H12920

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

DESCRIPTIVE REPORT

Type of Survey:	Basic Hydrographic Survey
Registry Number:	H12920

LOCALITY

State(s):	Louisiana
General Locality:	Southeastern Vicinity of the Chandeleur Islands
Sub-locality:	Breton Sound Alternate Route 2016

2016

CHIEF OF PARTY
Jonathan L. Dasler, PE, PLS, CH

LIBRARY & ARCHIVES

Date:

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:
HYDROGRAPHIC TITLE SHEET	**H12920**

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(s):	**Louisiana**
General Locality:	**Southeastern Vicinity of the Chandeleur Islands**
Sub-Locality:	**Breton Sound Alternate Route 2016**
Scale:	**20000**
Dates of Survey:	**07/28/2016 to 10/01/2016**
Instructions Dated:	**07/15/2016**
Project Number:	**OPR-J311-KR-16**
Field Unit:	**David Evans and Associates, Inc.**
Chief of Party:	**Jonathan L. Dasler, PE, PLS, CH**
Soundings by:	**Reson 7125 SV2**
Imagery by:	**EdgeTech 4200-HF**
Verification by:	**Atlantic Hydrographic Branch**
Soundings Acquired in:	**meters at Mean Lower Low Water**

Remarks:

NAD83, UTM Zone 16 North, Meters, Times are UTC. The purpose of this contract is to provide NOAA with modern, accurate hydrographic survey data with which to update nautical charts of the assigned area.

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 Centers for Environmental Information (NCEI) and can be retrieved via http://www.ncei.noaa.gov/.

Table of Contents

List of Tables

List of Figures

Descriptive Report to Accompany Survey H12920

Project: OPR-J311-KR-16

Locality: Southeastern Vicinity of the Chandeleur Islands

Sublocality: Breton Sound Alternate Route 2016

Scale: 1:20000

July 2016 - October 2016

David Evans and Associates, Inc.

Chief of Party: Jonathan L. Dasler, PE, PLS, CH

A. Area Surveyed

David Evans and Associates, Inc. (DEA) conducted a hydrographic survey of portions of the Gulf Intracoastal Waterway (GIWW) Alternate Route within Chandeleur and Breton Sounds. Survey H12920 was conducted in accordance with the Statement of Work (July 7, 2016) and Hydrographic Survey Project Instructions (July 15, 2016).

The Hydrographic Survey Project Instructions reference the National Ocean Service (NOS) Hydrographic Surveys Specifications and Deliverables Manual (HSSD), 2016 as the technical requirements for this project.

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
30° 17' 1.72" N 89° 18' 26.97" W	29° 25' 21.17" N 88° 57' 9.44" W

Table 1: Survey Limits

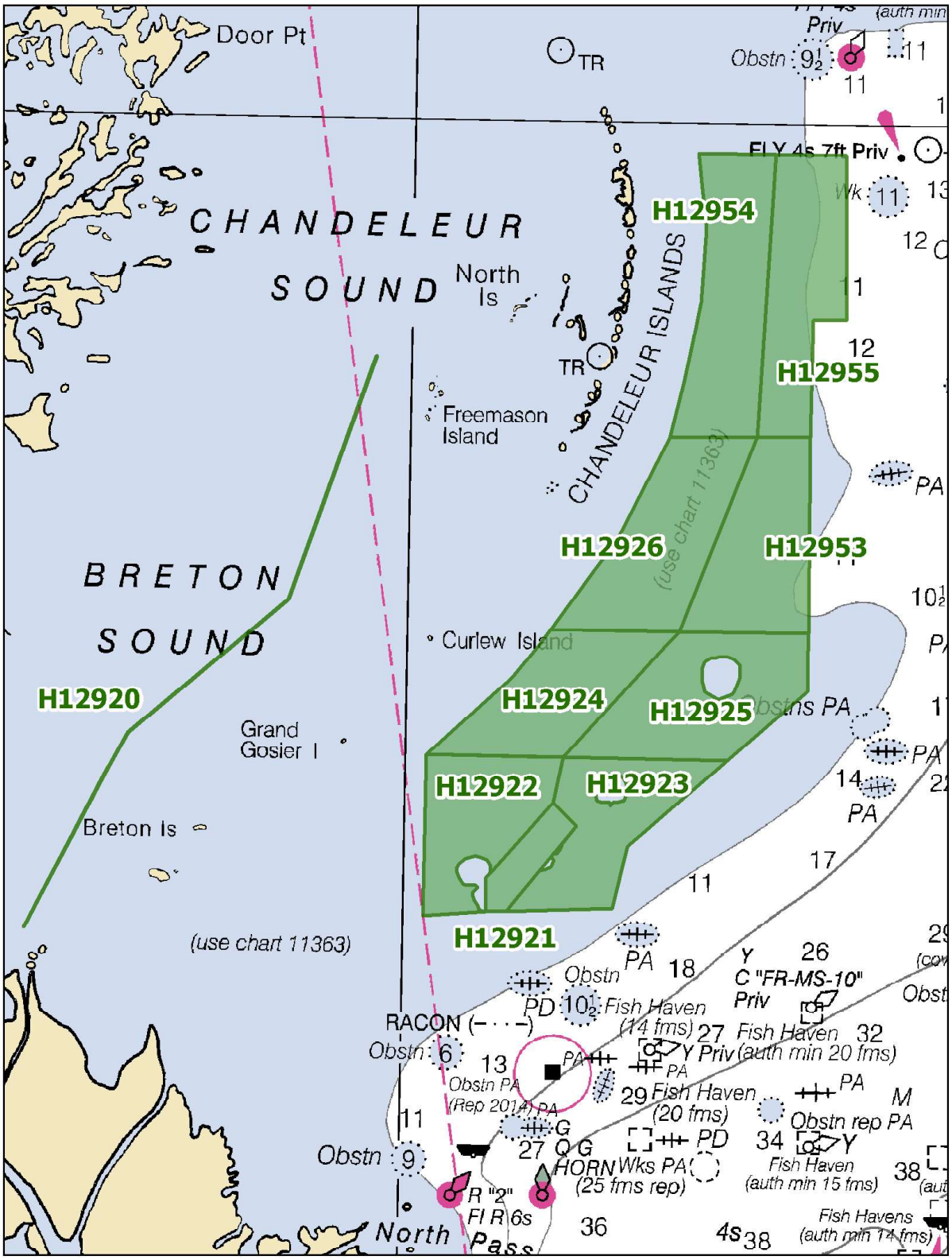


Figure 1: OPR-J377-KR2-15 Assigned Survey Areas

Survey Limits were surveyed in accordance with the requirements in the Project Instructions and the HSSD. An additional feature investigation was performed over a Wreck, charted as Position Approximate (PA), in Mississippi Sound. This investigation was performed at the request of the United States Coast Guard (USCG) with the approval of the Hydrographic Surveys Division (HSD).

A.2 Survey Purpose

The purpose of this project is to provide contemporary surveys to update National Ocean Service (NOS) nautical charting products. This project includes two survey areas totaling 263 SNM of which 226 SNM are classified as emerging critical areas, 32 SNM as priority two areas and 2 SNM as priority three as identified in the 2012 NOAA Hydrographic Survey Priorities. The first area is a narrow corridor located to the west of the Chandeleur Islands and extends from Baptiste Collette, LA towards Gulfport, MS. This corridor will serve as an alternate traffic route during the August 2016 closure of the INHC Lock in New Orleans. The second area, located to the east of the Chandeleur Islands, is a heavily trafficked area and encompasses approximately 125 SNM with multiple oil platforms and well heads.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

A.4 Survey Coverage

The following table lists the coverage requirements for this survey as assigned in the project instructions:

Water Depth	Coverage Required
All Sheet Numbers	All MBES acquisition requires backscatter acquisition (refer to HSSD Section 6.2)
Sheet Number 1	Object Detection Coverage via 200% Side Scan Sonar Coverage with Concurrent Multibeam or Single beam (refer to HSSD Section 5.2.2.2 Option 2)

Object detection survey coverage was obtained over the survey area using 200 percent side scan sonar coverage with concurrent multibeam echosounder (MBES) and backscatter. This coverage type follows Option B of the Object Detection Coverage requirement specified in Section 5.2.2 of the 2016 HSSD. Significant side scan sonar contacts were developed with multibeam sonar at object detection resolution as required by the coverage classification. Survey coverage was obtained within the survey area depicted in the Project Reference File (PRF) OPR-J311-KR-16_PRF.000. An additional feature disproval performed in Mississippi Sound has been included with this survey.

Figure 2: H12920 Survey Outline

A.5 Survey Statistics

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

	HULL ID	*S/V Blake*	*Total*
LNM	**SBES Mainscheme**	0.0	0
	MBES Mainscheme	3.96	3.96
	Lidar Mainscheme	0.0	0
	SSS Mainscheme	4.07	4.07
	SBES/SSS Mainscheme	0.0	0
	MBES/SSS Mainscheme	124.55	124.55
	SBES/MBES Crosslines	5.42	5.42
	Lidar Crosslines	0.0	0
Number of Bottom Samples			3
Number Maritime Boundary Points Investigated			0
Number of DPs			0
Number of Items Investigated by Dive Ops			0
Total SNM			2.0

Table 2: Hydrographic Survey Statistics

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

Survey Dates	Day of the Year
07/28/2016	210
07/29/2016	211
07/30/2016	212
07/31/2016	213
10/01/2016	275

Table 3: Dates of Hydrography

B. Data Acquisition and Processing

B.1 Equipment and Vessels

The OPR-J311-KR-16 Data Acquisition and Processing Report (DAPR), submitted with this survey, details equipment and vessel information as well as data acquisition and processing procedures. There were no vessel or equipment configurations used during data acquisition that deviated from those described in the DAPR.

B.1.1 Vessels

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

Hull ID	***S/V Blake***
LOA	83 feet
Draft	4.5 feet

Table 4: Vessels Used

Figure 3: S/V Blake

B.1.2 Equipment

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

Manufacturer	Model	Type
Reson	7125 SV2	MBES
Edgetech	4200-HF	SSS
Applanix	POS/MV 320 v5	Positioning & Attitude
Rolls Royce	MVP30-350 with AML Micro SV&P	Primary Sound Speed Profiler
AML	Micro SV Xchange	Surface Sound Speed
Sea-Bird Electronics	SEACAT SBE 19-03 CTD	Secondary Sound Speed Profiler

Table 5: Major Systems Used

B.2 Quality Control

B.2.1 Crosslines

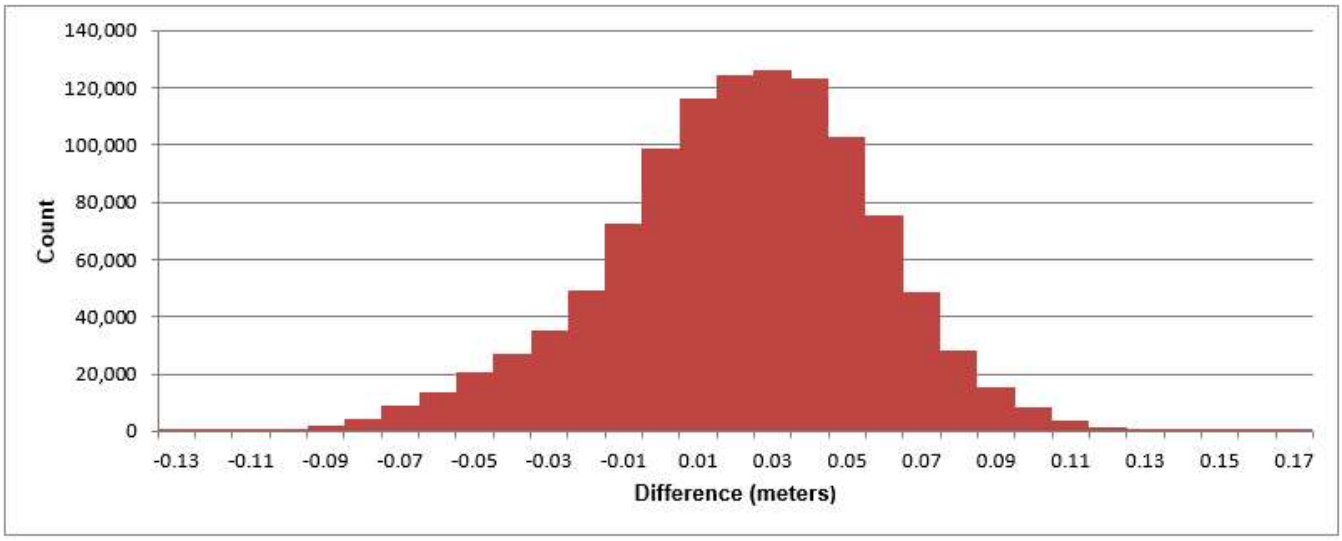
Crosslines acquired for this survey totaled 4.22% of mainscheme acquisition.

Crosslines were run across the entire survey area in order to provide a varied spatial and temporal distribution for analysis of internal consistency within the survey data. Crossline mileage was manually computed as crossline coverage extended well beyond the required survey limits. Crossline miles were only counted for portions of the survey track overlapping mainscheme hydrography.

Crossline analysis was performed using the CARIS Hydrographic Information Processing System (HIPS) Quality Control (QC) Report tool, which compares crossline data to a gridded surface and reports results by beam number. Crosslines were compared to a 50-centimeter CUBE surface encompassing mainscheme data for the entire survey area. The QC Report tabular output and plot are included in Separate II. The results of the analysis meet the requirements as stated in the 2016 HSSD.

Additional crossline analysis was performed by computing a 50-centimeter CUBE surface from the crossline data. The surface was then differenced from a 50-centimeter surface comprised of all mainscheme, fill, and investigation data. The resultant difference surface was exported using the Base Surface to ASCII function and statistics were compiled on the ASCII data.

Results from the crossline to mainscheme difference analysis are depicted in Figure 4. Outliers from the difference analysis were reviewed in HIPS subset editor and found to result from sound speed artifacts and sediment migration which occurred between July and October acquisition.



Mean:	0.018 m	Standard Deviation:	0.036 m
Minimum:	-0.137 m	Bin size:	0.01 m
Maximum:	0.170 m	Number of Nodes:	1,109,853

Figure 4: H12920 Crossline Differences

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Measured	Zoning	Method
0.00 meters	0.112 meters	Discrete

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
S/V Blake	n/a meters/second	1.0 meters/second	0.5 meters/second

Table 7: Survey Specific Sound Speed TPU Values

Additional discussion of these parameters is included in the DAPR.

During surface finalization in HIPS, the "greater of the two" option was selected, where the calculated uncertainty from total propagated uncertainty (TPU) is compared to the standard deviation of the soundings influencing the node, and where the greater value is assigned as the final uncertainty of the node. The

uncertainty of the finalized surfaces increased for nodes where the standard deviation of the node was greater than the total propagated uncertainty.

The resulting calculated uncertainty values of all nodes in the finalized 50-centimeter Object Detection Coverage multibeam surface range from 0.234 meters to 1.602 meters with a standard deviation of 0.003 meters.

To determine if surface grid nodes met International Hydrographic Organization (IHO) Order 1 specification, a ratio of the final node uncertainty to the allowable uncertainty at that depth was determined. As a percentage, this value represents the amount of error budget utilized by the uncertainty value at each node. Values greater than 100% indicate nodes exceeding the allowable IHO uncertainty.

For the 50-centimeter Object Detection Coverage multibeam surface, the allowable uncertainty utilized ranges from 46% to 317%. The mean allowable uncertainty for the surface is 47% with a standard deviation of 0.006. In total 232 nodes out of 17,559,162 fail to meet specification.

Nodes that were reported out of specification were coincident with areas of high depth standard deviation with steep slopes or high relief. All uncertainty values were within allowable specification prior to surface finalization when standard deviation was incorporated into the solution when it was greater than the node uncertainty.

B.2.3 Junctions

Survey H12920 junctions with surveys D00140, D00141, D00142, H11815, and H12722.

Prior surveys D00140, D00141, D00142 were hydrographic reconnaissance surveys which used a vertical beam echosounder with 1,000-meter line spacing to evaluate chart adequacy. Survey H11815 was a single beam survey with concurrent side scan performed by TerraSond Ltd and survey H12722 was a multibeam survey with concurrent side scan performed by DEA.

The Bathymetric Attributed Grids (BAGs) for surveys D00140, D00141, D00142, and H11815 were downloaded from NOAA's National Centers for Environmental Information (NCEI) website for comparison with H12920. Survey H12722, which was performed by DEA in 2014, was not available on the NCEI website. A copy of the CSAR surface that was submitted to the Atlantic Hydrographic Branch was used during the comparison. The finalized H12920 surface was compared to each junction survey by generating a difference surface with CARIS HIPS.

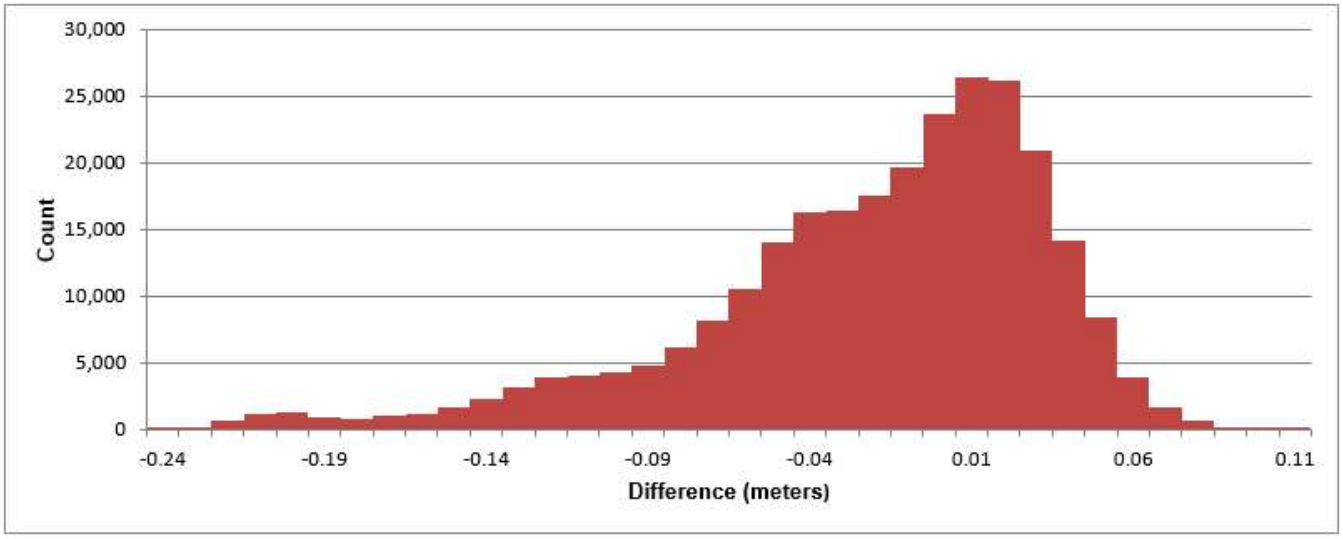
The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
D00140	1:40000	2008	Terrasond, Ltd.	N
D00141	1:40000	2008	Terrasond, Ltd.	W
D00142	1:40000	2008	Terrasond, Ltd.	E
H11815	1:20000	2008	Terrasond, Ltd.	S
H12722	1:40000	2014	David Evans & Associates, Inc.	N

Table 8: Junctioning Surveys

D00140

H12920 survey depths generally range from 5 centimeters deeper than D00140 to 10 centimeters shoaler than D00140. The minimum reported differences (H12920 up to 24 centimeters shoaler than D00140) appears to result from several factors, such as natural change and tide artifacts. The maximum reported differences (H12920 up to 11 centimeters deeper than D00140) occurs in an area of apparent natural change. Survey D00140 was tide corrected with zoning from Gulfport Harbor, MS (8745557) and a subordinate gauge at Olga Compressor Station, LA (8760889) which differs from the zoning scheme used for H12920.

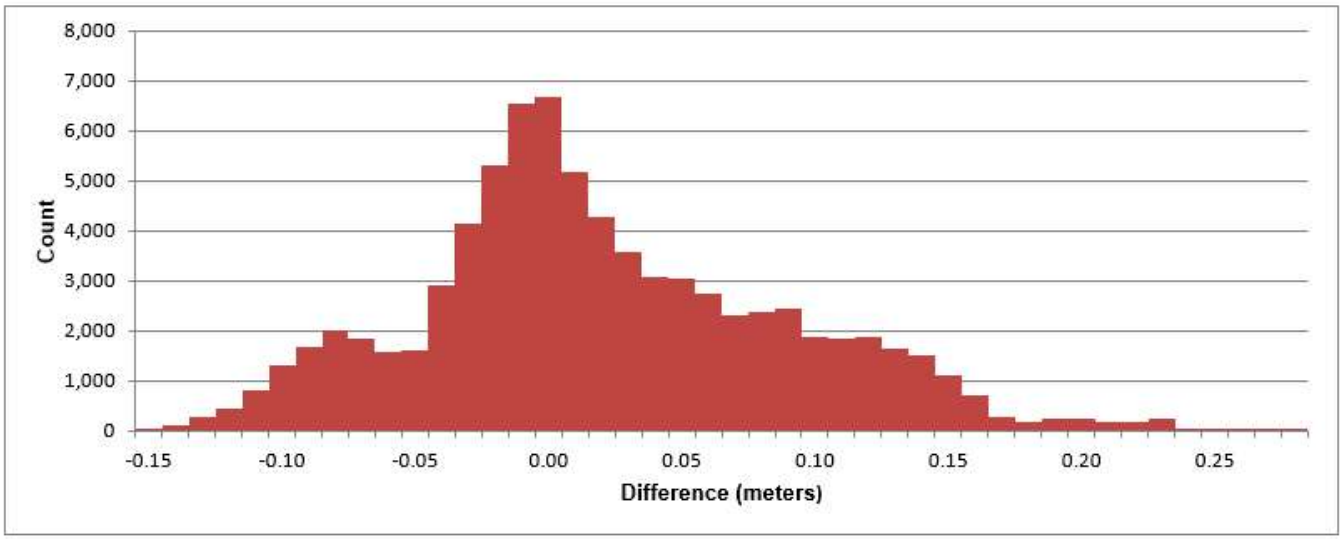


Mean:	-0.022 m	Standard Deviation:	0.054 m
Minimum:	-0.244 m	Bin size:	0.01 m
Maximum:	0.110 m	Number of Nodes:	266,306

Figure 5: Junction results between H12920 50-centimeter and D00140 5-meter bathy grids

D00141

H12920 survey depths generally range from 15 centimeters deeper than D00141 to 10 centimeters shoaler than D00141. Minimum and maximum deviations appear to be related to a combination of natural seabead change and minor sound speed and tide artifacts. Survey D00141 was tide corrected with zoning from a subordinate gauge at Olga Compressor Station, LA (8760889) which differs from the zoning scheme used for H12920.

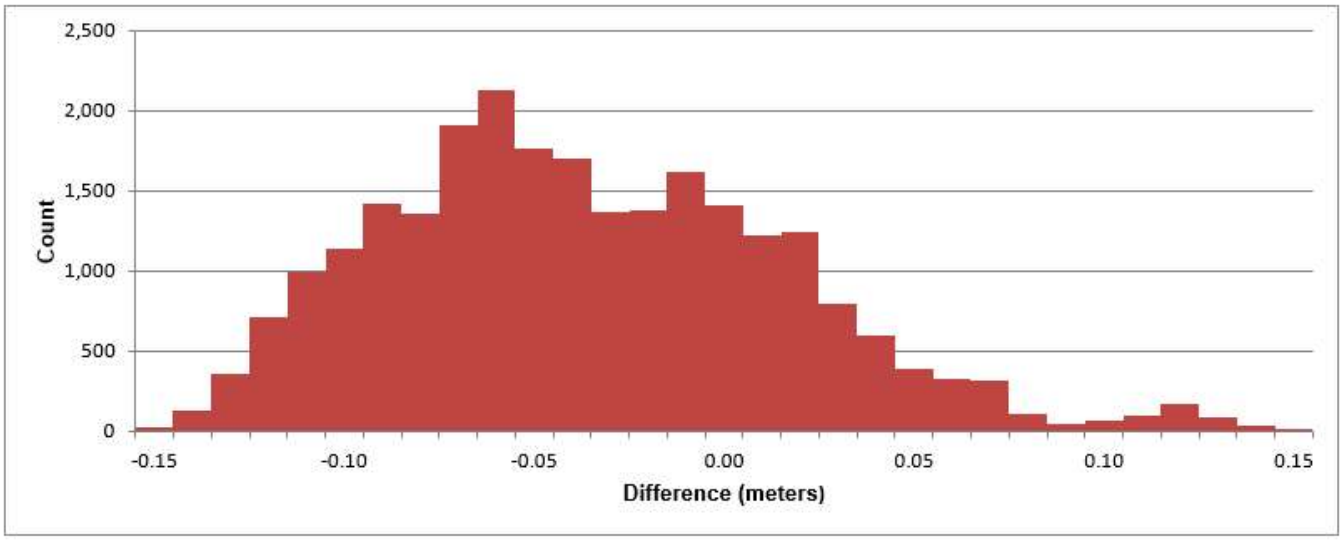


Mean:	0.019 m	Standard Deviation:	0.069 m
Minimum:	-0.154 m	Bin size:	0.01 m
Maximum:	0.282 m	Number of Nodes:	78,553

Figure 6: Junction results between H12920 50-centimeter and D00141 5-meter bathy grids

D00142

H12920 survey depths generally range from 15 centimeters deeper than D00142 to 10 centimeters shoaler than D00142. Minimum and maximum deviations appear to be related to a combination of natural seabead change and minor sound speed and tide artifacts. Survey D00142 was tide corrected with zoning from a subordinate gauge at Olga Compressor Station, LA (8760889) which differs from the zoning scheme used for H12920.

