

H12555

NOAA Form 76-35A

U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
National Ocean Survey

**DESCRIPTIVE REPORT**

Type of Survey: Navigable Area

Registry Number: H12555

**LOCALITY**

State: Louisiana

General Locality: Louisiana Coast, LA

Sub-locality: 20 NM SW of Ship Shoal

**2015**

CHIEF OF PARTY  
Tara Levy

LIBRARY & ARCHIVES

Date:

**HYDROGRAPHIC TITLE SHEET**

**H12555**

**INSTRUCTIONS:** The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

State: **Louisiana**

General Locality: **Louisiana Coast, LA**

Sub-Locality: **20 NM SW of Ship Shoal**

Scale: **40000**

Dates of Survey: **03/02/2014 to 02/07/2015**

Instructions Dated: **04/16/2013**

Project Number: **OPR-K354-KR-13**

Field Unit: **C & C Technologies**

Chief of Party: **Tara Levy**

Soundings by: **Multibeam Echo Sounder**

Imagery by: **Side Scan Sonar Multibeam Echo Sounder**

Verification by: **Atlantic Hydrographic Branch**

Soundings Acquired in: **meters**

H-Cell Compilation Units: ***Meters at MLLW***

Remarks:

*The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via <http://www.ngdc.noaa.gov/>.*

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## Descriptive Report to Accompany Survey H12555

Project: OPR-K354-KR-13

Locality: Louisiana Coast, LA

Sublocality: 20 NM SW of Ship Shoal

Scale: 1:40000

March 2014 - February 2015

**C & C Technologies**

Chief of Party: Tara Levy

### A. Area Surveyed

The survey area is located 20 NM SW of Ship Shoal off the coast of Louisiana, USA.

#### A.1 Survey Limits

Data was acquired within the following survey limits:

Northeast Limit	Southwest Limit
28.911 -91.422	28.790 -91.528

*Table 1: Survey Limits*

Survey limits were designed as outlined in the Project Instructions and the HSSD.

#### A.2 Survey Purpose

Survey H12555 covers 35.68 square nautical miles (SNM) in a high commercial traffic area with a high concentration of platforms and pipelines in the Gulf of Mexico. The purpose of this survey is to provide a contemporary survey to update National Ocean Service (NOS) nautical charting products. A significant portion of the SNM for this project is considered critical survey area as designated in the NOAA Hydrographic Survey Priorities, 2012 edition and contains potentially unreliable depths from 1934 – 1936 surveys.

#### A.3 Survey Quality

The entire survey is adequate to supersede previous data.

## A.4 Survey Coverage

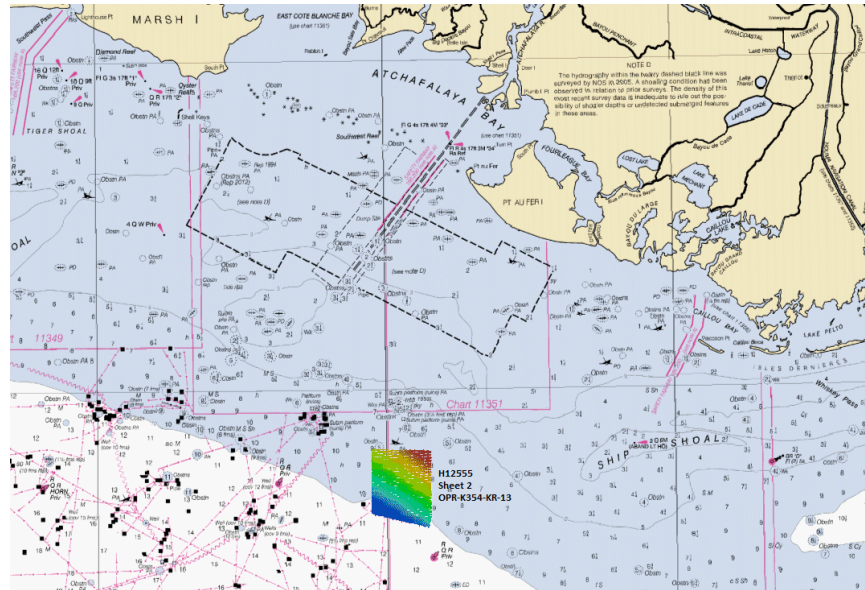


Figure 1: H12555 Survey Coverage

Survey coverage for H12555 (Figure 1) was in accordance with the requirements of the Project Instructions and HSSD. 200% SSS with concurrent MBES data was acquired in the survey area. The line plan was periodically modified in the field and the SSS line spacing updated as needed to accommodate changes in data quality and to expedite data collection.



## A.5 Survey Statistics

The following table lists the mainscheme and crossline acquisition mileage for this survey:

	<b>HULL ID</b>	<b><i>1237094</i></b>	<b><i>Total</i></b>
<b>LNM</b>	<b>SBES Mainscheme</b>	0	0
	<b>MBES Mainscheme</b>	0	0
	<b>Lidar Mainscheme</b>	0	0
	<b>SSS Mainscheme</b>	0	0
	<b>SBES/MBES Combo Mainscheme</b>	0	0
	<b>SBES/SSS Combo Mainscheme</b>	0	0
	<b>MBES/SSS Combo Mainscheme</b>	893.79	893.79
	<b>SBES/MBES Combo Crosslines</b>	79.70	79.70
	<b>Lidar Crosslines</b>	0	0
	<b>Number of Bottom Samples</b>		7
<b>Number of DPs</b>		0	
<b>Number of Items Items Investigated by Dive Ops</b>		0	
<b>Total Number of SNM</b>		35.68	

*Table 2: Hydrographic Survey Statistics*

The following table lists the specific dates of data acquisition for this survey:

<b><i>Survey Dates</i></b>
03/02/2014
03/03/2014
03/04/2014
03/07/2014
03/08/2014
03/09/2014
03/10/2014
03/11/2014
03/12/2014
03/14/2014
03/15/2014
03/16/2014
03/20/2014
03/21/2014
04/02/2014
04/03/2014
04/04/2014
04/10/2014
06/04/2014
06/05/2014
07/03/2014
07/07/2014
01/07/2015
02/01/2015
02/06/2015
02/07/2015

*Table 3: Dates of Hydrography*

## A.6 Shoreline

Shoreline does not exist for this survey.

## A.7 Bottom Samples

Seven (7) bottom samples were collected within the limits of H12555.

# B. Data Acquisition and Processing

## B.1 Equipment and Vessels

Refer to the OPR-K354-KR-13 Data Acquisition and Processing Report (DAPR) for additional information regarding survey systems as well as operational, processing and quality control procedures. Additional and supplemental information is included in this descriptive report.

### B.1.1 Vessels

The following vessels were used for data acquisition during this survey:

<b>Hull ID</b>	<i>1237094</i>
<b>LOA</b>	10.84 meters
<b>Draft</b>	1.98 meters

*Table 4: Vessels Used*

## B.1.2 Equipment

The following major systems were used for data acquisition during this survey:

<b>Manufacturer</b>	<b>Model</b>	<b>Type</b>
Kongsberg	EM2040C	MBES
Klein	5000 V2	SSS
Coda Octopus	F180	Attitude and Positioning System
C-Nav	3050	Positioning System
YSI Electronics	600F-BCR-C-T	Sound Speed System
Sea-Bird Electronics, Inc	SBE 19 and SBE 19 Plus	Sound Speed System

*Table 5: Major Systems Used*

## B.2 Quality Control

### B.2.1 Crosslines

Crosslines were run perpendicular to mainscheme lines so that quality control statistics could be performed on the data after completion of mainscheme survey lines. It was recognized post-survey operations that the crossline to mainline mileage had been underestimated due to changing the line spacing in the field to accommodate SSS data quality. The R/V Sea Scout acquired additional crossline data on January 7, 2015 to sufficiently meet the 8% requirement. The total crossline miles were 79.70 NM and the total mainline miles were 893.79 NM; investigation lines and fill-ins were not included in mainlines totals. The crosslines comprise 8.9 percent of the total main line miles.

Mainlines were compared to crosslines for which there was overlapping data using C & C's proprietary Hydromap software. The graphs generated from the comparison show the mean difference, RMS difference and confidence interval for each beam. Refer to the DAPR for additional information and Separates II Digital Data for sample graphical documentation.

The surface difference tool in CARIS HIPS was used to evaluate crossline and mainscheme line agreement; fill-ins and investigations were not included in the comparisons. The mainline BASE surface was used as Surface 1 and the crossline BASE surface as Surface 2. Statistical information about the difference surface was generated using the compute statistics tool (Figure 2). The analysis shows that 96% of depth difference values are between -0.251 and 0.249 m. This is well within the maximum allowable TVU for the depths of the comparison area (13.36 – 22.08 m) which ranges from  $\pm 0.530$  –  $\pm 0.582$  m.

Statistical crossline information was also generated by comparing each of the crosslines to the depth layer of the 1-m BASE surface of the mainscheme survey lines using the CARIS QC report utility. In general, greater

than 99% of crossline soundings were considered to meet IHO (S-44 Ed. 4) survey Order 1a standards, as stated in the CARIS User Manual. Crossline comparisons generated with the CARIS QC report utility as well as the difference BASE surface are shown in the Separates II Digital Data\Checkpoint Summary & Crossline Comparisons folder.

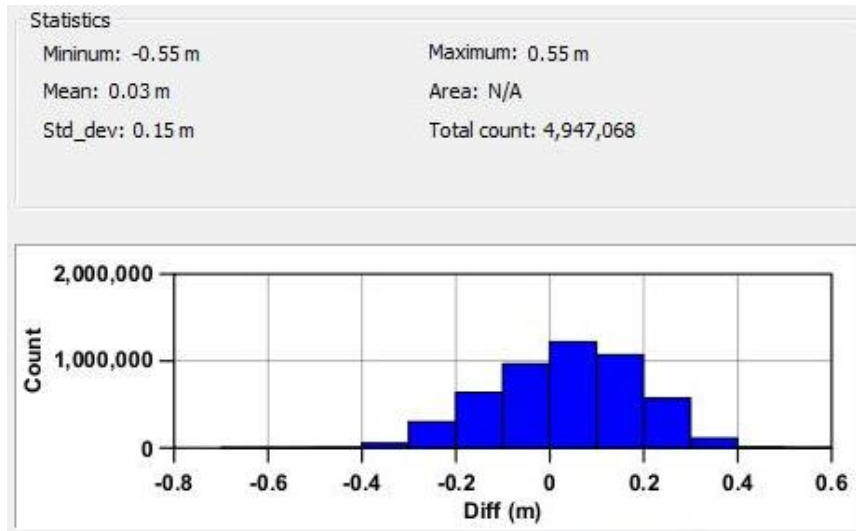


Figure 2: Crossline comparison statistical information and histogram output from CARIS compute statistics tool.

**B.2.2 Uncertainty**

The following survey specific parameters were used for this survey:

Measured	Zoning
0.009meters	0.102meters

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
1237094	2.00meters/second	N/A	0.8meters/second

Table 7: Survey Specific Sound Speed TPU Values

Uncertainty of all components of the sounding measurement are included in the CARIS vessel file and detailed in the DAPR.

### B.2.3 Junctions

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H12435	1:40000	2012	C & C Technologies	E
H12436	1:40000	2012	C & C Technologies	E
H12554	1:40000	2013	C & C Technologies	E
H12556	1:40000	2013	C & C Technologies	N
H12557	1:40000	2013	C & C Technologies	N
H12558	1:40000	2013	C & C Technologies	W

Table 8: Junctioning Surveys

#### H12435

The areas of overlap between Sheets (Figure 3) were evaluated using the CARIS Difference Tool to ensure general agreement of depths. If necessary, data was further reviewed in Subset Editor. Junction analyses were conducted between contemporary Sheets using 1 meter BASE surfaces and between 2012 data using 2 meter BASE surfaces. The eastern margin of H12555 borders the western margin of H12435. Figure 4 shows statistical information for the junction generated with the CARIS compute statistics tool. It is evident that the data from H12555 is generally slightly deeper than that of H12435 with 96% of depth difference values between -0.065 and 0.335 m.

