

THE RESPONSE OF EXPERIMENTAL CHANNELS
IN EVERGLADES NATIONAL PARK
TO INCREASED NITROGEN AND PHOSPHORUS LOADING
DATA REPORT: CHEMISTRY AND PRIMARY PRODUCTIVITY



NATIONAL PARK SERVICE
WATER RESOURCES DIVISION
FORT COLLINS, COLORADO
RESOURCE ROOM PROPERTY

WATER RESOURCES REPORT NO. 86-6



WATER RESOURCES DIVISION
NATIONAL PARK SERVICE
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80523

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INTRODUCTION

In order to assess the effects of increased nutrient loading in surface waters delivered to Everglades National Park (EVER), an 18-month experimental field program was conducted by the National Park Service in the freshwater marsh of the Shark River Slough. Nitrate-nitrogen ($\text{NO}_3\text{-N}$), phosphate-phosphorus ($\text{PO}_4\text{-P}$), and a combination of nitrate-nitrogen and phosphate-phosphorus ($\text{NO}_3\text{-N}$ plus $\text{PO}_4\text{-P}$) were added continuously to three flow-through experimental channels (5 m x 100 m) that were monitored regularly for water quality and biological changes downstream from the sources of nutrient addition.

Nutrient addition of $\text{NO}_3\text{-N}$ plus $\text{PO}_4\text{-P}$ into experimental Channel B commenced in April, 1983 and continued through September, 1984. Additions of $\text{PO}_4\text{-P}$ into experimental Channel A and $\text{NO}_3\text{-N}$ into experimental Channel C were begun in October, 1983 and terminated at the end of September, 1984. Results from these experiments are summarized in the following technical reports:

Flora, M. D., D. R. Walker, D. J. Scheidt, R. G. Rice, and D. H. Landers. (In preparation.) The response of experimental channels in Everglades National Park to increased nitrogen and phosphorus loading. Part I: Nutrient uptake and periphyton productivity. South Florida Research Center Report, Everglades National Park, Homestead, FL.

Walker, D. R., M. D. Flora, R. G. Rice, and D. J. Scheidt. (In preparation.) The response of experimental channels in Everglades National Park to increased nitrogen and phosphorus loading. Part II: Macrophyte community structure and chemical composition. South Florida Research Center Report, Everglades National Park, Homestead, FL.

Rice, R. G., M. D. Flora, D. R. Walker, and D. J. Scheidt. (In preparation.) The response of experimental channels in Everglades National Park to increased nitrogen and phosphorus loading. Part III: Periphyton community dynamics. South Florida Research Center, Everglades National Park, Homestead, FL.

The purpose of this report is to present data-processing procedures utilized in the management of the data base established from this study and to provide listings and descriptions of the different data files used in the preparation of the above reports.

DATA PROCESSING METHODOLOGY

The data base created in this study was developed using the Statistical Package for the Social Sciences (SPSS) on the CYBER computer system at Colorado State University. This data base consists of nine separate data files at three levels of refinement (Figure 1).

Initially, data were entered into four separate files, each containing a particular section of results. These files became the

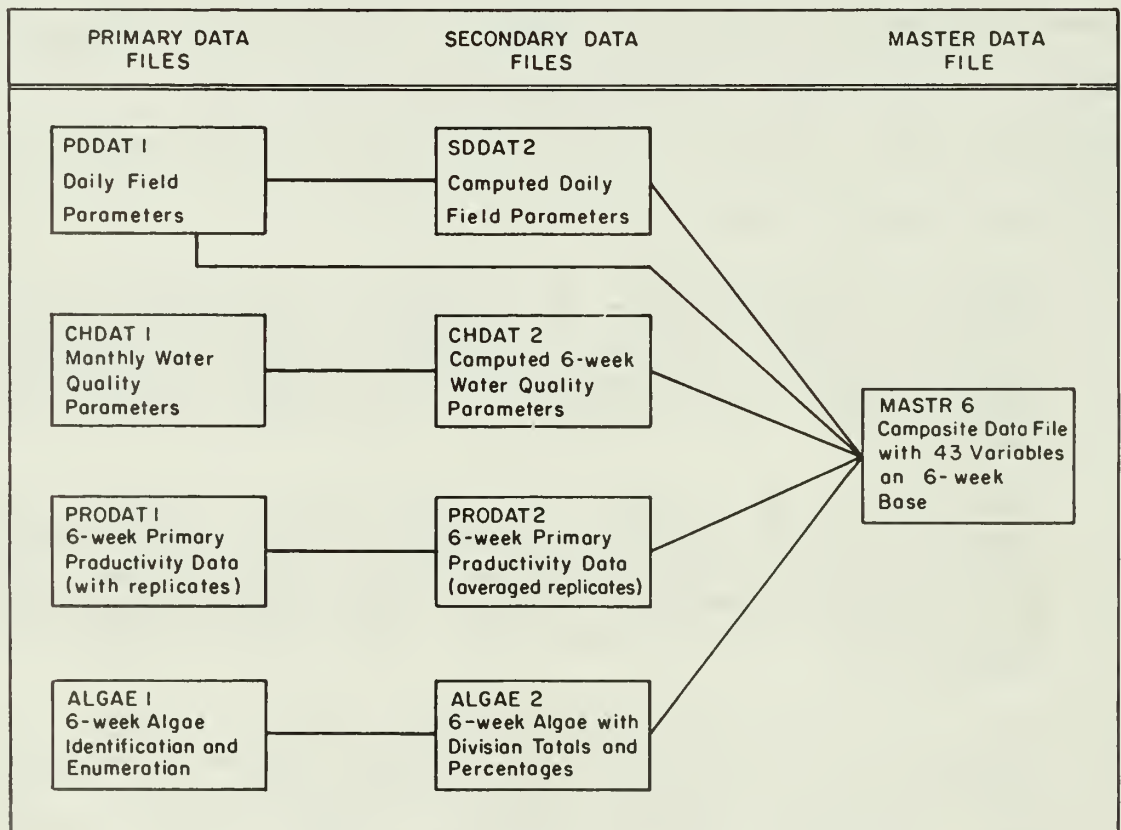


Figure 1. Data management scheme for Everglades nutrient addition study.

Table 1. Primary data files.

File Name	Description
PDDAT1	Primary data file containing daily measurements of physical field parameters
CHDAT1	Chemistry data file containing monthly USGS water quality samples and additional NPS samples
PRODAT1	Productivity data file composed of six-week primary productivity determinations (carbon fixed, chlorophyll <u>a</u> , phaeopigment and dry weight)
ALGAE1	Algae data file containing six-week identifications and enumeration of algae present, by genera

primary data files after the raw data files were formatted and labeled (Table 1). A secondary data base was then created in which the files contain either summaries of data or new variables calculated from the original data (Table 2). These conversions were made to aid in the comparison of different data sets. Finally, elements of the primary and secondary data files were merged into a master file (MASTR6) of 43 variables organized by date (every six weeks) and by site. Much of the analysis presented in the technical reports is derived from the MASTR6 data file.

Table 2. Secondary data files.

File Name	Description
SDDAT2	Daily data file containing discharge and initial nutrient concentrations calculated from primary data in PDDAT1
CHDAT2	Contains computed six-week water chemistry parameters
PRODAT2	Productivity file containing mean values calculated from replicate values in PRODAT1
ALGAE2	Algae file containing data by division rather than genera with calculated percentages for the 3 major divisions

This report describes and presents MASTR6 (Appendix A), the master data file generated from this study, and the most important primary and secondary data files including PDDAT1 (Appendix B), SDDAT2 (Appendix C), CHDAT2 (Appendix D), and PRODAT1 (Appendix E).

The most difficult task in structuring the master file was standardizing the time scale to six-week intervals. This was accomplished by computing six-week averages of the daily data (PDDAT1 and SDDAT2) and computing six-week averages (CHDAT2) from the water chemistry parameters (CHDAT1). The productivity data (PRODAT1) and the algae data (ALGAE1) were already organized on a six-week basis and the secondary files of these data were included in their entirety in the MASTR6 data file. Table 3 presents the numeric codes for the beginning dates of experiments, and site location codes for the data files are found in Table 4. Following are brief descriptions of data files contained in this report.

Table 3. Numeric codes for day and week of productivity experiments.

Date	Day Number (Year, Julian Day)	Week of Experiment
15 May 83	83135	6
26 June 83	83177	12
7 August 83	83219	18
18 September 83	83261	24
30 October 83	83303	30
11 December 83	83345	36
22 January 84	84022	42
11 March 84	84071	49
22 April 84	84113	55
10 June 84	84162	62
22 July 84	84204	68
23 September 84	84267	77

Table 4. Site descriptions and codes used in data files.

Site Number	Site	Description
		Channel A (P addition)
01	10A	10 meters downstream
02	20A	20 meters
03	35A	35 meters
04	65A	65 meters
05	95A	95 meters
		Channel B (P+N addition)
06	10B	10 meters downstream
07	20B	20 meters
08	35B	35 meters
09	65B	65 meters
10	95B	95 meters
		Channel C (N addition)
11	10C	10 meters downstream
12	20C	20 meters
13	35C	35 meters
14	65C	65 meters
15	95C	95 meters
		Control
16	20R	20 meters downstream
17	65R	65 meters

MASTR6

The MASTR6 data file contains an array of 43 variables merged into one file based on six-week time intervals. Computations were done using a binary version of the file. Table 5 presents and defines the MASTR6 data file. (In the MASTR6 and all other files, missing data are represented by 999 and usually resulted from equipment failure or the need for a dummy variable.)

PDDAT1

PDDAT1 includes 13 variables representing measures of the daily physical parameters. Initially, water velocity was measured only in Channel C. After the disappearance of the periphyton mat and increased

Table 5. Definition of variables for the master data file (MASTR6).

Variable Name	Description of Variable	Units
WEEK	Week of experiment from time zero (10 April 83)	weeks
DEPTH	Mean daily water depth	meters
HITEMP	Daily maximum water temperature	° Celsius
LOTEMP	Daily minimum water temperature	° Celsius
SPCOND	Mean daily specific conductance	$\mu\text{mhos cm}^{-1}$
LANGLEYS	Mean total radiation	Langleys day^{-1}
DISA	Discharge Channel A	$\ell \text{ sec}^{-1}$
DISB	Discharge Channel B	$\ell \text{ sec}^{-1}$
DISC	Discharge Channel C	$\ell \text{ sec}^{-1}$
CONCNB	Mean initial concentration $\text{NO}_3\text{-N}$ Channel B	$\mu\text{g } \ell^{-1}$
CONCNC	Mean initial concentration $\text{NO}_3\text{-N}$ Channel C	$\mu\text{g } \ell^{-1}$
CONCPA	Mean initial concentration $\text{PO}_4\text{-P}$ Channel A	$\mu\text{g } \ell^{-1}$
CONCPB	Mean initial concentration $\text{PO}_4\text{-P}$ Channel B	$\mu\text{g } \ell^{-1}$
NO3-10	Dissolved $\text{NO}_3\text{-N}$ (at 10 cm depth)	$\mu\text{g } \ell^{-1}$
NH4-10	Dissolved $\text{NH}_4\text{-N}$ (at 10 cm depth)	$\mu\text{g } \ell^{-1}$
ORGN-10	Dissolved organic nitrogen (as N) (at 10 cm)	$\mu\text{g } \ell^{-1}$
NTOT-10	Total nitrogen (at 10 cm depth)	$\mu\text{g } \ell^{-1}$
PO4-10	Dissolved orthophosphate (as P) (at 10 cm)	$\mu\text{g } \ell^{-1}$
PTOT-10	Total phosphorus (at 10 cm depth)	$\mu\text{g } \ell^{-1}$
TEMP	Water temperature during productivity incubation	° Celsius
LANGLEYS	Solar radiation input during productivity incubation	Langleys hr^{-1}
14CUP	Mean carbon fixed during incubation (corrected)	$\mu\text{g C cm}^{-2} \text{ hr}^{-1}$
CHLA	Mean chlorophyll <u>a</u>	$\mu\text{g cm}^{-2} \text{ 6 wk}^{-1}$
PHAEO	Mean phaeopigment	$\mu\text{g cm}^{-2} \text{ 6 wk}^{-1}$
DRYWT	Mean dry weight	$\mu\text{g cm}^{-2} \text{ 6 wk}^{-1}$
CHLA/PHAEO	Mean ratio of CHLA to PHAEO	$\mu\text{g C } \mu\text{g}^{-1}$
C14/DRYWT	Mean carbon fixed per unit dry weight	$\text{dry wt } \text{hr}^{-1}$
CHLA/WK	Mean chlorophyll <u>a</u> per week of growth	$\mu\text{g cm}^{-2} \text{ wk}^{-1}$
PHAEO/WK	Mean phaeopigment per week of growth	$\mu\text{g cm}^{-2} \text{ wk}^{-1}$
DRYWT/WK	Mean dry weight per week of growth	$\mu\text{g cm}^{-2} \text{ wk}^{-1}$

Table 5. (continued)

Variable Name	Description of Variable	Units
1000	Cyanophyta (cells)	cells cm ⁻²
2000	Chlorophyta	cells cm ⁻²
3000	Euglenophyta	cells cm ⁻²
4000	Xanthophyta	cells cm ⁻²
5000	Chrysophyta	cells cm ⁻²
6000	Bacillariophyta	cells cm ⁻²
7000	Dinophyta	cells cm ⁻²
8000	Cryptophyta	cells cm ⁻²
TOTAL	Total algal cell count	cells cm ⁻²
%BLGRN	Percent Cyanophyta	% of total count
%GREEN	Percent Chlorophyta	% of total count
%DIATOMS	Percent Diatoms	% of total count
%OTHER	Percent Other	% of total count

macrophyte growth, water velocity measurements were also conducted in the other two channels. Table 6 presents the variable descriptions for PDDAT1.

SDDAT2

SDDAT2 consists of variables calculated from data contained in PDDAT1. Depth, channel width, water velocity and a conversion factor are used to compute discharge measurements for each channel. Discharge ($\ell \text{ sec}^{-1}$), nutrient amount dosed, and a conversion factor are then used to calculate initial nutrient concentrations (assuming complete mixing) at the points of nutrient addition. Table 7 contains the variable descriptions for SDDAT2.

Table 6. Definition of variables for the daily primary data file (PDDAT1).

Variable Name	Description of Variable	Units
DATE	YYDDD	days (year, Julian day)
DEPTH	Daily mean water depth	meters
HITEMP	Daily maximum water temperature	° Celsius
LOTEMP	Daily minimum water temperature	° Celsius
SPCOND	Daily mean specific conductance	$\mu\text{mhos cm}^{-1}$
LANGLEYS	Daily solar radiation	Langleys day^{-1}
VELA	Water velocity in Channel A	millimeters sec^{-1}
VELB	Water velocity in Channel B	millimeters sec^{-1}
VELC	Water velocity in Channel C	millimeters sec^{-1}
NUTA	Daily nutrient addition of stock $\text{PO}_4\text{-P}$ solution Channel A	liters day^{-1}
NUTB	Daily nutrient addition of stock $\text{NO}_3\text{-N} + \text{PO}_4\text{-P}$ solution Channel B	liters day^{-1}
NUTC	Daily nutrient addition of stock $\text{NO}_3\text{-N}$ solution Channel C	liters day^{-1}

Table 7. Definition of variables for the converted daily primary data file (SDDAT2).

Variable Name	Description of Variable	Units
DATE	YYDDD	days (yr, Julian day)
DEPTH	Daily mean water depth	meters
DISA	Daily discharge Channel A (DEPTH x WIDTH x VEL x conversion factor)	liters sec^{-1}
DISB	Daily discharge Channel B	liters sec^{-1}
DISC	Daily discharge Channel C	liters sec^{-1}
CONCNB	Daily initial $\text{NO}_3\text{-N}$ concentration, Channel B	$\mu\text{g l}^{-1}$
CONCNC	Daily initial $\text{NO}_3\text{-N}$ concentration, Channel C*	$\mu\text{g l}^{-1}$
CONCPA	Daily initial $\text{PO}_4\text{-P}$ concentration, Channel A*	$\mu\text{g l}^{-1}$
CONCPB	Daily initial $\text{PO}_4\text{-P}$ concentration, Channel B	$\mu\text{g l}^{-1}$

* Channels A and C also have two dummy variables, CONCNA and CONCPC, in SDDAT2.

CHDAT2

The chemistry data file, CHDAT2, contains the six-week weighted averages of the nutrient parameters measured throughout the experimental and control channels. Monthly water quality determinations were made by the U.S. Geological Survey. These were supplemented by more frequent phosphorus analyses conducted by the National Park Service. Both data sets were used to compile CHDAT2, for which the variables are defined in Table 8. The original USGS and NPS water chemistry data files contained in CHDAT1 are available on computer tape at the South Florida Research Center, Everglades National Park.

PRODAT1

PRODAT1 contains 12 variables associated with primary productivity results from in situ experiments. Two or three light bottle replicates and one dark bottle per site were incubated in the field and analyzed in the laboratory. Replicates were averaged and data condensed in PRODAT2 for inclusion in MASTR6. Table 9 describes the variables found in PRODAT1.

Table 8. Definition of variables for the chemistry data file (CHDAT2).

Variable Name	Description of Variable	Units
WEEK	Week of experiment from time zero (10 April 83)	weeks
SITE	Site location (see Table 4)	
NO3-10	Dissolved NO ₃ -N concentration (10 cm depth)	µg l ⁻¹
NH4-10	Dissolved NH ₄ -N concentration (10 cm depth)	µg l ⁻¹
ORGN-10	Dissolved organic nitrogen (10 cm depth)	µg l ⁻¹
NTOT-10	Total nitrogen as N (10 cm depth)	µg l ⁻¹
PO4-10	Dissolved orthophosphate as P (10 cm depth)	µg l ⁻¹
PTOT-10	Total phosphorus as P (10 cm depth)	µg l ⁻¹

Table 9. Definition of variables for the six-week productivity file (PRODAT1).

Variable Name	Description of Variable	Units
WEEK	Week after beginning of experiment	weeks
SITE	Site location (see Table 4)	
TEMP	Water temperature during ^{14}C incubation	$^{\circ}\text{Celsius}$
LANGLEYS	Solar radiation during ^{14}C incubation	Langleys hr^{-1}
14CUP	Carbon fixed during incubation (corrected)	$\mu\text{g cm}^{-2} \text{hr}^{-1}$
CHLA	Chlorophyll <u>a</u> per unit area of slide	$\mu\text{g cm}^{-2} 6 \text{ wk}^{-1}$
PHAEO	Phaeopigment of sample per unit area of slide	$\mu\text{g cm}^{-2} 6 \text{ wk}^{-1}$
DRYWT	Dry weight (105°C) per unit area of slide	$\mu\text{g cm}^{-2} 6 \text{ wk}^{-1}$
CHLA/PHAEO	Ratio of CHLA to PHAEO	
C14/DRYWT	Carbon fixed per unit dry weight	$\mu\text{g C } \mu\text{g}^{-1} \text{ dry wt}$
CHLA/WK	Chlorophyll <u>a</u>	$\mu\text{g cm}^{-2} \text{wk}^{-1}$
PHAEO/WK	Phaeopigment	$\mu\text{g cm}^{-2} \text{wk}^{-1}$
DRYWT/WK	Dry weight	$\mu\text{g cm}^{-2} \text{wk}^{-1}$

APPENDIX A: MASTR 6

MASTER FILE FOR 6-WEEK LISTINGS OF PRIMARY, CHEMISTRY, PRODUCTIVITY AND ALGAL DATA.

