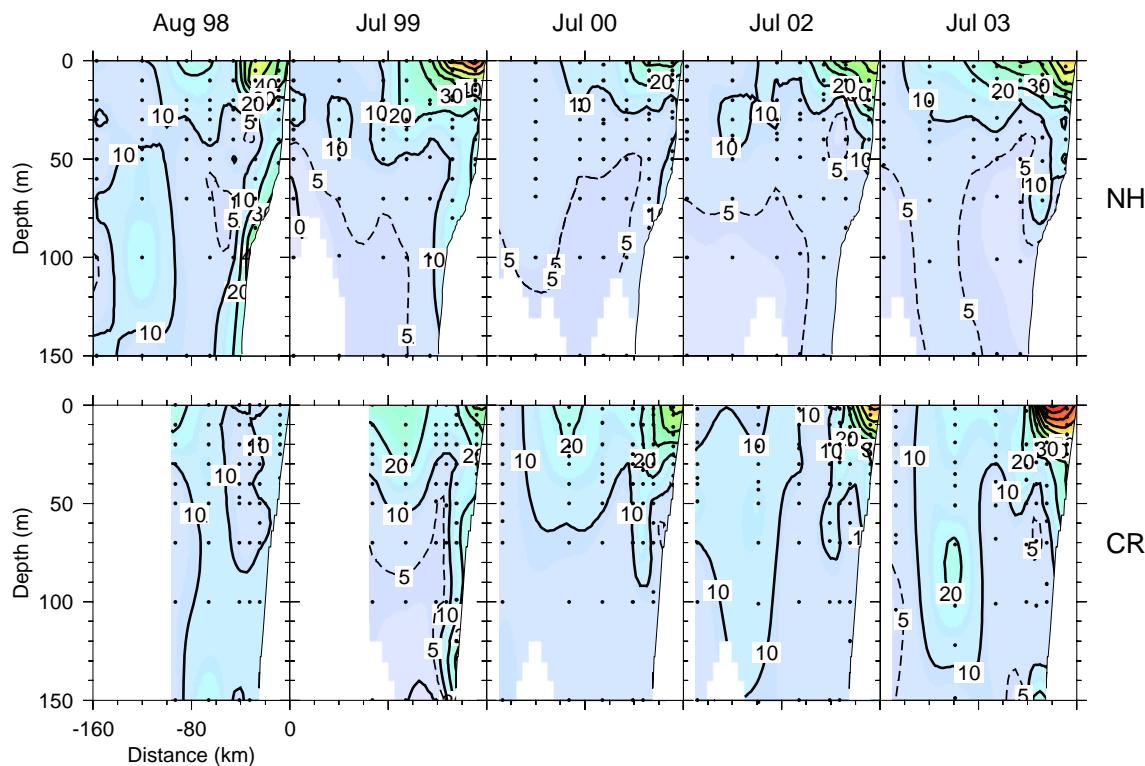


# College of Oceanic and Atmospheric Sciences

POC ( $\mu\text{M}$ ) comparison between the Newport and Crescent City Lines



## Particulate and Dissolved Organic Carbon and Nitrogen Data from the GLOBEC Long- Term Observation Program, 1997-2004

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Corvallis, Oregon 97331-5503

Data Report 205  
COAS Reference 2006-2  
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The particulate and dissolved organic carbon and nitrogen data included in this report are a complete version of all data for GLOBEC cruises 1997-2004. The nutrient and chlorophyll data that correspond to this data set can be found in “Nutrient and Extracted Chlorophyll Data from the GLOBEC Long-Term Observation Program, 1997-2004”, Data Report 193, COAS Reference 2004-1, published February 2004. This data can be found in electronic format on the GLOBEC website:

<http://ltop.coas.oregonstate.edu/~ctd/index.html>.

For further hydrographic information from all cruises, see cruise reports provided on the GLOBEC web page or contact Dr. A Huyer at Oregon State University, COAS, 104 COAS Admin. Bldg., Corvallis, OR, 97331-5503. All particulate and dissolved organic carbon and nitrogen data that follow include cruise station numbers to allow comparison with the hydrographic information found in other data reports.

### Sample Collection

At each station, water samples were collected from various depths with 5 L Niskin bottles on a 12 bottle rosette.

Total Organic Carbon (TOC) samples were subsampled from niskins into precombusted borosilicate vials capped with Teflon coated liners (these are the first samples drawn from the niskins). 50 µl of 85% H<sub>3</sub>PO<sub>4</sub> is added to each vial immediately and the vials are stored in the dark at room temperature until analysis.

Total Nitrogen (TN) samples are sampled into 125-ml Nalgene HDPE bottles and triplicate 10 ml volumes are subsampled by pipette into acid washed and rinsed 60 ml HPDE or Teflon bottles. Samples are stored at -20°C until analysis.

Particulate Organic Carbon and Nitrogen (POC/PON) samples were subsampled from the niskins into 1 or 0.5 L acid-washed and rinsed bottles after filtration through 200µm mesh (to exclude large zooplankton). 1 or 0.5 L samples were then vacuum filtered (<200 mm Hg) through precombusted (at 400°C for 4 h) 25 mm Whatman™ GF/F filters. The filters were then stored in glass Vacutainer™ tubes at -20°C until further analysis.

### Sample Analyses

#### *Total Nitrogen Analysis*

For TN analysis, samples were thawed at room temperature. Organic nitrogen was converted to nitrate using a persulfate wet oxidation method (Libby and Wheeler 1997), which was then analyzed using a Technicon AA-II. Instrument calibration was performed daily using a standard curve prepared from triplicate digested leucine standards at three concentrations. Fresh standards were made prior to each run by diluting a primary standard with artificial seawater. Digested artificial seawater was used

as a blank, and the standard curve was corrected for nitrogen content of the blank by determining the concentration of nitrogen in the persulfate solution and then calculating the amount of nitrogen in the artificial seawater. Artificial seawater nitrogen content was estimated as the difference between blank signal and persulfate signal. Data was screened by checking triplicate data for  $CV > 10\%$ . Fliers greater than 1sd from the mean replicate value were deleted from the dataset. In addition, data was screened for coherence within depth profiles. See Table 1 for the average coefficient of variation for all TN replicates after editing.

Table 1. TN average CV (%)  $\pm$  stdev for each year of cruises, and highest observed CV.

| <i>Year of Cruise</i> | <i>CV (%) <math>\pm</math> stdev</i> | <i>High observed CV</i> |
|-----------------------|--------------------------------------|-------------------------|
| 1997                  | $3.12 \pm 2.73$                      | 15.8                    |
| 1998                  | $5.11 \pm 4.38$                      | 28.6                    |
| 1999                  | $5.30 \pm 4.96$                      | 36.2                    |
| 2000                  | $2.31 \pm 2.05$                      | 13.8                    |
| 2001                  | $2.56 \pm 2.30$                      | 19.5                    |
| 2002                  | $2.22 \pm 2.07$                      | 16.3                    |
| 2003                  | $3.24 \pm 3.34$                      | 31.45                   |
| 2004                  | $4.38 \pm 2.98$                      | 18.52                   |

#### *POC/PON Analysis*

GLOBEC data from 1997, 1998, and July 1999 was processed at two different places, OSU and Santa Barbara Analytical Lab. All other samples were processed at the Santa Barbara lab. Table 2 lists cruise and where data was processed.

Table 2. Processing location for GLOBEC POM samples

| <i>Cruise</i> | <i>OSU</i> | <i>Santa Barbara</i> |
|---------------|------------|----------------------|
| Sep 1997      | X          |                      |
| Nov 1997      | X          | X                    |
| Jan 1998      | X          | X                    |
| April 1998    | X          | X                    |
| Aug 1998      | X          | X                    |
| Sep 1998      | X          | X                    |
| Nov 1998      | X          |                      |
| Jul 1999      | X          | X                    |

Filters processed at OSU were fumed with concentrated hydrochloric acid for 12 h (to remove inorganic carbon) and dried. The filters were then placed in tin boats and analyzed using a Carlo Erba™ CNS analyzer. Boat blanks, filter blanks and acetonitrile standards were run with each batch of samples. Within each run, the average filter blank

is subtracted from the sample values. Additionally, the average, sd and CV of all filter blanks run within each year were calculated (see Table 3). Samples that were less than twice the yearly average blank value were deleted from the data set.

The other 1999 cruises and all of 2000-2004 cruise samples were processed at the MSI Analytical Lab, UC, Santa Barbara, California. Prior to shipping to Santa Barbara, filters were fumed with concentrated hydrochloric acid (for 12 h) to remove inorganic carbon and then dried at 60°C overnite. Analysis followed using a Control Equipment Corp. 440HA CHN elemental analyzer calibrated with acetanilide. During analysis, filter blanks were run after every nine to ten samples and were checked for fliers within each batch run. The average, sd, and CV of all blanks run within one batch were calculated. The  $\text{avg} \pm 2\text{sd}$  was used to screen the blanks. Any values outside of this range were not included in the blank mean used to correct sample values. Filter blank averages for each batch run at Santa Barbara are listed in Table 3.

Table 3. Filter blank averages by year of cruise or batch # of samples.

| <i>Year of Cruise/<br/>Batch #</i> | $\mu\text{g } C$ | $\mu\text{g } N$ |
|------------------------------------|------------------|------------------|
| 1997-99 (OSU)                      | $9.84 \pm 4.87$  | $2.17 \pm 0.72$  |
| 1029                               | $23.78 \pm 2.84$ | $0.71 \pm 0.49$  |
| 1100                               | $18.04 \pm 2.07$ | $0.70 \pm 0.48$  |
| 1175                               | $17.91 \pm 2.77$ | $0.39 \pm 0.49$  |
| 409                                | $29.56 \pm 3.78$ | $2.37 \pm 0.82$  |
| 424                                | $19.31 \pm 1.76$ | $0.10 \pm 0.51$  |
| 447                                | $23.36 \pm 3.84$ | $0.35 \pm 0.41$  |
| 482                                | $25.63 \pm 5.87$ | $0.32 \pm 1.03$  |
| 558                                | $24.49 \pm 4.54$ | $0.53 \pm 0.63$  |
| 576                                | $19.58 \pm 5.21$ | $0.36 \pm 0.81$  |
| 606                                | $22.61 \pm 3.00$ | $0.10 \pm 1.03$  |
| 656                                | $21.74 \pm 3.20$ | $0.61 \pm 0.93$  |
| 752                                | $27.50 \pm 8.68$ | $0.17 \pm 0.82$  |
| 787                                | $26.44 \pm 9.27$ | $0.65 \pm 0.62$  |
| 816                                | $21.94 \pm 2.97$ | $0.31 \pm 0.72$  |
| 853                                | $22.95 \pm 2.92$ | $-0.01 \pm 0.77$ |
| 874                                | $18.76 \pm 1.65$ | $0.96 \pm 0.77$  |
| 908                                | $21.40 \pm 2.74$ | $0.06 \pm 0.96$  |
| All Batches                        | $22.72 \pm 5.29$ | $0.48 \pm 0.82$  |

For Santa Barbara samples, these average blank values were subtracted from each measured sample value as a filter blank correction. Resulting sample values were then screened for the number of standard deviations away from filter blank values. Any samples values that were very low or a negative number of sd from the blank average were deleted from the data set as below detection limit (bdl). Data was further screened

by coherence within depth profiles. The majority of the data excluded from the data set was due to values being bdl. Table 4 lists the number of values excluded by screening.

Table 4. # values excluded for all sample values (n).

| <i>Year of Cruise</i> | <i>POC # values excluded (n)</i> | <i>PON # values excluded (n)</i> |
|-----------------------|----------------------------------|----------------------------------|
| 1997                  | 24 (353)                         | 65 (353)                         |
| 1998                  | 63 (1006)                        | 145 (1006)                       |
| 1999                  | 183 (874)                        | 21 (874)                         |
| 2000                  | 150 (1060)                       | 46 (1060)                        |
| 2001                  | 119 (679)                        | 10 (679)                         |
| 2002                  | 83 (1014)                        | 5 (1014)                         |
| 2003                  | 10 (887)                         | 6 (887)                          |
| 2004                  | 11 (147)                         | 0 (147)                          |

### *TOC Analysis*

Early triplicate samples from 1997 and 1998 were run on a Shimadzu TOC-500. Standard curves were made up in DIW with acid potassium phthalate. 50  $\mu$ l of 50% H<sub>3</sub>PO<sub>4</sub> was added to each sample and samples were sparged with compressed air for 10 minutes prior to analysis. In most cases, Deep Sea Water (DSW) samples were run at the beginning and end of a run to check for drift. If drift was apparent, another standard curve was run to allow for interpolation of the samples. Three subsamples were taken from each water sample. These were screened by a coefficient of variance (CV) of 5%. If the CV between subsamples was > than 5%, the value > 1 sd from the mean was removed. If the CV was still > 5% the value was deleted from the triplicate data set (see Table 5 for subsample average CV). To account for drift between days, the data was normalized using the DSW bottle average over all runs and the daily DSW average (this was possible for most runs, however a few days did not have DSW run with the samples and could not be normalized, e.g. July 9, 1998 run for Sep 97).

Triplicate values were screened to be within 15% CV. If CV was greater than 15, the value > 1sd from the mean was removed. If the CV was still > 15, the entire sample was excluded from the data summary (see Table 8 for avg CV and # of samples deleted from dataset).

Starting in April 2000, triplicate samples were analyzed using the High Temperature Catalytic Combustion method on a Shimadzu TOC-5000A analyzer with an ASI 5000 autosampler. Standard curves were run twice daily using a DIW blank and four concentrations of an acid potassium phthalate solution. Beginning and ending standard curves were used to interpolate the data and account for drift during each run. All samples and standards received 50  $\mu$ l of 50% H<sub>3</sub>PO<sub>4</sub> and were sparged with compressed air prior to injection. Five subsamples were taken from each water sample and injected in sequence. Subsamples were screened for a coefficient of variance > 5 %.

If the CV was >5%, values greater than 1 sd from the mean were excluded. Table 5 lists the subsample variance for each cruise after editing.

Table 5. Subsample variance by cruise (after editing by CV).

| <i>Cruise</i> | <i>Avg CV ± sd for subsamples</i> |
|---------------|-----------------------------------|
| Sep 1997      | 1.87 ± 1.18                       |
| Nov 1997      | 1.74 ± 1.03                       |
| Aug 1998      | 2.83 ± 1.38                       |
| Sep 1998      | 2.38 ± 1.24                       |
| Apr 2000      | 2.41 ± 1.78                       |
| Jul 2000      | 2.13 ± 1.25                       |
| Sep 2000      | 1.46 ± 0.94                       |
| Jan 2001      | 2.87 ± 2.15                       |
| Mar 2001      | 1.56 ± 0.96                       |
| Jul 2001      | 1.32 ± 0.89                       |
| Sep 2001      | 1.41 ± 1.02                       |
| Nov 2001      | 1.37 ± 1.39                       |
| Feb 2002      | 1.53 ± 0.97                       |
| Apr 2002      | 1.46 ± 1.02                       |
| Jul 2002      | 1.83 ± 1.44                       |
| Sep 2002      | 1.92 ± 1.24                       |
| Dec 2002      | 2.59 ± 1.64                       |
| Feb 2003      | 1.64 ± 1.04                       |
| Apr 2003      | 1.69 ± 1.06                       |
| Jul 2003      | 1.86 ± 1.04                       |
| Sep 2003      | 2.13 ± 1.14                       |
| Sep 2004      | 2.00 ± 1.62                       |

Deep-water standards (DSW) of known approximate TOC concentration were injected after every three to four samples (fifteen to twenty subsamples) to check for baseline shifts. DSW standards used over the course of analyzing the GLOBEC data set were taken from multiple bottles. These bottles were collected at various times and therefore slight variation exists among the TOC concentrations in the bottles. To account for this variation, individual bottle averages were determined (including all days of runs). In order to normalize the data to account for instrument variation between runs, each DSW bottle average was divided by the daily DSW value. The resulting normalization factor was then multiplied by that particular day's sample values. Note that for each cruise DSW standards may have come from more than one bottle. Table 6 lists the average DSW values for each cruise and the DSW bottle averages used to normalize the data sets.

Table 6. Average daily DSW value for each cruise (before normalization) and Avg DSW bottle value used to normalize each cruise (multiple values indicate # of bottles of DSW used for that cruise).

| <i>Cruise</i>  | <i>Avg daily DSW value <math>\pm</math> sd</i>           | <i>Avg DSW bottle value</i> |
|----------------|--|-----------------------------|
| Apr 2000       | $40.03 \pm 3.25$   | 39.67                       |
| Jul 2000       | $38.51 \pm 3.64$<br>$40.66 \pm 2.63$<br>$38.26 \pm 4.85$ | 39.48<br>40.48<br>39.67     |
| Sep 2000       | $39.16 \pm 2.22$   | 41.80                       |
| Jan 2001       | $39.85 \pm 4.31$   | 39.54                       |
| Mar 2001       | $46.69 \pm 6.12$<br>$52.63 \pm 5.62$                     | 41.80<br>42.10              |
| Jul 2001       | $40.67 \pm 6.54$   | 42.10                       |
| Sep 2001       | $37.18 \pm 2.71$<br>$38.33 \pm 2.79$                     | 42.10<br>38.60              |
| Nov 2001       | $39.61 \pm 2.68$   | 38.60                       |
| Feb 2002       | $34.76 \pm 5.57$   | 38.60                       |
| Apr 2002       | $43.66 \pm 5.90$   | 40.66                       |
| Jul 2002       | $46.19 \pm 1.74$<br>$43.84 \pm 3.21$                     | 46.69<br>43.58              |
| Sep 2002       | $44.38 \pm 5.84$<br>$42.19 \pm 7.65$                     | 43.58<br>41.51              |
| Dec 2002       | $37.61 \pm 3.35$   | 41.51                       |
| Feb 2003       | $36.98 \pm 1.13$   | 36.27                       |
| Apr 2003       | $37.18 \pm 2.26$<br>$40.15 \pm 3.51$                     | 36.27<br>39.92              |
| Jul 2003       | $46.05 \pm 10.96$  | 39.92                       |
| Sep 2003       | $49.97 \pm 12.32$  | 41.00                       |
| Sep 2004       | $41.73 \pm 2.23$<br>$40.71 \pm 1.40$                     | 41.00<br>38.90              |
| <b>Average</b> | $41.25 \pm 4.18$   | $40.87 \pm 2.13$            |

Starting in April 2000, a Sargasso Deep Sea Water Standard (SDSW) (obtained from Drs. Dennis Hansell and W. Chen, Certified Reference Materials Program, University of Miami) was used as an additional check of the machine and standards. This reference material was injected several times (in triplicate) during each run. Average values for the SDSW for each cruise are listed in Table 7.

Table 7. Average values of SDSW for each cruise.

| <i>Cruise</i>  | <i>Avg SDSW<br/>(prior to normalizing) <math>\pm sd</math></i> | <i>Avg SDSW<br/>(after normalizing) <math>\pm sd</math></i> |
|----------------|--|---|
| Apr 2000       | 42.62 $\pm$ 5.78   | 45.56 $\pm$ 8.97  |
| Jul 2000       | 43.03 $\pm$ 0.40   | 40.18 $\pm$ 0.37  |
| Sep 2000       | 45.72 $\pm$ 4.34   | 49.00 $\pm$ 3.35  |
| Jan 2001       | No SDSW run  | No SDSW run   |
| Mar 2001       | 52.08 $\pm$ 9.53   | 44.91 $\pm$ 7.31  |
| Jul 2001       | 42.68 $\pm$ 4.68   | 44.50 $\pm$ 2.82  |
| Sep 2001       | 45.10 $\pm$ 8.83   | 49.00 $\pm$ 9.38  |
| Nov 2001       | 43.39 $\pm$ 4.74   | 42.93 $\pm$ 4.23  |
| Feb 2002       | 39.32 $\pm$ 2.30   | 44.25 $\pm$ 7.39  |
| Apr 2002       | 50.20 $\pm$ 6.35   | 46.15 $\pm$ 11.92   |
| Jul 2002       | 50.03 $\pm$ 3.87   | 49.27 $\pm$ 4.68  |
| Sep 2002       | 46.96 $\pm$ 8.16   | 47.32 $\pm$ 4.21  |
| Dec 2002       | 43.15 $\pm$ 5.67   | 45.08 $\pm$ 6.08  |
| Feb 2003       | 43.62 $\pm$ 2.84   | 42.93 $\pm$ 2.41  |
| Apr 2003       | 47.28 $\pm$ 4.75   | 46.96 $\pm$ 6.81  |
| Jul 2003       | 49.89 $\pm$ 5.50   | 49.32 $\pm$ 3.49  |
| Sep 2003       | 52.46 $\pm$ 9.35   | 55.27 $\pm$ 7.77  |
| Sep 2004       | 50.11 $\pm$ 6.37   | 47.31 $\pm$ 5.94  |
| <b>Average</b> | <b>46.33 <math>\pm</math> 3.89</b>                             | <b>46.46 <math>\pm</math> 5.71</b>                          |

After interpolating and normalizing the data, values were screened by calculating the coefficient of variation between triplicates. If the CV of the triplicates was  $> 15\%$ , a sample value was removed if it was greater than one standard deviation away from the mean of the triplicates. Table 8 lists the average CV for triplicate values (after screening), number of values excluded after screening, and total # of samples processed for each cruise.

Table 8. Average CV between triplicate samples for each cruise (after screening), # values excluded and total # samples processed (n)

| <i>Cruise</i> | <i>Avg CV <math>\pm sd</math></i> | <i># values excluded</i> | <i>n</i> |
|---------------|-----------------------------------|--------------------------|----------|
| Sep 1997      | 6.46 $\pm$ 4.62                   | 32                       | 132      |
| Nov 1997      | 6.38 $\pm$ 3.37                   | 16                       | 69       |
| Aug 1998      | 7.14 $\pm$ 3.27                   | 12                       | 180      |
| Sep 1998      | 5.62 $\pm$ 3.50                   | 10                       | 105      |
| Apr 2000      | 6.20 $\pm$ 3.86                   | 70                       | 687      |
| Jul 2000      | 5.58 $\pm$ 3.44                   | 52                       | 588      |
| Sep 2000      | 5.86 $\pm$ 6.63                   | 34                       | 597      |
| Jan 2001      | 3.95 $\pm$ 2.97                   | 8                        | 174      |
| Mar 2001      | 5.19 $\pm$ 3.70                   | 21                       | 363      |
| Jul 2001      | 5.86 $\pm$ 3.72                   | 10                       | 144      |

|          |                 |    |     |
|----------|-----------------|----|-----|
| Sep 2001 | $4.77 \pm 3.35$ | 19 | 492 |
| Nov 2001 | $5.14 \pm 3.16$ | 1  | 99  |
| Feb 2002 | $6.69 \pm 4.32$ | 9  | 135 |
| Apr 2002 | $4.66 \pm 3.72$ | 37 | 567 |
| Jul 2002 | $4.77 \pm 2.99$ | 35 | 579 |
| Sep 2002 | $5.52 \pm 3.45$ | 34 | 471 |
| Dec 2002 | $5.29 \pm 2.77$ | 8  | 135 |
| Feb 2003 | $4.64 \pm 2.54$ | 8  | 135 |
| Apr 2003 | $4.74 \pm 3.16$ | 25 | 573 |
| Jul 2003 | $5.72 \pm 3.35$ | 34 | 453 |
| Sep 2003 | $6.03 \pm 3.63$ | 27 | 465 |
| Sep 2004 | $4.93 \pm 3.46$ | 20 | 252 |

#### *Other Missing TOC data*

Data from the following cruises has not been analyzed: September 1997 (NH 45-85), November 1997 (NH25 thru NH65, FM, CR and COC lines), January 1998 (part of NH line, all of FM line), April 1998 (parts of NH, all of FM, CR and COC lines), November 1998 (all), all cruises in 1999, and Feb 2000.

#### DON and DOC calculations

Dissolved organic nitrogen (DON) was determined by subtracting PON and DIN ( $\text{NH}_4^+$ ,  $\text{NO}_3^-$ , and  $\text{NO}_2^-$ ) values from TN values, as shown in Eq. (1).

$$(1) \quad \text{DON} = \text{TN} - \text{PON} - \text{DIN}$$

The standard deviation for DON was calculated by propagation of error using standard deviations for TN, PON, and DIN.

Dissolved organic carbon (DOC) was determined by subtracting POC values from TOC values, as shown in Eq. (2).

$$(2) \quad \text{DOC} = \text{TOC} - \text{POC}$$

The standard deviation for DOC was calculated by propagation of error using standard deviations for TOC and POC.

## Missing Data

Individual data points within data sets were deleted if the coefficient of variation remained greater than 15% after removing data points greater than one sd from the mean. Also for POM data, various points were deleted if the sample value was determined to be below the detection limit. If POC data was missing, the corresponding DOC values were not calculated (TOC data can be used as an approximation for deep water DOC values). If PON data was missing, DON values were left in if they met the following criteria: sample depth was > 50m and surrounding values were  $\leq 10\%$  of the DON values. Other miscellaneous TN and DON data was deleted if values were abnormally hi or lo according to the depth profile or expected ranges.

## Data Presentation

Data are presented as depth profiles for each station along latitudinal lines. Lines are listed by decreasing latitude and stations are listed from inshore to offshore. Cruise ID and station numbers are included for reference to other cruise data. GMT date and GMT time indicate the date/time at the start of the CTD cast. Depth (pressure in dbar), temperature ( $^{\circ}\text{C}$ ), and salinity are also included as measured by CTD when Niskin bottles were fired (upcast). Units for POC, PON, DOC and DON are all  $\mu\text{M}$ .

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## References

- Libby, P.S., and P.A. Wheeler. 1997. *Particulate and dissolved organic nitrogen in the central and eastern equatorial Pacific*. Deep Sea Res. 44(2): 345-361.

