## REVISION NOTICE TABLE

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| DATE | DESCRIPTION OF REVISION |
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## PROCESSING NOTES

Cruise: 1978-63

Agency: Institute of Ocean Sciences, Sidney, BC

Project: Kitimat Hydrocarbon Baseline Study

Location: Douglas Channel

Platform: Sea Lion

Date: 20 October 1978 – 25 October 1978

Processed by: Germaine Gatien

Date of Processing: 18 July 2017- 19 July 2017

Number of BOT files: 28

These data are from the second of 3 cruises that formed part of the project: 1978-62, 1978-63 and 1979-75.

These data were transcribed in 2017 by Danielle Caleb from a report by Paul Erickson of Seakem Oceanography Ltd. (Erickson, 1979, Kitimat Hydrocarbon Baseline Study: Oceanographic Observations ) Erickson ran 3 cruises under contract to the Institute of Ocean Sciences. The report can be found in the documents folder. It includes the data and a report on the methods, precision and accuracy of analytical methods.

The report says that there were CTD casts throughout the first cruise and at some sites during the third cruise, but those data had not been found as of July 2017.

The data in spreadsheet “data rescue-macdonald-erikson.xls” were separated into 3 separate spreadsheets for the 3 cruises that were part of this project. The data for this cruise were not reported in date order in the report, but rather were grouped into different types of stations. So the data were reordered, and event numbers added.

A few transcription errors were found in the course of editing including an error in position for one cast and a salinity entry for another cast. There are remarkably few such errors. A few other outliers were identified and turned out to be transcribed correctly from the report but are likely due to misplaced decimal points in the report.

The format for positions was changed and the file was saved as 1978-63-bottles.csv. (This took many iterations to get all formats correct.)

That file was then converted to IOS SHELL format files. The DATE and TIME were converted as channels rather than directly to header entries.

CLEAN was run to add event numbers and to create START and END times in the headers based on the Date and Time channels.

The times are believed to be local, 8 hours behind UTC. ADD TIME CHANNEL was used to add 7 hours to start times.

REMOVE was run to remove the Date and Time channels.

Profile plots look reasonable except for an extreme outlier in silicate at station 11. No other variable shows such outliers and the June 1978 and February 1979 data from the same site show no such low values in silicate at 100m, though a 10m value looks somewhat low. Both those entries look like typos, with the decimal point misplaced. However, at 10m there is a lot of variability, so that one is not so clear. The 100m value of 4.6 was replaced with 46 and a note about why was entered in the header. The profile looks very good with the value of 46.

The only climatology available for the area is based on offshore values, so it is no surprise that the salinity is often lower than the minimum of the range, but most temperature values are within the climatology.

T-S plots turned up one transcription error in salinity. When that was fixed the plots had no unstable features.

Track plots were produced with event numbers and station numbers. One error in position was found in the original spreadsheet – it was corrected there and in the reformatted spreadsheet; the processing steps were rerun. After that correction all positions look to be correct and the plots were added to the end of this report.

Head Edit was run to add a comment, fix formats and channel names and to remove the END TIME which is the same as the START TIME.