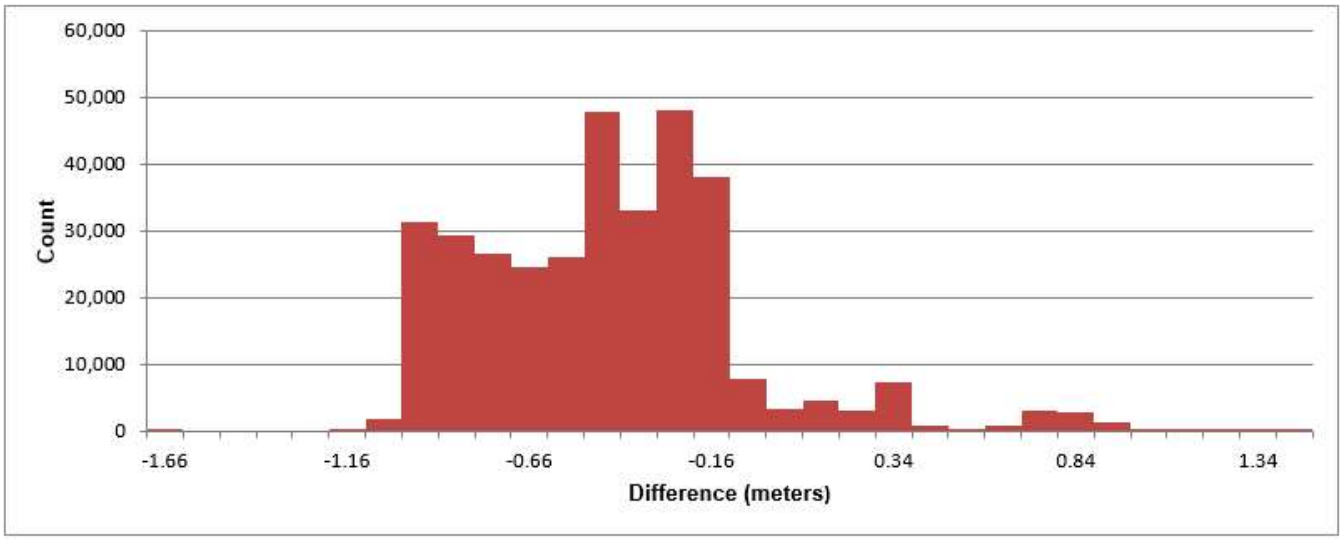


Mean:	-0.032 m	Standard Deviation:	0.053 m
Minimum:	-0.148 m	Bin size:	0.01 m
Maximum:	0.157 m	Number of Nodes:	24,884

Figure 7: Junction results between H12920 50-centimeter and D00142 5-meter bathy grids

H11815

H12920 survey depths are generally 5 centimeters to 1 meter shoaler than H11815. The minimum reported differences (H12920 up to 1.7 meters shoaler than H11815) occurs at the location of H12920 Danger to Navigation (DtoN) 3 which was not identified by the prior survey. The maximum reported differences (H12920 up to 1.5 meters deeper than D00140) result from dredging within the Baptiste Collette Bayou Channel.

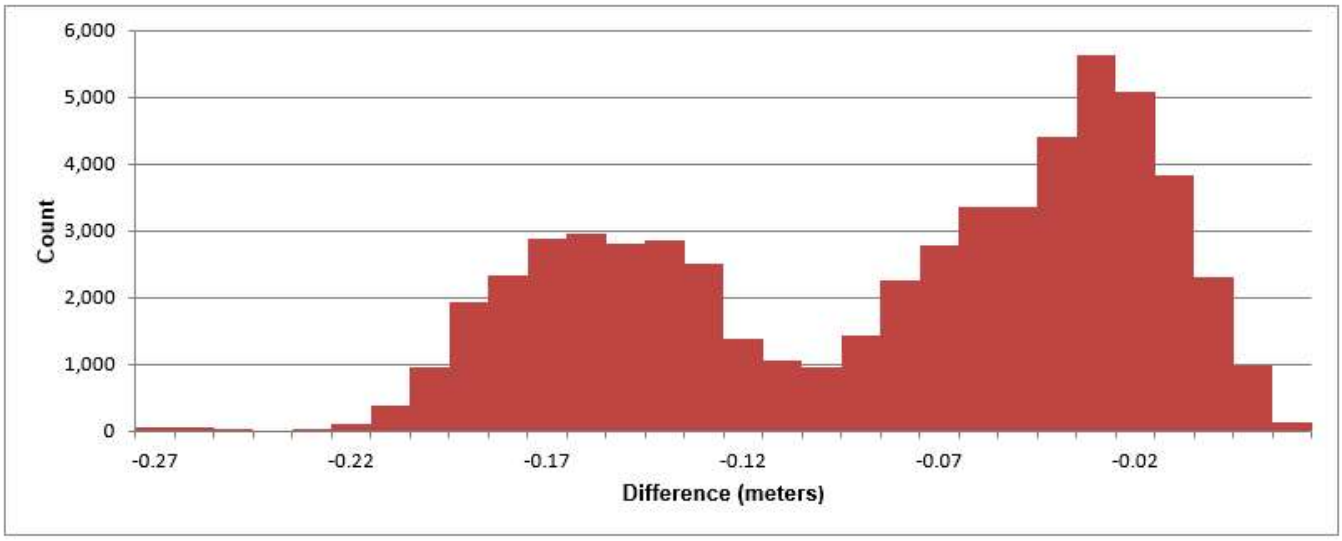


Mean:	-0.435 m	Standard Deviation:	0.368 m
Minimum:	-1.664 m	Bin size:	0.1 m
Maximum:	1.451 m	Number of Nodes:	341,937

Figure 8: Junction results between H12920 50-centimeter and H11815 5-meter bathy grids

H12722

H12920 survey depths are generally 1 to 20 centimeters shoaler than H12722. Minimum and maximum deviations appear to be related to minor sound speed and tide artifacts. Survey H12722 was tide corrected with zoning from Bay Waveland Yacht Club, MS (8747437) which differs from the zoning scheme used for H12920.



Mean:	-0.089 m	Standard Deviation:	0.063 m
Minimum:	-0.279 m	Bin size:	0.01 m
Maximum:	0.02 m	Number of Nodes:	58,828

Figure 9: Junction results between H12920 50-centimeter and H12722 4-meter bathy grids

B.2.4 Sonar QC Checks

Quality control is discussed in detail in Section B of the DAPR. Results from weekly position checks and weekly multibeam bar checks are included in Separate I Acquisition and Processing Logs of this report. Sound speed checks can be found in Separate II Sound Speed Data Summary of this report.

Multibeam data were reviewed at multiple levels of data processing including: CARIS HIPS conversion, subset editing, and analysis of anomalies revealed in CUBE surfaces.

B.2.5 Equipment Effectiveness

No Delayed Heave on October 1, 2016

Delayed heave was not logged during acquisition on October 1, 2016 (DN275). As a result, delayed heave and delayed heave RMS have not been applied to survey data acquired on this day. Total Vertical Uncertainty (TVU) was computed with values included in the HIPS Vessel File (HVF).

B.2.6 Factors Affecting Soundings

Navigation Offset

A small navigation offset is present in survey line 2016BL2102028. The offset, which is apparent in the along-track direction at the edge of a dredge cut, is within the expected accuracy of DGPS navigation systems.

Sound Speed Artifacts

The shallow and protected waters of Chandeleur and Breton Sounds are prone to stratification of the water column by factors such as river outflow, rain events, and solar heating. Sound speed artifacts resulting from this stratification impacted multibeam data quality during the survey. It appears that in certain conditions, the MVP, which is towed from the stern of the survey vessel, collects a profile through a water column that has been mixed by the prop wash of the survey vessel. The sonar and surface sound speed instrument, which are co-located midships and deployed through a moon pool between the catamaran sponsons, transit through undisturbed water and acquire data in a more stratified water column. The mixing action by the props can invalidate a sound speed profile taken seconds after the acquisition of a multibeam sonar ping.

Impacts to the MBES soundings were mitigated by filtering (rejecting) portions of the outer swath in some areas as well as rejecting several sound speed profiles acquired on DN210. While artifacts of up to 15 centimeters are occasionally visible in the sounding data, they are less pronounced in the bathymetric grids submitted with this survey.

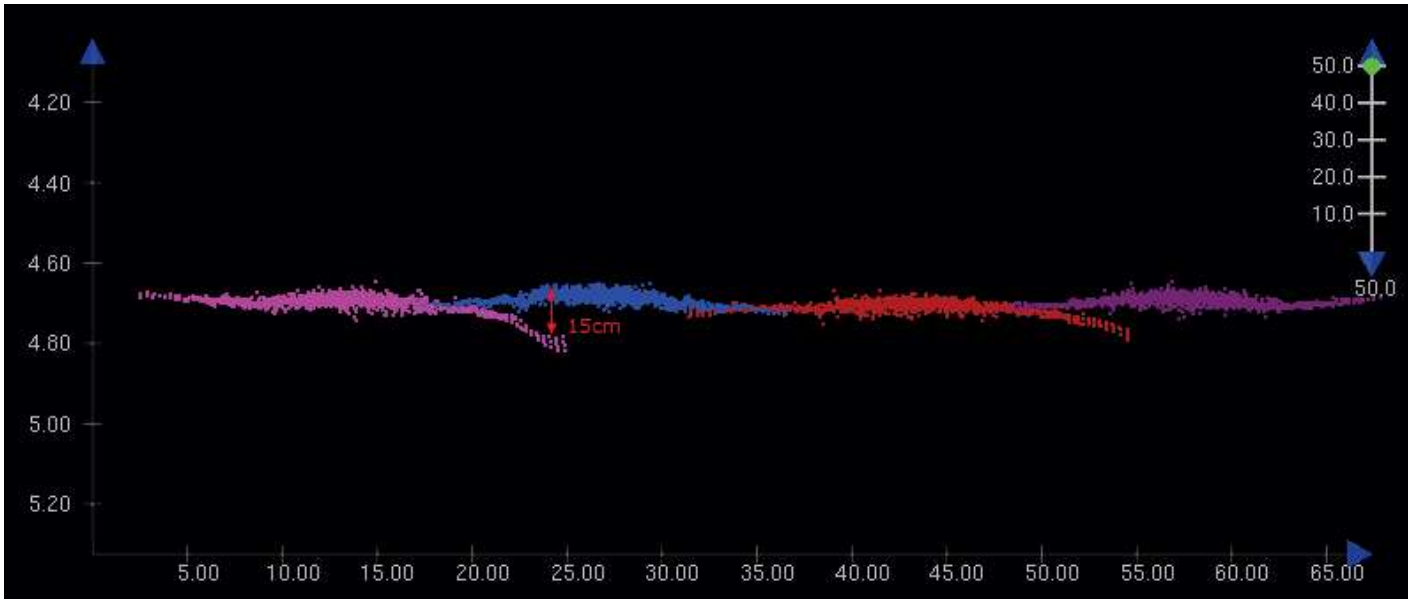


Figure 10: Example sound speed artifact in the H12920 sounding data

B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: Approximately 15-minute intervals.

A Rolls Royce Moving Vessel Profiler (MVP) was the primary instrument used to acquire sound speed readings during multibeam operations. MVP sound speed readings were measured at approximately 15-minute intervals during survey operations. Additional discussion of sound speed methods can be found in the DAPR.

B.2.8 Coverage Equipment and Methods

Survey speeds were maintained to meet or exceed along-track sounding density and side scan sonar ensonification requirements.

Side scan mosaics were thoroughly reviewed for holidays and areas of poor quality coverage due to biomass, vessel wakes, or other factors. A fill plan was created in order to acquire side scan data where holidays and significant poor quality coverage existed. Side scan sonar contacts were developed with multibeam sonar to obtain a least depth of the contact using Object Detection Coverage requirements.

B.2.9 Density

The sounding density requirement of 80% of all nodes, populated with at least five soundings per node, was verified by exporting the density child layer of each CUBE surface to an ASCII text file and compiling statistics on the density values. More than 98.8% of all final CUBE surface nodes contained five or more soundings.

B.3 Echo Sounding Corrections

B.3.1 Corrections to Echo Soundings

Data reduction procedures for survey H12920 are detailed in the DAPR. A summary multibeam processing log is included in Separate I of this report.

B.3.2 Calibrations

No additional calibration tests were conducted beyond those discussed in the DAPR.

B.4 Backscatter

Multibeam backscatter was logged in Hypack 7K format and included with the H12920 digital deliverables. Data were processed periodically in CARIS HIPS to evaluate backscatter quality but the processed data is not included with the deliverables.

For data management purposes, the names of multibeam crosslines have been appended with the suffix _XL. This change was made to HIPS files only. The original file names of raw data files (Hypack HSX and 7k) have been retained.

B.5 Data Processing

B.5.1 Primary Data Processing Software

The following software program was the primary program used for bathymetric data processing:

Manufacturer	Name	Version
CARIS	HIPS	9.1.6

Table 9: Primary bathymetric data processing software

The following software program was the primary program used for imagery data processing:

Manufacturer	Name	Version
Chesapeake Technology, Inc.	SonarWiz	6.004.0006 and 6.004.0009

Table 10: Primary imagery data processing software

The following Feature Object Catalog was used: 5.3.4. A detailed listing of all data processing software is included in the OPR-J311-KR-16 DAPR.

B.5.2 Surfaces

The following surfaces and/or BAGs were submitted to the Processing Branch:

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H12920_MB_50cm_MLLW	CUBE	50 centimeters	3.44 meters - 6.83 meters	NOAA_0.5m	Object Detection Coverage
H12920_MB_50cm_MLLW_Final	CUBE	50 centimeters	3.09 meters - 6.83 meters	NOAA_0.5m	Finalized Object Detection Coverage

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H12920_SSS_1m_100	Mosaic	1 meters	0 meters - 0 meters	N/A	100- percent coverage
H12920_SSS_1m_200	Mosaic	1 meters	0 meters - 0 meters	N/A	200- percent coverage
H12920_USCG_disproval_SSS_1m_100	Mosaic	1 meters	-	N/A	100- percent coverage over USCG investigation
H12920_USCG_disproval_SSS_1m_200	Mosaic	0 meters	-	N/A	200- percent coverage over USCG investigation

Table 11: Submitted Surfaces

Bathymetric grids were created relative to Mean Lower Low Water (MLLW) in CUBE format using Object Detection Coverage resolution requirements as described in the HSSD. Surveys and mosaics include data acquired as part of the disproval of the Wreck PA charted in Mississippi Sound requested by the USCG. Separate side scan mosaics were produced for the assigned survey area and
wreck disproval due to mosaic file size limitations.

C. Vertical and Horizontal Control

A complete description of the horizontal and vertical control for survey H12920 can be found in the OPR-J311-KR-16 Horizontal and Vertical Control Report (HVCR), submitted under a separate cover. A summary of horizontal and vertical control for this survey follows.

The horizontal datum for the project was the North American Datum of 1983 (NAD 83) as specified by Hydrographic Technical Directive (HTD) 2016-3: Revision of Horizontal Datum in 2016 HSSD. A copy of this HTD is included in the OPR-J311-KR-16 Project Correspondence.

C.1 Vertical Control

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

Standard Vertical Control Methods Used:

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

Station Name	Station ID
Pascagoula	8741533

Table 12: NWLON Tide Stations

File Name	Status
8741533.tid	Verified Observed

Table 13: Water Level Files (.tid)

File Name	Status
J311KR2016RevCORP.zdf	Final
J348KR2011CORP_Rev.zdf	Final

Table 14: Tide Correctors (.zdf or .tc)

Tide zoning file J311KR2016RevCORP.zdf was provided with the project instructions and used for sounding correction within the assigned survey area. Tide zoning file J348KR2011CORP_Rev.zdf, which was used by DEA during project OPR-J348-KR-11, was used for correction of soundings acquired as part of the wreck disproval in Mississippi Sound. All soundings acquired during the wreck disproval fell within zone CGM68 which used a time correction of 18 minutes and range correction of 1.14.

C.2 Horizontal Control

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

The projection used for this project is NAD83 UTM Zone 16 North.

The following DGPS Stations were used for horizontal control:

DGPS Stations
English Turn, LA (293 kHz)

Table 15: USCG DGPS Stations

D. Results and Recommendations

D.1 Chart Comparison

Direct comparison between the survey and charts was performed by comparing the raster navigational charts (RNCs) to surveyed soundings. GIS methods were used to compute zonal statistics between soundings charted on each RNC and all finalized grid nodes within a predefined radius around the charted soundings. The 1:40,000 scale comparison used a 60-meter radius and the 1:80,000 scale comparison used a 120-meter radius. The chart comparison also included a review of all assigned charted features within the survey area. Sparsely charted soundings and contours in the vicinity of the survey area prevented the creation of a digital surface of the electronic navigational charts (ENCs) needed to produce a difference surface between the charts and survey.

The ENC comparison was performed by manually comparing the ENCs covering the survey area to the corresponding RNCs and identifying discrepancies between the two chart formats.

The electronic and raster versions of the relevant charts used during the comparison were reviewed to check that all US Coast Guard (USCG) Local Notice to Mariners (LNMs) issued during survey acquisition and impacting the survey area were applied and addressed by this survey.

D.1.1 Raster Charts

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

Chart	Scale	Edition	Edition Date	LNM Date	NM Date
11353	1:40000	8	07/2016	09/27/2016	10/01/2016
11363	1:80000	1	02/2013	09/27/2016	10/01/2016

Table 16: Largest Scale Raster Charts

11353

In general, depths are between 1 feet shoaler to 2 feet deeper than charted. In a few cases, the zonal comparison results show surveyed depths up to 5.5 feet deeper than charted. These differences are artifacts of applying a single charted depth value to each 60-meter comparison radius. Surveyed depths in the interior of the radius, typically over newly applied DtoNs, agree with the chart.

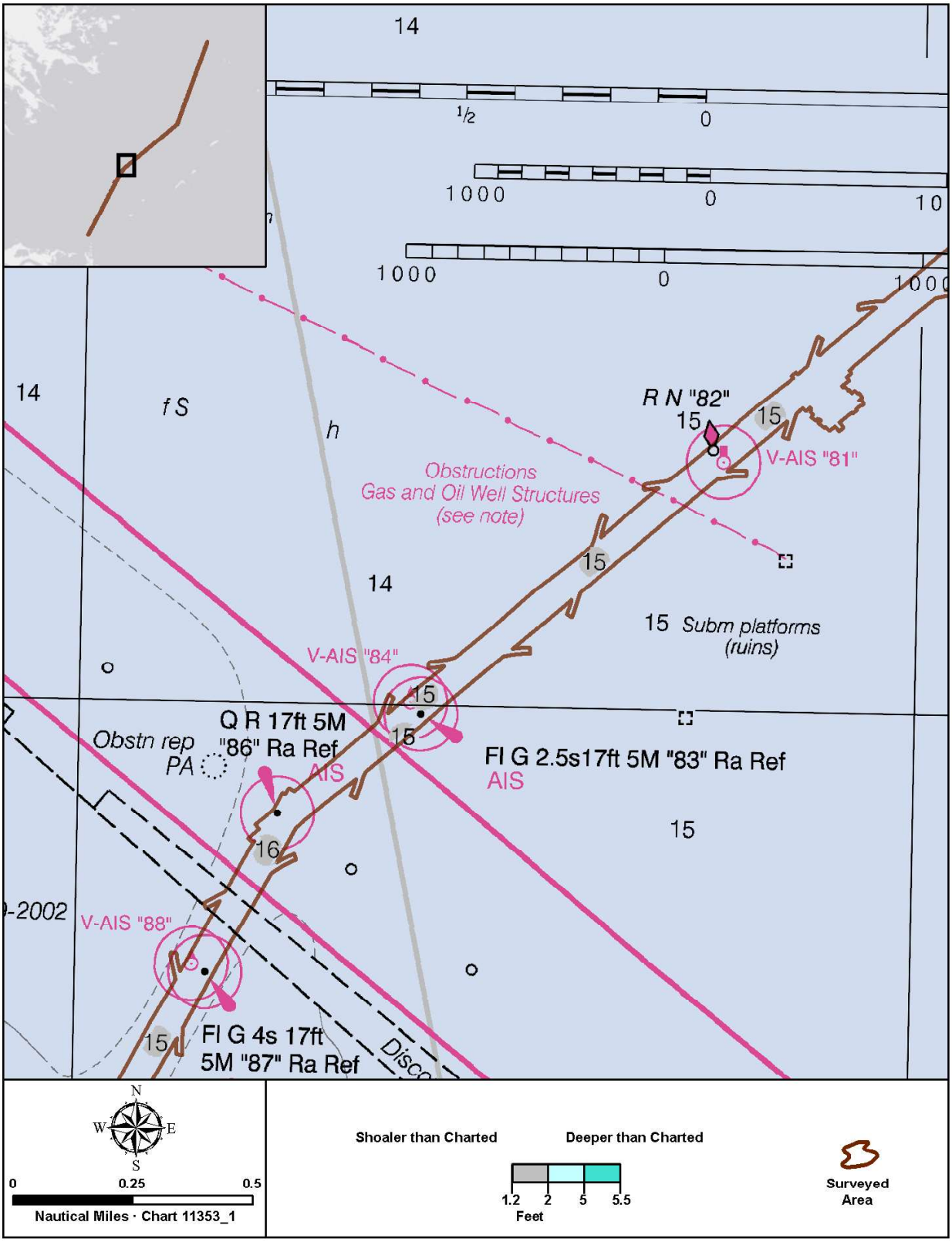


Figure 11: 11353 Charted Sounding Comparison (1 of 5)

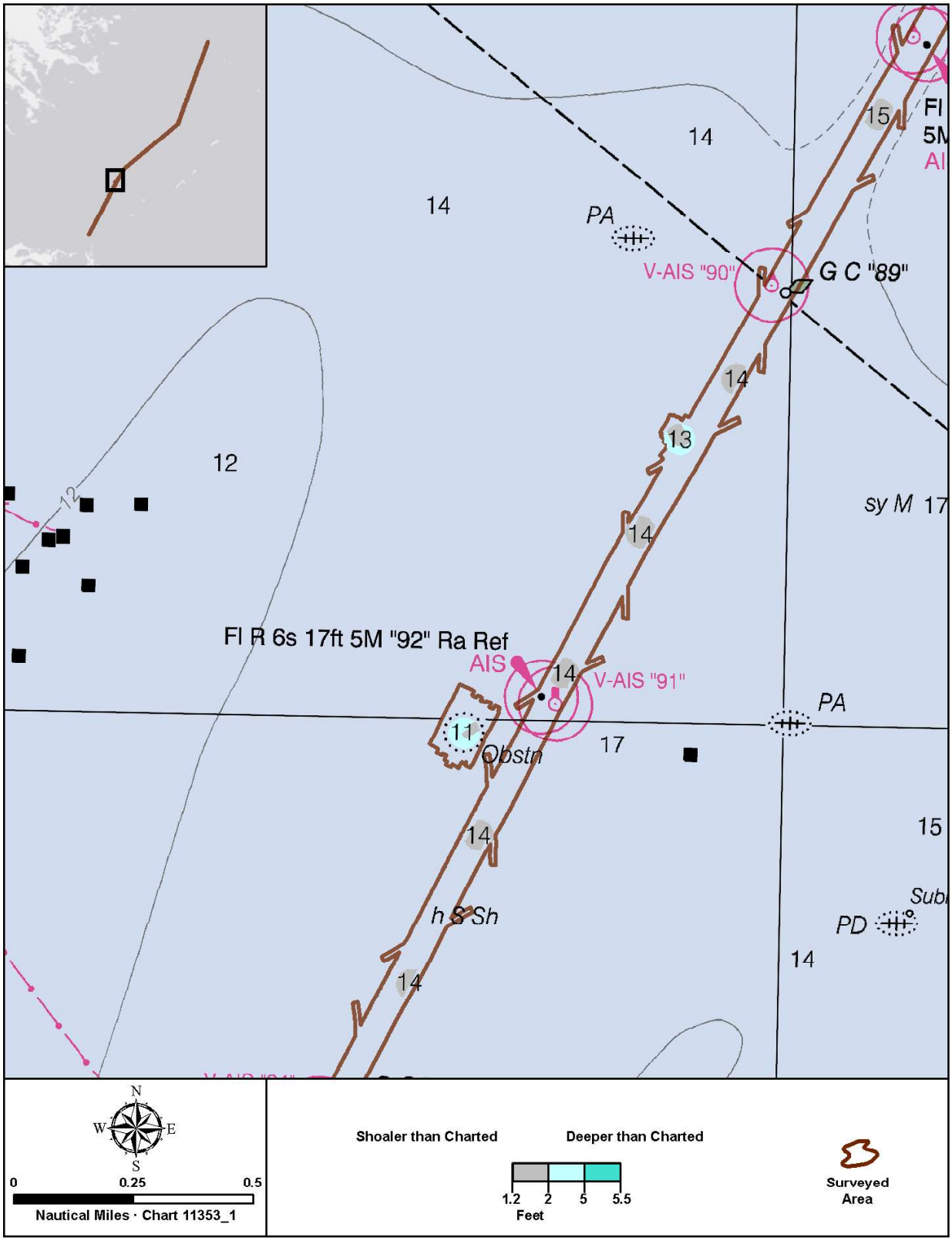


Figure 12: 11353 Charted Sounding Comparison (2 of 5)

