C. VERTICAL AND HORIZONTAL CONTROL *See also the H-Cell Report*

Tide and water level corrections were determined and applied in accordance with Attachment #7 of the Statement of Work. Tidal zoning as set forth in the Statement of Work was applied. Data from Port Fourchon, LA (8762075) was used as the primary source of tides, while Grand Isle, LA (8761724) was used as a back up. Because there were no outages at the primary station during the survey, the secondary station was not used for any tidal corrections. The following table shows the tidal zone and correctors that were used for this sheet. Tidal data were processed using the 1983-01 epoch.

Tide Zone	Reference Station	Primary/ Secondary	Time Corrector	Range Ratio
CGM366	8762075	PRIM	-12	1.05
CGM366	8761724	SEC	-48	1.23
CGM717	8762075	PRIM	-12	1.05
CGM717	8761724	SEC	-48	1.23
CGM718	8762075	PRIM	-12	1.05
CGM718	8761724	SEC	-42	1.23
CGM731	8762075	PRIM	-12	1.05
CGM731	8761724	SEC	-42	1.23
CGM732	8762075	PRIM	-6	1.09
CGM732	8761724	SEC	-42	1.27
CGM733	8762075	PRIM	-6	1.17
CGM733	8761724	SEC	-36	1.37
CGM734	8762075	PRIM	-6	1.09
CGM734	8761724	SEC	-36	1.27
CGM735	8762075	PRIM	-6	1.05
CGM735	8761724	SEC	-42	1.23
CGM749	8762075	PRIM	0	1.13
CGM749	8761724	SEC	-36	1.32
CGM750	8762075	PRIM	0	1.09
CGM750	8761724	SEC	-36	1.27
WGM416	8762075	PRIM	-6	1.21
WGM416	8761724	SEC	-36	1.42
CGM364	8762075	PRIM	-6	1.09
CGM364	8761724	SEC	-36	1.27

The horizontal datum for the survey is the North American Datum of 1983 (NAD 83). The projection is Universal Transverse Mercator (UTM) Zone 15 North. The vertical datum for the soundings is Mean Lower Low Water (MLLW). ***Concur.***

The tidal data applied to all single beam echosounder data was downloaded from the following website:

http://tidesandcurrents.noaa.gov/data_menu.shtml?stn=8768094%20Calcasieu%20Pass,%20LA&type=Historic%20Tide%20Data

ABSTRACT OF TIMES OF HYDROGRAPHY

Project: OPR-K354-KR-09
Contractor Name: C & C Technologies, Inc.
Inclusive Dates: July 10th,2009 - July 27th,2009
Registry No.: H12048 (Sheet A)
Date: Dec 2009
Sheet Letter: A
Field Work is Complete
Time (UTC)

Date	Julian Day	Start	End	Year
7/10/2009	191	1916	2400	2009
7/11/2009	192	0000	2400	2009
7/12/2009	193	0000	2400	2009
7/13/2009	194	0000	2400	2009
7/14/2009	195	0000	2400	2009
7/15/2009	196	0000	0720	2009
7/15/2009	196	2223	2400	2009
7/16/2009	197	0000	2400	2009
7/17/2009	198	0000	2400	2009
7/18/2009	199	0000	2400	2009
7/19/2009	200	0000	2400	2009
7/20/2009	201	0000	2400	2009
7/21/2009	202	0000	0950	2009
7/21/2009	202	1234	2400	2009
7/22/2009	203	0000	0513	2009
7/23/2009	204	0034	2400	2009
7/24/2009	205	0000	2400	2009
7/25/2009	206	0000	2400	2009
7/26/2009	207	0000	2400	2009
7/27/2009	208	0000	2256	2009