

The following table summarizes the days in which data were collected that contribute to the final accepted data set.

Table 1
Abstract of Times of Hydrography

Date	Day Number	Min. Time UTC	Max. Time UTC
8/18/2016	231	15:33:36	23:28:45
8/19/2016	232	01:28:32	13:37:52
8/22/2016	235	05:22:52	09:28:25
8/23/2016	236	06:54:14	23:53:54
8/24/2016	237	00:12:41	23:53:10
8/25/2016	238	00:22:23	23:54:36
8/26/2016	239	00:15:09	23:54:14
8/27/2016	240	00:21:05	23:54:10
8/28/2016	241	00:24:27	04:30:16
8/29/2016	242	21:34:42	23:54:09
8/30/2016	243	00:02:43	23:54:11
8/31/2016	244	00:16:59	17:51:21
9/08/2016	252	10:27:03	12:13:26
9/12/2016	256	22:57:38	23:49:58
9/13/2016	257	00:04:17	06:19:10
9/14/2016	258	18:07:37	23:54:11
9/15/2016	259	00:28:59	23:49:49
9/16/2016	260	00:15:41	23:54:08
9/17/2016	261	00:18:11	15:53:42
9/18/2016	262	00:30:47	23:51:48
9/19/2016	263	00:25:56	09:27:03
9/20/2016	264	16:44:46	23:55:00
9/21/2016	265	00:11:36	13:17:39
9/23/2016	267	17:32:18	19:14:21
9/25/2016	269	09:21:40	10:12:07
9/27/2016	271	23:35:23	23:41:11
9/28/2016	272	00:24:51	12:04:43
9/29/2016	273	17:51:53	22:30:00
9/30/2016	274	02:42:32	05:33:54

Water level data from NOS-NOAA tide station LAWMA, LA (876-4227) was used for vertical control. Predicted tide files were used during preliminary processing. Preliminary tides from the LAWMA, LA station were downloaded and reviewed for data gaps. Verified tides were downloaded and reviewed when available.

The project is located within zones indicated by preliminary tidal zoning included in the project Statement of Work (subsequently modified as described below).

According to the Tides Statement of Work (SOW), as regards the preliminary tidal zoning, “there is insufficient data with which to perform an accurate error estimation”. Accordingly, NOAA CO-OPS recommended deploying a bottom mounted pressure gauge (BMPG) or GPS buoy at the southwest extent of the survey area to gain a “better understanding of tidal propagation and error associated with tidal zoning”.

To this end OSI deployed a pair of BMPGs (primary and backup) near the southwest extent of the survey area. OSI’s tides subcontractor, JOA Surveys, processed the recorded BMPG data, performed an instrument “settling analysis”, and incorporated datum-corrected offshore tide data into an analysis of the CO-OPS provided preliminary zoning. JOA Surveys’ analysis indicated that the preliminary zoning did in fact require adjustment. JOA Surveys’ modification of the preliminary zoning retained the preliminary zone shapes but modified the range ratios and time correctors for each zone.

Time and range corrections were applied to LAWMA, LA (876-4227) verified data according to Table 2 which includes the modified time and range correctors.

Table 2
Modified Tide Zones Associated with Project OPR-K354-KR-16

Zone	Time Correction	Range Correction
WGM280	-108	0.85
WGM281	-102	0.85
WGM282	-90	0.91
WGM283	-84	0.97
WGM410	-72	1.04
WGM284	-60	1.10

The BMPG tide data, analysis, and report were transmitted to CO-OPS via e-mail and FTP link on November 9, 2016. The BMPG analysis and zoning modification report is included with the project deliverables, as well as with this document.

Based on the results of cross line analysis, it appears that the time and range factors as provided in the modified zoning scheme are adequate.