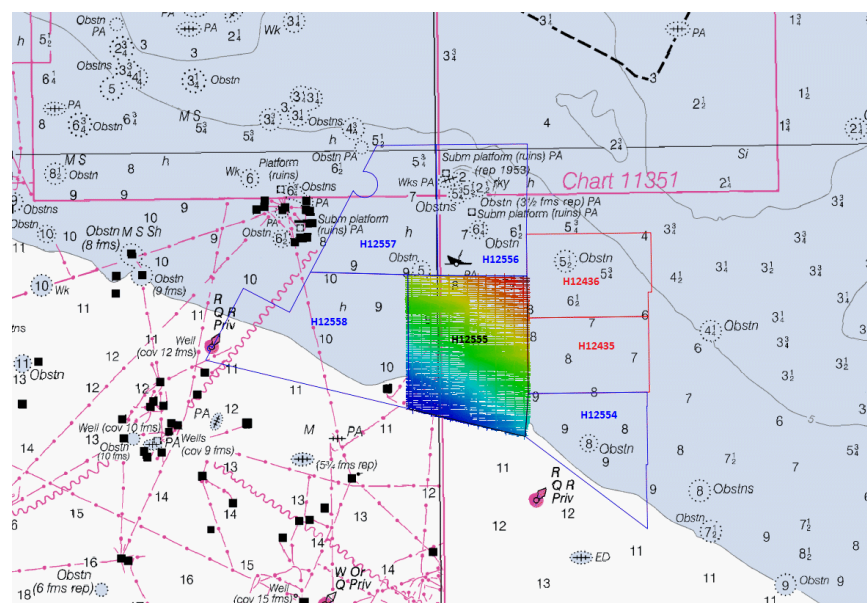


Figure 3: H12555 Junctions.

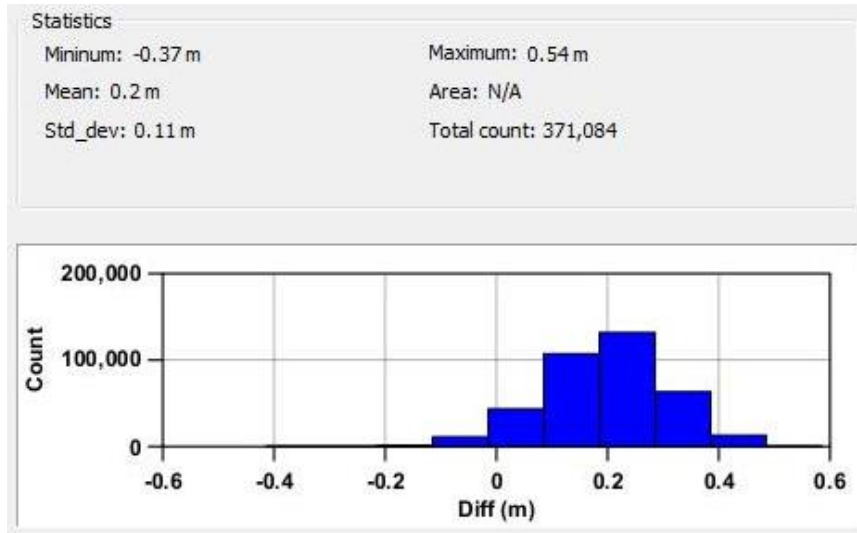
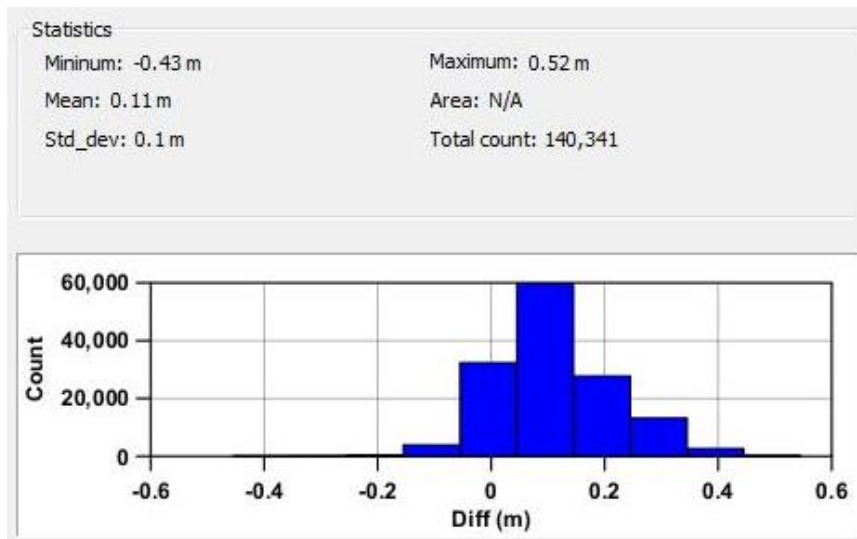


Figure 4: Statistical information and histogram output from CARIS Compute Statistics tool for the difference surface generated between H12555 and H12435.

H12436

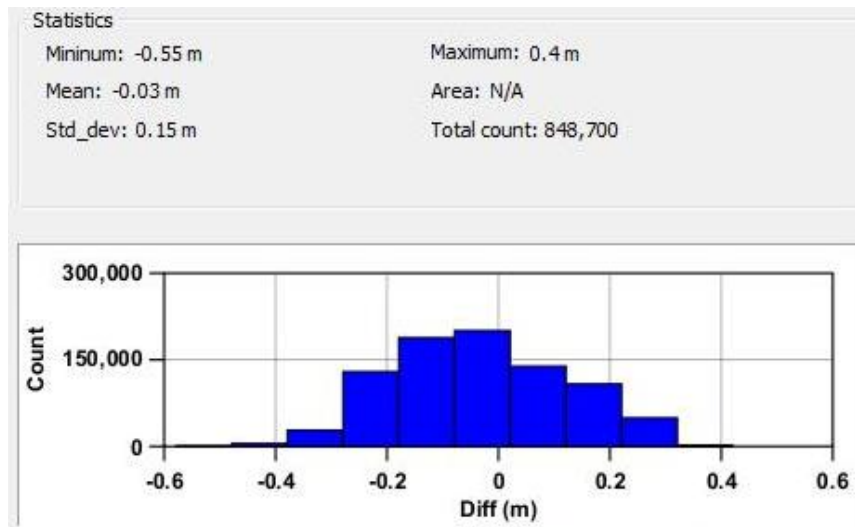
The upper eastern margin of H12555 borders the lower western margin of H12436. Figure 5 shows statistical information for the junction generated with the CARIS compute statistics tool. It is evident that the data from H12555 is generally slightly deeper than that of H12435 with 98% of depth difference values between -0.105 and 0.295 m.



*Figure 5: Statistical information and histogram output from CARIS Compute Statistics tool for the difference surface generated between H12555 and H12436.*

#### H12554

The southeast margin of H12555 borders the northwest margin of H12554. Figure 6 shows statistical information for the junction generated with the CARIS compute statistics tool. The differences values show that the depths agree well between the sheets with 96% of depth difference values between -0.229 and 0.271 m.



*Figure 6: Statistical information and histogram output from CARIS Compute Statistics tool for the difference surface generated between H12555 and H12554.*

#### H12556

There is minimal overlap where the northern margin of H12555 borders the southern margin of H12556. Figure 7 shows statistical information for the junction generated with the CARIS compute statistics tool. It is evident that data from H12556 is generally slightly deeper than data from H12555. Depth differences greater than 0.5 m are generally concentrated on the outer edges of overlap between mainlines of H12555 collected with the R/V Sea Scout and tielines of H12556 collected with the R/V C-Wolf. Overall the depth differences generally show decent agreement with 98% of depth difference values between -0.433 and 0.367 m.



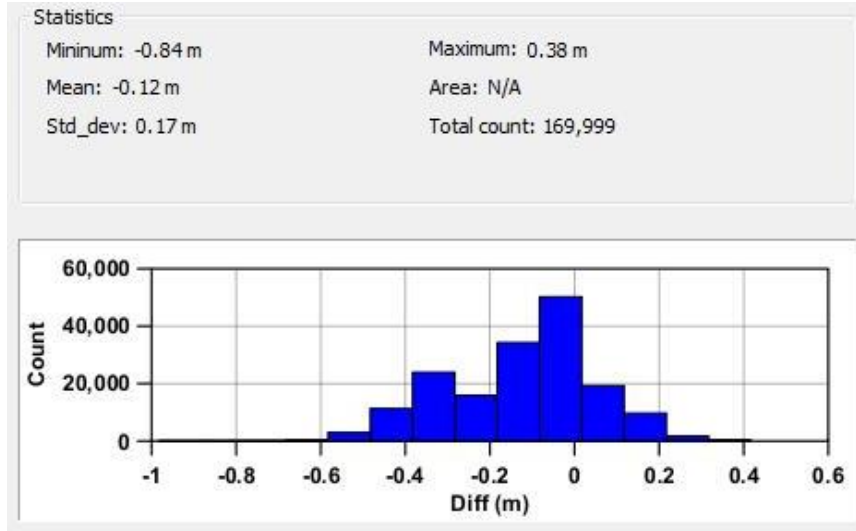


Figure 7: Statistical information and histogram output from CARIS Compute Statistics tool for the difference surface generated between H12555 and H12556.

H12557

A small portion of the northern margin of H12555 borders a small portion of the southern margin of H12557. Figure 8 shows statistical information for the junction generated with the CARIS compute statistics tool. In general, the data from H12557 is slightly deeper than the data from H12555. The depth differences show decent agreement with 99% of depth difference values between -0.313 and 0.087 m.

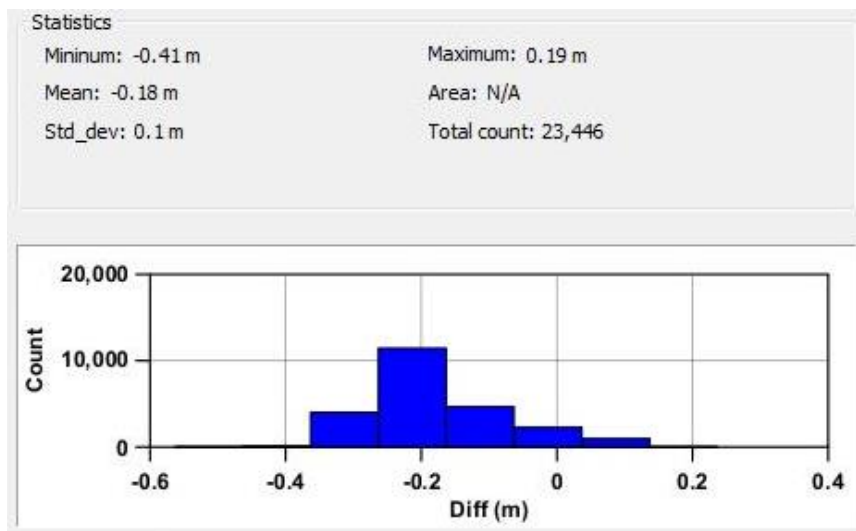
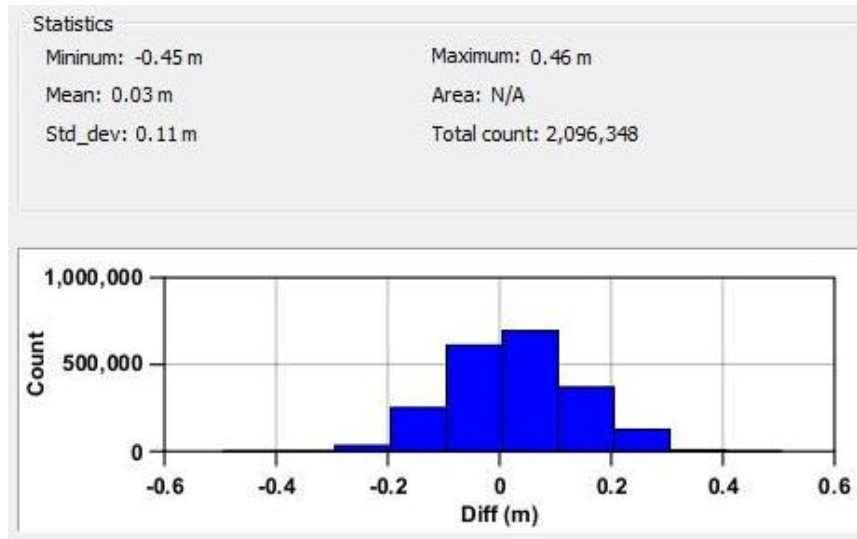


Figure 8: Statistical information and histogram output from CARIS Compute Statistics tool for the difference surface generated between H12555 and H12557.

