H12722

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

DESCRIPTIVE REPORT

Type of Survey:	Basic Hydrographic Survey
Registry Number:	H12722

LOCALITY

State(s):	Louisiana
General Locality:	Western Vicinity of Lake Borgne
Sub-locality:	Shoalwater Bay

2015

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

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Date:

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTRY NUMBER:

HYDROGRAPHIC TITLE SHEET

H12722

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:	**Western Vicinity of Lake Borgne**
Sub-Locality:	**Shoalwater Bay**
Scale:	**40000**
Dates of Survey:	**01/25/2015 to 06/02/2015**
Instructions Dated:	**08/29/2014**
Project Number:	**OPR-J311-KR-14**
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, 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 Geophysical Data Center (NGDC) and can be retrieved via http://www.ngdc.noaa.gov/.

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Descriptive Report to Accompany Survey H12722

Project: OPR-J311-KR-14

Locality: Western Vicinity of Lake Borgne

Sublocality: Shoalwater Bay

Scale: 1:40000

January 2015 - June 2015

David Evans and Associates, Inc.

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

A. Area Surveyed

David Evans and Associates, Inc. (DEA) conducted hydrographic survey operations in Chandeleur Sound in the vicinity of Shoalwater Bay. Survey H12722 was conducted in accordance with the Statement of Work (July 9, 2014) and Hydrographic Survey Project Instructions (August 29, 2014).

The Hydrographic Survey Project Instructions reference the National Ocean Service (NOS) Hydrographic Surveys Specifications and Deliverables Manual (HSSD), April 2014 as the technical requirements for this project.

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
29° 53' 26.15" N 89° 4' 20.58" W	29° 49' 49.65" N 88° 52' 50.44" W

