| Station Information |       |                  |           |            |                               |                                   |                                    |
|---------------------|-------|------------------|-----------|------------|-------------------------------|-----------------------------------|------------------------------------|
| ID*                 | Туре* | Location         | Latitude* | Longitude* | Coordinate<br>System<br>Units | Coordinate<br>Reference<br>System | Coordinate<br>Collection<br>Method |
| IF1                 | Ocean | Hudson<br>Strait | 60.9729   | -64.7737   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| IF3                 | Ocean | Hudson<br>Strait | 61.15     | -64.8197   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 16                  | Ocean | Hudson<br>Bay    | 62.2796   | -85.906    | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 18                  | Ocean | Hudson<br>Bay    | 63.7138   | -88.417    | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 21                  | Ocean | Hudson<br>Bay    | 60.9113   | -89.3586   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 24                  | Ocean | Hudson<br>Bay    | 61.6966   | -87.7641   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 25                  | Ocean | Hudson<br>Bay    | 62.0219   | -87.0088   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 33                  | Ocean | Hudson<br>Bay    | 56.600883 | -87.065833 | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 34                  | Ocean | Hudson<br>Bay    | 56.5062   | -86.8942   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 36                  | Ocean | Hudson<br>Bay    | 57.774    | -86.0311   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 38                  | Ocean | Hudson<br>Bay    | 58.7224   | -86.3045   | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |
| 40                  | Ocean | Hudson<br>Bay    | 58.23267  | -88.56332  | decimal<br>degrees            | Unknown                           | GPS -<br>Unspecified               |

## SAMPLE VARIABLE DETAILS

| Variable Name*            | Variable Description                                  | Variable<br>Speciation | Variable<br>Sample<br>Fraction* | Variable Media<br>Type | Activity Collection<br>Type | Result Value<br>Type |
|---------------------------|---|------------------------|---------------------------------|------------------------|-----------------------------|----------------------|
| Year                      |   | None                   | None                            | Other                  | n/a                         | Actual               |
| Month                     |   | None                   | None                            | Other                  | n/a                         | Actual               |
| Day                       |   | None                   | None                            | Other                  | n/a                         | Actual               |
| Station                   | ID  | None                   | None                            | Other                  | n/a                         | Actual               |
| Lat                       | Latitude in Decimal<br>Degrees                        | None                   | None                            | Other                  | Satellite                   | Actual               |
| Long                      | Longitude in Decimal<br>Degrees                       | None                   | None                            | Other                  | Satellite                   | Actual               |
| Sample_Type               | Bottom ice, Melosira<br>arctica                       | None                   | None                            | Other                  | Field Observation           | Actual               |
| Bottom_Core_heig<br>ht_cm | Height of the<br>collected ice core<br>bottom section | None                   | None                            | Ice Core               | Field Observation           | Actual               |
| Sampling_device           | Core barrel   | None                   | None                            | Other                  | Field Observation           | Actual               |
| Numbers_of_cores          | Number of bottom core sections that                   | None                   | None                            | Ice Core               | Lab Measurement             | Calculated           |

|                       | were pooled in this sample         |      |          |            |                 |            |
|-----------------------|------------------------------------|------|----------|------------|-----------------|------------|
| Filtered<br>Volume_mL | Filtered Volume                    | None | Filtrate | Ice Core   | Lab Measurement | Calculated |
| Chl_a_mg_m-2          | Chlorophyll a concentration - Area | None | Filtrate | Biological | Lab Measurement | Calculated |

| Phaeopigments_mg _m-2           | Phaeopigment<br>concentration - Area    | None | Filtrate | Biological | Lab Measurement | Calculated |
|---------------------------------|---|------|----------|------------|-----------------|------------|
| Chl_a_microgram_L<br>-1         | Chlorophyll a<br>concentration - Volume | None | Filtrate | Biological | Lab Measurement | Calculated |
| Phaeopigments_mic<br>rogram_L-1 | Phaeopigment<br>concentration - Volume  | None | Filtrate | Biological | Lab Measurement | Calculated |
|                                 | Data qualifier                          | None | None     | Other      | n/a             | Actual     |
| QF                              |   |      |          |            |                 |            |