H12558

The western margin of H12555 borders the eastern margin of H12558. Figure 9 shows statistical information for the junction generated with the CARIS compute statistics tool. The difference values show that the depths agree well between the sheets with 98% of depth difference values between -0.145 and 0.255 m.



*Figure 9: Statistical information and histogram output from CARIS Compute Statistics tool for the difference surface generated between H12555 and H12558.*

## B.2.4 Sonar QC Checks

An Odom Echotrac MK III single beam echosounder was continuously operated and monitored during the survey as an independent check on the multibeam bottom-detect.

## B.2.5 Equipment Effectiveness

### B.2.5.1 Equipment Effectiveness

If necessary, the angle of the multibeam sonars was modified in order to moderate the effects of factors such as increased sea state or to increase coverage; any changes are documented in the acquisition logs. In addition, the line plan was modified in the field as needed and the SSS line spacing updated to accommodate changes in data quality and expedite data collection.

## B.2.6 Factors Affecting Soundings

### B.2.6.1 Factors Affecting Soundings

Weather, sea state, water column sound speed, thermoclines, and fish/marine life were all temporary factors that affected the data periodically throughout the duration of the survey; these are noted in the acquisition and processing logs. In addition, a portion of the MBES data was sound velocity corrected in post processing to account for an improper Z-value the MBES transducer. Although this corrected the depths, it appears that there are some residual artifacts scattered throughout the data that were not present prior to SVC (Figure 10). These were cleaned from the data as much as possible, but some residual noise may be present. CARIS indicates that the SVC process has been updated in current versions and there should be no further issues moving forward.

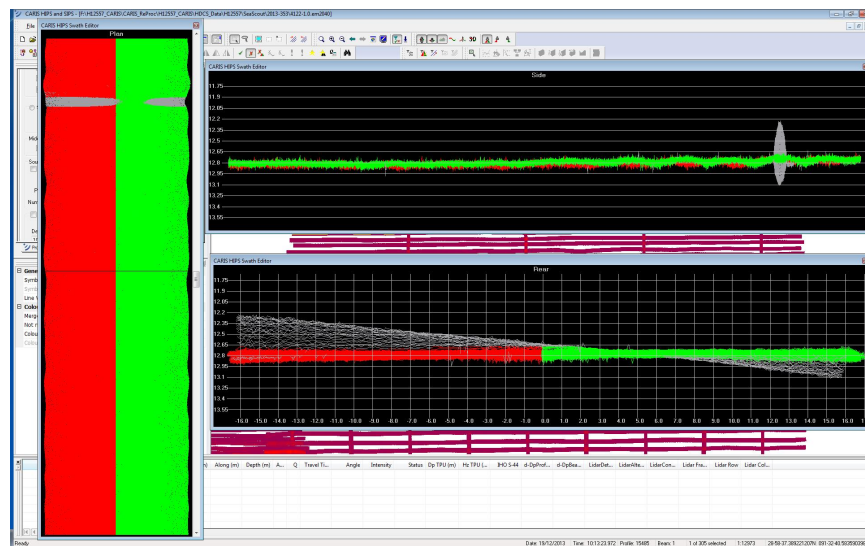


Figure 10: Data artifact present after SVC.

## B.2.7 Sound Speed Methods

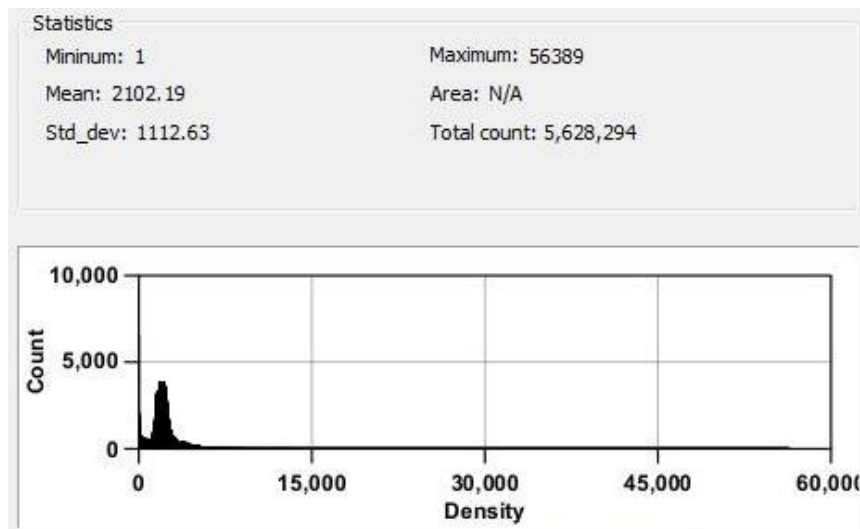
Sound Speed Cast Frequency: Sea Bird Electronics SBE19 CTDs were used for speed of sound measurements. Casts were conducted at least twice daily and more often as needed. The multibeam data was corrected for the water column sound speed in real-time using the SIS control software. Endeco YSI sondes were used to determine the sound speed at the transducers. The sound speed data and confidence checks are located in Separates II Digital Data\Sound Speed Data Summary.

## B.2.8 Coverage Equipment and Methods

Main survey lines were oriented east/west throughout the survey area. 200% SSS with concurrent MBES was acquired in the survey area in accordance with the requirements stated in the project instructions for this survey. SSS data were acquired with a Klein 5000 V2 towfish and MBES data were acquired with a Kongsberg EM2040C echosounder.

## B.2.9 Density

According to section 5.2.2.3 of the HSSD (2013) at least 95% of all nodes on the surface shall be populated with at least 3 soundings for Set Line Spacing multibeam coverage. The Compute Statistics tool in CARIS HIPS was used to generate statistics about the density child layer of the H12555\_MB\_4m\_MLLW\_Final surface (Figure 11). A bin size of 1 was used and the data exported in ASCII format. The number of nodes in the first 2 bins were added together to determine the number of nodes that contain less than 3 soundings. 5,619,541 nodes contain at least 3 soundings and the surface contains a total of 5,628,294 nodes. Therefore, greater than 99% of all nodes on the surface contain at least 3 soundings.



*Figure 11: Statistical information about the density child layer of the H12555\_MB\_4m\_MLLW\_Final BASE surface, generated from the CARIS Compute Statistics tool.*

## B.3 Echo Sounding Corrections

### B.3.1 Corrections to Echo Soundings

All corrections to echo sounding (instrument corrections, static and dynamic draft, speed of sound, and attitude corrections) follow the procedures outlined in the DAPR.

### **B.3.2 Calibrations**

Prior to initiating survey operations, a standard patch test was performed to determine correctors for pitch, roll, and heading; additional calibrations were performed as necessary. A squat and settlement test was also conducted. Refer to the Data Acquisition and Processing Report for additional information.

### **B.4 Backscatter**

Backscatter was logged within each raw Kongsberg EM file. This data was imported during CARIS conversion and reviewed when necessary.

## **B.5 Data Processing**

### **B.5.1 Software Updates**

There were no software configuration changes after the DAPR was submitted.

The following Feature Object Catalog was used: NOAA Extended Attribute Files V5\_3\_2.

Software updates are detailed in the DAPR. No further software updates occurred after the submission of the DAPR.

### **B.5.2 Surfaces**

The following CARIS surfaces were submitted to the Processing Branch:

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H12555_MB_4m_MLLW	Uncertainty	4 meters	13.36 meters - 21.77 meters	N/A	Set Line Spacing MBES
H12555_MB_4m_MLLW_Final	Uncertainty	4 meters	13.36 meters - 21.77 meters	N/A	Set Line Spacing MBES
2555_MB_Investigations_50cm_MLL	Uncertainty	0.5 meters	14.51 meters - 21.68 meters	N/A	Object Detection
55_MB_Investigation_50cm_MLLW_	Uncertainty	0.5 meters	13.59 meters - 21.68 meters	N/A	Object Detection
H12555_MB_1m_MLLW	Uncertainty	1 meters	13.36 meters - 21.68 meters	N/A	QC/Junction
H12555_MB_2m_MLLW	Uncertainty	2 meters	13.36 meters - 21.78 meters	N/A	Junction
H12555_MB_Mainlines_1m_MLLW	Uncertainty	1 meters	13.36 meters - 22.08 meters	N/A	QC
H12555_MB_Crosslines_1m_MLLW	Uncertainty	1 meters	13.58 meters - 21.34 meters	N/A	QC

*Table 9: CARIS Surfaces*

The above CARIS surfaces were submitted. A 4-m BASE surface of all the lines was generated to fulfill the requirement for Set Line Spacing MB coverage, specified in section 5.2.2.3 in the HSSD (2013). A 1-m BASE surface of all the lines was generated for QC purposes as well as for junctions. A 2-m BASE surface was also generated for junction analysis. Separate 1-m BASE surfaces were generated for the crosslines and mainlines in order to conduct the crossline comparison analysis.

After initial data cleaning, the surfaces were reviewed a second time for fliers using the standard deviation layer and the 3D display window. Higher standard deviation is generally associated with bathymetric features, contacts and/or areas of bathymetric change. Areas of noisy MBES data, although cleaned, can also show higher standard deviation. The highest standard deviation of the H12555\_MB\_4m\_MLLW\_Final BASE surface is 1.82 m, located at 28-52-11.108N, 91-29-37.105W. This corresponds to the edge of a large and deep depression feature associated with the removal of a platform.

## C. Vertical and Horizontal Control

### C.1 Vertical Control

The vertical datum for this project is Mean lower low water (MLLW).

### C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD83).

## D. Results and Recommendations

### D.1 Chart Comparison

#### D.1.1 Raster Charts

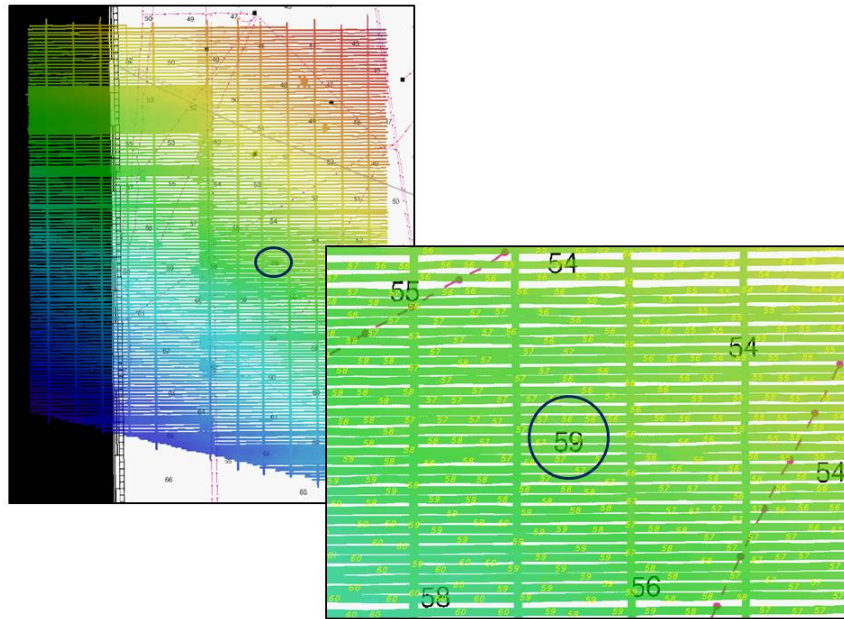
The following are the largest scale raster charts, which cover the survey area:

Chart	Scale	Edition	Edition Date	LNМ Date	NM Date
11356	1:80000	41	07/2014	02/03/2015	02/14/2015
11340	1:458596	78	08/2014	02/03/2015	02/14/2015

