DE	79.00	21.00	2.50	NAP	4.40	3.50	320.00
20 JUL 1979	PENN STATE	52.00	10.00	11.00	NAP	21.00	5.10	370.00
21 JUL 1979	VIRGINIA	34.00	1.20	1.30	NAP	6.60	1.80	250.00
22 JUL 1979	LEWES DE	13.00	28.00	8.40	NAP	2.70	2.20	230.00
24 JUL 1979	ITHACA	54.00	.91	5.10	NAP	3.50	.95	190.00
	PENN STATE	12.00	.53	.61	NAP	1.20	< .40	130.00
	LEWES DE	7.90	17.00	.74	NAP	1.00	2.10	72.00
25 JUL 1979	PENN STATE	4.00	2.80	.89	NAP	5.00	1.60	210.00
	ILLINOIS	18.00	1.90	.78	NAP	2.80	.82	110.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	5.70	6.10	.50	NAP	.87	.91	92.00
26 JUL 1979	PENN STATE	7.00	4.80	.70	NAP	2.80	1.10	180.00
	VIRGINIA	1.30	5.60	1.00	NAP	1.90	1.00	84.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	13.00	3.00	.69	NAP	3.30	1.30	130.00
27 JUL 1979	ITHACA	14.00	2.80	2.40	NAP	.72	< .40	120.00

DATA FROM 1 JUL 1979 TO 31 JUL 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
		RPC	RPC	RPC	NAP	RPC	RPC	RPC
29 JUL 1979	PENN STATE	7.40	1.60	.98	NAP	1.20	.41	81.00
	OXFORD OH	15.00	8.20	1.70	NAP	4.40	1.60	120.00
30 JUL 1979	WHITEFACE	20.00	5.50	3.70	NAP	1.00	< .40	110.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	MOE	MOE	MOE	NAP	MOE	MOE	MOE
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
31 JUL 1979	ITHACA	12.00	.82	2.70	NAP	1.30	.49	140.00
	VIRGINIA	23.00	1.50	1.30	NAP	1.20	.41	120.00
	ILLINOIS	22.00	9.20	2.40	NAP	6.40	1.90	87.00
	LEWES DE	ISA	ISA	ISA	NAP	ISA	ISA	ISA

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 AUG 1979	ITHACA	22.00	2.00	.57	NAP	3.40	1.30	160.00
	PENN STATE	34.00	7.80	4.30	NAP	7.10	1.40	300.00
	ILLINOIS	13.00	1.70	1.40	NAP	1.30	.78	57.00
2 AUG 1979	WHITEFACE	24.00	2.00	1.90	NAP	1.60	.45	110.00
	PENN STATE	22.00	3.80	4.50	NAP	5.30	1.90	300.00
	OXFORD OH	9.30	4.00	.63	NAP	2.70	1.20	150.00
3 AUG 1979	ITHACA	7.80	1.80	.52	NAP	1.70	.66	120.00
	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEAFS DE	43.00	17.00	1.30	NAP	2.10	2.70	220.00
4 AUG 1979	BROOKHAVEN	13.00	66.00	2.00	NAP	2.70	7.40	230.00
5 AUG 1979	BROOKHAVEN	15.00	4.30	.72	NAP	.52	.62	120.00
6 AUG 1979	WHITEFACE	18.00	1.10	.84	NAP	1.50	< .40	99.00
	VIRGINIA	38.00	1.60	2.00	NAP	10.00	2.10	180.00
7 AUG 1979	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEAFS DE	54.00	18.00	3.90	NAP	5.20	3.30	280.00
8 AUG 1979	PENN STATE	41.00	2.60	1.30	NAP	11.00	3.20	180.00
10 AUG 1979	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
11 AUG 1979	PENN STATE	36.00	1.00	1.10	NAP	4.90	1.40	290.00
	BROOKHAVEN	36.00	12.00	1.20	NAP	5.00	3.00	180.00
13 AUG 1979	WHITEFACE	PPC	RPC	RPC	NAP	RPC	RPC	RPC
	PENN STATE	5.10	2.40	< .40	NAP	2.50	< .40	45.00
	BROOKHAVEN	12.00	38.00	4.70	NAP	1.90	4.10	140.00

DATA FROM 1 AUG 1979 TO 30 AUG 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	LEWES DE	27.00	120.00	2.50	NAP	5.10	13.00	200.00
14 AUG 1979	ITHACA	36.00	1.10	1.20	NAP	3.50	.78	190.00
	VIRGINIA	13.00	.50	.96	NAP	1.80	< .40	100.00
15 AUG 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
16 AUG 1979	WHITEFACE	13.00	1.20	1.50	NAP	5.60	.82	51.00
	ITHACA	13.00	6.90	6.10	NAP	16.00	7.00	NAP
	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
19 AUG 1979	PENN STATE	53.00	2.00	1.50	NAP	3.00	.78	350.00
	VIRGINIA	34.00	3.20	1.60	NAP	7.40	1.70	170.00
	ILLINOIS	58.00	3.60	3.80	NAP	18.00	4.60	150.00
	BROOKHAVEN	39.00	31.00	1.80	NAP	5.70	4.50	320.00
	OXFORD OH	34.00	.96	1.10	NAP	4.60	1.10	87.00
20 AUG 1979	WHITEFACE	14.00	2.30	9.10	NAP	4.40	5.70	150.00
21 AUG 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	23.00	3.30	2.40	NAP	2.10	.45	130.00
22 AUG 1979	LEWES DE	10.00	38.00	1.70	NAP	3.70	5.60	180.00
24 AUG 1979	ITHACA	< .60	1.60	1.20	NAP	5.70	2.20	NAP
	VIRGINIA	31.00	.76	1.20	NAP	1.70	< .40	180.00
	OXFORD OH	13.00	4.50	7.20	NAP	1.00	< .40	130.00
25 AUG 1979	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
26 AUG 1979	PENN STATE	24.00	5.90	.74	NAP	2.80	1.20	170.00
	LEWES DE	ISA	ISA	ISA	NAP	ISA	ISA	ISA

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
27 AUG 1979	PENN STATE	41.00	2.00	1.50	NAP	1.60	.41	140.00
	VIRGINIA	7.80	1.90	.94	NAP	2.10	.43	79.00
28 AUG 1979	WHITEFACE	13.00	.81	.62	NAP	.53	< .40	64.00
	ITHACA	15.00	1.00	.76	NAP	1.10	< .40	110.00
	VIRGINIA	9.00	1.90	.79	NAP	1.20	.45	70.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWIS DE	33.00	8.40	1.30	NAP	1.00	1.40	110.00
29 AUG 1979	BROOKHAVEN	2.70	11.00	1.10	NAP	.60	1.20	36.00
30 AUG 1979	WHITEFACE	13.00	.92	.64	NAP	.70	< .40	95.00
	PENN STATE	14.00	.69	.70	NAP	2.30	.62	120.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWIS DE	6.40	3.00	.45	NAP	< .50	.45	55.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOF MEANS MALFUNCTION OR OPERATOR ERROR
 RPD MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 SEP 1979 TO 30 SEP 1979 (CONT.)

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
2 SEP 1979	BROOKHAVEN	14.00	13.00	1.70	NAP	1.20	1.60	110.00
	LEWES DE	8.20	6.00	.95	NAP	.75	1.00	60.00
3 SEP 1979	ITHACA	16.00	.86	.64	NAP	1.20	< .40	99.00
	PENN STATE	17.00	1.10	.98	NAP	1.60	< .40	70.00
	LEWES DE	17.00	11.00	1.20	NAP	1.00	1.70	52.00
4 SEP 1979	VIRGINIA	13.00	2.20	1.40	NAP	.77	< .40	120.00
	LEWES DE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
6 SEP 1979	WHITEFACE	5.20	1.90	1.30	NAP	2.50	.70	29.00
	PENN STATE	1.30	9.40	7.00	NAP	.95	< .40	34.00
	BROOKHAVEN	10.00	450.00	8.50	NAP	16.00	43.00	600.00
	LEWES DE	2.60	110.00	2.50	NAP	5.40	15.00	170.00
7 SEP 1979	ITHACA	2.20	1.20	1.20	NAP	.67	< .40	14.00
	PENN STATE	100.00	11.00	9.10	NAP	50.00	16.00	480.00
	VIRGINIA	2.30	4.30	.37	NAP	.90	.53	23.00
8 SEP 1979	VIRGINIA	67.00	10.00	9.30	NAP	15.00	4.10	260.00
10 SEP 1979	WHITEFACE	12.00	.74	.78	NAP	.50	< .40	59.00
11 SEP 1979	WHITEFACE	2.00	.86	.88	NAP	1.20	< .40	77.00
15 SEP 1979	ITHACA	6.30	1.60	.77	NAP	1.50	.49	57.00
	PENN STATE	7.40	4.10	1.90	NAP	1.60	.62	49.00
	VIRGINIA	15.00	19.00	1.20	NAP	1.80	2.20	83.00
	BROOKHAVEN	MOE	MOE	MOE	NAP	MOE	MOE	MOE
	LEWES DE	6.30	12.00	1.10	NAP	.87	2.10	37.00
17 SEP 1979	WHITEFACE	.85	.82	< .40	NAP	.52	< .40	17.00

DATA FROM 2 SEP 1979 TO 30 SEP 1979 (CONT.)

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
20 SEP 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
21 SEP 1979	WHITEFACE	17.00	1.80	1.40	NAP	1.70	.41	56.00
22 SEP 1979	ITHACA	21.00	1.20	1.20	NAP	3.50	1.10	130.00
23 SEP 1979	PENN STATE	5.30	.53	.54	NAP	1.20	< .40	39.00
	VIRGINIA	17.00	5.40	.78	NAP	1.00	.82	82.00
	SPOOKHAVEN	9.30	31.00	1.60	NAP	1.50	3.80	88.00
	LEWES DE	5.70	22.00	1.20	NAP	.72	2.50	50.00
	OXFORD OH	4.70	.49	.71	NAP	6.20	1.70	74.00
26 SEP 1979	LEWES DE	3.00	120.00	3.70	NAP	3.00	13.00	170.00
29 SEP 1979	ITHACA	2.30	.83	3.30	NAP	< .50	< .40	55.00
	OXFORD OH	12.00	< .40	.44	NAP	.62	< .40	42.00
30 SEP 1979	PENN STATE	41.00	3.00	0.70	NAP	1.20	1.90	110.00
	ILLINOIS	140.00	3.40	9.80	NAP	42.00	8.30	260.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 OCT 1979 TO 29 OCT 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 OCT 1979	VIRGINIA	11.00	2.10	9.90	NAP	.72	< .40	83.00
2 OCT 1979	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	22.00	12.00	3.00	NAP	.85	1.50	58.00
	OXFORD OH	28.00	.93	1.50	NAP	3.60	.53	120.00
3 OCT 1979	BROOKHAVEN	17.00	76.00	2.50	NAP	2.90	8.80	170.00
	LEWES DE	19.00	23.00	12.00	NAP	3.70	1.80	98.00
4 OCT 1979	ITHACA	35.00	1.80	1.70	NAP	.75	< .40	120.00
	PENN STATE	10.00	.54	.78	NAP	.90	< .40	64.00
5 OCT 1979	OXFORD OH	12.00	.79	1.00	NAP	4.00	.62	55.00
6 OCT 1979	ITHACA	21.00	1.90	1.50	NAP	1.30	< .40	100.00
	PENN STATE	6.10	.65	.52	NAP	.62	< .40	47.00
	VIRGINIA	13.00	1.40	.97	NAP	1.00	< .40	46.00
	BROOKHAVEN	9.90	43.00	5.30	NAP	4.00	5.60	100.00
	LEWES DE	16.00	33.00	2.10	NAP	2.60	3.90	75.00
8 OCT 1979	PENN STATE	120.00	3.70	25.00	NAP	10.00	6.50	180.00
9 OCT 1979	WHITEFACE	9.80	1.50	7.20	NAP	6.90	3.20	83.00
	VIRGINIA	20.00	14.00	8.50	NAP	19.00	4.00	160.00
10 OCT 1979	ITHACA	15.00	.99	.66	NAP	4.20	1.10	88.00
	OXFORD OH	49.00	5.70	3.20	NAP	35.00	4.20	190.00
11 OCT 1979	PENN STATE	40.00	3.00	2.60	NAP	14.00	2.40	170.00
	LEWES DE	18.00	150.00	3.30	NAP	5.70	16.00	270.00
12 OCT 1979	BROOKHAVEN	21.00	65.00	4.80	NAP	2.30	8.80	140.00
	OXFORD OH	43.00	1.40	2.10	NAP	25.00	4.90	110.00

DATA FROM 1 OCT 1979 TO 29 OCT 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
13 OCT 1979	ITHACA	31.00	.89	1.40	NAP	5.30	1.50	130.00
	BROOKHAVEN	23.00	25.00	1.90	NAP	5.70	4.10	130.00
14 OCT 1979	PENN STATE	47.00	1.70	1.90	NAP	13.00	3.10	160.00
15 OCT 1979	ITHACA	57.00	19.00	25.00	NAP	12.00	3.70	220.00
	LEWES DE	38.00	11.00	2.00	NAP	7.60	2.60	180.00
16 OCT 1979	WHITEFACE	15.00	.80	6.90	NAP	3.00	1.30	78.00
	OXFORD OH	30.00	3.90	2.00	NAP	14.00	3.10	170.00
18 OCT 1979	PENN STATE	22.00	1.00	3.50	NAP	16.00	4.00	170.00
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
23 OCT 1979	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
24 OCT 1979	WHITEFACE	MOE	MOE	MOE	NAP	MOE	MOE	MOE
	ITHACA	25.00	2.80	1.50	NAP	4.00	1.70	100.00
	OXFORD OH	49.00	1.10	2.40	NAP	3.70	1.10	88.00
25 OCT 1979	PENN STATE	7.90	3.90	.91	NAP	2.00	.78	53.00
	LEWES DE	24.00	28.00	2.30	NAP	3.30	4.50	120.00
28 OCT 1979	ITHACA	34.00	2.90	1.80	NAP	4.50	1.40	150.00
	PENN STATE	22.00	1.80	1.50	NAP	8.30	1.20	120.00
	OXFORD OH	52.00	12.00	12.00	NAP	50.00	7.70	250.00
29 OCT 1979	WHITEFACE	MOE	MOE	MOE	NAP	MOE	MOE	MOE
	BROOKHAVEN	37.00	250.00	5.10	NAP	10.00	20.00	480.00

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 PPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 1 NOV 1979 TO 29 NOV 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
1 NOV 1979	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
2 NOV 1979	OXFORD OH	8.80	3.68	.96	NAP	1.00	.82	49.00
3 NOV 1979	ITHACA	4.00	12.08	.63	NAP	.75	.62	68.00
	BROOKHAVEN	1.30	27.08	.73	NAP	1.00	4.10	51.00
4 NOV 1979	PENN STATE	63.00	52.08	19.08	NAP	17.00	13.00	240.00
	LEWES DE	6.50	57.00	1.20	NAP	1.80	6.70	110.00
7 NOV 1979	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
8 NOV 1979	WHITEFACE	MOE	MOE	MOE	NAP	MOE	MOE	MOE
	ITHACA	RPC	RPC	RPC	NAP	RPC	RPC	RPC
	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
10 NOV 1979	OXFORD OH	18.00	2.30	2.10	NAP	.57	< .40	49.00
11 NOV 1979	PENN STATE	30.00	3.48	3.00	NAP	8.50	1.70	170.00
	BROOKHAVEN	11.00	9.00	1.40	NAP	2.60	1.80	71.00
12 NOV 1979	LEWES DE	8.50	9.30	.49	NAP	1.10	1.30	55.00
13 NOV 1979	WHITEFACE	17.00	.74	1.10	NAP	1.00	< .40	100.00
	PENN STATE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	BROOKHAVEN	3.90	6.10	.29	NAP	.50	.86	35.00
14 NOV 1979	ITHACA	1.60	50.00	1.90	NAP	2.30	.91	210.00
	BROOKHAVEN	14.00	43.00	1.70	NAP	4.10	5.20	190.00
	LEWES DE	10.00	120.00	4.30	NAP	4.30	14.00	200.00
15 NOV 1979	WHITEFACE	MOE	MOE	MOE	NAP	MOE	MOE	MOE
	PENN STATE	36.00	3.20	3.50	NAP	6.70	.91	ISA
16 NOV 1979	PENN STATE	15.00	1.20	1.40	NAP	2.90	< .80	110.00

DATA FROM 1 NOV 1979 TO 29 NOV 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
19 NOV 1979	WHITEFACE	10.00	3.80	3.90	NAP	1.60	.91	63.00
20 NOV 1979	ITHACA	18.00	1.30	1.20	NAP	4.90	1.20	110.00
26 NOV 1979	VIRGINIA	12.00	45.00	8.60	NAP	2.80	5.30	110.00
	BROOKHAVEN	MOE	MOE	MOE	NAP	MOE	MOE	MOE
	OXFORD OH	11.00	3.70	3.00	NAP	1.70	< .80	61.00
27 NOV 1979	WHITEFACE	3.30	2.30	.91	NAP	1.40	.41	24.00
	ITHACA	5.90	3.00	.40	NAP	.92	< .80	31.00
	PENN STATE	3.00	5.40	2.30	NAP	.50	< .30	25.00
	BROOKHAVEN	7.70	190.00	3.90	NAP	4.60	18.00	270.00
	LEWES IE	9.00	110.00	4.90	NAP	3.00	12.00	170.00
29 NOV 1979	OXFORD OH	25.00	10.00	2.30	NAP	17.00	2.60	120.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 2 DEC 1979 TO 28 DEC 1979 (CONT.)