## DATA FILE DETAILS

| Column Name*                | Unit   | Description  | Statistic |
|-----------------------------|--------|--|-----------|
|                             |        |  | Applied   |
| Sample_Type                 | none   | Bottom ice, Melosira arctica                                   |           |
| Bottom_Core_height_cm       | cm     | Height of the collected ice core bottom section                |           |
| Sampling_device             | none   | Core barrel  |           |
| Numbers_of_cores            | none   | Number of bottom core sections that were pooled in this sample |           |
| Filtered Volume_mL          | mL     | Filtered Volume  |           |
| Chl_a_mg_m-2                | mg m-2 | Chlorophyll a concentration - Area                             |           |
| Phaeopigments_mg_m-2        | mg m-2 | Phaeopigment concentration - Area                              |           |
| Chl_a_microgram_L-1         | □g L-1 | Chlorophyll a concentration - Volume                           |           |
| Phaeopigments_microgram_L-1 | □g L-1 | Phaeopigment concentration -<br>Volume                         |           |

| CanWIN Short Code | Definition                                   | User Code              |
|-------------------|--|------------------------|
| ADL               | Above Detection Limit                        |                        |
| BDL               | Below Detection Limit                        |                        |
| \$                | Incorrect sample container                   |                        |
| EFAI              | Equipment failure, sample lost               |                        |
| FEF               | Field equipment failed                       |                        |
| FEQ               | Field Equipment Questionable                 |                        |
| FFB               | Failed. Field blank not acceptable.          |                        |
| FFD               | Failed. Field Duplicate.                     |                        |
| FFS               | Failed. Field spike not acceptable.          |                        |
| Н                 | Holding time exceeded                        |                        |
| ISP               | Improper sample preservation                 |                        |
| ITNA              | Incubation time not attained                 |                        |
| ITNM              | Incubation temperature not maintained        |                        |
| JCW               | Sample container damaged, sample lost        |                        |
| NaN               | Value is missing and reason is not known     |                        |
| NC                | Not collected                                |                        |
| ND                | Not detected                                 |                        |
| NR                | Sample taken/measured on site but            |                        |
|                   | information in this field not recorded       |                        |
| NS                | Sample collected but not submitted           |                        |
| OC                | Master Coordinate List Used                  |                        |
| Р                 | Analysis requested and result pending        |                        |
| prob_good         | probably good value. Data value that is      |                        |
|                   | probably consistent with real phenomena      |                        |
|                   | forming part of a malfunction that is        |                        |
|                   | considered too small to affect the overall   |                        |
|                   | quality of the data object of which it is a  |                        |
|                   | part.  |                        |
| prob_bad          | probably bad value. Data value recognised    |                        |
|                   | as unusual during quality control that forms |                        |
|                   | part of a feature that is probably           |                        |
| Interpolated      | This value has been derived by               |                        |
| Interpolated      | interpolation from other values in the data  |                        |
|                   | object.                                      |                        |
| Q                 | Below limit of quantification (LOQ). The     |                        |
|                   | value was below the LOQ of the analytical    |                        |
|                   | method. The value in the result field is the |                        |
|                   | limit of quantification (limit of detection) |                        |
| TAT               | Tor me method.                               | Name and a state to CM |
| LAF               | trusted due to detected lab instrument       | New code added by LCM  |

Table 1. Code list

| failure (e.g. contamination) during sample |  |
|--|--|
| processing                                 |  |

| Tuble 2. Options for Stat |  |
|---------------------------|--|
| Statistics Applied        | Description  |
| 30DADMean                 | Thirty-day average daily mean  |
| 7DADM                     | Seven-day average daily maximum  |
| 7DADMean                  | Seven-day average daily mean   |
| 7DADMin                   | Seven-day average daily minimum  |
| Coefficient of variation  | The ratio of the standard deviation $\sigma$ to the mean, $\mu$ .  |
| Daily Geometric Mean      | Provides a number that is more representative of the median and helps reduce the effect of a few extreme values.                   |
| Daily Maximum             | The largest value of a set, each period of a day cycle   |
| Daily Minimum             | The smallest value of a set, each period of a day cycle  |
| Hourly Maximum            | The largest value of a set, each period of an hour cycle   |
| Hourly Minimum            | The smallest value of a set, each period of an hour cycle  |
| MatLab script             | Provide the MatLab script or the link to it  |
| Mean                      | The sum of all the numbers in the set divided by the amount of numbers in the set  |
| Median                    | The middle point of a number set, in which half the numbers are above the median and half are below.                               |
| None                      | None   |
| R script                  | Provide the R script or the link to it   |
| Standard Deviation        | This describes the spread of values in the sample  |
| Standard Error            | The standard deviation of the sample mean, $\bar{x}$ , which describes its accuracy as an estimate of the population mean, $\mu$ . |

## Table 2. Options for Statistics Applied