APPENDIX A: MASTR6

WEEK	DLPTH,M	HITEMP,C	LOTTEMP,C	SPECUND	LANGLEY'S	DISAL/S	DISB/L/S	DISCAL/S	(CONCMB	CUNCNC	CUNCLPA	CONCFB)-UG/L
6	47	26.1	23.1	456	555	11.1	11.1	11.1	103	599	999	35

WEEK	SITE	(NO3-+J	NH4-10	GRGN-10	PTOT-10)	UG/L
------	------	---------	--------	---------	----------	------

6	1	999	999	599	5	999
6	2	999	999	999	5	999
6	3	999	999	999	6	999
6	4	999	999	999	6	999
6	5	999	999	999	6	999
6	6	999	999	999	41	999
6	7	999	999	999	31	999
6	8	999	999	999	24	999
6	9	999	999	999	19	999
6	10	999	999	999	11	999
6	11	999	999	999	5	999
6	12	999	999	999	5	999
6	13	999	999	999	6	999
6	14	999	999	999	599	999
6	15	999	999	999	5	999
6	16	999	999	999	6	999
6	17	999	999	999	6	999

WEEK	SITE	TEMP,C	LANGLEY'S	LI4CUP	CHLA	PHAED	DRYWT	CHLA/PHAE	C14/DRYWT	CHLA/MK	PHAED/MK	DRYWT/MK)
------	------	--------	-----------	--------	------	-------	-------	-----------	-----------	---------	----------	-----------

6	1	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	2	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	3	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	4	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	5	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	6	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	7	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	8	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	9	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	10	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	11	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	12	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	13	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	14	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	15	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	16	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000
6	17	999.0	999	999.000	999.00	999.000	999.000	999.00	999.000	999.00	999.00	999.000

WEEK	SITE	1000	2000	3000	4000	5000	6000	7000	8000	TOTAL	2-BLGKN	2-CHEM	2-DIATOPS	2-JTH2F
------	------	------	------	------	------	------	------	------	------	-------	---------	--------	-----------	---------

6	1	136483	4863	496	496	397	47319	7000	1835	193193	7167	2.4	24.5	1.4
6	2	79261	7489	397	79261	1140	32636	0	3224	124347	63.7	6.1	26.4	3.8
6	3	6967	6457	546	0	446	14236	50	14.9	112230	79.3	5.5	12.7	2.2
6	4	999	999	999	999	999	999	999	999	999	999.0	999.0	999.0	999.0
6	5	322458	21474	1785	0	793	71424	149	2928	451111	78.4	4.8	15.8	1.3
6	6	37694	59960	1483	397	0	32142	0	3398	238279	15.9	17.1	13.5	3.5
6	7	72216	26587	943	1587	0	49402	0	7717	131122	43.6	1.8	3.2	6.3
6	8	57289	59534	1091	0	0	11394	0	2232	211334	26.4	25.5	43.4	1.6
6	9	126381	3523	595	2361	248	25366	0	1291	159764	75.1	2.2	15.9	2.8
6	10	70284	18997	347	0	0	53093	0	2733	134449	53.9	14.2	24.2	2.4
6	11	14162	2430	268	3.74	2075	42157	0	1766	157035	60.3	1.8	27.1	1.1
6	12	46718	4668	543	397	1438	44342	0	2735	134534	61.2	2.4	34.1	3.4
6	13	66661	2725	1042	0	1141	13595	50	2579	93001	71.9	2.9	20.0	5.2
6	14	999	999	999	999	999	999	999	999	999	999.0	999.0	999.0	999.0
6	15	35059	4068	445	492	258	10466	0	1240	54459	76.3	7.6	16.9	5.8
6	16	77425	9374	347	2778	0	50593	50	4367	144634	63.5	6.5	30.1	5.0
6	17	175287	10367	1042	794	4563	32588	94	2723	227468	77.1	4.6	14.3	4.4

MASTR6 CONTINUED

WEEK	DEPTH,M	HITEMP,C	LOTTEMP,C	SPEED	LANGLEYS	DISAL/S	DISB/L/S	DISC/L/S	(CJNCNB	CJNCNC	CJNCPC)	UG/L	
18	.45	30.4	27.8	355	345	5.7	6.7	8.1	123	5.9	9.9	41	
WEEK	SITE	(M33-10	NH4-1C	DRGN-10	MTGT-1C	PU4-10	PIOT-10)	-UG/L					
18	1	999	999	999	999	5	999						
18	2	10	999	999	999	999	999						
18	3	10	999	999	999	6	999						
18	4	10	999	999	999	999	999						
18	5	10	999	999	999	5	999						
18	6	60	999	999	1054	19	185						
18	7	46	999	994	1850	12	118						
18	8	50	995	999	1204	12	88						
18	9	46	995	999	1300	7	143						
18	10	40	999	990	601	5	72						
18	11	10	999	999	995	5	999						
18	12	10	995	999	999	999	999						
18	13	13	999	999	999	5	995						
18	14	13	999	999	999	999	999						
18	15	13	999	999	999	5	999						
18	16	11	999	999	995	5	999						
18	17	11	999	999	995	5	999						
WEEK	SITE	TEMP,C	LANGLEYS	(14CUP	CHLA	PHALD	DRYNT	CHLA/PHASEC	CI+DRYAT	CHLA/WM	PHALD/WM	DRYAT/WM)	-UG
18	1	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	2	24.1	47	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	3	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	4	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	5	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	6	24.2	43	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	7	24.1	52	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	8	24.1	52	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	9	24.1	51	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	10	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	11	24.2	50	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	12	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	13	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	14	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	15	999.0	999	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	16	24.4	54	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
18	17	24.4	50	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	999.000	
WEEK	SITE	TEMP,C	LANGLEYS	3000	4000	5000	6000	7000	8000	TOTAL	%-GREEN	Z-OIATIONS	%-OTHER
18	1	23.596	6248	643	0	23134	0	2231	263122	67.6	2.4	8.9	1.2
18	2	227869	5107	347	595	20023	0	2677	257467	88.5	2.0	7.5	1.7
18	3	61281	1141	50	238	14328	0	1333	75436	78.1	1.5	1.5	2.2
18	4	999	999	999	999	999	999	999	999	999	999	999	
18	5	10693	7034	158	595	29993	0	992	141134	73.1	4.8	3.2	1.0
18	6	206398	47182	180	372	13188	0	0	253226	77.0	17.6	3.2	2.0
18	7	1353210	27466	372	0	2770	0	0	1433654	96.4	4.8	1.5	2.0
18	8	203601	21297	279	0	47337	0	2415	304822	60.5	4.8	1.5	2.0
18	9	221227	8776	347	0	2452	0	3322	261941	64.7	3.4	9.4	2.5
18	10	426808	190464	1483	0	1116	0	5268	670592	63.5	28.4	8.9	2.0
18	11	23996	4661	397	743	8576	0	1934	43357	59.5	11.2	21.3	7.7
18	12	201147	10309	793	0	37532	0	1934	253761	79.6	4.3	14.1	1.5
18	13	141550	5009	193	0	2332	0	1337	170756	62.9	2.9	13.4	1.0
18	14	999	999	999	999	999	999	999	999	999	999	999	
18	15	32624	654	2776	0	3456	0	595	43384	71.2	4.6	12.3	0.2
18	16	170010	12841	297	0	4674	0	1934	207690	91.4	6.2	1.9	2.0
18	17	171772	15125	456	0	16996	0	3720	164744	93.1	8.0	5.9	3.0

MASTR6 CONTINUED

WEEK 24
DEPTH, M 55
HITEMP, C 27.3
LOTEMP, C 27.2
SPECNO 479
LANGLEYS 267
DISAL/S 13.5
DISBAL/S 14.6
DISCAL/S 12.4
CONCNC 999
CONCNCB 76
CJNCFA 999
CJNCFB)-UG/L 26

WEEK 24
SITE 1
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 2
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 3
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 4
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 5
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 6
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 7
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 8
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 9
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 10
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 11
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 12
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 13
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 14
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 15
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 16
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 17
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 1
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 2
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 3
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 4
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 5
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 6
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 7
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 8
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

WEEK 24
SITE 9
IN03-10 10
N46-10 999
ORGN-10 999
P04-10 999
PI01-10)UG/L 999

[illegible]

MASTR6 CONTINUED

[illegible]

WEEK	DEPTH,M	WTEMP,C	LOTEMP,C	SPCOND	LANGLEY'S	DISAL/S	DISAL/S	DISC/L/S	(CONCHB	CONCAC	CJNCPA	CJNCPLI)-UG/L
42	.58	19.2	16.5	641	237	31.2	25.7	24.7	4.0	76	12	13
WEEK	SITE	(N03-10	NH4-10	ORGN-10	NICI-10	PHAD	DRYHT	CHLA/PHAED	CJ/DRYHT	CHLA/MK	PHALC/MK	DRYHT/MK)-UG
42	1	10	360	1540	1820	409.17	1.0684	1.82	.2459	124.36	65.15	.1761
42	2	10	350	1650	2020	562.21	1.1984	1.35	.2235	126.71	93.70	.1997
42	3	10	340	2460	1920	143.42	.4290	1.79	.2727	42.72	23.91	.1715
42	4	10	599	999	999	999.00	999.00	999.00	999.00	999.00	999.00	.0000
42	5	10	599	999	999	50.17	.2243	1.85	.4816	15.47	8.36	.1574
42	6	20	300	1500	1830	173.21	.5972	1.87	.4616	53.84	28.84	.1995
42	7	60	330	1670	1950	168.31	1.3772	1.57	.2028	44.10	28.22	.2295
42	8	20	300	1600	1940	143.42	.4290	1.79	.2727	42.72	23.91	.1715
42	9	999	999	999	999	50.17	.2243	1.85	.4816	15.47	8.36	.1574
42	10	50	250	1550	1900	173.21	.5972	1.87	.4616	53.84	28.84	.1995
42	11	40	360	1440	1850	168.31	1.3772	1.57	.2028	44.10	28.22	.2295
42	12	110	350	1650	2120	212.50	.6549	1.82	.3461	35.42	15.47	.1091
42	13	70	360	2840	3460	327.91	1.3375	1.66	.2434	90.26	54.65	.2233
42	14	160	320	1760	2060	391.30	.8856	1.82	.3639	55.32	35.94	.1475
42	15	110	330	1700	1910	221.17	.8856	1.82	.3639	55.32	35.94	.1475
42	16	10	370	1730	1920	7.49	.1649	2.86	.4437	3.70	1.25	.0275
42	17	30	350	1750	1920	5.90	.0676	3.35	.4912	6.77	3.25	.0146
42	18	20.5	55	999	999	20.98	.1181	4.74	.4912	6.77	3.25	.0146
42	19	20.5	55	999	999	999.00	999.00	999.00	999.00	999.00	999.00	.0000
42	20	20.5	54	.039	27.51	8.64	.0273	1.71	1.5256	2.46	1.44	.0029
42	21	21.3	57	.015	14.64	6.39	.0411	1.74	.3525	2.44	1.40	.0063
WEEK	SITE	1000	2000	3000	4000	5000	6000	7000	TOTAL	Z-BLGRN	Z-GREEN	Z-DIATORS
42	1	325303	62471	0	0	0	161031	7000	2554859	91.0	2.4	6.3
42	2	2470375	163598	496	0	0	135549	0	2782926	68.8	6.0	4.9
42	3	1235463	124446	992	0	0	42952	0	1848641	83.1	6.7	9.9
42	4	999	999	999	999	999	999	999	999	999.0	999.0	999.0
42	5	897397	165004	496	0	0	212699	0	1283137	69.9	2.9	16.6
42	6	3681314	52058	3471	0	0	227574	0	3964375	92.7	1.3	5.7
42	7	2557337	21319	496	0	0	411426	0	2679302	95.4	3.4	3.4
42	8	146608	177000	0	1983	0	411426	7	734688	19.2	24.1	56.8
42	9	115040	6944	0	0	2976	162920	0	233368	51.0	3.0	44.1
42	10	378791	177001	0	992	0	253352	0	813111	46.6	21.6	31.2
42	11	377932	8184	2728	0	2460	192150	0	536716	68.4	1.4	32.7
42	12	501208	20088	248	0	468	92150	0	620496	6.6	3.2	14.9
42	13	1724066	25544	248	1984	0	67033	0	1844110	93.1	1.4	4.7
42	14	999	999	999	999	999	999	999	999	999.0	999.0	999.0
42	15	184512	12152	248	248	2232	39028	0	244526	75.5	5.0	15.3
42	16	691992	25046	1240	0	241	450696	0	162944	3.1	3.1	16.1
42	17	407547	215177	0	0	5453	456631	0	1693237	37.3	15.7	41.1

MASTRG CONTINUED

WEEK	DEPTH,M	WTEMP,C	HTEMP,C	LOTEMP,C	LANGLEYS	ORGN-10	NIOT-10	LANGLEYS	OISA,L/S	DISC,L/S	(CONC8	CONCNC	CJACPA	CONC8B)-UG/L
49	49	22.2	18.6	684	312	312	22.4	17.3	13.2	71	136	19	24	
WEEK	SITE	(ND3-10	NH4-10	ORGN-10	NIOT-10	CHLA	PHAE0	ORYMT	CHLA/PHAE-C	C14/DRYHT	CHLA/HK	PHAE0/HK	DRY-T/HK)-UG	
49	1	10	295	1555	1820	1054.88	545.63	2.9330	1.77	.6773	150.70	35.09	.4142	
49	2	10	280	1600	1920	677.70	375.18	1.5031	1.81	.1841	96.81	53.66	.2145	
49	3	10	1774	1430	1774	606.04	325.98	1.0469	1.84	.2666	86.86	47.14	.1567	
49	4	10	290	1510	2020	999.000	999.000	999.0000	999.0000	999.0000	999.0000	999.0000	999.0000	
49	5	10	290	1960	2020	513.08	275.58	1.4496	1.84	.9142	73.36	39.94	.0642	
49	6	105	275	1575	2600	613.97	346.82	1.9093	1.77	.1274	37.71	46.55	.2728	
49	7	50	255	1545	1860	1235.15	654.42	2.3765	1.89	.4157	176.44	93.45	.3345	
49	8	40	250	1450	3920	183.56	55.51	2.454	1.84	.4157	26.42	14.82	.0351	
49	9	50	250	1700	3790	714.94	392.18	1.4527	1.82	.4290	102.13	56.03	.2078	
49	10	41	250	1650	2090	1106.35	663.40	.9790	1.67	.3745	150.65	94.77	.1599	
49	11	270	250	1570	2125	63.78	35.74	.2299	1.76	.4001	9.11	5.11	.0329	
49	12	195	280	1560	1915	12.75	15.16	.0451	1.53	.0231	3.96	2.86	.0085	
49	13	225	270	1720	2185	10.29	2.92	.0631	1.74	.1830	1.47	.81	.0085	
49	14	190	265	1775	2195	999.000	999.000	999.0000	999.0000	999.0000	999.0000	999.0000	999.0000	
49	15	130	275	1615	2130	63.78	35.74	.2299	1.76	.4001	9.11	5.11	.0329	
49	16	10	285	1595	1920	12.75	15.16	.0451	1.53	.0231	3.96	2.86	.0085	
49	17	10	305	1640	1970	1054.88	545.63	2.9330	1.77	.6773	150.70	35.09	.4142	
WEEK	SITE	TEMP,C	LANGLEYS	(14CUP	CHLA	PHAE0	ORYMT	CHLA/PHAE-C	C14/DRYHT	CHLA/HK	PHAE0/HK	DRY-T/HK)-UG		
49	1	23.9	43	.227	1054.88	545.63	2.9330	1.77	.6773	150.70	35.09	.4142		
49	2	25.1	34	.277	677.70	375.18	1.5031	1.81	.1841	96.81	53.66	.2145		
49	3	25.1	54	.293	606.04	325.98	1.0469	1.84	.2666	86.86	47.14	.1567		
49	4	999.0	999	999.000	999.000	999.000	999.0000	999.0000	999.0000	999.0000	999.0000	999.0000		
49	5	25.4	60	.410	513.08	275.58	1.4496	1.84	.9142	73.36	39.94	.0642		
49	6	24.4	39	.243	613.97	346.82	1.9093	1.77	.1274	37.71	46.55	.2728		
49	7	24.8	34	.275	1235.15	654.42	2.3765	1.89	.4157	176.44	93.45	.3345		
49	8	25.2	58	.102	183.56	55.51	2.454	1.84	.4157	26.42	14.82	.0351		
49	9	25.1	61	.187	714.94	392.18	1.4527	1.82	.4290	102.13	56.03	.2078		
49	10	25.0	61	.367	1106.35	663.40	.9790	1.67	.3745	150.65	94.77	.1599		
49	11	24.2	39	.392	63.78	35.74	.2299	1.76	.4001	9.11	5.11	.0329		
49	12	24.4	21	.026	12.75	15.16	.0451	1.53	.0231	3.96	2.86	.0085		
49	13	24.6	58	.711	10.29	2.92	.0631	1.74	.1830	1.47	.81	.0085		
49	14	999.0	999	999.000	999.000	999.000	999.0000	999.0000	999.0000	999.0000	999.0000	999.0000		
49	15	25.5	61	.613	12.49	6.61	.0341	1.84	.3715	1.76	.95	.0049		
49	16	24.2	40	.038	25.32	22.79	.1365	1.29	.2745	4.19	3.26	.0145		
49	17	25.4	61	.023	22.51	12.44	.0715	1.83	.3148	3.26	1.78	.0162		
WEEK	SITE	1000	2000	3000	4000	5000	6000	7000	TOTAL	Z-BLGRN	Z-GREEN	Z-OTATUMS	Z-OTHER	
49	1	1936099	45119	496	0	0	151715	6924	2142353	50.4	2.1	7.1	.4	
49	2	1329736	213195	0	0	0	212203	4462	1759576	75.6	12.1	12.1	.3	
49	3	825011	68413	0	0	0	423415	8924	1325763	62.2	31.7	31.7	.7	
49	4	999	999	999	999	999	999	999	999	999.0	999.0	999.0	999.0	
49	5	95194	44622	992	0	0	177001	0	317839	30.0	14.7	5.7	.3	
49	6	2588075	69925	0	0	0	273684	0	2441105	88.0	2.4	1.3	.3	
49	7	463677	16362	0	0	0	153364	0	601726	67.9	2.4	2.4	1.5	
49	8	578599	180442	496	0	0	33962	0	1105034	52.3	16.3	33.7	.6	
49	9	540422	10412	496	0	0	33962	0	864161	62.5	1.2	35.2	1.1	
49	10	230051	175513	0	992	0	2475	0	615287	37.4	26.5	32.9	1.2	
49	11	538054	25781	1983	0	0	2475	0	1207274	77.7	2.1	19.3	.9	
49	12	719902	6421	992	0	0	329212	0	1070931	67.2	.9	33.7	1.2	
49	13	707506	40656	592	0	0	143236	0	950372	78.6	4.5	15.7	1.0	
49	14	999	999	999	999	999	999	999	999	999.0	999.0	999.0	999.0	
49	15	369370	1280	2479	0	0	165925	496	586017	62.8	2.2	31.6	3.4	
49	16	131387	5454	0	0	0	160646	0	241951	54.3	2.3	41.6	1.6	
49	17	339127	3470	0	0	0	160646	0	462551	73.3	.8	23.7	2.3	

MASTR6 CONTINUED

WEEK	DEPTH,M	HIT-TEMP,C	LOT-TEMP,C	SPCNO	LANGLEYS	DISC,L/S	CJNCNR	CJNCPC	CJNCBPB-JC/L				
55	.43	25.6	21.2	528	371	12.2	11.9	137	36				
WEEK	SITE	(NO3-10	MH4-10	ORGN-10	NTOT-10	PC4-10	PTOT-10	UG/L					
55	1	10	30	1670	1820	30	50						
55	2	10	30	1670	1920	30	50						
55	3	10	20	1680	1920	10	40						
55	4	10	20	1680	1920	10	40						
55	5	10	90	1610	2010	10	20						
55	6	70	30	1570	1860	30	50						
55	7	60	30	1570	2070	20	50						
55	8	40	30	1670	1850	10	40						
55	9	10	30	1870	2020	10	40						
55	10	10	30	1770	2020	10	30						
55	11	230	50	1650	2140	5	20						
55	12	150	50	1650	1960	5	20						
55	13	180	70	1530	1890	5	20						
55	14	160	70	1930	4270	5	20						
55	15	10	20	1760	1820	30	50						
55	16	10	40	1560	1920	5	20						
55	17	10	30	1970	2020	5	20						
WEEK	SITE	TEMP,C	LANGLEYS	(14CUP	CFLA	PHACD	ORYMT	CHLA/PHACD	C14/ORYMT	CFLA/WM	PHACD/WM	DRYWT/WM	-L6
55	1	23.3	50	.088	25.57	1.529	.0639	1.67	1.2551	4.26	2.55	.0116	
55	2	27.1	37	.072	34.81	1.550	.1552	1.79	.4616	5.80	3.25	.0259	
55	3	26.5	36	.042	36.30	1.336	.1135	1.74	.3832	5.05	2.89	.0154	
55	4	999.0	999	999.000	995.00	995.00	999.0000	999.00	999.0000	999.00	999.00	999.0000	
55	5	26.8	26	.263	316.89	1.6116	1.8116	1.70	.1450	52.82	31.02	.3020	
55	6	22.8	51	.075	40.95	24.28	.1342	1.50	.7247	16.32	4.28	.0174	
55	7	25.9	38	.123	119.67	67.52	.2364	1.77	.5202	15.94	1.225	.0394	
55	8	23.7	37	.082	47.36	25.67	.0666	1.85	1.2312	7.90	4.28	.0111	
55	9	26.5	26	.062	27.57	1.594	.1170	1.73	.5329	4.60	2.64	.0155	
55	10	26.2	36	.335	336.74	200.12	1.9236	1.68	.1741	56.12	33.36	.3210	
55	11	26.2	51	.067	4.00	4.45	.0373	1.63	.1760	.67	.42	.0042	
55	12	25.8	38	.067	4.65	3.17	.0211	1.47	.3476	.75	.53	.0035	
55	13	26.1	43	.011	6.18	3.65	.0303	1.59	.3830	1.03	.61	.0030	
55	14	999.0	999	999.000	995.00	995.00	999.0000	999.00	999.0000	999.00	999.00	999.0000	
55	15	27.7	32	.002	1.45	.85	.999.0000	1.70	.549.0000	.24	.14	.949.0000	
55	16	26.6	37	.012	8.02	4.46	.0227	1.80	.6378	1.53	.74	.0023	
55	17	26.5	31	.016	10.38	5.84	.0341	1.84	.4545	1.73	.54	.0057	
WEEK	SITE	1000	2000	3000	4000	5000	6000	7000	TOTAL	Z-BLGRN	Z-GREEN	Z-OTHER	
55	1	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	2	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	3	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	4	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	5	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	6	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	7	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	8	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	9	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	10	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	11	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	12	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	13	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	14	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	15	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	16	999	999	999	999	999	999	999	999	999.0	999.0	999.0	
55	17	999	999	999	999	999	999	999	999	999.0	999.0	999.0	