*Table 10: Largest Scale Raster Charts*

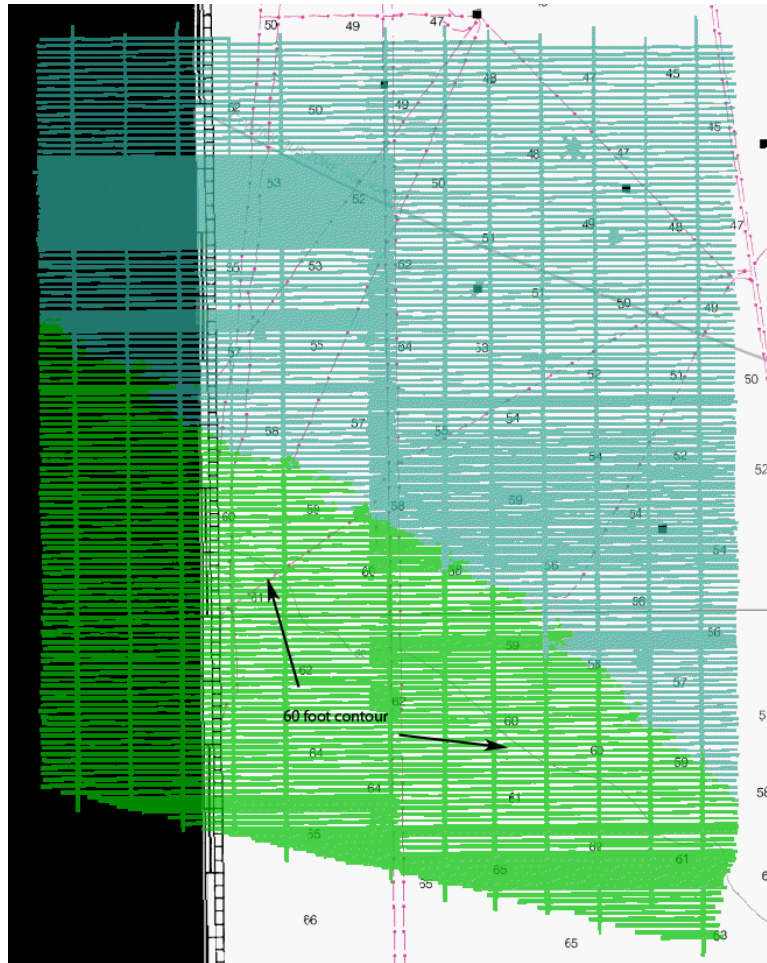
#### 11356

Four (4) Local Notice to Mariners were issued within the survey bounds subsequent to the date of the project instructions and before the end of the survey. These are: LNM 32/13 8th Dist issued on 8/12/2013 to delete Platform (Energy Resource-107-20), LNM 34/13 8Th Dist issued on 8/29/2013 to delete Platform (Energy Resource-107-30), LNM 48/13 8th Dist issued on 12/3/2013 to delete Platform (Arena Offshore-105-58, and a not yet published 45 foot Obstruction that corresponds to the DtoN submitted for this survey. Surveyed depths range from 48.8 to 71.5 feet (13.4 - 21.8 meters) and depths increase from northeast to southwest. A shoal biased selected sounding layer for the H12555\_MB\_1m\_MLLW BASE surface was generated in CARIS with a single-defined radius of 150 meters. Surveyed soundings are generally 1 – 2 feet deeper than charted depths. In one location (Figure 12) surveyed soundings are 2 feet shallower than charted depths in the vicinity of a 59 foot charted depth. The 60 foot contour extends northwest – southeast through the southern portion of the survey area. A user defined color map was used to evaluate surveyed soundings with respect to the charted contour (Figure 13). Contemporary data indicates that depths 60 feet or greater extend northeast of the currently charted contour.



*Figure 12: Survey area showing location where surveyed soundings are 2 ft shallower than charted 59 ft depth.*





*Figure 13: Depths 0 – 18.288 are shown in blue and depths greater than 18.288 shown in green; 18.288 represents 60 feet. It is evident that surveyed soundings greater than 60 feet extend northeast of the currently charted contour.*

### 11340

One (1) Local Notice to Mariners, a not yet published 45 foot Obstruction, was issued within the survey bounds subsequent to the date of the project instructions and before the end of the survey. This obstruction corresponds to the DtoN submitted for this survey. Surveyed depths range from 7.3 to 11.9 fathoms (48.8 to 71.5 feet) and depths increase from northeast to southwest. Surveyed soundings are generally 2 – 4 feet deeper than charted depths though surveyed soundings match the 11 fathom depth in the southern portion of the survey area and the partially surveyed 8 fathom depth in the northeast portion of the survey area. The 10-fathom (60-foot) contour extends from northwest to southeast through the southern portion of the survey area. A user defined color map was used to evaluate surveyed soundings with respect to the charted contour (Figure 14). As observed in the comparison with chart 11356, it is evident that depths greater than 10 fathoms extend northeast of the currently charted contour.

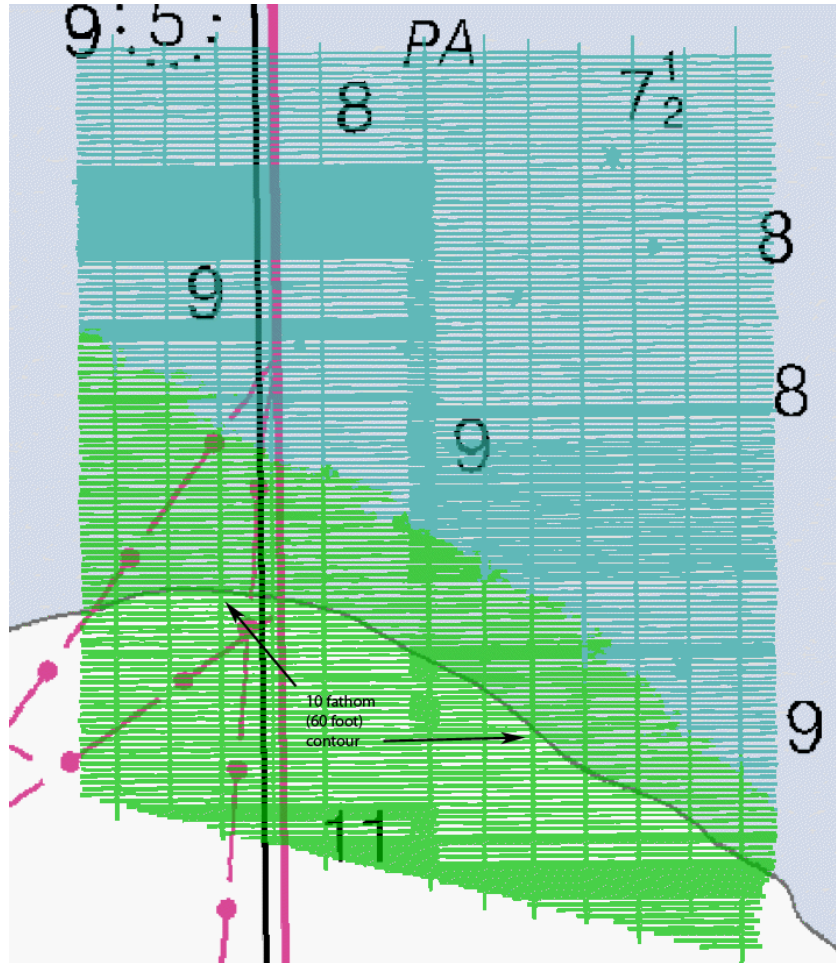


Figure 14: Comparison between the charted 10 fathom (60 foot) contour and surveyed soundings shows that surveyed soundings greater than 10 fathoms (60 feet) extend northeast of the charted contour. Surveyed soundings 0 – 18.288 m in blue and surveyed soundings greater than 18.288 m in green; 18.288 represents 10 fathoms (60 feet).

### D.1.2 Electronic Navigational Charts

The following are the largest scale ENC's, which cover the survey area:

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US4LA25M	1:80000	17	09/19/2013	02/09/2015	NO
US3GC03M	1:458896	46	08/27/2013	12/15/2014	NO

Table 11: Largest Scale ENC's

US4LA25M

Depths on ENC US4LA25M generally match the charted depths of 11356 or are 1 foot shallower. Comparisons for the RNC are generally valid for the ENC although some surveyed soundings are up to 3 feet deeper than charted depths. In the vicinity of the 59 foot charted depth on 11356 where surveyed soundings were 2 feet shallower than the charted depth, the corresponding ENC depth is 58 feet; surveyed soundings are only 1 foot shallower in this case.

### US3GC03M

Depths on ENC US3GC03M match those on chart 11340. Comparisons made for the RNC are valid for the ENC. There is an additional 9 foot fathom depth in the southeast portion of the survey area that does not correspond to a depth on chart 11340. Surveyed soundings are up to 5 feet deeper than the charted depth.

### **D.1.3 AWOIS Items**

No AWOIS items exist within the survey area.

### **D.1.4 Charted Features**

#### Chart 11356

Four (4) charted platforms exist within the survey area as well as several pipelines. Refer to sections D.2.7 and D.2.5, respectively, for additional information.

#### US4LA25M

In addition to the four (4) charted platforms and several pipelines that match those observed on chart 11356, an obstruction is located in the northeast portion of the survey area; refer to section D.1.6 for additional information.

#### Chart 11340

There are no individually charted platforms on chart 11340 but there are three (3) submarine pipelines charted in the western portion of the survey area. Refer to section D.2.5 and the Final Feature File for additional information.

#### US3GC03M

Charted features on ENC USGC03M match those of chart 11340.

### D.1.5 Uncharted Features

One (1) uncharted obstruction was observed within the survey area and submitted as a DtoN. Several areas in the southwest portion of the survey area were delineated from the SSS data that show concentrated areas of small, semi-circular areas of darker seabed return. Review of the BASE surface standard deviation layer and review of the data in 3D indicate evidence of potential small mound features in the same areas (Figure 15). Because the features were identified on separate 100% SSS coverages in the same location and corroborated with the MBES data, they are inferred to be real. However, they are likely transient features because while the features exist in the western Subarea 1 of the survey area, data collected at a later date in the eastern Subarea 2 that overlaps the previous data does not show indication of these features. These features were not identified as individual contacts, but the polygon features are located: OPR-K354-KR-13\_Louisiana\_Coast\_LA\H12555\Data\Processed\S-57\_Features.

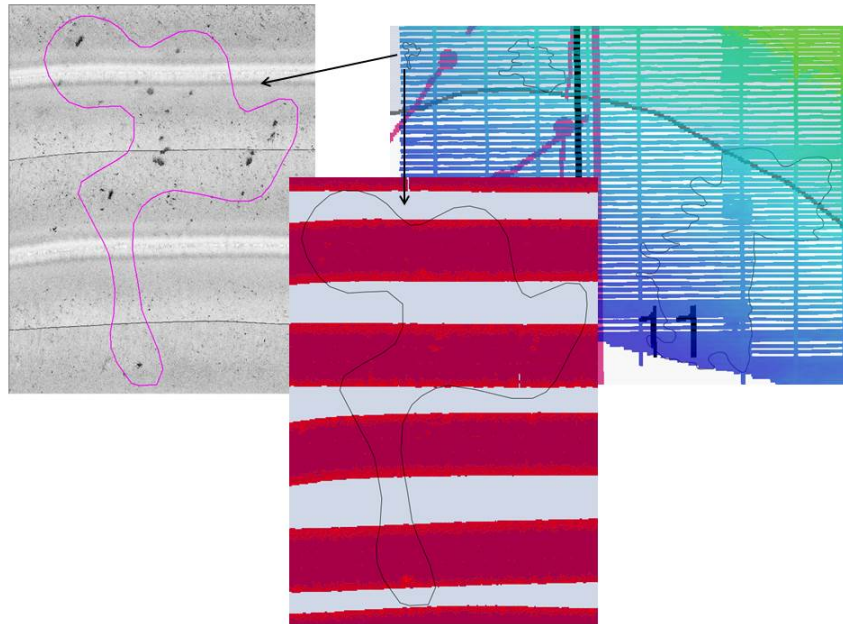


Figure 15: Bathy overlay with polygons delineated from SSS data at right. Left image shows SSS image of areas of darker seabed return and center image shows the standard deviation layer of same area.

### D.1.6 Dangers to Navigation

The following DTON reports were submitted to the processing branch:

DTON Report Name	Date Submitted
H12555_DtoN1	2015-01-23

Table 12: DTON Reports

One (1) Danger to Navigation were submitted for this survey; refer to the Final Feature File and OPR-K354-KR-13\_Louisiana\_Coast\_LA\H12555\Data\Descriptive\_Report\Appendices for additional information.

### **D.1.7 Shoal and Hazardous Features**

No shoal areas were observed within the survey area. Survey data indicates that a potential gas seep is located at 28-52-09.864N, 91-28-38.360W (refer to section D.2.8 for additional information).

### **D.1.8 Channels**

No channels are currently charted within the survey limits, and none were observed during survey operations.

## **D.2 Additional Results**

### **D.2.1 Shoreline**

Shoreline does not exist within the survey area.

### **D.2.2 Prior Surveys**

Prior survey data was not required to be evaluated for this survey.

### **D.2.3 Aids to Navigation**

No Aids to Navigation are currently charted within the survey area, and none were observed either visually or within survey data.

