C. Vertical and Horizontal Control

A summary of the horizontal and vertical control for survey H13487 follows.

C.1 Vertical Control

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

ERS Datum Transformation

The following ellipsoid-to-chart vertical datum transformation was used:

Method	Ellipsoid to Chart Datum Separation File
ERS via VDATUM	OPR-J315-KR-21_100m_NAD83_2011-MLLW.csar

Table 13: ERS method and SEP file

C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD 83).

The projection used for this project is Universal Transverse Mercator (UTM) Zone 16.

The following PPK methods were used for horizontal control:

- Single Base

The separation model listed in Table 13 was provided with the Project Instructions and used for sounding correction within the assigned survey area. Real-time navigation for all MBES survey lines were overwritten with post-processed navigation solutions in SBET format. Post-processed solutions were generated using Applanix POSPac MMS using the single-base processing option and by incorporating base station data from nearby base stations, as listed in Table 14, operated by the Gulf Coast Geospatial Center (GCGC). Additional discussion on post-processing methods and survey control is included in the DAPR.

The following CORS Stations were used for horizontal control:

HVCR Site ID	Base Station ID
Gautier, MS	MSGA
Grand Bay NERR	MSGB

Table 14: CORS Base Stations