		N H	N A	K	A L	C A	M G	C A T O N
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
2 DEC 1979	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
3 DEC 1979	WHITEFACE	20.00	7.70	1.10	NAP	3.90	.95	100.00
	PENN STATE	22.00	2.20	2.60	NAP	8.30	1.40	ISA
4 DEC 1979	ITHACA	25.00	2.20	1.70	NAP	5.10	1.60	110.00
6 DEC 1979	WHITEFACE	16.00	2.10	1.80	NAP	6.80	2.10	69.00
	VIRGINIA	ISA	ISA	ISA	NAP	ISA	ISA	ISA
7 DEC 1979	WHITEFACE	23.00	29.00	1.60	NAP	8.00	1.10	160.00
	ITHACA	40.00	3.70	2.70	NAP	16.00	1.50	170.00
	PENN STATE	32.00	9.60	3.80	NAP	16.00	2.80	210.00
	BROOKHAVEN	8.80	10.00	1.20	NAP	1.30	1.60	44.00
	OXFORD OH	ISA	ISA	ISA	NAP	ISA	ISA	ISA
8 DEC 1979	PENN STATE	ISA	ISA	<00.00	NAP	ISA	ISA	ISA
	LEWES DE	4.40	2.90	.68	NAP	1.00	< .80	30.00
10 DEC 1979	WHITEFACE	35.00	.89	1.50	NAP	2.30	< .80	96.00
14 DEC 1979	ITHACA	20.00	1.90	1.50	NAP	3.40	< .80	84.00
	PENN STATE	12.00	1.10	.73	NAP	5.20	< .80	59.00
	VIRGINIA	2.30	3.30	.48	NAP	.97	< .80	35.00
	BROOKHAVEN	6.90	13.00	.67	NAP	1.40	1.80	77.00
	LEWES DE	8.50	11.00	.73	NAP	.62	1.40	49.00
	OXFORD OH	14.00	2.60	1.10	NAP	4.70	1.20	69.00
17 DEC 1979	WHITEFACE	18.00	1.80	1.10	NAP	2.80	< .80	130.00
	BROOKHAVEN	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	14.00	32.00	1.80	NAP	1.50	3.40	130.00

DATA FROM 2 DEC 1979 TO 28 DEC 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
18 DEC 1979	ITHACA	6.90	16.00	.80	NAP	9.80	2.90	100.00
19 DEC 1979	PENN STATE	17.00	22.00	3.10	NAP	47.00	6.10	100.00
20 DEC 1979	ITHACA	1.10	1.20	.51	NAP	1.30	< .80	56.00
	BROOKHAVEN	7.30	16.00	1.40	NAP	9.10	4.50	62.00
21 DEC 1979	VIRGINIA	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	LEWES DE	ISA	ISA	ISA	NAP	ISA	ISA	ISA
23 DEC 1979	VIRGINIA	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	OXFORD OH	11.00	2.90	1.30	NAP	3.10	1.00	87.00
25 DEC 1979	ILLINOIS	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	BROOKHAVEN	6.00	30.00	1.30	NAP	1.30	3.30	86.00
26 DEC 1979	PENN STATE	5.30	1.70	.56	NAP	4.80	2.80	54.00
	VIRGINIA	17.00	31.00	.95	NAP	2.00	3.40	110.00
	OXFORD OH	24.00	3.70	3.40	NAP	1.70	.95	77.00
27 DEC 1979	WHITEFACE	2.80	.76	< .50	NAP	.52	< .80	42.00
28 DEC 1979	LEWES DE	7.40	33.00	2.20	NAP	1.30	3.50	67.00

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 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

SAMPLES AVAILABLE

[illegible]

SAMPLES AVAILABLE

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SAMPLES AVAILABLE

	W	H	I	T	L	Y	W	K	L	Y	W	K	L	Y	W	K	L	Y	W	K	L	Y
6 MAR 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 MAR 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 MAR 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 MAR 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 MAR 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 MAR 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 MAR 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 MAR 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 MAR 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 MAR 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 APR 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 APR 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 APR 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 APR 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 APR 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24 APR 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 MAY 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 MAY 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 MAY 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 MAY 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 MAY 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24 MAY 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29 MAY 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31 MAY 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 JUN 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 JUN 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 JUN 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 JUN 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 JUN 1979	S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

DATA FROM 4 JUL 1978 TO 31 OCT 1978

		Z	HOURS	HOURS	HOURS		NO.0A	
4 JUL 1978	ITHAC WKLY	1300.00	168.00	0.00	25.00	NAP	7.18	77.72
5 JUL 1978	VIRGI WKLY	2000.00	166.50	0.00	58.00	NAP	8.22	4417.00
11 JUL 1978	WHITE WKLY	1430.00	167.50	0.00	2.00	NAP	7.26	77.71
	ITHAC WKLY	1300.00	168.00	0.00	3.00	NAP	7.18	77.72
	VIRGI WKLY	2100.00	145.50	0.00	6.00	NAP	8.22	5101.00
18 JUL 1978	ITHAC WKLY	1300.00	158.00	0.00	9.00	NAP	8.68	77.72
	VIRGI WKLY	2130.00	158.50	0.00	15.50	NAP	8.22	5619.00
25 JUL 1978	WHITE WKLY	1730.00	176.00	0.00	8.00	NAP	9.07	6323.00
	ITHAC WKLY	1300.00	158.00	0.00	1.00	NAP	8.08	77.72
	VIRGI WKLY	2030.00	167.00	0.00	5.00	NAP	8.22	6501.00
1 AUG 1978	WHITE WKLY	1400.00	154.50	0.00	21.00	NAP	9.07	7014.00
	ITHAC WKLY	1300.00	158.00	0.00	3.00	NAP	8.08	77.72
	VIRGI WKLY	2030.00	158.00	0.00	30.50	NAP	10.09	NAP
8 AUG 1978	WHITE WKLY	1300.00	157.00	0.00	7.00	NAP	9.07	4612.00
	ITHAC WKLY	1300.00	158.00	0.00	38.00	NAP	8.21	4800.00
	VIRGI WKLY	2130.00	159.00	0.00	27.30	NAP	10.09	NAP
15 AUG 1978	WHITE WKLY	1930.00	174.50	0.00	10.00	NAP	9.07	5215.00
	ITHAC WKLY	1300.00	158.00	0.00	9.00	NAP	8.21	5001.00
22 AUG 1978	WHITE WKLY	1500.00	153.50	0.00	12.00	NAP	9.07	5812.00
	ITHAC WKLY	1200.00	167.00	0.00	1.00	NAP	9.07	6001.00
29 AUG 1978	WHITE WKLY	1930.00	172.50	0.00	22.00	NAP	9.12	6901.00
	ITHAC WKLY	1500.00	171.00	0.00	3.00	NAP	9.07	6907.00
5 SEP 1978	WHITE WKLY	1330.00	162.00	0.00	9.00	NAP	9.12	NAP

DATA FROM 4 JUL 1978 TO 31 OCT 1978 (CONT.)

		Z	HOURS	HOURS	HOURS		MO. DA	
	ITHAC WKLY	1300.00	155.00	0.00	24.00	NAP	9.07	4318.00
12 SEP 1978	WHITE WKLY	1930.00	174.00	0.00	31.00	NAP	10.04	NAP
13 SEP 1978	ITHAC WKLY	1300.00	192.00	0.00	14.00	NAP	9.28	NAP
19 SEP 1978	WHITE WKLY	1830.00	167.00	0.00	11.00	NAP	10.04	NAP
	ITHAC WKLY	1800.00	149.00	0.00	32.00	NAP	9.28	NAP
26 SEP 1978	WHITE WKLY	1930.00	159.00	0.00	7.00	NAP	10.04	NAP
4 OCT 1978	WHITE WKLY	1330.00	152.00	0.00	11.00	NAP	10.24	NAP
10 OCT 1978	WHITE WKLY	1300.00	157.50	0.00	26.00	NAP	10.24	NAP
	ITHAC WKLY	1300.00	161.00	0.00	21.00	NAP	10.25	NAP
17 OCT 1978	WHITE WKLY	1300.00	158.00	0.00	33.00	NAP	10.24	NAP
	ITHAC WKLY	1400.00	159.00	0.00	20.00	NAP	10.25	NAP
	VIRGI WKLY	1400.00	158.00	1505.00	.50	NAP	ISA	5212.00
24 OCT 1978	WHITE WKLY	1230.00	167.50	0.00	15.00	NAP	11.14	6322.00
	ITHAC WKLY	1600.00	170.00	0.00	15.00	NAP	11.14	6321.00
	VIRGI WKLY	1400.00	158.00	0.00	2.00	NAP	ISA	5913.00
31 OCT 1978	WHITE WKLY	1430.00	170.00	0.00	31.00	NAP	11.14	6810.00
	ITHAC WKLY	1600.00	158.00	0.00	12.00	NAP	11.14	6706.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

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		Z	HOURS	HOURS	HOURS	40.0A	
7 NOV 1978	ITHAC WKLY	2000.00	172.00	0.00	0.00	NAP	ISA
8 NOV 1978	WHITE WKLY	1500.00	192.50	0.00	5.00	NAP	11.14 4806.00
14 NOV 1978	ITHAC WKLY	1500.00	153.00	0.00	4.00	NAP	12.07 5414.00
	VIRGI WKLY	1300.00	503.00	0.00	14.50	NAP	12.27 5314.00
15 NOV 1978	WHITE WKLY	1500.00	158.00	0.00	12.00	NAP	11.28 5423.00
21 NOV 1978	WHITE WKLY	2000.00	149.00	0.00	19.00	NAP	11.28 5823.00
	ITHAC WKLY	1300.00	155.00	0.00	12.00	NAP	12.07 6113.00
	VIRGI WKLY	1400.00	159.00	0.00	55.50	NAP	12.27 5809.00
28 NOV 1978	WHITE WKLY	1730.00	155.50	0.00	23.00	NAP	12.20 6811.00
	ITHAC WKLY	2000.00	175.00	0.00	72.00	NAP	12.07 6817.00
2 DEC 1978	VIRGI WKLY	1400.00	264.00	0.00	23.00	NAP	12.27 7003.00
5 DEC 1978	WHITE WKLY	1600.00	156.50	0.00	19.00	NAP	12.20 4419.00
	ITHAC WKLY	1200.00	150.00	0.00	10.00	NAP	12.21 4320.00
7 DEC 1978	VIRGI WKLY	1300.00	119.00	0.00	35.50	NAP	3.14 4508.00
12 DEC 1978	WHITE WKLY	1830.00	170.50	0.00	14.00	NAP	1.12 5011.00
	ITHAC WKLY	1600.00	172.00	0.00	16.00	NAP	12.21 5001.00
	VIRGI WKLY	1400.00	121.00	0.00	12.50	NAP	3.14 4922.00
19 DEC 1978	WHITE WKLY	2000.00	159.50	0.00	30.00	NAP	1.12 5811.00
26 DEC 1978	WHITE WKLY	1430.00	152.50	0.00	41.00	NAP	1.12 6611.00
	VIRGI WKLY	1430.00	336.50	0.00	16.50	NAP	3.14 6508.00
2 JAN 1979	WHITE WKLY	1400.00	157.50	0.00	20.00	NAP	1.22 4914.00
	ITHAC WKLY	1700.00	336.00	163.00	61.00	NAP	1.12 4205.00
	VIRGI WKLY	1400.00	157.50	0.00	61.00	NAP	3.14 4218.00

DATA FROM 7 NOV 1978 TO 28 FEB 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		10.DA	
9 JAN 1979	WHITE WKLY	1430.00	168.50	0.00	37.00	NAP	1.22	4818.00
	ITHAC WKLY	1200.00	153.00	0.00	34.00	NAP	2.09	4902.00
	VIRGI WKLY	1400.00	158.00	0.00	25.00	NAP	3.14	4805.00
15 JAN 1979	ITHAC WKLY	1400.00	146.00	0.00	12.00	NAP	2.09	5502.00
16 JAN 1979	WHITE WKLY	2030.00	174.00	0.00	29.00	NAP	2.05	5421.00
	VIRGI WKLY	1400.00	168.00	0.00	22.50	NAP	3.14	5319.00
23 JAN 1979	VIRGI WKLY	1300.00	167.00	0.00	36.50	NAP	3.14	6115.00
24 JAN 1979	WHITE WKLY	1400.00	185.50	0.00	23.00	NAP	2.05	6216.00
29 JAN 1979	LEWES WKLY	1600.00	166.00	0.00	NAP	NAP	3.08	NAP
30 JAN 1979	WHITE WKLY	1630.00	146.50	0.00	58.00	NAP	2.21	7016.00
	VIRGI WKLY	1430.00	159.50	0.00	20.00	NAP	3.14	6811.00
6 FEB 1979	WHITE WKLY	1530.00	167.00	0.00	12.00	NAP	2.21	4516.00
	VIRGI WKLY	1330.00	167.00	0.00	3.00	NAP	3.14	4316.00
13 FEB 1979	WHITE WKLY	1400.00	166.50	0.00	7.00	NAP	3.12	4818.00
	VIRGI WKLY	1400.00	158.50	0.00	10.50	NAP	4.11	5222.00
20 FEB 1979	WHITE WKLY	2030.00	174.50	0.00	ISA	NAP	3.12	6099.00
22 FEB 1979	VIRGI WKLY	2100.00	223.00	0.00	15.00	NAP	4.11	6116.00
	LEWES WKLY	1900.00	228.00	353.00	NAP	NAP	3.08	NAP
27 FEB 1979	WHITE WKLY	2030.00	158.00	0.00	35.00	NAP	3.12	6711.00
28 FEB 1979	VIRGI WKLY	2130.00	144.50	0.00	69.30	NAP	4.11	6622.00
	LEWES WKLY	1500.00	140.00	0.00	NAP	NAP	3.08	NAP

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 RPC MEANS REJECTED--PROB. CONTAMINATION

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		Z	HOURS	HOURS	HOURS		10.00	
6 MAR 1979	VIRGI WKLY	1300.00	135.50	0.00	26.00	NAP	4.11	4601.00
7 MAR 1979	WHITE WKLY	1530.00	187.00	0.00	29.00	NAP	3.27	4714.00
9 MAR 1979	LEWES WKLY	1600.00	217.00	0.00	NAP	NAP	5.18	4699.00
12 MAR 1979	LEWES WKLY	1700.00	73.00	0.00	8.00	NAP	5.18	4699.00
13 MAR 1979	WHITE WKLY	1400.00	142.50	0.00	5.00	NAP	3.27	5216.00
	VIRGI WKLY	1300.00	166.00	0.00	8.50	NAP	6.25	4820.00
15 MAR 1979	ITHAC WKLY	1400.00	213.00	0.00	6.00	NAP	4.05	5499.00
19 MAR 1979	LEWES WKLY	1330.00	164.50	0.00	6.00	NAP	5.18	5418.00
20 MAR 1979	WHITE WKLY	1400.00	168.00	0.00	10.00	NAP	3.27	5509.00
26 MAR 1979	LEWES WKLY	1600.00	170.50	0.00	12.00	NAP	5.18	6699.00
27 MAR 1979	WHITE WKLY	1330.00	167.50	0.00	16.00	NAP	4.11	6618.00
	ITHAC WKLY	1200.00	286.00	0.00	16.00	NAP	4.05	6605.00
	VIRGI WKLY	1700.00	340.00	0.00	26.00	NAP	6.25	6520.00
3 APR 1979	WHITE WKLY	2100.00	175.50	0.00	34.00	NAP	4.11	4305.00
	ITHAC WKLY	1230.00	168.50	0.00	16.00	NAP	5.08	4221.00
	VIRGI WKLY	1700.00	168.00	0.00	16.50	NAP	6.25	4317.00
6 APR 1979	LEWES WKLY	2000.00	258.00	0.00	NAP	NAP	5.18	NAP
10 APR 1979	WHITE WKLY	1400.00	161.00	0.00	56.00	NAP	5.01	5013.00
	ITHAC WKLY	1300.00	168.50	0.00	30.00	NAP	5.08	5004.00
	VIRGI WKLY	2100.00	172.00	0.00	39.00	NAP	6.25	4914.00
17 APR 1979	ITHAC WKLY	1600.00	171.00	0.00	46.00	NAP	5.08	6099.00
	VIRGI WKLY	1300.00	160.00	0.00	21.50	NAP	6.25	5405.00
	LEWES WKLY	1930.00	264.00	0.00	10.00	NAP	5.18	4999.00

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		40.00	
19 APR 1979	WHITE WKLY	1930.00	221.50	0.00	30.00	NAP	5.01	5622.00
24 APR 1979	WHITE WKLY	1900.00	119.50	0.00	1.00	NAP	5.01	6212.00
	VIRGI WKLY	1300.00	168.00	0.00	2.50	NAP	6.25	6300.00
1 MAY 1979	WHITE WKLY	2030.00	159.50	0.00	19.00	NAP	5.17	4110.00
	VIRGI WKLY	1300.00	168.00	0.00	4.00	NAP	7.23	6621.00
8 MAY 1979	WHITE WKLY	1930.00	167.00	0.00	17.00	NAP	5.17	4412.00
	VIRGI WKLY	1330.00	168.50	0.00	15.50	NAP	7.23	4511.00
15 MAY 1979	WHITE WKLY	1900.00	167.50	0.00	8.00	NAP	6.12	5316.00
	ITHAC WKLY	1200.00	158.00	500.00	3.00	NAP	6.04	5314.00
	VIRGI WKLY	2100.00	175.50	0.00	19.00	NAP	7.23	5412.00
21 MAY 1979	WHITE WKLY	2000.00	145.00	0.00	3.00	NAP	6.12	6122.00
22 MAY 1979	ITHAC WKLY	1400.00	170.00	0.00	6.00	NAP	6.04	6118.00
	VIRGI WKLY	1330.00	160.50	0.00	6.00	NAP	7.23	6001.00
24 MAY 1979	PENNS WKLY	1600.00	158.00	0.00	25.80	NAP	6.11	6413.00
29 MAY 1979	WHITE WKLY	2000.00	192.00	0.00	57.00	NAP	6.12	6905.00
	ITHAC WKLY	1200.00	166.00	0.00	34.00	NAP	6.04	NAP
	VIRGI WKLY	1330.00	168.00	0.00	16.00	NAP	7.23	6509.00
	LEWES WKLY	1630.00	NAP	1000.00	NAP	NAP	7.02	NAP
31 MAY 1979	PENNS WKLY	1600.00	168.00	0.00	15.40	NAP	6.11	7102.00
5 JUN 1979	WHITE WKLY	2000.00	168.00	0.00	9.00	NAP	6.27	7620.00
	VIRGI WKLY	1700.00	171.50	0.00	39.00	NAP	7.23	4404.00
	LEWES WKLY	1930.00	146.50	0.00	NAP	NAP	7.02	NAP
7 JUN 1979	PENNS WKLY	1600.00	168.00	0.00	2.20	NAP	6.26	4615.00

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		Z	HOURS	HOURS	HOURS		40.6A	
12 JUN 1979	WHITE WKLY	1930.00	157.50	0.00	17.00	NAP	6.27	5220.00
	ITHAC WKLY	1200.00	158.00	168.00	10.00	NAP	7.10	5117.00
	PENNS WKLY	1600.00	120.00	0.00	3.10	NAP	6.26	5113.00
	VIRGI WKLY	1300.00	164.00	0.00	8.00	NAP	7.23	5103.00
	LEWES WKLY	1700.00	155.50	0.00	NAP	NAP	7.02	NAP
19 JUN 1979	WHITE WKLY	1500.00	153.50	0.00	8.00	NAP	6.27	5817.00
	PENNS WKLY	1600.00	159.00	0.00	1.30	NAP	ISA	5810.00
	VIRGI WKLY	1300.00	168.00	0.00	10.50	NAP	7.23	6712.00
	LEWES WKLY	1400.00	165.00	0.00	NAP	NAP	7.02	NAP
26 JUN 1979	WHITE WKLY	1300.00	166.00	0.00	16.00	NAP	7.19	6421.00
	ITHAC WKLY	1200.00	336.00	0.00	11.00	NAP	7.10	6313.00
	PENNS WKLY	1330.00	165.50	0.00	.80	NAP	7.12	6201.00
	VIRGI WKLY	1300.00	158.00	0.00	4.50	NAP	9.19	6419.00
	LEWES WKLY	1430.00	158.50	0.00	NAP	NAP	7.02	NAP

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

V L O L T P H P H A B C H D U C T

P R E D F I E L D F I E L L A B C H D U C T

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DATA FROM 4 JUL 1978 TO 31 OCT 1978 (CONT.)