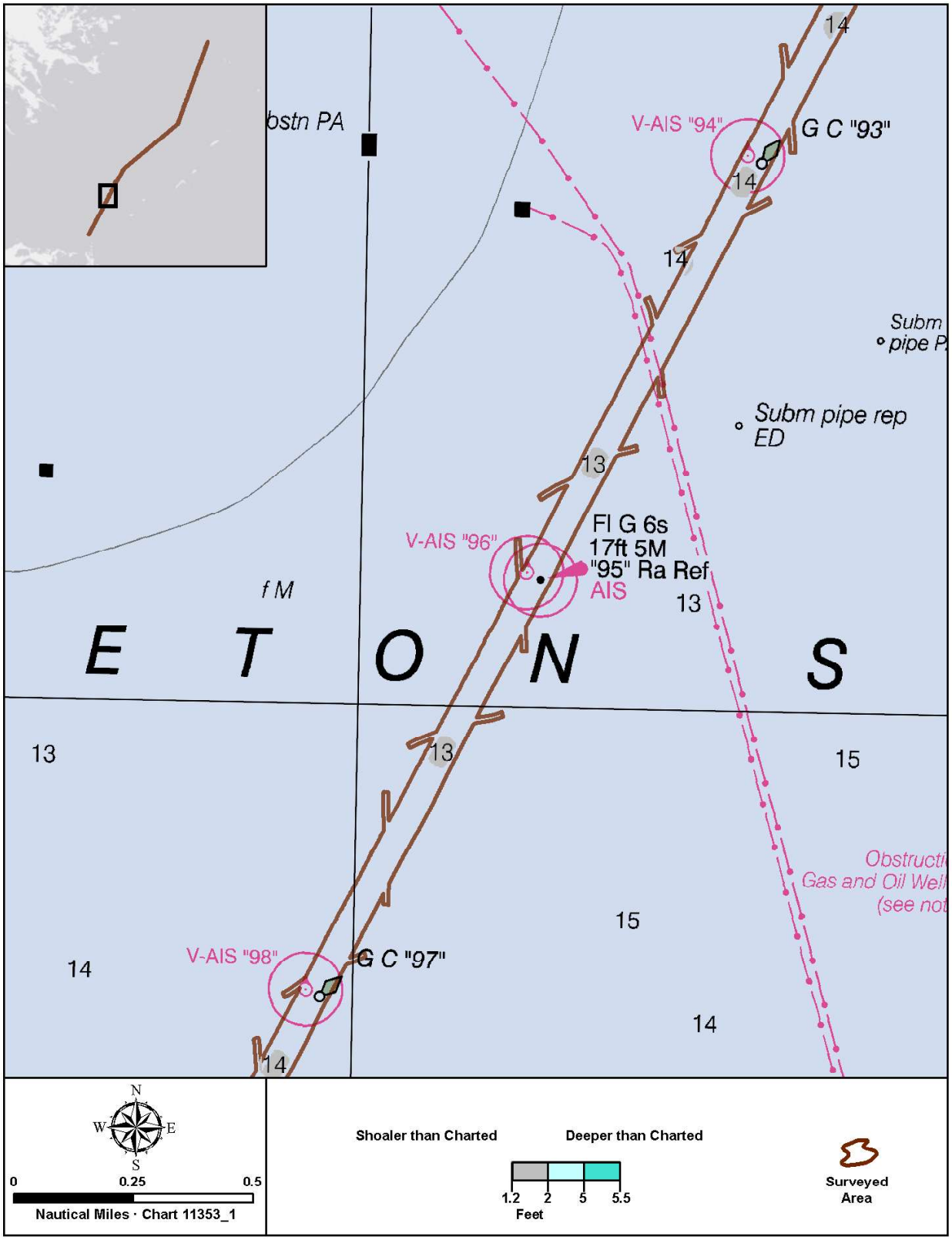


Figure 13: 11353 Charted Sounding Comparison (3 of 5)

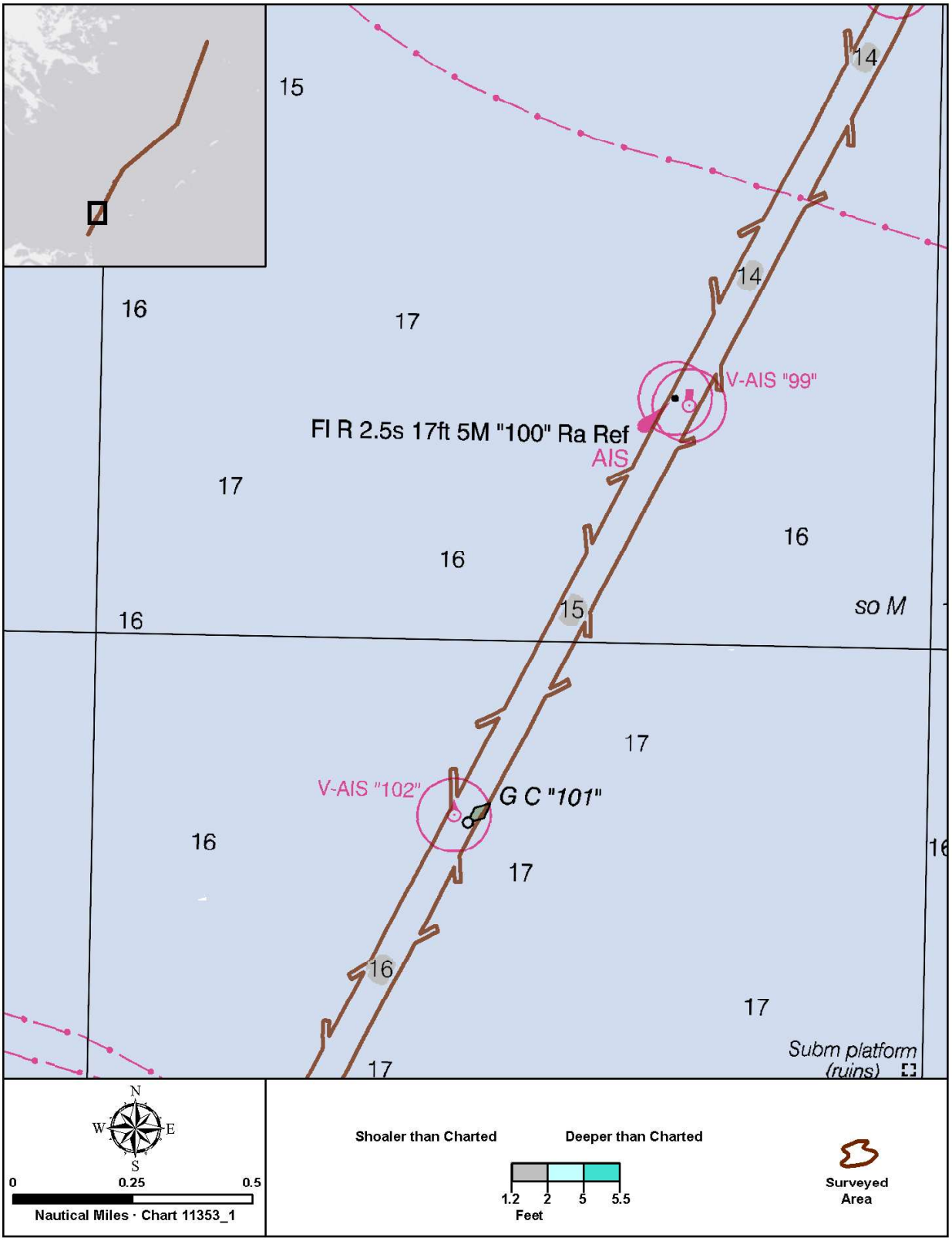


Figure 14: 11353 Charted Sounding Comparison (4 of 5)

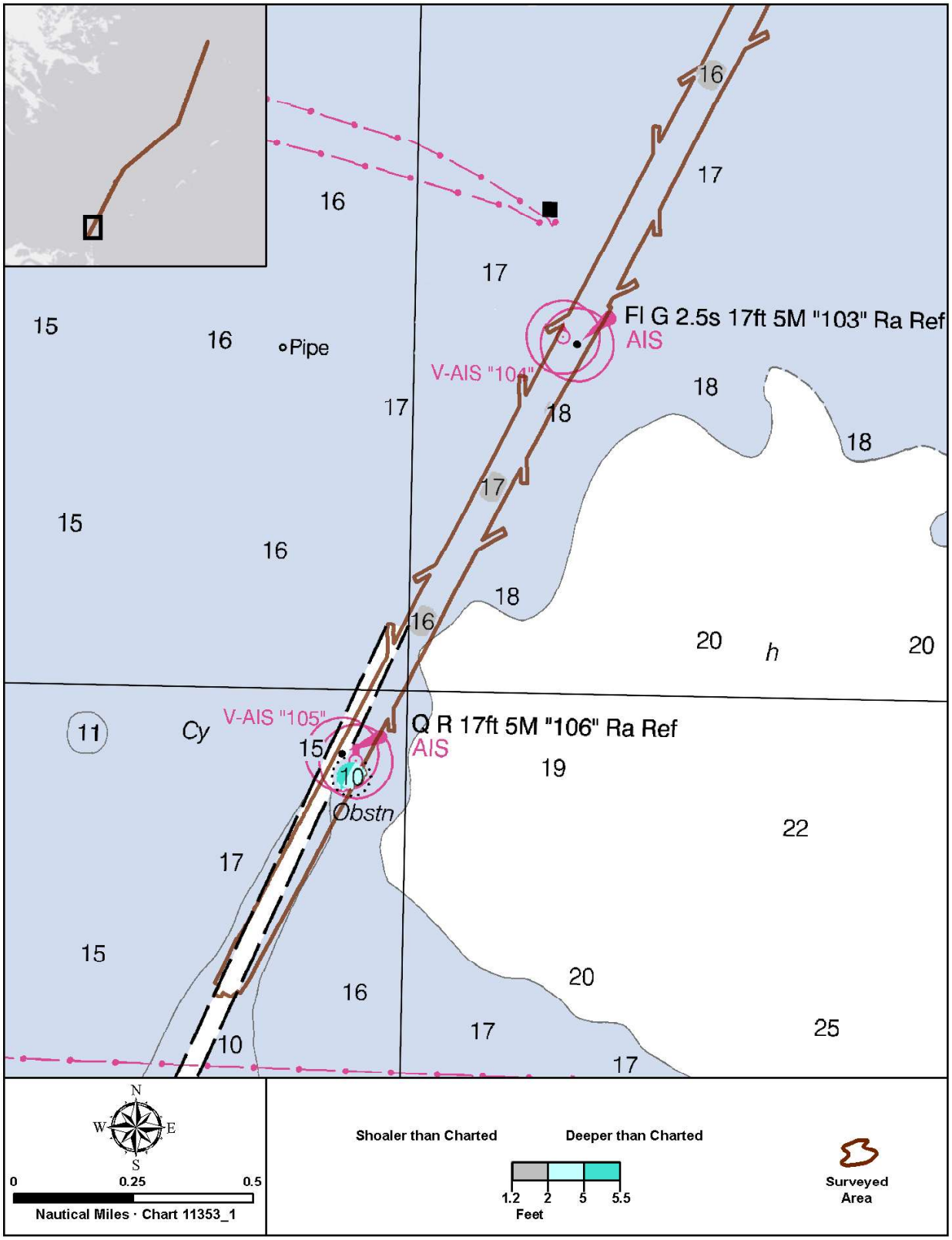


Figure 15: 11353 Charted Sounding Comparison (5 of 5)

11363

In general, depths are between 1 foot shoaler to 2 feet deeper than charted. In a few cases, the zonal comparison results show surveyed depths exceeding this threshold. Surveyed depths are up to 3 feet shoaler than charted where H12920 DtoN 3 has not yet been applied to the chart. As with the comparison with chart 11353, there are a few areas were surveyed depths are up to 5.5 deep than charted. These differences are artifacts of applying a single charted depth value to each 120-meter comparison radius. Surveyed depths in the interior of the radius, typically over newly applied DtoNs, agree with the chart.

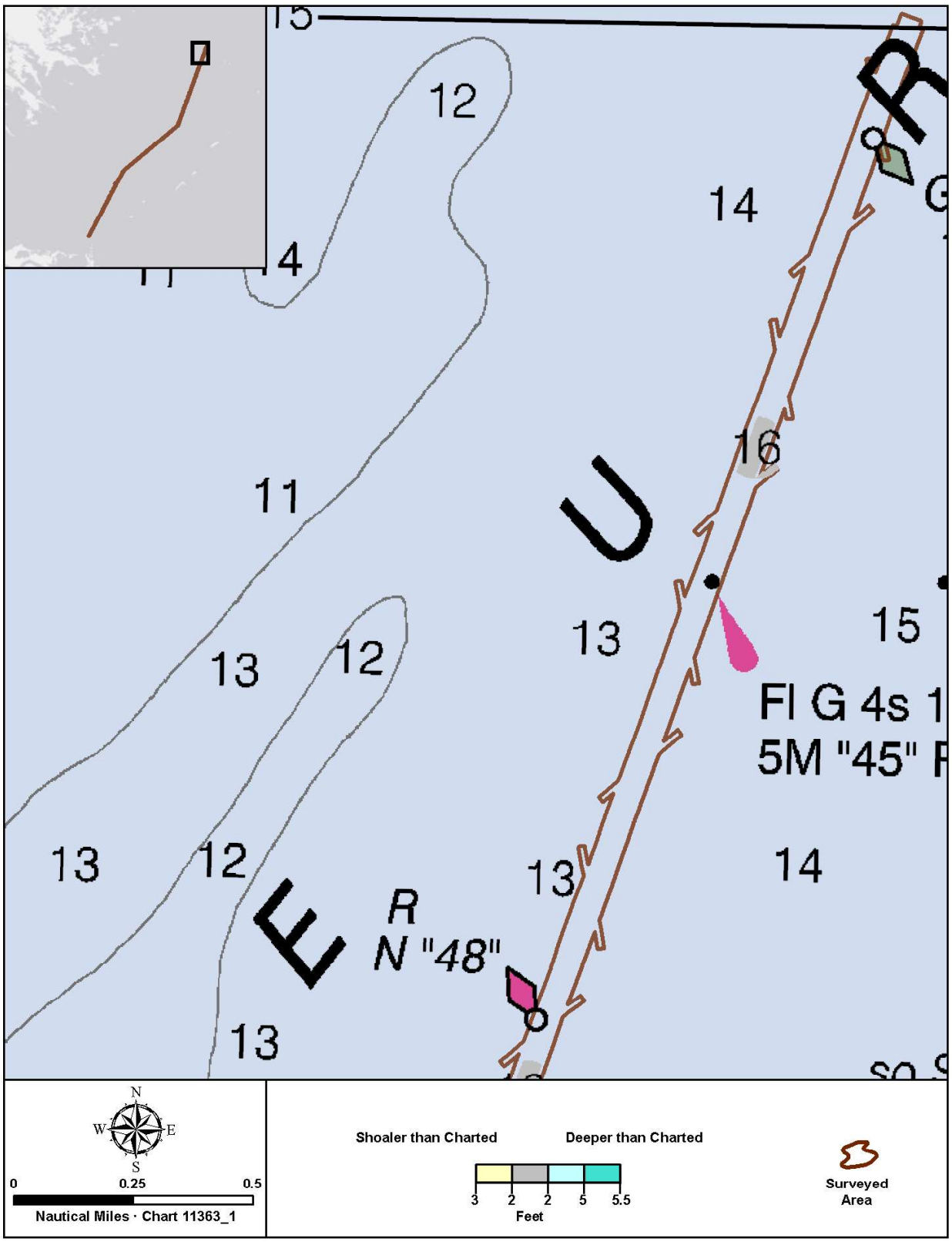


Figure 16: 11363 Charted Sounding Comparison (1 of 13)

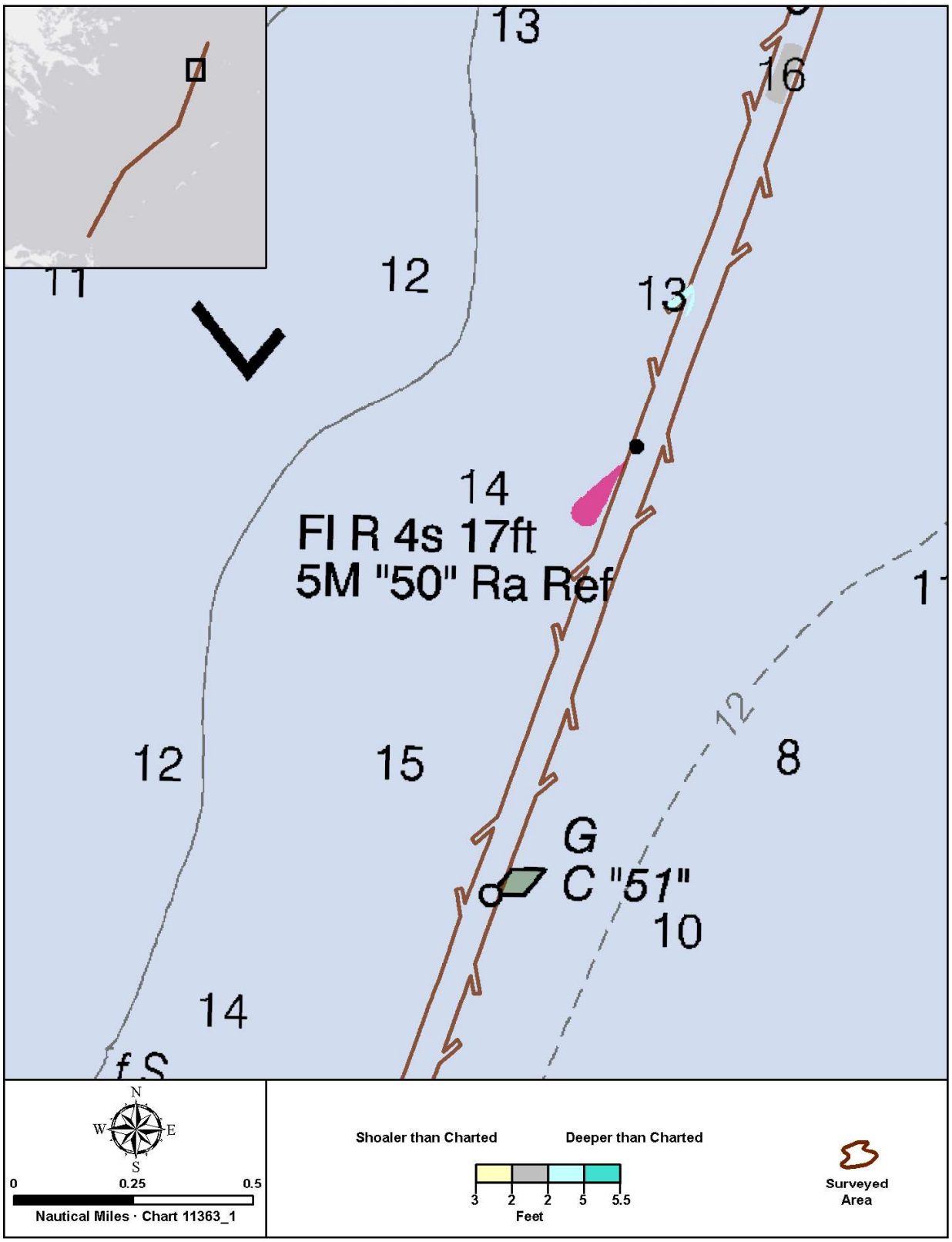


Figure 17: 11363 Charted Sounding Comparison (2 of 13)

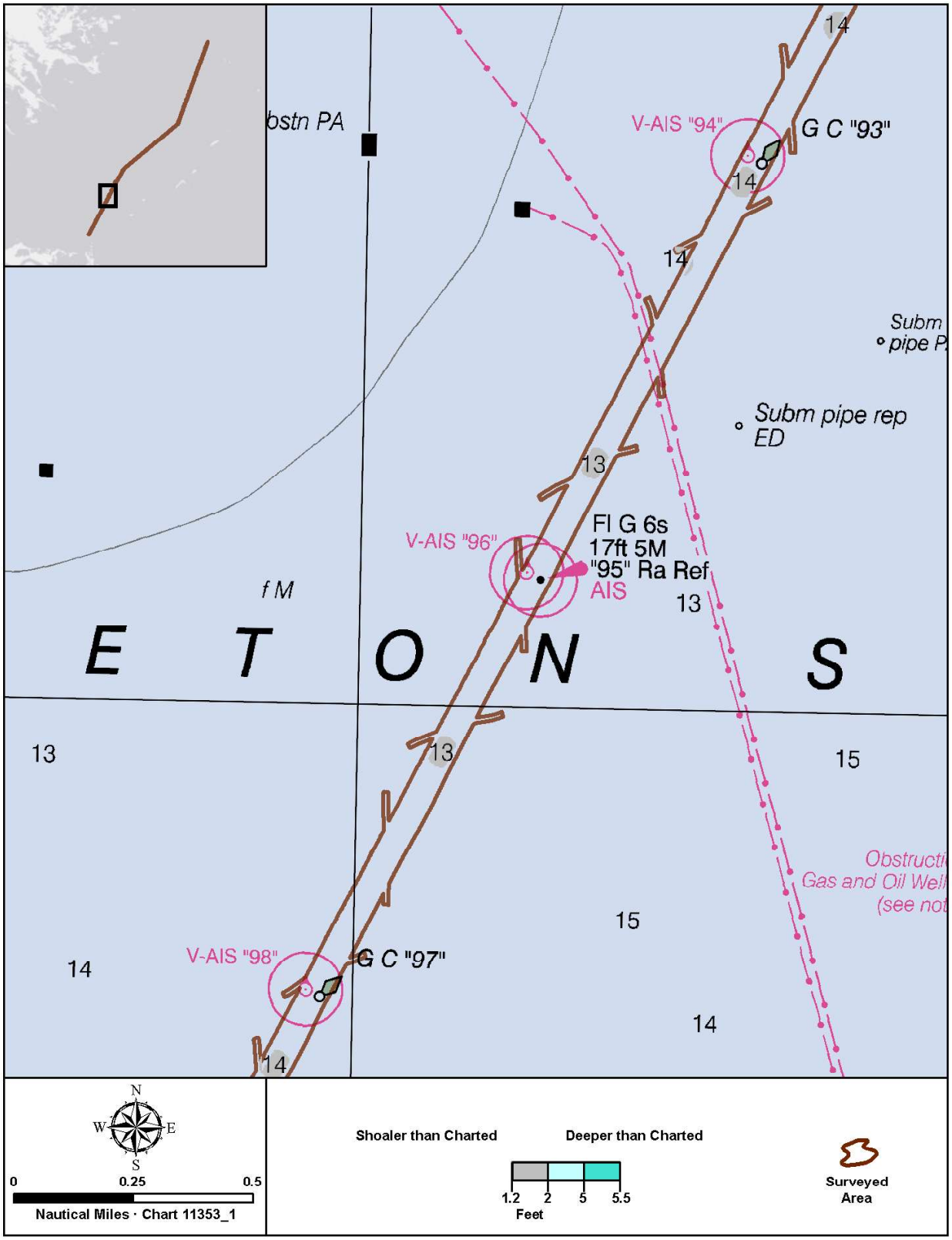


Figure 18: 11363 Charted Sounding Comparison (3 of 13)