MASTR6 CONTINUED

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MASTR6 CONTINUED

WEEK	DEPTH,M	HITEMP,C	LCTEMP,C	SPEED	LANGLEYS	DISA/L/S	DISB,L/S	DISC,L/S	(CUNCN8	CUNCNC	CUNCN8	CUNCN8	CUNCN8	CUNCN8	CUNCN8
68	50	30.4	26.7	532	314	12.5	13.1	15.8	51	75	2c	31	31	31	31
WEEK	SITE	(NO3-10	NH4-10	ORGN-10	NTOT-10	PO4-10	PTOT-10	PTOT-10	CHLA/PH4ED	C14/DRYWT	CHLA/MK	PH4/LU/MK	DPYWT/MK	(MK)-UG	(MK)-UG
68	1	20	23	975	1570	71	235	1.20	1.5804	28.25	15.15	.C320			
68	2	10	30	1170	1420	60	100	1.28	2.7320	2.74	.0314	.C011			
68	3	10	35	1315	1660	39	75	1.22	.0757	.48	.35	.C051			
68	4	10	35	1365	1520	34	60	999.0000	599.0000	999.0000	999.0000	999.0000			
68	5	10	50	1650	1770	34	60	1.73	.1623	46.14	28.65	.2769			
68	6	105	50	1650	1615	47	60	1.74	.5107	35.72	22.62	.0444			
68	7	55	30	1370	1715	40	55	1.76	.5384	59.63	33.79	.6819			
68	8	35	35	1415	1730	33	65	1.72	.4992	65.32	49.71	.1242			
68	9	10	35	1315	1570	20	50	1.77	.2919	144.72	11.73	.5376			
68	10	10	45	1365	1570	24	50	1.73	.2540	110.26	62.99	.3501			
68	11	205	25	1425	1645	7	50	1.33	.6452	2.28	1.65	.C052			
68	12	125	30	1370	1625	7	27	1.36	999.0000	1.53	1.12	999.0000			
68	13	110	45	1555	1965	7	27	1.55	.6135	1.48	.96	.C049			
68	14	95	40	1460	1650	7	27	999.0000	999.0000	999.0000	999.0000	999.0000			
68	15	85	35	1415	1790	8	27	1.33	599.0000	.67	.52	999.0000			
68	16	10	25	1325	1520	7	27	1.73	.4308	2.81	1.65	.C054			
68	17	10	25	1375	1510	7	27	1.62	.2418	3.61	1.56	.C013			
WEEK	SITE	TEMP,C	LANGLEYS	(14CUP	CHLA	PH4ED	DRYWT	CHLA/PH4ED	C14/DRYWT	CHLA/MK	PH4/LU/MK	DPYWT/MK	(MK)-UG	(MK)-UG	(MK)-UG
68	1	28.1	49	.303	164.40	94.90	.1917	1.50	1.5804	28.25	15.15	.C320			
68	2	28.0	30	.013	16.44	12.32	.7065	1.28	2.7320	2.74	.0314	.C011			
68	3	23.4	22	.082	2.84	2.33	.0306	1.22	.0757	.48	.35	.C051			
68	4	599.0	999	999.0000	999.0000	999.0000	999.0000	999.0000	599.0000	999.0000	999.0000	999.0000			
68	5	28.0	32	.266	276.85	156.91	1.6372	1.73	.1623	46.14	28.65	.2769			
68	6	28.0	37	.243	238.28	136.93	.2665	1.74	.5107	35.72	22.62	.0444			
68	7	28.0	30	.265	327.78	202.72	.4916	1.76	.5384	59.63	33.79	.6819			
68	8	28.4	18	.363	511.91	298.26	.7272	1.72	.4992	65.32	49.71	.1242			
68	9	28.4	27	.651	688.31	490.39	3.2255	1.77	.2919	144.72	11.73	.5376			
68	10	28.0	32	.543	661.56	377.93	2.1368	1.73	.2540	110.26	62.99	.3501			
68	11	27.9	32	.020	13.66	9.88	.0314	1.33	.6452	2.28	1.65	.C052			
68	12	28.1	15	.007	9.17	6.75	999.0000	1.36	999.0000	1.53	1.12	999.0000			
68	13	28.0	18	.024	6.94	5.76	.0292	1.55	.6135	1.48	.96	.C049			
68	14	999.0	999	999.0000	999.0000	999.0000	999.0000	999.0000	999.0000	999.0000	999.0000	999.0000			
68	15	28.2	32	.066	4.02	3.11	999.0000	1.33	599.0000	.67	.52	999.0000			
68	16	28.4	37	.014	16.49	9.93	.0325	1.73	.4308	2.81	1.65	.C054			
68	17	28.2	27	.017	18.06	11.13	.0682	1.62	.2418	3.61	1.56	.C013			
WEEK	SITE	1000	2000	3000	4000	5000	6000	7000	8000	TOTAL	Z-BLGRN	Z-GREEN	Z-DIATMS	Z-UTHEP	Z-UTHEP
68	1	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	2	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	3	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	4	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	5	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	6	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	7	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	8	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	9	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	10	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	11	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	12	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	13	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	14	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	15	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	16	999	999	999	999	999	999	999	999	999	999	999	999	999	999
68	17	999	999	999	999	999	999	999	999	999	999	999	999	999	999

PKINADY DAILY DATA FILE.

APPENDIX B: PDDAT1

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PRIMARY DAILY DATA FILE.

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PDDAT1 CONTINUED

DATE	DEPTH,M	HITEMP,C	LOTEMP,C	SPEED	LANGLEYS	VELA,M/M/S	VELB,M/M/S	VELC,M/M/S	NUTAT,L	NUTB,L	NUTC,L
83110	421	29.23	26.00	410	466.67	3.658	3.656	3.653	997.00	1.50	999.00
83159	430	30.90	27.00	450	111.71	3.656	3.654	3.656	999.00	6.30	999.00
83160	460	27.90	27.60	460	264.26	3.962	3.962	3.962	999.00	6.30	999.00
83161	460	27.90	25.10	435	324.32	3.962	3.962	3.962	999.00	6.30	999.00
83162	412	28.10	26.20	400	356.76	3.962	3.962	3.962	999.00	6.30	999.00
83163	436	28.90	25.80	375	321.62	3.962	3.962	3.962	999.00	6.30	999.00
83164	430	29.90	26.60	360	227.03	3.962	3.962	3.962	999.00	6.30	999.00
83165	418	27.00	26.00	355	599.00	3.962	3.962	3.962	999.00	6.40	999.00
83166	403	25.29	25.00	999	481.68	3.962	3.962	3.962	999.00	10.20	999.00
83167	491	30.20	25.70	999	599.00	3.962	3.962	3.962	999.00	10.40	999.00
83168	482	30.80	27.00	999	599.00	3.962	3.962	3.962	999.00	10.40	999.00
83169	472	30.70	27.70	999	599.00	3.962	3.962	3.962	999.00	10.40	999.00
83170	466	30.00	27.20	999	599.00	3.962	3.962	3.962	999.00	10.40	999.00
83171	485	25.90	27.50	999	599.00	3.658	3.658	3.658	999.00	10.40	999.00
83172	480	28.00	27.10	500	599.00	3.658	3.658	3.658	999.00	5.70	999.00
83173	494	28.00	25.70	405	599.00	3.658	3.658	3.658	999.00	5.70	999.00
83174	491	29.10	27.40	410	599.00	3.658	3.658	3.658	999.00	5.70	999.00
83175	484	29.90	27.80	410	599.00	3.658	3.658	3.658	999.00	5.70	999.00
83176	485	30.20	27.50	410	599.00	3.353	3.353	3.353	999.00	5.70	999.00
83177	485	30.30	27.90	410	599.00	3.353	3.353	3.353	999.00	5.70	999.00
83178	479	29.80	27.50	400	599.00	3.353	3.353	3.353	999.00	5.70	999.00
83179	472	30.60	28.00	405	413.21	3.353	3.353	3.353	999.00	10.30	999.00
83180	469	31.00	28.20	430	593.54	3.353	3.353	3.353	999.00	10.60	999.00
83181	466	30.90	29.00	450	219.12	3.353	3.353	3.353	999.00	11.50	999.00
83182	472	29.90	28.40	405	261.86	3.353	3.353	3.353	999.00	11.00	999.00
83183	484	29.10	28.00	370	325.53	3.353	3.353	3.353	999.00	10.50	999.00
83184	485	29.00	27.10	999	520.12	3.353	3.353	3.353	999.00	10.50	999.00
83185	475	31.00	27.60	999	479.26	3.353	3.353	3.353	999.00	10.50	999.00
83186	463	31.30	28.60	358	367.57	3.353	3.353	3.353	999.00	5.70	999.00
83187	454	999.00	999.00	358	437.24	3.353	3.353	3.353	999.00	9.30	999.00
83188	446	999.00	999.00	360	257.96	3.353	3.353	3.353	999.00	9.30	999.00
83189	450	999.00	999.00	345	239.64	3.353	3.353	3.353	999.00	9.30	999.00
83190	448	999.00	999.00	330	443.24	3.353	3.353	3.353	999.00	5.30	999.00
83191	472	999.00	999.00	330	360.76	3.353	3.353	3.353	999.00	5.30	999.00
83192	463	999.00	999.00	326	438.44	3.353	3.353	3.353	999.00	5.30	999.00
83193	454	999.00	999.00	322	431.23	3.353	3.353	3.353	999.00	5.70	999.00
83194	448	999.00	999.00	328	599.00	3.353	3.353	3.353	999.00	5.70	999.00
83195	442	999.00	999.00	326	348.35	3.353	3.353	3.353	999.00	5.00	999.00
83196	439	999.00	999.00	334	597.66	3.353	3.353	3.353	999.00	5.00	999.00
83197	435	999.00	999.00	999	257.66	3.353	3.353	3.353	999.00	5.00	999.00
83198	433	999.00	999.00	999	466.49	3.658	3.658	3.658	999.00	9.00	999.00
83199	427	999.00	999.00	999	379.50	3.658	3.658	3.658	999.00	5.40	999.00
83200	424	999.00	999.00	999	414.41	3.658	3.658	3.658	999.00	5.00	999.00
83201	427	999.00	999.00	364	318.32	3.658	3.658	3.658	999.00	8.00	999.00
83202	433	999.00	999.00	364	444.44	3.658	3.658	3.658	999.00	8.20	999.00
83203	433	999.00	999.00	364	339.74	3.658	3.658	3.658	999.00	8.30	999.00
83204	430	999.00	999.00	364	466.07	3.962	3.962	3.962	999.00	8.30	999.00
83205	427	999.00	999.00	370	433.63	3.962	3.962	3.962	999.00	8.30	999.00
83206	421	999.00	999.00	376	307.51	3.962	3.962	3.962	999.00	8.70	999.00
83207	415	999.00	999.00	378	420.42	3.962	3.962	3.962	999.00	8.50	999.00
83208	410	999.00	999.00	390	270.27	3.962	3.962	3.962	999.00	8.90	999.00
83209	421	999.00	999.00	999	254.65	3.962	3.962	3.962	999.00	8.90	999.00
83210	421	999.00	999.00	999	509.01	3.962	3.962	3.962	999.00	10.10	999.00
83211	424	999.00	999.00	999	317.12	3.962	3.962	3.962	999.00	10.10	999.00
83212	418	999.00	999.00	999	412.01	3.962	3.962	3.962	999.00	10.10	999.00
83213	421	999.00	999.00	418	330.43	3.658	3.658	3.658	999.00	8.90	999.00
83214	410	999.00	999.00	999	320.72	3.658	3.658	3.658	999.00	8.90	999.00
83215	424	999.00	999.00	999	176.58	3.658	3.658	3.658	999.00	8.60	999.00

PDDATI CONTINUED

DATE	DEPTH,M	HITEMP,C	LOTEMP,C	SPEED	LANGLEYS	VELA,M/M/S	VELB,M/M/S	VELC,M/M/S	NUTAL,L	NUTB,L	NUTC,L
83216	0.59	999.00	999.00	999	276.28	3.656	3.656	3.658	999.00	999.00	999.00
83217	0.54	999.00	999.00	999	176.57	3.658	3.656	3.658	999.00	999.00	999.00
83218	0.63	999.00	999.00	999	300.30	3.658	3.656	3.658	999.00	999.00	999.00
83219	0.66	999.00	999.00	999	233.03	3.658	3.658	3.658	999.00	999.00	999.00
83220	0.91	999.00	999.00	999	332.73	3.658	3.658	3.658	999.00	999.00	999.00
83221	0.94	999.00	999.00	999	154.55	3.658	3.658	3.658	999.00	999.00	999.00
83222	0.66	999.00	999.00	999	324.32	3.658	3.658	3.658	999.00	999.00	999.00
83223	0.66	999.00	999.00	999	318.32	3.658	3.658	3.658	999.00	999.00	999.00
83224	1.04	999.00	999.00	999	364.91	3.658	3.658	3.658	999.00	999.00	999.00
83225	0.66	999.00	999.00	999	443.24	3.658	3.658	3.658	999.00	999.00	999.00
83226	0.03	999.00	999.00	999	392.75	3.658	3.658	3.658	999.00	999.00	999.00
83227	0.69	999.00	999.00	480	599.00	3.658	3.658	3.658	999.00	999.00	999.00
83228	0.12	999.00	999.00	475	260.66	3.658	3.658	3.658	999.00	999.00	999.00
83229	0.12	999.00	999.00	480	446.24	3.658	3.658	3.658	999.00	999.00	999.00
83230	0.21	999.00	999.00	490	269.49	3.658	3.658	3.658	999.00	999.00	999.00
83231	0.21	999.00	999.00	490	317.12	3.658	3.658	3.658	999.00	999.00	999.00
83232	0.15	999.00	999.00	490	509.31	3.658	3.658	3.658	999.00	999.00	999.00
83233	0.39	999.00	999.00	495	372.37	3.658	3.658	3.658	999.00	999.00	999.00
83234	0.03	999.00	999.00	500	365.16	3.658	3.658	3.658	999.00	999.00	999.00
83235	0.97	999.00	999.00	500	169.37	3.658	3.658	3.658	999.00	999.00	999.00
83236	0.03	999.00	999.00	510	342.34	3.658	3.658	3.658	999.00	999.00	999.00
83237	0.21	999.00	999.00	505	267.67	3.658	3.658	3.658	999.00	999.00	999.00
83238	0.12	999.00	999.00	502	229.42	3.658	3.658	3.658	999.00	999.00	999.00
83239	0.05	999.00	999.00	502	329.13	3.658	3.658	3.658	999.00	999.00	999.00
83240	0.97	999.00	999.00	500	343.54	3.658	3.658	3.658	999.00	999.00	999.00
83241	0.03	999.00	999.00	999	240.24	3.658	3.658	3.658	999.00	999.00	999.00
83242	0.15	999.00	999.00	999	170.57	3.658	3.658	3.658	999.00	999.00	999.00
83243	0.21	999.00	999.00	999	138.14	3.658	3.658	3.658	999.00	999.00	999.00
83244	0.53	27.10	27.00	480	57.30	3.658	3.658	3.658	999.00	999.00	999.00
83245	0.49	26.20	26.10	999	201.89	3.658	3.658	3.658	999.00	999.00	999.00
83246	0.68	26.50	26.10	999	275.07	3.658	3.658	3.658	999.00	999.00	999.00
83247	0.45	27.00	26.70	999	286.29	3.658	3.658	3.658	999.00	999.00	999.00
83248	0.55	27.00	27.00	999	365.55	3.658	3.658	3.658	999.00	999.00	999.00
83249	0.65	27.30	27.00	420	199.40	3.658	3.658	3.658	999.00	999.00	999.00
83250	0.51	27.60	27.40	438	268.25	3.658	3.658	3.658	999.00	999.00	999.00
83251	0.45	27.60	27.60	440	213.81	3.658	3.658	3.658	999.00	999.00	999.00
83252	0.79	27.80	27.80	999	311.11	3.658	3.658	3.658	999.00	999.00	999.00
83253	0.73	27.80	27.80	999	213.61	3.658	3.658	3.658	999.00	999.00	999.00
83254	0.64	27.90	27.60	465	283.48	3.658	3.658	3.658	999.00	999.00	999.00
83255	0.61	27.80	27.80	461	242.64	3.658	3.658	3.658	999.00	999.00	999.00
83256	0.67	27.80	27.80	465	216.22	3.658	3.658	3.658	999.00	999.00	999.00
83257	0.82	27.70	27.60	480	335.13	3.658	3.658	3.658	999.00	999.00	999.00
83258	0.91	27.60	27.50	480	223.42	3.658	3.658	3.658	999.00	999.00	999.00
83259	0.54	27.30	27.10	460	205.41	3.658	3.658	3.658	999.00	999.00	999.00
83260	0.62	27.20	27.10	478	369.19	3.658	3.658	3.658	999.00	999.00	999.00
83261	0.73	27.10	27.00	475	184.58	3.658	3.658	3.658	999.00	999.00	999.00
83262	0.73	27.10	27.00	473	599.00	3.658	3.658	3.658	999.00	999.00	999.00
83263	0.70	27.00	27.00	473	270.27	3.658	3.658	3.658	999.00	999.00	999.00
83264	0.64	27.00	27.00	477	177.78	3.658	3.658	3.658	999.00	999.00	999.00
83265	0.61	27.00	27.00	470	230.63	3.658	3.658	3.658	999.00	999.00	999.00
83266	0.73	27.00	27.00	475	279.84	3.658	3.658	3.658	999.00	999.00	999.00
83267	0.76	27.00	26.80	475	222.22	3.658	3.658	3.658	999.00	999.00	999.00
83268	0.70	26.20	26.00	472	367.57	3.658	3.658	3.658	999.00	999.00	999.00
83269	0.61	26.90	25.90	470	329.13	3.658	3.658	3.658	999.00	999.00	999.00
83270	0.55	26.00	26.00	530	240.25	3.658	3.658	3.658	999.00	999.00	999.00
83271	0.52	26.00	25.90	535	182.54	3.658	3.658	3.658	999.00	999.00	999.00
83272	0.55	26.00	25.80	550	237.54	3.658	3.658	3.658	999.00	999.00	999.00
83273	0.52	25.80	25.60	565	245.64	3.658	3.658	3.658	999.00	999.00	999.00