		ML	ML	C			UMOL/L	UMHO/CM
	ITHAC WKLY	1380.00	1630.00	15.00	4.00	4.04	91.00	46.00
12 SEP 1978	WHITE WKLY	2683.00	2440.00	15.00	3.97	4.17	58.00	37.00
13 SEP 1978	ITHAC WKLY	770.00	780.00	20.00	3.80	3.80	150.00	84.00
19 SEP 1978	WHITE WKLY	1598.00	1400.00	21.00	4.29	4.32	48.00	26.00
	ITHAC WKLY	1520.00	1820.00	15.00	3.84	3.90	130.00	58.00
26 SEP 1978	WHITE WKLY	655.00	630.00	18.00	4.20	4.24	58.00	29.00
4 OCT 1978	WHITE WKLY	930.00	750.00	21.00	3.97	4.02	96.00	41.00
10 OCT 1978	WHITE WKLY	1405.00	1370.00	17.00	3.85	4.35	45.00	21.00
	ITHAC WKLY	990.00	1010.00	13.00	4.07	4.09	91.00	36.00
17 OCT 1978	WHITE WKLY	3380.00	1410.00	5.00	4.10	4.33	47.00	23.00
	ITHAC WKLY	2820.00	2850.00	14.00	4.19	4.28	52.00	23.00
	VIRGI WKLY	22.00	20.00	19.00	3.70	ISA	200.00	ISA
24 OCT 1978	WHITE WKLY	810.00	750.00	5.00	4.10	4.12	76.00	40.00
	ITHAC WKLY	1130.00	1120.00	16.00	3.88	3.92	120.00	70.00
	VIRGI WKLY	37.00	20.00	19.00	3.34	ISA	450.00	ISA
31 OCT 1978	WHITE WKLY	2034.00	1980.00	18.00	4.42	4.45	35.00	18.00
	ITHAC WKLY	1310.00	1290.00	10.00	4.14	4.24	58.00	31.00

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 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 7 NOV 1978 TO 28 FEB 1979 (CONT.)

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		ML	ML	C			JMOL/L	UMHO/CM
7 NOV 1978	ITHAC WKLY	0.00	0.00	ISA	ISA	ISA	ISA	ISA
8 NOV 1978	WHITE WKLY	170.00	220.00	21.00	3.88	3.95	110.00	65.00
14 NOV 1978	ITHAC WKLY	280.00	290.00	15.00	3.80	3.83	150.00	64.00
	VIRGI WKLY	195.00	130.00	13.00	3.06	3.10	730.00	270.00
15 NOV 1978	WHITE WKLY	455.00	460.00	22.00	3.85	3.86	140.00	62.00
21 NOV 1978	WHITE WKLY	879.00	890.00	21.00	4.35	4.36	44.00	20.00
	ITHAC WKLY	1030.00	1000.00	18.00	4.21	4.22	50.00	29.00
	VIRGI WKLY	2495.00	2500.00	19.00	3.97	4.14	72.00	28.00
28 NOV 1978	WHITE WKLY	688.00	720.00	21.00	4.28	4.39	41.00	20.00
	ITHAC WKLY	1140.00	1020.00	15.00	4.02	4.06	87.00	41.00
2 DEC 1978	VIRGI WKLY	1970.00	1670.00	20.00	3.98	4.08	83.00	32.00
5 DEC 1978	WHITE WKLY	448.00	720.00	13.00	4.18	4.25	56.00	29.00
	ITHAC WKLY	640.00	710.00	17.00	4.05	4.05	99.00	47.00
7 DEC 1978	VIRGI WKLY	1615.00	1430.00	24.00	4.20	4.40	40.00	12.00
12 DEC 1978	WHITE WKLY	814.00	650.00	21.00	4.15	4.14	72.00	26.00
	ITHAC WKLY	1610.00	1550.00	13.00	4.22	4.22	50.00	28.00
	VIRGI WKLY	1885.00	1750.00	24.00	4.50	4.55	28.00	11.00
19 DEC 1978	WHITE WKLY	326.00	860.00	13.00	3.99	4.24	58.00	31.00
26 DEC 1978	WHITE WKLY	2446.00	2910.00	12.00	4.29	4.59	26.00	NAP
	VIRGI WKLY	2705.00	2550.00	24.00	4.21	4.28	52.00	18.00
2 JAN 1979	WHITE WKLY	1384.00	990.00	13.00	MOE	4.60	25.00	14.00
	ITHAC WKLY	4920.00	5290.00	11.00	4.38	4.33	47.00	19.00
	VIRGI WKLY	2762.00	2710.00	23.00	4.43	4.48	33.00	14.00

DATA FROM 7 NOV 1978 TO 28 FEB 1979 (CONT.)

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		ML	ML	C			JMOL/L	UMHO/CM
9 JAN 1979	WHITE WKLY	1780.00	1560.00	13.00	4.31	4.52	30.00	16.00
	ITHAC WKLY	1990.00	NAP	13.00	4.20	4.35	45.00	22.00
	VIRGI WKLY	1385.00	1330.00	23.00	4.07	4.10	79.00	28.00
15 JAN 1979	ITHAC WKLY	780.00	720.00	15.00	4.27	4.36	44.00	21.00
16 JAN 1979	WHITE WKLY	1413.00	1070.00	17.00	4.32	4.57	27.00	14.00
	VIRGI WKLY	855.00	840.00	22.00	4.02	4.07	35.00	29.00
23 JAN 1979	VIRGI WKLY	3808.00	3850.00	22.00	4.35	4.40	40.00	14.00
24 JAN 1979	WHITE WKLY	2019.00	1870.00	20.00	4.49	4.73	19.00	8.40
29 JAN 1979	LEWES WKLY	2201.00	NAP	12.00	4.35	4.35	45.00	41.00
30 JAN 1979	WHITE WKLY	1861.00	1330.00	19.00	4.46	4.75	18.00	13.00
	VIRGI WKLY	2960.00	3270.00	24.00	4.15	4.25	50.00	18.00
6 FEB 1979	WHITE WKLY	69.00	210.00	20.00	4.30	4.36	44.00	18.00
	VIRGI WKLY	62.00	80.00	24.00	3.99	4.00	100.00	ISA
13 FEB 1979	WHITE WKLY	253.00	140.00	19.00	4.34	4.38	42.00	13.00
	VIRGI WKLY	1600.00	1620.00	24.00	4.10	4.35	45.00	18.00
20 FEB 1979	WHITE WKLY	MOE	ISA	ISA	ISA	ISA	ISA	ISA
22 FEB 1979	VIRGI WKLY	1300.00	1120.00	24.00	4.14	4.30	50.00	19.00
	LEWES WKLY	873.00	NAP	3.00	4.00	3.97	110.00	60.00
27 FEB 1979	WHITE WKLY	1883.00	1350.00	13.00	4.20	4.17	58.00	21.00
28 FEB 1979	VIRGI WKLY	6017.00	5990.00	24.00	4.15	4.35	45.00	20.00
	LEWES WKLY	5540.00	NAP	12.00	4.55	4.34	40.00	24.00

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 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPD MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		S	P	F	F	L	(	C
		ML	ML	C			JMOL/L	UMHO/CM
6 MAR 1979	VIRGI WKLY	3375.00	3070.00	24.00	4.25	4.45	35.00	18.00
7 MAR 1979	WHITE WKLY	2062.00	1280.00	19.00	4.21	4.35	45.00	20.00
9 MAR 1979	LEWES WKLY	4587.00	NAP	10.00	4.59	NAP	26.00	NAP
12 MAR 1979	LEWES WKLY	572.00	650.00	20.00	4.47	NAP	34.00	NAP
13 MAR 1979	WHITE WKLY	339.00	160.00	10.00	3.76	3.85	140.00	65.00
	VIRGI WKLY	545.00	510.00	24.00	3.70	3.75	180.00	79.00
15 MAR 1979	ITHAC WKLY	230.00	220.00	20.00	3.92	3.95	110.00	63.00
19 MAR 1979	LEWES WKLY	117.00	160.00	12.00	4.18	NAP	56.00	NAP
20 MAR 1979	WHITE WKLY	867.00	540.00	19.00	4.05	4.25	56.00	32.00
26 MAR 1979	LEWES WKLY	2568.00	2200.00	19.00	4.85	NAP	14.00	NAP
27 MAR 1979	WHITE WKLY	978.00	730.00	19.00	4.09	NAP	81.00	NAP
	ITHAC WKLY	985.00	1020.00	18.00	4.16	4.15	71.00	31.00
	VIRGI WKLY	3475.00	3200.00	24.00	4.59	4.65	22.00	12.00
3 APR 1979	WHITE WKLY	1285.00	1280.00	20.00	3.96	NAP	110.00	NAP
	ITHAC WKLY	1390.00	1270.00	14.00	3.85	3.85	140.00	61.00
	VIRGI WKLY	1145.00	920.00	24.00	4.05	4.10	79.00	44.00
6 APR 1979	LEWES WKLY	1884.00	NAP	15.00	3.95	3.95	110.00	64.00
10 APR 1979	WHITE WKLY	1723.00	2230.00	19.00	4.25	4.50	32.00	14.00
	ITHAC WKLY	3550.00	3650.00	20.00	4.28	4.25	56.00	28.00
	VIRGI WKLY	1570.00	1520.00	24.00	4.15	4.05	89.00	34.00
17 APR 1979	ITHAC WKLY	630.00	1600.00	17.00	4.06	4.15	71.00	44.00
	VIRGI WKLY	1545.00	1510.00	24.00	4.04	4.05	89.00	40.00
	LEWES WKLY	1940.00	2760.00	10.00	4.32	NAP	48.00	NAP

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

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 19 APR 1979 WHITE WKLY 1644.00 1410.00 19.00 4.27 4.50 32.00 14.00
 24 APR 1979 WHITE WKLY 19.00 16.00 ISA ISA ISA ISA
 VIRGI WKLY 136.00 130.00 24.00 3.40 3.45 350.00 200.00
 1 MAY 1979 WHITE WKLY 2499.00 1950.00 19.00 4.27 4.55 20.00 13.00
 VIRGI WKLY 1240.00 1200.00 24.00 4.26 4.22 50.00 30.00
 8 MAY 1979 WHITE WKLY 707.00 620.00 21.00 3.86 3.90 130.00 62.00
 VIRGI WKLY 603.00 490.00 24.00 4.09 4.07 35.00 34.00
 15 MAY 1979 WHITE WKLY 227.00 180.00 22.00 3.95 4.35 45.00 55.00
 ITHAC WKLY 235.00 210.00 21.00 3.75 3.75 180.00 91.00
 VIRGI WKLY 2330.00 2230.00 24.00 4.26 4.63 23.00 10.00
 21 MAY 1979 WHITE WKLY 453.00 340.00 18.00 3.75 4.05 39.00 52.00
 22 MAY 1979 ITHAC WKLY 245.00 260.00 20.00 3.49 3.50 320.00 170.00
 VIRGI WKLY 1030.00 840.00 25.00 4.46 4.36 44.00 26.00
 24 MAY 1979 PENNS WKLY 4581.00 5220.00 25.00 4.41 4.25 56.00 26.00
 29 MAY 1979 WHITE WKLY 2862.00 3350.00 18.00 4.04 4.25 56.00 25.00
 ITHAC WKLY 3520.00 3330.00 19.00 4.17 4.15 71.00 35.00
 VIRGI WKLY 1850.00 1630.00 25.00 4.12 4.06 37.00 35.00
 LEWES WKLY 6050.00 3860.00 23.00 4.36 4.40 40.00 26.00
 31 MAY 1979 PENNS WKLY 1137.00 1150.00 25.00 4.00 3.80 150.00 66.00
 5 JUN 1979 WHITE WKLY 601.00 410.00 20.00 3.86 3.85 140.00 75.00
 VIRGI WKLY 10345.00 11300.00 28.00 4.08 4.02 96.00 35.00
 LEWES WKLY 4610.00 4390.00 23.00 4.32 4.40 40.00 22.00
 7 JUN 1979 PENNS WKLY 169.00 190.00 25.00 3.81 3.70 200.00 140.00

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		ML	ML	C			JMOL/L	UMHO/CM
12 JUN 1979	WHITE WKLY	718.00	570.00	11.00	4.23	4.30	50.00	27.00
	ITHAC WKLY	2390.00	2200.00	17.00	4.22	4.25	56.00	30.00
	PENNS WKLY	3230.00	2950.00	25.00	4.55	4.55	28.00	21.00
	VIRGI WKLY	427.00	310.00	28.00	4.05	4.07	95.00	36.00
	LEWES WKLY	1200.00	330.00	NAP	3.90	4.85	99.00	55.00
19 JUN 1979	WHITE WKLY	158.00	150.00	22.00	3.94	4.15	71.00	39.00
	PENNS WKLY	13.00	ISA	ISA	ISA	ISA	ISA	ISA
	VIRGI WKLY	1820.00	1710.00	28.00	4.56	4.69	20.00	16.00
	LEWES WKLY	389.00	325.00	NAP	4.81	5.25	5.60	10.00
26 JUN 1979	WHITE WKLY	79.00	360.00	21.00	3.79	3.95	110.00	25.00
	ITHAC WKLY	1490.00	1500.00	21.00	4.09	4.10	79.00	48.00
	PENNS WKLY	51.00	70.00	ISA	ISA	3.75	190.00	97.00
	VIRGI WKLY	288.00	310.00	22.00	3.71	3.69	200.00	88.00
	LEWES WKLY	1130.00	2180.00	23.00	3.89	4.00	100.00	47.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 4 JUL 1978 TO 31 OCT 1978 (CONT.)

		² S (	⁴ S (	² N (	³ N (	¹ C (	⁴ P (	⁰ N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
4 JUL 1978	ITHAC WKLY	< .10	17.00	.18	21.00	2.40	< .20	58.00
5 JUL 1978	VIRGI WKLY	< .20	75.00	< .08	86.00	20.00	< .20	260.00
11 JUL 1978	WHITE WKLY	< .10	91.00	.08	56.00	6.80	< .20	240.00
	ITHAC WKLY	< .10	93.00	.34	50.00	5.20	< .20	240.00
	VIRGI WKLY	< .20	44.00	< .08	31.00	7.80	3.30	140.00
18 JUL 1978	ITHAC WKLY	< .20	59.00	.14	28.00	3.30	< .20	150.00
	VIRGI WKLY	< .20	59.00	< .08	31.00	6.50	< .10	160.00
25 JUL 1978	WHITE WKLY	< .20	93.00	.09	48.00	5.60	< .10	240.00
	ITHAC WKLY	< .20	57.00	.20	40.00	4.50	< .20	180.00
	VIRGI WKLY	< .20	20.00	.08	12.00	5.70	< .10	58.00
1 AUG 1978	WHITE WKLY	< .20	21.00	.13	18.00	3.20	< .10	63.00
	ITHAC WKLY	< .20	62.00	.29	45.00	4.50	< .20	170.00
	VIRGI WKLY	< .20	36.00	< .08	42.00	4.00	< .10	120.00
8 AUG 1978	WHITE WKLY	< .20	55.00	.13	45.00	1.60	< .10	160.00
	ITHAC WKLY	< .20	41.00	.14	22.00	4.20	< .20	110.00
	VIRGI WKLY	< .20	19.00	.11	15.00	3.50	< .10	57.00
15 AUG 1978	WHITE WKLY	< .20	71.00	.12	38.00	3.70	< .10	180.00
	ITHAC WKLY	< .20	77.00	.17	37.00	4.40	< .20	200.00
22 AUG 1978	WHITE WKLY	< .20	35.00	.15	22.00	5.30	< .20	98.00
	ITHAC WKLY	< .20	64.00	.21	38.00	7.50	< .20	170.00
29 AUG 1978	WHITE WKLY	< .20	83.00	.25	58.00	6.80	< .10	230.00
	ITHAC WKLY	< .20	78.00	.22	49.00	7.30	< .20	210.00
5 SEP 1978	WHITE WKLY	< .20	41.00	.16	39.00	4.00	< .10	130.00

DATA FROM 4 JUL 1978 TO 31 OCT 1978 (CONT.)