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 3           | 17.58      | 31.64 | 10.17   | 88.48    | 9.33     | 1.36     | 79.16    | 8.56     |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 4           | 17.52      | 31.82 | 9.04    | 83.14    | 6.24     | 0.95     | 76.90    | 7.95     |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 10          | 17.38      | 31.92 | 9.22    | 72.68    | 9.90     | 1.44     | 62.78    | 7.70     |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 15          | 17.32      | 31.92 | 8.82    | 85.49    | 8.40     | 1.35     | 77.09    | 7.28     |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 21          | 17.16      | 32.07 | 9.11    | 75.03    | 7.19     | 1.02     | 67.84    | 7.77     |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 25          | 16.92      | 32.14 | 10.36   | 74.55    | 11.76    | 1.22     | 62.78    | 8.52     |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 35          | 15.86      | 32.37 | 13.43   | 74.85    | 9.50     | 1.20     | 65.36    | 10.62    |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 40          | 15.67      | 32.43 | 11.50   | 84.68    | 5.08     |          |          |          |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 44          | 15.09      | 32.51 | 13.25   | 70.38    | 10.04    | 1.58     | 60.34    | 9.20     |
| W9709B    | 9/19/97  | 22:23    | 3         | NH-05        | 44.65 | -124.18 | 49          | 14.30      | 32.66 | 20.50   | 72.32    | 15.65    | 2.04     | 56.67    | 15.10    |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 4           | 17.31      | 31.62 | 8.73    | 109.28   | 5.82     |          | 103.46   |          |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 5           | 17.31      | 31.62 | 8.98    | 104.35   | 2.84     |          | 101.51   |          |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 10          | 17.29      | 31.62 | 8.79    | 146.90   | 4.79     |          | 142.11   |          |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 20          | 17.01      | 31.62 | 8.65    | 113.50   | 7.45     | 1.03     | 106.05   | 7.48     |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 26          | 16.99      | 31.62 | 8.58    | 142.47   | 12.06    | 1.34     | 130.41   | 7.18     |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 30          | 15.99      | 31.84 | 12.36   | 134.74   | 9.62     | 1.42     | 125.12   | 8.22     |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 35          | 12.57      | 32.47 | 17.47   | 89.85    | 11.15    | 1.49     | 78.70    | 8.26     |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 40          | 9.94       | 32.54 | 16.65   | 92.17    | 7.09     | 0.99     | 85.08    | 7.35     |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 50          | 9.15       | 32.78 | 22.07   | 73.76    | 4.00     |          | 69.76    |          |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 60          | 9.13       | 33.07 | 27.49   | 75.36    | 4.80     |          | 70.56    | 9.08     |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 69          | 9.23       | 33.33 | 31.49   | 74.56    | 4.63     |          | 69.93    | 9.07     |
| W9709B    | 9/20/97  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 86          | 9.40       | 33.53 | 34.10   | 73.04    | 7.23     |          | 65.81    | 10.10    |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 3           | 17.71      | 31.76 | 7.64    | 138.53   | 9.30     | 1.05     | 129.23   | 5.76     |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 10          | 17.72      | 31.76 | 7.54    |          | 5.88     | 0.88     |          | 6.32     |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 21          | 16.74      | 31.82 | 8.24    | 123.89   | 10.74    | 1.33     | 113.14   | 6.55     |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 25          | 12.94      | 32.29 | 8.95    | 124.55   | 9.26     | 1.15     | 115.30   | 6.47     |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 30          | 12.21      | 32.37 | 9.04    | 94.11    | 8.86     | 0.91     | 85.25    | 6.40     |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 40          | 10.98      | 32.48 | 11.60   | 91.31    | 4.89     |          | 86.43    |          |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 50          | 9.79       | 32.72 | 16.75   | 99.65    | 3.73     |          | 95.92    |          |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 200         | 8.41       | 33.91 | 38.09   | 109.31   | 4.83     |          | 104.48   | 7.44     |
| W9709B    | 9/20/97  | 3:14     | 7         | NH-25        | 44.65 | -124.65 | 214         | 8.39       | 33.91 | 37.56   | 68.89    | 5.84     |          | 63.05    | 7.03     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 3           | 17.12      | 31.66 | 7.68    |          | 8.78     | 1.26     |          | 6.17     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 20          | 17.09      | 31.66 | 7.84    | 134.92   | 9.17     | 1.40     | 125.76   | 6.18     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 25          | 16.80      | 31.69 | 7.98    | 115.47   | 11.60    | 1.48     | 103.87   | 6.24     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 30          | 15.53      | 31.90 | 8.55    | 133.56   | 9.76     | 1.54     | 123.79   | 6.29     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 35          | 11.52      | 32.44 | 8.95    | 113.56   | 3.84     | 0.79     | 109.72   | 6.09     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 40          | 11.06      | 32.48 | 9.64    | 105.61   | 7.31     | 0.83     | 98.30    | 5.96     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 50          | 10.17      | 32.52 | 12.88   | 94.01    | 6.00     |          | 88.02    |          |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 60          | 9.74       | 32.58 | 15.07   | 103.66   |          |          |          | 6.59     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 71          | 9.50       | 32.68 | 16.80   | 83.37    |          |          |          | 6.58     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.85       | 33.20 | 25.77   | 81.06    |          |          |          | 6.41     |
| W9709B    | 9/20/97  | 6:03     | 8         | NH-35        | 44.65 | -124.88 | 406         | 5.85       | 34.04 | 45.25   | 88.88    | 5.64     |          | 83.24    | 7.27     |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 5           | 17.54      | 31.67 | 7.57    |          | 10.58    | 1.41     |          | 6.16     |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 10          | 17.54      | 31.67 | 7.39    |          | 11.49    | 1.32     |          | 6.06     |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 20          | 17.50      | 31.67 | 7.90    |          | 10.51    | 1.45     |          | 6.43     |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 30          | 13.79      | 32.20 | 8.64    |          | 11.29    | 1.49     |          | 6.31     |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 36          | 10.77      | 32.48 | 11.02   |          | 4.85     | 0.82     |          | 6.43     |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 40          | 10.26      | 32.52 | 14.19   |          | 5.16     | 0.77     |          | 7.10     |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 50          | 9.87       | 32.65 | 16.93   |          | 6.90     | 0.76     |          | 7.12     |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 59          | 9.01       | 32.68 | 20.37   |          |          |          |          | 7.95     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 70          | 8.83       | 32.77 | 21.27   |          | 4.24     |          | 7.96     |          |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 101         | 8.62       | 33.52 | 31.90   |          | 6.39     |          | 7.82     |          |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.32       | 34.09 | 44.32   |          |          |          | 4.02     |          |
| W9709B    | 9/20/97  | 8:50     | 9         | NH-45        | 44.65 | -125.12 | 682         | 4.76       | 34.20 | 46.45   |          |          |          | 2.42     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 2           | 17.00      | 31.71 | 6.90    |          | 8.25     | 0.98     | 5.84     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 10          | 17.00      | 31.71 | 7.43    |          | 12.78    | 1.23     | 6.12     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 19          | 17.00      | 31.71 | 7.01    |          | 5.90     | 0.88     | 5.96     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 25          | 16.65      | 31.78 | 7.52    |          | 6.56     | 1.10     | 6.34     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 30          | 13.67      | 32.22 | 7.06    |          | 9.27     | 1.46     | 5.50     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 35          | 11.66      | 32.45 | 8.22    |          | 7.16     | 0.87     | 5.52     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 40          | 10.88      | 32.49 | 10.34   |          |          | 0.67     | 5.64     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 49          | 9.71       | 32.56 | 14.75   |          |          |          | 6.65     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 69          | 9.13       | 32.99 | 23.62   |          |          |          | 7.24     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 100         | 8.72       | 33.69 | 33.85   |          |          |          | 8.07     |          |
| W9709B    | 9/20/97  | 12:35    | 11        | NH-65        | 44.65 | -125.6  | 999         | 3.61       | 34.41 | 52.00   |          |          |          | 9.99     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 3           | 17.37      | 31.69 | 7.31    |          | 7.05     | 0.87     | 6.40     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 10          | 17.36      | 31.69 | 7.29    |          | 5.34     | 0.93     | 6.23     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 20          | 17.34      | 31.69 | 7.93    |          | 5.06     | 0.71     | 7.08     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 30          | 11.81      | 32.39 | 8.71    |          | 9.44     | 1.82     | 5.86     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 35          | 11.43      | 32.42 | 9.44    |          | 6.77     | 1.36     | 6.09     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 40          | 10.84      | 32.47 | 10.63   |          | 4.57     | 0.83     | 6.24     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 50          | 10.17      | 32.54 | 13.46   |          |          |          | 7.09     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 60          | 9.79       | 32.67 | 16.69   |          |          |          | 7.17     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 70          | 9.41       | 32.88 | 20.67   |          |          |          | 7.09     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.80       | 33.37 | 29.44   |          |          |          | 7.68     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 870         | 3.99       | 34.36 | 50.96   |          |          |          | 8.49     |          |
| W9709B    | 9/20/97  | 15:35    | 12        | NH-85        | 44.65 | -126.05 | 1006        | 3.65       | 34.41 | 51.83   |          |          |          | 9.13     |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 2           | 12.38      | 32.47 | 13.99   |          | 11.62    | 1.99     | 8.01     |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 4           | 12.38      | 32.47 | 12.23   |          | 9.83     | 1.80     | 6.45     |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 10          | 12.38      | 32.47 | 12.13   |          | 10.32    | 1.34     | 6.82     |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 15          | 12.37      | 32.48 | 13.28   |          |          |          |          |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 22          | 12.00      | 32.64 | 15.43   |          | 2.63     | 0.42     | 8.56     |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 24          | 12.08      | 32.75 | 16.02   |          | 8.41     | 1.35     | 7.63     |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 28          | 12.08      | 32.83 | 16.30   |          |          |          |          |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 31          | 12.08      | 32.87 | 14.98   |          | 5.38     | 0.94     | 6.54     |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 43          | 11.98      | 33.02 | 16.38   |          | 3.54     | 0.48     | 8.89     |          |
| W9711C    | 11/15/97 | 22:07    | 3         | NH-05        | 44.65 | -124.18 | 52          | 11.90      | 33.10 | 16.25   |          | 6.05     | 0.83     | 7.47     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 3           | 12.19      | 32.96 | 13.21   |          | 10.67    | 1.45     | 6.84     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 4           | 12.19      | 32.96 | 13.02   |          | 8.80     | 1.40     | 6.76     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 10          | 12.20      | 32.96 | 13.51   |          | 15.04    | 2.16     | 6.47     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 19          | 12.19      | 32.97 | 14.69   |          | 13.42    | 2.00     | 7.57     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 30          | 11.82      | 33.16 | 15.37   |          | 10.93    | 1.43     | 6.55     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 35          | 11.58      | 33.26 | 18.10   |          | 9.82     | 0.99     | 6.51     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 41          | 11.09      | 33.33 | 21.11   |          | 8.50     | 0.74     | 6.34     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 50          | 11.01      | 33.33 | 22.26   |          | 7.92     | 0.88     | 6.81     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 60          | 10.84      | 33.35 | 24.05   |          | 7.72     | 0.83     | 7.39     |          |
| W9711C    | 11/16/97 | 0:32     | 5         | NH-15        | 44.65 | -124.41 | 70          | 10.68      | 33.40 | 24.19   |          | 9.02     | 0.96     | 6.41     |          |
| W9711C    | 11/16/97 | 0:32     |           | NH-15        | 44.65 | -124.41 | 88          | 10.35      | 33.48 | 27.36   |          | 10.11    | 1.11     | 7.26     |          |
| W9711C    | 11/16/97 | 3:03     | 7         | NH-25        | 44.65 | -124.65 | 4           | 12.15      | 32.91 | 9.87    |          | 12.67    | 1.57     | 2.58     |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9711C    | 11/16/97 | 3:03     | 7         | NH-25        | 44.65 | -124.65 | 10          | 12.16      | 32.91 | 10.69   |          | 5.18     | 0.81     |          | 4.16     |
| W9711C    | 11/16/97 | 3:03     | 7         | NH-25        | 44.65 | -124.65 | 15          | 12.16      | 32.91 | 11.43   |          | 10.37    | 1.43     |          | 4.27     |
| W9711C    | 11/16/97 | 3:03     | 7         | NH-25        | 44.65 | -124.65 | 19          | 12.15      | 32.92 | 10.72   |          | 8.92     | 1.59     |          | 3.34     |
| W9711C    | 11/16/97 | 3:03     | 7         | NH-25        | 44.65 | -124.65 | 31          | 12.09      | 32.97 | 12.44   |          | 10.86    | 0.84     |          | 4.91     |
| W9711C    | 11/16/97 | 3:03     | 7         | NH-25        | 44.65 | -124.65 | 39          | 11.57      | 33.20 | 16.12   |          | 4.22     | 0.65     |          | 4.61     |
| W9711C    | 11/16/97 | 3:03     | 7         | NH-25        | 44.65 | -124.65 | 100         | 9.86       | 33.66 | 26.34   |          | 3.42     | 0.41     |          | 4.07     |
| W9711C    | 11/16/97 | 3:03     | 7         | NH-25        | 44.65 | -124.65 | 151         | 9.50       | 33.73 | 30.71   |          |          |          |          | 6.57     |
| W9711C    | 11/16/97 | 5:53     | 8         | NH-35        | 44.65 | -124.88 | 2           | 13.73      | 32.34 | 4.58    |          | 6.24     | 0.84     |          | 3.18     |
| W9711C    | 11/16/97 | 5:53     | 8         | NH-35        | 44.65 | -124.88 | 20          | 13.15      | 32.60 |         |          | 5.14     | 0.82     |          |          |
| W9711C    | 11/16/97 | 5:53     | 8         | NH-35        | 44.65 | -124.88 | 29          | 11.71      | 33.15 |         |          | 7.60     | 1.09     |          |          |
| W9711C    | 11/16/97 | 5:53     | 8         | NH-35        | 44.65 | -124.88 | 40          | 10.98      | 33.38 |         |          | 4.78     | 0.65     |          |          |
| W9711C    | 11/16/97 | 5:53     | 8         | NH-35        | 44.65 | -124.88 | 49          | 10.53      | 33.47 |         |          | 4.60     | 0.61     |          |          |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 5           | 12.74      | 32.52 | 8.26    |          | 10.92    | 1.23     |          | 4.13     |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 10          | 12.75      | 32.52 | 8.13    |          | 12.85    | 1.30     |          | 3.95     |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 20          | 12.61      | 32.61 | 8.97    |          | 14.15    | 1.52     |          | 4.27     |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 24          | 11.86      | 32.84 | 13.56   |          |          |          |          |          |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 30          | 11.24      | 33.05 | 14.92   |          | 6.05     | 0.62     |          | 4.03     |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 40          | 11.49      | 33.39 | 19.33   |          | 11.88    | 1.10     |          | 5.00     |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 50          | 10.97      | 33.48 | 20.44   |          | 12.13    | 1.17     |          | 2.81     |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 70          | 9.91       | 33.52 | 23.46   |          | 9.81     | 0.97     |          | 2.74     |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 100         | 9.17       | 33.58 | 25.87   |          | 4.44     | 0.31     |          | 3.64     |
| W9711C    | 11/16/97 | 8:47     | 9         | NH-45        | 44.65 | -125.12 | 151         | 8.73       | 33.85 | 32.77   |          |          |          |          | 6.55     |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 3           | 14.01      | 32.28 | 4.35    |          | 6.04     | 0.75     |          | 3.37     |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 11          | 14.01      | 32.28 |         |          | 5.93     | 0.79     |          |          |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 20          | 14.01      | 32.28 |         |          | 4.15     | 0.60     |          |          |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 29          | 14.01      | 32.27 |         |          | 5.74     | 0.75     |          |          |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 41          | 14.01      | 32.27 |         |          | 5.43     | 0.54     |          |          |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 50          | 13.54      | 32.30 |         |          | 6.59     | 0.79     |          |          |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 60          | 10.80      | 32.59 |         |          | 3.97     | 0.67     |          |          |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 70          | 9.86       | 32.77 |         |          | 3.52     | 0.43     |          |          |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 101         | 8.95       | 33.27 |         |          | 3.46     | 0.34     |          |          |
| W9711C    | 11/16/97 | 15:33    | 11        | NH-65        | 44.65 | -125.6  | 149         | 7.98       | 33.74 |         |          | 5.17     |          |          |          |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 4           | 14.05      | 32.25 | 4.50    |          | 8.69     | 0.86     |          | 3.50     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 10          | 14.05      | 32.25 | 4.52    |          | 8.23     | 0.87     |          | 3.51     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 21          | 14.05      | 32.25 | 5.03    |          | 10.62    | 1.12     |          | 3.71     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 29          | 14.05      | 32.25 | 5.10    |          | 7.92     | 0.89     |          | 4.07     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 34          | 14.05      | 32.25 | 4.90    |          | 7.36     | 0.73     |          | 4.12     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 40          | 14.02      | 32.25 | 5.73    |          | 8.70     | 1.12     |          | 4.48     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 48          | 11.00      | 32.63 | 12.20   |          | 6.07     | 0.54     |          | 4.52     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 71          | 9.81       | 33.10 | 19.88   |          | 3.34     | 0.30     |          | 4.07     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 98          | 9.50       | 33.55 | 27.46   |          | 5.40     | 0.38     |          | 4.34     |
| W9711C    | 11/16/97 | 20:27    | 12        | NH-85        | 44.65 | -126.05 | 152         | 7.90       | 33.83 | 34.58   |          | 5.83     | 0.26     |          | 5.69     |
| W9711C    | 11/17/97 | 18:31    | 19        | FM-03        | 43.22 | -124.5  | 2           | 14.42      | 32.75 | 5.95    |          | 7.03     | 0.76     |          | 4.67     |
| W9711C    | 11/17/97 | 18:31    | 19        | FM-03        | 43.22 | -124.5  | 10          | 14.42      | 32.76 |         |          | 7.12     | 0.81     |          |          |
| W9711C    | 11/17/97 | 18:31    | 19        | FM-03        | 43.22 | -124.5  | 20          | 13.93      | 32.79 |         |          | 6.07     | 0.80     |          |          |
| W9711C    | 11/17/97 | 18:31    | 19        | FM-03        | 43.22 | -124.5  | 31          | 13.79      | 32.80 |         |          | 6.64     | 0.87     |          |          |
| W9711C    | 11/17/97 | 18:31    | 19        | FM-03        | 43.22 | -124.5  | 41          | 13.74      | 32.80 |         |          | 7.49     | 0.84     |          |          |
| W9711C    | 11/17/97 | 18:31    | 19        | FM-03        | 43.22 | -124.5  | 51          | 13.71      | 32.80 |         |          | 7.46     | 0.87     |          |          |
| W9711C    | 11/17/97 | 18:31    | 19        | FM-03        | 43.22 | -124.5  | 61          | 13.69      | 32.80 |         |          | 7.63     | 0.87     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9711C    | 11/17/97 | 17:13    | 18        | FM-04        | 43.22 | -124.58 | 3           | 14.36      | 32.78 | 5.92    |          | 6.87     | 0.89     |          | 4.47     |
| W9711C    | 11/17/97 | 17:13    | 18        | FM-04        | 43.22 | -124.58 | 10          | 14.35      | 32.78 |         |          | 6.16     | 0.82     |          |          |
| W9711C    | 11/17/97 | 17:13    | 18        | FM-04        | 43.22 | -124.58 | 20          | 14.31      | 32.77 |         |          | 6.82     | 0.80     |          |          |
| W9711C    | 11/17/97 | 17:13    | 18        | FM-04        | 43.22 | -124.58 | 31          | 14.34      | 32.78 |         |          | 7.23     | 0.77     |          |          |
| W9711C    | 11/17/97 | 17:13    | 18        | FM-04        | 43.22 | -124.58 | 41          | 14.01      | 32.81 |         |          | 7.10     | 0.70     |          |          |
| W9711C    | 11/17/97 | 17:13    | 18        | FM-04        | 43.22 | -124.58 | 51          | 13.46      | 32.87 |         |          | 5.85     | 0.73     |          |          |
| W9711C    | 11/17/97 | 17:13    | 18        | FM-04        | 43.22 | -124.58 | 60          | 13.03      | 32.90 |         |          | 5.84     | 0.69     |          |          |
| W9711C    | 11/17/97 | 17:13    | 18        | FM-04        | 43.22 | -124.58 | 70          | 12.85      | 32.93 |         |          | 7.68     | 0.88     |          |          |
| W9711C    | 11/17/97 |          | 18        | FM-04        | 43.22 | -124.58 | 80          | 12.83      | 32.93 |         |          | 8.15     | 1.05     |          |          |
| W9711C    | 11/17/97 | 15:55    | 17        | FM-05        | 43.22 | -124.67 | 4           | 13.68      | 32.58 | 6.60    |          | 6.96     | 0.80     |          | 4.84     |
| W9711C    | 11/17/97 | 15:55    | 17        | FM-05        | 43.22 | -124.67 | 10          | 13.68      | 32.58 |         |          | 6.51     | 0.77     |          |          |
| W9711C    | 11/17/97 | 15:55    | 17        | FM-05        | 43.22 | -124.67 | 20          | 13.73      | 32.73 |         |          | 6.25     | 0.79     |          |          |
| W9711C    | 11/17/97 | 15:55    | 17        | FM-05        | 43.22 | -124.67 | 32          | 13.68      | 32.79 |         |          | 5.63     | 0.67     |          |          |
| W9711C    | 11/17/97 | 15:55    | 17        | FM-05        | 43.22 | -124.67 | 40          | 13.64      | 32.81 |         |          | 6.53     | 0.67     |          |          |
| W9711C    | 11/17/97 | 15:55    | 17        | FM-05        | 43.22 | -124.67 | 40          | 13.64      | 32.81 |         |          | 6.43     | 0.70     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 3           | 13.61      | 32.62 | 6.44    |          | 7.99     | 0.76     |          | 4.28     |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 10          | 13.61      | 32.62 |         |          | 8.13     | 0.71     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 20          | 13.61      | 32.62 |         |          | 7.39     | 0.73     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 30          | 13.59      | 32.63 |         |          | 8.29     | 0.79     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 40          | 13.49      | 32.66 |         |          | 7.28     | 0.68     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 45          | 12.70      | 32.93 |         |          | 7.21     | 0.55     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 50          | 12.11      | 33.05 |         |          | 7.13     | 0.64     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 70          | 10.35      | 33.28 |         |          | 4.88     | 0.26     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 100         | 10.49      | 33.56 |         |          | 5.94     | 0.34     |          |          |
| W9711C    | 11/17/97 | 12:47    | 15        | FM-07        | 43.22 | -124.83 | 151         | 9.92       | 33.70 |         |          | 5.43     | 0.26     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 3           | 13.50      | 32.51 | 6.05    |          | 9.04     | 0.93     |          | 4.28     |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 10          | 13.50      | 32.52 |         |          | 7.82     | 0.82     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 20          | 13.50      | 32.52 |         |          | 10.19    | 0.93     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 30          | 13.50      | 32.52 |         |          | 10.46    | 0.93     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 34          | 13.49      | 32.57 |         |          | 8.67     | 0.80     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 39          | 13.45      | 32.66 |         |          | 8.73     | 0.85     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 48          | 12.43      | 33.00 |         |          | 9.45     | 0.69     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 70          | 11.22      | 33.20 |         |          | 6.56     | 0.32     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 100         | 10.15      | 33.49 |         |          | 7.56     | 0.31     |          |          |
| W9711C    | 11/17/97 | 10:13    | 14        | FM-08        | 43.22 | -125.   | 150         | 9.15       | 33.83 |         |          | 5.84     |          |          |          |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 5           | 13.63      | 32.49 | 6.31    |          | 9.04     | 0.86     |          | 4.60     |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 10          | 13.63      | 32.49 |         |          | 8.61     | 0.68     |          |          |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 30          | 13.64      | 32.49 |         |          | 8.21     | 0.65     |          |          |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 39          | 13.61      | 32.51 |         |          | 8.96     | 0.77     |          |          |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 45          | 13.51      | 32.64 |         |          | 9.02     | 0.93     |          |          |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 51          | 13.25      | 33.14 |         |          | 9.90     | 0.81     |          |          |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 71          | 11.55      | 33.14 |         |          | 8.32     | 0.44     |          |          |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 101         | 10.10      | 33.39 |         |          | 8.06     | 0.37     |          |          |
| W9711C    | 11/17/97 | 7:38     | 13        | FM-09        | 43.22 | -125.17 | 152         | 8.69       | 33.87 |         |          | 4.92     | 0.23     |          |          |
| W9711C    | 11/21/97 | 17:05    | 41        | CR-01        | 41.90 | -124.3  | 0           | 13.34      | 32.56 | 8.73    |          | 11.99    | 1.46     |          | 5.42     |
| W9711C    | 11/21/97 | 17:05    | 41        | CR-01        | 41.90 | -124.3  | 10          | 13.51      | 32.80 |         |          | 9.76     | 0.89     |          |          |
| W9711C    | 11/21/97 | 17:05    | 41        | CR-01        | 41.90 | -124.3  | 20          | 13.15      | 32.78 |         |          | 12.61    | 1.28     |          |          |
| W9711C    | 11/21/97 | 17:05    | 41        | CR-01        | 41.90 | -124.3  | 28          | 13.12      | 32.80 |         |          |          |          |          |          |
| W9711C    | 11/21/97 | 17:05    | 41        | CR-01        | 41.90 | -124.3  | 30          | 13.13      | 32.81 |         |          |          |          |          |          |
| W9711C    | 11/21/97 | 17:05    | 41        | CR-01        | 41.90 | -124.3  | 36          | 13.20      | 32.84 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 3           | 14.53      | 32.93 | 5.64    |          | 7.96     | 0.66     |          | 3.88     |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 5           | 14.53      | 32.93 |         |          | 6.51     | 0.73     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 10          | 14.58      | 32.95 |         |          | 6.81     | 0.82     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 20          | 14.58      | 32.96 |         |          | 6.89     | 0.64     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 30          | 14.57      | 32.96 |         |          | 6.85     | 0.77     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 36          | 14.57      | 32.96 |         |          | 6.58     | 0.82     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 41          | 14.57      | 32.96 |         |          | 7.56     | 0.79     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 51          | 14.48      | 33.08 |         |          | 5.57     | 0.60     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 60          | 14.27      | 33.17 |         |          | 5.23     | 0.45     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 70          | 13.72      | 33.22 |         |          | 6.50     | 0.50     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 100         | 13.00      | 33.38 |         |          | 6.42     | 0.49     |          |          |
| W9711C    | 11/21/97 | 14:41    | 39        | CR-03        | 41.90 | -124.5  | 110         | 13.01      | 33.38 |         |          | 4.79     | 0.41     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 3           | 14.24      | 32.81 | 6.20    |          | 10.52    | 0.84     |          | 4.14     |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 10          | 14.24      | 32.81 |         |          | 8.35     | 0.70     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 21          | 14.25      | 32.81 |         |          | 8.72     | 0.85     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 31          | 14.26      | 32.81 |         |          | 9.46     | 0.75     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 40          | 14.30      | 32.84 |         |          | 9.59     | 0.78     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 45          | 14.42      | 33.06 |         |          | 8.96     | 0.64     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 50          | 14.39      | 33.16 |         |          | 7.99     | 0.57     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 70          | 13.42      | 33.36 |         |          | 6.94     | 0.35     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 100         | 11.97      | 33.49 |         |          | 5.80     | 0.42     |          |          |
| W9711C    | 11/21/97 | 13:09    | 38        | CR-04        | 41.90 | -124.6  | 150         | 11.14      | 33.59 |         |          | 5.15     |          |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 3           | 14.25      | 32.75 | 5.70    |          | 13.70    | 1.73     |          | 3.51     |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 10          | 14.25      | 32.78 |         |          | 11.21    | 1.50     |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 20          | 14.23      | 32.79 |         |          | 11.88    | 1.71     |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 30          | 13.94      | 32.88 |         |          | 7.78     | 0.89     |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 40          | 13.03      | 33.04 |         |          | 6.10     | 0.44     |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 45          | 12.80      | 33.07 |         |          | 6.43     | 0.49     |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 50          | 12.33      | 33.10 |         |          | 5.47     | 0.34     |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 70          | 11.50      | 33.49 |         |          | 4.67     |          |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 100         | 10.93      | 33.59 |         |          | 4.00     |          |          |          |
| W9711C    | 11/21/97 | 11:21    | 37        | CR-05        | 41.90 | -124.7  | 150         | 10.07      | 33.75 |         |          | 4.26     |          |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 3           | 14.45      | 32.47 | 5.40    |          | 7.66     | 0.70     |          | 3.98     |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 10          | 14.46      | 32.47 |         |          | 7.27     | 0.77     |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 20          | 14.45      | 32.47 |         |          | 6.79     | 0.67     |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 29          | 14.43      | 32.48 |         |          | 5.33     | 0.60     |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 34          | 14.29      | 32.54 |         |          | 7.56     | 0.65     |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 39          | 13.86      | 32.61 |         |          | 8.41     | 0.59     |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 50          | 13.24      | 32.74 |         |          | 5.22     | 0.43     |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 68          | 11.96      | 32.81 |         |          | 5.68     | 0.40     |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 101         | 10.55      | 33.22 |         |          | 3.86     | 0.25     |          |          |
| W9711C    | 11/21/97 | 7:45     | 35        | CR-07        | 41.90 | -125.   | 150         | 8.99       | 33.66 |         |          | 3.86     |          |          |          |
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 4           | 14.23      | 32.42 | 5.57    |          |          |          |          |          |
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 11          | 14.23      | 32.42 |         |          |          |          |          |          |
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 20          | 14.23      | 32.42 |         |          |          |          |          |          |
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 30          | 14.22      | 32.42 |         |          | 7.85     | 0.80     |          |          |
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 41          | 14.22      | 32.43 |         |          | 6.27     | 0.58     |          |          |
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 50          | 12.66      | 32.65 |         |          | 5.51     | 0.59     |          |          |
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 70          | 10.05      | 32.88 |         |          | 4.55     | 0.34     |          |          |
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 101         | 9.13       | 33.46 |         |          | 4.01     |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9711C    | 11/21/97 | 3:38     | 33        | CR-09        | 41.90 | -125.33 | 153         | 8.47       | 33.81 |         |          | 4.21     | 0.30     |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 3           | 15.54      | 33.24 | 8.49    |          | 28.53    | 3.55     |          | 4.26     |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 5           | 15.56      | 33.25 |         |          | 21.56    | 2.31     |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 9           | 15.56      | 33.25 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 15          | 15.59      | 33.27 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 20          | 15.60      | 33.27 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 26          | 15.65      | 33.31 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 30          | 15.67      | 33.34 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 42          | 15.67      | 33.36 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 50          | 15.66      | 33.35 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 61          | 15.66      | 33.35 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 9:09     | 32        | COC-02       | 38.65 | -123.45 | 65          | 15.66      | 33.35 |         |          |          |          |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 4           | 15.76      | 33.31 | 6.01    |          | 11.47    | 1.03     |          | 4.57     |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 5           | 15.76      | 33.31 |         |          | 8.85     | 1.00     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 11          | 15.76      | 33.31 |         |          | 9.02     | 1.04     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 15          | 15.76      | 33.31 |         |          | 8.31     | 0.81     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 20          | 15.77      | 33.32 |         |          | 8.20     | 0.74     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 30          | 15.76      | 33.32 |         |          | 7.43     | 0.74     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 40          | 15.69      | 33.33 |         |          | 5.74     | 0.54     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 46          | 15.50      | 33.36 |         |          | 9.05     | 0.53     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 52          | 15.32      | 33.37 |         |          | 7.06     | 0.69     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 61          | 14.71      | 33.42 |         |          | 7.54     | 0.79     |          |          |
| W9711C    | 11/20/97 | 7:46     | 31        | COC-04       | 38.60 | -123.51 | 72          | 14.59      | 33.42 |         |          | 9.76     | 0.90     |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 3           | 15.81      | 33.15 | 4.99    |          |          |          |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 10          | 15.82      | 33.15 |         |          | 6.73     | 0.80     |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 24          | 15.85      | 33.17 |         |          | 5.60     | 0.63     |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 30          | 15.86      | 33.20 |         |          | 5.93     | 0.60     |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 40          | 15.84      | 33.33 |         |          | 5.98     | 0.49     |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 50          | 15.03      | 33.41 |         |          | 4.36     | 0.39     |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 70          | 13.21      | 33.46 |         |          | 4.02     | 0.45     |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 99          | 12.32      | 33.50 |         |          | 4.68     | 0.25     |          |          |
| W9711C    | 11/20/97 | 3:01     | 27        | COC-07       | 38.50 | -123.66 | 149         | 11.09      | 33.63 |         |          | 2.91     | 0.24     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 5           | 15.82      | 32.99 | 5.68    |          | 6.59     | 0.63     |          | 5.04     |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 9           | 15.82      | 32.99 |         |          | 5.93     | 0.68     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 21          | 15.81      | 33.00 |         |          | 6.75     | 0.69     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 30          | 15.79      | 33.00 |         |          | 8.05     | 0.69     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 40          | 15.09      | 33.01 |         |          | 5.69     | 0.53     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 47          | 13.85      | 33.03 |         |          | 6.35     | 0.54     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 48          | 13.72      | 33.01 |         |          | 5.30     | 0.46     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 74          | 11.83      | 33.15 |         |          | 3.24     | 0.31     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 100         | 11.37      | 33.59 |         |          | 5.47     | 0.30     |          |          |
| W9711C    | 11/19/97 | 22:55    | 25        | COC-09       | 38.40 | -123.82 | 152         | 10.42      | 33.75 |         |          | 5.62     | 0.30     |          |          |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 4           | 15.64      | 32.92 | 4.84    |          | 5.29     | 0.62     |          | 4.23     |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 10          | 15.65      | 32.92 |         |          | 5.08     | 0.49     |          |          |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 21          | 15.65      | 32.93 |         |          | 5.57     | 0.55     |          |          |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 32          | 15.46      | 32.98 |         |          | 6.87     | 0.75     |          |          |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 40          | 14.84      | 33.06 |         |          | 6.12     | 0.70     |          |          |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 46          | 14.10      | 33.05 |         |          | 6.54     | 0.67     |          |          |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 52          | 13.36      | 33.02 |         |          | 5.08     | 0.51     |          |          |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 70          | 11.76      | 33.05 |         |          | 4.78     | 0.33     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 100         | 10.56      | 33.32 |         |          | 6.97     | 0.26     |          |          |
| W9711C    | 11/19/97 | 18:45    | 23        | COC-11       | 38.29 | -123.99 | 152         | 8.98       | 33.76 |         |          | 5.90     |          |          |          |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 3           | 16.09      | 33.20 | 4.88    |          | 5.06     | 0.59     |          | 4.27     |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 11          | 16.09      | 33.20 |         |          | 6.18     | 0.73     |          |          |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 21          | 16.10      | 33.20 |         |          | 5.85     | 0.67     |          |          |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 30          | 16.10      | 33.20 |         |          | 6.64     | 0.62     |          |          |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 40          | 16.10      | 33.20 |         |          | 6.80     | 0.80     |          |          |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 61          | 12.36      | 33.03 |         |          | 5.04     | 0.31     |          |          |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 71          | 11.47      | 33.16 |         |          | 3.93     | 0.40     |          |          |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 102         | 10.26      | 33.46 |         |          | 4.18     |          |          |          |
| W9711C    | 11/19/97 | 14:07    | 21        | COC-13       | 38.13 | -124.24 | 151         | 8.89       | 33.80 |         |          | 3.38     |          |          |          |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 2           | 12.37      | 30.88 | 9.53    | 102.72   | 8.66     | 0.91     | 94.06    | 4.71     |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 5           | 12.39      | 31.25 | 8.80    | 64.28    | 10.61    | 1.34     | 53.67    | 3.85     |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 10          | 12.48      | 31.65 | 7.96    | 75.93    | 8.01     | 0.83     | 67.91    | 3.69     |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 15          | 12.49      | 31.75 | 8.60    |          | 9.87     | 0.78     |          | 4.42     |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 20          | 12.50      | 31.77 | 8.50    | 66.75    | 8.80     | 0.88     | 57.95    | 4.27     |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 24          | 12.51      | 31.87 | 8.70    |          | 8.15     | 0.81     |          | 4.57     |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 30          | 12.50      | 31.93 | 7.82    | 72.79    | 10.19    | 1.00     | 62.60    | 3.57     |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 41          | 12.51      | 32.22 | 7.87    |          | 10.83    | 1.11     |          | 3.82     |
| W9801B    | 1/30/98  | 22:40    | 3         | NH-05        | 44.65 | -124.18 | 50          | 12.53      | 32.42 | 8.16    | 69.52    | 10.28    | 1.03     | 59.24    | 4.10     |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 2           | 12.09      | 32.77 | 7.26    | 70.56    | 6.52     | 0.76     | 64.04    | 4.24     |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 2           | 12.09      | 32.77 |         |          |          |          |          |          |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 6           | 12.09      | 32.77 | 6.95    |          | 6.46     | 0.77     |          | 3.91     |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 11          | 12.09      | 32.77 | 7.83    |          | 7.59     | 0.69     |          | 4.88     |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 11          | 12.09      | 32.77 |         |          |          |          |          |          |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 21          | 12.09      | 32.77 |         | 61.98    | 6.45     | 0.70     | 55.53    |          |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 25          | 12.09      | 32.77 | 7.35    |          | 6.61     | 0.75     |          | 4.35     |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 30          | 12.10      | 32.77 | 7.04    |          | 6.02     | 0.66     |          | 4.11     |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 51          | 12.08      | 32.77 | 7.39    |          |          |          |          |          |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 51          | 12.08      | 32.77 |         | 64.79    | 6.21     | 0.65     | 58.59    |          |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 61          | 12.08      | 32.77 | 6.94    |          | 4.04     | 0.54     |          | 4.12     |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 71          | 12.08      | 32.77 | 6.88    |          | 7.44     | 0.66     |          | 3.91     |
| W9801B    | 1/31/98  | 2:21     | 5         | NH-15        | 44.65 | -124.41 | 84          | 12.07      | 32.77 | 7.65    | 70.33    | 8.36     | 0.86     | 61.98    | 4.31     |
| W9801B    | 2/2/98   | 12:28    | 22        | NH-15        | 44.65 | -124.41 | 1           | 12.27      | 32.83 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 12:28    | 22        | NH-15        | 44.65 | -124.41 | 1           | 12.27      | 32.83 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 12:28    | 22        | NH-15        | 44.65 | -124.41 | 10          | 12.26      | 32.82 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 12:28    | 22        | NH-15        | 44.65 | -124.41 | 10          | 12.26      | 32.82 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 12:28    | 22        | NH-15        | 44.65 | -124.41 | 49          | 12.29      | 32.83 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 12:28    | 22        | NH-15        | 44.65 | -124.41 | 49          | 12.29      | 32.83 |         |          |          |          |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 2           | 11.82      | 32.71 | 9.00    |          | 12.71    | 0.82     |          | 5.81     |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 2           | 11.82      | 32.71 |         |          |          |          |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 9           | 11.82      | 32.71 |         |          | 10.71    | 0.81     |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 9           | 11.82      | 32.71 |         |          |          |          |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 30          | 11.82      | 32.71 |         |          | 8.77     | 0.86     |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 39          | 11.79      | 32.70 |         |          | 6.39     | 0.61     |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 51          | 11.81      | 32.71 |         |          | 7.55     | 0.72     |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 69          | 11.72      | 32.69 |         |          | 9.40     | 0.85     |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 84          | 11.91      | 32.82 |         |          | 8.80     | 0.82     |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 99          | 11.73      | 33.08 |         |          | 9.08     | 0.63     |          |          |
| W9801B    | 1/31/98  | 5:40     | 7         | NH-25        | 44.65 | -124.65 | 149         | 10.78      | 33.34 |         |          | 10.07    | 0.70     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9801B    | 2/2/98   | 10:10    | 20        | NH-25        | 44.65 | -124.65 | 1           | 12.17      | 32.81 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 10:10    | 20        | NH-25        | 44.65 | -124.65 | 1           | 12.17      | 32.81 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 10:10    | 20        | NH-25        | 44.65 | -124.65 | 10          | 12.18      | 32.80 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 10:10    | 20        | NH-25        | 44.65 | -124.65 | 10          | 12.18      | 32.80 |         |          |          |          |          |          |
| W9801B    | 2/2/98   | 8:18     | 19        | NH-35        | 44.65 | -124.88 | 2           | 11.57      | 32.66 | 7.80    |          | 7.24     | 0.71     |          | 4.64     |
| W9801B    | 2/2/98   | 8:18     | 19        | NH-35        | 44.65 | -124.88 | 11          | 11.58      | 32.67 |         |          | 10.14    | 0.89     |          |          |
| W9801B    | 2/2/98   | 8:18     | 19        | NH-35        | 44.65 | -124.88 | 21          | 11.62      | 32.69 |         |          | 8.91     | 0.77     |          |          |
| W9801B    | 2/2/98   | 8:18     | 19        | NH-35        | 44.65 | -124.88 | 31          | 11.62      | 32.69 |         |          | 8.69     | 0.83     |          |          |
| W9801B    | 2/2/98   | 8:18     | 19        | NH-35        | 44.65 | -124.88 | 40          | 11.62      | 32.69 |         |          | 11.87    | 0.77     |          |          |
| W9801B    | 2/2/98   | 8:18     | 19        | NH-35        | 44.65 | -124.88 | 71          | 11.65      | 32.69 |         |          | 12.10    | 0.97     |          |          |
| W9801B    | 2/2/98   | 8:18     | 19        | NH-35        | 44.65 | -124.88 | 99          | 11.67      | 32.70 |         |          | 13.49    | 0.83     |          |          |
| W9801B    | 2/2/98   | 8:18     | 19        | NH-35        | 44.65 | -124.88 | 143         | 10.45      | 33.32 |         |          | 10.21    | 0.42     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 2           | 11.36      | 32.64 | 7.62    |          | 6.65     | 0.67     |          | 4.24     |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 10          | 11.36      | 32.64 |         |          | 9.88     | 0.81     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 22          | 11.36      | 32.64 |         |          | 8.52     | 0.71     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 30          | 11.36      | 32.64 |         |          | 7.52     | 0.65     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 39          | 11.36      | 32.64 |         |          | 7.82     | 0.82     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 50          | 11.38      | 32.64 |         |          | 9.35     | 0.70     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 69          | 11.46      | 32.66 |         |          | 8.30     | 0.65     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 86          | 11.55      | 32.70 |         |          | 6.55     | 0.57     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 101         | 11.35      | 32.95 |         |          | 5.64     | 0.43     |          |          |
| W9801B    | 2/2/98   | 4:34     | 18        | NH-45        | 44.65 | -125.12 | 148         | 9.00       | 33.52 |         |          | 6.63     | 0.53     |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 3           | 10.79      | 32.48 | 7.54    |          | 7.22     | 0.53     |          | 4.90     |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 10          | 10.80      | 32.48 |         |          | 7.80     | 0.59     |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 19          | 10.80      | 32.48 |         |          | 6.54     | 0.63     |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 30          | 10.80      | 32.48 |         |          | 7.38     | 0.53     |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 40          | 10.80      | 32.48 |         |          | 7.77     | 0.71     |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 50          | 10.80      | 32.48 |         |          | 9.21     | 0.66     |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 72          | 10.79      | 32.48 |         |          | 4.83     | 0.49     |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 91          | 10.71      | 32.52 |         |          | 7.01     | 0.44     |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 101         | 9.45       | 32.99 |         |          | 4.88     |          |          |          |
| W9801B    | 2/1/98   | 22:07    | 16        | NH-65        | 44.65 | -125.6  | 148         | 8.38       | 33.71 |         |          | 8.90     | 0.34     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 1           | 10.39      | 32.46 | 9.82    |          | 8.12     | 0.80     |          | 5.25     |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 11          | 10.39      | 32.46 |         |          | 10.68    | 1.12     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 20          | 10.39      | 32.46 |         |          | 9.48     | 0.81     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 29          | 10.39      | 32.47 |         |          | 10.46    | 0.90     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 41          | 10.39      | 32.47 |         |          | 9.32     | 0.91     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 50          | 10.39      | 32.47 |         |          | 11.33    | 1.16     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 71          | 10.38      | 32.47 |         |          | 10.04    | 0.95     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 85          | 10.05      | 32.66 |         |          | 11.96    | 1.18     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 99          | 9.07       | 33.21 |         |          | 5.37     | 0.40     |          |          |
| W9801B    | 2/1/98   | 18:26    | 15        | NH-85        | 44.65 | -126.05 | 149         | 8.13       | 33.67 |         |          | 5.61     | 0.36     |          |          |
| W9801B    | 1/31/98  | 20:24    | 9         | FM-03        | 43.22 | -124.5  | 11          | 12.56      | 31.31 | 10.21   |          | 11.19    | 1.00     |          | 5.68     |
| W9801B    | 1/31/98  | 20:24    | 9         | FM-03        | 43.22 | -124.5  | 15          | 12.56      | 31.38 |         |          | 12.35    | 0.97     |          |          |
| W9801B    | 1/31/98  | 20:24    | 9         | FM-03        | 43.22 | -124.5  | 21          | 12.60      | 31.54 |         |          | 14.92    | 1.17     |          |          |
| W9801B    | 1/31/98  | 20:24    | 9         | FM-03        | 43.22 | -124.5  | 25          | 12.63      | 31.71 |         |          | 9.42     | 0.72     |          |          |
| W9801B    | 1/31/98  | 20:24    | 9         | FM-03        | 43.22 | -124.5  | 30          | 12.64      | 31.78 |         |          | 9.45     | 0.69     |          |          |
| W9801B    | 1/31/98  | 20:24    | 9         | FM-03        | 43.22 | -124.5  | 41          | 12.76      | 32.19 |         |          | 11.05    | 0.82     |          |          |
| W9801B    | 1/31/98  | 20:24    | 9         | FM-03        | 43.22 | -124.5  | 51          | 12.82      | 32.57 |         |          | 10.12    | 0.86     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9801B    | 1/31/98  | 20:24    | 9         | FM-03        | 43.22 | -124.5  | 56          | 12.82      | 32.57 |         |          | 15.28    | 0.87     |          |          |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 10          | 12.59      | 31.26 | 8.83    |          | 10.28    | 0.84     |          | 4.41     |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 21          | 12.64      | 31.45 |         |          | 9.19     | 0.57     |          |          |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 26          | 12.69      | 31.77 |         |          |          |          |          |          |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 30          | 12.72      | 31.89 |         |          | 9.30     | 0.53     |          |          |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 41          | 12.80      | 32.25 |         |          | 11.49    | 0.88     |          |          |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 51          | 12.80      | 32.44 |         |          | 11.84    | 0.81     |          |          |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 60          | 12.81      | 32.57 |         |          | 9.35     | 0.81     |          |          |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 71          | 12.77      | 32.81 |         |          | 16.98    | 1.02     |          |          |
| W9801B    | 1/31/98  | 22:19    | 10        | FM-04        | 43.22 | -124.58 | 73          | 12.77      | 32.81 |         |          | 12.57    | 0.89     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 1           | 12.79      | 32.74 | 7.52    |          | 16.44    | 0.90     |          | 3.83     |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 10          | 12.80      | 32.73 |         |          | 10.28    | 0.68     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 20          | 12.81      | 32.79 |         |          | 12.23    | 0.84     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 31          | 12.82      | 32.91 |         |          | 9.88     | 0.62     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 41          | 12.81      | 32.92 |         |          | 14.49    | 0.58     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 51          | 12.81      | 32.93 |         |          | 10.82    | 0.56     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 59          | 12.80      | 32.93 |         |          | 8.11     | 0.50     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 70          | 12.80      | 32.93 |         |          | 8.28     | 0.52     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 80          | 12.81      | 32.94 |         |          | 11.77    | 0.61     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 102         | 12.81      | 32.94 |         |          | 8.66     | 0.56     |          |          |
| W9801B    | 1/31/98  | 23:57    | 11        | FM-05        | 43.22 | -124.67 | 129         | 12.79      | 32.97 |         |          | 7.74     | 0.49     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 2           | 12.55      | 32.96 | 8.70    |          | 8.72     | 0.69     |          | 4.66     |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 11          | 12.56      | 32.96 |         |          | 11.01    | 0.84     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 20          | 12.57      | 32.97 |         |          | 11.32    | 0.88     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 31          | 12.58      | 32.97 |         |          | 9.21     | 0.77     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 41          | 12.58      | 32.97 |         |          | 14.38    | 1.09     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 50          | 12.59      | 32.97 |         |          | 11.73    | 0.80     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 71          | 12.60      | 32.98 |         |          | 12.49    | 0.90     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 86          | 12.60      | 32.99 |         |          | 11.97    | 0.89     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 101         | 12.57      | 33.02 |         |          | 16.75    | 0.94     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 121         | 12.48      | 33.07 |         |          | 15.15    | 0.93     |          |          |
| W9801B    | 2/1/98   | 3:38     | 13        | FM-07        | 43.22 | -124.83 | 150         | 10.89      | 33.39 |         |          | 7.52     |          |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 5           | 11.28      | 32.60 | 7.09    |          | 5.85     | 0.59     |          | 5.18     |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 10          | 11.28      | 32.60 |         |          | 7.33     | 0.72     |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 20          | 11.28      | 32.60 |         |          | 8.18     | 0.73     |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 28          | 11.28      | 32.60 |         |          | 6.56     | 0.66     |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 39          | 11.28      | 32.60 |         |          | 8.88     | 1.16     |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 50          | 11.28      | 32.60 |         |          | 6.46     | 0.55     |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 70          | 11.28      | 32.60 |         |          | 9.98     | 0.72     |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 101         | 11.24      | 32.61 |         |          | 6.29     | 0.51     |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 121         | 10.10      | 32.77 |         |          | 7.34     | 0.53     |          |          |
| W9801B    | 2/1/98   | 6:55     | 14        | FM-08        | 43.22 | -125.   | 150         | 9.34       | 33.33 |         |          | 6.96     | 0.29     |          |          |
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 2           | 11.82      | 31.89 | 6.59    |          | 21.97    | 2.07     |          | 4.46     |
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 5           | 11.83      | 31.90 | 6.04    |          | 20.54    | 1.79     |          | 4.18     |
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 10          | 11.80      | 31.93 | 5.67    |          | 26.09    | 2.35     |          | 3.27     |
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 15          | 11.54      | 32.16 | 7.31    |          | 24.06    | 2.13     |          | 5.12     |
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 20          | 11.06      | 32.43 | 9.51    |          | 17.46    | 2.60     |          | 6.85     |
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 25          | 10.98      | 32.62 | 11.03   |          | 11.49    | 1.50     |          | 9.37     |
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 30          | 10.88      | 32.68 | 12.11   |          | 11.74    | 1.17     |          | 10.26    |
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 40          | 10.69      | 32.93 | 15.52   |          | 11.43    | 0.99     |          | 10.38    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9804A    | 4/5/98   | 13:16    | 11        | NH-05        | 44.65 | -124.18 | 49          | 10.49      | 33.01 | 17.07   |          | 15.20    | 1.38     | 8.51     |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 3           | 11.71      | 32.04 | 9.99    |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 4           | 11.71      | 32.04 |         |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 10          | 11.70      | 32.04 | 4.34    |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 16          | 11.74      | 32.11 |         |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 20          | 11.72      | 32.10 | 4.97    |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 25          | 11.72      | 32.13 |         |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 30          | 11.47      | 32.42 | 6.12    |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 41          | 11.11      | 32.63 |         |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 51          | 10.82      | 32.82 | 11.60   |          |          |          |          |          |
| W9804A    | 4/10/98  | 19:40    | 46        | NH-05        | 44.65 | -124.18 | 54          | 10.76      | 32.85 |         |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 3           | 11.44      | 32.22 | 2.93    |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 7           | 11.37      | 32.50 | 3.17    |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 10          | 11.30      | 32.54 | 2.88    |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 20          | 11.13      | 32.60 | 5.20    |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 30          | 11.05      | 32.64 | 4.07    |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 41          | 10.96      | 32.66 | 4.86    |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 50          | 10.93      | 32.69 | 5.86    |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 60          | 11.08      | 32.79 | 9.72    |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 70          | 10.97      | 32.81 | 11.41   |          |          |          |          |          |
| W9804A    | 4/5/98   | 9:44     | 9         | NH-15        | 44.65 | -124.41 | 80          |            |       | 14.14   |          |          |          |          |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 2           | 11.64      | 31.49 | 4.17    |          | 9.54     | 1.05     | 3.09     |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 4           | 11.64      | 31.53 |         |          | 7.94     | 1.05     |          |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 10          | 11.64      | 31.55 | 4.61    |          | 10.34    | 1.05     | 3.53     |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 19          | 11.59      | 31.94 |         |          | 10.83    | 1.51     |          |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 31          | 11.03      | 32.46 | 6.30    |          | 9.40     | 1.18     | 4.21     |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 32          | 10.89      | 32.57 |         |          | 9.83     | 1.17     |          |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 39          | 10.70      | 32.72 |         |          | 6.87     | 0.67     |          |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 50          | 10.06      | 33.00 | 14.46   |          | 5.36     | 0.48     | 1.94     |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 60          | 10.00      | 33.02 |         |          | 6.12     | 0.43     |          |          |
| W9804A    | 4/10/98  | 22:58    | 48        | NH-15        | 44.65 | -124.41 | 69          | 9.92       | 33.05 |         |          | 6.98     | 0.44     |          |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 2           | 11.55      | 32.62 | 4.34    |          | 11.11    | 1.18     | 3.17     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 10          | 11.55      | 32.62 | 5.11    |          | 11.03    | 1.36     | 3.46     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 20          | 11.40      | 32.63 | 4.01    |          | 9.36     | 1.24     | 2.49     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 30          | 11.37      | 32.64 | 3.72    |          | 13.19    | 1.67     | 1.42     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 35          | 11.36      | 32.64 | 4.07    |          | 11.49    | 1.50     | 1.85     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 40          | 11.34      | 32.70 | 5.47    |          | 8.71     | 1.11     | 1.41     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 50          | 11.17      | 32.75 | 9.43    |          | 8.19     | 0.69     | 2.00     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 70          | 10.96      | 32.78 | 8.74    |          | 6.77     | 0.59     | 1.21     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 100         | 10.47      | 33.08 | 15.70   |          | 4.49     | 0.48     | 2.59     |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 200         |            |       | 34.15   |          |          |          |          |          |
| W9804A    | 4/5/98   | 5:48     | 7         | NH-25        | 44.65 | -124.65 | 244         |            |       | 36.82   |          |          |          |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 2           | 11.68      | 32.50 | 3.00    |          | 6.64     | 0.71     | 1.76     |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 10          | 11.69      | 32.50 |         |          | 10.97    | 1.09     |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 20          | 11.62      | 32.50 |         |          | 8.39     | 0.94     |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 29          | 11.53      | 32.53 |         |          | 7.88     | 0.96     |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 35          | 11.52      | 32.53 |         |          | 7.35     | 0.93     |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 40          | 11.49      | 32.60 |         |          | 10.36    | 1.39     |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 50          | 11.38      | 32.64 |         |          | 10.48    | 1.26     |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 70          | 11.12      | 32.67 |         |          | 7.09     | 0.71     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 101         | 10.72      | 32.87 |         |          | 6.25     | 0.52     |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 150         | 8.80       | 33.60 |         |          | 7.94     | 0.53     |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 300         | 6.49       | 33.99 |         |          | 3.90     |          |          |          |
| W9804A    | 4/5/98   | 4:04     | 6         | NH-35        | 44.65 | -124.88 | 400         | 5.73       | 34.05 |         |          | 5.46     |          |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 2           | 12.09      | 32.10 | 2.75    |          | 8.80     | 1.22     |          | 1.53     |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 10          | 11.62      | 32.16 |         |          | 8.24     | 1.27     |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 20          | 11.35      | 32.64 |         |          | 12.74    | 1.59     |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 30          | 11.35      | 32.70 |         |          | 15.59    | 2.06     |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 36          | 11.35      | 32.72 |         |          | 9.32     | 1.44     |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 40          | 11.38      | 32.74 |         |          | 7.31     | 0.99     |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 50          | 11.36      | 32.74 |         |          | 7.81     | 0.81     |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 70          | 11.09      | 32.78 |         |          | 8.03     | 0.62     |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 100         | 10.59      | 33.05 |         |          | 7.93     | 0.44     |          |          |
| W9804A    | 4/5/98   | 0:10     | 5         | NH-45        | 44.65 | -125.12 | 150         | 8.97       | 33.65 |         |          | 7.43     | 0.65     |          |          |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 10          | 11.01      | 32.67 | 6.12    |          | 9.90     | 1.31     |          | 4.73     |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 20          | 10.97      | 32.69 |         |          | 12.92    | 1.46     |          |          |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 30          | 10.95      | 32.69 |         |          | 9.70     | 1.03     |          |          |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 40          | 10.96      | 32.69 |         |          | 7.49     | 1.02     |          |          |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 45          | 10.95      | 32.69 |         |          | 8.09     | 1.09     |          |          |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 51          | 10.94      | 32.69 |         |          | 6.32     | 0.82     |          |          |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 70          | 10.91      | 32.71 |         |          | 5.35     | 0.70     |          |          |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 100         | 9.76       | 33.32 |         |          | 4.94     | 0.47     |          |          |
| W9804A    | 4/4/98   | 18:29    | 3         | NH-65        | 44.65 | -125.6  | 150         | 8.38       | 33.76 |         |          | 6.53     | 0.43     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 2           | 11.03      | 32.67 | 3.61    |          | 7.87     | 0.95     |          | 1.58     |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 10          | 11.02      | 32.67 |         |          | 6.23     | 0.87     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 21          | 11.01      | 32.67 |         |          | 10.06    | 1.01     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 29          | 10.98      | 32.67 |         |          | 9.23     | 1.23     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 40          | 10.93      | 32.67 |         |          | 11.72    | 1.39     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 50          | 10.90      | 32.67 |         |          | 7.79     | 1.01     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 69          | 10.79      | 32.65 |         |          | 7.07     | 0.81     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 101         | 10.24      | 32.91 |         |          | 6.62     | 0.44     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 150         | 8.65       | 33.70 |         |          | 7.89     | 0.56     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 864         | 3.88       | 34.34 |         |          | 7.84     | 0.41     |          |          |
| W9804A    | 4/4/98   | 15:38    | 2         | NH-85        | 44.65 | -126.05 | 1006        | 3.56       | 34.40 |         |          | 0.67     |          |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 2           | 12.31      | 31.85 | 9.14    |          | 25.34    | 2.81     |          | 3.81     |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 5           | 11.74      | 32.14 |         |          | 17.22    | 2.02     |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 10          | 11.43      | 32.62 |         |          | 13.74    | 1.59     |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 15          | 10.86      | 32.87 |         |          | 13.07    | 1.29     |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 20          | 10.26      | 33.07 |         |          | 11.67    | 1.18     |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 25          | 10.05      | 33.19 |         |          | 9.77     | 0.99     |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 29          | 9.54       | 33.39 |         |          | 11.12    | 0.83     |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 41          | 9.31       | 33.47 |         |          | 8.95     | 0.57     |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 45          | 9.19       | 33.50 |         |          | 8.11     | 0.72     |          |          |
| W9804A    | 4/6/98   | 0:03     | 15        | FM-03        | 43.22 | -124.5  | 49          | 9.17       | 33.50 |         |          | 8.39     | 0.70     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 2           | 12.20      | 32.07 | 2.90    |          | 11.63    | 1.22     |          | 1.62     |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 5           | 12.19      | 32.07 |         |          | 13.16    | 1.32     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 10          | 11.77      | 32.33 |         |          | 10.29    | 1.13     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 20          | 11.80      | 32.56 |         |          | 15.75    | 1.85     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 30          | 11.50      | 32.62 |         |          | 16.55    | 1.94     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 36          | 11.34      | 32.64 |         |          | 13.73    | 1.53     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 40          | 11.30      | 32.67 |         |          | 7.97     | 0.83     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 45          | 11.21      | 32.71 |         |          | 10.17    | 1.01     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 50          | 11.03      | 32.75 |         |          | 8.56     | 0.78     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 60          | 10.47      | 32.96 |         |          | 10.75    | 1.04     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 70          | 10.04      | 33.17 |         |          | 15.05    | 1.52     |          |          |
| W9804A    | 4/6/98   | 1:30     | 16        | FM-04        | 43.22 | -124.58 | 75          | 9.15       | 33.51 |         |          | 9.29     | 0.87     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 2           | 12.18      | 31.89 | 2.71    |          | 8.77     | 1.07     |          | 1.59     |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 10          | 11.69      | 32.36 |         |          | 11.22    | 1.38     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 21          | 11.48      | 32.56 |         |          | 4.35     | 0.62     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 30          | 11.38      | 32.59 |         |          | 10.60    | 1.50     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 40          | 11.34      | 32.66 |         |          | 3.69     | 0.45     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 51          | 11.34      | 32.70 |         |          | 7.04     | 1.22     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 60          | 11.11      | 32.73 |         |          | 5.49     | 0.84     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 71          | 10.93      | 32.79 |         |          | 9.51     | 1.11     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 101         | 8.50       | 33.71 |         |          | 8.00     | 0.76     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 135         | 7.91       | 33.87 |         |          | 6.92     | 0.66     |          |          |
| W9804A    | 4/6/98   | 3:39     | 17        | FM-05        | 43.22 | -124.67 | 147         | 7.91       | 33.87 |         |          | 11.28    | 0.83     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 2           | 11.63      | 32.44 | 2.90    |          | 10.16    | 1.18     |          | 1.71     |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 9           | 11.39      | 32.58 |         |          | 9.63     | 1.42     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 20          | 11.36      | 32.60 |         |          | 8.84     | 1.14     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 26          | 11.30      | 32.61 |         |          | 8.09     | 0.95     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 30          | 11.30      | 32.64 |         |          | 9.59     | 1.10     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 40          | 11.29      | 32.67 |         |          | 6.30     | 0.76     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 50          | 11.25      | 32.70 |         |          | 5.62     | 0.55     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 71          | 11.00      | 32.82 |         |          | 7.45     | 0.72     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 101         | 9.65       | 33.45 |         |          | 6.50     | 0.69     |          |          |
| W9804A    | 4/6/98   | 5:33     | 19        | FM-07        | 43.22 | -124.83 | 150         | 8.23       | 33.82 |         |          | 5.31     | 0.47     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 2           | 11.55      | 32.21 | 2.20    |          | 10.47    | 0.85     |          | 1.27     |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 10          | 11.65      | 32.25 |         |          | 8.29     | 0.91     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 20          | 11.50      | 32.45 |         |          | 12.14    | 1.23     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 24          | 11.41      | 32.45 |         |          | 11.51    | 1.09     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 30          | 11.38      | 32.50 |         |          | 12.14    | 1.23     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 41          | 11.26      | 32.56 |         |          | 10.00    | 0.90     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 50          | 11.33      | 32.62 |         |          | 6.77     | 0.61     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 69          | 11.00      | 32.69 |         |          | 6.56     | 0.57     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 100         | 10.25      | 33.08 |         |          | 5.95     | 0.43     |          |          |
| W9804A    | 4/6/98   | 7:36     | 20        | FM-08        | 43.22 | -125.   | 151         | 8.63       | 33.70 |         |          | 5.07     | 0.27     |          |          |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 2           | 10.90      | 31.33 | 11.02   |          | 14.14    | 2.00     |          | 3.06     |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 5           | 10.89      | 31.34 |         |          | 14.52    | 2.53     |          |          |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 8           | 10.91      | 31.42 |         |          | 13.42    | 2.08     |          |          |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 10          | 10.93      | 31.44 |         |          | 11.00    | 1.63     |          |          |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 15          | 10.98      | 31.66 |         |          | 13.76    | 2.03     |          |          |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 19          | 10.70      | 32.34 |         |          | 14.31    | 2.36     |          |          |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 25          | 10.48      | 32.73 |         |          | 9.82     | 1.22     |          |          |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 29          | 10.24      | 32.99 |         |          | 13.08    | 1.47     |          |          |
| W9804A    | 4/9/98   | 15:58    | 37        | CR-01        | 41.90 | -124.3  | 34          | 10.02      | 33.14 |         |          | 15.13    | 1.44     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 2           | 11.43      | 32.07 | 6.24    |          | 15.00    | 1.87     |          | 2.93     |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 5           | 11.43      | 32.07 |         |          | 14.03    | 2.10     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 10          | 11.43      | 32.07 |         |          | 13.66    | 2.02     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 19          | 10.96      | 32.15 |         |          | 18.62    | 2.56     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 24          | 10.88      | 32.25 |         |          | 19.24    | 2.77     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 31          | 10.78      | 32.72 |         |          | 9.43     | 0.89     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 40          | 10.53      | 32.93 |         |          | 8.66     | 0.79     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 50          | 10.11      | 33.05 |         |          | 8.19     | 0.71     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 61          | 9.58       | 33.37 |         |          | 8.41     | 0.57     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 70          | 8.80       | 33.70 |         |          | 3.52     |          |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 100         | 8.59       | 33.76 |         |          | 9.76     | 0.60     |          |          |
| W9804A    | 4/9/98   | 14:03    | 35        | CR-03        | 41.90 | -124.5  | 117         | 8.57       | 33.76 |         |          | 10.68    | 0.83     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 2           | 11.56      | 32.31 | 3.75    |          | 8.59     | 1.23     |          | 2.36     |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 10          | 11.55      | 32.31 |         |          | 7.69     | 1.02     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 20          | 11.54      | 32.34 |         |          | 10.93    | 1.22     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 29          | 11.52      | 32.37 |         |          | 8.31     | 1.22     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 35          | 11.51      | 32.40 |         |          | 8.31     | 1.26     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 40          | 11.50      | 32.43 |         |          | 8.00     | 1.07     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 51          | 11.44      | 32.49 |         |          | 9.29     | 1.08     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 70          | 10.82      | 32.82 |         |          | 6.59     | 0.91     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 99          | 8.90       | 33.63 |         |          | 5.58     | 0.40     |          |          |
| W9804A    | 4/9/98   | 17:58    | 38        | CR-04        | 41.90 | -124.6  | 149         | 7.70       | 33.92 |         |          | 7.08     | 0.41     |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 4           | 11.35      | 32.47 | 4.30    |          | 8.08     | 1.07     |          | 3.23     |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 9           | 11.35      | 32.47 |         |          | 8.88     | 0.88     |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 20          | 11.34      | 32.47 |         |          | 9.04     | 1.15     |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 29          | 11.27      | 32.50 |         |          | 7.94     | 0.87     |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 40          | 11.16      | 32.56 |         |          | 6.64     | 0.97     |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 45          | 11.15      | 32.56 |         |          | 7.06     | 0.97     |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 50          | 11.11      | 32.57 |         |          | 5.64     | 0.76     |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 69          | 10.75      | 32.62 |         |          | 3.71     | 0.39     |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 101         | 10.84      | 33.00 |         |          | 3.70     |          |          |          |
| W9804A    | 4/9/98   | 20:03    | 39        | CR-05        | 41.90 | -124.7  | 150         | 8.67       | 33.74 |         |          | 4.02     |          |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 2           | 11.51      | 32.54 | 9.05    |          | 21.81    | 2.50     |          | 6.36     |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 10          | 11.49      | 32.54 |         |          | 13.40    | 1.48     |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 20          | 11.48      | 32.54 |         |          | 11.84    | 1.47     |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 30          | 11.47      | 32.54 |         |          | 10.65    | 1.12     |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 40          | 11.47      | 32.54 |         |          | 11.99    | 1.36     |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 50          | 11.47      | 32.54 |         |          | 9.14     | 1.11     |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 60          | 11.57      | 32.59 |         |          | 7.92     | 0.76     |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 70          | 11.82      | 32.73 |         |          | 7.50     | 0.56     |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 100         | 11.14      | 32.72 |         |          | 8.27     | 0.46     |          |          |
| W9804A    | 4/9/98   | 23:27    | 41        | CR-07        | 41.90 | -125.   | 149         | 9.15       | 33.49 |         |          | 5.56     |          |          |          |
| W9804A    | 4/10/98  | 2:58     | 43        | CR-09        | 41.90 | -125.33 | 3           | 12.05      | 32.80 | 13.54   |          | 9.98     | 1.02     |          | 12.25    |
| W9804A    | 4/10/98  | 2:58     | 43        | CR-09        | 41.90 | -125.33 | 10          | 12.05      | 32.80 |         |          | 9.30     | 1.01     |          |          |
| W9804A    | 4/10/98  | 2:58     | 43        | CR-09        | 41.90 | -125.33 | 19          | 12.05      | 32.80 |         |          | 10.67    | 1.10     |          |          |
| W9804A    | 4/10/98  | 2:58     | 43        | CR-09        | 41.90 | -125.33 | 40          | 12.06      | 32.80 |         |          | 7.86     | 0.90     |          |          |
| W9804A    | 4/10/98  | 2:58     | 43        | CR-09        | 41.90 | -125.33 | 51          | 12.06      | 32.80 |         |          | 9.65     | 0.92     |          |          |
| W9804A    | 4/10/98  | 2:58     | 43        | CR-09        | 41.90 | -125.33 | 70          | 11.94      | 32.87 |         |          | 5.93     | 0.49     |          |          |
| W9804A    | 4/10/98  | 2:58     | 43        | CR-09        | 41.90 | -125.33 | 101         | 11.12      | 33.13 |         |          | 6.80     | 0.62     |          |          |
| W9804A    | 4/7/98   | 12:39    | 22        | COC-02       | 38.65 | -123.45 | 1           |            |       | 9.49    |          |          |          |          |          |
| W9804A    | 4/7/98   | 12:39    | 22        | COC-02       | 38.65 | -123.45 | 5           |            |       |         |          |          |          |          |          |
| W9804A    | 4/7/98   | 12:39    | 22        | COC-02       | 38.65 | -123.45 | 15          |            |       |         |          |          |          |          |          |
| W9804A    | 4/7/98   | 12:39    | 22        | COC-02       | 38.65 | -123.45 | 20          |            |       |         |          |          |          |          |          |
| W9804A    | 4/7/98   | 12:39    | 22        | COC-02       | 38.65 | -123.45 | 31          | 11.37      | 33.18 |         |          | 8.83     | 0.89     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9804A    | 4/7/98   | 12:39    | 22        | COC-02       | 38.65 | -123.45 | 41          | 11.19      | 33.24 |         |          | 12.52    | 1.00     |          |          |
| W9804A    | 4/7/98   | 12:39    | 22        | COC-02       | 38.65 | -123.45 | 71          | 10.12      | 33.61 |         |          | 16.76    | 1.91     |          |          |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 2           | 11.72      | 33.03 | 10.35   |          | 8.34     | 0.99     |          | 2.90     |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 5           | 11.72      | 33.03 |         |          | 12.23    | 1.53     |          |          |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 10          | 11.71      | 33.03 |         |          | 12.25    | 1.51     |          |          |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 25          | 11.58      | 33.10 |         |          | 15.83    | 2.14     |          |          |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 30          | 11.39      | 33.16 |         |          | 9.47     | 1.19     |          |          |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 40          | 11.08      | 33.27 |         |          | 6.98     | 0.61     |          |          |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 51          | 10.91      | 33.34 |         |          | 4.79     | 0.32     |          |          |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 61          | 10.46      | 33.48 |         |          | 5.43     | 0.37     |          |          |
| W9804A    | 4/7/98   | 15:34    | 23        | COC-04       | 38.60 | -123.51 | 101         | 9.62       | 33.71 |         |          | 7.22     | 0.65     |          |          |
| W9804A    | 4/7/98   | 17:35    | 24        | COC-05       | 38.58 | -123.56 | 10          | 12.11      | 32.82 | 7.30    |          | 13.18    | 1.98     |          | 3.85     |
| W9804A    | 4/7/98   | 17:35    | 24        | COC-05       | 38.58 | -123.56 | 20          | 12.11      | 32.82 |         |          | 5.89     | 0.64     |          |          |
| W9804A    | 4/7/98   | 17:35    | 24        | COC-05       | 38.58 | -123.56 | 31          | 12.11      | 32.89 |         |          | 4.68     | 0.27     |          |          |
| W9804A    | 4/7/98   | 17:35    | 24        | COC-05       | 38.58 | -123.56 | 41          | 11.58      | 33.20 |         |          | 7.67     | 0.68     |          |          |
| W9804A    | 4/7/98   | 17:35    | 24        | COC-05       | 38.58 | -123.56 | 49          | 11.27      | 33.23 |         |          | 5.76     |          |          |          |
| W9804A    | 4/7/98   | 17:35    | 24        | COC-05       | 38.58 | -123.56 | 70          | 10.14      | 33.56 |         |          | 4.83     |          |          |          |
| W9804A    | 4/7/98   | 17:35    | 24        | COC-05       | 38.58 | -123.56 | 99          | 9.57       | 33.68 |         |          |          |          |          |          |
| W9804A    | 4/7/98   | 17:35    | 24        | COC-05       | 38.58 | -123.56 | 125         | 9.04       | 33.82 |         |          | 5.98     | 0.30     |          |          |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 3           | 12.49      | 32.80 | 3.70    |          | 6.75     | 0.82     |          | 2.60     |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 10          | 12.49      | 32.80 |         |          | 7.61     | 0.87     |          |          |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 20          | 12.47      | 32.79 |         |          | 8.00     | 0.96     |          |          |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 30          | 12.47      | 32.79 |         |          | 6.81     | 0.85     |          |          |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 41          | 12.47      | 32.80 |         |          | 7.47     | 0.95     |          |          |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 51          | 12.48      | 32.81 |         |          | 8.78     | 0.93     |          |          |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 71          | 11.85      | 33.27 |         |          | 5.03     | 0.42     |          |          |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 98          | 9.99       | 33.55 |         |          | 3.96     |          |          |          |
| W9804A    | 4/7/98   | 19:31    | 26        | COC-07       | 38.50 | -123.66 | 151         | 9.03       | 33.84 |         |          | 3.66     |          |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 3           | 12.64      | 32.82 | 2.66    |          | 8.58     | 0.77     |          | 1.83     |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 10          | 12.64      | 32.82 |         |          | 10.65    | 0.92     |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 19          | 12.63      | 32.82 |         |          | 9.81     | 0.93     |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 29          | 12.64      | 32.82 |         |          | 9.36     | 0.84     |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 39          | 12.61      | 32.82 |         |          | 8.06     | 0.84     |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 50          | 12.60      | 32.82 |         |          | 8.04     | 0.74     |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 70          | 12.02      | 33.07 |         |          | 5.27     | 0.40     |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 80          | 11.18      | 33.24 |         |          | 3.37     |          |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 101         | 10.08      | 33.54 |         |          | 5.61     |          |          |          |
| W9804A    | 4/8/98   | 0:07     | 28        | COC-09       | 38.40 | -123.82 | 150         | 8.63       | 33.89 |         |          | 2.64     |          |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 3           | 12.62      | 32.81 | 2.91    |          | 8.32     | 0.95     |          | 1.60     |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 10          | 12.62      | 32.81 |         |          | 7.42     | 0.83     |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 19          | 12.62      | 32.81 |         |          | 8.07     | 0.95     |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 29          | 12.62      | 32.81 |         |          | 6.24     | 0.75     |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 41          | 12.62      | 32.81 |         |          | 8.06     | 0.78     |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 50          | 12.62      | 32.81 |         |          | 10.57    | 0.77     |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 60          | 12.62      | 32.81 |         |          | 9.71     | 0.87     |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 70          | 12.47      | 32.87 |         |          | 5.47     | 0.50     |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 99          | 10.14      | 33.35 |         |          | 4.47     | 0.35     |          |          |
| W9804A    | 4/8/98   | 3:56     | 29        | COC-11       | 38.29 | -123.99 | 151         | 8.70       | 33.77 |         |          | 3.71     |          |          |          |
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 0           | 10.30      | 33.24 | 20.82   | 95.95    | 39.15    | 5.30     | 56.80    | 7.11     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 5           | 10.40      | 33.23 | 21.39   | 81.69    | 57.18    |          | 24.51    |          |
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 10          | 10.20      | 33.25 |         | 74.01    | 34.41    | 4.38     | 39.60    |          |
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 15          | 9.80       | 33.29 | 25.96   | 69.15    | 10.95    | 1.38     | 58.20    | 0.71     |
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 20          | 8.80       | 33.37 | 28.16   | 61.09    | 13.30    | 1.19     | 47.79    | 5.48     |
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 25          | 8.20       | 33.61 | 29.54   | 56.53    | 8.80     | 1.09     | 47.73    | 1.81     |
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 30          | 8.00       | 33.69 | 31.66   | 53.13    | 8.70     | 0.86     | 44.43    | 1.89     |
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.80       | 33.81 | 33.86   | 63.10    | 19.17    |          | 43.93    |          |
| W9808A    | 8/6/98   | 20:36    | 3         | NH-05        | 44.65 | -124.18 | 52          | 7.80       | 33.81 | 35.49   | 72.22    | 28.21    | 1.93     | 44.01    | 3.07     |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 0           | 12.00      | 32.42 | 13.32   | 121.38   | 52.05    | 6.68     | 69.34    | 4.30     |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 5           | 11.60      | 32.54 |         | 128.66   | 74.98    | 11.63    | 53.69    |          |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 10          | 11.50      | 32.60 |         | 114.66   | 79.96    | 14.27    | 34.70    |          |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 20          | 9.60       | 32.55 | 14.34   | 68.80    | 13.30    | 1.54     | 55.50    | 2.94     |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 30          | 8.90       | 32.79 | 16.34   | 79.05    |          |          |          |          |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 50          | 8.80       | 33.27 |         | 55.98    |          |          |          |          |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 60          | 8.50       | 33.56 |         | 54.52    | 17.30    |          | 37.22    |          |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 70          | 8.40       | 33.66 |         | 61.28    | 12.16    |          | 49.12    |          |
| W9808A    | 8/7/98   | 9:29     | 7         | NH-15        | 44.65 | -124.41 | 85          | 7.90       | 33.79 |         | 99.39    | 37.62    |          | 61.77    |          |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 0           | 14.50      | 31.82 | 8.69    | 83.12    | 13.80    | 1.36     | 69.32    | 5.24     |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 10          | 14.30      | 31.86 | 7.47    | 69.77    | 16.50    | 1.89     | 53.27    | 3.41     |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 20          | 10.40      | 32.50 | 7.93    | 66.98    | 13.40    | 1.80     | 53.58    | 3.56     |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 25          | 10.20      | 32.54 | 9.83    | 58.96    | 5.73     | 0.78     | 53.23    | 5.19     |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 30          | 9.90       | 32.56 | 12.19   | 71.06    |          | 1.08     |          | 5.42     |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 40          | 9.40       | 32.61 | 15.47   | 58.67    | 7.50     |          | 51.17    |          |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 50          | 9.10       | 32.78 | 18.06   | 62.53    | 12.50    |          | 50.03    |          |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 70          | 8.70       | 33.34 | 28.87   | 56.90    | 2.84     |          | 54.06    |          |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 100         | 8.10       | 33.70 | 34.58   | 55.58    | 7.42     | 0.60     | 48.16    | 5.22     |
| W9808A    | 8/7/98   | 6:20     | 5         | NH-25        | 44.65 | -124.65 | 200         | 7.40       | 33.95 |         | 78.17    | 11.39    | 1.06     | 66.78    |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 0           | 15.20      | 31.60 | 9.91    | 88.33    | 22.80    | 2.95     | 65.53    | 6.46     |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 10          | 15.20      | 31.61 |         |          | 15.60    | 1.58     |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 20          | 11.60      | 32.28 |         |          | 11.70    | 1.43     |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 25          | 10.80      | 32.43 |         |          | 10.50    | 1.34     |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 30          | 10.40      | 32.50 |         |          | 13.60    | 2.04     |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 40          | 9.90       | 32.55 |         |          | 14.00    | 0.97     |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 50          | 9.60       | 32.58 |         |          | 4.50     |          |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 70          | 9.40       | 33.03 |         |          | 5.50     |          |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.40       | 33.51 |         |          | 7.75     | 0.79     |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 150         | 7.90       | 33.89 |         |          | 8.08     | 0.69     |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 235         | 7.20       | 33.97 |         |          | 6.99     | 0.97     |          |          |
| W9808A    | 8/7/98   | 11:35    | 8         | NH-35        | 44.65 | -124.88 | 410         | 6.00       | 34.02 |         |          | 8.85     | 0.87     |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 0           | 15.80      | 31.29 | 8.16    | 93.11    | 24.60    | 1.48     | 68.51    | 6.36     |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 20          | 10.60      | 32.49 |         |          | 12.30    | 1.09     |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 25          | 10.10      | 32.54 |         |          | 8.72     | 1.12     |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 30          | 10.00      | 32.55 |         |          | 10.50    | 1.50     |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 40          | 9.60       | 32.59 |         |          | 8.50     | 0.84     |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 50          | 9.40       | 32.70 |         |          | 7.80     |          |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 70          | 8.80       | 33.41 |         |          | 6.60     |          |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 150         | 7.50       | 33.93 |         |          |          |          |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.70       | 34.06 |         |          |          |          |          |          |
| W9808A    | 8/7/98   | 13:40    | 9         | NH-45        | 44.65 | -125.12 | 680         | 4.60       | 34.21 |         |          | 6.09     | 0.57     |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 0           | 16.80      | 30.76 | 7.40    | 80.47    | 10.04    | 1.16     | 70.43    | 5.93     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 10          | 16.70      | 30.83 |         |          | 7.37     | 0.89     |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 20          | 13.60      | 32.22 |         |          | 4.70     | 0.66     |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 30          | 10.90      | 32.62 |         |          | 5.60     | 0.65     |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 40          | 10.60      | 32.61 |         |          | 4.80     | 0.67     |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 45          | 10.30      | 32.59 |         |          | 12.50    | 0.90     |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 50          | 9.80       | 32.57 |         |          | 17.60    | 0.98     |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 70          | 9.20       | 32.89 |         |          | 12.30    |          |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 100         | 8.90       | 33.53 |         |          | 20.20    |          |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 150         | 8.10       | 33.83 |         |          | 4.96     | 0.60     |          |          |
| W9808A    | 8/7/98   | 18:45    | 11        | NH-65        | 44.65 | -125.6  | 1005        | 3.50       | 34.43 |         |          | 8.87     | 0.92     |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 0           | 17.50      | 31.46 | 6.79    | 69.23    | 10.10    | 0.94     | 59.13    | 5.72     |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 20          | 15.80      | 31.80 |         |          | 6.90     | 0.85     |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 30          | 12.70      | 32.41 |         |          | 14.96    | 0.73     |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 40          | 11.20      | 32.56 |         |          | 3.90     | 0.56     |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 50          | 10.90      | 32.59 |         |          | 6.90     | 0.70     |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 60          | 10.30      | 32.59 |         |          | 6.10     |          |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 70          | 9.90       | 32.58 |         |          | 11.89    |          |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 100         | 9.40       | 33.10 |         |          | 4.06     |          |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 150         | 8.00       | 33.79 |         |          | 12.78    | 0.43     |          |          |
| W9808A    | 8/7/98   | 22:32    | 12        | NH-85        | 44.65 | -126.05 | 1000        | 3.50       | 34.41 |         |          |          |          |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 0           | 10.10      | 33.56 | 26.68   | 89.75    | 47.52    | 6.61     | 42.23    | 7.80     |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 5           | 10.00      | 33.56 |         |          | 40.93    | 5.63     |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 10          | 9.70       | 33.55 |         |          | 60.20    | 10.21    |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 15          | 9.60       | 33.54 |         |          | 61.33    | 10.01    |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 20          | 9.40       | 33.56 |         |          | 16.09    | 2.76     |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 25          | 8.90       | 33.61 |         |          | 4.71     | 1.38     |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 30          | 8.70       | 33.72 |         |          | 15.39    | 1.14     |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 40          | 8.60       | 33.79 |         |          | 10.03    |          |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 50          | 8.50       | 33.83 |         |          | 6.53     |          |          |          |
| W9808A    | 8/8/98   | 19:41    | 19        | FM-03        | 43.22 | -124.5  | 60          | 8.50       | 33.83 |         |          | 17.11    | 1.30     |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 0           | 10.58      | 33.35 |         | 94.48    | 73.21    | 11.70    | 21.27    |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 5           | 10.58      | 33.35 |         |          | 44.35    | 6.34     |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 8           | 10.24      | 33.36 |         |          | 54.59    | 9.16     |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 10          | 10.20      | 33.37 |         |          | 28.04    | 4.28     |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 20          | 9.58       | 33.47 |         |          | 15.73    | 1.94     |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 29          | 9.05       | 33.56 |         |          | 11.58    |          |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 40          | 9.08       | 33.68 |         |          | 11.65    | 1.26     |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 50          | 8.63       | 33.78 |         |          | 28.52    | 1.65     |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 59          | 8.45       | 33.83 |         |          | 7.75     | 1.18     |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 70          | 8.40       | 33.86 |         |          | 13.68    |          |          |          |
| W9808A    | 8/8/98   | 18:15    | 18        | FM-04        | 43.22 | -124.58 | 77          | 8.40       | 33.86 |         |          | 10.94    | 1.37     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 0           | 11.50      | 33.23 | 11.41   | 65.04    | 21.90    | 2.84     | 43.14    | 5.67     |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 10          | 11.40      | 33.23 |         |          | 24.82    | 3.40     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 15          | 11.50      | 33.23 |         |          | 12.25    | 1.44     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 20          | 11.40      | 33.23 |         |          | 14.01    | 1.73     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 30          | 10.50      | 33.28 |         |          | 11.04    | 1.22     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 40          | 9.60       | 33.41 |         |          | 13.58    | 1.05     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 50          | 8.80       | 33.60 |         |          | 9.88     | 0.47     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 60          | 8.80       | 33.72 |         |          | 10.67    | 0.57     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 70          | 8.70       | 33.77 |         |          | 16.45    | 0.69     |          |          |
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 100         | 8.40       | 33.87 |         |          | 6.61     |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9808A    | 8/8/98   | 16:36    | 17        | FM-05        | 43.22 | -124.67 | 140         | 8.20       | 33.92 |         |          | 14.81    | 1.42     |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 0           | 12.00      | 33.01 |         | 60.43    | 17.61    | 2.75     | 42.81    |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 10          | 11.80      | 33.06 |         |          | 10.70    | 1.38     |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 15          | 11.40      | 33.02 |         |          | 16.19    | 2.48     |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 20          | 9.40       | 33.00 |         |          | 18.72    | 2.51     |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 30          | 9.20       | 33.32 |         |          | 5.84     | 0.44     |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 40          | 9.00       | 33.51 |         |          | 7.01     |          |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 51          | 8.90       | 33.66 |         |          | 4.99     |          |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 70          | 8.80       | 33.73 |         |          | 8.52     |          |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 100         | 8.60       | 33.84 |         |          | 7.91     |          |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 152         | 8.00       | 33.99 |         |          | 7.18     | 0.46     |          |          |
| W9808A    | 8/8/98   | 13:58    | 15        | FM-07        | 43.22 | -124.83 | 250         | 7.60       | 34.02 |         |          | 5.26     | 0.44     |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 0           | 12.10      | 32.82 | 9.00    | 58.66    | 13.32    | 1.31     | 45.34    | 7.35     |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 10          | 12.10      | 32.82 |         |          | 17.40    | 2.44     |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 20          | 12.00      | 33.03 |         |          | 12.63    | 1.31     |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 25          | 10.90      | 32.87 |         |          | 11.41    | 0.99     |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 30          | 10.80      | 32.91 |         |          | 8.94     | 0.95     |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 40          | 9.30       | 33.06 |         |          | 4.08     |          |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 49          | 9.20       | 33.28 |         |          | 3.66     | 0.57     |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 70          | 9.10       | 33.67 |         |          | 6.30     |          |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 100         | 8.80       | 33.77 |         |          | 9.06     |          |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 150         | 8.30       | 33.95 |         |          |          | 0.49     |          |          |
| W9808A    | 8/8/98   | 11:20    | 14        | FM-08        | 43.22 | -125.   | 1005        | 3.70       | 34.41 |         |          |          | 0.47     |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 0           | 12.70      | 32.93 | 10.56   | 63.66    | 9.20     | 1.52     | 54.46    | 8.64     |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 10          | 12.70      | 32.95 |         |          | 18.40    | 2.70     |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 20          | 12.40      | 33.04 |         |          | 19.40    | 2.88     |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 30          | 11.80      | 33.19 |         |          | 20.70    | 2.79     |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 40          | 11.10      | 33.26 |         |          | 13.80    | 1.24     |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 50          | 9.40       | 33.18 |         |          | 19.00    | 1.33     |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 70          | 9.30       | 33.45 |         |          |          |          |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 85          | 9.00       | 33.62 |         |          |          |          |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 100         | 8.70       | 33.66 |         |          | 5.60     |          |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 150         | 8.10       | 33.94 |         |          | 8.69     | 0.49     |          |          |
| W9808A    | 8/8/98   | 8:07     | 13        | FM-09        | 43.22 | -125.17 | 1005        | 3.60       | 34.42 |         | 37.45    |          | 0.46     |          |          |
| W9808A    | 8/9/98   | 20:09    | 29        | CR-01        | 41.90 | -124.3  | 0           | 11.60      | 33.43 | 16.69   | 68.39    | 11.38    | 1.83     | 57.01    | 8.50     |
| W9808A    | 8/9/98   | 20:09    | 29        | CR-01        | 41.90 | -124.3  | 5           | 10.90      | 33.45 |         |          | 16.35    | 2.21     |          |          |
| W9808A    | 8/9/98   | 20:09    | 29        | CR-01        | 41.90 | -124.3  | 10          | 10.40      | 33.46 |         |          | 14.37    | 1.91     |          |          |
| W9808A    | 8/9/98   | 20:09    | 29        | CR-01        | 41.90 | -124.3  | 15          | 10.10      | 33.49 |         |          | 15.04    | 1.43     |          |          |
| W9808A    | 8/9/98   | 20:09    | 29        | CR-01        | 41.90 | -124.3  | 20          | 9.80       | 33.55 |         |          | 19.38    | 1.96     |          |          |
| W9808A    | 8/9/98   | 20:09    | 29        | CR-01        | 41.90 | -124.3  | 25          | 9.60       | 33.60 |         |          | 11.84    | 1.47     |          |          |
| W9808A    | 8/9/98   | 20:09    | 29        | CR-01        | 41.90 | -124.3  | 37          | 9.30       | 33.69 |         |          | 10.89    | 0.79     |          |          |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 0           | 12.20      | 32.75 | 5.12    | 63.21    | 7.86     | 1.10     | 55.35    | 1.95     |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 5           | 12.20      | 32.75 |         |          | 11.55    | 1.61     |          |          |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 17          | 11.10      | 32.78 |         |          | 13.18    | 1.19     |          |          |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 20          | 10.50      | 32.89 |         |          | 9.19     | 0.79     |          |          |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 30          | 10.00      | 33.08 |         |          | 6.17     | 0.56     |          |          |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 40          | 9.70       | 33.23 |         |          | 15.24    | 0.73     |          |          |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 50          | 9.50       | 33.37 |         |          |          |          |          |          |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 60          | 9.30       | 33.48 |         |          | 3.59     |          |          |          |
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 70          | 9.10       | 33.60 |         |          | 10.41    | 0.51     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9808A    | 8/9/98   | 16:59    | 27        | CR-03        | 41.90 | -124.5  | 100         | 8.60       | 33.86 |         |          |          |          |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 0           | 12.60      | 32.71 | 3.72    |          | 0.89     |          |          | 1.97     |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 10          | 12.20      | 32.72 |         |          | 9.81     | 1.51     |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 20          | 12.10      | 32.74 |         |          |          | 1.00     |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 25          | 11.80      | 32.82 |         |          | 6.49     | 0.94     |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 30          | 11.80      | 33.05 |         |          | 5.83     | 0.84     |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 40          | 10.10      | 32.92 |         |          | 9.75     | 0.80     |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 50          | 9.70       | 33.19 |         |          | 6.23     | 0.52     |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 70          | 9.30       | 33.46 |         |          | 5.89     |          |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 100         | 8.80       | 33.74 |         |          | 13.01    |          |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 150         | 8.20       | 33.92 |         |          | 11.83    | 0.58     |          |          |
| W9808A    | 8/9/98   | 14:42    | 26        | CR-04        | 41.90 | -124.6  | 460         | 5.70       | 34.11 |         |          | 20.78    | 0.53     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 0           | 13.60      | 32.65 | 3.20    | 84.69    | 11.10    | 1.04     | 73.59    | 1.42     |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 10          | 13.60      | 32.65 |         |          | 6.93     | 0.88     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 20          | 13.40      | 32.65 |         |          | 7.84     | 0.75     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 30          | 13.20      | 32.79 |         |          | 7.04     | 0.78     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 40          | 12.00      | 33.16 |         |          | 6.64     | 0.74     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 47          | 11.10      | 33.26 |         |          | 8.15     | 1.16     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 50          | 10.90      | 33.27 |         |          | 8.85     | 0.61     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 70          | 9.70       | 33.42 |         |          | 8.21     | 0.61     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 100         | 8.80       | 33.70 |         |          |          |          |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 150         | 7.90       | 33.90 |         |          | 8.09     | 0.37     |          |          |
| W9808A    | 8/9/98   | 13:17    | 25        | CR-05        | 41.90 | -124.7  | 510         | 5.30       | 34.15 |         |          | 9.13     | 0.37     |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 0           | 13.70      | 32.82 |         | 74.45    | 14.25    | 2.12     | 60.19    |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 10          | 13.70      | 32.82 |         |          | 9.71     | 1.32     |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 20          | 13.70      | 32.82 |         |          | 10.12    | 1.28     |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 30          | 11.20      | 32.77 |         |          | 16.35    | 1.88     |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 40          | 11.00      | 33.25 |         |          | 14.89    | 1.86     |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 50          | 9.90       | 33.25 |         |          | 10.25    | 0.81     |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 70          | 9.70       | 33.55 |         |          | 10.99    | 0.61     |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 100         | 8.80       | 33.73 |         |          |          |          |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 150         | 8.10       | 33.90 |         |          | 18.91    | 0.54     |          |          |
| W9808A    | 8/9/98   | 9:25     | 23        | CR-07        | 41.90 | -125.   | 780         | 4.20       | 34.34 |         |          |          |          |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 0           | 13.50      | 32.81 |         | 78.36    | 23.09    | 3.12     | 55.28    |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 10          | 12.70      | 32.81 |         |          | 22.52    | 3.11     |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 20          | 11.90      | 32.81 |         |          | 17.65    | 2.58     |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 30          | 11.40      | 32.64 |         |          | 8.75     | 1.11     |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 40          | 10.00      | 32.78 |         |          | 6.19     | 0.75     |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 50          | 9.80       | 33.05 |         |          |          |          |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 70          | 9.80       | 33.36 |         |          |          |          |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 100         | 9.10       | 33.69 |         |          |          |          |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 150         | 8.10       | 33.89 |         |          | 6.96     | 0.51     |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 750         | 4.20       | 34.31 |         |          |          | 0.28     |          |          |
| W9808A    | 8/9/98   | 5:00     | 21        | CR-09        | 41.90 | -125.33 | 1005        | 3.60       | 34.42 |         |          |          | 0.75     |          |          |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 0           | 12.90      | 33.36 | 16.97   | 98.49    | 36.16    | 4.99     | 62.34    | 8.44     |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 5           | 12.90      | 33.37 |         |          | 39.80    | 6.67     |          |          |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 10          | 11.70      | 33.50 |         |          | 28.38    | 3.78     |          |          |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 15          | 11.00      | 33.53 |         |          | 53.70    | 6.36     |          |          |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 20          | 10.40      | 33.60 |         |          | 31.14    | 4.77     |          |          |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 25          | 10.20      | 33.61 |         |          | 42.25    | 5.14     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 30          | 10.00      | 33.64 |         |          | 13.88    | 2.41     |          |          |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 40          | 9.20       | 33.78 |         |          |          |          |          |          |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 50          | 8.90       | 33.84 |         |          |          |          |          |          |
| W9808A    | 8/10/98  | 2:25     | 30        | EU-01        | 40.87 | -124.27 | 55          | 8.90       | 33.85 |         |          |          |          |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 0           | 11.60      | 33.13 | 15.95   | 70.21    | 6.38     | 1.03     | 63.83    | 9.09     |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 5           | 11.60      | 33.13 |         |          | 10.90    | 1.60     |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 10          | 11.20      | 33.18 |         |          |          | 0.92     |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 20          | 10.40      | 33.25 |         |          |          | 0.90     |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 25          | 10.20      | 33.24 |         |          | 8.13     | 0.82     |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 30          | 10.10      | 33.30 |         |          | 6.02     | 0.87     |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 40          | 9.70       | 33.56 |         |          | 6.87     | 0.43     |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 50          | 9.40       | 33.68 |         |          |          |          |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 60          | 9.00       | 33.79 |         |          |          | 0.48     |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 70          | 8.90       | 33.82 |         |          |          |          |          |          |
| W9808A    | 8/10/98  | 3:47     | 31        | EU-02        | 40.87 | -124.37 | 105         | 8.50       | 33.91 |         |          | 20.12    | 1.01     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 0           | 12.10      | 33.11 | 17.41   | 67.09    | 13.60    | 2.08     | 53.48    | 7.49     |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 10          | 11.90      | 33.11 |         |          | 14.77    | 2.21     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 20          | 11.10      | 33.19 |         |          | 11.22    | 2.03     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 25          | 10.80      | 33.33 |         |          | 11.76    | 1.92     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 30          | 10.60      | 33.46 |         |          | 12.43    | 1.86     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 40          | 10.00      | 33.54 |         |          | 10.24    | 1.66     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 50          | 9.50       | 33.63 |         |          | 8.35     | 1.19     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 70          | 9.30       | 33.80 |         |          | 5.94     |          |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 100         | 9.00       | 33.86 |         |          |          |          |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 150         | 8.60       | 33.95 |         |          | 6.65     | 0.44     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 325         | 6.40       | 34.08 |         |          | 9.27     | 0.29     |          |          |
| W9808A    | 8/10/98  | 5:32     | 32        | EU-03        | 40.87 | -124.47 | 350         | 6.20       | 34.09 |         |          | 7.52     | 0.42     |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 0           | 13.60      | 32.92 | 13.02   | 77.52    | 16.02    | 1.89     | 61.50    | 6.63     |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 10          | 12.80      | 32.93 |         |          | 12.95    | 1.79     |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 20          | 11.80      | 33.14 |         |          | 16.51    | 1.92     |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 30          | 10.60      | 33.40 |         |          | 14.02    | 1.62     |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 40          | 10.10      | 33.52 |         |          | 7.75     | 1.23     |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 50          | 9.90       | 33.64 |         |          | 5.07     |          |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 70          | 9.50       | 33.73 |         |          |          |          |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 100         | 9.00       | 33.86 |         |          | 4.79     |          |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 150         | 8.70       | 33.93 |         |          |          | 0.62     |          |          |
| W9808A    | 8/10/98  | 9:07     | 34        | EU-05        | 40.87 | -124.67 | 710         | 4.50       | 34.29 |         |          |          | 0.55     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 0           | 13.80      | 32.65 | 7.83    | 62.55    | 0.16     | 2.14     | 62.39    | 5.66     |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 10          | 13.80      | 32.65 |         |          | 4.34     | 1.96     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 20          | 12.20      | 32.76 |         |          | 8.06     | 1.92     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 25          | 11.80      | 32.78 |         |          | 7.36     | 1.88     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 30          | 11.20      | 32.81 |         |          | 5.04     | 1.52     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 40          | 11.00      | 32.83 |         |          | 7.65     | 1.46     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 50          | 10.80      | 32.87 |         |          | 9.40     | 1.29     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 70          | 10.40      | 33.03 |         |          | 10.72    | 1.03     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 100         | 9.30       | 33.57 |         |          | 22.20    | 0.85     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 199         | 7.90       | 33.98 |         |          |          | 0.38     |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 316         | 6.50       | 34.06 |         |          | 5.44     |          |          |          |
| W9808A    | 8/10/98  | 12:39    | 36        | EU-07        | 40.87 | -124.93 | 1000        | 3.70       | 34.42 |         |          |          |          |          |          |
| W9808A    | 8/11/98  | 2:25     | 37        | COC-02       | 38.65 | -123.45 | 0           | 11.00      | 33.63 | 30.60   | 55.14    | 9.60     | 0.89     | 45.55    | 7.21     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9808A    | 8/11/98  | 2:25     | 37        | CO-C02       | 38.65 | -123.45 | 5           | 10.90      | 33.63 |         |          | 10.40    | 1.09     |          |          |
| W9808A    | 8/11/98  | 2:25     | 37        | CO-C02       | 38.65 | -123.45 | 10          | 10.60      | 33.65 |         |          | 8.43     | 1.03     |          |          |
| W9808A    | 8/11/98  | 2:25     | 37        | CO-C02       | 38.65 | -123.45 | 15          | 10.30      | 33.69 |         |          | 12.11    | 1.07     |          |          |
| W9808A    | 8/11/98  | 2:25     | 37        | CO-C02       | 38.65 | -123.45 | 30          | 10.00      | 33.72 |         |          | 12.91    | 0.74     |          |          |
| W9808A    | 8/11/98  | 2:25     | 37        | CO-C02       | 38.65 | -123.45 | 40          | 10.00      | 33.73 |         |          | 4.09     | 1.01     |          |          |
| W9808A    | 8/11/98  | 2:25     | 37        | CO-C02       | 38.65 | -123.45 | 50          | 9.90       | 33.76 |         |          | 13.59    | 1.13     |          |          |
| W9808A    | 8/11/98  | 2:25     | 37        | CO-C02       | 38.65 | -123.45 | 60          | 9.80       | 33.77 |         |          | 5.79     | 1.10     |          |          |
| W9808A    | 8/11/98  | 2:25     | 37        | CO-C02       | 38.65 | -123.45 | 72          | 9.80       | 33.78 |         |          | 6.79     | 1.40     |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 0           | 10.90      | 33.68 | 32.20   |          | 7.92     | 1.05     |          | 7.71     |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 10          | 10.80      | 33.68 |         |          | 9.01     | 1.17     |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 20          | 10.20      | 33.70 |         |          | 6.79     | 1.07     |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 30          | 10.00      | 33.74 |         |          | 8.31     | 0.99     |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 40          | 9.60       | 33.80 |         |          | 9.66     |          |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 50          | 9.60       | 33.81 |         |          | 9.25     |          |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 60          | 9.60       | 33.83 |         |          |          | 0.98     |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 70          | 9.50       | 33.86 |         |          |          | 0.97     |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 90          | 9.40       | 33.88 |         |          | 9.79     | 0.97     |          |          |
| W9808A    | 8/11/98  | 3:55     | 38        | CO-C04       | 38.60 | -123.51 | 102         | 9.40       | 33.89 |         |          |          |          |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 0           | 10.60      | 33.72 | 33.99   | 55.65    | 8.25     | 1.15     | 47.40    | 6.90     |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 10          | 10.60      | 33.72 |         |          | 14.59    | 1.34     |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 20          | 10.50      | 33.72 |         |          | 8.52     | 1.18     |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 30          | 10.20      | 33.73 |         |          | 13.73    | 1.22     |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 35          | 10.10      | 33.73 |         |          | 16.64    | 1.15     |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 40          | 10.10      | 33.74 |         |          | 11.69    | 1.09     |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 50          | 9.80       | 33.78 |         |          | 6.97     |          |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 70          | 9.40       | 33.88 |         |          | 9.71     |          |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 85          | 9.30       | 33.89 |         |          | 10.79    |          |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 100         | 9.30       | 33.90 |         |          | 22.10    |          |          |          |
| W9808A    | 8/11/98  | 5:36     | 39        | CO-C05       | 38.58 | -123.56 | 130         | 9.10       | 33.95 |         |          | 39.93    |          |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 0           | 12.10      | 33.31 | 13.40   | 52.79    | 12.20    | 1.83     | 40.59    | 2.49     |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 10          | 12.10      | 33.31 |         |          | 9.90     | 1.47     |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 20          | 12.10      | 33.31 |         |          | 10.60    | 1.34     |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 30          | 11.70      | 33.38 |         |          | 15.75    | 1.42     |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 40          | 11.60      | 33.40 |         |          | 11.81    | 1.33     |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 50          | 10.50      | 33.60 |         |          | 7.61     |          |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 70          | 10.10      | 33.79 |         |          | 6.50     |          |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 100         | 9.80       | 33.87 |         |          | 6.67     |          |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 150         | 9.40       | 33.96 |         |          | 12.29    |          |          |          |
| W9808A    | 8/11/98  | 8:01     | 41        | CO-C07       | 38.50 | -123.66 | 414         | 6.70       | 34.10 |         |          |          | 0.80     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 0           | 12.60      | 33.31 | 13.40   | 57.79    | 18.66    | 2.56     | 39.13    | 2.39     |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 10          | 12.60      | 33.31 |         |          | 26.19    | 2.86     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 20          | 12.60      | 33.31 |         |          | 40.16    | 2.84     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 30          | 12.50      | 33.32 |         |          | 59.52    | 3.99     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 40          | 12.20      | 33.36 |         |          | 38.66    | 2.86     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 50          | 11.50      | 33.48 |         |          | 12.24    | 1.91     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 60          | 11.00      | 33.54 |         |          | 9.17     | 1.12     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 70          | 10.20      | 33.71 |         |          | 7.66     | 0.98     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 100         | 9.70       | 33.85 |         |          | 6.23     |          |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 150         | 9.40       | 33.93 |         |          | 7.48     |          |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 670         | 4.70       | 34.22 |         |          |          | 0.49     |          |          |
| W9808A    | 8/11/98  | 11:51    | 43        | CO-C09       | 38.40 | -123.82 | 1006        | 3.90       | 34.43 |         |          | 6.34     | 0.47     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 0           | 12.50      | 33.40 | 13.40   | 52.38    | 10.91    | 1.74     | 41.47    | 0.42     |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 10          | 12.50      | 33.40 |         |          | 19.89    | 2.26     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 15          | 12.50      | 33.40 |         |          | 11.79    | 1.84     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 20          | 12.50      | 33.40 |         |          | 12.18    | 1.72     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 30          | 11.70      | 33.41 |         |          | 14.07    | 1.59     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 40          | 11.20      | 33.51 |         |          | 18.80    | 1.10     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 50          | 10.80      | 33.57 |         |          | 7.67     | 0.94     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 70          | 10.40      | 33.69 |         |          | 16.17    | 0.94     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 100         | 9.80       | 33.82 |         |          | 18.41    | 1.02     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 150         | 9.10       | 33.94 |         |          | 7.87     | 0.77     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 800         | 4.50       | 34.36 |         |          | 9.84     | 0.40     |          |          |
| W9808A    | 8/11/98  | 14:34    | 44        | COC-11       | 38.29 | -123.99 | 1001        | 3.90       | 34.44 |         |          | 12.08    | 0.47     |          |          |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 0           | 10.20      | 32.89 | 24.19   | 83.89    | 21.46    | 2.10     | 62.43    | 6.24     |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 10          | 9.40       | 32.96 | 24.87   | 87.16    | 13.44    | 1.28     | 73.72    | 5.90     |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 15          | 9.10       | 33.10 | 25.30   | 82.10    | 22.63    | 1.45     | 59.47    | 6.25     |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 20          | 9.10       | 33.23 | 28.80   | 80.17    | 15.50    | 0.97     | 64.67    | 5.40     |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 30          | 9.00       | 33.40 | 31.33   | 82.69    | 12.74    | 1.06     | 69.95    | 6.67     |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 40          | 8.80       | 33.70 | 35.73   | 68.04    | 9.04     | 1.17     | 59.00    | 6.37     |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 47          | 8.50       | 33.73 | 37.69   | 66.98    |          |          |          |          |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 50          | 8.50       | 33.73 | 37.99   | 60.01    |          |          |          |          |
| W9809A    | 9/24/98  | 20:06    | 3         | NH-05        | 44.65 | -124.18 | 55          | 8.50       | 33.73 | 38.89   | 57.84    |          |          |          |          |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 0           | 14.00      | 31.95 | 8.20    | 79.91    | 24.61    | 3.12     | 55.30    | 4.96     |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 10          | 14.20      | 31.96 | 10.60   | 75.41    | 19.08    | 2.39     | 56.33    | 6.74     |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 20          | 10.00      | 32.50 | 13.42   | 64.53    | 11.73    | 1.06     | 52.80    | 6.11     |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 29          | 9.50       | 32.64 | 17.10   | 62.59    | 11.04    | 0.94     | 51.55    | 6.77     |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 39          | 9.10       | 32.73 | 18.21   | 64.60    | 7.14     | 0.88     | 57.46    | 6.17     |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 49          | 8.90       | 32.88 | 20.43   | 69.60    | 10.59    | 0.77     | 59.01    | 2.46     |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 61          | 8.80       | 33.13 | 24.96   | 64.06    | 12.24    | 0.79     | 51.83    | 6.96     |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 70          | 8.80       | 33.28 | 28.76   | 59.44    | 6.52     | 0.68     | 52.92    | 6.19     |
| W9809A    | 9/24/98  | 23:03    | 5         | NH-15        | 44.65 | -124.41 | 84          | 8.40       | 33.65 | 34.53   |          | 8.27     | 0.82     |          | 6.89     |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 0           | 15.20      | 32.17 |         | 84.16    | 11.98    | 1.27     | 72.18    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 10          | 15.20      | 32.17 |         | 83.63    | 7.97     | 1.15     | 75.66    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 15          | 14.40      | 32.22 |         | 82.55    | 11.67    | 1.36     | 70.88    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 20          | 11.50      | 32.44 |         | 72.72    | 10.99    | 1.04     | 61.74    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 30          | 10.50      | 32.55 |         | 72.59    | 8.78     | 0.73     | 63.81    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 40          | 9.80       | 32.60 |         | 69.87    | 4.79     | 0.53     | 65.08    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 50          | 9.50       | 32.63 |         | 65.51    | 9.31     |          | 56.20    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 70          | 8.90       | 32.88 |         | 67.41    | 8.17     |          | 59.24    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 149         | 8.20       | 33.81 |         | 89.21    | 5.34     |          | 83.87    |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 200         | 7.70       | 33.95 |         | 53.95    |          |          |          |          |
| W9809A    | 9/25/98  | 1:51     | 7         | NH-25        | 44.65 | -124.65 | 210         | 7.70       | 33.96 |         | 62.20    | 2.99     |          | 59.21    |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 0           | 16.00      | 32.03 |         | 80.82    | 6.64     | 1.28     | 74.17    |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 10          | 16.00      | 32.03 |         |          | 5.60     | 0.99     |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 20          | 15.00      | 32.01 |         |          | 8.46     | 1.39     |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 25          | 14.00      | 32.21 |         |          | 8.16     | 1.70     |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 30          | 12.50      | 32.41 |         |          | 6.35     | 1.04     |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 40          | 10.80      | 32.53 |         |          | 4.02     | 0.72     |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 50          | 10.00      | 32.57 |         |          | 2.92     | 0.63     |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 70          | 9.40       | 32.74 |         |          | 3.05     |          |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 100         | 9.00       | 33.37 |         |          | 1.80     |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [μM] | TOC [μM] | POC [μM] | PON [μM] | DOC [μM] | DON [μM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 150         | 8.10       | 33.86 |         |          | 3.83     | 0.72     |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 275         | 7.20       | 33.99 |         |          | 3.53     | 0.55     |          |          |
| W9809A    | 9/25/98  | 3:50     | 8         | NH-35        | 44.65 | -124.88 | 430         | 5.30       | 34.09 |         |          | 3.13     | 0.54     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 0           | 16.30      | 31.98 | 6.75    | 83.81    | 14.51    | 1.77     | 69.30    | 4.84     |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 10          | 16.30      | 31.98 |         |          | 11.57    | 1.26     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 20          | 16.00      | 32.00 |         |          | 6.60     | 0.76     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 27          | 14.40      | 32.30 |         |          | 11.20    | 1.51     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 30          | 13.40      | 32.42 |         |          | 13.60    | 2.27     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 40          | 11.60      | 32.52 |         |          | 6.64     | 1.14     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 50          | 10.40      | 32.57 |         |          | 3.83     | 0.94     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 70          | 9.60       | 32.70 |         |          | 4.28     | 0.83     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 100         | 8.90       | 33.32 |         |          | 3.83     | 0.70     |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 150         | 8.10       | 33.85 |         |          |          |          |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.20       | 34.10 |         |          |          |          |          |          |
| W9809A    | 9/25/98  | 5:39     | 9         | NH-45        | 44.65 | -125.12 | 580         | 4.80       | 34.16 |         |          |          |          |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 0           | 16.20      | 32.06 | 6.41    | 72.53    | 5.27     | 0.46     | 67.25    | 5.75     |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 10          | 16.20      | 32.06 |         |          | 10.49    | 1.34     |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 20          | 15.80      | 32.07 |         |          | 6.22     | 0.57     |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 30          | 13.50      | 32.26 |         |          | 11.35    | 1.50     |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 35          | 12.00      | 32.47 |         |          | 7.65     | 0.97     |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 40          | 11.20      | 32.58 |         |          | 4.52     | 0.40     |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 50          | 10.50      | 32.59 |         |          | 4.87     | 0.44     |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 70          | 9.80       | 32.78 |         |          | 4.38     | 0.38     |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 100         | 9.00       | 33.47 |         |          | 4.55     | 0.34     |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 150         | 8.10       | 33.86 |         |          |          |          |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 820         | 4.00       | 34.32 |         |          |          |          |          |          |
| W9809A    | 9/25/98  | 10:11    | 11        | NH-65        | 44.65 | -125.6  | 1000        | 3.60       | 34.41 |         |          |          |          |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 0           | 17.70      | 31.91 | 5.98    | 74.41    | 8.37     | 0.87     | 66.03    | 5.11     |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 10          | 17.70      | 31.91 |         |          | 10.20    | 1.06     |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 20          | 14.80      | 32.18 |         |          | 10.31    | 1.05     |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 25          | 12.40      | 32.32 |         |          | 7.54     | 0.97     |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 30          | 11.20      | 32.44 |         |          | 8.75     | 0.94     |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 40          | 10.30      | 32.55 |         |          | 7.42     | 0.52     |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 50          | 9.70       | 32.62 |         |          | 5.22     | 0.43     |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 70          | 9.00       | 32.96 |         |          | 7.27     | 0.34     |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.10       | 33.72 |         |          |          |          |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 150         | 7.90       | 33.94 |         |          |          |          |          |          |