PDDAT1 CONTINUED

DATE	DEPTH,M	HITEMP,C	LOTEMP,C	SPEED	LANGLAYS	VELA,MM/S	VELB,MM/S	VELC,MM/S	NUTAL	NUTB	NUTC
83274	549	25.90	25.80	565	229.43	6.401	7.620	6.396	6.20	6.60	6.50
83275	546	25.80	25.85	565	206.61	6.401	7.620	6.401	6.20	6.60	6.50
83276	555	25.80	25.80	560	245.04	6.401	7.620	6.401	6.20	6.60	6.50
83277	552	25.80	25.80	560	235.44	6.401	7.620	6.401	6.20	6.60	6.50
83278	552	25.90	25.80	570	179.96	6.401	7.620	6.401	10.10	13.60	10.30
83279	549	26.00	25.90	570	199.40	6.706	7.315	6.706	10.10	18.60	13.00
83280	546	26.00	26.00	570	273.27	6.706	7.315	6.706	10.10	10.80	13.60
83281	543	26.00	26.00	570	275.07	6.706	7.315	6.706	10.10	6.20	13.60
83282	539	26.00	26.00	570	215.01	7.010	7.315	7.010	10.00	6.20	11.00
83283	543	26.10	26.10	565	172.97	7.010	7.010	7.010	5.90	6.20	9.20
83284	546	26.00	26.00	565	599.00	7.010	7.010	7.010	9.90	6.20	9.20
83285	543	26.00	26.00	555	163.78	7.010	7.010	7.010	5.60	8.70	8.50
83286	543	26.00	26.00	553	171.77	7.010	7.010	7.010	5.60	8.70	8.50
83287	543	26.00	26.00	550	236.64	7.010	7.010	7.010	4.40	10.50	8.00
83288	543	26.00	25.90	550	289.45	7.010	7.010	7.010	5.70	5.30	9.50
83289	543	26.00	25.90	545	164.54	7.315	7.315	7.315	10.00	8.40	9.50
83290	573	26.00	26.00	520	194.59	7.315	7.315	7.315	10.00	8.40	9.50
83291	576	26.00	26.00	515	67.67	7.315	7.315	7.315	10.20	8.40	9.50
83292	585	26.00	25.80	515	207.61	7.315	7.315	7.315	10.20	8.40	9.50
83293	585	25.90	25.80	515	259.46	7.315	7.315	7.315	10.30	8.50	9.60
83294	552	999.00	999.00	520	207.61	7.315	7.315	7.315	10.30	8.50	9.60
83295	552	999.00	999.00	520	164.56	7.315	7.315	7.315	10.30	8.50	9.60
83296	552	999.00	999.00	520	251.85	7.315	7.315	7.315	10.30	8.50	9.60
83297	579	999.00	999.00	520	163.78	7.620	7.315	7.620	10.30	8.50	9.60
83298	582	999.00	999.00	520	183.76	7.620	7.315	7.620	9.40	8.00	8.70
83299	582	999.00	999.00	535	129.73	7.620	7.315	7.620	8.70	7.70	8.00
83300	579	999.00	999.00	550	279.58	7.620	7.620	7.620	8.70	7.70	8.00
83301	573	999.00	999.00	550	237.84	7.620	7.620	7.620	8.70	7.70	8.00
83302	567	999.00	999.00	555	218.62	7.620	7.620	7.620	10.50	8.30	9.60
83303	567	999.00	999.00	560	218.62	7.925	7.620	7.925	10.50	8.30	9.60
83304	564	999.00	999.00	565	225.63	7.925	7.620	7.925	10.50	8.30	9.60
83305	573	999.00	999.00	545	999.00	7.925	7.620	7.925	10.40	8.80	15.90
83306	573	999.00	999.00	545	171.77	7.925	7.620	7.925	10.30	8.80	15.90
83307	567	999.00	999.00	545	305.10	7.925	7.620	7.925	10.30	8.80	15.90
83308	567	999.00	999.00	545	212.31	7.925	7.620	7.925	10.30	8.80	15.90
83309	564	999.00	999.00	545	337.54	8.230	7.620	8.230	10.30	8.80	15.90
83310	564	999.00	999.00	545	212.31	8.230	7.620	8.230	10.30	8.80	15.90
83311	567	999.00	999.00	545	209.01	8.230	7.925	8.230	10.30	8.80	15.90
83312	582	999.00	999.00	540	144.14	8.230	7.925	8.230	10.30	8.80	15.90
83313	582	999.00	999.00	540	237.84	8.230	7.925	8.230	10.30	8.80	15.90
83314	582	999.00	999.00	525	237.84	8.230	7.925	8.230	10.30	8.80	15.90
83315	562	999.00	999.00	520	212.61	8.230	7.925	8.230	10.30	8.80	15.90
83316	579	999.00	999.00	520	235.44	8.534	7.925	8.534	10.30	8.80	15.90
83317	579	999.00	999.00	525	251.45	8.534	7.925	8.534	10.30	8.80	15.90
83318	576	999.00	999.00	525	348.35	8.534	7.925	8.534	10.30	8.80	15.90
83319	576	999.00	999.00	520	169.37	8.534	7.925	8.534	10.30	8.80	15.90
83320	579	999.00	999.00	520	245.14	8.534	7.925	8.534	10.30	8.80	15.90
83321	579	999.00	999.00	535	259.16	8.534	7.925	8.534	10.30	8.80	15.90
83322	576	999.00	999.00	548	269.49	8.534	7.925	8.534	10.30	8.80	15.90
83323	573	999.00	999.00	550	295.50	8.534	7.925	8.534	10.30	8.80	15.90
83324	579	999.00	999.00	553	223.42	8.839	7.925	8.839	10.30	8.80	15.90
83325	579	999.00	999.00	560	203.90	8.839	7.925	8.839	10.30	8.80	15.90
83326	579	999.00	999.00	560	289.49	8.839	7.925	8.839	10.30	8.80	15.90
83327	579	999.00	999.00	595	172.97	8.839	7.925	8.839	10.30	8.80	15.90
83328	573	999.00	999.00	597	203.46	8.839	7.925	8.839	10.30	8.80	15.90
83329	573	999.00	999.00	599	269.07	8.839	7.925	8.839	10.30	8.80	15.90
83330	573	999.00	999.00	599	281.06	8.839	7.925	8.839	10.30	8.80	15.90
83331	573	999.00	999.00	595	302.76	9.144	7.925	9.144	10.30	8.80	15.90

DATE	OLPTH,M	HITFMP,C	LOTEMP,C	SPCONO	LANGLEYS	VELA,MH/S	VELB,MH/S	VCLC,MH/S	NOTA,L	NOTB,L	NUTC,L
83332	.567	999.00	999.00	565	237.84	9.144	9.534	6.401	6.30	7.70	7.00
83333	.561	999.00	999.00	560	257.36	9.144	9.534	6.401	7.42	7.42	6.50
83334	.561	999.00	999.00	560	197.64	9.144	9.534	6.401	8.30	8.30	6.50
83335	.561	999.00	999.00	565	213.81	8.839	9.534	6.401	6.30	6.60	6.70
83336	.558	999.00	999.00	565	263.46	8.839	9.534	6.401	6.40	6.50	6.80
83337	.558	23.40	22.10	570	270.27	9.144	9.534	6.401	4.60	4.60	4.50
83338	.555	23.70	22.50	570	271.47	9.144	9.534	6.401	4.60	4.60	4.50
83339	.555	23.90	22.80	580	260.66	9.144	9.534	6.401	4.60	4.60	4.50
83340	.552	23.40	22.50	580	999.00	9.144	9.534	6.401	4.60	4.60	4.50
83341	.549	22.60	22.00	599	999.00	9.144	9.534	6.401	6.30	7.50	10.10
83342	.546	20.20	19.30	640	213.81	9.449	9.534	6.401	6.30	7.50	10.10
83343	.546	20.00	19.10	642	181.38	9.449	9.534	6.401	7.80	7.80	10.60
83344	.549	20.50	19.50	650	218.62	9.449	9.534	6.401	7.80	7.80	10.60
83345	.558	21.10	19.80	650	271.47	9.449	9.534	6.401	7.80	7.80	10.60
83346	.561	21.20	20.40	645	284.68	9.449	9.534	6.401	7.80	7.80	10.60
83347	.558	20.00	19.10	645	999.00	9.754	9.534	6.401	6.30	6.30	9.70
83348	.555	20.00	19.00	646	999.00	9.754	9.534	6.401	6.30	6.30	9.70
83349	.561	20.40	19.60	650	999.00	9.754	9.534	6.401	6.30	6.30	9.70
83350	.561	20.00	19.40	605	192.15	9.754	9.534	6.401	6.30	6.30	9.70
83351	.607	21.00	19.90	999	206.61	9.754	9.534	6.401	6.30	6.30	9.70
83352	.610	22.00	20.50	999	221.02	10.058	9.534	6.401	6.30	6.30	9.70
83353	.604	22.10	20.80	999	249.85	10.058	9.534	6.401	6.30	6.30	9.70
83354	.597	22.80	21.50	999	142.16	10.058	9.534	6.401	6.30	6.30	9.70
83355	.597	22.80	21.50	560	193.35	10.058	9.534	6.401	6.30	6.30	9.70
83356	.594	23.00	21.60	560	248.65	10.363	9.534	6.401	6.30	6.30	9.70
83357	.591	23.80	22.10	580	276.27	10.363	9.534	6.401	6.30	6.30	9.70
83358	.591	22.90	22.50	610	172.57	10.973	9.534	6.401	6.30	6.30	9.70
83359	.579	16.80	16.10	615	999.00	10.973	9.534	6.401	6.30	6.30	9.70
83360	.573	12.60	11.40	625	999.00	10.973	9.534	6.401	6.30	6.30	9.70
83361	.567	13.20	11.10	650	999.00	10.973	9.534	6.401	6.30	6.30	9.70
83362	.567	16.80	13.20	660	999.00	10.973	9.534	6.401	6.30	6.30	9.70
83363	.573	19.20	16.70	660	999.00	10.973	9.534	6.401	6.30	6.30	9.70
83364	.603	15.00	14.50	675	37.24	10.973	9.534	6.401	6.30	6.30	9.70
83365	.610	13.00	12.00	680	78.08	10.973	9.534	6.401	6.30	6.30	9.70
84001	.607	13.20	11.00	620	250.75	10.973	9.534	6.401	6.30	6.30	9.70
84002	.604	14.30	12.40	610	263.06	10.973	9.534	6.401	6.30	6.30	9.70
84003	.596	15.50	13.90	610	206.61	10.973	9.534	6.401	6.30	6.30	9.70
84004	.597	15.10	13.80	615	294.29	10.973	9.534	6.401	6.30	6.30	9.70
84005	.594	14.90	13.30	615	209.71	10.973	9.534	6.401	6.30	6.30	9.70
84006	.584	15.20	13.70	625	289.45	10.973	9.534	6.401	6.30	6.30	9.70
84007	.569	16.00	14.00	625	206.31	10.973	9.534	6.401	6.30	6.30	9.70
84008	.565	16.00	14.20	620	293.04	10.973	9.534	6.401	6.30	6.30	9.70
84009	.562	17.20	15.10	620	277.44	10.973	9.534	6.401	6.30	6.30	9.70
84010	.579	18.10	16.80	620	195.60	10.973	9.534	6.401	6.30	6.30	9.70
84011	.576	18.90	17.70	625	225.83	10.973	9.534	6.401	6.30	6.30	9.70
84012	.570	16.30	15.10	625	252.25	10.973	9.534	6.401	6.30	6.30	9.70
84013	.567	17.20	15.20	630	279.88	10.973	9.534	6.401	6.30	6.30	9.70
84014	.564	17.60	16.00	640	206.61	10.973	9.534	6.401	6.30	6.30	9.70
84015	.564	17.20	16.80	640	151.35	10.973	9.534	6.401	6.30	6.30	9.70
84016	.561	18.80	18.60	640	253.45	10.973	9.534	6.401	6.30	6.30	9.70
84017	.564	20.00	18.00	655	999.00	10.973	9.534	6.401	6.30	6.30	9.70
84018	.558	21.10	19.10	660	247.50	10.973	9.534	6.401	6.30	6.30	9.70
84019	.554	21.40	20.10	665	212.61	10.973	9.534	6.401	6.30	6.30	9.70
84020	.555	21.00	19.50	660	293.06	10.973	9.534	6.401	6.30	6.30	9.70
84021	.552	19.50	18.40	660	99.70	10.973	9.534	6.401	6.30	6.30	9.70
84022	.546	22.60	17.80	675	259.46	10.973	9.534	6.401	6.30	6.30	9.70
84023	.546	19.30	17.00	675	289.45	10.973	9.534	6.401	6.30	6.30	9.70
84024	.546	999.00	999.00	660	999.00	10.973	9.534	6.401	6.30	6.30	9.70

DATE	DEPTH,M	HITEMP,C	LOTEMP,C	SPEEDNO	LANGLEYS	VELA,MM/S	VELB,MM/S	VELC,MM/S	NUTA,L	NUTB,L	NUTC,L
84125	546	999.00	999.00	690	245.64	10.973	8.230	4.572	11.50	11.00	12.50
84026	543	999.00	999.00	700	599.06	10.973	8.230	4.572	11.50	10.50	11.50
84127	534	999.00	999.00	705	318.32	10.973	8.230	4.572	10.80	10.70	11.30
84128	536	999.00	999.00	705	241.44	10.973	8.230	4.572	10.80	10.70	11.30
84029	533	999.00	999.00	700	373.57	10.973	7.925	4.572	10.80	10.70	11.30
84030	530	999.00	999.00	700	353.75	10.973	7.925	4.572	10.80	10.70	11.30
84031	527	999.00	999.00	700	599.06	10.973	7.925	4.572	10.80	10.70	11.30
84032	527	999.00	999.00	710	599.06	10.973	8.230	4.572	10.90	10.60	11.10
84033	524	999.00	999.00	710	223.42	10.973	7.925	4.572	11.00	10.50	11.00
84034	521	999.00	999.00	710	317.12	10.973	7.620	4.572	11.30	10.80	10.70
84035	521	999.00	999.00	710	594.86	10.973	7.620	4.572	11.50	11.00	10.50
84036	516	999.00	999.00	710	268.29	10.058	7.925	4.572	11.50	11.00	10.50
84037	515	999.00	999.00	710	237.64	9.754	7.925	4.572	11.50	11.00	10.50
84038	509	999.00	999.00	720	599.06	9.449	8.230	4.572	11.50	10.80	10.60
84039	506	999.00	999.00	720	319.52	9.144	8.230	4.572	11.50	10.70	10.70
84040	503	999.00	999.00	710	260.66	8.839	8.534	4.572	11.50	10.70	10.70
84041	503	999.00	999.00	700	206.31	8.534	8.534	4.572	11.60	11.40	12.70
84042	500	999.00	999.00	700	274.17	8.534	8.534	4.572	11.60	11.40	12.70
84043	497	999.00	999.00	720	263.06	8.839	8.534	4.572	11.60	11.90	13.50
84044	497	999.00	999.00	720	163.16	9.144	8.230	4.572	11.60	11.90	10.80
84045	497	999.00	999.00	740	247.45	9.449	8.230	4.572	9.30	9.40	11.60
84046	494	999.00	999.00	740	271.47	9.754	8.230	4.572	7.80	7.80	11.50
84047	491	999.00	999.00	740	503.91	9.754	7.925	4.572	6.20	6.50	9.20
84048	489	999.00	999.00	740	416.82	10.056	7.925	4.572	6.50	9.00	7.50
84049	485	999.00	999.00	740	327.93	10.363	7.925	4.572	6.50	9.00	7.50
84050	482	999.00	999.00	740	344.74	10.668	7.925	4.572	6.50	9.00	7.50
84051	482	999.00	999.00	740	295.56	10.973	7.620	3.562	8.50	9.00	7.50
84052	488	999.00	999.00	740	123.72	10.973	7.620	3.562	9.00	11.60	10.50
84053	465	999.00	999.00	725	599.06	10.973	7.620	3.562	9.00	11.60	10.50
84054	483	999.00	999.00	730	255.44	10.668	7.620	3.562	9.00	13.40	12.60
84055	482	999.00	999.00	730	268.29	10.363	7.620	3.562	9.00	13.40	12.60
84056	482	999.00	999.00	730	146.55	9.754	7.620	3.562	9.00	13.40	12.60
84057	479	999.00	999.00	725	368.71	9.449	7.315	4.267	9.90	13.40	12.60
84058	480	999.00	999.00	700	392.75	9.144	7.315	4.267	10.80	13.40	12.10
84059	491	999.00	999.00	690	249.85	8.839	7.315	4.267	12.20	13.30	11.70
84060	482	999.00	999.00	690	367.57	8.534	7.010	4.267	12.20	13.30	11.70
84061	475	17.00	13.30	695	460.86	9.144	8.401	4.267	12.30	13.40	11.60
84062	472	17.30	13.40	695	398.80	8.839	8.401	4.267	12.40	13.40	10.70
84063	469	19.30	15.40	698	412.61	8.839	6.556	4.267	12.40	13.40	10.70
84064	463	20.60	17.10	999	343.54	8.534	6.556	4.267	12.40	13.40	10.70
84065	463	22.60	18.80	999	369.19	8.230	5.791	4.572	12.40	13.40	10.70
84066	457	24.40	20.60	570	331.53	7.925	5.486	4.572	9.20	9.00	7.70
84067	451	24.80	22.40	550	281.06	7.620	5.486	4.572	6.70	7.00	5.40
84068	445	22.60	18.10	550	444.44	7.620	5.182	4.572	6.70	7.00	5.40
84069	442	22.00	18.00	560	415.62	7.315	4.877	4.572	9.50	7.90	6.70
84070	439	21.90	15.00	560	414.41	7.010	4.877	4.572	12.10	9.40	7.70
84071	433	22.70	15.00	560	373.57	7.010	4.877	4.572	12.10	6.40	7.70
84072	442	23.30	20.10	550	315.92	7.010	5.182	4.572	12.10	6.40	7.70
84073	469	999.00	999.00	550	599.06	7.010	5.182	4.572	11.40	8.50	9.60
84074	475	24.80	22.20	650	505.10	7.010	5.182	4.572	10.50	8.50	12.00
84075	466	24.40	20.80	670	599.06	7.010	5.486	4.572	10.60	7.90	11.10
84076	460	22.60	20.40	670	255.86	7.010	5.486	4.572	10.60	7.90	11.10
84077	454	25.40	19.20	675	468.41	7.010	5.486	4.572	11.10	7.20	11.10
84078	451	26.00	20.50	675	356.76	7.010	5.486	4.572	11.10	7.20	11.10
84079	442	25.90	23.40	675	394.59	7.010	5.791	4.572	11.10	7.20	11.10
84080	439	24.10	20.90	675	338.74	7.010	5.791	4.572	10.80	7.60	13.70
84081	454	25.70	20.50	540	597.60	7.010	5.791	4.572	10.60	8.00	15.60
84082	442	23.80	19.00	535	437.24	7.010	6.095	4.572	10.60	8.00	15.60