		0 S (	0 S (	0 N (	0 N (	0 L (	0 P (	0 A (
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	ITHAC WKLY	< .20	41.00	.14	29.00	3.10	< .20	110.00
12 SEP 1978	WHITE WKLY	< .20	50.00	< .08	27.00	3.10	< .10	130.00
13 SEP 1978	ITHAC WKLY	< .20	81.00	.20	50.00	5.40	< .20	220.00
19 SEP 1978	WHITE WKLY	.37	19.00	.31	34.00	2.70	< .10	75.00
	ITHAC WKLY	< .20	50.00	.22	46.00	4.40	< .20	150.00
26 SEP 1978	WHITE WKLY	< .20	32.00	.11	23.00	3.10	< .10	90.00
4 OCT 1978	WHITE WKLY	< .20	41.00	.19	33.00	3.20	< .20	120.00
10 OCT 1978	WHITE WKLY	.37	19.00	< .05	22.00	1.60	< .20	62.00
	ITHAC WKLY	NAP	33.00	.14	38.00	4.40	< .10	110.00
17 OCT 1978	WHITE WKLY	< .20	20.00	< .05	17.00	2.30	< .20	59.00
	ITHAC WKLY	1.30	18.00	.18	18.00	1.90	< .10	56.00
	VIRGI WKLY	ISA	ISA	ISA	ISA	ISA	ISA	ISA
24 OCT 1978	WHITE WKLY	.36	31.00	< .08	50.00	3.40	< .20	120.00
	ITHAC WKLY	1.20	49.00	.26	81.00	8.90	< .20	190.00
	VIRGI WKLY	ISA	ISA	ISA	ISA	ISA	ISA	ISA
31 OCT 1978	WHITE WKLY	.54	14.00	< .08	14.00	1.80	< .20	44.00
	ITHAC WKLY	2.70	20.00	.12	20.00	4.00	< .20	64.00

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NSC MEANS NO SAMPLE COLLECTED
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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 7 NOV 1978 TO 26 FEB 1979 (CONT.)

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		0 S (	0 S (	0 S (	0 N (	0 C (	0 P (	0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
7 NOV 1978	ITHAC WKLY	ISA	ISA	ISA	ISA	ISA	ISA	ISA
8 NOV 1978	WHITE WKLY	1.10	48.00	.25	80.00	8.50	< .20	180.00
14 NOV 1978	ITHAC WKLY	.64	52.00	.09	53.00	6.10	< .20	160.00
	VIRGI WKLY	< .20	240.00	.32	540.00	74.00	.73	1100.00
15 NOV 1978	WHITE WKLY	.69	59.00	.08	63.00	6.50	< .20	190.00
21 NOV 1978	WHITE WKLY	.22	14.00	< .08	22.00	2.00	< .20	52.00
	ITHAC WKLY	.49	19.00	.19	31.00	4.30	< .20	74.00
	VIRGI WKLY	< .20	25.00	.30	23.00	5.70	< .20	79.00
28 NOV 1978	WHITE WKLY	.81	10.00	< .05	21.00	1.00	< .20	42.00
	ITHAC WKLY	.79	27.00	< .05	44.00	4.90	< .20	100.00
2 DEC 1978	VIRGI WKLY	.35	25.00	.30	32.00	8.80	< .20	91.00
5 DEC 1978	WHITE WKLY	.52	17.00	.11	32.00	2.30	< .20	68.00
	ITHAC WKLY	2.30	30.00	.29	56.00	5.70	< .20	120.00
7 DEC 1978	VIRGI WKLY	< .30	9.70	< .05	6.10	1.60	< .20	29.00
12 DEC 1978	WHITE WKLY	4.20	18.00	< .08	29.00	3.20	< .20	72.00
	ITHAC WKLY	2.70	18.00	.10	29.00	5.40	< .20	71.00
	VIRGI WKLY	< .30	9.20	< .08	5.10	2.20	< .20	27.00
19 DEC 1978	WHITE WKLY	< .20	21.00	< .08	56.00	5.50	< .20	100.00
26 DEC 1978	WHITE WKLY	.84	6.50	.12	9.30	1.20	< .20	24.00
	VIRGI WKLY	1.90	16.00	.17	17.00	1.70	< .20	51.00
2 JAN 1979	WHITE WKLY	2.50	8.50	.13	14.00	1.60	< .20	33.00
	ITHAC WKLY	5.00	14.00	.25	16.00	2.40	.18	50.00
	VIRGI WKLY	< .30	9.80	< .08	5.30	13.00	< .20	41.00

DATA FROM 7 NOV 1978 TO 28 FEB 1979 (CONT.)

		0 ² S	0 ⁴ S	0 ² N	0 ³ N	L C	0 ⁴ P	0 ¹ N
		UMOL/L	JMOL/L	UMOL/L	UMOL/L	UMOL/L	JMOL/L	UEQ/L
9 JAN 1979	WHITE WKLY	< .15	5.80	< .08	26.00	1.80	< .20	39.00
	ITHAC WKLY	.71	8.70	< .08	35.00	3.90	< .20	56.00
	VIRGI WKLY	< .20	22.00	.24	32.00	9.70	< .20	86.00
15 JAN 1979	ITHAC WKLY	3.50	16.00	< .08	22.00	6.60	< .20	61.00
16 JAN 1979	WHITE WKLY	2.50	9.40	< .08	13.00	1.90	< .20	34.00
	VIRGI WKLY	< .20	22.00	.41	27.00	4.10	< .20	76.00
23 JAN 1979	VIRGI WKLY	.47	13.00	.28	7.10	1.50	< .20	35.00
24 JAN 1979	WHITE WKLY	< .20	4.40	.10	13.00	1.70	< .20	24.00
29 JAN 1979	LEWES WKLY	13.80	26.00	< .08	21.00	110.00	< .20	180.00
30 JAN 1979	WHITE WKLY	< .15	9.10	.08	7.20	4.30	< .20	30.00
	VIRGI WKLY	< .20	13.00	.47	14.00	6.10	< .20	47.00
6 FEB 1979	WHITE WKLY	< .15	6.20	< .08	29.00	4.10	< .20	45.00
	VIRGI WKLY	< .20	16.00	1.60	44.00	12.00	< .20	90.00
13 FEB 1979	WHITE WKLY	< .30	4.00	.13	23.00	3.10	< .20	34.00
	VIRGI WKLY	< .20	4.40	< .08	30.00	3.50	< .20	42.00
20 FEB 1979	WHITE WKLY	2.30	ISA	ISA	ISA	ISA	ISA	ISA
22 FEB 1979	VIRGI WKLY	< .20	11.00	< .08	19.00	4.60	< .20	46.00
	LEWES WKLY	4.00	52.00	< .08	47.00	150.00	< .20	300.00
27 FEB 1979	WHITE WKLY	NAP	18.00	< .08	17.00	2.80	< .20	56.00
28 FEB 1979	VIRGI WKLY	2.80	12.00	.21	15.00	1.40	< .20	41.00
	LEWES WKLY	1.50	21.00	.19	13.00	59.00	< .20	110.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 6 MAR 1979 TO 25 JUN 1979 (CONT.)

-23-

		2 0 S (	2 0 S (	2 0 N (	3 0 N (	1 0 C (	4 0 P (	5 0 N I S U M
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
6 MAR 1979	VIRGI WKLY	< .20	13.00	< .08	11.00	12.00	< .20	49.00
7 MAR 1979	WHITE WKLY	.53	14.00	.14	22.00	2.10	< .20	52.00
9 MAR 1979	LEWES WKLY	5.80	24.00	.19	10.00	19.00	< .20	77.00
12 MAR 1979	LEWES WKLY	7.60	22.00	.12	29.00	21.00	< .20	94.00
13 MAR 1979	WHITE WKLY	.53	51.00	< .03	83.00	5.00	< .20	190.00
	VIRGI WKLY	< .20	49.00	< .07	110.00	5.60	< .20	210.00
15 MAR 1979	ITHAC WKLY	1.10	52.00	.25	91.00	11.00	< .20	230.00
19 MAR 1979	LEWES WKLY	.44	36.00	.24	32.00	16.00	< .20	120.00
20 MAR 1979	WHITE WKLY	1.20	26.00	.20	36.00	2.90	< .20	91.00
26 MAR 1979	LEWES WKLY	< .20	7.50	< .03	4.00	68.00	< .20	87.00
27 MAR 1979	WHITE WKLY	< .20	ISA	ISA	ISA	ISA	ISA	ISA
	ITHAC WKLY	.81	21.00	.18	31.00	4.60	< .20	78.00
	VIRGI WKLY	< .20	9.30	.09	7.90	5.60	< .20	32.00
3 APR 1979	WHITE WKLY	< .20	ISA	ISA	ISA	ISA	ISA	ISA
	ITHAC WKLY	.51	54.00	.14	53.00	9.30	< .20	170.00
	VIRGI WKLY	< .20	44.00	< .07	34.00	13.00	< .20	140.00
6 APR 1979	LEWES WKLY	< .20	48.00	< .08	45.00	62.00	< .20	200.00
10 APR 1979	WHITE WKLY	< .20	10.00	.12	13.00	1.20	< .20	34.00
	ITHAC WKLY	1.70	28.00	.17	27.00	2.20	< .20	85.00
	VIRGI WKLY	.63	26.00	.27	21.00	2.00	< .20	75.00
17 APR 1979	ITHAC WKLY	NAP	54.00	.10	45.00	5.00	< .20	180.00
	VIRGI WKLY	< .20	31.00	< .07	31.00	5.60	< .20	99.00
	LEWES WKLY	< .20	33.00	.10	28.00	130.00	< .20	220.00

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		2 S (	4 S (	2 N (	3 N (	L C (	4 P (	0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
19 APR 1979	WHITE WKLY	< .20	13.00	.09	12.00	1.50	< .20	40.00
24 APR 1979	WHITE WKLY	.19	120.00	ISA	120.00	15.00	< .20	380.00
	VIRGI WKLY	< .20	180.00	< .07	190.00	17.00	.53	570.00
1 MAY 1979	WHITE WKLY	< .20	8.00	.11	11.00	1.80	< .20	29.00
	VIRGI WKLY	< .20	24.00	< .08	21.00	6.90	< .20	76.00
8 MAY 1979	WHITE WKLY	< .20	46.00	.17	70.00	3.80	< .20	170.00
	VIRGI WKLY	< .20	22.00	< .08	26.00	1.50	< .20	72.00
15 MAY 1979	WHITE WKLY	.61	82.00	.24	59.00	4.30	1.70	230.00
	ITHAC WKLY	< .20	81.00	< .07	88.00	6.20	< .20	260.00
	VIRGI WKLY	< .20	5.20	< .08	7.40	5.40	< .20	23.00
21 MAY 1979	WHITE WKLY	< .20	49.00	.09	37.00	2.20	< .20	140.00
22 MAY 1979	ITHAC WKLY	< .20	170.00	.09	140.00	14.00	< .20	490.00
	VIRGI WKLY	< .20	21.00	< .08	21.00	3.30	< .20	66.00
24 MAY 1979	PENNS WKLY	< .30	22.00	.15	18.00	3.40	< .20	66.00
29 MAY 1979	WHITE WKLY	< .20	21.00	.22	19.00	1.10	< .20	62.00
	ITHAC WKLY	< .20	25.00	.25	25.00	3.10	< .20	78.00
	VIRGI WKLY	< .20	24.00	.16	21.00	1.70	< .20	71.00
	LEWES WKLY	< .20	21.00	NAP	18.00	25.00	< .20	85.00
31 MAY 1979	PENNS WKLY	NAP	68.00	.13	74.00	8.10	< .20	220.00
5 JUN 1979	WHITE WKLY	< .20	54.00	.12	54.00	2.30	< .20	160.00
	VIRGI WKLY	< .20	30.00	.20	15.00	2.90	< .20	78.00
	LEWES WKLY	< .20	17.00	< .08	12.00	21.00	< .20	67.00
7 JUN 1979	PENNS WKLY	< .40	150.00	< .07	140.00	16.00	< .20	460.00

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		2 0 S (	2 0 S (	2 0 N (	3 0 N (	2 0 C (	2 0 P (	2 0 N A
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L
12 JUN 1979	WHITE WKLY	< .20	23.00	.08	18.00	.87	< .20	65.00
	ITHAC WKLY	.90	26.00	< .08	20.00	.83	< .20	73.00
	PENNS WKLY	< .40	19.00	.20	9.20	3.00	< .20	50.00
	VIRGI WKLY	< .20	25.00	.08	32.00	5.40	< .20	88.00
	LEWES WKLY	< .20	53.00	< .08	29.00	83.00	< .20	220.00
19 JUN 1979	WHITE WKLY	< .20	34.00	.10	23.00	2.80	< .20	94.00
	PENNS WKLY	ISA	ISA	ISA	ISA	ISA	ISA	ISA
	VIRGI WKLY	< .20	8.00	.12	7.50	5.70	< .20	29.00
	LEWES WKLY	< .20	13.00	< .08	6.60	26.00	< .20	59.00
26 JUN 1979	WHITE WKLY	< .20	52.00	< .08	41.00	19.00	< .20	180.00
	ITHAC WKLY	< .20	37.00	< .08	41.00	2.30	< .20	120.00
	PENNS WKLY	< .40	76.00	< .03	70.00	14.00	< .20	240.00
	VIRGI WKLY	MOE	83.00	NAP	70.00	6.90	NAP	250.00
	LEWES WKLY	< .20	45.00	.37	34.00	14.00	< .20	140.00

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 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPD MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 4 JUL 1978 TO 31 OCT 1978 (CONT.)

		N (H +)	N (A +)	K (+)	A (L + +)	C (A + +)	G (+ +)	A (I O N + + + H U S)
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
4 JUL 1978	ITHAC WKLY	5.20	1.40	.41	NAP	1.20	.37	54.00
5 JUL 1978	VIRGI WKLY	45.00	10.00	1.10	NAP	4.00	2.40	230.00
11 JUL 1978	WHITE WKLY	39.00	1.00	.90	NAP	5.20	1.20	250.00
	ITHAC WKLY	36.00	1.20	1.50	NAP	6.60	1.00	260.00
	VIRGI WKLY	23.00	1.70	2.40	NAP	4.20	1.10	120.00
18 JUL 1978	ITHAC WKLY	23.00	< .40	.39	NAP	3.60	.70	140.00
	VIRGI WKLY	31.00	.90	1.20	NAP	2.20	.62	150.00
25 JUL 1978	WHITE WKLY	56.00	2.30	1.50	NAP	13.00	3.10	260.00
	ITHAC WKLY	18.00	1.30	.79	NAP	4.30	1.00	170.00
	VIRGI WKLY	6.30	.90	.52	NAP	2.40	.49	55.00
1 AUG 1978	WHITE WKLY	3.90	.70	.37	NAP	.80	< .40	57.00
	ITHAC WKLY	29.00	6.40	.55	NAP	4.50	.99	180.00
	VIRGI WKLY	12.00	.80	1.10	NAP	9.20	.91	120.00
8 AUG 1978	WHITE WKLY	18.00	< .40	< .30	NAP	1.00	< .40	130.00
	ITHAC WKLY	12.00	.60	.56	NAP	1.40	.29	110.00
	VIRGI WKLY	5.00	1.60	1.00	NAP	1.00	.50	50.00
15 AUG 1978	WHITE WKLY	20.00	.50	.29	NAP	2.50	.70	140.00
	ITHAC WKLY	46.00	.55	.65	NAP	3.90	.62	200.00
22 AUG 1978	WHITE WKLY	9.80	1.10	.60	NAP	2.60	.50	94.00
	ITHAC WKLY	22.00	2.10	.71	NAP	5.90	1.20	170.00
29 AUG 1978	WHITE WKLY	46.00	1.30	NAP	NAP	3.00	.99	250.00
	ITHAC WKLY	38.00	2.00	1.20	NAP	6.90	1.90	210.00
5 SEP 1978	WHITE WKLY	33.00	1.90	NAP	NAP	5.10	1.60	140.00

DATA FROM 4 JUL 1978 TO 31 OCT 1978 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
	ITHAC WKLY	22.00	< .40	.83	NAP	2.60	.74	120.00
12 SEP 1978	WHITE WKLY	43.00	.88	.58	NAP	6.30	1.50	130.00
13 SEP 1978	ITHAC WKLY	59.00	1.60	< .25	NAP	11.00	3.00	250.00
19 SEP 1978	WHITE WKLY	17.00	.57	.49	NAP	1.60	.41	70.00
	ITHAC WKLY	22.00	2.30	1.10	NAP	3.70	1.10	170.00
26 SEP 1978	WHITE WKLY	20.00	1.80	1.60	NAP	3.00	.78	89.00
4 OCT 1978	WHITE WKLY	19.00	1.30	.88	NAP	1.90	.49	120.00
10 OCT 1978	WHITE WKLY	4.70	.44	8.60	NAP	2.80	.53	65.00
	ITHAC WKLY	17.00	1.70	.81	NAP	2.20	.66	110.00
17 OCT 1978	WHITE WKLY	2.60	8.60	9.00	NAP	2.20	1.40	74.00
	ITHAC WKLY	9.80	< .40	.41	NAP	1.30	.25	65.00
	VIRGI WKLY	ISA	ISA	ISA	NAP	ISA	ISA	ISA
24 OCT 1978	WHITE WKLY	35.00	1.10	2.20	NAP	5.00	.86	130.00
	ITHAC WKLY	55.00	1.30	1.20	NAP	8.50	1.20	200.00
	VIRGI WKLY	ISA	ISA	ISA	NAP	ISA	ISA	ISA
31 OCT 1978	WHITE WKLY	7.30	.47	.48	NAP	1.80	.25	47.00
	ITHAC WKLY	10.00	.80	.83	NAP	.75	< .20	71.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 7 NOV 1978 TO 28 FEB 1979 (CONT.)