| W9809A    | 9/25/98  | 13:24    | 12        | NH-85        | 44.65 | -126.05 | 999         | 3.60       | 34.40 |         |          |          |          |          |          |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 0           | 12.20      | 32.25 |         |          | 8.37     | 1.27     |          |          |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 5           | 12.20      | 32.26 |         |          | 8.09     | 1.29     |          |          |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 10          | 12.20      | 32.28 |         |          | 7.93     | 1.21     |          |          |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 15          | 12.20      | 32.28 | 9.56    |          | 12.25    | 1.38     |          | 5.60     |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 20          | 12.10      | 32.30 | 9.33    |          | 9.02     | 1.19     |          | 5.75     |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 25          | 12.20      | 32.32 | 10.04   |          | 10.27    | 1.04     |          | 6.60     |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 30          | 12.20      | 32.33 | 9.49    |          | 10.88    | 1.47     |          | 5.63     |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 40          | 12.20      | 32.35 |         |          | 5.64     | 0.86     |          |          |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 50          | 12.00      | 32.46 |         |          | 10.75    | 1.18     |          |          |
| W9811A    | 11/16/98 | 21:33    | 3         | NH-05        | 44.65 | -124.18 | 55          | 11.40      | 32.81 |         |          | 10.75    | 1.20     |          |          |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 0           | 13.00      | 32.37 |         |          | 11.09    | 1.25     |          |          |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 5           | 13.00      | 32.37 |         |          | 11.51    | 1.30     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 10          | 13.00      | 32.37 |         |          | 5.86     | 0.77     |          |          |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 20          | 13.00      | 32.36 | 21.01   |          | 8.42     | 1.08     |          | 19.46    |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 30          | 12.30      | 32.45 | 23.18   |          | 4.89     | 0.57     |          | 21.95    |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 40          | 10.30      | 32.99 | 22.14   |          | 4.12     | 0.49     |          | 10.31    |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 50          | 9.90       | 33.15 | 22.92   |          | 6.09     | 0.58     |          | 5.76     |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 60          | 9.90       | 33.18 | 23.54   |          | 5.86     | 0.53     |          | 5.70     |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 70          | 9.80       | 33.23 | 26.89   |          | 4.97     | 0.51     |          | 8.87     |
| W9811A    | 11/17/98 | 1:10     | 5         | NH-15        | 44.65 | -124.41 | 80          | 9.80       | 33.25 |         |          | 7.16     | 0.59     |          |          |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 0           | 12.80      | 32.40 |         |          | 5.99     | 0.86     |          |          |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 10          | 12.80      | 32.40 | 7.95    |          | 4.97     | 0.82     |          | 6.87     |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 20          | 12.80      | 32.40 | 9.33    |          | 7.45     | 1.01     |          | 8.06     |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 30          | 12.80      | 32.40 | 11.62   |          | 6.09     | 0.93     |          | 10.43    |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 40          | 12.80      | 32.40 | 16.30   |          | 5.02     | 0.85     |          | 15.00    |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 45          | 12.50      | 32.43 | 15.59   |          | 4.13     | 0.70     |          | 12.56    |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 50          | 11.50      | 32.53 | 19.94   |          |          | 0.37     |          | 13.01    |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 70          | 9.60       | 33.04 | 31.59   |          |          |          |          | 16.81    |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 100         | 9.00       | 33.55 | 33.31   |          | 3.17     | 0.39     |          | 7.93     |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 150         | 8.40       | 33.85 | 38.74   |          |          |          |          | 9.76     |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 200         | 7.60       | 33.92 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 4:43     | 7         | NH-25        | 44.65 | -124.65 | 288         |            |       |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 0           | 12.80      | 32.36 |         |          | 5.73     | 0.84     |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 10          | 12.80      | 32.36 |         |          | 5.49     | 0.85     |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 20          | 12.80      | 32.36 |         |          | 6.43     | 0.90     |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 30          | 12.80      | 32.36 |         |          | 5.50     | 0.80     |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 40          | 11.10      | 32.56 |         |          | 3.13     | 0.45     |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 50          | 10.30      | 32.67 |         |          | 2.79     |          |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 70          | 9.60       | 32.92 |         |          | 2.82     |          |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.90       | 33.65 |         |          | 2.54     |          |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 150         | 8.20       | 33.82 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 7:11     | 8         | NH-35        | 44.65 | -124.88 | 420         | 5.50       | 34.07 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 0           | 12.90      | 32.33 | 13.62   |          | 4.58     | 0.92     |          | 12.51    |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 10          | 12.90      | 32.34 |         |          | 5.15     | 0.86     |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 20          | 12.90      | 32.36 |         |          | 5.28     | 0.98     |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 30          | 13.00      | 32.37 |         |          | 6.55     | 1.06     |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 40          | 12.10      | 32.44 |         |          | 3.79     | 0.66     |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 50          | 10.20      | 32.67 |         |          | 2.89     | 0.49     |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 70          | 9.60       | 33.20 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 100         | 9.10       | 33.59 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 150         | 8.40       | 33.86 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 8:52     | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.20       | 34.13 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 0           | 12.90      | 32.27 | 14.61   |          | 5.87     | 0.86     |          | 13.68    |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 10          | 12.90      | 32.27 |         |          | 4.95     | 0.62     |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 20          | 12.90      | 32.27 |         |          | 6.83     | 0.75     |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 31          | 12.90      | 32.27 |         |          | 5.87     | 0.83     |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 36          | 12.80      | 32.29 |         |          | 4.24     | 0.58     |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 41          | 12.80      | 32.29 |         |          | 8.04     | 0.93     |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 50          | 9.90       | 32.61 |         |          | 5.31     | 0.46     |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 69          | 9.80       | 32.92 |         |          | 3.40     |          |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 102         | 8.80       | 33.46 |         |          | 4.22     |          |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 148         | 7.90       | 33.84 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 14:04    | 11        | NH-65        | 44.65 | -125.6  | 1006        | 3.60       | 34.42 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 0           | 13.70      | 32.51 | 6.26    |          | 4.82     | 0.75     |          | 5.50     |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 10          | 13.70      | 32.53 |         |          | 4.92     | 0.74     |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 20          | 13.70      | 32.53 |         |          | 5.43     | 0.82     |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 30          | 13.70      | 32.53 |         |          | 4.25     | 0.61     |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 40          | 13.70      | 32.53 |         |          | 4.87     | 0.79     |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 45          | 13.70      | 32.53 |         |          | 5.92     | 0.73     |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 51          | 13.60      | 32.52 |         |          | 3.63     | 0.56     |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 70          | 9.80       | 33.02 |         |          | 4.09     |          |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 101         | 8.50       | 33.40 |         |          | 2.68     |          |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 149         | 7.90       | 33.88 |         |          |          |          |          |          |
| W9811A    | 11/17/98 | 17:42    | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.50       | 34.42 |         |          |          |          |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 0           | 11.70      | 32.80 |         |          | 10.15    | 1.43     |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 5           | 11.70      | 32.80 |         |          | 9.78     | 1.50     |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 10          | 11.70      | 32.80 |         |          | 9.45     | 1.62     |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 15          | 11.80      | 32.81 |         |          | 8.57     | 1.42     |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 20          | 11.80      | 32.86 |         |          | 8.37     | 1.46     |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 25          | 11.80      | 33.00 |         |          | 7.07     | 1.42     |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 29          | 11.80      | 33.00 |         |          | 8.25     | 1.35     |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 40          | 11.40      | 33.07 |         |          | 8.00     | 1.14     |          |          |
| W9811A    | 11/18/98 | 14:11    | 20        | FM-03        | 43.22 | -124.5  | 49          | 10.90      | 33.22 |         |          | 7.40     | 1.02     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 0           | 11.80      | 32.92 |         |          | 5.62     | 1.02     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 10          | 11.80      | 32.94 |         |          | 6.75     | 1.09     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 16          | 11.60      | 33.06 |         |          | 6.65     | 1.16     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 19          | 11.50      | 33.11 |         |          | 5.24     | 0.94     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 29          | 11.60      | 33.20 |         |          | 5.03     | 0.83     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 40          | 11.40      | 33.23 |         |          | 4.43     | 0.80     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 50          | 11.40      | 33.25 |         |          | 6.30     | 0.68     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 61          | 10.50      | 33.38 |         |          | 6.97     | 0.80     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 72          | 10.40      | 33.41 |         |          | 8.07     | 1.02     |          |          |
| W9811A    | 11/18/98 | 12:44    | 19        | FM-04        | 43.22 | -124.58 | 75          | 10.30      | 33.43 |         |          | 7.60     | 0.86     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 0           | 12.00      | 32.87 |         |          | 7.32     | 1.36     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 10          | 12.00      | 32.88 |         |          | 7.79     | 1.40     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 20          | 11.80      | 32.94 |         |          | 5.32     | 1.03     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 25          | 11.70      | 32.95 |         |          | 6.60     | 1.20     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 30          | 11.70      | 32.95 |         |          | 5.28     | 1.06     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 40          | 11.60      | 33.08 |         |          | 4.21     | 0.90     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 50          | 10.70      | 33.42 |         |          |          | 0.46     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 60          | 10.20      | 33.47 |         |          |          | 0.46     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 70          | 10.10      | 33.52 |         |          |          | 0.45     |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 100         | 9.60       | 33.67 |         |          | 2.80     |          |          |          |
| W9811A    | 11/18/98 | 11:01    | 18        | FM-05        | 43.22 | -124.67 | 150         | 8.80       | 33.79 |         |          |          |          |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 0           | 12.50      | 32.38 |         |          | 3.30     | 0.72     |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 10          | 12.30      | 32.43 |         |          | 3.76     | 0.99     |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 20          |            | 32.70 |         |          | 2.75     | 0.71     |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 25          | 12.00      | 32.74 |         |          | 3.51     | 0.70     |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 30          | 12.00      | 32.81 |         |          |          | 0.61     |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 40          | 11.40      | 33.13 |         |          |          | 0.71     |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 50          | 10.90      | 33.38 |         |          |          | 0.58     |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 70          | 10.40      | 33.46 |         |          | 3.17     | 0.66     |          |          |
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 100         | 9.50       | 33.67 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9811A    | 11/18/98 | 8:17     | 16        | FM-07        | 43.22 | -124.83 | 335         | 6.10       | 34.03 |         |          |          |          |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 0           | 13.40      | 32.39 |         |          | 5.69     | 0.76     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 10          | 13.40      | 32.39 |         |          | 6.49     | 0.84     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 20          | 13.30      | 32.39 |         |          | 5.17     | 0.69     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 30          | 13.20      | 32.39 |         |          | 6.88     | 0.86     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 35          | 13.20      | 32.39 |         |          | 5.89     | 0.75     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 40          | 12.90      | 32.46 |         |          | 4.82     | 0.64     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 50          | 11.00      | 32.87 |         |          | 4.14     | 0.55     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 70          | 9.80       | 33.46 |         |          | 2.95     | 0.34     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 100         | 9.20       | 33.63 |         |          |          | 2.72     |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 150         | 8.60       | 33.90 |         |          |          |          |          |          |
| W9811A    | 11/18/98 | 5:55     | 15        | FM-08        | 43.22 | -125.   | 1005        | 3.60       | 34.42 |         |          |          |          |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 0           | 13.40      | 32.39 |         |          | 7.86     | 1.03     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 10          | 13.40      | 32.39 |         |          | 5.92     | 0.75     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 20          | 13.40      | 32.39 |         |          | 6.23     | 0.81     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 30          | 13.30      | 32.39 |         |          | 5.71     | 0.78     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 35          | 13.30      | 32.39 |         |          | 6.57     | 0.81     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 40          | 13.10      | 32.40 |         |          | 5.82     | 0.75     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 50          | 10.80      | 32.55 |         |          | 3.99     | 0.51     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 70          | 10.00      | 32.86 |         |          |          | 2.86     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 100         | 9.40       | 33.47 |         |          |          | 3.57     |          |          |
| W9811A    | 11/18/98 | 3:12     | 14        | FM-09        | 43.22 | -125.17 | 1006        | 3.60       | 34.42 |         |          |          |          |          |          |
| W9811A    | 11/18/98 | 23:26    | 22        | CR-01        | 41.90 | -124.3  | 0           | 12.20      | 32.61 |         |          | 19.86    | 2.87     |          |          |
| W9811A    | 11/18/98 | 23:26    | 22        | CR-01        | 41.90 | -124.3  | 5           | 12.20      | 32.62 |         |          | 19.39    | 2.86     |          |          |
| W9811A    | 11/18/98 | 23:26    | 22        | CR-01        | 41.90 | -124.3  | 10          | 12.10      | 32.69 |         |          | 16.43    | 2.55     |          |          |
| W9811A    | 11/18/98 | 23:26    | 22        | CR-01        | 41.90 | -124.3  | 15          | 12.20      | 32.86 |         |          | 12.80    | 2.01     |          |          |
| W9811A    | 11/18/98 | 23:26    | 22        | CR-01        | 41.90 | -124.3  | 20          | 12.10      | 32.82 |         |          | 11.35    | 1.70     |          |          |
| W9811A    | 11/18/98 | 23:26    | 22        | CR-01        | 41.90 | -124.3  | 25          | 12.10      | 32.83 |         |          | 11.09    | 1.75     |          |          |
| W9811A    | 11/18/98 | 23:26    | 22        | CR-01        | 41.90 | -124.3  | 30          | 12.10      | 33.00 |         |          | 10.14    | 1.29     |          |          |
| W9811A    | 11/18/98 | 23:26    | 22        | CR-01        | 41.90 | -124.3  | 34          | 12.00      | 33.05 |         |          | 13.33    | 1.61     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 0           | 12.20      | 32.84 |         |          | 10.59    | 1.43     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 5           | 12.20      | 32.87 |         |          | 11.71    | 1.54     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 10          | 12.20      | 32.89 |         |          | 9.14     | 1.42     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 15          | 12.10      | 32.94 |         |          | 8.39     | 1.17     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 20          | 12.10      | 32.96 |         |          | 8.89     | 1.22     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 30          | 11.90      | 32.98 |         |          | 8.51     | 1.14     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 40          | 11.90      | 32.99 |         |          | 7.42     | 0.98     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 49          | 11.60      | 33.02 |         |          | 7.25     | 0.97     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 60          | 11.10      | 33.06 |         |          | 9.99     | 1.38     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 70          | 11.10      | 33.20 |         |          | 5.48     | 0.61     |          |          |
| W9811A    | 11/19/98 | 1:56     | 24        | CR-03        | 41.90 | -124.5  | 99          | 9.90       | 33.56 |         |          | 4.55     | 0.61     |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 0           | 12.20      | 32.75 |         |          | 7.49     | 1.07     |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 10          | 12.20      | 32.76 |         |          | 8.33     | 1.16     |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 15          | 12.20      | 32.77 |         |          | 8.19     | 1.22     |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 20          | 12.20      | 32.81 |         |          | 7.62     | 1.10     |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 30          | 11.90      | 32.86 |         |          | 6.53     | 0.89     |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 40          | 11.90      | 33.00 |         |          | 4.73     | 0.68     |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 50          | 11.30      | 33.21 |         |          | 4.72     | 0.61     |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 70          | 10.40      | 33.42 |         |          | 3.43     |          |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 100         | 9.50       | 33.66 |         |          | 3.15     |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 150         | 8.60       | 33.87 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 3:26     | 25        | CR-04        | 41.90 | -124.6  | 450         | 5.70       | 34.10 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 0           | 12.30      |       |         |          | 10.54    | 1.62     |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 10          | 12.30      | 32.85 |         |          | 10.08    | 1.56     |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 20          | 12.20      | 32.87 |         |          | 8.45     | 1.47     |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 40          | 11.40      | 33.16 |         |          | 5.99     | 1.06     |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 50          | 11.20      | 33.21 |         |          | 4.35     | 0.38     |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 70          | 10.50      | 33.39 |         |          | 4.76     | 0.62     |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 100         | 10.20      | 33.51 |         |          | 4.88     | 0.72     |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 150         | 8.50       | 33.85 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 350         | 6.30       | 34.05 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 4:58     | 26        | CR-05        | 41.90 | -124.7  | 500         | 5.10       | 34.15 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 0           | 12.40      | 32.77 |         |          | 8.28     | 1.06     |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 10          | 12.40      | 32.77 |         |          | 7.98     | 1.51     |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 20          | 12.00      | 32.90 |         |          | 6.23     | 1.19     |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 30          | 11.50      | 33.16 |         |          | 7.84     | 1.39     |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 40          | 11.30      | 33.20 |         |          | 6.47     | 1.10     |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 50          | 10.90      | 33.29 |         |          | 3.68     | 0.65     |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 70          | 9.90       | 33.52 |         |          | 3.48     | 0.57     |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 100         | 9.00       | 33.81 |         |          | 3.71     | 0.60     |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 150         | 8.50       | 33.93 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 8:43     | 28        | CR-07        | 41.90 | -125.   | 830         | 4.00       | 34.36 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 0           | 12.60      | 32.81 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 10          | 12.60      | 32.81 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 20          | 12.60      | 32.88 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 29          | 12.20      | 33.11 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 40          | 11.00      | 33.24 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 50          | 10.30      | 33.38 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 70          | 9.80       | 33.53 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 100         | 9.20       | 33.80 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 150         | 8.20       | 33.96 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 860         | 4.00       | 34.39 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 11:17    | 29        | CR-08        | 41.90 | -125.33 | 994         | 3.70       | 34.42 |         |          |          |          |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 0           | 11.80      | 32.95 |         |          | 14.24    | 2.52     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 5           | 11.80      | 32.95 |         |          | 12.94    | 2.31     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 10          | 11.70      | 33.03 |         |          | 11.48    | 2.00     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 15          | 11.60      | 33.10 |         |          | 10.15    | 1.61     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 20          | 11.50      | 33.15 |         |          | 8.28     | 1.48     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 25          | 11.40      | 33.16 |         |          | 7.67     | 1.31     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 30          | 11.20      | 33.19 |         |          | 8.12     | 1.18     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 40          | 11.00      | 33.27 |         |          | 6.85     | 1.07     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 50          | 10.60      | 33.34 |         |          | 7.00     | 0.87     |          |          |
| W9811A    | 11/20/98 | 4:20     | 38        | EU-01        | 40.87 | -124.27 | 55          | 10.40      | 33.39 |         |          | 6.30     | 0.86     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 0           | 12.10      | 32.96 |         |          | 10.42    | 1.58     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 5           | 12.10      | 32.96 |         |          | 10.07    | 1.67     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 10          | 12.00      | 32.97 |         |          | 9.92     | 1.64     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 20          | 12.00      | 33.03 |         |          | 9.13     | 1.58     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 30          | 11.60      | 33.13 |         |          | 6.58     | 0.89     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 40          | 11.00      | 33.23 |         |          | 5.25     | 0.62     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 50          | 10.80      | 33.30 |         |          | 5.90     | 0.77     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [μM] | TOC [μM] | POC [μM] | PON [μM] | DOC [μM] | DON [μM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 60          | 10.00      | 33.49 |         |          | 7.19     | 0.87     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 70          | 9.70       | 33.55 |         |          | 9.83     | 0.80     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 85          | 9.10       | 33.70 |         |          | 4.16     | 0.57     |          |          |
| W9811A    | 11/20/98 | 2:48     | 37        | EU-02        | 40.87 | -124.37 | 106         | 8.50       | 33.86 |         |          | 6.28     | 0.53     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 0           | 12.20      | 32.88 |         |          | 13.53    | 1.92     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 10          | 12.20      | 32.87 |         |          | 14.10    | 1.92     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 15          | 12.20      | 32.89 |         |          | 12.92    | 1.75     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 20          | 12.20      | 32.96 |         |          | 7.43     | 1.21     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 30          | 12.00      | 33.05 |         |          | 9.00     | 1.00     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 40          | 11.80      | 33.12 |         |          | 5.09     | 0.75     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 50          | 11.30      | 33.17 |         |          | 5.78     | 0.76     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 70          | 10.30      | 33.35 |         |          | 4.00     | 0.56     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 100         | 9.40       | 33.68 |         |          | 4.36     | 0.51     |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 150         | 8.70       | 33.81 |         |          |          |          |          |          |
| W9811A    | 11/20/98 | 1:09     | 35        | EU-03        | 40.87 | -124.47 | 350         | 5.80       | 34.10 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 0           | 12.40      | 32.93 |         |          | 11.70    | 1.75     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 10          | 12.30      | 32.95 |         |          | 10.68    | 1.62     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 15          | 12.30      | 32.98 |         |          | 9.74     | 1.51     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 20          | 12.20      | 33.04 |         |          | 6.49     | 0.93     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 30          | 11.70      | 33.14 |         |          | 4.89     | 0.75     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 40          | 11.20      | 33.20 |         |          | 3.50     | 0.59     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 50          | 10.70      | 33.26 |         |          | 2.82     | 0.52     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 70          | 9.80       | 33.41 |         |          | 2.77     | 0.46     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 100         | 9.20       | 33.73 |         |          | 3.59     | 0.52     |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 150         | 8.70       | 33.86 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 22:17    | 33        | EU-05        | 40.87 | -124.67 | 500         | 5.40       | 34.14 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 0           | 12.20      | 32.86 |         |          | 16.14    | 2.69     |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 20          | 11.90      | 32.98 |         |          | 6.35     | 1.09     |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 30          | 11.20      | 33.21 |         |          | 4.06     | 0.62     |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 40          | 10.80      | 33.32 |         |          | 3.04     | 0.48     |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 50          | 10.00      | 33.49 |         |          | 3.18     | 0.43     |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 70          | 9.40       | 33.62 |         |          | 3.60     | 0.37     |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 100         | 8.70       | 33.83 |         |          | 2.12     | 0.32     |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 150         | 8.00       | 33.97 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 886         | 4.00       | 34.38 |         |          |          |          |          |          |
| W9811A    | 11/19/98 | 19:17    | 31        | EU-07        | 40.87 | -124.93 | 1000        | 3.70       | 34.43 |         |          |          |          |          |          |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 0           | 9.30       | 32.51 | 18.96   |          | 6.85     | 1.00     |          | 9.59     |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 5           | 9.30       | 32.52 | 18.54   |          | 8.48     | 1.12     |          | 8.76     |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 10          | 9.30       | 32.52 | 18.78   |          | 7.68     | 0.79     |          | 9.21     |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 15          | 9.20       | 32.56 | 25.17   |          | 8.84     | 1.25     |          | 14.96    |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 20          | 9.20       | 32.56 | 23.13   |          | 12.26    | 0.79     |          | 13.43    |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 25          | 9.30       | 32.57 | 19.42   |          | 5.81     | 0.50     |          | 10.05    |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 30          | 9.30       | 32.59 | 24.28   |          | 8.19     | 1.14     |          | 14.31    |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 40          | 9.30       | 32.61 | 26.13   |          | 8.84     | 1.12     |          | 15.99    |
| W9902A    | 2/18/99  | 2:20     | 3         | NH-05        | 44.65 | -124.18 | 50          | 9.30       | 32.61 | 20.66   |          | 19.11    | 2.14     |          | 9.22     |
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 0           | 9.30       | 32.65 | 17.60   |          | 8.81     | 1.42     |          | 7.24     |
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 5           | 9.30       | 32.65 |         |          | 9.39     | 1.45     |          |          |
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 10          | 9.20       | 32.65 |         |          | 10.50    | 1.43     |          |          |
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 20          | 9.20       | 32.65 |         |          | 10.30    | 1.68     |          |          |
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 30          | 9.20       | 32.65 |         |          | 8.95     | 1.38     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 40          | 9.20       | 32.65 |         |          | 10.40    | 1.34     |          |          |
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 50          | 9.20       | 32.66 |         |          | 12.64    | 1.53     |          |          |
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 60          | 9.30       | 32.68 |         |          | 17.24    | 1.91     |          |          |
| W9902A    | 2/17/99  | 23:26    | 1         | NH-10        | 44.65 | -124.3  | 70          | 9.30       | 32.70 |         |          | 22.95    | 2.64     |          |          |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 0           | 9.30       | 32.73 | 15.94   |          | 6.54     | 0.85     |          | 6.22     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 5           | 9.30       | 32.73 | 16.30   |          | 6.69     | 1.16     |          | 6.60     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 10          | 9.30       | 32.73 | 16.08   |          | 6.96     | 0.89     |          | 6.22     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 20          | 9.30       | 32.74 | 14.98   |          | 7.16     | 1.05     |          | 5.47     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 30          | 9.30       | 32.75 | 15.58   |          | 9.22     | 1.07     |          | 5.82     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 40          | 9.30       | 32.75 | 15.28   |          | 5.65     | 0.76     |          | 5.97     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 50          | 9.30       | 32.75 | 17.98   |          | 5.87     | 1.02     |          | 8.38     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 60          | 9.30       | 32.76 | 17.04   |          | 6.50     | 1.07     |          | 7.32     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 70          | 9.30       | 32.76 | 17.90   |          | 8.62     | 1.14     |          | 7.90     |
| W9902A    | 2/18/99  | 3:59     | 4         | NH-15        | 44.65 | -124.41 | 83          | 9.30       | 32.76 | 18.02   |          | 9.59     | 1.38     |          | 7.89     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 0           | 9.30       | 32.72 | 17.14   |          | 5.13     | 0.89     |          | 6.93     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 10          | 9.30       | 32.72 | 16.18   |          |          | 1.10     |          | 5.79     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 20          | 9.30       | 32.72 | 16.56   |          |          | 1.08     |          | 6.16     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 30          | 9.30       | 32.72 | 16.60   |          | 5.46     | 1.06     |          | 6.12     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 40          | 9.30       | 32.72 | 15.80   |          | 4.61     | 0.80     |          | 5.59     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 50          | 9.30       | 32.73 | 16.92   |          |          | 0.90     |          | 6.63     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 70          | 9.30       | 32.75 | 16.60   |          |          | 0.99     |          | 6.06     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 100         | 9.30       | 33.12 | 24.54   |          |          | 0.25     |          | 9.03     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 150         | 8.60       | 33.75 | 31.88   |          |          |          |          | 5.28     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 199         | 7.70       | 33.95 | 34.22   |          |          |          |          | 4.02     |
| W9902A    | 2/18/99  | 6:35     | 6         | NH-25        | 44.65 | -124.65 | 286         | 6.60       | 34.00 | 39.09   |          |          |          |          | 4.69     |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 0           | 9.30       | 32.73 | 14.82   |          |          | 0.71     |          | 7.50     |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 10          | 9.30       | 32.73 |         |          |          | 0.94     |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 20          | 9.30       | 32.74 |         |          |          | 0.72     |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 30          | 9.30       | 32.75 |         |          | 4.87     | 0.53     |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 40          | 9.30       | 32.75 |         |          | 4.61     | 0.72     |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 50          | 9.30       | 32.75 |         |          |          | 0.92     |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 70          | 9.30       | 32.76 |         |          | 4.71     | 1.04     |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 100         | 9.10       | 33.45 |         |          |          | 0.88     |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 130         | 8.90       | 33.64 |         |          |          |          |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 150         | 8.80       | 33.67 |         |          |          |          |          |          |
| W9902A    | 2/18/99  | 9:08     | 7         | NH-35        | 44.65 | -124.88 | 430         | 5.50       | 34.09 |         |          |          |          |          |          |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 0           | 10.20      | 31.84 | 10.77   |          | 34.66    | 3.92     |          | 6.37     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 5           | 10.20      | 31.84 | 12.98   |          | 36.83    | 3.96     |          | 8.69     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 10          | 10.20      | 31.85 | 12.18   |          | 31.68    | 3.68     |          | 8.14     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 15          | 10.20      | 31.90 | 17.30   |          | 25.05    | 3.37     |          | 8.68     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 20          | 9.60       | 32.35 | 24.74   |          | 6.85     | 0.83     |          | 7.86     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 25          | 8.70       | 33.13 | 27.88   |          | 7.46     | 1.22     |          | 9.71     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 30          | 8.70       | 33.21 | 26.81   |          | 6.77     | 1.00     |          | 9.98     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 40          | 8.30       | 33.50 | 33.61   |          | 7.18     | 1.07     |          | 8.53     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 50          | 8.10       | 33.72 | 35.31   |          | 6.51     | 0.93     |          | 6.85     |
| W9904B    | 4/19/99  | 22:25    | 3         | NH-05        | 44.65 | -124.18 | 56          | 8.10       | 33.74 | 38.20   |          | 7.99     | 0.86     |          | 9.17     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 0           | 10.10      | 31.70 | 14.21   |          | 15.47    | 2.24     |          | 9.33     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 5           | 10.10      | 31.71 | 12.71   |          | 13.98    | 2.09     |          | 7.90     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 10          | 9.80       | 31.94 | 12.02   |          | 10.61    | 2.05     |          | 6.84     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 15          | 9.50       | 32.20 | 13.99   |          | 12.35    | 2.23     |          | 8.11     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 20          | 9.20       | 32.56 | 13.39   |          | 11.24    | 2.33     |          | 7.11     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 30          | 9.10       | 32.74 | 14.76   |          | 4.93     | 1.22     |          | 6.06     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 40          | 8.90       | 32.77 | 14.85   |          |          | 0.80     |          | 6.45     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 50          | 8.90       | 32.78 | 16.14   |          |          | 0.69     |          | 7.25     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 60          | 8.90       | 32.84 | 17.32   |          |          | 0.71     |          | 7.03     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 70          | 8.90       | 32.90 | 19.84   |          |          | 0.50     |          | 8.53     |
| W9904B    | 4/20/99  | 1:57     | 5         | NH-15        | 44.65 | -124.41 | 85          | 8.80       | 33.03 | 20.95   |          | 4.75     | 0.34     |          | 6.69     |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 0           | 10.00      | 32.05 |         |          | 12.72    | 2.50     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 10          | 9.90       | 32.25 |         |          | 10.90    | 2.09     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 20          | 9.40       | 32.46 |         |          | 10.46    | 1.75     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 25          | 9.10       | 32.54 |         |          | 9.27     | 1.59     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 30          | 9.00       | 32.62 |         |          | 7.79     | 1.32     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 40          | 9.00       | 32.71 |         |          |          | 0.89     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 50          | 9.00       | 32.75 |         |          |          | 0.57     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 70          | 8.90       | 32.77 |         |          |          | 0.37     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 100         | 8.80       | 33.12 |         |          |          | 0.60     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 150         | 8.00       | 33.88 |         |          |          | 0.36     |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 200         | 7.00       | 33.99 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 5:03     | 7         | NH-25        | 44.65 | -124.65 | 260         | 6.50       | 34.02 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 0           | 9.80       | 32.64 | 12.69   |          | 12.47    | 2.37     |          | 6.32     |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 10          | 9.70       | 32.64 |         |          | 13.44    | 2.26     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 15          | 9.60       | 32.64 |         |          | 11.81    | 2.19     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 20          | 9.40       | 32.69 |         |          | 7.89     | 1.62     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 30          | 9.40       | 32.70 |         |          | 5.17     | 0.91     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 40          | 9.30       | 32.71 |         |          |          | 0.64     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 50          | 9.10       | 32.78 |         |          |          | 0.46     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 70          | 8.90       | 32.99 |         |          |          | 0.50     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.50       | 33.47 |         |          |          | 0.50     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 150         | 7.60       | 33.93 |         |          |          | 0.44     |          |          |
| W9904B    | 4/20/99  | 7:36     | 8         | NH-35        | 44.65 | -124.88 | 425         | 5.30       | 34.13 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 0           | 9.60       | 32.76 | 14.70   |          | 8.22     | 1.55     |          | 8.99     |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 10          | 9.60       | 32.76 |         |          | 7.91     | 1.53     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 15          | 9.60       | 32.76 |         |          | 7.81     | 1.54     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 20          | 9.60       | 32.76 |         |          | 8.98     | 1.56     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 25          | 9.40       | 32.76 |         |          | 7.30     | 1.56     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 30          | 9.10       | 32.77 |         |          | 5.84     | 1.10     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 40          | 9.00       | 32.78 |         |          |          | 0.83     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 50          | 8.90       | 32.79 |         |          |          | 0.78     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 70          | 8.80       | 32.79 |         |          |          | 0.60     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 100         | 8.70       | 33.35 |         |          |          | 0.53     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 150         | 7.80       | 33.89 |         |          |          | 0.39     |          |          |
| W9904B    | 4/20/99  | 9:22     | 9         | NH-45        | 44.65 | -125.12 | 688         | 4.40       | 34.29 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 0           | 9.40       | 32.81 |         |          | 7.12     | 1.23     |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 10          | 9.40       | 32.81 |         |          | 7.49     | 1.14     |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 20          | 9.40       | 32.81 |         |          | 6.53     | 1.09     |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 30          | 9.20       | 32.80 |         |          | 6.76     | 1.03     |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 40          | 8.90       | 32.80 |         |          | 5.74     | 1.20     |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 50          | 8.90       | 32.80 |         |          | 7.00     | 1.19     |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 70          | 8.80       | 32.81 |         |          | 4.86     | 0.91     |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 100         | 8.70       | 32.85 |         |          |          | 0.75     |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 150         | 7.90       | 33.78 |         |          |          | 0.59     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 465         | 5.20       | 34.10 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 830         | 4.10       | 34.36 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 14:20    | 11        | NH-65        | 44.65 | -125.6  | 1004        | 3.60       | 34.43 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 0           | 9.50       | 32.78 | 14.19   |          | 6.35     | 1.37     |          | 7.45     |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 10          | 9.40       | 32.78 |         |          | 6.97     | 1.25     |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 20          | 9.40       | 32.78 |         |          | 6.60     | 1.05     |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 30          | 9.00       | 32.79 |         |          | 5.66     | 1.19     |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 40          | 8.90       | 32.79 |         |          |          | 1.12     |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 50          | 8.80       | 32.79 |         |          |          | 0.91     |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 60          | 8.80       | 32.79 |         |          |          | 0.93     |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 70          | 8.80       | 32.80 |         |          |          | 0.63     |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.50       | 33.41 |         |          |          | 0.47     |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 150         | 7.60       | 33.88 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 970         | 3.50       | 34.43 |         |          |          |          |          |          |
| W9904B    | 4/20/99  | 18:34    | 12        | NH-85        | 44.65 | -126.05 | 1000        | 3.40       | 34.44 |         |          |          |          |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 0           | 10.00      | 32.19 | 18.84   |          | 17.94    | 3.59     |          | 13.82    |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 5           | 9.90       | 32.24 |         |          | 19.08    | 3.73     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 8           | 9.60       | 32.38 |         |          | 18.22    | 4.00     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 10          | 9.30       | 32.48 |         |          | 11.69    | 2.23     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 15          | 9.20       | 32.55 |         |          | 8.87     | 2.00     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 20          | 9.10       | 32.66 |         |          |          | 1.16     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 25          | 9.00       | 32.81 |         |          | 5.09     | 1.10     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 30          | 8.90       | 33.00 |         |          |          | 0.88     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 40          | 8.50       | 33.33 |         |          |          | 0.61     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 50          | 7.80       | 33.74 |         |          | 5.13     | 0.61     |          |          |
| W9904B    | 4/21/99  | 15:10    | 19        | FM-03        | 43.22 | -124.5  | 55          | 7.80       | 33.76 |         |          |          | 0.56     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 0           | 10.23      | 32.20 | 13.53   |          | 14.44    | 3.28     |          | 8.76     |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 5           | 10.09      | 32.32 |         |          | 13.95    | 3.35     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 10          | 9.97       | 32.46 |         |          | 14.19    | 3.07     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 15          | 9.50       | 32.55 |         |          | 7.41     | 1.76     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 20          | 9.29       | 32.65 |         |          | 4.82     | 1.33     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 30          | 8.99       | 32.84 |         |          |          | 0.78     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 40          | 8.65       | 33.30 |         |          |          | 0.33     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 50          | 8.53       | 33.44 |         |          |          | 0.33     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 60          | 8.43       | 33.47 |         |          |          | 0.42     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 70          | 7.90       | 33.72 |         |          |          | 0.67     |          |          |
| W9904B    | 4/21/99  | 13:45    | 18        | FM-04        | 43.22 | -124.58 | 80          | 7.67       | 33.85 |         |          |          | 0.49     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 0           | 10.30      | 32.41 | 15.66   |          | 10.02    | 2.41     |          | 11.44    |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 10          | 10.30      | 32.41 |         |          | 9.10     | 2.34     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 20          | 9.80       | 32.58 |         |          | 8.85     | 2.11     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 25          | 9.40       | 32.63 |         |          | 8.17     | 1.56     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 30          | 9.30       | 32.64 |         |          | 6.32     | 1.22     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 40          | 9.10       | 32.74 |         |          |          | 0.88     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 50          | 9.00       | 32.92 |         |          |          | 0.85     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 60          | 8.80       | 33.23 |         |          |          | 0.85     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 70          | 8.60       | 33.48 |         |          |          | 0.51     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 100         | 7.80       | 33.78 |         |          |          | 0.70     |          |          |
| W9904B    | 4/21/99  | 11:47    | 17        | FM-05        | 43.22 | -124.67 | 150         | 7.20       | 33.97 |         |          | 10.48    | 1.57     |          |          |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 0           | 10.20      | 32.47 | 20.49   |          | 13.15    | 2.81     |          | 17.16    |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 10          | 10.20      | 32.49 |         |          | 12.22    | 2.56     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 20          | 9.70       | 32.55 |         |          | 8.98     | 1.79     |          |          |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 30          | 9.30       | 32.60 |         |          | 7.20     | 1.42     |          |          |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 40          | 9.20       | 32.70 |         |          | 0.80     |          |          |          |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 50          | 9.00       | 32.93 |         |          | 0.63     |          |          |          |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 70          | 8.70       | 33.55 |         |          | 0.49     |          |          |          |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 100         | 8.20       | 33.81 |         |          | 0.63     |          |          |          |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 150         | 7.50       | 33.97 |         |          | 0.26     |          |          |          |
| W9904B    | 4/21/99  | 8:31     | 15        | FM-07        | 43.22 | -124.83 | 338         | 5.90       | 34.07 |         |          |          |          |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 0           | 10.40      | 32.46 | 16.32   |          | 10.82    | 1.94     |          | 11.26    |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 10          | 10.40      | 32.47 |         |          | 10.08    | 2.10     |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 20          | 9.50       | 32.67 |         |          | 10.38    | 2.02     |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 26          | 9.50       | 32.70 |         |          | 11.99    | 2.07     |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 30          | 9.40       | 32.70 |         |          | 10.29    | 1.93     |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 40          | 9.30       | 32.72 |         |          | 6.67     | 1.26     |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 50          | 9.20       | 32.74 |         |          | 4.89     | 0.98     |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 70          | 9.00       | 33.02 |         |          | 0.57     |          |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 100         | 8.30       | 33.81 |         |          | 0.42     |          |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 150         | 7.20       | 33.98 |         |          | 5.20     | 0.64     |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 840         | 4.10       | 34.34 |         |          |          |          |          |          |
| W9904B    | 4/21/99  | 5:05     | 14        | FM-08        | 43.22 | -125.   | 1000        | 3.80       | 34.42 |         |          |          |          |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 0           | 10.20      | 32.63 | 18.24   |          | 11.62    | 2.29     |          | 12.37    |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 10          | 10.20      | 32.63 |         |          | 13.04    | 2.33     |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 15          | 9.90       | 32.63 |         |          | 12.63    | 2.35     |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 20          | 9.70       | 32.65 |         |          | 11.61    | 1.54     |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 30          | 9.20       | 32.70 |         |          | 7.57     | 1.54     |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 40          | 9.20       | 32.74 |         |          | 6.09     | 1.49     |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 50          | 9.10       | 32.76 |         |          | 5.70     | 1.33     |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 70          | 8.90       | 32.77 |         |          | 4.88     | 0.96     |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 150         | 8.00       | 33.90 |         |          | 4.80     | 0.66     |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 970         | 3.70       | 34.42 |         |          |          |          |          |          |
| W9904B    | 4/21/99  | 2:57     | 13        | FM-09        | 43.22 | -125.17 | 1000        | 3.60       | 34.43 |         |          |          |          |          |          |
| W9904B    | 4/21/99  | 23:50    | 21        | CR-01        | 41.90 | -124.3  | 0           | 9.40       | 33.10 | 31.23   |          | 13.04    | 1.89     |          | 11.04    |
| W9904B    | 4/21/99  | 23:50    | 21        | CR-01        | 41.90 | -124.3  | 5           | 9.30       | 33.12 |         |          | 10.10    | 1.62     |          |          |
| W9904B    | 4/21/99  | 23:50    | 21        | CR-01        | 41.90 | -124.3  | 10          | 9.20       | 33.16 |         |          | 8.77     | 1.61     |          |          |
| W9904B    | 4/21/99  | 23:50    | 21        | CR-01        | 41.90 | -124.3  | 20          | 8.40       | 33.62 |         |          | 4.59     | 0.82     |          |          |
| W9904B    | 4/21/99  | 23:50    | 21        | CR-01        | 41.90 | -124.3  | 30          | 8.00       | 33.75 |         |          | 6.92     | 1.03     |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 0           | 10.00      | 32.64 | 22.20   |          | 16.41    | 2.28     |          | 10.17    |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 5           | 10.00      | 32.64 |         |          | 13.08    | 2.07     |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 10          | 9.80       | 32.65 |         |          | 11.18    | 1.98     |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 20          | 9.50       | 32.71 |         |          | 9.78     | 1.73     |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 25          | 9.50       | 32.73 |         |          | 9.30     | 1.55     |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 30          | 9.10       | 32.89 |         |          | 6.34     | 1.00     |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 40          | 9.00       | 33.18 |         |          | 0.79     |          |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 50          | 8.80       | 33.37 |         |          | 0.45     |          |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 60          | 8.60       | 33.52 |         |          | 0.58     |          |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 70          | 8.30       | 33.71 |         |          | 0.61     |          |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 100         | 7.60       | 33.94 |         |          | 0.52     |          |          |          |
| W9904B    | 4/22/99  | 2:18     | 23        | CR-03        | 41.90 | -124.5  | 110         | 7.50       | 33.95 |         |          | 0.45     |          |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 0           | 10.00      | 32.48 | 16.53   |          | 14.93    | 2.66     |          | 12.21    |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 10          | 9.80       | 32.51 |         |          | 14.45    | 2.62     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 20          | 9.60       | 32.54 |         |          | 13.10    | 2.42     |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 25          | 9.60       | 32.54 |         |          | 11.55    | 2.42     |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 30          | 9.50       | 32.59 |         |          | 10.42    | 1.99     |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 40          | 9.30       | 32.70 |         |          | 5.72     | 1.06     |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 50          | 9.10       | 32.88 |         |          | 4.82     | 0.72     |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 70          | 8.80       | 33.37 |         |          |          | 0.61     |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 100         | 8.20       | 33.79 |         |          |          | 0.56     |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 150         | 7.50       | 33.96 |         |          |          | 0.38     |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 360         | 5.90       | 34.06 |         |          |          |          |          |          |
| W9904B    | 4/22/99  | 3:55     | 24        | CR-04        | 41.90 | -124.6  | 450         | 5.40       | 34.12 |         |          |          |          |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 0           | 10.10      | 32.52 | 15.81   |          | 17.92    | 2.72     |          | 12.27    |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 10          | 10.10      | 32.52 |         |          | 16.39    | 3.17     |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 20          | 10.10      | 32.52 |         |          | 11.32    | 2.23     |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 25          | 9.80       | 32.57 |         |          | 16.82    | 3.43     |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 30          | 9.60       | 32.63 |         |          | 4.90     | 0.97     |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 40          | 9.60       | 32.67 |         |          | 5.29     | 0.81     |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 50          | 9.30       | 32.71 |         |          |          | 0.86     |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 70          | 9.30       | 32.84 |         |          |          | 0.84     |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 100         | 8.80       | 33.61 |         |          |          | 0.41     |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 150         | 8.10       | 33.87 |         |          |          |          |          |          |
| W9904B    | 4/22/99  | 7:00     | 25        | CR-05        | 41.90 | -124.7  | 645         | 4.70       | 34.27 |         |          |          |          |          |          |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 0           | 13.20      | 30.37 | 11.45   |          | 87.47    | 10.54    |          | 0.89     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 5           | 11.80      | 31.33 | 20.79   |          | 63.01    | 9.40     |          | 4.38     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 10          | 9.50       | 32.38 | 26.52   |          | 49.72    | 7.85     |          | 4.44     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 12.5        | 8.90       | 32.85 | 30.71   |          | 32.20    | 5.35     |          | 1.53     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 15          | 8.30       | 33.12 | 35.64   |          | 25.52    | 3.90     |          | 3.56     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 20          | 7.90       | 33.63 | 39.26   |          | 16.62    | 2.29     |          | 5.57     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 25          | 7.60       | 33.74 | 38.55   |          | 14.49    | 1.95     |          | 4.89     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 30          | 7.50       | 33.82 | 40.71   |          | 13.54    | 1.60     |          | 6.90     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.30       | 33.90 | 40.90   |          | 22.27    | 2.33     |          | 4.59     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.20       | 33.94 | 39.72   |          | 20.24    | 2.33     |          | 2.67     |
| W9907A    | 7/3/99   | 20:51    | 3         | NH-05        | 44.65 | -124.18 | 53          | 7.20       | 33.94 | 42.66   |          | 24.70    | 2.62     |          | 5.37     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 0           | 15.80      | 24.64 | 18.79   |          | 76.24    | 8.28     |          | 10.51    |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 5           | 14.20      | 29.80 | 8.69    |          | 38.70    | 5.05     |          | 3.64     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 10          | 12.00      | 31.88 | 8.05    |          | 32.84    | 4.29     |          | 3.76     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 18          | 10.00      | 32.40 | 10.28   |          | 27.68    | 4.30     |          | 3.86     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 20          | 10.00      | 32.49 | 11.63   |          | 23.80    | 3.52     |          | 3.73     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 30          | 8.70       | 32.75 |         |          | 17.43    | 2.56     |          |          |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 34          | 8.50       | 32.75 | 14.80   |          | 13.43    | 2.08     |          | 4.42     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 40          | 8.30       | 32.80 | 19.75   |          | 15.59    | 2.49     |          | 7.28     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 50          | 8.10       | 33.03 | 24.45   |          | 9.34     | 1.59     |          | 6.15     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 60          | 7.80       | 33.22 | 34.27   |          | 10.87    | 1.82     |          | 7.13     |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 71          | 8.00       | 33.50 |         |          | 14.05    | 2.09     |          |          |
| W9907A    | 7/3/99   | 23:31    | 5         | NH-15        | 44.65 | -124.41 | 80          | 7.90       | 33.61 | 34.42   |          | 19.50    | 3.16     |          | 4.40     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 0           | 16.20      | 26.32 | 7.94    |          | 36.88    | 4.39     |          | 3.55     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 10          | 13.90      | 31.15 | 7.50    |          | 28.76    | 4.14     |          | 3.37     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 20          | 10.10      | 32.23 | 12.08   |          | 27.33    | 4.63     |          | 5.91     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 22          | 9.60       | 32.43 | 16.04   |          | 28.13    | 4.64     |          | 7.93     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 30          | 9.10       | 32.71 | 17.64   |          | 16.67    | 2.47     |          | 8.71     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 40          | 8.80       | 32.77 |         |          | 8.76     | 1.61     |          |          |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 49          | 8.50       | 32.78 | 14.48   |          | 6.53     | 1.22     |          | 4.64     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 70          | 8.20       | 33.13 | 24.72   |          | 7.41     | 1.27     |          | 5.90     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 100         | 8.00       | 33.77 | 32.12   |          | 8.24     | 1.14     |          | 2.22     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 150         | 7.20       | 33.95 | 35.74   |          | 6.64     | 1.05     |          | 1.58     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 160         | 7.10       | 33.96 | 36.61   |          | 12.01    | 1.30     |          | 1.97     |
| W9907A    | 7/4/99   | 2:33     | 7         | NH-25        | 44.65 | -124.65 | 200         | 6.60       | 33.99 |         |          | 11.37    | 1.81     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 0           | 16.20      | 27.48 |         |          | 24.56    | 3.14     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 10          | 15.80      | 29.55 |         |          | 23.25    | 3.16     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 20          | 11.60      | 32.26 |         |          | 23.53    | 3.70     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 30          | 9.80       | 32.64 |         |          | 24.86    | 4.45     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 35          | 9.40       | 32.71 |         |          | 19.26    | 3.21     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 40          | 9.20       | 32.73 |         |          | 16.31    | 2.10     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 50          | 8.70       | 32.75 |         |          | 5.58     | 1.23     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 70          | 8.40       | 32.90 |         |          | 6.81     | 1.18     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.20       | 33.65 |         |          | 4.80     | 0.98     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 150         | 7.50       | 33.92 |         |          | 4.91     | 0.97     |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 225         | 6.60       | 33.99 |         |          |          |          |          |          |
| W9907A    | 7/4/99   | 5:10     | 8         | NH-35        | 44.65 | -124.88 | 430         | 5.60       | 34.10 |         |          |          |          |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 0           | 15.90      | 27.00 |         |          | 11.45    | 1.64     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 10          | 15.10      | 31.21 |         |          | 8.73     | 1.55     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 20          | 12.60      | 32.73 |         |          | 9.66     | 2.01     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 30          | 11.80      | 32.80 |         |          | 13.43    | 2.56     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 35          | 11.40      | 32.79 |         |          | 10.61    | 1.94     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 40          | 10.60      | 32.79 |         |          | 17.31    | 3.33     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 50          | 9.80       | 32.84 |         |          | 10.77    | 1.93     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 70          | 8.80       | 32.82 |         |          | 5.27     | 1.07     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 100         | 8.70       | 33.36 |         |          | 4.61     | 0.97     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 150         | 8.00       | 33.85 |         |          | 4.94     | 0.88     |          |          |
| W9907A    | 7/4/99   | 7:31     | 9         | NH-45        | 44.65 | -125.12 | 870         | 4.00       | 34.36 |         |          |          |          |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 0           | 15.60      | 30.73 | 13.04   |          | 9.36     | 1.45     |          | 11.58    |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 10          | 14.90      | 32.13 |         |          | 8.33     | 1.30     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 20          | 14.00      | 32.51 |         |          | 10.12    | 1.60     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 30          | 13.20      | 32.72 |         |          | 12.07    | 2.15     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 40          | 11.20      | 32.69 |         |          | 14.42    | 2.88     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 44          | 10.70      | 32.72 |         |          | 10.31    | 1.98     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 50          | 10.30      | 32.77 |         |          | 7.43     | 1.48     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 70          | 9.30       | 32.85 |         |          |          | 0.74     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 99          | 9.10       | 33.04 |         |          |          | 0.59     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 150         | 8.00       | 33.82 |         |          |          | 0.95     |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 240         | 6.60       | 33.95 |         |          |          |          |          |          |
| W9907A    | 7/4/99   | 12:11    | 11        | NH-65        | 44.65 | -125.6  | 1005        | 3.60       | 34.42 |         |          |          |          |          |          |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 0           | 15.40      | 30.22 | 6.80    |          | 9.20     | 1.46     |          | 5.34     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 10          | 15.10      | 31.11 | 6.85    |          | 8.18     | 1.15     |          | 5.70     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 20          | 11.40      | 32.47 | 9.55    |          | 10.68    | 1.48     |          | 8.07     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 30          | 10.00      | 32.73 | 9.68    |          | 14.51    | 2.67     |          | 7.01     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 35          | 9.60       | 32.75 | 10.99   |          | 8.29     | 1.68     |          | 6.10     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 40          | 9.20       | 32.76 | 11.72   |          | 4.79     | 1.04     |          | 5.99     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 50          | 8.90       | 32.79 | 13.84   |          |          | 0.52     |          | 6.39     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 70          | 8.50       | 32.85 | 13.48   |          |          | 0.27     |          | 4.92     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.50       | 33.41 | 24.24   |          |          | 0.29     |          | 2.97     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 150         | 7.70       | 33.85 | 31.06   |          |          | 0.30     |          | 3.25     |
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 885         | 3.80       | 34.37 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9907A    | 7/4/99   | 15:39    | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.60       | 34.43 |         |          |          |          |          |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 0           | 13.70      | 32.48 | 16.33   | 57.07    | 8.05     |          | 8.28     |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 5           | 13.00      | 32.58 | 18.17   | 60.10    | 9.25     |          | 7.38     |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 10          | 11.20      | 32.89 | 31.62   | 22.00    | 3.86     |          | 6.53     |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 15          | 8.50       | 33.22 | 35.83   | 11.10    | 2.05     |          | 7.34     |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 20          | 8.20       | 33.46 | 36.81   | 7.32     | 1.57     |          | 6.12     |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 25          | 7.90       | 33.65 | 36.31   | 5.53     | 1.10     |          | 4.87     |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 30          | 7.80       | 33.74 | 35.56   | 4.55     | 1.13     |          | 3.54     |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 40          | 7.40       | 33.87 | 37.58   | 6.46     | 1.05     |          | 2.66     |          |
| W9907A    | 7/8/99   | 1:44     | 37        | HH-01        | 44.00 | -124.2  | 48          | 7.30       | 33.90 | 38.76   | 5.72     | 1.38     |          | 3.49     |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 0           | 14.10      | 30.39 | 14.26   | 30.03    | 5.15     |          | 9.11     |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 5           | 13.00      | 30.80 |         | 24.94    | 4.78     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 10          | 8.60       | 32.62 |         | 12.65    | 2.81     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 20          | 8.10       | 32.97 |         | 7.41     | 1.55     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 30          | 8.00       | 33.60 |         | 5.32     | 1.34     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 40          | 7.70       | 33.78 |         |          | 1.02     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 50          | 7.40       | 33.87 |         |          | 0.81     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 60          | 7.30       | 33.90 |         |          | 0.72     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 70          | 7.40       | 33.96 |         |          | 0.50     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 100         | 7.00       | 33.97 |         |          | 0.57     |          |          |          |
| W9907A    | 7/8/99   | 3:03     | 38        | HH-02        | 44.00 | -124.4  | 116         | 6.90       | 33.98 |         |          | 4.78     | 1.31     |          |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 0           | 14.50      | 29.69 | 14.47   | 32.21    | 3.87     |          | 10.44    |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 10          | 11.10      | 31.91 | 13.66   | 25.56    | 5.11     |          | 8.36     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 15          | 9.00       | 32.45 | 22.18   | 17.27    | 3.49     |          | 9.74     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 20          | 8.90       | 32.95 | 27.04   | 9.04     | 1.43     |          | 8.79     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 30          | 8.00       | 33.31 | 34.66   | 5.39     | 0.77     |          | 7.79     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 40          | 7.80       | 33.51 | 36.01   |          | 0.82     |          | 6.51     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 50          | 7.80       | 33.67 | 34.99   |          | 0.82     |          | 3.77     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 60          | 7.70       | 33.77 | 35.39   |          | 0.59     |          | 4.23     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 70          | 7.50       | 33.87 | 37.89   |          | 0.65     |          | 5.18     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 100         | 7.40       | 33.96 | 35.97   |          | 0.56     |          | 3.63     |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 120         | 7.10       | 33.97 | 36.81   |          |          | 4.16     |          |          |
| W9907A    | 7/8/99   | 4:39     | 39        | HH-03        | 44.00 | -124.6  | 145         | 6.90       | 33.98 | 38.79   |          | 4.70     | 0.81     | 3.30     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 0           | 15.20      | 29.28 | 8.39    | 13.11    | 2.15     |          | 6.23     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 5           | 15.20      | 29.34 | 11.29   | 11.97    | 2.10     |          | 9.19     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 10          | 12.70      | 31.57 | 12.62   | 11.68    | 2.33     |          | 10.29    |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 15          | 9.80       | 32.29 | 15.11   | 11.22    | 2.51     |          | 8.76     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 20          | 8.90       | 32.55 | 14.05   | 9.67     | 1.60     |          | 5.92     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 30          | 8.30       | 32.71 | 17.49   |          | 0.91     |          | 7.33     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 40          | 8.10       | 32.86 | 23.50   |          | 0.66     |          | 8.68     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 50          | 7.90       | 33.44 | 33.49   |          | 0.44     |          | 7.93     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 60          | 7.80       | 33.73 | 35.78   |          | 0.33     |          | 6.19     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 70          | 7.80       | 33.81 | 36.92   |          | 0.28     |          | 7.00     |          |
| W9907A    | 7/8/99   | 6:23     | 40        | HH-04        | 44.00 | -124.8  | 95          | 7.40       | 33.95 | 37.25   |          |          | 5.95     |          |          |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 0           | 14.90      | 29.95 | 7.66    | 11.69    | 2.18     |          | 5.48     |          |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 10          | 13.80      | 30.75 | 10.31   | 12.38    | 2.89     |          | 6.25     |          |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 15          | 11.70      | 31.86 | 20.93   | 7.96     | 2.00     |          | 10.02    |          |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 20          | 10.70      | 32.25 | 30.26   | 5.82     | 1.00     |          | 9.61     |          |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 30          | 8.60       | 32.91 | 29.61   |          | 0.62     |          | 4.52     |          |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 40          | 7.90       | 33.36 | 37.41   |          | 0.39     |          | 9.21     |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 50          | 7.90       | 33.65 | 33.98   |          |          | 0.33     |          | 4.20     |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 70          | 7.70       | 33.74 | 34.63   |          |          | 0.42     |          | 2.60     |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 100         | 7.20       | 33.95 | 39.01   |          |          | 0.33     |          | 5.29     |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 150         | 6.90       | 33.99 | 40.40   |          |          | 0.28     |          | 6.90     |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 500         | 5.50       | 34.11 | 47.16   |          |          | 0.44     |          |          |
| W9907A    | 7/8/99   | 8:20     | 41        | HH-05        | 44.00 | -125.   | 930         | 4.00       | 34.37 | 49.59   |          |          |          |          |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 0           | 14.80      | 30.06 |         |          | 13.96    |          | 2.39     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 10          | 14.40      | 30.32 |         |          | 13.80    |          | 2.71     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 15          | 11.20      | 31.86 |         |          | 14.80    |          | 3.05     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 20          | 9.70       | 32.34 |         |          | 12.14    |          | 2.18     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 30          | 8.20       | 33.11 |         |          | 7.07     |          | 1.02     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 40          | 8.10       | 33.38 |         |          | 4.45     |          | 0.77     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 50          | 7.90       | 33.56 |         |          | 5.02     |          | 0.63     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 70          | 7.60       | 33.77 |         |          |          |          | 0.58     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 100         | 7.30       | 33.91 |         |          | 6.31     |          | 0.67     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 150         | 6.60       | 34.00 |         |          | 5.41     |          | 0.56     |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 200         | 6.20       | 34.03 |         |          |          |          |          |          |
| W9907A    | 7/8/99   | 12:02    | 43        | HH-07        | 44.00 | -125.2  | 1005        | 3.80       | 34.41 |         |          |          |          |          |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 0           | 16.10      | 27.45 | 11.09   |          | 9.50     |          | 1.48     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 10          | 15.50      | 29.47 |         |          | 9.72     |          | 1.81     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 20          | 11.70      | 31.93 |         |          | 8.48     |          | 2.04     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 30          | 10.40      | 32.24 |         |          | 11.26    |          | 2.69     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 35          | 9.50       | 32.55 |         |          | 6.23     |          | 1.63     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 40          | 9.00       | 32.65 |         |          | 7.35     |          | 1.30     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 50          | 8.50       | 32.74 |         |          |          |          | 1.03     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 70          | 8.10       | 32.90 |         |          | 4.64     |          | 0.67     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 100         | 7.50       | 33.81 |         |          | 4.43     |          | 0.71     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 150         | 7.10       | 33.96 |         |          |          |          | 0.51     |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 555         | 5.00       | 34.19 |         |          |          |          |          |          |
| W9907A    | 7/8/99   | 14:39    | 45        | HH-09        | 44.00 | -125.4  | 1005        | 3.70       | 34.41 |         |          |          |          |          |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 0           | 13.30      | 32.53 | 19.09   |          | 39.22    |          | 5.92     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 5           | 13.10      | 32.56 |         |          | 40.24    |          | 6.25     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 10          | 10.10      | 33.24 |         |          | 38.79    |          | 6.50     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 15          | 9.50       | 33.38 |         |          | 26.85    |          | 4.65     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 20          | 9.20       | 33.45 |         |          | 8.47     |          | 1.62     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 22.5        | 9.10       | 33.46 |         |          | 6.00     |          | 0.98     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 25          | 9.00       | 33.46 |         |          | 8.17     |          | 1.13     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 30          | 7.80       | 33.72 |         |          | 5.62     |          | 1.04     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 40          | 7.30       | 33.91 |         |          | 4.53     |          | 0.69     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 50          | 7.20       | 33.92 |         |          | 5.33     |          | 0.76     |          |
| W9907A    | 7/5/99   | 3:02     | 14        | FM-03        | 43.22 | -124.5  | 55          | 7.20       | 33.92 |         |          | 4.73     |          | 0.65     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 0           | 14.60      | 31.83 | 11.91   |          | 23.08    |          | 3.23     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 5           | 14.60      | 31.83 |         |          | 25.53    |          | 3.44     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 10          | 12.10      | 32.41 |         |          | 34.08    |          | 5.46     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 15          | 11.40      | 32.70 |         |          | 24.24    |          | 3.25     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 20          | 9.10       | 32.89 |         |          | 10.43    |          | 1.76     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 25          | 8.90       | 33.28 |         |          | 10.12    |          | 1.97     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 30          | 8.20       | 33.57 |         |          | 4.79     |          | 0.98     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 40          | 7.60       | 33.78 |         |          | 5.30     |          | 0.78     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 50          | 7.30       | 33.92 |         |          |          |          | 0.58     |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 60          | 7.20       | 33.95 |         |          |          |          | 0.60     |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 70          | 7.10       | 33.97 |         |          | 6.28     | 0.72     |          |          |
| W9907A    | 7/5/99   | 4:08     | 15        | FM-04        | 43.22 | -124.58 | 80          | 7.00       | 33.97 |         |          | 5.70     | 0.67     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 0           | 15.10      | 31.11 | 8.98    |          | 16.55    | 2.34     |          | 6.64     |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 10          | 14.50      | 31.35 |         |          | 20.03    | 2.92     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 20          | 11.20      | 31.91 |         |          | 9.49     | 1.63     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 25          | 9.20       | 32.34 |         |          | 6.23     | 1.04     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 30          | 8.40       | 32.65 |         |          | 5.29     | 0.78     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 40          | 8.00       | 33.07 |         |          | 4.71     | 0.95     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 50          | 8.00       | 33.23 |         |          | 4.47     | 0.71     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 60          | 8.00       | 33.57 |         |          |          | 0.58     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 70          | 7.60       | 33.79 |         |          |          | 0.49     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 100         | 7.00       | 33.98 |         |          |          | 0.60     |          |          |
| W9907A    | 7/5/99   | 5:14     | 16        | FM-05        | 43.22 | -124.67 | 145         | 6.70       | 34.00 |         |          | 4.65     | 0.84     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 0           | 15.10      | 30.62 | 7.67    |          | 10.47    | 1.81     |          | 5.87     |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 10          | 13.50      | 31.47 |         |          | 8.46     | 1.64     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 20          | 10.60      | 32.52 |         |          | 8.15     | 1.88     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 25          | 9.90       | 32.61 |         |          | 7.14     | 1.51     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 30          | 9.30       | 32.69 |         |          | 5.88     | 1.03     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 40          | 8.70       | 32.75 |         |          | 5.47     | 0.96     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 50          | 8.40       | 32.79 |         |          | 4.76     | 0.77     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 60          | 8.60       | 33.01 |         |          |          | 0.64     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 70          | 8.50       | 33.29 |         |          |          | 0.37     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 100         | 8.00       | 33.81 |         |          |          | 0.39     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 150         | 7.10       | 33.95 |         |          | 5.44     | 0.71     |          |          |
| W9907A    | 7/5/99   | 8:07     | 18        | FM-07        | 43.22 | -124.83 | 340         | 5.70       | 34.08 |         |          | 5.59     | 0.35     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 0           | 15.60      | 30.17 | 7.85    |          | 10.28    | 1.57     |          | 6.28     |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 10          | 14.90      | 30.96 |         |          | 10.63    | 1.75     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 20          | 11.10      | 32.37 |         |          | 11.20    | 2.03     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 25          | 10.10      | 32.66 |         |          | 9.57     | 1.56     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 30          | 9.30       | 32.73 |         |          | 6.47     | 1.22     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 40          | 8.80       | 32.78 |         |          |          | 0.57     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 50          | 8.80       | 32.85 |         |          |          | 0.55     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 70          | 8.60       | 33.10 |         |          |          | 0.66     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 100         | 8.50       | 33.68 |         |          |          | 0.33     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 150         | 7.30       | 33.95 |         |          |          | 0.88     |          |          |
| W9907A    | 7/5/99   | 10:07    | 19        | FM-08        | 43.22 | -125.   | 1005        | 3.90       | 34.40 |         |          |          |          |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 0           | 15.40      | 30.17 | 9.36    |          | 10.94    | 1.79     |          | 7.49     |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 10          | 12.70      | 31.41 |         |          | 9.25     | 1.63     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 17.5        | 10.40      | 32.20 |         |          | 16.27    | 3.27     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 20          | 10.80      | 32.52 |         |          | 15.06    | 3.10     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 29          | 9.20       | 32.74 |         |          | 12.61    | 2.50     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 40          | 8.90       | 32.77 |         |          | 5.48     | 1.06     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 50          | 8.80       | 32.78 |         |          |          | 0.64     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 70          | 8.70       | 32.83 |         |          |          | 0.53     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 100         | 8.20       | 33.44 |         |          |          | 0.70     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 150         | 7.60       | 33.92 |         |          |          | 0.41     |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 850         | 4.20       | 34.35 |         |          |          |          |          |          |
| W9907A    | 7/5/99   | 12:08    | 20        | FM-09        | 43.22 | -125.17 | 1005        | 3.80       | 34.41 |         |          |          |          |          |          |
| W9907A    | 7/5/99   | 21:01    | 21        | CR-01        | 41.90 | -124.3  | 0           | 8.50       | 33.89 | 34.75   |          | 44.97    | 7.11     |          | 5.03     |
| W9907A    | 7/5/99   | 21:01    | 21        | CR-01        | 41.90 | -124.3  | 5           | 8.40       | 33.90 |         |          | 29.97    | 5.35     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9907A    | 7/5/99   | 21:01    | 21        | CR-01        | 41.90 | -124.3 | 10          | 7.90       | 33.92 |         |          | 18.46    | 3.03     |          |          |
| W9907A    | 7/5/99   | 21:01    | 21        | CR-01        | 41.90 | -124.3 | 15          | 7.80       | 33.94 |         |          | 27.10    | 4.47     |          |          |
| W9907A    | 7/5/99   | 21:01    | 21        | CR-01        | 41.90 | -124.3 | 20          | 7.70       | 33.95 |         |          | 21.32    | 3.37     |          |          |
| W9907A    | 7/5/99   | 21:01    | 21        | CR-01        | 41.90 | -124.3 | 25          | 7.60       | 33.96 |         |          | 17.90    | 2.96     |          |          |
| W9907A    | 7/5/99   | 21:01    | 21        | CR-01        | 41.90 | -124.3 | 30          | 7.50       | 33.96 |         |          | 19.69    | 3.10     |          |          |
| W9907A    | 7/5/99   | 21:01    | 21        | CR-01        | 41.90 | -124.3 | 35          | 7.50       | 33.96 |         |          | 18.41    | 3.08     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 0           | 13.00      | 32.95 | 15.90   |          | 18.13    | 2.49     |          | 11.73    |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 5           | 12.50      | 32.95 |         |          | 18.60    | 2.65     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 10          | 12.30      | 32.95 |         |          | 18.72    | 2.36     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 20          | 9.50       | 33.16 |         |          | 12.79    | 1.79     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 30          | 8.70       | 33.24 |         |          | 7.14     | 0.41     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 40          | 8.80       | 33.63 |         |          | 15.55    | 2.60     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 50          | 8.60       | 33.78 |         |          | 17.23    | 2.60     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 60          | 8.60       | 33.80 |         |          | 17.96    | 2.62     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 70          | 8.50       | 33.82 |         |          | 19.10    | 2.54     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 99          | 8.00       | 33.88 |         |          | 14.38    | 1.93     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 120         | 7.70       | 33.95 |         |          | 28.47    | 3.65     |          |          |
| W9907A    | 7/5/99   | 23:05    | 23        | CR-03        | 41.90 | -124.5 | 129         | 7.70       | 33.95 |         |          | 33.64    | 3.81     |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 0           | 12.10      | 32.74 | 15.19   |          | 19.07    | 2.99     |          | 11.77    |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 10          | 12.00      | 32.74 |         |          | 17.31    | 2.58     |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 15          | 11.30      | 32.73 |         |          | 13.47    | 1.93     |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 20          | 9.60       | 32.84 |         |          | 9.12     | 1.64     |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 30          | 9.70       | 32.93 |         |          | 8.43     | 1.03     |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 40          | 9.10       | 33.15 |         |          | 6.01     | 0.92     |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 51          | 8.80       | 33.37 |         |          | 4.47     | 0.30     |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 70          | 8.70       | 33.63 |         |          | 4.40     |          |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 100         | 8.10       | 33.84 |         |          | 4.49     |          |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 150         | 7.40       | 33.96 |         |          | 4.56     |          |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 451         | 5.60       | 34.12 |         |          |          |          |          |          |
| W9907A    | 7/6/99   | 0:35     | 24        | CR-04        | 41.90 | -124.6 | 490         | 5.50       | 34.14 |         |          |          |          |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 0           | 13.40      | 32.67 | 9.07    |          | 16.86    | 2.21     |          | 6.86     |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 10          | 12.90      | 32.71 |         |          | 16.87    | 2.47     |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 15          | 12.40      | 32.73 |         |          | 17.64    | 2.90     |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 20          | 12.00      | 32.76 |         |          | 14.49    | 2.02     |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 30          | 10.50      | 32.91 |         |          | 8.34     | 1.08     |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 40          | 9.90       | 32.91 |         |          | 6.33     | 0.92     |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 49          | 9.30       | 32.97 |         |          | 5.33     | 0.34     |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 70          | 8.80       | 33.26 |         |          | 4.86     | 0.49     |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 100         | 8.50       | 33.64 |         |          | 4.41     | 0.61     |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 150         | 7.70       | 33.92 |         |          | 0.58     |          |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 499         | 5.20       | 34.16 |         |          | 0.52     |          |          |          |
| W9907A    | 7/6/99   | 2:24     | 25        | CR-05        | 41.90 | -124.7 | 620         | 4.60       | 34.25 |         |          | 0.43     |          |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 0           | 12.70      | 33.11 | 15.07   |          | 29.97    | 4.39     |          | 6.95     |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 10          | 12.70      | 33.11 |         |          | 28.26    | 4.11     |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 20          | 10.20      | 33.36 |         |          | 26.73    | 4.11     |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 25          | 10.30      | 33.53 |         |          | 28.09    | 4.50     |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 30          | 9.30       | 33.43 |         |          | 21.88    | 3.79     |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 40          | 8.90       | 33.55 |         |          | 13.48    | 2.28     |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 50          | 8.70       | 33.69 |         |          | 11.15    | 1.99     |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 70          | 8.40       | 33.78 |         |          | 6.50     | 1.00     |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.  | 100         | 7.90       | 33.89 |         |          | 4.21     | 0.61     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.   | 150         | 7.20       | 33.97 |         |          |          |          | 0.62     |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.   | 500         | 5.00       | 34.17 |         |          |          |          |          |          |
| W9907A    | 7/6/99   | 5:47     | 27        | CR-07        | 41.90 | -125.   | 817         | 4.00       | 34.38 |         |          |          |          |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 0           | 11.10      | 33.17 | 20.65   |          | 29.24    | 5.24     |          | 7.15     |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 10          | 11.10      | 33.15 |         |          | 18.44    | 3.11     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 20          | 9.20       | 33.04 |         |          | 14.07    | 2.63     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 25          | 9.10       | 33.10 |         |          | 14.56    | 2.56     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 30          | 9.10       | 33.37 |         |          | 13.96    | 2.40     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 40          | 9.50       | 33.57 |         |          | 7.43     | 1.40     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 50          | 9.00       | 33.68 |         |          | 5.88     | 1.00     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 70          | 8.40       | 33.77 |         |          |          | 0.48     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 100         | 8.00       | 33.88 |         |          |          | 0.50     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 150         | 7.40       | 33.95 |         |          |          | 0.50     |          |          |
| W9907A    | 7/6/99   | 9:43     | 29        | CR-09        | 41.90 | -125.33 | 1005        | 3.70       | 34.43 |         |          |          | 0.50     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 0           | 11.00      | 33.62 | 21.72   |          | 56.65    | 9.89     |          | 8.59     |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 5           | 10.60      | 33.60 |         |          | 57.09    | 9.75     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 10          | 10.50      | 33.63 |         |          | 47.98    | 8.46     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 15          | 10.10      | 33.67 |         |          | 44.49    | 7.77     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 20          | 9.20       | 33.71 |         |          | 13.58    | 2.63     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 25          | 8.70       | 33.74 |         |          | 11.66    | 2.15     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 30          | 8.30       | 33.81 |         |          | 6.30     | 1.29     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 40          | 8.10       | 33.85 |         |          |          | 1.02     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 50          | 7.70       | 33.92 |         |          | 4.75     | 1.16     |          |          |
| W9907A    | 7/6/99   | 20:29    | 30        | EU-01        | 40.87 | -124.27 | 55          | 7.70       | 33.93 |         |          | 4.50     | 1.17     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 0           | 12.10      | 33.54 | 15.07   |          | 27.04    | 4.30     |          | 7.76     |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 5           | 12.00      | 33.54 |         |          | 25.70    | 4.39     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 10          | 9.70       | 33.51 |         |          | 19.46    | 3.24     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 15          | 9.20       | 33.57 |         |          | 13.01    | 2.32     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 20          | 8.80       | 33.61 |         |          | 10.30    | 1.63     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 30          | 8.60       | 33.70 |         |          | 5.30     | 1.24     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 40          | 8.50       | 33.79 |         |          |          | 0.82     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 50          | 8.30       | 33.85 |         |          |          | 0.69     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 60          | 8.00       | 33.90 |         |          |          | 0.69     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 70          | 7.90       | 33.91 |         |          | 4.53     | 0.65     |          |          |
| W9907A    | 7/6/99   | 21:31    | 31        | EU-02        | 40.87 | -124.37 | 105         | 7.20       | 33.99 |         |          | 6.41     | 1.24     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 0           | 12.20      | 33.20 | 14.64   |          | 58.93    | 7.87     |          | 6.69     |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 10          | 11.60      | 33.15 |         |          | 49.08    | 7.11     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 15          | 9.80       | 33.35 |         |          | 26.37    | 4.07     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 20          | 9.60       | 33.41 |         |          | 21.53    | 3.49     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 30          | 9.00       | 33.49 |         |          | 8.01     | 1.35     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 40          | 8.70       | 33.67 |         |          |          | 0.64     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 50          | 8.50       | 33.74 |         |          |          | 0.48     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 70          | 8.10       | 33.85 |         |          |          | 0.47     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 101         | 7.60       | 33.95 |         |          |          | 0.43     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 150         | 7.30       | 34.01 |         |          |          | 0.66     |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 300         | 6.50       | 34.05 |         |          |          |          |          |          |
| W9907A    | 7/6/99   | 22:58    | 32        | EU-03        | 40.87 | -124.47 | 349         | 6.30       | 34.08 |         |          |          |          |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 0           | 11.70      | 33.45 | 17.96   |          | 104.53   | 11.33    |          | 6.62     |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 5           | 10.70      | 33.47 |         |          | 99.26    | 11.64    |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 10          | 10.00      | 33.48 |         |          | 52.14    | 8.26     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 20          | 9.20       | 33.59 |         |          | 21.84    | 3.94     |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 30          | 8.80       | 33.64 |         |          | 14.02    | 2.83     |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 40          | 8.70       | 33.69 |         |          | 8.05     | 1.71     |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 50          | 8.50       | 33.77 |         |          | 6.87     | 1.39     |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 70          | 8.30       | 33.81 |         |          | 6.29     | 1.17     |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 100         | 8.00       | 33.90 |         |          | 5.16     | 0.78     |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 150         | 7.60       | 33.97 |         |          | 9.65     | 1.40     |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 500         | 5.50       | 34.22 |         |          |          |          |          |          |
| W9907A    | 7/7/99   | 1:38     | 34        | EU-05        | 40.87 | -124.67 | 690         | 4.80       | 34.27 |         |          |          |          |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 0           | 11.80      | 33.09 | 16.43   |          | 31.03    | 5.41     |          | 10.79    |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 10          | 11.50      | 33.07 |         |          | 30.44    | 5.15     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 20          | 10.60      | 33.00 |         |          | 16.32    | 2.96     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 30          | 9.80       | 32.96 |         |          | 11.86    | 2.33     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 40          | 9.10       | 32.99 |         |          | 7.90     | 1.33     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 50          | 8.90       | 33.12 |         |          | 6.66     | 1.16     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 70          | 9.00       | 33.53 |         |          | 10.21    | 1.94     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 85          | 8.90       | 33.68 |         |          | 13.38    | 2.26     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 100         | 8.60       | 33.78 |         |          | 16.40    | 3.11     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 150         | 7.80       | 33.93 |         |          | 6.32     | 1.00     |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 715         | 4.40       | 34.29 |         |          |          |          |          |          |
| W9907A    | 7/7/99   | 5:11     | 36        | EU-07        | 40.87 | -124.93 | 1000        | 3.70       | 34.43 |         |          |          |          |          |          |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 3           | 9.36       | 33.14 | 20.30   |          | 58.53    | 8.22     |          | 7.94     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 7           | 9.11       | 33.19 | 26.10   |          | 32.11    | 4.68     |          | 6.63     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 12          | 8.69       | 33.26 | 28.10   |          | 22.29    | 2.93     |          | 6.84     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 14          | 8.37       | 33.22 | 28.96   |          | 18.44    | 1.73     |          | 5.88     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 17          | 8.10       | 33.24 | 30.35   |          | 17.22    | 1.35     |          | 5.71     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 22          | 8.13       | 33.41 | 30.45   |          | 11.20    | 0.72     |          | 4.66     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 27          | 8.18       | 33.52 | 33.89   |          | 11.17    | 0.66     |          | 6.84     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 32          | 8.18       | 33.58 |         |          | 29.09    | 1.96     |          |          |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 42          | 8.03       | 33.74 | 35.38   |          | 13.68    | 1.16     |          | 2.97     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 52          | 7.96       | 33.77 | 35.99   |          | 13.80    | 1.28     |          | 3.24     |
| W9909C    | 9/22/99  | 20:04    | 3         | NH-05        | 44.65 | -124.18 | 55          | 7.96       | 33.77 | 37.46   |          | 16.67    | 1.70     |          | 4.48     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 3           | 12.59      | 32.29 | 12.57   |          | 22.74    | 3.69     |          | 7.07     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 6.5         | 12.37      | 32.33 | 13.08   |          | 28.87    | 3.44     |          | 7.53     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 12          | 11.20      | 32.57 | 13.96   |          | 15.74    | 1.96     |          | 5.98     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 22          | 9.42       | 32.76 | 16.40   |          | 11.20    | 1.07     |          | 6.56     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 32          | 8.66       | 32.79 | 15.43   |          | 8.01     | 0.68     |          | 5.36     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 42          | 8.45       | 32.81 | 19.04   |          | 7.44     | 0.72     |          | 8.93     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 51          | 8.28       | 32.88 | 20.82   |          | 17.43    | 0.72     |          | 5.84     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 62          | 8.33       | 33.13 | 24.75   |          | 9.98     | 0.61     |          | 5.33     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 71          | 8.25       | 33.42 | 34.70   |          | 8.28     | 0.86     |          | 5.43     |
| W9909C    | 9/22/99  | 23:04    | 5         | NH-15        | 44.65 | -124.41 | 82          | 8.04       | 33.73 | 37.54   |          | 9.88     | 0.96     |          | 4.69     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 3           | 11.51      | 32.46 | 16.81   |          | 20.03    | 3.03     |          | 7.09     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 12          | 11.24      | 32.50 | 16.36   |          | 17.94    | 3.08     |          | 6.10     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 20          | 10.53      | 32.61 |         |          | 18.88    | 3.10     |          |          |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 22          | 10.27      | 32.66 | 17.64   |          | 16.09    | 2.25     |          | 7.43     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 32          | 8.88       | 32.78 | 15.65   |          | 5.98     | 0.73     |          | 6.17     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 42          | 8.54       | 32.80 | 16.23   |          | 6.99     | 0.77     |          | 6.42     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 52          | 8.32       | 32.85 | 16.27   |          | 5.58     | 0.54     |          | 5.29     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 72          | 8.17       | 33.06 | 22.96   |          | 6.58     | 0.87     |          | 4.87     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 102         | 8.16       | 33.58 | 35.08   |          | 6.76     | 0.79     |          | 3.74     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 152         | 7.88       | 33.88 | 35.14   |          | 6.05     | 0.49     |          | 2.74     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 202         | 7.38       | 33.94 | 35.89   |          | 7.41     | 0.70     |          | 1.07     |
| W9909C    | 9/23/99  | 6:31     | 7         | NH-25        | 44.65 | -124.65 | 275         | 6.96       | 33.98 | 39.44   |          | 7.34     | 0.77     |          | 2.87     |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 3           | 14.96      | 31.59 | 8.49    |          | 16.49    | 2.72     |          | 5.70     |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 12          | 14.05      | 31.90 |         |          | 16.07    | 2.44     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 17          | 13.19      | 32.37 |         |          | 16.95    | 2.78     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 22          | 11.28      | 32.69 |         |          | 10.67    | 1.77     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 32          | 9.99       | 32.75 |         |          | 7.96     | 1.05     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 42          | 9.11       | 32.77 |         |          | 5.46     | 0.78     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 52          | 8.52       | 32.79 |         |          | 6.30     | 0.58     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 72          | 8.30       | 32.99 |         |          | 4.30     | 0.44     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 102         | 8.26       | 33.58 |         |          | 3.99     | 0.39     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 152         | 7.73       | 33.90 |         |          |          | 0.58     |          |          |
| W9909C    | 9/23/99  | 9:22     | 8         | NH-35        | 44.65 | -124.88 | 427         | 5.80       | 34.05 |         |          | 5.47     | 0.50     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 3           | 15.65      | 31.66 | 7.72    |          | 12.10    | 1.78     |          | 5.92     |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 12          | 15.48      | 31.71 |         |          | 13.80    | 1.99     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 20          | 12.43      | 32.56 |         |          | 9.44     | 1.69     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 22          | 12.07      | 32.59 |         |          | 10.29    | 1.37     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 32          | 10.46      | 32.73 |         |          | 6.53     | 1.14     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 42          | 9.65       | 32.76 |         |          | 6.41     | 0.68     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 52          | 9.00       | 32.79 |         |          | 4.60     | 0.49     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 72          | 8.49       | 32.93 |         |          | 6.40     | 0.66     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 102         | 8.40       | 33.75 |         |          | 5.24     | 0.52     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 152         | 8.20       | 33.96 |         |          | 4.18     | 0.58     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 502         | 5.39       | 34.09 |         |          |          | 0.30     |          |          |
| W9909C    | 9/23/99  | 10:58    | 9         | NH-45        | 44.65 | -125.12 | 693         | 4.39       | 34.26 |         |          |          | 0.26     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 3           | 14.57      | 31.97 | 10.14   |          | 13.70    | 2.21     |          | 7.87     |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 12          | 11.84      | 32.45 |         |          | 17.28    | 3.03     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 20          | 10.16      | 32.72 |         |          | 12.75    | 2.24     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 22          | 9.77       | 32.75 |         |          | 11.30    | 1.99     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 32          | 8.89       | 32.78 |         |          | 8.20     | 0.95     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 42          | 8.40       | 32.82 |         |          | 4.93     | 0.75     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 53          | 8.57       | 32.97 |         |          | 5.20     | 0.89     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 72          | 8.54       | 33.23 |         |          | 5.71     | 0.84     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 102         | 8.36       | 33.67 |         |          |          | 0.63     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 153         | 7.66       | 33.91 |         |          |          | 0.42     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 765         | 4.47       | 34.27 |         |          | 4.49     | 0.35     |          |          |
| W9909C    | 9/23/99  | 15:30    | 11        | NH-65        | 44.65 | -125.6  | 1007        | 3.77       | 34.39 |         |          | 4.60     | 0.52     |          |          |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 3           | 12.47      | 32.57 | 9.92    |          | 13.10    | 2.20     |          | 5.94     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 12          | 11.69      | 32.96 | 13.27   |          | 10.16    | 1.71     |          | 6.99     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 18          | 11.44      | 33.04 | 14.82   |          | 8.04     | 1.23     |          | 6.00     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 22          | 11.09      | 33.02 | 17.02   |          | 9.53     | 1.22     |          | 6.43     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 32          | 10.29      | 33.02 | 18.05   |          | 7.60     | 1.02     |          | 5.86     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 42          | 9.07       | 33.13 | 21.03   |          |          | 0.75     |          | 6.03     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 72          | 8.35       | 33.66 | 24.04   |          | 5.33     | 0.78     |          | 5.26     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 92          | 8.05       | 33.81 | 28.24   |          | 4.57     | 0.61     |          | 4.66     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 102         | 7.91       | 33.85 | 33.73   |          |          | 0.56     |          | 4.93     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 152         | 7.37       | 33.95 | 37.36   |          | 4.54     | 0.54     |          | 4.90     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 527         | 5.02       | 34.17 | 45.15   |          |          | 0.38     |          | 2.54     |
| W9909C    | 9/23/99  | 18:45    | 12        | NH-85        | 44.65 | -126.05 | 1007        | 3.55       | 34.42 | 46.83   |          |          | 0.28     |          | 1.51     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 1           | 9.43       | 33.64 |         |          | 14.43    | 2.47     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 5           | 9.45       | 33.64 |         |          | 13.63    | 2.27     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 10          | 9.37       | 33.64 |         |          | 14.31    | 2.58     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 15          | 9.18       | 33.66 |         |          | 13.96    | 2.25     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 19          | 9.02       | 33.68 |         |          | 9.52     | 1.39     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 25          | 8.78       | 33.73 |         |          | 8.02     | 1.06     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 31          | 8.71       | 33.75 |         |          | 6.16     | 1.04     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 41          | 8.60       | 33.79 |         |          | 6.28     | 0.92     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 50          | 8.51       | 33.80 |         |          | 6.93     | 0.85     |          |          |
| W9909C    | 9/24/99  | 15:13    | 19        | FM-03        | 43.22 | -124.5  | 58          | 8.51       | 33.80 |         |          | 10.31    | 1.03     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 1           | 9.77       | 33.41 | 20.24   |          | 12.52    | 2.18     |          | 1.75     |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 5           | 9.76       | 33.42 |         |          | 13.33    | 2.00     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 10          | 9.77       | 33.41 |         |          | 11.51    | 2.05     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 20          | 9.65       | 33.49 |         |          | 12.95    | 2.14     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 30          | 9.61       | 33.51 |         |          | 11.33    | 2.00     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 40          | 9.55       | 33.57 |         |          | 13.02    | 2.11     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 50          | 9.49       | 33.61 |         |          | 12.31    | 2.09     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 55          | 9.31       | 33.62 |         |          | 8.16     | 1.40     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 60          | 9.12       | 33.64 |         |          | 9.39     | 1.15     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 70          | 8.56       | 33.78 |         |          | 5.86     | 0.75     |          |          |
| W9909C    | 9/24/99  | 14:07    | 18        | FM-04        | 43.22 | -124.58 | 76          | 8.50       | 33.81 |         |          | 4.58     | 0.65     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 1           | 10.38      | 33.08 | 15.72   |          | 9.81     | 1.94     |          | 3.95     |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 10          | 10.12      | 33.25 |         |          | 12.07    | 2.23     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 20          | 9.83       | 33.48 |         |          | 16.56    | 2.51     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 25          | 9.74       | 33.55 |         |          | 14.14    | 2.11     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 30          | 9.66       | 33.56 |         |          | 13.44    | 2.27     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 40          | 9.22       | 33.61 |         |          | 10.09    | 1.75     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 50          | 9.19       | 33.62 |         |          | 9.88     | 1.36     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 60          | 9.05       | 33.64 |         |          | 8.95     | 1.06     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 70          | 8.92       | 33.68 |         |          | 6.45     | 0.93     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 100         | 8.33       | 33.84 |         |          | 5.51     | 0.72     |          |          |
| W9909C    | 9/24/99  | 12:23    | 17        | FM-05        | 43.22 | -124.67 | 140         | 8.38       | 33.88 |         |          | 6.33     | 0.81     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 1           | 14.22      | 32.61 | 10.00   |          | 13.16    | 2.21     |          | 7.31     |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 10          | 14.22      | 32.61 |         |          | 12.46    | 2.14     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 20          | 11.97      | 32.81 |         |          | 9.38     | 1.55     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 25          | 11.38      | 32.85 |         |          | 8.25     | 1.32     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 30          | 11.32      | 32.86 |         |          | 7.31     | 1.09     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 40          | 10.33      | 32.86 |         |          | 4.83     | 0.74     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 50          | 8.74       | 32.84 |         |          | 3.68     | 0.51     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 67          | 8.26       | 32.98 |         |          | 3.83     | 0.51     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 100         | 8.76       | 33.64 |         |          | 4.32     | 0.72     |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 150         | 8.00       | 33.87 |         |          | 0.51     |          |          |          |
| W9909C    | 9/24/99  | 9:12     | 15        | FM-07        | 43.22 | -124.83 | 327         | 6.24       | 34.05 |         |          | 5.65     | 0.65     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 1.4         | 15.12      | 32.46 | 8.52    |          | 11.38    | 1.53     |          | 6.96     |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 10          | 15.07      | 32.47 |         |          | 11.56    | 1.40     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 20          | 12.26      | 32.75 |         |          | 10.06    | 1.23     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 25          | 11.27      | 32.79 |         |          | 17.92    | 1.83     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 30          | 10.74      | 32.82 |         |          | 8.28     | 1.08     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 40          | 9.35       | 32.82 |         |          | 5.98     | 0.70     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 50          | 8.97       | 32.88 |         |          | 6.51     | 0.55     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 70          | 8.40       | 32.91 |         |          | 7.09     | 0.44     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [μM] | TOC [μM] | POC [μM] | PON [μM] | DOC [μM] | DON [μM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 101         | 8.50       | 33.24 |         |          | 5.85     | 0.79     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 150         | 7.83       | 33.89 |         |          |          | 0.33     |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 810         | 4.14       | 34.34 |         |          |          |          |          |          |
| W9909C    | 9/24/99  | 6:01     | 14        | FM-08        | 43.22 | -125.   | 1004        | 3.60       | 34.42 |         |          | 9.95     | 1.41     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 2           | 14.70      | 32.57 | 9.76    |          | 13.36    | 2.07     |          | 7.58     |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 10          | 13.11      | 32.64 |         |          | 14.29    | 2.20     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 16          | 12.36      | 32.70 |         |          | 13.02    | 1.88     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 20          | 12.19      | 32.80 |         |          | 10.48    | 1.60     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 30          | 9.84       | 32.78 |         |          | 6.38     | 1.00     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 41          | 9.06       | 32.80 |         |          | 5.48     | 0.74     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 51          | 8.80       | 32.83 |         |          | 6.60     | 0.64     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 70          | 8.39       | 32.95 |         |          | 4.60     | 0.50     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 100         | 8.75       | 33.55 |         |          |          | 0.40     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 150         | 8.05       | 33.88 |         |          | 4.29     | 0.37     |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 856         | 3.92       | 34.36 |         |          |          |          |          |          |
| W9909C    | 9/24/99  | 3:33     | 13        | FM-09        | 43.22 | -125.17 | 1005        | 3.55       | 34.42 |         |          |          |          |          |          |
| W9909C    | 9/24/99  | 23:30    | 21        | CR-1         | 41.90 | -124.3  | 0           | 12.30      | 33.05 | 19.33   |          | 67.54    | 8.53     |          | 7.77     |
| W9909C    | 9/24/99  | 23:30    | 21        | CR-1         | 41.90 | -124.3  | 5           | 12.24      | 33.06 |         |          | 51.82    | 6.79     |          |          |
| W9909C    | 9/24/99  | 23:30    | 21        | CR-1         | 41.90 | -124.3  | 10          | 11.48      | 33.21 |         |          | 28.30    | 4.39     |          |          |
| W9909C    | 9/24/99  | 23:30    | 21        | CR-1         | 41.90 | -124.3  | 14          | 11.09      | 33.30 |         |          | 22.23    | 3.30     |          |          |
| W9909C    | 9/24/99  | 23:30    | 21        | CR-1         | 41.90 | -124.3  | 20          | 10.68      | 33.32 |         |          | 32.37    | 5.08     |          |          |
| W9909C    | 9/24/99  | 23:30    | 21        | CR-1         | 41.90 | -124.3  | 25          | 10.86      | 33.45 |         |          | 19.91    | 3.23     |          |          |
| W9909C    | 9/24/99  | 23:30    | 21        | CR-1         | 41.90 | -124.3  | 35          | 10.46      | 33.50 |         |          | 16.47    | 2.78     |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 0           | 10.87      | 33.19 | 18.46   |          | 13.05    | 1.83     |          | 7.33     |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 10          | 10.84      | 33.20 |         |          | 12.71    | 1.95     |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 20          | 9.86       | 33.30 |         |          | 8.46     | 1.31     |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 30          | 9.60       | 33.38 |         |          | 5.66     | 0.78     |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 35          | 9.47       | 33.43 |         |          | 7.12     | 0.69     |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 50          | 9.23       | 33.54 |         |          | 6.90     | 0.63     |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 60          | 9.08       | 33.60 |         |          | 5.45     | 0.54     |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 70          | 8.98       | 33.64 |         |          | 4.30     |          |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 100         | 8.43       | 33.84 |         |          | 4.53     | 0.44     |          |          |
| W9909C    | 9/25/99  | 1:45     | 23        | CR-3         | 41.90 | -124.5  | 125         | 8.37       | 33.86 |         |          | 5.22     | 0.59     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 1           | 11.29      | 33.18 | 17.38   |          | 14.94    | 2.44     |          | 7.26     |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 10          | 11.23      | 33.18 |         |          | 13.31    | 2.25     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 13          | 10.11      | 33.29 |         |          | 13.03    | 1.97     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 21          | 9.40       | 33.39 |         |          | 6.75     | 0.91     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 30          | 9.28       | 33.47 |         |          | 5.38     | 0.62     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 40          | 9.08       | 33.57 |         |          | 4.36     | 0.61     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 53          | 8.62       | 33.69 |         |          | 4.32     | 0.61     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 71          | 8.52       | 33.78 |         |          |          | 0.40     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 102         | 8.28       | 33.89 |         |          |          | 0.28     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 150         | 7.87       | 33.96 |         |          | 4.95     | 0.42     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 238         | 7.44       | 33.99 |         |          | 4.91     | 0.37     |          |          |
| W9909C    | 9/25/99  | 3:00     | 24        | CR-4         | 41.90 | -124.6  | 496         | 5.27       | 34.14 |         |          |          | 0.32     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 1.2         | 11.41      | 33.20 | 18.36   |          | 14.08    | 2.19     |          | 7.75     |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 10          | 11.41      | 33.20 |         |          | 12.36    | 1.93     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 13          | 11.38      | 33.20 |         |          | 10.17    | 1.55     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 20          | 10.03      | 33.42 |         |          | 9.89     | 1.24     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 31          | 9.38       | 33.47 |         |          | 6.02     | 0.79     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 40          | 9.11       | 33.51 |         |          | 5.80     | 0.71     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 51          | 8.81       | 33.61 |         |          | 5.69     | 0.57     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 71          | 8.45       | 33.81 |         |          | 3.88     | 0.38     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 99          | 8.07       | 33.93 |         |          | 4.01     | 0.38     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 150         | 7.51       | 33.98 |         |          | 4.80     | 0.38     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 500         | 5.25       | 34.16 |         |          |          | 0.33     |          |          |
| W9909C    | 9/25/99  | 5:04     | 25        | CR-5         | 41.90 | -124.7  | 578         | 4.71       | 34.22 |         |          |          | 0.26     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 1           | 10.82      | 33.16 | 20.93   |          | 13.15    | 1.93     |          | 7.58     |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 10          | 10.64      | 33.17 |         |          | 10.70    | 1.76     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 13          | 10.40      | 33.18 |         |          | 10.91    | 1.55     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 20          | 10.35      | 33.18 |         |          | 11.35    | 1.67     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 30          | 9.71       | 33.26 |         |          | 9.35     | 1.17     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 40          | 9.47       | 33.35 |         |          | 7.93     | 0.89     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 50          | 9.12       | 33.52 |         |          | 6.17     | 0.88     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 70          | 8.61       | 33.62 |         |          | 6.58     | 0.41     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 100         | 8.09       | 33.86 |         |          | 3.87     | 0.30     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 150         | 7.45       | 33.96 |         |          | 4.47     | 0.30     |          |          |
| W9909C    | 9/25/99  | 9:06     | 27        | CR-7         | 41.90 | -125.   | 825         | 4.02       | 34.37 |         |          | 4.93     |          |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 1           | 11.25      | 32.86 | 14.86   |          | 8.92     | 1.25     |          | 7.78     |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 5           | 11.27      | 32.86 |         |          | 9.11     | 1.37     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 10          | 11.18      | 32.87 |         |          | 7.97     | 1.32     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 20          | 10.87      | 32.90 |         |          | 8.02     | 1.21     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 30          | 10.41      | 32.94 |         |          | 5.41     | 0.71     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 40          | 9.97       | 33.18 |         |          |          | 0.45     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 50          | 9.26       | 33.35 |         |          | 6.30     | 0.47     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 71          | 8.99       | 33.58 |         |          | 5.64     | 0.37     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 100         | 8.42       | 33.76 |         |          |          | 0.30     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 150         | 7.64       | 33.96 |         |          | 4.34     | 0.30     |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 841         | 4.11       | 34.34 |         |          |          |          |          |          |
| W9909C    | 9/25/99  | 13:13    | 29        | CR-9         | 41.90 | -125.3  | 1003        | 3.71       | 34.42 |         |          |          |          |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 1           | 11.03      | 33.30 |         |          | 24.14    | 2.94     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 5           | 10.99      | 33.30 |         |          | 15.34    | 2.27     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 10          | 10.28      | 33.32 |         |          | 11.09    | 1.40     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 15          | 9.96       | 33.37 |         |          | 11.44    | 1.47     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 20          | 9.87       | 33.39 |         |          | 7.42     | 1.25     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 25          | 9.85       | 33.40 |         |          | 9.76     | 1.15     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 30          | 9.74       | 33.47 |         |          | 8.62     | 1.03     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 40          | 9.59       | 33.51 |         |          | 8.36     | 0.94     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 50          | 9.27       | 33.59 |         |          | 8.99     | 0.91     |          |          |
| W9909C    | 9/25/99  | 21:07    | 30        | EU-1         | 40.87 | -124.7  | 54          | 9.07       | 33.65 |         |          | 8.22     | 0.89     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 1           | 11.63      | 33.25 | 13.82   |          | 19.82    | 3.28     |          | 1.73     |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 5           | 11.64      | 33.25 |         |          | 21.37    | 3.37     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 10          | 11.61      | 33.25 |         |          | 20.93    | 3.23     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 15          | 11.49      | 33.24 |         |          | 17.99    | 2.94     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 20          | 10.34      | 33.21 |         |          | 9.20     | 1.10     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 30          | 9.71       | 33.32 |         |          | 8.37     | 0.71     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 40          | 9.44       | 33.43 |         |          | 7.80     | 0.61     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 50          | 9.28       | 33.47 |         |          | 8.20     | 0.71     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 60          | 9.28       | 33.50 |         |          | 6.22     | 0.69     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 70          | 9.12       | 33.61 |         |          | 12.59    | 0.62     |          |          |
| W9909C    | 9/25/99  | 22:22    | 31        | EU-2         | 40.87 | -124.37 | 105         | 8.33       | 33.89 |         |          | 6.18     | 0.59     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 2.6         | 12.62      | 33.10 | 11.68   |          | 13.59    | 1.49     |          | 3.69     |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 10          | 12.58      | 33.10 |         |          | 12.40    | 1.56     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 20          | 11.64      | 33.14 |         |          | 10.90    | 1.24     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 30          | 11.06      | 33.29 |         |          | 13.35    | 2.01     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 35          | 10.56      | 33.28 |         |          | 9.65     | 1.12     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 40          | 9.87       | 33.32 |         |          | 6.61     | 0.64     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 50          | 9.50       | 33.43 |         |          |          |          |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 70          | 8.85       | 33.66 |         |          | 8.20     | 0.50     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 100         | 8.51       | 33.83 |         |          | 5.92     | 0.37     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 151         | 8.08       | 33.95 |         |          | 5.51     | 0.37     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 180         | 7.87       | 33.96 |         |          | 5.19     | 0.44     |          |          |
| W9909C    | 9/26/99  | 0:06     | 32        | EU-3         | 40.87 | -124.7  | 360         | 6.43       | 34.04 |         |          | 4.74     | 0.30     |          |          |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 1           | 10.04      | 33.02 | 26.33   |          | 9.57     | 1.47     |          | 11.84    |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 5           | 10.04      | 33.02 | 26.38   |          | 11.77    | 1.60     |          | 11.76    |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 10          | 10.04      | 33.02 | 22.81   |          | 11.62    | 1.60     |          | 8.19     |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 15          | 10.04      | 33.01 | 25.03   |          | 8.91     | 1.42     |          | 10.68    |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 20          | 10.05      | 33.02 | 24.37   |          | 9.21     | 1.53     |          | 9.80     |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 25          | 10.03      | 33.00 | 24.31   |          | 8.81     | 1.50     |          | 9.78     |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 30          | 9.98       | 33.05 | 24.08   |          | 11.30    | 1.63     |          | 9.06     |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 39          | 9.96       | 33.06 | 25.47   |          | 14.32    | 1.58     |          | 9.83     |
| W9911A    | 11/3/99  | 22:37    | 2         | NH-05        | 44.65 | -124.18 | 52          | 9.89       | 33.09 | 29.79   |          | 27.17    | 2.01     |          | 12.96    |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 1           | 11.10      | 32.58 | 13.58   |          | 12.44    | 1.64     |          | 6.83     |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 5           | 11.10      | 32.58 | 14.26   |          | 10.04    | 1.59     |          | 7.16     |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 10          | 11.10      | 32.58 | 14.69   |          | 13.14    | 1.73     |          | 7.10     |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 17          | 11.00      | 32.60 | 15.35   |          | 10.02    | 1.75     |          | 6.80     |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 21          | 10.80      | 32.70 |         |          | 7.71     | 0.98     |          |          |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 30          | 10.10      | 32.99 | 23.66   |          |          |          |          |          |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 40          | 9.30       | 33.29 | 27.33   |          | 6.99     | 0.89     |          | 6.32     |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 61          | 8.50       | 33.51 | 31.11   |          | 8.56     | 1.02     |          | 5.55     |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 71          | 8.20       | 33.60 | 33.79   |          | 6.62     | 0.56     |          | 6.23     |
| W9911A    | 11/4/99  | 1:25     | 4         | NH-15        | 44.65 | -124.41 | 84          | 8.20       | 33.65 | 33.95   |          | 12.51    | 0.95     |          | 5.05     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 2           | 10.90      | 32.55 | 13.42   |          | 7.92     | 1.20     |          | 6.99     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 10          | 10.90      | 32.55 |         |          | 7.61     | 1.26     |          |          |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 20          | 10.80      | 32.56 | 13.68   |          | 7.33     | 1.22     |          | 6.84     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 30          | 10.40      | 32.74 | 19.34   |          | 12.67    | 0.86     |          | 7.23     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 40          | 9.40       | 32.96 | 20.65   |          | 5.61     | 0.38     |          | 5.86     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 50          | 8.80       | 33.10 |         |          | 5.29     | 0.43     |          |          |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 70          | 8.30       | 33.50 | 31.86   |          | 6.77     | 0.50     |          |          |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 100         | 8.10       | 33.82 | 34.59   |          | 4.62     | 0.50     |          | 3.32     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 116         | 8.00       | 33.84 | 35.66   |          |          | 0.66     |          | 4.25     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 149         | 7.90       | 33.89 | 36.39   |          | 6.64     | 0.62     |          | 4.25     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 200         | 7.70       | 33.94 | 38.36   |          | 5.35     | 0.55     |          | 5.99     |
| W9911A    | 11/4/99  | 5:08     | 6         | NH-25        | 44.65 | -124.65 | 276         | 7.50       | 33.96 | 48.41   |          | 8.56     | 1.06     |          | 14.84    |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 1           | 11.20      | 32.54 | 11.48   |          | 8.10     | 1.45     |          | 5.98     |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 10          | 11.20      | 32.54 |         |          | 10.16    | 1.56     |          |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 15          | 11.20      | 32.54 |         |          | 7.86     | 1.38     |          |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 21          | 11.20      | 32.54 |         |          | 7.75     | 1.29     |          |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 30          | 10.40      | 32.72 |         |          |          | 0.93     |          |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 40          | 9.00       | 32.86 |         |          |          | 0.54     |          |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 50          | 8.50       | 33.05 |         |          |          | 0.39     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 70          | 8.40       | 33.47 |         |          |          |          | 0.41     |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 101         | 8.30       | 33.81 |         |          |          |          | 0.47     |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 150         | 7.90       | 33.93 |         |          |          |          | 0.29     |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 411         | 5.50       | 34.07 |         |          |          |          | 0.36     |          |
| W9911A    | 11/5/99  | 1:05     | 11        | NH-35        | 44.65 | -124.88 | 440         | 5.30       | 34.09 |         |          |          |          | 0.47     |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 1           | 11.50      | 32.55 | 10.89   |          | 11.75    | 1.18     |          | 6.82     |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 10          | 11.50      | 32.55 |         |          | 10.63    | 1.52     |          |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 14          | 11.40      | 32.55 |         |          | 15.00    | 1.41     |          |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 20          | 11.20      | 32.52 |         |          | 6.22     | 1.97     |          |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 30          | 10.30      | 32.62 |         |          | 5.17     | 1.58     |          |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 40          | 9.10       | 32.80 |         |          | 5.14     | 1.49     |          |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 50          | 8.40       | 32.93 |         |          |          |          | 1.25     |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 71          | 8.30       | 33.19 |         |          | 5.08     | 1.15     |          |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 101         | 8.20       | 33.57 |         |          |          |          | 0.98     |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 151         | 7.60       | 33.92 |         |          |          |          | 0.84     |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 500         | 5.00       | 34.12 |         |          |          |          | 0.59     |          |