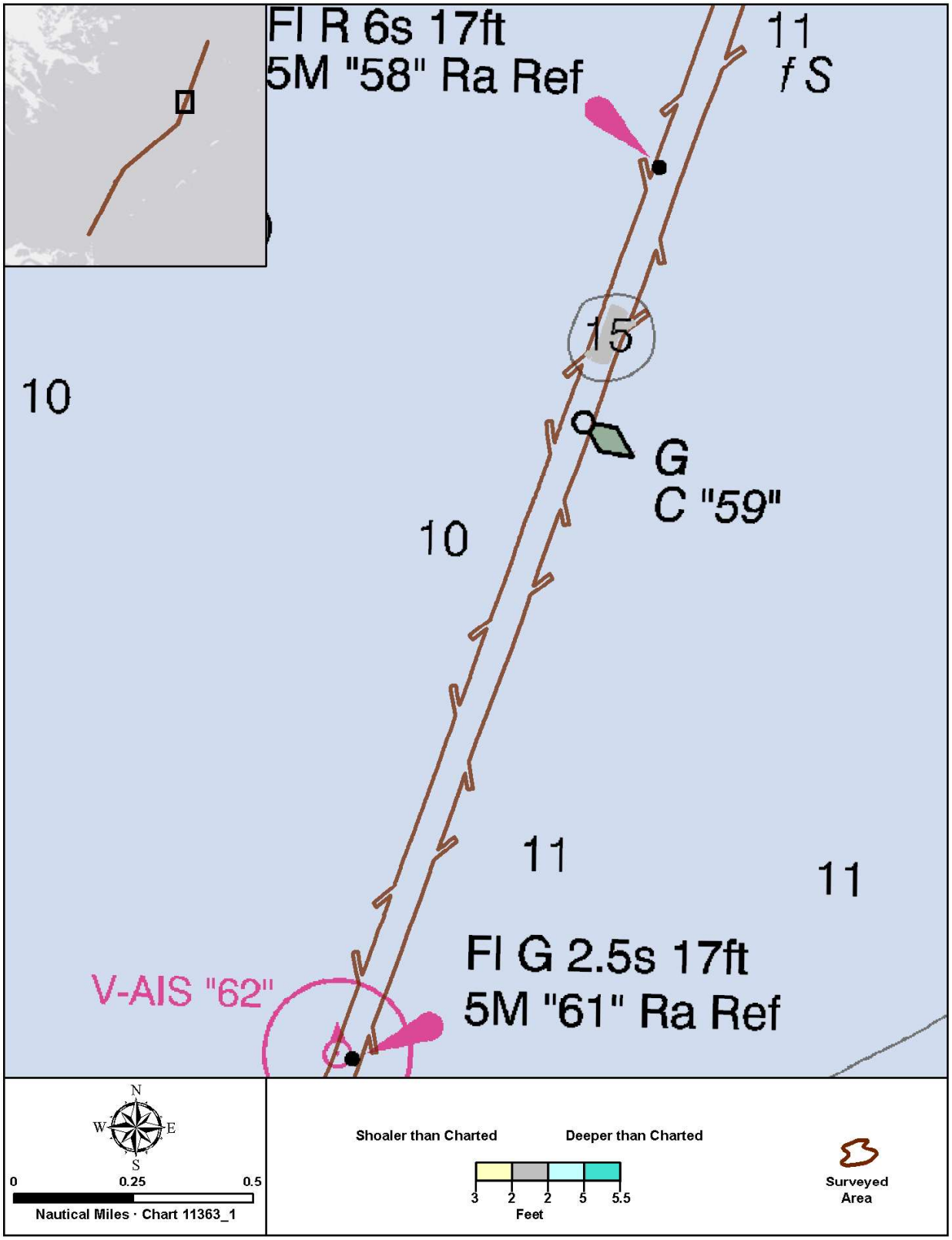


Figure 19: 11363 Charted Sounding Comparison (4 of 13)

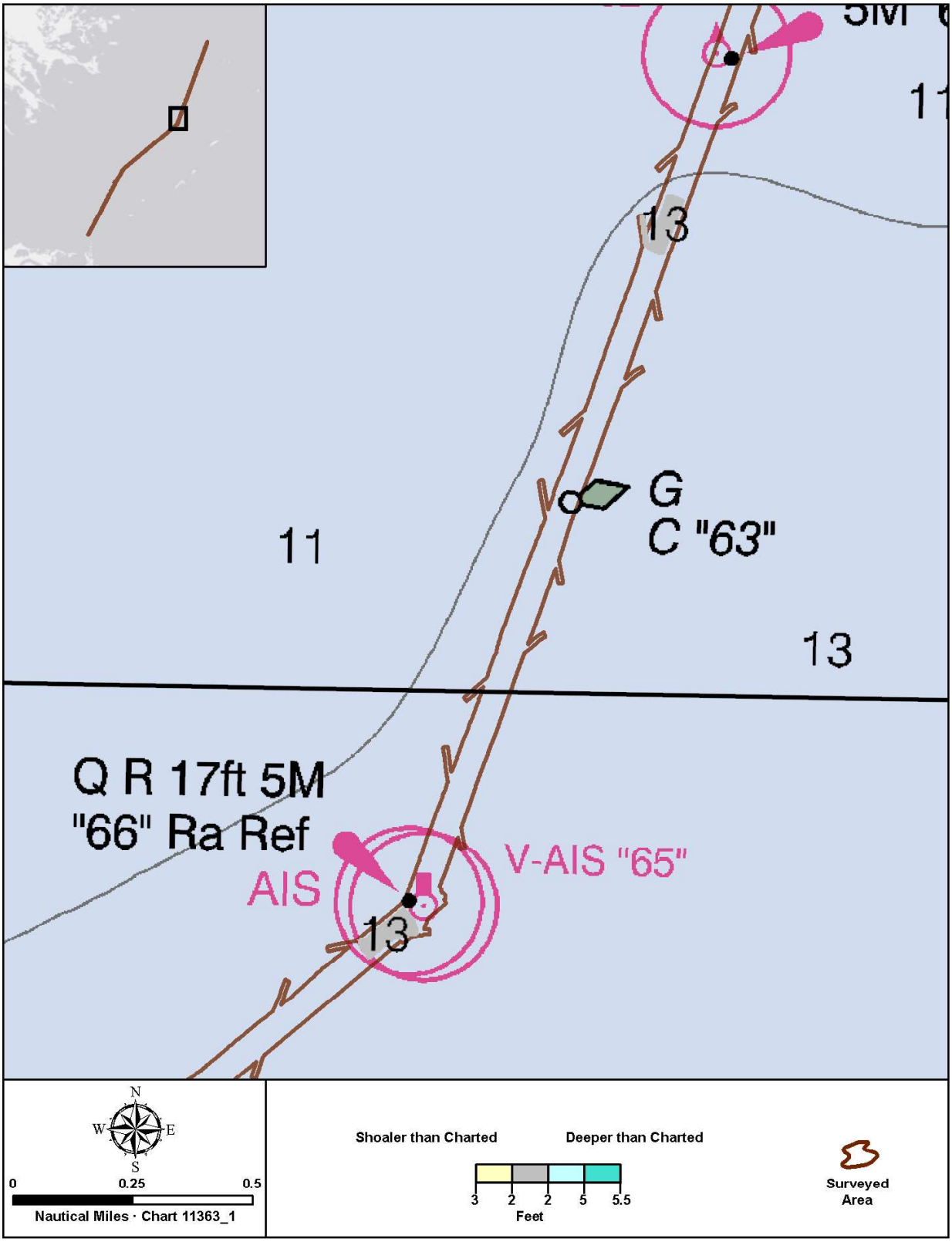


Figure 20: 11363 Charted Sounding Comparison (5 of 13)

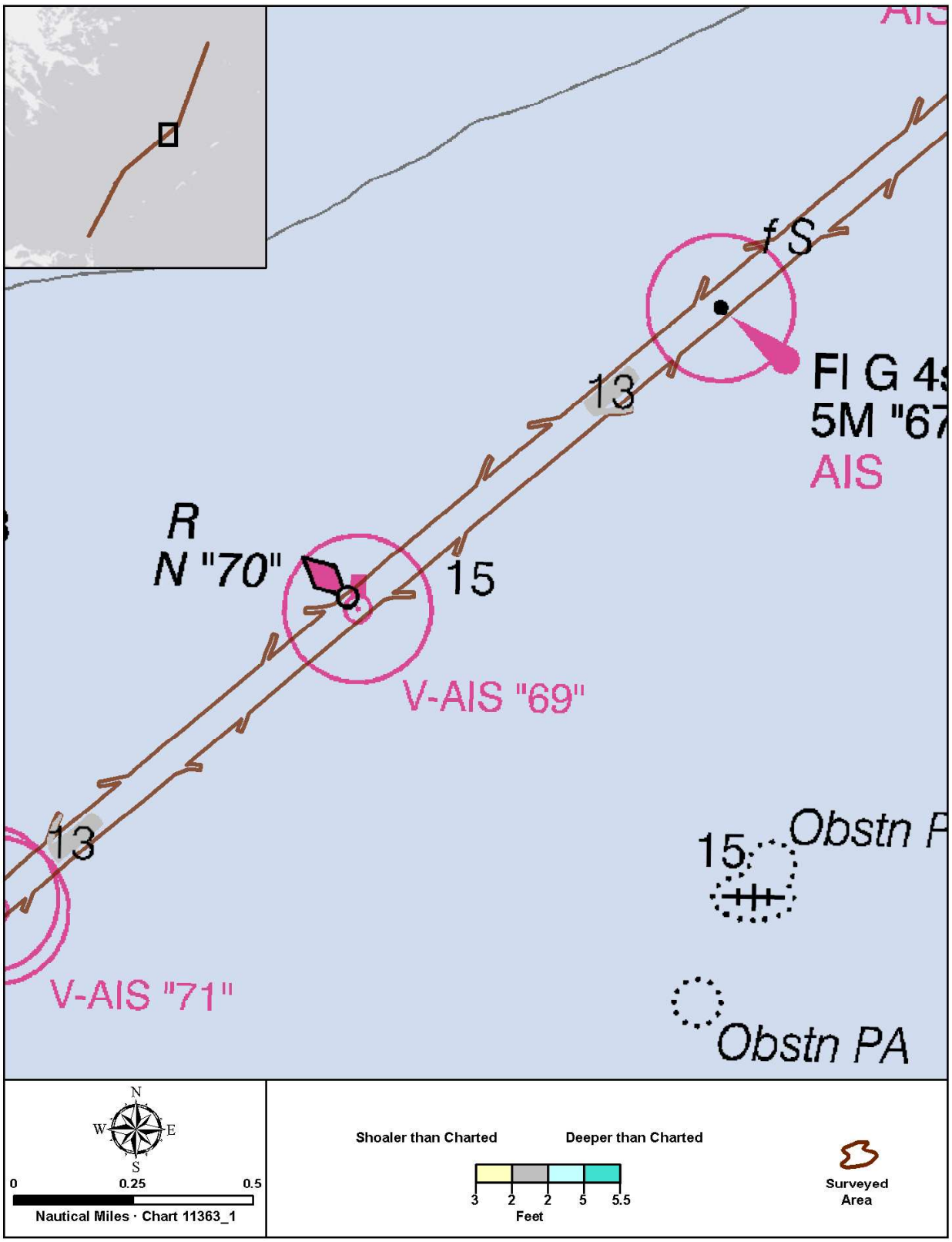


Figure 21: 11363 Charted Sounding Comparison (6 of 13)

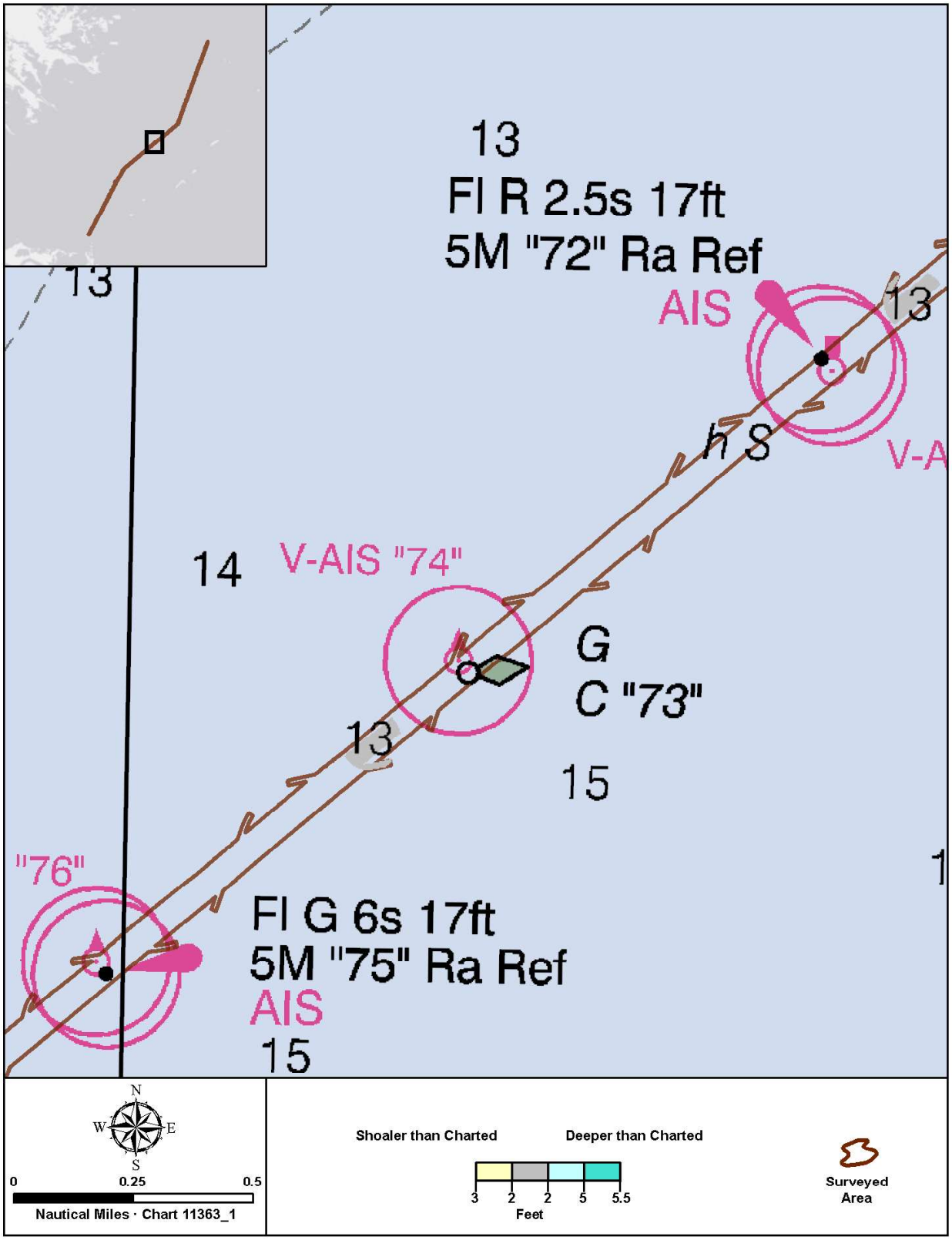


Figure 22: 11363 Charted Sounding Comparison (7 of 13)

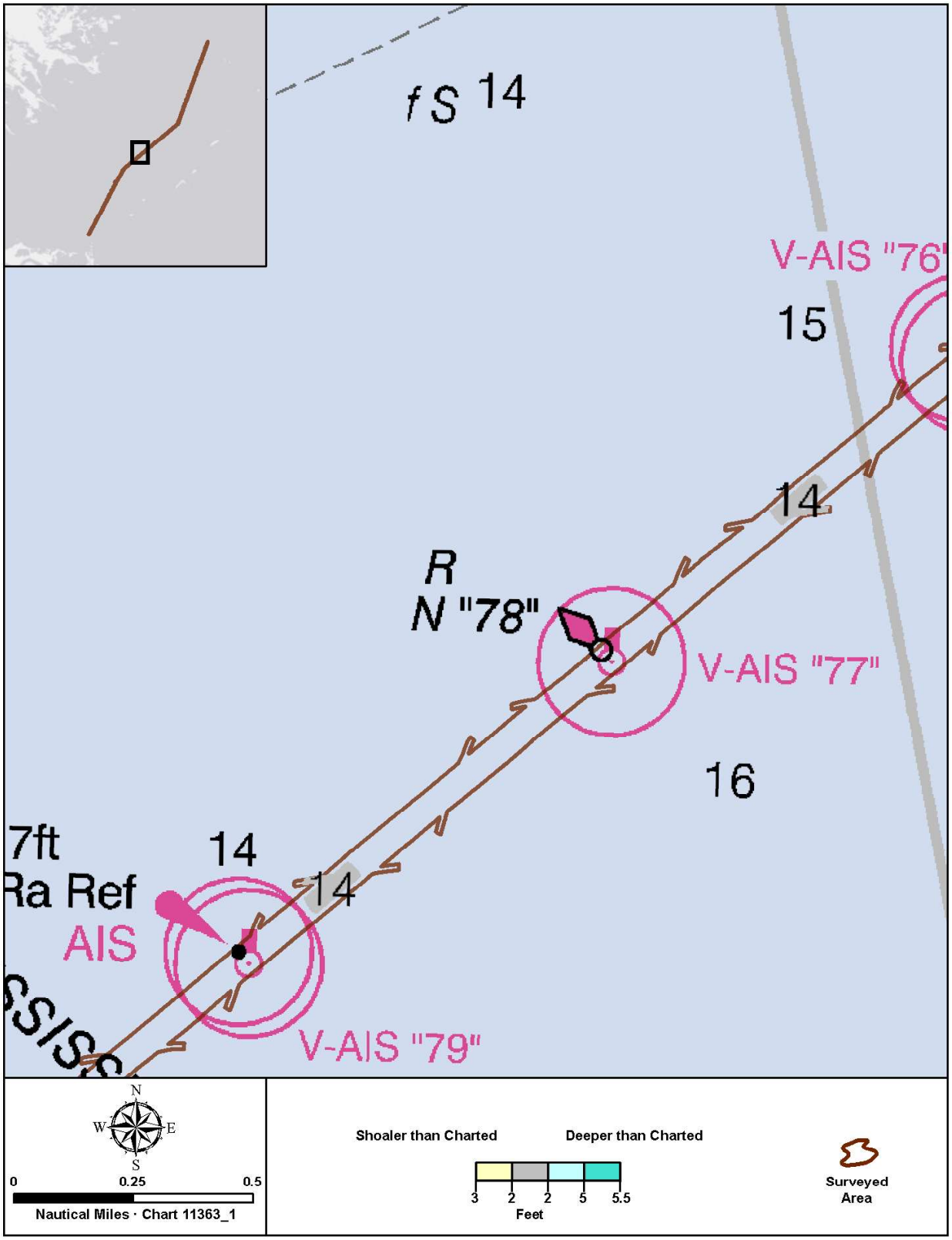


Figure 23: 11363 Charted Sounding Comparison (8 of 13)

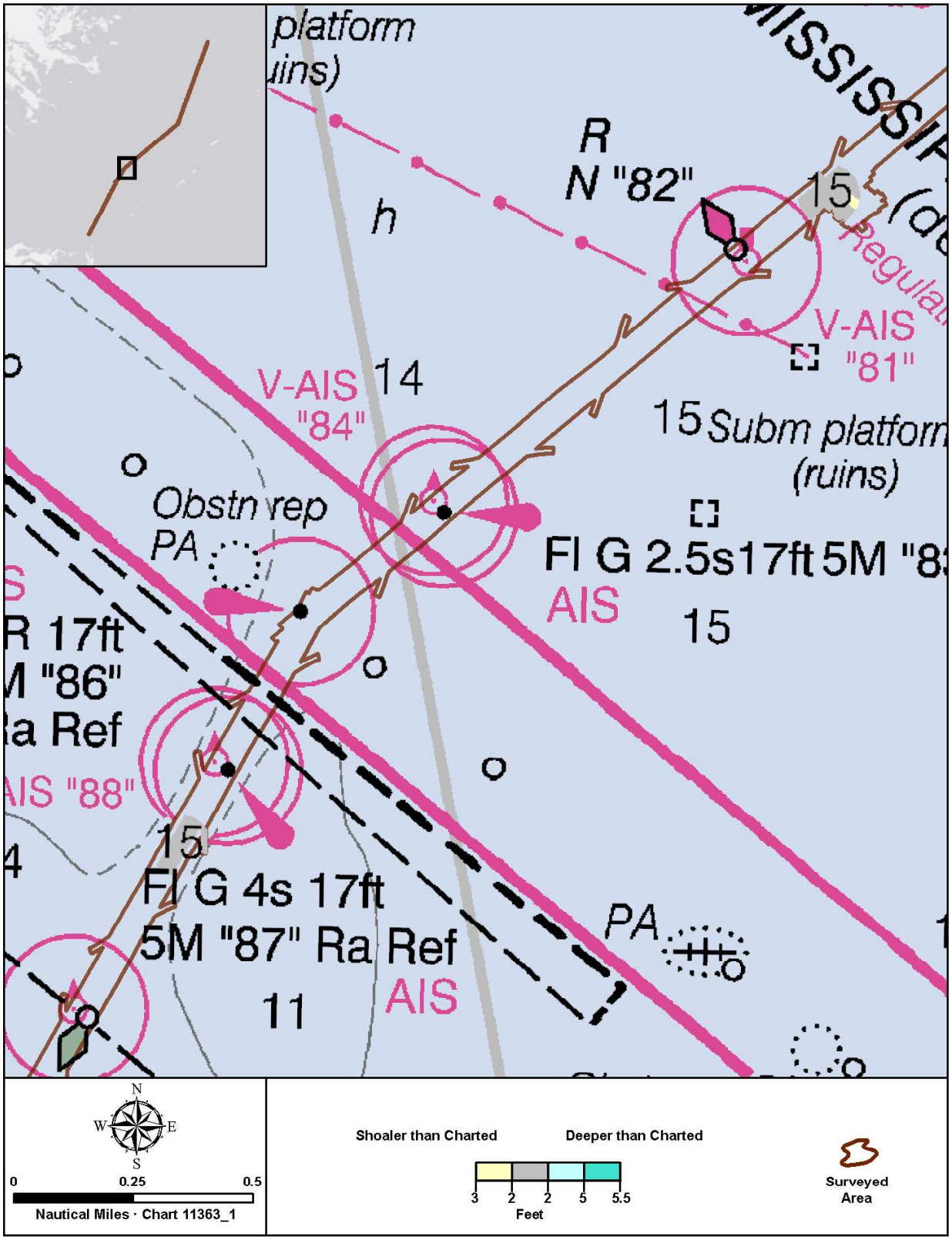


Figure 24: 11363 Charted Sounding Comparison (9 of 13)

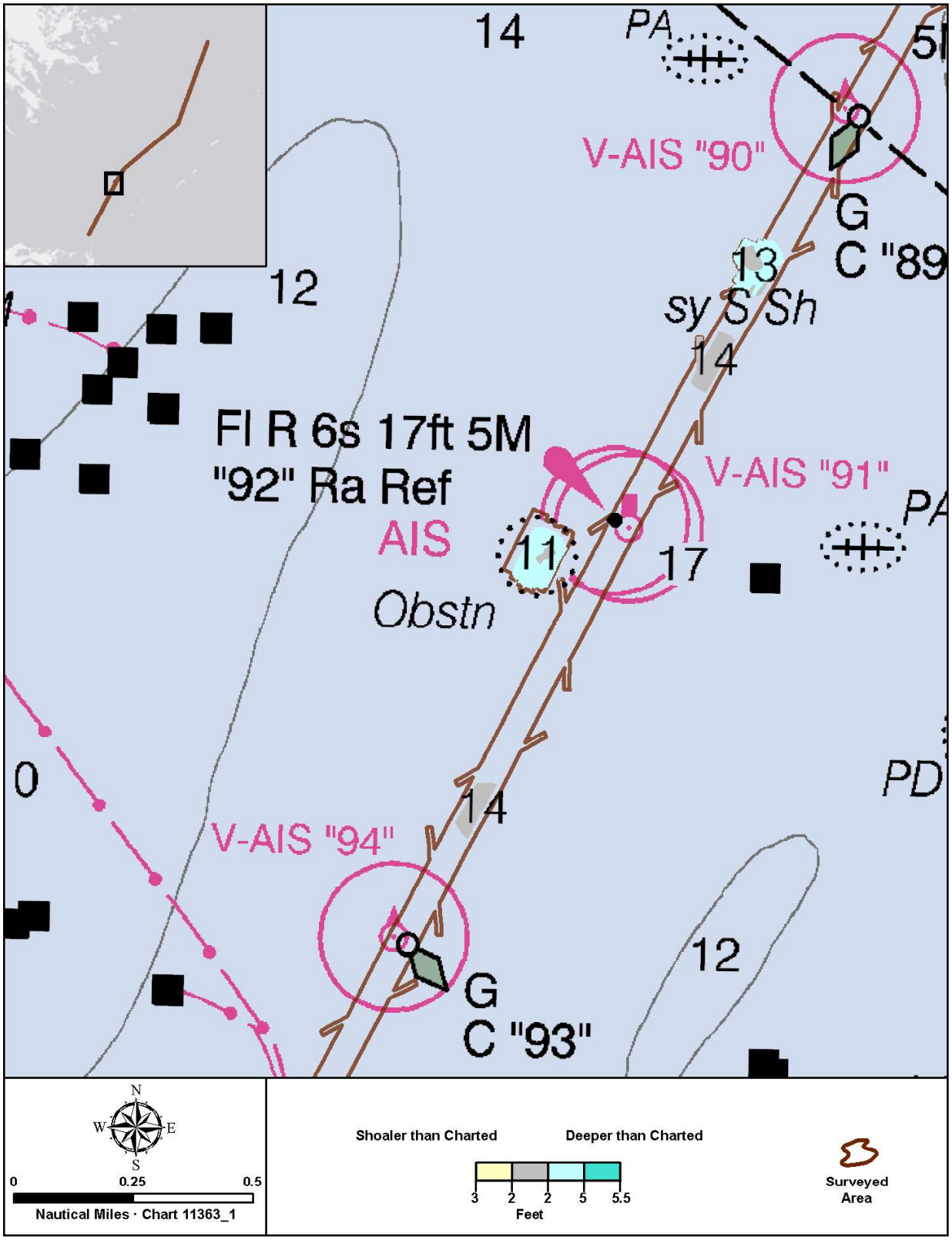


Figure 25: 11363 Charted Sounding Comparison (10 of 13)