Table 1: Survey Limits

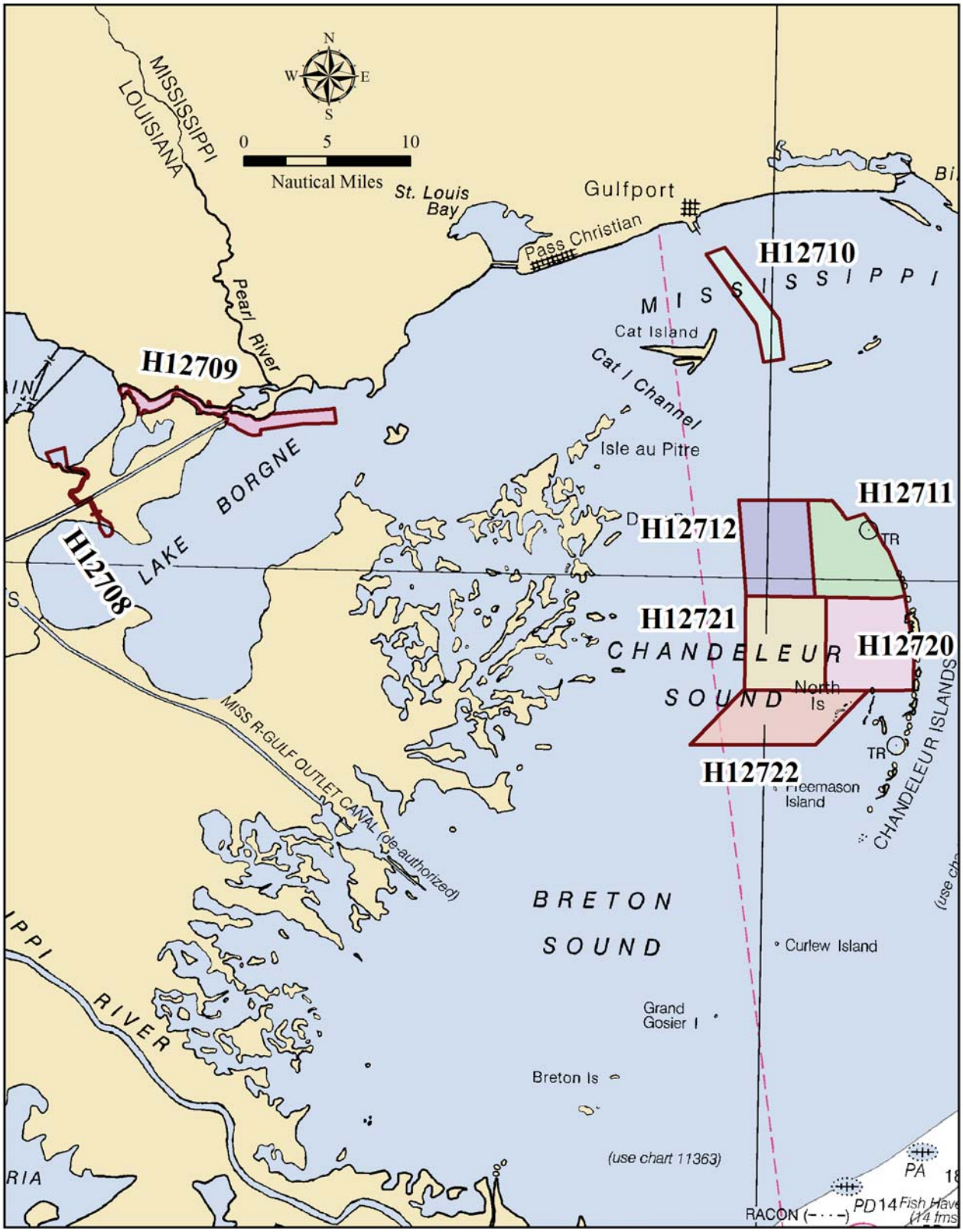


Figure 1: OPR-J311-KR-14 Assigned Survey Areas

Survey Limits were acquired in accordance with the requirements in the Project Instructions and the HSSD.

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 is located in an area subject to the influence of hurricanes on an annual basis, thus producing a very dynamic environment requiring frequent re-surveying. In addition, the tug and tow industry will be re-routed to the west of the Chandeleur Islands due to a Gulf Intracoastal Waterway West (GIWW) closure in the Summer of 2015. A large portion of the proposed alternative route for the tug and tow industry lies within the southern portion of this project area. This project will cover approximately 129 SNM of emerging critical areas and 4.5 SNM of priority 2 areas as identified in the 2012 NOAA Hydrographic Survey Priorities (NHSP). The project area is located in the vicinity of Lake Borgne, the Gulfport Sound Channel, and west of the Chandeleur Islands.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