| W9911A    | 11/4/99  | 22:18    | 10        | NH-45        | 44.65 | -125.12 | 755         | 4.20       | 34.31 |         |          |          |          | 0.48     |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 2           | 13.20      | 32.55 | 8.56    |          | 9.97     | 1.15     |          | 6.90     |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 10          | 13.20      | 32.55 |         |          | 11.13    | 1.22     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 20          | 13.20      | 32.55 |         |          | 10.35    | 1.44     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 30          | 13.20      | 32.55 |         |          | 10.09    | 1.22     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 40          | 13.20      | 32.55 |         |          | 6.98     | 0.71     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 50          | 10.50      | 32.70 |         |          | 4.87     | 0.36     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 70          | 8.30       | 32.82 |         |          | 5.57     | 0.29     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 100         | 8.00       | 33.17 |         |          | 6.18     | 0.41     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 150         | 7.70       | 33.88 |         |          | 5.48     | 0.29     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 735         | 4.30       | 34.28 |         |          | 3.78     | 0.24     |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 861         | 4.00       | 34.35 |         |          | 4.52     |          |          |          |
| W9911A    | 11/4/99  | 16:56    | 8         | NH-65        | 44.65 | -125.6  | 1005        | 3.60       | 34.42 |         |          | 5.46     |          |          |          |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 2           | 12.20      | 32.59 | 10.28   |          | 10.20    | 1.28     |          | 7.10     |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 10          | 12.20      | 32.59 | 10.49   |          | 10.46    | 1.30     |          | 7.17     |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 20          | 12.20      | 32.59 | 13.92   |          | 8.17     | 1.35     |          | 10.65    |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 29          | 12.20      | 32.60 | 13.19   |          | 7.85     | 1.11     |          | 9.73     |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 39          | 12.10      | 32.61 | 13.40   |          | 6.05     | 0.70     |          | 7.70     |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 50          | 9.80       | 32.82 | 18.31   |          | 5.36     | 0.32     |          | 9.61     |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 100         | 8.30       | 33.38 | 31.75   |          | 7.18     | 0.72     |          | 7.27     |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 150         | 7.80       | 33.88 | 37.35   |          | 5.81     | 0.39     |          | 7.66     |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 780         | 4.20       | 34.31 |         |          | 4.49     | 0.32     |          |          |
| W9911A    | 11/4/99  | 14:10    | 7         | NH-85        | 44.65 | -126.05 | 1006        | 3.60       | 34.42 | 49.51   |          | 5.12     | 0.34     |          | 4.54     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 1           | 9.70       | 31.69 | 16.24   |          | 12.17    | 1.14     |          | 7.16     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 5           | 9.70       | 31.80 | 15.35   |          | 10.84    | 1.23     |          | 6.12     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 10          | 9.70       | 31.80 | 15.56   |          | 12.55    | 1.32     |          | 6.28     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 15          | 9.70       | 31.79 | 15.45   |          | 9.68     | 1.14     |          | 6.36     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 20          | 9.70       | 31.80 | 14.90   |          | 13.46    | 1.18     |          | 5.76     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 25          | 9.70       | 31.85 | 14.88   |          | 13.02    | 1.32     |          | 5.66     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 30          | 9.70       | 31.86 | 14.99   |          | 12.82    | 1.27     |          | 5.84     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 40          | 9.70       | 31.95 | 14.54   |          | 10.44    | 1.19     |          | 5.60     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 50          | 9.80       | 32.04 | 14.66   |          | 8.55     | 0.94     |          | 6.19     |
| W0002A    | 2/1/00   | 21:39    | 2         | NH-05        | 44.65 | -124.18 | 52          | 9.80       | 32.05 | 14.28   |          | 12.53    | 1.10     |          | 5.65     |
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 1           | 10.00      | 32.69 | 15.39   |          | 5.47     | 0.63     |          | 6.56     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 10          | 10.00      | 32.68 | 15.34   |          | 6.10     | 0.69     |          | 6.46     |
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 20          | 10.00      | 32.69 | 15.45   |          | 7.07     | 0.68     |          | 6.57     |
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 30          | 10.00      | 32.69 | 15.24   |          | 7.73     | 0.73     |          | 6.32     |
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 40          | 10.00      | 32.68 | 15.51   |          | 6.93     | 0.73     |          | 6.51     |
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 50          | 10.00      | 32.68 | 15.28   |          | 9.22     | 0.80     |          | 6.21     |
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 60          | 10.00      | 32.68 | 15.22   |          | 7.49     | 0.73     |          | 6.21     |
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 70          | 10.00      | 32.69 | 15.53   |          | 6.91     | 0.76     |          | 6.50     |
| W0002A    | 2/2/00   | 1:50     | 4         | NH-15        | 44.65 | -124.41 | 85          | 10.00      | 32.68 | 16.76   |          | 5.91     | 0.65     |          | 7.76     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 1           | 9.90       | 32.65 | 14.53   |          | 10.04    | 0.92     |          | 5.97     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 10          | 9.90       | 32.65 | 13.81   |          | 10.04    | 0.94     |          | 5.15     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 20          | 9.90       | 32.65 | 13.70   |          | 10.07    | 0.81     |          | 5.18     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 25          | 9.90       | 32.66 | 13.77   |          | 11.09    | 1.18     |          | 4.95     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 30          | 10.00      | 32.67 | 13.96   |          | 9.63     | 1.36     |          | 4.96     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 40          | 10.00      | 32.68 | 13.66   |          | 8.54     | 1.16     |          | 4.86     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 50          | 10.00      | 32.68 | 14.91   |          | 6.61     | 0.96     |          | 5.57     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 70          | 9.50       | 33.20 | 21.88   |          |          | 0.39     |          | 5.29     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 100         | 9.00       | 33.49 | 26.92   |          |          | 0.30     |          | 5.04     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 150         | 8.30       | 33.86 | 33.38   |          |          |          |          | 4.94     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 200         | 7.70       | 33.95 | 35.99   |          |          |          |          | 5.11     |
| W0002A    | 2/3/00   | 2:09     | 14        | NH-25        | 44.65 | -124.65 | 275         | 6.90       | 33.99 | 38.68   |          |          |          |          | 5.14     |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 2           | 9.90       | 32.65 | 14.08   |          | 10.91    | 1.15     |          | 6.04     |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 10          | 9.90       | 32.65 |         |          | 10.46    | 0.92     |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 20          | 9.90       | 32.64 |         |          | 9.95     | 0.85     |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 29          | 9.80       | 32.64 |         |          | 9.86     | 0.86     |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 41          | 9.80       | 32.65 |         |          | 8.71     | 0.85     |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 50          | 9.80       | 32.65 |         |          | 8.51     | 0.49     |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 61          | 9.70       | 32.65 |         |          | 7.74     | 0.36     |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 70          | 9.40       | 33.21 |         |          |          |          |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 101         | 8.80       | 33.64 |         |          |          |          |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 150         | 8.20       | 33.87 |         |          |          |          |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 314         | 6.60       | 34.01 |         |          |          |          |          |          |
| W0002A    | 2/3/00   | 0:32     | 13        | NH-35        | 44.65 | -124.88 | 425         | 5.90       | 34.03 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 1           | 9.70       | 32.67 | 12.26   |          | 9.84     | 1.19     |          | 5.47     |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 10          | 9.70       | 32.67 |         |          | 10.39    | 1.22     |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 20          | 9.70       | 32.67 |         |          | 11.31    | 1.30     |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 30          | 9.70       | 32.67 |         |          | 11.35    | 1.26     |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 40          | 9.70       | 32.67 |         |          | 9.37     | 1.15     |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 50          | 9.70       | 32.67 |         |          | 10.61    | 1.24     |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 60          | 9.70       | 32.67 |         |          | 10.10    | 1.24     |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 70          | 9.70       | 32.67 |         |          | 9.01     | 1.26     |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 100         | 9.00       | 33.59 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 150         | 8.00       | 33.90 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 500         | 5.10       | 34.12 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 22:25    | 12        | NH-45        | 44.65 | -125.12 | 689         | 4.40       | 34.27 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 1.6         | 9.40       | 32.63 | 12.77   |          | 11.41    | 1.26     |          | 5.58     |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 6           | 9.40       | 32.63 |         |          | 10.18    | 1.32     |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 11          | 9.40       | 32.63 |         |          | 9.48     | 1.10     |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 20          | 9.40       | 32.63 |         |          | 8.75     | 1.10     |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 31          | 9.40       | 32.63 |         |          | 8.58     | 0.99     |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 39          | 9.40       | 32.63 |         |          | 8.20     | 0.93     |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 49          | 9.40       | 32.63 |         |          | 9.28     | 1.06     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 70          | 9.40       | 32.65 |         |          | 8.36     | 0.97     |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 101         | 8.30       | 33.62 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 150         | 7.70       | 33.92 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 802         | 4.10       | 34.33 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 17:31    | 10        | NH-65        | 44.65 | -125.6  | 999         | 3.60       | 34.41 |         |          |          |          |          |          |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 3           | 9.30       | 32.64 | 12.79   |          | 12.86    | 1.69     |          | 4.61     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 10          | 9.30       | 32.65 | 12.60   |          | 13.29    | 1.83     |          | 4.37     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 20          | 9.40       | 32.65 | 13.13   |          | 10.71    | 1.45     |          | 5.27     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 30          | 9.40       | 32.65 | 12.60   |          | 14.01    | 1.54     |          | 4.95     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 42          | 9.40       | 32.66 | 12.01   |          | 13.06    | 1.58     |          | 4.24     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 45          | 9.40       | 32.66 | 12.54   |          | 13.45    | 1.83     |          | 4.51     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 50          | 9.40       | 32.66 | 12.41   |          | 9.27     | 1.19     |          | 5.02     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 69          | 9.30       | 32.75 | 15.19   |          | 5.89     | 0.83     |          | 4.93     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 100         | 8.30       | 33.63 | 31.21   |          | 5.14     | 0.50     |          | 4.67     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 152         | 7.80       | 33.89 | 35.38   |          |          |          |          | 4.83     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 900         | 3.80       | 34.39 | 46.88   |          |          |          |          | 2.06     |
| W0002A    | 2/2/00   | 14:32    | 9         | NH-85        | 44.65 | -126.05 | 1000        | 3.50       | 34.43 |         |          |          |          |          |          |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 2           | 11.07      | 32.26 | 11.29   | 140.92   | 39.50    | 4.33     | 101.42   | 6.86     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 5           | 10.81      | 32.29 | 18.53   | 130.45   | 37.97    | 4.52     | 92.48    | 12.77    |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 10          | 9.91       | 32.42 | 17.22   | 82.31    | 28.23    | 3.91     | 54.08    | 7.02     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 15          | 9.19       | 32.87 | 22.87   | 72.54    | 18.04    | 2.50     | 54.49    | 6.94     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 20          | 8.85       | 33.14 | 25.12   |          | 8.42     | 0.90     |          | 6.99     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 26          | 8.72       | 33.34 | 27.24   | 49.04    | 8.99     | 0.82     | 40.05    | 6.87     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 30          | 8.51       | 33.55 | 30.30   | 49.35    | 7.54     | 0.71     | 41.81    | 6.68     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 41          | 8.19       | 33.77 | 34.55   | 51.10    | 7.03     | 0.55     | 44.07    | 6.28     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 43          | 8.16       | 33.78 | 35.37   | 56.90    | 8.87     | 0.61     | 48.03    | 6.40     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 50          | 7.81       | 33.85 | 37.46   | 56.80    | 22.72    | 1.12     | 34.08    | 5.94     |
| W0004B    | 4/12/00  | 1:03     | 4         | NH-05        | 44.65 | -124.18 | 55          | 7.81       | 33.85 | 37.50   | 67.47    | 21.59    | 1.52     | 45.88    | 5.80     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 2           | 11.12      | 29.61 | 9.76    | 64.90    | 10.88    | 1.67     | 54.02    | 7.80     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 5           | 10.88      | 30.25 | 10.06   |          | 13.85    | 2.07     |          | 7.71     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 10          | 10.23      | 31.53 | 12.09   |          | 21.34    | 3.36     |          | 7.36     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 15          | 9.52       | 32.53 | 17.64   |          | 17.74    | 2.78     |          | 10.13    |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 20          | 9.37       | 32.59 | 14.88   |          | 10.59    | 1.26     |          | 7.63     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 30          | 9.22       | 32.61 | 15.94   |          | 7.24     | 0.95     |          | 9.03     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 35          | 9.12       | 32.62 | 15.90   | 64.24    | 5.77     | 0.71     | 58.47    | 9.45     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 41          | 9.04       | 32.62 | 17.30   |          | 9.72     | 1.04     |          | 10.18    |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 50          | 8.99       | 32.63 | 15.68   | 59.64    | 15.34    | 0.79     | 44.29    | 8.52     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 61          | 9.08       | 32.80 | 20.70   | 54.98    |          | 0.94     | 54.98    | 9.86     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 70          | 9.15       | 33.06 | 20.87   | 59.24    |          | 0.83     | 59.24    | 6.47     |
| W0004B    | 4/12/00  | 10:45    | 5         | NH-15        | 44.65 | -124.41 | 86          | 8.50       | 33.62 | 35.05   | 62.59    |          | 0.77     | 62.59    | 10.80    |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 2           | 11.25      | 29.43 | 7.58    | 75.60    | 8.64     | 1.37     | 66.96    | 6.05     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 10          | 10.43      | 31.18 | 9.63    | 74.87    | 10.14    | 1.84     | 64.73    | 7.02     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 21          | 9.79       | 32.44 | 13.86   | 68.63    | 8.66     | 1.41     | 59.97    | 7.47     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 30          | 9.77       | 32.56 | 14.60   |          | 5.20     | 0.80     |          | 7.32     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 40          | 9.69       | 32.64 | 15.53   | 71.27    | 4.47     | 0.68     | 66.80    | 8.31     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 50          | 9.65       | 32.67 | 15.04   |          | 5.77     | 0.69     |          | 7.72     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 70          | 9.00       | 32.69 | 14.22   | 56.32    | 5.70     | 0.55     | 50.61    | 6.95     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 101         | 9.05       | 33.14 | 24.26   | 60.71    | 4.49     | 0.52     | 56.22    | 7.22     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 151         | 8.24       | 33.93 | 39.08   | 49.06    | 5.50     | 0.54     | 43.55    | 6.24     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 201         | 6.89       | 33.98 | 40.83   |          | 6.27     | 0.59     |          | 5.75     |
| W0004B    | 4/12/00  | 13:46    | 7         | NH-25        | 44.65 | -124.65 | 289         | 6.05       | 34.03 | 42.77   | 53.72    | 6.43     | 0.46     | 47.29    | 5.43     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 1           | 11.26      | 29.92 | 7.86    | 78.40    | 9.69     | 1.44     | 68.71    | 6.26     |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 10          | 10.43      | 31.36 |         |          | 13.64    | 2.44     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 15          | 9.96       | 32.22 |         |          | 12.18    | 2.18     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 20          | 9.83       | 32.40 |         |          | 9.51     | 1.52     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 31          | 9.77       | 32.55 |         |          | 7.42     | 1.20     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 40          | 9.69       | 32.61 |         |          | 5.55     | 0.85     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 50          | 9.65       | 32.67 |         |          | 5.14     | 0.88     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 70          | 9.00       | 32.62 |         |          | 5.61     | 0.51     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 100         | 9.07       | 33.38 |         |          |          | 0.35     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 150         | 8.25       | 33.85 |         |          |          | 0.33     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 400         | 5.59       | 34.08 |         |          | 5.73     | 0.32     |          |          |
| W0004B    | 4/12/00  | 15:55    | 8         | NH-35        | 44.65 | -124.88 | 445         | 5.46       | 34.10 |         |          | 4.80     | 0.38     |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 2           | 11.02      | 31.57 |         | 64.70    | 7.59     | 1.26     | 57.11    |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 10          | 10.62      | 31.83 |         |          | 8.79     | 1.26     |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 11          | 10.37      | 32.01 |         |          | 10.00    | 2.00     |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 20          | 10.09      | 32.39 |         |          | 7.10     | 0.88     |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 31          | 9.76       | 32.67 |         |          | 5.34     | 0.75     |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 40          | 9.65       | 32.70 |         |          | 4.62     | 0.45     |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 50          | 9.56       | 32.70 |         |          | 3.37     | 0.42     |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 70          | 9.26       | 32.79 |         |          | 3.85     |          |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 101         | 8.58       | 33.33 |         |          | 3.37     |          |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 151         | 8.21       | 33.81 |         |          |          | 0.22     |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.00       | 34.16 |         |          |          |          |          |          |
| W0004B    | 4/12/00  | 18:56    | 9         | NH-45        | 44.65 | -125.12 | 580         | 4.67       | 34.22 |         |          | 3.52     | 0.25     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 1           | 11.29      | 31.84 | 7.64    | 66.60    | 9.26     | 1.19     | 57.34    | 6.16     |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 10          | 10.98      | 32.04 |         |          | 10.43    | 1.30     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 19          | 10.27      | 32.51 |         |          | 8.03     | 1.16     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 25          | 10.03      | 32.66 |         |          | 11.82    | 1.01     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 29          | 10.05      | 32.69 |         |          | 6.99     | 0.80     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 40          | 10.03      | 32.73 |         |          |          | 1.10     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 50          | 9.70       | 32.71 |         |          | 4.23     | 0.57     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 70          | 9.52       | 32.77 |         |          | 4.07     | 0.25     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 100         | 9.03       | 33.22 |         |          | 4.88     | 0.32     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 150         | 8.34       | 33.76 |         |          |          | 0.28     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 300         | 6.46       | 34.00 |         |          |          | 0.26     |          |          |
| W0004B    | 4/13/00  | 1:11     | 11        | NH-65        | 44.65 | -125.6  | 830         | 4.09       | 34.33 |         |          |          |          |          |          |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 1           | 11.02      | 32.67 | 9.86    | 69.60    | 9.40     | 1.02     | 60.20    | 7.08     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 10          | 10.74      | 32.66 | 10.09   | 69.50    | 9.88     | 0.92     | 59.62    | 7.09     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 13          | 10.48      | 32.68 | 10.44   | 66.30    | 9.94     | 0.89     | 56.36    | 7.00     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 20          | 10.18      | 32.69 | 10.67   | 61.20    | 5.11     | 0.43     | 56.09    | 6.28     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 30          | 9.90       | 32.69 | 11.27   | 59.80    | 4.86     | 0.29     | 54.94    | 6.72     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 40          | 9.33       | 32.68 | 12.06   | 64.80    | 4.27     | 0.23     | 60.53    | 7.34     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 50          | 9.15       | 32.67 | 11.95   | 59.60    | 3.70     |          | 55.90    | 7.04     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 90          | 8.76       | 32.76 | 12.51   | 56.58    |          |          |          | 7.33     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.62       | 32.93 | 18.72   | 57.80    | 4.37     | 0.37     | 53.43    | 6.74     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 150         | 8.07       | 33.79 | 34.26   | 49.60    |          |          |          | 6.25     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 849         | 3.81       | 34.33 | 46.92   | 39.40    |          |          |          | 2.52     |
| W0004B    | 4/13/00  | 4:02     | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.45       | 34.40 | 47.25   | 39.10    |          |          |          | 2.85     |
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2  | 2           | 11.50      | 30.35 | 9.10    | 67.20    | 9.25     | 1.37     | 57.95    | 7.55     |
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2  | 5           | 11.45      | 30.47 | 8.92    | 85.69    | 11.58    | 1.53     | 74.12    | 7.17     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2 | 10          | 10.95      | 31.19 | 10.93   | 84.12    | 13.27    | 1.70     | 70.85    | 8.66     |
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2 | 15          | 10.58      | 31.91 | 19.42   | 75.85    | 13.71    | 1.91     | 62.14    | 9.40     |
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2 | 20          | 9.28       | 33.04 | 26.10   | 63.84    | 4.68     | 0.43     | 59.16    | 9.64     |
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2 | 25          | 9.05       | 33.26 | 30.46   | 57.07    | 4.98     | 0.53     | 52.10    | 9.63     |
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2 | 30          | 8.87       | 33.42 | 32.58   | 54.13    | 3.85     |          | 50.29    | 9.14     |
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2 | 40          | 8.47       | 33.63 | 35.46   | 57.18    | 4.75     |          | 52.43    | 8.94     |
| W0004B    | 4/16/00  | 18:45    | 39        | HH-01        | 44.00 | -124.2 | 49          | 8.31       | 33.71 | 36.76   | 56.40    | 4.96     |          | 51.44    | 8.53     |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 2           | 11.54      | 30.26 | 7.61    | 73.70    | 7.61     | 1.10     | 66.09    | 6.52     |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 5           | 11.52      | 30.26 |         |          | 7.94     | 0.90     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 10          | 11.43      | 30.31 |         |          | 7.93     | 0.90     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 15          | 10.77      | 32.13 |         |          | 10.66    | 1.68     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 20          | 10.02      | 32.93 |         |          | 7.43     | 0.68     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 30          | 8.76       | 33.47 |         |          | 3.75     | 0.65     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 40          | 8.43       | 33.67 |         |          | 3.98     | 0.50     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 50          | 8.31       | 33.71 |         |          | 3.98     | 0.36     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 60          | 7.93       | 33.80 |         |          |          | 0.45     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 70          | 7.80       | 33.91 |         |          |          | 0.23     |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 100         | 7.24       | 33.98 |         |          | 4.97     |          |          |          |
| W0004B    | 4/16/00  | 20:12    | 40        | HH-02        | 44.00 | -124.4 | 115         | 7.20       | 33.98 |         |          | 4.47     | 0.49     |          |          |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 1           | 11.37      | 30.46 | 9.26    | 69.10    | 13.02    | 1.76     | 56.08    | 7.20     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 10          | 10.97      | 31.61 | 11.07   | 83.02    | 14.25    | 2.35     | 68.77    | 7.49     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 15          | 10.62      | 32.62 | 14.63   | 71.90    | 12.96    | 2.06     | 58.94    | 7.59     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 20          | 10.13      | 32.80 | 20.14   | 70.67    | 10.54    | 1.54     | 60.13    | 9.03     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 30          | 9.25       | 33.14 | 27.91   | 58.37    | 7.43     | 0.95     | 50.94    | 8.90     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 40          | 8.86       | 33.40 | 32.75   | 55.88    | 7.09     | 0.78     | 48.79    | 8.92     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 50          | 8.45       | 33.66 | 35.54   | 52.90    | 5.35     | 0.73     | 47.55    | 7.88     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 60          | 8.20       | 33.74 | 38.07   | 54.99    | 6.84     | 0.39     | 48.15    | 9.25     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 71          | 7.97       | 33.82 | 39.08   | 50.50    | 7.83     | 0.50     | 42.67    | 8.90     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 100         | 7.31       | 33.91 | 39.49   | 58.81    | 7.99     | 0.45     | 50.83    | 7.87     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 145         | 6.71       | 34.01 | 43.36   | 58.51    |          | 0.53     |          | 8.18     |
| W0004B    | 4/16/00  | 22:21    | 41        | HH-03        | 44.00 | -124.6 | 150         | 6.71       | 34.01 | 41.85   | 51.54    |          | 0.78     |          | 6.50     |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 2           | 11.58      | 30.10 | 8.49    | 81.02    | 8.65     | 1.25     | 72.37    | 6.88     |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 5           | 10.76      | 31.22 |         |          | 10.53    | 1.49     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 10          | 10.06      | 32.48 |         |          | 13.00    | 2.03     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 16          | 9.88       | 32.62 |         |          | 13.78    | 2.04     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 20          | 9.69       | 32.66 |         |          | 12.09    | 1.62     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 30          | 9.46       | 32.67 |         |          | 8.59     | 0.98     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 40          | 9.32       | 32.70 |         |          | 4.10     | 0.61     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 50          | 9.22       | 32.81 |         |          | 3.68     | 0.64     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 60          | 9.11       | 33.13 |         |          | 4.48     | 0.64     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 70          | 8.90       | 33.36 |         |          |          |          |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 95          | 7.85       | 33.76 |         |          |          | 0.58     |          |          |
| W0004B    | 4/17/00  | 0:54     | 42        | HH-04        | 44.00 | -124.8 | 100         | 7.65       | 33.81 |         |          | 6.64     | 0.59     |          |          |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.  | 1           | 11.10      | 32.11 | 7.81    |          | 7.77     | 1.19     |          | 6.62     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.  | 10          | 10.84      | 32.30 | 9.72    |          | 10.28    | 1.52     |          | 7.45     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.  | 15          | 10.75      | 32.32 | 11.63   |          | 9.07     | 1.32     |          | 7.41     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.  | 20          | 9.92       | 32.52 | 12.92   |          | 6.99     | 0.97     |          | 7.71     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.  | 30          | 9.86       | 32.58 | 13.24   |          | 4.96     | 0.45     |          | 7.85     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.  | 40          | 9.79       | 32.70 | 13.30   |          | 4.30     | 0.32     |          | 7.61     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.  | 50          | 9.65       | 32.74 | 14.16   |          |          | 0.22     |          | 7.97     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.  | 70          | 9.35       | 33.00 | 18.87   |          |          |          |          | 7.97     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.   | 100         | 8.87       | 33.47 | 30.71   |          | 3.93     | 0.29     |          | 7.95     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.   | 150         | 7.39       | 33.92 | 38.38   |          |          |          |          | 5.98     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.   | 195         | 7.16       | 33.97 | 39.45   |          |          |          |          | 5.84     |
| W0004B    | 4/17/00  | 4:00     | 43        | HH-05        | 44.00 | -125.   | 500         | 5.45       | 34.11 | 44.03   |          |          |          |          | 4.25     |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 1           | 11.20      | 32.28 | 8.26    | 78.60    | 6.89     | 0.98     | 71.71    | 6.81     |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 10          | 11.19      | 32.28 |         |          | 7.35     | 0.97     |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 20          | 10.58      | 32.33 |         |          | 7.10     | 0.98     |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 28          | 10.38      | 32.62 |         |          | 4.89     | 0.55     |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 30          | 10.34      | 32.71 |         |          | 4.26     | 0.50     |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 40          | 10.20      | 32.77 |         |          | 4.43     | 0.58     |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 50          | 9.97       | 32.73 |         |          | 3.63     | 0.42     |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 70          | 9.92       | 32.92 |         |          | 3.74     | 0.22     |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 100         | 9.13       | 33.48 |         |          | 3.46     | 0.26     |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 150         | 8.28       | 33.85 |         |          |          |          |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 900         | 3.92       | 34.37 |         |          |          |          |          |          |
| W0004B    | 4/17/00  | 5:53     | 44        | HH-07        | 44.00 | -125.2  | 1005        | 3.69       | 34.41 |         |          |          |          |          |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 1           | 11.41      | 32.57 | 8.20    | 68.90    | 5.38     | 0.76     | 63.52    | 7.44     |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 10          | 11.41      | 32.57 |         |          | 5.13     | 0.75     |          |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 20          | 11.41      | 32.71 |         |          | 4.82     | 0.61     |          |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 30          | 11.14      | 32.83 |         |          | 4.06     | 0.45     |          |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 35          | 11.08      | 32.84 |         |          | 3.67     | 0.39     |          |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 40          | 10.99      | 32.85 |         |          |          |          | 0.36     |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 50          | 10.68      | 32.84 |         |          |          |          | 0.31     |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 70          | 9.66       | 32.81 |         |          | 3.54     | 0.34     |          |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 100         | 9.34       | 33.27 |         |          |          |          |          |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 150         | 8.21       | 33.81 |         |          |          |          |          |          |
| W0004B    | 4/17/00  | 7:54     | 45        | HH-09        | 44.00 | -125.4  | 1005        | 3.70       | 34.41 |         |          |          |          |          |          |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 1           | 10.30      | 32.79 | 18.91   |          | 12.69    | 2.34     |          | 8.84     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 4           | 10.30      | 32.79 | 19.09   | 75.94    | 13.93    | 2.37     | 62.01    | 9.12     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 7           | 10.21      | 32.83 | 20.66   | 69.35    | 13.03    | 2.28     | 56.32    | 9.49     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 10          | 9.68       | 33.06 | 20.24   |          | 10.79    | 1.54     |          | 8.56     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 15          | 9.13       | 33.31 | 24.08   | 66.08    | 9.92     | 1.30     | 56.16    | 6.01     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 20          | 8.70       | 33.57 | 30.48   | 61.07    | 8.31     | 0.96     | 52.76    | 9.64     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 25          | 8.50       | 33.64 | 34.62   | 51.82    | 5.89     | 0.73     | 45.93    | 8.89     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 30          | 8.40       | 33.69 | 33.84   |          | 6.52     | 0.86     |          | 6.00     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 40          | 8.30       | 33.71 | 36.34   | 52.62    | 6.31     | 0.81     | 46.31    | 7.55     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 45          | 8.14       | 33.76 | 35.62   | 62.80    | 5.51     | 0.67     | 57.29    | 5.80     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 49          | 8.13       | 33.76 | 37.72   |          | 6.02     | 0.76     |          | 7.39     |
| W0004B    | 4/13/00  | 16:50    | 15        | FM-03        | 43.22 | -124.5  | 55          | 8.12       | 33.77 | 37.53   |          | 5.95     | 0.72     |          | 7.20     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 2           | 10.22      | 32.90 | 20.67   |          | 11.26    | 2.13     |          | 8.07     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 5           | 10.22      | 32.90 | 21.85   | 66.30    | 11.16    | 2.08     | 55.15    | 9.19     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 11          | 9.49       | 33.18 | 25.24   | 61.66    | 8.29     | 1.64     | 53.38    | 7.93     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 16          | 9.09       | 33.38 | 29.53   |          | 6.92     | 1.26     |          | 8.02     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 20          | 8.99       | 33.43 | 33.17   | 58.04    | 6.38     | 1.01     | 51.66    | 8.13     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 30          | 8.32       | 33.73 | 37.20   | 50.99    | 4.24     | 0.68     | 46.75    | 8.74     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 40          | 8.10       | 33.85 | 37.09   | 56.72    | 4.17     | 0.60     | 52.55    | 7.14     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 51          | 8.01       | 33.90 | 38.06   |          |          | 0.46     |          | 7.69     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 60          | 7.79       | 33.92 | 38.10   |          | 3.45     | 0.44     |          | 6.55     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 70          | 7.55       | 33.93 | 39.00   | 54.22    | 3.91     | 0.47     | 50.31    | 7.04     |
| W0004B    | 4/13/00  | 14:03    | 13        | FM-04        | 43.22 | -124.58 | 80          | 7.54       | 33.93 | 39.88   |          | 4.55     | 0.51     |          | 7.80     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 2           | 10.73      | 31.83 | 8.45    | 70.40    | 8.99     | 2.11     | 61.41    | 5.72     |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 10          | 10.71      | 31.82 |         |          | 9.95     | 2.25     |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 21          | 10.20      | 32.34 |         |          | 9.19     | 1.96     |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 24          | 9.99       | 32.53 |         |          | 5.97     | 0.73     |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 30          | 9.36       | 32.98 |         |          | 8.68     | 1.07     |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 41          | 8.99       | 33.39 |         |          | 6.20     | 0.60     |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 49          | 8.50       | 33.60 |         |          | 3.73     | 0.32     |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 60          | 8.29       | 33.76 |         |          | 3.45     | 0.26     |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 70          | 8.18       | 33.83 |         |          | 3.89     |          |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 100         | 7.45       | 33.94 |         |          | 4.74     |          |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 124         | 7.33       | 33.95 |         |          | 5.69     | 0.49     |          |          |
| W0004B    | 4/13/00  | 18:44    | 16        | FM-05        | 43.22 | -124.67 | 153         | 7.15       | 33.98 |         |          |          |          |          |          |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 2           | 10.70      | 32.36 | 9.11    | 62.78    | 11.82    | 2.09     | 50.96    | 6.11     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 10          | 10.70      | 32.35 | 9.19    | 66.89    | 13.16    | 2.31     | 53.73    | 5.89     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 15          | 10.64      | 32.37 | 8.71    | 69.33    | 11.94    | 2.17     | 57.39    | 5.48     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 20          | 10.42      | 32.46 | 9.68    | 67.78    | 10.62    | 1.92     | 57.15    | 6.00     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 30          | 10.04      | 32.55 | 11.93   | 55.32    | 7.27     | 1.36     | 48.05    | 6.46     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 40          | 9.64       | 32.67 | 14.35   | 51.49    | 6.03     | 1.13     | 45.46    | 6.54     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 50          | 9.54       | 32.83 | 14.48   | 49.15    | 4.79     | 0.70     | 44.36    | 6.53     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 70          | 9.12       | 33.35 | 25.78   | 48.70    | 4.31     | 0.71     | 44.40    | 7.13     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 100         | 8.56       | 33.74 | 35.33   | 36.83    | 3.64     | 0.52     | 33.19    | 7.58     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 150         | 7.59       | 33.95 | 37.99   | 40.08    |          |          |          | 6.78     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 300         | 6.38       | 34.05 | 42.32   | 35.59    |          |          |          | 6.35     |
| W0004B    | 4/13/00  | 22:35    | 18        | FM-07        | 43.22 | -124.83 | 335         | 6.19       | 34.06 | 42.59   | 39.77    |          |          |          | 5.76     |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 1           | 11.31      | 32.42 | 7.27    | 60.50    | 9.53     |          | 50.97    | 6.60     |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 10          | 11.30      | 32.42 |         |          | 6.42     | 1.13     |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 21          | 10.14      | 32.54 |         |          | 8.30     | 1.03     |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 25          | 9.95       | 32.60 |         |          | 7.26     | 0.53     |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 30          | 9.99       | 32.71 |         |          | 5.11     | 0.53     |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 41          | 9.87       | 32.71 |         |          | 4.67     | 0.51     |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 51          | 9.75       | 32.72 |         |          | 3.53     | 0.60     |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 70          | 9.71       | 32.94 |         |          |          | 0.59     |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 101         | 8.74       | 33.57 |         |          | 3.41     | 0.64     |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 150         | 8.13       | 33.87 |         |          |          |          |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 800         | 4.14       | 34.33 |         |          |          |          |          |          |
| W0004B    | 4/14/00  | 1:58     | 19        | FM-08        | 43.22 | -125.   | 1005        | 3.61       | 34.42 |         |          |          |          |          |          |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 1           | 11.51      | 32.67 | 9.64    | 63.61    | 6.49     | 0.72     | 57.12    | 7.80     |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 10          | 11.50      | 32.68 | 9.49    | 68.55    | 6.82     | 0.74     | 61.74    | 8.19     |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 20          | 11.29      | 32.71 | 9.93    | 66.69    | 6.88     | 0.69     | 59.81    | 8.26     |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 25          | 11.06      | 32.72 | 10.31   | 66.15    | 7.33     |          | 58.82    |          |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 30          | 11.00      | 32.72 | 10.51   | 68.59    | 6.89     |          | 61.70    |          |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 40          | 10.95      | 32.73 | 11.69   | 65.50    | 5.19     |          | 60.31    |          |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 50          | 10.82      | 32.76 | 12.40   | 60.51    | 4.37     |          | 56.15    | 9.37     |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 70          | 10.40      | 32.84 | 15.16   | 57.77    |          |          |          | 9.75     |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 100         | 9.53       | 33.32 | 28.59   | 53.39    | 3.65     |          | 49.73    | 12.28    |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 150         | 8.36       | 33.78 | 39.38   | 46.72    |          |          |          | 11.55    |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 900         | 3.90       | 34.37 | 53.20   | 34.87    |          |          |          | 8.93     |
| W0004B    | 4/14/00  | 4:00     | 20        | FM-09        | 43.22 | -125.17 | 1005        | 3.69       | 34.41 | 53.57   | 34.84    |          |          |          | 9.27     |
| W0004B    | 4/16/00  | 2:12     | 35        | RR-01        | 42.50 | -124.5  | 1           | 10.94      | 31.60 | 20.36   | 106.20   | 42.06    | 6.58     | 64.14    | 9.40     |
| W0004B    | 4/16/00  | 2:12     | 35        | RR-01        | 42.50 | -124.5  | 6           | 10.14      | 32.83 | 26.19   | 84.86    | 21.58    | 4.59     | 63.28    | 10.01    |
| W0004B    | 4/16/00  | 2:12     | 35        | RR-01        | 42.50 | -124.5  | 9           | 9.79       | 33.18 | 27.90   | 78.26    | 20.56    | 3.89     | 57.70    | 9.11     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0004B    | 4/16/00  | 2:12     | 35        | RR-01        | 42.50 | -124.5 | 15          | 9.79       | 33.29 | 28.41   | 66.57    | 11.35    | 1.99     | 55.21    | 9.89     |
| W0004B    | 4/16/00  | 2:12     | 35        | RR-01        | 42.50 | -124.5 | 19          | 9.69       | 33.36 | 28.91   | 68.17    | 12.74    | 1.88     | 55.43    | 10.29    |
| W0004B    | 4/16/00  | 2:12     | 35        | RR-01        | 42.50 | -124.5 | 20          | 9.69       | 33.36 | 28.86   | 68.36    | 12.33    | 2.15     | 56.03    | 10.00    |
| W0004B    | 4/16/00  | 2:12     | 35        | RR-01        | 42.50 | -124.5 | 25          | 9.24       | 33.49 | 31.31   | 70.70    | 12.62    | 2.20     | 58.08    | 9.99     |
| W0004B    | 4/16/00  | 2:12     | 35        | RR-01        | 42.50 | -124.5 | 30          | 8.96       | 33.61 | 32.68   | 62.38    | 13.07    | 1.99     | 49.31    | 9.68     |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 1           | 10.66      | 32.60 | 15.83   | 74.20    | 17.65    | 2.63     | 56.55    | 9.95     |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 5           | 10.66      | 32.61 | 29.08   | 89.55    | 22.96    | 3.65     | 66.59    | 14.01    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 11          | 9.98       | 33.02 | 32.60   | 76.93    | 14.70    | 2.69     | 62.23    | 12.68    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 11          | 9.98       | 33.02 | 33.72   | 73.39    | 11.40    | 1.91     | 61.99    | 14.28    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 22          | 9.63       | 33.46 | 36.03   | 58.76    | 8.49     | 1.31     | 50.27    | 14.39    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 31          | 9.16       | 33.60 | 37.60   | 58.50    | 5.78     | 0.82     | 52.73    | 16.20    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 34          | 9.13       | 33.61 | 37.85   | 63.66    | 6.42     | 0.88     | 57.24    | 14.17    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 39          | 9.08       | 33.63 | 37.85   | 58.44    | 8.69     | 0.81     | 49.75    | 14.41    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 52          | 8.98       | 33.66 | 39.28   | 55.07    | 8.18     | 0.52     | 46.89    | 15.08    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 61          | 8.60       | 33.75 | 41.66   | 53.42    | 6.37     | 0.67     | 47.05    | 14.62    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 70          | 8.39       | 33.80 | 42.19   | 55.59    | 6.81     | 0.77     | 48.78    | 13.91    |
| W0004B    | 4/16/00  | 3:23     | 36        | RR-02        | 42.50 | -124.6 | 81          | 8.24       | 33.81 | 44.13   | 50.74    | 11.34    | 1.47     | 39.40    | 14.66    |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 1           | 11.14      | 32.45 | 8.33    | 60.90    | 9.05     | 1.41     | 51.85    | 6.29     |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 5           | 11.08      | 32.44 |         |          | 6.90     | 1.25     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 11          | 10.52      | 32.50 |         |          | 7.58     | 1.47     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 15          | 9.99       | 32.64 |         |          | 7.16     | 1.30     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 20          | 9.68       | 32.79 |         |          | 5.02     | 0.69     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 30          | 9.52       | 33.05 |         |          | 4.34     | 0.54     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 40          | 9.14       | 33.36 |         |          | 7.45     | 1.24     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 50          | 9.14       | 33.41 |         |          | 9.37     | 1.53     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 61          | 9.23       | 33.56 |         |          | 5.35     | 0.60     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 70          | 9.08       | 33.66 |         |          | 7.91     | 1.03     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 116         | 8.04       | 33.87 |         |          | 5.53     | 0.77     |          |          |
| W0004B    | 4/16/00  | 6:11     | 37        | RR-03        | 42.50 | -124.7 | 122         | 8.04       | 33.87 |         |          | 4.99     | 0.58     |          |          |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 1           | 11.59      | 32.55 | 8.14    |          | 8.07     | 1.61     |          | 5.76     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 10          | 11.22      | 32.55 | 7.89    | 80.11    | 8.14     | 1.40     | 71.97    | 5.93     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 20          | 10.76      | 32.58 | 10.48   | 82.18    | 7.36     | 1.26     | 74.82    | 6.37     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 25          | 10.20      | 32.71 | 13.35   | 86.99    | 7.26     | 0.79     | 79.73    | 7.04     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 30          | 10.03      | 32.75 | 13.44   | 57.74    | 4.30     | 0.40     | 53.44    | 7.09     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 40          | 9.74       | 32.73 | 13.73   | 60.51    | 4.38     | 0.49     | 56.13    | 6.55     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 50          | 9.75       | 32.92 | 19.01   | 58.49    | 3.94     | 0.35     | 54.55    | 8.16     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 70          | 9.17       | 33.39 | 28.11   | 57.22    |          | 0.28     |          | 8.40     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 100         | 8.22       | 33.79 | 31.21   |          | 4.05     | 0.35     |          | 8.24     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 150         | 7.75       | 33.92 | 36.90   |          |          |          |          | 9.02     |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 500         | 5.58       | 34.14 | 38.32   |          |          |          |          |          |
| W0004B    | 4/15/00  | 22:58    | 34        | RR-04        | 42.50 | -124.8 | 1005        |            |       | 44.61   |          |          |          |          |          |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 2           | 11.32      | 32.57 | 7.68    | 66.50    | 4.91     | 0.90     | 61.59    | 6.34     |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 10          | 11.24      | 32.62 | 8.05    |          | 5.12     | 0.88     |          | 6.69     |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 17          | 11.24      | 32.63 | 8.38    |          | 4.79     | 0.60     |          | 7.02     |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 20          | 11.25      | 32.63 | 8.60    |          | 10.30    | 1.86     |          | 5.86     |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 30          | 10.76      | 32.76 | 10.64   |          | 4.20     | 0.64     |          | 7.46     |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 40          | 10.66      | 32.82 | 13.53   |          | 3.70     | 0.70     |          | 8.27     |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 50          | 10.58      | 32.85 | 15.42   |          |          | 0.41     |          | 9.11     |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 70          | 10.12      | 32.97 | 21.44   |          |          | 0.47     |          | 10.09    |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 100         | 8.99       | 33.54 | 37.70   | 55.56    |          | 0.73     |          | 13.13    |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 150         | 8.05       | 33.89 | 43.89   | 54.36    |          |          |          | 14.53    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 960         | 3.83       | 34.40 |         | 48.73    |          |          |          |          |
| W0004B    | 4/15/00  | 20:59    | 33        | RR-06        | 42.50 | -125.  | 1007        | 3.74       | 34.41 |         | 46.70    |          |          |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 1           | 11.41      | 32.46 | 7.83    | 63.00    | 6.75     | 1.00     | 56.25    | 6.55     |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 10          | 11.38      | 32.50 |         |          | 7.51     | 1.34     |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 20          | 11.05      | 32.55 |         |          | 8.01     | 1.46     |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 30          | 10.83      | 32.60 |         |          | 5.57     | 1.19     |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 32          | 10.69      | 32.68 |         |          | 4.57     | 1.00     |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 40          | 10.74      | 32.82 |         |          | 3.73     | 0.84     |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 50          | 10.75      | 32.86 |         |          | 3.98     | 0.50     |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 70          | 10.43      | 32.95 |         |          | 3.86     | 0.46     |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 100         | 9.25       | 33.45 |         |          | 4.70     | 0.65     |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 150         | 8.29       | 33.85 |         |          |          |          |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 440         | 6.01       | 34.10 |         |          |          |          |          |          |
| W0004B    | 4/15/00  | 18:47    | 32        | RR-07        | 42.50 | -125.2 | 1005        | 3.63       | 34.42 |         |          |          |          |          |          |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 1           | 10.40      | 33.17 | 24.22   | 91.90    | 28.26    | 5.32     | 63.64    | 11.92    |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 3           | 10.38      | 33.17 | 26.49   | 88.88    | 26.00    | 4.92     | 62.88    | 13.72    |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 5           | 10.38      | 33.17 | 21.27   | 84.03    | 22.61    | 4.15     | 61.42    | 8.29     |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 10          | 10.32      | 33.18 | 22.98   | 87.15    | 20.79    | 3.91     | 66.35    | 8.49     |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 15          | 10.07      | 33.25 | 24.59   | 68.27    | 19.49    | 3.67     | 48.78    | 8.24     |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 20          | 9.74       | 33.35 | 26.60   | 67.38    | 18.56    | 3.36     | 48.82    | 9.65     |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 25          | 9.47       | 33.40 | 28.51   |          | 11.94    | 1.96     |          | 10.93    |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 30          | 9.07       | 33.54 | 30.84   |          | 6.43     | 1.05     |          | 8.43     |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 33          | 8.84       | 33.65 | 33.73   |          | 10.38    | 1.52     |          | 8.54     |
| W0004B    | 4/14/00  | 15:54    | 22        | CR-01        | 41.90 | -124.3 | 36          | 8.74       | 33.68 | 34.10   |          | 15.20    | 1.50     |          | 7.97     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 2           | 11.02      | 32.42 | 8.93    | 74.60    | 8.06     | 1.42     | 66.54    | 7.51     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 5           | 11.02      | 32.42 | 8.58    | 69.50    | 7.06     | 1.38     | 62.44    | 7.20     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 10          | 11.03      | 32.42 | 14.19   | 80.70    | 7.80     | 1.58     | 72.90    | 12.62    |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 20          | 10.45      | 32.72 | 15.82   | 67.10    | 8.09     | 1.46     | 59.01    | 8.66     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 25          | 10.39      | 32.74 | 17.95   | 63.20    | 7.69     | 1.32     | 55.51    | 8.72     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 30          | 9.67       | 32.99 | 22.36   | 63.10    | 5.95     | 1.01     | 57.15    | 10.69    |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 41          | 9.15       | 33.32 | 29.60   | 56.30    | 4.55     | 0.55     | 51.75    | 10.40    |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 50          | 9.04       | 33.45 | 30.34   | 58.18    | 4.69     | 0.45     | 53.49    | 8.86     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 61          | 8.60       | 33.63 | 33.42   |          |          | 0.26     |          | 8.29     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 70          | 8.53       | 33.66 | 33.38   | 58.84    | 3.37     | 0.31     | 55.48    | 7.76     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 100         | 7.90       | 33.92 | 37.98   | 51.91    | 3.37     | 0.23     | 48.54    | 9.51     |
| W0004B    | 4/14/00  | 13:23    | 21        | CR-03        | 41.90 | -124.5 | 130         | 7.74       | 33.93 | 39.25   | 55.36    | 5.38     | 0.65     | 49.98    | 7.78     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 2           | 11.06      | 32.43 | 6.94    |          | 10.83    | 1.69     |          | 4.85     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 10          | 11.00      | 32.44 | 7.70    | 72.49    | 10.99    | 1.78     | 61.50    | 5.51     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 20          | 10.97      | 32.44 | 7.05    | 69.95    | 11.27    | 1.94     | 58.68    | 2.95     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 25          | 10.91      | 32.45 | 8.83    | 70.45    | 10.75    | 1.75     | 59.70    | 4.04     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 30          | 10.49      | 32.59 | 14.28   | 68.72    | 7.91     | 1.32     | 60.81    | 6.86     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 40          | 9.77       | 32.82 | 20.26   | 66.40    | 6.55     | 0.98     | 59.85    | 6.96     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 50          | 9.30       | 33.16 | 25.78   | 59.14    | 5.04     | 0.89     | 54.10    | 6.96     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 70          | 8.83       | 33.57 | 32.25   | 56.20    | 5.12     | 0.73     | 51.08    | 6.84     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 100         | 8.27       | 33.80 | 34.55   | 55.93    | 3.61     | 0.56     | 52.33    | 5.68     |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 150         | 7.65       | 33.94 | 37.02   | 52.20    |          |          |          |          |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 450         | 5.40       | 34.15 | 44.48   | 42.80    |          |          |          |          |
| W0004B    | 4/14/00  | 19:03    | 24        | CR-04        | 41.90 | -124.6 | 495         | 5.26       | 34.17 | 45.24   | 41.70    |          |          |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7 | 2           | 11.31      | 32.57 | 8.21    | 72.20    | 11.32    | 1.66     | 60.88    | 6.55     |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7 | 10          | 11.25      | 32.57 |         |          | 11.72    | 1.84     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 20          | 11.17      | 32.57 |         |          | 11.46    | 1.81     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 25          | 10.96      | 32.54 |         |          | 9.12     | 1.57     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 30          | 10.70      | 32.51 |         |          | 5.82     | 0.83     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 40          | 10.00      | 32.65 |         |          | 4.47     | 0.76     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 50          | 9.61       | 32.90 |         |          | 4.68     | 0.69     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 70          | 8.98       | 33.40 |         |          | 3.83     | 0.44     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 100         | 8.48       | 33.74 |         |          | 3.96     | 0.63     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 150         | 7.71       | 33.95 |         |          |          | 0.21     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 500         | 5.10       | 34.19 |         |          |          | 0.27     |          |          |
| W0004B    | 4/14/00  | 22:53    | 25        | CR-05        | 41.90 | -124.7  | 650         | 4.56       | 34.27 |         |          | 4.29     | 0.58     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 1           | 11.63      | 32.59 | 8.19    | 63.80    | 7.69     | 0.97     | 56.11    | 7.10     |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 10          | 11.52      | 32.60 |         |          | 8.66     | 1.28     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 15          | 11.42      | 32.61 |         |          | 8.17     | 1.19     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 20          | 11.38      | 32.61 |         |          | 6.56     | 0.94     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 30          | 10.98      | 32.69 |         |          | 5.68     | 0.76     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 40          | 10.96      | 32.73 |         |          |          | 0.52     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 50          | 10.87      | 32.74 |         |          | 4.45     | 0.33     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 70          | 10.71      | 32.81 |         |          | 3.81     | 0.27     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 100         | 9.40       | 33.02 |         |          | 3.62     | 0.30     |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 150         | 8.31       | 33.82 |         |          |          |          |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 360         | 5.85       | 34.08 |         |          |          |          |          |          |
| W0004B    | 4/15/00  | 3:25     | 27        | CR-07        | 41.90 | -125.   | 500         | 5.36       | 34.14 |         |          |          |          |          |          |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 1           | 11.42      | 32.60 | 9.29    |          | 13.01    | 1.95     |          | 7.34     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 10          | 11.42      | 32.60 | 9.22    | 76.85    | 11.53    | 1.77     | 65.32    | 7.37     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 20          | 11.34      | 32.60 | 9.23    | 75.64    | 8.02     | 1.22     | 67.62    | 7.57     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 25          | 11.49      | 32.60 | 9.65    | 69.96    | 7.10     | 1.08     | 62.86    | 7.99     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 30          | 11.42      | 32.64 | 9.69    | 58.51    | 5.89     | 0.76     | 52.61    | 7.69     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 40          | 10.89      | 32.66 | 10.76   | 63.06    | 5.54     | 0.87     | 57.52    | 7.84     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 50          | 10.65      | 32.63 | 10.94   | 62.56    | 5.06     | 0.67     | 57.49    | 7.66     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 70          | 10.71      | 32.70 | 11.52   | 55.62    | 4.38     | 0.54     | 51.24    | 7.29     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 100         | 9.99       | 33.17 | 20.79   | 58.74    | 3.36     | 0.37     | 55.38    | 7.97     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 150         | 8.78       | 33.76 | 32.87   | 53.24    |          |          |          | 8.79     |
| W0004B    | 4/15/00  | 8:42     | 29        | CR-09        | 41.90 | -125.33 | 1005        | 3.66       | 34.42 | 49.30   | 43.55    |          |          |          | 4.85     |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 1           | 11.52      | 32.68 | 8.23    | 66.50    | 8.93     | 1.31     | 57.57    | 6.66     |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 10          | 11.53      | 32.68 |         |          | 8.55     | 1.40     |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 20          | 11.31      | 32.76 |         |          | 7.78     | 1.39     |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 25          | 10.92      | 32.81 |         |          | 7.38     | 1.34     |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 30          | 10.75      | 32.82 |         |          | 0.00     | 0.00     |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 41          | 10.52      | 32.81 |         |          | 4.86     | 0.78     |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 50          | 10.42      | 32.81 |         |          | 5.20     | 0.65     |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 70          | 9.79       | 32.91 |         |          | 5.39     | 0.65     |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 101         | 8.51       | 33.34 |         |          |          | 0.52     |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 151         | 8.05       | 33.79 |         |          |          |          |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 766         | 4.25       | 34.31 |         |          |          |          |          |          |
| W0004B    | 4/15/00  | 13:24    | 31        | CR-11        | 41.90 | -126.   | 1005        | 3.61       | 34.43 |         |          |          |          |          |          |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 1           | 10.92      | 32.61 | 27.88   | 100.74   | 36.68    | 6.72     | 64.06    | 9.66     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 5           | 10.87      | 32.62 | 31.61   | 74.57    | 22.59    | 4.12     | 51.98    | 6.71     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 7           | 10.09      | 32.83 | 35.86   | 57.35    | 12.52    | 2.01     | 44.83    | 5.62     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 10          | 9.23       | 33.12 | 37.13   | 54.32    | 9.36     | 0.83     | 44.96    | 5.70     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 15          | 8.42       | 33.40 | 40.72   | 52.45    | 8.00     | 0.48     | 44.46    | 6.36     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 20          | 8.09       | 33.55 | 39.94   | 48.32    | 5.53     |          | 42.79    | 5.28     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 26          | 7.79       | 33.78 | 39.82   | 48.24    | 7.89     |          | 40.36    | 5.24     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 29          | 7.68       | 33.83 | 40.82   | 47.43    | 7.85     |          | 39.58    | 4.98     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.37       | 33.93 | 40.66   | 43.94    | 10.22    |          | 33.73    | 4.55     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 46          | 7.33       | 33.93 | 40.70   | 42.24    | 9.11     | 0.74     | 33.13    | 3.58     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.30       | 33.93 | 40.82   | 44.43    | 11.48    | 0.79     | 32.95    | 3.65     |
| W0007A    | 7/7/00   | 19:57    | 3         | NH-05        | 44.65 | -124.18 | 55          | 7.23       | 33.94 | 40.90   | 45.43    | 13.04    | 1.39     | 32.39    | 3.23     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 1           | 13.95      | 31.20 | 10.48   | 117.68   | 32.17    | 4.94     | 85.51    | 5.54     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 5           | 13.95      | 31.21 | 11.87   | 103.42   | 32.44    | 5.13     | 70.98    | 6.44     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 10          | 11.38      | 31.97 | 14.96   | 71.98    | 18.96    | 3.43     | 53.01    | 6.27     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 20          | 8.84       | 32.58 | 15.49   | 60.62    | 8.87     | 1.61     | 51.75    | 6.37     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 27          | 8.42       | 32.65 | 16.66   | 58.43    | 8.37     | 1.28     | 50.06    | 5.87     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 30          | 8.37       | 32.66 | 20.72   | 58.71    | 7.01     | 0.97     | 51.71    | 7.63     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 40          | 8.05       | 32.92 | 26.82   | 51.63    |          | 0.72     |          | 5.59     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 50          | 8.01       | 33.29 | 32.26   | 53.60    | 5.53     | 0.83     | 48.07    | 4.80     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 60          | 7.88       | 33.66 | 35.50   | 47.91    | 6.48     | 0.89     | 41.43    | 3.64     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 70          | 7.66       | 33.82 | 38.63   | 44.30    | 5.92     | 0.92     | 38.38    | 3.50     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 76          | 7.55       | 33.85 | 38.79   | 42.24    | 9.21     | 1.18     | 33.03    | 2.76     |
| W0007A    | 7/8/00   | 1:44     | 6         | NH-15        | 44.65 | -124.41 | 85          | 7.41       | 33.89 | 41.45   | 42.19    | 8.55     | 1.20     | 33.65    | 4.42     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 1           | 14.85      | 31.17 | 11.68   | 96.78    | 18.01    | 2.97     | 78.77    | 8.71     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 10          | 14.26      | 31.33 | 11.33   | 94.26    | 19.20    | 2.91     | 75.06    | 8.43     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 20          | 10.08      | 32.39 | 10.25   | 83.96    | 13.52    | 2.06     | 70.45    | 8.19     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 25          | 9.34       | 32.51 | 10.05   | 83.33    | 11.35    | 1.77     | 71.97    | 7.92     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 30          | 8.85       | 32.58 | 14.53   | 69.82    | 5.60     | 0.74     | 64.22    | 8.67     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 40          | 8.56       | 32.67 | 18.37   | 66.19    | 5.65     | 0.40     | 60.54    | 7.96     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 50          | 8.29       | 32.80 | 21.67   | 61.60    |          |          |          | 7.87     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 70          | 8.15       | 33.32 | 30.09   | 55.20    |          |          |          | 7.00     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 100         | 7.69       | 33.81 | 39.24   | 62.46    |          | 0.78     |          | 4.37     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 150         | 6.85       | 33.99 | 39.56   | 48.14    |          |          |          | 2.94     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 200         | 6.54       | 34.01 | 40.52   | 48.70    |          |          |          | 2.91     |
| W0007A    | 7/8/00   | 5:35     | 8         | NH-25        | 44.65 | -124.65 | 230         | 6.42       | 34.01 | 40.83   | 49.03    |          |          |          | 2.67     |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 2           | 15.56      | 30.94 | 7.88    | 71.71    | 11.17    | 1.26     | 60.53    | 5.06     |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 10          | 15.53      | 30.94 |         |          | 12.35    | 1.55     |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 20          | 12.60      | 32.05 |         |          | 7.60     | 0.69     |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 30          | 10.40      | 32.54 |         |          | 6.35     | 0.74     |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 32          | 10.03      | 32.59 |         |          |          | 0.54     |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 40          | 9.25       | 32.65 |         |          | 5.88     | 0.46     |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 50          | 8.71       | 32.68 |         |          |          | 0.43     |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 70          | 8.37       | 32.89 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 100         | 8.17       | 33.59 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 150         | 7.12       | 33.97 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 397         | 5.98       | 34.04 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 8:59     | 9         | NH-35        | 44.65 | -124.88 | 426         | 5.91       | 34.05 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 1           | 16.04      | 29.79 | 7.22    | 78.71    | 11.37    | 1.62     | 67.34    | 5.59     |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 10          | 15.54      | 30.41 |         |          | 12.03    | 1.53     |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 20          | 12.92      | 31.90 |         |          | 11.36    | 1.38     |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 25          | 10.85      | 32.39 |         |          | 8.00     | 0.92     |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 30          | 10.03      | 32.54 |         |          | 6.79     | 0.62     |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 40          | 9.25       | 32.64 |         |          | 7.03     | 0.37     |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 50          | 8.87       | 32.70 |         |          | 5.21     |          |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 70          | 8.63       | 32.84 |         |          | 4.85     |          |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 100         | 8.31       | 33.36 |         |          | 4.72     |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [μM] | TOC [μM] | POC [μM] | PON [μM] | DOC [μM] | DON [μM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 150         | 7.69       | 33.89 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 500         | 5.19       | 34.12 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 14:19    | 10        | NH-45        | 44.65 | -125.12 | 664         | 4.58       | 34.26 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 1           | 16.53      | 29.66 | 7.42    | 74.15    | 7.76     | 1.17     | 66.38    | 6.14     |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 10          | 15.96      | 30.76 |         |          | 6.98     | 1.27     |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 20          | 15.34      | 31.52 |         |          | 6.46     | 0.84     |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 31          | 14.19      | 32.51 |         |          | 5.68     |          |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 40          | 12.45      | 32.64 |         |          | 5.87     | 0.54     |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 50          | 10.43      | 32.72 |         |          | 5.70     | 0.51     |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 60          | 10.02      | 32.76 |         |          |          | 0.43     |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 69          | 9.44       | 32.80 |         |          | 5.63     |          |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 100         | 8.73       | 33.10 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 150         | 8.14       | 33.76 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 860         | 4.03       | 34.35 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 18:24    | 12        | NH-65        | 44.65 | -125.6  | 1004        | 3.67       | 34.41 |         |          |          |          |          |          |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 2           | 16.07      | 31.48 | 8.73    | 70.65    | 6.34     | 0.53     | 64.31    | 8.20     |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 10          | 16.02      | 31.52 |         | 72.43    | 6.97     | 0.76     | 65.46    |          |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 20          | 15.87      | 31.66 | 8.81    |          |          |          |          |          |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 30          | 15.03      | 32.24 | 8.49    | 70.85    | 6.08     | 0.62     | 64.78    | 7.87     |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 40          | 13.90      | 32.58 | 8.38    | 73.34    | 6.90     | 0.83     | 66.44    | 7.56     |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 50          | 12.72      | 32.61 | 9.67    | 69.40    | 8.55     | 1.17     | 60.84    | 8.39     |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 60          | 10.57      | 32.67 | 12.13   | 62.26    | 6.07     | 0.81     | 56.19    | 8.22     |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 70          | 9.62       | 32.71 | 14.58   | 65.29    |          |          | 65.29    | 8.87     |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 100         | 8.89       | 33.00 | 22.33   |          |          | 0.45     |          | 7.31     |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 150         | 8.12       | 33.72 | 32.23   |          |          |          |          | 5.66     |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 800         | 4.16       | 34.32 |         | 49.75    |          |          |          |          |
| W0007A    | 7/8/00   | 21:15    | 13        | NH-85        | 44.65 | -126.05 | 1006        | 3.66       | 34.41 |         | 42.80    |          |          |          |          |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 2           | 9.00       | 33.58 | 35.20   | 116.15   | 28.62    | 4.93     | 87.53    | 7.19     |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 5           | 8.98       | 33.58 | 37.12   | 123.48   | 27.29    | 5.17     | 96.19    | 8.76     |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 8           | 8.90       | 33.59 | 36.44   | 121.63   | 26.47    | 5.04     | 95.17    | 8.33     |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 10          | 8.89       | 33.59 | 37.16   | 128.20   | 29.03    | 4.87     | 99.16    | 8.52     |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 15          | 8.49       | 33.65 | 38.38   | 83.27    | 20.80    | 3.84     | 62.46    |          |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 19          | 8.26       | 33.71 | 37.91   | 77.83    | 17.91    | 3.41     | 59.92    | 4.78     |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 25          | 8.19       | 33.76 | 38.38   | 81.42    | 19.39    | 3.41     | 62.03    | 4.74     |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 30          | 8.16       | 33.78 | 40.11   | 69.26    | 15.08    | 2.54     | 54.19    | 3.98     |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 40          | 7.51       | 33.89 | 42.36   | 55.58    | 11.28    | 1.74     | 44.29    | 4.02     |
| W0007A    | 7/12/00  | 23:47    | 41        | HH-01        | 44.00 | -124.2  | 48          | 7.37       | 33.92 | 41.74   | 62.27    | 13.46    | 2.31     | 48.81    | 2.33     |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 1           | 11.73      | 32.91 | 13.96   | 86.72    | 30.29    | 4.98     | 56.42    | 7.78     |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 5           | 11.70      | 32.91 |         |          | 28.09    | 4.65     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 10          | 11.60      | 32.90 |         |          | 24.12    | 4.11     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 15          | 10.90      | 32.85 |         |          | 18.03    | 2.72     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 20          | 8.43       | 32.84 |         |          | 6.67     | 0.56     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 30          | 8.13       | 33.19 |         |          | 7.50     | 0.85     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 40          | 8.08       | 33.36 |         |          | 6.11     | 0.67     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 50          | 8.05       | 33.57 |         |          | 11.45    | 1.74     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 60          | 7.68       | 33.81 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 70          | 7.49       | 33.92 |         |          |          | 0.54     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 100         | 7.06       | 33.99 |         |          |          | 0.45     |          |          |
| W0007A    | 7/13/00  | 1:29     | 42        | HH-02        | 44.00 | -124.4  | 115         | 6.90       | 33.99 |         |          | 8.13     | 0.75     |          |          |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6  | 1           | 12.75      | 32.42 | 11.64   | 95.84    | 29.47    | 4.20     | 66.36    | 7.35     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 5           | 12.79      | 32.40 | 12.30   | 93.69    | 34.59    | 5.05     | 59.10    | 7.01     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 10          | 12.51      | 32.51 | 13.01   | 80.05    | 22.74    | 3.47     | 57.31    | 8.08     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 20          | 9.74       | 32.46 | 19.75   | 60.48    | 17.61    | 3.00     | 42.88    | 5.84     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 30          | 8.20       | 33.12 | 29.01   | 48.62    | 10.70    | 1.58     | 37.92    | 5.54     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 40          | 8.19       | 33.41 | 31.44   | 53.20    |          | 0.70     |          | 5.73     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 50          | 8.00       | 33.56 | 33.90   | 50.11    |          | 0.58     |          | 6.11     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 60          | 7.92       | 33.66 | 35.02   | 39.61    | 6.09     | 0.86     | 33.52    | 6.00     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 70          | 7.76       | 33.77 | 37.20   | 39.50    |          | 0.50     |          | 6.25     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 100         | 7.14       | 33.97 | 38.79   | 37.49    | 6.41     | 1.02     | 31.08    | 3.90     |
| W0007A    | 7/13/00  | 4:02     | 43        | HH-03        | 44.00 | -124.6 | 145         | 6.68       | 34.00 | 40.52   | 50.85    | 10.01    | 1.34     | 40.83    | 3.09     |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 1           | 13.18      | 31.90 | 11.79   | 90.31    | 23.07    | 3.68     | 67.24    | 7.91     |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 5           | 13.15      | 31.91 |         |          | 25.18    |          | 3.87     |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 8           | 13.00      | 31.95 |         |          | 19.58    |          | 3.76     |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 10          | 11.83      | 32.03 |         |          | 14.82    |          | 2.55     |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 20          | 8.73       | 32.63 |         |          | 8.90     |          | 1.09     |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 30          | 8.29       | 32.93 |         |          |          |          | 0.46     |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 40          | 8.50       | 33.21 |         |          |          |          | 0.51     |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 50          | 8.42       | 33.44 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 60          | 8.41       | 33.53 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 70          | 8.19       | 33.72 |         |          |          |          | 0.52     |          |
| W0007A    | 7/13/00  | 6:30     | 44        | HH-04        | 44.00 | -124.8 | 95          | 8.09       | 33.77 |         |          |          |          | 0.31     |          |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 2           | 14.56      | 31.93 | 9.14    | 90.80    | 12.87    | 1.94     | 77.93    | 6.27     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 10          | 14.29      | 32.46 | 8.45    | 72.00    | 9.78     | 1.22     | 62.23    | 6.85     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 20          | 14.17      | 32.55 | 8.75    | 74.77    | 10.25    | 1.36     | 64.52    | 6.66     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 30          | 11.01      | 32.70 | 13.27   |          | 9.57     |          | 1.51     | 7.85     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 36          | 9.96       | 32.77 | 18.53   | 66.36    | 8.67     | 1.09     | 57.69    | 7.30     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 40          | 9.74       | 32.80 | 19.14   | 66.72    | 8.73     | 1.14     | 57.99    | 6.43     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 50          | 9.26       | 32.98 | 20.87   | 58.87    |          | 0.52     |          | 6.09     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 70          | 8.87       | 33.32 | 28.81   | 53.83    |          |          |          | 6.95     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 100         | 8.31       | 33.72 | 33.37   | 53.36    |          | 0.30     |          | 5.23     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 150         | 7.70       | 33.94 | 36.04   | 54.61    |          |          |          | 4.55     |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 500         | 5.39       | 34.10 |         | 46.61    |          |          |          |          |
| W0007A    | 7/13/00  | 8:13     | 45        | HH-05        | 44.00 | -125.  | 885         | 4.19       | 34.34 |         | 45.17    |          |          |          |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 1           | 14.16      | 32.57 | 9.68    | 67.90    | 11.47    | 1.82     | 56.44    | 7.63     |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 10          | 14.16      | 32.56 |         |          | 11.79    |          | 1.66     |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 20          | 13.52      | 32.56 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 30          | 12.81      | 32.60 |         |          | 10.17    |          | 1.31     |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 40          | 10.63      | 32.68 |         |          | 8.10     |          | 1.28     |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 44          | 10.43      | 32.72 |         |          | 8.37     |          | 1.03     |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 50          | 10.16      | 32.83 |         |          | 5.75     |          | 0.84     |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 70          | 9.37       | 33.14 |         |          | 0.52     |          |          |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 100         | 8.40       | 33.70 |         |          | 0.46     |          |          |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 149         | 7.77       | 33.94 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 890         | 4.06       | 34.36 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 11:48    | 46        | HH-07        | 44.00 | -125.2 | 1006        | 3.76       | 34.40 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4 | 1           | 13.63      | 32.47 | 9.76    | 69.28    | 13.79    | 2.96     | 55.49    | 6.70     |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4 | 10          | 13.32      | 32.52 |         |          | 15.67    |          | 3.28     |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4 | 20          | 13.19      | 32.54 |         |          | 10.77    |          | 2.09     |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4 | 30          | 9.90       | 32.65 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4 | 38          | 9.19       | 32.78 |         |          | 9.01     |          | 1.31     |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4 | 40          | 9.03       | 32.80 |         |          | 9.77     |          | 1.33     |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4  | 50          | 9.12       | 33.04 |         |          | 7.51     | 1.03     |          |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4  | 70          | 8.82       | 33.43 |         |          | 6.63     | 0.84     |          |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4  | 100         | 8.63       | 33.78 |         |          |          | 0.49     |          |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4  | 150         | 7.64       | 33.95 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4  | 740         | 4.44       | 34.30 |         |          |          |          |          |          |
| W0007A    | 7/13/00  | 13:36    | 47        | HH-09        | 44.00 | -125.4  | 1005        | 3.77       | 34.41 |         |          |          |          |          |          |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 2           | 10.84      | 33.71 | 22.36   | 139.20   | 51.13    | 7.41     | 88.08    | 14.20    |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 5           | 10.72      | 33.71 | 24.69   | 134.77   | 47.61    | 7.80     | 87.16    | 14.11    |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 8           | 10.37      | 33.69 | 25.01   | 115.15   | 38.56    | 6.44     | 76.59    | 13.84    |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 10          | 9.81       | 33.69 | 25.26   | 114.00   | 36.97    | 6.64     | 77.03    | 11.79    |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 15          | 9.14       | 33.68 | 31.33   | 92.01    | 26.69    | 4.43     | 65.32    | 11.97    |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 20          | 8.54       | 33.71 | 38.00   | 64.54    | 10.96    | 1.41     | 53.58    | 11.98    |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 25          | 8.28       | 33.78 | 42.81   | 60.32    | 16.55    | 2.20     | 43.78    | 12.58    |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 30          | 7.84       | 33.85 | 42.55   | 55.12    | 11.68    | 1.76     | 43.44    | 8.91     |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 40          | 7.68       | 33.88 | 44.50   | 57.16    | 12.86    | 1.81     | 44.30    | 9.49     |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 50          | 7.64       | 33.89 | 46.87   | 59.00    | 17.73    | 3.03     | 41.27    | 9.86     |
| W0007A    | 7/9/00   | 20:12    | 20        | FM-03        | 43.22 | -124.5  | 53          | 7.62       | 33.89 | 46.31   | 65.30    | 20.16    | 2.77     | 45.14    | 9.61     |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 1           | 12.25      | 33.19 | 14.04   | 124.70   | 41.64    | 6.76     | 83.06    | 7.09     |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 5           | 12.15      | 33.22 |         |          | 44.67    | 7.78     |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 10          | 10.88      | 33.27 |         |          | 31.24    | 5.37     |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 12          | 10.25      | 33.31 |         |          | 27.43    | 4.48     |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 20          | 9.08       | 33.42 |         |          | 17.36    | 2.38     |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 30          | 8.54       | 33.72 |         |          | 15.84    | 1.92     |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 40          | 8.13       | 33.78 |         |          | 9.70     | 1.21     |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 45          | 8.13       | 33.79 |         |          | 9.01     | 1.07     |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 50          | 8.04       | 33.79 |         |          | 12.58    |          |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 60          | 7.73       | 33.88 |         |          | 7.61     |          |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 70          | 7.49       | 33.94 |         |          | 11.62    | 1.07     |          |          |
| W0007A    | 7/9/00   | 18:12    | 19        | FM-04        | 43.22 | -124.58 | 78          | 7.46       | 33.95 |         |          | 25.09    | 3.11     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 1           | 12.43      | 32.94 | 11.82   | 85.15    | 20.18    | 3.69     | 64.97    | 6.37     |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 10          | 10.05      | 32.90 |         |          | 14.16    | 2.29     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 15          | 9.44       | 33.14 |         |          | 12.18    | 1.94     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 20          | 9.10       | 33.21 |         |          | 8.08     | 1.12     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 30          | 8.71       | 33.45 |         |          | 8.99     | 1.32     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 40          | 8.53       | 33.63 |         |          | 6.60     | 0.84     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 50          | 8.42       | 33.69 |         |          | 8.14     | 1.01     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 60          | 8.22       | 33.75 |         |          | 8.58     | 1.09     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 70          | 7.96       | 33.82 |         |          | 10.70    | 1.15     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 100         | 7.68       | 33.94 |         |          | 7.96     | 0.70     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 104         | 7.67       | 33.95 |         |          | 12.52    | 1.06     |          |          |
| W0007A    | 7/9/00   | 15:59    | 18        | FM-05        | 43.22 | -124.67 | 149         | 7.21       | 33.99 |         |          |          |          |          |          |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 1           | 13.19      | 32.91 | 7.71    | 84.31    | 20.71    | 3.79     | 63.60    | 3.76     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 10          | 12.72      | 32.90 | 9.44    | 81.36    | 20.75    | 3.92     | 60.61    | 5.36     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 20          | 10.16      | 33.15 | 19.31   | 85.04    | 23.10    | 4.15     | 61.95    | 7.05     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 23          | 9.80       | 33.26 | 21.33   | 76.16    | 22.69    | 3.96     | 53.46    | 7.15     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 30          | 9.13       | 33.25 | 25.44   | 57.32    | 11.41    | 1.60     | 45.91    | 7.69     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 40          | 9.23       | 33.42 | 26.19   | 59.27    | 10.28    | 1.40     | 48.99    | 6.70     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 50          | 9.18       | 33.56 | 27.07   | 53.30    | 6.30     | 0.73     | 46.99    | 7.14     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 70          | 8.44       | 33.72 | 28.74   | 59.37    | 6.14     | 0.64     | 53.23    | 5.52     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 100         | 7.90       | 33.88 | 34.47   | 44.88    |          |          | 5.02     |          |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 150         | 7.49       | 33.97 | 36.66   | 48.18    | 5.75     |          | 42.43    | 4.57     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [μM] | TOC [μM] | POC [μM] | PON [μM] | DOC [μM] | DON [μM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 300         | 6.26       | 34.08 | 41.36   | 44.64    |          | 0.62     |          | 3.16     |
| W0007A    | 7/9/00   | 11:02    | 16        | FM-07        | 43.22 | -124.83 | 320         | 6.13       | 34.08 | 41.40   | 48.03    | 6.01     | 0.70     | 42.02    | 2.71     |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 2           | 13.74      | 32.69 | 8.00    | 89.02    | 15.51    | 2.60     | 73.51    | 5.10     |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 10          | 12.80      | 32.68 |         |          | 15.78    | 2.93     |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 15          | 10.90      | 32.81 |         |          | 16.05    | 2.79     |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 20          | 10.11      | 32.85 |         |          | 13.82    | 2.16     |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 30          | 9.82       | 32.98 |         |          | 11.98    | 1.68     |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 40          | 9.42       | 33.09 |         |          | 15.88    | 1.60     |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 50          | 9.24       | 33.29 |         |          | 7.02     | 1.00     |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 70          | 9.05       | 33.41 |         |          | 5.52     | 0.75     |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 100         | 8.27       | 33.68 |         |          |          |          |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 150         | 7.51       | 33.95 |         |          |          |          |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 830         | 4.18       | 34.33 |         |          |          |          |          |          |
| W0007A    | 7/9/00   | 8:26     | 15        | FM-08        | 43.22 | -125.   | 1005        | 3.81       | 34.41 |         |          |          |          |          |          |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 2           | 15.13      | 32.44 | 6.94    | 79.18    | 16.66    | 3.07     | 62.52    | 3.70     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 10          | 14.87      | 32.41 | 7.19    | 75.11    | 11.34    | 1.81     | 63.77    | 5.18     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 20          | 12.23      | 32.43 | 8.38    | 75.61    | 14.88    | 2.59     | 60.73    | 5.61     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 30          | 10.75      | 32.66 | 10.34   | 74.80    | 16.83    | 3.17     | 57.97    | 5.20     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 35          | 10.28      | 32.73 | 13.57   | 70.97    | 14.79    | 2.76     | 56.18    | 5.64     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 40          | 9.81       | 32.78 | 15.49   | 69.83    | 9.97     | 1.91     | 59.85    | 6.21     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 50          | 9.00       | 32.85 | 21.67   | 63.22    |          | 1.15     |          | 6.71     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 70          | 8.61       | 33.14 | 25.11   | 57.97    |          | 0.81     |          | 5.63     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 100         | 8.32       | 33.70 | 32.14   | 57.86    |          | 0.84     |          | 4.61     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 150         | 7.55       | 33.96 | 34.79   | 51.50    |          |          |          | 7.86     |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 737         | 4.36       | 34.28 |         | 48.44    |          |          |          |          |
| W0007A    | 7/9/00   | 6:37     | 14        | FM-09        | 43.22 | -125.17 | 1005        | 3.68       | 34.43 |         | 45.49    |          |          |          |          |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 1           | 7.71       | 33.98 | 40.48   |          | 14.95    | 2.49     |          | 4.73     |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 5           | 7.71       | 33.98 | 39.63   |          | 15.46    | 2.65     |          | 3.70     |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 9           | 7.71       | 33.98 | 40.10   |          | 14.99    | 2.15     |          | 4.74     |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 15          | 7.71       | 33.98 | 40.06   |          | 17.63    | 2.88     |          | 3.96     |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 17          | 7.70       | 33.98 | 40.03   | 54.20    | 13.67    | 2.35     | 40.53    | 4.46     |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 20          | 7.70       | 33.98 | 39.04   | 60.60    | 17.39    | 2.88     | 43.21    | 2.87     |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 24          | 7.70       | 33.98 | 39.53   |          | 11.25    | 1.95     |          | 4.24     |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 30          | 7.69       | 33.98 | 39.00   | 60.09    |          |          |          |          |
| W0007A    | 7/11/00  | 16:25    | 34        | RR-01        | 42.50 | -124.5  | 32          | 7.69       | 33.98 | 38.89   | 50.83    | 16.15    | 2.98     | 34.69    | 2.79     |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 2           | 8.49       | 33.90 | 36.65   | 50.17    | 13.48    | 2.07     | 36.70    | 8.98     |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 5           | 8.49       | 33.90 |         |          | 13.47    | 1.98     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 12          | 8.49       | 33.89 |         |          | 12.23    | 1.82     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 17          | 8.49       | 33.89 |         |          | 11.69    | 1.84     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 20          | 8.48       | 33.90 |         |          | 12.51    | 1.91     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 31          | 8.45       | 33.90 |         |          | 3.52     | 0.42     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 41          | 8.13       | 33.92 |         |          | 8.32     | 1.23     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 50          | 7.68       | 33.94 |         |          | 5.40     | 0.81     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 60          | 7.61       | 33.97 |         |          | 11.75    | 1.65     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 71          | 7.59       | 33.99 |         |          | 11.89    | 1.80     |          |          |
| W0007A    | 7/11/00  | 17:43    | 35        | RR-02        | 42.50 | -124.6  | 82          | 7.58       | 33.99 |         |          | 13.30    | 2.38     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7  | 3           | 9.11       | 33.78 | 34.19   | 57.69    | 23.30    | 3.70     | 34.39    | 8.69     |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7  | 5           | 9.12       | 33.78 |         |          | 24.41    | 3.82     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7  | 10          | 9.08       | 33.78 |         |          | 16.26    | 2.87     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7  | 20          | 9.05       | 33.79 |         |          | 22.05    | 3.62     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [μM] | TOC [μM] | POC [μM] | PON [μM] | DOC [μM] | DON [μM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7 | 25          | 9.06       | 33.79 |         |          | 19.69    | 3.22     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7 | 30          | 9.06       | 33.79 |         |          | 18.52    | 3.40     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7 | 40          | 9.03       | 33.79 |         |          | 19.93    | 3.40     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7 | 50          | 8.92       | 33.82 |         |          | 16.18    | 2.89     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7 | 60          | 8.68       | 33.85 |         |          | 14.61    | 2.60     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7 | 70          | 8.69       | 33.85 |         |          | 15.65    | 2.70     |          |          |
| W0007A    | 7/11/00  | 20:15    | 36        | RR-03        | 42.50 | -124.7 | 123         | 7.74       | 33.98 |         |          | 8.82     | 0.86     |          |          |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 2           | 9.77       | 33.53 | 28.56   |          | 8.07     | 1.53     |          | 8.17     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 10          | 9.75       | 33.53 | 28.62   |          | 7.75     | 1.26     |          | 8.48     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 20          | 9.57       | 33.56 | 27.99   |          | 8.16     | 1.23     |          | 7.27     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 28          | 9.53       | 33.58 | 28.92   |          | 6.39     | 0.75     |          | 7.07     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 30          | 9.46       | 33.60 | 29.32   |          | 5.57     | 1.05     |          | 6.67     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 40          | 9.44       | 33.67 | 30.06   |          |          | 0.45     |          | 6.61     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 50          | 9.33       | 33.68 | 30.38   |          |          |          |          | 6.69     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 70          | 8.73       | 33.69 | 32.07   |          | 7.51     | 1.02     |          | 6.13     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 100         | 8.27       | 33.84 | 35.95   |          | 6.14     | 0.70     |          | 4.68     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 150         | 7.73       | 33.99 | 36.50   |          |          |          |          | 4.94     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 445         | 5.96       | 34.11 | 42.60   |          |          |          |          | 2.88     |
| W0007A    | 7/12/00  | 2:25     | 37        | RR-04        | 42.50 | -124.8 | 500         | 5.63       | 34.14 | 43.30   |          |          |          |          | 2.64     |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 2           | 11.16      | 32.89 | 16.11   | 64.12    | 12.52    | 1.84     | 51.60    | 8.42     |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 10          | 11.16      | 32.89 |         |          | 11.51    | 1.90     |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 20          | 11.16      | 32.89 |         |          | 11.57    | 1.93     |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 25          | 11.14      | 32.81 |         |          | 10.33    | 1.68     |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 30          | 11.14      | 32.91 |         |          | 9.74     | 1.88     |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 40          | 11.11      | 32.93 |         |          | 9.71     | 1.73     |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 50          | 10.82      | 33.04 |         |          | 9.45     | 1.59     |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 70          | 10.22      | 33.31 |         |          | 10.20    | 1.67     |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 100         | 9.18       | 33.68 |         |          |          | 0.97     |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 150         | 7.86       | 33.93 |         |          |          |          |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 880         | 4.27       | 34.34 |         |          |          |          |          |          |
| W0007A    | 7/12/00  | 9:39     | 39        | RR-06        | 42.50 | -125.  | 1005        | 3.93       | 34.39 |         |          |          |          |          |          |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 3           | 10.86      | 33.03 | 19.79   |          | 8.28     | 1.75     |          | 9.80     |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 10          | 10.86      | 33.02 | 19.86   |          | 9.57     | 1.89     |          | 9.68     |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 21          | 10.86      | 33.03 | 20.54   |          | 9.97     | 2.02     |          | 10.23    |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 30          | 10.86      | 33.03 | 20.52   |          | 9.32     | 1.75     |          | 10.35    |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 35          | 10.85      | 33.03 | 20.86   |          | 10.48    | 2.13     |          | 10.06    |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 40          | 10.86      | 33.03 | 21.52   |          | 9.47     | 1.86     |          | 10.59    |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 50          | 10.35      | 33.31 | 22.76   |          | 8.94     | 1.71     |          | 10.75    |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 70          | 9.36       | 33.67 | 32.96   |          | 6.03     | 0.96     |          | 10.56    |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 100         | 8.30       | 33.76 | 38.32   |          |          | 0.49     |          | 9.87     |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 150         | 7.51       | 33.97 | 42.57   |          |          |          |          | 9.34     |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 840         | 4.19       | 34.36 | 51.96   |          |          |          |          | 6.64     |
| W0007A    | 7/12/00  | 12:32    | 40        | RR-07        | 42.50 | -125.2 | 1002        | 3.84       | 34.41 | 51.14   |          |          |          |          | 5.74     |
| W0007A    | 7/10/00  | 23:03    | 27        | CR-01        | 41.90 | -124.3 | 1           | 9.92       | 33.86 | 32.67   | 161.99   | 52.45    | 9.13     | 109.53   | 13.32    |
| W0007A    | 7/10/00  | 23:03    | 27        | CR-01        | 41.90 | -124.3 | 5           | 9.93       | 33.85 | 30.79   | 170.53   | 47.51    | 10.47    | 123.03   |          |
| W0007A    | 7/10/00  | 23:03    | 27        | CR-01        | 41.90 | -124.3 | 11          | 9.92       | 33.86 | 31.58   | 173.87   | 60.53    | 10.50    | 113.35   | 9.58     |
| W0007A    | 7/10/00  | 23:03    | 27        | CR-01        | 41.90 | -124.3 | 15          | 9.55       | 33.88 | 32.62   | 110.33   | 34.37    | 6.35     | 75.97    | 15.39    |
| W0007A    | 7/10/00  | 23:03    | 27        | CR-01        | 41.90 | -124.3 | 21          | 8.75       | 33.91 | 36.29   | 71.03    | 19.27    | 3.17     | 51.76    | 4.94     |
| W0007A    | 7/10/00  | 23:03    | 27        | CR-01        | 41.90 | -124.3 | 25          | 8.39       | 33.92 | 37.30   | 60.92    | 12.44    | 1.90     | 48.48    | 4.28     |
| W0007A    | 7/10/00  | 23:03    | 27        | CR-01        | 41.90 | -124.3 | 30          | 8.11       | 33.94 | 35.99   | 54.04    | 10.55    | 1.30     | 43.49    | 3.09     |
| W0007A    | 7/10/00  | 23:03    | 27        | CR-01        | 41.90 | -124.3 | 36          | 8.10       | 33.94 | 35.95   | 58.00    | 10.13    | 1.56     | 47.87    | 2.76     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 2           | 9.07       | 33.88 | 34.11   | 86.43    | 29.18    | 5.20     | 57.25    | 7.08     |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 5           | 9.07       | 33.88 |         |          | 29.98    | 5.37     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 10          | 9.07       | 33.88 |         |          | 27.25    | 5.37     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 20          | 9.07       | 33.88 |         |          | 30.86    | 5.64     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 25          | 9.07       | 33.88 |         |          | 29.75    | 5.61     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 30          | 9.06       | 33.88 |         |          | 31.19    | 5.78     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 40          | 8.96       | 33.88 |         |          |          | 1.11     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 50          | 8.34       | 33.91 |         |          | 5.50     | 1.00     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 60          | 8.17       | 33.93 |         |          | 5.50     | 1.11     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 70          | 8.03       | 33.95 |         |          | 7.52     | 1.26     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 95          | 7.85       | 33.99 |         |          | 7.42     | 1.29     |          |          |
| W0007A    | 7/11/00  | 1:53     | 29        | CR-03        | 41.90 | -124.5  | 100         | 7.84       | 34.00 |         |          | 9.58     | 1.79     |          |          |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 2           | 8.89       | 33.85 | 32.47   | 72.43    | 19.58    | 3.02     | 52.86    | 5.23     |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 10          | 8.87       | 33.85 | 33.23   | 79.91    | 21.57    | 3.67     | 58.34    | 4.97     |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 20          | 8.84       | 33.86 | 34.06   | 76.20    | 17.65    | 2.96     | 58.54    | 4.91     |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 30          | 8.83       | 33.86 | 33.76   | 77.05    | 16.22    | 2.76     | 60.83    | 6.23     |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 33          | 8.81       | 33.86 | 33.47   | 80.32    | 13.72    | 2.61     | 66.60    | 6.29     |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 40          | 8.81       | 33.86 | 32.79   | 85.27    | 16.41    | 3.24     | 68.86    | 4.37     |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 50          | 8.82       | 33.86 | 33.21   | 74.22    | 18.59    | 3.55     | 55.63    | 4.29     |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 70          | 8.73       | 33.87 | 33.90   | 65.85    | 19.65    | 4.12     | 46.20    |          |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 150         | 7.71       | 34.03 | 36.94   | 54.51    |          |          | 3.92     |          |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 295         | 6.91       | 34.08 | 38.33   | 53.49    |          |          | 1.90     |          |
| W0007A    | 7/11/00  | 7:06     | 31        | CR-04        | 41.90 | -124.6  | 450         | 5.89       | 34.10 | 40.06   | 56.21    |          |          | 0.38     |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 2           | 9.38       | 33.60 | 29.13   | 67.94    |          |          | 67.94    |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 10          | 9.38       | 33.60 |         |          | 18.35    | 3.11     |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 20          | 9.38       | 33.60 |         |          | 13.55    | 2.32     |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 25          | 9.38       | 33.60 |         |          | 9.18     | 1.49     |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 30          | 9.32       | 33.60 |         |          | 9.46     | 1.38     |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 40          | 9.30       | 33.60 |         |          | 11.26    | 1.76     |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 50          | 9.28       | 33.61 |         |          | 9.91     | 1.36     |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 70          | 9.25       | 33.61 |         |          | 8.85     | 0.96     |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 100         | 8.48       | 33.77 |         |          | 7.40     | 0.80     |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 150         | 7.88       | 33.91 |         |          |          |          |          |          |
| W0007A    | 7/11/00  | 8:41     | 32        | CR-05        | 41.90 | -124.7  | 650         | 4.80       | 34.26 |         |          |          |          |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 2           | 11.25      | 32.90 | 14.33   | 63.19    | 15.33    | 1.97     | 47.86    | 7.28     |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 9           | 11.24      | 32.90 |         |          | 13.91    | 1.92     |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 20          | 11.24      | 32.90 |         |          | 15.07    | 1.94     |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 30          | 11.23      | 32.90 |         |          | 13.44    | 1.95     |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 35          | 11.20      | 32.90 |         |          | 14.33    | 2.28     |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 39          | 11.19      | 32.91 |         |          | 12.16    | 2.01     |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 50          | 11.14      | 33.09 |         |          | 11.02    | 1.75     |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 70          | 9.28       | 33.64 |         |          | 7.11     | 1.07     |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 100         | 8.91       | 33.85 |         |          | 6.76     | 0.97     |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 150         | 7.89       | 33.96 |         |          |          |          |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 500         | 5.05       | 34.13 |         |          |          |          |          |          |
| W0007A    | 7/10/00  | 17:38    | 26        | CR-07        | 41.90 | -125.   | 720         | 4.34       | 34.32 |         |          |          |          |          |          |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 1           | 12.12      | 33.27 | 18.54   | 109.22   | 23.02    | 4.29     | 86.20    | 8.53     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 10          | 12.12      | 33.27 | 18.65   | 82.91    | 19.47    | 3.93     | 63.44    | 9.06     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 21          | 11.86      | 33.30 | 19.93   | 82.02    | 22.23    | 4.10     | 59.79    | 9.97     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 26          | 11.36      | 33.36 | 22.28   | 94.96    | 18.32    | 3.48     | 76.64    | 11.91    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 30          | 10.82      | 33.37 | 24.31   | 76.28    | 17.38    | 3.32     | 58.90    | 10.88    |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 40          | 9.86       | 33.62 | 28.38   | 69.56    | 14.10    | 2.31     | 55.46    | 9.86     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 50          | 9.56       | 33.68 | 32.01   | 54.51    | 11.23    | 1.63     | 43.28    | 7.49     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 70          | 8.83       | 33.79 | 34.68   | 49.14    | 9.16     | 0.97     | 39.99    | 6.72     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 100         | 8.23       | 33.86 | 36.29   | 48.71    | 7.17     | 0.77     | 41.53    | 5.92     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 150         | 7.57       | 33.95 | 38.11   | 50.31    |          |          |          | 5.07     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 316         | 5.84       | 34.01 | 41.21   | 44.71    |          |          |          | 2.31     |
| W0007A    | 7/10/00  | 13:19    | 24        | CR-09        | 41.90 | -125.33 | 1005        | 3.58       | 34.44 |         | 44.14    |          |          |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 2           | 15.55      | 32.25 | 6.49    | 61.53    | 5.88     | 0.85     | 55.65    | 5.64     |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 10          | 15.52      | 32.26 |         |          | 6.55     | 0.82     |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 20          | 15.44      | 32.26 |         |          | 6.81     | 0.68     |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 30          | 14.74      | 32.36 |         |          | 6.83     | 0.90     |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 40          | 14.22      | 32.40 |         |          | 6.01     | 0.74     |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 50          | 13.41      | 32.59 |         |          | 7.09     | 1.02     |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 59          | 11.47      | 32.71 |         |          | 9.27     | 1.32     |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 70          | 10.36      | 32.75 |         |          | 6.06     | 0.90     |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 100         | 9.18       | 33.09 |         |          | 8.43     | 1.37     |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 150         | 8.38       | 33.73 |         |          |          |          |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 735         | 4.33       | 34.28 |         |          |          |          |          |          |
| W0007A    | 7/10/00  | 6:50     | 22        | CR-11        | 41.90 | -126.   | 1005        | 3.65       | 34.42 |         |          |          |          |          |          |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 1           | 12.71      | 33.14 | 15.56   | 95.80    | 30.89    | 5.17     | 64.91    | 9.21     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 5           | 12.72      | 33.14 | 16.45   | 105.40   | 40.82    | 6.52     | 64.58    | 8.90     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 10          | 12.63      | 33.14 | 15.79   | 94.70    | 33.27    | 5.81     | 61.43    | 8.53     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 15          | 12.52      | 33.14 | 34.37   | 98.30    | 31.76    | 5.36     | 66.54    | 14.57    |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 21          | 12.37      | 33.17 | 40.13   | 82.70    | 27.21    | 4.29     | 55.49    | 7.52     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 22          | 12.24      | 33.17 | 41.16   | 76.50    | 22.87    | 3.76     | 53.63    | 7.55     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 25          | 9.94       | 33.40 | 40.54   | 70.20    | 24.03    | 3.51     | 46.17    | 5.34     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 30          | 9.29       | 33.65 | 41.77   | 61.90    | 16.71    | 2.46     | 45.19    | 5.22     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 41          | 8.07       | 33.71 | 41.08   | 57.40    | 12.70    | 1.97     | 44.70    | 4.79     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.83       | 33.77 | 40.58   | 56.40    | 8.98     | 1.51     | 47.42    | 4.33     |
| W0009A    | 9/7/00   | 20:00    | 3         | NH-05        | 44.65 | -124.18 | 51          | 7.84       | 33.77 | 43.62   | 54.90    | 16.92    | 2.44     | 37.98    | 6.64     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 2           | 13.85      | 32.34 | 14.20   | 94.90    | 34.02    | 5.67     | 60.88    | 7.59     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 5           | 13.36      | 32.38 | 14.80   | 94.50    | 35.67    | 5.76     | 58.83    | 5.89     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 10          | 12.90      | 32.40 | 16.83   | 88.50    | 28.66    | 4.71     | 59.84    | 7.90     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 15          | 8.53       | 32.71 | 22.40   | 68.90    | 15.02    | 2.25     | 53.88    | 4.07     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 20          | 8.15       | 32.93 | 24.13   | 65.80    | 8.31     | 1.31     | 57.49    | 6.71     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 30          | 8.02       | 33.22 | 28.62   | 59.40    | 6.48     | 0.96     | 52.92    | 6.39     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 40          | 8.03       | 33.46 | 30.92   | 54.20    |          | 0.64     |          | 5.11     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 50          | 8.11       | 33.67 | 32.38   | 53.10    | 6.15     | 0.87     | 46.95    | 3.25     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 60          | 8.09       | 33.75 | 34.41   | 53.10    | 6.37     | 0.81     | 46.73    | 3.84     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 70          | 7.84       | 33.84 | 36.20   | 52.80    | 5.59     | 0.83     | 47.21    | 2.62     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 85          | 7.72       | 33.86 | 37.81   | 55.20    | 8.51     | 1.17     | 46.69    | 2.68     |
| W0009A    | 9/7/00   | 23:08    | 5         | NH-15        | 44.65 | -124.41 | 90          | 7.72       | 33.86 | 37.71   | 52.60    | 11.27    | 1.60     | 41.33    | 2.12     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 2           | 15.60      | 31.54 | 8.14    | 89.50    | 23.91    | 2.97     | 65.59    | 5.04     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 10          | 14.93      | 31.71 | 13.13   | 71.90    | 12.70    | 2.08     | 59.20    | 5.52     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 15          | 14.30      | 31.94 | 15.56   | 63.20    | 9.17     | 1.44     | 54.03    | 5.76     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 20          | 11.45      | 32.34 | 16.24   | 59.90    | 6.47     | 1.02     | 53.43    | 5.47     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 30          | 8.71       | 32.63 | 20.73   | 57.30    | 6.31     | 0.68     | 50.99    | 5.49     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 40          | 8.22       | 32.83 | 25.07   | 62.80    | 7.28     | 0.96     | 55.52    | 5.47     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 50          | 8.19       | 33.07 | 28.68   | 57.70    | 4.84     | 0.64     | 52.86    | 4.81     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 70          | 8.11       | 33.51 | 32.20   | 55.00    |          | 0.49     |          | 4.21     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 100         | 7.88       | 33.83 | 34.54   | 54.50    | 5.63     | 0.53     | 48.87    | 2.79     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 150         | 7.50       | 33.96 | 37.18   | 52.80    | 5.06     | 0.52     | 47.74    | 2.24     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 200         | 7.12       | 33.99 | 37.58   | 49.90    | 5.45     | 0.60     | 44.45    | 1.29     |
| W0009A    | 9/8/00   | 2:20     | 7         | NH-25        | 44.65 | -124.65 | 270         | 6.88       | 34.01 | 38.01   | 51.40    | 5.96     | 0.75     | 45.44    | 1.00     |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 1           | 16.01      | 32.08 | 7.16    | 82.60    | 9.73     | 1.37     | 72.87    | 5.71     |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 10          | 15.95      | 32.09 |         |          | 7.97     | 1.26     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 20          | 11.62      | 32.53 |         |          | 6.00     | 0.92     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 23          | 11.15      | 32.58 |         |          | 8.29     | 1.09     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 30          | 9.81       | 32.63 |         |          | 6.54     | 0.95     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 40          | 8.96       | 32.67 |         |          | 7.16     | 1.17     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 50          | 8.53       | 32.75 |         |          |          | 0.71     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 69          | 8.45       | 33.11 |         |          | 4.60     | 0.71     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.20       | 33.70 |         |          |          | 0.41     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 149         | 7.67       | 33.92 |         |          |          | 0.52     |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 310         | 6.60       | 34.03 |         |          |          |          |          |          |
| W0009A    | 9/8/00   | 5:38     | 8         | NH-35        | 44.65 | -124.88 | 374         | 6.27       | 34.05 |         |          |          |          |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 1           | 16.72      | 32.13 | 6.57    | 80.00    | 7.61     | 1.33     | 72.39    | 5.24     |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 10          | 16.67      | 32.13 |         |          | 8.60     | 1.52     |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 20          | 13.63      | 32.50 |         |          | 8.66     | 1.46     |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 26          | 12.40      | 32.57 |         |          | 6.47     | 1.26     |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 30          | 11.64      | 32.62 |         |          | 5.77     | 0.90     |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 40          | 9.97       | 32.67 |         |          | 6.03     | 0.90     |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 50          | 9.35       | 32.69 |         |          |          | 0.48     |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 70          | 8.74       | 32.77 |         |          | 5.03     | 0.48     |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 100         | 8.39       | 33.39 |         |          | 6.20     | 0.73     |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 150         | 7.94       | 33.85 |         |          |          |          |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.27       | 34.11 |         |          |          |          |          |          |
| W0009A    | 9/8/00   | 8:54     | 9         | NH-45        | 44.65 | -125.12 | 650         | 4.58       | 34.24 |         |          |          |          |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 1           | 16.16      | 32.08 | 6.82    | 79.40    | 7.12     | 0.94     | 72.28    | 5.87     |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 10          | 16.13      | 32.08 |         |          | 8.46     | 1.53     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 15          | 12.96      | 32.35 |         |          | 11.99    | 2.31     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 20          | 11.96      | 32.48 |         |          | 14.75    | 2.63     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 30          | 10.15      | 32.60 |         |          | 5.29     | 1.06     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 40          | 8.91       | 32.66 |         |          | 4.80     | 0.90     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 48          | 8.70       | 32.70 |         |          |          | 0.67     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 70          | 8.44       | 32.93 |         |          |          | 0.55     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 100         | 8.37       | 33.40 |         |          |          | 0.68     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 150         | 8.01       | 33.89 |         |          |          | 0.78     |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 861         | 4.04       | 34.35 |         |          |          |          |          |          |
| W0009A    | 9/8/00   | 14:57    | 11        | NH-65        | 44.65 | -125.6  | 1004        | 3.70       | 34.40 |         |          |          |          |          |          |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 1           | 16.14      | 31.93 | 8.26    |          | 11.45    | 1.55     |          | 6.62     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 10          | 16.14      | 31.94 | 8.37    |          | 11.00    | 1.69     |          | 6.58     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 20          | 14.18      | 32.33 | 9.59    |          | 11.95    | 1.87     |          | 6.59     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 25          | 12.86      | 32.39 | 10.58   |          | 9.88     | 1.52     |          | 6.30     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 30          | 12.60      | 32.53 | 13.26   |          | 8.64     | 1.28     |          | 6.31     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 40          | 10.22      | 32.72 | 18.03   |          | 8.96     | 1.10     |          | 5.86     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 50          | 9.31       | 32.89 | 21.07   |          | 6.34     | 0.67     |          | 5.68     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 70          | 8.86       | 33.27 | 25.89   |          | 5.37     | 0.45     |          | 4.35     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.36       | 33.53 | 28.91   |          |          | 0.37     |          | 3.28     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 150         | 7.78       | 33.91 | 34.58   |          |          | 0.36     |          | 2.79     |
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 900         | 3.81       | 34.35 |         |          | 42.80    |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0009A    | 9/8/00   | 18:06    | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.54       | 34.39 |         | 43.50    |          |          |          |          |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 1           | 13.47      | 33.04 | 16.43   | 89.30    | 17.09    | 2.71     | 72.21    | 6.67     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 5           | 13.00      | 33.08 | 18.11   |          | 13.20    | 2.11     |          | 7.60     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 10          | 12.99      | 33.07 | 24.87   |          | 32.73    | 5.50     |          | 8.31     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 15          | 11.17      | 33.25 | 30.31   |          | 22.82    | 4.12     |          | 8.90     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 20          | 9.87       | 33.39 | 35.08   |          | 4.44     | 0.91     |          | 7.71     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 24          | 9.41       | 33.60 | 36.37   |          | 8.28     | 1.64     |          | 6.91     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 30          | 9.21       | 33.65 | 37.44   |          | 6.06     | 1.32     |          | 7.84     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 39          | 8.88       | 33.65 | 38.89   |          | 7.17     | 1.32     |          | 7.41     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 45          | 8.81       | 33.66 | 38.93   |          | 8.01     | 1.39     |          | 8.30     |
| W0009A    | 9/12/00  | 0:30     | 39        | HH-01        | 44.00 | -124.2  | 49          | 8.70       | 33.69 | 39.19   |          | 9.71     | 1.59     |          | 7.31     |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 1           | 13.80      | 32.56 | 16.48   | 84.50    | 25.16    | 4.56     | 59.34    | 9.61     |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 5           | 13.78      | 32.56 |         |          | 28.32    | 4.76     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 10          | 12.81      | 32.61 |         |          | 12.18    | 2.33     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 20          | 10.17      | 32.80 |         |          | 6.47     | 1.44     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 25          | 8.77       | 32.99 |         |          |          | 0.80     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 30          | 8.35       | 33.19 |         |          |          | 0.73     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 40          | 8.27       | 33.46 |         |          |          | 0.54     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 50          | 8.24       | 33.59 |         |          |          | 0.43     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 60          | 8.19       | 33.75 |         |          |          | 0.70     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 70          | 8.07       | 33.81 |         |          |          | 0.71     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 100         | 7.82       | 33.92 |         |          | 4.78     | 0.88     |          |          |
| W0009A    | 9/12/00  | 2:12     | 40        | HH-02        | 44.00 | -124.4  | 110         | 7.73       | 33.96 |         |          | 6.27     | 1.03     |          |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 2           | 14.02      | 32.53 |         | 78.20    | 14.64    | 2.78     | 63.56    |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 11          | 10.84      | 32.62 |         | 67.80    | 11.21    | 2.06     | 56.59    |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 16          | 9.98       | 32.64 |         | 69.60    | 10.13    | 1.94     | 59.47    |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 21          | 9.21       | 32.76 |         | 67.80    | 9.80     | 1.98     | 58.00    |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 30          | 8.37       | 32.93 |         | 60.80    | 6.24     | 1.22     | 54.56    |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 40          | 8.13       | 33.39 |         | 60.00    | 5.36     | 1.11     | 54.64    |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 50          | 8.14       | 33.59 |         | 56.10    |          | 0.55     |          |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 60          | 8.24       | 33.75 |         | 56.40    |          | 0.60     |          |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 70          | 8.26       | 33.81 |         | 53.50    |          | 0.56     |          |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 100         | 7.95       | 33.93 |         | 55.60    | 3.63     | 0.63     | 51.97    |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 135         | 7.82       | 33.97 |         | 53.60    | 5.62     | 0.80     | 47.98    |          |
| W0009A    | 9/12/00  | 3:55     | 41        | HH-03        | 44.00 | -124.6  | 145         | 7.82       | 33.97 |         | 52.70    | 7.30     | 1.00     | 45.40    |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 1           | 14.16      | 32.47 | 14.05   | 88.70    | 15.16    | 2.93     | 73.54    | 10.10    |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 6           | 13.19      | 32.53 |         |          | 16.25    | 3.04     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 10          | 10.77      | 32.79 |         |          | 19.97    | 3.60     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 15          | 10.12      | 32.94 |         |          | 20.78    | 3.81     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 20          | 9.63       | 33.02 |         |          | 12.93    | 2.67     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 30          | 8.79       | 33.37 |         |          | 6.17     | 1.21     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 40          | 8.45       | 33.47 |         |          | 5.24     | 1.23     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 50          | 8.16       | 33.61 |         |          |          | 0.95     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 60          | 7.90       | 33.80 |         |          |          | 0.93     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 70          | 7.82       | 33.86 |         |          |          | 0.68     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 85          | 7.70       | 33.98 |         |          | 4.85     | 1.06     |          |          |
| W0009A    | 9/12/00  | 6:19     | 42        | HH-04        | 44.00 | -124.8  | 100         | 7.56       | 33.94 |         |          | 5.08     | 1.09     |          |          |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 2           | 14.10      | 32.36 | 12.36   | 85.00    | 17.30    | 3.35     | 67.70    | 7.79     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 11          | 12.72      | 32.37 | 15.07   | 73.40    | 16.48    | 3.09     | 56.92    | 7.71     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 20          | 8.95       | 32.70 | 23.32   | 60.30    | 5.91     | 1.17     | 54.39    | 7.71     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 30          | 8.30       | 32.95 | 27.21   | 55.50    | 4.88     | 0.79     | 50.62    | 7.68     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 40          | 8.18       | 33.14 | 30.76   | 56.20    |          | 0.70     |          | 7.03     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 50          | 8.17       | 33.35 | 33.87   | 52.20    | 4.56     | 0.72     | 47.64    | 6.88     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 70          | 8.13       | 33.74 | 37.70   | 47.40    |          | 0.55     |          | 5.87     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 100         | 7.96       | 33.91 | 38.64   | 55.70    |          | 0.79     |          | 5.69     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 150         | 7.72       | 33.99 | 40.31   | 51.90    |          |          |          | 6.18     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 300         | 6.53       | 34.05 | 42.22   | 52.90    |          |          |          | 5.16     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 501         | 5.46       | 34.10 | 45.95   | 50.80    |          |          |          | 4.66     |
| W0009A    | 9/12/00  | 8:47     | 43        | HH-05        | 44.00 | -125.   | 885         | 3.86       | 34.39 | 48.56   | 42.60    |          |          |          | 3.43     |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 1           | 14.53      | 32.20 | 12.36   | 85.60    | 15.70    | 3.24     | 69.90    | 8.88     |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 10          | 11.73      | 32.54 |         |          | 14.19    | 2.92     |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 12          | 11.27      | 32.54 |         |          | 11.86    | 2.56     |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 20          | 9.00       | 32.67 |         |          | 6.37     | 1.46     |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 30          | 8.37       | 32.85 |         |          |          | 0.98     |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 40          | 8.26       | 33.02 |         |          |          | 0.72     |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 50          | 8.38       | 33.19 |         |          |          | 0.65     |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 70          | 8.63       | 33.64 |         |          |          | 0.64     |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 100         | 8.09       | 33.86 |         |          |          | 0.42     |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 150         | 7.60       | 33.96 |         |          |          |          |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 350         | 6.13       | 34.06 |         |          |          |          |          |          |
| W0009A    | 9/12/00  | 12:24    | 44        | HH-07        | 44.00 | -125.2  | 1005        | 3.65       | 34.42 |         |          |          |          |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 1           | 15.54      | 31.89 | 10.44   | 86.40    | 12.23    | 2.18     | 74.17    | 8.07     |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 5           | 15.66      | 31.87 |         |          | 14.28    | 2.37     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 10          | 15.50      | 31.90 |         |          | 17.66    | 3.40     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 16          | 12.94      | 32.30 |         |          | 7.42     | 1.52     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 20          | 10.78      | 32.48 |         |          | 6.72     | 1.32     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 30          | 8.82       | 32.67 |         |          | 5.43     | 0.96     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 40          | 8.46       | 32.79 |         |          |          | 0.97     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 50          | 8.80       | 33.14 |         |          |          | 0.60     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 70          | 9.02       | 33.42 |         |          |          | 0.49     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 100         | 8.39       | 33.67 |         |          |          | 0.60     |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 150         | 7.71       | 33.92 |         |          |          |          |          |          |
| W0009A    | 9/12/00  | 14:07    | 45        | HH-09        | 44.00 | -125.4  | 1005        | 3.59       | 34.41 |         |          |          |          |          |          |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 1           | 11.48      | 33.32 | 27.58   | 76.50    | 25.48    | 5.06     | 51.02    | 10.08    |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 5           | 11.52      | 33.32 | 27.53   | 70.20    | 26.85    | 5.29     | 43.35    | 9.93     |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 10          | 11.07      | 33.38 | 28.48   | 73.10    | 24.47    | 4.70     | 48.63    | 11.01    |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 15          | 10.69      | 33.40 | 28.74   | 73.80    | 19.87    | 3.87     | 53.93    | 10.75    |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 21          | 10.32      | 33.53 | 28.29   | 75.30    | 19.28    | 3.80     | 56.02    | 9.78     |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 23          | 10.24      | 33.55 | 28.38   | 70.60    | 18.29    | 3.48     | 52.31    | 9.98     |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 25          | 10.11      | 33.58 | 29.28   | 65.90    | 17.22    | 3.25     | 48.68    | 10.11    |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 30          | 9.71       | 33.62 | 31.88   | 62.80    | 13.69    | 2.49     | 49.11    | 10.81    |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 41          | 8.89       | 33.83 | 37.47   | 57.50    | 7.40     | 1.38     | 50.10    | 9.78     |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 55          | 8.82       | 33.85 | 41.69   | 53.90    | 7.85     | 1.22     | 46.05    | 8.07     |
| W0009A    | 9/9/00   | 15:19    | 19        | FM-03        | 43.22 | -124.5  | 59          | 8.81       | 33.85 | 41.63   | 63.50    | 11.19    | 1.58     | 52.31    | 8.27     |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 2           | 11.88      | 33.12 | 22.08   | 68.70    | 17.00    | 3.51     | 51.70    | 7.41     |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 5           | 11.57      | 33.20 |         |          | 18.20    | 3.46     |          |          |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 10          | 11.26      | 33.24 |         |          | 14.69    | 2.75     |          |          |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 20          | 9.70       | 33.57 |         |          | 10.28    | 1.74     |          |          |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 30          | 9.37       | 33.64 |         |          | 6.75     | 1.27     |          |          |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 40          | 9.04       | 33.79 |         |          | 7.16     | 0.96     |          |          |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 50          | 8.86       | 33.79 |         |          | 6.12     | 0.83     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 60          | 8.61       | 33.81 |         |          | 6.12     | 0.74     |          |          |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 71          | 8.30       | 33.87 |         |          | 6.87     | 0.88     |          |          |
| W0009A    | 9/9/00   | 13:32    | 18        | FM-04        | 43.22 | -124.58 | 80          | 8.09       | 33.92 |         |          | 7.28     | 0.80     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 1           | 12.15      | 32.91 | 19.60   | 76.40    | 19.65    | 3.44     | 56.75    | 7.00     |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 10          | 11.66      | 32.97 |         |          | 20.63    | 3.68     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 13          | 11.25      | 33.06 |         |          | 18.78    | 3.40     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 20          | 9.37       | 33.23 |         |          | 9.12     | 1.47     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 30          | 8.81       | 33.55 |         |          | 4.91     | 0.67     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 40          | 8.74       | 33.60 |         |          | 5.33     | 0.65     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 50          | 8.90       | 33.74 |         |          | 8.27     | 1.04     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 60          | 8.56       | 33.79 |         |          |          | 0.73     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 70          | 8.59       | 33.86 |         |          | 5.99     | 0.89     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 100         | 8.14       | 33.93 |         |          | 6.32     | 0.76     |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 108         | 8.11       | 33.93 |         |          |          |          |          |          |
| W0009A    | 9/9/00   | 11:32    | 17        | FM-05        | 43.22 | -124.67 | 142         | 7.86       | 33.98 |         |          |          |          |          |          |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 1           | 13.04      | 32.71 | 13.58   | 70.40    | 11.08    | 2.42     | 59.32    | 7.15     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 10          | 11.72      | 32.77 | 15.92   | 73.70    | 9.50     | 1.96     | 64.20    | 8.04     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 15          | 11.37      | 32.79 | 16.00   | 72.00    | 10.89    | 1.85     | 61.11    | 7.08     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 20          | 10.50      | 32.77 | 19.71   | 66.80    | 7.41     | 1.45     | 59.39    | 7.83     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 30          | 9.61       | 33.05 | 23.31   | 57.70    | 6.09     | 0.98     | 51.61    | 6.75     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 40          | 9.32       | 33.19 | 27.77   | 57.20    | 6.93     | 0.74     | 50.27    | 6.74     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 50          | 8.91       | 33.27 | 29.45   | 52.80    | 5.79     | 0.85     | 47.01    | 5.73     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 71          | 8.76       | 33.62 | 30.69   | 52.60    | 5.65     | 0.49     | 46.95    | 5.37     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 100         | 8.52       | 33.81 | 34.50   | 55.70    | 4.93     | 0.54     | 50.77    | 4.34     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 150         | 7.74       | 33.96 | 36.59   | 53.90    |          |          |          | 3.18     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 175         | 7.52       | 33.97 | 36.19   | 53.80    |          |          |          | 2.79     |
| W0009A    | 9/9/00   | 7:39     | 15        | FM-07        | 43.22 | -124.83 | 302         | 6.55       | 34.06 | 39.38   | 49.20    |          |          |          | 1.94     |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 1           | 13.40      | 32.67 | 13.18   | 73.20    | 14.64    | 2.53     | 58.56    | 6.97     |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 10          | 12.65      | 32.66 |         |          | 17.07    | 2.68     |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 20          | 9.41       | 32.76 |         |          | 10.67    | 1.66     |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 30          | 9.12       | 32.89 |         |          | 6.78     | 1.04     |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 40          | 8.78       | 33.08 |         |          | 6.29     | 0.85     |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 50          | 8.83       | 33.30 |         |          | 7.44     | 0.85     |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 70          | 8.70       | 33.58 |         |          |          | 0.52     |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 100         | 8.49       | 33.83 |         |          | 5.81     | 0.70     |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 150         | 7.79       | 33.95 |         |          |          |          |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 225         | 7.03       | 34.00 |         |          |          |          |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 885         | 3.85       | 34.39 |         |          |          |          |          |          |