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		⁺ H N	⁺ A N	⁺ K	⁺ L A	⁺ A C	⁺ G M	⁺ O I T A C
		UMOL/L	JMOL/L	UMOL/L	UMOL/L	UMOL/L	JMOL/L	UEG/L
7 NOV 1978	ITHAC WKLY	ISA	ISA	ISA	NAP	ISA	ISA	ISA
8 NOV 1978	WHITE WKLY	61.00	2.60	2.10	NAP	13.00	1.50	200.00
14 NOV 1978	ITHAC WKLY	58.00	2.20	3.80	NAP	3.10	.49	220.00
	VIRGI WKLY	210.00	77.00	8.80	NAP	26.00	12.00	1200.00
15 NOV 1978	WHITE WKLY	77.00	6.30	4.20	NAP	5.20	1.20	240.00
21 NOV 1978	WHITE WKLY	9.50	2.90	1.40	NAP	1.00	.21	60.00
	ITHAC WKLY	22.00	2.20	1.40	NAP	1.40	.33	89.00
	VIRGI WKLY	10.00	3.70	.34	NAP	.95	.45	89.00
28 NOV 1978	WHITE WKLY	3.10	< .40	< .25	NAP	1.00	< .20	46.00
	ITHAC WKLY	13.00	2.20	4.30	NAP	3.20	1.00	110.00
2 DEC 1978	VIRGI WKLY	13.00	4.40	.92	NAP	.97	.91	100.00
5 DEC 1978	WHITE WKLY	12.00	1.40	.93	NAP	1.90	.33	75.00
	ITHAC WKLY	12.00	1.50	.77	NAP	5.70	1.30	120.00
7 DEC 1978	VIRGI WKLY	< .50	.95	< .25	NAP	.57	< .40	42.00
12 DEC 1978	WHITE WKLY	4.40	.41	< .25	NAP	2.10	.37	82.00
	ITHAC WKLY	5.40	.75	< .25	NAP	3.50	.78	75.00
	VIRGI WKLY	< .50	1.30	< .25	NAP	.80	< .40	31.00
19 DEC 1978	WHITE WKLY	16.00	2.50	7.10	NAP	9.20	5.20	110.00
26 DEC 1978	WHITE WKLY	2.00	.43	< .25	NAP	.62	.21	30.00
	VIRGI WKLY	4.90	.76	.43	NAP	1.00	< .40	61.00
2 JAN 1979	WHITE WKLY	1.50	2.70	.41	NAP	.45	< .20	31.00
	ITHAC WKLY	4.50	.80	.59	NAP	.72	.29	55.00
	VIRGI WKLY	1.60	10.00	.64	NAP	.80	1.60	50.00

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		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	JEG/L
9 JAN 1979	WHITE WKLY	2.00	.60	.73	NAP	.52	< .20	35.00
	ITHAC WKLY	3.50	1.60	.64	NAP	.97	.41	53.00
	VIRGI WKLY	4.80	3.70	< .25	NAP	.86	.70	91.00
15 JAN 1979	ITHAC WKLY	2.50	2.50	.00	NAP	3.40	.99	53.00
16 JAN 1979	WHITE WKLY	1.50	< .40	< .25	NAP	.37	< .20	29.00
	VIRGI WKLY	3.80	1.70	.40	NAP	.65	.45	93.00
23 JAN 1979	VIRGI WKLY	1.70	7.20	.43	NAP	.27	< .40	50.00
24 JAN 1979	WHITE WKLY	1.60	.90	< .25	NAP	.40	< .20	22.00
29 JAN 1979	LEWES WKLY	5.00	130.00	2.40	NAP	3.40	12.00	210.00
30 JAN 1979	WHITE WKLY	1.70	3.10	.47	NAP	.87	.41	26.00
	VIRGI WKLY	4.70	4.50	.73	NAP	.70	.82	69.00
6 FEB 1979	WHITE WKLY	2.20	1.00	.80	NAP	1.30	.37	52.00
	VIRGI WKLY	4.50	5.90	1.60	NAP	ISA	ISA	110.00
13 FEB 1979	WHITE WKLY	1.00	1.90	.46	NAP	1.40	< .40	48.00
	VIRGI WKLY	1.20	1.10	< .25	NAP	.75	< .40	48.00
20 FEB 1979	WHITE WKLY	ISA	ISA	ISA	NAP	ISA	ISA	ISA
22 FEB 1979	VIRGI WKLY	2.80	2.30	< .25	NAP	.75	< .40	57.00
	LEWES WKLY	22.00	190.00	5.30	NAP	10.00	16.00	380.00
27 FEB 1979	WHITE WKLY	6.50	1.60	.67	NAP	.72	< .40	78.00
28 FEB 1979	VIRGI WKLY	3.00	.61	< .25	NAP	< .50	< .40	48.00
	LEWES WKLY	4.40	57.00	1.40	NAP	2.60	5.00	120.00

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 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
6 MAR 1979	VIRGI WKLY	7.10	16.00	.53	NAP	1.70	1.60	66.00
7 MAR 1979	WHITE WKLY	3.80	.80	< .40	NAP	1.00	< .40	51.00
9 MAR 1979	LEWES WKLY	7.40	16.00	.61	NAP	3.60	2.80	63.00
12 MAR 1979	LEWES WKLY	29.00	16.00	.77	NAP	1.20	2.00	86.00
13 MAR 1979	WHITE WKLY	62.00	1.30	< .40	NAP	3.00	1.00	210.00
	VIRGI WKLY	36.00	2.30	1.40	NAP	4.10	.91	230.00
15 MAR 1979	ITHAC WKLY	67.00	< .50	< .40	NAP	19.00	5.00	230.00
19 MAR 1979	LEWES WKLY	38.00	15.00	2.60	NAP	5.00	3.00	140.00
20 MAR 1979	WHITE WKLY	25.00	1.50	1.30	NAP	2.60	.62	90.00
26 MAR 1979	LEWES WKLY	2.20	74.00	1.60	NAP	2.30	0.10	110.00
27 MAR 1979	WHITE WKLY	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	ITHAC WKLY	14.00	2.40	.71	NAP	1.80	.74	93.00
	VIRGI WKLY	3.10	6.20	.39	NAP	1.20	.82	36.00
3 APR 1979	WHITE WKLY	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	ITHAC WKLY	22.00	4.80	.91	NAP	7.80	1.80	190.00
	VIRGI WKLY	29.00	12.00	1.20	NAP	4.90	1.90	140.00
6 APR 1979	LEWES WKLY	26.00	64.00	2.90	NAP	5.90	7.20	230.00
10 APR 1979	WHITE WKLY	8.40	1.70	1.20	NAP	1.30	.41	46.00
	ITHAC WKLY	11.00	1.20	< .40	NAP	1.50	< .40	71.00
	VIRGI WKLY	11.00	1.70	1.30	NAP	1.40	< .40	110.00
17 APR 1979	ITHAC WKLY	37.00	1.90	1.80	NAP	5.60	1.50	130.00
	VIRGI WKLY	18.00	4.20	.46	NAP	1.00	.74	120.00
	LEWES WKLY	22.00	130.00	4.60	NAP	7.30	14.00	250.00

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DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
19 APR 1979	WHITE WKLY	13.00	.92	.28	NAP	1.60	.45	50.00
24 APR 1979	WHITE WKLY	6.40	7.70	8.50	NAP	32.00	7.30	ISA
	VIRGI WKLY	92.00	8.30	4.30	NAP	25.00	7.00	520.00
1 MAY 1979	WHITE WKLY	4.10	.77	.42	NAP	1.30	< .40	36.00
	VIRGI WKLY	12.00	8.10	1.60	NAP	1.50	1.20	87.00
8 MAY 1979	WHITE WKLY	23.00	1.20	.96	NAP	6.00	1.40	170.00
	VIRGI WKLY	5.90	1.20	1.30	NAP	2.70	.86	100.00
15 MAY 1979	WHITE WKLY	120.00	1.80	19.00	NAP	15.00	2.60	220.00
	ITHAC WKLY	40.00	1.70	1.70	NAP	13.00	4.60	260.00
	VIRGI WKLY	3.80	.23	< .40	NAP	.95	< .40	30.00
21 MAY 1979	WHITE WKLY	24.00	1.60	4.90	NAP	5.30	1.90	130.00
22 MAY 1979	ITHAC WKLY	110.00	2.40	4.70	NAP	12.00	3.00	460.00
	VIRGI WKLY	6.40	3.00	6.60	NAP	14.00	3.00	94.00
24 MAY 1979	PENNS WKLY	9.60	.80	.33	NAP	2.00	< .40	71.00
29 MAY 1979	WHITE WKLY	14.00	.78	.48	NAP	.82	< .40	73.00
	ITHAC WKLY	11.00	.87	< .30	NAP	1.10	< .40	85.00
	VIRGI WKLY	12.00	1.40	2.10	NAP	1.70	.45	110.00
	LEWES WKLY	14.00	21.00	1.10	NAP	1.80	3.00	66.00
31 MAY 1979	PENNS WKLY	34.00	1.10	1.60	NAP	10.00	2.40	220.00
5 JUN 1979	WHITE WKLY	25.00	.73	.86	NAP	2.60	1.10	180.00
	VIRGI WKLY	12.00	.69	.59	NAP	1.20	< .40	110.00
	LEWES WKLY	6.00	19.00	.81	NAP	1.00	2.60	73.00
7 JUN 1979	PENNS WKLY	45.00	7.80	5.10	NAP	66.00	5.30	400.00

DATA FROM 6 MAR 1979 TO 26 JUN 1979 (CONT.)