A.4 Survey Coverage

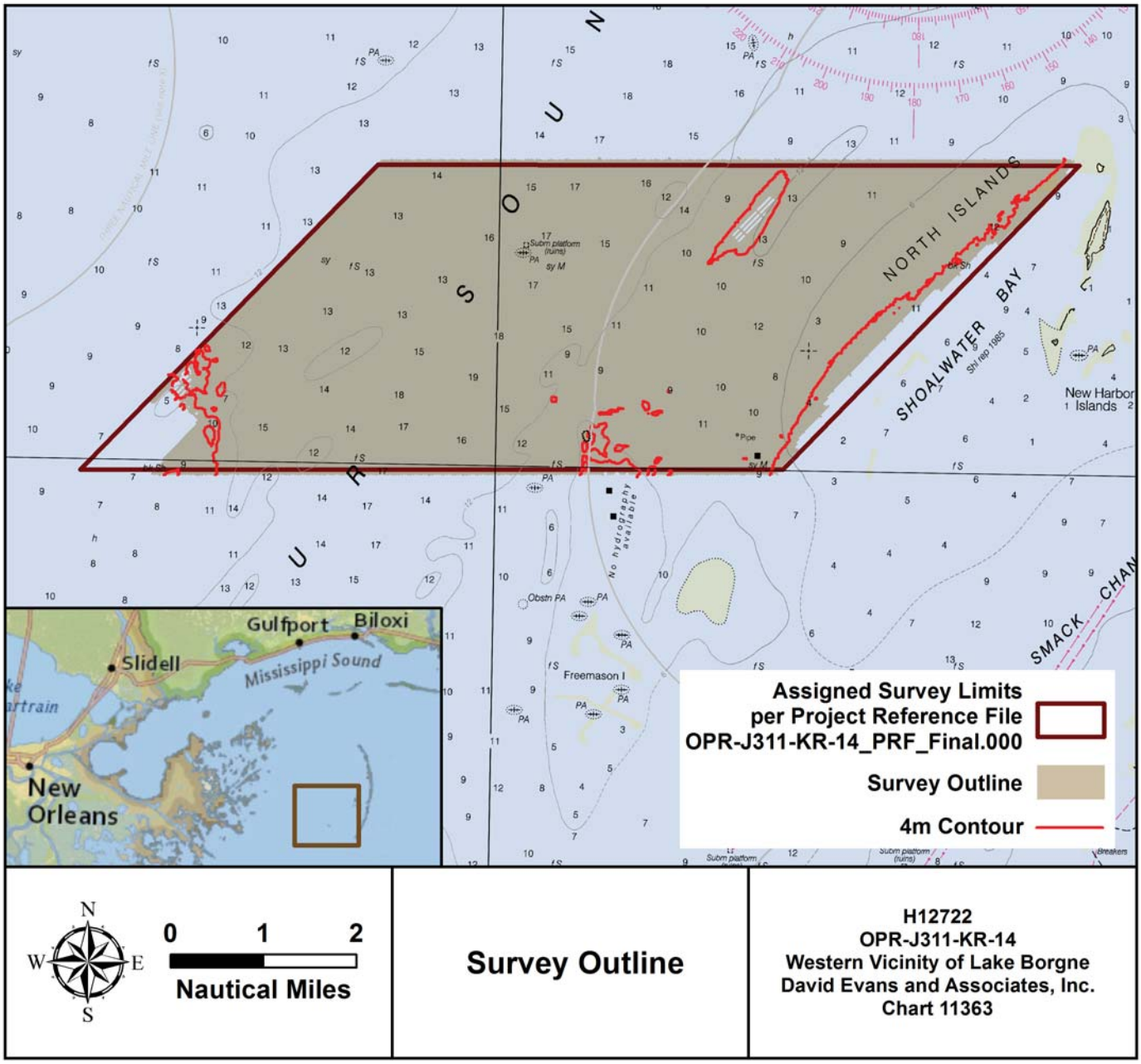


Figure 2: H12722 Survey Outline

The survey consisted of 200% side scan sonar coverage with concurrent multibeam echosounder (MBES) and backscatter using the Set Line Spacing coverage technique. Significant side scan sonar contacts were developed with multibeam sonar to meet Object Detection coverage requirements for multibeam surveys. The inshore limit of the survey was defined as the farthest offshore of either the surveyed 4-meter depth

contour or the Navigable Area Limit Line (NALL) defined in the OPR-J311-KR-14 Project Reference File (PRF).

DEA received a waiver to use the full sonar range when the towfish altitude was less than 8% of the range scale when operating at the 50-meter range scale. This waiver removed the minimum towfish height requirement at the 50-meter range scale as specified in Section 6.1.2.3 of the HSSD. A copy of the email correspondence granting this waiver is included in OPR-J311-KR-14 Project Correspondence.

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
	MBES Mainscheme	65.22	65.22
	Lidar Mainscheme	0	0
	SSS Mainscheme	11.12	11.12
	SBES/SSS Mainscheme	0	0
	MBES/SSS Mainscheme	1129.65	1129.65
	SBES/MBES Crosslines	93.84	93.84
	Lidar Crosslines	0	0
Number of Bottom Samples			7
Number of AWOIS Items Investigated			0
Number Maritime Boundary Points Investigated			0
Number of DPs			0
Number of Items Investigated by Dive Ops			0
Total SNM			24.28