| W0009A    | 9/9/00   | 5:25     | 14        | FM-08        | 43.22 | -125.   | 1005        | 3.53       | 34.44 |         |          |          |          |          |          |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 2           | 16.15      | 32.34 | 8.32    |          | 10.70    | 1.81     |          | 6.24     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 10          | 16.01      | 32.38 | 9.89    |          | 8.34     | 1.25     |          | 8.01     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 20          | 10.40      | 32.62 | 15.38   |          | 9.71     | 1.62     |          | 7.69     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 26          | 9.64       | 32.79 | 17.79   |          | 9.50     | 1.59     |          | 7.12     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 30          | 9.16       | 32.78 | 19.46   |          | 7.90     | 1.21     |          | 7.35     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 40          | 8.88       | 32.95 | 22.18   |          | 5.58     | 0.62     |          | 7.78     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 50          | 8.51       | 33.12 | 25.21   |          | 4.87     | 0.65     |          | 5.78     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 68          | 8.66       | 33.48 | 30.23   |          | 6.21     | 0.70     |          | 5.42     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 100         | 8.09       | 33.75 | 33.45   |          | 5.71     | 0.62     |          | 4.86     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 151         | 7.58       | 33.93 | 35.82   |          |          |          |          | 5.12     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 625         | 4.66       | 34.23 | 45.47   |          |          |          |          | 1.30     |
| W0009A    | 9/9/00   | 3:31     | 13        | FM-09        | 43.22 | -125.17 | 980         | 3.62       | 34.42 | 45.87   | 39.50    |          |          |          | 0.47     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 1           | 13.37      | 33.53 | 33.58   | 71.20    | 16.62    | 3.22     | 54.58    | 11.34    |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 3           | 10.36      | 33.53 | 33.40   | 75.10    | 18.06    | 3.50     | 57.04    | 10.95    |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 5           | 10.32      | 33.53 | 33.36   | 76.50    | 16.43    | 3.12     | 60.07    | 11.12    |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 9           | 9.97       | 33.53 | 33.76   | 65.80    | 14.29    | 2.73     | 51.51    | 10.25    |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 10          | 9.65       | 33.60 |         | 65.50    | 10.53    | 2.06     | 54.97    |          |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 15          | 9.50       | 33.67 | 37.77   |          | 6.70     | 1.13     |          | 8.00     |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 20          | 8.87       | 33.77 | 38.17   |          | 5.45     | 0.77     |          | 8.74     |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 25          | 8.63       | 33.80 | 43.53   |          | 5.87     | 0.74     |          | 12.39    |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 30          | 8.42       | 33.86 | 39.12   |          | 6.57     | 1.02     |          | 7.83     |
| W0009A    | 9/11/00  | 15:12    | 38        | RR-01        | 42.50 | -124.5 | 32          | 8.43       | 33.85 | 40.51   |          | 5.72     | 0.88     |          | 9.39     |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 2           | 10.84      | 33.12 | 25.23   | 70.30    | 15.03    | 3.03     | 55.27    | 8.48     |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 5           | 10.84      | 33.12 |         |          | 14.61    | 3.03     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 11          | 10.81      | 33.13 |         |          | 14.22    | 2.89     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 15          | 10.76      | 33.14 |         |          | 14.54    | 2.83     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 19          | 10.06      | 33.14 |         |          | 11.61    | 2.30     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 30          | 9.48       | 33.33 |         |          | 7.42     | 1.38     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 40          | 9.06       | 33.55 |         |          |          | 0.61     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 50          | 8.99       | 33.72 |         |          | 4.64     | 0.63     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 60          | 8.65       | 33.79 |         |          |          | 0.56     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 70          | 8.54       | 33.83 |         |          |          | 0.56     |          |          |
| W0009A    | 9/11/00  | 13:59    | 37        | RR-02        | 42.50 | -124.6 | 81          | 8.19       | 33.91 |         |          |          | 0.56     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 2           | 13.76      | 32.68 | 12.91   | 75.00    | 10.64    | 1.95     | 64.36    | 7.53     |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 5           | 13.75      | 32.68 |         |          | 10.24    | 1.81     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 10          | 12.52      | 32.74 |         |          | 8.81     | 1.68     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 15          | 10.75      | 32.91 |         |          | 8.05     | 1.37     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 20          | 9.70       | 32.96 |         |          | 7.37     | 1.21     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 30          | 9.27       | 33.35 |         |          | 5.01     | 0.76     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 40          | 9.12       | 33.49 |         |          |          | 0.46     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 50          | 8.92       | 33.64 |         |          |          | 0.38     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 61          | 8.75       | 33.73 |         |          |          | 0.40     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 70          | 8.58       | 33.81 |         |          | 5.52     | 0.65     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 100         | 8.19       | 33.93 |         |          |          | 0.60     |          |          |
| W0009A    | 9/11/00  | 10:57    | 36        | RR-03        | 42.50 | -124.7 | 120         | 8.06       | 33.94 |         |          |          |          |          |          |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 2           | 12.99      | 32.74 | 15.97   | 71.10    | 12.15    | 2.32     | 58.95    | 9.10     |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 10          | 12.52      | 32.77 | 20.29   | 69.70    | 11.58    | 2.07     | 58.12    | 10.02    |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 15          | 12.17      | 33.13 | 23.69   | 65.20    | 9.82     | 1.84     | 55.38    | 11.03    |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 20          | 12.15      | 33.20 | 22.54   | 64.70    | 7.32     | 1.64     | 57.38    | 9.55     |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 30          | 11.54      | 33.21 | 24.37   | 64.30    | 5.26     | 1.08     | 59.04    | 11.16    |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 40          | 10.75      | 33.22 | 26.73   | 65.90    | 7.95     | 1.27     | 57.95    | 9.88     |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 50          | 9.39       | 33.35 |         | 54.30    |          | 0.51     |          |          |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 70          | 8.74       | 33.70 | 30.32   | 54.50    |          | 0.58     |          | 3.47     |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 100         | 8.44       | 33.86 | 33.00   | 49.30    | 5.00     | 0.68     | 44.30    | 2.65     |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 150         | 7.83       | 33.98 | 40.92   | 49.10    |          |          |          | 8.47     |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 440         | 5.74       | 34.08 | 46.28   | 49.30    |          |          |          | 6.81     |
| W0009A    | 9/11/00  | 7:29     | 35        | RR-04        | 42.50 | -124.8 | 500         | 5.58       | 34.14 | 46.34   | 48.00    |          |          |          | 6.11     |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 2           | 13.23      | 32.84 | 15.76   | 72.60    | 17.61    | 2.99     | 54.99    | 6.98     |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 10          | 12.49      | 32.84 |         |          | 14.60    | 2.45     |          |          |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 19          | 11.60      | 32.99 |         |          | 12.66    | 2.37     |          |          |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 23          | 11.62      | 33.08 |         |          | 8.81     | 1.65     |          |          |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 29          | 11.00      | 33.15 |         |          | 5.19     | 1.02     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 38          | 9.32       | 33.00 |         |          |          |          | 0.61     |          |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 71          | 8.69       | 33.73 |         |          |          |          | 0.53     |          |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 100         | 8.41       | 33.90 |         |          | 4.89     |          | 0.54     |          |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 150         | 7.93       | 33.98 |         |          |          |          |          |          |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 815         | 4.24       | 34.33 |         |          |          |          |          |          |
| W0009A    | 9/11/00  | 4:12     | 33        | RR-06        | 42.50 | -125.  | 1006        | 3.63       | 34.43 |         |          |          |          |          |          |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 1           | 14.91      | 32.60 | 9.40    | 70.00    | 10.96    | 1.80     | 59.04    | 7.17     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 10          | 12.31      | 32.61 | 11.10   | 69.10    | 9.28     | 1.41     | 59.82    | 7.55     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 18          | 9.21       | 32.72 | 14.70   | 64.40    | 6.46     | 1.00     | 57.94    | 6.59     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 20          | 9.10       | 32.74 | 16.42   | 68.50    | 5.22     | 0.70     | 63.28    | 7.83     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 30          | 8.99       | 32.92 | 28.17   | 59.10    | 5.38     | 0.85     | 53.72    | 8.65     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 40          | 9.53       | 33.29 | 27.17   | 58.50    | 8.52     | 1.30     | 49.98    | 7.71     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 50          | 9.35       | 33.47 | 29.66   | 57.50    |          | 0.65     |          | 8.18     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 70          | 8.81       | 33.77 | 35.78   | 51.90    |          | 0.35     |          | 7.85     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 100         | 8.32       | 33.93 | 39.22   | 50.30    |          |          |          | 7.67     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 150         | 7.94       | 34.00 | 40.29   | 48.60    |          |          |          | 7.16     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 830         | 4.18       | 34.34 | 48.15   | 44.90    |          |          |          | 3.28     |
| W0009A    | 9/11/00  | 2:15     | 32        | RR-07        | 42.50 | -125.2 | 1007        | 3.71       | 34.41 | 49.53   | 42.60    |          |          |          | 4.28     |
| W0009A    | 9/10/00  | 0:07     | 21        | CR-01        | 41.90 | -124.3 | 2           | 9.77       | 33.74 | 33.86   | 65.10    | 8.00     | 1.70     | 57.10    | 5.21     |
| W0009A    | 9/10/00  | 0:07     | 21        | CR-01        | 41.90 | -124.3 | 5           | 9.63       | 33.74 | 33.77   | 63.00    | 7.10     | 1.29     | 55.90    | 5.48     |
| W0009A    | 9/10/00  | 0:07     | 21        | CR-01        | 41.90 | -124.3 | 10          | 9.51       | 33.76 | 34.37   | 69.20    | 7.56     | 1.39     | 61.64    | 5.88     |
| W0009A    | 9/10/00  | 0:07     | 21        | CR-01        | 41.90 | -124.3 | 15          | 9.45       | 33.77 | 34.50   | 64.40    | 7.14     | 1.20     | 57.26    | 6.28     |
| W0009A    | 9/10/00  | 0:07     | 21        | CR-01        | 41.90 | -124.3 | 20          | 9.52       | 33.76 | 35.00   | 62.40    | 7.52     | 1.20     | 54.88    | 6.47     |
| W0009A    | 9/10/00  | 0:07     | 21        | CR-01        | 41.90 | -124.3 | 25          | 9.51       | 33.76 | 35.22   | 60.50    | 7.47     | 1.20     | 53.03    | 6.31     |
| W0009A    | 9/10/00  | 0:07     | 21        | CR-01        | 41.90 | -124.3 | 30          | 9.48       | 33.76 | 35.11   | 61.50    | 6.79     | 1.33     | 54.71    | 5.42     |
| W0009A    | 9/10/00  | 0:07     | 21        | CR-01        | 41.90 | -124.3 | 35          | 9.10       | 33.79 | 35.77   | 64.30    | 9.88     | 1.63     | 54.42    | 5.25     |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 1           | 10.29      | 33.64 | 27.40   | 64.50    | 7.11     | 1.32     | 57.39    | 6.34     |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 5           | 10.28      | 33.64 |         |          | 7.58     |          | 1.32     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 10          | 10.26      | 33.64 |         |          | 7.74     |          | 1.33     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 19          | 10.24      | 33.64 |         |          | 8.72     |          | 1.48     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 30          | 9.19       | 33.76 |         |          | 7.54     |          | 1.18     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 40          | 8.83       | 33.87 |         |          | 5.60     |          | 0.84     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 50          | 8.71       | 33.90 |         |          | 4.99     |          | 0.72     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 61          | 8.59       | 33.92 |         |          | 5.45     |          | 0.81     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 71          | 8.51       | 33.94 |         |          | 5.04     |          | 0.57     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 80          | 8.47       | 33.95 |         |          | 5.01     |          | 0.81     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 100         | 8.21       | 33.99 |         |          | 5.57     |          | 0.73     |          |
| W0009A    | 9/10/00  | 3:12     | 23        | CR-03        | 41.90 | -124.5 | 129         | 8.03       | 34.01 |         |          | 6.02     |          | 0.84     |          |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 2           | 11.00      | 33.48 | 24.08   | 72.50    | 13.04    | 1.81     | 59.46    | 8.22     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 10          | 11.00      | 33.48 | 23.66   | 65.70    | 9.20     | 1.60     | 56.50    | 7.88     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 20          | 10.99      | 33.48 | 24.06   | 71.10    | 10.40    | 1.65     | 60.70    | 7.94     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 30          | 10.08      | 33.45 | 26.23   | 63.90    | 6.26     | 0.97     | 57.64    | 7.37     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 40          | 9.58       | 33.60 | 30.39   | 58.40    | 9.20     | 1.14     | 49.20    | 8.42     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 50          | 9.00       | 33.68 | 31.95   |          | 5.05     |          | 0.64     |          |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 70          | 8.86       | 33.83 | 34.25   | 57.99    |          | 0.54     |          | 6.31     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 100         | 8.63       | 33.89 | 36.12   | 54.20    | 6.36     | 0.76     | 47.84    | 5.22     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 150         | 8.09       | 34.00 | 38.73   | 50.30    |          |          |          | 5.58     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 320         | 6.60       | 34.07 | 41.28   | 46.10    |          |          |          | 4.38     |
| W0009A    | 9/10/00  | 5:09     | 24        | CR-04        | 41.90 | -124.6 | 444         | 5.69       | 34.07 | 43.65   | 46.13    |          |          |          | 3.44     |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7 | 2           | 11.08      | 33.40 | 22.38   | 60.60    | 10.06    | 1.77     | 50.54    | 7.87     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 4           | 11.07      | 33.41 |         |          | 8.92     | 1.65     |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 10          | 10.87      | 33.49 |         |          | 7.39     | 1.65     |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 19          | 10.74      | 33.52 |         |          | 6.78     | 1.46     |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 30          | 9.66       | 33.49 |         |          | 6.52     | 1.11     |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 40          | 9.27       | 33.53 |         |          | 5.90     | 0.54     |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 51          | 9.12       | 33.56 |         |          | 0.48     |          |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 70          | 8.80       | 33.71 |         |          | 5.12     | 0.57     |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 101         | 8.54       | 33.83 |         |          | 0.40     |          |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 151         | 7.82       | 33.93 |         |          |          |          |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 500         | 5.39       | 34.12 |         |          |          |          |          |          |
| W0009A    | 9/10/00  | 7:46     | 25        | CR-05        | 41.90 | -124.7  | 650         | 4.55       | 34.26 |         |          |          |          |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 1           | 12.61      | 33.05 | 14.70   | 70.10    | 12.68    | 2.36     | 57.42    | 6.19     |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 10          | 12.59      | 33.06 |         |          | 12.53    | 2.25     |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 20          | 11.52      | 33.22 |         |          | 12.17    | 2.16     |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 23          | 10.90      | 33.39 |         |          | 11.50    | 2.17     |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 30          | 10.67      | 33.50 |         |          | 9.88     | 1.69     |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 40          | 10.12      | 33.49 |         |          | 7.25     | 1.26     |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 50          | 9.26       | 33.53 |         |          | 0.67     |          |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 70          | 9.14       | 33.72 |         |          | 0.35     |          |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 100         | 8.40       | 33.80 |         |          | 0.31     |          |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 150         | 7.94       | 33.97 |         |          |          |          |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 500         | 5.07       | 34.15 |         |          |          |          |          |          |
| W0009A    | 9/10/00  | 12:40    | 27        | CR-07        | 41.90 | -125.   | 590         | 4.84       | 34.20 |         |          |          |          |          |          |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 1           | 13.92      | 32.86 | 11.17   | 75.70    | 9.40     | 1.65     | 66.30    | 7.10     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 10          | 12.59      | 32.92 | 13.22   | 79.50    | 10.27    | 2.03     | 69.23    | 6.69     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 20          | 12.16      | 33.05 | 16.94   | 74.00    | 11.42    | 2.02     | 62.58    | 7.59     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 25          | 11.58      | 33.10 | 18.59   | 70.20    | 7.50     | 1.49     | 62.70    | 7.82     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 30          | 11.37      | 33.12 | 18.88   | 67.70    | 7.75     | 1.52     | 59.95    | 7.41     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 40          | 11.26      | 33.21 | 19.49   | 71.30    | 6.70     | 1.20     | 64.60    | 7.71     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 50          | 11.22      | 33.32 | 21.25   | 70.61    | 8.38     | 1.53     | 62.23    | 7.72     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 70          | 10.23      | 33.40 | 24.65   | 67.50    | 6.24     | 0.96     | 61.26    | 7.01     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 100         | 9.05       | 33.68 | 31.10   | 52.90    |          | 0.51     |          | 5.50     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 150         | 8.29       | 33.88 | 34.68   | 48.10    |          |          |          | 5.03     |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 830         | 4.05       | 34.37 |         |          | 41.09    |          |          |          |
| W0009A    | 9/10/00  | 16:10    | 29        | CR-09        | 41.90 | -125.4  | 1005        | 3.69       | 34.43 |         |          | 38.34    |          |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 1           | 15.06      | 32.80 | 9.95    | 70.30    | 6.80     | 1.25     | 63.50    | 6.28     |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 10          | 14.91      | 32.84 |         |          | 7.95     | 1.65     |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 20          | 14.68      | 32.94 |         |          | 7.12     | 1.38     |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 30          | 11.05      | 33.10 |         |          | 5.93     | 1.38     |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 34          | 10.08      | 33.28 |         |          | 10.22    | 2.42     |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 40          | 9.73       | 33.40 |         |          | 5.27     | 0.77     |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 50          | 9.65       | 33.52 |         |          | 0.71     |          |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 70          | 8.89       | 33.66 |         |          | 0.52     |          |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 100         | 8.40       | 33.82 |         |          | 4.94     | 0.53     |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 151         | 7.68       | 33.95 |         |          |          |          |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 630         | 4.51       | 34.24 |         |          |          |          |          |          |
| W0009A    | 9/10/00  | 20:41    | 31        | CR-11        | 41.90 | -126.   | 1004        | 3.60       | 34.43 |         |          |          |          |          |          |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 2           | 10.32      | 32.68 | 14.88   | 57.29    |          |          |          |          |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 5           | 10.33      | 32.68 | 16.49   | 55.86    |          |          |          |          |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 10          | 10.31      | 32.69 | 16.12   | 53.56    | 7.52     | 0.91     | 46.04    | 10.52    |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 15          | 10.32      | 32.69 | 16.73   | 52.05    | 7.88     | 1.02     | 44.18    | 10.72    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 20          | 10.32      | 32.70 | 16.62   | 53.65    | 6.63     | 1.00     | 47.02    | 10.76    |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 25          | 10.31      | 32.70 | 16.23   | 49.48    | 8.69     | 1.19     | 40.80    | 10.05    |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 30          | 10.30      | 32.70 | 17.44   | 50.81    | 9.19     | 1.17     | 41.62    | 11.11    |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 38          | 10.24      | 32.69 | 16.85   | 52.31    | 7.63     | 1.25     | 44.68    | 10.21    |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 40          | 10.24      | 32.69 | 16.47   | 49.89    | 11.54    | 1.48     | 38.34    | 9.52     |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 50          | 10.16      | 32.68 | 18.53   | 52.60    | 11.09    | 1.71     | 41.51    | 11.41    |
| W0101C    | 1/27/01  | 21:20    | 3         | NH-05        | 44.65 | -124.18 | 51          | 10.16      | 32.68 | 19.24   | 52.04    | 11.08    | 1.62     | 40.96    | 10.37    |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 1           | 10.51      | 32.71 | 15.86   | 58.41    | 6.85     | 0.90     | 51.57    | 10.53    |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 5           | 10.51      | 32.71 | 15.11   | 54.43    | 7.65     | 0.81     | 46.78    | 9.73     |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 10          | 10.51      | 32.71 | 15.06   | 55.76    | 10.07    | 0.90     | 45.69    | 9.81     |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 20          | 10.49      | 32.71 | 14.61   |          | 6.49     | 0.76     |          | 9.46     |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 29          | 10.49      | 32.71 | 15.28   | 51.60    | 8.00     | 0.82     | 43.60    | 9.89     |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 40          | 10.53      | 32.76 | 16.14   | 50.05    | 5.01     | 0.63     | 45.04    | 9.82     |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 45          | 10.34      | 32.86 | 19.32   | 45.96    | 5.36     | 0.81     | 40.60    | 10.21    |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 50          | 10.27      | 32.90 | 20.37   | 45.34    |          |          |          |          |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 60          | 10.14      | 32.95 | 21.22   | 45.04    | 5.25     | 0.73     | 39.79    | 9.71     |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 65          | 10.12      | 32.96 | 21.66   | 45.43    | 7.43     | 0.84     | 38.00    | 9.86     |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 70          | 10.11      | 32.97 | 22.73   | 46.34    | 9.15     | 0.95     | 37.19    | 10.56    |
| W0101C    | 1/28/01  | 0:52     | 5         | NH-15        | 44.65 | -124.41 | 86          | 10.02      | 33.02 | 22.88   | 48.89    | 8.04     | 0.85     | 40.84    | 10.00    |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 1           | 10.38      | 32.72 | 13.29   | 52.17    | 7.27     | 1.02     | 44.90    | 7.31     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 10          | 10.38      | 32.72 | 12.66   | 53.58    | 8.80     | 1.22     | 44.78    | 6.36     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 15          | 10.35      | 32.71 | 13.31   | 50.36    | 7.28     | 1.02     | 43.08    | 7.26     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 20          | 10.35      | 32.71 | 13.29   | 49.79    | 6.35     | 0.94     | 43.44    | 7.27     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 30          | 10.30      | 32.70 | 13.53   | 52.19    | 5.70     | 0.99     | 46.49    | 7.36     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 37          | 10.30      | 32.70 | 13.29   | 54.22    |          | 0.66     |          | 7.43     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 50          | 10.29      | 32.70 | 16.31   | 48.78    |          | 0.97     |          | 10.08    |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 71          | 10.22      | 32.75 | 17.58   | 45.69    |          | 0.73     |          | 10.08    |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 100         | 8.99       | 33.35 | 29.69   | 42.77    |          | 0.37     |          | 9.79     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 151         | 8.73       | 33.68 | 34.22   | 41.97    |          |          |          | 8.88     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 201         | 8.10       | 33.90 | 38.35   | 40.26    |          |          |          | 7.54     |
| W0101C    | 1/28/01  | 4:01     | 7         | NH-25        | 44.65 | -124.65 | 287         | 7.30       | 33.98 | 40.15   | 37.94    |          |          |          | 5.90     |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 2           | 9.96       | 32.65 | 14.86   |          |          | 0.66     |          | 8.57     |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 10          | 9.96       | 32.65 |         |          | 0.60     |          |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 20          | 9.97       | 32.65 |         |          | 0.87     |          |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 25          | 9.97       | 32.65 |         |          | 0.88     |          |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 31          | 9.97       | 32.65 |         |          | 8.42     | 0.77     |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 40          | 9.97       | 32.65 |         |          | 4.89     | 0.74     |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 50          | 9.97       | 32.65 |         |          |          | 0.63     |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 68          | 9.85       | 32.81 |         |          | 5.24     | 0.60     |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 100         | 9.18       | 33.29 |         |          | 5.50     | 0.54     |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 150         | 8.52       | 33.64 |         |          |          |          |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 300         | 6.97       | 34.01 |         |          |          |          |          |          |
| W0101C    | 1/28/01  | 7:27     | 8         | NH-35        | 44.65 | -124.88 | 426         | 6.18       | 34.04 |         |          |          |          |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 1           |            |       |         |          | 6.28     | 0.93     |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 10          | 10.03      | 32.66 | 14.38   |          | 6.94     | 0.84     |          | 7.84     |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 20          | 10.05      | 32.67 |         |          | 6.65     | 0.96     |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 25          | 10.03      | 32.66 |         |          | 7.13     | 0.88     |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 30          | 10.05      | 32.66 |         |          | 7.24     | 0.85     |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 40          | 10.09      | 32.67 |         |          | 4.89     | 0.79     |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 50          | 10.11      | 32.68 |         |          | 5.07     | 0.63     |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 70          | 10.08      | 32.68 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 100         | 8.91       | 33.17 |         |          |          |          | 0.36     |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 150         | 8.45       | 33.67 |         |          |          |          |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 500         | 4.96       | 34.17 |         |          |          |          |          |          |
| W0101C    | 1/28/01  | 12:37    | 9         | NH-45        | 44.65 | -125.12 | 624         | 4.55       | 34.24 |         |          |          |          |          |          |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 3           | 9.57       | 32.52 | 13.23   |          | 4.87     | 0.34     |          | 8.11     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 20          | 9.58       | 32.52 | 11.63   |          | 6.06     | 0.68     |          | 6.24     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 28          | 9.58       | 32.52 | 11.15   |          | 4.71     | 0.55     |          | 5.37     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 30          | 9.58       | 32.52 | 11.66   |          |          | 0.61     |          | 6.09     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 40          | 9.58       | 32.52 | 11.40   |          | 6.54     | 0.58     |          | 5.37     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 50          | 9.58       | 32.52 | 11.36   |          | 6.01     | 0.59     |          | 5.94     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 70          | 8.61       | 32.76 | 18.23   |          |          | 0.49     |          | 6.55     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 100         | 7.93       | 33.39 | 27.87   |          |          | 0.29     |          | 5.33     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 150         | 7.80       | 33.89 | 33.93   |          |          |          |          | 4.00     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 870         | 3.90       | 34.34 | 46.91   |          |          |          |          | 1.81     |
| W0101C    | 1/28/01  | 19:49    | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.58       | 34.40 | 49.79   |          |          |          |          | 4.57     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 2           | 9.82       | 32.57 | 8.95    |          | 16.21    | 2.11     |          | 3.95     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 5           | 9.83       | 32.57 | 9.30    |          | 18.31    | 2.25     |          | 4.13     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 10          | 9.78       | 32.57 | 9.24    |          | 15.50    | 1.86     |          | 4.15     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 13          | 9.78       | 32.57 | 9.41    |          | 14.19    | 2.00     |          | 5.17     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 15          | 9.70       | 32.58 | 9.57    |          | 9.71     | 1.54     |          | 4.87     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 20          | 9.65       | 32.60 | 10.50   |          | 8.49     | 1.31     |          | 4.82     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 25          | 9.66       | 32.61 | 11.12   |          | 6.29     | 0.93     |          | 5.13     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 30          | 9.68       | 32.62 | 11.12   |          | 6.97     | 1.20     |          | 5.57     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 40          | 9.69       | 32.67 | 12.28   |          | 10.67    | 1.37     |          | 6.66     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 42          | 9.69       | 32.67 | 11.74   |          | 7.93     | 1.31     |          | 5.80     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 50          | 9.20       | 33.21 | 25.61   |          | 7.22     | 0.99     |          | 5.60     |
| W0103B    | 3/20/01  | 21:02    | 3         | NH-05        | 44.65 | -124.18 | 55          | 9.09       | 33.31 | 28.69   |          | 13.40    | 1.49     |          | 7.04     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 1           | 9.71       | 32.71 | 12.53   |          | 10.08    | 1.19     |          | 6.36     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 5           | 9.71       | 32.71 | 12.72   |          | 8.16     | 1.11     |          | 6.85     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 10          | 9.70       | 32.71 | 13.32   |          | 6.78     | 0.98     |          | 7.59     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 20          | 9.70       | 32.71 | 12.53   |          | 6.69     | 1.06     |          | 6.78     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 23          | 9.70       | 32.71 | 12.62   |          | 5.23     | 0.78     |          | 7.18     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 31          | 9.68       | 32.72 | 12.49   |          | 4.88     | 0.85     |          | 6.04     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 40          | 9.66       | 32.72 | 13.21   |          | 3.93     | 0.74     |          | 6.30     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 49          | 9.54       | 32.82 | 14.57   |          |          | 0.45     |          | 4.60     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 60          | 9.46       | 32.94 | 18.29   |          |          | 0.49     |          | 3.03     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 70          | 9.29       | 33.19 | 24.82   |          | 3.21     | 0.42     |          | 6.31     |
| W0103B    | 3/20/01  | 23:55    | 5         | NH-15        | 44.65 | -124.41 | 87          | 8.74       | 33.56 | 31.16   |          | 2.96     | 0.41     |          | 6.52     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 2           | 9.64       | 32.70 | 12.08   | 56.09    | 4.48     | 0.75     | 51.61    | 6.72     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 10          | 9.64       | 32.70 | 12.45   | 54.57    | 4.36     | 0.73     | 50.21    | 7.02     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 20          | 9.65       | 32.70 | 14.93   | 55.50    | 4.15     | 0.65     | 51.35    | 9.87     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 30          | 9.65       | 32.70 | 12.62   | 54.40    | 4.19     | 0.68     | 50.21    | 7.30     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 41          | 9.63       | 32.70 | 12.36   | 51.10    | 3.07     | 0.55     | 48.03    | 6.96     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 44          | 9.63       | 32.70 | 12.49   | 48.66    | 3.58     | 0.71     | 45.08    | 6.87     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 51          | 9.60       | 32.70 | 12.72   | 48.35    | 2.93     | 0.59     | 45.42    | 7.24     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 71          | 9.30       | 33.13 | 23.00   | 41.29    |          | 0.24     |          | 8.34     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 101         | 8.52       | 33.63 | 32.58   | 40.89    |          | 0.20     |          | 6.68     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 150         | 7.94       | 33.89 | 36.48   |          |          | 0.29     |          | 5.09     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 200         | 7.30       | 33.98 | 39.95   |          |          |          |          | 5.74     |
| W0103B    | 3/21/01  | 3:24     | 7         | NH-25        | 44.65 | -124.65 | 281         | 6.20       | 34.04 | 41.42   |          |          |          |          | 6.00     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 3           | 9.88       | 32.78 | 11.55   | 61.12    | 4.90     | 0.83     | 56.22    | 6.35     |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 10          | 9.88       | 32.78 |         |          | 4.88     | 0.80     |          |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 20          | 9.88       | 32.78 |         |          | 4.85     | 0.78     |          |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 30          | 9.88       | 32.78 |         |          | 3.57     | 0.84     |          |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 40          | 9.88       | 32.78 |         |          | 4.47     | 0.82     |          |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 50          | 9.87       | 32.79 |         |          | 4.04     | 0.67     |          |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 70          | 9.57       | 32.99 |         |          | 3.25     | 0.44     |          |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.71       | 33.51 |         |          |          |          | 0.28     |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 150         | 8.14       | 33.87 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 410         | 5.58       | 34.08 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 7:18     | 8         | NH-35        | 44.65 | -124.88 | 440         | 5.53       | 34.09 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 2           | 9.93       | 32.81 | 11.03   | 53.94    | 2.75     | 0.44     | 51.20    | 5.31     |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 10          | 9.94       | 32.81 |         |          |          | 0.45     |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 20          | 9.94       | 32.81 |         |          |          | 0.44     |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 30          | 9.94       | 32.81 |         |          |          | 0.44     |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 40          | 9.94       | 32.82 |         |          | 3.01     | 0.44     |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 45          | 9.94       | 32.82 |         |          | 3.77     | 0.63     |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 50          | 9.87       | 32.86 |         |          | 3.32     | 0.49     |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 70          | 9.10       | 33.34 |         |          |          | 0.24     |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 100         | 8.66       | 33.61 |         |          |          | 0.34     |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 150         | 8.39       | 33.77 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.44       | 34.10 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 14:30    | 9         | NH-45        | 44.65 | -125.12 | 615         | 4.78       | 34.19 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 2           | 9.80       | 32.78 | 12.52   | 58.69    | 4.97     | 0.63     | 53.71    | 6.14     |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 10          | 9.79       | 32.78 |         |          | 2.88     | 0.56     |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 20          | 9.79       | 32.78 |         |          |          | 0.49     |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 30          | 9.80       | 32.78 |         |          |          | 0.51     |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 35          | 9.79       | 32.78 |         |          | 2.92     | 0.47     |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 40          | 9.78       | 32.78 |         |          | 4.07     | 0.47     |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 50          | 9.77       | 32.78 |         |          |          | 0.45     |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 65          | 9.77       | 32.79 |         |          |          | 0.46     |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 100         | 8.46       | 33.65 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 150         | 7.96       | 33.91 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 916         | 3.86       | 34.39 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 19:43    | 11        | NH-65        | 44.65 | -125.6  | 1005        | 3.65       | 34.41 |         |          |          |          |          |          |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 2           | 9.34       | 32.64 | 12.89   | 54.09    | 3.22     | 0.44     | 50.87    | 7.55     |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 10          | 9.34       | 32.64 | 12.94   | 53.90    | 2.92     | 0.44     | 50.97    | 7.65     |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 20          | 9.33       | 32.64 | 12.82   | 60.23    | 2.84     | 0.55     | 57.39    | 7.34     |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 30          | 9.33       | 32.64 | 12.71   | 55.80    | 0.49     |          | 6.98     |          |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 40          | 9.32       | 32.64 | 13.33   | 55.40    | 2.98     | 0.53     | 52.42    | 7.87     |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 50          | 9.30       | 32.64 | 12.84   | 53.80    | 3.47     | 0.54     | 50.33    | 7.31     |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 53          | 9.29       | 32.64 | 12.79   | 59.83    | 2.74     | 0.49     | 57.09    | 7.28     |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 70          | 9.24       | 32.69 | 14.73   | 56.42    | 0.33     |          |          | 8.08     |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.23       | 33.27 |         | 47.80    | 0.24     |          |          |          |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 150         | 7.91       | 33.80 | 34.70   | 47.55    | 0.21     |          |          | 5.56     |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 920         | 3.81       | 34.36 |         | 37.21    |          |          |          |          |
| W0103B    | 3/21/01  | 22:53    | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.60       | 34.40 |         | 34.81    | 0.21     |          |          |          |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 2           | 10.05      | 32.62 | 14.51   | 76.70    |          |          |          |          |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 6           | 10.04      | 32.63 | 14.27   | 63.07    | 11.66    | 1.79     | 51.41    | 8.39     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 10          | 10.00      | 32.65 | 13.73   | 65.96    | 10.35    | 1.59     | 55.61    | 7.21     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 15          | 9.72       | 32.83 | 19.68   | 57.10    | 7.06     | 1.13     | 50.04    | 8.25     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 17          | 9.41       | 33.05 | 24.62   |          | 5.67     | 1.02     |          | 8.75     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 20          | 9.38       | 33.07 | 25.15   |          | 6.10     | 0.92     |          | 7.45     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 25          | 9.18       | 33.22 | 27.33   |          | 4.56     | 0.73     |          | 6.73     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 30          | 8.95       | 33.39 | 30.38   |          | 3.23     | 0.58     |          | 7.58     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 40          | 8.51       | 33.66 | 38.05   |          |          | 0.30     |          | 9.31     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 50          | 8.27       | 33.73 | 36.49   |          | 2.84     | 0.27     |          | 8.05     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 56          | 8.05       | 33.78 | 37.80   |          | 2.75     | 0.32     |          | 7.35     |
| W0103B    | 3/23/01  | 23:22    | 26        | FM-03        | 43.22 | -124.5  | 59          | 8.03       | 33.79 | 38.01   |          | 2.84     | 0.32     |          | 9.01     |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 1           | 10.07      | 32.51 | 11.41   | 86.80    | 13.83    | 1.70     | 72.97    | 7.99     |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 5           | 10.07      | 32.51 |         |          | 12.98    | 1.71     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 10          | 10.07      | 32.51 |         |          | 13.81    | 1.81     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 15          | 10.04      | 32.54 |         |          | 14.39    | 1.83     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 20          | 9.93       | 32.59 |         |          | 8.74     | 1.47     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 30          | 9.82       | 32.78 |         |          | 3.77     | 0.61     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 40          | 9.75       | 32.90 |         |          |          | 0.51     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 50          | 9.31       | 33.24 |         |          |          | 0.33     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 60          | 9.12       | 33.37 |         |          |          | 0.23     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 65          | 9.12       | 33.38 |         |          |          | 0.29     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 70          | 9.08       | 33.40 |         |          |          | 0.34     |          |          |
| W0103B    | 3/24/01  | 0:58     | 27        | FM-04        | 43.22 | -124.58 | 80          | 8.06       | 33.78 |         |          |          | 0.35     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 2           | 10.09      | 32.74 | 9.92    | 63.35    | 6.70     | 1.06     | 56.65    | 7.47     |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 10          | 10.09      | 32.74 |         |          | 6.62     | 1.06     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 20          | 10.09      | 32.74 |         |          | 6.49     | 1.15     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 30          | 10.07      | 32.74 |         |          | 5.98     | 1.05     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 40          | 9.92       | 32.81 |         |          | 6.06     | 0.90     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 50          | 9.72       | 32.95 |         |          | 3.09     | 0.48     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 60          | 9.25       | 33.30 |         |          | 3.46     | 0.60     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 70          | 9.18       | 33.34 |         |          |          | 0.45     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 100         | 8.23       | 33.73 |         |          |          | 0.36     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 120         | 7.75       | 33.92 |         |          | 3.25     | 0.55     |          |          |
| W0103B    | 3/24/01  | 2:39     | 28        | FM-05        | 43.22 | -124.67 | 150         | 7.65       | 33.94 |         |          | 3.45     | 0.45     |          |          |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 1           | 10.11      | 32.81 | 12.66   |          | 3.73     | 0.70     |          | 8.67     |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 10          | 10.11      | 32.81 | 14.04   |          | 3.19     | 0.65     |          | 9.14     |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 20          | 10.11      | 32.81 | 13.82   |          | 3.48     | 0.76     |          | 9.85     |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 24          | 10.11      | 32.81 | 13.82   |          | 3.36     | 0.62     |          | 9.58     |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 30          | 10.08      | 32.81 | 14.37   |          | 3.26     | 0.62     |          | 9.82     |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 40          | 10.03      | 32.83 | 14.04   |          | 3.25     | 0.59     |          | 7.98     |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 50          | 9.97       | 32.90 | 17.61   |          |          | 0.48     |          | 10.68    |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 71          | 9.38       | 33.23 | 27.05   |          |          | 0.39     |          | 13.24    |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 100         | 8.88       | 33.54 | 33.49   |          |          | 0.22     |          | 12.53    |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 151         | 8.21       | 33.87 | 38.64   | 47.45    |          | 0.39     |          | 11.97    |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 230         | 7.11       | 34.00 | 41.80   | 45.22    |          |          |          | 12.29    |
| W0103B    | 3/24/01  | 6:15     | 30        | FM-07        | 43.22 | -124.83 | 330         | 5.94       | 34.06 | 46.93   | 45.87    |          |          |          | 10.00    |
| W0103B    | 3/23/01  | 14:35    | 22        | RR-01        | 42.50 | -124.5  | 2           | 9.46       | 33.04 | 24.15   | 61.80    | 5.77     | 1.04     | 56.03    | 9.25     |
| W0103B    | 3/23/01  | 14:35    | 22        | RR-01        | 42.50 | -124.5  | 5           | 9.46       | 33.06 | 23.41   | 65.80    | 6.28     | 1.14     | 59.52    | 8.06     |
| W0103B    | 3/23/01  | 14:35    | 22        | RR-01        | 42.50 | -124.5  | 10          | 9.42       | 33.10 | 25.52   | 59.70    | 6.11     | 1.17     | 53.59    | 10.34    |
| W0103B    | 3/23/01  | 14:35    | 22        | RR-01        | 42.50 | -124.5  | 15          | 9.26       | 33.18 | 29.15   | 57.30    | 7.91     | 1.47     | 49.39    | 11.42    |
| W0103B    | 3/23/01  | 14:35    | 22        | RR-01        | 42.50 | -124.5  | 20          | 9.12       | 33.33 | 29.47   | 58.50    | 6.76     | 1.19     | 51.74    | 10.33    |
| W0103B    | 3/23/01  | 14:35    | 22        | RR-01        | 42.50 | -124.5  | 25          | 8.94       | 33.43 | 31.00   | 49.70    | 5.30     | 0.92     | 44.40    | 10.30    |
| W0103B    | 3/23/01  | 14:35    | 22        | RR-01        | 42.50 | -124.5  | 30          | 8.47       | 33.73 | 35.29   | 47.80    | 4.57     | 0.60     | 43.23    | 9.04     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0103B    | 3/23/01  | 14:35    | 22        | RR-01        | 42.50 | -124.5 | 32          | 8.45       | 33.74 | 34.60   | 46.40    | 2.84     | 0.49     | 43.56    | 7.47     |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 1           | 9.98       | 32.77 | 11.03   |          |          |          |          |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 5           | 9.98       | 32.77 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 10          | 9.98       | 32.76 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 17          | 9.73       | 32.91 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 20          | 9.61       | 32.98 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 30          | 8.96       | 33.45 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 40          | 8.79       | 33.60 |         |          |          |          | 0.40     |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 50          | 8.59       | 33.66 |         |          |          |          | 0.37     |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 60          | 8.38       | 33.74 |         |          |          |          | 0.41     |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 70          | 8.16       | 33.88 |         |          |          |          | 0.42     |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 73          | 8.14       | 33.89 |         |          |          |          | 0.38     |          |
| W0103B    | 3/23/01  | 15:49    | 23        | RR-02        | 42.50 | -124.6 | 80          | 8.12       | 33.89 |         |          |          |          | 0.36     |          |
| W0103B    | 3/23/01  | 17:35    | 24        | RR-03        | 42.50 | -124.7 | 1           | 9.98       | 32.76 | 11.48   |          |          | 5.17     | 0.92     | 8.49     |
| W0103B    | 3/23/01  | 17:35    | 24        | RR-03        | 42.50 | -124.7 | 5           | 9.98       | 32.76 |         |          |          | 7.73     | 1.10     |          |
| W0103B    | 3/23/01  | 17:35    | 24        | RR-03        | 42.50 | -124.7 | 10          | 9.98       | 32.76 |         |          |          | 5.02     | 0.92     |          |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 1           | 9.59       | 33.28 | 24.73   | 51.39    | 9.15     | 1.69     | 42.24    | 8.40     |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 6           | 9.55       | 33.29 | 25.76   | 56.08    | 8.37     | 1.43     | 47.71    | 9.46     |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 7           | 9.30       | 33.37 | 26.72   | 55.03    | 6.46     | 1.18     | 48.58    | 8.57     |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 10          | 9.11       | 33.44 | 29.56   | 50.20    | 5.96     | 0.71     | 44.24    | 8.63     |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 15          | 8.91       | 33.55 | 30.79   | 49.10    | 4.34     | 0.53     | 44.76    | 7.20     |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 19          | 8.80       | 33.63 | 32.10   | 50.01    | 3.81     | 0.47     | 46.20    | 6.81     |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 25          | 8.75       | 33.70 | 34.14   | 53.90    | 4.83     | 0.65     | 49.06    | 7.83     |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 30          | 8.74       | 33.71 | 33.44   | 52.28    | 5.57     | 0.66     | 46.71    | 6.87     |
| W0103B    | 3/22/01  | 15:25    | 13        | CR-01        | 41.90 | -124.3 | 35          | 8.73       | 33.71 | 33.39   | 55.70    | 6.15     | 0.73     | 49.55    | 7.01     |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 1           | 9.75       | 32.93 | 15.46   | 70.80    | 5.14     | 0.94     | 65.67    | 7.34     |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 5           | 9.74       | 32.93 |         |          |          | 5.84     | 0.92     |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 10          | 9.73       | 32.93 |         |          |          | 4.84     | 0.84     |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 16          | 9.68       | 32.98 |         |          |          | 5.32     | 1.00     |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 20          | 9.68       | 32.99 |         |          |          |          |          |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 30          | 9.63       | 33.06 |         |          |          |          |          |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 40          | 9.53       | 33.12 |         |          |          | 2.76     | 0.55     |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 50          | 9.39       | 33.29 |         |          |          |          | 0.36     |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 60          | 9.14       | 33.44 |         |          |          |          | 0.34     |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 69          | 8.87       | 33.55 |         |          |          | 3.03     | 0.44     |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 100         | 8.21       | 33.88 |         |          |          | 3.86     | 0.58     |          |
| W0103B    | 3/22/01  | 18:19    | 15        | CR-03        | 41.90 | -124.5 | 131         | 7.70       | 33.98 |         |          |          | 3.21     | 0.40     |          |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 2           | 10.01      | 32.81 | 12.50   |          |          | 6.63     | 1.15     | 7.64     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 10          | 9.94       | 32.82 | 12.97   |          |          | 6.27     | 1.21     | 7.31     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 20          | 9.93       | 32.82 | 12.24   |          |          | 4.97     | 0.98     | 6.70     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 22          | 9.93       | 32.82 | 13.10   |          |          | 6.96     | 1.14     | 7.22     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 30          | 9.92       | 32.84 | 14.42   |          |          | 5.88     | 0.97     | 9.48     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 40          | 9.92       | 32.89 | 15.63   |          |          | 5.81     | 0.92     | 9.07     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 50          | 9.92       | 33.04 | 18.78   | 59.49    | 4.07     | 0.62     | 55.41    | 7.73     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 70          | 9.50       | 33.29 | 25.12   | 51.40    |          |          | 0.44     | 7.99     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 100         | 8.92       | 33.60 | 31.95   | 48.70    |          |          | 0.31     | 7.54     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 150         | 8.15       | 33.92 | 37.34   | 47.27    |          |          |          | 6.83     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 395         | 5.68       | 34.10 | 44.21   | 43.40    |          |          |          | 3.54     |
| W0103B    | 3/22/01  | 20:09    | 16        | CR-04        | 41.90 | -124.6 | 450         | 5.42       | 34.13 | 44.97   | 42.80    |          |          |          | 3.58     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 2           | 10.25      | 32.81 | 12.08   |          | 5.10     | 0.79     |          | 7.37     |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 10          | 10.21      | 32.81 |         |          | 5.49     | 0.75     |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 11          | 10.18      | 32.81 |         |          | 3.73     | 0.73     |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 20          | 10.15      | 32.81 |         |          | 4.72     | 0.86     |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 30          | 10.14      | 32.81 |         |          |          |          |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 40          | 10.13      | 32.82 |         |          | 5.16     | 0.79     |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 50          | 10.10      | 32.83 |         |          |          | 0.56     |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 70          | 9.83       | 33.30 |         |          |          |          |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 100         | 9.02       | 33.64 |         |          |          | 0.25     |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 150         | 8.39       | 33.89 |         |          |          |          |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 500         | 5.29       | 34.15 |         |          |          |          |          |          |
| W0103B    | 3/22/01  | 23:11    | 17        | CR-05        | 41.90 | -124.7  | 633         | 4.69       | 34.26 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 2           | 10.35      | 33.04 | 14.54   |          | 4.14     | 0.87     |          | 7.09     |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 10          | 10.36      | 33.04 |         |          | 5.09     | 0.93     |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 20          | 10.31      | 33.04 |         |          | 5.84     | 0.91     |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 25          | 10.30      | 33.04 |         |          | 4.24     | 0.81     |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 30          | 10.30      | 33.04 |         |          | 4.21     | 0.76     |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 40          | 10.30      | 33.04 |         |          | 3.98     | 0.66     |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 50          | 10.28      | 33.04 |         |          | 5.89     | 0.74     |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 70          | 10.11      | 33.09 |         |          | 3.34     | 0.38     |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 100         | 8.96       | 33.58 |         |          | 4.46     | 0.30     |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 151         | 8.19       | 33.92 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 500         | 5.52       | 34.17 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 3:53     | 19        | CR-07        | 41.90 | -125.   | 798         | 4.17       | 34.35 |         |          |          |          |          |          |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 3           | 10.31      | 33.01 | 14.30   | 57.30    | 3.67     | 0.86     | 53.63    | 7.03     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 10          | 10.31      | 33.01 | 14.32   | 61.10    | 5.04     | 0.91     | 56.06    | 6.66     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 20          | 10.35      | 33.03 | 14.52   | 63.60    | 3.87     | 0.79     | 59.73    | 7.24     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 25          | 10.34      | 33.03 | 13.65   | 60.00    | 4.24     | 0.89     | 55.76    | 6.41     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 29          | 10.37      | 33.04 | 14.22   | 62.90    | 4.15     | 0.93     | 58.75    | 6.55     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 41          | 10.36      | 33.04 | 14.45   | 62.20    | 4.52     | 0.84     | 57.68    | 7.23     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 50          | 10.35      | 33.04 | 14.48   | 63.20    | 4.13     | 0.84     | 59.07    | 6.03     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 70          | 10.02      | 33.10 | 17.75   | 56.00    |          | 0.51     |          | 6.64     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 100         | 8.77       | 33.74 | 32.42   | 51.30    |          | 0.40     |          | 4.86     |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 150         | 8.08       | 33.93 | 36.69   | 53.00    |          | 0.37     |          |          |
| W0103B    | 3/23/01  | 7:56     | 21        | CR-09        | 41.90 | -125.4  | 1005        | 3.71       | 34.41 | 46.65   |          |          |          |          |          |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 1           | 9.00       | 33.49 | 37.06   | 67.12    | 15.04    | 2.35     | 52.08    | 9.68     |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 5           | 8.97       | 33.49 | 38.24   | 71.39    | 19.69    | 2.87     | 51.70    | 9.67     |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 15          | 8.46       | 33.56 | 38.54   | 56.30    | 12.59    | 2.14     | 43.71    | 6.21     |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 20          | 7.79       | 33.66 | 40.31   | 43.57    | 4.89     | 0.73     | 38.68    | 7.19     |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 25          | 7.55       | 33.78 | 38.74   | 45.10    | 3.06     | 0.44     | 42.04    | 4.44     |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 30          | 7.46       | 33.84 | 39.16   | 39.70    | 3.31     | 0.38     | 36.39    | 5.02     |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.22       | 33.94 | 40.20   | 41.30    | 6.89     | 0.55     | 34.41    | 5.28     |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.22       | 33.94 | 40.64   | 38.10    | 3.63     | 0.53     | 34.47    | 3.36     |
| W0107A    | 7/6/01   | 20:21    | 3         | NH-05        | 44.65 | -124.18 | 56          | 7.22       | 33.94 | 40.43   | 37.70    | 2.99     | 0.41     | 34.71    | 3.26     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 1           | 10.72      | 32.47 | 24.82   | 61.23    | 11.87    | 1.94     | 49.37    | 10.09    |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 5           | 10.65      | 32.48 | 24.07   | 66.40    | 12.74    | 1.99     | 53.66    | 8.40     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 10          | 9.69       | 32.71 | 31.32   | 72.03    | 31.16    | 4.41     | 40.87    | 8.35     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 12          | 9.43       | 32.79 | 32.76   | 68.30    | 18.91    | 2.94     | 49.39    | 9.12     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 20          | 9.15       | 32.99 | 34.99   | 61.60    | 14.96    | 2.54     | 46.64    | 9.04     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 24          | 9.12       | 33.00 | 36.10   | 64.70    | 14.18    | 2.51     | 50.52    | 9.90     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 30          | 8.35       | 33.01 | 32.60   | 51.80    | 5.56     | 0.85     | 46.24    | 8.01     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 40          | 8.01       | 33.16 | 33.26   | 46.90    | 2.85     | 0.40     | 44.05    | 8.11     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 50          | 7.97       | 33.29 | 34.58   | 45.12    |          | 0.33     |          | 7.39     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 60          | 7.83       | 33.48 | 36.79   | 45.09    | 2.91     | 0.43     | 42.17    | 5.19     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 69          | 7.78       | 33.70 | 36.49   | 46.69    |          | 0.31     |          | 4.46     |
| W0107A    | 7/6/01   | 23:33    | 5         | NH-15        | 44.65 | -124.41 | 86          | 7.36       | 33.90 | 40.64   | 44.30    |          | 0.34     |          | 4.94     |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 2           | 11.55      | 32.41 | 20.63   | 75.43    | 14.81    | 2.17     | 60.62    | 11.67    |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 10          | 11.53      | 32.41 | 22.21   | 71.80    | 14.21    | 2.13     | 57.59    | 12.94    |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 15          | 11.43      | 32.42 | 20.51   | 72.47    | 12.69    | 1.93     | 59.79    | 12.93    |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 20          | 11.07      | 32.41 | 17.07   | 66.84    | 9.55     | 1.45     | 57.30    | 10.80    |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 30          | 9.52       | 32.43 | 12.78   | 70.10    |          | 0.43     |          | 8.92     |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 40          | 8.96       | 32.50 | 14.90   | 64.42    |          | 0.46     |          | 9.92     |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 50          | 8.53       | 32.55 | 23.26   | 61.67    | 2.94     | 0.42     | 58.73    | 10.38    |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 70          | 8.24       | 33.05 | 29.29   | 53.74    |          |          |          | 7.95     |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 100         | 8.00       | 33.67 | 38.17   | 46.20    |          | 0.22     |          | 7.81     |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 150         | 7.33       | 33.93 | 42.60   | 46.90    |          |          |          | 7.17     |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 200         | 6.56       | 34.01 | 43.87   | 46.88    |          |          |          | 5.17     |
| W0107A    | 7/7/01   | 3:09     | 7         | NH-25        | 44.65 | -124.65 | 285         | 6.25       | 34.04 | 44.44   | 47.28    |          |          |          | 4.93     |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 1           | 14.35      | 32.18 | 10.71   | 85.71    | 16.91    | 2.29     | 68.80    | 7.43     |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 10          | 14.34      | 32.18 |         |          | 13.84    | 1.98     |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 20          | 14.31      | 32.18 |         |          | 11.24    | 1.78     |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 30          | 13.04      | 32.23 |         |          | 7.20     | 0.97     |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 40          | 10.56      | 32.48 |         |          | 9.68     | 1.50     |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 50          | 9.28       | 32.51 |         |          | 6.45     | 1.17     |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 55          | 9.15       | 32.53 |         |          | 6.68     | 1.11     |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 70          | 8.56       | 32.74 |         |          | 4.41     | 0.64     |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.33       | 33.49 |         |          |          |          | 0.25     |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 150         | 7.81       | 33.88 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 220         | 6.57       | 34.01 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 6:34     | 8         | NH-35        | 44.65 | -124.88 | 435         | 5.68       | 34.10 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 3           | 14.65      | 31.95 | 8.44    | 81.08    | 3.74     | 0.61     | 77.35    | 7.59     |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 10          | 14.66      | 31.95 |         |          | 2.77     | 0.51     |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 20          | 14.65      | 31.96 |         |          |          | 0.52     |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 30          | 14.65      | 31.97 |         |          | 2.77     | 0.50     |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 40          | 11.64      | 32.39 |         |          |          | 0.51     |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 49          | 10.42      | 32.53 |         |          |          | 0.55     |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 55          | 9.94       | 32.58 |         |          | 3.66     | 0.67     |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 70          | 9.01       | 32.80 |         |          |          | 0.43     |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 100         | 8.51       | 33.40 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 150         | 7.94       | 33.86 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.35       | 34.14 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 10:00    | 9         | NH-45        | 44.65 | -125.12 | 643         | 4.71       | 34.24 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 2           | 15.30      | 31.39 | 7.96    | 75.00    | 5.72     | 0.84     | 69.28    | 7.10     |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 10          | 15.29      | 31.41 |         |          | 6.29     | 1.01     |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 20          | 14.59      | 31.96 |         |          | 5.29     | 0.94     |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 30          | 13.43      | 32.20 |         |          | 5.62     | 0.84     |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 40          | 11.67      | 32.50 |         |          | 5.18     | 0.86     |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 50          | 10.83      | 32.53 |         |          | 8.39     | 1.31     |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 56          | 9.97       | 32.60 |         |          | 6.21     | 1.13     |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 71          | 9.24       | 32.73 |         |          | 4.25     | 0.62     |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 100         | 8.59       | 33.21 |         |          | 7.38     | 0.72     |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 150         | 8.09       | 33.80 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 230         | 7.22       | 33.99 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 15:32    | 11        | NH-65        | 44.65 | -125.6  | 1000        | 3.60       | 34.40 |         |          |          |          |          |          |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 2           | 15.63      | 31.44 | 7.10    | 74.76    | 5.32     | 0.82     | 69.43    | 5.88     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 10          | 15.56      | 31.49 | 7.49    | 80.69    | 6.28     | 1.08     | 74.42    | 6.26     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 20          | 15.00      | 32.06 | 7.49    | 69.83    | 7.07     | 1.10     | 62.76    | 6.16     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 30          | 12.72      | 32.44 | 7.78    | 68.90    | 7.99     | 1.08     | 60.91    | 5.64     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 40          | 11.57      | 32.53 | 8.11    | 65.83    | 9.33     | 1.38     | 56.50    | 6.64     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 50          | 10.61      | 32.53 | 8.91    | 68.19    | 11.01    | 1.74     | 57.18    | 6.84     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 59          | 10.07      | 32.57 | 13.72   | 61.75    | 6.64     | 1.13     | 55.11    | 8.65     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 70          | 9.48       | 32.60 | 16.49   | 60.91    | 5.03     | 0.74     | 55.88    | 9.08     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 101         | 8.72       | 32.96 | 28.32   | 55.63    | 2.89     | 0.46     | 52.74    | 7.20     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 150         | 8.13       | 33.73 | 37.65   | 47.06    |          |          |          | 6.08     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 366         | 5.78       | 34.04 | 44.44   | 44.68    |          |          |          | 1.99     |
| W0107A    | 7/7/01   | 18:19    | 12        | NH-85        | 44.65 | -126.05 | 1004        | 3.66       | 34.41 |         | 41.27    |          |          |          |          |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 2           | 14.50      | 32.29 | 21.77   | 96.80    | 21.73    | 3.24     | 75.07    | 17.55    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 4           | 13.65      | 32.36 | 21.99   | 97.51    | 22.42    | 3.56     | 75.10    | 16.32    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 5           | 13.97      | 32.33 | 19.68   | 92.10    | 26.52    | 3.87     | 65.58    | 13.31    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 11          | 11.40      | 32.58 | 30.80   | 71.80    | 20.86    | 3.32     | 50.94    | 16.13    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 15          | 9.00       | 32.89 | 36.80   | 65.50    | 13.25    | 2.06     | 52.25    | 13.48    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 20          | 8.97       | 32.93 | 37.30   | 59.20    | 9.79     | 1.53     | 49.41    | 14.34    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 24          | 10.06      | 33.39 | 39.97   | 61.73    | 9.30     | 1.45     | 52.43    | 19.72    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 30          | 8.52       | 33.54 | 44.38   | 59.55    | 7.60     | 1.16     | 51.94    | 21.50    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.76       | 33.70 | 46.43   | 54.10    | 9.83     | 1.35     | 44.27    | 18.18    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 47          | 7.66       | 33.78 | 45.98   | 56.83    | 15.06    | 2.11     | 41.77    | 15.85    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.61       | 33.80 | 45.00   | 59.47    | 14.47    | 2.24     | 45.01    | 16.15    |
| W0109A    | 9/4/01   | 19:51    | 3         | NH-05        | 44.65 | -124.18 | 55          | 7.58       | 33.81 | 46.58   | 60.30    | 20.26    | 2.57     | 40.04    | 13.79    |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 2           | 15.37      | 32.18 | 10.59   | 94.40    | 21.27    | 2.93     | 73.13    | 7.35     |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 6           | 15.33      | 32.17 | 11.31   | 96.24    | 21.50    | 2.74     | 74.74    | 8.22     |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 11          | 15.15      | 32.18 | 12.47   | 93.93    | 25.39    | 3.39     | 68.54    | 8.70     |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 12          | 15.03      | 32.19 | 13.78   | 94.15    | 20.61    | 4.22     | 73.54    | 9.20     |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 20          | 13.25      | 32.46 | 20.84   | 84.52    | 17.72    | 3.99     | 66.81    | 11.26    |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 30          | 11.03      | 33.10 | 28.12   | 61.63    | 9.97     | 2.49     | 51.66    | 13.54    |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 41          | 10.57      | 33.12 | 38.21   | 61.49    | 12.91    | 2.48     | 48.59    | 21.15    |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 50          | 8.88       | 33.45 | 39.62   | 53.83    | 9.40     | 1.89     | 44.43    | 11.45    |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 60          | 7.85       | 33.62 | 38.89   | 55.49    | 8.54     | 1.34     | 46.95    | 10.61    |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 71          | 7.93       | 33.80 | 40.39   | 48.70    | 6.08     | 1.09     | 42.62    | 12.62    |
| W0109A    | 9/4/01   | 21:52    | 5         | NH-15        | 44.65 | -124.41 | 85          | 7.69       | 33.84 | 42.63   | 49.70    | 8.28     | 1.48     | 41.42    | 8.51     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 1           | 15.49      | 32.19 | 12.47   | 79.21    | 18.94    | 3.04     | 60.27    | 9.29     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 10          | 15.47      | 32.20 | 12.85   | 81.07    | 19.47    | 3.16     | 61.59    | 9.46     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 12          | 15.45      | 32.20 | 12.67   | 82.15    | 20.58    | 3.36     | 61.57    | 8.99     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 21          | 15.01      | 32.39 | 13.64   | 82.90    | 25.22    | 3.74     | 57.67    | 9.16     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 30          | 11.71      | 32.92 | 24.15   | 62.71    | 8.79     | 1.78     | 53.92    | 14.33    |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 40          | 10.82      | 33.09 | 28.68   | 59.54    | 6.53     | 1.26     | 53.02    | 14.77    |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 50          | 9.23       | 33.27 | 34.87   | 57.94    | 5.03     | 0.94     | 52.91    | 12.43    |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 70          | 7.89       | 33.47 | 35.94   | 50.42    |          | 0.58     |          | 8.08     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 100         | 7.79       | 33.88 | 39.84   | 48.70    |          | 0.33     |          | 8.62     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 150         | 7.41       | 33.97 | 41.70   | 42.20    |          |          |          | 6.70     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 201         | 7.14       | 34.01 | 42.21   | 45.59    |          |          |          | 6.12     |
| W0109A    | 9/4/01   | 23:57    | 7         | NH-25        | 44.65 | -124.65 | 251         | 6.98       | 34.02 | 43.91   | 44.50    |          |          |          | 8.34     |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 2           | 16.58      | 32.17 | 12.38   | 70.28    | 12.15    | 1.83     | 58.13    | 10.50    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 10          | 16.05      | 32.18 |         |          | 13.95    | 2.08     |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 19          | 10.66      | 32.48 |         |          | 13.37    | 2.18     |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 19          | 10.23      | 32.49 |         |          | 11.60    | 1.98     |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 30          | 8.20       | 32.63 |         |          | 4.59     | 0.69     |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 49          | 7.84       | 32.89 |         |          | 4.49     | 0.45     |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 69          | 7.88       | 33.29 |         |          | 4.50     | 0.55     |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 100         | 7.83       | 33.82 |         |          | 5.31     | 0.47     |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 151         | 7.46       | 33.98 |         |          |          |          |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 175         | 7.37       | 33.98 |         |          |          |          |          |          |
| W0109A    | 9/5/01   | 1:37     | 8         | NH-35        | 44.65 | -124.88 | 421         | 6.15       | 34.06 |         |          |          |          |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 3           | 16.86      | 32.02 | 11.32   | 68.46    | 9.25     | 1.20     | 59.21    | 9.96     |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 10          | 16.51      | 32.03 |         |          | 7.42     | 1.31     |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 20          | 14.34      | 32.13 |         |          | 10.26    | 1.96     |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 25          | 11.72      | 32.31 |         |          | 9.42     | 1.76     |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 30          | 10.46      | 32.42 |         |          | 8.35     | 1.54     |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 40          | 9.38       | 32.53 |         |          | 6.10     | 1.08     |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 50          | 8.10       | 32.86 |         |          | 4.16     | 0.52     |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 70          | 8.06       | 33.29 |         |          |          | 0.41     |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 99          | 8.03       | 33.67 |         |          |          | 0.36     |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 150         | 7.64       | 33.93 |         |          |          |          |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 231         | 6.78       | 33.99 |         |          |          |          |          |          |
| W0109A    | 9/5/01   | 19:21    | 9         | NH-45        | 44.65 | -125.12 | 501         | 5.10       | 34.14 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 1           | 16.74      | 32.19 | 10.90   | 68.66    | 6.85     | 1.19     | 61.81    | 9.58     |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 9           | 16.71      | 32.18 |         |          | 7.86     | 1.19     |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 21          | 9.54       | 32.47 |         |          | 8.77     | 1.67     |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 30          | 8.94       | 32.51 |         |          | 7.25     | 1.21     |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 35          | 8.60       | 32.53 |         |          | 6.19     | 0.97     |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 40          | 8.44       | 32.53 |         |          | 4.82     | 0.85     |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 50          | 8.10       | 32.56 |         |          | 4.30     | 0.74     |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 70          | 8.08       | 33.05 |         |          | 3.25     | 0.40     |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 100         | 8.05       | 33.68 |         |          | 2.54     | 0.33     |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 150         | 7.61       | 33.94 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 790         | 4.20       | 34.31 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 1:18     | 11        | NH-65        | 44.65 | -125.6  | 1006        | 3.71       | 34.41 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 10          | 17.12      | 31.83 | 11.02   | 72.23    | 3.53     | 0.53     | 68.70    | 10.38    |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 21          | 16.43      | 32.11 | 9.37    | 66.21    | 9.34     | 1.67     | 56.87    | 7.58     |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 31          | 12.70      | 32.39 | 9.14    | 66.15    | 7.10     | 1.16     | 59.05    | 7.87     |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 40          | 11.08      | 32.45 | 10.39   | 66.70    | 3.57     | 0.57     | 63.13    | 9.37     |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 45          | 10.47      | 32.49 | 10.98   | 61.20    | 5.06     | 0.69     | 56.14    | 9.62     |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 51          | 9.64       | 32.51 | 12.80   | 59.63    | 3.72     | 0.72     | 55.91    | 9.32     |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 70          | 8.52       | 32.70 | 24.33   | 51.66    | 3.30     | 0.57     | 48.36    | 10.58    |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.17       | 33.35 | 35.23   | 53.25    |          | 0.33     |          | 10.15    |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 151         | 7.82       | 33.83 | 41.43   |          |          |          |          | 8.95     |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 780         | 4.12       | 34.29 | 51.99   |          |          |          |          | 5.79     |
| W0109A    | 9/6/01   | 4:14     | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.60       | 34.40 | 52.36   |          |          |          |          | 6.15     |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2  | 2           | 9.53       | 33.34 | 39.41   |          | 22.21    | 3.45     |          | 13.89    |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2  | 2           | 9.40       | 33.37 | 46.47   |          | 29.11    | 3.70     |          | 19.55    |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2  | 4           | 9.33       | 33.38 | 47.86   |          | 35.92    | 4.42     |          | 19.23    |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2  | 10          | 8.95       | 33.44 |         | 47.71    | 14.55    | 1.99     | 33.15    |          |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2  | 15          | 8.72       | 33.49 | 40.75   | 45.65    | 13.87    | 1.76     | 31.78    | 11.60    |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2  | 20          | 8.55       | 33.55 | 41.09   | 48.40    | 11.52    | 1.67     | 36.88    | 11.43    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2 | 25          | 8.46       | 33.59 | 41.75   | 45.84    | 8.43     | 1.42     | 37.41    | 12.08    |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2 | 30          | 8.27       | 33.63 | 42.54   | 44.43    | 6.97     | 1.09     | 37.46    | 11.32    |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2 | 35          | 8.03       | 33.71 | 43.14   | 45.77    | 7.65     | 1.36     | 38.12    | 9.87     |
| W0109A    | 9/10/01  | 14:37    | 44        | HH-01        | 44.00 | -124.2 | 49          | 7.89       | 33.79 | 44.50   | 54.24    | 12.29    | 1.99     | 41.95    | 10.10    |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 1           | 13.67      | 32.86 | 20.03   | 98.09    | 51.53    | 6.96     | 46.56    | 13.03    |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 5           | 13.37      | 32.87 |         |          | 54.37    | 7.40     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 10          | 11.97      | 32.98 |         |          | 45.08    | 5.81     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 19          | 9.62       | 33.29 |         |          | 15.44    | 2.02     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 31          | 7.95       | 33.62 |         |          | 5.07     | 1.01     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 40          | 7.96       | 33.74 |         |          | 5.49     | 0.84     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 51          | 8.00       | 33.86 |         |          | 4.30     | 0.62     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 60          | 7.91       | 33.91 |         |          | 5.12     | 0.77     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 70          | 7.85       | 33.93 |         |          | 6.14     | 0.82     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 90          | 7.62       | 33.95 |         |          | 6.14     | 0.98     |          |          |
| W0109A    | 9/10/01  | 11:50    | 43        | HH-02        | 44.00 | -124.4 | 100         | 7.61       | 33.96 |         |          | 7.75     | 1.35     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 2           | 14.01      | 32.84 | 17.25   | 85.66    | 33.91    | 4.39     | 51.75    | 12.06    |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 10          | 14.00      | 32.84 |         |          | 36.93    | 4.77     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 14          | 13.99      | 32.84 |         |          | 34.13    | 4.29     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 20          | 13.02      | 32.85 |         |          | 29.21    | 4.54     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 30          | 8.17       | 32.98 |         |          | 7.89     | 1.83     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 40          | 7.90       | 33.38 |         |          | 7.14     | 1.52     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 50          | 7.83       | 33.57 |         |          | 5.65     | 1.41     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 60          | 7.86       | 33.69 |         |          | 31.75    | 4.30     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 71          | 7.89       | 33.81 |         |          | 4.65     | 0.89     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 101         | 7.64       | 33.99 |         |          | 6.14     | 0.97     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 118         | 7.63       | 34.01 |         |          | 5.57     | 0.67     |          |          |
| W0109A    | 9/10/01  | 9:15     | 42        | HH-03        | 44.00 | -124.6 | 145         | 7.48       | 34.02 |         |          | 5.09     | 0.78     |          |          |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 2           | 13.52      | 32.65 | 22.16   | 95.41    | 43.99    | 5.56     | 51.42    | 15.20    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 5           | 13.55      | 32.65 | 19.29   | 89.68    | 50.82    | 6.26     | 38.87    | 11.59    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 10          | 13.38      | 32.66 | 21.55   | 94.95    | 45.61    | 5.76     | 49.33    | 14.08    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 17          | 12.68      | 32.80 | 21.66   | 92.11    | 33.57    | 4.66     | 58.54    | 13.10    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 21          | 12.49      | 32.76 | 23.68   | 81.63    | 24.39    | 2.95     | 57.24    | 15.03    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 31          | 10.94      | 32.67 | 28.47   | 69.60    | 34.44    | 4.50     | 35.16    | 15.85    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 40          | 8.21       | 32.79 | 35.18   | 50.71    | 4.92     | 0.73     | 45.79    | 17.98    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 50          | 8.00       | 33.18 | 38.09   | 45.41    |          | 0.61     |          | 11.32    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 59          | 7.99       | 33.53 | 42.29   | 43.93    |          | 0.54     |          | 12.21    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 71          | 7.89       | 33.69 | 44.87   | 46.64    |          | 0.64     |          | 10.19    |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 81          | 7.83       | 33.74 | 45.66   | 44.93    |          | 0.64     |          | 9.81     |
| W0109A    | 9/10/01  | 6:03     | 40        | HH-04        | 44.00 | -124.8 | 105         | 7.70       | 33.86 | 47.81   | 40.51    | 8.62     | 1.27     | 31.90    | 8.85     |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 2           | 14.40      | 32.50 | 18.46   | 92.15    | 29.30    | 3.61     | 62.86    | 13.45    |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 10          | 13.94      | 32.53 | 20.35   | 94.08    | 42.31    | 4.97     | 51.77    | 13.95    |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 16          | 13.84      | 32.55 | 18.93   | 94.81    | 37.78    | 4.58     | 57.04    | 12.81    |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 19          | 13.78      | 32.55 | 19.79   | 86.05    | 28.04    | 4.04     | 58.01    | 13.60    |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 31          | 12.26      | 32.53 | 24.08   | 72.35    | 14.05    | 2.52     | 58.30    | 14.07    |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 39          | 8.54       | 32.75 | 31.56   | 54.93    |          | 0.83     |          | 12.51    |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 50          | 8.13       | 33.11 | 36.58   | 51.51    | 4.74     | 0.79     | 46.77    | 12.17    |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 71          | 8.16       | 33.48 | 41.19   | 50.64    |          | 0.56     |          | 11.88    |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 99          | 7.83       | 33.73 | 46.36   | 44.85    |          | 0.66     |          | 9.51     |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 150         | 7.55       | 33.96 | 46.43   | 44.19    |          |          |          | 8.22     |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 320         | 6.51       | 34.06 | 49.89   | 39.25    |          |          |          | 8.53     |
| W0109A    | 9/10/01  | 1:34     | 39        | HH-05        | 44.00 | -125.  | 500         | 5.47       | 34.10 | 52.08   | 36.90    |          |          |          | 7.00     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 2           | 13.42      | 32.49 | 16.82   | 74.20    | 12.50    | 2.08     | 61.70    | 11.48    |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 10          | 13.34      | 32.50 |         |          | 14.29    | 2.15     |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 12          | 13.20      | 32.52 |         |          | 15.49    | 2.41     |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 21          | 11.76      | 32.51 |         |          | 9.73     | 1.54     |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 31          | 8.52       | 32.59 |         |          | 5.33     | 0.95     |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 40          | 8.40       | 32.79 |         |          | 3.58     | 0.58     |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 51          | 8.31       | 33.12 |         |          | 3.78     | 0.54     |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 70          | 8.22       | 33.47 |         |          | 2.79     | 0.52     |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 98          | 7.65       | 33.83 |         |          | 3.83     | 0.73     |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 151         | 7.48       | 33.96 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 315         | 6.73       | 34.04 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 22:58    | 37        | HH-07        | 44.00 | -125.2  | 1006        | 3.71       | 34.41 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 2           | 10.89      | 33.42 | 34.66   | 74.82    | 16.31    | 2.69     | 58.51    | 10.26    |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 5           | 10.89      | 33.42 | 33.42   | 74.24    | 17.83    | 2.95     | 56.41    | 10.31    |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 10          | 10.80      | 33.44 | 34.64   | 68.66    | 16.33    | 2.81     | 52.33    | 10.10    |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 15          | 9.03       | 33.75 | 34.93   | 69.40    | 11.58    | 1.82     | 57.82    | 9.88     |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 22          | 8.82       | 33.80 | 38.98   | 55.35    | 10.21    | 1.71     | 45.14    | 7.14     |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 26          | 8.79       | 33.81 | 40.10   | 61.62    | 8.60     | 1.58     | 53.02    | 8.20     |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 30          | 8.71       | 33.83 | 39.93   | 57.76    | 10.27    | 1.69     | 47.48    | 7.72     |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 40          | 8.67       | 33.84 | 41.51   | 53.57    | 8.33     | 1.46     | 45.23    | 11.02    |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 43          | 8.66       | 33.84 | 40.64   | 55.10    | 10.37    | 1.49     | 44.73    | 8.19     |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 50          | 8.46       | 33.85 | 41.44   | 56.70    | 5.79     | 1.06     | 50.91    | 9.02     |
| W0109A    | 9/6/01   | 16:01    | 14        | FM-03        | 43.22 | -124.5  | 57          | 8.42       | 33.85 | 41.98   | 53.31    | 6.39     | 0.95     | 46.91    | 8.89     |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 1           | 11.09      | 33.17 | 34.10   | 75.08    | 23.10    | 3.49     | 51.98    | 13.71    |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 6           | 10.82      | 33.17 |         |          | 20.90    | 3.13     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 10          | 9.96       | 33.30 |         |          | 9.99     | 1.68     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 15          | 9.06       | 33.44 |         |          | 7.55     | 1.19     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 20          | 8.32       | 33.49 |         |          | 7.18     | 1.17     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 30          | 8.49       | 33.87 |         |          | 8.43     | 1.19     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 40          | 8.40       | 33.90 |         |          | 6.75     | 1.17     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 50          | 8.38       | 33.90 |         |          | 7.24     | 1.28     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 60          | 8.37       | 33.90 |         |          | 6.45     | 1.08     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 70          | 8.36       | 33.90 |         |          | 7.02     | 0.96     |          |          |
| W0109A    | 9/6/01   | 17:26    | 15        | FM-04        | 43.22 | -124.58 | 82          | 8.34       | 33.91 |         |          | 6.58     | 0.87     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 2           | 12.38      | 32.66 | 22.97   | 82.33    | 23.43    | 3.67     | 58.90    | 12.12    |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 5           | 12.08      | 32.59 |         |          | 20.40    | 3.21     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 10          | 9.86       | 32.63 |         |          | 12.40    | 1.93     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 20          | 8.57       | 32.76 |         |          | 8.32     | 1.29     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 30          | 8.45       | 32.89 |         |          | 7.42     | 1.12     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 40          | 8.42       | 33.27 |         |          | 5.00     | 0.76     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 51          | 8.15       | 33.53 |         |          |          | 0.70     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 60          | 8.30       | 33.75 |         |          | 4.58     | 0.84     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 70          | 8.36       | 33.88 |         |          | 5.74     | 0.92     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 101         | 8.04       | 33.95 |         |          | 6.20     | 0.95     |          |          |
| W0109A    | 9/6/01   | 19:05    | 16        | FM-05        | 43.22 | -124.67 | 153         | 7.97       | 33.97 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 3           | 14.88      | 32.30 | 11.51   | 69.28    | 14.25    | 3.01     | 55.03    | 8.11     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 10          | 14.86      | 32.30 | 11.62   | 70.00    | 13.96    | 2.98     | 56.03    | 8.19     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 15          | 14.16      | 32.30 | 11.02   | 65.55    | 12.78    | 2.09     | 52.77    | 8.23     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 20          | 11.94      | 32.58 | 12.68   | 59.97    | 7.13     | 1.44     | 52.84    | 7.66     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 30          | 9.88       | 32.86 | 19.59   | 52.60    |          | 0.64     |          | 9.02     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 40          | 9.71       | 33.00 | 22.64   | 49.60    |          | 0.49     |          | 10.29    |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 50          | 9.45       | 33.15 | 26.27   | 49.99    |          | 0.42     |          | 8.48     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 70          | 8.43       | 33.40 | 32.42   | 46.29    |          | 0.35     |          | 9.47     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 100         | 8.07       | 33.84 | 38.89   | 43.60    |          | 0.42     |          | 7.41     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 150         | 7.82       | 33.99 | 41.08   | 42.81    |          |          |          | 7.41     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 277         | 6.79       | 34.07 | 42.83   | 38.06    |          |          |          | 4.96     |
| W0109A    | 9/6/01   | 22:07    | 18        | FM-07        | 43.22 | -124.83 | 300         | 6.59       | 34.07 | 43.27   | 41.27    |          |          |          | 5.41     |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 3           | 16.19      | 32.13 | 10.47   | 68.05    | 6.75     | 1.15     | 61.30    | 8.94     |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 10          | 16.15      | 32.15 |         |          | 6.87     | 1.18     |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 20          | 15.97      | 32.18 |         |          | 6.89     | 1.17     |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 30          | 11.98      | 32.68 |         |          | 6.87     | 1.17     |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 40          | 10.99      | 32.79 |         |          | 5.27     | 0.92     |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 45          | 10.26      | 32.86 |         |          | 4.44     | 0.85     |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 49          | 10.29      | 32.93 |         |          | 4.25     | 0.74     |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 70          | 9.81       | 33.23 |         |          | 3.12     | 0.62     |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 100         | 8.79       | 33.66 |         |          | 3.01     | 0.49     |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 151         | 8.02       | 33.93 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 710         | 4.51       | 34.26 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 1:18     | 19        | FM-08        | 43.22 | -125.   | 1006        | 3.73       | 34.41 |         |          |          |          |          |          |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 4           | 17.24      | 32.22 | 8.93    | 70.80    | 6.27     | 0.69     | 64.53    | 7.80     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 9           | 17.24      | 32.21 | 8.67    | 64.28    | 5.56     | 0.78     | 58.72    | 7.45     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 20          | 15.34      | 32.35 | 8.52    | 66.11    | 7.91     | 0.99     | 58.21    | 7.05     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 30          | 10.91      | 32.55 | 8.87    | 63.47    | 7.88     | 0.92     | 55.59    | 7.37     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 40          | 10.09      | 32.57 | 10.75   |          | 9.73     | 1.38     |          | 7.76     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 45          | 9.78       | 32.58 | 11.26   |          | 7.51     | 1.17     |          | 7.62     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 70          | 9.03       | 32.71 | 18.41   |          | 2.98     | 0.53     |          | 7.56     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 100         | 8.31       | 33.39 | 30.93   |          | 2.34     | 0.36     |          | 6.27     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 150         | 7.99       | 33.83 | 37.66   |          |          |          |          | 6.11     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 651         | 4.57       | 34.21 | 48.42   |          |          |          |          | 1.15     |
| W0109A    | 9/6/01   | 3:22     | 20        | FM-09        | 43.22 | -125.17 | 1006        | 3.71       | 34.41 | 47.99   |          |          |          |          | 0.40     |
| W0109A    | 9/9/01   | 14:07    | 36        | RR-01        | 42.50 | -124.5  | 1           | 8.70       | 33.89 | 43.59   | 50.87    | 6.60     | 0.99     | 44.27    | 10.31    |
| W0109A    | 9/9/01   | 14:07    | 36        | RR-01        | 42.50 | -124.5  | 5           | 8.68       | 33.89 |         |          | 7.46     | 1.08     |          |          |
| W0109A    | 9/9/01   | 14:07    | 36        | RR-01        | 42.50 | -124.5  | 10          | 8.68       | 33.89 |         |          | 5.35     | 1.02     |          |          |
| W0109A    | 9/9/01   | 14:07    | 36        | RR-01        | 42.50 | -124.5  | 15          | 8.54       | 33.90 |         |          | 4.99     | 0.77     |          |          |
| W0109A    | 9/9/01   | 14:07    | 36        | RR-01        | 42.50 | -124.5  | 20          | 8.18       | 33.94 |         |          | 6.50     | 0.86     |          |          |
| W0109A    | 9/9/01   | 14:07    | 36        | RR-01        | 42.50 | -124.5  | 25          | 8.06       | 33.97 |         |          | 4.46     | 0.63     |          |          |
| W0109A    | 9/9/01   | 14:07    | 36        | RR-01        | 42.50 | -124.5  | 30          | 7.91       | 33.99 |         |          |          | 0.63     |          |          |
| W0109A    | 9/9/01   | 14:07    | 36        | RR-01        | 42.50 | -124.5  | 32          | 7.59       | 34.01 |         |          | 5.70     | 0.96     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 1           | 8.83       | 33.75 | 41.16   | 52.68    | 8.19     | 0.92     | 44.49    | 10.63    |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 5           | 8.79       | 33.77 |         |          | 7.50     | 1.11     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 10          | 8.73       | 33.77 |         |          | 7.24     | 1.18     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 20          | 8.62       | 33.81 |         |          | 8.00     | 1.06     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 27          | 8.47       | 33.82 |         |          | 5.98     | 0.93     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 30          | 8.28       | 33.88 |         |          | 6.42     | 0.68     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 40          | 8.04       | 33.96 |         |          |          | 0.30     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 50          | 7.97       | 33.98 |         |          | 4.39     | 0.57     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 60          | 7.97       | 33.99 |         |          |          | 0.66     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 69          | 7.93       | 33.99 |         |          | 4.71     | 0.66     |          |          |
| W0109A    | 9/9/01   | 12:50    | 35        | RR-02        | 42.50 | -124.6  | 81          | 7.89       | 34.00 |         |          | 5.14     | 0.64     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7  | 2           | 9.18       | 33.21 | 33.32   | 54.41    | 6.01     | 1.09     | 48.40    | 11.91    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 5           | 9.04       | 33.34 |         |          | 7.02     | 0.92     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 10          | 8.93       | 33.35 |         |          | 5.69     | 0.84     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 20          | 8.81       | 33.45 |         |          | 5.10     | 0.74     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 30          | 8.72       | 33.55 |         |          | 4.70     | 0.85     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 40          | 8.68       | 33.57 |         |          | 5.26     | 0.73     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 50          | 8.68       | 33.59 |         |          | 5.46     | 0.74     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 54          | 8.68       | 33.60 |         |          | 5.81     | 1.03     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 60          | 8.67       | 33.61 |         |          | 6.02     | 0.87     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 71          | 8.69       | 33.64 |         |          | 5.45     | 0.79     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 100         | 8.32       | 33.91 |         |          | 5.84     | 0.48     |          |          |
| W0109A    | 9/9/01   | 11:33    | 34        | RR-03        | 42.50 | -124.7 | 124         | 8.00       | 33.98 |         |          | 6.32     | 0.65     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 2           | 9.46       | 33.06 | 30.88   | 56.99    | 7.74     | 1.39     | 49.24    | 11.03    |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 10          | 9.45       | 33.06 |         |          | 7.41     | 1.26     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 21          | 9.06       | 33.22 |         |          | 6.40     | 1.15     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 31          | 9.05       | 33.23 |         |          | 8.32     | 1.33     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 35          | 9.05       | 33.23 |         |          | 7.12     | 1.22     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 40          | 9.06       | 33.25 |         |          | 6.66     | 1.12     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 51          | 8.98       | 33.27 |         |          | 6.70     | 1.04     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 70          | 8.65       | 33.46 |         |          | 3.95     | 0.62     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 100         | 8.29       | 33.90 |         |          | 3.96     | 0.51     |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 151         | 7.60       | 34.02 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 231         | 7.20       | 34.04 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 9:58     | 33        | RR-04        | 42.50 | -124.8 | 590         | 5.12       | 34.21 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 2           | 12.03      | 32.73 | 21.20   | 68.00    | 10.66    | 1.88     | 57.34    | 12.44    |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 10          | 12.14      | 32.74 |         |          | 11.05    | 1.93     |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 16          | 11.60      | 32.80 |         |          | 12.10    | 1.78     |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 20          | 11.34      | 32.79 |         |          | 7.92     | 1.25     |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 30          | 10.72      | 33.19 |         |          | 6.34     | 1.16     |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 40          | 9.57       | 33.38 |         |          | 5.58     | 0.96     |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 49          | 8.93       | 33.42 |         |          | 7.95     | 0.71     |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 72          | 8.25       | 33.67 |         |          | 3.51     | 0.46     |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 100         | 8.02       | 33.84 |         |          | 2.83     | 0.33     |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 150         | 7.79       | 33.99 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 751         | 4.29       | 34.28 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 7:46     | 32        | RR-06        | 42.50 | -125.  | 1005        | 3.57       | 34.40 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 3           | 13.86      | 32.60 | 18.63   | 75.80    | 21.65    | 4.12     | 54.15    | 11.88    |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 10          | 13.89      | 32.61 |         |          | 22.10    | 3.94     |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 20          | 13.84      | 32.61 |         |          | 19.04    | 3.67     |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 24          | 13.54      | 32.61 |         |          | 17.12    | 3.28     |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 30          | 10.21      | 33.00 |         |          | 7.99     | 1.61     |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 39          | 9.64       | 33.15 |         |          | 5.79     | 0.93     |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 51          | 8.76       | 33.35 |         |          | 3.61     | 0.68     |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 70          | 8.36       | 33.66 |         |          | 0.22     |          |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 100         | 8.06       | 33.87 |         |          | 3.42     | 0.39     |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 150         | 7.58       | 33.99 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 785         | 4.34       | 34.33 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 5:40     | 31        | RR-07        | 42.50 | -125.2 | 1005        | 3.61       | 34.40 |         |          |          |          |          |          |
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 3           | 8.56       | 33.91 | 38.59   |          | 6.62     | 0.85     | 6.41     |          |
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 5           | 8.56       | 33.91 | 38.65   |          | 7.21     | 0.99     | 6.02     |          |
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 9           | 8.56       | 33.91 | 38.98   |          | 7.89     | 0.98     | 6.44     |          |
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 14          | 8.56       | 33.91 | 42.80   |          | 5.71     | 0.81     | 10.44    |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [μM] | TOC [μM] | POC [μM] | PON [μM] | DOC [μM] | DON [μM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 20          | 8.55       | 33.91 | 37.84   |          | 6.73     | 0.84     | 5.41     |          |
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 23          | 8.56       | 33.91 | 38.55   | 58.08    | 8.96     | 1.09     | 49.12    | 5.72     |
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 25          | 8.55       | 33.91 | 39.65   | 49.01    | 8.01     | 0.98     | 41.00    | 6.84     |
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 29          | 8.56       | 33.91 | 39.29   | 55.14    | 6.06     | 0.82     | 49.08    | 6.54     |
| W0109A    | 9/7/01   | 13:41    | 21        | CR-01        | 41.90 | -124.3 | 36          | 8.55       | 33.91 | 39.45   | 54.71    | 7.99     | 1.17     | 46.72    | 6.71     |
| W0109A    | 9/7/01   | 17:07    | 23        | CR-03        | 41.90 | -124.5 | 2           | 9.27       | 33.77 | 39.08   | 62.40    | 8.26     | 1.46     | 54.14    | 11.87    |
| W0109A    | 9/7/01   | 17:07    | 23        | CR-03        | 41.90 | -124.5 | 5           | 9.27       | 33.78 |         |          | 10.49    | 1.79     |          |          |
| W0109A    | 9/7/01   | 17:07    | 23        | CR-03        | 41.90 | -124.5 | 10          | 9.26       | 33.78 |         |          | 8.24     | 1.54     |          |          |
| W0109A    | 9/7/01   | 17:07    | 23        | CR-03        | 41.90 | -124.5 | 20          | 9.24       | 33.78 |         |          | 6.28     | 1.00     |          |          |
| W0109A    | 9/7/01   | 17:07    | 23        | CR-03        | 41.90 | -124.5 | 60          | 9.03       | 33.81 |         |          | 7.29     | 1.08     |          |          |
| W0109A    | 9/7/01   | 17:07    | 23        | CR-03        | 41.90 | -124.5 | 69          | 8.62       | 33.86 |         |          | 5.76     | 0.81     |          |          |
| W0109A    | 9/7/01   | 17:07    | 23        | CR-03        | 41.90 | -124.5 | 86          | 8.33       | 33.95 |         |          | 5.17     | 0.48     |          |          |
| W0109A    | 9/7/01   | 17:07    | 23        | CR-03        | 41.90 | -124.5 | 99          | 8.28       | 33.96 |         |          | 6.13     | 0.84     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 4           | 9.56       | 33.69 | 37.55   | 65.70    | 8.52     | 1.30     | 57.18    | 11.45    |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 10          | 9.55       | 33.69 |         |          | 5.94     | 0.87     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 20          | 9.55       | 33.69 |         |          | 6.30     | 0.79     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 30          | 9.43       | 33.69 |         |          | 5.19     | 0.94     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 36          | 9.27       | 33.69 |         |          |          | 0.68     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 40          | 8.78       | 33.75 |         |          |          | 0.52     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 52          | 8.64       | 33.79 |         |          |          | 0.40     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 70          | 8.34       | 33.89 |         |          |          | 0.37     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 100         | 8.13       | 33.99 |         |          |          | 0.51     |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 151         | 7.74       | 34.05 |         |          |          |          |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 205         | 7.43       | 34.07 |         |          |          |          |          |          |
| W0109A    | 9/7/01   | 20:35    | 24        | CR-04        | 41.90 | -124.6 | 450         | 5.74       | 34.10 |         |          |          |          |          |          |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 11          | 9.83       | 33.65 | 32.47   | 63.42    | 7.90     | 1.58     | 55.52    | 7.49     |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 17          | 9.83       | 33.65 | 32.55   | 69.43    | 11.85    | 1.70     | 57.58    | 7.34     |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 20          | 9.83       | 33.65 | 31.77   | 65.68    | 8.14     | 1.41     | 57.54    | 7.02     |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 32          | 9.82       | 33.65 | 32.33   | 66.91    | 7.99     | 1.32     | 58.92    | 7.67     |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 49          | 9.80       | 33.65 | 32.80   | 60.57    | 8.33     | 1.35     | 52.24    | 7.99     |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 70          | 9.30       | 33.70 | 33.46   | 56.89    | 4.86     | 0.91     | 52.03    | 7.29     |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 100         | 8.67       | 33.80 | 35.86   | 50.85    | 3.75     | 0.60     | 47.10    | 5.11     |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 149         | 8.04       | 33.97 | 38.30   | 53.62    |          |          | 5.73     |          |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 500         | 5.28       | 34.15 | 45.73   | 42.22    |          |          | 2.49     |          |
| W0109A    | 9/8/01   | 0:18     | 25        | CR-05        | 41.90 | -124.7 | 624         | 4.95       | 34.26 | 46.98   | 51.06    |          |          | 2.64     |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 3           | 9.57       | 32.85 | 23.66   | 62.05    | 6.52     | 0.99     | 55.54    | 11.83    |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 10          | 9.55       | 32.86 |         |          | 6.49     | 1.03     |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 20          | 9.55       | 32.85 |         |          | 5.22     | 1.03     |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 30          | 9.55       | 32.86 |         |          | 7.67     | 1.18     |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 37          | 9.54       | 32.87 |         |          | 6.54     | 1.13     |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 40          | 9.51       | 32.88 |         |          | 8.70     | 1.22     |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 51          | 9.43       | 33.18 |         |          | 3.92     | 0.72     |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 101         | 8.66       | 33.61 |         |          | 4.03     | 0.92     |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 151         | 8.31       | 33.91 |         |          |          |          |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 499         | 5.60       | 34.17 |         |          |          |          |          |          |
| W0109A    | 9/8/01   | 16:00    | 27        | CR-07        | 41.90 | -125.  | 838         | 4.16       | 34.37 |         |          |          |          |          |          |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4 | 3           | 11.03      | 32.78 | 17.07   | 65.78    | 8.17     | 1.48     | 57.61    | 9.39     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4 | 10          | 11.00      | 32.78 | 15.86   | 68.69    | 8.09     | 1.57     | 60.60    | 8.04     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4 | 20          | 10.83      | 32.77 | 16.40   | 62.44    | 7.54     | 1.40     | 54.90    | 8.92     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4 | 29          | 10.63      | 32.74 | 16.08   | 61.06    | 7.10     | 1.26     | 53.96    | 8.74     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4  | 32          | 10.62      | 32.76 | 16.10   | 58.92    | 5.43     | 1.23     | 53.48    | 8.63     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4  | 41          | 10.76      | 32.89 | 18.42   |          |          | 1.19     |          | 8.34     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4  | 49          | 10.43      | 33.23 | 24.36   | 58.69    | 4.84     | 1.07     | 53.86    | 10.18    |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4  | 69          | 9.89       | 33.37 | 27.02   | 63.10    | 4.57     | 0.86     | 58.53    | 8.81     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4  | 101         | 9.02       | 33.66 | 32.76   | 52.80    | 3.73     | 0.60     | 49.07    | 7.34     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4  | 150         | 8.45       | 33.90 | 36.50   | 54.57    |          |          |          | 5.47     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4  | 359         | 6.26       | 34.05 | 42.61   | 47.88    |          |          |          | 3.27     |
| W0109A    | 9/8/01   | 22:50    | 29        | CR-09        | 41.90 | -125.4  | 1005        | 3.71       | 34.42 | 47.10   | 40.75    |          |          |          | 0.40     |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 3           | 13.29      | 32.77 | 19.15   | 72.46    | 12.28    | 2.24     | 60.18    | 12.51    |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 11          | 13.29      | 32.77 |         |          | 11.17    | 2.10     |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 16          | 13.20      | 32.77 |         |          | 10.80    | 2.15     |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 20          | 13.13      | 32.77 |         |          | 11.64    | 2.10     |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 30          | 13.01      | 32.80 |         |          | 9.01     | 1.91     |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 40          | 12.75      | 32.80 |         |          | 8.43     | 1.80     |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 49          | 12.46      | 32.80 |         |          | 7.10     | 1.51     |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 69          | 10.28      | 33.42 |         |          | 4.32     | 0.76     |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 99          | 8.65       | 33.68 |         |          | 4.78     | 0.52     |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 149         | 7.78       | 33.93 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 719         | 4.48       | 34.31 |         |          |          |          |          |          |
| W0109A    | 9/9/01   | 1:01     | 30        | CR-10        | 41.90 | -125.7  | 1006        | 3.71       | 34.42 |         |          |          |          |          |          |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 2           | 10.69      | 30.92 | 24.79   | 70.27    | 19.19    | 2.06     | 51.08    | 13.28    |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 5           | 10.74      | 30.97 | 24.34   | 69.64    | 14.12    | 1.69     | 55.52    | 13.27    |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 10          | 11.35      | 32.12 | 16.89   | 65.60    | 10.04    | 1.02     | 55.56    | 10.41    |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 15          | 11.41      | 32.34 | 16.56   | 60.36    | 12.01    | 1.22     | 48.35    | 9.81     |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 21          | 11.46      | 32.43 | 15.37   | 57.57    | 11.59    | 1.17     | 45.98    | 8.78     |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 25          | 11.56      | 32.55 | 16.39   | 57.47    | 10.51    | 1.08     | 46.95    | 9.09     |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 31          | 11.70      | 32.62 | 16.30   | 57.08    | 7.89     | 0.72     | 49.19    | 9.82     |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 40          | 11.50      | 32.63 | 16.47   | 54.61    | 7.60     | 0.70     | 47.01    | 9.88     |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 50          | 11.55      | 32.65 | 15.99   | 53.59    | 6.45     | 0.72     | 47.14    | 9.33     |
| W0111B    | 11/27/01 | 20:58    | 3         | NH-05        | 44.65 | -124.18 | 53          | 11.63      | 32.70 | 16.58   | 56.95    | 7.37     | 0.83     | 49.58    | 9.45     |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 3           | 11.10      | 32.38 | 16.38   | 53.82    | 8.78     | 1.09     | 45.05    | 10.68    |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 5           | 11.10      | 32.38 | 17.37   | 55.15    | 8.84     | 1.06     | 46.31    | 11.52    |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 10          | 11.10      | 32.38 | 17.52   | 56.96    | 10.26    | 1.21     | 46.70    | 11.52    |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 20          | 11.08      | 32.38 | 17.03   | 63.15    | 9.18     | 1.03     | 53.97    | 11.03    |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 30          | 11.08      | 32.41 | 17.35   | 55.17    | 5.76     | 0.83     | 49.41    | 11.08    |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 34          | 11.07      | 32.42 | 16.29   | 53.99    | 8.41     | 1.10     | 45.57    | 9.74     |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 40          | 11.05      | 32.45 | 16.16   | 63.81    | 9.02     | 1.16     | 54.79    | 9.72     |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 50          | 11.09      | 32.50 | 17.35   | 63.60    | 6.40     | 0.83     | 57.20    | 10.09    |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 61          | 11.13      | 32.84 | 20.95   | 53.18    | 6.14     | 0.65     | 47.05    | 11.85    |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 71          | 10.43      | 33.21 | 27.56   | 53.59    | 6.89     | 0.82     | 46.70    | 11.30    |
| W0111B    | 11/27/01 | 23:49    | 5         | NH-15        | 44.65 | -124.41 | 85          | 10.00      | 33.37 | 30.97   | 50.66    | 8.13     | 0.95     | 42.53    | 11.33    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 3           | 10.96      | 32.44 | 19.29   | 62.19    | 7.57     | 1.07     | 54.62    | 11.96    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 10          | 10.96      | 32.44 | 18.84   | 59.76    | 8.31     | 1.21     | 51.44    | 11.65    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 20          | 10.96      | 32.44 | 19.37   | 61.85    | 8.90     | 1.21     | 52.95    | 11.77    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 30          | 10.96      | 32.44 | 19.61   | 51.56    | 6.16     | 0.85     | 45.40    | 12.08    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 40          | 11.01      | 32.52 | 19.71   | 51.51    | 5.50     | 0.61     | 46.00    | 11.15    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 50          | 10.41      | 32.73 | 28.38   | 50.21    | 3.54     | 0.46     | 46.67    | 16.38    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 70          | 9.75       | 33.45 | 32.13   | 49.82    | 4.10     | 0.58     | 45.73    | 10.76    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 100         | 9.33       | 33.60 | 34.86   | 43.10    | 3.29     | 0.41     | 39.81    | 10.36    |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 149         | 8.82       | 33.78 | 37.73   | 46.09    | 3.63     | 0.39     | 42.46    | 9.10     |
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 200         | 8.44       | 33.91 | 39.28   | 44.89    |          |          |          | 9.01     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0111B    | 11/28/01 | 2:48     | 7         | NH-25        | 44.65 | -124.65 | 250         | 7.91       | 33.97 | 41.14   | 41.07    |          |          |          | 9.30     |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 4           | 11.01      | 32.41 | 16.67   | 54.15    | 15.49    | 2.34     | 38.66    | 9.96     |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 10          | 11.02      | 32.40 |         |          | 15.05    | 2.33     |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 20          | 10.97      | 32.43 |         |          | 10.04    | 1.88     |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 25          | 10.91      | 32.46 |         |          | 9.57     | 1.68     |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 30          | 10.87      | 32.47 |         |          | 11.66    | 1.96     |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 39          | 10.56      | 32.60 |         |          | 5.73     | 0.95     |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 50          | 9.52       | 32.88 |         |          | 3.81     | 0.51     |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 70          | 8.75       | 33.17 |         |          | 2.34     | 0.45     |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.95       | 33.70 |         |          | 4.37     | 0.68     |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 150         | 8.49       | 33.87 |         |          |          |          |          |          |
| W0111B    | 11/28/01 | 6:14     | 8         | NH-35        | 44.65 | -124.88 | 420         | 5.62       | 34.09 |         |          |          |          |          |          |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 2           | 9.70       | 31.95 | 18.39   | 83.65    | 22.83    | 2.75     | 60.81    | 13.25    |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 5           | 9.70       | 31.94 | 18.09   | 91.57    | 29.28    | 4.09     | 62.28    | 11.82    |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 10          | 9.70       | 31.95 | 18.37   | 76.64    | 19.32    | 2.92     | 57.32    | 12.75    |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 15          | 9.69       | 32.15 | 17.26   | 67.65    | 22.62    | 3.55     | 45.04    | 10.93    |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 20          | 9.69       | 32.29 | 17.48   | 67.62    | 16.40    | 2.66     | 51.22    | 11.69    |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 25          | 9.70       | 32.34 | 18.95   | 61.23    | 15.76    | 2.75     | 45.48    | 12.88    |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 31          | 9.73       | 32.41 | 18.84   | 63.89    | 16.51    | 2.50     | 47.38    | 11.92    |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 41          | 9.74       | 32.46 | 19.33   | 62.16    | 16.35    | 2.44     | 45.81    | 11.88    |
| W0202A    | 2/20/02  | 1:23     | 3         | NH-05        | 44.65 | -124.18 | 54          | 9.73       | 32.48 | 20.91   | 60.36    | 20.38    | 2.64     | 39.98    | 12.67    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 4           | 9.60       | 32.03 | 18.52   | 74.51    | 18.51    | 3.03     | 55.99    | 12.73    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 5           | 9.60       | 32.03 | 18.92   | 70.44    | 20.11    | 3.34     | 50.33    | 12.97    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 10          | 9.60       | 32.04 | 19.65   | 69.88    | 17.54    | 2.95     | 52.34    | 14.01    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 20          | 9.63       | 32.22 | 19.19   | 62.47    | 11.47    | 2.03     | 51.00    | 13.25    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 32          | 9.72       | 32.44 | 20.41   | 57.20    |          | 0.85     |          | 14.17    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 43          | 9.68       | 32.65 | 23.86   | 59.48    | 7.89     | 1.17     | 51.59    | 15.12    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 51          | 9.62       | 32.69 | 24.86   | 60.82    |          | 0.98     |          | 14.18    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 63          | 9.61       | 32.71 | 25.14   | 56.46    | 6.84     | 1.08     | 49.62    | 13.89    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 71          | 9.49       | 32.85 | 26.68   | 58.10    | 11.63    | 1.57     | 46.47    | 11.22    |
| W0202A    | 2/20/02  | 4:55     | 5         | NH-15        | 44.65 | -124.41 | 88          | 9.42       | 33.11 | 29.02   | 62.04    | 11.03    | 1.82     | 51.01    | 11.31    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 3           | 9.53       | 31.98 | 20.54   | 70.40    | 11.38    | 2.05     | 59.02    | 13.65    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 10          | 9.53       | 31.98 | 18.92   | 70.10    | 15.73    | 2.02     | 54.37    | 12.05    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 19          | 9.59       | 32.02 | 19.52   | 73.46    | 13.62    | 2.00     | 59.84    | 12.53    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 31          | 9.54       | 32.06 | 19.83   | 76.40    |          | 1.85     |          | 12.86    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 39          | 9.58       | 32.14 | 19.38   | 72.75    | 19.74    | 1.66     | 53.01    | 11.50    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 50          | 9.74       | 32.40 | 20.96   | 66.91    | 4.28     | 0.59     | 62.63    | 11.92    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 73          | 9.78       | 32.73 | 24.79   | 57.31    | 3.95     | 0.62     | 53.36    | 12.06    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 101         | 8.98       | 33.54 | 35.65   | 59.99    | 4.62     | 0.73     | 55.37    | 10.34    |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 150         | 8.14       | 33.88 | 40.43   | 48.03    | 4.01     | 0.66     | 44.03    | 7.89     |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 199         | 7.74       | 33.96 | 42.02   | 61.50    | 4.62     | 0.68     | 56.88    | 9.51     |
| W0202A    | 2/20/02  | 8:04     | 7         | NH-25        | 44.65 | -124.65 | 249         | 7.43       | 33.99 | 43.11   | 48.95    | 4.17     | 0.57     | 44.78    | 7.97     |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 3           | 9.38       | 32.47 | 19.01   | 60.07    | 6.70     | 1.03     | 53.36    | 11.50    |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 11          | 9.30       | 32.47 |         |          | 6.70     | 1.01     |          |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 17          | 9.27       | 32.47 |         |          | 6.58     | 1.26     |          |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 20          | 9.25       | 32.47 |         |          | 6.84     | 1.17     |          |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 30          | 9.26       | 32.48 |         |          | 7.68     | 0.98     |          |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 40          | 9.25       | 32.48 |         |          | 11.20    | 1.04     |          |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 49          | 9.30       | 32.50 |         |          | 8.91     | 0.88     |          |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 71          | 9.69       | 32.96 |         |          | 4.86     | 0.74     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 99          | 9.13       | 33.50 |         |          |          |          | 0.40     |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 151         | 8.11       | 33.91 |         |          |          |          | 0.45     |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 366         | 6.19       | 34.06 |         |          |          |          |          |          |
| W0202A    | 2/20/02  | 23:09    | 11        | NH-35        | 44.65 | -124.88 | 435         | 5.81       | 34.08 |         |          |          |          |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 2           | 9.54       | 32.45 | 19.69   | 67.40    | 20.24    | 2.84     | 47.16    | 12.12    |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 10          | 9.52       | 32.46 |         |          | 13.69    | 2.16     |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 20          | 9.51       | 32.46 |         |          | 13.30    | 2.02     |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 30          | 9.51       | 32.46 |         |          | 11.96    | 1.75     |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 39          | 9.51       | 32.47 |         |          | 16.19    | 1.98     |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 49          | 9.52       | 32.49 |         |          | 8.37     | 1.55     |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 69          | 9.78       | 32.87 |         |          | 3.93     | 0.61     |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 100         | 8.47       | 33.47 |         |          | 3.87     | 0.53     |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 149         | 7.82       | 33.87 |         |          |          | 0.36     |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 501         | 5.28       | 34.12 |         |          |          |          |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 520         | 5.21       | 34.13 |         |          |          |          |          |          |
| W0202A    | 2/20/02  | 21:18    | 10        | NH-45        | 44.65 | -125.12 | 656         | 4.57       | 34.23 |         |          |          |          |          |          |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 2           | 8.60       | 32.34 | 17.91   | 57.28    | 5.90     | 0.95     | 51.38    | 10.93    |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 10          | 8.54       | 32.34 | 17.56   | 53.03    | 6.38     | 0.92     | 46.65    | 10.83    |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 21          | 8.52       | 32.34 | 18.21   | 67.34    | 5.17     | 0.86     | 62.18    | 10.73    |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 30          | 8.52       | 32.34 | 17.28   |          | 6.18     | 0.87     | -6.18    | 9.50     |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 38          | 8.53       | 32.34 | 17.58   | 61.57    | 8.55     | 0.86     | 53.02    | 9.24     |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 50          | 8.58       | 32.36 | 16.61   | 59.20    | 5.29     | 0.79     | 53.91    | 8.28     |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 70          | 8.78       | 32.41 | 17.06   | 55.99    | 4.44     | 0.76     | 51.55    | 8.30     |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 100         | 7.94       | 33.04 | 28.42   | 63.97    |          | 0.42     |          | 9.12     |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 151         | 7.75       | 33.76 | 35.77   | 51.50    |          | 0.37     |          | 6.15     |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 783         | 4.17       | 34.31 | 47.23   |          |          |          |          | 3.29     |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 1004        | 3.66       | 34.41 | 47.70   | 40.31    |          |          |          |          |
| W0202A    | 2/20/02  | 18:27    | 9         | NH-65        | 44.65 | -125.6  | 1006        | 3.66       | 34.41 | 48.07   |          |          |          |          | 3.15     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 5           | 9.25       | 33.28 | 34.73   | 68.38    | 23.27    | 3.38     | 45.11    | 9.11     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 10          | 8.94       | 33.39 | 35.49   | 61.76    | 16.78    | 2.55     | 44.97    | 8.89     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 15          | 8.71       | 33.47 | 36.91   | 59.30    | 16.97    | 2.31     | 42.33    | 8.68     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 20          | 8.38       | 33.63 | 38.75   | 54.37    | 10.62    | 1.54     | 43.75    | 7.42     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 25          | 8.09       | 33.79 | 39.43   | 53.24    | 6.76     | 1.13     | 46.48    | 8.35     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 30          | 8.09       | 33.80 | 40.08   | 52.83    | 6.87     | 1.19     | 45.96    | 7.95     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.86       | 33.88 | 40.42   | 49.47    | 5.96     | 0.77     | 43.51    | 9.34     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.82       | 33.90 | 41.10   | 54.31    | 6.91     | 0.88     | 47.40    | 8.60     |
| W0204A    | 4/5/02   | 0:53     | 3         | NH-05        | 44.65 | -124.18 | 56          | 7.80       | 33.91 | 40.59   | 51.95    | 7.61     | 0.83     | 44.34    | 6.60     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 2           | 8.97       | 31.60 | 12.71   | 87.51    | 7.13     | 1.11     | 80.38    | 8.87     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 5           | 8.97       | 31.60 | 12.51   |          | 6.53     | 0.95     |          | 8.64     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 10          | 8.96       | 31.60 | 12.84   | 69.87    | 8.47     | 1.42     | 61.41    | 8.26     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 20          | 8.87       | 31.70 | 12.41   | 67.39    | 8.35     | 1.30     | 59.04    | 7.78     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 30          | 8.95       | 32.09 | 14.38   | 66.32    | 6.54     | 0.89     | 59.78    | 8.29     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 40          | 8.98       | 32.25 | 15.63   | 67.69    | 8.31     | 1.05     | 59.38    | 8.10     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 50          | 8.94       | 32.44 | 16.75   | 69.80    | 7.22     | 0.83     | 62.58    | 7.59     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 60          | 9.10       | 32.69 | 21.42   | 65.00    |          | 0.56     |          | 9.66     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 70          | 9.02       | 33.16 | 29.54   | 62.10    |          | 0.45     |          | 9.88     |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 74          | 8.98       | 33.22 | 30.72   | 67.20    |          | 0.47     |          | 10.10    |
| W0204A    | 4/5/02   | 3:51     | 5         | NH-15        | 44.65 | -124.41 | 88          | 8.65       | 33.49 | 34.58   | 60.90    |          | 0.45     |          | 12.06    |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 2           | 9.72       | 31.07 | 9.60    | 88.40    | 27.45    | 2.38     | 60.95    | 7.04     |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 10          | 9.47       | 31.43 |         | 88.30    | 23.35    | 2.70     | 64.95    |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 17          | 9.30       | 31.69 | 12.60   | 83.50    | 24.49    | 3.61     | 59.01    | 8.28     |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 20          | 9.29       | 31.71 | 13.74   | 86.60    | 24.04    | 4.13     | 62.56    | 8.85     |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 30          | 9.13       | 32.25 | 14.65   | 91.10    | 7.16     | 1.23     | 83.94    | 8.43     |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 40          | 8.98       | 32.37 | 22.35   | 61.80    | 5.36     | 0.83     | 56.44    | 15.31    |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 50          | 8.93       | 32.42 | 22.96   | 61.30    | 4.63     | 0.75     | 56.67    | 15.07    |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 70          | 8.90       | 32.68 | 28.39   | 55.70    |          | 0.53     |          | 15.23    |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 100         | 8.81       | 33.57 | 35.85   | 54.30    |          | 0.39     |          | 9.93     |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 150         | 8.05       | 33.90 | 40.27   | 52.60    |          |          |          | 10.34    |
| W0204A    | 4/5/02   | 7:02     | 7         | NH-25        | 44.65 | -124.65 | 200         | 7.40       | 33.99 | 41.50   | 54.40    |          |          |          | 8.62     |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 1           | 9.79       | 31.36 | 10.97   | 100.60   | 25.57    | 2.55     | 75.03    | 8.33     |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 5           | 9.73       | 31.48 |         | 40.47    | 3.31     |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 10          | 9.55       | 31.66 |         | 38.34    | 3.56     |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 20          | 9.10       | 32.35 |         |          | 1.20     |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 30          | 8.94       | 32.40 |         | 5.13     | 0.74     |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 40          | 8.82       | 32.41 |         | 5.37     | 0.71     |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 50          | 8.87       | 32.46 |         |          | 0.39     |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 70          | 8.81       | 32.77 |         |          | 0.39     |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 100         | 8.86       | 33.38 |         |          | 0.48     |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 150         | 8.22       | 33.85 |         |          |          |          |          |          |
| W0204A    | 4/5/02   | 10:17    | 8         | NH-35        | 44.65 | -124.88 | 427         | 5.33       | 34.12 |         |          |          |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 2           | 9.85       | 31.32 | 9.82    | 79.20    | 12.04    | 2.27     | 67.16    | 6.42     |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 10          | 9.82       | 31.61 |         | 16.74    | 3.02     |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 19          | 9.47       | 32.20 |         | 11.87    | 2.87     |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 25          | 9.22       | 32.36 |         | 7.23     | 1.39     |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 30          | 9.12       | 32.40 |         |          | 1.16     |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 40          | 9.05       | 32.42 |         | 4.60     | 0.94     |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 50          | 8.93       | 32.46 |         | 4.89     | 0.91     |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 69          | 8.95       | 32.51 |         | 4.41     | 0.77     |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 100         | 8.75       | 32.75 |         |          | 0.39     |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 150         | 8.25       | 33.83 |         |          |          |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 499         | 5.31       | 34.12 |         |          |          |          |          |          |
| W0204A    | 4/5/02   | 13:47    | 9         | NH-45        | 44.65 | -125.12 | 680         | 4.60       | 34.22 |         |          |          |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 1           | 10.00      | 31.40 | 11.27   | 90.30    | 15.37    | 2.09     | 74.93    | 9.15     |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 10          | 9.92       | 31.50 |         | 13.80    | 2.38     |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 15          | 9.23       | 32.12 |         | 11.00    | 2.17     |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 20          | 8.77       | 32.40 |         | 7.55     | 1.55     |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 30          | 8.67       | 32.41 |         | 7.58     | 1.28     |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 40          | 8.57       | 32.41 |         | 5.40     | 1.13     |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 50          | 8.35       | 32.41 |         | 3.93     | 0.56     |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 70          | 8.99       | 32.65 |         | 4.26     | 0.55     |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 100         | 8.38       | 33.33 |         |          | 0.41     |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 150         | 8.03       | 33.80 |         |          |          |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 600         | 4.96       | 34.17 |         |          |          |          |          |          |
| W0204A    | 4/5/02   | 20:09    | 11        | NH-65        | 44.65 | -125.6  | 1005        | 3.70       | 34.40 |         |          |          |          |          |          |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 1           | 9.92       | 32.22 | 14.28   | 75.80    | 19.93    | 3.38     | 55.87    | 10.56    |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 4           | 9.92       | 32.22 | 13.66   | 72.50    | 18.18    | 3.01     | 54.32    | 10.31    |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 10          | 9.91       | 32.22 | 13.66   | 78.60    | 18.24    | 3.38     | 60.36    | 9.79     |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 20          | 9.83       | 32.23 | 13.14   | 81.10    | 14.95    | 3.06     | 66.15    | 9.01     |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 30          | 9.56       | 32.49 | 16.15   | 67.20    | 7.57     | 1.30     | 59.63    | 10.77    |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 40          | 9.44       | 32.51 | 14.98   | 64.70    |          | 0.79     |          | 8.53     |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 50          | 9.11       | 32.50 | 15.55   | 65.90    |          | 0.43     |          | 9.06     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 70          | 8.95       | 32.51 | 16.65   | 64.10    |          | 0.68     |          | 8.68     |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.96       | 32.91 | 24.94   | 63.70    |          | 0.40     |          | 9.07     |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 150         | 8.39       | 33.67 | 33.25   | 57.20    |          |          |          | 5.69     |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 285         | 6.92       | 34.02 | 39.58   | 57.57    |          |          |          | 3.60     |
| W0204A    | 4/5/02   | 23:13    | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.65       | 34.41 | 46.52   | 43.70    |          |          |          | 1.66     |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 2           | 10.10      | 32.51 | 17.59   | 168.80   | 64.44    | 6.13     | 104.36   | 10.95    |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 5           | 10.02      | 32.51 | 17.96   | 171.70   | 73.04    | 6.82     | 98.66    | 10.48    |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 10          | 9.72       | 32.53 | 20.20   | 143.30   | 50.28    | 5.62     | 93.02    | 11.92    |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 15          | 8.97       | 32.81 | 24.86   | 64.80    | 15.07    | 2.31     | 49.73    | 8.13     |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 20          | 8.95       | 33.01 | 27.75   | 58.00    | 7.22     | 1.28     | 50.78    | 8.49     |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 25          | 8.88       | 33.20 | 30.77   | 59.10    |          | 1.00     |          | 8.31     |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 29          | 8.75       | 33.35 |         | 54.40    | 8.49     | 1.09     | 45.91    |          |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 40          | 8.46       | 33.66 | 37.38   | 57.20    | 11.05    | 1.41     | 46.15    | 6.87     |
