C. Vertical and Horizontal Control

Per Section 5.1.2.3 of the 2014 Field Procedures Manual, no Horizontal and Vertical Control Report has been generated for H12993.

C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

Traditional Methods Used:

TCARI

File Name	Status
9444900.tid	Final Approved
9447130.tid	Final Approved

Table 12: Water Level Files (.tid)

File Name	Status
H12993_H12994.tc	Final

Table 13: Tide Correctors (.zdf or .tc)

A request for final approved tides was sent to N/OPS1 on 10/12/2018. The final tide note was received on 11/01/2018.

ERS Methods Used:

ERS via VDATUM

Ellipsoid to Chart Datum Separation File:

VDatumShape_xyNAD83-MLLW_geoid12b

ERS methods were used as the final means of reducing H12993 to MLLW for submission following the successful application of SBETs. The final TCARI grid was used to reduce all features to MLLW.

C.2 Horizontal Control

The horizontal datum for this project is North American Datum 1983.

The projection used for this project is Projected UTM 10.

Vessel kinematic data were post-processed using Applanix POSPac processing software and RTX methods described in the DAPR. Smoothed Best Estimate of Trajectory (SBET) and associated error (RMS) data were applied to all MBES data in CARIS HIPS and SIPS.

Differential correctors from the US Coast Guard beacon at Whidbey Island (302kHz) were used in real-time for acquisition when not otherwise noted in the acquisition logs, and were the sole method of positioning of detached positions (DP) and bottom samples.