DATE	DEPTH,M	WTEMP,C	LCTEMP,C	SFCND	LANGLEYS	VELA,MM/S	VELB,MM/S	VELC,MM/S	MUTAL	MUTBL	MUTCAL
84083	.482	22.80	19.50	505	20.48	7.010	6.096	4.572	10.59	10.50	13.70
84084	.506	22.00	18.70	465	371.17	7.010	6.096	4.572	11.10	12.60	12.30
84085	.497	26.00	21.40	440	422.62	7.010	6.401	4.572	11.10	12.60	12.30
84086	.494	27.40	23.40	460	438.04	7.010	6.401	4.572	11.10	12.60	12.30
84127	.494	28.40	24.70	460	438.04	7.010	6.401	4.572	9.30	9.60	11.30
84088	.468	27.80	22.40	462	371.17	7.010	6.401	4.572	6.00	7.50	10.50
84089	.485	24.80	22.40	470	364.56	7.010	6.096	4.572	9.60	8.30	10.00
84090	.475	24.30	18.90	460	468.69	6.706	6.096	4.572	11.60	6.80	9.60
84091	.469	23.80	18.30	460	468.69	6.706	6.096	4.572	11.60	6.80	9.60
84092	.463	24.30	19.60	470	385.59	6.401	5.791	4.572	11.60	6.80	9.60
84093	.457	25.00	20.30	475	361.56	6.096	6.096	4.572	11.60	6.80	9.60
84094	.451	25.40	20.80	999	368.37	5.791	6.096	4.572	11.60	6.80	10.10
84095	.443	24.00	22.40	999	98.50	5.791	6.096	4.572	11.60	9.00	13.50
84096	.445	25.70	20.80	999	267.87	5.486	6.401	4.572	11.60	8.90	10.80
84097	.436	25.30	19.50	999	535.74	5.182	6.401	4.572	11.60	8.80	10.80
84098	.430	25.20	19.00	999	530.93	5.182	6.401	4.572	11.00	8.80	11.00
84099	.427	26.60	20.80	999	454.05	5.182	6.096	4.572	11.00	8.80	11.00
84100	.424	26.00	22.00	999	319.52	5.182	6.096	4.572	11.00	8.80	11.00
84101	.419	27.70	22.80	999	319.52	5.182	6.096	4.572	10.80	8.70	11.20
84102	.415	25.70	21.00	999	253.45	4.877	5.791	4.572	10.50	8.70	11.40
84103	.411	24.90	21.80	999	229.43	4.877	5.486	4.572	10.50	8.70	11.40
84104	.406	24.00	22.10	999	197.00	4.877	5.182	4.267	11.00	7.20	11.20
84105	.405	28.00	23.10	999	343.54	4.877	5.182	4.267	11.50	6.10	11.10
84106	.402	27.50	23.70	999	314.71	4.877	5.182	4.267	11.50	6.10	11.10
84107	.394	999.00	999.00	999	440.84	4.572	4.877	4.267	11.50	6.10	11.10
84108	.399	999.00	999.00	540	343.95	4.572	4.877	4.267	10.60	7.30	10.60
84109	.396	999.00	999.00	545	420.42	4.572	4.877	4.267	10.30	6.20	10.50
84110	.393	999.00	999.00	545	599.00	4.572	4.572	4.267	10.30	6.20	10.50
84111	.390	999.00	999.00	550	475.68	4.572	4.572	4.267	9.20	8.60	11.10
84112	.387	999.00	999.00	570	345.55	4.267	4.572	4.267	8.50	8.90	11.50
84113	.384	999.00	999.00	570	414.41	4.267	4.267	4.267	8.50	8.90	11.50
84114	.381	999.00	999.00	520	353.56	4.267	4.267	4.267	8.50	8.90	11.50
84115	.376	999.00	999.00	525	422.82	4.267	4.267	4.267	8.50	8.90	11.50
84116	.387	999.00	999.00	515	599.00	4.267	3.962	3.962	13.20	6.20	11.40
84117	.384	999.00	999.00	525	599.00	3.962	3.962	3.962	11.50	4.30	11.30
84118	.381	999.00	999.00	570	393.19	3.962	3.962	3.962	11.50	4.30	11.30
84119	.375	999.00	999.00	550	493.70	3.962	3.962	3.962	11.50	4.30	11.30
84120	.372	999.00	999.00	560	357.56	3.962	3.962	3.962	11.50	4.30	11.30
84121	.369	999.00	999.00	565	274.77	3.962	3.658	3.962	11.50	4.30	11.50
84122	.363	999.00	999.00	575	323.53	3.658	3.353	3.962	11.50	3.00	10.70
84123	.360	999.00	999.00	620	413.60	3.658	3.353	3.962	10.60	2.00	10.30
84124	.357	999.00	999.00	615	470.87	3.658	3.353	3.962	10.60	2.00	10.30
84125	.351	999.00	999.00	620	260.66	3.658	3.353	3.962	10.60	2.00	10.30
84126	.351	999.00	999.00	625	295.15	3.353	3.048	3.658	10.60	7.50	4.30
84127	.347	999.00	999.00	630	470.87	3.353	3.048	3.658	10.60	7.50	4.30
84128	.341	999.00	999.00	620	450.44	3.353	2.743	3.658	10.60	7.50	4.30
84129	.338	999.00	999.00	645	521.92	3.048	2.743	3.658	10.50	8.30	5.80
84130	.332	999.00	999.00	650	282.28	2.438	2.743	3.658	10.40	8.90	7.90
84131	.332	999.00	999.00	650	470.87	2.438	2.743	3.353	10.60	8.40	11.10
84132	.326	999.00	999.00	660	403.41	2.438	3.048	3.353	10.60	8.60	12.60
84133	.323	999.00	999.00	660	410.82	2.438	3.048	3.658	10.60	6.00	12.30
84134	.317	999.00	999.00	660	413.21	2.438	3.048	3.658	10.80	6.00	12.60
84135	.314	999.00	999.00	660	326.73	2.438	3.048	3.658	10.80	6.00	12.00
84136	.311	999.00	999.00	660	395.19	2.438	3.048	3.962	10.60	8.00	12.00
84137	.305	999.00	999.00	660	993.00	2.743	3.353	3.962	10.60	8.00	12.60
84138	.302	999.00	999.00	660	271.47	2.743	3.353	4.267	10.90	8.50	9.50
84139	.290	999.00	999.00	700	333.35	2.743	2.333	4.267	11.00	8.50	7.70
84140	.293	999.00	999.00	700	461.26	2.743	3.353	4.572	11.00	8.50	7.70

PDDAT1 CONTINUED

DATE	DEPTH,M	HITEMP,C	LOITEMP,C	SPCNO	LANGLEYS	VELA,MM/S	VELB,MM/S	VELC,MM/S	NUTA,°L	NUTB,°L	NUTC,°L
84141	.267	999.00	999.00	695	309.91	2.743	3.353	4.572	11.00	8.90	7.70
84142	.283	999.00	999.00	700	276.28	2.743	3.353	4.572	11.00	8.90	7.70
84143	.283	999.00	999.00	705	599.00	2.743	3.353	4.572	11.00	8.90	7.70
84144	.305	999.00	999.00	650	599.00	2.743	3.353	4.572	10.00	8.90	7.70
84145	.338	999.00	999.00	600	211.41	2.743	3.353	4.572	10.00	8.90	7.70
84146	.369	999.00	999.00	600	129.73	2.743	3.353	4.572	10.00	8.90	7.70
84147	.381	999.00	999.00	575	282.24	2.743	3.353	4.572	10.00	8.90	7.70
84148	.445	999.00	999.00	460	134.53	2.743	3.353	4.572	10.00	8.90	7.70
84149	.479	999.00	999.00	420	134.53	2.743	3.353	4.572	10.00	8.90	7.70
84150	.537	999.00	999.00	400	209.01	2.743	3.353	4.572	10.00	8.90	7.70
84151	.600	999.00	999.00	999	234.23	2.743	3.353	4.572	10.00	8.90	7.70
84152	.695	999.00	999.00	999	313.51	2.743	3.353	4.572	10.00	8.90	7.70
84153	.485	999.00	999.00	420	449.25	2.743	3.353	4.572	10.00	8.90	7.70
84154	.472	999.00	999.00	430	223.72	3.048	3.962	6.096	9.40	8.40	7.40
84155	.463	999.00	999.00	440	475.66	3.048	3.962	6.096	9.40	8.40	7.40
84156	.451	999.00	999.00	440	512.91	3.048	3.962	6.096	9.40	8.40	7.40
84157	.442	999.00	999.00	450	472.07	3.048	3.962	6.096	9.40	8.40	7.40
84158	.433	999.00	999.00	460	559.00	3.048	3.962	6.096	9.40	8.40	7.40
84159	.427	999.00	999.00	480	295.50	3.048	3.962	6.096	9.40	8.40	7.40
84160	.421	999.00	999.00	485	377.16	3.048	3.962	6.096	9.40	8.40	7.40
84161	.415	999.00	999.00	455	342.34	3.353	4.267	7.013	9.40	8.40	7.40
84162	.411	999.00	999.00	510	306.31	3.353	4.267	7.013	9.40	8.40	7.40
84163	.405	999.00	999.00	525	364.97	3.353	4.267	7.013	9.40	8.40	7.40
84164	.399	999.00	999.00	520	599.00	3.353	4.267	7.013	9.40	8.40	7.40
84165	.359	999.00	999.00	545	599.00	3.353	4.267	7.013	9.40	8.40	7.40
84166	.336	999.00	999.00	525	109.31	3.353	4.267	7.013	9.40	8.40	7.40
84167	.414	999.00	999.00	510	111.71	3.353	4.267	7.013	9.40	8.40	7.40
84168	.451	999.00	999.00	495	217.42	3.658	4.572	7.620	9.40	8.40	7.40
84169	.451	999.00	999.00	495	259.45	3.658	4.572	7.620	9.40	8.40	7.40
84170	.445	999.00	999.00	480	257.00	3.658	4.572	7.620	9.40	8.40	7.40
84171	.442	999.00	999.00	480	312.31	3.658	4.572	7.620	9.40	8.40	7.40
84172	.436	999.00	999.00	500	257.06	3.658	4.572	7.620	9.40	8.40	7.40
84173	.436	999.00	999.00	510	265.89	3.658	4.572	7.620	9.40	8.40	7.40
84174	.430	999.00	999.00	530	307.51	3.658	4.572	7.620	9.40	8.40	7.40
84175	.427	999.00	999.00	545	406.01	3.658	4.572	7.620	9.40	8.40	7.40
84176	.436	999.00	999.00	550	495.56	3.962	5.192	9.990	10.00	11.60	8.60
84177	.439	999.00	999.00	550	444.44	4.267	5.466	9.990	10.00	11.60	8.60
84178	.439	999.00	999.00	550	599.00	4.267	5.466	9.990	10.00	11.60	8.60
84179	.439	999.00	999.00	550	599.00	4.267	5.466	9.990	10.00	11.60	8.60
84180	.427	999.00	999.00	575	427.63	999.000	999.000	999.000	10.00	11.60	8.60
84181	.427	999.00	999.00	575	192.16	999.000	999.000	999.000	10.00	11.60	8.60
84182	.427	999.00	999.00	575	276.26	999.000	999.000	999.000	10.00	11.60	8.60
84183	.488	32.20	25.60	520	343.54	4.877	4.877	5.466	10.00	11.60	8.60
84184	.482	30.80	27.50	495	599.00	5.182	5.182	5.466	10.00	11.60	8.60
84185	.479	30.50	26.50	475	255.66	5.182	5.182	5.466	10.00	11.60	8.60
84186	.475	30.50	26.30	480	257.06	5.182	5.182	5.466	10.00	11.60	8.60
84187	.479	30.30	25.70	475	599.00	5.182	5.182	5.466	10.00	11.60	8.60
84188	.479	30.70	26.50	490	264.66	5.182	5.182	5.466	10.00	11.60	8.60
84189	.475	31.00	27.00	490	266.67	5.182	5.182	5.466	10.00	11.60	8.60
84190	.491	32.00	27.40	490	318.32	5.182	5.182	5.466	10.00	11.60	8.60
84191	.497	30.50	28.20	500	181.38	5.182	5.182	5.466	10.00	11.60	8.60
84192	.497	30.70	27.00	505	599.00	5.182	5.182	5.466	10.00	11.60	8.60
84193	.503	30.40	27.00	525	265.69	5.182	5.182	5.466	10.00	11.60	8.60
84194	.512	28.60	26.20	525	263.06	5.182	5.182	5.466	10.00	11.60	8.60
84195	.518	29.30	26.00	525	293.09	5.182	5.182	5.466	10.00	11.60	8.60
84196	.524	29.00	26.40	999	293.09	5.182	5.182	5.466	10.00	11.60	8.60
84197	.530	26.00	26.00	999	354.31	5.182	5.182	5.466	10.00	11.60	8.60
84198	.533	31.50	26.70	999	467.27	5.486	5.486	6.441	10.00	11.60	8.60

PDDAT1 CONTINUED

DATE	DEPTH:M	HITEMP,C	LOTEMP,C	SPEED	LANGLEYS	VELA,MH/S	VELB,MH/S	VELC,MH/S	MUTATL	MUTBTL	MUTCAL
84199	.530	31.80	27.23	565	437.24	5.486	5.406	6.401	10.60	10.60	12.13
84200	.536	32.70	28.50	570	424.02	5.486	5.466	6.401	11.00	10.70	12.20
84201	.536	32.80	29.00	580	418.02	5.486	5.466	6.401	11.00	10.70	12.20
84202	.549	28.60	28.70	590	216.22	5.486	5.486	6.401	11.00	10.70	12.20
84203	.570	26.60	26.50	575	290.69	5.486	5.486	6.401	11.00	10.70	12.20
84204	.582	27.00	25.80	570	216.22	5.486	5.486	6.401	11.00	10.70	12.20
84205	.585	27.30	24.50	570	999.00	5.486	5.486	6.401	10.10	9.80	11.70
84206	.591	999.00	24.50	570	999.00	5.486	5.486	6.401	9.40	9.20	11.40
84207	.585	999.00	999.00	570	338.74	5.486	5.486	6.401	9.40	9.20	11.40
84208	.579	999.00	999.00	550	222.22	5.486	5.486	6.401	9.40	9.20	11.40
84209	.573	999.00	999.00	550	438.44	5.486	5.182	6.706	9.40	9.20	11.40
84210	.567	999.00	999.00	550	452.85	5.486	5.182	6.706	9.40	9.20	11.40
84211	.558	999.00	999.00	550	473.27	5.486	5.182	6.706	9.40	9.20	11.40
84212	.552	999.00	999.00	550	294.25	5.486	5.182	6.706	9.40	9.20	11.40
84213	.549	999.00	999.00	550	599.00	5.486	5.182	6.706	9.40	9.20	11.40
84214	.546	31.30	27.00	570	504.50	5.182	5.182	6.706	10.20	9.00	9.70
84215	.543	31.70	27.00	570	540.54	5.182	5.182	6.706	10.20	9.00	9.70
84216	.536	28.00	27.60	570	360.36	5.182	5.182	6.706	10.20	9.00	9.70
84217	.533	32.00	26.60	565	528.53	5.182	5.182	6.706	10.20	9.00	9.70
84218	.533	32.20	28.20	560	504.50	5.182	5.182	6.706	10.20	9.00	9.70
84219	.558	30.50	27.80	520	324.32	5.182	5.182	6.706	10.20	9.00	9.70
84220	.552	32.20	27.80	500	504.50	5.182	5.182	6.706	10.20	9.00	9.70
84221	.549	33.00	28.50	500	450.46	5.182	5.182	6.706	10.20	9.00	9.70
84222	.552	31.70	27.60	500	599.00	5.182	5.182	6.706	10.20	9.00	9.70
84223	.543	32.60	28.70	500	599.00	5.182	5.182	6.706	10.20	9.00	9.70
84224	.530	32.00	28.00	510	372.37	5.182	5.182	6.706	10.20	9.00	9.70
84225	.539	30.40	27.50	510	336.34	5.182	5.182	6.706	10.20	9.00	9.70
84226	.543	31.20	27.30	520	450.46	5.182	5.182	6.706	10.20	9.00	9.70
84227	.546	32.20	28.20	520	492.49	5.182	5.182	6.706	10.20	9.00	9.70
84228	.527	32.50	28.70	525	462.46	5.182	5.182	6.706	10.20	9.00	9.70
84229	.518	31.10	28.40	525	364.36	5.182	5.182	6.706	10.20	9.00	9.70
84230	.512	30.90	28.00	525	336.34	5.182	5.182	6.706	10.20	9.00	9.70
84231	.513	30.30	28.20	550	216.22	5.182	5.182	6.706	10.20	9.00	9.70
84232	.521	28.20	26.70	550	226.23	5.182	5.182	6.706	10.20	9.00	9.70
84233	.521	30.20	26.70	550	450.46	5.182	5.182	6.706	10.20	9.00	9.70
84234	.576	31.00	26.50	470	324.32	5.182	5.182	6.706	10.20	9.00	9.70
84235	.616	28.00	26.00	420	300.30	5.182	5.182	6.706	10.20	9.00	9.70
84236	.591	28.30	26.50	440	300.30	5.182	5.182	6.706	10.20	9.00	9.70
84237	.565	29.00	26.70	435	342.34	5.182	5.182	6.706	10.20	9.00	9.70
84238	.568	30.30	27.00	435	348.35	5.182	5.182	6.706	10.20	9.00	9.70
84239	.576	30.70	28.20	435	254.35	5.182	5.182	6.706	10.20	9.00	9.70
84240	.564	31.00	27.60	440	420.42	5.182	5.182	6.706	10.20	9.00	9.70
84241	.555	30.20	26.80	440	599.00	5.182	5.182	6.706	10.20	9.00	9.70
84242	.552	30.70	27.00	450	381.46	5.182	5.182	6.706	10.20	9.00	9.70
84243	.550	30.20	27.30	460	288.29	5.182	5.182	6.706	10.20	9.00	9.70
84244	.552	30.60	27.60	470	312.31	5.182	5.182	6.706	10.20	9.00	9.70
84245	.546	31.00	27.60	460	390.39	5.182	5.182	6.706	10.20	9.00	9.70
84246	.555	29.00	27.00	460	212.61	5.182	5.182	6.706	10.20	9.00	9.70
84247	.575	27.00	26.00	480	252.25	5.182	5.182	6.706	10.20	9.00	9.70
84248	.567	28.90	25.50	460	426.43	5.182	5.182	6.706	10.20	9.00	9.70
84249	.555	30.50	28.50	460	444.44	5.182	5.182	6.706	10.20	9.00	9.70
84250	.549	29.50	28.00	460	222.22	5.182	5.182	6.706	10.20	9.00	9.70
84251	.546	29.70	25.80	500	414.41	5.182	5.182	6.706	10.20	9.00	9.70
84252	.534	29.80	25.70	525	430.43	5.182	5.182	6.706	10.20	9.00	9.70
84253	.536	28.80	25.80	550	468.47	5.182	5.182	6.706	10.20	9.00	9.70
84254	.533	30.30	26.60	560	415.62	5.182	5.182	6.706	10.20	9.00	9.70
84255	.527	30.50	26.70	570	446.65	5.182	5.182	6.706	10.20	9.00	9.70
84256	.524	29.00	27.60	580	212.61	5.182	5.182	6.706	10.20	9.00	9.70

CONTINUED

DATE	DEPTH, M	WTEMP, C	LOTEMP, C	SPEED	LANGLEY, S	VELA, MM/S	VELB, MM/S	VELC, MM/S	MUTAL	MUTBL	NUTC, L
84257	521	29.83	26.20	580	306.31	6.401	4.877	6.401	10.90	10.00	10.90
84258	521	30.20	27.20	605	314.71	6.401	4.877	6.401	10.90	10.00	10.90
84259	524	29.50	27.20	620	294.29	6.401	4.877	6.401	10.90	10.00	10.90
84260	524	30.40	26.50	620	414.41	6.401	4.877	6.401	10.90	10.00	10.90
84261	524	29.00	27.50	625	270.27	6.401	4.877	6.401	10.90	10.00	10.90
84262	527	29.62	26.50	640	222.22	6.401	4.877	6.401	10.90	10.00	10.90
84263	530	26.20	25.50	645	103.11	999.000	999.000	999.000	10.40	5.90	10.90
84264	533	25.50	24.00	650	201.80	999.000	999.000	999.000	10.50	6.60	10.40
84265	546	28.70	23.90	650	244.25	999.000	999.000	999.000	10.50	10.50	10.50
84266	564	29.40	24.70	625	402.40	999.000	999.000	999.000	10.50	10.50	10.00
84267	558	29.80	25.20	625	426.43	999.000	999.000	999.000	10.50	10.50	10.00
84268	552	28.80	25.30	625	559.00	999.000	999.000	999.000	10.50	6.60	10.30
84269	549	29.20	25.20	625	559.00	999.000	999.000	999.000	10.50	7.60	10.50
84270	546	27.80	24.60	630	299.00	999.000	999.000	999.000	10.30	6.60	5.60
84271	549	25.00	24.60	640	177.70	999.000	999.000	999.000	10.10	5.60	.80
84272	549	27.60	24.30	650	372.37	999.000	999.000	999.000	10.10	5.60	.80
84273	561	27.20	25.80	650	206.61	999.000	999.000	999.000	10.10	5.60	.80
84274	588	26.00	25.00	999	81.68	999.000	999.000	999.000	10.10	5.60	.80
84275	590.00	999.00	999.00	999	999.00	999.000	999.000	999.000	.00	.00	.00
84276	595.00	999.00	999.00	999	999.00	999.000	999.000	999.000	.00	.00	.00
84277	999.00	999.00	999.00	999	559.00	999.000	999.000	999.000	.00	.00	.00
84278	999.00	999.00	999.00	999	559.00	999.000	999.000	999.000	.00	.00	.00
84279	999.00	999.00	999.00	999	559.00	999.000	999.000	999.000	.00	.00	.00
84280	999.00	999.00	999.00	999	559.00	999.000	999.000	999.000	.00	.00	.00
84281	999.00	999.00	999.00	999	559.00	999.000	999.000	999.000	.00	.00	.00
84282	999.00	999.00	999.00	999	559.00	999.000	999.000	999.000	.00	.00	.00

APPENDIX C: SDDAT2

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CONCERN

CONVERTED, PRIMARY DAILY DATA FILE.