Table 2: Hydrographic Survey Statistics

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

Survey Dates	Day of the Year
01/25/2015	25
01/27/2015	27
01/28/2015	28
02/04/2015	35
02/14/2015	45
02/15/2015	46
03/04/2015	63
03/05/2015	64
03/07/2015	66
03/08/2015	67
03/09/2015	68
03/10/2015	69
03/11/2015	70
04/10/2015	100
04/11/2015	101
04/12/2015	102
04/13/2015	103
04/14/2015	104
06/02/2015	153

Table 3: Dates of Hydrography

B. Data Acquisition and Processing

B.1 Equipment and Vessels

The OPR-J311-KR-14 Data Acquisition and Processing Report (DAPR), previously submitted with survey H12708, details equipment and vessel information as well as data acquisition and processing procedures used during this survey. 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 v4	Positioning & Attitude
Rolls Royce	MVP30-350 with AML Micro SVP&T	Primary Sound Speed Profiler
AML	Micro SV Exchange	Surface Sound Speed
Sea-Bird Electronics	SEACAT SBE 19-03 CTD	Secondary Sound Speed Profiler
AML	SV Plus V2	Secondary Sound Speed Profiler

Table 5: Major Systems Used

B.2 Quality Control

B.2.1 Crosslines

Crosslines acquired for this survey totaled 8% of mainscheme acquisition.

The crossline percentage for the survey was computed by using mainscheme and crossline mileage only. Investigation and fill mileage was excluded from the crossline percentage computation.

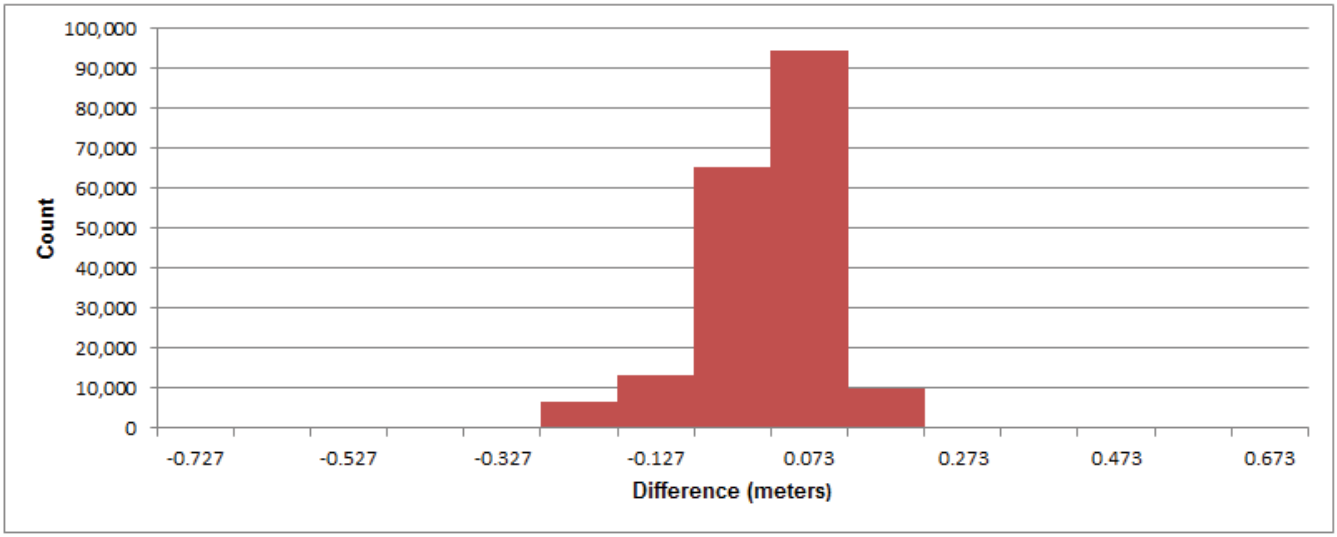
Crosslines were run in a direction perpendicular to main scheme lines across the entire surveyed area, providing a good representation for analysis of consistency. All crosslines were used for crossline comparisons.

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 4-meter CUBE surface encompassing mainscheme data for the entire survey area. The QC Report tabular output and plot are included in Separate II Digital Data. The results of the analysis meet the requirements as stated in the 2014 HSSD.