		H N (	A N (	K K (	L A (	A C (	G M (	I O N C
		UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UMOL/L	UEQ/L
12 JUN 1979	WHITE WKLY	16.00	2.10	2.50	NAP	2.20	.78	77.00
	ITHAC WKLY	12.00	.85	.83	NAP	3.00	.82	78.00
	PENNS WKLY	12.00	.94	2.00	NAP	.92	< .40	45.00
	VIRGI WKLY	15.00	2.00	1.30	NAP	2.60	.91	110.00
	LEWES WKLY	30.00	85.00	2.90	NAP	4.80	8.90	230.00
19 JUN 1979	WHITE WKLY	13.00	1.50	1.50	NAP	6.00	1.60	100.00
	PENNS WKLY	ISA	ISA	ISA	NAP	ISA	ISA	ISA
	VIRGI WKLY	3.20	5.80	.49	NAP	1.70	.86	35.00
	LEWES WKLY	27.00	25.00	2.40	NAP	1.10	3.30	69.00
-247 26 JUN 1979	WHITE WKLY	26.00	23.00	21.00	NAP	5.90	1.20	200.00
	ITHAC WKLY	33.00	.90	1.10	NAP	5.50	1.70	130.00
	PENNS WKLY	19.00	10.00	3.70	NAP	17.00	3.00	250.00
	VIRGI WKLY	31.00	1.40	1.50	NAP	6.10	1.60	250.00
	LEWES WKLY	23.00	11.00	2.30	NAP	3.40	2.00	150.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	78042840	78051240	
Q.A. SAMPLE NUMBER	-----	78042890	-----
Q.A. SAMPLE CODE	-	21.34	-
COLLECTION DATE	4.28.1978	4.28.1978	-
ARRIVAL DATE	6.08.1978	6.08.1978	-
SAMP. VOL. (ML.)	2090.00	2090.00	-
PRED. VOL. (ML.)	3100.00	3100.00	-
FIELD PH TEMP(C)	23.00	23.00	-
FIELD PH	4.22	4.22	-
LABORATORY PH	4.21	4.19	0.24 %
H+ (UMOL/L)	62.00	65.00	2.36 %
COND. (UMHO/CM)	29.00	30.00	1.59 %
SO2 (UMOL/L)	< 0.10	< 0.10	- %
SO4 (UMOL/L)	28.00	26.00	3.70 %
NO2 (UMOL/L)	< 0.08	< 0.08	- %
NO3 (UMOL/L)	23.00	20.00	6.98 %
CL (UMOL/L)	25.00	NAP	- %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	6.80	6.60	1.49 %
NA (UMOL/L)	1.70	1.80	2.36 %
K (UMOL/L)	0.84	0.86	1.18 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	2.10	2.10	0.0 %
MG (UMOL/L)	0.74	0.66	5.71 %
ANIONS (UEQ/L)	100.00	NAP	- %
CATIONS (UEQ/L)	77.00	79.00	1.28 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	78042130	78050130	
Q.A. SAMPLE NUMBER		78042190	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.33	-
COLLECTION DATE	4.21.1978	4.21.1978	-
ARRIVAL DATE	4.27.1978	4.27.1978	-
SAMP. VOL. (ML.)	1160.00	1160.00	-
PRED. VOL. (ML.)	1130.00	1130.00	-
FIELD PH TEMP(C)	25.00	25.00	-
FIELD PH	4.01	4.05	-
LABORATORY PH	4.05	4.05	0.0 %
H+ (UMOL/L)	89.00	89.00	0.0 %
COND. (UMHO/CM)	40.00	41.00	1.23 %
SO2 (UMOL/L)	< 0.10	< 0.10	- %
SO4 (UMOL/L)	34.00	34.00	0.0 %
NO2 (UMOL/L)	0.16	0.17	3.03 %
NO3 (UMOL/L)	56.00	57.00	0.88 %
CL (UMOL/L)	1.40	1.10	12.00 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	17.00	31.00	29.17 %
NA (UMOL/L)	1.20	2.70	38.46 %
K (UMOL/L)	0.59	1.20	34.08 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	5.00	4.90	1.01 %
MG (UMOL/L)	0.91	0.99	4.21 %
ANIONS (UEQ/L)	130.00	130.00	0.0 %
CATIONS (UEQ/L)	120.00	140.00	7.69 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	78061320	78061620	
Q.A. SAMPLE NUMBER		78061390	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.32	-
COLLECTION DATE	6.13.1978	6.13.1978	-
ARRIVAL DATE	6.20.1978	7.06.1978	-
SAMP. VOL. (ML.)	860.00	860.00	-
PRED. VOL. (ML.)	700.00	700.00	-
FIELD PH TEMP(C)	11.00	18.00	-
FIELD PH	4.00	3.98	-
LABORATORY PH	4.09	4.11	0.24 %
H+ (UMOL/L)	81.00	78.00	1.39 %
COND. (UMHO/CM)	35.00	40.00	6.67 %
SO2 (UMOL/L)	< 0.10	< 0.10	- %
SO4 (UMOL/L)	39.00	41.00	2.50 %
NO2 (UMOL/L)	0.35	0.29	9.38 %
NO3 (UMOL/L)	24.00	26.00	4.00 %
CL (UMOL/L)	5.50	2.50	37.50 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	27.00	28.00	1.82 %
NA (UMOL/L)	1.00	1.60	23.08 %
K (UMOL/L)	0.87	0.68	12.26 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	3.80	3.40	5.56 %
MG (UMOL/L)	0.82	0.82	0.00 %
ANIONS (UEQ/L)	110.00	110.00	0.0 %
CATIONS (UEQ/L)	120.00	120.00	0.0 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	78070420	78071320	
Q.A. SAMPLE NUMBER		78070490	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.32	-
COLLECTION DATE	7. 4.1978	7. 4.1978	-
ARRIVAL DATE	7.18.1978	7.18.1978	-
SAMP. VOL. (ML.)	1380.00	1380.00	-
PRED. VOL. (ML.)	1110.00	1110.00	-
FIELD PH TEMP(C)	21.00	19.00	-
FIELD PH	4.34	4.34	-
LABORATORY PH	4.18	NAP	- %
H+ (UMOL/L)	66.00	46.00	17.86 %
COND. (UMHO/CM)	24.00	25.00	2.04 %
SO2 (UMOL/L)	< 0.10	< 0.10	- %
SO4 (UMOL/L)	16.00	19.00	8.57 %
NO2 (UMOL/L)	0.20	0.23	6.98 %
NO3 (UMOL/L)	22.00	24.00	4.35 %
CL (UMOL/L)	2.50	2.40	2.04 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	3.50	3.60	1.41 %
NA (UMOL/L)	1.10	0.74	19.57 %
K (UMOL/L)	< 0.25	< 0.26	- %
AL (UMOL/L)	VAP	NAP	- %
CA (UMOL/L)	0.90	0.95	2.70 %
MG (UMOL/L)	< 0.20	0.29	- %
ANIONS (UEQ/L)	57.00	65.00	6.56 %
CATIONS (UEQ/L)	73.00	53.00	15.37 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	78072540	78071940	
Q.A. SAMPLE NUMBER		78072590	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.34	-
COLLECTION DATE	7.25.1978	7.25.1978	-
ARRIVAL DATE	8.22.1978	8.22.1978	-
SAMP. VOL. (ML.)	2200.00	2200.00	-
PRED. VOL. (ML.)	2400.00	2400.00	-
FIELD PH TEMP(C)	5.00	5.00	-
FIELD PH	4.28	4.28	-
LABORATORY PH	4.36	4.37	0.11 %
H+ (UMOL/L)	44.00	43.00	1.15 %
COND. (UMHO/CM)	24.00	24.00	0.0 %
SO2 (UMOL/L)	< 0.20	< 0.20	- %
SO4 (UMOL/L)	22.00	22.00	0.0 %
NO2 (UMOL/L)	0.29	0.28	1.75 %
NO3 (UMOL/L)	13.00	13.00	0.0 %
CL (UMOL/L)	5.20	4.90	2.97 %
PO4 (UMOL/L)	< 0.10	< 0.10	- %
NH4 (UMOL/L)	9.60	9.30	1.59 %
NA (UMOL/L)	0.77	0.77	0.0 %
K (UMOL/L)	< 0.25	< 0.25	- %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	2.00	1.90	2.56 %
MG (UMOL/L)	0.37	0.45	9.76 %
ANIONS (UEQ/L)	63.00	62.00	0.80 %
CATIONS (UEQ/L)	59.00	58.00	0.85 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	78081750	78081550	
Q.A. SAMPLE NUMBER		78081790	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.35	-
COLLECTION DATE	8.17.1978	8.17.1978	-
ARRIVAL DATE	9.01.1978	9.01.1978	-
SAMP. VOL. (ML.)	170.00	170.00	-
PRED. VOL. (ML.)	410.00	410.00	-
FIELD PH TEMP(C)	25.00	25.00	-
FIELD PH	3.86	3.98	-
LABORATORY PH	3.90	3.90	0.0 %
H+ (UMOL/L)	130.00	130.00	0.0 %
COND. (UMHO/CM)	71.00	62.00	6.77 %
SO2 (UMOL/L)	< 0.20	< 0.20	- %
SO4 (UMOL/L)	60.00	59.00	0.84 %
NO2 (UMOL/L)	0.50	0.62	10.71 %
NO3 (UMOL/L)	49.00	47.00	2.08 %
CL (UMOL/L)	6.80	6.20	4.62 %
PO4 (UMOL/L)	< 0.10	< 0.10	- %
NH4 (UMOL/L)	25.00	24.00	2.04 %
NA (UMOL/L)	3.90	3.80	1.30 %
K (UMOL/L)	0.91	0.86	2.92 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	16.00	16.00	0.0 %
MG (UMOL/L)	2.40	2.60	4.00 %
ANIONS (UEQ/L)	180.00	170.00	2.36 %
CATIONS (UEQ/L)	200.00	200.00	0.0 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	78080720	78091620	
Q.A. SAMPLE NUMBER		78080790	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.32	-
COLLECTION DATE	8. 7.1978	8. 7.1978	-
ARRIVAL DATE	8.21.1978	9.28.1978	-
SAMP. VOL. (ML.)	1330.00	1330.00	-
PRED. VOL. (ML.)	1500.00	1500.00	-
FIELD PH TEMP(C)	21.00	21.00	-
FIELD PH	4.60	4.60	-
LABORATORY PH	4.67	4.63	0.43 %
H+ (UMOL/L)	21.00	23.00	4.55 %
COND. (UMHO/CM)	NAP	11.00	- %
SO2 (UMOL/L)	< 0.20	< 0.20	- %
SO4 (UMOL/L)	9.40	9.00	2.17 %
NO2 (UMOL/L)	< 0.08	< 0.08	- %
NO3 (UMOL/L)	6.70	6.00	5.51 %
CL (UMOL/L)	3.30	2.10	22.22 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	< 0.60	< 0.60	- %
NA (UMOL/L)	< 0.40	< 0.40	- %
K (UMOL/L)	< 0.25	0.59	- %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.50	1.40	3.45 %
MG (UMOL/L)	0.74	0.91	10.30 %
ANIONS (UEQ/L)	29.00	26.00	5.45 %
CATIONS (UEQ/L)	26.00	28.00	3.70 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79010241	79021540	
Q.A. SAMPLE NUMBER		75010250	
Q.A. SAMPLE CODE	-	21.34	-
COLLECTION DATE	1. 2.1979	1. 2.1979	-
ARRIVAL DATE	3.14.1979	4.11.1979	-
SAMP. VOL. (ML.)	2762.00	2762.00	-
PRED. VOL. (ML.)	2710.00	2710.00	-
FIELD PH TEMP(C)	23.00	7.00	-
FIELD PH	4.43	4.40	-
LABORATORY PH	4.48	4.40	0.90 %
H+ (UMOL/L)	33.00	40.00	9.59 %
COND. (UMHO/CM)	14.00	14.00	0.0 %
SO2 (UMOL/L)	< 0.30	MOE	- %
SO4 (UMOL/L)	9.80	9.30	2.62 %
NO2 (UMOL/L)	< 0.08	< 0.08	- %
NO3 (UMOL/L)	8.30	9.00	4.05 %
CL (UMOL/L)	13.00	15.00	7.14 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	1.60	0.79	33.89 %
NA (UMOL/L)	10.00	11.00	4.76 %
K (UMOL/L)	0.64	0.44	18.52 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	0.80	0.60	14.29 %
MG (UMOL/L)	1.60	1.30	10.34 %
ANIONS (UEQ/L)	41.00	43.00	2.38 %
CATIONS (UEQ/L)	50.00	56.00	5.66 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79010370	79012470	
Q.A. SAMPLE NUMBER		79010390	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.37	-
COLLECTION DATE	1. 3.1979	1. 3.1979	-
ARRIVAL DATE	2.01.1979	2.01.1979	-
SAMP. VOL. (ML.)	1594.00	1594.00	-
PRED. VOL. (ML.)	NAP	NAP	-
FIELD PH TEMP(C)	14.00	14.00	-
FIELD PH	4.91	4.91	-
LABORATORY PH	4.92	4.94	0.20 %
H+ (UMOL/L)	12.00	11.00	4.35 %
COND. (UMHO/CM)	9.40	8.80	3.30 %
SO2 (UMOL/L)	< 0.20	NAP	- %
SO4 (UMOL/L)	7.50	7.30	1.35 %
NO2 (UMOL/L)	< 0.08	0.14	- %
NO3 (UMOL/L)	3.40	3.60	2.86 %
CL (UMOL/L)	20.00	21.00	2.44 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	5.20	6.00	7.14 %
NA (UMOL/L)	16.00	16.00	0.0 %
K (UMOL/L)	0.39	1.10	47.65 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	0.87	0.80	4.19 %
MG (UMOL/L)	2.00	2.10	2.44 %
ANIONS (UEQ/L)	38.00	39.00	1.30 %
CATIONS (UEQ/L)	39.00	40.00	1.27 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79012370	79012570	
Q.A. SAMPLE NUMBER		79012390	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.37	-
COLLECTION DATE	1.23.1979	1.23.1979	-
ARRIVAL DATE	2.01.1979	2.01.1979	-
SAMP. VOL. (ML.)	MOE	MOE	-
PRED. VOL. (ML.)	2000.00	2000.00	-
FIELD PH TEMP(C)	5.00	5.00	-
FIELD PH	4.48	4.48	-
LABORATORY PH	4.52	4.55	0.33 %
H+ (UMOL/L)	30.00	28.00	3.45 %
COND. (UMHO/CM)	20.00	22.00	4.76 %
SO2 (UMOL/L)	< 0.15	NAP	- %
SO4 (UMOL/L)	15.00	15.00	0.0 %
NO2 (UMOL/L)	0.13	0.14	3.70 %
NO3 (UMOL/L)	7.90	7.70	1.28 %
CL (UMOL/L)	38.00	46.00	9.52 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	< 0.60	4.40	- %
NA (UMOL/L)	34.00	42.00	10.53 %
K (UMOL/L)	0.33	3.40	82.31 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.50	1.70	6.25 %
MG (UMOL/L)	4.00	4.60	6.98 %
ANIONS (UEQ/L)	76.00	84.00	5.00 %
CATIONS (UEQ/L)	76.00	91.00	8.98 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79010970	79012670	
Q.A. SAMPLE NUMBER	-----	79010990	-----
Q.A. SAMPLE CODE	-	21.37	-
COLLECTION DATE	1. 9.1979	1. 9.1979	-
ARRIVAL DATE	2.01.1979	2.01.1979	-
SAMP. VOL. (ML.)	1889.00	1889.00	-
PRED. VOL. (ML.)	NAP	NAP	-
FIELD PH TEMP(C)	12.00	12.00	-
FIELD PH	4.44	4.44	-
LABORATORY PH	4.50	4.47	0.33 %
H+ (UMOL/L)	32.00	34.00	3.03 %
COND. (UMHO/CM)	20.00	19.00	2.56 %
SD2 (UMOL/L)	1.10	NAP	- %
SD4 (UMOL/L)	12.00	16.00	14.29 %
NO2 (UMOL/L)	0.15	0.14	3.45 %
NO3 (UMOL/L)	19.00	19.00	0.0 %
CL (UMOL/L)	22.00	20.00	4.76 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	5.60	6.40	6.67 %
NA (UMOL/L)	15.00	16.00	3.23 %
K (UMOL/L)	0.64	1.40	37.25 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.20	0.87	15.94 %
MG (UMOL/L)	2.10	2.10	0.0 %
ANIONS (UEQ/L)	65.00	71.00	4.41 %
CATIONS (UEQ/L)	59.00	64.00	4.07 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79060930	79070630	
Q.A. SAMPLE NUMBER		79060990	
Q.A. SAMPLE CODE	-----	-----	-----
COLLECTION DATE	6. 9.1979	6. 9.1979	-
ARRIVAL DATE	6.26.1979	7.12.1979	-
SAMP. VOL. (ML.)	1905.00	1905.00	-
PRED. VOL. (ML.)	1800.00	1800.00	-
FIELD PH TEMP(C)	25.00	25.00	-
FIELD PH	4.60	4.41	-
LABORATORY PH	4.55	4.69	1.52 %
H+ (UMOL/L)	28.00	20.00	16.67 %
COND. (UMHO/CM)	16.00	9.00	28.00 %
SO2 (UMOL/L)	< 0.40	< 0.20	- %
SO4 (UMOL/L)	12.00	13.00	4.00 %
NO2 (UMOL/L)	0.18	< 0.08	- %
NO3 (UMOL/L)	6.20	6.00	1.64 %
CL (UMOL/L)	0.67	1.90	47.86 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	6.20	6.00	1.64 %
NA (UMOL/L)	1.10	< 0.40	- %
K (UMOL/L)	0.40	< 0.40	- %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.00	0.90	5.26 %
MG (UMOL/L)	< 0.40	< 0.40	- %
ANIONS (UEQ/L)	31.00	34.00	4.62 %
CATIONS (UEQ/L)	38.00	28.00	15.15 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79052920	79060520	
Q.A. SAMPLE NUMBER		79052990	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.32	-
COLLECTION DATE	5.29.1979	5.29.1979	-
ARRIVAL DATE	6.04.1979	7.10.1979	-
SAMP. VOL. (ML.)	2250.00	2250.00	-
PRED. VOL. (ML.)	2550.00	2550.00	-
FIELD PH TEMP(C)	18.00	19.00	-
FIELD PH	4.20	4.19	-
LABORATORY PH	4.20	4.20	0.0 %
H+ (UMOL/L)	63.00	63.00	0.0 %
COND. (UMHO/CM)	30.00	31.00	1.64 %
SO2 (UMOL/L)	< 0.20	< 0.20	- %
SO4 (UMOL/L)	24.00	24.00	0.0 %
NO2 (UMOL/L)	0.17	0.13	13.33 %
NO3 (UMOL/L)	25.00	25.00	0.0 %
CL (UMOL/L)	3.30	1.70	32.00 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	14.00	8.70	23.35 %
NA (UMOL/L)	< 0.40	0.50	- %
K (UMOL/L)	0.42	0.49	7.69 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.30	1.10	8.33 %
MG (UMOL/L)	< 0.40	< 0.40	- %
ANIONS (UEQ/L)	77.00	75.00	1.32 %
CATIONS (UEQ/L)	80.00	75.00	3.23 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79100140	79102040	
Q.A. SAMPLE NUMBER		79100190	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.34	-
COLLECTION DATE	10. 1.1979	10. 1.1979	-
ARRIVAL DATE	10.25.1979	11.05.1979	-
SAMP. VOL. (ML.)	MOE	MOE	-
PRED. VOL. (ML.)	1990.00	1990.00	-
FIELD PH TEMP(C)	24.00	24.00	-
FIELD PH	4.21	4.21	-
LABORATORY PH	4.23	4.10	1.56 %
H+ (UMOL/L)	59.00	79.00	14.49 %
COND. (UMHG/CM)	30.00	29.00	1.69 %
SO2 (UMOL/L)	< 0.30	< 0.20	- %
SO4 (UMOL/L)	22.00	20.00	4.76 %
NO2 (UMOL/L)	0.22	0.20	4.76 %
NO3 (UMOL/L)	30.00	30.00	0.0 %
CL (UMOL/L)	7.80	3.50	38.05 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	11.00	12.00	4.35 %
NA (UMOL/L)	2.10	2.40	6.67 %
K (UMOL/L)	9.90	1.10	80.00 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	0.72	0.42	26.32 %
MG (UMOL/L)	< 0.40	0.49	- %
ANIONS (UEQ/L)	82.00	74.00	5.13 %
CATIONS (UEQ/L)	83.00	97.00	7.78 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79112730	79121030	
Q.A. SAMPLE NUMBER	-----	79112790	-----
Q.A. SAMPLE CODE	-	21.33	-
COLLECTION DATE	11.27.1979	11.27.1979	-
ARRIVAL DATE	12.18.1979	12.26.1979	-
SAMP. VOL. (ML.)	3502.00	3502.00	-
PRED. VOL. (ML.)	3340.00	3340.00	-
FIELD PH TEMP(C)	25.00	25.00	-
FIELD PH	4.85	4.85	-
LABORATORY PH	4.88	5.73	8.01 %
H+ (UMOL/L)	13.00	1.90	74.50 %
COND. (UMHO/CM)	6.00	4.80	11.11 %
SO2 (UMOL/L)	< 0.30	1.00	- %
SO4 (UMOL/L)	6.50	7.60	7.80 %
NO2 (UMOL/L)	0.14	0.29	34.88 %
NO3 (UMOL/L)	4.10	4.30	2.38 %
CL (UMOL/L)	14.00	6.70	35.27 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	3.00	27.00	80.00 %
NA (UMOL/L)	5.40	5.80	3.57 %
K (UMOL/L)	2.30	3.80	24.59 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	0.50	1.40	47.37 %
MG (UMOL/L)	< 0.80	< 0.80	- %
ANIONS (UEQ/L)	31.00	27.00	6.90 %
CATIONS (UEQ/L)	25.00	41.00	24.24 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79110320	79102620	
Q.A. SAMPLE NUMBER		79110350	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.39	-
COLLECTION DATE	11. 3.1979	11. 3.1979	-
ARRIVAL DATE	11.21.1979	11.21.1979	-
SAMP. VOL. (ML.)	1050.00	1050.00	-
PRED. VOL. (ML.)	1370.00	1370.00	-
FIELD PH TEMP(C)	22.00	22.00	-
FIELD PH	4.42	4.42	-
LABORATORY PH	4.31	4.35	0.46 %
H+ (UMOL/L)	49.00	45.00	4.26 %
COND. (UMHO/CM)	19.00	19.00	0.0 %
SO2 (UMOL/L)	3.70	NAP	- %
SO4 (UMOL/L)	20.00	20.00	0.0 %
NO2 (UMOL/L)	0.29	0.28	1.75 %
NO3 (UMOL/L)	14.00	14.00	0.0 %
CL (UMOL/L)	7.70	6.00	12.41 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	4.00	12.00	50.00 %
NA (UMOL/L)	12.00	4.10	49.07 %
K (UMOL/L)	0.63	0.98	21.74 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	0.75	0.75	0.0 %
MG (UMOL/L)	0.62	0.66	3.12 %
ANIONS (UEQ/L)	62.00	60.00	1.64 %
CATIONS (UEQ/L)	68.00	65.00	2.26 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