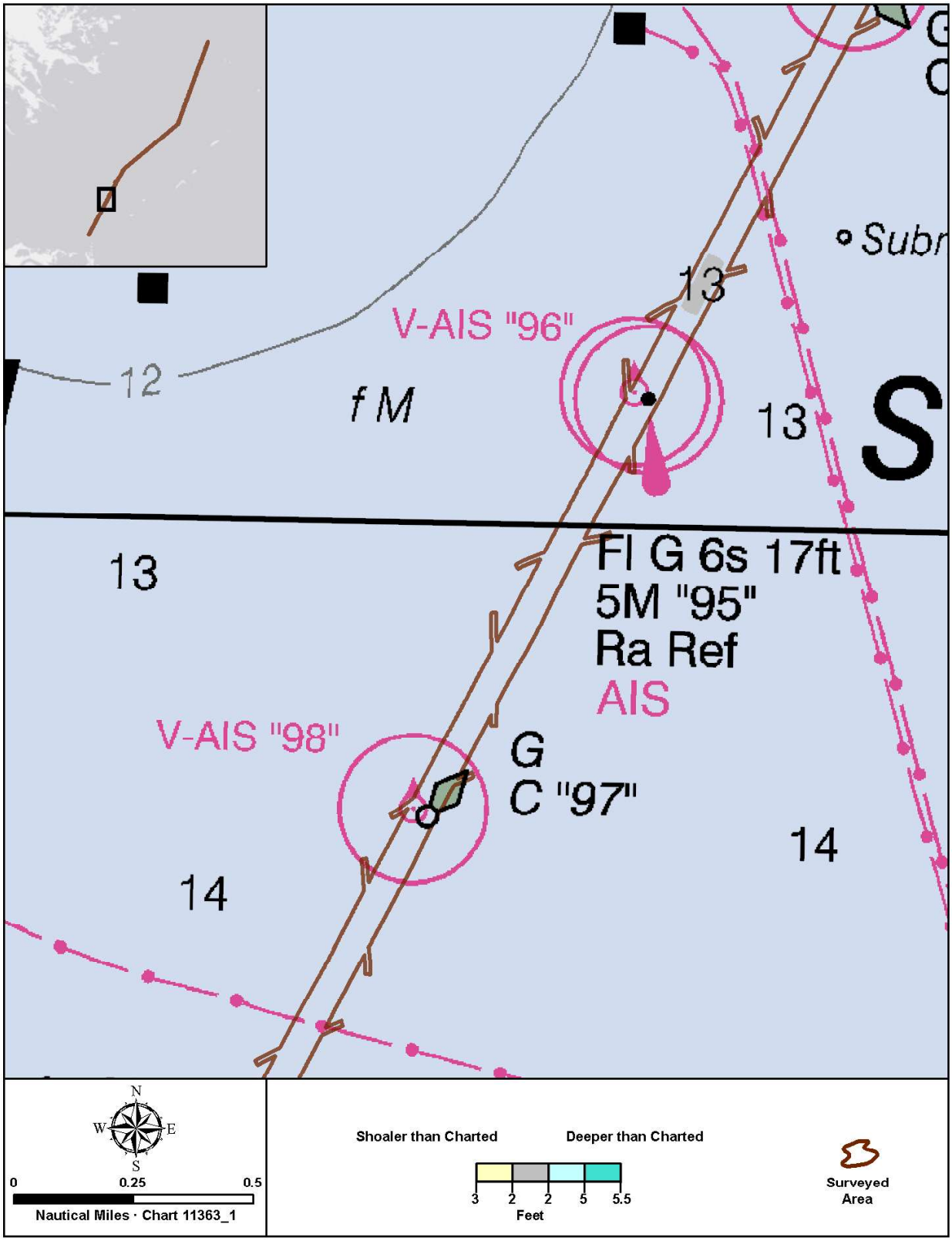


Figure 26: 11363 Charted Sounding Comparison (11 of 13)

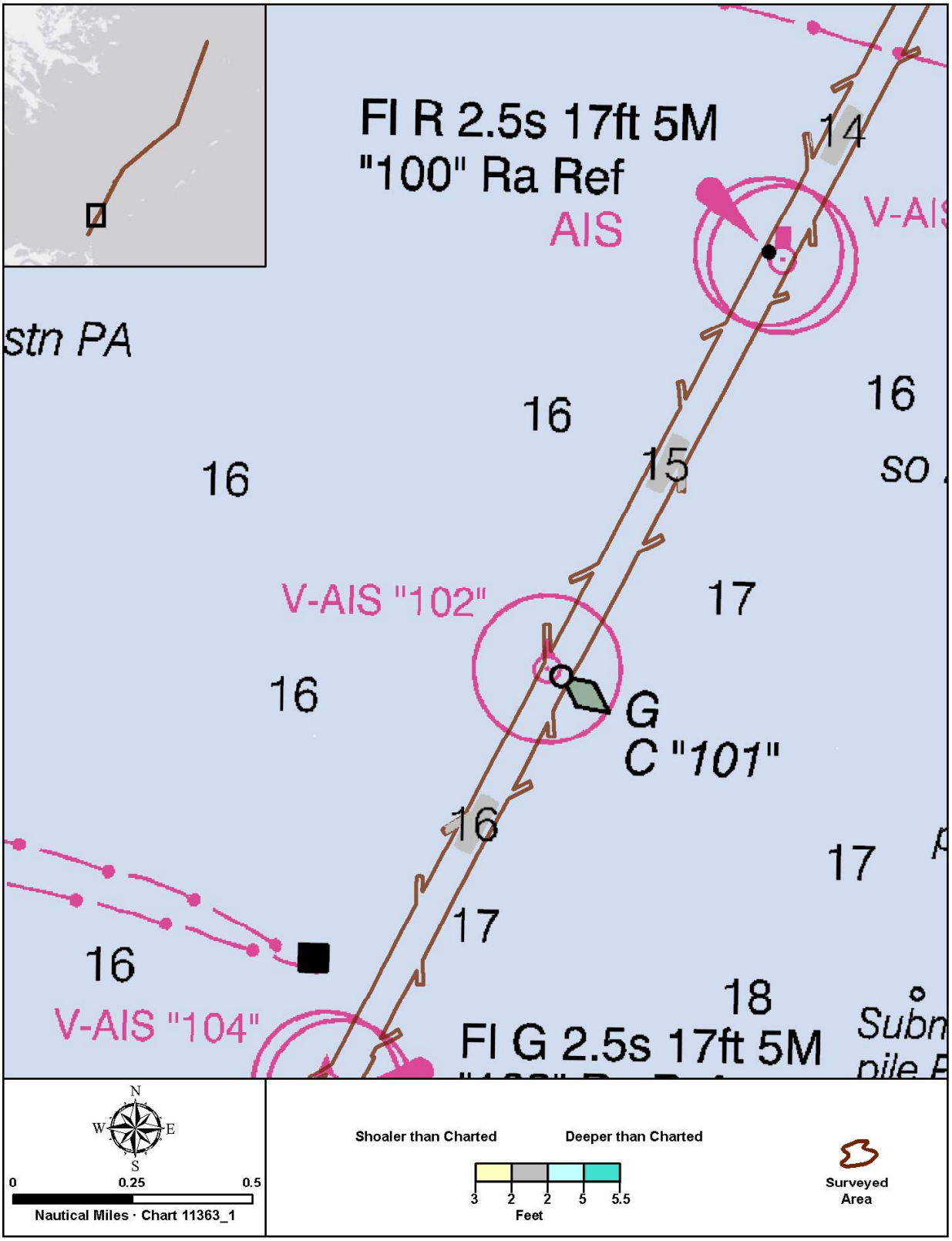


Figure 27: 11363 Charted Sounding Comparison (12 of 13)

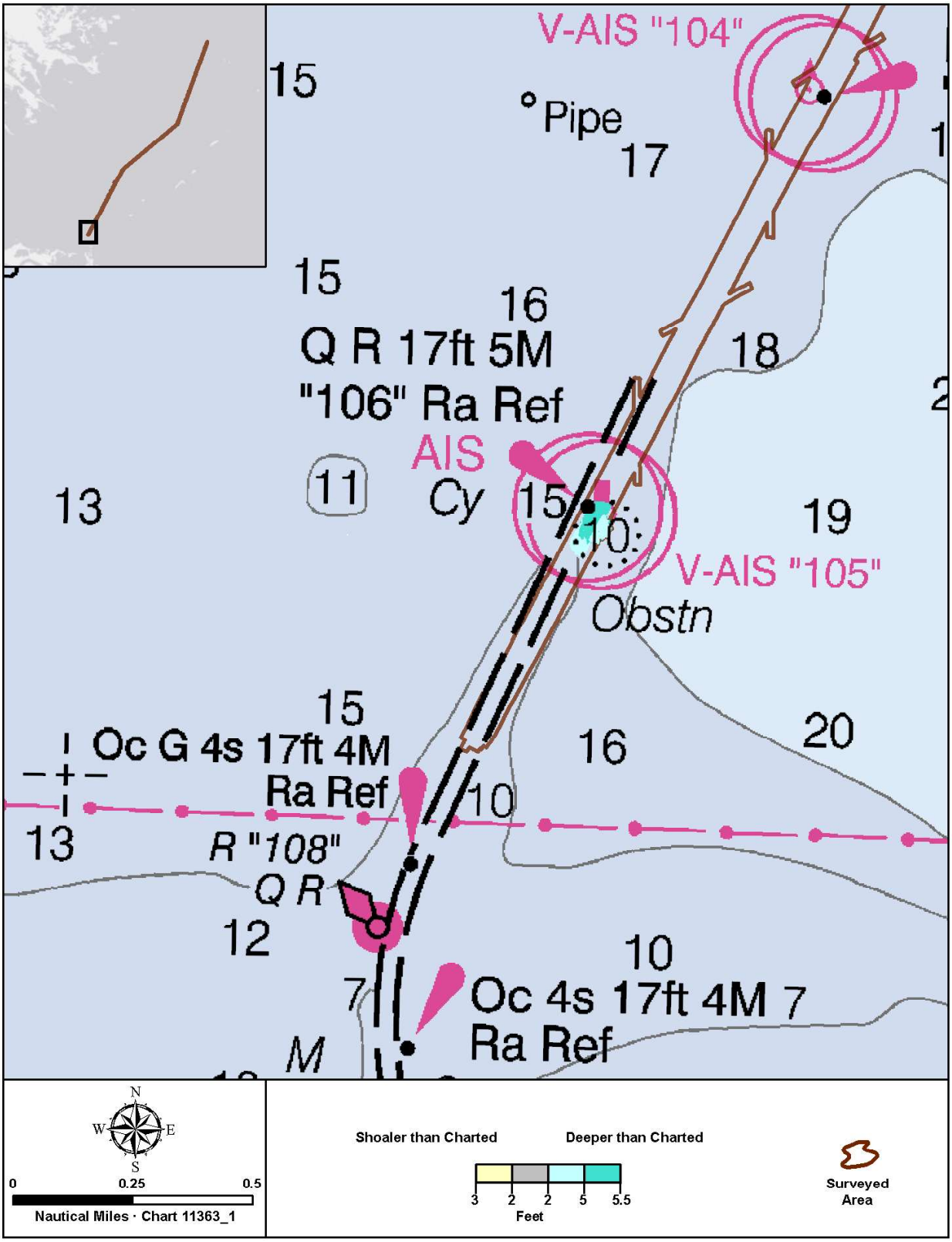


Figure 28: 11363 Charted Sounding Comparison (13 of 13)

D.1.2 Electronic Navigational Charts

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

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US5LA24M	1:40000	42	09/15/2016	09/15/2016	NO
US4LA34M	1:80000	29	01/06/2016	09/21/2016	NO

Table 17: Largest Scale ENCs

US5LA24M

ENC US5LA24M was compared to chart 11353 within the survey area. The ENC has not been updated to include soundings from a recent United States Army Corps of Engineers (USACE) survey of the Alternate Route.

US4LA34M

ENC US4LA34M was compared to chart 11363 within the survey area. The ENC has not been updated to include soundings from a recent USACE survey of the Breton Sound Alternate Route.

D.1.3 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.4 Charted Features

A Wreck, charted as Position Approximate (PA), outside of the survey area in Mississippi Sound has been disproved by the survey. Additional information on this feature can be found in the DtoN section of this report.

The survey area does not contain any charted features labeled as Reported, Position Doubtful (PD), or Existence Doubtful (ED). All charted and surveyed features within the H12920 survey area are portrayed in the FFF.

D.1.5 Uncharted Features

All uncharted features are portrayed in the FFF as surveyed and attributed with the description of ‘New’.

D.1.6 Dangers to Navigation

The following DTON reports were submitted:

DTON Report Name	Date Submitted
H12920 Anti-DtoN 01	2016-08-01
H12920 DtoN 01	2016-08-01
H12920 DtoN 02	2016-10-04

Table 18: DTON Reports

One Charted Feature Removal Request (Anti-DtoN) and two DtoNs were submitted for this survey. Copies of these reports are included in Appendix II.

H12920 Anti-DtoN 01 reported the disproval of a Wreck PA charted outside of the assigned survey area. The feature investigation was requested by the USCG and approved by the Hydrographic Surveys Division Operations Branch. Email correspondence related to the disproval request is included in Appendix II of this report.

H12920 DtoN 01 reported three uncharted features and one Charted Feature Removal Request. The new features have been added to the charts using preliminary survey information.

H12920 DtoN 02 reported an uncharted feature located approximately 90 meters outside of the assigned survey area. The DtoN had not been added to the charts at time of submission of this Descriptive Report.

D.1.7 Shoal and Hazardous Features

All shoal and hazardous features were submitted as DtoNs.

D.1.8 Channels

The entire H12920 survey area encompasses the southern section of the GIWW Alternate Route.

D.1.9 Bottom Samples

Three bottom samples were acquired on Jul 29, 2016 (DN211). The sampling plan followed suggested sample locations included in the PRF provided by the Hydrographic Surveys Division.

D.2 Additional Results

D.2.1 Shoreline

Shoreline investigation was not assigned for this survey.

D.2.2 Prior Surveys

Other than the previously mentioned junction analysis no other comparisons with prior surveys were conducted.

D.2.3 Aids to Navigation

All charted Aids to Navigation (AtoNs) were found to be on station and serving their intended purpose. No new uncharted AtoNs were observed during the survey.

D.2.4 Overhead Features

There were no overhead bridges, cables, or other structures which would impact overhead clearance in the survey area.

D.2.5 Submarine Features

Several pipelines are charted within the survey area. No evidence of these pipelines was observed in the survey data.

D.2.6 Ferry Routes and Terminals

There were no ferry routes or terminals within the survey area.

D.2.7 Platforms

No platforms were observed during the survey area. H12920 DtoN 01 included a Charted Feature Removal Request for a charted platform that has since been removed from the charts.

D.2.8 Significant Features

Section B.2.6 of this report includes a discussion of the impacts of environmental factors on water column stratification and sound speed corrections within Chandeleur and Breton Sounds.

There was no other information of scientific or practical value observed during the survey.

D.2.9 Construction and Dredging

No construction or dredging activities were observed during survey operations. Evidence of previous dredging was observed at the southern end of the survey area in the charted Baptiste Collette Bayou Channel.

D.2.10 New Survey Recommendation

No new surveys or further investigations are recommended for this area.

D.2.11 Inset Recommendation

No new insets are recommended for this area.

E. Approval Sheet

As Chief of Party, field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports.

All field sheets, this Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys and Specifications Deliverables Manual, Statement of Work, and Hydrographic Survey Project Instructions. These data are adequate to supersede charted data in their common areas. This survey is complete and no additional work is required.

Report Name	Report Date Sent
OPR-J311-KR-16 Data Acquisition and Processing Report	2016-11-03

Approver Name	Approver Title	Approval Date	Signature
Jonathan L. Dasler, PE, PLS, CH	NSPS/THSOA Certified Hydrographer, Chief of Party	11/03/2016	Digitally signed by Jon Dasler DN: cn=Jon Dasler, o=David Evans and Associates, Inc., ou=Marine Services Division, email=jld@deainc.com, c=US Date: 2016.11.03 12:20:37 -07'00'
Jason Creech, CH	NSPS/THSOA Certified Hydrographer, Charting Manager / Project Manager / Lead Hydrographer	11/03/2016	Digitally signed by Jason Creech DN: cn=Jason Creech, o=David Evans and Associates, Inc., ou=Marine Services Division, email=jasc@deainc.com, c=US Date: 2016.11.03 12:21:02 -07'00'
Kathleen Schacht	MBES Data Processing Manager	11/03/2016	Digitally signed by Kathleen Schacht DN: cn=Kathleen Schacht, o=David Evans and Associates, Inc., ou, email=kmsc@deainc.com, c=US Date: 2016.11.03 12:21:30 -07'00'

F. Table of Acronyms

Acronym	Definition
AHB	Atlantic Hydrographic Branch
ASCII	American Standard Code for Information Interchange
AWOIS	Automated Wreck and Obstruction Information System
BAG	Bathymetric Attributed Grid
CH	Certified Hydrographer
CSF	Composite Source File
CTD	Conductivity Temperature Depth
DAPR	Data Acquisition and Processing Report
DEA	David Evans and Associates, Inc
DGPS	Differential Global Positioning System
DN	Day Number
DtoN	Danger to Navigation
ED	Existence Doubtful
ENC	Electronic Navigational Chart
GPS	Global Positioning System
HIPS	Hydrographic Information Processing System
HSD	Hydrographic Surveys Division
HSSD	Hydrographic Surveys Specifications and Deliverables
HVCR	Horizontal and Vertical Control Report
IHO	International Hydrographic Organization
LNM	Local Notice to Mariners
MBES	Multibeam Echo Sounder
MLLW	Mean Lower Low Water
MVP	Moving Vessel Profiler
NOAA	National Oceanic and Atmospheric Administration
NSPS	National Society of Professional Surveyors
NWLON	National Water Level Observation Network
PA	Position Approximate
PD	Position Doubtful
PE	Professional Engineer
PLS	Professional Land Surveyor

Acronym	Definition
PRF	Project Reference File
QC	Quality Control
RNC	Raster Navigational Chart
SBES	Single Beam Echo Sounder
SSS	Side Scan Sonar
TIN	Triangular Irregular Network
TPU	Total Propagated Uncertainty
USCG	United Stated Coast Guard

APPENDIX I
TIDES AND WATER LEVELS

H12920
TIMES OF HYDROGRAPHY

Project: OPR-J311-KR-16
Contractor Name: David Evans and Associates, Inc.
Date: October 1, 2016
Inclusive Dates: July 28, 2016 - October 1, 2016
Field work is complete
Time (UTC)

Day Number	Date	Start Time	End Time
210	07/28/2016	6:13:57	23:45:26
211	07/29/2016	0:13:06	22:04:52
213	07/31/2016	22:59:28	23:56:53
275	10/01/2016	0:25:08	1:40:15

H12920
FINAL TIDE NOTE AND ZONING

DATE: October 1, 2016

HYDROGRAPHIC BRANCH: Atlantic Hydrographic Branch
HYDROGRAPHIC PROJECT: OPR-J311-KR-16
HYDROGRAPHIC SURVEY: H12920

LOCALITY: Southeastern Vicinity of the Chandeleur Islands
SUB-LOCALITY: Breton Sound Alternative Route 2016

TIME PERIOD [1] : July 28, 2016 - October 1, 2016

TIDE STATIONS USED:

Station Name	Station ID	Type	Latitude	Longitude
Pascagoula, MS	8741533	Control	30° 22.1' N	88° 33.8' W

PLANE OF REFERENCE (MEAN LOWER LOW WATER) :

8741533	0.000m

HEIGHT OF MEAN HIGH WATER ABOVE PLANE OF REFERENCE:

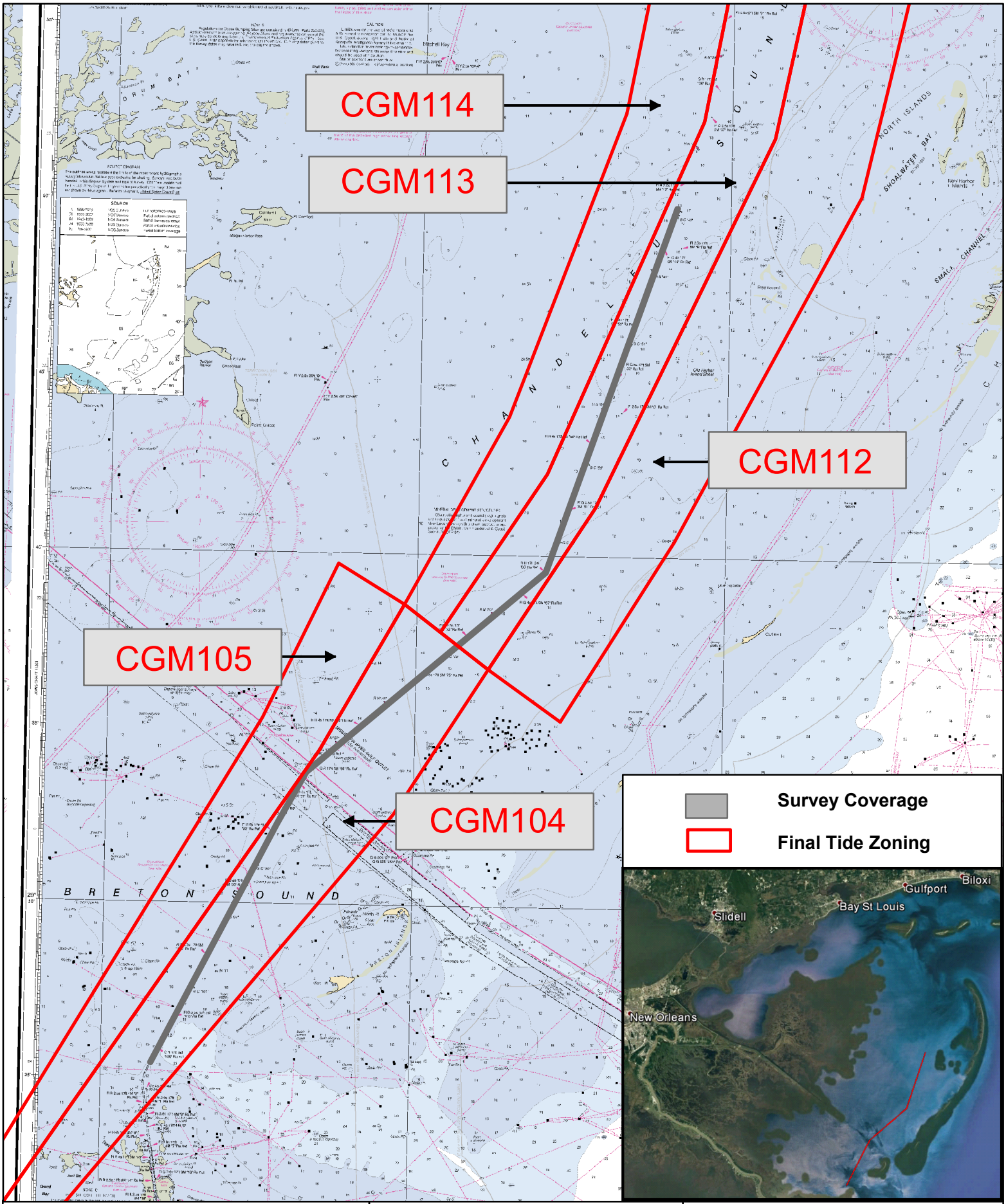
8741533	0.440m

FINAL ZONING AND TIDAL REDUCERS TO CHART DATUMN:

Zone	(Mins)	Range Ratio	Station
CGM104	42	0.88	8741533
CGM105	54	0.88	8741533
CGM112	30	0.91	8741533
CGM113	42	0.94	8741533
CGM114	48	0.97	8741533

[1] Please refer to the comprehensive list in attached Times of Hydrography.

http://tidesandcurrents.noaa.gov/benchmarks.html?id=8741533



OPR-J311-KR-16
Eastern Vicinity of the Chandeleur Islands
David Evans and Associates, Inc.
Chart 11363 and 11364

H12920
Final Tide Zoning Chartlet

N W E S

0 1.5 3
Nautical Miles

APPENDIX II
SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE

DANGER TO NAVIGATION REPORTS

From: Jason Creech
Sent: Monday, August 01, 2016 8:21 AM
To: 'ahb.dton@noaa.gov' (ahb.dton@noaa.gov)
Cc: Christina Fandel - NOAA Federal; Jon Dasler (Jld@deainc.com); Tim Osborn (Tim.Osborn@noaa.gov); Emily Clark - NOAA Federal (emily.clark@noaa.gov)
Subject: H12920 DtoN 01
Attachments: H12920_DtoN_01.000; H12920_DtoN_1.1_MBES_2D.jpg; H12920_DtoN_1.1_MBES_3D.jpg; H12920_DtoN_1.1_Overview_11363.jpg; H12920_DtoN_1.2_MBES_2D.jpg; H12920_DtoN_1.2_MBES_3D.jpg; H12920_DtoN_1.2_Overview_11363.jpg; H12920_DtoN_1.3_MBES_2D.jpg; H12920_DtoN_1.3_MBES_3D.jpg; H12920_DtoN_1.3_Overview_11363.jpg

Good Morning

I have attached H12920 DtoN 01 which contains 3 new uncharted features and one feature disproval located in the vicinity of the Breton Sound Alternate Route.