### **D.2.4 Overhead Features**

Overhead features do not exist for this survey.

### **D.2.5 Submarine Features**

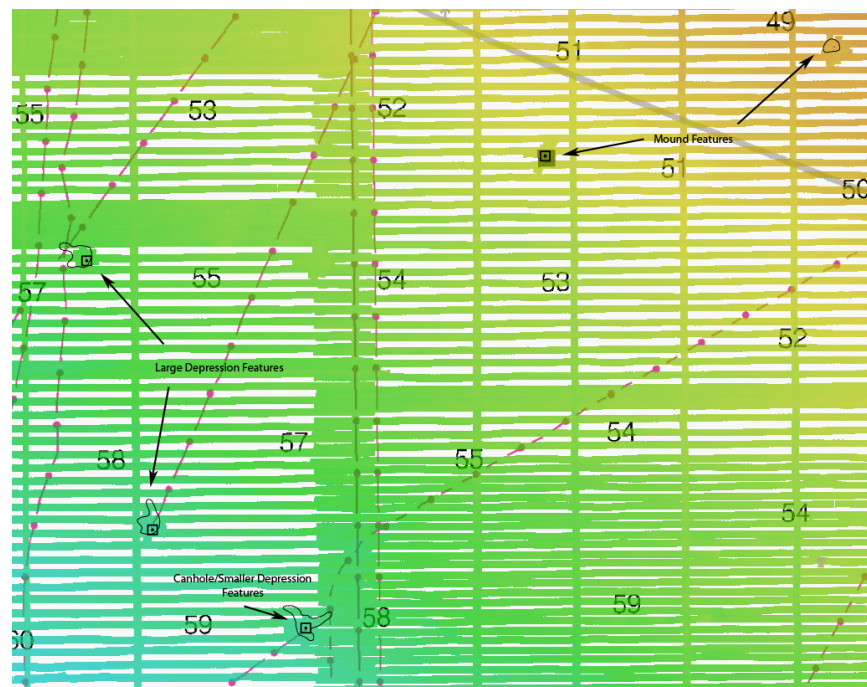
Several pipelines are charted within the survey area. Features potentially representative of exposed pipeline were observed in the SSS and MBES data; additional investigations were conducted if necessary (refer to the Final Feature File for additional information).

## D.2.6 Ferry Routes and Terminals

No ferry routes or terminals are currently charted within the survey limits, and none were observed during survey operations.

## D.2.7 Platforms

No platforms were observed either visually or within survey data. There are four (4) currently charted platforms on chart 11356 that the hydrographer recommends removing from the chart. In addition to the four (4) charted platforms, the CSF file contains an additional three (3) platforms assigned for investigation. These correspond to three Local Notices to Mariners that were issued to remove the platforms. Polygons were delineated from the SSS and MBES data around areas that includes disturbed seabed, depressions, small contacts and/or mound features located at the position of these and two (2) additional removed platforms. The polygon features are located: OPR-K354-KR-13\_Louisiana\_Coast\_LA\H12555\Data\Processed\S-57\_Features. The most northeast platform on Figure 18 is no longer on the chart or in the CSF file but a mound feature was observed within the SSS and MBES data and review of internal data indicates that a platform existed and was removed at that location. Refer to Figure 18 and the Final Feature File for additional information.

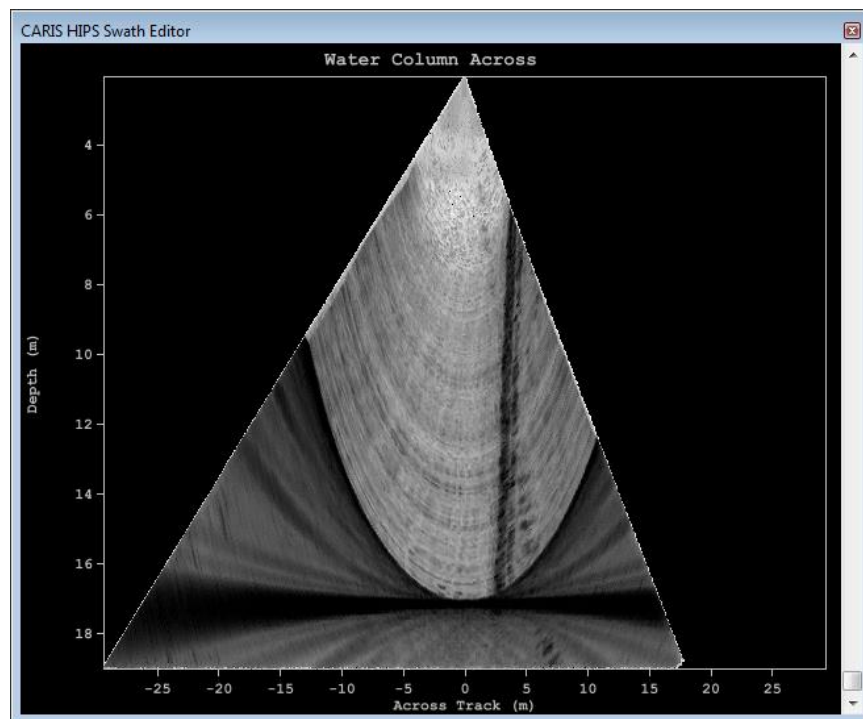


*Figure 16: Locations of removed platforms with evidence in SSS and MBES of disturbed seabed, depressions, small contacts and/or mound features.*

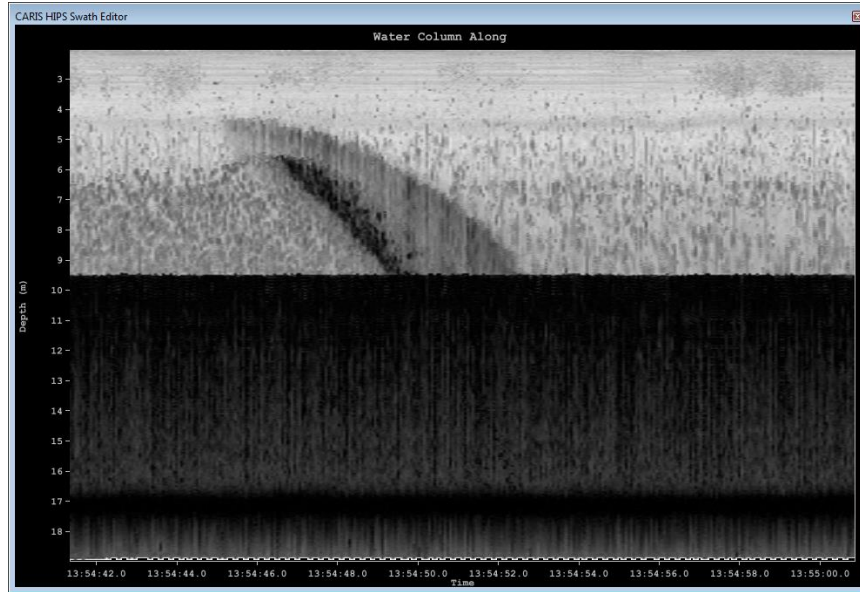


### D.2.8 Significant Features

No anomalous environmental conditions were observed during the survey. Survey data indicates that a potential gas seep is located at 28-52-09.864N, 91-28-38.360W (Figures 16 and 17). Although this feature is located between two charted pipelines, there are no charted pipelines or platforms in the direct vicinity of the feature. Review of internal data does not indicate that there are any historic wells, platforms or pipelines in the direct vicinity of the feature. Water column data identified from several investigation lines were added to the 'Additional Bathymetry' layer in the CARIS project but because this feature is not part of the seafloor, the data was not added to any BASE surface and evidence in the bathymetry data was removed so as not to skew the final depths of the BASE surfaces.



*Figure 17: Stacked across track view of potential gas seep feature.*



*Figure 18: Stacked along track view of potential gas seep feature.*

## **D.2 Construction and Dredging**

No active dredging or construction was observed during survey operations.



## E. Approval Sheet

Field operations contributing to the accomplishment of the H12555 survey were conducted under my direct supervision with frequent personal checks of progress and adequacy. This report and CARIS project have been closely reviewed and are considered complete and adequate as per the Statement of Work.

This report is accompanied by the Data Acquisition and Processing Report for project OPR-K354-KR-13.

<b>Approver Name</b>	<b>Approver Title</b>	<b>Approval Date</b>	<b>Signature</b>
Tara Levy	Chief of Party	02/27/2015	
Nicole Galloway	Geoscientist	02/27/2015	

## F. Table of Acronyms

<b>Acronym</b>	<b>Definition</b>
<b>AFF</b>	Assigned Features File
<b>AHB</b>	Atlantic Hydrographic Branch
<b>AST</b>	Assistant Survey Technician
<b>ATON</b>	Aid to Navigation
<b>AWOIS</b>	Automated Wreck and Obstruction Information System
<b>BAG</b>	Bathymetric Attributed Grid
<b>BASE</b>	Bathymetry Associated with Statistical Error
<b>CO</b>	Commanding Officer
<b>CO-OPS</b>	Center for Operational Products and Services
<b>CORS</b>	Continually Operating Reference Station
<b>CTD</b>	Conductivity Temperature Depth
<b>CEF</b>	Chart Evaluation File
<b>CSF</b>	Composite Source File
<b>CST</b>	Chief Survey Technician
<b>CUBE</b>	Combined Uncertainty and Bathymetry Estimator
<b>DAPR</b>	Data Acquisition and Processing Report
<b>DGPS</b>	Differential Global Positioning System
<b>DP</b>	Detached Position
<b>DR</b>	Descriptive Report
<b>DTON</b>	Danger to Navigation
<b>ENC</b>	Electronic Navigational Chart
<b>ERS</b>	Ellipsoidal Referenced Survey
<b>ERZT</b>	Ellipsoidally Referenced Zoned Tides
<b>FOO</b>	Field Operations Officer
<b>FPM</b>	Field Procedures Manual
<b>GAMS</b>	GPS Azimuth Measurement Subsystem
<b>GC</b>	Geographic Cell
<b>GPS</b>	Global Positioning System
<b>HIPS</b>	Hydrographic Information Processing System
<b>HSD</b>	Hydrographic Surveys Division
<b>HSSDM</b>	Hydrographic Survey Specifications and Deliverables Manual

<b>Acronym</b>	<b>Definition</b>
<b>HSTP</b>	Hydrographic Systems Technology Programs
<b>HSX</b>	Hypack Hysweep File Format
<b>HTD</b>	Hydrographic Surveys Technical Directive
<b>HVCR</b>	Horizontal and Vertical Control Report
<b>HVF</b>	HIPS Vessel File
<b>IHO</b>	International Hydrographic Organization
<b>IMU</b>	Inertial Motion Unit
<b>ITRF</b>	International Terrestrial Reference Frame
<b>LNM</b>	Local Notice to Mariners
<b>LNM</b>	Linear Nautical Miles
<b>MCD</b>	Marine Chart Division
<b>MHW</b>	Mean High Water
<b>MLLW</b>	Mean Lower Low Water
<b>NAD 83</b>	North American Datum of 1983
<b>NAIP</b>	National Agriculture and Imagery Program
<b>NALL</b>	Navigable Area Limit Line
<b>NM</b>	Notice to Mariners
<b>NMEA</b>	National Marine Electronics Association
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>NOS</b>	National Ocean Service
<b>NRT</b>	Navigation Response Team
<b>NSD</b>	Navigation Services Division
<b>OCS</b>	Office of Coast Survey
<b>OMAO</b>	Office of Marine and Aviation Operations (NOAA)
<b>OPS</b>	Operations Branch
<b>MBES</b>	Multibeam Echosounder
<b>NWLON</b>	National Water Level Observation Network
<b>PDBS</b>	Phase Differencing Bathymetric Sonar
<b>PHB</b>	Pacific Hydrographic Branch
<b>POS/MV</b>	Position and Orientation System for Marine Vessels
<b>PPK</b>	Post Processed Kinematic
<b>PPP</b>	Precise Point Positioning
<b>PPS</b>	Pulse per second