DATE	DEPTH,M	DISAL/L/S	DISR/L/S	DISC/L/S	CONCNA	CONCRB	CONCNC	CUNCPA	CUNCPB	CONCPC)-UG/L
83158	.421	7.70	7.70	7.70	.00	125.51	999.00	999.00	42.72	.00
83159	.430	7.86	7.86	7.86	.00	119.99	999.00	999.00	40.84	.00
83160	.460	9.11	9.11	9.11	.00	123.56	999.00	999.00	35.25	.00
83161	.509	9.91	9.91	9.91	.00	95.48	999.00	999.00	32.43	.00
83162	.512	10.14	10.14	10.14	.00	93.04	999.00	999.00	31.67	.00
83163	.536	10.62	10.62	10.62	.00	86.88	999.00	999.00	30.25	.00
83164	.536	10.62	10.62	10.62	.00	88.88	999.00	999.00	30.25	.00
83165	.518	10.26	10.26	10.26	.00	104.15	999.00	999.00	35.45	.00
83166	.503	9.96	9.96	9.96	.00	116.39	999.00	999.00	39.61	.00
83167	.491	9.73	9.73	9.73	.00	121.57	999.00	999.00	41.30	.00
83168	.482	9.55	9.55	9.55	.00	123.84	999.00	999.00	42.15	.00
83169	.472	9.35	9.35	9.35	.00	126.46	999.00	999.00	43.04	.00
83170	.466	8.52	8.52	8.52	.00	138.74	999.00	999.00	47.22	.00
83171	.485	8.87	8.87	8.87	.00	133.30	999.00	999.00	45.37	.00
83172	.500	9.15	9.15	9.15	.00	123.09	999.00	999.00	41.90	.00
83173	.494	9.04	9.04	9.04	.00	122.07	999.00	999.00	41.55	.00
83174	.491	8.98	8.98	8.98	.00	122.81	999.00	999.00	41.89	.00
83175	.483	8.93	8.93	8.93	.00	123.57	999.00	999.00	42.06	.00
83176	.485	8.13	8.13	8.13	.00	135.64	999.00	999.00	46.17	.00
83177	.485	8.13	8.13	8.13	.00	135.64	999.00	999.00	46.17	.00
83178	.479	8.03	8.03	8.03	.00	137.34	999.00	999.00	46.75	.00
83179	.472	7.91	7.91	7.91	.00	148.00	999.00	999.00	50.37	.00
83180	.469	7.86	7.86	7.86	.00	153.28	999.00	999.00	52.17	.00
83181	.460	7.81	7.81	7.81	.00	167.37	999.00	999.00	56.97	.00
83182	.472	7.91	7.91	7.91	.00	158.05	999.00	999.00	53.60	.00
83183	.483	8.13	8.13	8.13	.00	145.92	999.00	999.00	49.67	.00
83184	.485	8.13	8.13	8.13	.00	146.63	999.00	999.00	49.98	.00
83185	.475	7.96	7.96	7.96	.00	149.92	999.00	999.00	51.03	.00
83186	.463	7.76	7.76	7.76	.00	142.08	999.00	999.00	48.36	.00
83187	.454	7.61	7.61	7.61	.00	138.93	999.00	999.00	47.29	.00
83188	.448	7.51	7.51	7.51	.00	140.79	999.00	999.00	47.62	.00
83189	.460	7.71	7.71	7.71	.00	137.11	999.00	999.00	46.67	.00
83190	.488	8.18	8.18	8.18	.00	129.25	999.00	999.00	43.99	.00
83191	.472	7.91	7.91	7.91	.00	133.63	999.00	999.00	45.48	.00
83192	.463	7.76	7.76	7.76	.00	139.16	999.00	999.00	47.36	.00
83193	.454	7.61	7.61	7.61	.00	144.90	999.00	999.00	49.32	.00
83194	.448	7.51	7.51	7.51	.00	140.79	999.00	999.00	47.62	.00
83195	.442	7.41	7.41	7.41	.00	138.09	999.00	999.00	47.00	.00
83196	.439	7.36	7.36	7.36	.00	139.04	999.00	999.00	47.32	.00
83197	.436	7.31	7.31	7.31	.00	140.00	999.00	999.00	47.65	.00
83198	.433	7.92	7.92	7.92	.00	129.21	999.00	999.00	43.98	.00
83199	.427	7.81	7.81	7.81	.00	122.29	999.00	999.00	41.62	.00
83200	.424	7.75	7.75	7.75	.00	117.29	999.00	999.00	39.92	.00
83201	.427	7.81	7.81	7.81	.00	116.47	999.00	999.00	39.64	.00
83202	.433	7.92	7.92	7.92	.00	117.73	999.00	999.00	40.07	.00
83203	.430	7.92	7.92	7.92	.00	119.16	999.00	999.00	40.26	.00
83204	.427	8.52	8.52	8.52	.00	110.79	999.00	999.00	37.71	.00
83205	.427	8.46	8.46	8.46	.00	111.56	999.00	999.00	37.97	.00
83206	.421	8.34	8.34	8.34	.00	118.61	999.00	999.00	40.37	.00
83207	.415	8.22	8.22	8.22	.00	123.09	999.00	999.00	41.90	.00
83208	.415	8.22	8.22	8.22	.00	123.09	999.00	999.00	41.90	.00
83209	.421	8.34	8.34	8.34	.00	130.86	999.00	999.00	44.55	.00
83210	.421	8.34	8.34	8.34	.00	137.69	999.00	999.00	46.67	.00
83211	.424	8.40	8.40	8.40	.00	136.72	999.00	999.00	46.54	.00
83212	.418	8.28	8.28	8.28	.00	138.68	999.00	999.00	47.20	.00
83213	.421	7.70	7.70	7.70	.00	137.32	999.00	999.00	46.74	.00
83214	.418	7.65	7.65	7.65	.00	130.87	999.00	999.00	44.55	.00
83215	.424	7.75	7.75	7.75	.00	139.62	999.00	999.00	43.92	.00

CONVERTED, PRIMARY DAILY DATA FILE.

DATE	DEPTH, M	DISA, L/S	DISB, L/S	DISC, L/S	CONCNA	CONCNB	CONCNC	CONCPC	CONCPC1-UG/L
83216	4.3	8.03	6.03	8.03	.CC	124.61	599.00	599.00	.00
83217	4.3	8.30	6.30	8.30	.CC	120.50	599.00	599.00	.00
83218	4.63	8.47	8.47	8.47	.CC	118.15	599.00	599.00	.00
83219	4.66	8.52	8.52	8.52	.CC	117.39	599.00	599.00	.00
83220	4.59	12.72	12.72	12.72	.CC	84.01	599.00	599.00	.00
83221	4.59	13.19	13.19	13.19	.CC	83.63	599.00	599.00	.00
83222	5.05	13.11	13.11	13.11	.CC	79.79	599.00	599.00	.00
83223	5.06	13.11	13.11	13.11	.CC	76.32	599.00	599.00	.00
83224	5.19	13.19	13.19	13.19	.CC	75.87	599.00	599.00	.00
83225	5.06	12.34	12.34	12.34	.CC	81.09	599.00	599.00	.00
83226	5.03	12.27	12.27	12.27	.CC	81.57	599.00	599.00	.00
83227	5.04	12.41	12.41	12.41	.CC	82.44	599.00	599.00	.00
83228	5.12	12.49	12.49	12.49	.CC	81.96	599.00	599.00	.00
83229	5.12	12.49	12.49	12.49	.CC	81.96	599.00	599.00	.00
83230	5.21	11.91	11.91	11.91	.CC	80.92	599.00	599.00	.00
83231	5.21	11.91	11.91	11.91	.CC	80.92	599.00	599.00	.00
83232	5.15	11.77	11.77	11.77	.CC	86.92	599.00	599.00	.00
83233	5.09	11.64	11.64	11.64	.CC	87.94	599.00	599.00	.00
83234	5.03	11.50	11.50	11.50	.CC	88.99	599.00	599.00	.00
83235	5.03	10.60	10.60	10.60	.CC	90.51	599.00	599.00	.00
83236	5.03	10.73	10.73	10.73	.CC	95.35	599.00	599.00	.00
83237	5.21	11.12	11.12	11.12	.CC	92.06	599.00	599.00	.00
83238	5.12	10.92	10.92	10.92	.CC	93.68	599.00	599.00	.00
83239	5.06	10.80	10.80	10.80	.CC	94.75	599.00	599.00	.00
83240	4.97	9.85	9.85	9.85	.CC	103.94	599.00	599.00	.00
83241	5.04	10.08	10.08	10.08	.CC	104.48	599.00	599.00	.00
83242	5.15	10.20	10.20	10.20	.CC	105.22	599.00	599.00	.00
83243	5.21	10.32	10.32	10.32	.CC	113.47	599.00	599.00	.00
83244	5.30	10.50	10.50	11.31	.CC	109.38	599.00	599.00	.00
83245	5.49	11.71	11.71	11.71	.CC	96.10	599.00	599.00	.00
83246	5.68	12.54	12.54	12.54	.CC	89.73	599.00	599.00	.00
83247	5.88	12.54	12.54	12.54	.CC	96.63	599.00	599.00	.00
83248	5.95	12.46	12.46	12.46	.CC	91.10	599.00	599.00	.00
83249	5.93	16.94	12.48	12.48	.CC	83.81	599.00	599.00	.00
83250	5.91	15.31	16.21	14.41	.CC	61.02	599.00	599.00	.00
83251	5.95	15.16	16.05	14.27	.CC	61.65	599.00	599.00	.00
83252	5.79	15.68	16.76	14.12	.CC	59.00	599.00	599.00	.00
83253	5.73	15.72	16.59	13.97	.CC	56.62	599.00	599.00	.00
83254	5.64	15.47	17.19	13.75	.CC	57.54	599.00	599.00	.00
83255	5.61	16.24	17.10	13.68	.CC	57.65	599.00	599.00	.00
83256	5.67	16.42	18.15	13.83	.CC	52.63	599.00	599.00	.00
83257	5.82	16.65	18.63	14.19	.CC	50.05	599.00	599.00	.00
83258	5.91	17.11	19.82	14.31	.CC	47.95	599.00	599.00	.00
83259	5.91	17.11	19.82	15.31	.CC	52.79	599.00	599.00	.00
83260	5.82	16.85	19.51	15.08	.CC	57.68	599.00	599.00	.00
83261	5.73	17.47	19.21	14.85	.CC	58.59	599.00	599.00	.00
83262	5.73	17.47	20.06	14.85	.CC	56.05	599.00	599.00	.00
83263	5.70	17.37	19.98	14.77	.CC	56.34	599.00	599.00	.00
83264	5.64	17.19	19.77	15.47	.CC	56.37	599.00	599.00	.00
83265	5.61	17.10	20.52	15.39	.CC	53.30	599.00	599.00	.00
83266	5.73	17.47	20.96	15.72	.CC	53.17	599.00	599.00	.00
83267	5.76	17.56	21.07	15.80	.CC	52.69	599.00	599.00	.00
83268	5.70	17.37	20.85	15.64	.CC	53.45	599.00	599.00	.00
83269	5.61	17.95	20.52	15.29	.CC	53.30	599.00	599.00	.00
83270	5.55	17.76	21.15	16.07	.CC	42.48	599.00	599.00	.00
83271	5.52	17.67	21.03	15.98	.CC	35.66	599.00	599.00	.00
83272	5.55	17.76	21.15	16.07	.CC	35.49	599.00	599.00	.00
83273	5.52	17.67	21.03	15.98	.CC	35.68	599.00	599.00	.00

DATE	DEPTH,M	DISA,L/S	DISB,L/S	DISC,L/S	(CCACNA	CUNCNB	CUNCNC	CUNCPC	CUNCPC1-UG/L
83274	1.49	17.57	20.92	16.73	.00	35.86	44.17	13.66	.00
83275	1.46	17.47	20.80	17.47	.00	36.07	42.29	13.73	.00
83276	1.55	17.76	21.15	17.76	.00	35.49	41.61	13.11	.00
83277	1.52	17.67	21.03	17.67	.00	73.53	66.29	15.62	.00
83278	1.52	17.67	21.03	17.67	.00	100.56	83.67	22.12	.00
83279	1.49	18.41	20.08	18.41	.00	103.32	80.30	21.23	.00
83280	1.46	18.31	19.97	18.31	.00	61.49	80.74	21.35	.00
83281	1.43	18.21	19.86	18.21	.00	35.50	81.18	21.47	.00
83282	1.39	18.89	19.71	18.89	.00	35.76	80.20	23.48	.00
83283	1.43	19.03	19.03	19.03	.00	37.04	84.96	20.13	.00
83284	1.46	19.14	19.14	19.14	.00	36.84	84.66	20.02	.00
83285	1.43	19.03	19.03	19.03	.00	51.97	80.78	19.52	.00
83286	1.43	19.03	19.03	19.03	.00	62.73	47.79	19.11	.00
83287	1.43	19.03	19.03	19.03	.00	55.56	53.17	19.72	.00
83288	1.43	19.03	19.03	19.03	.00	50.18	56.75	20.33	.00
83289	1.43	19.03	19.03	19.03	.00	50.18	56.75	19.49	.00
83290	1.73	20.96	20.96	20.08	.00	45.57	53.78	15.47	.00
83291	1.76	21.07	21.07	20.19	.00	45.33	54.07	18.74	.00
83292	1.95	21.40	21.40	20.50	.00	45.17	53.23	13.63	.00
83293	1.95	21.40	21.40	20.50	.00	45.17	53.23	13.63	.00
83294	1.52	20.19	20.19	16.35	.00	47.87	56.42	19.74	.00
83295	1.52	20.19	20.19	16.51	.00	47.87	56.42	19.74	.00
83296	1.52	20.19	20.19	18.51	.00	47.87	56.42	19.74	.00
83297	1.74	22.06	21.18	15.41	.00	45.64	56.22	19.87	.00
83298	1.82	22.17	21.29	19.51	.00	42.73	50.69	16.41	.00
83299	1.82	22.17	21.29	19.51	.00	41.13	46.01	15.18	.00
83300	1.79	22.06	22.06	15.41	.00	39.69	46.05	13.51	.00
83301	1.73	21.83	21.83	19.21	.00	43.23	47.34	17.37	.00
83302	1.67	21.60	21.60	15.01	.00	45.79	58.61	13.81	.00
83303	1.67	22.47	21.60	19.01	.00	45.79	58.61	18.09	.00
83304	1.64	22.35	21.49	18.91	.00	46.03	58.92	13.18	.00
83305	1.70	22.59	21.72	19.11	.00	46.07	94.59	17.52	.00
83306	1.70	22.59	21.72	19.11	.00	46.07	123.77	17.65	.00
83307	1.67	22.47	21.72	15.11	.00	41.88	59.24	17.65	.00
83308	1.64	22.47	21.60	15.01	.00	36.32	54.42	12.36	.00
83309	1.64	23.21	21.49	18.91	.00	36.51	54.71	12.43	.00
83310	1.64	23.21	22.35	18.91	.00	35.10	54.71	11.93	.00
83311	1.67	23.33	22.47	15.01	.00	34.92	54.42	11.89	.00
83312	1.62	23.95	23.06	15.51	.00	34.02	53.02	11.58	.00
83313	1.82	23.95	23.06	15.51	.00	34.02	53.02	11.58	.00
83314	1.82	23.95	23.06	19.51	.00	33.53	48.94	11.41	.00
83315	1.82	23.95	23.06	15.51	.00	33.53	48.94	11.41	.00
83316	1.79	24.71	22.94	19.41	.00	33.53	48.94	11.41	.00
83317	1.79	24.71	22.94	19.41	.00	33.20	46.85	11.30	.00
83318	1.76	24.58	22.82	15.31	.00	33.38	47.10	11.36	.00
83319	1.76	24.58	22.82	15.31	.00	33.38	47.10	11.36	.00
83320	1.79	24.71	23.83	16.41	.00	31.97	46.85	10.88	.00
83321	1.79	24.71	23.83	16.41	.00	31.97	46.85	10.88	.00
83322	1.76	24.58	23.70	15.31	.00	32.14	46.85	10.54	.00
83323	1.73	25.32	23.58	15.21	.00	32.31	47.34	10.34	.00
83324	1.79	25.59	23.83	19.41	.00	31.97	46.85	10.28	.00
83325	1.79	25.59	23.83	19.41	.00	31.97	46.85	10.28	.00
83326	1.79	25.59	23.83	19.41	.00	36.84	43.34	9.83	.00
83327	1.74	25.59	23.83	19.41	.00	36.75	41.03	9.53	.00
83328	1.73	25.32	23.58	15.21	.00	37.13	41.43	9.63	.00
83329	1.73	25.32	24.45	18.34	.00	35.81	43.40	9.63	.00
83330	1.70	26.06	24.32	18.24	.00	36.00	43.63	9.36	.00
83331	1.70	26.06	24.32	18.24	.00	36.00	43.63	9.36	.00

DATE	DPTH:M	DISA:L/S	DISC:L/S	(CONCNA	CONCNB	CUNCNC	CUNCPC	CONCPB	CUNCPC)-UG/L
83332	.567	25.92	24.19	.00	36.19	43.56	9.41	CONCPB	CUNCPC)-UG/L
83333	.561	25.65	23.94	.00	39.42	43.66	11.17	.00	.00
83334	.561	25.65	23.94	.00	41.80	42.43	12.52	13.42	.00
83335	.561	24.79	23.94	.00	41.80	42.43	12.52	14.23	.00
83336	.558	24.66	23.81	.00	32.47	51.57	10.04	11.05	.00
83337	.558	25.51	23.81	.00	32.47	60.45	6.98	7.56	.00
83338	.555	25.37	23.68	.00	23.53	60.81	7.62	8.61	.00
83339	.555	25.37	23.68	.00	23.53	60.81	7.62	8.61	.00
83340	.552	25.24	24.40	.00	22.84	60.81	7.02	7.77	.00
83341	.549	25.10	24.26	.00	22.84	61.47	7.05	7.77	.00
83342	.546	25.80	24.13	.00	35.34	61.47	7.05	7.77	.00
83343	.546	25.60	24.13	.00	44.29	68.97	11.70	12.63	.00
83344	.549	25.94	24.26	.00	44.05	64.71	11.70	12.63	.00
83345	.558	26.36	24.66	.00	43.34	67.49	11.64	14.59	.00
83346	.561	26.50	24.79	.00	43.11	67.13	11.45	14.59	.00
83347	.558	27.21	24.66	.00	43.80	61.76	11.39	14.67	.00
83348	.555	27.07	24.53	.00	44.64	57.61	12.51	14.67	.00
83349	.561	27.36	25.65	.00	44.64	57.61	13.55	14.59	.00
83350	.561	27.36	25.65	.00	45.66	39.90	13.44	15.24	.00
83351	.607	26.60	27.75	.00	45.07	25.75	.00	15.34	.00
83352	.610	30.68	27.89	.00	44.65	25.63	.00	15.26	.00
83353	.604	30.38	27.61	.00	45.29	25.66	.00	15.42	.00
83354	.600	30.17	27.43	.00	44.76	31.38	10.00	15.24	.00
83355	.597	30.02	27.29	.00	44.57	35.70	17.14	15.17	.00
83356	.594	30.78	27.16	.00	44.80	35.88	15.72	15.25	.00
83357	.591	30.62	27.02	.00	48.39	38.50	17.44	16.47	.00
83358	.565	32.10	26.75	.00	51.44	38.50	17.00	17.51	.00
83359	.579	31.77	25.59	.00	53.76	41.37	17.16	18.30	.00
83360	.573	31.44	25.32	.00	54.33	41.50	17.36	16.49	.00
83361	.567	31.11	25.06	.00	44.92	49.46	12.69	15.29	.00
83362	.567	31.11	25.06	.00	33.12	58.17	6.97	11.27	.00
83363	.573	31.44	25.32	.00	32.78	60.77	6.89	11.27	.00
83364	.590	32.92	27.43	.00	33.99	64.28	9.70	11.57	.00
83365	.610	33.47	27.89	.00	35.68	101.73	11.79	12.21	.00
84001	.607	33.30	27.75	.00	36.05	108.44	11.65	12.27	.00
84002	.604	33.14	27.61	.00	36.23	108.98	11.94	12.53	.00
84003	.600	32.92	27.43	.00	34.82	96.15	11.70	11.85	.00
84004	.597	32.75	28.21	.00	33.06	71.55	11.70	11.25	.00
84005	.594	32.59	28.06	.00	33.22	77.03	11.70	11.31	.00
84006	.585	32.26	27.76	.00	35.20	78.67	11.64	11.98	.00
84007	.585	32.10	27.64	.00	36.20	79.07	11.55	12.32	.00
84008	.585	32.10	27.64	.00	36.20	79.07	11.55	12.32	.00
84009	.582	31.93	26.61	.00	37.60	79.48	11.63	12.60	.00
84010	.579	31.77	26.47	.00	39.05	83.33	11.45	13.30	.00
84011	.576	31.60	26.33	.00	40.15	66.55	11.39	13.67	.00
84012	.570	31.27	26.06	.00	40.58	87.26	11.51	13.97	.00
84013	.567	31.11	25.92	.00	39.91	87.72	15.05	13.59	.00
84014	.564	30.94	24.93	.00	41.05	88.19	17.51	13.97	.00
84015	.564	30.94	24.93	.00	41.05	88.19	17.51	13.97	.00
84016	.561	30.79	24.79	.00	41.27	88.66	17.60	14.65	.00
84017	.564	30.94	24.93	.00	31.47	69.85	13.63	14.65	.00
84018	.558	30.61	24.66	.00	24.44	91.61	11.00	8.32	.00
84019	.558	30.61	23.81	.00	25.31	91.91	11.00	8.32	.00
84020	.555	30.45	23.66	.00	32.17	91.41	12.33	16.95	.00
84021	.552	30.24	23.55	.00	37.65	91.91	13.42	12.82	.00
84022	.546	30.12	23.43	.00	37.86	92.41	13.49	12.69	.00
84023	.546	29.95	23.30	.00	38.07	92.62	13.06	12.96	.00
84024	.545	29.96	22.47	.00	48.58	102.54	16.34	16.54	.00