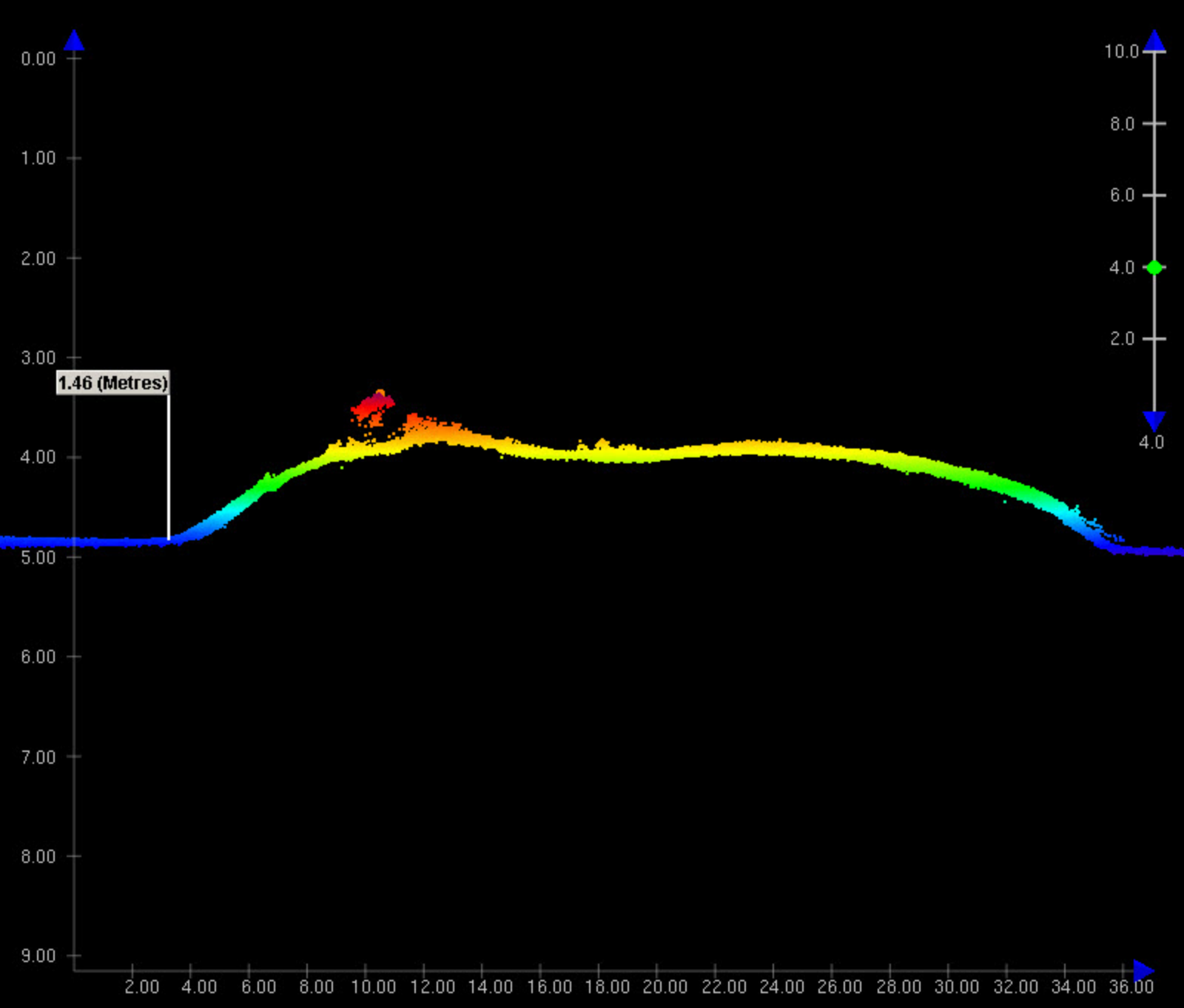
Please let me know if you have any questions.

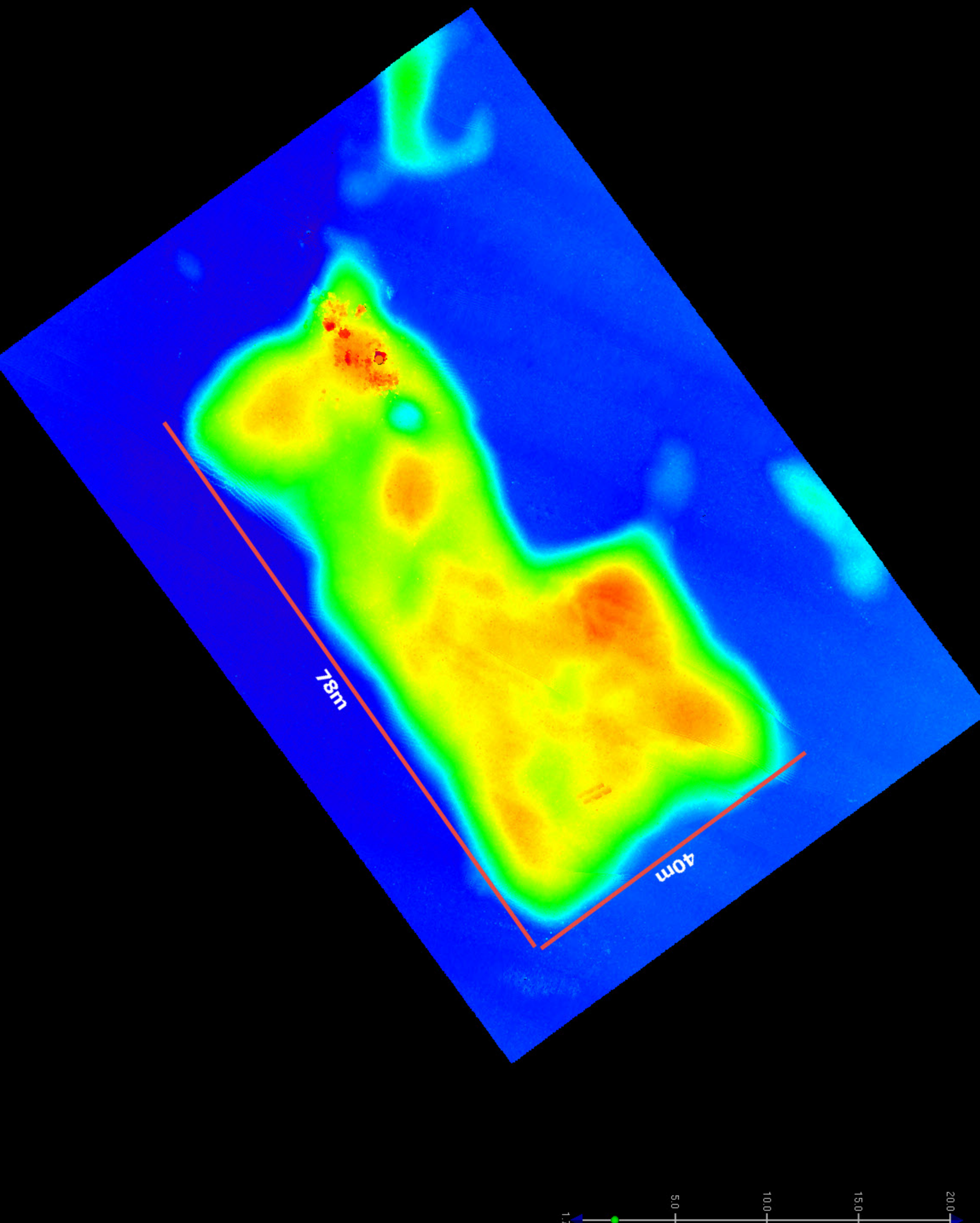
Thanks,
Jason

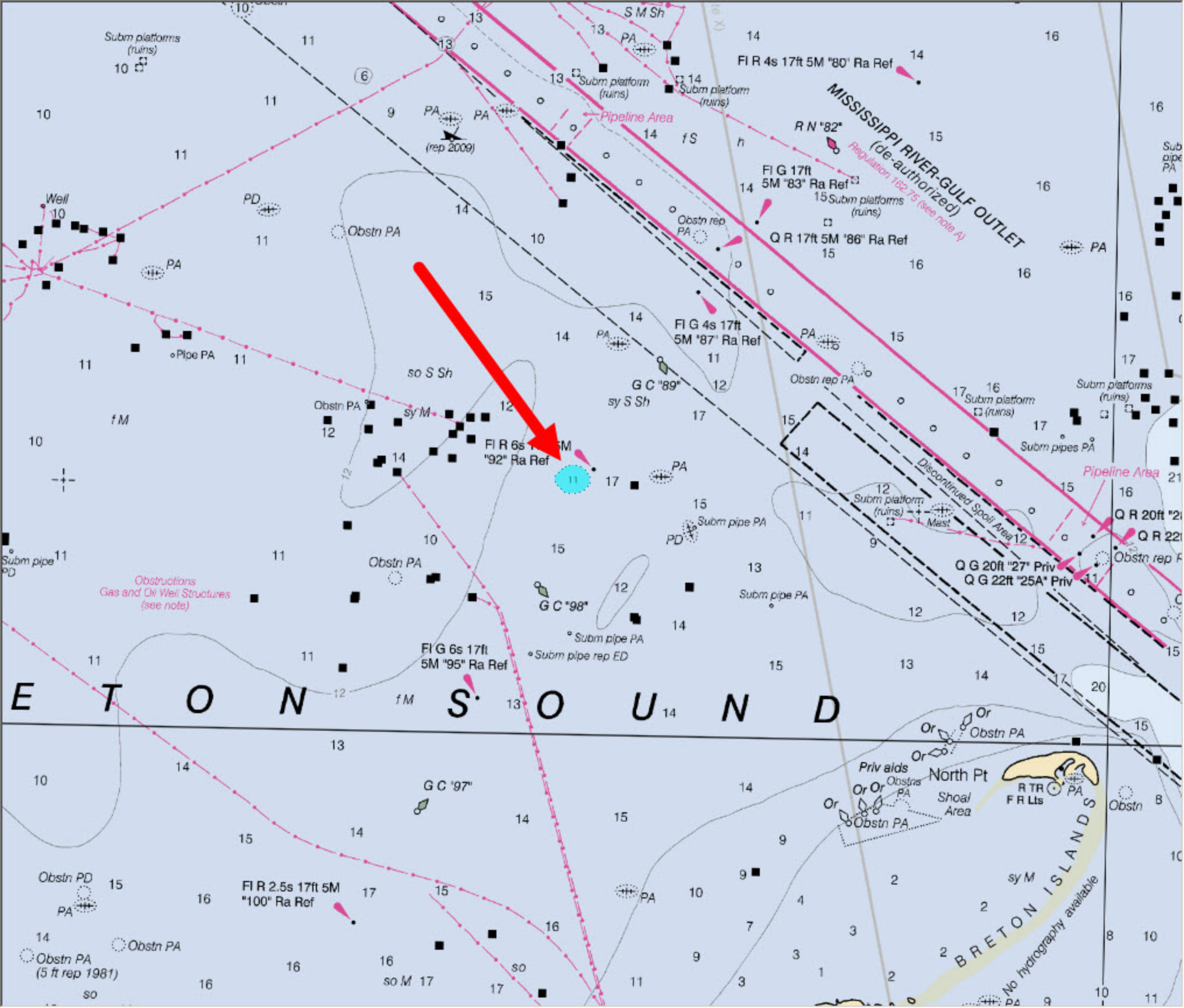
Jason Creech, CH | Senior Associate, Nautical Charting Program Manager
David Evans and Associates, Inc. | Marine Services Division | www.deamarine.com
t: 360.314.3200 | c: 804.516.7829 | jasc@deainc.com

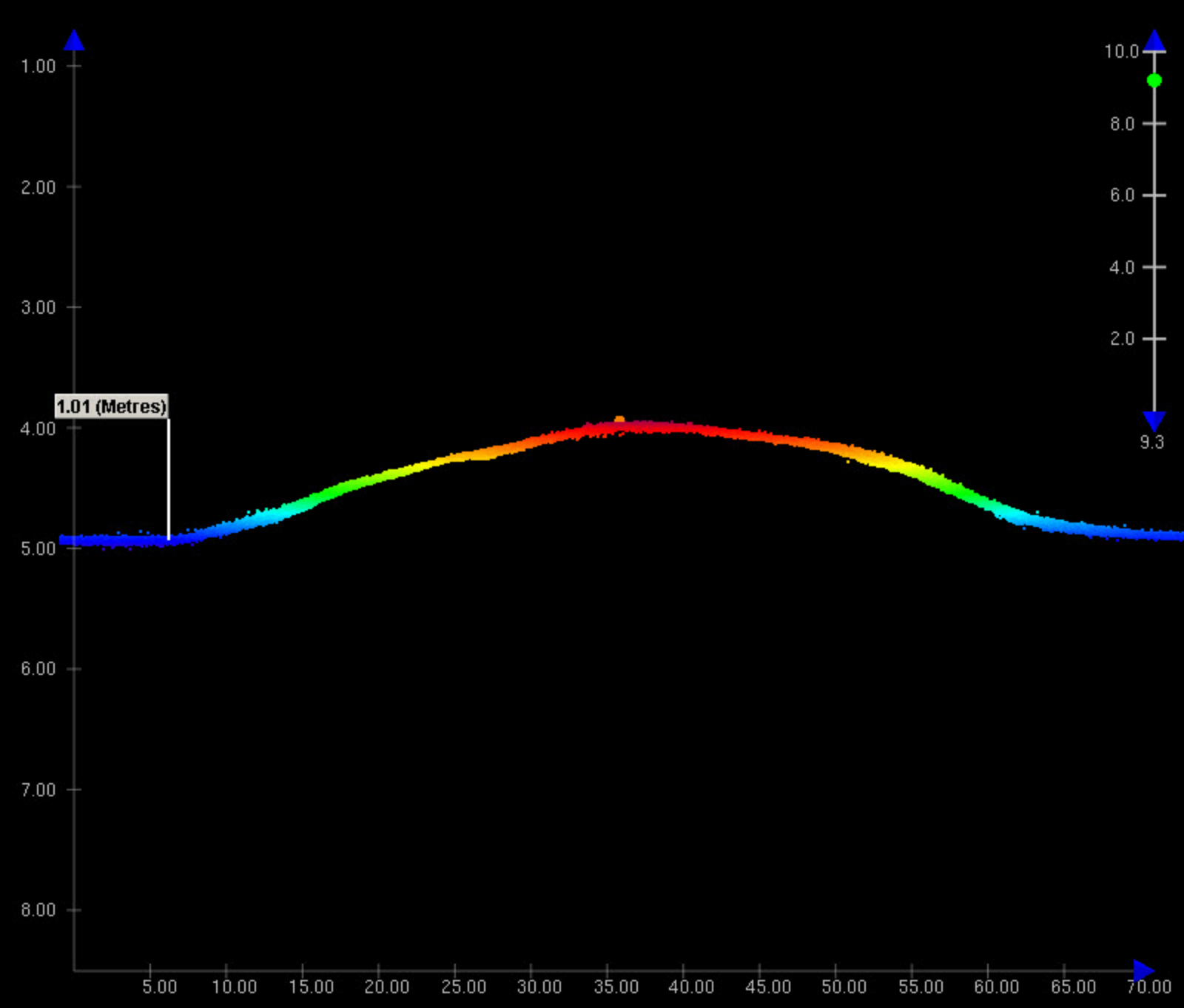
DAVID EVANS AND ASSOCIATES INC. MARINE SERVICES

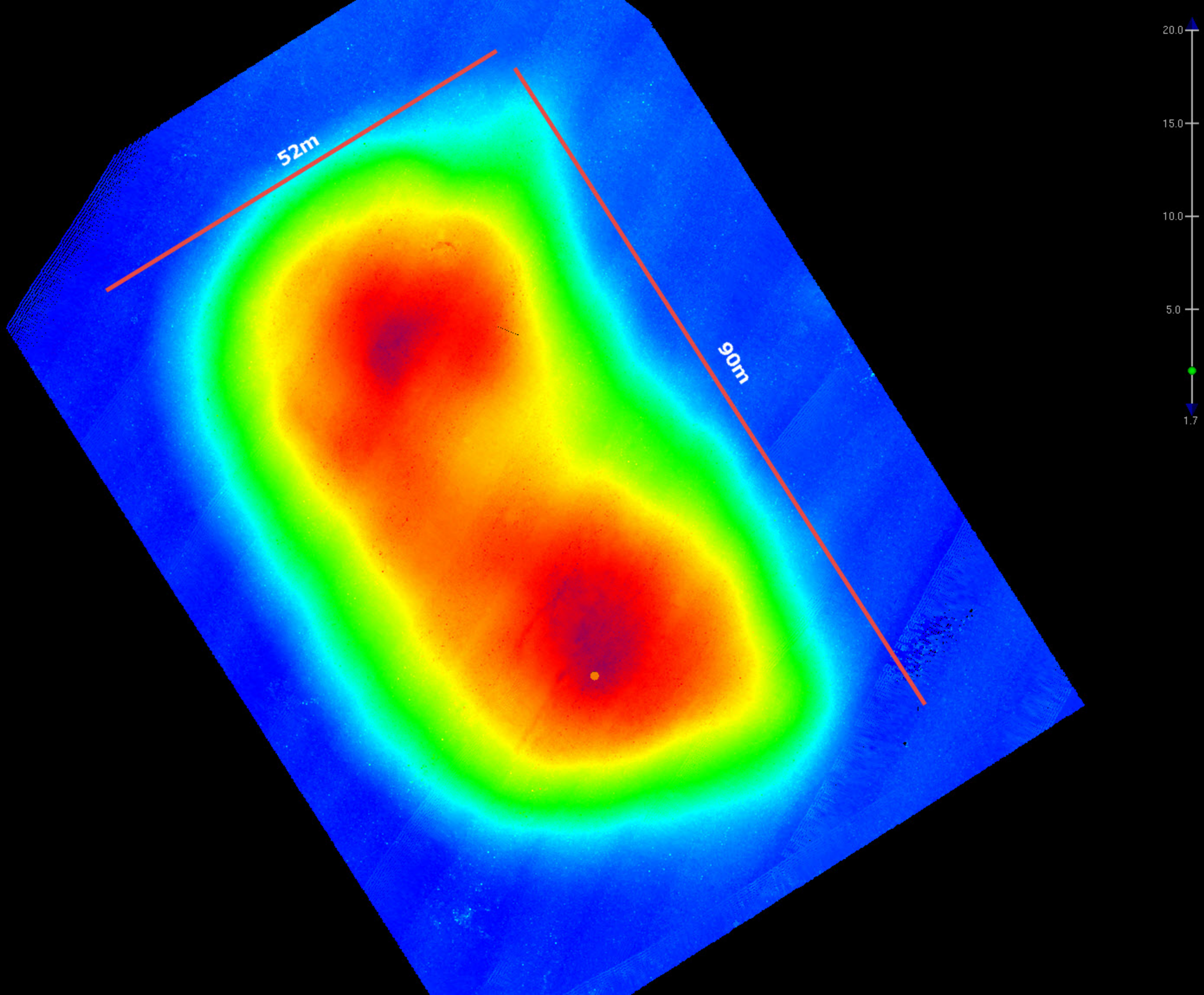
Follow us on LinkedIn | Twitter | Facebook | YouTube

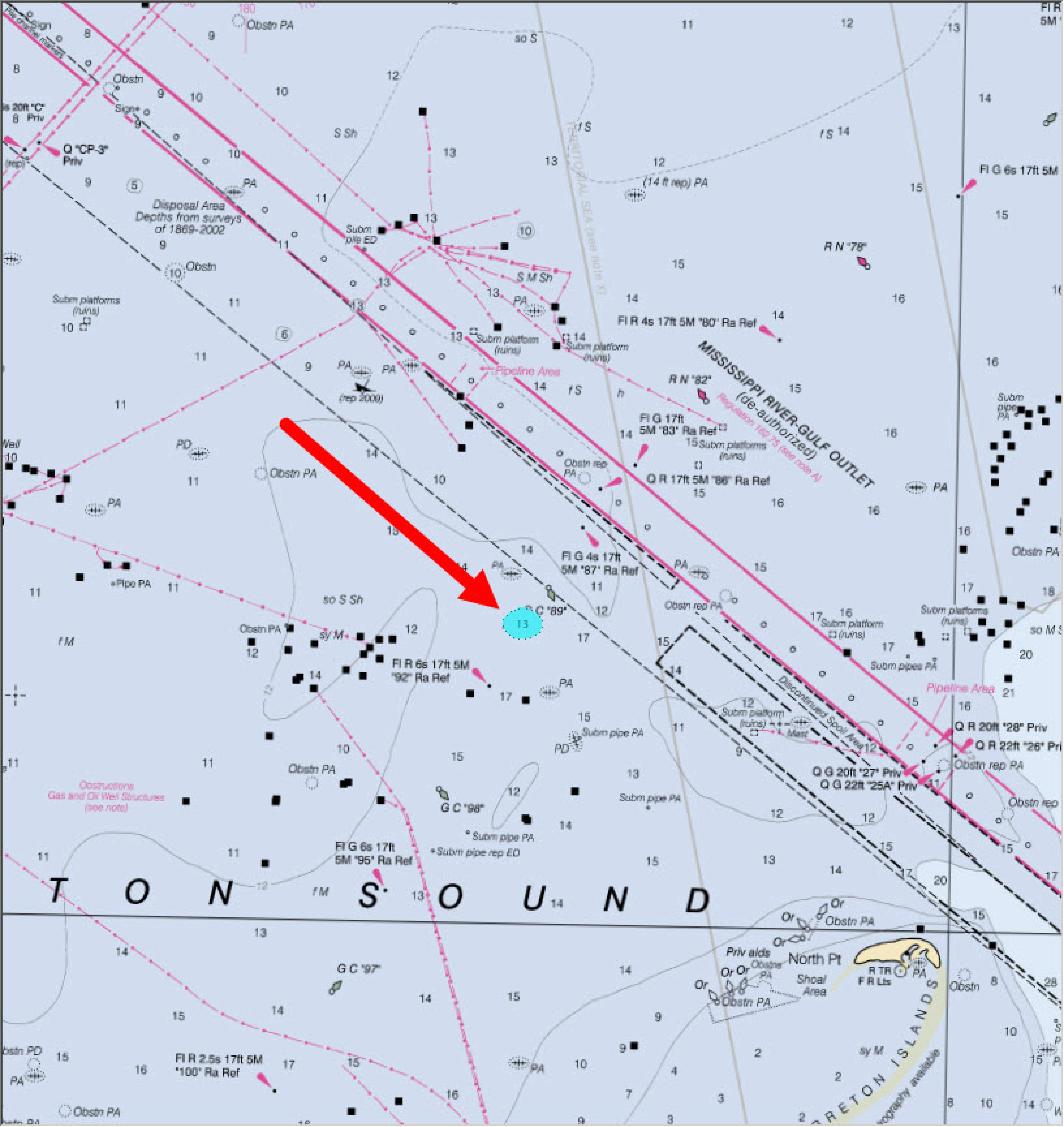

0.00
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
1.46 (Metres)
10.0
8.0
6.0
4.0
2.0
4.0
2.00 4.00 6.00 8.00 10.00 12.00 14.00 16.00 18.00 20.00 22.00 24.00 26.00 28.00 30.00 32.00 34.00 36.00