Additional crossline analysis was performed by computing a 4-meter CUBE surface from the crossline data. The surface was then differenced from a 4-meter 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. Maximum differences greater than 30 centimeters occurred in areas of high relief and were artifacts of producing a coarse 4-meter resolution gridded bathymetric surface over steep slopes. Less extreme differences which were distributed throughout the survey area resulted from a combination of sound speed artifacts in the outer beams and tide zoning errors.



Mean:	0.02 m	Standard Deviation:	0.080 m
Minimum:	-0.635 m	Bin size:	0.1 m
Maximum:	0.682 m	Number of Nodes:	190,090

Figure 4: H12722 Crossline Differences

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Measured	Zoning
0.000 meters	0.077 meters

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
S/V Blake	n/a meters/second	1 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 4-meter Set Line Spacing multibeam surface range from 0.163 meters to 0.300 meters with a standard deviation of 0.002 meters.

The uncertainty values of all nodes in the finalized 50-centimeter Object Detection multibeam surface range from 0.163 meters to 1.079 meters with a standard deviation of 0.022 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 4-meter Set Line Spacing multibeam surface, the allowable uncertainty utilized ranges from 32% to 60%. The mean allowable uncertainty for the surface is 33% with a standard deviation of 0.004.

For the 50-centimeter Object Detection multibeam surface, the allowable uncertainty utilized ranges from 32% to 214%. The mean allowable uncertainty for the surface is 33% with a standard deviation of 0.044. In total 420 nodes out of 328,225 fail to meet specification.

Nodes that were reported out of specification were coincident with areas of high depth standard deviation over significant features with steep slopes. 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 H12722 junctions with surveys H12720, H12721 and D00140. Surveys H12720 and H12721 were also performed by DEA as part of project OPR-J311-KR-14. Prior survey D00140 was a hydrographic

reconnaissance survey which used a vertical beam echosounder with 1,000-meter line spacing to evaluate chart adequacy.

The Bathymetric Attributed Grid (BAG) for survey D00140 was downloaded from NOAA's National Geophysical Data Center (NGDC) website for comparison with H12722. The 4-meter finalized H12722 surface was compared to each junction survey by generating a difference surface with CARIS Base Editor.

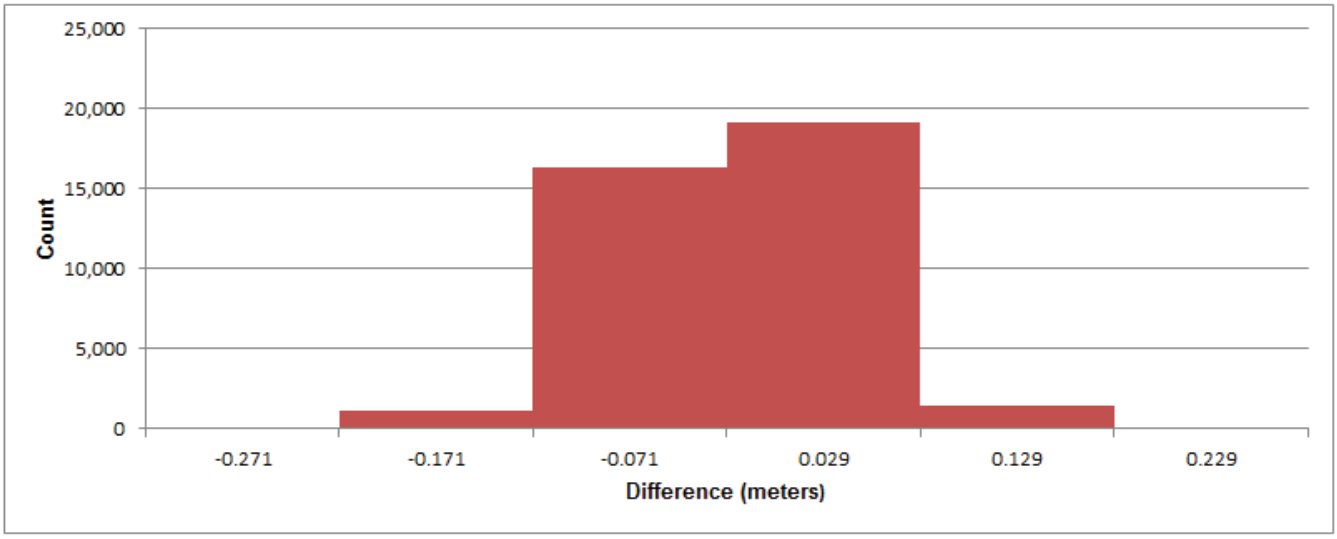
The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H12720	1:40000	2014	David Evans and Associates, Inc.	N
H12721	1:40000	2015	David Evans and Associates, Inc.	NE
D00140	1:20000	2008	Terrasond, Ltd.	S