<b>Acronym</b>	<b>Definition</b>
<b>PRF</b>	Project Reference File
<b>PS</b>	Physical Scientist
<b>PST</b>	Physical Science Technician
<b>RNC</b>	Raster Navigational Chart
<b>RTK</b>	Real Time Kinematic
<b>SBES</b>	Singlebeam Echosounder
<b>SBET</b>	Smooth Best Estimate and Trajectory
<b>SNM</b>	Square Nautical Miles
<b>SSS</b>	Side Scan Sonar
<b>ST</b>	Survey Technician
<b>SVP</b>	Sound Velocity Profiler
<b>TCARI</b>	Tidal Constituent And Residual Interpolation
<b>TPU</b>	Total Propagated Error
<b>TPU</b>	Topside Processing Unit
<b>USACE</b>	United States Army Corps of Engineers
<b>USCG</b>	United States Coast Guard
<b>UTM</b>	Universal Transverse Mercator
<b>XO</b>	Executive Officer
<b>ZDA</b>	Global Positioning System timing message
<b>ZDF</b>	Zone Definition File

APPENDIX I  
TIDES AND WATER LEVELS

# FINAL TIDE NOTE and FINAL TIDE ZONING CHART

**DATE:** February 2015

**HYDROGRAPHIC BRANCH:** Atlantic

**HYDROGRAPHIC PROJECT:** OPR-K354-KR-13

**HYDROGRAPHIC SHEET:** H12555

**LOCALITY:** 20 NM SW of Ship Shoal

**TIME PERIOD:** March 2, 2014 – February 7, 2015

**TIDE STATION USED:** 8764227 LAWMA, Amerada Pass, LA

Lat. 29° 27.0' N      Lon. 91° 20.3' W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.00 m

**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.999 m

## REMARKS: RECOMMENDED ZONING

Use zones identified as: WGM263 and WGM264

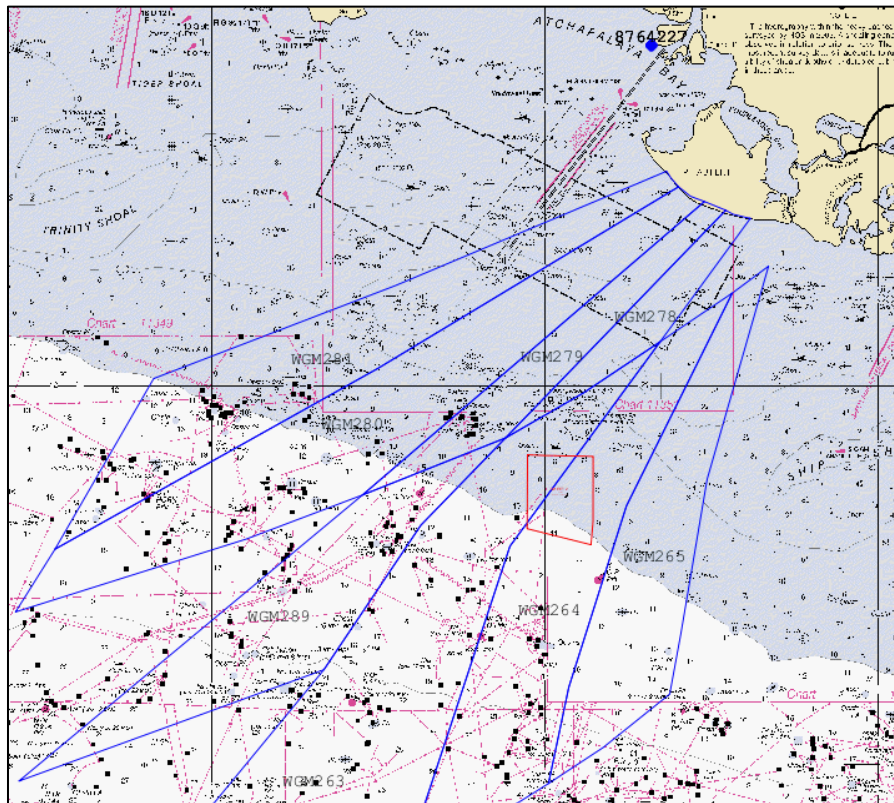


Figure 1. Final Tidal Zoning Chart

Note 1: Provided time series data are six minute time series data in meters, relative to MLLW and Greenwich Mean Time (GMT).

Note 2: For final processing, tidal zoning correctors were applied to verified observed data, acquired from the NOAA Tides and Currents website.

## ABSTRACT OF TIMES OF HYDROGRAPHY

Project: OPR-K354-KR-13 Registry No.: H12555

Contractor Name: C & C Technologies, Inc.

Date: February 2015

Sheet Number: 2

Inclusive Dates: March, 2014 - February, 2015

Field Work is Complete

Time (UTC)

Day (yy/mm/dd)	Julian Day	Start	End	Year
14/03/02	61	0214	0233	2014
14/03/02	61	0249	2311	2014
14/03/02	61	2357	2400	2014
14/03/03	62	0000	0044	2014
14/03/04	63	1334	1350	2014
14/03/07	66	2121	2127	2014
14/03/08	67	0115	0044	2014
14/03/08	67	0111	1813	2014
14/03/08	67	1849	1916	2014
14/03/09	68	0044	0211	2014
14/03/09	68	0641	2325	2014
14/03/10	69	2343	2400	2014
14/03/11	70	0000	1201	2014
14/03/11	70	1236	1312	2014
14/03/11	70	1434	1829	2014
14/03/11	70	1854	2400	2014
14/03/12	71	0000	0017	2014
14/03/14	73	1240	2025	2014
14/03/14	73	2042	2204	2014
14/03/14	73	2247	2340	2014
14/03/14	73	2359	2400	2014
14/03/15	74	0000	0041	2014
14/03/15	74	0117	1230	2014
14/03/15	74	1253	2400	2014
14/03/16	75	0000	0236	2014
14/03/16	75	0320	0330	2014
14/03/16	75	0406	0513	2014
14/03/20	79	1151	1210	2014
14/03/20	79	1230	1510	2014
14/03/20	79	1553	2237	2014
14/03/20	79	2254	2400	2014
14/03/21	80	0000	1248	2014
14/03/21	80	1307	1449	2014
14/03/21	80	1510	1526	2014
14/03/21	80	1556	1949	2014

Day (yy/mm/dd)	Julian Day	Start	End	Year
14/03/21	80	2026	2053	2014
14/03/21	80	2111	2247	2014
14/04/02	92	1306	2235	2014
14/04/03	93	2207	2400	2014
14/04/04	94	0000	0852	2014
14/04/10	100	0912	1015	2014
14/04/10	100	1037	2155	2014
14/06/04	155	0417	0430	2014
14/06/04	155	0449	1713	2014
14/06/04	155	1732	2400	2014
14/06/05	156	0000	0657	2014
14/06/05	156	0807	0841	2014
14/06/05	156	0857	1151	2014
14/07/03	184	1645	2035	2014
14/07/03	184	2122	2150	2014
14/07/07	188	0835	1604	2014
14/07/07	188	1637	1756	2014
15/01/07	007	0959	1002	2015
15/01/07	007	1106	1243	2015
15/02/01	032	1216	1225	2015
15/02/01	032	1300	1320	2015
15/02/01	032	1344	1658	2015
15/02/06	037	2155	2400	2015
15/02/07	038	0000	0114	2015



## APPENDIX II

# SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE

[NOAA] OPR-K354-KR-13Final\_Outline Sheet 2 (H12555).txt

Subject:

[NOAA] OPR-K354-KR-13Final\_Outline Sheet 2 (H12555)

From:

Tara Levy <tara.levy@cctechnol.com>

Date:

7/30/2014 4:46 PM

To:

\_NOS OCS Survey Outlines <survey.outlines@noaa.gov>

CC:

"Turner, Paul" <paul.turner@noaa.gov>, noaa@cctechnol.com

Please see attached final survey outline for Sheet 2 (H12555) of project OPR-K354-KR-13.

Any questions please contact me.

--

Tara Levy

C&C Technologies, Inc  
730 E. Kaliste Saloom Rd.  
Lafayette, LA, USA 70508  
337-210-0000 (Ext. 3518)  
337-210-0612 (direct line)  
337-296-3029 (cell)  
337-261-0192 (Fax)

tara.levy@cctech.us

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NOAA mailing list  
NOAA@cctechnol.com  
<http://mail.cctechnol.com/mailman/listinfo/noaa>

Attachments:

H12555\_FinalSurveyOutline.000 2.5 KB  
H12555\_FinalSurveyOutline.hob 1.0 KB

20150126-Re\_H12555 DtoN #1 45ft Obstruction Submission to NDB-19.txt  
Subject: Re: H12555 DtoN #1 45ft Obstruction Submission to NDB  
From: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>  
Date: 1/26/2015 10:22 AM  
To: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>  
CC: Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>, Michael  
Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Paul Turner - NOAA Federal  
<paul.turner@noaa.gov>, Tiffany Squyres - NOAA Federal  
<tiffany.squyres@noaa.gov>, Nicole Galloway <nicole.galloway@cctechnol.com>, Tara  
Levy <tara.levy@cctechnol.com>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>,  
\_NOS OCS NSD Coast Pilot <coast.pilot@noaa.gov>, \_NOS OCS PBA Branch  
<ocs.pba@noaa.gov>, \_NOS OCS PBB Branch <ocs.pbb@noaa.gov>, \_NOS OCS PBC Branch  
<ocs.pbc@noaa.gov>, \_NOS OCS PBD Branch <ocs.pbd@noaa.gov>, \_NOS OCS PBE Branch  
<ocs.pbe@noaa.gov>, \_NOS OCS PBG Branch <ocs.pbg@noaa.gov>, Benjamin K Evans -  
NOAA Federal <Benjamin.K.Evans@noaa.gov>, James Crocker - NOAA Federal  
<James.M.Crocker@noaa.gov>, Matt Kroll - NOAA Federal <Matt.Kroll@noaa.gov>, OCS  
NDB - NOAA Service Account <OCS.NDB@noaa.gov>, Tara Wallace - NOAA Federal  
<Tara.wallace@noaa.gov>, Chris Libeau - NOAA Federal <Chris.Libeau@noaa.gov>

L-112/15 and DD-25800 have been registered by the Nautical Data Branch and  
directed to PBG for processing.

The DtoN reported is one obstruction in the Gulf of Mexico, approximately 25 NM  
south of Atchafalaya Bay, LA.

The following charts are affected:  
11356 kapp 62

11340 kapp 49

The following ENCs are affected:  
US4LA25M

US3GC03M

References:  
H12555  
OPR-K354-KR-13

This information was discovered by a NOAA contractor and was submitted by AHB.

Nautical Data Branch/Marine Chart Division/  
Office of Coast Survey/National Ocean Service/  
Contact: ocs.ndb@noaa.gov

On Fri, Jan 23, 2015 at 5:58 PM, Castle Parker - NOAA Federal  
<castle.e.parker@noaa.gov> wrote:

Good Day,

Please find attached a zip file associated with survey H12555 DtoN #1 report.  
This Danger submission to Nautical Data Branch & Marine Chart Division  
contains one uncharted 45ft Obstruction for chart application.

The contents of the attached winZip file were originally submitted by  
contract field unit C&C Technologies. The submitted Danger products were  
reviewed and generated at Atlantic Hydrographic Branch. The attached zip file  
contains a DtoN Letter (PDF), Pydro XML file, and image files.

20150126-Re\_H12555 DtoN #1 45ft Obstruction Submission to NDB-19.txt  
If you have any questions, please direct them back to me; email me or call  
757-441-6746 ext. 115.

Thank you,  
Gene Parker

Castle Eugene Parker  
Atlantic Hydrographic Branch  
Hydrographic Team Lead  
Physical Scientist, NOAA Office of Coast Survey  
castle.e.parker@noaa.gov  
office (757) 441-6746 x115

Attachments-1/H12555 DtoN #1 45ft Obstruction.zip

H12555 Gas Seep.txt

Subject:  
H12555 Gas Seep  
From:  
Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>  
Date:  
2/24/2015 12:04 PM  
To:  
Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>  
CC:  
Nicole Galloway <nicole.galloway@cctechnol.com>, Tara Levy  
<tara.levy@cctechnol.com>, Paul Turner - NOAA Federal <paul.turner@noaa.gov>,  
Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>

Good day Tim,

C&C Technologies has located what appears to be a gas seep in the area of survey H12555. The attached document describes the issue as presented by the field unit. AHB is passing this information along to you with hopes of informing the proper authorities USCG and BOEM.

Whether the gas seep is natural or there is a and uncharted pipeline is unknown. I have crossed referenced the BOEM pipeline file we have on hand and it correlates to what C&C has documented.

Thanks and respond as necessary.