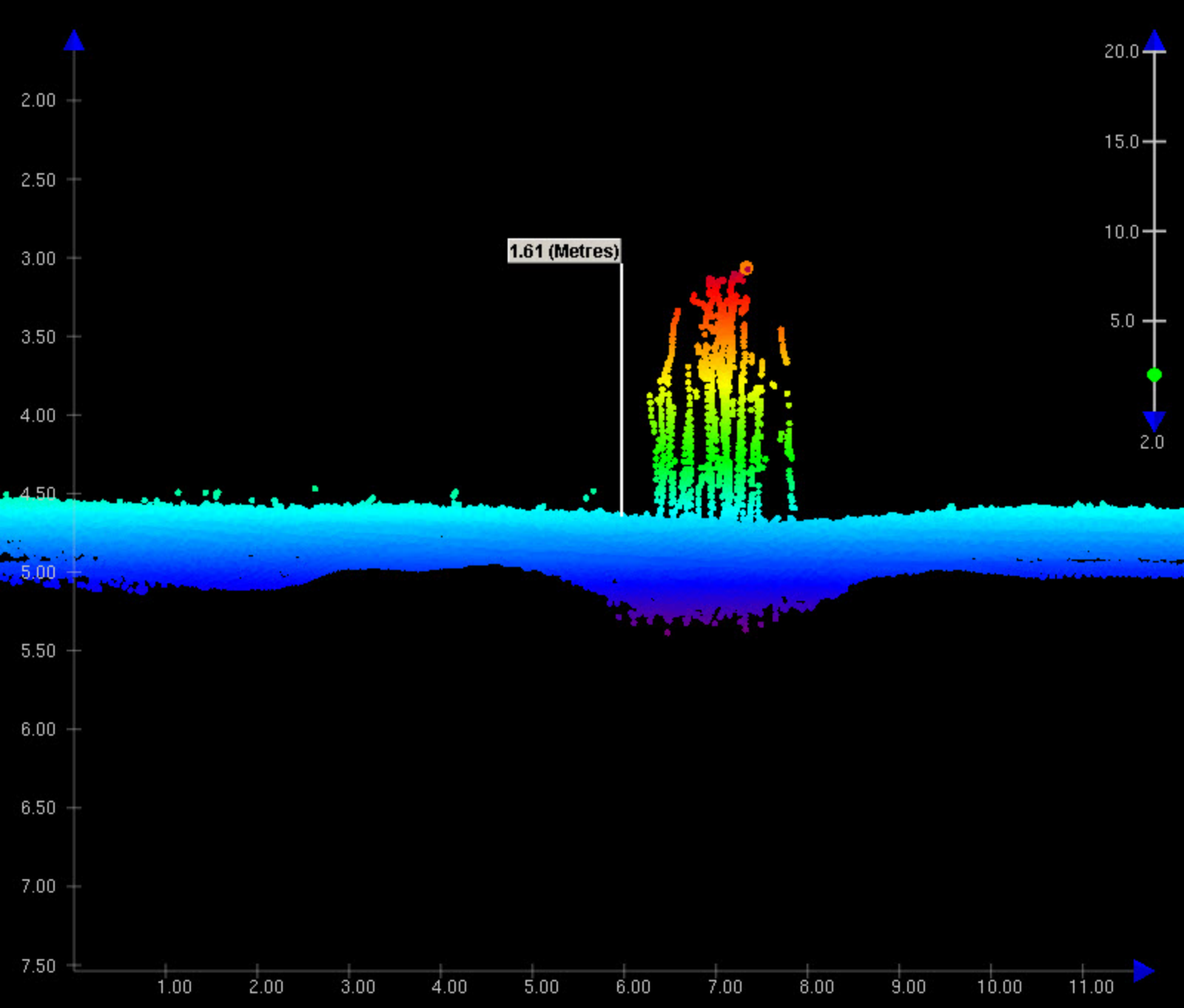

78m
40m
1.7
5.0
10.0
15.0
20.0

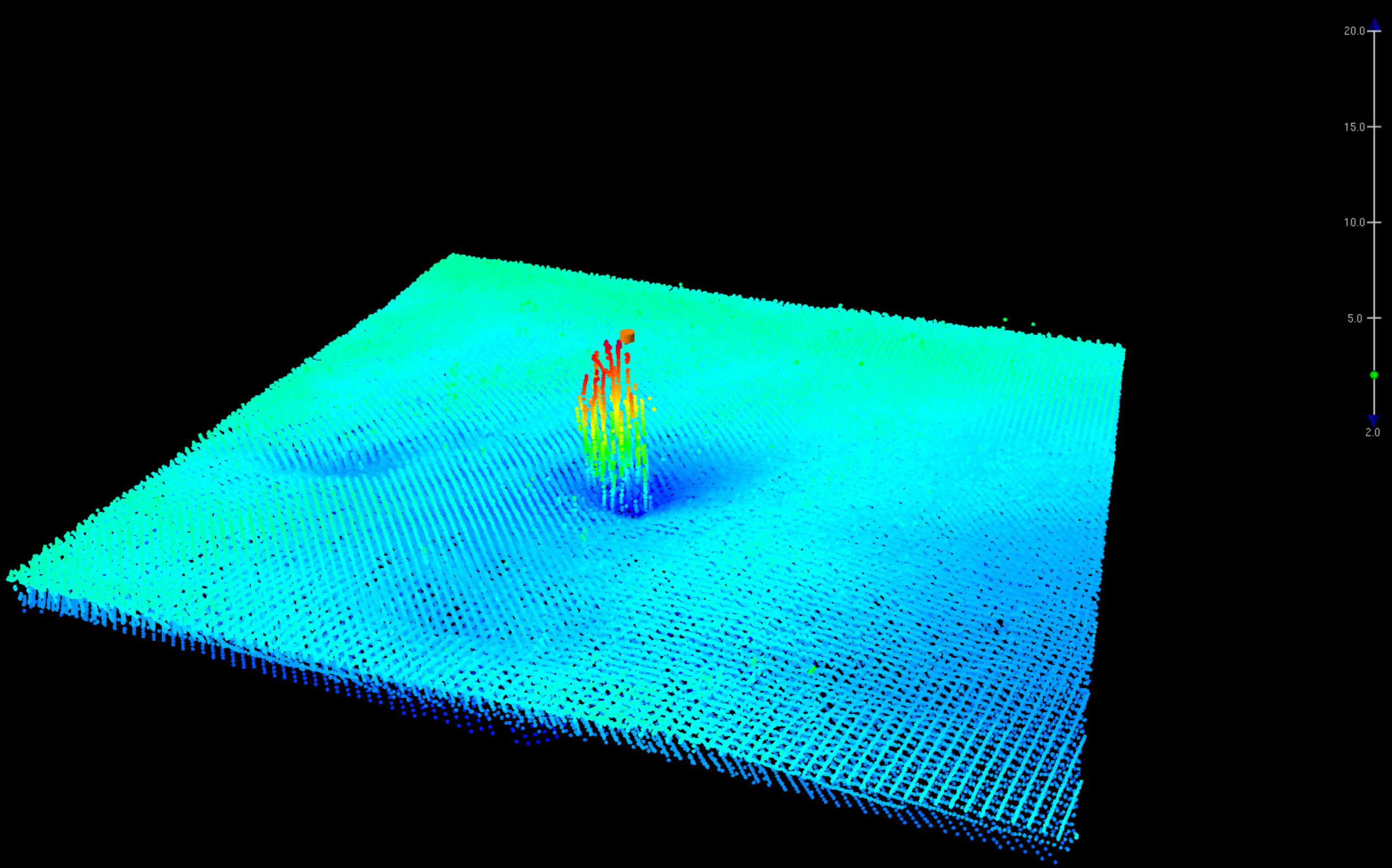

Subm platforms (ruins)
Fl R 4s 17ft 5M "80" Ra Ref
MISSISSIPPI RIVER-GULF OUTLET (de-authorized)
Regulation 162.75 (see note A)
Pipeline Area
R N "82"
Fl G 17ft 5M "83" Ra Ref
Q R 17ft 5M "86" Ra Ref
Subm platform (ruins)
Obstn rep PA
Obstn PA
Well
PD
PA
(rep 2009)
Pipe PA
Fl G 4s 17ft 5M "87" Ra Ref
so S Sh
sy S Sh
G C "89"
Obstn rep PA
Subm platforms (ruins)
Subm pipes PA
Fl R 6s 17ft 5M "92" Ra Ref
Discontinued Spoil Area
Subm pipe PA
Q R 20ft "27" Priv
Q G 22ft "25A" Priv
Obstructions Gas and Oil Well Structures (see note)
G C "98"
Subm pipe rep ED
Fl G 6s 17ft 5M "95" Ra Ref
E T O N S O U N D
G C "97"
Priv aids
North Pt
Shoal Area
R TR
F R Lts
Obstn
BRETON ISLANDS
No hydrography available
Fl R 2.5s 17ft 5M "100" Ra Ref
Obstn PD
Obstn PA (5 ft rep 1981)
fM
sy M
so M

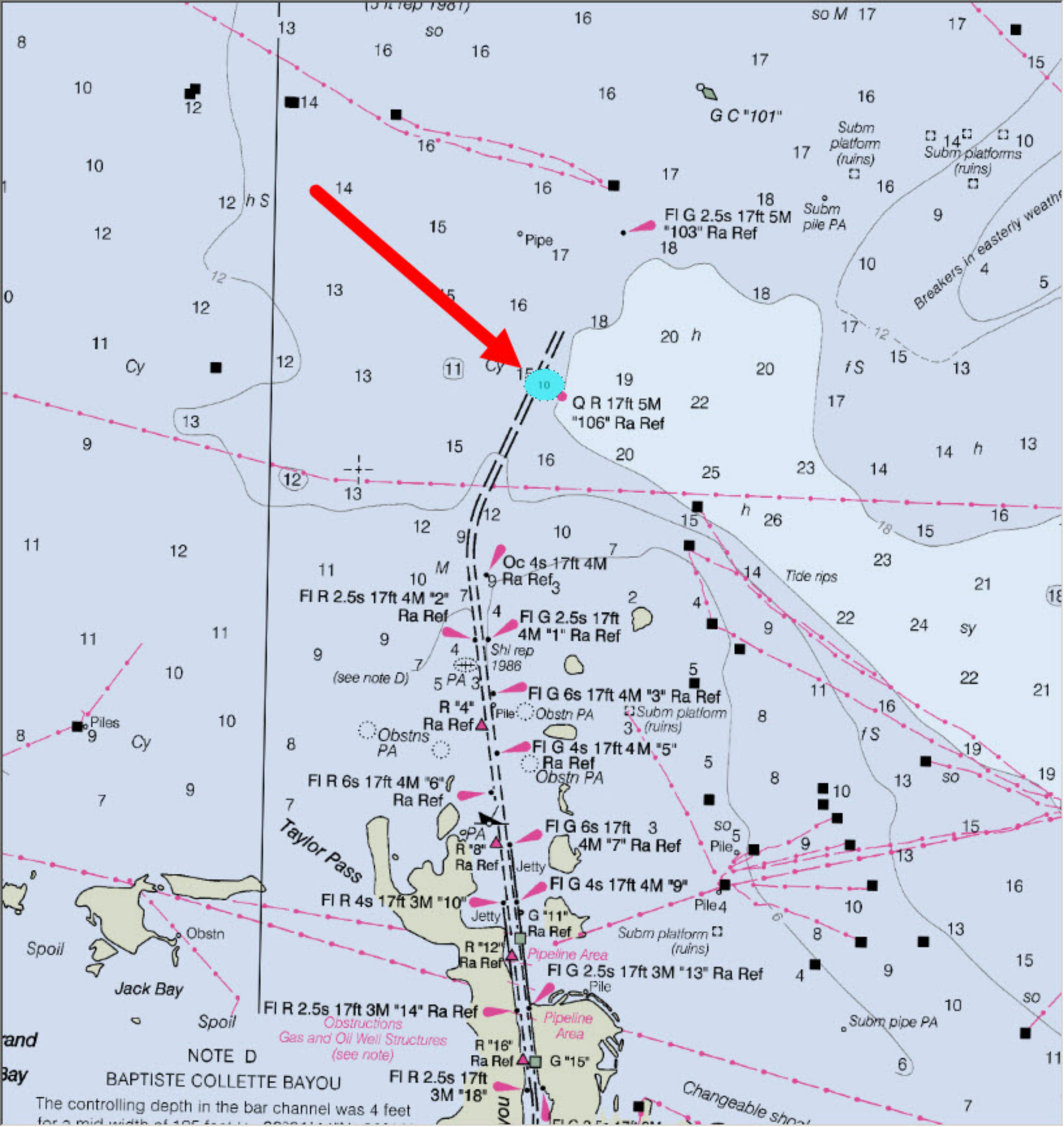

1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
1.01 (Metres)
10.0
8.0
6.0
4.0
2.0
9.3
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
50.00
55.00
60.00
65.00
70.00


52m
90m
20.0
15.0
10.0
5.0
1.7


Disposal Area
Depths from surveys
of 1869-2002
Subm platforms
(ruins)
Q "CP-3"
Priv
Obstn PA
Subm
pile ED
S M Sh
Pipeline Area
(rep 2009)
(14 ft rep) PA
R N "78"
Fl G 6s 17ft 5M
Fl R 4s 17ft 5M "80" Ra Ref
MISSISSIPPI RIVER-GULF OUTLET
(de-authorized)
R N "82"
Fl G 17ft
5M "83" Ra Ref
Q R 17ft 5M "86" Ra Ref
Fl G 4s 17ft
5M "87" Ra Ref
G C "89"
Fl R 6s 17ft 5M
"92" Ra Ref
Obstn rep PA
Discontinued Spoil Area
Q R 20ft "28" Priv
Q R 22ft "26" Priv
Q G 20ft "27" Priv
Q G 22ft "25A" Priv
Obstructions
Gas and Oil Well Structures
(see note)
G C "98"
Subm pipe PA
Subm pipe rep ED
Fl G 6s 17ft
5M "95" Ra Ref
T O N S O U N D
G C "97"
Priv aids
North Pt
Shoal
Area
Fl R 2.5s 17ft 5M
"100" Ra Ref
Obstn PA


1.61 (Metres)
2.00
2.50
3.00
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
20.0
15.0
10.0
5.0
2.0


20.0
15.0
10.0
5.0
2.0


Fl G 2.5s 17ft 5M "103" Ra Ref
Q R 17ft 5M "106" Ra Ref
Oc 4s 17ft 4M Ra Ref
Fl R 2.5s 17ft 4M "2" Ra Ref
Fl G 2.5s 17ft 4M "1" Ra Ref
Fl G 6s 17ft 4M "3" Ra Ref
R "4" Ra Ref
Fl G 4s 17ft 4M "5" Ra Ref
Fl R 6s 17ft 4M "6" Ra Ref
Fl G 6s 17ft 4M "7" Ra Ref
R "8" Ra Ref
Fl G 4s 17ft 4M "9"
Fl R 4s 17ft 3M "10"
G "11" Ra Ref
R "12" Ra Ref
Fl G 2.5s 17ft 3M "13" Ra Ref
Fl R 2.5s 17ft 3M "14" Ra Ref
R "16" Ra Ref
G "15"
Fl R 2.5s 17ft 3M "18"
G C "101"
Subm platform (ruins)
Subm platforms (ruins)
Subm pile PA
Pipe
Breakers in easterly weather
Tide rips
Shl rep 1986
(see note D)
Obstn PA
Subm platform (ruins)
Obstns PA
Taylor Pass
Jetty
Pipeline Area
Subm platform (ruins)
Jack Bay
Spoil
Obstn
Obstructions
Gas and Oil Well Structures
(see note)
Pipeline Area
Subm pipe PA
NOTE D
BAPTISTE COLLETTE BAYOU
The controlling depth in the bar channel was 4 feet
Changeable shoal
Piles
Cy

From: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Sent: Tuesday, August 02, 2016 12:10 PM
To: Castle Parker - NOAA Federal
Cc: Christina Fandel - NOAA Federal; Corey Allen - NOAA Federal; Jasmine Cousins - NOAA Federal; Jason Creech; Jon Dasler; Tim Osborn - NOAA Federal; _NOS OCS PBA Branch; _NOS OCS PBB Branch; _NOS OCS PBC Branch; _NOS OCS PBD Branch; _NOS OCS PBE Branch; _NOS OCS PBG Branch; Benjamin K Evans; James M Crocker; Matt Kroll; Nautical Data Branch; NSD Coast Pilot; Pearce Hunt; Tara Wallace
Subject: Fwd: H12920 Anti-DtoN Charted Wreck PA
Attachments: H12920 Anti-DtoN Charted Wreck PA.zip

DD-27531 has been registered by the Nautical Data Branch and directed to Products Branch G for processing.

The Anti-DtoN disproves a charted wreck located in the ICWW and the Breton Sound Alternate Route.

The following charts are affected:
11372 kapp 21

11373 kapp 52

The following ENCs are affected:
US5MS11M

US4MS12M

References:
H12920
OPR-J311-KR-16

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
NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

---------- Forwarded message ----------
From: **Castle Parker - NOAA Federal** <castle.e.parker@noaa.gov>
Date: Mon, Aug 1, 2016 at 10:53 AM
Subject: H12920 Anti-DtoN Charted Wreck PA
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Cc: Christina Fandel - NOAA Federal <christina.fandel@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Jasmine Cousins - NOAA Federal <jasmine.cousins@noaa.gov>, Jason Creech <Jasc@deainc.com>, Jon Dasler

<Jld@deainc.com>, Tim Osborn - NOAA Federal <tim.osborn@noaa.gov>

Good day,

Please accept Anti-DtoN submission for removal of charted Wreck PA disproved by survey H12920 (2016). The attached document details the specifics of the request for chart deletion.

If you have any questions, please direct them back to me via email or phone 757-441-6746 x115.

Thank you for your assistance with this matter.

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

From: Jason Creech
Sent: Tuesday, October 04, 2016 8:23 AM
To: 'ahb.dton@noaa.gov' (ahb.dton@noaa.gov)
Cc: Christina Fandel - NOAA Federal; Jon Dasler (Jld@deainc.com); Tim Osborn (Tim.Osborn@noaa.gov); Emily Clark - NOAA Federal (emily.clark@noaa.gov)
Subject: H12920 DtoN 02
Attachments: H12920_DtoN_02.000; H12920_DtoN_2_MBES_2D.jpg; H12920_DtoN_2_MBES_3D.jpg; H12920_DtoN_2_Overview_11363.jpg

Good Morning

I have attached H12920 DtoN 02 which reports an uncharted obstruction located in the vicinity of the Breton Sound Alternate Route. The sounding is preliminary and reduced to MLLW using observed zoned tides.

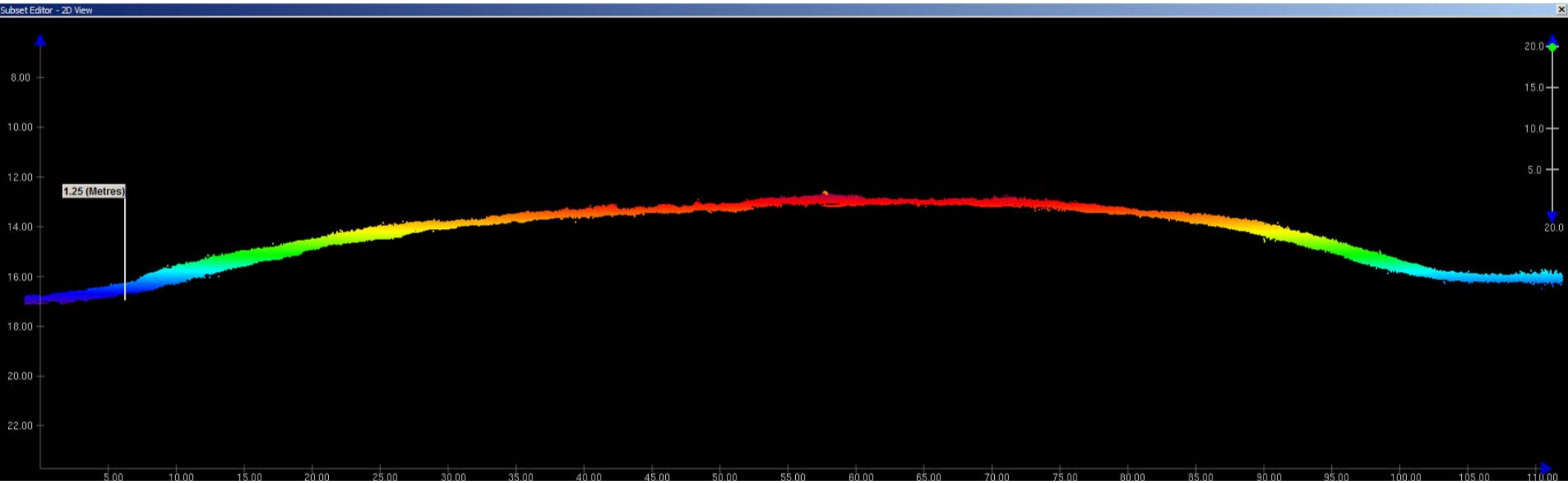
Please let me know if you have any questions or require additional information on this danger to navigation.

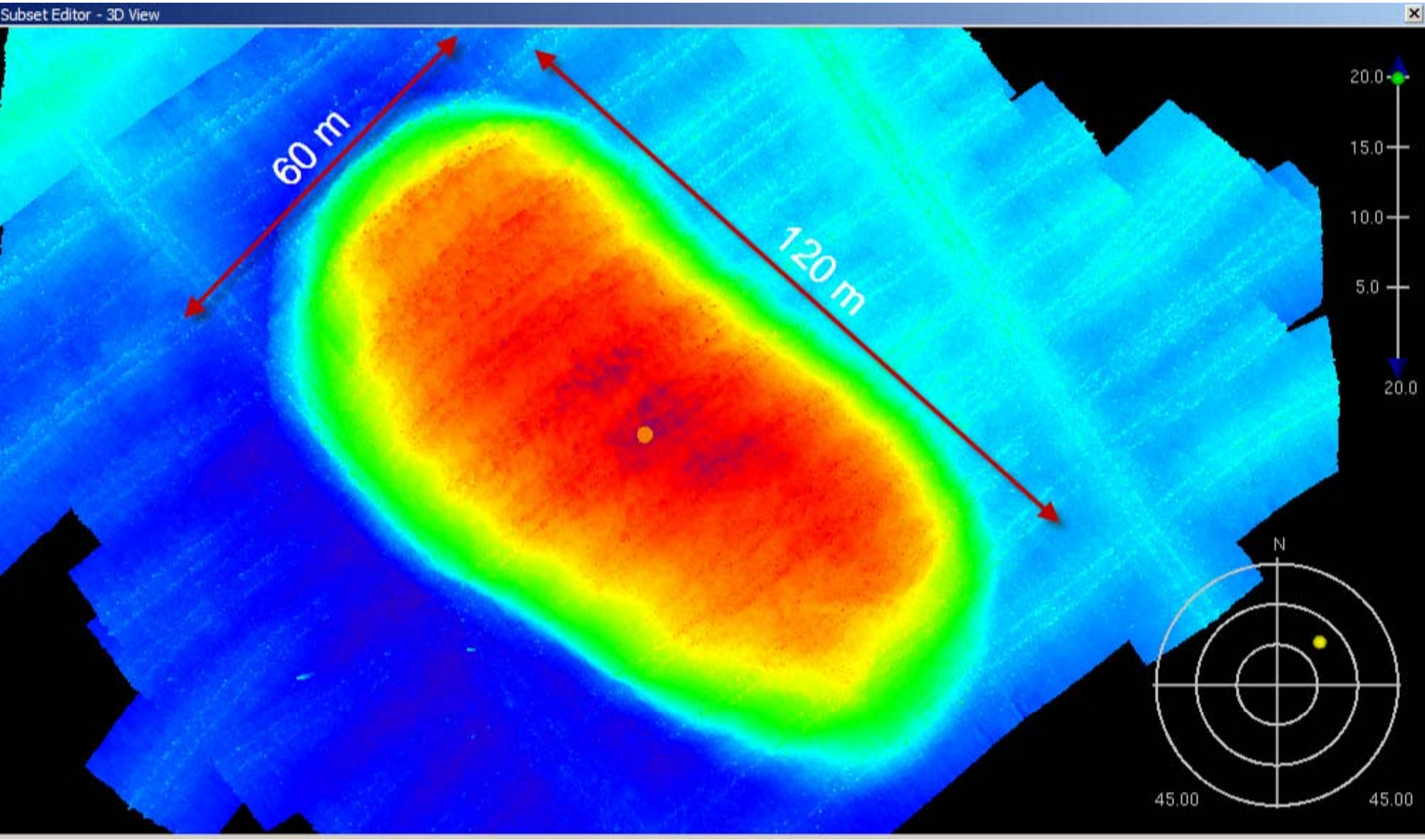
Thanks,
Jason

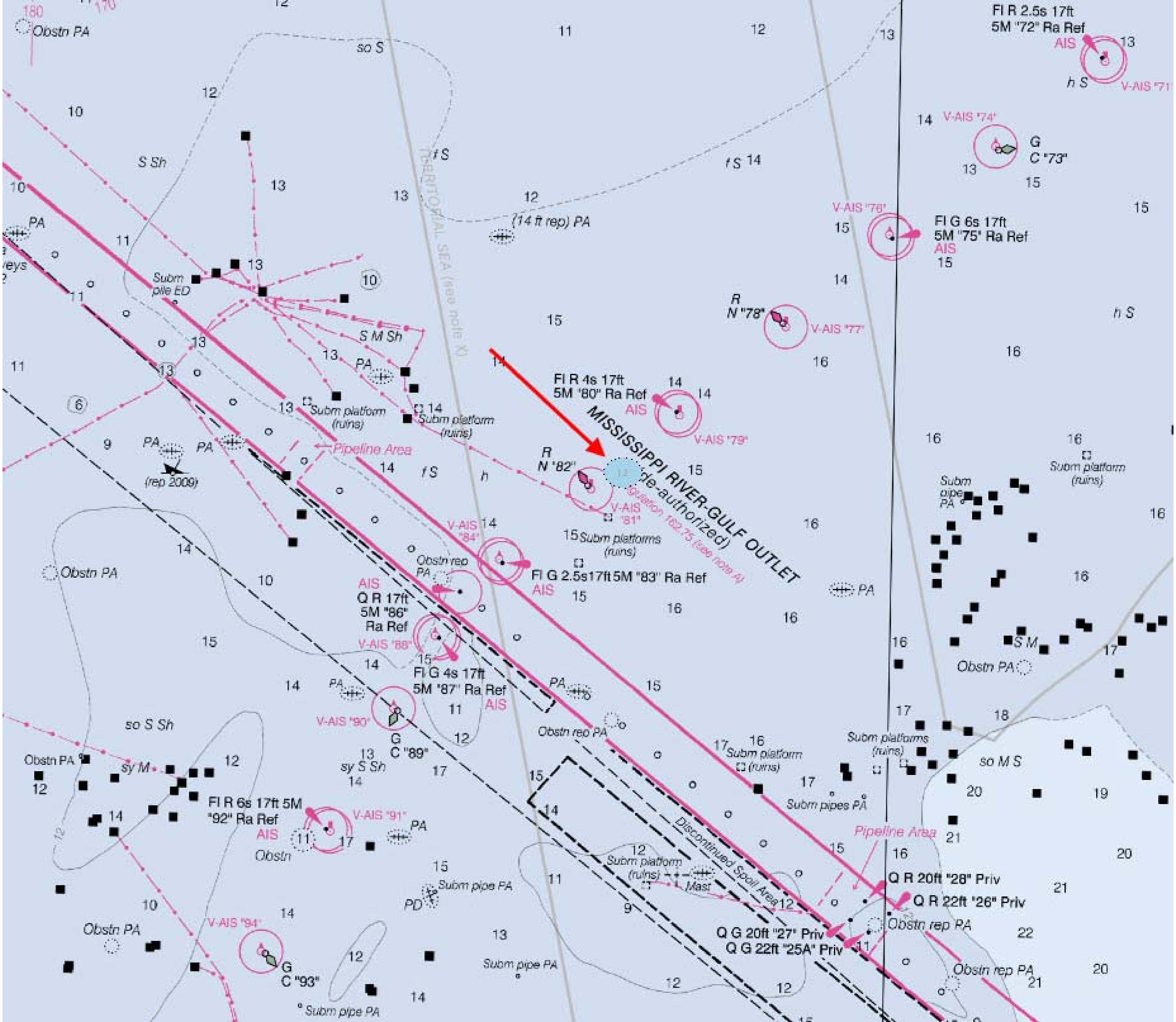
Jason Creech, CH | Senior Associate, Nautical Charting Program Manager
David Evans and Associates, Inc. | Marine Services Division | www.deamarine.com
t: 360.314.3200 | c: 804.516.7829 | jasc@deainc.com