| W0204A    | 4/9/02   | 12:45    | 40        | HH-01        | 44.00 | -124.2  | 48          | 8.44       | 33.67 | 37.30   | 60.60    | 8.76     | 1.10     | 51.84    | 10.87    |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 3           | 9.64       | 32.72 | 21.98   | 116.50   | 46.53    | 7.18     | 69.98    | 9.77     |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 4           | 9.64       | 32.72 |         |          | 46.41    | 7.22     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 10          | 9.64       | 32.72 |         |          | 42.53    | 7.32     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 20          | 9.55       | 32.79 |         |          | 34.77    | 6.14     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 24          | 9.19       | 33.04 |         |          | 28.20    | 4.51     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 30          | 8.63       | 33.49 |         |          |          | 0.92     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 40          | 8.26       | 33.72 |         |          |          | 0.71     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 50          | 8.09       | 33.83 |         |          |          | 0.74     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 60          | 7.98       | 33.85 |         |          |          | 1.19     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 70          | 7.67       | 33.96 |         |          |          | 0.69     |          |          |
| W0204A    | 4/9/02   | 14:20    | 41        | HH-02        | 44.00 | -124.4  | 100         | 7.33       | 34.00 |         |          | 6.83     | 1.15     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 2           | 9.49       | 31.17 | 9.53    | 72.60    | 7.64     | 1.74     | 64.96    | 7.38     |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 10          | 9.49       | 31.17 |         |          | 13.33    | 2.49     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 20          | 9.26       | 31.49 |         |          | 8.45     | 2.09     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 30          | 8.83       | 32.50 |         |          |          | 1.42     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 40          | 8.84       | 32.93 |         |          |          | 1.10     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 50          | 8.67       | 33.46 |         |          |          | 1.00     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 59          | 8.44       | 33.64 |         |          |          | 0.56     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 69          | 8.31       | 33.71 |         |          |          | 0.55     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 100         | 7.34       | 33.94 |         |          |          | 0.56     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 125         | 6.85       | 34.03 |         |          | 5.09     | 0.65     |          |          |
| W0204A    | 4/9/02   | 16:19    | 42        | HH-03        | 44.00 | -124.6  | 144         | 6.60       | 34.04 |         |          | 5.23     | 0.61     |          |          |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 2           | 9.52       | 31.82 | 10.00   | 84.20    | 16.35    | 2.83     | 67.85    | 7.07     |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 5           | 9.52       | 31.82 | 9.38    | 85.40    |          |          |          |          |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 10          | 9.51       | 31.83 | 12.36   | 86.10    | 18.14    | 3.08     | 67.96    | 9.22     |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 20          | 9.47       | 31.84 | 13.98   | 84.00    | 10.84    | 1.84     | 73.16    | 12.00    |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 30          | 9.43       | 31.88 | 13.70   | 87.70    | 16.31    | 3.16     | 71.39    | 10.09    |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 40          | 9.04       | 32.27 | 16.83   | 68.90    | 10.42    | 2.02     | 58.48    | 9.76     |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 50          | 9.06       | 32.49 | 18.69   | 62.30    |          | 0.72     |          | 9.88     |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 60          | 9.13       | 32.60 | 26.23   | 69.30    |          | 0.54     |          | 16.32    |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 70          | 8.97       | 32.84 | 33.46   | 55.70    |          | 0.61     |          | 16.64    |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 95          | 8.31       | 33.66 | 38.77   | 53.40    |          | 0.51     |          | 9.41     |
| W0204A    | 4/9/02   | 17:52    | 43        | HH-04        | 44.00 | -124.8  | 110         | 8.30       | 33.68 | 39.05   | 58.50    |          | 0.43     |          | 9.56     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 2           | 10.03      | 31.91 | 8.15    | 95.70    | 11.19    | 1.44     | 84.51    | 5.94     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 10          | 9.90       | 31.95 | 7.80    | 88.70    | 12.69    | 1.49     | 76.01    | 6.13     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 20          | 9.67       | 32.05 | 8.89    | 88.80    | 13.48    | 2.04     | 75.32    | 6.05     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 25          | 9.55       | 32.10 | 9.87    | 78.40    | 11.08    | 1.91     | 67.32    | 6.62     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 30          | 9.19       | 32.22 | 12.20   | 87.20    | 9.42     | 1.92     | 77.78    | 6.67     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 40          | 9.10       | 32.49 | 13.95   | 77.10    | 8.53     | 1.69     | 68.57    | 6.48     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 50          | 9.00       | 32.49 | 15.37   | 71.30    | 9.80     | 1.55     | 61.50    | 7.47     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 70          | 8.75       | 32.48 | 15.16   | 69.10    |          | 1.06     |          | 6.00     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 100         | 8.65       | 33.37 | 29.32   | 64.00    |          | 0.75     |          | 5.11     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 150         | 7.55       | 33.89 | 37.62   | 60.60    |          |          |          | 3.83     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 500         | 5.45       | 34.14 | 43.61   | 51.40    |          |          |          | 1.32     |
| W0204A    | 4/9/02   | 19:19    | 44        | HH-05        | 44.00 | -125.   | 820         | 4.29       | 34.32 | 45.36   | 57.90    |          |          |          | 0.01     |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 2           | 10.29      | 31.76 | 7.88    | 77.80    | 8.27     | 1.44     | 69.53    | 6.42     |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 10          | 10.29      | 31.76 |         |          | 9.16     | 1.47     |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 20          | 9.75       | 32.02 |         |          | 14.91    | 1.88     |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 30          | 9.16       | 32.37 |         |          | 19.74    | 3.29     |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 40          | 9.05       | 32.42 |         |          | 9.90     | 1.75     |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 50          | 9.01       | 32.47 |         |          | 8.01     | 1.27     |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 70          | 8.89       | 32.64 |         |          | 5.00     | 0.88     |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 100         | 8.71       | 33.37 |         |          | 5.51     | 0.87     |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 150         | 8.26       | 33.83 |         |          |          |          |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 900         | 4.02       | 34.36 |         |          |          |          |          |          |
| W0204A    | 4/9/02   | 21:10    | 45        | HH-07        | 44.00 | -125.2  | 1005        | 3.73       | 34.40 |         |          |          |          |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 1           | 10.07      | 32.48 | 12.83   | 65.90    | 6.59     | 1.36     | 59.31    | 7.19     |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 10          | 10.05      | 32.48 |         |          | 7.05     | 1.50     |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 20          | 9.93       | 32.51 |         |          | 6.35     | 1.27     |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 30          | 9.81       | 32.51 |         |          | 5.91     | 1.32     |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 40          | 9.46       | 32.52 |         |          | 4.94     | 1.08     |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 45          | 9.44       | 32.53 |         |          | 4.38     | 0.90     |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 50          | 9.22       | 32.52 |         |          | 4.05     | 0.81     |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 70          | 8.96       | 32.54 |         |          |          | 0.52     |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 99          | 8.69       | 33.17 |         |          |          | 0.41     |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 150         | 8.28       | 33.80 |         |          |          |          |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 910         | 3.88       | 34.37 |         |          |          |          |          |          |
| W0204A    | 4/9/02   | 23:05    | 46        | HH-09        | 44.00 | -125.4  | 1004        | 3.64       | 34.40 |         |          |          |          |          |          |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 1           | 9.65       | 32.77 | 24.36   | 146.70   | 61.29    | 9.06     | 85.41    | 14.08    |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 5           | 9.41       | 32.79 | 23.29   | 146.60   | 50.03    | 7.83     | 96.57    | 13.19    |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 10          | 8.93       | 33.18 | 23.70   | 132.80   | 40.58    | 6.81     | 92.22    | 13.52    |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 15          | 8.51       | 33.46 | 24.42   | 128.10   | 38.98    | 6.16     | 89.12    | 13.41    |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 20          | 8.31       | 33.62 | 26.27   | 106.30   | 28.13    | 4.43     | 78.18    | 13.06    |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 25          | 8.29       | 33.65 | 31.78   | 74.10    | 21.32    | 2.11     | 52.78    | 8.93     |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 30          | 8.06       | 33.82 | 34.60   | 68.10    | 8.21     | 1.21     | 59.89    | 7.53     |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 40          | 7.81       | 33.91 | 38.43   | 51.20    | 3.80     | 0.53     | 47.40    | 6.31     |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 50          | 7.76       | 33.92 | 38.75   | 54.90    | 4.17     | 0.62     | 50.73    | 5.14     |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 55          | 7.77       | 33.92 | 38.79   | 56.54    | 5.34     | 0.66     | 51.20    | 5.23     |
| W0204A    | 4/6/02   | 22:13    | 20        | FM-03        | 43.22 | -124.5  | 60          | 7.76       | 33.92 | 38.59   | 53.50    | 5.53     | 0.77     | 47.97    | 5.09     |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 1           | 9.88       | 32.50 | 23.81   | 165.80   | 62.35    | 8.90     | 103.45   | 14.38    |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 5           | 9.81       | 32.52 |         |          | 59.85    | 8.83     |          |          |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 10          | 9.58       | 32.63 |         |          | 45.12    | 7.33     |          |          |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 20          | 9.35       | 32.79 |         |          | 29.83    | 5.60     |          |          |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 30          | 9.23       | 32.89 |         |          | 15.29    | 2.98     |          |          |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 41          | 9.14       | 33.00 |         |          | 12.25    | 2.23     |          |          |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 50          | 8.76       | 33.45 |         |          |          | 0.53     |          |          |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 61          | 8.22       | 33.72 |         |          |          | 0.67     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 70          | 7.83       | 33.90 |         |          |          |          | 0.78     |          |
| W0204A    | 4/6/02   | 20:00    | 18        | FM-04        | 43.22 | -124.58 | 80          | 7.69       | 33.91 |         |          |          |          |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 2           | 9.71       | 32.25 |         | 147.10   | 53.30    | 5.85     | 93.80    |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 5           | 9.63       | 32.26 |         |          | 54.61    | 6.23     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 10          | 9.60       | 32.27 |         |          | 36.14    | 4.67     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 20          | 9.47       | 32.41 |         |          | 28.39    | 4.92     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 30          | 9.22       | 32.71 |         |          | 9.09     | 1.65     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 40          | 9.14       | 32.96 |         |          | 8.40     | 1.72     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 51          | 8.99       | 33.18 |         |          | 7.64     | 1.25     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 60          | 8.76       | 33.42 |         |          | 3.64     | 0.52     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 70          | 8.18       | 33.75 |         |          | 4.48     | 0.60     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 100         | 7.71       | 33.95 |         |          | 5.89     | 0.46     |          |          |
| W0204A    | 4/6/02   | 17:23    | 17        | FM-05        | 43.22 | -124.67 | 151         | 6.98       | 34.02 |         |          |          |          |          |          |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 1           | 9.68       | 31.96 | 13.29   | 83.40    | 27.11    | 3.67     | 56.29    | 9.33     |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 5           | 9.65       | 32.00 | 15.10   | 86.30    | 31.21    | 4.72     | 55.09    | 10.32    |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 10          | 9.53       | 32.12 | 15.10   | 85.60    | 30.53    | 5.08     | 55.07    | 9.93     |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 14          | 9.42       | 32.25 | 16.84   | 79.60    | 25.96    | 5.00     | 53.64    | 10.16    |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 20          | 9.36       | 32.30 | 18.33   |          | 21.43    | 4.31     | 10.22    |          |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 31          | 9.29       | 32.38 | 18.09   | 64.90    | 15.77    | 3.03     | 49.13    | 9.41     |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 38          | 9.22       | 32.47 | 18.93   | 64.90    | 8.32     | 1.65     | 56.58    | 9.26     |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 50          | 9.18       | 32.69 | 21.82   | 61.30    | 7.58     | 1.32     | 53.72    | 8.84     |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 69          | 8.86       | 33.37 | 31.58   | 50.90    |          | 0.46     | 7.34     |          |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 100         | 8.50       | 33.63 | 34.29   | 50.90    | 4.23     | 0.64     | 46.67    | 6.20     |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 150         | 8.04       | 33.91 | 38.46   | 49.70    |          |          | 6.15     |          |
| W0204A    | 4/6/02   | 12:49    | 15        | FM-07        | 43.22 | -124.83 | 300         | 6.19       | 34.07 | 44.12   | 46.20    |          |          | 4.80     |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 1           | 10.08      | 32.53 | 19.22   | 63.10    | 10.47    | 1.93     | 52.63    | 14.74    |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 5           | 10.10      | 32.53 |         |          | 9.39     | 1.83     |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 10          | 10.10      | 32.53 |         |          | 10.74    | 2.07     |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 20          | 10.01      | 32.55 |         |          | 14.42    | 2.74     |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 30          | 9.91       | 32.55 |         |          | 8.70     | 1.41     |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 39          | 9.83       | 32.57 |         |          |          | 1.00     |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 50          | 9.82       | 32.57 |         |          | 6.41     | 1.07     |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 70          | 9.26       | 33.02 |         |          |          | 0.53     |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 100         | 8.54       | 33.59 |         |          |          | 0.44     |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 150         | 8.06       | 33.91 |         |          |          |          |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 850         | 4.17       | 34.34 |         |          |          |          |          |          |
| W0204A    | 4/6/02   | 10:32    | 14        | FM-08        | 43.22 | -125.   | 999         | 3.75       | 34.41 |         |          |          |          |          |          |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 1           | 9.93       | 32.44 | 13.99   | 84.50    | 22.17    | 3.34     | 62.33    | 10.62    |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 5           | 9.98       | 32.46 | 14.15   | 84.80    | 19.20    | 2.88     | 65.60    | 10.91    |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 10          | 10.01      | 32.48 | 14.01   | 76.80    | 16.19    | 2.73     | 60.61    | 10.31    |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 20          | 9.96       | 32.54 | 15.10   | 64.30    | 14.52    | 2.66     | 49.78    | 8.92     |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 30          | 9.89       | 32.56 | 15.14   | 60.90    | 16.63    | 1.58     | 44.27    | 9.16     |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 41          | 9.87       | 32.56 | 13.83   | 67.00    | 7.07     | 1.22     | 59.93    | 8.03     |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 50          | 9.83       | 32.57 | 15.50   | 64.70    | 4.76     | 0.94     | 59.94    | 9.30     |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 70          | 9.41       | 32.84 | 15.44   | 64.60    | 4.65     | 0.93     | 59.95    | 8.89     |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 99          | 8.70       | 33.59 | 34.55   | 53.00    |          | 0.43     | 7.16     |          |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 150         | 8.30       | 33.84 | 37.70   | 52.70    |          |          | 6.22     |          |
| W0204A    | 4/6/02   | 8:31     | 13        | FM-09        | 43.22 | -125.17 | 1000        | 3.77       | 34.41 | 49.42   | 48.70    |          |          | 0.98     |          |
| W0204A    | 4/8/02   | 15:04    | 33        | RR-01        | 42.50 | -124.5  | 2           | 8.76       | 33.58 | 37.70   | 77.40    | 20.29    | 3.94     | 57.11    | 13.38    |
| W0204A    | 4/8/02   | 15:04    | 33        | RR-01        | 42.50 | -124.5  | 5           | 8.76       | 33.57 | 37.28   | 69.50    | 20.92    | 4.27     | 48.58    | 12.03    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0204A    | 4/8/02   | 15:04    | 33        | RR-01        | 42.50 | -124.5 | 10          | 8.63       | 33.71 | 36.38   | 67.10    | 14.90    | 3.20     | 52.20    | 8.57     |
| W0204A    | 4/8/02   | 15:04    | 33        | RR-01        | 42.50 | -124.5 | 15          | 8.43       | 33.80 | 37.53   | 56.50    | 10.62    | 2.45     | 45.88    | 6.93     |
| W0204A    | 4/8/02   | 15:04    | 33        | RR-01        | 42.50 | -124.5 | 20          | 8.31       | 33.84 | 39.34   | 54.30    | 9.25     | 1.71     | 45.05    | 7.70     |
| W0204A    | 4/8/02   | 15:04    | 33        | RR-01        | 42.50 | -124.5 | 25          | 8.12       | 33.90 | 41.08   | 56.20    | 13.35    | 2.51     | 42.85    | 6.30     |
| W0204A    | 4/8/02   | 15:04    | 33        | RR-01        | 42.50 | -124.5 | 30          | 8.10       | 33.91 | 42.35   | 60.80    | 14.28    | 2.47     | 46.52    | 7.44     |
| W0204A    | 4/8/02   | 15:04    | 33        | RR-01        | 42.50 | -124.5 | 32          | 8.10       | 33.91 | 42.48   | 65.20    | 19.57    | 3.45     | 45.63    | 7.07     |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 2           | 8.85       | 33.63 | 32.38   | 103.00   | 12.69    | 2.49     | 90.31    | 9.54     |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 5           | 8.85       | 33.63 |         |          | 14.93    | 3.10     |          |          |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 10          | 8.82       | 33.64 |         |          | 13.35    | 3.00     |          |          |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 20          | 8.79       | 33.65 |         |          | 12.14    | 3.04     |          |          |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 30          | 8.09       | 33.90 |         |          |          | 1.27     |          |          |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 40          | 7.90       | 33.95 |         |          | 8.44     | 1.96     |          |          |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 50          | 7.87       | 33.96 |         |          | 5.63     | 1.08     |          |          |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 60          | 7.85       | 33.97 |         |          | 5.15     | 0.79     |          |          |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 70          | 7.84       | 33.97 |         |          | 5.91     | 0.87     |          |          |
| W0204A    | 4/8/02   | 16:10    | 34        | RR-02        | 42.50 | -124.6 | 83          | 7.84       | 33.97 |         |          | 6.67     | 1.04     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 2           | 8.71       | 33.63 | 33.99   | 86.90    | 20.32    | 4.41     | 66.58    | 6.59     |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 5           | 8.63       | 33.68 |         |          | 15.50    | 3.64     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 10          | 8.62       | 33.71 |         |          | 17.70    | 4.11     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 15          | 8.61       | 33.72 |         |          | 15.25    | 3.68     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 19          | 8.60       | 33.74 |         |          | 16.45    | 3.77     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 30          | 8.60       | 33.75 |         |          | 12.42    | 2.92     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 40          | 8.56       | 33.77 |         |          | 11.74    | 2.68     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 51          | 8.54       | 33.77 |         |          | 11.30    | 2.63     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 60          | 8.44       | 33.79 |         |          | 12.07    | 2.43     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 70          | 8.15       | 33.87 |         |          | 8.06     | 1.12     |          |          |
| W0204A    | 4/8/02   | 18:01    | 35        | RR-03        | 42.50 | -124.7 | 120         | 7.70       | 33.98 |         |          | 8.93     | 1.60     |          |          |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 1           | 9.65       | 32.88 | 23.88   | 141.60   | 53.50    | 8.63     | 88.10    | 10.84    |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 5           | 9.35       | 32.97 | 25.96   | 113.70   | 36.89    | 6.93     | 76.81    | 9.52     |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 10          | 9.24       | 33.02 | 26.35   | 88.40    | 22.27    | 4.49     | 66.13    | 7.33     |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 20          | 9.00       | 33.25 | 30.23   | 68.40    | 18.07    | 2.77     | 50.33    | 4.97     |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 30          | 8.69       | 33.51 | 34.86   | 61.10    |          | 0.85     | 6.41     |          |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 40          | 8.61       | 33.60 | 35.06   | 52.30    |          | 0.87     | 5.52     |          |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 50          | 8.39       | 33.73 | 35.86   | 53.50    | 5.26     | 1.08     | 48.24    | 4.01     |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 70          | 8.14       | 33.87 | 37.44   |          | 5.76     | 1.11     | 3.85     |          |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 100         | 7.76       | 33.97 | 38.94   | 49.10    | 6.18     | 1.19     | 42.92    | 2.52     |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 150         | 7.65       | 34.00 | 39.60   | 48.20    |          |          | 3.71     |          |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 450         | 5.98       | 34.09 | 40.34   | 49.40    |          |          | 4.40     |          |
| W0204A    | 4/8/02   | 20:05    | 36        | RR-04        | 42.50 | -124.8 | 500         | 5.72       | 34.11 | 44.03   | 47.40    |          |          | 0.73     |          |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 1           | 10.44      | 32.22 | 10.91   | 113.40   | 37.79    | 3.63     | 75.61    | 7.21     |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 10          | 9.81       | 32.23 | 11.56   |          | 36.79    | 3.86     | 7.60     |          |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 19          | 9.78       | 32.24 | 11.45   | 101.30   | 33.75    | 4.51     | 67.55    | 6.63     |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 25          | 9.76       | 32.24 | 11.54   | 101.80   | 24.45    | 4.05     | 77.35    | 7.10     |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 30          | 9.27       | 32.32 | 13.71   | 83.80    | 18.07    | 3.06     | 65.73    | 6.47     |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 39          | 9.55       | 32.53 | 15.38   | 71.30    | 10.26    | 1.74     | 61.04    | 5.54     |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 50          | 9.38       | 32.77 | 23.44   | 60.80    |          | 1.09     | 7.68     |          |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 70          | 8.83       | 33.48 | 30.96   | 63.20    |          | 0.56     | 5.05     |          |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 100         | 8.45       | 33.76 | 34.78   | 61.70    |          | 0.42     | 4.33     |          |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 150         | 8.02       | 33.91 | 37.39   | 52.70    | 3.95     | 0.70     | 48.75    | 3.58     |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 200         | 7.64       | 34.01 | 38.93   | 52.80    |          |          | 6.67     |          |
| W0204A    | 4/9/02   | 0:20     | 38        | RR-06        | 42.50 | -125.  | 1005        | 3.61       | 34.43 | 47.58   | 41.10    |          |          | 2.64     |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 2           | 10.24      | 32.39 | 17.53   |          | 17.74    | 2.31     |          | 15.20    |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 10          | 10.21      | 32.39 |         |          | 16.98    | 2.18     |          |          |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 20          | 10.02      | 32.43 |         |          | 19.89    | 2.68     |          |          |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 26          | 9.88       | 32.50 |         |          | 13.14    | 2.35     |          |          |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 50          | 9.69       | 32.56 |         |          | 14.70    | 2.40     |          |          |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 70          | 9.37       | 32.82 |         |          | 5.57     | 0.99     |          |          |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 100         | 8.70       | 33.50 |         |          |          | 0.52     |          |          |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 150         | 8.41       | 33.87 |         |          |          | 0.39     |          |          |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 830         | 4.09       | 34.35 |         |          |          |          |          |          |
| W0204A    | 4/9/02   | 2:24     | 39        | RR-07        | 42.50 | -125.2 | 1006        | 3.65       | 34.43 |         |          |          |          |          |          |
| W0204A    | 4/8/02   | 0:56     | 30        | CR-01        | 41.90 | -124.3 | 2           | 9.74       | 33.15 | 24.57   | 128.80   | 44.93    | 6.53     | 83.87    | 11.66    |
| W0204A    | 4/8/02   | 0:56     | 30        | CR-01        | 41.90 | -124.3 | 5           | 9.74       | 33.15 | 25.33   | 131.30   | 44.85    | 6.68     | 86.45    | 11.16    |
| W0204A    | 4/8/02   | 0:56     | 30        | CR-01        | 41.90 | -124.3 | 10          | 9.58       | 33.23 | 27.72   | 114.20   | 31.64    | 5.09     | 82.56    | 10.09    |
| W0204A    | 4/8/02   | 0:56     | 30        | CR-01        | 41.90 | -124.3 | 15          | 8.73       | 33.73 | 34.82   | 80.60    | 25.13    | 4.05     | 55.47    | 6.97     |
| W0204A    | 4/8/02   | 0:56     | 30        | CR-01        | 41.90 | -124.3 | 20          | 8.63       | 33.77 | 34.90   | 76.60    | 15.36    | 3.17     | 61.24    | 5.98     |
| W0204A    | 4/8/02   | 0:56     | 30        | CR-01        | 41.90 | -124.3 | 25          | 8.49       | 33.78 | 36.03   | 74.20    | 17.24    | 2.59     | 56.96    | 5.13     |
| W0204A    | 4/8/02   | 0:56     | 30        | CR-01        | 41.90 | -124.3 | 30          | 8.28       | 33.83 | 39.12   | 83.50    | 20.82    | 3.24     | 62.68    | 4.18     |
| W0204A    | 4/8/02   | 0:56     | 30        | CR-01        | 41.90 | -124.3 | 34          | 8.26       | 33.85 | 40.83   | 90.60    | 27.05    | 4.07     | 63.55    | 4.93     |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 2           | 9.62       | 33.31 | 23.95   | 101.30   | 26.32    | 4.63     | 74.98    | 9.01     |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 5           | 9.64       | 33.30 |         |          | 32.85    | 5.52     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 10          | 9.60       | 33.33 |         |          | 30.90    | 5.14     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 20          | 9.12       | 33.61 |         |          | 8.61     | 1.77     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 30          | 8.95       | 33.64 |         |          |          | 1.27     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 40          | 8.55       | 33.78 |         |          |          | 1.10     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 50          | 8.23       | 33.91 |         |          |          | 0.58     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 60          | 8.15       | 33.93 |         |          | 3.93     | 0.64     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 70          | 7.97       | 33.99 |         |          | 3.91     | 0.59     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 100         | 7.92       | 34.00 |         |          | 6.31     | 0.79     |          |          |
| W0204A    | 4/8/02   | 4:16     | 32        | CR-03        | 41.90 | -124.5 | 133         | 7.92       | 34.00 |         |          | 7.57     | 0.83     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 2           | 9.26       | 33.39 | 32.24   | 70.10    | 6.76     | 1.44     | 63.34    | 8.98     |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 9           | 9.26       | 33.39 |         |          | 9.10     | 1.52     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 20          | 9.19       | 33.39 |         |          | 7.95     | 1.54     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 25          | 9.05       | 33.43 |         |          | 7.00     | 1.21     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 30          | 8.89       | 33.50 |         |          |          | 1.00     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 40          | 8.79       | 33.57 |         |          |          | 0.75     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 50          | 8.66       | 33.64 |         |          | 4.16     | 0.54     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 70          | 8.52       | 33.72 |         |          | 4.29     | 0.50     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 100         | 8.33       | 33.84 |         |          | 3.86     | 0.40     |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 150         | 8.21       | 34.03 |         |          |          |          |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 449         | 5.83       | 34.10 |         |          |          |          |          |          |
| W0204A    | 4/7/02   | 22:55    | 29        | CR-04        | 41.90 | -124.6 | 495         | 5.69       | 34.11 |         |          |          |          |          |          |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 2           | 9.54       | 33.29 | 27.78   | 74.50    | 17.51    | 3.12     | 56.99    | 6.45     |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 10          | 9.54       | 33.28 | 27.84   | 79.10    | 17.10    | 2.97     | 62.00    | 6.92     |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 20          | 9.44       | 33.29 | 28.59   | 79.10    | 11.95    | 2.37     | 67.15    | 7.17     |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 30          | 9.04       | 33.39 | 30.87   | 70.30    | 5.31     | 1.06     | 64.99    | 6.26     |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 40          | 8.80       | 33.53 | 33.46   | 64.70    | 5.86     | 0.95     | 58.84    | 5.76     |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 50          | 8.56       | 33.68 | 35.50   | 62.10    | 5.03     | 0.75     | 57.07    | 4.79     |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 70          | 8.40       | 33.77 | 36.30   | 60.70    | 5.93     | 0.54     | 54.77    | 4.41     |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 100         | 8.06       | 33.92 | 59.90   |          | 0.35     |          |          |          |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7 | 150         | 7.58       | 34.01 | 39.92   | 63.50    |          |          |          | 3.27     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7  | 401         | 6.03       | 34.09 | 44.90   | 57.40    |          |          |          | 0.65     |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7  | 500         | 5.36       | 34.15 |         | 56.10    |          |          |          |          |
| W0204A    | 4/7/02   | 21:26    | 28        | CR-05        | 41.90 | -124.7  | 645         | 4.79       | 34.23 |         | 52.00    |          |          |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 2           | 10.04      | 32.57 | 16.32   | 108.50   | 26.16    | 3.61     | 82.34    | 11.78    |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 5           | 10.04      | 32.57 |         |          | 27.47    | 4.42     |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 10          | 10.00      | 32.57 |         |          | 23.34    | 3.84     |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 20          | 9.72       | 32.59 |         |          | 14.03    | 2.62     |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 30          | 9.61       | 32.65 |         |          | 12.82    | 2.43     |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 41          | 9.44       | 32.73 |         |          | 10.54    | 1.57     |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 50          | 9.48       | 32.81 |         |          | 8.66     | 1.55     |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 70          | 9.18       | 33.07 |         |          |          | 1.25     |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 100         | 8.80       | 33.48 |         |          | 4.79     | 0.69     |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 151         | 8.22       | 33.87 |         |          |          |          |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 501         | 5.27       | 34.14 |         |          |          |          |          |          |
| W0204A    | 4/7/02   | 18:24    | 26        | CR-07        | 41.90 | -125.   | 836         | 4.16       | 34.36 |         |          |          |          |          |          |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 2           | 10.09      | 32.61 | 16.60   | 80.90    | 7.07     | 1.76     | 73.83    | 9.72     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 4           | 10.09      | 32.61 | 16.24   | 71.20    | 7.26     | 1.69     | 63.94    | 9.57     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 10          | 10.09      | 32.61 | 15.47   | 71.40    | 10.78    | 1.87     | 60.62    | 8.63     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 20          | 10.09      | 32.61 | 15.47   | 82.20    | 14.52    | 2.23     | 67.68    | 8.29     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 30          | 10.06      | 32.61 | 16.39   | 71.60    | 14.93    | 2.24     | 56.67    | 9.15     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 40          | 10.02      | 32.62 | 15.52   | 71.00    |          | 1.60     |          | 8.49     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 50          | 10.01      | 32.65 | 15.09   | 73.60    | 9.15     | 1.84     | 64.45    | 8.04     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 70          | 9.43       | 32.91 | 24.61   | 69.20    | 4.95     | 1.01     | 64.25    | 9.72     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 100         | 9.22       | 33.15 | 28.71   | 66.10    | 4.08     | 0.79     | 62.02    | 8.77     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 150         | 8.80       | 33.50 | 34.02   | 63.00    |          |          |          | 7.03     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 770         | 4.38       | 34.32 | 50.22   | 51.90    |          |          |          | 0.45     |
| W0204A    | 4/7/02   | 14:26    | 24        | CR-09        | 41.90 | -125.4  | 1006        | 3.75       | 34.42 | 50.26   | 45.40    |          |          |          | 0.05     |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 1           | 10.22      | 32.69 | 16.51   | 80.70    | 16.23    | 2.58     | 64.47    | 10.47    |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 10          | 10.23      | 32.69 |         |          | 11.07    | 1.92     |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 15          | 10.34      | 32.73 |         |          | 18.08    | 3.45     |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 20          | 10.45      | 32.79 |         |          | 12.37    | 2.26     |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 30          | 10.15      | 32.81 |         |          | 9.41     | 1.58     |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 40          | 9.86       | 32.78 |         |          | 8.10     | 1.34     |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 50          | 10.12      | 32.87 |         |          | 8.03     | 1.15     |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 70          | 9.53       | 33.11 |         |          | 7.30     | 1.12     |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 100         | 8.86       | 33.56 |         |          | 5.10     | 0.58     |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 150         | 8.17       | 33.84 |         |          |          |          |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 390         | 6.04       | 34.08 |         |          |          |          |          |          |
| W0204A    | 4/7/02   | 9:44     | 22        | CR-11        | 41.90 | -126.   | 1000        | 3.77       | 34.41 |         |          |          |          |          |          |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 5           | 13.29      | 33.05 | 25.61   | 399.40   | 11.04    |          |          | 13.66    |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 10          | 8.45       | 33.47 | 38.86   | 139.68   | 48.53    | 6.09     | 91.15    | 7.11     |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 15          | 9.05       | 33.53 | 37.65   | 116.50   |          |          |          |          |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 20          | 7.66       | 33.81 |         | 63.10    | 45.17    | 4.67     | 17.93    |          |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 25          | 7.50       | 33.87 | 40.98   | 59.50    | 9.99     | 1.40     | 49.51    | 3.60     |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 30          | 7.32       | 33.93 | 40.68   | 62.80    | 12.10    | 1.55     | 50.70    | 2.52     |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.31       | 33.94 | 41.02   | 63.90    | 9.12     | 1.24     | 54.78    | 3.67     |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.28       | 33.94 | 41.04   | 57.00    | 18.80    | 2.20     | 38.20    | 1.65     |
| W0207A    | 7/9/02   | 23:53    | 3         | NH-05        | 44.65 | -124.18 | 55          | 7.28       | 33.94 | 42.03   | 55.90    | 10.74    | 1.55     | 45.16    | 6.26     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 2           | 15.67      | 29.55 | 11.41   | 155.40   | 54.33    | 4.49     | 101.07   | 6.91     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 4           | 15.64      | 29.56 | 11.70   | 139.30   | 48.17    | 4.22     | 91.13    | 7.41     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 10          | 11.05      | 32.04 | 21.66   | 79.80    | 18.39    | 3.11     | 61.41    | 6.29     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 20          | 7.50       | 32.92 | 34.83   | 64.30    | 5.83     | 0.67     | 58.47    | 3.24     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 30          | 7.05       | 33.26 | 32.61   | 61.20    |          | 0.48     |          | 3.78     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 40          | 7.44       | 33.51 | 35.65   | 58.60    |          | 0.35     |          | 3.62     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 49          | 7.48       | 33.59 | 37.01   | 60.20    | 4.78     | 0.44     | 55.42    | 2.93     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 60          | 7.59       | 33.78 | 37.33   | 51.30    | 6.77     | 0.47     | 44.53    | 2.72     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 70          | 7.60       | 33.85 | 37.71   | 58.90    | 5.55     | 0.55     | 53.35    | 3.47     |
| W0207A    | 7/10/02  | 4:59     | 6         | NH-15        | 44.65 | -124.41 | 85          | 7.32       | 33.92 | 41.75   | 53.40    | 6.19     | 0.81     | 47.21    | 2.87     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 2           | 15.97      | 28.70 | 10.52   |          |          |          |          |          |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 10          | 14.47      | 30.68 | 10.55   | 98.10    | 23.49    | 4.04     | 74.61    | 5.93     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 17          | 11.08      | 31.99 | 20.17   | 83.10    | 17.79    | 2.80     | 65.31    | 4.76     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 20          | 8.37       | 32.28 | 19.35   | 66.50    | 9.60     | 1.35     | 56.90    | 6.05     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 30          | 8.08       | 32.38 | 17.26   | 55.00    | 6.86     | 1.08     | 48.14    | 6.12     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 40          | 7.44       | 32.50 | 23.42   | 55.00    | 5.34     | 0.59     | 49.66    | 5.02     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 50          | 7.47       | 32.97 | 35.33   | 49.90    | 6.05     | 0.66     | 43.85    | 4.37     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 70          | 7.37       | 33.43 | 33.43   | 49.50    | 5.19     | 0.56     | 44.31    | 2.46     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 100         | 7.52       | 33.87 | 39.29   | 51.30    | 6.77     | 0.64     | 44.53    | 1.46     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 150         | 6.82       | 33.99 | 40.27   | 49.90    |          |          |          | 1.20     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 200         | 6.50       | 34.02 | 41.10   | 47.50    |          |          |          | 1.99     |
| W0207A    | 7/10/02  | 7:40     | 7         | NH-25        | 44.65 | -124.65 | 223         | 6.48       | 34.02 | 41.21   | 47.50    |          |          |          | 4.77     |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 1           | 16.52      | 27.85 | 10.54   |          | 16.95    | 2.56     |          | 7.94     |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 9           | 15.03      | 31.74 |         |          | 7.99     | 1.31     |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 20          | 10.19      | 32.22 |         |          | 9.32     | 1.74     |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 27          | 9.35       | 32.26 |         |          | 7.69     | 1.47     |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 30          | 9.12       | 32.33 |         |          | 7.42     | 1.32     |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 40          | 7.88       | 32.37 |         |          | 7.17     | 1.27     |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 49          | 7.57       | 32.42 |         |          | 6.30     | 0.87     |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 69          | 7.40       | 32.83 |         |          | 6.25     | 0.81     |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 98          | 7.42       | 33.45 |         |          | 4.09     | 0.49     |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 149         | 7.24       | 33.95 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 364         | 5.94       | 34.08 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 10:45    | 8         | NH-35        | 44.65 | -124.88 | 430         | 5.79       | 34.10 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 1           | 16.90      | 28.32 | 8.69    |          | 11.22    | 1.63     |          | 7.06     |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 10          | 15.11      | 31.66 |         |          | 9.69     | 1.51     |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 20          | 13.00      | 32.08 |         |          | 9.54     | 1.71     |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 30          | 10.59      | 32.20 |         |          | 11.29    | 2.07     |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 37          | 9.16       | 32.30 |         |          | 11.78    | 2.04     |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 40          | 8.93       | 32.32 |         |          | 8.02     | 1.50     |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 50          | 8.13       | 32.37 |         |          | 6.03     | 1.04     |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 70          | 7.47       | 32.58 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 100         | 7.34       | 33.23 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 150         | 7.40       | 33.89 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 499         | 5.10       | 34.14 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 14:53    | 9         | NH-45        | 44.65 | -125.12 | 660         | 4.41       | 34.27 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 1           | 16.88      | 31.42 | 7.24    |          | 6.44     | 1.04     |          | 6.16     |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 10          | 15.95      | 31.92 |         |          | 6.31     | 0.94     |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 20          | 14.82      | 31.96 |         |          | 10.23    | 1.48     |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 30          | 10.94      | 32.35 |         |          | 16.65    | 2.82     |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 38          | 9.77       | 32.40 |         |          | 11.51    | 2.45     |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 40          | 9.53       | 32.41 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 50          | 8.98       | 32.40 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 70          | 8.23       | 32.40 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 100         | 7.69       | 33.15 |         |          | 2.41     | 0.34     |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 150         | 7.70       | 33.83 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 500         | 5.28       | 34.14 |         |          |          |          |          |          |
| W0207A    | 7/10/02  | 21:22    | 11        | NH-65        | 44.65 | -125.6  | 1005        | 3.56       | 34.42 |         |          |          |          |          |          |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 3           | 16.63      | 32.05 | 7.71    |          | 8.07     | 1.24     |          | 6.47     |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 10          | 16.56      | 32.08 | 8.18    |          | 7.27     | 1.20     |          | 6.94     |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 20          | 15.89      | 32.19 | 8.12    |          | 8.24     | 1.42     |          | 6.71     |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 30          | 12.49      | 32.38 | 10.41   |          |          |          |          |          |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 36          | 10.64      | 32.38 | 11.85   |          |          |          |          |          |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 40          | 9.71       | 32.39 | 13.10   |          |          |          |          |          |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 50          | 9.12       | 32.39 | 14.73   | 75.50    | 7.16     | 1.23     | 68.34    | 6.82     |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 70          | 8.49       | 32.37 | 15.90   | 68.20    | 5.03     | 0.71     | 63.17    | 6.26     |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 100         | 7.49       | 32.59 | 21.60   | 62.20    | 2.90     | 0.36     | 59.30    | 6.03     |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 150         | 7.72       | 33.64 | 32.83   | 53.80    |          |          |          | 5.14     |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 639         | 4.71       | 34.21 | 47.66   | 43.50    |          |          |          |          |
| W0207A    | 7/11/02  | 0:21     | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.65       | 34.39 | 48.50   | 54.60    |          |          |          | 0.94     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 2           | 8.67       | 33.85 | 42.72   | 70.70    | 22.07    | 4.36     | 48.63    | 5.74     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 5           | 8.62       | 33.84 | 42.14   | 84.80    | 16.65    | 3.34     | 68.15    | 3.84     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 10          | 8.00       | 33.86 | 42.49   | 60.60    | 12.88    | 2.70     | 47.72    | 5.16     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 15          | 8.13       | 33.85 | 42.43   | 55.60    | 10.23    | 2.19     | 45.37    | 5.75     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 20          | 7.63       | 33.87 | 41.96   | 52.70    | 8.06     | 1.50     | 44.64    | 3.45     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 25          | 7.59       | 33.87 | 42.23   | 55.10    | 6.63     | 1.32     | 48.47    | 3.55     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 30          | 7.60       | 33.89 | 42.66   | 55.50    | 9.67     | 1.55     | 45.83    | 3.84     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 35          | 7.60       | 33.90 | 43.07   | 53.30    | 10.15    | 1.95     | 43.15    | 3.83     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 40          | 7.56       | 33.92 | 42.68   | 55.00    | 10.29    | 1.88     | 44.71    | 3.69     |
| W0207A    | 7/14/02  | 12:50    | 40        | HH-01        | 44.00 | -124.2  | 50          | 7.48       | 33.94 | 45.17   | 57.80    | 15.34    | 3.06     | 42.46    | 5.02     |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 2           | 10.65      | 33.20 | 32.27   | 157.90   | 90.20    | 16.42    | 67.70    | 11.29    |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 5           | 10.64      | 33.21 |         |          | 20.11    | 3.90     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 10          | 9.84       | 33.38 |         |          | 35.99    | 7.18     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 20          | 9.42       | 33.46 |         |          | 38.99    | 7.57     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 30          | 7.72       | 33.66 |         |          | 8.20     | 1.36     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 35          | 7.78       | 33.84 |         |          | 6.91     | 0.67     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 40          | 7.67       | 33.86 |         |          | 5.39     | 0.67     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 50          | 7.59       | 33.88 |         |          | 5.05     | 0.77     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 60          | 7.45       | 33.94 |         |          | 7.73     | 0.71     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 70          | 7.25       | 33.96 |         |          | 6.31     | 0.59     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 100         | 7.05       | 34.00 |         |          | 6.82     | 1.29     |          |          |
| W0207A    | 7/14/02  | 14:04    | 41        | HH-02        | 44.00 | -124.4  | 110         | 6.99       | 34.00 |         |          | 9.36     | 1.79     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 2           | 13.82      | 32.33 | 20.79   | 153.60   | 60.46    | 10.38    | 93.14    | 10.36    |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 10          | 8.12       | 32.75 |         |          | 16.34    | 3.07     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 20          | 7.41       | 33.12 |         |          | 6.69     | 1.37     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 30          | 7.33       | 33.22 |         |          | 3.91     | 0.94     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 40          | 7.61       | 33.61 |         |          | 3.38     | 0.90     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 50          | 7.57       | 33.79 |         |          | 3.99     | 0.41     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 60          | 7.50       | 33.88 |         |          | 4.73     | 0.65     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 70          | 7.43       | 33.92 |         |          | 4.34     | 0.79     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 100         | 7.07       | 33.98 |         |          | 7.58     | 1.06     |          |          |
| W0207A    | 7/14/02  | 15:27    | 42        | HH-03        | 44.00 | -124.6  | 145         | 6.68       | 34.03 |         |          | 8.51     | 1.45     |          |          |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8  | 2           | 13.16      | 31.52 | 17.89   | 125.40   | 52.59    | 8.65     | 72.81    | 9.16     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 5           | 13.14      | 31.52 | 17.10   | 122.90   | 53.15    | 8.72     | 69.75    | 8.15     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 7           | 12.87      | 31.60 | 17.58   | 117.90   | 46.81    | 8.43     | 71.09    | 7.25     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 10          | 12.24      | 31.85 | 19.18   | 102.20   | 35.41    | 7.03     | 66.79    | 6.57     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 20          | 9.24       | 32.38 | 28.79   | 77.90    | 12.74    | 2.24     | 65.16    | 4.45     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 30          | 7.82       | 32.75 | 32.66   | 70.00    | 7.92     | 1.32     | 62.08    | 3.28     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 40          | 7.34       | 33.08 | 32.51   | 58.30    | 4.38     | 0.76     | 53.92    | 3.14     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 50          | 7.41       | 33.36 | 35.12   | 57.60    | 4.14     | 0.68     | 53.46    | 3.15     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 60          | 7.53       | 33.64 | 37.88   | 54.40    | 6.75     | 1.08     | 47.65    | 2.48     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 70          | 7.38       | 33.82 | 39.53   | 54.90    | 4.90     | 0.81     | 50.00    | 1.74     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 89          | 7.32       | 33.87 | 39.99   | 53.50    | 3.96     | 0.68     | 49.54    | 1.49     |
| W0207A    | 7/14/02  | 16:50    | 43        | HH-04        | 44.00 | -124.8 | 105         | 7.13       | 33.94 | 41.03   | 55.90    | 4.14     | 0.63     | 51.76    | 2.01     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 1           | 14.68      | 31.09 | 10.76   | 100.70   | 20.75    | 3.36     | 79.95    | 7.20     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 9           | 12.53      | 31.87 |         | 87.00    | 16.81    | 2.57     | 70.19    |          |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 20          | 8.42       | 32.43 |         | 68.90    | 6.39     | 1.09     | 62.51    |          |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 30          | 7.29       | 32.68 | 24.95   | 72.00    | 4.91     | 0.53     | 67.09    | 4.39     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 40          | 7.89       | 33.12 | 27.49   | 63.60    | 6.19     | 0.46     | 57.41    | 3.86     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 50          | 7.91       | 33.34 | 30.65   | 70.80    | 4.14     | 0.34     | 66.66    | 3.90     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 70          | 7.99       | 33.62 | 33.52   | 59.80    | 3.94     | 0.39     | 55.86    | 3.14     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 100         | 7.53       | 33.88 | 37.77   | 61.50    | 5.74     | 0.64     | 55.76    | 2.61     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 150         | 7.11       | 34.00 | 40.03   | 58.30    |          |          |          | 2.40     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 375         | 5.99       | 34.09 | 43.21   | 58.30    |          |          |          | 0.80     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 470         | 5.68       | 34.14 | 44.53   | 51.40    |          |          |          | 0.46     |
| W0207A    | 7/14/02  | 18:13    | 44        | HH-05        | 44.00 | -125.  | 500         | 5.52       | 34.16 | 44.82   | 47.80    |          |          |          | 0.94     |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 2           | 15.20      | 31.04 | 10.74   | 95.10    | 18.42    | 3.09     | 76.68    | 7.46     |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 10          | 13.92      | 31.41 |         |          | 16.13    | 2.97     |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 14          | 10.13      | 32.13 |         |          | 10.36    | 1.87     |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 19          | 8.29       | 32.29 |         |          | 6.75     | 1.34     |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 30          | 7.88       | 32.38 |         |          | 5.33     | 0.80     |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 40          | 7.38       | 32.49 |         |          | 4.67     | 0.52     |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 50          | 7.21       | 32.73 |         |          | 4.20     | 0.54     |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 70          | 7.60       | 33.23 |         |          | 2.64     |          |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 100         | 7.90       | 33.71 |         |          | 2.96     | 0.34     |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 150         | 7.40       | 33.96 |         |          |          |          |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 643         | 4.46       | 34.23 |         |          |          |          |          |          |
| W0207A    | 7/14/02  | 20:11    | 45        | HH-07        | 44.00 | -125.2 | 1005        | 3.60       | 34.42 |         |          |          |          |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 2           | 15.02      | 31.11 | 10.89   | 93.40    | 17.17    | 2.96     | 76.23    | 7.59     |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 10          | 14.19      | 31.42 |         |          | 25.03    | 4.36     |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 18          | 13.33      | 31.66 |         |          | 19.25    | 3.81     |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 20          | 13.11      | 31.73 |         |          | 17.33    | 3.23     |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 30          | 8.92       | 32.39 |         |          | 8.70     | 1.63     |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 40          | 8.10       | 32.51 |         |          | 5.74     | 0.96     |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 50          | 7.50       | 32.71 |         |          | 4.84     | 0.64     |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 70          | 7.46       | 33.02 |         |          | 3.85     | 0.47     |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 100         | 7.84       | 33.61 |         |          | 3.77     | 0.47     |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 150         | 7.53       | 33.93 |         |          |          |          |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 690         | 4.42       | 34.25 |         |          |          |          |          |          |
| W0207A    | 7/14/02  | 22:02    | 46        | HH-09        | 44.00 | -125.4 | 1004        | 3.68       | 34.41 |         |          |          |          |          |          |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5 | 2           | 11.02      | 33.43 | 30.20   | 256.00   | 48.36    | 7.31     | 207.64   | 20.74    |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5 | 5           | 10.89      | 33.43 | 33.29   | 253.80   | 23.19    | 4.52     | 230.61   | 24.76    |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5 | 10          | 8.79       | 33.58 | 37.18   | 97.20    | 57.28    | 7.96     | 39.92    | 3.72     |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5 | 15          | 7.99       | 33.71 | 38.65   | 63.60    | 9.95     | 1.97     | 53.65    | 3.92     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5  | 20          | 7.68       | 33.82 | 39.67   | 58.50    |          |          |          |          |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5  | 25          | 7.60       | 33.85 | 39.65   | 60.40    |          |          |          |          |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5  | 28          | 7.51       | 33.88 | 39.95   | 54.90    |          |          |          |          |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5  | 34          | 7.38       | 33.93 | 40.99   | 63.70    | 7.51     | 1.38     | 56.19    | 3.15     |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5  | 40          | 7.38       | 33.93 | 40.54   | 52.30    | 10.01    | 1.68     | 42.29    | 2.68     |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5  | 50          | 7.38       | 33.93 | 40.32   |          | 16.39    | 2.49     |          | 0.63     |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5  | 54          | 7.38       | 33.93 | 40.68   | 66.90    | 8.78     | 1.27     | 58.12    | 2.28     |
| W0207A    | 7/11/02  | 23:37    | 20        | FM-03        | 43.22 | -124.5  | 61          | 7.38       | 33.93 | 40.81   |          | 14.78    | 2.38     |          | 1.72     |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 1           | 11.44      | 33.37 | 30.72   | 300.40   | 100.15   | 12.68    | 200.25   | 16.68    |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 4           | 11.25      | 33.36 |         |          | 66.35    | 9.38     |          |          |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 10          | 8.48       | 33.62 |         |          | 17.01    | 3.26     |          |          |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 19          | 7.54       | 33.89 |         |          | 6.81     | 1.27     |          |          |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 30          | 7.44       | 33.95 |         |          | 6.49     | 1.02     |          |          |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 40          | 7.36       | 33.97 |         |          | 4.20     | 0.62     |          |          |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 49          | 7.31       | 33.97 |         |          | 6.37     | 0.75     |          |          |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 60          | 7.20       | 33.99 |         |          | 6.49     | 1.11     |          |          |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 70          | 7.20       | 33.99 |         |          | 6.32     | 0.88     |          |          |
| W0207A    | 7/11/02  | 21:44    | 19        | FM-04        | 43.22 | -124.58 | 81          | 7.20       | 33.99 |         |          | 4.79     | 0.74     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 2           | 11.56      | 33.09 | 25.91   | 164.60   | 43.27    | 7.92     | 121.33   | 14.36    |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 10          | 10.84      | 33.01 |         |          | 48.97    | 8.02     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 20          | 7.90       | 32.91 |         |          | 12.11    | 1.69     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 30          | 7.99       | 33.50 |         |          | 8.16     | 1.39     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 40          | 7.60       | 33.84 |         |          | 5.96     | 1.19     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 50          | 7.55       | 33.90 |         |          | 6.22     | 1.10     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 60          | 7.45       | 33.95 |         |          | 4.48     | 0.84     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 70          | 7.41       | 33.97 |         |          | 3.87     | 0.71     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 100         | 7.11       | 34.00 |         |          | 4.66     | 0.91     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 111         | 7.07       | 34.01 |         |          | 4.79     | 0.90     |          |          |
| W0207A    | 7/11/02  | 19:17    | 18        | FM-05        | 43.22 | -124.67 | 150         | 6.94       | 34.02 |         |          | 6.53     | 0.96     |          |          |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 2           | 14.52      | 31.83 | 10.92   | 140.40   | 15.09    | 2.53     | 125.31   | 8.35     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 10          | 14.49      | 31.83 | 10.65   | 117.90   | 14.66    | 2.57     | 103.24   | 8.02     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 20          | 11.05      | 32.11 | 14.95   | 104.10   | 20.81    | 3.64     | 83.29    | 8.61     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 22          | 10.20      | 32.13 | 19.10   | 93.80    | 19.71    | 3.56     | 74.09    | 8.30     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 30          | 7.83       | 32.36 | 23.45   | 67.60    | 8.52     | 1.37     | 59.08    | 7.19     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 40          | 7.53       | 32.61 | 24.49   | 64.90    | 4.69     | 0.62     | 60.21    | 6.35     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 50          | 7.45       | 32.89 | 28.51   | 71.80    | 5.29     | 0.64     | 66.51    | 6.44     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 70          | 7.87       | 33.64 | 35.95   | 66.60    | 4.67     | 0.56     | 61.93    | 5.09     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 100         | 7.47       | 33.93 | 40.02   | 60.30    | 4.06     | 0.51     | 56.24    | 4.45     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 150         | 6.99       | 34.01 | 40.28   | 47.20    |          |          |          | 4.34     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 240         | 6.54       | 34.03 | 42.38   | 46.20    |          |          |          | 4.37     |
| W0207A    | 7/11/02  | 14:43    | 16        | FM-07        | 43.22 | -124.83 | 300         | 6.25       | 34.07 | 43.25   | 46.80    |          |          |          | 4.31     |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 1           | 15.34      | 31.39 | 7.97    | 87.10    | 8.57     | 1.54     | 78.53    | 6.43     |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 10          | 15.30      | 31.39 |         |          | 7.91     | 1.47     |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 20          | 10.78      | 32.10 |         |          | 9.95     | 1.83     |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 30          | 7.91       | 32.41 |         |          | 6.96     | 1.07     |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 34          | 7.77       | 32.47 |         |          | 5.51     | 0.77     |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 40          | 7.79       | 32.71 |         |          | 4.55     | 0.58     |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 50          | 8.01       | 33.06 |         |          | 4.45     | 0.59     |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 70          | 7.98       | 33.54 |         |          | 4.16     | 0.51     |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 100         | 7.74       | 33.86 |         |          | 3.98     | 0.36     |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 150         | 7.18       | 34.00 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 745         | 4.52       | 34.28 |         |          |          |          |          |          |
| W0207A    | 7/11/02  | 12:24    | 15        | FM-08        | 43.22 | -125.   | 1006        | 3.79       | 34.40 |         |          |          |          |          |          |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 2           | 16.04      | 31.23 | 13.98   | 88.20    | 6.76     | 1.09     | 81.44    | 12.90    |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 10          | 16.02      | 31.22 | 13.82   | 87.90    | 8.31     | 1.14     | 79.59    | 12.69    |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 20          | 10.28      | 32.23 | 13.88   | 79.10    | 10.54    | 1.80     | 68.56    | 11.92    |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 30          | 8.66       | 32.34 | 15.01   | 66.20    | 9.33     | 1.44     | 56.87    | 6.19     |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 36          | 8.33       | 32.41 | 16.59   | 69.40    | 5.64     | 0.96     | 63.76    | 5.61     |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 40          | 8.19       | 32.42 | 17.71   | 72.10    | 5.62     | 0.90     | 66.48    | 5.98     |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 51          | 7.89       | 32.52 | 20.08   | 73.70    | 8.89     | 1.08     | 64.81    | 5.10     |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 70          | 7.49       | 32.82 | 26.46   | 78.00    | 4.88     | 0.61     | 73.12    | 5.46     |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 100         | 8.05       | 33.71 | 35.75   | 59.30    | 2.94     | 0.52     | 56.36    | 4.67     |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 150         | 7.57       | 33.95 | 37.69   | 61.20    |          |          |          | 3.46     |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 822         | 4.21       | 34.34 | 47.52   | 51.10    |          |          |          | 1.19     |
| W0207A    | 7/11/02  | 10:04    | 14        | FM-09        | 43.22 | -125.17 | 1004        | 3.62       | 34.43 | 47.24   | 41.90    |          |          |          | 1.23     |
| W0207A    | 7/13/02  | 15:05    | 33        | RR-01        | 42.50 | -124.5  | 2           | 8.65       | 33.88 | 40.53   | 98.22    | 12.58    | 2.49     | 85.64    | 12.73    |
| W0207A    | 7/13/02  | 15:05    | 33        | RR-01        | 42.50 | -124.5  | 5           | 8.63       | 33.88 | 41.38   | 86.20    | 26.78    | 5.73     | 59.42    | 8.19     |
| W0207A    | 7/13/02  | 15:05    | 33        | RR-01        | 42.50 | -124.5  | 10          | 8.25       | 33.90 | 41.75   | 87.03    | 19.01    | 3.93     | 68.01    | 8.44     |
| W0207A    | 7/13/02  | 15:05    | 33        | RR-01        | 42.50 | -124.5  | 15          | 7.97       | 33.91 | 42.82   | 70.07    | 11.97    | 2.63     | 58.10    | 8.10     |
| W0207A    | 7/13/02  | 15:05    | 33        | RR-01        | 42.50 | -124.5  | 20          | 7.77       | 33.94 | 42.26   |          | 12.72    | 2.49     |          | 5.65     |
| W0207A    | 7/13/02  | 15:05    | 33        | RR-01        | 42.50 | -124.5  | 25          | 7.65       | 33.96 | 43.08   |          | 9.72     | 1.78     |          | 6.25     |
| W0207A    | 7/13/02  | 15:05    | 33        | RR-01        | 42.50 | -124.5  | 31          | 7.60       | 33.97 | 43.25   |          | 11.00    | 2.00     |          | 5.97     |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 2           | 8.56       | 33.57 | 37.35   | 111.70   | 22.72    | 4.43     | 88.98    | 8.96     |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 5           | 8.57       | 33.57 |         |          | 24.16    | 4.57     |          |          |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 9           | 8.48       | 33.61 |         |          | 23.39    | 4.73     |          |          |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 20          | 8.28       | 33.76 |         |          | 18.93    | 3.82     |          |          |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 30          | 8.15       | 33.83 |         |          | 15.17    | 3.09     |          |          |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 40          | 8.10       | 33.89 |         |          | 15.88    | 2.99     |          |          |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 50          | 7.94       | 33.90 |         |          | 12.84    | 2.59     |          |          |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 60          | 7.73       | 33.92 |         |          | 11.09    | 1.97     |          |          |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 70          | 7.51       | 33.95 |         |          | 16.94    | 2.50     |          |          |
| W0207A    | 7/13/02  | 16:20    | 34        | RR-02        | 42.50 | -124.6  | 81          | 7.42       | 33.96 |         |          | 8.49     | 1.21     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 1           | 9.80       | 33.09 | 29.29   | 155.80   | 39.10    | 7.47     | 116.70   | 12.72    |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 5           | 9.79       | 33.09 |         |          | 44.30    | 8.15     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 10          | 9.68       | 33.12 |         |          | 36.38    | 7.08     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 15          | 9.44       | 33.19 |         |          | 33.87    | 6.86     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 20          | 9.20       | 33.27 |         |          | 29.59    | 5.93     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 30          | 8.74       | 33.40 |         |          | 25.86    | 5.08     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 39          | 8.41       | 33.39 |         |          | 13.24    | 2.53     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 49          | 8.36       | 33.53 |         |          | 14.50    | 2.46     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 60          | 8.35       | 33.62 |         |          | 15.64    | 3.16     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 69          | 8.36       | 33.67 |         |          | 20.07    | 4.17     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 90          | 7.60       | 33.90 |         |          | 13.97    | 2.48     |          |          |
| W0207A    | 7/13/02  | 18:00    | 35        | RR-03        | 42.50 | -124.7  | 120         | 7.10       | 34.03 |         |          | 6.96     | 1.28     |          |          |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8  | 1           | 10.66      | 32.52 | 19.47   | 113.30   | 23.03    | 4.65     | 90.27    | 10.92    |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8  | 10          | 10.32      | 32.51 | 18.93   | 108.80   | 24.52    | 4.95     | 84.28    | 8.71     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8  | 21          | 9.34       | 32.55 | 20.78   |          | 16.18    | 3.39     |          | 7.27     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8  | 30          | 8.17       | 32.57 | 21.83   |          | 4.72     | 0.98     |          | 6.62     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8  | 40          | 8.19       | 32.71 | 23.05   |          | 9.36     | 1.74     |          | 5.69     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8  | 50          | 8.15       | 32.87 | 26.85   |          | 13.45    | 2.51     |          | 4.49     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8  | 70          | 8.19       | 33.29 | 31.13   |          | 13.30    | 2.42     |          | 3.07     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8 | 100         | 8.11       | 33.64 | 35.23   |          | 16.11    | 3.22     |          | 1.54     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8 | 150         | 7.45       | 33.97 | 40.46   |          |          |          |          | 4.64     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8 | 170         | 7.30       | 34.01 | 41.58   |          |          |          |          | 4.50     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8 | 320         | 6.55       | 34.06 | 43.70   | 48.90    |          |          |          | 3.67     |
| W0207A    | 7/13/02  | 20:09    | 36        | RR-04        | 42.50 | -124.8 | 500         | 5.33       | 34.19 | 47.90   | 51.10    |          |          |          | 3.05     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 2           | 11.41      | 32.40 | 15.38   | 147.50   | 33.87    | 5.52     | 113.63   | 9.30     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 10          | 10.75      | 32.44 | 18.27   | 127.80   | 28.02    | 5.27     | 99.78    | 10.25    |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 20          | 9.08       | 32.62 | 23.68   | 86.70    | 13.02    | 2.52     | 73.68    | 10.48    |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 30          | 9.06       | 32.65 | 22.23   | 87.10    | 11.95    | 2.65     | 75.15    | 8.88     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 40          | 9.10       | 32.71 | 23.07   | 90.40    | 14.85    | 2.83     | 75.55    | 8.45     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 50          | 9.06       | 32.71 | 22.65   | 92.30    | 16.72    | 3.27     | 75.58    | 7.27     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 60          | 8.95       | 32.71 | 23.30   | 96.10    | 18.36    | 3.67     | 77.74    | 6.49     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 70          | 8.73       | 32.79 | 24.27   | 78.80    | 18.25    | 3.70     | 60.55    | 4.84     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 100         | 8.08       | 33.30 | 32.02   | 65.60    | 21.44    | 4.49     | 44.16    | 1.63     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 151         | 7.94       | 33.88 | 37.49   | 59.30    |          |          |          | 4.53     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 870         | 3.96       | 34.38 | 49.35   | 49.50    |          |          |          | 1.24     |
| W0207A    | 7/14/02  | 0:32     | 38        | RR-06        | 42.50 | -125.  | 1006        | 3.81       | 34.41 | 49.21   | 46.70    |          |          |          | 1.37     |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 1           | 13.41      | 32.05 |         | 93.10    | 7.31     | 1.40     | 85.79    |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 10          | 10.68      | 32.40 |         |          | 15.18    | 2.99     |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 20          | 9.53       | 32.53 |         |          | 14.51    | 2.95     |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 25          | 9.31       | 32.54 |         |          | 13.32    | 2.76     |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 30          | 9.29       | 32.57 |         |          | 13.80    | 2.86     |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 40          | 9.03       | 32.56 |         |          | 9.53     | 2.04     |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 50          | 8.64       | 32.52 |         |          | 8.11     | 1.44     |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 70          | 8.06       | 32.87 |         |          | 4.39     | 0.54     |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 100         | 8.06       | 33.48 |         |          |          |          | 0.64     |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 150         | 7.62       | 33.93 |         |          |          |          |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 700         | 4.32       | 34.30 |         |          |          |          |          |          |
| W0207A    | 7/14/02  | 2:25     | 39        | RR-07        | 42.50 | -125.2 | 1005        | 3.58       | 34.43 |         |          |          |          |          |          |
| W0207A    | 7/13/02  | 11:01    | 32        | CR-01        | 41.90 | -124.3 | 2           | 10.11      | 33.77 | 35.49   | 203.20   | 71.72    | 13.00    | 131.48   | 12.87    |
| W0207A    | 7/13/02  | 11:01    | 32        | CR-01        | 41.90 | -124.3 | 5           | 9.88       | 33.79 | 43.12   | 207.20   | 72.20    | 11.99    | 135.00   | 20.17    |
| W0207A    | 7/13/02  | 11:01    | 32        | CR-01        | 41.90 | -124.3 | 10          | 9.17       | 33.84 | 41.39   | 139.82   | 63.43    | 10.57    | 76.38    | 7.69     |
| W0207A    | 7/13/02  | 11:01    | 32        | CR-01        | 41.90 | -124.3 | 15          | 8.48       | 33.90 | 45.63   | 82.45    | 22.33    | 5.05     | 60.12    | 6.39     |
| W0207A    | 7/13/02  | 11:01    | 32        | CR-01        | 41.90 | -124.3 | 20          | 7.99       | 33.96 | 45.32   | 72.24    | 12.62    | 2.16     | 59.63    | 4.60     |
| W0207A    | 7/13/02  | 11:01    | 32        | CR-01        | 41.90 | -124.3 | 25          | 7.88       | 33.98 | 46.46   | 63.02    | 11.29    | 1.81     | 51.73    | 6.16     |
| W0207A    | 7/13/02  | 11:01    | 32        | CR-01        | 41.90 | -124.3 | 30          | 7.79       | 33.98 | 47.20   | 61.12    | 18.35    | 2.18     | 42.77    | 5.15     |
| W0207A    | 7/13/02  | 11:01    | 32        | CR-01        | 41.90 | -124.3 | 35          | 7.77       | 33.98 | 47.14   | 61.87    | 17.99    | 3.28     | 43.88    | 4.33     |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 2           | 8.83       | 33.49 | 36.61   | 118.00   | 32.37    | 6.66     | 85.63    | 12.17    |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 5           | 8.79       | 33.53 |         |          | 25.95    | 5.20     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 11          | 8.90       | 33.58 |         |          | 25.72    | 5.50     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 16          | 8.83       | 33.64 |         |          | 20.16    | 4.54     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 20          | 8.12       | 33.73 |         |          | 14.48    | 3.14     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 30          | 7.96       | 33.86 |         |          | 12.27    | 2.70     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 40          | 7.84       | 33.96 |         |          | 10.69    | 2.28     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 50          | 7.56       | 33.99 |         |          | 6.35     | 0.96     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 60          | 7.46       | 34.01 |         |          | 5.77     | 0.80     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 70          | 7.40       | 34.03 |         |          | 7.16     | 0.86     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 100         | 7.39       | 34.03 |         |          | 4.37     | 0.78     |          |          |
| W0207A    | 7/13/02  | 7:14     | 30        | CR-03        | 41.90 | -124.5 | 120         | 7.34       | 34.04 |         |          | 7.25     | 1.24     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 2           | 8.96       | 32.78 | 26.80   | 76.40    | 10.05    | 1.72     | 66.35    | 10.36    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 9           | 8.93       | 33.23 |         |          | 21.49    | 3.52     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 20          | 8.95       | 33.44 |         |          | 23.22    | 4.71     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 27          | 8.96       | 33.44 |         |          | 22.42    | 4.60     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 29          | 8.97       | 33.45 |         |          | 21.68    | 4.24     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 40          | 8.67       | 33.60 |         |          | 16.09    | 3.39     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 50          | 8.30       | 33.62 |         |          | 8.54     | 1.54     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 70          | 7.98       | 33.85 |         |          | 11.21    | 1.49     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 100         | 7.60       | 33.99 |         |          | 6.90     | 1.15     |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 150         | 7.26       | 34.05 |         |          |          |          |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 180         | 7.16       | 34.06 |         |          |          |          |          |          |
| W0207A    | 7/13/02  | 4:18     | 29        | CR-04        | 41.90 | -124.6 | 450         | 5.78       | 34.10 |         |          |          |          |          |          |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 1           | 9.30       | 32.45 | 16.10   | 80.00    | 9.79     | 1.85     | 70.21    | 6.34     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 10          | 9.27       | 32.46 | 16.73   | 88.40    | 10.35    | 1.72     | 78.05    | 6.44     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 20          | 8.91       | 32.55 | 19.50   | 72.00    | 8.54     | 1.68     | 63.46    | 5.44     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 30          | 8.60       | 32.78 | 22.20   | 63.60    | 6.54     | 1.10     | 57.06    | 5.24     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 40          | 8.62       | 32.98 | 25.62   | 69.20    | 8.22     | 1.57     | 60.98    | 5.40     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 50          | 8.81       | 33.16 | 27.98   | 80.30    | 11.82    | 2.26     | 68.48    | 6.83     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 60          | 8.82       | 33.19 | 28.49   | 81.70    | 13.99    | 2.74     | 67.71    | 6.27     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 69          | 8.82       | 33.21 | 28.35   | 84.80    | 11.32    | 2.21     | 73.48    | 6.41     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 100         | 8.07       | 33.63 |         | 57.50    | 6.81     | 1.18     | 50.69    |          |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 150         | 7.55       | 33.96 | 36.16   | 50.30    |          |          |          | 2.14     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 459         | 5.24       | 34.10 | 44.97   | 48.10    |          |          |          | 0.28     |
| W0207A    | 7/13/02  | 2:42     | 28        | CR-05        | 41.90 | -124.7 | 499         | 5.10       | 34.13 | 44.44   | 56.50    |          |          |          | 1.50     |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 2           | 13.60      | 31.96 | 9.09    | 80.80    | 13.19    | 2.19     | 67.61    | 6.88     |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 10          | 13.49      | 31.97 |         |          | 8.83     | 1.63     |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 20          | 12.74      | 32.08 |         |          | 11.02    | 1.88     |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 22          | 12.70      | 32.09 |         |          | 9.57     | 1.83     |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 30          | 12.22      | 32.17 |         |          | 11.96    | 2.11     |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 40          | 11.86      | 32.21 |         |          | 8.83     | 1.79     |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 50          | 9.27       | 32.51 |         |          | 6.83     | 1.49     |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 70          | 8.86       | 32.89 |         |          | 4.94     | 0.98     |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 100         | 8.72       | 33.24 |         |          | 5.37     | 0.89     |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 150         | 8.25       | 33.85 |         |          |          |          |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 500         | 5.62       | 34.19 |         |          |          |          |          |          |
| W0207A    | 7/12/02  | 22:44    | 26        | CR-07        | 41.90 | -125.  | 790         | 4.24       | 34.34 |         |          |          |          |          |          |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 1           | 13.57      | 32.00 | 9.22    | 68.60    | 9.03     | 1.34     | 59.57    | 7.84     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 10          | 13.56      | 32.00 | 8.64    | 61.50    | 9.58     | 1.43     | 51.92    | 7.11     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 21          | 13.53      | 32.00 | 9.18    | 64.40    | 9.82     | 1.83     | 54.58    | 7.33     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 30          | 13.33      | 32.02 | 9.88    | 62.90    | 9.92     | 1.71     | 52.98    | 8.13     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 39          | 10.77      | 32.37 | 12.47   | 66.20    | 11.34    | 2.26     | 54.86    | 8.55     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 43          | 10.04      | 32.46 | 15.44   | 67.50    | 17.50    | 3.15     | 50.00    | 9.09     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 50          | 9.48       | 32.55 | 20.64   | 66.40    | 15.99    | 2.93     | 50.41    | 8.89     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 70          | 9.33       | 32.77 | 24.28   | 59.20    | 13.46    | 2.47     | 45.74    | 6.88     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 101         | 8.56       | 33.12 | 29.64   | 52.40    | 12.35    | 2.39     | 40.05    | 6.11     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 151         | 7.85       | 33.80 | 38.64   | 48.90    |          |          |          | 6.44     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 796         | 4.11       | 34.33 | 50.84   | 45.20    |          |          |          | 2.99     |
| W0207A    | 7/12/02  | 17:40    | 24        | CR-09        | 41.90 | -125.4 | 1004        | 3.59       | 34.43 | 51.46   | 43.50    |          |          |          | 3.60     |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.  | 2           | 15.27      | 32.07 | 9.02    | 76.30    | 8.45     | 1.39     | 67.85    | 7.61     |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.  | 10          | 15.26      | 32.07 |         |          | 8.36     | 1.39     |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.  | 19          | 15.25      | 32.07 |         |          | 10.08    | 1.91     |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.  | 30          | 14.23      | 32.25 |         |          | 9.65     | 1.72     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.   | 37          | 11.54      | 32.41 |         |          | 10.72    | 1.73     |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.   | 40          | 10.81      | 32.42 |         |          | 14.99    | 2.70     |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.   | 49          | 9.80       | 32.44 |         |          | 17.53    | 3.26     |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.   | 70          | 9.04       | 32.45 |         |          | 9.15     | 1.54     |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.   | 100         | 7.69       | 32.81 |         |          | 6.29     | 1.08     |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.   | 150         | 8.51       | 33.77 |         |          |          |          |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.   | 636         | 4.76       | 34.22 |         |          |          |          |          |          |
| W0207A    | 7/12/02  | 12:18    | 22        | CR-11        | 41.90 | -126.   | 1004        | 3.72       | 34.41 |         |          |          |          |          |          |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 2           | 8.93       | 33.41 | 34.52   | 89.69    | 19.68    | 2.96     | 70.01    | 4.45     |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 6           | 8.92       | 33.41 | 34.25   | 90.54    | 19.42    | 2.96     | 71.12    | 3.89     |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 10          |            |       | 33.11   | 89.31    | 20.35    | 3.06     | 68.96    |          |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 16          | 8.86       | 33.41 | 34.25   | 89.16    | 16.39    | 2.66     | 72.77    | 5.42     |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 21          | 8.71       | 33.44 | 34.15   | 79.24    | 12.08    | 1.78     | 67.16    | 3.24     |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 26          | 8.24       | 33.46 | 33.93   | 68.44    | 8.09     | 1.20     | 60.34    | 2.14     |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 31          | 8.00       | 33.54 | 34.84   | 69.58    | 6.32     | 1.07     | 63.26    | 2.54     |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 41          | 7.86       | 33.67 | 36.70   | 60.72    | 9.79     | 1.22     | 50.93    | 1.59     |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 51          | 7.80       | 33.81 | 38.72   | 58.30    | 10.46    | 1.26     | 47.85    | 3.91     |
| AT721     | 9/28/02  | 3:16     | 2         | NH-05        | 44.65 | -124.18 | 53          | 7.82       | 33.80 | 37.92   | 64.42    |          |          |          |          |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 1           | 10.21      | 32.50 | 20.31   | 78.98    | 19.94    | 3.17     | 59.04    | 6.78     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 6           | 10.17      | 32.51 | 20.33   | 71.07    | 18.02    | 2.96     | 53.05    | 7.05     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 11          | 10.20      | 32.50 | 20.09   | 73.52    | 19.38    | 3.08     | 54.14    | 7.08     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 21          | 8.52       | 32.68 | 27.69   | 58.89    | 25.45    | 4.14     | 33.43    | 7.04     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 31          | 7.35       | 32.92 | 30.88   |          | 6.51     | 0.85     |          | 8.13     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 41          | 8.00       | 33.44 | 32.63   | 55.40    | 3.90     | 0.32     | 51.50    | 4.79     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 51          | 8.03       | 33.59 | 36.49   | 57.28    | 2.90     | 0.18     | 54.39    | 4.42     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 61          | 7.94       | 33.69 | 39.12   | 59.16    | 4.35     | 0.61     | 54.82    | 7.03     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 72          | 7.75       | 33.72 | 40.84   | 60.60    | 6.79     | 0.69     | 53.81    | 2.34     |
| AT721     | 9/28/02  | 9:33     | 4         | NH-15        | 44.65 | -124.41 | 86          | 7.72       | 33.75 | 38.96   | 56.95    | 5.91     | 0.65     | 51.04    | 1.38     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 2           | 11.36      | 32.39 | 16.03   | 78.46    | 14.29    | 3.10     | 64.17    | 5.61     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 10          | 11.35      | 32.39 | 15.98   | 76.94    | 14.52    | 2.83     | 62.42    | 5.62     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 14          | 10.87      | 32.39 | 16.11   | 77.54    | 16.39    | 2.58     | 61.15    | 4.56     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 19          | 8.38       | 32.41 | 17.79   | 72.43    | 10.31    | 1.38     | 62.12    | 4.12     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 30          | 7.71       | 32.53 | 21.21   | 72.89    | 8.39     | 1.08     | 64.50    | 3.43     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 42          | 7.63       | 32.62 |         |          | 7.04     | 0.48     |          |          |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 51          | 7.91       | 32.81 | 24.66   |          | 9.51     | 0.61     |          | 4.78     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 71          | 7.94       | 33.32 | 29.14   |          | 6.07     | 0.37     |          | 5.74     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 102         | 8.37       | 33.76 | 34.55   |          | 4.72     | 0.29     |          | 2.25     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 152         | 7.92       | 33.91 | 37.29   |          |          |          |          | 2.56     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 202         | 7.38       | 33.98 | 38.28   |          |          |          |          | 2.47     |
| AT721     | 9/28/02  | 15:19    | 6         | NH-25        | 44.65 | -124.65 | 252         | 6.99       | 34.01 | 37.82   |          |          |          |          | 2.11     |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 2           | 12.78      | 32.25 | 13.85   | 84.44    | 15.60    | 2.58     | 68.84    | 7.22     |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 11          | 12.58      | 32.26 |         |          | 14.32    | 2.55     |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 16          | 12.13      | 32.28 |         |          | 19.58    | 3.01     |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 21          | 11.41      | 32.31 |         |          | 15.34    | 2.46     |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 30          | 8.88       | 32.49 |         |          | 10.81    | 1.26     |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 41          | 7.85       | 32.51 |         |          | 4.65     | 0.70     |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 72          | 8.77       | 33.44 |         |          | 4.09     | 0.59     |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 100         | 8.20       | 33.71 |         |          | 3.31     | 0.40     |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 152         | 7.78       | 33.96 |         |          | 3.25     | 0.58     |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 287         | 6.70       | 34.03 |         |          |          |          |          |          |
| AT721     | 9/28/02  | 19:28    | 7         | NH-35        | 44.65 | -124.88 | 435         | 5.96       | 34.07 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 1           | 12.60      | 32.32 | 14.37   | 87.57    | 25.80    | 3.83     | 61.77    | 5.94     |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 10          | 12.54      | 32.32 |         |          | 20.04    | 2.69     |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 20          | 12.32      | 32.35 |         |          | 14.43    | 1.87     |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 30          | 8.69       | 32.44 |         |          | 9.73     | 1.17     |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 41          | 8.07       | 32.62 |         |          | 6.04     | 0.76     |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 51          | 7.63       | 32.67 |         |          | 4.56     | 0.58     |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 72          | 7.76       | 33.12 |         |          | 5.92     | 0.80     |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 101         | 8.21       | 33.45 |         |          | 3.63     | 0.42     |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 151         | 7.95       | 33.88 |         |          | 3.49     | 0.51     |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 503         | 5.41       | 34.12 |         |          |          |          |          |          |
| AT721     | 9/29/02  | 0:06     | 8         | NH-45        | 44.65 | -125.12 | 684         | 4.84       | 34.25 |         |          |          |          |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 2           | 14.14      | 32.09 | 10.50   | 93.80    | 13.47    | 2.44     | 80.33    | 7.50     |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 6           | 14.10      | 32.09 |         |          | 12.76    | 2.37     |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 11          | 13.51      | 32.13 |         |          | 14.92    | 2.46     |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 21          | 9.29       | 32.38 |         |          | 4.99     | 0.83     |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 31          | 8.51       | 32.43 |         |          | 5.17     | 0.74     |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 41          | 8.01       | 32.59 |         |          | 4.08     | 0.62     |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 52          | 7.84       | 32.77 |         |          | 3.95     | 0.46     |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 72          | 7.96       | 33.33 |         |          | 4.94     | 0.73     |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 103         | 8.00       | 33.61 |         |          | 2.82     | 0.28     |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 151         | 7.74       | 33.89 |         |          |          |          |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 623         | 4.94       | 34.22 |         |          |          |          |          |          |
| AT721     | 9/29/02  | 8:17     | 10        | NH-65        | 44.65 | -125.6  | 1005        | 3.80       | 34.39 |         |          |          |          |          |          |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 3           | 14.71      | 32.03 | 7.85    |          | 7.60     | 1.57     |          | 5.96     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 11          | 14.69      | 32.03 | 8.42    |          | 9.75     | 1.85     |          | 5.48     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 21          | 12.40      | 32.43 | 11.89   |          | 7.40     | 1.27     |          | 4.87     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 31          | 10.46      | 32.49 | 14.49   |          | 6.97     | 1.12     |          | 4.81     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 40          | 8.86       | 32.58 | 18.63   |          | 3.93     | 0.69     |          | 4.07     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 50          | 8.79       | 32.85 | 19.57   |          | 3.80     | 0.59     |          | 3.18     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 71          | 8.20       | 33.20 | 27.63   |          | 5.11     | 0.52     |          | 2.94     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 101         | 8.07       | 33.73 | 32.33   |          | 4.01     | 0.45     |          | 0.11     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 149         | 7.76       | 33.92 |         |          | 3.34     | 0.42     |          |          |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 320         | 6.77       | 34.04 | 37.59   |          |          |          |          | 1.11     |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 880         | 4.03       | 34.33 |         |          |          |          |          |          |
| AT721     | 9/29/02  | 12:36    | 11        | NH-85        | 44.65 | -126.05 | 1001        | 3.76       | 34.40 |         |          |          |          |          |          |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 1           | 9.78       | 33.39 | 27.47   | 91.97    | 24.86    | 4.50     | 67.11    | 7.48     |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 4           | 9.80       | 33.39 | 29.75   | 109.98   | 24.78    | 4.36     | 85.20    | 10.10    |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 6           | 9.78       | 33.39 | 26.96   | 101.72   | 21.43    | 4.04     | 80.29    | 7.25     |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 10          | 9.79       | 33.39 | 26.54   | 82.81    | 20.08    | 3.91     | 62.73    | 6.92     |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 16          | 9.12       | 33.42 | 28.91   | 70.88    | 13.61    | 2.45     | 57.27    | 5.97     |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 21          | 8.94       | 33.44 | 34.37   | 69.70    | 15.11    | 2.29     | 54.59    | 10.43    |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 26          | 8.86       | 33.59 | 38.51   | 62.39    | 10.55    | 1.98     | 51.84    | 12.01    |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 31          | 8.84       | 33.62 | 39.83   | 63.75    | 8.74     | 1.71     | 55.02    | 10.34    |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 41          | 8.73       | 33.70 | 43.52   | 67.55    | 14.44    | 2.54     | 53.10    | 6.99     |
| AT721     | 10/2/02  | 15:50    | 32        | HH-01        | 44.00 | -124.2  | 48          | 8.55       | 33.75 | 42.76   | 70.72    | 15.16    | 2.75     | 55.56    | 6.40     |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4  | 1           | 10.24      | 33.00 | 21.11   | 90.85    | 23.56    | 4.29     | 67.30    | 8.41     |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4  | 5           | 10.20      | 33.03 |         |          | 17.96    | 3.33     |          |          |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4  | 10          | 10.04      | 33.17 |         |          | 18.42    | 3.01     |          |          |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4  | 20          | 9.31       | 33.34 |         |          | 11.17    | 1.81     |          |          |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4  | 30          | 8.36       | 33.51 |         |          | 18.60    | 1.87     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4 | 40          | 8.52       | 33.62 |         |          | 18.33    | 2.28     |          |          |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4 | 50          | 8.70       | 33.75 |         |          | 10.39    | 1.31     |          |          |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4 | 60          | 8.59       | 33.79 |         |          | 5.60     | 0.74     |          |          |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4 | 71          | 8.29       | 33.81 |         |          | 9.09     | 0.89     |          |          |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4 | 102         | 8.11       | 33.92 |         |          | 6.87     | 1.14     |          |          |
| AT721     | 10/2/02  | 17:35    | 33        | HH-02        | 44.00 | -124.4 | 116         | 8.09       | 33.92 |         |          | 12.69    | 1.74     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 2           | 10.02      | 32.92 | 28.61   | 69.33    | 20.95    | 3.44     | 48.38    | 14.76    |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 10          | 9.07       | 32.95 |         |          | 17.64    | 3.47     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 20          | 9.00       | 32.97 |         |          | 12.14    | 2.23     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 30          | 8.98       | 33.12 |         |          | 11.58    | 2.16     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 40          | 8.02       | 33.13 |         |          | 9.60     | 1.23     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 50          | 8.45       | 33.55 |         |          | 6.17     | 0.98     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 60          | 8.31       | 33.67 |         |          | 7.31     | 0.93     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 70          | 8.28       | 33.84 |         |          | 7.88     | 0.93     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 90          | 8.11       | 33.88 |         |          | 11.64    | 1.41     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 100         | 8.06       | 33.91 |         |          | 20.55    | 3.11     |          |          |
| AT721     | 10/2/02  | 20:54    | 34        | HH-03        | 44.00 | -124.6 | 146         | 7.76       | 33.96 |         |          | 11.26    | 1.44     |          |          |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 1           | 12.52      | 32.50 | 13.91   | 89.16    | 19.51    | 3.26     | 69.64    | 4.07     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 5           | 12.50      | 32.51 | 13.61   | 85.44    | 12.91    | 2.26     | 72.53    | 4.56     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 10          | 12.43      | 32.60 | 15.62   | 78.69    | 13.53    | 2.37     | 65.16    | 5.76     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 21          | 11.94      | 32.81 | 17.87   | 74.58    | 11.41    | 1.85     | 63.17    | 7.19     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 30          | 10.85      | 32.83 | 19.22   | 64.82    | 7.32     | 0.97     | 57.50    | 5.20     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 40          | 9.97       | 32.95 | 23.27   | 62.30    | 6.02     | 0.70     | 56.27    | 5.90     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 50          | 9.04       | 33.21 | 28.19   | 66.78    | 5.05     | 0.65     | 61.73    | 5.03     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 59          | 7.89       | 33.32 | 31.97   | 69.84    | 4.50     | 0.75     | 65.34    | 5.05     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 69          | 8.03       | 33.49 | 34.91   | 79.84    | 5.76     | 0.91     | 74.08    | 4.35     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 94          | 8.08       | 33.83 | 40.16   | 63.75    | 10.28    | 1.49     | 53.46    | 4.40     |
| AT721     | 10/2/02  | 23:44    | 35        | HH-04        | 44.00 | -124.8 | 104         | 8.08       | 33.85 | 39.08   | 61.16    | 4.04     | 0.61     | 57.13    | 5.84     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 2           | 14.13      | 32.34 | 10.56   |          | 11.36    | 1.99     |          | 6.42     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 10          | 13.36      | 32.46 | 12.58   |          | 9.86     | 1.70     |          | 6.90     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 15          | 12.09      | 32.54 | 15.25   |          | 9.97     | 1.56     |          | 6.39     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 20          | 9.98       | 32.69 | 18.34   |          | 6.65     | 1.12     |          | 7.15     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 30          | 8.35       | 32.59 | 20.32   |          | 7.15     | 0.88     |          | 6.79     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 41          | 8.70       | 33.11 | 27.43   |          | 6.07     | 0.75     |          | 5.89     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 51          | 8.34       | 33.25 | 30.60   |          | 5.47     | 0.66     |          | 4.88     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 71          | 8.68       | 33.70 | 34.33   |          | 5.09     | 0.51     |          | 5.05     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 101         | 8.25       | 33.82 | 35.89   |          | 2.94     | 0.35     |          | 4.72     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 150         | 7.96       | 33.96 | 37.31   |          | 3.44     | 0.38     |          | 7.94     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 501         | 5.62       | 34.11 | 43.34   |          |          |          |          | 5.67     |
| AT721     | 10/3/02  | 3:36     | 36        | HH-05        | 44.00 | -125.  | 915         | 3.90       | 34.37 | 47.09   |          |          |          |          | 4.56     |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 2           | 14.51      | 32.28 | 10.33   |          | 8.79     | 1.55     |          | 7.68     |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 6           | 14.51      | 32.28 |         |          | 9.12     | 1.52     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 10          | 14.51      | 32.28 |         |          | 8.76     | 1.56     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 20          | 11.47      | 32.43 |         |          | 10.20    | 1.67     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 30          | 8.31       | 32.40 |         |          | 8.65     | 1.22     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 40          | 8.30       | 32.54 |         |          | 4.64     | 0.77     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 49          | 8.42       | 32.69 |         |          | 5.09     | 0.65     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 70          | 8.88       | 33.18 |         |          | 4.09     | 0.47     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 101         | 8.62       | 33.65 |         |          | 3.23     | 0.41     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 151         | 8.31       | 33.93 |         |          |          | 0.34     |          |          |
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2 | 315         | 7.03       | 34.03 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| AT721     | 10/3/02  | 6:18     | 37        | HH-07        | 44.00 | -125.2  | 1004        | 3.73       | 34.39 |         |          |          |          |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 1           | 14.36      | 32.31 | 9.97    |          | 8.52     | 1.43     |          | 6.74     |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 5           | 14.19      | 32.34 |         |          | 8.78     | 1.56     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 10          | 13.18      | 32.51 |         |          | 15.36    | 1.97     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 20          | 12.51      | 32.70 |         |          | 10.60    | 1.50     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 30          | 10.97      | 32.81 |         |          | 8.92     | 1.16     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 40          | 9.42       | 32.91 |         |          | 5.51     | 0.75     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 50          | 9.19       | 33.06 |         |          | 5.17     | 0.65     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 71          | 7.99       | 33.16 |         |          | 5.49     | 0.50     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 100         | 8.25       | 33.57 |         |          | 2.31     | 0.35     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 149         | 8.22       | 33.92 |         |          | 2.39     | 0.32     |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 262         | 7.53       | 34.05 |         |          |          |          |          |          |
| AT721     | 10/3/02  | 8:27     | 38        | HH-09        | 44.00 | -125.4  | 500         | 5.87       | 34.10 |         |          |          |          |          |          |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 2           | 9.73       | 33.40 | 26.63   | 101.95   | 23.78    | 4.61     | 78.17    | 3.50     |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 5           | 9.53       | 33.43 | 26.69   | 89.68    | 27.96    | 4.94     | 61.73    | 1.76     |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 9           | 9.73       | 33.40 | 27.10   | 99.94    | 23.44    | 4.50     | 76.50    | 3.01     |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 10          | 9.49       | 33.42 | 27.21   | 75.81    | 17.94    | 3.40     | 57.87    | 6.14     |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 15          | 9.44       | 33.47 | 28.85   | 79.15    | 15.35    | 2.68     | 63.80    | 3.67     |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 20          | 8.84       | 33.64 |         | 67.43    | 10.73    | 1.97     | 56.70    |          |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 25          | 8.76       | 33.67 |         | 67.17    | 11.95    | 2.06     | 55.22    |          |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 30          | 8.70       | 33.69 | 32.94   | 52.61    | 16.53    | 3.00     | 36.08    | 2.47     |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 40          | 8.63       | 33.77 | 34.06   | 57.18    | 9.37     | 1.54     | 47.81    | 0.55     |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 50          | 8.43       | 33.83 | 35.81   | 62.28    | 11.60    | 1.64     | 50.67    | 0.48     |
| AT721     | 10/1/02  | 20:46    | 25        | FM-03        | 43.22 | -124.5  | 57          | 8.41       | 33.84 | 35.62   | 52.62    | 12.68    | 1.67     | 39.95    | 0.41     |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 2           | 10.71      | 33.05 | 24.82   | 118.61   | 29.06    | 5.47     | 89.55    | 11.10    |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 4           | 10.62      | 33.06 |         |          | 32.28    | 6.10     |          |          |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 9           | 9.34       | 33.15 |         |          | 24.33    | 4.23     |          |          |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 20          | 9.22       | 33.52 |         |          | 16.81    | 3.38     |          |          |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 30          | 8.97       | 33.64 |         |          | 8.94     | 1.62     |          |          |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 40          | 8.65       | 33.74 |         |          | 7.39     | 1.43     |          |          |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 50          | 8.43       | 33.82 |         |          | 7.73     | 1.34     |          |          |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 60          | 8.41       | 33.83 |         |          | 6.90     | 1.18     |          |          |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 71          | 8.40       | 33.84 |         |          | 8.50     | 1.44     |          |          |
| AT721     | 10/1/02  | 22:10    | 26        | FM-04        | 43.22 | -124.58 | 78          | 8.34       | 33.87 |         |          | 12.07    | 1.95     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 2           | 11.33      | 32.89 | 21.39   | 103.51   | 22.14    | 3.86     | 81.37    | 9.42     |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 11          | 10.65      | 32.96 |         |          | 17.40    | 3.29     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 14          | 9.91       | 32.99 |         |          |          |          |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 20          | 9.51       | 33.21 |         |          | 13.66    | 2.73     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 31          | 9.41       | 33.29 |         |          | 22.84    | 3.51     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 41          | 9.40       | 33.44 |         |          | 9.28     | 1.63     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 51          | 9.33       | 33.47 |         |          | 9.55     | 1.55     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 59          | 9.14       | 33.56 |         |          | 9.15     | 1.22     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 69          | 8.99       | 33.61 |         |          | 10.00    | 1.49     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 100         | 8.40       | 33.84 |         |          | 8.61     | 1.21     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 140         | 8.24       | 33.93 |         |          | 14.77    | 1.67     |          |          |
| AT721     | 10/1/02  | 23:35    | 27        | FM-05        | 43.22 | -124.67 | 151         | 8.22       | 33.94 |         |          | 8.66     | 1.25     |          |          |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 2           | 11.21      | 32.70 | 18.51   | 79.85    | 12.96    | 2.42     | 66.89    | 7.77     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 11          | 11.21      | 32.70 | 18.64   | 81.52    | 11.97    | 2.33     | 69.55    | 7.22     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 18          | 10.67      | 32.82 | 20.78   | 81.87    | 9.15     | 2.01     | 72.72    | 7.46     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 21          | 9.88       | 32.96 | 24.06   | 67.08    | 8.16     | 1.62     | 58.92    | 9.07     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 31          | 9.48       | 33.05 | 26.54   | 60.41    | 11.15    | 1.59     | 49.27    | 7.90     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 41          | 9.02       | 33.11 | 27.00   | 60.62    | 5.43     | 0.79     | 55.19    | 6.71     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 50          | 8.82       | 33.21 | 28.99   | 62.11    | 4.44     | 0.71     | 57.67    | 7.48     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 70          | 8.41       | 33.40 | 32.09   | 58.72    | 6.09     | 0.88     | 52.63    | 7.33     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 101         | 8.25       | 33.60 | 35.25   | 53.60    | 3.43     | 0.62     | 50.18    | 8.90     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 150         | 8.12       | 33.97 | 39.49   | 54.70    | 2.57     | 0.53     | 52.13    | 6.41     |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 235         | 7.46       | 34.03 | 42.21   | 64.72    |          |          |          | 10.13    |
| AT721     | 10/2/02  | 2:43     | 29        | FM-07        | 43.22 | -124.83 | 302         | 6.84       | 34.06 | 42.54   | 55.24    |          |          |          | 6.85     |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 2           | 11.13      | 32.78 | 18.33   | 68.91    | 8.38     | 1.92     | 60.54    | 6.44     |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 6           | 11.10      | 32.79 |         |          | 8.73     | 1.88     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 11          | 11.10      | 32.78 |         |          | 7.16     | 1.59     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 21          | 10.11      | 32.94 |         |          | 11.16    | 1.75     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 31          | 9.93       | 32.99 |         |          | 5.85     | 1.13     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 40          | 9.74       | 33.05 |         |          | 8.63     | 1.22     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 51          | 9.57       | 33.13 |         |          | 7.64     | 1.00     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 70          | 8.92       | 33.34 |         |          | 4.62     | 0.62     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 101         | 8.94       | 33.73 |         |          | 4.24     | 0.85     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 151         | 8.41       | 33.89 |         |          | 3.04     | 0.59     |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 319         | 6.85       | 34.05 |         |          |          |          |          |          |
| AT721     | 10/2/02  | 5:16     | 30        | FM-08        | 43.22 | -125.   | 1001        | 3.80       | 34.40 |         |          |          |          |          |          |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 2           | 11.05      | 32.81 | 20.00   | 64.61    | 9.49     | 2.18     | 55.12    | 8.75     |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 10          | 10.92      | 32.81 | 20.14   | 64.68    | 9.16     | 1.92     | 55.52    | 8.12     |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 20          | 10.71      | 32.81 | 19.89   | 65.01    | 8.32     | 1.77     | 56.69    | 7.10     |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 30          | 10.15      | 32.93 | 21.62   | 61.41    | 8.47     | 1.42     | 52.95    | 7.64     |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 40          | 9.75       | 32.90 | 22.68   | 63.49    | 8.08     | 1.38     | 55.40    | 6.54     |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 51          | 9.45       | 33.09 | 25.65   | 64.47    | 7.65     | 1.41     | 56.82    | 7.03     |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 72          | 8.94       | 33.38 | 31.88   | 58.05    | 4.45     | 0.79     | 53.60    | 11.50    |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 101         | 8.89       | 33.56 | 33.36   | 57.74    | 4.88     | 0.78     | 52.86    | 9.64     |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 151         | 8.04       | 33.87 | 36.66   | 51.25    |          | 0.25     |          | 2.59     |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 284         | 7.15       | 34.10 |         |          | 48.91    |          |          |          |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 330         | 6.40       | 34.05 | 44.61   | 52.75    |          |          |          | 10.78    |
| AT721     | 10/2/02  | 8:05     | 31        | FM-09        | 43.22 | -125.17 | 1000        | 3.83       | 34.40 | 51.60   | 43.56    |          |          |          | 5.52     |
| AT721     | 9/30/02  | 22:45    | 19        | CR-01        | 41.90 | -124.3  | 2           | 10.48      | 33.38 | 25.39   |          | 47.16    | 7.14     |          | 6.81     |
| AT721     | 9/30/02  | 22:45    | 19        | CR-01        | 41.90 | -124.3  | 5           | 10.50      | 33.37 | 26.65   |          | 50.17    | 7.98     |          | 7.11     |
| AT721     | 9/30/02  | 22:45    | 19        | CR-01        | 41.90 | -124.3  | 10          | 10.47      | 33.38 | 27.46   |          | 39.70    | 6.49     |          | 8.81     |
| AT721     | 9/30/02  | 22:45    | 19        | CR-01        | 41.90 | -124.3  | 15          | 10.16      | 33.40 | 30.49   |          | 24.63    | 4.31     |          | 7.34     |
| AT721     | 9/30/02  | 22:45    | 19        | CR-01        | 41.90 | -124.3  | 21          | 9.56       | 33.48 | 32.74   |          | 12.95    | 2.34     |          | 6.35     |
| AT721     | 9/30/02  | 22:45    | 19        | CR-01        | 41.90 | -124.3  | 26          | 8.84       | 33.63 | 35.71   |          | 7.53     | 1.19     |          | 5.69     |
| AT721     | 9/30/02  | 22:45    | 19        | CR-01        | 41.90 | -124.3  | 32          | 8.78       | 33.63 | 37.58   |          | 12.76    | 1.55     |          | 5.91     |
| AT721     | 9/30/02  | 22:45    | 19        | CR-01        | 41.90 | -124.3  | 35          | 8.85       | 33.62 | 36.78   |          | 9.23     | 1.45     |          | 7.28     |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 1           | 10.73      | 32.93 | 20.55   | 74.18    | 20.02    | 3.56     | 54.16    | 6.50     |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 5           | 10.52      | 32.96 |         |          | 17.65    | 2.99     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 10          | 10.11      | 33.04 |         |          | 17.41    | 3.08     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 19          | 9.79       | 33.08 |         |          | 15.27    | 2.99     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 30          | 9.67       | 33.09 |         |          | 12.71    | 2.57     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 40          | 9.18       | 33.40 |         |          | 5.31     | 0.93     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 50          | 9.70       | 33.84 |         |          | 11.27    | 1.44     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 60          | 9.28       | 33.91 |         |          | 4.09     | 0.72     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 70          | 9.22       | 33.92 |         |          | 4.21     | 0.73     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 100         | 9.04       | 33.95 |         |          | 9.22     | 1.17     |          |          |
| AT721     | 10/1/02  | 2:40     | 21        | CR-03        | 41.90 | -124.5  | 115         | 8.91       | 33.95 |         |          | 5.92     | 0.74     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 2           | 12.91      | 32.60 | 13.34   | 79.53    | 11.80    | 1.82     | 67.73    | 7.40     |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 6           | 12.91      | 32.60 |         |          | 12.45    | 1.71     |          |          |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 11          | 12.87      | 32.60 |         |          | 8.20     | 1.37     |          |          |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 21          | 12.23      | 32.61 |         |          | 17.37    | 2.86     |          |          |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 31          | 9.36       | 32.82 |         |          | 3.99     | 0.60     |          |          |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 42          | 8.69       | 33.05 |         |          | 3.31     | 0.44     |          |          |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 51          | 8.39       | 33.25 |         |          | 5.40     | 0.59     |          |          |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 73          | 9.24       | 33.77 |         |          | 6.13     | 0.55     |          |          |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 101         | 8.81       | 33.92 |         |          | 3.04     | 0.41     |          |          |
| AT721     | 10/1/02  | 5:22     | 22        | CR-04        | 41.90 | -124.6 | 147         | 8.21       | 33.95 |         |          |          | 0.36     |          |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 2           | 12.94      | 32.59 |         | 80.88    | 14.03    | 2.27     | 66.85    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 10          | 12.85      | 32.60 |         | 75.30    | 9.84     | 1.71     | 65.47    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 20          | 12.82      | 32.60 |         | 78.77    | 8.94     | 1.56     | 69.83    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 25          | 12.74      | 32.59 |         | 78.72    | 9.31     | 1.50     | 69.41    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 30          | 9.76       | 32.77 |         | 61.16    | 7.08     | 0.84     | 54.08    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 40          | 9.13       | 32.95 |         | 64.17    | 2.48     | 0.45     | 61.69    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 50          | 8.81       | 33.03 |         | 62.63    | 3.61     | 0.41     | 59.02    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 70          | 8.32       | 33.34 |         | 56.08    | 2.56     |          | 53.52    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 102         | 8.18       | 33.70 |         | 53.92    | 4.04     | 0.48     | 49.88    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 150         | 8.18       | 33.98 |         | 51.58    | 4.24     | 0.48     | 47.34    |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 500         | 5.49       | 34.15 |         | 47.00    |          |          |          |          |
| AT721     | 10/1/02  | 8:55     | 23        | CR-05        | 41.90 | -124.7 | 646         | 4.89       | 34.23 |         | 49.20    |          |          |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 2           | 13.16      | 32.68 | 13.60   | 85.13    | 14.41    | 1.95     | 70.71    | 7.21     |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 7           | 13.13      | 32.68 |         |          | 12.71    | 1.93     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 12          | 11.06      | 32.73 |         |          | 15.73    | 2.22     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 22          | 10.49      | 33.15 |         |          | 42.53    | 5.72     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 32          | 10.38      | 33.26 |         |          | 15.13    | 2.57     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 42          | 10.20      | 33.28 |         |          | 12.36    | 2.13     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 52          | 8.86       | 33.16 |         |          | 7.32     | 0.93     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 72          | 9.62       | 33.84 |         |          | 4.92     | 0.65     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 102         | 8.29       | 33.82 |         |          |          | 0.36     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 153         | 7.61       | 33.95 |         |          | 3.40     | 0.34     |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 498         | 5.06       | 34.14 |         |          |          |          |          |          |
| AT721     | 9/30/02  | 16:36    | 17        | CR-07        | 41.90 | -125.  | 802         | 4.11       | 34.36 |         |          |          |          |          |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 11          | 10.45      | 32.60 |         | 71.79    | 10.39    | 1.56     | 61.40    |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 22          | 10.23      | 32.62 |         | 73.76    | 7.71     | 1.21     | 66.05    |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 31          | 9.91       | 32.74 |         | 70.10    | 6.69     | 1.06     | 63.41    |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 42          | 9.00       | 32.80 |         | 67.33    | 4.73     | 0.61     | 62.60    |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 46          | 8.90       | 32.94 |         | 62.86    | 3.83     | 0.40     | 59.02    |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 72          | 9.19       | 33.48 |         | 58.79    | 3.53     | 0.50     | 55.26    |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 103         | 8.16       | 33.73 |         | 58.16    | 3.62     | 0.31     | 54.54    |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 150         | 7.58       | 33.95 |         | 51.81    |          |          |          |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 679         | 4.57       | 34.27 |         | 43.79    |          |          |          |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 840         | 4.10       | 34.34 |         | 46.98    |          |          |          |          |
| AT721     | 9/30/02  | 11:04    | 15        | CR-09        | 41.90 | -125.4 | 1002        | 3.72       | 34.42 |         | 42.56    |          |          |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.  | 2           | 12.63      | 32.68 | 13.85   | 77.19    | 8.04     | 1.42     | 69.15    | 6.08     |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.  | 10          | 12.45      | 32.68 |         |          | 8.35     | 1.63     |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.  | 20          | 12.40      | 32.68 |         |          | 11.24    | 1.69     |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.  | 30          | 12.38      | 32.68 |         |          | 11.21    | 1.58     |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.  | 34          | 12.33      | 32.68 |         |          | 8.87     | 1.58     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.   | 40          | 12.31      | 32.68 |         |          | 8.97     | 1.54     |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.   | 50          | 10.40      | 32.73 |         |          | 5.07     | 0.89     |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.   | 72          | 8.63       | 33.00 |         |          | 3.05     | 0.49     |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.   | 101         | 8.35       | 33.68 |         |          | 2.69     | 0.49     |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.   | 149         | 7.95       | 33.98 |         |          | 4.11     | 0.54     |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.   | 784         | 4.14       | 34.33 |         |          |          |          |          |          |
| AT721     | 9/30/02  | 4:57     | 13        | CR-11        | 41.90 | -126.   | 1005        | 3.60       | 34.42 |         |          |          |          |          |          |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 1           | 12.48      | 32.29 | 10.01   |          | 15.15    | 2.23     |          | 6.70     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 5           | 12.47      | 32.29 | 9.85    |          |          | 2.17     |          | 6.55     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 10          | 12.46      | 32.29 | 9.60    |          | 14.84    | 2.10     |          | 6.31     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 15          | 12.25      | 32.31 | 10.68   |          | 11.46    | 1.55     |          | 6.47     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 20          | 11.97      | 32.31 | 12.92   | 75.01    | 10.30    | 1.34     | 64.72    | 6.53     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 26          | 10.70      | 32.42 | 14.88   | 77.98    | 8.09     | 0.96     | 69.89    | 6.69     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 30          | 10.09      | 32.48 | 17.37   |          | 5.93     | 0.63     |          | 5.70     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 40          | 8.82       | 32.53 | 19.49   | 58.78    | 6.84     | 0.62     | 51.94    | 6.74     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 50          | 8.80       | 32.79 | 23.66   | 60.30    | 8.07     | 0.86     | 52.23    | 6.34     |
| W0212A    | 12/3/02  | 20:23    | 3         | NH-05        | 44.65 | -124.18 | 53          | 8.92       | 32.83 | 24.12   | 57.90    | 11.94    | 1.07     | 45.96    | 6.45     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 1           | 12.80      | 32.31 | 9.62    | 74.24    | 9.20     | 1.38     | 65.05    | 6.89     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 5           | 12.80      | 32.31 | 9.64    | 77.80    |          | 1.48     |          | 6.81     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 10          | 12.80      | 32.31 | 9.39    | 74.06    | 12.26    | 1.47     | 61.80    | 6.57     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 20          | 12.76      | 32.31 | 9.51    | 78.54    | 11.05    | 1.53     | 67.50    | 6.46     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 30          | 12.63      | 32.30 | 9.95    | 72.27    | 8.77     | 1.17     | 63.50    | 6.72     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 40          | 11.45      | 32.33 | 14.09   | 70.86    | 14.56    | 1.31     | 56.30    | 7.01     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 50          | 10.18      | 32.49 | 17.62   | 52.35    | 5.57     | 0.59     | 46.78    | 6.97     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 60          | 9.34       | 32.58 | 19.92   | 46.70    | 4.57     | 0.51     | 42.13    | 6.33     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 70          | 8.82       | 32.78 | 23.83   | 44.43    | 4.24     | 0.48     | 40.20    | 7.11     |
| W0212A    | 12/3/02  | 22:28    | 5         | NH-15        | 44.65 | -124.41 | 84          | 8.82       | 33.01 | 26.14   | 53.19    | 5.40     | 0.54     | 47.79    | 6.18     |
| W0212A    | 12/3/02  | 23:33    | 6         | NH-20        | 44.65 | -124.53 | 100         | 8.48       | 33.38 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 2           | 12.74      | 32.30 | 8.56    | 80.55    | 6.12     | 1.06     | 74.44    | 5.73     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 10          | 12.70      | 32.30 | 8.37    | 78.36    | 6.83     | 1.10     | 71.53    | 5.12     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 20          | 12.66      | 32.30 | 8.52    | 74.90    | 6.76     | 1.07     | 68.14    | 5.39     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 30          | 12.63      | 32.30 | 9.12    | 75.90    | 8.37     | 0.95     | 67.53    | 5.80     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 40          | 10.32      | 32.41 | 14.65   |          | 3.14     | 0.40     |          | 5.56     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 49          | 8.62       | 32.46 | 17.30   | 68.00    | 4.50     | 0.43     | 63.50    | 6.83     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 71          | 8.16       | 32.70 | 21.06   | 67.90    | 3.16     | 0.32     | 64.74    | 4.98     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 101         | 8.63       | 33.26 | 27.44   | 66.10    | 3.00     | 0.39     | 63.10    | 4.78     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 130         | 8.60       | 33.53 | 32.33   | 67.70    | 3.91     | 0.35     | 63.79    | 5.19     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 151         | 8.35       | 33.68 | 35.03   | 53.20    | 4.51     | 0.40     | 48.69    | 5.98     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 199         | 7.90       | 33.93 | 37.24   | 50.50    |          |          |          | 4.77     |
| W0212A    | 12/4/02  | 0:43     | 7         | NH-25        | 44.65 | -124.65 | 284         | 7.17       | 34.00 | 40.58   | 49.90    |          |          |          | 6.40     |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 2           | 12.84      | 32.34 | 9.72    | 63.00    | 8.08     | 1.01     | 54.92    | 6.98     |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 10          | 12.80      | 32.33 |         |          | 6.45     | 1.00     |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 20          | 12.81      | 32.33 |         |          | 6.01     | 0.95     |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 19          | 12.82      | 32.33 |         |          | 8.05     | 0.98     |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 29          | 12.80      | 32.33 |         |          | 5.91     | 0.94     |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 40          | 10.93      | 32.35 |         |          | 4.21     | 0.55     |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 48          | 9.08       | 32.38 |         |          | 7.15     | 0.67     |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 70          | 7.69       | 32.42 |         |          | 4.83     | 0.38     |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 101         | 8.30       | 32.91 |         |          | 4.01     | 0.31     |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 152         | 8.11       | 33.70 |         |          | 4.49     | 0.37     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 361         | 6.34       | 34.04 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 13:12    | 8         | NH-35        | 44.65 | -124.88 | 422         | 6.21       | 34.03 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 2           | 12.69      | 32.40 | 10.05   | 60.10    | 5.88     | 0.92     | 54.22    | 6.58     |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 10          | 12.70      | 32.40 |         |          | 5.29     | 0.84     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 12          | 12.70      | 32.40 |         |          | 6.38     | 1.02     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 20          | 12.69      | 32.40 |         |          | 6.37     | 0.88     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 28          | 12.68      | 32.40 |         |          | 5.05     | 0.76     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 40          | 11.96      | 32.41 |         |          | 4.55     | 0.63     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 50          | 11.32      | 32.47 |         |          | 4.68     | 0.58     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 71          | 9.81       | 32.82 |         |          | 3.67     | 0.45     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 101         | 7.99       | 32.99 |         |          | 2.50     | 0.24     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 148         | 7.25       | 33.49 |         |          | 3.00     | 0.23     |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 499         | 4.98       | 34.06 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 14:57    | 9         | NH-45        | 44.65 | -125.12 | 683         | 4.55       | 34.23 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 16:49    | 10        | NH-55        | 44.65 | -125.37 | 79          | 8.15       | 33.04 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 16:49    | 10        | NH-55        | 44.65 | -125.37 | 145         | 8.30       | 33.78 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 2           | 13.06      | 32.28 | 10.30   | 78.40    | 9.96     | 1.37     | 68.44    | 7.81     |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 11          | 13.02      | 32.28 |         |          | 10.19    | 1.39     |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 21          | 13.02      | 32.28 |         |          | 10.37    | 1.33     |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 29          | 13.02      | 32.28 |         |          | 11.57    | 1.64     |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 42          | 12.89      | 32.27 |         |          | 11.17    | 1.55     |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 50          | 10.01      | 32.36 |         |          | 3.99     | 0.47     |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 69          | 7.42       | 32.44 |         |          | 2.65     | 0.26     |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 101         | 6.94       | 32.87 |         |          | 3.03     | 0.24     |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 152         | 7.62       | 33.77 |         |          | 2.91     | 0.22     |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 875         | 4.00       | 34.35 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 18:55    | 11        | NH-65        | 44.65 | -125.6  | 1005        | 3.68       | 34.39 |         |          |          |          |          |          |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 1           | 13.67      | 32.37 | 8.81    | 72.50    | 7.33     | 0.84     | 65.17    | 6.80     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 10          | 13.66      | 32.37 | 8.27    | 75.20    | 8.07     | 0.85     | 67.13    | 6.25     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 20          | 13.62      | 32.37 | 8.94    | 73.40    | 6.81     | 0.91     | 66.59    | 6.92     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 30          | 13.56      | 32.35 | 9.21    | 74.90    | 6.53     | 0.91     | 68.38    | 6.87     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 40          | 9.78       | 32.39 | 16.57   |          | 4.98     | 0.67     |          | 6.38     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 50          | 8.05       | 32.44 | 18.92   |          | 2.40     | 0.29     |          | 5.51     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 69          | 7.40       | 32.61 | 21.72   |          | 3.08     | 0.32     |          | 4.57     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 101         | 8.06       | 33.26 | 30.94   |          | 3.47     | 0.35     |          | 6.12     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 150         | 7.62       | 33.79 | 35.70   |          |          | 0.22     |          | 4.03     |
| W0212A    | 12/4/02  | 22:00    | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.44       | 34.40 | 48.82   |          |          |          |          | 1.86     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 2           | 11.06      | 31.86 | 15.06   |          | 13.56    | 2.43     |          | 7.48     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 5           | 11.05      | 31.86 | 15.36   |          | 14.17    | 2.45     |          | 7.87     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 10          | 11.15      | 31.99 | 15.75   |          | 10.17    | 1.84     |          | 7.95     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 15          | 11.21      | 32.15 | 16.00   |          | 7.58     | 1.44     |          | 7.94     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 21          | 11.01      | 32.31 | 15.38   | 75.30    | 5.89     | 0.79     | 69.41    | 7.64     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 25          | 11.04      | 32.38 | 15.20   | 63.50    | 5.00     | 0.68     | 58.50    | 7.16     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 31          | 10.98      | 32.39 | 15.32   | 62.50    | 5.49     | 0.63     | 57.01    | 6.85     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 41          | 10.45      | 32.71 | 20.41   | 61.80    | 7.00     | 0.85     | 54.80    | 6.83     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 50          | 10.45      | 32.72 | 20.39   | 64.40    | 8.97     | 1.08     | 55.43    | 7.01     |
| W0302A    | 2/14/03  | 19:56    | 2         | NH-05        | 44.65 | -124.18 | 53          | 10.45      | 32.72 | 20.29   | 70.40    | 12.19    | 1.19     | 58.21    | 7.48     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 1           | 10.69      | 31.56 | 14.61   | 86.70    | 30.23    | 4.64     | 56.47    | 7.16     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 5           | 10.69      | 31.57 | 14.88   | 77.00    | 31.71    | 4.71     | 45.29    | 7.33     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 10          | 10.90      | 31.92 | 14.67   | 73.80    | 16.89    | 2.60     | 56.91    | 7.11     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 20          | 11.01      | 32.19 | 14.96   | 59.24    | 6.79     | 0.84     | 52.45    | 7.02     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 30          | 10.96      | 32.28 | 15.16   | 60.65    | 6.02     | 0.88     | 54.63    | 6.74     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 40          | 10.85      | 32.45 | 16.77   | 60.35    | 4.81     | 0.64     | 55.55    | 7.31     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 50          | 10.21      | 32.74 | 20.80   | 57.79    | 4.79     | 0.71     | 53.00    | 6.83     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 60          | 9.38       | 33.04 | 26.66   | 58.30    | 5.20     | 0.64     | 53.10    | 6.88     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 70          | 8.78       | 33.27 | 30.85   | 57.37    | 6.41     | 0.76     | 50.96    | 6.55     |
| W0302A    | 2/14/03  | 22:38    | 4         | NH-15        | 44.65 | -124.41 | 85          | 8.50       | 33.41 | 31.89   | 56.06    | 7.72     | 0.91     | 48.35    | 5.62     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 1           | 10.48      | 31.69 | 11.93   | 77.28    | 16.15    | 2.31     | 61.13    | 5.40     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 5           | 10.48      | 31.72 | 11.99   | 71.97    | 14.15    | 2.24     | 57.82    | 5.87     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 10          | 10.47      | 31.75 | 11.78   | 73.79    | 15.35    | 2.22     | 58.44    | 5.55     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 21          | 10.57      | 31.94 | 12.04   | 69.76    | 11.34    | 1.74     | 58.42    | 5.83     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 31          | 10.82      | 32.32 | 12.60   | 64.96    | 6.43     | 0.75     | 58.53    | 5.33     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 40          | 11.04      | 32.43 | 13.62   | 58.42    | 4.59     | 0.44     | 53.83    | 5.96     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 50          | 11.02      | 32.47 | 13.06   | 56.79    | 4.07     | 0.50     | 52.73    | 4.73     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 71          | 10.87      | 32.61 | 14.84   | 58.51    | 4.52     | 0.51     | 53.99    | 4.22     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 100         | 9.11       | 32.97 | 22.29   | 58.71    | 3.11     | 0.32     | 55.60    | 3.24     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 150         | 7.86       | 33.80 | 34.35   | 52.44    | 5.37     | 0.58     | 47.07    | 2.04     |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 199         | 7.42       | 33.96 |         | 54.54    |          |          |          |          |
| W0302A    | 2/15/03  | 0:32     | 6         | NH-25        | 44.65 | -124.65 | 287         | 6.73       | 34.01 |         | 53.90    |          |          |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 2           | 10.73      | 31.98 | 13.94   | 76.81    | 11.52    | 2.14     | 65.28    | 7.90     |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 5           | 10.74      | 31.98 |         |          | 11.61    | 2.18     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 10          | 10.72      | 32.00 |         |          | 9.75     | 2.01     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 21          | 10.96      | 32.27 |         |          | 4.48     | 0.84     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 30          | 11.13      | 32.37 |         |          | 3.24     | 0.42     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 40          | 11.20      | 32.44 |         |          | 2.96     | 0.35     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 50          | 11.17      | 32.46 |         |          | 2.55     | 0.39     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 70          | 11.05      | 32.57 |         |          | 3.36     | 0.48     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 101         | 9.88       | 32.84 |         |          | 2.70     | 0.39     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 151         | 8.17       | 33.56 |         |          |          | 0.32     |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 299         | 6.86       | 34.01 |         |          |          |          |          |          |