DUPLICATE ANALYSES OF A SINGLE EVENT

	ORIGINAL	DUPLICATE	PERCENT DEVIATION FROM MEAN
SAMPLE NUMBER	79120411	79121910	
Q.A. SAMPLE NUMBER		79120450	
	-----	-----	-----
Q.A. SAMPLE CODE	-	21.31	-
COLLECTION DATE	12. 4.1979	12. 4.1979	-
ARRIVAL DATE	12.18.1979	1.11.1979	-
SAMP. VOL. (ML.)	707.00	707.00	-
PRED. VOL. (ML.)	470.00	470.00	-
FIELD PH TEMP(C)	17.00	17.00	-
FIELD PH	4.04	4.04	-
LABORATORY PH	4.27	4.17	1.18 %
H+ (UMOL/L)	54.00	68.00	11.48 %
COND. (UMHO/CM)	34.00	37.00	4.23 %
SO2 (UMOL/L)	0.94	< 0.30	- %
SO4 (UMOL/L)	22.00	21.00	2.33 %
NO2 (UMOL/L)	0.12	< 0.10	- %
NO3 (UMOL/L)	51.00	47.00	4.08 %
CL (UMOL/L)	13.00	6.50	33.33 %
PO4 (UMOL/L)	< 0.20	< 0.20	- %
NH4 (UMOL/L)	19.00	21.00	5.00 %
NA (UMOL/L)	4.70	4.50	2.17 %
K (UMOL/L)	1.10	1.10	0.0 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	3.50	3.60	1.41 %
MG (UMOL/L)	0.86	< 0.80	- %
ANIONS (UEQ/L)	110.00	96.00	6.80 %
CATIONS (UEQ/L)	87.00	100.00	6.95 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	78081890	-	-
ANALYZED AS	78081740	-	-
Q.A. SAMPLE CODE	21.24	-	-
LABORATORY PH	4.73	5.08	3.57 %
H+ (UMOL/L)	19.00	8.30	39.19 %
COND. (UMHO/CM)	11.00	8.60	12.24 %
SO2 (UMOL/L)	< 0.20	NAP	- %
SO4 (UMOL/L)	11.00	10.20	3.77 %
NO2 (UMOL/L)	0.08	NAP	- %
NO3 (UMOL/L)	2.40	4.19	27.16 %
CL (UMOL/L)	9.70	6.49	19.83 %
PO4 (UMOL/L)	< 0.10	NAP	- %
NH4 (UMOL/L)	1.10	5.10	64.52 %
NA (UMOL/L)	6.30	5.22	9.38 %
K (UMOL/L)	1.00	0.69	18.34 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.50	6.64	63.14 %
MG (UMOL/L)	1.40	2.84	33.96 %
ANIONS (UEQ/L)	34.00	31.00	4.62 %
CATIONS (UEQ/L)	33.00	38.20	7.30 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	78102790	-	-
ANALYZED AS	78102750	-	-
Q.A. SAMPLE CODE	21.25	-	-
LABORATORY PH	4.71	4.75	0.42 %
H+ (UMOL/L)	20.00	17.80	5.82 %
COND. (UMHO/CM)	13.00	10.60	10.17 %
SO2 (UMOL/L)	< 0.20	NAP	- %
SO4 (UMOL/L)	12.00	12.70	2.83 %
NO2 (UMOL/L)	< 0.05	NAP	- %
NO3 (UMOL/L)	4.00	7.74	31.86 %
CL (UMOL/L)	13.00	10.40	11.11 %
PO4 (UMOL/L)	NAP	NAP	- %
NH4 (UMOL/L)	0.94	9.98	82.78 %
NA (UMOL/L)	8.30	10.00	9.29 %
K (UMOL/L)	1.70	1.61	2.72 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.40	1.72	10.26 %
MG (UMOL/L)	1.30	1.07	9.70 %
ANIONS (UEQ/L)	41.00	43.50	2.96 %
CATIONS (UEQ/L)	36.00	44.90	11.00 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79010490	-	-
ANALYZED AS	79010420	-	-
Q.A. SAMPLE CODE	21.22	-	-
LABORATORY PH	5.08	5.14	0.59 %
H+ (UMOL/L)	8.30	7.24	6.82 %
COND. (UMHO/CM)	5.20	5.20	0.0 %
SO2 (UMOL/L)	< 0.20	NAP	- %
SO4 (UMOL/L)	5.40	4.27	11.69 %
NO2 (UMOL/L)	< 0.08	NAP	- %
NO3 (UMOL/L)	< 0.20	3.55	- %
CL (UMOL/L)	5.40	4.03	14.53 %
PO4 (UMOL/L)	0.90	NAP	- %
NH4 (UMOL/L)	1.50	3.38	38.52 %
NA (UMOL/L)	4.70	3.78	10.85 %
K (UMOL/L)	2.60	0.79	53.39 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	0.85	0.90	2.86 %
MG (UMOL/L)	1.10	0.45	41.94 %
ANIONS (UEQ/L)	19.00	16.10	8.26 %
CATIONS (UEQ/L)	21.00	17.90	7.97 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT	EML RESULT	PERCENT DEVIATION FROM MEAN
	-----	-----	-----
Q.A. SAMPLE NUMBER	79011190	-	-
ANALYZED AS	79011110	-	-
Q.A. SAMPLE CODE	21.21	-	-
LABORATORY PH	5.34	5.29	0.47 %
H+ (UMOL/L)	4.60	4.10	5.75 %
COND. (UMHO/CM)	4.40	4.30	1.15 %
SO2 (UMOL/L)	0.30	NAP	- %
SO4 (UMOL/L)	4.90	3.96	10.61 %
NO2 (UMOL/L)	< 0.08	NAP	- %
NO3 (UMOL/L)	3.10	1.61	31.63 %
CL (UMOL/L)	6.20	2.82	37.47 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	< 0.60	2.33	- %
NA (UMOL/L)	2.30	1.91	9.26 %
K (UMOL/L)	2.10	< 0.38	- %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	3.20	2.67	9.03 %
MG (UMOL/L)	1.90	1.03	29.69 %
ANIONS (UEQ/L)	19.00	12.30	21.41 %
CATIONS (UEQ/L)	19.00	15.70	9.51 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79022490	-	-
ANALYZED AS	79022440	-	-
Q.A. SAMPLE CODE	21.24	-	-
LABORATORY PH	4.70	4.75	0.53 %
H+ (UMOL/L)	20.00	17.80	5.82 %
COND. (UMHO/CM)	11.00	10.60	1.85 %
SO2 (UMOL/L)	MOE	NAP	- %
SO4 (UMOL/L)	9.80	12.70	12.89 %
NO2 (UMOL/L)	< 0.08	NAP	- %
NO3 (UMOL/L)	0.58	7.74	86.06 %
CL (UMOL/L)	10.00	10.40	1.96 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	1.30	9.98	76.95 %
NA (UMOL/L)	11.00	10.00	4.76 %
K (UMOL/L)	1.50	1.61	3.54 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	2.10	1.72	9.95 %
MG (UMOL/L)	1.20	1.07	5.73 %
ANIONS (UEQ/L)	30.00	43.50	18.37 %
CATIONS (UEQ/L)	40.00	44.90	5.77 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79010590	-	-
ANALYZED AS	79010550	-	-
Q.A. SAMPLE CODE	21.25	-	-
LABORATORY PH	5.11	5.08	0.29 %
H+ (UMOL/L)	7.80	8.30	3.11 %
COND. (UMHO/CM)	6.80	8.60	11.69 %
SO2 (UMOL/L)	< 0.30	NAP	- %
SO4 (UMOL/L)	9.90	10.20	1.49 %
NO2 (UMOL/L)	< 0.08	NAP	- %
NO3 (UMOL/L)	7.00	4.19	25.11 %
CL (UMOL/L)	6.90	6.49	3.06 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	0.88	5.10	70.57 %
NA (UMOL/L)	4.80	5.22	4.19 %
K (UMOL/L)	0.45	0.69	21.05 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	7.60	6.64	6.74 %
MG (UMOL/L)	3.00	2.84	2.74 %
ANIONS (UEQ/L)	34.00	31.00	4.62 %
CATIONS (UEQ/L)	35.00	38.20	4.37 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT	EML RESULT	PERCENT DEVIATION FROM MEAN
	-----	-----	-----
Q.A. SAMPLE NUMBER	79051090	-	-
ANALYZED AS	79051010	-	-
Q.A. SAMPLE CODE	21.21	-	-
LABORATORY PH	4.95	5.32	3.60 %
H+ (UMOL/L)	11.00	4.79	39.33 %
COND. (UMHO/CM)	4.20	3.50	9.09 %
SO2 (UMOL/L)	< 0.20	NAP	- %
SO4 (UMOL/L)	2.40	2.05	7.87 %
NO2 (UMOL/L)	< 0.08	NAP	- %
NO3 (UMOL/L)	0.30	1.77	71.01 %
CL (UMOL/L)	3.00	2.31	12.99 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	< 0.60	2.11	- %
NA (UMOL/L)	1.60	1.96	10.11 %
K (UMOL/L)	< 0.40	< 0.38	- %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	0.52	< 0.50	- %
MG (UMOL/L)	< 0.40	< 0.21	- %
ANIONS (UEQ/L)	8.10	8.20	0.61 %
CATIONS (UEQ/L)	14.00	8.90	22.27 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79042290	-	-
ANALYZED AS	79042220	-	-
Q.A. SAMPLE CODE	21.22	-	-
LABORATORY PH	5.02	5.60	5.46 %
H+ (UMOL/L)	9.60	2.51	58.55 %
COND. (UMHO/CM)	4.00	2.70	19.40 %
SO2 (UMOL/L)	< 0.20	NAP	- %
SO4 (UMOL/L)	3.30	1.87	27.66 %
NO2 (UMOL/L)	< 0.08	NAP	- %
NO3 (UMOL/L)	0.69	0.97	16.87 %
CL (UMOL/L)	2.10	1.02	34.62 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	0.67	< 1.11	- %
NA (UMOL/L)	1.50	1.09	15.83 %
K (UMOL/L)	0.45	< 0.38	- %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.70	1.52	5.59 %
MG (UMOL/L)	0.53	0.53	0.00 %
ANIONS (UEQ/L)	9.40	5.70	24.50 %
CATIONS (UEQ/L)	17.00	7.70	37.65 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79052690	-	-
ANALYZED AS	79052640	-	-
Q.A. SAMPLE CODE	21.24	-	-
LABORATORY PH	4.68	5.39	7.05 %
H+ (UMOL/L)	21.00	4.07	67.53 %
COND. (UMHO/CM)	7.00	4.30	23.89 %
SO2 (UMOL/L)	< 0.20	NAP	- %
SO4 (UMOL/L)	3.80	3.96	2.06 %
NO2 (UMOL/L)	0.08	NAP	- %
NO3 (UMOL/L)	2.60	1.61	23.52 %
CL (UMOL/L)	2.90	2.82	1.40 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	< 0.60	2.33	- %
NA (UMOL/L)	2.20	1.91	7.06 %
K (UMOL/L)	< 0.40	< 0.38	- %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	3.50	2.67	13.45 %
MG (UMOL/L)	1.20	1.03	7.62 %
ANIONS (UEQ/L)	13.00	12.30	2.77 %
CATIONS (UEQ/L)	32.00	15.70	34.17 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79041290	-	-
ANALYZED AS	79041250	-	-
Q.A. SAMPLE CODE	21.25	-	-
LABORATORY PH	5.10	5.14	0.39 %
H+ (UMOL/L)	7.90	7.24	4.36 %
COND. (UMHO/CM)	5.30	5.20	0.95 %
SO2 (UMOL/L)	0.20	NAP	- %
SO4 (UMOL/L)	5.30	4.27	10.76 %
NO2 (UMOL/L)	0.10	NAP	- %
NO3 (UMOL/L)	0.58	3.55	71.91 %
CL (UMOL/L)	4.50	4.03	5.51 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	3.50	3.38	1.74 %
NA (UMOL/L)	3.80	3.78	0.26 %
K (UMOL/L)	0.68	0.79	7.48 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	0.95	0.90	2.70 %
MG (UMOL/L)	0.53	0.45	8.16 %
ANIONS (UEQ/L)	16.00	16.10	0.31 %
CATIONS (UEQ/L)	19.00	17.90	2.98 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79091290	-	-
ANALYZED AS	79091240	-	-
Q.A. SAMPLE CODE	21.24	-	-
LABORATORY PH	4.45	4.14	3.61 %
H+ (UMOL/L)	35.00	72.40	34.82 %
COND. (UMHO/CM)	17.00	35.00	34.62 %
SO2 (UMOL/L)	< 0.30	NAP	- %
SO4 (UMOL/L)	23.00	24.60	3.36 %
NO2 (UMOL/L)	< 0.08	NAP	- %
NO3 (UMOL/L)	< 0.20	49.20	- %
CL (UMOL/L)	22.00	19.60	5.77 %
PO4 (UMOL/L)	< 0.20	0.90	- %
NH4 (UMOL/L)	0.57	6.10	82.91 %
NA (UMOL/L)	22.00	18.70	8.11 %
K (UMOL/L)	3.20	3.40	3.03 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	3.50	3.12	5.74 %
MG (UMOL/L)	2.60	2.80	3.70 %
ANIONS (UEQ/L)	68.00	121.00	28.04 %
CATIONS (UEQ/L)	73.00	112.00	21.08 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79072290	-	-
ANALYZED AS	79072250	-	-
Q.A. SAMPLE CODE	21.25	-	-
LABORATORY PH	4.86	4.42	4.74 %
H+ (UMOL/L)	14.00	38.00	46.15 %
COND. (UMHO/CM)	10.00	24.00	41.18 %
SO2 (UMOL/L)	< 0.30	NAP	- %
SO4 (UMOL/L)	21.00	21.50	1.18 %
NO2 (UMOL/L)	< 0.08	NAP	- %
NO3 (UMOL/L)	14.00	39.60	47.76 %
CL (UMOL/L)	21.00	12.70	24.63 %
PO4 (UMOL/L)	< 0.20	1.23	- %
NH4 (UMOL/L)	3.30	< 0.83	- %
NA (UMOL/L)	12.00	10.87	4.94 %
K (UMOL/L)	3.20	1.46	37.34 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	15.00	15.47	1.54 %
MG (UMOL/L)	6.30	6.42	0.94 %
ANIONS (UEQ/L)	77.00	96.40	11.19 %
CATIONS (UEQ/L)	75.00	95.00	11.76 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79100390	-	-
ANALYZED AS	79100320	-	-
Q.A. SAMPLE CODE	21.22	-	-
LABORATORY PH	4.64	4.75	1.17 %
H+ (UMOL/L)	23.00	17.80	12.75 %
COND. (UMHO/CM)	12.00	10.60	6.19 %
SO2 (UMOL/L)	< 0.30	NAP	- %
SO4 (UMOL/L)	11.00	12.70	7.17 %
NO2 (UMOL/L)	0.12	NAP	- %
NO3 (UMOL/L)	< 0.40	7.74	- %
CL (UMOL/L)	13.00	10.40	11.11 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	0.64	9.98	87.95 %
NA (UMOL/L)	11.00	10.00	4.76 %
K (UMOL/L)	3.50	1.61	36.99 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	1.70	1.72	0.58 %
MG (UMOL/L)	1.30	1.07	9.70 %
ANIONS (UEQ/L)	35.00	43.50	10.83 %
CATIONS (UEQ/L)	44.00	44.90	1.01 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT	EML RESULT	PERCENT DEVIATION FROM MEAN
	-----	-----	-----
Q.A. SAMPLE NUMBER	79102190	-	-
ANALYZED AS	79102130	-	-
Q.A. SAMPLE CODE	21.23	-	-
LABORATORY PH	5.03	5.08	0.49 %
H+ (UMOL/L)	9.30	8.30	5.68 %
COND. (UMHO/CM)	8.00	8.60	3.61 %
SO2 (UMOL/L)	0.28	NAP	- %
SO4 (UMOL/L)	11.00	10.20	3.77 %
NO2 (UMOL/L)	< 0.10	NAP	- %
NO3 (UMOL/L)	6.80	4.19	23.75 %
CL (UMOL/L)	7.20	6.49	5.19 %
PO4 (UMOL/L)	< 0.20	NAP	- %
NH4 (UMOL/L)	< 0.60	5.10	- %
NA (UMOL/L)	5.50	5.22	2.61 %
K (UMOL/L)	0.46	0.69	20.00 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	7.70	6.64	7.39 %
MG (UMOL/L)	3.30	2.84	7.49 %
ANIONS (UEQ/L)	36.00	31.00	7.46 %
CATIONS (UEQ/L)	37.00	38.20	1.60 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79111590	-	-
ANALYZED AS	79111540	-	-
Q.A. SAMPLE CODE	21.24	-	-
LABORATORY PH	4.11	4.14	0.36 %
H+ (UMOL/L)	78.00	72.40	3.72 %
COND. (UMHO/CM)	35.00	35.00	0.0 %
SO2 (UMOL/L)	< 0.30	NAP	- %
SO4 (UMOL/L)	24.00	24.60	1.23 %
NO2 (UMOL/L)	< 0.10	NAP	- %
NO3 (UMOL/L)	41.00	49.20	9.09 %
CL (UMOL/L)	20.00	19.60	1.01 %
PO4 (UMOL/L)	< 0.20	0.90	- %
NH4 (UMOL/L)	0.28	6.10	91.22 %
NA (UMOL/L)	21.00	18.70	5.79 %
K (UMOL/L)	4.40	3.40	12.82 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	3.40	3.12	4.29 %
MG (UMOL/L)	2.70	2.80	1.82 %
ANIONS (UEQ/L)	110.00	121.00	4.76 %
CATIONS (UEQ/L)	120.00	112.00	3.45 %

EXTERNAL QUALITY ASSURANCE RESULTS
MAP3S PRECIPITATION CHEMISTRY PROGRAM

ANALYSES OF A REFERENCE SAMPLE

	PNL RESULT -----	EML RESULT -----	PERCENT DEVIATION FROM MEAN -----
Q.A. SAMPLE NUMBER	79102090	-	-
ANALYZED AS	79102050	-	-
Q.A. SAMPLE CODE	21.25	-	-
LABORATORY PH	4.70	4.42	3.07 %
H+ (UMOL/L)	20.00	38.00	31.03 %
COND. (UMHO/CM)	17.00	24.00	17.07 %
SO2 (UMOL/L)	< 0.30	NAP	- %
SO4 (UMOL/L)	23.00	21.50	3.37 %
NO2 (UMOL/L)	< 0.10	NAP	- %
NO3 (UMOL/L)	15.00	39.60	45.05 %
CL (UMOL/L)	16.00	12.70	11.50 %
PO4 (UMOL/L)	< 0.20	1.23	- %
NH4 (UMOL/L)	0.19	< 0.83	- %
NA (UMOL/L)	10.00	10.87	4.17 %
K (UMOL/L)	1.10	1.46	14.06 %
AL (UMOL/L)	NAP	NAP	- %
CA (UMOL/L)	15.00	15.47	1.54 %
MG (UMOL/L)	6.30	6.42	0.94 %
ANIONS (UEQ/L)	77.00	96.40	11.19 %
CATIONS (UEQ/L)	74.00	95.00	12.43 %

SAMPLES AVAILABLE

S
A
M
P
L
E

SAMPLES AVAILABLE

C
Q

2 JUL 1978 S
5 JUL 1978 S
6 JUL 1978 S
9 JUL 1978 S
11 JUL 1978 S
15 JUL 1978 S
18 JUL 1978 S
19 JUL 1978 S
24 JUL 1978 S
25 JUL 1978 S
28 JUL 1978 S
30 JUL 1978 S
31 JUL 1978 S
2 AUG 1978 S
10 AUG 1978 S
15 AUG 1978 S
17 AUG 1978 S
21 AUG 1978 S
29 AUG 1978 S
1 SEP 1978 S
11 SEP 1978 S
4 OCT 1978 S
20 OCT 1978 S
25 OCT 1978 S