DAVID EVANS AND ASSOCIATES INC. MARINE SERVICES

Follow us on LinkedIn | Twitter | Facebook | YouTube


Subset Editor - 2D View
8.00
10.00
12.00
14.00
16.00
18.00
20.00
22.00
1.25 (Metres)
5.00
10.00
15.00
20.00
25.00
30.00
35.00
40.00
45.00
50.00
55.00
60.00
65.00
70.00
75.00
80.00
85.00
90.00
95.00
100.00
105.00
110.00
20.0
15.0
10.0
5.0
20.0


Subset Editor - 3D View
60 m
120 m
20.0
15.0
10.0
5.0
20.0
N
45.00
45.00



MISSISSIPPI RIVER-GULF OUTLET
(de-authorized)
Fl R 2.5s 17ft
5M "72" Ra Ref
AIS
V-AIS "71"
V-AIS "74"
G
C "73"
V-AIS "76"
Fl G 6s 17ft
5M "75" Ra Ref
AIS
R
N "78"
V-AIS "77"
Fl R 4s 17ft
5M "80" Ra Ref
AIS
V-AIS "79"
R
N "82"
V-AIS "81"
Subm platforms (ruins)
V-AIS "84"
Fl G 2.5s17ft5M "83" Ra Ref
AIS
AIS
Q R 17ft
5M "86"
Ra Ref
V-AIS "88"
Fl G 4s 17ft
5M "87" Ra Ref
AIS
V-AIS "90"
G
C "89"
Fl R 6s 17ft 5M
"92" Ra Ref
AIS
V-AIS "91"
V-AIS "94"
G
C "93"
Pipeline Area
Subm platform (ruins)
Subm pile ED
(14 ft rep) PA
(rep 2009)
Obstn rep PA
Obstn PA
Discontinued Spoil Area
Subm pipe PA
Subm pipes PA
Q R 20ft "28" Priv
Q R 22ft "26" Priv
Q G 20ft "27" Priv
Q G 22ft "25A" Priv
Obstn rep PA
Mast
TERRITORIAL SEA (see note X)

From: Vanessa Miller - NOAA Federal <vanessa.miller@noaa.gov>
Sent: Wednesday, October 05, 2016 9:14 AM
To: OCS NDB - NOAA Service Account
Cc: Christina Fandel - NOAA Federal; Jasmine Cousins - NOAA Federal; Briana Welton - NOAA Federal; Jason Creech
Subject: H12920 DtoN #2
Attachments: H12920 DtoN 2.pdf; H12920 DtoN 2.xml; H12920 DtoN 2.zip

Good day,

Please find attached compressed file for H12920 DtoN #2 for submission to Nautical Data Branch
(NDB) and Marine Chart Division (MCD). This danger submission contains one uncharted obstruction for chart application.

The information originates from NOAA contract field unit David Evans and Associates, Inc., and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of theattached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF),associated image files, and a Pydro XML file.

Sincerely,

Vanessa Self Miller
Hydrographer/Physical Scientist
Atlantic Hydrographic Branch
439 West York St.
Norfolk, VA 23510
757-441-6746 x102

Feature Images

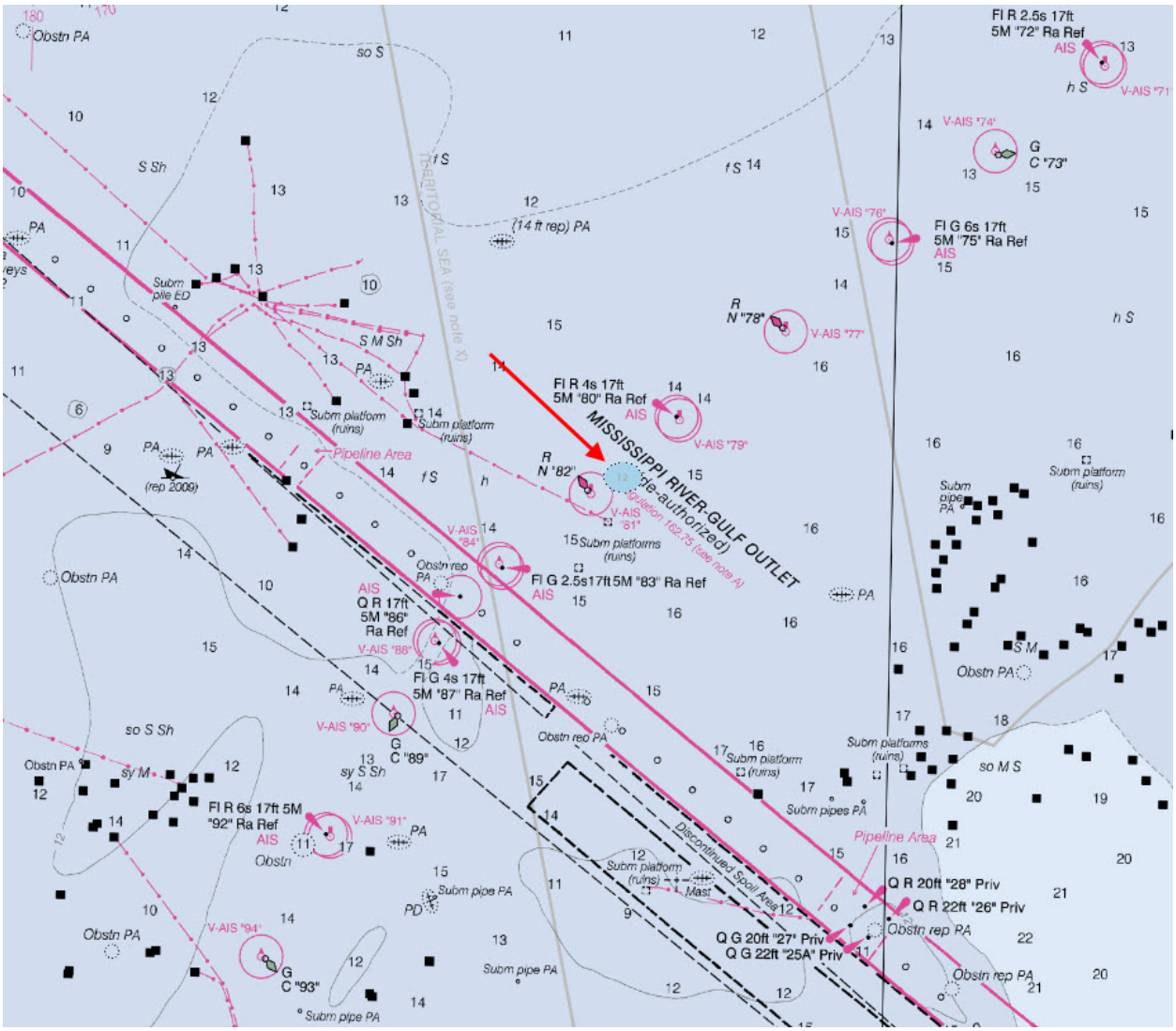


Figure 1.1.1

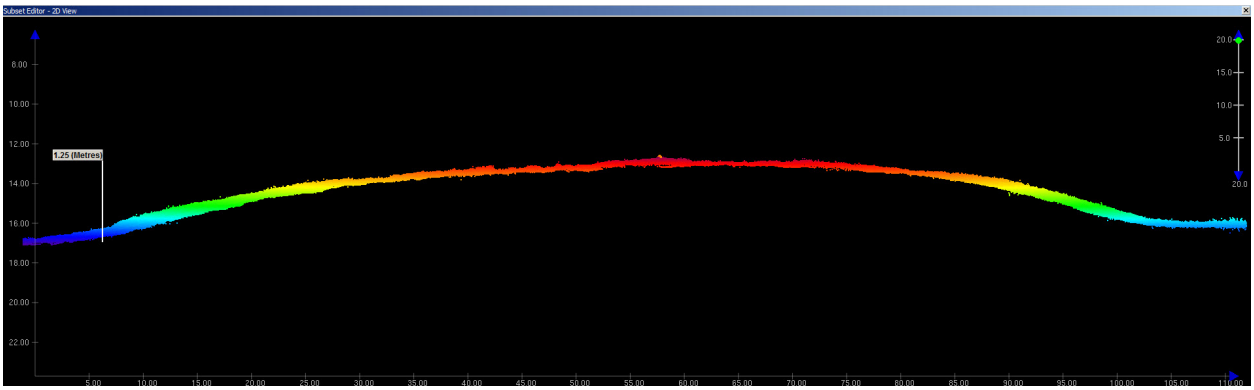


Figure 1.1.2

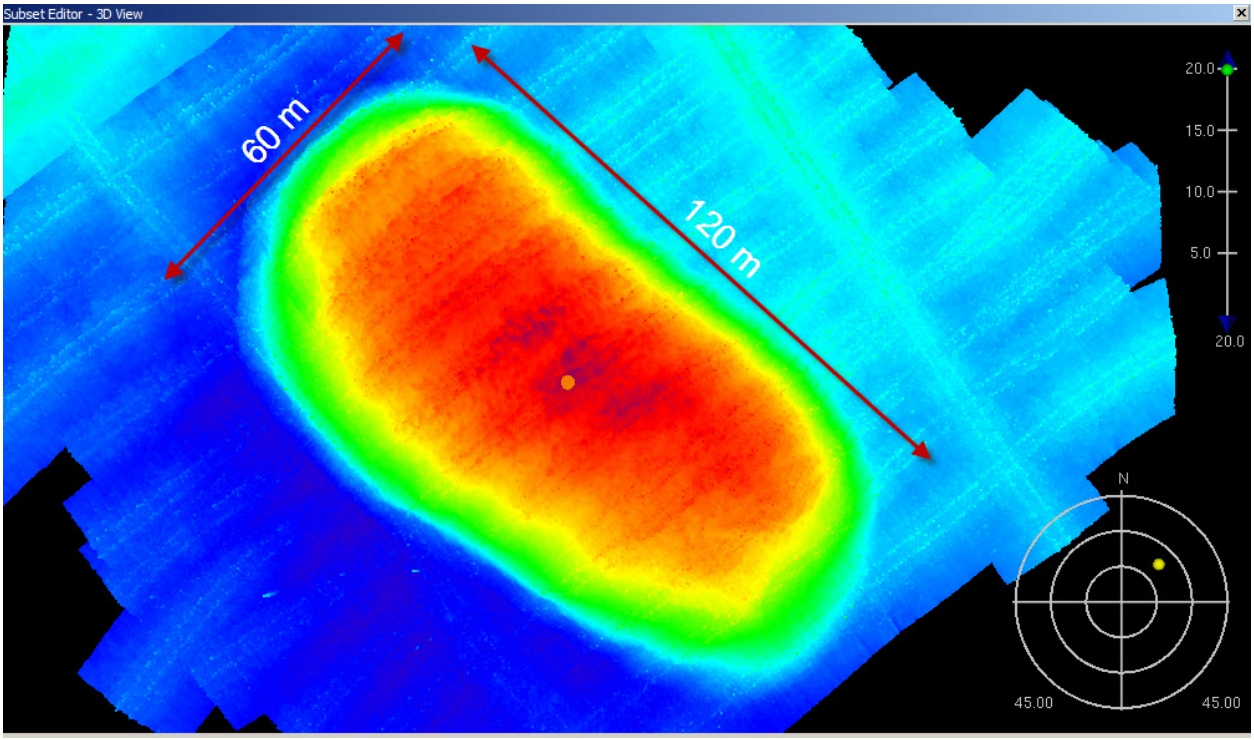


Figure 1.1.3

From: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Sent: Wednesday, October 05, 2016 2:05 PM
To: Vanessa Miller - NOAA Federal
Cc: Christina Fandel - NOAA Federal; Jasmine Cousins - NOAA Federal; Briana Welton - NOAA Federal; Jason Creech; _NOS OCS PBA Branch; _NOS OCS PBB Branch; _NOS OCS PBC Branch; _NOS OCS PBD Branch; _NOS OCS PBE Branch; _NOS OCS PBG Branch; Benjamin K Evans; Castle E Parker; James M Crocker; Matt Kroll; NSD Coast Pilot; Pearce Hunt; Tara Wallace
Subject: Fwd: H12920 DtoN #2
Attachments: H12920 DtoN 2.pdf; H12920 DtoN 2.xml; H12920 DtoN 2.zip

DD-27711 has been registered by the Nautical Data Branch and directed to Products Branch G for processing.

The DtoN reported is an obstruction in Breton Sound.

The following charts are affected:
11353 kapp 79

11363 kapp 55

The following ENCs are affected:

US5LA24M

US4LA34M

References:
H12920
OPR-J311-KR-16

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
NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

---------- Forwarded message ----------
From: **Vanessa Miller - NOAA Federal** <vanessa.miller@noaa.gov>
Date: Wed, Oct 5, 2016 at 12:14 PM
Subject: H12920 DtoN #2
To: OCS NDB - NOAA Service Account <OCS.NDB@noaa.gov>
Cc: Christina Fandel - NOAA Federal <christina.fandel@noaa.gov>, Jasmine Cousins - NOAA

Federal <jasmine.cousins@noaa.gov>, Briana Welton - NOAA Federal <briana.welton@noaa.gov>, Jason Creech <jasc@deainc.com>

Good day,

Please find attached compressed file for H12920 DtoN #2 for submission to Nautical Data Branch
(NDB) and Marine Chart Division (MCD). This danger submission contains one uncharted obstruction for chart application.

The information originates from NOAA contract field unit David Evans and Associates, Inc., and was submitted to the Atlantic Hydrographic Branch (AHB) for review and processing. The contents of theattached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF),associated image files, and a Pydro XML file.

Sincerely,

Vanessa Self Miller
Hydrographer/Physical Scientist
Atlantic Hydrographic Branch
439 West York St.
Norfolk, VA 23510
757-441-6746 x102

From: Christina Fandel - NOAA Federal <christina.fandel@noaa.gov>
Sent: Tuesday, July 26, 2016 8:58 AM
To: Jon Dasler; Jason Creech; Michael Gonsalves - NOAA Federal; Emily Clark - NOAA Federal
Subject: Re: Notice of Hydrographic Survey Operations

Jason, Jon,

The USCG recently requested the investigation of an offshore oil platform located at 29-31-58.4N 089-14-46.2W and a dangerous wreck at 30-16-53.0N 088-57-17.0W. The offshore oil platform feature had previously been assigned and included in the GIS files for the OPR-J311-KR-16 project. The investigation of the dangerous wreck at 30-16-53.0N 088-57-17.0W by DEA is within the scope of the current task order (EA133C-14-CQ-0037 T-003) and following a phone conversation with Jason Creech this morning, would be of no additional cost to the government.

As such, please verify the investigation of the dangerous wreck feature would be of no cost to the government. Following this verification, please investigate the dangerous wreck feature. The data may be included with H12920 survey deliverable.

Thank you,

Christy

On Mon, Jul 25, 2016 at 9:47 AM, Christina Fandel - NOAA Federal <christina.fandel@noaa.gov> wrote:

> Jason,
>
> Please do not act on the feature investigation request from the USCG at this time. I am seeking further guidance from AGO regarding this request and will get back to you with further information when received.
>
> Thank you,
>
> Christy
>
> On Mon, Jul 25, 2016 at 8:26 AM, Ledet, David P CIV <David.P.Ledet@uscg.mil> wrote:
>
> > Good morning Jason,
> >
> > Along the Breton Sound Alternate Route we have two areas of concern that we would like you to survey for us. One is a charted platform symbol at 29-31-58.4N 089-14-46.2W and the other a dangerous wreck symbol at 30-16-53.0N 088-57-17.0W. Both are adjacent to the channel. Recent reports indicate that the platform is not physically there. We do not know if it was removed or knocked below the waterline.

Thank you,

Mr. David P. Ledet Sr.
Chief, Navigation Information Section (D8)
D8 Wreck and Obstruction Coordinator
(504) 671-2116 (W) (504) 330-0171 (C)

-----Original Message-----
From: Jason Creech [mailto:Jasc@deainc.com]
Sent: Friday, July 22, 2016 9:26 AM
To: D08-DG-District-MarineInfo
Cc: Ledet, David P CIV; 'Tim Osborn (Tim.Osborn@noaa.gov)'
Subject: [Non-DoD Source] Notice of Hydrographic Survey Operations

Good morning,

Please publish this notice in the District 8 Local Notice to Mariners. The following information is also included in the attachment.

Let me know if you have any questions.

Thanks,

Jason

Jason Creech, CH | Senior Associate, Nautical Charting Program Manager

David Evans and Associates, Inc. | Marine Services Division |
www.deamarine.com <http://www.deamarine.com/>

t: 360.314.3200 | c: 804.516.7829 | jasc@deainc.com

Follow us on LinkedIn <http://www.linkedin.com/company/16154?trk=tyah> | Twitter <https://twitter.com/DEA_Marine> | Facebook <http://www.facebook.com/#!/pages/David-Evans-and-Associates-Inc/15301839482 2270> | YouTube <http://www.youtube.com/user/DEAMarineServices>

NOTICE TO MARINERS

-HYDROGRAPHIC SURVEYING ACTIVITY-

Beginning August 26, 2016 David Evans and Associates, Inc. will be conducting hydrographic surveys under contract to the National Oceanic and Atmospheric Administration (NOAA), Office of Coast Survey. S/V BLAKE, an 82-foot aluminum-hulled catamaran, will be conducting hydrographic surveys of portions of the Inner Harbor Navigation Canal (IHNC) Alternate Route within Chandeleur and Breton Sounds (see survey area graphic on the next page). Operations will continue until approximately August 1st.

The survey area is bounded by approximate positions:

NW 29-49-58 N, 089-18-25 W and NE 29-49-58 N, 089-01-42 W

SW 29-25-24 N, 089-18-25 W and SE 29-25-24 N, 089-01-42 W

Starting August 1st, the S/V Blake will begin hydrographic survey operations south and east of the Chandeleur Islands (see survey area graphic on the next page). Survey operations will continue until February 1, 2017.

The survey area is bounded by approximate positions:

NW 29-58-46 N, 088-59-02 W and NE 29-58-46 N, 088-38-59 W

SW 29-26-11 N, 088-59-02 W and SE 29-26-11 N, 088-38-59 W

S/V BLAKE, which will be operating 24 hours a day, will be towing sensitive instrumentation and will be displaying day shapes and/or lights that identify it as restricted in its ability to maneuver. Approaching vessels should give a wide berth to reduce impacts to survey data quality and potential entanglement in the towed instrumentation. S/V BLAKE has an AIS and can be reached via VHF radio on channels 13 and 16 at all times.

For information, contact:

Jason Creech

David Evans and Associates, Inc.

(804) 516-7829

Tim McClinton

David Evans and Associates, Inc.

(228) 241-1970

--
Physical Scientist
Hydrographic Surveys Division
Office of Coast Survey, NOAA
Christina.Fandel@noaa.gov
(301) 713 - 2702 x 133

--
Physical Scientist
Hydrographic Surveys Division
Office of Coast Survey, NOAA
Christina.Fandel@noaa.gov
(301) 713 - 2702 x 133

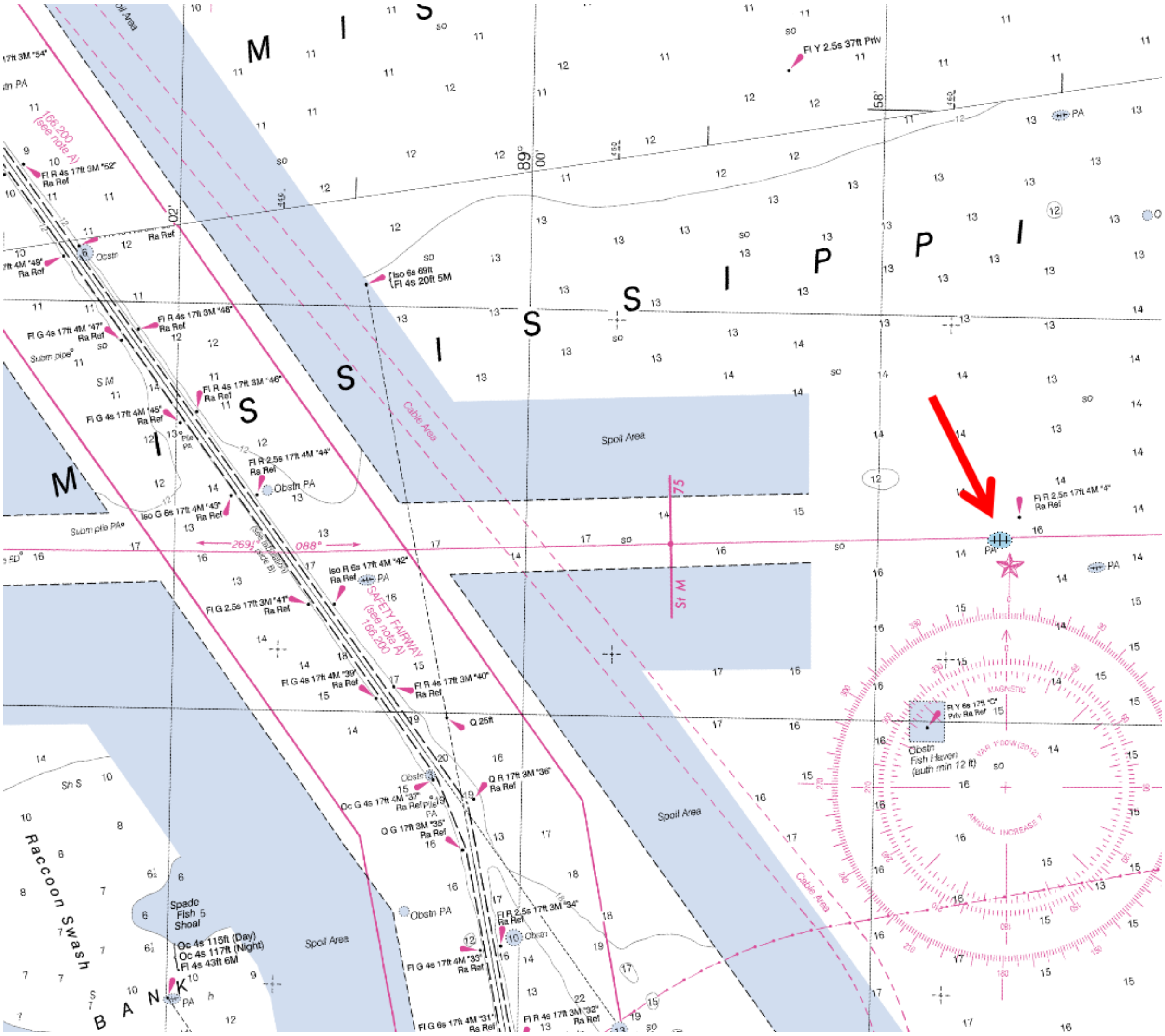

M I S S I S S I P P I
Spoil Area
Cable Area
SAFETY FAIRWAY (see note A) 166.200
Spade Fish Shoal
Raccoon Swash
B A N K
Obstn Fish Haven (auth min 12 ft)
Oc 4s 115ft (Day)
Oc 4s 117ft (Night)
Fl 4s 43ft 6M
Fl Y 2.5s 37ft Priv
Iso 6s 69ft
Fl 4s 20ft 5M
Q 25ft
Obstn PA
Subm pipe PA
269°
088°
MAGNETIC
ANNUAL INCREASE

Figure 1.1.4

APPROVAL PAGE

H12920

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 NCEI for archive

- H12920_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12920_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: Brianna Welton Hillstrom

Digitally signed by HILLSTROM.BRIANA.WELTON.1267667531
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=NOAA, cn=HILLSTROM.BRIANA.WELTON.1267667531
Date: 2017.06.23 16:40:29 -04'00'

Lieutenant Commander Brianna Welton, NOAA
Chief, Atlantic Hydrographic Branch