DATE	DEPTH, M	DISA, L/S	Q15BL, L/S	DISC, L/S	CONCMA	CONCMB	CONCNC	CNCPA	CONCDB	CNCPBC)-06/07
84025	146	29.96	22.47	12.48	.00	55.67	109.31	14.06	18.99	.00
84026	143	29.79	22.34	12.41	.00	54.96	106.25	14.42	18.71	.00
84027	139	29.57	22.16	12.32	.00	54.65	104.27	14.13	18.67	.00
84028	136	29.41	22.06	12.25	.00	55.16	104.56	14.21	18.77	.00
84029	133	29.24	21.12	12.18	.00	57.60	103.45	14.29	19.61	.00
84030	130	29.08	21.00	12.12	.00	57.93	106.04	14.37	19.72	.00
84031	127	28.91	20.88	12.05	.00	53.26	106.65	14.46	19.63	.00
84032	127	28.91	21.69	12.05	.00	55.58	104.76	14.54	19.52	.00
84033	124	28.75	21.76	11.98	.00	57.50	104.41	14.61	19.57	.00
84034	121	28.58	19.85	11.91	.00	61.86	102.15	15.33	21.06	.00
84035	121	27.79	19.85	11.91	.00	63.01	100.24	16.01	21.43	.00
84036	118	26.05	20.53	11.64	.00	60.93	106.62	17.03	20.74	.00
84037	115	25.12	20.41	11.77	.00	61.39	101.41	17.72	20.46	.00
84038	109	24.05	20.95	12.41	.00	56.83	97.10	18.51	19.45	.00
84039	106	23.13	20.82	12.34	.00	58.43	98.60	19.24	19.69	.00
84040	103	22.23	21.46	12.27	.00	56.88	99.19	20.02	19.29	.00
84041	103	21.46	21.46	12.27	.00	60.39	99.19	20.42	20.56	.00
84042	100	21.34	21.34	12.19	.00	63.42	100.71	21.04	21.59	.00
84043	997	21.96	20.21	12.12	.00	63.70	101.32	21.44	21.72	.00
84044	997	22.72	20.45	11.36	.00	66.16	105.08	19.76	22.52	.00
84045	997	23.43	20.45	11.36	.00	52.26	118.08	15.33	17.79	.00
84046	994	24.09	20.33	11.29	.00	43.63	115.79	12.53	14.85	.00
84047	991	23.95	19.46	11.22	.00	46.87	93.19	13.25	16.91	.00
84048	988	24.54	19.34	10.41	.00	52.92	81.90	13.40	18.61	.00
84049	985	25.13	19.22	10.35	.00	53.25	82.41	13.09	16.12	.00
84050	982	25.71	19.10	10.28	.00	53.58	82.92	12.79	16.24	.00
84051	982	26.44	18.36	9.55	.00	55.72	95.31	12.44	18.47	.00
84052	989	26.77	18.59	9.67	.00	55.04	86.21	12.72	16.73	.00
84053	985	26.81	19.48	9.61	.00	71.38	124.26	13.09	24.29	.00
84054	985	25.87	18.48	9.61	.00	82.45	151.48	13.46	28.06	.00
84055	982	24.97	18.36	9.55	.00	82.96	152.42	13.93	28.24	.00
84056	982	23.51	18.36	9.55	.00	82.96	152.42	14.62	26.24	.00
84057	979	22.63	17.52	10.22	.00	86.97	142.41	15.59	29.69	.00
84058	988	22.31	17.85	10.41	.00	85.36	132.14	19.73	29.05	.00
84059	991	21.70	17.96	10.48	.00	84.21	126.99	21.75	28.66	.00
84060	982	20.57	16.89	10.28	.00	89.51	129.56	22.56	30.47	.00
84061	975	21.72	15.20	10.13	.00	100.22	123.41	21.92	34.11	.0

DATE	DEPTH,M	DISA,L/S	DISB,L/S	DISC,L/S	(CUNCNA	CUNCNB	CUNCNC	CUNCDA	CUNCDB	CUNCPC)-UG/L
84083	482	16.89	16.69	11.62	.CC	31.26	141.37	44.57	37.65	.00
84084	580	17.53	15.24	11.43	.CC	94.00	122.35	24.51	32.00	.00
84085	497	17.42	15.91	11.36	.00	90.07	123.39	24.65	30.66	.00
84086	494	17.31	15.81	11.29	.00	90.61	123.84	24.81	30.84	.CC
84087	491	17.21	15.71	11.22	.CC	69.46	134.47	20.91	23.64	.CC
84088	488	17.10	15.62	11.16	.00	56.60	167.82	13.49	16.58	.CC
84089	485	17.00	14.78	11.69	.CC	63.84	102.55	22.31	16.53	.00
84090	475	15.93	14.48	10.86	.00	69.11	100.52	26.73	21.73	.00
84091	469	15.73	13.58	10.72	.CC	73.68	101.81	27.07	23.52	.00
84092	463	14.82	13.41	10.56	.CC	74.63	103.13	28.73	25.08	.00
84093	457	13.93	13.93	10.45	.CC	71.63	104.46	30.56	25.41	.00
84094	451	13.06	13.75	10.34	.CC	73.61	111.39	32.60	24.45	.00
84095	448	12.97	13.66	10.24	.00	74.94	116.57	32.82	25.06	.00
84096	445	12.24	14.24	10.17	.00	71.05	120.71	34.58	25.51	.00
84097	436	11.30	13.95	9.97	.CC	71.70	125.46	37.68	24.18	.00
84098	430	11.14	13.76	9.83	.CC	72.70	127.24	35.21	24.41	.00
84099	427	11.06	13.01	9.76	.CC	76.88	128.13	35.48	24.75	.00
84100	424	10.99	12.92	9.69	.00	77.42	129.04	30.75	26.17	.00
84101	418	10.83	12.74	9.56	.CC	77.64	133.27	37.58	26.35	.00
84102	415	10.12	12.02	9.49	.00	82.32	136.63	39.39	26.43	.00
84103	411	10.02	11.27	9.40	.00	87.74	137.96	39.77	26.02	.00
84104	408	9.95	10.57	8.70	.CC	77.44	146.29	42.78	25.87	.00
84105	405	9.88	10.49	8.64	.00	66.09	146.06	43.06	26.36	.00
84106	402	9.80	13.42	8.58	.CC	68.59	147.15	45.40	22.30	.00
84107	399	9.12	9.73	8.51	.CC	71.26	148.26	48.79	22.66	.00
84108	399	9.12	9.73	8.51	.00	85.31	144.25	45.52	24.26	.00
84109	396	9.05	9.66	8.45	.00	96.55	141.31	44.43	25.04	.00
84110	393	8.98	8.98	8.32	.CC	193.78	142.39	44.37	32.86	.00
84111	390	8.92	8.92	8.32	.00	109.68	151.66	29.94	33.32	.00
84112	387	8.26	8.85	8.26	.CC	114.38	158.36	39.04	37.33	.00
84113	384	8.19	8.19	8.19	.00	123.52	159.69	43.15	36.93	.00
84114	381	8.13	8.13	8.13	.00	124.49	160.86	40.47	42.04	.00
84115	378	8.06	8.06	7.49	.CC	125.48	174.62	43.79	42.37	.00
84116	377	8.26	7.67	7.67	.00	91.95	169.57	47.84	42.71	.00
84117	374	7.61	7.61	7.61	.CC	64.27	168.50	47.84	34.55	.00
84118	371	7.55	7.55	7.55	.00	64.76	170.23	53.97	21.85	.00
84119	373	7.43	6.86	7.43	.CC	71.28	172.95	54.91	22.05	.00
84120	372	7.37	6.80	7.37	.00	71.86	174.35	61.39	24.26	.00
84121	364	7.31	6.75	7.31	.00	72.44	175.76	60.66	24.46	.00
84122	363	6.64	6.09	7.19	.CC	56.05	169.18	60.66	24.66	.00
84123	360	6.53	6.04	7.13	.00	37.68	164.21	64.12	19.06	.00
84124	357	6.53	5.99	7.07	.CC	37.99	165.59	62.83	12.82	.00
84125	351	6.42	5.35	6.95	.CC	110.53	70.31	63.99	12.93	.00
84126	355	5.88	5.35	6.42	.CC	159.42	.00	69.71	37.62	.00
84127	347	5.82	5.29	6.35	.00	161.25	.00	70.52	34.26	.00
84128	341	5.72	4.68	6.24	.CC	182.34	.00	71.76	54.65	.00
84129	339	5.15	4.64	6.16	.CC	203.56	106.67	78.69	62.06	.00
84130	332	4.05	4.55	6.07	.00	222.24	185.37	99.65	69.29	.00
84131	332	3.54	4.55	5.57	.CC	255.75	226.71	115.80	75.64	.00
84132	326	3.97	4.97	5.47	.CC	183.08	249.64	105.18	71.39	.00
84133	323	3.94	4.92	5.91	.CC	184.76	230.95	106.15	62.32	.00
84134	317	3.86	4.83	5.80	.00	198.28	235.33	108.46	62.89	.00
84135	314	3.83	4.79	5.74	.CC	190.08	237.57	109.19	64.09	.00
84136	311	3.79	4.74	6.16	.CC	191.91	221.46	110.23	64.70	.00
84137	305	4.18	5.11	6.04	.00	177.89	225.82	99.52	65.32	.00
84138	302	4.04	5.06	6.44	.CC	190.66	167.64	101.84	60.55	.00
84139	298	4.06	4.96	6.32	.00	203.92	136.65	104.80	64.97	.00
84140	293	4.02	4.91	6.70	.00	206.01	136.71	105.94	69.41	.00
									70.12	.00

DATE	DEPTH,M	DISA,L/S	OISB,L/S	OISC,L/S	(CONCNA	CJNCNB	CJNCNC	CJNCRA	CJNCPR	CONCPCI-U6/L
84141	.207	3.94	4.82	6.56	.CC	215.31	133.44	106.15	71.58	.CC
84142	.205	3.88	4.74	6.47	.CC	215.29	135.35	109.68	72.65	.CC
84143	.280	3.84	5.12	6.83	.CC	197.60	128.22	110.85	67.26	.CC
84144	.305	4.18	5.58	7.44	.CC	179.36	148.29	95.02	61.25	.CC
84145	.238	4.64	6.18	6.76	.CC	161.65	145.41	89.33	55.09	.CC
84146	.364	5.05	6.75	9.56	.CC	145.25	133.19	81.2	50.46	.CC
84147	.301	5.23	6.97	5.87	.CC	143.58	129.00	79.23	46.87	.CC
84148	.445	6.19	8.14	12.21	.CC	122.93	104.53	67.03	41.64	.CC
84149	.479	8.76	8.76	13.14	.CC	114.21	96.92	63.03	38.87	.CC
84150	.637	9.74	11.65	17.47	.CC	88.81	69.63	43.35	30.23	.CC
84151	999.000	999.00	999.00	999.00	.CC	995.00	959.00	995.00	995.00	.CC
84152	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.CC
84153	.485	6.65	8.87	14.78	.CC	115.02	79.22	54.69	40.37	.CC
84154	.472	7.19	9.35	14.39	.CC	113.09	81.40	50.57	38.49	.CC
84155	.463	7.06	9.17	14.11	.CC	115.29	82.99	51.56	39.24	.CC
84156	.451	6.87	9.93	14.43	.CC	118.35	81.13	52.93	40.28	.CC
84157	.442	6.74	9.76	14.15	.CC	120.76	82.79	54.00	41.10	.CC
84158	.433	6.60	8.58	13.86	.CC	114.00	75.48	55.13	38.80	.CC
84159	.427	6.51	8.46	14.32	.CC	108.88	66.71	55.90	37.06	.CC
84160	.421	6.42	8.34	14.12	.CC	110.43	67.66	56.70	37.59	.CC
84161	.415	6.06	8.85	13.91	.CC	104.02	68.84	52.29	35.40	.CC
84162	.411	6.89	8.77	14.41	.CC	105.03	66.30	52.80	35.75	.CC
84163	.405	6.79	8.64	14.20	.CC	106.59	67.28	53.53	36.28	.CC
84164	.599	6.69	8.51	13.98	.CC	112.20	81.30	54.38	38.19	.CC
84165	.399	6.69	8.51	14.59	.CC	114.87	87.26	54.38	39.10	.CC
84166	.436	7.31	9.30	15.95	.CC	105.12	79.86	49.77	35.78	.CC
84167	.454	7.61	9.69	16.61	.CC	100.95	76.69	47.79	34.36	.CC
84168	.451	8.25	10.31	17.18	.CC	94.64	74.11	44.10	32.28	.CC
84169	.441	8.25	10.31	17.18	.CC	94.64	74.11	44.10	32.28	.CC
84170	.445	8.14	10.17	16.95	.CC	96.12	75.11	44.73	32.72	.CC
84171	.442	8.09	10.10	16.84	.CC	114.78	84.14	49.89	35.07	.CC
84172	.436	7.97	9.97	15.95	.CC	128.91	59.18	13.41	43.86	.CC
84173	.436	7.97	10.63	15.95	.CC	120.85	59.18	14.41	41.13	.CC
84174	.430	7.86	10.49	15.07	.CC	124.70	64.12	30.02	42.44	.CC
84175	.427	7.21	10.41	995.00	.CC	126.67	999.00	37.86	43.11	.CC
84176	.436	8.64	11.30	999.00	.CC	116.75	999.00	34.05	39.74	.CC
84177	.439	9.37	12.04	999.00	.CC	109.53	999.00	31.49	37.28	.CC
84178	.439	9.37	12.04	999.00	.CC	109.53	999.00	37.19	37.28	.CC
84179	999.000	999.00	999.00	999.00	.CC	995.00	999.00	999.00	999.00	.CC
84180	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.CC
84181	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.CC
84182	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.CC
84183	.488	11.90	11.90	13.39	.CC	110.83	84.09	32.52	37.72	.CC
84184	.482	12.49	12.49	13.22	.CC	105.61	85.14	30.99	35.95	.CC
84185	.479	12.41	12.41	13.14	.CC	106.27	85.67	31.18	36.17	.CC
84186	.475	12.31	12.31	12.31	.CC	107.17	91.46	31.44	36.49	.CC
84187	.479	12.41	12.41	12.41	.CC	103.52	67.95	49.69	35.24	.CC
84188	.479	12.41	12.41	12.41	.CC	100.77	66.12	26.82	34.30	.CC
84189	.475	12.31	12.31	12.31	.CC	101.62	66.84	27.04	34.59	.CC
84190	.471	12.72	12.72	12.72	.CC	98.31	64.01	26.16	33.46	.CC
84191	.497	12.88	12.68	12.68	.CC	97.12	63.00	25.55	33.06	.CC
84192	.497	12.88	12.68	12.68	.CC	76.82	68.87	25.25	26.15	.CC
84193	.513	13.03	13.03	13.60	.CC	61.07	51.21	29.69	20.79	.CC
84194	.512	13.27	13.27	14.62	.CC	60.00	51.34	29.17	20.42	.CC
84195	.516	13.42	13.42	15.79	.CC	76.24	70.57	23.83	25.55	.CC
84196	.524	13.58	13.58	15.97	.CC	87.93	85.43	28.53	29.93	.CC
84197	.530	13.73	13.73	16.15	.CC	86.54	84.46	28.18	29.59	.CC
84198	.533	14.62	14.62	17.06	.CC	81.66	79.58	25.47	27.79	.CC