| W0302A    | 2/15/03  | 1:58     | 7         | NH-35        | 44.65 | -124.88 | 428         | 5.97       | 34.01 |         |          |          |          |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 2           | 11.04      | 32.09 | 13.98   | 66.20    | 6.39     | 1.28     | 59.81    | 8.11     |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 10          | 11.04      | 32.09 |         |          | 6.49     | 1.13     |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 20          | 11.01      | 32.17 |         |          | 5.87     | 1.09     |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 31          | 10.92      | 32.29 |         |          | 5.20     | 1.05     |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 40          | 10.79      | 32.33 |         |          | 4.79     | 0.93     |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 50          | 10.75      | 32.34 |         |          | 4.90     | 0.77     |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 61          | 10.66      | 32.39 |         |          | 3.70     | 0.50     |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 71          | 10.15      | 32.55 |         |          | 3.22     | 0.30     |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 100         | 8.18       | 32.82 |         |          |          | 0.28     |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 152         | 7.64       | 33.51 |         |          |          |          |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 500         | 5.45       | 34.09 |         |          |          |          |          |          |
| W0302A    | 2/15/03  | 23:47    | 11        | NH-45        | 44.65 | -125.12 | 606         | 4.85       | 34.18 |         |          |          |          |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 3           | 10.67      | 32.37 | 14.25   | 64.40    | 10.19    | 1.45     | 54.21    | 7.83     |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 9           | 10.67      | 32.37 |         |          | 7.53     | 1.07     |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 11          | 10.67      | 32.37 |         |          | 7.83     | 1.16     |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 21          | 10.66      | 32.37 |         |          | 6.42     | 1.16     |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 29          | 10.66      | 32.37 |         |          | 7.66     | 1.17     |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 41          | 10.68      | 32.37 |         |          | 7.90     | 1.11     |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 49          | 10.68      | 32.37 |         |          | 7.77     | 1.06     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 68          | 10.49      | 32.89 |         |          | 4.13     | 0.47     |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 101         | 8.10       | 33.16 |         |          | 3.22     | 0.35     |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 152         | 8.23       | 33.77 |         |          | 4.43     | 0.32     |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 823         | 4.14       | 34.31 |         |          |          |          |          |          |
| W0302A    | 2/15/03  | 18:41    | 9         | NH-65        | 44.65 | -125.6  | 1003        | 3.72       | 34.40 |         |          |          |          |          |          |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 3           | 11.08      | 32.45 | 11.85   | 65.50    | 4.85     | 1.01     | 60.65    | 5.58     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 10          | 11.09      | 32.45 | 12.22   | 62.90    | 4.98     | 1.11     | 57.92    | 5.92     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 21          | 11.09      | 32.45 | 12.47   | 65.20    | 7.21     | 1.38     | 57.99    | 5.82     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 31          | 11.10      | 32.45 | 11.93   | 61.10    | 5.56     | 1.13     | 55.54    | 5.55     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 40          | 11.11      | 32.45 | 12.93   | 64.10    | 5.01     | 1.13     | 59.09    | 6.56     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 51          | 11.12      | 32.50 | 12.37   | 67.20    | 4.54     | 1.03     | 62.66    | 5.96     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 73          | 10.71      | 33.00 | 18.88   | 56.30    | 3.82     | 0.37     | 52.48    | 5.29     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 100         | 7.82       | 33.10 | 26.11   | 52.10    |          | 0.24     |          | 4.74     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 151         | 7.54       | 33.65 | 31.26   | 49.20    | 2.61     | 0.28     | 46.59    | 2.16     |
| W0302A    | 2/15/03  | 15:23    | 8         | NH-85        | 44.65 | -126.05 | 1003        | 3.69       | 34.40 |         | 40.20    |          |          |          |          |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 1           | 11.25      | 31.23 | 12.02   | 92.70    | 28.47    | 3.42     | 64.23    | 8.46     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 5           | 11.24      | 31.23 | 11.48   | 84.70    | 40.50    | 4.80     | 44.20    | 6.52     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 9           | 11.23      | 31.25 | 11.40   | 96.06    | 32.38    | 3.76     | 63.68    | 7.46     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 15          | 11.03      | 31.46 | 12.62   | 85.80    | 28.46    | 3.90     | 57.34    | 7.01     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 21          | 10.88      | 31.68 | 13.37   | 72.20    | 21.93    | 3.29     | 50.27    | 7.37     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 26          | 10.87      | 31.96 | 12.56   | 68.60    | 17.09    | 2.76     | 51.51    | 6.45     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 32          | 10.69      | 32.04 | 12.62   | 62.60    | 7.79     | 1.12     | 54.81    | 6.10     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 41          | 10.58      | 32.18 | 13.39   | 57.67    | 7.60     | 0.99     | 50.07    | 5.89     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 51          | 10.07      | 32.57 | 17.46   | 61.03    | 7.95     | 0.90     | 53.08    | 6.18     |
| W0304A    | 4/1/03   | 23:30    | 3         | NH-05        | 44.65 | -124.18 | 54          | 9.90       | 32.70 | 19.75   | 61.74    | 10.18    | 1.02     | 51.55    | 6.25     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 2           | 10.84      | 31.85 | 11.60   | 80.72    | 27.00    | 3.67     | 53.72    | 6.82     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 6           | 10.84      | 31.85 | 11.14   | 79.44    | 22.89    | 3.33     | 56.55    | 6.62     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 10          | 10.87      | 31.92 | 11.76   | 74.30    | 22.61    | 3.42     | 51.68    | 6.67     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 20          | 10.86      | 31.95 | 11.88   | 79.45    | 18.98    | 2.98     | 60.47    | 6.96     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 30          | 10.68      | 32.22 | 11.04   | 67.79    | 9.38     | 1.48     | 58.42    | 6.16     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 41          | 10.60      | 32.25 | 11.76   | 66.75    | 7.37     | 1.12     | 59.38    | 6.74     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 50          | 10.50      | 32.27 | 11.84   | 63.88    | 5.97     | 0.71     | 57.91    | 6.31     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 59          | 10.42      | 32.34 | 13.21   | 60.02    | 5.32     | 0.62     | 54.71    | 6.11     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 70          | 10.25      | 32.49 | 17.02   | 60.95    | 6.77     | 0.70     | 54.18    | 6.23     |
| W0304A    | 4/2/03   | 4:39     | 6         | NH-15        | 44.65 | -124.41 | 85          | 9.37       | 32.90 | 23.94   | 54.21    | 6.99     | 0.66     | 47.22    | 6.09     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 3           | 10.64      | 32.26 | 10.70   | 66.94    | 9.78     | 1.60     | 57.16    | 5.55     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 10          | 10.64      | 32.26 | 10.89   |          | 8.90     | 1.54     |          | 5.52     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 20          | 10.64      | 32.26 | 10.85   |          | 8.46     | 1.50     |          | 5.95     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 31          | 10.64      | 32.26 | 10.45   |          | 7.57     | 1.43     |          | 5.03     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 40          | 10.64      | 32.26 | 10.66   |          | 8.14     | 1.48     |          | 5.42     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 50          | 10.61      | 32.26 | 10.60   |          | 7.71     | 1.22     |          | 5.28     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 72          | 10.44      | 32.28 | 11.51   | 64.60    | 4.89     | 0.48     | 59.71    | 5.11     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 101         | 8.75       | 33.13 | 26.29   | 58.60    | 6.22     | 0.50     | 52.38    | 6.29     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 151         | 8.13       | 33.69 | 34.34   | 53.80    | 5.55     | 0.46     | 48.25    | 2.73     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 201         | 7.29       | 33.97 | 37.90   | 54.10    |          |          |          | 2.55     |
| W0304A    | 4/2/03   | 18:25    | 9         | NH-25        | 44.65 | -124.65 | 287         | 6.18       | 34.04 | 41.06   | 57.90    |          |          |          | 1.87     |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 4           | 10.66      | 32.26 | 11.14   | 62.06    | 8.36     | 1.38     | 53.70    | 6.20     |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 11          | 10.66      | 32.26 |         |          | 7.64     | 1.43     |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 22          | 10.66      | 32.26 |         |          | 7.98     | 1.41     |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 26          | 10.66      | 32.26 |         |          | 8.23     | 1.44     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 32          | 10.67      | 32.26 |         |          | 8.71     | 1.50     |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 38          | 10.67      | 32.26 |         |          | 8.24     | 1.48     |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 50          | 10.65      | 32.26 |         |          | 8.24     | 1.41     |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 68          | 10.31      | 32.38 |         |          | 4.52     | 0.53     |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 101         | 8.44       | 33.09 |         |          | 4.03     | 0.47     |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 149         | 8.18       | 33.65 |         |          |          |          |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 317         | 6.19       | 34.03 |         |          |          |          |          |          |
| W0304A    | 4/2/03   | 16:44    | 8         | NH-35        | 44.65 | -124.88 | 429         | 4.92       | 34.13 |         |          |          |          |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 2           | 10.47      | 32.31 | 11.16   | 62.53    | 8.61     | 0.81     | 53.91    | 6.35     |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 10          | 10.47      | 32.31 |         |          | 8.83     | 0.87     |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 21          | 10.48      | 32.31 |         |          | 7.70     | 0.87     |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 31          | 10.49      | 32.32 |         |          | 6.21     | 0.85     |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 40          | 10.49      | 32.33 |         |          | 6.72     | 0.79     |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 49          | 10.48      | 32.33 |         |          | 5.84     | 0.91     |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 53          | 10.46      | 32.34 |         |          | 6.75     | 1.06     |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 70          | 10.18      | 32.37 |         |          | 6.40     | 0.83     |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 102         | 8.80       | 32.98 |         |          | 6.19     | 0.68     |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 150         | 8.12       | 33.65 |         |          |          |          |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 329         | 6.60       | 34.02 |         |          |          |          |          |          |
| W0304A    | 4/2/03   | 14:48    | 7         | NH-45        | 44.65 | -125.12 | 500         | 5.05       | 34.13 |         |          |          |          |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 2           | 10.61      | 32.31 | 11.06   | 62.31    | 9.61     | 1.19     | 52.70    | 5.90     |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 10          | 10.61      | 32.31 |         |          | 11.81    | 1.40     |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 21          | 10.61      | 32.31 |         |          | 10.80    | 1.26     |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 30          | 10.61      | 32.31 |         |          | 6.97     | 1.10     |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 40          | 10.57      | 32.32 |         |          | 6.38     | 0.94     |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 49          | 10.43      | 32.37 |         |          | 7.54     | 0.83     |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 70          | 10.28      | 32.42 |         |          | 4.82     | 0.64     |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 99          | 8.58       | 33.09 |         |          | 4.00     | 0.43     |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 151         | 8.14       | 33.77 |         |          | 5.51     | 0.46     |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 401         | 5.69       | 34.01 |         |          |          |          |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 948         | 3.71       | 34.38 |         |          |          |          |          |          |
| W0304A    | 4/3/03   | 0:41     | 11        | NH-65        | 44.65 | -125.6  | 1005        | 3.53       | 34.40 |         |          |          |          |          |          |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 3           | 10.73      | 32.30 | 10.24   | 58.51    | 6.39     | 0.88     | 52.12    | 6.04     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 11          | 10.73      | 32.30 | 10.41   | 57.68    | 7.01     | 1.04     | 50.67    | 6.15     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 19          | 10.73      | 32.30 | 9.68    |          | 5.89     | 0.89     |          | 5.51     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 30          | 10.73      | 32.30 | 9.76    | 62.60    | 6.31     | 0.88     | 56.29    | 5.58     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 30          | 10.73      | 32.30 | 9.66    | 63.20    | 6.10     | 0.88     | 57.10    | 5.47     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 38          | 10.74      | 32.30 | 9.31    | 61.41    | 5.17     | 0.88     | 56.24    | 5.27     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 52          | 10.73      | 32.31 | 9.87    | 62.28    | 6.85     | 1.06     | 55.43    | 5.72     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 70          | 10.40      | 32.38 | 13.21   | 61.29    | 4.57     | 0.59     | 56.72    | 5.97     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.51       | 33.07 | 24.94   | 53.43    | 2.99     | 0.31     | 50.45    | 4.53     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 149         | 8.26       | 33.67 | 31.89   | 47.90    | 3.02     | 0.35     | 44.88    | 3.71     |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 627         | 4.62       | 34.19 | 45.23   | 42.80    |          |          |          |          |
| W0304A    | 4/3/03   | 4:05     | 12        | NH-85        | 44.65 | -126.05 | 1005        | 3.66       | 34.42 | 46.54   | 42.70    |          |          |          |          |
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2  | 2           | 10.71      | 29.89 | 9.62    | 87.30    | 32.34    | 4.09     | 54.96    | 5.13     |
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2  | 5           | 10.70      | 30.71 | 10.75   | 81.90    | 27.41    | 4.05     | 54.49    | 6.40     |
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2  | 9           | 10.64      | 32.03 | 10.04   | 72.30    | 25.81    | 3.87     | 46.49    | 5.80     |
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2  | 16          | 10.72      | 32.16 | 10.31   | 68.60    | 18.80    | 3.22     | 49.80    | 6.16     |
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2  | 21          | 10.72      | 32.19 | 10.10   | 62.70    | 17.86    | 3.12     | 44.84    | 5.89     |
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2  | 26          | 10.70      | 32.21 | 9.68    | 70.10    | 17.04    | 3.02     | 53.06    | 5.20     |
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2  | 30          | 10.69      | 32.24 | 9.52    | 70.87    | 18.31    | 3.12     | 52.55    | 4.91     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2 | 39          | 10.68      | 32.30 | 11.85   | 65.76    | 13.34    | 2.19     | 52.42    | 5.85     |
| W0304A    | 4/6/03   | 18:51    | 44        | HH-01        | 44.00 | -124.2 | 45          | 10.58      | 32.38 | 12.29   | 67.78    | 13.94    | 2.07     | 53.83    | 3.91     |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 2           | 10.71      | 32.15 | 9.64    | 92.89    | 25.53    | 3.80     | 67.36    | 5.67     |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 6           | 10.71      | 32.15 |         |          | 27.07    | 4.11     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 10          | 10.71      | 32.15 |         |          | 23.20    | 3.61     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 20          | 10.71      | 32.16 |         |          | 23.61    | 3.64     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 29          | 10.72      | 32.31 |         |          | 12.68    | 2.10     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 39          | 10.69      | 32.33 |         |          | 4.00     | 0.60     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 49          | 10.55      | 32.38 |         |          | 3.21     | 0.53     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 60          | 9.64       | 32.86 |         |          | 3.18     | 0.47     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 69          | 9.22       | 33.10 |         |          | 2.95     | 0.49     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 100         | 7.88       | 33.72 |         |          | 3.37     | 0.36     |          |          |
| W0304A    | 4/6/03   | 16:04    | 42        | HH-02        | 44.00 | -124.4 | 113         | 7.61       | 33.82 |         |          | 6.18     | 0.68     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 2           | 10.67      | 32.14 | 9.62    |          | 13.89    | 2.53     |          | 5.80     |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 10          | 10.66      | 32.14 |         |          | 16.45    | 2.98     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 20          | 10.66      | 32.14 |         |          | 14.61    | 2.64     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 25          | 10.67      | 32.15 |         |          | 15.07    | 2.70     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 30          | 10.67      | 32.15 |         |          | 14.62    | 2.62     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 40          | 10.68      | 32.22 |         |          | 6.85     | 1.23     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 49          | 10.65      | 32.34 |         |          | 3.84     | 0.54     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 60          | 10.61      | 32.34 |         |          | 4.82     | 0.63     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 70          | 10.48      | 32.42 |         |          | 2.94     | 0.44     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 101         | 8.20       | 33.62 |         |          | 3.60     | 0.50     |          |          |
| W0304A    | 4/6/03   | 14:40    | 41        | HH-03        | 44.00 | -124.6 | 144         | 6.95       | 33.97 |         |          | 6.82     | 0.80     |          |          |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 2           | 10.60      | 32.20 | 10.04   |          | 7.00     | 1.45     |          | 5.33     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 5           | 10.60      | 32.20 | 10.57   |          | 7.88     | 1.52     |          | 6.02     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 10          | 10.61      | 32.21 | 9.75    |          | 8.37     | 1.63     |          | 4.88     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 20          | 10.61      | 32.20 | 10.08   | 68.49    | 7.86     | 1.66     | 60.63    | 5.17     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 25          | 10.62      | 32.21 | 10.06   | 66.75    | 7.76     | 1.62     | 59.00    | 5.20     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 31          | 10.61      | 32.21 | 9.90    | 66.57    | 7.52     | 1.67     | 59.05    | 4.99     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 41          | 10.62      | 32.21 | 10.12   | 64.96    | 7.18     | 1.61     | 57.79    | 5.25     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 51          | 10.64      | 32.22 | 9.96    | 65.29    | 6.47     | 1.34     | 58.82    | 5.13     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 60          | 10.57      | 32.30 | 11.77   | 63.49    | 4.20     | 0.82     | 59.29    | 4.70     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 70          | 10.20      | 32.49 | 15.26   | 66.12    | 3.04     | 0.50     | 63.07    | 4.72     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 94          | 9.13       | 33.14 | 26.06   | 62.24    | 3.42     | 0.55     | 58.82    | 4.40     |
| W0304A    | 4/6/03   | 13:18    | 40        | HH-04        | 44.00 | -124.8 | 100         | 8.84       | 33.28 | 26.73   | 58.85    | 3.95     | 0.47     | 54.90    | 3.69     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 2           | 10.65      | 32.23 | 10.33   | 66.56    | 5.92     | 1.19     | 60.64    | 4.90     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 9           | 10.66      | 32.23 | 9.97    | 68.25    | 5.71     | 1.06     | 62.54    | 4.65     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 20          | 10.66      | 32.23 | 10.11   |          | 6.00     | 1.19     |          | 4.54     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 31          | 10.66      | 32.23 | 10.39   |          | 5.82     | 1.17     |          | 5.01     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 41          | 10.66      | 32.23 | 10.43   |          | 5.42     | 1.10     |          | 5.12     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 51          | 10.65      | 32.25 | 10.45   |          | 4.37     | 0.79     |          | 4.71     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 71          | 10.17      | 32.49 | 15.84   |          | 3.78     | 0.40     |          | 4.68     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 101         | 8.29       | 33.46 | 30.03   |          | 2.95     | 0.31     |          | 3.31     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 150         | 7.68       | 33.91 |         |          | 4.32     | 0.41     |          |          |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 499         | 5.03       | 34.12 | 43.43   |          |          |          |          | 1.44     |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 552         | 4.79       | 34.17 |         |          |          |          |          |          |
| W0304A    | 4/6/03   | 11:12    | 39        | HH-05        | 44.00 | -125.  | 771         | 4.10       | 34.31 |         |          |          |          |          |          |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5 | 2           | 10.80      | 32.17 | 11.23   | 82.28    | 17.65    | 3.24     | 64.63    | 6.59     |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5 | 4           | 10.80      | 32.17 | 11.85   | 84.57    | 19.11    | 3.38     | 65.46    | 7.18     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5  | 12          | 10.80      | 32.17 | 11.37   | 79.47    | 25.56    | 4.22     | 53.91    | 5.76     |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5  | 16          | 10.79      | 32.17 | 11.78   | 75.80    | 20.70    | 3.61     | 55.10    | 6.64     |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5  | 20          | 10.80      | 32.18 | 11.88   | 73.55    | 19.64    | 3.41     | 53.91    | 6.81     |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5  | 25          | 10.82      | 32.19 | 11.74   | 78.02    | 18.83    | 3.47     | 59.20    | 6.51     |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5  | 29          | 10.83      | 32.21 | 12.80   | 73.20    | 22.03    | 3.71     | 51.17    | 6.95     |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5  | 42          | 10.58      | 32.44 | 15.00   | 62.73    | 12.16    | 2.01     | 50.57    | 6.32     |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5  | 50          | 9.93       | 32.87 | 21.66   | 58.46    | 8.23     | 1.10     | 50.23    | 4.65     |
| W0304A    | 4/3/03   | 15:56    | 14        | FM-03        | 43.22 | -124.5  | 58          | 9.51       | 33.14 | 24.69   | 55.69    | 9.01     | 1.02     | 46.68    | 4.78     |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 2           | 10.77      | 32.31 | 10.71   | 67.57    | 13.41    | 2.42     | 54.17    | 4.93     |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 7           | 10.77      | 32.31 |         |          | 9.79     | 2.00     |          |          |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 11          | 10.77      | 32.31 |         |          | 10.01    | 1.93     |          |          |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 21          | 10.77      | 32.31 |         |          | 9.16     | 1.93     |          |          |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 28          | 10.77      | 32.31 |         |          | 8.14     | 1.62     |          |          |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 41          | 10.76      | 32.36 |         |          | 6.62     | 1.06     |          |          |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 50          | 10.21      | 32.68 |         |          | 4.29     | 0.63     |          |          |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 60          | 8.89       | 33.42 |         |          | 5.35     | 0.67     |          |          |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 70          | 8.62       | 33.57 |         |          | 6.19     | 0.70     |          |          |
| W0304A    | 4/3/03   | 17:25    | 15        | FM-04        | 43.22 | -124.58 | 79          | 8.43       | 33.67 |         |          | 8.91     | 1.31     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 3           | 10.75      | 32.31 | 10.62   | 65.63    | 7.04     | 1.40     | 58.59    | 5.37     |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 10          | 10.75      | 32.31 |         |          | 6.86     | 1.38     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 17          | 10.74      | 32.31 |         |          | 7.50     | 1.51     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 20          | 10.73      | 32.32 |         |          | 6.38     | 1.39     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 31          | 10.74      | 32.32 |         |          | 6.32     | 1.33     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 40          | 10.72      | 32.35 |         |          | 5.22     | 1.00     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 52          | 10.56      | 32.36 |         |          | 4.51     | 0.73     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 61          | 10.55      | 32.39 |         |          | 3.75     | 0.63     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 69          | 10.25      | 32.62 |         |          | 4.70     | 0.59     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 100         | 8.63       | 33.64 |         |          | 4.05     | 0.64     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 129         | 7.61       | 33.90 |         |          |          | 0.52     |          |          |
| W0304A    | 4/3/03   | 18:53    | 16        | FM-05        | 43.22 | -124.67 | 149         | 7.65       | 33.92 |         |          | 3.66     | 0.47     |          |          |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 2           | 10.91      | 32.34 | 10.48   | 66.90    | 7.62     | 1.42     | 59.28    | 6.02     |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 11          | 10.89      | 32.34 | 10.55   | 73.18    | 7.91     | 1.57     | 65.27    | 5.70     |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 20          | 10.89      | 32.34 | 10.76   | 64.48    | 7.29     | 1.48     | 57.19    | 5.96     |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 27          | 10.87      | 32.34 | 11.33   | 68.19    | 6.96     | 1.44     | 61.23    | 6.47     |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 31          | 10.86      | 32.34 | 10.48   | 62.98    | 6.43     | 1.30     | 56.55    | 6.06     |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 41          | 10.77      | 32.38 | 11.66   | 64.13    | 5.45     | 1.09     | 58.69    | 5.90     |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 51          | 10.74      | 32.39 | 12.31   | 61.03    | 5.98     | 0.77     | 55.05    | 6.48     |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 69          | 10.17      | 32.70 | 17.39   |          | 5.28     | 0.65     | 4.95     |          |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 102         | 8.53       | 33.36 | 28.54   |          | 7.31     | 0.73     | 4.51     |          |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 150         | 8.11       | 33.86 | 35.55   |          | 5.03     | 0.47     | 4.27     |          |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 163         | 8.06       | 33.89 | 36.58   |          |          |          | 5.14     |          |
| W0304A    | 4/3/03   | 22:08    | 18        | FM-07        | 43.22 | -124.83 | 301         | 6.25       | 34.03 | 41.63   |          |          |          | 4.66     |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 3           | 10.62      | 32.34 | 12.36   |          | 9.70     | 1.30     |          | 5.59     |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 10          | 10.63      | 32.34 |         |          | 7.31     | 1.26     |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 20          | 10.63      | 32.34 |         |          | 7.18     | 1.22     |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 30          | 10.63      | 32.34 |         |          | 6.53     | 1.16     |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 40          | 10.61      | 32.34 |         |          | 7.26     | 1.35     |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 42          | 10.61      | 32.34 |         |          | 7.24     | 1.28     |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 50          | 10.52      | 32.35 |         |          | 8.44     | 1.06     |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 69          | 9.77       | 32.48 |         |          | 7.08     | 0.73     |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 100         | 7.50       | 33.16 |         |          | 5.32     | 0.47     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 149         | 7.63       | 33.80 |         |          | 5.41     | 0.43     |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 451         | 5.13       | 34.07 |         |          |          |          |          |          |
| W0304A    | 4/4/03   | 1:10     | 19        | FM-08        | 43.22 | -125.   | 1008        | 3.43       | 34.44 |         |          |          |          |          |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 2           | 10.59      | 32.35 | 12.93   |          | 7.88     | 1.15     | 6.39     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 10          | 10.59      | 32.36 | 12.50   |          | 7.28     | 1.04     | 6.47     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 20          | 10.59      | 32.36 | 12.67   |          | 7.75     | 1.15     | 5.91     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 31          | 10.59      | 32.36 | 12.65   |          | 6.73     | 1.01     | 6.19     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 40          | 10.57      | 32.36 | 12.24   |          | 7.57     | 1.16     | 5.84     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 46          | 10.56      | 32.36 | 12.31   |          | 7.61     | 1.24     | 5.49     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 51          | 10.46      | 32.37 | 12.35   |          | 6.53     | 1.17     | 5.46     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 71          | 9.57       | 32.61 | 18.68   |          | 3.09     | 0.43     | 5.67     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 102         | 7.43       | 33.07 | 27.05   |          |          | 0.21     | 8.55     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 149         | 7.51       | 33.74 | 32.16   |          | 2.62     |          | 7.04     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 510         | 4.84       | 34.13 | 46.42   |          |          |          | 2.10     |          |
| W0304A    | 4/4/03   | 3:10     | 20        | FM-09        | 43.22 | -125.17 | 1004        | 3.45       | 34.42 | 47.79   |          |          |          | 1.33     |          |
| W0304A    | 4/6/03   | 2:11     | 38        | RR-01        | 42.50 | -124.5  | 3           | 10.81      | 31.07 | 9.32    | 78.72    | 17.72    | 3.09     | 61.00    | 5.86     |
| W0304A    | 4/6/03   | 2:11     | 38        | RR-01        | 42.50 | -124.5  | 6           | 10.81      | 31.06 | 9.71    | 85.70    | 18.85    | 3.18     | 66.85    | 6.17     |
| W0304A    | 4/6/03   | 2:11     | 38        | RR-01        | 42.50 | -124.5  | 11          | 10.88      | 31.53 | 9.58    | 87.87    | 13.45    | 2.59     | 74.42    | 6.57     |
| W0304A    | 4/6/03   | 2:11     | 38        | RR-01        | 42.50 | -124.5  | 15          | 10.97      | 31.87 | 9.38    | 79.80    | 18.70    | 3.56     | 61.11    | 5.40     |
| W0304A    | 4/6/03   | 2:11     | 38        | RR-01        | 42.50 | -124.5  | 21          | 10.94      | 32.00 | 9.50    | 74.02    | 18.41    | 3.43     | 55.60    | 5.68     |
| W0304A    | 4/6/03   | 2:11     | 38        | RR-01        | 42.50 | -124.5  | 25          | 10.96      | 32.08 | 9.23    | 76.53    | 15.80    | 3.03     | 60.73    | 5.63     |
| W0304A    | 4/6/03   | 2:11     | 38        | RR-01        | 42.50 | -124.5  | 32          | 10.89      | 32.17 | 9.40    | 68.43    | 11.93    | 2.52     | 56.50    | 5.23     |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 2           | 10.91      | 32.06 | 8.81    | 82.67    | 14.56    | 2.60     | 68.11    | 5.37     |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 5           | 10.92      | 32.07 |         |          | 15.17    | 2.60     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 10          | 10.92      | 32.07 |         |          | 15.87    | 2.64     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 15          | 10.93      | 32.09 |         |          | 13.87    | 2.55     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 20          | 10.92      | 32.13 |         |          | 11.83    | 2.16     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 31          | 10.86      | 32.21 |         |          | 10.50    | 1.90     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 39          | 10.82      | 32.26 |         |          | 6.81     | 1.21     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 49          | 10.03      | 32.75 |         |          | 3.85     | 0.53     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 60          | 9.27       | 33.05 |         |          | 2.99     | 0.41     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 70          | 8.49       | 33.37 |         |          | 3.02     | 0.39     |          |          |
| W0304A    | 4/6/03   | 0:40     | 37        | RR-02        | 42.50 | -124.6  | 83          | 8.40       | 33.61 |         |          | 4.20     | 0.49     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 2           | 10.88      | 32.18 | 8.95    | 77.02    | 13.58    | 2.38     | 63.44    | 5.60     |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 5           | 10.88      | 32.18 |         |          | 16.75    | 3.28     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 10          | 10.88      | 32.18 |         |          | 23.48    | 5.35     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 19          | 10.89      | 32.18 |         |          | 14.17    | 2.67     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 26          | 10.90      | 32.21 |         |          | 12.43    | 2.22     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 29          | 10.91      | 32.24 |         |          | 12.35    | 2.37     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 41          | 10.93      | 32.34 |         |          | 7.42     | 1.43     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 50          | 10.76      | 32.39 |         |          | 4.29     | 0.71     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 60          | 9.42       | 32.72 |         |          | 4.56     | 0.54     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 70          | 9.14       | 33.11 |         |          | 3.69     | 0.46     |          |          |
| W0304A    | 4/5/03   | 22:55    | 36        | RR-03        | 42.50 | -124.7  | 120         | 8.40       | 33.65 |         |          | 4.05     | 0.43     |          |          |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8  | 2           | 10.79      | 32.30 | 10.81   | 63.09    | 8.16     | 1.44     | 54.93    | 6.38     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8  | 9           | 10.79      | 32.30 | 10.38   | 62.79    | 8.61     | 1.46     | 54.18    | 5.77     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8  | 16          | 10.79      | 32.31 | 10.42   | 65.25    | 8.39     | 1.42     | 56.86    | 5.69     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8  | 20          | 10.79      | 32.33 | 10.50   | 65.71    | 7.52     | 1.43     | 58.18    | 5.75     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8  | 29          | 10.79      | 32.34 | 10.81   | 58.97    | 6.90     | 1.15     | 52.07    | 5.69     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8  | 38          | 10.77      | 32.35 | 10.91   | 56.65    | 5.86     | 0.97     | 50.79    | 5.70     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8 | 51          | 10.64      | 32.44 | 12.63   | 57.68    | 4.99     | 0.68     | 52.68    | 5.89     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8 | 68          | 9.31       | 33.03 | 23.85   | 56.74    | 4.64     | 0.52     | 52.10    | 5.54     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8 | 99          | 8.43       | 33.60 | 30.55   | 57.42    | 4.24     | 0.48     | 53.18    | 3.00     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8 | 152         | 8.06       | 33.87 | 33.76   | 43.40    | 3.38     | 0.36     | 40.02    | 5.63     |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8 | 500         | 5.08       | 34.15 |         |          |          |          |          |          |
| W0304A    | 4/5/03   | 20:17    | 35        | RR-04        | 42.50 | -124.8 | 593         | 4.55       | 34.24 |         | 42.11    |          |          |          |          |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 3           | 10.86      | 32.35 | 10.07   | 56.13    | 6.69     | 1.14     | 49.45    | 6.04     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 10          | 10.86      | 32.35 | 10.46   | 54.10    | 6.74     | 1.16     | 47.36    | 6.60     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 21          | 10.86      | 32.35 | 10.29   | 53.30    | 6.73     | 1.19     | 46.57    | 6.16     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 30          | 10.86      | 32.35 | 10.40   | 53.30    | 7.03     | 1.26     | 46.27    | 6.31     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 40          | 10.82      | 32.35 | 10.50   | 56.90    | 5.85     | 0.96     | 51.05    | 6.25     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 50          | 10.56      | 32.38 | 12.50   | 54.76    | 5.08     | 0.59     | 49.68    | 6.32     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 69          | 9.63       | 32.93 | 22.59   | 50.80    | 3.87     | 0.43     | 46.93    | 7.37     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 98          | 8.02       | 33.29 | 27.81   | 47.50    | 3.34     | 0.30     | 44.16    | 4.59     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 151         | 7.52       | 33.87 | 32.73   | 48.40    | 2.69     |          | 45.71    | 5.34     |
| W0304A    | 4/5/03   | 16:57    | 33        | RR-06        | 42.50 | -125.  | 1005        | 3.56       | 34.43 | 46.59   | 42.19    |          |          |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 2           | 10.62      | 32.34 | 11.41   | 57.22    | 5.75     | 0.99     | 51.47    | 6.24     |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 10          | 10.63      | 32.34 |         |          | 6.42     | 1.01     |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 20          | 10.63      | 32.34 |         |          | 6.10     | 1.01     |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 30          | 10.63      | 32.34 |         |          | 6.23     | 0.93     |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 40          | 10.62      | 32.34 |         |          | 6.21     | 0.93     |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 51          | 10.50      | 32.35 |         |          | 5.25     | 0.71     |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 71          | 8.96       | 32.71 |         |          | 3.42     | 0.32     |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 100         | 8.76       | 33.46 |         |          |          |          |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 150         | 8.08       | 33.77 |         |          | 2.56     |          |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 511         | 5.16       | 34.17 |         |          |          |          |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 880         | 3.91       | 34.36 |         |          |          |          |          |          |
| W0304A    | 4/5/03   | 15:10    | 32        | RR-07        | 42.50 | -125.2 | 1006        | 3.55       | 34.41 |         |          |          |          |          |          |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 2           | 10.99      | 32.02 | 10.31   | 63.23    | 12.10    | 2.08     | 51.13    | 6.54     |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 5           | 11.06      | 32.04 | 11.08   | 64.67    | 11.18    | 2.01     | 53.49    | 7.31     |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 8           | 11.07      | 32.05 | 10.00   | 64.08    | 11.14    | 2.13     | 52.94    | 6.12     |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 10          | 11.04      | 32.09 | 10.19   | 66.44    | 11.86    | 1.99     | 54.58    | 5.97     |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 15          | 10.98      | 32.17 | 11.40   | 57.30    | 9.62     | 1.70     | 47.68    | 6.11     |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 20          | 10.86      | 32.28 | 12.93   | 55.31    | 8.38     | 1.34     | 46.93    | 5.58     |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 26          | 10.46      | 32.59 | 16.83   | 62.76    | 5.45     | 0.77     | 57.31    | 6.19     |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 30          | 10.09      | 32.84 | 20.01   | 58.25    | 4.74     | 0.50     | 53.51    | 6.97     |
| W0304A    | 4/4/03   | 13:38    | 21        | CR-01        | 41.90 | -124.3 | 35          | 10.04      | 32.87 | 20.88   | 62.63    | 10.76    | 1.08     | 51.88    | 5.34     |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 2           | 11.06      | 32.22 | 9.34    | 65.00    | 13.12    | 2.49     | 51.88    | 5.64     |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 5           | 11.06      | 32.22 |         |          | 13.16    | 2.58     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 10          | 11.06      | 32.22 |         |          | 12.60    | 2.48     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 15          | 11.08      | 32.22 |         |          | 13.34    | 2.63     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 20          | 11.08      | 32.22 |         |          | 13.13    | 2.53     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 30          | 11.04      | 32.26 |         |          | 8.88     | 1.64     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 41          | 10.88      | 32.35 |         |          | 4.70     | 0.82     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 49          | 10.45      | 32.58 |         |          | 4.18     | 0.57     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 60          | 9.62       | 33.08 |         |          | 3.96     | 0.47     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 70          | 9.46       | 33.17 |         |          | 4.26     | 0.43     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 100         | 8.12       | 33.85 |         |          | 3.58     | 0.36     |          |          |
| W0304A    | 4/4/03   | 16:15    | 23        | CR-03        | 41.90 | -124.5 | 116         | 7.91       | 33.93 |         |          | 3.61     | 0.43     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 2           | 11.03      | 32.26 | 10.04   | 58.82    | 8.41     | 1.67     | 50.41    | 5.60     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [μM] | TOC [μM] | POC [μM] | PON [μM] | DOC [μM] | DON [μM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 11          | 11.00      | 32.27 |         |          | 8.49     | 1.60     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 11          | 11.00      | 32.28 |         |          | 8.48     | 1.63     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 20          | 10.99      | 32.30 |         |          | 8.01     | 1.61     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 29          | 10.99      | 32.32 |         |          | 7.57     | 1.39     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 39          | 10.99      | 32.35 |         |          | 6.44     | 1.20     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 50          | 10.96      | 32.37 |         |          | 5.30     | 0.94     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 71          | 9.60       | 33.05 |         |          | 3.79     | 0.52     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 100         | 8.99       | 33.45 |         |          | 3.82     | 0.47     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 150         | 7.61       | 33.94 |         |          | 2.83     | 0.31     |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 252         | 6.43       | 34.04 |         |          |          |          |          |          |
| W0304A    | 4/4/03   | 18:00    | 24        | CR-04        | 41.90 | -124.6 | 450         | 5.25       | 34.14 |         |          |          |          |          |          |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 2           | 11.23      | 32.35 | 9.96    | 62.33    | 7.31     | 1.34     | 55.02    | 6.34     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 10          | 11.20      | 32.35 | 9.22    | 58.34    | 6.61     | 1.43     | 51.73    | 5.49     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 20          | 11.15      | 32.35 | 9.55    | 64.61    | 5.89     | 1.21     | 58.72    | 5.95     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 30          | 11.15      | 32.35 | 9.20    | 59.09    | 7.15     | 1.36     | 51.94    | 5.39     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 41          | 11.14      | 32.35 | 9.75    | 60.76    | 5.71     | 1.02     | 55.04    | 6.12     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 51          | 11.06      | 32.36 | 10.00   | 59.03    | 5.86     | 0.95     | 53.18    | 5.85     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 70          | 9.25       | 32.86 | 20.86   | 50.31    | 4.59     | 0.53     | 45.72    | 5.82     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 101         | 8.54       | 33.33 | 27.73   | 47.56    | 2.71     | 0.35     | 44.85    | 5.71     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 150         | 8.27       | 33.75 | 34.02   | 45.87    | 4.00     | 0.41     | 41.86    | 6.16     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 501         | 5.05       | 34.16 | 44.43   | 40.22    |          |          |          | 1.15     |
| W0304A    | 4/4/03   | 20:38    | 25        | CR-05        | 41.90 | -124.7 | 551         | 4.80       | 34.21 | 44.41   | 38.65    |          |          |          | 0.08     |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 2           | 11.28      | 32.36 | 9.14    | 63.74    | 12.93    | 1.64     | 50.81    | 5.26     |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 10          | 11.29      | 32.36 |         |          | 9.68     | 1.44     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 20          | 11.28      | 32.36 |         |          | 9.57     | 1.46     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 26          | 11.27      | 32.36 |         |          | 8.17     | 1.28     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 31          | 11.24      | 32.36 |         |          | 6.58     | 1.27     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 40          | 11.18      | 32.36 |         |          | 6.25     | 1.07     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 50          | 10.72      | 32.37 |         |          | 4.35     | 0.84     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 70          | 9.77       | 32.60 |         |          | 2.94     | 0.55     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 101         | 8.52       | 33.13 |         |          | 3.84     | 0.39     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 150         | 8.25       | 33.83 |         |          | 4.21     | 0.41     |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 500         | 5.32       | 34.15 |         |          |          |          |          |          |
| W0304A    | 4/5/03   | 0:48     | 27        | CR-07        | 41.90 | -125.  | 799         | 4.09       | 34.35 |         |          |          |          |          |          |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 3           | 11.42      | 32.37 | 9.92    | 62.82    | 7.30     | 1.49     | 55.52    | 6.99     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 10          | 11.42      | 32.37 | 8.80    | 62.90    | 7.22     | 1.40     | 55.68    | 5.79     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 20          | 11.43      | 32.37 | 9.11    | 59.82    | 6.85     | 1.39     | 52.96    | 6.19     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 26          | 11.43      | 32.37 | 9.01    | 60.43    | 7.24     | 1.48     | 53.18    | 5.93     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 31          | 11.43      | 32.37 | 9.32    | 61.42    | 8.13     | 1.44     | 53.30    | 6.19     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 40          | 11.32      | 32.38 | 9.34    | 59.52    | 7.19     | 1.36     | 52.33    | 5.89     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 50          | 10.89      | 32.44 | 11.36   | 56.59    | 4.34     | 0.59     | 52.25    | 5.39     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 70          | 10.02      | 32.74 | 18.32   | 52.12    | 3.99     | 0.56     | 48.14    | 5.85     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 100         | 8.62       | 33.27 | 26.31   | 47.50    | 4.59     | 0.53     | 42.91    | 8.17     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 151         | 8.30       | 33.84 | 32.98   | 43.79    | 2.84     | 0.40     | 40.95    | 4.78     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 390         | 5.89       | 34.09 | 41.94   | 41.48    |          |          |          | 1.52     |
| W0304A    | 4/5/03   | 4:25     | 29        | CR-09        | 41.90 | -125.4 | 980         | 3.72       | 34.40 | 46.49   | 39.56    |          |          |          | 1.95     |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.  | 3           | 11.25      | 32.37 | 9.49    | 63.34    | 7.65     | 1.14     | 55.69    | 6.42     |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.  | 9           | 11.25      | 32.37 |         |          | 6.62     | 1.13     |          |          |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.  | 19          | 11.26      | 32.37 |         |          | 8.66     | 1.22     |          |          |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.  | 30          | 11.26      | 32.37 |         |          | 8.27     | 1.10     |          |          |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.  | 39          | 11.25      | 32.37 |         |          | 5.37     | 1.00     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.   | 50          | 10.66      | 32.38 |         |          | 3.87     | 0.52     |          |          |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.   | 71          | 9.48       | 32.80 |         |          | 2.71     | 0.44     |          |          |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.   | 101         | 8.29       | 33.24 |         |          | 2.80     | 0.41     |          |          |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.   | 150         | 8.15       | 33.65 |         |          | 2.97     | 0.30     |          |          |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.   | 384         | 5.65       | 34.01 |         |          |          |          |          |          |
| W0304A    | 4/5/03   | 9:33     | 31        | CR-11        | 41.90 | -126.   | 1006        | 3.54       | 34.44 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 3           | 10.48      | 33.23 | 29.51   |          | 66.87    | 13.88    |          | 3.82     |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 6           | 10.47      | 33.25 | 31.70   |          | 56.64    | 11.18    |          | 7.41     |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 11          | 10.06      | 33.50 | 35.80   |          | 76.21    | 12.18    |          | 6.60     |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 17          | 8.37       | 33.58 | 38.28   |          | 29.19    | 6.09     |          |          |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 21          | 7.65       | 33.76 | 40.58   | 44.43    | 10.71    | 2.02     | 33.72    | 2.54     |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 25          | 7.51       | 33.80 | 39.98   | 43.11    | 6.28     | 0.84     | 36.83    | 2.61     |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 29          | 7.40       | 33.81 | 40.06   | 42.35    | 7.34     | 0.93     | 35.00    | 1.36     |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.49       | 33.90 | 40.62   | 49.35    | 8.84     | 1.18     | 40.51    | 2.10     |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.19       | 33.93 | 38.57   | 74.31    | 32.65    | 5.64     | 41.66    |          |
| NH0307A   | 7/3/03   | 2:50     | 3         | NH-05        | 44.65 | -124.18 | 55          | 7.14       | 33.93 | 40.21   | 43.50    | 9.40     | 1.12     | 34.10    | 2.25     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 2           | 12.50      | 31.73 | 12.01   | 105.25   | 40.82    | 4.41     | 64.43    | 7.59     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 7           | 12.48      | 31.73 | 11.95   | 106.86   | 43.78    | 4.22     | 63.09    | 7.70     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 12          | 11.73      | 31.86 | 12.73   | 105.74   | 31.51    | 4.22     | 74.23    | 8.48     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 18          | 9.19       | 32.28 | 18.68   | 65.61    | 18.68    | 3.33     | 46.92    | 7.32     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 19          | 9.14       | 32.29 | 19.98   | 63.49    | 15.75    | 2.79     | 47.74    | 8.25     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 31          | 8.42       | 32.49 | 21.89   | 70.94    | 7.35     | 1.25     | 63.59    | 6.18     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 39          | 8.06       | 32.65 | 25.05   | 62.92    | 7.08     | 0.96     | 55.84    | 5.55     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 51          | 7.78       | 32.80 | 26.92   | 60.53    | 6.00     | 0.77     | 54.53    | 4.99     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 60          | 7.52       | 32.99 | 30.00   | 53.23    | 5.25     | 0.61     | 47.98    | 4.95     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 71          | 7.33       | 33.36 | 34.10   | 50.80    | 25.86    | 2.02     | 24.94    | 3.04     |
| NH0307A   | 7/3/03   | 7:49     | 5         | NH-15        | 44.65 | -124.41 | 82          | 7.30       | 33.69 | 38.53   | 47.82    | 8.52     | 0.86     | 39.30    | 6.18     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 3           | 14.22      | 30.95 | 11.18   | 123.90   | 39.22    | 3.81     | 84.68    | 7.38     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 10          | 14.26      | 30.98 | 10.59   | 137.10   | 26.17    | 3.30     | 110.93   | 7.27     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 20          | 11.24      | 32.06 | 10.45   | 69.18    | 7.33     | 1.25     | 61.84    | 8.06     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 31          | 9.79       | 32.24 | 12.64   | 64.14    | 6.06     | 0.97     | 58.08    | 6.54     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 40          | 9.26       | 32.30 | 15.23   | 56.16    | 4.65     | 0.76     | 51.51    | 5.79     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 50          | 8.87       | 32.40 | 17.97   | 53.01    | 4.49     | 0.64     | 48.52    | 6.43     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 72          | 7.62       | 33.06 |         | 48.86    | 3.23     | 0.43     | 45.63    |          |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 102         | 7.69       | 33.54 | 33.22   | 49.25    | 3.29     | 0.53     | 45.96    | 3.15     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 149         | 7.36       | 33.93 | 37.80   | 48.32    | 3.87     | 0.48     | 44.45    | 2.18     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 199         | 6.82       | 33.98 | 40.56   | 46.35    |          |          |          | 4.90     |
| NH0307A   | 7/3/03   | 12:31    | 7         | NH-25        | 44.65 | -124.65 | 243         | 6.54       | 34.00 | 40.66   | 50.93    |          |          |          | 2.36     |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 3           | 15.01      | 30.65 | 10.58   | 123.97   | 30.20    | 3.12     | 93.77    | 7.41     |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 9           | 14.98      | 30.66 |         |          | 27.81    | 2.91     |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 19          | 12.67      | 31.94 |         |          | 9.40     | 1.54     |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 29          | 11.42      | 32.22 |         |          | 15.82    | 2.32     |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 40          | 10.28      | 32.26 |         |          | 7.59     | 1.21     |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 50          | 10.03      | 32.27 |         |          | 4.30     | 0.85     |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 69          | 9.70       | 32.52 |         |          | 3.02     | 0.51     |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 101         | 7.74       | 33.13 |         |          | 3.44     | 0.47     |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 149         | 7.27       | 33.82 |         |          | 3.92     | 0.52     |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 237         | 6.49       | 34.01 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 255         | 6.39       | 34.01 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 14:30    | 8         | NH-35        | 44.65 | -124.88 | 429         | 5.60       | 34.09 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 3           | 15.63      | 29.84 | 9.13    | 121.84   | 22.21    | 2.26     | 99.63    | 6.88     |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 10          | 14.27      | 30.98 |         |          | 18.80    | 2.24     |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 20          | 12.67      | 31.63 |         |          | 11.56    | 2.22     |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 30          | 11.32      | 32.23 |         |          | 9.83     | 1.59     |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 40          | 10.22      | 32.28 |         |          | 6.69     | 1.11     |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 49          | 9.73       | 32.32 |         |          | 5.48     | 0.78     |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 70          | 8.90       | 32.54 |         |          | 4.26     | 0.59     |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 149         | 7.73       | 33.76 |         |          | 5.69     | 0.62     |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 271         | 6.35       | 34.01 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 500         | 5.26       | 34.12 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 573         | 5.00       | 34.15 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 17:55    | 9         | NH-45        | 44.65 | -125.12 | 690         | 4.40       | 34.28 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 3           | 15.80      | 30.25 | 8.55    | 96.27    | 17.13    | 2.13     | 79.14    | 6.38     |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 11          | 15.68      | 30.30 |         |          | 10.74    | 1.58     |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 21          | 13.73      | 31.65 |         |          | 8.69     | 1.28     |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 31          | 10.98      | 32.16 |         |          | 10.31    | 1.83     |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 35          | 10.39      | 32.16 |         |          | 12.33    | 2.15     |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 41          | 10.18      | 32.17 |         |          | 9.57     | 1.61     |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 50          | 10.19      | 32.33 |         |          | 5.79     | 0.65     |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 71          | 8.92       | 32.71 |         |          | 6.17     | 0.70     |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 102         | 7.92       | 33.15 |         |          | 6.19     | 0.79     |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 155         | 7.50       | 33.77 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 769         | 4.22       | 34.31 |         |          |          |          |          |          |
| NH0307A   | 7/3/03   | 23:23    | 11        | NH-65        | 44.65 | -125.6  | 1009        | 3.64       | 34.42 |         |          |          |          |          |          |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 3           | 16.33      | 30.75 | 7.28    | 87.00    | 6.46     | 1.09     | 80.54    | 5.80     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 11          | 16.32      | 30.75 | 7.38    | 87.40    | 8.11     | 1.38     | 79.28    | 5.58     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 22          | 15.62      | 30.76 | 8.04    | 82.39    | 7.90     | 1.44     | 74.49    | 5.29     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 31          | 12.26      | 31.95 | 7.83    | 79.00    | 6.51     | 1.17     | 72.50    | 6.18     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 40          | 11.33      | 32.16 | 7.77    | 81.29    | 6.09     | 1.14     | 75.20    | 6.08     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 44          | 10.70      | 32.22 | 8.63    | 79.32    | 10.27    | 2.04     | 69.05    | 3.04     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 53          | 10.15      | 32.25 | 12.08   | 68.40    | 5.07     | 0.86     | 63.33    | 6.25     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 65          | 9.74       | 32.33 | 16.01   | 68.30    | 2.65     | 0.50     | 65.65    | 6.06     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 100         | 8.43       | 32.99 | 26.39   | 62.00    |          | 0.32     |          | 4.40     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 155         | 7.97       | 33.64 | 33.30   | 57.12    |          |          |          | 3.70     |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 755         | 4.17       | 34.30 | 46.03   | 52.33    |          |          |          |          |
| NH0307A   | 7/4/03   | 2:39     | 12        | NH-85        | 44.65 | -126.05 | 1006        | 3.52       | 34.40 | 47.32   | 38.66    |          |          |          | 0.91     |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 3           | 9.58       | 33.41 | 33.63   | 177.95   | 57.25    | 11.64    | 120.69   | 6.97     |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 6           | 9.14       | 33.50 | 34.90   | 158.52   | 92.98    | 14.94    | 65.54    | 1.31     |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 11          | 8.66       | 33.62 | 36.46   | 102.83   | 33.64    | 7.30     | 69.19    | 3.59     |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 15          | 7.96       | 33.71 | 37.13   | 77.13    | 27.40    | 5.34     | 49.73    | 0.48     |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 22          | 7.69       | 33.80 | 37.45   | 61.61    | 18.32    | 3.21     | 43.29    | 0.59     |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 26          | 7.68       | 33.80 |         | 52.25    | 14.01    | 2.53     | 38.24    |          |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 30          | 7.69       | 33.81 | 38.71   | 55.02    | 18.48    | 2.99     | 36.53    | 0.92     |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 40          | 7.64       | 33.83 | 37.90   | 48.64    | 12.79    | 2.39     | 35.85    | 0.44     |
| NH0307A   | 7/8/03   | 0:55     | 34        | HH-01        | 44.00 | -124.2  | 49          | 7.61       | 33.85 | 37.61   | 47.37    | 13.84    | 2.53     | 33.53    | 0.47     |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4  | 3           | 11.18      | 33.04 | 27.68   | 257.37   | 133.68   | 13.76    | 123.69   | 13.54    |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4  | 6           | 10.85      | 33.04 |         |          | 121.37   | 13.28    |          |          |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4  | 11          | 9.99       | 33.18 |         |          | 116.95   | 14.98    |          |          |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4  | 19          | 9.49       | 33.26 |         |          | 71.82    | 13.97    |          |          |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4  | 31          | 7.90       | 33.32 |         |          | 21.36    | 4.36     |          |          |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4  | 39          | 7.69       | 33.53 |         |          | 11.82    | 2.13     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4 | 49          | 7.61       | 33.68 |         |          | 7.45     | 1.30     |          |          |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4 | 59          | 7.54       | 33.80 |         |          | 6.53     | 1.07     |          |          |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4 | 70          | 7.50       | 33.84 |         |          | 6.23     | 1.02     |          |          |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4 | 100         | 6.98       | 33.98 |         |          | 18.45    | 3.13     |          |          |
| NH0307A   | 7/8/03   | 2:18     | 35        | HH-02        | 44.00 | -124.4 | 115         | 6.95       | 33.98 |         |          | 22.64    | 3.74     |          |          |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 10          | 10.13      | 33.11 | 30.92   | 212.54   | 114.68   | 17.39    | 97.85    | 6.53     |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 21          | 8.69       | 33.34 |         |          | 52.78    | 8.94     |          |          |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 31          | 7.79       | 33.55 |         |          | 21.76    | 3.97     |          |          |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 40          | 7.42       | 33.74 |         |          | 10.25    | 1.55     |          |          |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 53          | 7.37       | 33.79 |         |          | 10.32    | 1.58     |          |          |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 61          | 7.29       | 33.83 |         |          | 8.47     | 1.05     |          |          |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 70          | 7.15       | 33.86 |         |          | 7.13     | 0.84     |          |          |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 101         | 7.22       | 33.97 |         |          | 7.71     | 1.14     |          |          |
| NH0307A   | 7/8/03   | 4:28     | 36        | HH-03        | 44.00 | -124.6 | 148         | 6.97       | 33.98 |         |          | 10.96    | 1.59     |          |          |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 2           | 11.63      | 32.60 | 12.19   | 124.46   | 58.18    | 6.01     | 66.28    | 6.14     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 6           | 11.59      | 32.61 | 13.49   | 139.42   | 56.30    | 6.05     | 83.12    | 7.40     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 10          | 11.29      | 32.68 | 15.07   | 124.14   | 56.41    | 7.87     | 67.73    | 6.94     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 15          | 8.82       | 32.42 | 34.92   | 166.16   | 83.77    | 11.17    | 82.40    | 11.81    |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 20          | 8.61       | 32.46 | 27.84   | 138.17   | 48.72    | 6.77     | 89.44    | 5.29     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 31          | 8.12       | 32.61 | 26.87   | 70.21    | 21.18    | 2.84     | 49.02    | 5.28     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 41          | 7.61       | 32.93 | 28.37   | 52.70    | 7.23     | 0.84     | 45.47    | 3.96     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 52          | 8.33       | 33.24 | 32.18   | 52.25    | 9.55     | 1.54     | 42.70    | 3.17     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 61          | 8.04       | 33.51 | 35.26   | 51.69    | 10.88    | 1.63     | 40.82    | 2.50     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 70          | 7.93       | 33.61 | 37.84   | 50.50    | 8.94     | 1.33     | 41.56    | 3.80     |
| NH0307A   | 7/8/03   | 7:04     | 37        | HH-04        | 44.00 | -124.8 | 99          | 7.14       | 33.85 | 37.51   | 44.27    | 7.47     | 1.12     | 36.80    | 1.69     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 3           | 11.83      | 32.35 | 14.57   | 146.52   | 79.11    | 7.64     | 67.41    | 6.83     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 10          | 11.78      | 32.38 | 16.49   | 151.47   | 91.10    | 8.26     | 60.37    | 8.10     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 21          | 10.39      | 32.62 | 26.24   | 148.86   | 81.82    | 11.21    | 67.03    | 8.33     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 31          | 9.37       | 32.88 | 29.43   | 94.33    | 41.97    | 6.52     | 52.36    | 5.84     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 41          | 8.29       | 33.11 | 30.55   | 78.98    | 17.70    | 2.96     | 61.28    | 5.98     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 52          | 7.83       | 33.34 | 33.15   | 58.44    | 12.33    | 1.55     | 46.12    | 2.17     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 71          | 7.49       | 33.63 | 35.32   | 51.00    | 8.08     | 1.10     | 42.92    | 1.83     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 102         | 7.33       | 33.91 | 36.34   | 46.88    | 7.47     | 0.92     | 39.41    | 1.72     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 153         | 7.11       | 33.98 | 36.65   | 52.10    | 3.41     | 0.49     | 48.69    | 2.68     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 398         | 5.68       | 34.09 | 41.95   | 48.60    |          |          |          | 1.80     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 502         | 5.19       | 34.15 | 43.43   | 43.86    |          |          |          | 2.00     |
| NH0307A   | 7/7/03   | 6:02     | 33        | HH-05        | 44.00 | -125.  | 815         | 4.11       | 34.34 |         |          | 48.26    |          |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 3           | 13.14      | 31.93 | 9.90    | 100.85   | 33.75    | 4.03     | 67.11    | 5.63     |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 10          | 13.12      | 31.92 |         |          | 30.09    | 3.78     |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 22          | 9.97       | 32.27 |         |          | 15.52    | 2.41     |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 31          | 9.58       | 32.31 |         |          | 10.90    | 1.68     |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 40          | 8.94       | 32.37 |         |          | 9.56     | 1.10     |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 49          | 8.83       | 32.49 |         |          | 7.03     | 0.82     |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 72          | 8.08       | 32.96 |         |          | 8.14     | 1.42     |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 103         | 8.07       | 33.51 |         |          | 6.73     | 1.16     |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 152         | 7.50       | 33.90 |         |          | 9.03     | 1.60     |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 343         | 5.72       | 34.03 |         |          |          |          |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 782         | 4.22       | 34.32 |         |          |          |          |          |          |
| NH0307A   | 7/7/03   | 3:44     | 32        | HH-07        | 44.00 | -125.2 | 1003        | 3.62       | 34.41 |         |          |          |          |          |          |
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5 | 2           | 8.88       | 33.70 | 34.10   | 114.63   | 28.06    | 6.01     | 86.57    | 5.12     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5  | 5           | 8.89       | 33.70 | 34.33   | 101.71   | 40.97    | 8.08     | 60.73    | 3.15     |
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5  | 10          | 8.54       | 33.71 | 34.90   | 85.76    | 28.05    | 5.91     | 57.71    | 4.51     |
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5  | 14          | 8.30       | 33.72 | 36.36   | 83.25    | 32.23    | 7.01     | 51.02    | 1.98     |
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5  | 20          | 8.06       | 33.73 | 36.74   | 69.47    | 22.18    | 4.47     | 47.29    | 1.03     |
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5  | 26          | 7.70       | 33.81 | 37.12   | 56.66    | 7.71     | 1.38     | 48.96    | 1.38     |
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5  | 30          | 7.59       | 33.85 | 38.05   | 54.98    | 9.78     | 1.43     | 45.20    | 2.37     |
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5  | 40          | 7.39       | 33.91 | 38.32   | 52.52    | 7.11     | 1.11     | 45.41    | 1.39     |
| NH0307A   | 7/6/03   | 19:45    | 30        | FM-03        | 43.22 | -124.5  | 48          | 7.36       | 33.91 | 38.11   | 50.75    | 7.15     | 1.11     | 43.60    | 1.46     |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 4           | 9.59       | 33.43 | 32.77   | 137.61   | 40.26    | 8.83     | 97.35    | 8.54     |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 6           | 9.48       | 33.43 |         |          | 47.42    |          | 9.92     |          |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 12          | 9.35       | 33.44 |         |          | 45.56    |          | 7.98     |          |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 20          | 8.12       | 33.58 |         |          | 18.53    |          | 3.40     |          |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 31          | 7.68       | 33.79 |         |          | 9.94     |          | 1.80     |          |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 40          | 7.46       | 33.88 |         |          | 6.53     |          | 0.82     |          |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 50          | 7.39       | 33.90 |         |          | 8.47     |          | 1.16     |          |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 59          | 7.25       | 33.95 |         |          | 7.34     |          | 0.89     |          |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 71          | 7.25       | 33.96 |         |          | 7.48     |          | 0.91     |          |
| NH0307A   | 7/6/03   | 17:55    | 29        | FM-04        | 43.22 | -124.58 | 81          | 7.22       | 33.97 |         |          | 10.85    |          | 1.40     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 3           | 9.96       | 32.80 | 26.80   | 105.18   | 33.95    | 7.25     | 71.23    | 9.70     |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 6           | 9.96       | 32.80 |         |          | 35.86    |          | 7.71     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 10          | 9.95       | 32.80 |         |          | 31.40    |          | 7.10     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 23          | 9.24       | 32.87 |         |          | 22.82    |          | 5.10     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 31          | 9.45       | 33.10 |         |          | 35.39    |          | 7.74     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 42          | 9.29       | 33.34 |         |          | 26.96    |          | 5.37     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 50          | 7.88       | 33.51 |         |          | 10.11    |          | 1.66     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 68          | 7.75       | 33.75 |         |          | 6.63     |          | 1.01     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 100         | 7.33       | 33.95 |         |          | 4.23     |          | 0.52     |          |
| NH0307A   | 7/6/03   | 16:07    | 28        | FM-05        | 43.22 | -124.67 | 155         | 7.16       | 34.00 |         |          | 7.23     |          | 0.89     |          |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 4           | 11.80      | 32.21 | 12.11   | 82.55    | 16.26    | 3.55     | 66.29    | 5.48     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 10          | 11.81      | 32.21 | 12.21   | 81.03    | 17.28    | 3.54     | 63.75    | 4.26     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 20          | 10.57      | 32.23 | 15.18   | 71.59    | 14.89    | 3.17     | 56.70    | 4.92     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 25          | 9.42       | 32.31 | 17.24   | 64.28    | 9.77     | 2.02     | 54.52    | 6.17     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 32          | 9.10       | 32.41 | 21.29   | 61.19    | 8.30     | 1.91     | 52.89    | 6.16     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 41          | 8.82       | 32.59 | 23.33   | 59.35    | 6.93     | 1.42     | 52.42    | 6.21     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 53          | 8.39       | 32.87 | 27.47   | 63.12    | 5.60     | 0.88     | 57.52    | 4.83     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 70          | 7.90       | 33.32 | 33.44   | 56.12    | 10.04    | 1.05     | 46.08    | 5.74     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 100         | 7.76       | 33.70 | 33.19   | 54.62    | 5.32     | 0.74     | 49.30    | 2.56     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 151         | 7.39       | 33.96 | 37.54   | 52.92    | 5.41     | 0.80     | 47.51    | 2.78     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 217         | 7.01       | 34.02 | 39.18   | 45.21    |          |          |          | 0.67     |
| NH0307A   | 7/6/03   | 11:59    | 26        | FM-07        | 43.22 | -124.83 | 303         | 6.48       | 34.05 | 39.63   | 45.17    |          |          |          | 3.07     |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 2           | 11.93      | 32.19 | 10.72   | 79.31    | 19.04    | 3.38     | 60.27    | 4.72     |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 10          | 11.90      | 32.18 |         |          | 20.77    |          | 3.71     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 16          | 11.33      | 32.18 |         |          | 21.83    |          | 3.79     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 21          | 10.24      | 32.21 |         |          | 22.12    |          | 3.67     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 30          | 9.89       | 32.31 |         |          | 9.79     |          | 1.42     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 40          | 9.68       | 32.40 |         |          | 5.45     |          | 0.78     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 50          | 8.61       | 32.72 |         |          | 7.34     |          | 0.81     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 70          | 8.17       | 33.15 |         |          | 3.13     |          | 0.38     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 103         | 7.85       | 33.60 |         |          | 3.62     |          | 0.49     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 155         | 7.43       | 33.95 |         |          | 4.56     |          | 0.60     |          |
| NH0307A   | 7/6/03   | 9:28     | 25        | FM-08        | 43.22 | -125.   | 1005        | 3.77       | 34.41 |         |          |          |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 3           | 12.95      | 32.09 | 8.40    | 70.76    | 19.29    | 2.62     | 51.47    | 4.52     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 9           | 12.92      | 32.09 | 10.95   | 77.98    | 19.44    | 2.86     | 58.54    | 7.24     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 15          | 11.73      | 32.13 | 13.68   | 96.74    | 23.48    | 3.50     | 73.26    | 9.27     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 19          | 10.84      | 32.21 | 14.04   | 95.56    | 40.11    | 5.70     | 55.45    | 5.71     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 30          | 9.98       | 32.32 | 13.62   | 72.98    | 7.90     | 1.08     | 65.08    | 5.88     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 40          | 9.46       | 32.36 | 17.41   | 66.65    | 6.04     | 0.83     | 60.62    | 5.64     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 52          | 9.11       | 32.46 | 18.66   | 62.23    | 5.69     | 0.65     | 56.54    | 4.83     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 71          | 8.67       | 32.77 | 24.31   | 58.29    | 5.25     | 0.56     | 53.04    | 5.09     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 95          | 7.92       | 33.33 | 30.73   | 54.37    | 4.33     | 0.44     | 50.04    | 3.98     |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 155         | 7.77       | 33.90 | 36.99   | 52.88    | 3.89     | 0.47     | 48.99    |          |
| NH0307A   | 7/6/03   | 6:36     | 24        | FM-09        | 43.22 | -125.17 | 1006        | 3.80       | 34.41 | 48.19   | 37.83    |          |          |          | 1.18     |
| NH0307A   | 7/4/03   | 20:50    | 13        | CR-01        | 41.90 | -124.3  | 2           | 11.11      | 33.71 | 24.46   | 166.70   | 89.85    | 11.72    | 76.85    | 10.52    |
| NH0307A   | 7/4/03   | 20:50    | 13        | CR-01        | 41.90 | -124.3  | 6           | 10.59      | 33.69 | 28.46   | 169.89   | 72.57    | 11.29    | 97.33    | 11.40    |
| NH0307A   | 7/4/03   | 20:50    | 13        | CR-01        | 41.90 | -124.3  | 10          | 10.52      | 33.70 | 30.36   | 162.60   | 83.85    | 13.83    | 78.75    | 10.77    |
| NH0307A   | 7/4/03   | 20:50    | 13        | CR-01        | 41.90 | -124.3  | 15          | 10.18      | 33.74 | 39.81   | 138.88   | 68.00    | 11.24    | 70.88    | 12.72    |
| NH0307A   | 7/4/03   | 20:50    | 13        | CR-01        | 41.90 | -124.3  | 20          | 8.58       | 33.79 | 41.29   | 83.07    | 37.90    | 6.06     | 45.17    | 3.15     |
| NH0307A   | 7/4/03   | 20:50    | 13        | CR-01        | 41.90 | -124.3  | 25          | 8.34       | 33.85 | 40.62   | 76.10    | 25.59    | 4.36     | 50.51    | 4.94     |
| NH0307A   | 7/4/03   | 20:50    | 13        | CR-01        | 41.90 | -124.3  | 31          | 8.27       | 33.87 | 40.31   | 66.87    | 24.92    | 4.08     | 41.95    | 4.55     |
| NH0307A   | 7/4/03   | 20:50    | 13        | CR-01        | 41.90 | -124.3  | 35          | 8.27       | 33.87 | 41.20   | 69.92    | 29.56    | 4.80     | 40.36    | 5.04     |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 4           | 10.47      | 33.69 | 28.40   | 170.81   | 95.62    | 14.10    | 75.19    | 9.90     |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 6           | 10.36      | 33.69 |         |          | 76.01    | 11.62    |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 11          | 10.43      | 33.69 |         |          | 63.39    | 9.87     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 19          | 8.38       | 33.64 |         |          | 27.37    | 4.25     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 30          | 8.27       | 33.76 |         |          | 14.55    | 2.18     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 41          | 8.36       | 33.83 |         |          | 12.90    | 2.17     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 50          | 7.91       | 33.89 |         |          | 15.49    | 2.52     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 59          | 7.87       | 33.93 |         |          | 6.57     | 1.00     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 70          | 7.80       | 33.95 |         |          | 6.17     | 0.90     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 91          | 7.71       | 33.96 |         |          | 7.58     | 1.06     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 100         | 7.69       | 33.97 |         |          | 6.24     | 1.08     |          |          |
| NH0307A   | 7/4/03   | 23:54    | 15        | CR-03        | 41.90 | -124.5  | 133         | 7.48       | 34.00 |         |          | 8.74     | 1.37     |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 3           | 9.73       | 33.59 | 28.76   | 103.51   | 49.24    | 7.05     | 54.27    | 6.87     |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 10          | 9.73       | 33.59 |         |          | 35.25    | 5.74     |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 20          | 9.41       | 33.60 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 29          | 8.54       | 33.59 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 40          | 8.20       | 33.67 |         |          | 7.81     | 1.20     |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 50          | 8.00       | 33.82 |         |          | 5.26     | 0.80     |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 69          | 7.88       | 33.90 |         |          | 3.64     | 0.51     |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 102         | 7.63       | 33.98 |         |          | 5.30     | 0.67     |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 151         | 7.44       | 34.00 |         |          | 26.59    | 2.39     |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 434         | 5.97       | 34.10 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 437         | 5.97       | 34.10 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 2:10     | 16        | CR-04        | 41.90 | -124.6  | 497         | 5.77       | 34.12 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 3           | 9.89       | 33.45 | 26.39   | 75.98    | 19.79    | 3.04     | 56.19    | 5.47     |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 20          | 9.87       | 33.47 | 26.80   | 69.32    |          |          |          |          |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 31          | 9.76       | 33.49 | 27.32   | 75.23    | 21.95    | 3.33     | 53.28    | 4.12     |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 38          | 9.41       | 33.53 | 28.06   | 63.03    | 18.54    | 2.85     | 44.49    | 4.09     |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 50          | 8.92       | 33.61 | 32.04   | 53.71    | 9.04     | 1.68     | 44.67    | 6.95     |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 71          | 8.45       | 33.63 | 34.84   | 52.92    | 7.29     | 1.36     | 45.63    | 5.90     |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 100         | 8.07       | 33.77 | 35.47   | 48.56    | 5.93     | 1.14     | 42.63    | 4.29     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 151         | 7.61       | 33.98 | 39.24   | 44.31    | 5.40     | 0.78     | 38.91    | 3.57     |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 280         | 6.40       | 34.07 | 43.51   | 49.84    |          |          |          | 3.67     |
| NH0307A   | 7/5/03   | 5:12     | 17        | CR-05        | 41.90 | -124.7  | 500         | 5.48       | 34.16 | 45.95   | 38.78    |          |          |          | 5.38     |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 3           | 10.41      | 33.38 | 24.01   | 72.95    | 14.94    | 2.90     | 58.02    | 7.85     |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 10          | 10.41      | 33.38 |         |          | 15.55    | 2.97     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 20          | 10.33      | 33.38 |         |          | 16.49    | 3.17     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 26          | 9.90       | 33.37 |         |          | 12.26    | 2.37     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 30          | 9.07       | 33.34 |         |          | 8.50     | 1.54     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 39          | 8.74       | 33.55 |         |          | 5.42     | 0.65     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 51          | 8.64       | 33.56 |         |          | 5.34     | 0.70     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 68          | 8.71       | 33.66 |         |          | 6.38     | 1.00     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 101         | 8.34       | 33.69 |         |          | 6.31     | 0.88     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 151         | 7.64       | 33.96 |         |          | 8.74     | 1.15     |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 508         | 5.07       | 34.19 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 10:55    | 19        | CR-07        | 41.90 | -125.   | 817         | 4.14       | 34.36 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 2           | 11.87      | 32.24 | 9.93    | 86.14    | 16.64    | 2.75     | 69.50    | 6.05     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 10          | 11.82      | 32.24 | 10.54   | 89.71    | 14.94    | 2.56     | 74.77    | 6.44     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 19          | 11.22      | 32.29 | 12.48   | 77.58    | 16.60    | 2.98     | 60.98    | 6.35     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 29          | 10.72      | 32.30 | 15.19   | 76.92    | 15.21    | 2.73     | 61.70    | 8.16     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 35          | 10.38      | 32.30 | 17.95   | 75.71    | 16.21    | 2.70     | 59.50    | 7.73     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 41          | 9.97       | 32.41 | 17.65   | 59.45    | 8.27     | 1.31     | 51.18    | 5.66     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 51          | 8.70       | 32.71 | 22.85   | 54.77    | 8.35     | 1.15     | 46.41    | 5.00     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 71          | 9.68       | 33.24 | 27.39   | 76.65    | 23.50    | 3.87     | 53.15    | 6.75     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 102         | 9.38       | 33.50 | 31.18   | 77.17    | 19.14    | 3.87     | 58.02    | 6.86     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 122         | 8.72       | 33.53 | 33.46   | 64.67    | 11.85    | 2.18     | 52.82    | 5.83     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 149         | 7.96       | 33.74 | 34.84   | 52.14    | 7.31     | 0.74     | 44.83    | 3.31     |
| NH0307A   | 7/5/03   | 15:55    | 21        | CR-09        | 41.90 | -125.4  | 1005        | 3.63       | 34.43 | 48.63   | 41.76    |          |          |          | 1.77     |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 3           | 15.81      | 31.91 | 7.29    | 68.56    | 6.22     | 0.99     | 62.34    | 6.07     |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 11          | 15.79      | 31.91 |         |          | 7.31     | 1.06     |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 20          | 15.66      | 31.92 |         |          | 9.34     | 1.69     |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 29          | 15.59      | 31.93 |         |          | 7.02     | 1.18     |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 39          | 15.54      | 31.95 |         |          | 6.18     | 0.99     |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 51          | 15.55      | 32.17 |         |          | 5.82     | 0.87     |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 66          | 12.62      | 32.31 |         |          | 6.43     | 1.24     |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 70          | 12.00      | 32.30 |         |          | 6.81     | 1.21     |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 104         | 9.11       | 32.70 |         |          | 3.32     | 0.55     |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 158         | 7.98       | 33.65 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 488         | 5.32       | 34.10 |         |          |          |          |          |          |
| NH0307A   | 7/5/03   | 21:10    | 23        | CR-11        | 41.90 | -126.   | 998         | 3.64       | 34.43 |         |          |          |          |          |          |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 2           | 8.71       | 33.38 | 36.32   | 48.20    | 18.88    | 1.27     | 29.32    | 4.88     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 5           | 8.67       | 33.38 | 39.50   | 48.31    | 19.99    | 1.18     | 28.32    | 8.16     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 10          | 8.45       | 33.37 | 37.35   | 50.59    | 19.34    | 1.75     | 31.26    | 5.37     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 16          | 8.23       | 33.37 | 38.41   | 56.75    | 24.08    | 2.35     | 32.67    | 6.20     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 20          | 8.21       | 33.45 | 37.66   | 57.67    |          | 1.54     |          | 4.73     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 25          | 8.10       | 33.47 | 38.49   | 47.29    | 11.28    | 1.27     | 36.01    | 5.20     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 30          | 7.97       | 33.57 | 40.46   | 47.95    | 7.96     | 0.87     | 39.99    | 5.74     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 40          | 7.72       | 33.70 | 41.23   | 52.05    | 10.15    | 0.95     | 41.90    | 5.13     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 50          | 7.74       | 33.79 | 41.25   | 53.39    | 10.34    | 1.00     | 43.05    | 7.53     |
| W0309B    | 9/26/03  | 19:23    | 3         | NH-05        | 44.65 | -124.18 | 53          | 7.74       | 33.79 | 42.55   | 48.68    | 15.19    | 1.13     | 33.49    | 6.13     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 2           | 10.19      | 32.50 | 24.34   | 79.33    | 23.07    | 2.14     | 56.25    | 6.37     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 6           | 9.85       | 32.53 | 24.65   | 79.80    | 17.87    | 2.09     | 61.93    | 7.90     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 10          | 9.57       | 32.57 | 26.71   | 75.22    | 21.63    | 2.26     | 53.59    | 7.91     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 21          | 8.25       | 32.71 | 26.84   | 65.81    | 10.71    | 0.95     | 55.09    | 8.51     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 30          | 8.06       | 32.87 | 28.70   | 61.92    | 11.82    | 0.44     | 50.11    | 6.73     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 41          | 7.92       | 33.06 | 29.82   | 55.65    | 3.81     | 0.36     | 51.84    | 5.93     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 51          | 7.81       | 33.25 | 31.92   | 52.96    | 4.13     | 0.39     | 48.83    | 5.08     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 60          | 7.94       | 33.41 | 38.38   | 61.41    | 6.26     | 0.65     | 55.16    | 7.16     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 70          | 7.75       | 33.51 | 37.31   | 64.81    | 6.06     | 0.71     | 58.75    | 4.21     |
| W0309B    | 9/26/03  | 21:55    | 5         | NH-15        | 44.65 | -124.41 | 86          | 7.83       | 33.70 | 40.73   | 61.51    | 6.49     | 0.59     | 55.01    | 5.06     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 1           | 11.49      | 31.94 | 21.50   | 81.97    | 32.42    | 3.88     | 49.55    | 10.19    |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 10          | 10.55      | 32.08 | 17.50   | 79.83    | 25.34    | 3.33     | 54.49    | 5.00     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 20          | 9.94       | 32.20 | 22.46   | 77.37    | 32.55    | 3.92     | 44.82    | 5.34     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 30          | 9.12       | 32.06 | 19.89   | 62.10    | 10.74    | 1.44     | 51.36    | 4.87     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 41          | 8.22       | 32.77 | 22.27   | 52.90    | 6.62     | 0.44     | 46.28    | 4.02     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 50          | 8.14       | 32.84 | 24.36   | 58.18    |          | 0.39     | 5.08     |          |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 70          | 7.90       | 33.43 | 32.68   | 56.72    | 5.90     | 0.42     | 50.82    | 5.79     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 100         | 7.99       | 33.71 | 35.16   | 52.74    | 4.90     | 0.33     | 47.84    | 4.52     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 150         | 7.79       | 33.92 | 36.12   | 59.44    | 4.75     | 0.39     | 54.69    | 1.43     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 175         | 7.73       | 33.97 | 36.01   | 71.83    |          |          |          | 1.34     |
| W0309B    | 9/27/03  | 0:04     | 7         | NH-25        | 44.65 | -124.65 | 202         | 7.36       | 34.00 | 42.33   | 62.25    |          |          |          | 7.13     |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 2           | 13.47      | 32.14 | 13.04   | 92.63    | 16.29    | 2.60     | 76.33    | 8.28     |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 10          | 13.46      | 32.14 |         |          | 14.50    | 2.45     |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 20          | 11.15      | 32.31 |         |          | 6.27     | 0.88     |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 30          | 10.34      | 32.35 |         |          | 4.89     | 0.73     |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 40          | 9.15       | 32.48 |         |          | 4.41     | 0.52     |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 50          | 8.69       | 32.57 |         |          | 6.21     | 0.50     |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 70          | 7.96       | 33.09 |         |          | 3.22     | 0.30     |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 99          | 8.01       | 33.60 |         |          | 2.57     | 0.32     |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 150         | 7.96       | 33.84 |         |          | 3.95     | 0.35     |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 380         | 6.11       | 34.06 |         |          |          |          |          |          |
| W0309B    | 9/27/03  | 6:46     | 9         | NH-35        | 44.65 | -124.88 | 428         | 5.85       | 34.08 |         |          |          |          |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 2           | 15.23      | 32.03 | 12.97   | 88.15    | 7.08     | 1.04     | 81.07    | 11.65    |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 10          | 15.23      | 32.03 |         |          | 6.27     | 1.10     |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 20          | 15.13      | 32.05 |         |          | 6.04     | 1.04     |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 30          | 10.17      | 32.35 |         |          | 3.84     | 0.55     |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 40          | 9.71       | 32.39 |         |          | 4.31     | 0.50     |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 50          | 9.26       | 32.45 |         |          | 3.77     | 0.49     |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 70          | 8.35       | 32.76 |         |          | 4.79     | 0.32     |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 98          | 7.97       | 33.49 |         |          | 2.34     | 0.20     |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 150         | 7.92       | 33.83 |         |          | 2.59     | 0.36     |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 499         | 5.27       | 34.12 |         |          |          |          |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 665         | 4.65       | 34.23 |         |          |          |          |          |          |
| W0309B    | 9/27/03  | 10:21    | 10        | NH-45        | 44.65 | -125.12 | 680         | 4.64       | 34.23 |         |          |          |          |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 3           | 15.12      | 31.90 | 10.47   | 89.39    | 13.00    | 2.50     | 76.39    | 6.75     |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 5           | 15.12      | 31.90 |         |          | 13.87    | 2.57     |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 10          | 15.20      | 31.95 |         |          | 13.50    | 2.33     |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 21          | 15.28      | 32.01 |         |          | 12.43    | 2.00     |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 30          | 14.42      | 32.02 |         |          | 12.08    | 1.75     |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 41          | 10.88      | 32.32 |         |          | 5.96     | 0.73     |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 50          | 9.49       | 32.35 |         |          | 3.26     | 0.50     |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 70          | 8.40       | 32.59 |         |          | 2.96     | 0.37     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 100         | 7.27       | 33.08 |         |          | 3.63     | 0.25     |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 151         | 7.48       | 33.72 |         |          | 3.40     | 0.31     |          |          |
| W0309B    | 9/27/03  | 15:35    | 12        | NH-65        | 44.65 | -125.6  | 1004        | 3.72       | 34.40 |         |          |          |          |          |          |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 2           | 17.75      | 31.94 | 6.14    | 81.25    | 9.62     | 0.95     | 71.63    | 5.18     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 10          | 17.72      | 31.94 | 5.78    | 87.35    | 7.84     | 0.89     | 79.51    | 4.86     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 21          | 17.60      | 31.96 | 5.95    | 84.88    | 9.13     | 0.87     | 75.75    | 4.60     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 30          | 17.32      | 31.99 | 6.20    | 84.14    | 7.43     | 0.84     | 76.72    | 4.98     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 40          | 16.84      | 31.99 | 6.89    | 84.18    | 6.25     | 0.73     | 77.93    | 5.54     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 49          | 15.26      | 32.18 | 6.20    | 88.01    | 7.23     | 0.84     | 80.78    | 4.59     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 71          | 9.49       | 32.38 | 15.93   | 71.03    | 5.66     | 0.46     | 65.37    | 8.48     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 100         | 8.05       | 32.53 | 22.93   | 67.33    | 4.45     | 0.31     | 62.88    | 11.54    |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 142         | 7.87       | 33.33 | 28.82   |          | 3.95     | 0.28     |          | 2.21     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 620         | 4.76       | 34.20 | 45.89   |          |          |          |          | 0.44     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 805         | 4.12       | 34.31 | 46.58   |          |          |          |          | 0.92     |
| W0309B    | 9/27/03  | 18:38    | 13        | NH-85        | 44.65 | -126.05 | 1004        | 3.66       | 34.42 |         |          |          |          |          |          |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 1           | 9.02       | 33.38 | 32.24   | 119.45   | 34.18    | 5.69     | 85.28    | 11.96    |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 5           | 9.01       | 33.41 | 33.46   | 95.81    | 25.53    | 4.09     | 70.28    | 6.27     |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 10          | 8.98       | 33.43 | 33.23   | 89.87    | 19.94    | 3.00     | 69.93    | 5.68     |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 15          | 8.83       | 33.47 | 35.60   | 77.82    | 20.98    | 3.00     | 56.84    | 6.05     |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 20          | 8.81       | 33.51 | 35.35   | 75.98    | 14.05    | 2.16     | 61.93    | 5.57     |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 26          | 8.82       | 33.53 | 37.05   | 68.87    | 14.59    | 2.11     | 54.28    | 6.79     |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 30          | 8.76       | 33.58 | 39.32   | 69.51    | 15.66    | 2.03     | 53.84    | 7.44     |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 40          | 8.66       | 33.61 | 36.80   | 74.56    | 11.54    | 1.61     | 63.03    | 3.86     |
| W0309B    | 9/30/03  | 9:31     | 33        | HH-01        | 44.00 | -124.2  | 49          | 8.38       | 33.62 | 39.23   | 68.88    | 18.23    | 2.31     | 50.65    | 5.43     |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 2           | 9.56       | 33.19 | 29.62   | 90.03    | 22.28    | 4.04     | 67.75    | 8.39     |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 5           | 9.03       | 33.28 |         |          | 18.70    | 3.28     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 10          | 8.54       | 33.33 |         |          | 15.97    | 2.77     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 20          | 8.11       | 33.40 |         |          | 8.47     | 1.40     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 30          | 8.12       | 33.50 |         |          | 6.01     | 1.14     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 40          | 7.99       | 33.61 |         |          | 4.34     | 0.80     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 50          | 7.96       | 33.70 |         |          | 4.37     | 0.64     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 61          | 7.97       | 33.75 |         |          | 3.55     | 0.53     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 70          | 7.98       | 33.80 |         |          | 4.53     | 0.62     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 100         | 7.94       | 33.89 |         |          | 5.25     | 0.72     |          |          |
| W0309B    | 9/30/03  | 10:50    | 34        | HH-02        | 44.00 | -124.4  | 115         | 7.89       | 33.91 |         |          | 6.93     | 0.85     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 1           | 11.35      | 32.40 | 18.30   | 79.53    | 23.71    | 4.10     | 55.82    | 3.93     |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 10          | 9.60       | 32.65 |         |          | 11.29    | 2.15     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 19          | 8.99       | 32.85 |         |          | 5.21     | 1.00     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 30          | 8.65       | 33.01 |         |          | 6.42     | 1.22     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 40          | 8.77       | 33.35 |         |          | 6.38     | 1.18     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 50          | 8.53       | 33.36 |         |          | 6.23     | 1.16     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 60          | 8.36       | 33.40 |         |          | 6.66     | 1.18     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 69          | 8.02       | 33.47 |         |          | 5.48     | 0.96     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 101         | 7.91       | 33.73 |         |          | 4.05     | 0.65     |          |          |
| W0309B    | 9/30/03  | 12:49    | 35        | HH-03        | 44.00 | -124.6  | 145         | 7.89       | 33.90 |         |          | 7.66     | 1.09     |          |          |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8  | 2           | 11.35      | 32.41 | 18.97   | 88.73    | 50.12    | 9.09     | 38.61    | 1.41     |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8  | 5           | 11.42      | 32.43 | 18.88   | 81.46    | 47.45    | 8.34     | 34.01    | 3.65     |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8  | 11          | 10.68      | 32.66 | 18.71   | 77.94    | 31.87    | 5.44     | 46.06    | 5.86     |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8  | 20          | 10.81      | 32.87 | 19.76   | 81.99    | 40.26    | 6.70     | 41.73    | 7.37     |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8  | 30          | 9.86       | 32.92 | 25.06   | 82.59    | 38.94    | 6.52     | 43.65    | 3.69     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8 | 40          | 9.45       | 33.14 | 31.38   | 81.29    | 37.14    | 5.82     | 44.15    | 6.44     |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8 | 50          | 9.41       | 33.18 | 28.69   | 71.07    | 30.75    | 5.59     | 40.33    | 3.19     |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8 | 60          | 9.23       | 33.19 | 31.16   | 83.59    | 29.44    | 5.18     | 54.16    | 4.64     |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8 | 70          | 8.39       | 33.21 | 33.15   | 68.88    | 28.85    | 4.75     | 40.02    | 2.24     |
| W0309B    | 9/30/03  | 14:51    | 36        | HH-04        | 44.00 | -124.8 | 94          | 7.97       | 33.77 | 40.97   | 55.70    | 18.71    | 2.47     | 36.98    | 3.33     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 1           | 14.47      | 32.22 | 9.09    | 74.32    | 12.68    | 2.04     | 61.64    | 6.39     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 10          | 13.09      | 32.30 | 10.42   | 77.56    | 9.47     | 1.72     | 68.09    | 5.70     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 20          | 10.56      | 32.48 | 18.22   | 63.50    | 6.89     | 1.17     | 56.60    | 6.21     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 31          | 9.34       | 32.56 | 20.71   | 55.40    | 5.13     | 0.65     | 50.28    | 5.42     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 40          | 8.70       | 32.71 | 23.84   | 58.32    | 6.01     | 0.88     | 52.31    | 4.23     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 50          | 8.15       | 33.13 | 31.09   | 49.47    | 6.16     | 0.80     | 43.31    | 5.32     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 70          | 8.03       | 33.45 | 34.92   | 51.73    |          |          |          |          |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 100         | 8.05       | 33.75 | 36.99   | 52.58    | 6.16     | 0.69     | 46.42    | 2.95     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 151         | 7.92       | 33.88 | 39.24   | 48.35    | 6.83     | 0.97     | 41.52    | 2.64     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 200         | 7.88       | 33.94 | 40.73   | 50.19    |          |          |          | 4.55     |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 500         | 5.40       | 34.11 | 49.69   | 47.40    |          |          |          | 11.09    |
| W0309B    | 9/30/03  | 18:29    | 37        | HH-05        | 44.00 | -125.  | 800         | 4.20       | 34.32 | 49.14   | 43.66    |          |          |          | 4.46     |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 1           | 15.31      | 32.11 | 8.88    | 75.72    | 14.23    | 2.21     | 61.49    | 6.11     |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 10          | 15.00      | 32.11 |         |          | 12.35    | 2.07     |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 20          | 12.23      | 32.31 |         |          | 8.85     | 1.55     |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 30          | 10.17      | 32.39 |         |          | 4.38     | 0.74     |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 40          | 8.92       | 32.48 |         |          | 4.13     | 0.49     |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 51          | 8.60       | 32.66 |         |          | 4.36     | 0.51     |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 70          | 8.13       | 32.87 |         |          | 5.42     | 0.53     |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 100         | 7.45       | 33.39 |         |          | 3.70     | 0.43     |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 150         | 7.69       | 33.83 |         |          | 4.29     | 0.51     |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 250         | 6.67       | 34.00 |         |          |          |          |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 570         | 4.94       | 34.21 |         |          |          |          |          |          |
| W0309B    | 9/30/03  | 23:17    | 38        | HH-07        | 44.00 | -125.2 | 1006        | 3.57       | 34.43 |         |          |          |          |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 1           | 16.21      | 31.72 | 8.57    | 79.29    | 10.43    | 1.60     | 68.86    | 6.78     |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 10          | 15.94      | 31.87 |         |          | 8.30     | 1.24     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 20          | 15.05      | 32.10 |         |          | 7.79     | 1.15     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 25          | 14.31      | 32.15 |         |          | 7.71     | 1.20     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 30          | 13.83      | 32.18 |         |          | 8.15     | 1.35     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 39          | 12.10      | 32.28 |         |          | 6.19     | 0.91     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 50          | 9.94       | 32.37 |         |          | 5.70     | 0.63     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 70          | 8.32       | 32.77 |         |          | 4.17     | 0.43     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 100         | 7.61       | 33.36 |         |          | 4.52     | 0.44     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 149         | 7.59       | 33.89 |         |          | 4.07     | 0.45     |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 456         | 5.26       | 34.11 |         |          |          |          |          |          |
| W0309B    | 10/1/03  | 1:31     | 39        | HH-09        | 44.00 | -125.4 | 505         | 5.06       | 34.13 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 1           | 9.38       | 33.61 | 37.23   | 68.88    | 23.68    | 4.24     | 45.20    | 9.65     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 5           | 9.36       | 33.61 | 32.47   | 70.71    | 25.57    | 4.67     | 45.14    | 2.97     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 11          | 9.31       | 33.69 | 35.34   | 66.70    | 25.39    | 4.70     | 41.31    | 6.66     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 15          | 9.28       | 33.72 | 33.73   | 66.06    | 22.21    | 3.82     | 43.86    | 5.37     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 20          | 9.14       | 33.73 | 33.34   | 64.20    | 17.30    | 3.02     | 46.90    | 4.59     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 24          | 9.05       | 33.73 | 35.79   | 61.84    | 16.87    | 2.68     | 44.97    | 6.99     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 30          | 9.02       | 33.73 | 34.77   | 63.99    | 13.57    | 2.46     | 50.42    | 5.57     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 40          | 9.02       | 33.74 | 35.01   | 58.58    | 13.93    | 2.45     | 44.65    | 7.08     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 50          | 9.01       | 33.76 | 33.01   | 58.66    | 14.83    | 2.54     | 43.84    | 3.55     |
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5 | 55          | 9.01       | 33.76 | 33.51   | 62.20    | 15.60    | 2.59     | 46.61    | 3.80     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0309B    | 9/29/03  | 19:32    | 26        | FM-03        | 43.22 | -124.5  | 61          | 9.01       | 33.76 | 37.03   | 62.33    | 14.15    | 2.45     | 48.18    | 7.81     |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 1           | 9.32       | 33.55 | 31.97   | 70.44    | 24.60    | 4.49     | 45.85    | 1.80     |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 5           | 9.21       | 33.57 |         |          | 20.52    | 3.49     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 10          | 9.21       | 33.59 |         |          | 16.53    | 2.82     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 20          | 8.88       | 33.61 |         |          | 11.61    | 2.00     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 30          | 8.61       | 33.65 |         |          | 8.17     | 1.22     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 40          | 8.71       | 33.74 |         |          | 6.75     | 1.10     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 49          | 8.72       | 33.75 |         |          | 7.10     | 1.06     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 61          | 8.73       | 33.77 |         |          | 7.19     | 1.15     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 66          | 8.73       | 33.77 |         |          | 9.00     | 1.23     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 70          | 8.72       | 33.78 |         |          | 8.91     | 1.34     |          |          |
| W0309B    | 9/29/03  | 20:32    | 27        | FM-04        | 43.22 | -124.58 | 79          | 8.71       | 33.78 |         |          | 7.55     | 1.09     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 2           | 9.20       | 33.54 | 31.57   | 59.64    | 14.09    | 1.99     | 45.55    | 5.10     |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 10          | 8.86       | 33.71 |         |          | 8.70     | 1.10     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 21          | 8.85       | 33.72 |         |          | 8.22     | 1.05     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 30          | 8.60       | 33.73 |         |          | 7.07     | 0.78     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 40          | 8.58       | 33.73 |         |          | 5.81     | 0.66     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 50          | 8.56       | 33.74 |         |          | 6.38     | 0.69     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 61          | 8.50       | 33.75 |         |          | 5.61     | 0.58     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 70          | 8.44       | 33.78 |         |          | 6.00     | 0.60     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 100         | 8.40       | 33.82 |         |          | 9.38     | 0.89     |          |          |
| W0309B    | 9/29/03  | 21:32    | 28        | FM-05        | 43.22 | -124.67 | 150         | 8.26       | 33.87 |         |          | 8.31     | 0.68     |          |          |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 2           | 9.60       | 33.31 | 31.38   | 73.22    | 17.43    | 2.73     | 55.79    | 9.19     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 10          | 9.27       | 33.37 | 31.38   | 69.99    | 18.16    | 2.66     | 51.83    | 9.73     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 20          | 9.01       | 33.45 | 30.56   | 63.52    | 13.19    | 1.87     | 50.33    | 3.69     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 30          | 8.75       | 33.53 | 32.88   | 65.79    | 8.27     | 1.28     | 57.53    | 5.92     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 41          | 8.66       | 33.57 | 35.77   | 63.55    | 5.74     | 0.89     | 57.81    | 9.14     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 50          | 8.64       | 33.60 | 34.39   | 98.32    | 5.66     | 0.82     | 92.66    | 5.44     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 70          | 8.59       | 33.67 | 33.45   | 52.94    | 4.67     | 0.64     | 48.28    | 4.75     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 100         | 8.31       | 33.75 | 34.58   | 51.29    | 3.06     | 0.36     | 48.23    | 6.87     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 151         | 8.06       | 33.94 |         |          | 83.07    | 1.97     | 0.28     | 81.10    |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 215         | 7.61       | 34.03 |         |          | 44.98    |          |          |          |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 250         | 7.38       | 34.04 | 38.51   | 43.41    |          |          |          | 1.84     |
| W0309B    | 9/29/03  | 23:28    | 30        | FM-07        | 43.22 | -124.83 | 300         | 7.07       | 34.06 | 41.37   | 45.79    |          |          |          | 4.55     |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 1           | 12.68      | 32.36 | 12.12   | 70.63    | 12.14    | 1.76     | 58.49    | 6.90     |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 10          | 12.08      | 32.40 |         |          | 11.87    | 1.55     |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 20          | 10.11      | 32.40 |         |          | 6.31     | 0.88     |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 30          | 8.80       | 32.68 |         |          | 5.16     | 0.57     |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 40          | 9.34       | 32.97 |         |          | 7.37     | 1.00     |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 50          | 9.22       | 33.00 |         |          | 7.98     | 1.08     |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 70          | 8.47       | 33.30 |         |          | 5.98     | 0.71     |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 100         | 8.05       | 33.56 |         |          | 4.43     | 0.44     |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 150         | 7.74       | 33.88 |         |          | 3.28     | 0.34     |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 250         | 7.32       | 34.04 |         |          |          |          |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 700         | 4.62       | 34.26 |         |          |          |          |          |          |
| W0309B    | 9/30/03  | 1:18     | 31        | FM-08        | 43.22 | -125.   | 1007        | 3.57       | 34.43 |         |          |          |          |          |          |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 2           | 14.70      | 32.24 | 7.78    | 76.90    | 9.44     | 1.28     | 67.46    | 6.09     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 10          | 14.63      | 32.23 | 8.17    | 72.51    | 6.60     | 1.17     | 65.91    | 6.02     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 20          | 11.77      | 32.45 | 12.61   | 63.94    | 6.34     | 1.24     | 57.61    | 6.37     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 30          | 10.20      | 32.45 |         |          | 62.69    | 6.25     | 0.97     | 56.44    |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 40          | 9.57       | 32.53 | 19.31   | 61.57    | 6.77     | 0.67     | 54.80    | 5.46     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 45          | 9.32       | 32.58 | 21.71   | 56.68    | 8.05     | 0.79     | 48.63    | 7.38     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 50          | 9.73       | 32.89 | 23.27   | 52.52    | 5.14     | 0.49     | 47.38    | 6.17     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 71          | 9.10       | 33.13 | 26.67   | 52.75    | 4.73     | 0.53     | 48.02    | 5.52     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 101         | 8.27       | 33.45 | 29.98   | 54.28    | 4.18     | 0.42     | 50.11    | 2.85     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 149         | 8.13       | 33.91 | 37.30   | 54.21    | 3.57     | 0.38     | 50.65    | 2.89     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 956         | 3.86       | 34.40 | 48.83   | 42.98    |          |          |          | 2.80     |
| W0309B    | 9/30/03  | 2:57     | 32        | FM-09        | 43.22 | -125.17 | 1005        | 3.73       | 34.42 | 47.64   | 43.37    |          |          |          | 0.36     |
| W0309B    | 9/28/03  | 13:21    | 14        | CR-01        | 41.90 | -124.3  | 2           | 11.45      | 33.08 | 17.72   |          | 37.20    | 6.91     |          | 9.00     |
| W0309B    | 9/28/03  | 13:21    | 14        | CR-01        | 41.90 | -124.3  | 5           | 11.39      | 33.09 | 17.57   |          | 33.77    | 6.36     |          | 8.85     |
| W0309B    | 9/28/03  | 13:21    | 14        | CR-01        | 41.90 | -124.3  | 10          | 11.09      | 33.11 |         |          | 36.30    | 6.64     |          |          |
| W0309B    | 9/28/03  | 13:21    | 14        | CR-01        | 41.90 | -124.3  | 15          | 10.96      | 33.12 | 19.90   |          | 34.45    | 6.47     |          | 9.29     |
| W0309B    | 9/28/03  | 13:21    | 14        | CR-01        | 41.90 | -124.3  | 20          | 10.53      | 33.17 | 21.45   |          | 26.41    | 5.52     |          | 6.48     |
| W0309B    | 9/28/03  | 13:21    | 14        | CR-01        | 41.90 | -124.3  | 25          | 10.07      | 33.23 | 26.56   |          | 27.64    | 4.54     |          | 7.18     |
| W0309B    | 9/28/03  | 13:21    | 14        | CR-01        | 41.90 | -124.3  | 30          | 9.61       | 33.29 | 28.96   |          | 12.75    | 2.05     |          | 7.82     |
| W0309B    | 9/28/03  | 13:21    | 14        | CR-01        | 41.90 | -124.3  | 35          | 9.41       | 33.32 | 29.70   | 55.68    | 12.73    | 1.96     | 42.95    | 7.88     |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 2           | 12.15      | 32.81 | 14.32   | 53.15    | 12.87    | 2.55     | 40.28    | 6.25     |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 5           | 12.13      | 32.82 |         |          | 12.23    | 2.45     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 10          | 11.74      | 32.87 |         |          | 10.18    | 2.09     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 20          | 10.31      | 33.00 |         |          | 7.82     | 1.43     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 30          | 9.72       | 33.03 |         |          | 6.19     | 1.05     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 41          | 9.00       | 33.15 |         |          | 4.11     | 0.59     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 50          | 8.65       | 33.35 |         |          | 4.36     | 0.44     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 60          | 8.67       | 33.39 |         |          | 3.26     | 0.43     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 70          | 8.71       | 33.47 |         |          | 5.81     | 0.77     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 99          | 8.61       | 33.75 |         |          | 7.74     | 1.03     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 110         | 8.58       | 33.74 |         |          | 6.25     | 0.75     |          |          |
| W0309B    | 9/28/03  | 15:49    | 16        | CR-03        | 41.90 | -124.5  | 129         | 8.54       | 33.76 |         |          | 6.11     | 0.66     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 2           | 11.32      | 32.48 | 13.85   | 48.56    | 9.59     | 1.56     | 38.97    | 5.55     |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 10          | 11.80      | 32.99 |         |          | 20.58    | 3.48     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 14          | 11.58      | 33.03 |         |          | 20.02    | 3.53     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 20          | 10.30      | 33.03 |         |          | 8.73     | 1.55     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 30          | 9.09       | 33.03 |         |          | 4.22     | 0.54     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 40          | 8.42       | 33.16 |         |          | 3.88     | 0.44     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 50          | 8.38       | 33.23 |         |          | 4.23     | 0.44     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 70          | 8.15       | 33.45 |         |          | 3.55     | 0.42     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 101         | 8.23       | 33.65 |         |          | 4.12     | 0.52     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 149         | 7.87       | 33.92 |         |          | 3.69     | 0.42     |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 350         | 6.72       | 34.08 |         |          |          |          |          |          |
| W0309B    | 9/28/03  | 18:03    | 17        | CR-04        | 41.90 | -124.6  | 450         | 6.01       | 34.11 |         |          |          |          |          |          |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 2           | 11.24      | 32.80 | 15.09   | 59.11    | 16.80    | 2.33     | 42.31    | 6.55     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 10          | 10.48      | 33.02 | 19.23   | 59.17    | 23.41    | 3.65     | 35.76    | 3.84     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 20          | 10.39      | 33.17 | 21.32   | 57.62    | 16.44    | 3.75     | 41.18    | 4.39     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 30          | 9.96       | 33.25 | 24.60   | 57.55    | 16.80    | 3.19     | 40.75    | 4.34     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 40          | 9.12       | 33.33 | 26.46   | 53.15    | 6.81     | 1.08     | 46.34    | 2.42     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 50          | 8.96       | 33.47 | 28.96   | 56.37    | 5.91     | 0.87     | 50.46    | 2.81     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 70          | 8.46       | 33.56 | 29.87   | 47.32    | 6.45     | 0.68     | 40.87    | 1.76     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 100         | 8.08       | 33.77 | 31.90   | 44.85    | 3.89     | 0.37     | 40.96    | 1.43     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 151         | 8.01       | 33.95 | 34.56   | 52.09    | 3.75     | 0.42     | 48.34    | 0.97     |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 270         | 6.90       | 34.06 |         |          | 46.43    |          |          |          |
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 500         | 5.27       | 34.15 |         |          | 46.44    |          |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0309B    | 9/28/03  | 20:34    | 18        | CR-05        | 41.90 | -124.7  | 651         | 4.80       | 34.24 |         | 45.49    |          |          |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 1           | 13.74      | 32.49 | 11.24   | 60.03    | 8.64     | 1.03     | 51.39    | 7.18     |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 11          | 11.64      | 32.73 |         |          | 10.22    | 1.33     |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 20          | 11.08      | 32.78 |         |          | 9.35     | 1.29     |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 29          | 10.52      | 33.06 |         |          | 15.62    | 2.57     |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 40          | 9.98       | 33.21 |         |          | 15.54    | 2.52     |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 50          | 9.62       | 33.30 |         |          | 9.91     | 1.49     |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 70          | 9.04       | 33.43 |         |          | 6.16     | 0.77     |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 100         | 8.01       | 33.56 |         |          | 6.08     | 0.64     |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 150         | 7.74       | 33.92 |         |          | 3.95     | 0.43     |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 419         | 5.65       | 34.15 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 501         | 5.30       | 34.18 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 0:29     | 20        | CR-07        | 41.90 | -125.   | 780         | 4.28       | 34.32 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 2           | 16.99      | 32.18 | 8.30    | 70.28    | 9.64     | 1.09     | 60.65    | 7.12     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 10          | 16.14      | 32.22 | 7.07    | 54.39    | 7.58     | 0.93     | 46.81    | 5.77     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 20          | 13.30      | 32.55 | 11.21   | 58.15    | 9.05     | 0.94     | 49.11    | 6.85     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 30          | 12.63      | 32.57 | 12.49   | 61.65    | 8.10     | 0.89     | 53.55    | 6.34     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 40          | 11.59      | 32.50 | 11.96   | 58.90    | 5.47     | 0.64     | 53.42    | 5.93     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 50          | 10.35      | 32.41 | 15.41   | 54.77    | 5.74     | 0.63     | 49.02    | 8.31     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 70          | 8.93       | 32.59 | 21.71   | 53.78    | 5.44     | 0.41     | 48.34    | 9.08     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 100         | 8.63       | 33.16 | 25.86   | 58.56    | 3.82     | 0.43     | 54.74    | 3.84     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 149         | 7.70       | 33.67 | 31.09   | 52.74    | 3.47     | 0.25     | 49.27    | 2.22     |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 765         | 4.16       | 34.30 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 845         | 4.04       | 34.36 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 4:02     | 22        | CR-09        | 41.90 | -125.4  | 1005        | 3.61       | 34.44 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 2           | 16.92      | 32.16 | 7.36    | 61.48    | 11.00    | 1.28     | 50.48    | 5.93     |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 11          | 16.90      | 32.16 |         |          | 9.92     | 1.13     |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 21          | 16.89      | 32.16 |         |          | 8.11     | 0.89     |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 30          | 15.78      | 32.24 |         |          | 9.05     | 0.80     |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 40          | 14.53      | 32.30 |         |          | 6.67     | 0.60     |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 51          | 12.81      | 32.40 |         |          | 4.37     | 0.35     |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 70          | 10.49      | 32.47 |         |          | 2.10     | 0.21     |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 100         | 9.47       | 32.85 |         |          | 2.43     | 0.22     |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 150         | 8.11       | 33.58 |         |          | 2.85     |          |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 770         | 4.20       | 34.31 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 940         | 3.74       | 34.40 |         |          |          |          |          |          |
| W0309B    | 9/29/03  | 9:13     | 24        | CR-11        | 41.90 | -126.   | 1004        | 3.58       | 34.43 |         |          |          |          |          |          |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 3           | 15.25      | 32.46 | 15.15   | 107.54   | 70.31    | 9.34     | 37.24    | 5.44     |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 6           | 15.03      | 32.47 | 15.22   | 104.32   | 59.19    | 7.93     | 45.13    | 6.55     |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 10          | 14.96      | 32.47 | 11.99   | 98.87    | 59.66    | 8.20     | 39.21    | 2.73     |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 15          | 14.56      | 32.49 | 12.23   | 80.56    | 36.19    | 4.67     | 44.38    | 4.09     |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 21          | 11.79      | 32.75 | 14.82   | 76.88    | 17.38    | 2.66     | 59.50    | 2.30     |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 25          | 10.12      | 32.92 | 23.36   | 70.39    | 11.25    | 1.78     | 59.14    | 2.79     |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 30          | 8.80       | 33.09 |         |          | 60.35    | 8.82     | 1.29     | 51.53    |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 41          | 8.13       | 33.30 | 31.32   | 53.81    | 9.09     | 1.12     | 44.72    | 0.97     |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 51          | 7.86       | 33.55 |         |          | 54.47    | 13.46    | 1.53     | 41.01    |
| W0409     | 8/30/04  | 23:21    | 3         | NH-05        | 44.65 | -124.18 | 52          | 7.86       | 33.55 |         |          | 55.65    | 18.88    | 1.91     | 36.77    |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 3           | 16.15      | 32.38 | 9.14    | 92.17    | 30.51    | 3.93     | 61.66    | 5.18     |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 5           | 16.12      | 32.38 | 9.21    | 89.59    | 31.22    | 4.08     | 58.37    | 5.09     |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 10          | 16.08      | 32.39 | 9.27    | 95.97    | 35.84    | 4.43     | 60.13    | 4.78     |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 12          | 16.05      | 32.39 | 14.49   | 92.40    | 33.56    | 4.47     | 58.84    | 8.28     |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 20          | 10.85      | 32.96 | 17.50   | 74.00    | 22.54    | 3.75     | 51.47    | 2.50     |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 30          | 8.91       | 33.21 | 28.63   | 53.57    | 10.93    | 1.60     | 42.65    | 0.94     |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 39          | 7.92       | 33.29 | 28.66   | 44.68    | 5.63     | 0.81     | 39.05    | 0.52     |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 50          | 7.95       | 33.55 |         | 48.07    | 4.98     | 0.69     | 43.09    |          |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 60          | 7.87       | 33.73 |         | 50.44    | 8.03     | 0.98     | 42.42    |          |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 69          | 7.84       | 33.78 |         | 56.69    | 8.45     | 1.06     | 48.24    |          |
| W0409     | 8/31/04  | 1:49     | 5         | NH-15        | 44.65 | -124.41 | 86          | 7.83       | 33.79 |         | 55.74    | 9.47     | 1.08     | 46.27    |          |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 2           | 15.46      | 32.16 | 10.20   | 98.51    | 48.29    | 5.99     | 50.23    | 3.85     |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 11          | 12.25      | 32.29 | 14.22   | 94.54    | 52.43    | 7.29     | 42.11    | 5.41     |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 20          | 9.42       | 32.60 | 18.03   | 59.79    | 9.27     | 1.27     | 50.52    | 1.89     |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 30          | 8.54       | 32.76 | 20.65   | 58.28    | 6.01     | 0.86     | 52.27    | 3.07     |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 39          | 8.91       | 32.95 | 22.36   |          | 7.07     | 1.03     | -7.07    | 2.85     |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 50          | 8.97       | 33.21 | 25.60   | 52.86    | 7.04     | 1.02     | 45.81    | 1.35     |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 70          | 8.05       | 33.27 | 27.31   | 47.97    | 3.69     | 0.66     | 44.28    | 0.87     |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 100         | 7.83       | 33.67 |         | 44.38    | 3.42     | 0.56     | 40.96    |          |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 149         | 7.89       | 33.88 |         | 51.27    | 3.75     | 0.49     | 47.52    |          |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 171         | 7.83       | 33.91 | 33.63   | 49.30    |          |          |          |          |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 200         | 7.61       | 33.92 | 32.99   | 48.19    |          |          |          |          |
| W0409     | 8/31/04  | 4:12     | 7         | NH-25        | 44.65 | -124.65 | 284         | 7.01       | 34.01 |         |          |          |          |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 4           | 16.59      | 31.46 | 7.56    | 77.92    | 12.46    | 1.89     | 65.46    | 5.32     |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 10          | 16.21      | 31.63 |         |          | 12.89    | 2.14     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 20          | 11.82      | 32.28 |         |          | 11.60    | 1.80     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 25          | 9.71       | 32.49 |         |          | 8.44     | 1.55     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 30          | 9.46       | 32.53 |         |          | 8.35     | 1.47     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 41          | 9.05       | 32.75 |         |          | 4.80     | 0.85     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 50          | 8.75       | 32.83 |         |          | 6.33     | 0.94     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 70          | 8.08       | 33.08 |         |          | 4.65     | 0.59     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 100         | 7.91       | 33.75 |         |          | 3.72     | 0.60     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 150         | 7.72       | 33.92 |         |          | 5.34     | 0.68     |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 220         | 7.39       | 33.98 |         |          |          |          |          |          |
| W0409     | 8/31/04  | 13:06    | 8         | NH-35        | 44.65 | -124.88 | 429         | 5.75       | 34.06 |         |          |          |          |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 3           | 17.98      | 31.38 | 7.98    | 78.92    | 16.02    | 2.32     | 62.90    | 5.49     |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 9           | 17.96      | 31.39 |         |          | 10.90    | 1.67     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 20          | 12.77      | 32.24 |         |          | 11.93    | 2.12     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 26          | 11.50      | 32.33 |         |          | 10.69    | 1.96     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 30          | 10.15      | 32.40 |         |          | 7.69     | 1.32     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 40          | 9.06       | 32.52 |         |          | 4.55     | 0.79     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 50          | 8.81       | 32.70 |         |          | 3.66     | 0.50     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 70          | 8.42       | 33.00 |         |          | 2.63     | 0.35     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 100         | 8.08       | 33.43 |         |          |          | 0.28     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 150         | 7.86       | 33.86 |         |          |          | 0.27     |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 500         | 5.39       | 34.11 |         |          |          |          |          |          |
| W0409     | 8/31/04  | 16:30    | 11        | NH-45        | 44.65 | -125.12 | 685         | 4.34       | 34.28 |         |          |          |          |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 4           | 18.31      | 31.99 | 8.03    | 73.05    | 11.96    | 1.71     | 61.10    | 6.32     |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 10          | 18.20      | 31.99 |         |          | 12.70    | 1.67     |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 21          | 12.60      | 32.23 |         |          | 11.14    | 1.62     |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 30          | 9.99       | 32.35 |         |          | 14.56    | 2.22     |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 40          | 9.35       | 32.42 |         |          | 6.32     | 0.94     |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 50          | 8.92       | 32.51 |         |          | 3.30     | 0.47     |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 70          | 8.47       | 32.86 |         |          |          | 0.32     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W  | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|---------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 100         | 8.25       | 33.46 |         |          | 2.76     | 0.41     |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 150         | 7.86       | 33.85 |         |          | 2.67     | 0.36     |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 814         | 4.14       | 34.33 |         |          |          |          |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 980         | 3.63       | 34.41 |         |          |          |          |          |          |
| W0409     | 8/31/04  | 21:45    | 13        | NH-65        | 44.65 | -125.6  | 1004        | 3.59       | 34.42 |         |          |          |          |          |          |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 3           | 19.32      | 31.79 | 7.56    | 73.71    | 10.76    | 1.34     | 62.94    | 6.22     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 10          | 19.26      | 31.80 | 6.60    | 72.68    | 8.52     | 1.17     | 64.16    | 5.41     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 20          | 16.17      | 32.14 | 7.52    | 66.17    | 9.25     | 1.28     | 56.92    | 6.13     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 30          | 11.78      | 32.34 | 6.44    | 68.68    | 8.90     | 1.23     | 59.78    | 5.11     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 41          | 10.87      | 32.40 | 8.69    | 70.32    | 12.99    | 1.79     | 57.33    | 6.22     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 50          | 9.65       | 32.43 | 13.37   | 58.61    | 4.98     | 0.81     | 53.62    | 6.20     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 70          | 8.83       | 32.66 | 6.77    | 69.09    | 9.08     | 1.26     | 60.00    | 5.20     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 100         | 8.19       | 33.17 | 27.27   | 52.00    | 2.51     | 0.29     | 49.49    | 1.98     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 150         | 7.79       | 33.69 | 32.55   | 42.58    | 2.51     | 0.28     | 40.07    | 3.01     |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 289         | 6.52       | 34.00 | 39.40   | 40.90    |          |          |          |          |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 800         | 4.06       | 34.32 | 45.00   | 37.39    |          |          |          |          |
| W0409     | 9/1/04   | 1:11     | 14        | NH-85        | 44.65 | -126.05 | 1006        | 3.62       | 34.40 | 45.10   | 36.31    |          |          |          |          |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 3           | 10.47      | 33.04 | 25.82   | 54.94    | 10.65    | 1.83     | 44.29    | 1.48     |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 5           | 10.28      | 33.16 | 26.52   | 61.25    | 12.93    | 2.14     | 48.32    | 0.08     |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 10          | 10.19      | 33.17 | 27.18   | 56.71    | 13.26    | 2.14     | 43.45    | 0.76     |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 11          | 10.18      | 33.17 | 29.69   | 63.23    | 13.57    | 2.31     | 49.66    | 3.07     |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 15          | 10.08      | 33.16 | 26.73   | 61.51    | 12.96    | 2.07     | 48.55    | 0.13     |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 20          | 9.32       | 33.21 | 26.98   | 59.23    | 9.72     | 1.64     | 49.51    | 0.12     |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 25          | 8.60       | 33.27 | 28.64   | 55.94    | 5.75     | 0.99     | 50.19    | 1.45     |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 30          | 8.34       | 33.32 | 28.63   | 52.72    | 4.74     | 0.66     | 47.98    | 2.25     |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 40          | 8.20       | 33.51 |         | 52.22    | 8.01     | 1.09     | 44.21    |          |
| W0409     | 9/1/04   | 14:03    | 16        | HH-01        | 44.00 | -124.2  | 49          | 8.20       | 33.51 |         | 52.61    | 8.78     | 1.26     | 43.82    |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 2           | 15.90      | 32.38 | 11.97   | 85.43    | 37.23    | 5.46     | 48.20    | 6.48     |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 5           | 15.84      | 32.38 |         |          | 31.69    | 4.78     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 10          | 13.99      | 32.41 |         |          | 19.19    | 3.39     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 13          | 12.23      | 32.56 |         |          | 14.35    | 2.60     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 20          | 9.42       | 32.65 |         |          | 6.69     | 1.01     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 30          | 8.57       | 33.02 |         |          | 3.90     | 0.57     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 40          | 8.09       | 33.24 |         |          | 4.33     | 0.57     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 50          | 8.09       | 33.39 |         |          | 3.77     | 0.59     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 60          | 8.10       | 33.59 |         |          | 4.66     | 0.70     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 70          | 8.01       | 33.68 |         |          | 6.18     | 0.62     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 100         | 8.12       | 33.84 |         |          | 9.14     | 1.04     |          |          |
| W0409     | 9/1/04   | 16:04    | 18        | HH-02        | 44.00 | -124.4  | 105         | 8.12       | 33.84 |         |          | 9.08     | 1.07     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 3           | 13.43      | 31.75 | 8.34    | 78.19    | 15.53    | 2.39     | 62.66    | 5.94     |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 10          | 10.84      | 32.57 |         |          | 11.52    | 2.20     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 20          | 9.81       | 33.00 |         |          | 11.44    | 1.91     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 25          | 9.48       | 33.02 |         |          | 8.52     | 1.48     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 30          | 9.05       | 33.04 |         |          | 7.58     | 1.35     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 40          | 8.69       | 33.15 |         |          | 5.35     | 0.82     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 50          | 8.49       | 33.19 |         |          | 3.57     | 0.53     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 60          | 8.35       | 33.28 |         |          | 3.61     | 0.42     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 70          | 8.09       | 33.79 |         |          | 3.62     | 0.36     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 100         | 8.05       | 33.81 |         |          | 3.69     | 0.46     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 130         | 8.02       | 33.80 |         |          | 5.71     | 0.71     |          |          |
| W0409     | 9/1/04   | 18:32    | 20        | HH-03        | 44.00 | -124.6  | 144         | 8.02       | 33.84 |         |          | 8.30     | 0.91     |          |          |