2 MAR 1979 S
10 MAR 1979 S
26 MAR 1979 S
19 APR 1979 S
30 APR 1979 S
7 MAY 1979 S
14 MAY 1979 S
24 MAY 1979 S
28 MAY 1979 S
5 JUN 1979 S
10 JUN 1979 S
12 JUN 1979 S
24 JUN 1979 S
26 JUN 1979 S
29 JUN 1979 S

C
Q

S
A
M
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L
E

SAMPLES AVAILABLE

S
A
M
P
L
E

C
Q

18 NOV 1978 S
24 NOV 1978 S
4 DEC 1978 S
9 DEC 1978 S
11 DEC 1978 S
21 DEC 1978 S
3 JAN 1979 S
5 JAN 1979 S
9 JAN 1979 S
15 JAN 1979 S
16 JAN 1979 S
21 JAN 1979 S
23 JAN 1979 S
24 JAN 1979 S
25 JAN 1979 S
29 JAN 1979 S
31 JAN 1979 S
4 FEB 1979 S
9 FEB 1979 S
14 FEB 1979 S
22 FEB 1979 S
27 FEB 1979 S
28 FEB 1979 S

DATA FOR QD/PE CODE

S
A
M
P
L
E

C
Q

2 JUL 1978	12.35
5 JUL 1978	12.36
6 JUL 1978	12.37
9 JUL 1978	12.34
11 JUL 1978	12.34
15 JUL 1978	12.34
18 JUL 1978	12.34
19 JUL 1978	12.34
24 JUL 1978	12.33
25 JUL 1978	12.34
28 JUL 1978	12.33
30 JUL 1978	12.35
31 JUL 1978	12.37
2 AUG 1978	12.31
10 AUG 1978	12.31
15 AUG 1978	12.33
17 AUG 1978	12.31
21 AUG 1978	12.31
29 AUG 1978	12.32
1 SEP 1978	12.33
11 SEP 1978	12.36
4 OCT 1978	12.38
20 OCT 1978	12.32
25 OCT 1978	12.37

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DATA FOR QD/PE CODE

S
A
M
P
L
E

C
Q

18 NOV 1978	12.36
24 NOV 1978	12.36
4 DEC 1978	12.38
9 DEC 1978	12.38
11 DEC 1978	12.37
21 DEC 1978	12.38
3 JAN 1979	12.37
5 JAN 1979	12.35
9 JAN 1979	12.31
15 JAN 1979	12.32
16 JAN 1979	12.37
21 JAN 1979	12.36
23 JAN 1979	12.37
24 JAN 1979	12.37
25 JAN 1979	12.36
29 JAN 1979	12.32
31 JAN 1979	12.37
4 FEB 1979	12.32
9 FEB 1979	12.32
14 FEB 1979	12.37
22 FEB 1979	12.37
27 FEB 1979	12.33
28 FEB 1979	12.37

DATA FOR QD/PE CODE

S
A
M
P
L
E

C
Q

2 MAR 1979	12.33
10 MAR 1979	12.34
26 MAR 1979	12.37
19 APR 1979	12.31
30 APR 1979	12.34
7 MAY 1979	12.34
14 MAY 1979	12.36
24 MAY 1979	12.36
28 MAY 1979	12.36
5 JUN 1979	12.34
13 JUN 1979	12.35
12 JUN 1979	12.37
24 JUN 1979	12.38
26 JUN 1979	12.31
29 JUN 1979	12.31

DATA FOR (S04=)	UMOL/L	DATA FOR (S04=)	UMOL/L	DATA FOR (S04=)	UMOL/L
	E L P M A S C Q		E L P M A S C Q		E L P M A S C Q
2 JUL 1978	NAP	18 NOV 1978	22.00	2 MAR 1979	NAP
5 JUL 1978	NAP	24 NOV 1978	35.00	10 MAR 1979	NAP
6 JUL 1978	53.00	4 DEC 1978	24.00	26 MAR 1979	14.00
9 JUL 1978	NAP	9 DEC 1978	NAP	19 APR 1979	14.00
11 JUL 1978	NAP	11 DEC 1978	16.00	30 APR 1979	NAP
15 JUL 1978	NAP	21 DEC 1978	45.00	7 MAY 1979	22.00
18 JUL 1978	60.00	3 JAN 1979	7.70	14 MAY 1979	29.00
19 JUL 1978	NAP	5 JAN 1979	11.00	24 MAY 1979	41.00
24 JUL 1978	NAP	9 JAN 1979	5.70	28 MAY 1979	29.00
25 JUL 1978	NAP	15 JAN 1979	15.00	5 JUN 1979	34.00
28 JUL 1978	NAP	16 JAN 1979	12.00	10 JUN 1979	NAP
30 JUL 1978	26.00	21 JAN 1979	NAP	12 JUN 1979	53.00
31 JUL 1978	110.00	23 JAN 1979	16.00	24 JUN 1979	20.00
2 AUG 1978	33.00	24 JAN 1979	7.40	26 JUN 1979	69.00
10 AUG 1978	NAP	25 JAN 1979	NAP	29 JUN 1979	32.00
15 AUG 1978	110.00	29 JAN 1979	42.00		
17 AUG 1978	55.00	31 JAN 1979	14.00		
21 AUG 1978	14.00	4 FEB 1979	28.00		
29 AUG 1978	52.00	9 FEB 1979	7.70		
1 SEP 1978	NAP	14 FEB 1979	13.00		
11 SEP 1978	130.00	22 FEB 1979	24.00		
4 OCT 1978	NAP	27 FEB 1979	NAP		
20 OCT 1978	NAP	28 FEB 1979	NAP		
25 OCT 1978	94.00				

DATA FOR (N03-)	UMOL/L
2 JUL 1978	NAP
5 JUL 1978	NAP
6 JUL 1978	38.00
9 JUL 1978	NAP
11 JUL 1978	NAP
15 JUL 1978	NAP
18 JUL 1978	NAP
19 JUL 1978	NAP
24 JUL 1978	NAP
25 JUL 1978	NAP
28 JUL 1978	47.00
30 JUL 1978	NAP
31 JUL 1978	110.00
2 AUG 1978	NAP
10 AUG 1978	40.00
15 AUG 1978	32.00
17 AUG 1978	NAP
21 AUG 1978	9.30
29 AUG 1978	30.00
1 SEP 1978	NAP
11 SEP 1978	100.00
4 OCT 1978	NAP
20 OCT 1978	NAP
25 OCT 1978	130.00

DATA FOR (N03-)	UMOL/L
18 NOV 1978	9.70
24 NOV 1978	16.00
4 DEC 1978	8.10
9 DEC 1978	NAP
11 DEC 1978	12.00
21 DEC 1978	22.00
3 JAN 1979	3.60
5 JAN 1979	7.90
9 JAN 1979	NAP
15 JAN 1979	13.00
16 JAN 1979	10.00
21 JAN 1979	NAP
23 JAN 1979	7.70
24 JAN 1979	3.70
25 JAN 1979	NAP
29 JAN 1979	34.00
31 JAN 1979	51.00
4 FEB 1979	11.00
9 FEB 1979	42.00
14 FEB 1979	61.00
22 FEB 1979	23.00
27 FEB 1979	NAP
28 FEB 1979	12.00

DATA FOR (N03-)	UMOL/L
2 MAR 1979	130.00
10 MAR 1979	NAP
26 MAR 1979	5.70
19 APR 1979	13.00
30 APR 1979	NAP
7 MAY 1979	27.00
14 MAY 1979	22.00
24 MAY 1979	32.00
28 MAY 1979	26.00
5 JUN 1979	17.00
10 JUN 1979	8.10
12 JUN 1979	22.00
24 JUN 1979	21.00
26 JUN 1979	61.00
29 JUN 1979	15.00

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPB MEANS REJECTED--PROB. CONTAMINATION

DATA FOR (CL-)	UMOL/L	DATA FOR (CL-)	UMOL/L	DATA FOR (CL-)	UMOL/L
	E L P N A S C Q		E L P N A S C Q		E L P N A S C Q
2 JUL 1978	NAP	18 NOV 1978	NAP	2 MAR 1979	17.00
5 JUL 1978	NAP	24 NOV 1978	NAP	10 MAR 1979	NAP
6 JUL 1978	NAP	4 DEC 1978	NAP	26 MAR 1979	NAP
9 JUL 1978	NAP	9 DEC 1978	NAP	19 APR 1979	1.40
11 JUL 1978	NAP	11 DEC 1978	NAP	30 APR 1979	NAP
15 JUL 1978	NAP	21 DEC 1978	5.70	7 MAY 1979	2.80
18 JUL 1978	NAP	3 JAN 1979	22.00	14 MAY 1979	12.00
19 JUL 1978	NAP	5 JAN 1979	NAP	24 MAY 1979	NAP
24 JUL 1978	NAP	9 JAN 1979	6.00	28 MAY 1979	1.70
25 JUL 1978	NAP	15 JAN 1979	4.20	5 JUN 1979	1.60
28 JUL 1978	NAP	16 JAN 1979	68.00	10 JUN 1979	NAP
30 JUL 1978	NAP	21 JAN 1979	NAP	12 JUN 1979	NAP
31 JUL 1978	NAP	23 JAN 1979	41.00	24 JUN 1979	NAP
2 AUG 1978	5.20	24 JAN 1979	17.00	26 JUN 1979	8.60
10 AUG 1978	NAP	25 JAN 1979	NAP	29 JUN 1979	2.30
15 AUG 1978	NAP	29 JAN 1979	NAP		
17 AUG 1978	NAP	31 JAN 1979	8.00		
21 AUG 1978	NAP	4 FEB 1979	29.00		
29 AUG 1978	3.80	9 FEB 1979	11.00		
1 SEP 1978	NAP	14 FEB 1979	NAP		
11 SEP 1978	NAP	22 FEB 1979	NAP		
4 OCT 1978	NAP	27 FEB 1979	NAP		
20 OCT 1978	NAP	28 FEB 1979	72.00		
25 OCT 1978	NAP				

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FOR (NH ₄ +) E L P M A S	UMOL/L	DATA FOR (NH ₄ +) E L P M A S	UMOL/L	DATA FOR (NH ₄ +) E L P M A S	UMOL/L
	C Q		C Q		C Q
2 JUL 1978	NAP	18 NOV 1978	NAP	2 MAR 1979	NAP
5 JUL 1978	NAP	24 NOV 1978	NAP	10 MAR 1979	9.80
6 JUL 1978	NAP	4 DEC 1978	NAP	26 MAR 1979	NAP
9 JUL 1978	17.00	9 DEC 1978	NAP	19 APR 1979	15.00
11 JUL 1978	11.00	11 DEC 1978	NAP	30 APR 1979	9.60
15 JUL 1978	13.00	21 DEC 1978	14.00	7 MAY 1979	NAP
18 JUL 1978	26.00	3 JAN 1979	4.70	14 MAY 1979	35.00
19 JUL 1978	7.60	5 JAN 1979	NAP	24 MAY 1979	NAP
24 JUL 1978	9.30	9 JAN 1979	NAP	28 MAY 1979	NAP
25 JUL 1978	7.80	15 JAN 1979	3.30	5 JUN 1979	15.00
28 JUL 1978	NAP	16 JAN 1979	NAP	10 JUN 1979	NAP
30 JUL 1978	NAP	21 JAN 1979	NAP	12 JUN 1979	NAP
31 JUL 1978	NAP	23 JAN 1979	NAP	24 JUN 1979	16.00
2 AUG 1978	NAP	24 JAN 1979	5.60	26 JUN 1979	NAP
10 AUG 1978	36.00	25 JAN 1979	NAP	29 JUN 1979	NAP
15 AUG 1978	NAP	29 JAN 1979	17.00		
17 AUG 1978	NAP	31 JAN 1979	NAP		
21 AUG 1978	NAP	4 FEB 1979	NAP		
29 AUG 1978	NAP	9 FEB 1979	NAP		
1 SEP 1978	17.00	14 FEB 1979	NAP		
11 SEP 1978	NAP	22 FEB 1979	NAP		
4 OCT 1978	NAP	27 FEB 1979	8.20		
20 OCT 1978	NAP	28 FEB 1979	NAP		
25 OCT 1978	NAP				

NSC MEANS NO SAMPLE COLLECTED
 ISM MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MFL MEANS MALFUNCTION OR OPERATOR ERROR
 RPO MEANS REJECTED--PROB. CONTAMINATION

DATA FOR (NA+)		DATA FOR (NA+)		DATA FOR (NA+)	
UMOL/L		UMOL/L		UMOL/L	
E L P M A S C Q		E L P M A S C Q		E L P M A S C Q	
2 JUL 1978	.82	18 NOV 1978	NAP	2 MAR 1979	NAP
5 JUL 1978	7.30	24 NOV 1978	NAP	10 MAR 1979	NAP
6 JUL 1978	NAP	4 DEC 1978	NAP	26 MAR 1979	NAP
9 JUL 1978	1.10	9 DEC 1978	.63	19 APR 1979	NAP
11 JUL 1978	3.80	11 DEC 1978	NAP	30 APR 1979	7.10
15 JUL 1978	1.10	21 DEC 1978	NAP	7 MAY 1979	NAP
18 JUL 1978	.78	3 JAN 1979	NAP	14 MAY 1979	11.00
19 JUL 1978	.60	5 JAN 1979	NAP	24 MAY 1979	NAP
24 JUL 1978	1.70	9 JAN 1979	NAP	28 MAY 1979	NAP
25 JUL 1978	.60	15 JAN 1979	NAP	5 JUN 1979	.87
28 JUL 1978	NAP	16 JAN 1979	NAP	10 JUN 1979	NAP
30 JUL 1978	1.20	21 JAN 1979	7.40	12 JUN 1979	NAP
31 JUL 1978	NAP	23 JAN 1979	NAP	24 JUN 1979	.99
2 AUG 1978	NAP	24 JAN 1979	17.00	26 JUN 1979	NAP
10 AUG 1978	.91	25 JAN 1979	31.00	29 JUN 1979	NAP
15 AUG 1978	NAP	29 JAN 1979	1.40		
17 AUG 1978	NAP	31 JAN 1979	NAP		
21 AUG 1978	NAP	4 FEB 1979	NAP		
29 AUG 1978	NAP	9 FEB 1979	NAP		
1 SEP 1978	.96	14 FEB 1979	NAP		
11 SEP 1978	NAP	22 FEB 1979	NAP		
4 OCT 1978	1.30	27 FEB 1979	1.20		
20 OCT 1978	1.80	28 FEB 1979	NAP		
25 OCT 1978	NAP				

NSC MEANS NO SAMPLE COLLECTED
 ISA MEANS INSUFF. SAMPLE FOR ANALYSIS
 NAP MEANS NO ANALYSIS PERFORMED
 MOE MEANS MALFUNCTION OR OPERATOR ERROR
 RPC MEANS REJECTED--PROB. CONTAMINATION

DATA FOR (K+)	UMOL/L	DATA FOR (K+)	UMOL/L	DATA FOR (K+)	UMOL/L	DATA FOR (K+)	UMOL/L
	S A M P L E		S A M P L E		S A M P L E		S A M P L E
	C Q		C Q		C Q		C Q
2 JUL 1978	.66	18 NOV 1978	NAP	2 MAR 1979	NAP	18 NOV 1978	NAP
5 JUL 1978	5.00	24 NOV 1978	NAP	10 MAR 1979	NAP	24 NOV 1978	NAP
6 JUL 1978	NAP	4 DEC 1978	NAP	26 MAR 1979	NAP	4 DEC 1978	NAP
9 JUL 1978	.53	9 DEC 1978	NAP	19 APR 1979	.75	9 DEC 1978	NAP
11 JUL 1978	1.80	11 DEC 1978	NAP	30 APR 1979	.63	11 DEC 1978	NAP
15 JUL 1978	1.20	21 DEC 1978	.98	7 MAY 1979	NAP	21 DEC 1978	NAP
18 JUL 1978	.63	3 JAN 1979	NAP	14 MAY 1979	1.70	3 JAN 1979	NAP
19 JUL 1978	< .25	5 JAN 1979	NAP	24 MAY 1979	NAP	5 JAN 1979	NAP
24 JUL 1978	.70	9 JAN 1979	NAP	28 MAY 1979	NAP	9 JAN 1979	NAP
25 JUL 1978	< .25	15 JAN 1979	.26	5 JUN 1979	.83	15 JAN 1979	NAP
28 JUL 1978	NAP	16 JAN 1979	NAP	10 JUN 1979	NAP	16 JAN 1979	NAP
30 JUL 1978	.75	21 JAN 1979	NAP	12 JUN 1979	NAP	21 JAN 1979	NAP
31 JUL 1978	NAP	23 JAN 1979	NAP	24 JUN 1979	.64	23 JAN 1979	NAP
2 AUG 1978	NAP	24 JAN 1979	.68	26 JUN 1979	NAP	24 JAN 1979	NAP
10 AUG 1978	NAP	25 JAN 1979	NAP	29 JUN 1979	NAP	25 JAN 1979	NAP
15 AUG 1978	NAP	29 JAN 1979	.70			29 JAN 1979	NAP
17 AUG 1978	NAP	31 JAN 1979	NAP			31 JAN 1979	NAP
21 AUG 1978	NAP	4 FEB 1979	NAP			4 FEB 1979	NAP
29 AUG 1978	NAP	9 FEB 1979	NAP			9 FEB 1979	NAP
1 SEP 1978	.51	14 FEB 1979	NAP			14 FEB 1979	2.80
11 SEP 1978	NAP	22 FEB 1979	NAP			22 FEB 1979	NAP
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