DATE	DEPTH,M	DISA,L/S	DISB,L/S	DISC,L/S	CUNCNRA	CUNCNB	CUNCNC	CUNCNRA	CUNCNPB	CUNCNFC)-UG/L
84199	.36	14.70	14.70	17.15	.CC	81.97	80.20	27.30	.CC	.CC
84200	.36	14.70	14.70	17.15	.CC	82.75	80.86	28.95	.CC	.CC
84201	.36	14.70	14.70	17.15	.CC	82.75	80.86	28.95	.CC	.CC
84202	.56	15.06	15.06	17.57	.CC	80.79	78.95	26.27	.CC	.CC
84203	.573	15.64	15.64	18.24	.CC	77.81	76.04	27.23	.CC	.CC
84204	.582	15.96	15.96	18.63	.CC	76.21	74.47	26.67	.CC	.CC
84205	.585	16.05	16.05	18.72	.CC	69.44	71.05	24.36	.CC	.CC
84206	.591	16.21	16.21	18.91	.CC	64.53	66.53	22.44	.CC	.CC
84207	.595	16.05	16.05	18.72	.CC	65.19	69.23	22.67	.CC	.CC
84208	.579	15.88	15.88	18.53	.CC	65.86	69.95	22.51	.CC	.CC
84209	.573	15.72	15.72	18.45	.CC	70.46	67.46	23.15	.CC	.CC
84210	.567	15.55	15.55	18.01	.CC	71.20	66.16	23.39	.CC	.CC
84211	.558	15.31	15.31	18.71	.CC	72.35	69.24	23.77	.CC	.CC
84212	.552	15.14	15.14	18.51	.CC	73.14	70.03	24.03	.CC	.CC
84213	.569	15.06	15.06	18.41	.CC	72.74	59.91	23.18	.CC	.CC
84214	.566	14.22	14.22	18.31	.CC	72.33	51.55	27.90	.CC	.CC
84215	.543	14.07	14.07	18.21	.CC	72.73	51.83	29.06	.CC	.CC
84216	.536	13.89	13.89	17.97	.CC	73.66	52.51	28.42	.CC	.CC
84217	.536	13.89	13.89	17.97	.CC	73.66	52.51	28.42	.CC	.CC
84218	.533	13.81	13.81	17.67	.CC	74.10	52.61	28.13	.CC	.CC
84219	.558	14.46	14.46	18.71	.CC	70.78	50.44	27.30	.CC	.CC
84220	.552	14.30	14.30	18.51	.CC	71.55	50.99	27.63	.CC	.CC
84221	.549	14.22	14.22	18.41	.CC	71.94	51.27	27.75	.CC	.CC
84222	.552	14.30	14.30	18.51	.CC	71.55	50.99	27.63	.CC	.CC
84223	.543	14.07	14.07	18.21	.CC	57.38	56.83	27.23	.CC	.CC
84224	.536	13.89	13.89	17.97	.CC	46.67	61.37	27.03	.CC	.CC
84225	.539	13.97	13.97	18.07	.CC	46.41	61.63	26.88	.CC	.CC
84226	.543	14.07	14.07	18.21	.CC	46.06	60.58	26.68	.CC	.CC
84227	.533	13.00	13.00	18.68	.CC	49.86	59.74	29.39	.CC	.CC
84228	.527	12.85	12.85	18.47	.CC	50.43	55.71	29.21	.CC	.CC
84229	.518	12.63	12.63	18.16	.CC	51.31	60.75	29.72	.CC	.CC
84230	.512	12.49	12.49	17.45	.CC	74.66	65.26	30.04	.CC	.CC
84231	.515	12.56	12.56	18.05	.CC	90.54	68.13	30.82	.CC	.CC
84232	.521	12.70	12.70	18.26	.CC	89.50	67.24	30.46	.CC	.CC
84233	.521	12.70	12.70	18.26	.CC	89.50	67.24	30.46	.CC	.CC
84234	.516	14.05	14.05	20.19	.CC	79.33	65.53	27.55	.CC	.CC
84235	.616	15.02	15.02	21.59	.CC	73.42	63.72	25.78	.CC	.CC
84236	.591	14.41	14.41	20.71	.CC	68.64	43.36	26.32	.CC	.CC
84237	.585	14.27	14.27	20.50	.CC	62.17	22.18	26.32	.CC	.CC
84238	.586	15.24	14.34	20.61	.CC	61.85	22.67	24.64	.CC	.CC
84239	.576	15.80	14.05	14.31	.CC	63.14	23.55	23.78	.CC	.CC
84240	.564	16.33	13.75	18.91	.CC	64.46	24.05	22.99	.CC	.CC
84241	.553	16.92	13.53	18.61	.CC	66.49	27.05	22.42	.CC	.CC
84242	.552	17.67	13.46	18.51	.CC	55.75	67.57	21.47	.CC	.CC
84243	.558	18.71	13.61	17.66	.CC	55.15	70.05	23.27	.CC	.CC
84244	.552	19.35	13.46	17.67	.CC	55.75	70.79	19.00	.CC	.CC
84245	.546	19.97	13.31	17.47	.CC	56.36	71.57	18.99	.CC	.CC
84246	.555	21.15	13.53	17.76	.CC	53.45	70.41	17.54	.CC	.CC
84247	.570	22.59	13.90	17.37	.CC	53.99	71.69	16.79	.CC	.CC
84248	.567	23.33	13.83	17.28	.CC	54.27	72.37	16.25	.CC	.CC
84249	.555	23.68	13.53	16.92	.CC	68.69	66.54	16.18	.CC	.CC
84250	.549	22.59	13.39	16.73	.CC	79.83	61.83	17.13	.CC	.CC
84251	.566	21.64	13.31	16.64	.CC	80.27	62.17	17.59	.CC	.CC
84252	.539	20.54	13.14	16.43	.CC	81.52	62.56	13.85	.CC	.CC
84253	.536	19.60	13.07	17.15	.CC	41.77	60.31	13.74	.CC	.CC
84254	.533	18.68	13.00	17.06	.CC	82.23	60.85	23.72	.CC	.CC
84255	.527	17.67	12.85	16.87	.CC	83.17	61.34	24.59	.CC	.CC
84256	.524	16.77	12.78	16.77	.CC	87.20	69.15	24.23	.CC	.CC

CONVERTED, PRIMARY DAILY DATA FILE. PAGE *10 SDDAT2 CONTINUED

DATE	DEPTH,M	DISA,L/S	DISB,L/S	DISC,L/S	(CONCNA	CONCMB	CONCNC	CUNCPA	CUNCPB	CONCPC)-UG/L
84257	.521	16.67	12.70	16.67	.CC	89.50	74.32	25.30	30.46	.00
84258	.521	16.67	12.70	16.67	.CC	89.50	74.32	25.30	30.46	.00
84259	.528	16.59	12.63	16.58	.00	90.01	74.75	25.44	30.64	.00
84260	.524	16.77	12.76	15.97	.CC	88.98	77.60	25.15	30.29	.00
84261	.527	16.87	12.78	15.97	.CC	88.98	77.60	25.15	30.29	.00
84262	.530	999.00	999.00	999.00	.CC	66.36	77.15	24.32	22.59	.00
84263	.533	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84264	.536	999.00	999.00	999.00	.00	999.00	999.00	999.00	999.00	.00
84265	.546	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84266	.549	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84267	.553	999.00	999.00	999.00	.00	999.00	999.00	999.00	999.00	.00
84268	.552	999.00	999.00	999.00	.00	999.00	999.00	999.00	999.00	.00
84269	.549	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84270	.546	999.00	999.00	999.00	.00	999.00	999.00	999.00	999.00	.00
84271	.549	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84272	.549	999.00	999.00	999.00	.00	999.00	999.00	999.00	999.00	.00
84273	.561	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84274	.588	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84275	999.000	999.00	999.00	999.00	.00	999.00	999.00	999.00	999.00	.00
84276	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84277	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84278	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84279	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00
84280	999.000	999.00	999.00	999.00	.CC	999.00	999.00	999.00	999.00	.00

5 WEEK CHEMISTRY DATA FILE.

PAGE 1

APPENDIX D: CHDAT2

WEEK SITE	(N03-1)	NH4-10	ORGN-10	NTOT-10	PO4-10	PTOT-10)-UG/L
5 1	999.00	999.00	999.00	999.00	5.00	999.00
5 2	999.00	999.00	999.00	999.00	5.00	999.00
6 3	999.00	999.00	999.00	999.00	6.00	999.00
6 4	999.00	999.00	999.00	999.00	6.00	999.00
6 5	999.00	999.00	999.00	999.00	8.00	999.00
6 6	999.00	999.00	999.00	999.00	41.00	999.00
6 7	999.00	999.00	999.00	999.00	31.00	999.00
6 8	999.00	999.00	999.00	999.00	24.00	999.00
6 9	999.00	999.00	999.00	999.00	19.50	999.00
6 10	999.00	999.00	999.00	999.00	11.00	999.00
6 11	999.00	999.00	999.00	999.00	5.00	999.00
6 12	999.00	999.00	999.00	999.00	6.00	999.00
6 13	999.00	999.00	999.00	999.00	6.00	999.00
6 14	999.00	999.00	999.00	999.00	599.00	999.00
6 15	999.00	999.00	999.00	999.00	5.00	999.00
6 16	999.00	999.00	999.00	999.00	6.00	999.00
6 17	999.00	999.00	999.00	999.00	6.00	999.00
12 1	10.00	999.00	999.00	999.00	5.33	999.00
12 2	10.00	999.00	999.00	999.00	599.00	999.00
12 3	10.00	999.00	999.00	999.00	5.00	999.00
12 4	10.00	999.00	999.00	999.00	599.00	999.00
12 5	10.00	999.00	999.00	999.00	6.66	999.00
12 6	10.00	999.00	999.00	999.00	24.33	999.00
12 7	10.00	999.00	999.00	999.00	24.83	999.00
12 8	10.00	999.00	999.00	999.00	19.07	999.00
12 9	10.00	999.00	999.00	999.00	12.97	999.00
12 10	10.00	999.00	999.00	999.00	6.60	999.00
12 11	10.00	999.00	999.00	999.00	5.33	999.00
12 12	10.00	999.00	999.00	999.00	599.00	999.00
12 13	10.00	999.00	999.00	999.00	6.00	999.00
12 14	10.00	999.00	999.00	999.00	5.00	999.00
12 15	10.00	999.00	999.00	999.00	5.00	999.00
12 16	10.00	999.00	999.00	999.00	5.00	999.00
12 17	10.00	999.00	999.00	999.00	5.00	999.00
18 1	10.00	999.00	999.00	999.00	5.00	999.00
18 2	10.00	999.00	999.00	999.00	5.00	999.00
18 3	10.00	999.00	999.00	999.00	5.00	999.00
18 4	10.00	999.00	999.00	999.00	5.00	999.00
18 5	10.00	999.00	999.00	999.00	5.00	999.00
18 6	10.00	999.00	999.00	999.00	5.00	999.00
18 7	10.00	999.00	999.00	999.00	5.00	999.00
18 8	10.00	999.00	999.00	999.00	5.00	999.00
18 9	10.00	999.00	999.00	999.00	5.00	999.00
18 10	10.00	999.00	999.00	999.00	5.00	999.00
18 11	10.00	999.00	999.00	999.00	5.00	999.00
18 12	10.00	999.00	999.00	999.00	5.00	999.00
18 13	10.00	999.00	999.00	999.00	5.00	999.00
18 14	10.00	999.00	999.00	999.00	5.00	999.00
18 15	10.00	999.00	999.00	999.00	5.00	999.00
18 16	10.00	999.00	999.00	999.00	5.00	999.00
18 17	10.00	999.00	999.00	999.00	5.00	999.00

WEEK	SITE	NO3-10	NH4-10	DRGN-10	NTOT-10	PO4-10	PIOT-10)-05/L
24	1	10.00	999.00	999.00	999.00	999.00	999.00
24	2	10.00	999.00	999.00	999.00	999.00	999.00
24	3	10.00	999.00	999.00	999.00	999.00	999.00
24	4	10.00	999.00	999.00	999.00	999.00	999.00
24	5	10.00	999.00	999.00	999.00	999.00	999.00
24	6	35.00	999.00	999.00	999.00	999.00	999.00
24	7	35.00	999.00	999.00	999.00	999.00	999.00
24	8	45.00	999.00	999.00	999.00	999.00	999.00
24	9	45.00	999.00	999.00	999.00	999.00	999.00
24	10	30.00	999.00	999.00	999.00	999.00	999.00
24	11	10.00	999.00	999.00	999.00	999.00	999.00
24	12	10.00	999.00	999.00	999.00	999.00	999.00
24	13	10.00	999.00	999.00	999.00	999.00	999.00
24	14	10.00	999.00	999.00	999.00	999.00	999.00
24	15	10.00	999.00	999.00	999.00	999.00	999.00
24	16	15.00	999.00	999.00	999.00	999.00	999.00
24	17	10.00	999.00	999.00	999.00	999.00	999.00
30	1	10.00	70.00	1430.00	1510.00	10.00	50.00
30	2	10.00	70.00	1330.00	1510.00	10.00	40.00
30	3	10.00	50.00	1150.00	1410.00	10.00	40.00
30	4	10.00	40.00	1160.00	1210.00	10.00	40.00
30	5	10.00	50.00	1350.00	1310.00	10.00	30.00
30	6	50.00	60.00	1240.00	1360.00	10.00	30.00
30	7	30.00	60.00	1340.00	1440.00	10.00	50.00
30	8	20.00	40.00	1160.00	1430.00	10.00	30.00
30	9	20.00	40.00	1260.00	1530.00	10.00	30.00
30	10	10.00	30.00	1270.00	1320.00	10.00	10.00
30	11	70.00	70.00	1230.00	1390.00	5.00	30.00
30	12	50.00	70.00	1230.00	1460.00	5.00	20.00
30	13	60.00	60.00	1140.00	1370.00	5.00	20.00
30	14	70.00	70.00	1230.00	1380.00	5.00	20.00
30	15	40.00	999.00	999.00	1540.00	999.00	20.00
30	16	10.00	80.00	1120.00	1710.00	5.00	30.00
30	17	10.00	80.00	1220.00	1210.00	5.00	20.00
36	1	10.00	160.00	1590.00	1615.00	15.00	35.00
36	2	10.00	140.00	1310.00	2225.00	15.00	35.00
36	3	10.00	50.00	685.00	600.00	10.00	40.00
36	4	10.00	135.00	1365.00	1515.00	10.00	30.00
36	5	10.00	140.00	1363.00	1530.00	10.00	30.00
36	6	55.00	55.00	770.00	890.00	15.00	50.00
36	7	50.00	120.00	1330.00	1660.00	10.00	35.00
36	8	55.00	95.00	1495.00	2615.00	15.00	35.00
36	9	40.00	105.00	1295.00	1650.00	7.50	35.00
36	10	45.00	125.00	1225.00	1705.00	5.00	30.00
36	11	60.00	130.00	1370.00	1590.00	5.00	25.00
36	12	65.00	145.00	1355.00	1585.00	5.00	30.00
36	13	65.00	145.00	1355.00	1625.00	5.00	30.00
36	14	65.00	145.00	1405.00	1625.00	5.00	25.00
36	15	10.00	150.00	1250.00	1515.00	5.00	25.00
36	16	10.00	155.00	1345.00	1515.00	5.00	25.00
36	17	10.00	155.00	1345.00	1515.00	5.00	25.00

6 WEEK CHEMISTRY DATA FILE.

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CHDAT2 CONTINUED

WEEK	SITE	(NO3-10)	NH4-10	ORGN-10	NTOT-10	PD4-10	PTOT-10)-UG/L
42	1	11.00	360.00	1340.00	1620.00	19.00	50.00
42	2	10.00	350.00	1050.00	2020.00	10.00	30.00
42	3	10.00	340.00	2460.00	1920.00	20.00	60.00
42	4	10.00	999.00	999.00	999.00	11.00	999.00
42	5	10.00	999.00	999.00	999.00	6.00	999.00
42	6	20.00	300.00	1500.00	1630.00	19.33	40.00
42	7	61.00	330.00	1670.00	1950.00	17.00	40.00
42	8	20.00	300.00	1600.00	1940.00	17.67	30.00
42	9	999.00	999.00	999.00	999.00	6.50	999.00
42	10	50.00	250.00	1550.00	1960.00	6.67	20.00
42	11	40.00	360.00	1440.00	1850.00	5.33	20.00
42	12	110.00	350.00	1650.00	2120.00	5.33	20.00
42	13	70.00	360.00	2840.00	3960.00	5.66	20.00
42	14	160.00	320.00	1780.00	2060.00	5.66	20.00
42	15	110.00	330.00	1700.00	1910.00	5.33	20.00
42	16	10.00	370.00	1730.00	1920.00	5.33	20.00
42	17	30.00	350.00	1750.00	1920.00	5.33	20.00
49	1	10.00	295.00	1555.00	1820.00	15.00	25.00
49	2	10.00	260.00	1800.00	1920.00	15.00	20.00
49	3	10.00	270.00	1430.00	1770.00	15.00	25.00
49	4	10.00	290.00	1510.00	2020.00	10.00	25.00
49	5	10.00	290.00	1960.00	2020.00	10.00	25.00
49	6	105.00	275.00	1575.00	2000.00	25.00	35.00
49	7	50.00	255.00	1545.00	1960.00	15.00	20.00
49	8	40.00	250.00	1450.00	3920.00	10.00	20.00
49	9	50.00	250.00	1700.00	3790.00	15.00	20.00
49	10	40.00	250.00	1650.00	2090.00	10.00	45.00
49	11	270.00	250.00	1570.00	2125.00	8.50	20.00
49	12	150.00	280.00	1580.00	1915.00	8.50	20.00
49	13	225.00	270.00	1720.00	2185.00	8.50	30.00
49	14	140.00	280.00	1775.00	2145.00	8.50	20.00
49	15	130.00	275.00	1815.00	2130.00	8.50	20.00
49	16	10.00	285.00	1595.00	1920.00	8.50	20.00
49	17	10.00	305.00	1640.00	1970.00	8.50	20.00
55	1	10.00	30.00	1670.00	1820.00	30.00	50.00
55	2	10.00	30.00	1670.00	1920.00	30.00	50.00
55	3	10.00	20.00	1680.00	1920.00	10.00	50.00
55	4	10.00	20.00	1680.00	1920.00	10.00	50.00
55	5	10.00	90.00	1610.00	2010.00	10.00	20.00
55	6	70.00	30.00	1570.00	1880.00	30.00	50.00
55	7	60.00	30.00	1570.00	2070.00	20.00	50.00
55	8	40.00	30.00	1670.00	1850.00	10.00	40.00
55	9	10.00	30.00	1870.00	2020.00	10.00	40.00
55	10	10.00	30.00	1770.00	2020.00	10.00	30.00
55	11	200.00	50.00	1650.00	2140.00	5.00	20.00
55	12	150.00	50.00	1650.00	1960.00	5.00	20.00
55	13	160.00	70.00	1530.00	1890.00	5.00	20.00
55	14	160.00	70.00	1930.00	4270.00	5.00	20.00
55	15	10.00	20.00	1780.00	1620.00	5.00	30.00
55	16	10.00	40.00	1560.00	1920.00	5.00	20.00
55	17	10.00	30.00	1870.00	2020.00	5.00	20.00

WEEK	SITE	(ND3-1J)	NH4-1C	ORG-1D	NTOT-1C	P04-1D	PTOT-1C)-U6/L
62	1	10.00	40.00	2360.00	2820.00	49.50	999.00
62	2	10.00	40.00	2360.00	2820.00	27.50	150.00
62	3	10.00	50.00	1920.00	2320.00	49.50	140.00
62	4	10.00	40.00	1860.00	2420.00	29.00	110.00
62	5	10.00	50.00	2050.00	2420.00	11.50	60.00
62	6	10.00	40.00	2060.00	2700.00	28.50	90.00
62	7	10.00	60.00	2240.00	2460.00	38.50	120.00
62	8	10.00	40.00	2060.00	2460.00	32.00	90.00
62	9	10.00	80.00	1920.00	2430.00	18.50	70.00
62	10	10.00	40.00	1860.00	2320.00	10.50	40.00
62	11	10.00	60.00	2440.00	3050.00	5.00	20.00
62	12	10.00	80.00	2320.00	2680.00	5.00	20.00
62	13	10.00	200.00	2100.00	2760.00	5.50	999.00
62	14	10.00	150.00	2350.00	2730.00	5.50	20.00
62	15	10.00	170.00	2130.00	2740.00	5.00	30.00
62	16	10.00	60.00	2040.00	2420.00	5.00	20.00
62	17	10.00	70.00	1930.00	2520.00	5.00	50.00
63	1	10.00	23.00	975.00	1570.00	71.67	235.00
63	2	10.00	30.00	1170.00	1420.00	80.00	160.00
63	3	10.00	35.00	1315.00	1660.00	39.33	75.00
63	4	10.00	35.00	1365.00	1520.00	34.00	60.00
63	5	10.00	50.00	1650.00	1770.00	34.67	60.00
63	6	10.00	50.00	1650.00	1815.00	47.00	60.00
63	7	10.00	30.00	1370.00	1715.00	40.33	55.00
63	8	10.00	35.00	1415.00	1700.00	33.67	65.00
63	9	10.00	35.00	1315.00	1570.00	20.67	50.00
63	10	10.00	45.00	1305.00	1570.00	24.00	50.00
63	11	10.00	25.00	1425.00	1645.00	7.33	50.00
63	12	10.00	30.00	1370.00	1625.00	7.33	27.50
63	13	10.00	45.00	1555.00	1965.00	7.33	27.50
63	14	10.00	40.00	1460.00	1650.00	7.00	27.50
63	15	10.00	35.00	1415.00	1790.00	8.67	27.50
63	16	10.00	25.00	1325.00	1520.00	7.00	27.50
63	17	10.00	25.00	1375.00	1510.00	7.00	27.50
77	1	10.00	45.00	1315.00	1465.00	24.00	30.00
77	2	10.00	45.00	1455.00	1665.00	17.00	50.00
77	3	10.00	50.00	1450.00	1515.00	15.00	35.00
77	4	10.00	75.00	1395.00	1465.00	16.00	25.00
77	5	10.00	50.00	1405.00	1565.00	15.00	30.00
77	6	10.00	50.00	1365.00	1665.00	15.00	70.00
77	7	10.00	35.00	1325.00	1355.00	14.00	60.00
77	8	10.00	40.00	1290.00	1600.00	15.00	35.00
77	9	10.00	45.00	1310.00	1350.00	11.00	40.00
77	10	10.00	45.00	1310.00	1475.00	11.00	25.00
77	11	10.00	40.00	1410.00	1685.00	8.00	20.00
77	12	10.00	35.00	1265.00	1485.00	7.00	17.00
77	13	10.00	70.00	1680.00	1640.00	6.00	22.00
77	14	10.00	50.00	1300.00	1545.00	5.00	15.00
77	15	10.00	45.00	1305.00	1365.00	5.00	15.00
77	16	10.00	45.00	1405.00	1405.00	8.00	15.00
77	17	10.00	45.00	1310.00	1310.00	7.00	10.00

[illegible]

48

WEEK PRODUCTION DATA FILE.

49

PRODAT1 CONTINUED

[illegible]

PRODAT1 CONTINUED

[illegible]

PRODAT1 CONTINUED

[illegible]

53

[illegible]

[illegible]

55

[illegible]

[illegible]