| Cruise ID | GMT Date | GMT Time | Station # | Station Name | Lat N | Long W | Press. (db) | Temp. (°C) | Sal   | TN [µM] | TOC [µM] | POC [µM] | PON [µM] | DOC [µM] | DON [µM] |
|-----------|----------|----------|-----------|--------------|-------|--------|-------------|------------|-------|---------|----------|----------|----------|----------|----------|
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 3           | 17.08      | 32.12 | 7.19    | 74.95    | 11.97    | 1.69     | 62.98    | 5.32     |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 5           | 16.80      | 32.14 | 6.66    | 75.93    | 10.68    | 1.85     | 65.26    | 4.73     |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 10          | 14.42      | 32.18 | 8.03    | 72.98    | 11.33    | 1.81     | 61.65    | 5.83     |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 15          | 10.78      | 32.35 | 11.75   | 67.07    | 9.56     | 1.62     | 57.51    | 6.32     |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 20          | 9.65       | 32.45 | 13.00   | 61.46    | 4.86     | 0.90     | 56.59    | 4.07     |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 30          | 9.35       | 32.54 | 15.12   | 59.86    | 5.75     | 0.90     | 54.11    | 2.15     |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 40          | 8.95       | 32.73 | 18.32   | 65.35    | 2.92     | 0.45     | 62.43    | 2.07     |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 50          | 8.64       | 32.94 | 21.53   | 53.07    |          | 0.34     | 0.99     |          |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 60          | 8.43       | 33.16 | 23.46   | 52.50    |          | 0.27     | 0.39     |          |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 70          | 8.30       | 33.28 | 26.52   | 50.23    |          | 0.24     |          | 1.73     |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 95          | 8.05       | 33.71 |         | 56.11    |          | 0.24     |          |          |
| W0409     | 9/1/04   | 20:15    | 21        | HH-04        | 44.00 | -124.8 | 107         | 7.91       | 33.82 | 32.59   | 43.80    | 2.48     | 0.34     | 41.33    | 2.36     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 3           | 18.64      | 31.93 | 6.58    | 73.31    | 8.56     | 1.28     | 64.75    | 5.19     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 10          | 18.54      | 31.93 | 5.88    | 80.67    | 9.04     | 1.24     | 71.63    | 4.49     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 20          | 17.28      | 31.95 | 9.64    | 74.59    | 8.43     | 1.31     | 66.16    | 8.18     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 30          | 10.63      | 32.31 | 7.29    | 69.33    | 7.20     | 1.18     | 62.12    | 6.04     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 35          | 10.20      | 32.35 | 8.53    | 71.26    | 6.94     | 0.98     | 64.32    | 5.69     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 40          | 9.95       | 32.40 | 9.02    | 51.54    | 4.22     | 0.66     | 47.32    | 4.45     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 50          | 9.57       | 32.45 |         | 55.14    | 3.38     | 0.50     | 51.76    |          |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 71          | 8.48       | 32.98 | 22.15   | 51.76    |          | 0.28     |          | 4.60     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 100         | 8.11       | 33.41 | 26.96   | 48.57    |          | 0.19     |          | 1.91     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 151         | 7.65       | 33.83 | 31.23   | 43.64    |          | 0.22     |          | 0.97     |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 498         | 5.38       | 34.06 | 41.27   | 44.95    |          |          |          |          |
| W0409     | 9/1/04   | 22:06    | 22        | HH-05        | 44.00 | -125.  | 927         | 4.07       | 34.35 | 43.39   | 36.39    |          |          |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 3           | 18.90      | 31.87 | 7.63    | 79.73    | 9.39     | 1.26     | 70.34    | 6.36     |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 10          | 18.88      | 31.87 |         |          | 8.54     | 1.19     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 20          | 18.71      | 31.96 |         |          | 7.31     | 1.02     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 30          | 13.99      | 32.21 |         |          | 7.83     | 1.24     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 40          | 11.78      | 32.28 |         |          | 7.20     | 1.02     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 45          | 10.47      | 32.31 |         |          | 12.28    | 1.76     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 50          | 10.08      | 32.34 |         |          | 13.58    | 2.21     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 70          | 8.74       | 32.62 |         |          | 2.95     | 0.48     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 100         | 7.97       | 33.37 |         |          | 2.75     | 0.44     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 150         | 7.58       | 33.72 |         |          |          | 0.22     |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 360         | 6.09       | 34.07 |         |          |          |          |          |          |
| W0409     | 9/1/04   | 0:16     | 23        | HH-07        | 44.00 | -125.2 | 1005        | 3.65       | 34.42 |         |          |          |          |          |          |