Table 8: Junctioning Surveys

H12720

Results from the junction analysis are shown in Figure 5. The minimum and maximum differences are associated with sound speed and tide zoning artifacts.

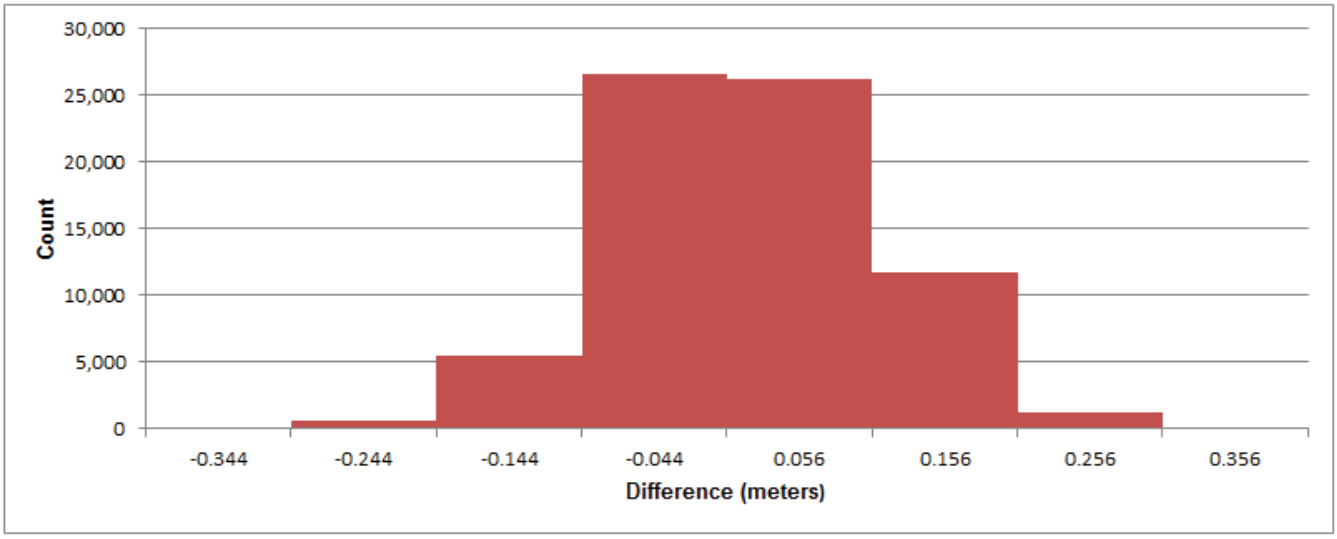


Mean:	-0.02 m	Standard Deviation:	0.055 m
Minimum:	-0.209 m	Bin size:	0.1 m
Maximum:	0.166 m	Number of Nodes:	38,095

Figure 5: Junction results between H12722 and H12720 4-meter bathy grids

H12721

Results from the junction analysis are shown in Figure 6. The minimum and maximum differences are associated with sound speed and tide zoning artifacts.