Regards,

Gene Parker

Castle Eugene Parker  
NOAA Office of Coast Survey  
Atlantic Hydrographic Branch  
Hydrographic Team Lead / Physical Scientist  
castle.e.parker@noaa.gov  
office (757) 441-6746 x115

Attachments:  
H12555 Gas Seep.pdf 1.7 MB

# REQUISITION FOR SUPPLIES/SERVICE

REQ. DATE

PAGE

OF

1

1. REQUISITION NO.	2. PRIORITY	3. AMOUNT	4. DELIVERY DATE		5. FUNDS AVAILABLE			
					Funds Available	SAF		
6. CONTACT (Name and Phone)		7. AUTHORIZED BY			8. CONTRACT/IDC NO.			
9. PURCHASE FOR			10. DEPT	11. FUND	12. PROJECT			
					13. FSC			
			14. ACCOUNTING AND APPROPRIATION DATA					
			See Schedule					
15a. DELIVER TO			16a. RECOMMENDED COR					
			16b. FUND CERTIFYING OFFICIAL					
			17. VENDOR					
15b. SUPPLEMENTAL ADDRESS								
18. PURPOSE								

ITEM OR FORM NO. (19)	DESCRIPTION (20)	QUANTITY (21)	UNIT (22)	UNIT PRICE (23)	AMOUNT (24)	

**SCHEDULE Continued**

ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	<p>The following is request for a zero dollar modification for an extension of the original contract delivery date for C&amp;C Technologies, Inc. on Task order 0009, NCNJ3000-14-00410. Task order 0009, NCNJ3000-14-00410 is a hydrographic survey contract for survey operations in the Gulf of Mexico requiring a large survey vessel capable of conducting offshore, open ocean hydrographic surveys for pro-longed duration's. C&amp;C Technologies, Inc. has requested a five month extension to the delivery date to compensate for time lost while focusing internal resources and efforts on an additional, higher priority NOAA contract awarded in response to Hurricane Sandy.</p> <p>Accounting and Appropriation Data:            14.14.L8K6JSB.P00.1011.010301003.            1009000301000000.25130000.000000            \$0.00            DELIVERY DATE: 02/28/2015            SHIP TO:                HYDROGRAPHIC SURVEYS DIV                1315 EASTWEST HWY                SSMC-3 6TH FL/N/CS3                SILVER SPRING MD 20910            FOB : Destination</p>	0.00	EA	0.00	0.00

Re H12555 Gas Seep.txt

Subject:  
Re: H12555 Gas Seep  
From:  
Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>  
Date:  
2/24/2015 12:42 PM  
To:  
Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>  
CC:  
Nicole Galloway <nicole.galloway@cctechnol.com>, Tara Levy  
<tara.levy@cctechnol.com>, Paul Turner - NOAA Federal <paul.turner@noaa.gov>,  
Matthew Jaskoski - NOAA Federal <matthew.jaskoski@noaa.gov>

Gene

Thank you. I have contacted, BOEM, BSEE and USCG.

Tim

On Feb 24, 2015, at 1:04 PM, Castle Parker - NOAA Federal  
<castle.e.parker@noaa.gov> wrote:

> Good day Tim,  
>  
> C&C Technologies has located what appears to be a gas seep in the area of  
> survey H12555. The attached document describes the issue as presented by the  
> field unit. AHB is passing this information along to you with hopes of informing  
> the proper authorities USCG and BOEM.  
>  
>  
> whether the gas seep is natural or there is a and uncharted pipeline is  
> unknown. I have crossed referenced the BOEM pipeline file we have on hand and it  
> correlates to what C&C has documented.  
>  
>  
> Thanks and respond as necessary.  
>  
> Regards,  
>  
> Gene Parker  
>  
>  
>  
>  
>  
> Castle Eugene Parker  
> NOAA Office of Coast Survey  
> Atlantic Hydrographic Branch  
> Hydrographic Team Lead / Physical Scientist  
> castle.e.parker@noaa.gov  
> office (757) 441-6746 x115  
>  
>  
> <H12555 Gas Seep.pdf>



**Subject:** Re: OPR-K354-KR-13 -- Modification Approval

**From:** Tara Levy <tara.levy@cctechnol.com>

**Date:** 9/25/2014 9:45 AM

**To:** Paul Turner - NOAA Federal <paul.turner@noaa.gov>, tara.levy@cctech.us

**CC:** Scott Croft <scott.croft@cctechnol.com>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>

Paul,

I will use the new monthly survey progress report you attached in your e-mail.

Thank you for working to get this done so quickly for us.

Tara Levy

C&C Technologies, Inc  
730 E. Kaliste Saloom Rd.  
Lafayette, LA, USA 70508  
337-210-0000 (Ext. 3518)  
337-210-0612 (direct line)  
337-296-3029 (cell)  
337-261-0192 (Fax)

[tara.levy@cctech.us](mailto:tara.levy@cctech.us)

On 9/25/2014 8:45 AM, Paul Turner - NOAA Federal wrote:

Good morning Tara-

The modification request to extend the final delivery date of OPR-K354-KR-13 from 9/30/2014 to 02/28/2015 has been approved by NOAA's Contracting Office and you will receive an email and hard copy of the modified contract in the next 2-3 weeks.

For reference on future NOAA contracts, all requests for extensions/modifications are due to the Hydrographic Surveys Division no later than August 1st to allow adequate time for NOAA's Contracting Office to review and process the submitted request.

I've attached a revised monthly survey progress report to use for the remainder of this project. Please note the new *Monthly Processing* and *Expected Delivery Date* columns to indicate the monthly % complete for acquisition and processing until the survey is submitted to AHB (You can disregard the Acquisition column for this project).

Please use this form going forward for all remaining monthly reports and indicate the *Date of Survey Submission* as each sheet is submitted to AHB.

Let me know if you have any questions.

Paul

--

Paul Turner  
Physical Scientist  
NOAA - Office of Coast Survey

301-713-2700 \*106

[Paul.Turner@noaa.gov](mailto:Paul.Turner@noaa.gov)

**Subject:** Re: Request for Modification for OPR-K354-KR-13

**From:** Tara Levy <tara.levy@cctech.com>

**Date:** 9/19/2014 1:42 PM

**To:** Paul Turner - NOAA Federal <paul.turner@noaa.gov>, tara.levy@cctech.us

**CC:** Scott Croft <scott.croft@cctech.com>, Michael Gonsalves - NOAA Federal <michael.gonsalves@noaa.gov>, Mark Lathrop - NOAA Federal <mark.t.lathrop@noaa.gov>

Paul,

I do not have any questions at this time. I will contact you if I do.

Thank you for the update!

Tara Levy

C&C Technologies, Inc  
730 E. Kaliste Saloom Rd.  
Lafayette, LA, USA 70508  
337-210-0000 (Ext. 3518)  
337-210-0612 (direct line)  
337-296-3029 (cell)  
337-261-0192 (Fax)

[tara.levy@cctech.us](mailto:tara.levy@cctech.us)

On 9/19/2014 1:40 PM, Paul Turner - NOAA Federal wrote:

Hi Tara-

Thank you for providing the justification. I've submitted the modification request for OPR-K354-KR-13 with an extension and new delivery date of 02/28/2015. Once the request has been approved, you will receive an Amendment of Solicitation/Modification of Contract via email and hard copy. *This process usually takes 2-3 weeks.*

Please let me know if you have any additional questions.

Paul

On Tue, Sep 16, 2014 at 5:58 PM, Tara Levy <[tara.levy@cctech.com](mailto:tara.levy@cctech.com)> wrote:

**Paul,**

**I am requesting an extension on task order OPR-K354-KR-13 in order to give us time to complete the remaining deliverables. Task order OPR-C319-KR-13(Sandy Hook) final deliverables took considerably more time than expected with all the geology and contacts that needed to be reviewed and verified. We put a lot of our resources into completing those and unfortunately fell behind in this project. We have thus far completed and verified all field work, and all DTON's noted from the field data collection have been turned in. I am**

**requesting a Modification for time to complete the report portion for the 5 sheets for OPR-K354-KR-13 on the following schedule.**

**H12556 Oct 31st**

**H12557 Nov 26th**

**H12554 Dec 19th**

**H12555 Jan 26th**

**H12558 Feb 28th**

**Please let me know if you require anything else from me.**

**Have a good evening.**

Tara Levy

C&C Technologies, Inc  
730 E. Kaliste Saloom Rd.  
Lafayette, LA, USA 70508  
[337-210-0000](tel:337-210-0000) (Ext. 3518)  
[337-210-0612](tel:337-210-0612) (direct line)  
[337-296-3029](tel:337-296-3029) (cell)  
[337-261-0192](tel:337-261-0192) (Fax)

[tara.levy@cctech.us](mailto:tara.levy@cctech.us)

On 9/15/2014 3:18 PM, Paul Turner - NOAA Federal wrote:

Good afternoon Tara-

I apologize for the delay in my response and I am actively working on submitting the request for modification to OPR-K354-KR-13.

In order to submit the modification, please provide a more in-depth justification as to why you are requesting an extension along with a timeline of planned survey submission(s) and a plan of action that you will adhere to in order to meet the new contract modification submission date.

The Hydrographic Surveys Division is recommending an extension to 12/31/2014, however, would like to allow adequate time to produce quality survey deliverables. Please include in your justification a proposed Delivery Date for the contract modification that will allow sufficient time to process and submit all deliverables for OPR-K354-KR-13.

Thank you and please let me if you have any questions.

Paul

On Tue, Sep 9, 2014 at 4:59 PM, Tara Levy <[tara.levy@cctechnol.com](mailto:tara.levy@cctechnol.com)> wrote:

Paul,

I am requesting a modification for OPR-K354-KR-13 to complete the deliverables. Due to a back log of reporting these have yet to be completed. The plan is to complete one report each month starting the month of Oct. This would have us completing all reports by February of 2015.

Please let me know if you need any more information regarding this request.

Sincerely,

--

Tara Levy

C&C Technologies, Inc  
730 E. Kaliste Saloom Rd.  
Lafayette, LA, USA 70508  
[337-210-0000](tel:337-210-0000) (Ext. 3518)  
[337-210-0612](tel:337-210-0612) (direct line)  
[337-296-3029](tel:337-296-3029) (cell)  
[337-261-0192](tel:337-261-0192) (Fax)

[tara.levy@cctech.us](mailto:tara.levy@cctech.us)

--

Paul Turner  
Physical Scientist  
NOAA - Office of Coast Survey

[301-713-2700](tel:301-713-2700) \*106  
[Paul.Turner@noaa.gov](mailto:Paul.Turner@noaa.gov)

--

Paul Turner  
Physical Scientist  
NOAA - Office of Coast Survey

301-713-2700 \*106  
[Paul.Turner@noaa.gov](mailto:Paul.Turner@noaa.gov)

## APPENDIX III

### SURVEY FEATURES REPORT

DTONS - 1

AWOIS - 0

WRECK - 0

MARITIME

BOUNDARIES - 0

# H12555 Feature Report

**Registry Number:** H12555  
**State:** Louisiana  
**Locality:** Louisiana, LA  
**Sub-locality:** 20 NM SW of Ship Shoal  
**Project Number:** OPR-K354-KR-13  
**Survey Dates:** 03/02/2014 - 07/02/2015

## Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11356	38th	06/01/2008	1:80,000 (11356_1)	[L]NTM: ?
11340	73rd	08/01/2008	1:458,596 (11340_1)	[L]NTM: ?
1116A	73rd	08/01/2008	1:458,596 (1116A_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_1)	[L]NTM: ?

\* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	DTON 1	Obstruction	13.59 m	28° 53' 37.6" N	091° 26' 48.1" W	---

# **1 - Dangers To Navigation**



## 1.1) DTON 1

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 28° 53' 37.6" N, 091° 26' 48.1" W  
**Least Depth:** 13.59 m (= 44.58 ft = 7.430 fm = 7 fm 2.58 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)** [None] ; **TVU (TPEv)** [None]  
**Timestamp:** 2015-032.15:21:48.000 (02/01/2015)  
**Dataset:** H12555\_Features.000  
**FOID:** US 0000301759 00001(022600049ABF0001)  
**Charts Affected:** 11356\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

OBSTRN/remrks: feature observed within SSS and MB data. Least depth is 44 feet between 47 and 48 foot depths. Submitted as a DtoN

#### Feature Correlation

Source	Feature	Range	Azimuth	Status
H12555_Features.000	US 0000301759 00001	0.00	000.0	Primary

#### Hydrographer Recommendations

Add to chart as an obstruction

#### Cartographically-Rounded Depth (Affected Charts):

44ft (11356\_1)

7 ¼fm (1116A\_1, 11340\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** QUASOU - 6:least depth known  
 SORDAT - 20150207  
 SORIND - US,US,graph,H12555  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 13.588 m

WATLEV - 3:always under water/submerged

### Office Notes

SAR: Agree with field unit. Chart as new feature. Compile: concur with SAR. Delete/add scenario as submitted feature has new charted least depth of 44 ft (13.588 m). Currently charted on largest scale RNC, but not largest scale ENC.

### Feature Images

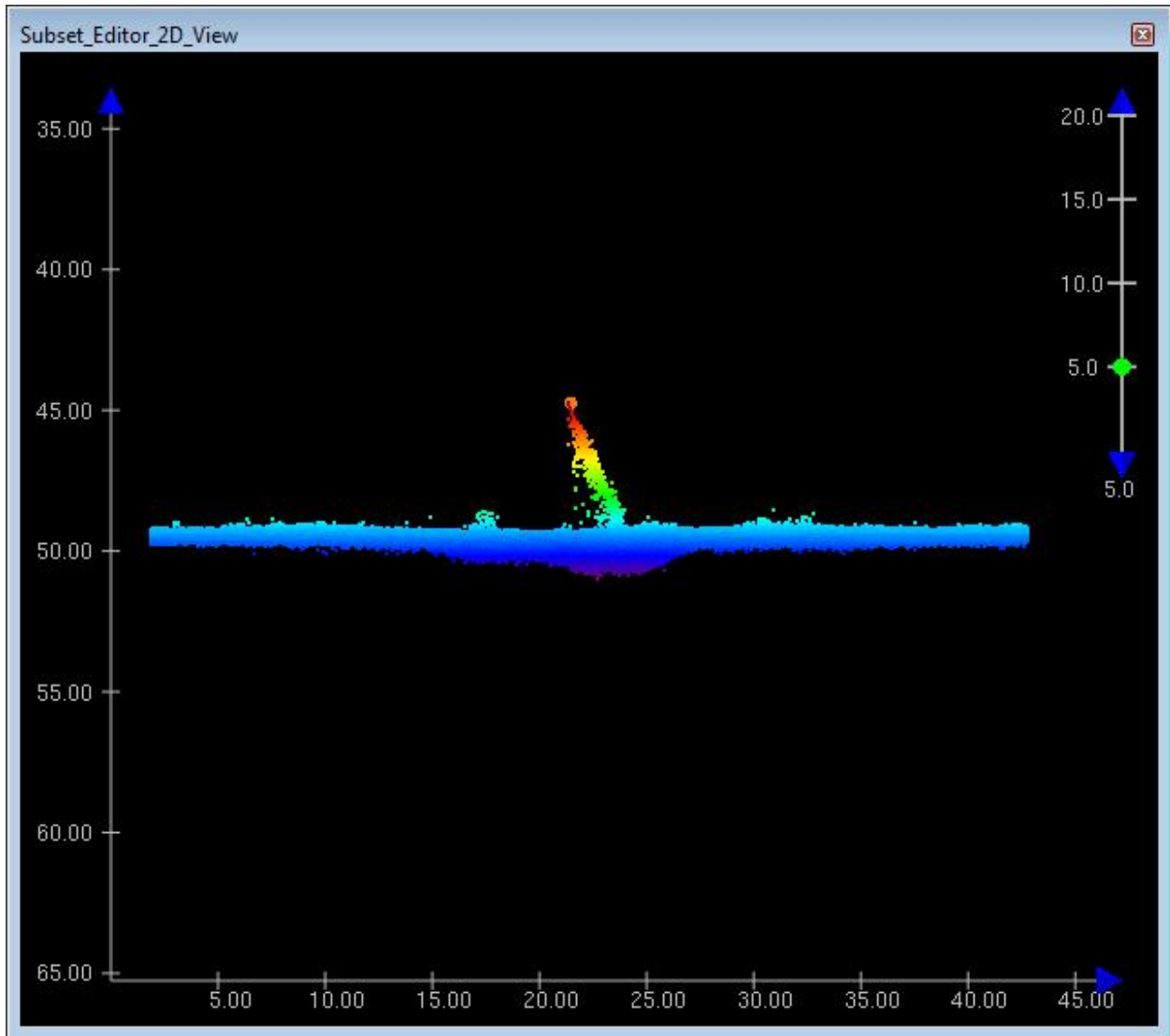


Figure 1.1.1

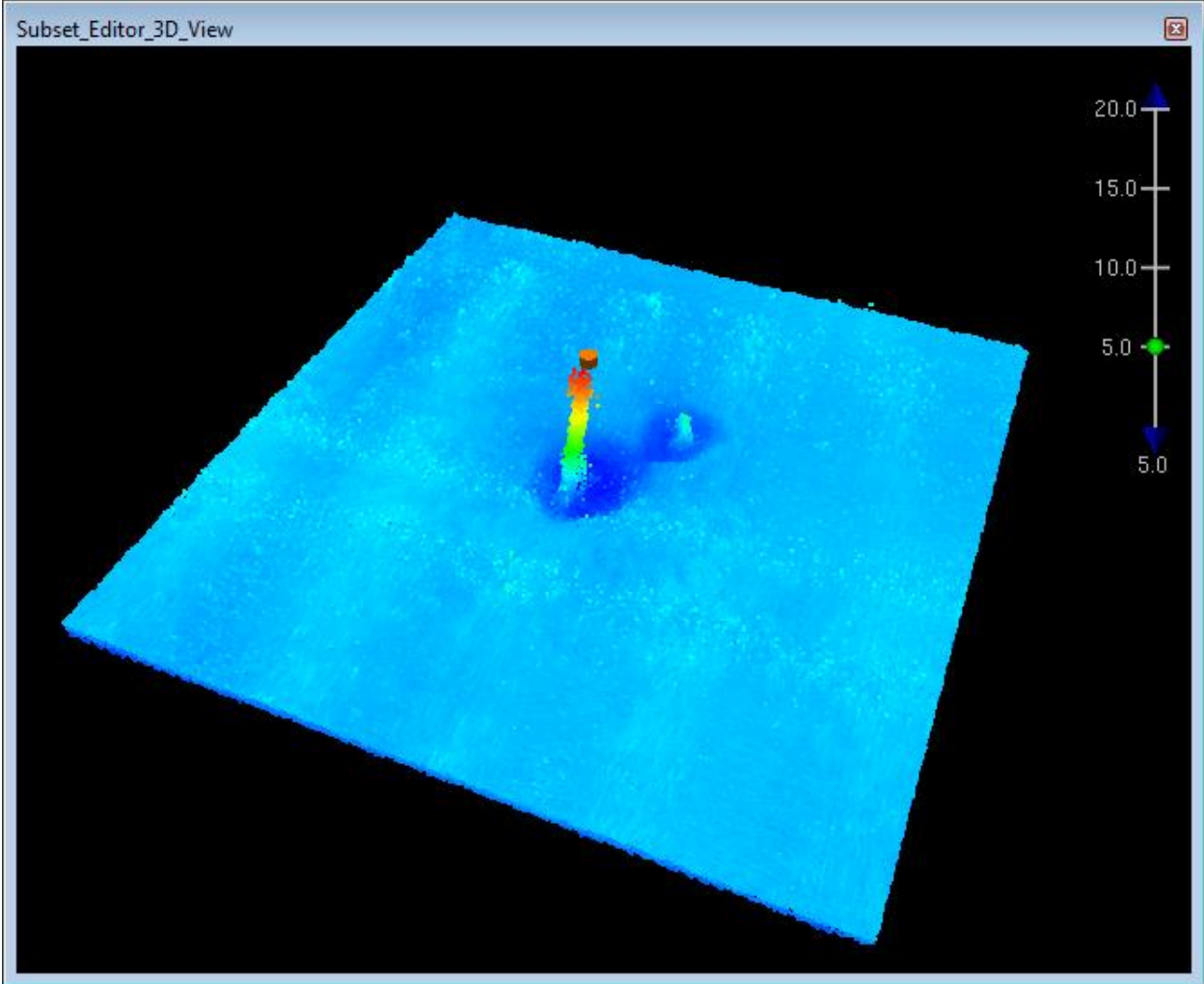
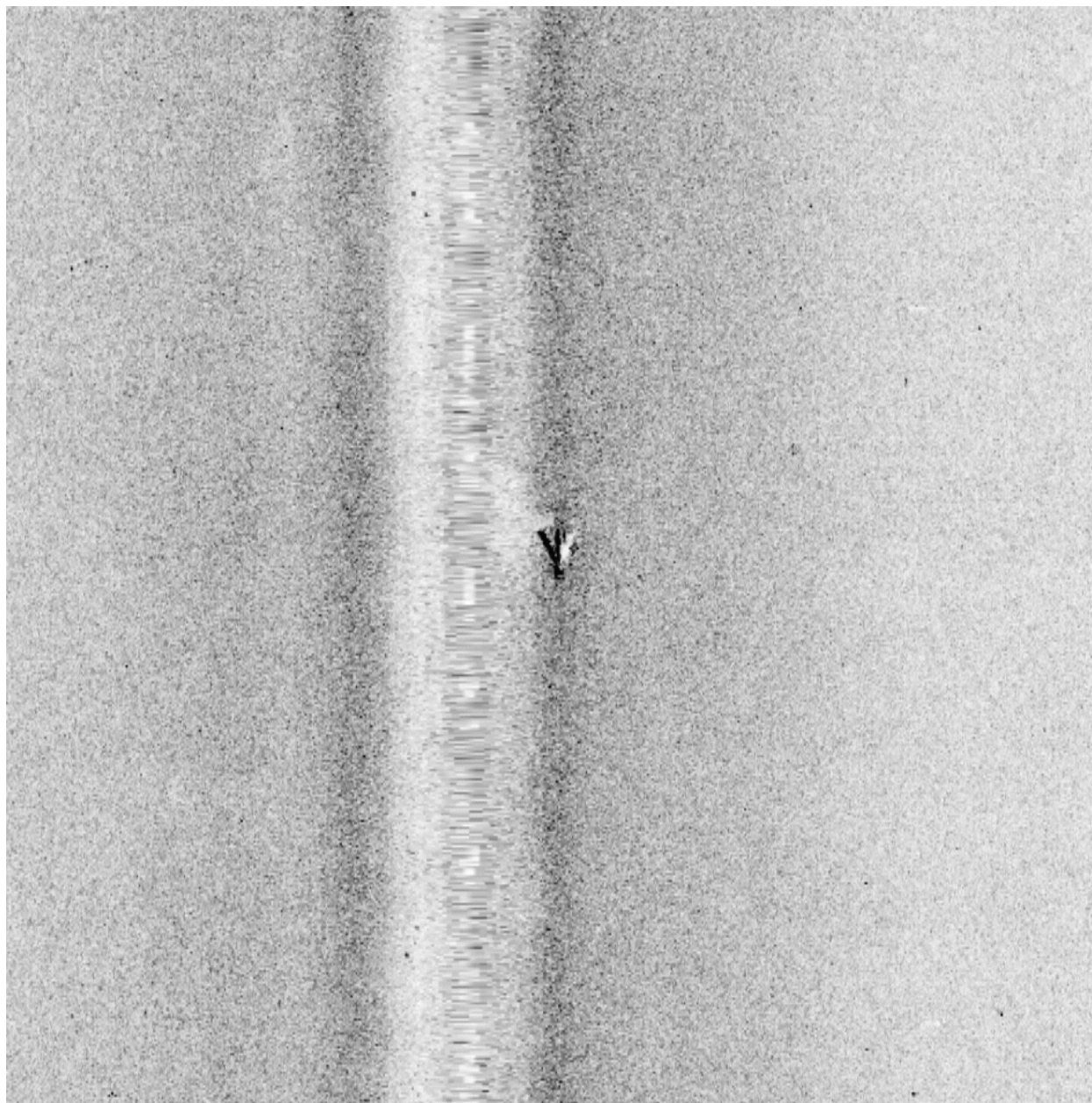


Figure 1.1.2



*Figure 1.1.3*

APPROVAL PAGE

H12555

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NGDC for archive

- H12555\_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12555\_GeoImage.pdf

The survey evaluation and verification has been conducted according current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: \_\_\_\_\_

**Lieutenant Commander Matthew Jaskoski, NOAA**  
Chief, Atlantic Hydrographic Branch