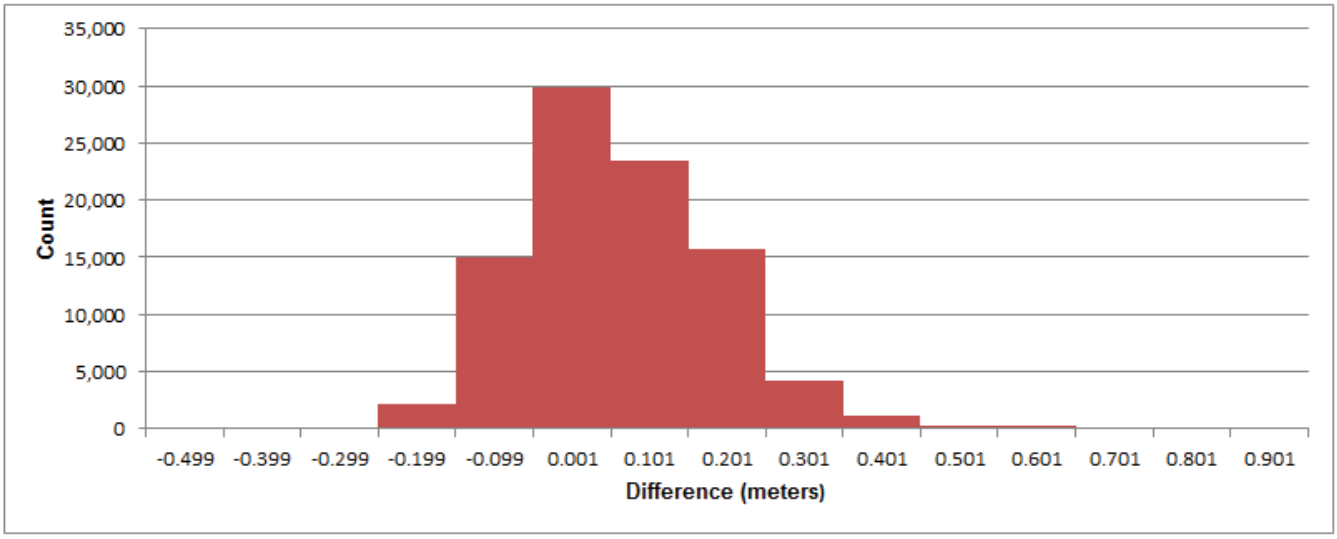


Mean:	0.02 m	Standard Deviation:	0.088 m
Minimum:	-0.275 m	Bin size:	0.1 m
Maximum:	0.287 m	Number of Nodes:	72,014

Figure 6: Junction results between H12722 and H12721 4-meter bathy grids

D00140

The entire H12722 survey area junctions with prior hydrographic reconnaissance survey D00140. The maximum reported differences (H12722 up to 93 centimeters deeper than D00140) coincide with questionable depth values in the 5-meter BAG from D00140. The minimum reported differences (H12722 up to 44 centimeters shoaler than D00140) occur over bottom features with steep slopes that may have migrated since the prior survey. These differences may also be artifacts of gridding these features at a coarse resolution. On average the H12722 data is approximately 6 centimeters deeper than the prior survey from 2008. Results from this analysis are shown in Figure 7.



Mean:	0.06 m	Standard Deviation:	0.127 m
Minimum:	-0.442 m	Bin size:	0.1 m
Maximum:	0.943 m	Number of Nodes:	92,320

Figure 7: Junction results between H12722 4-meter and D00140 5-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

There were no conditions or deficiencies that affected equipment operational effectiveness.

B.2.6 Factors Affecting Soundings

Tide Zoning Artifacts

The survey area, which lies in the Chandeleur Sound and is protected by the Chandeleur Islands, is 55 to 75 nautical miles from the controlling NWLON (National Water Level Observation Network) stations at Bay Waveland Yacht Club and Pascagoula NOAA Lab. Vertical errors resulting from the limitations of tide zoning are visible in the data. These errors generally range from 10 to 15 centimeters, but in some cases approach 30 centimeters. This vertical offset is within the typical error contribution of 20 to 45 centimeters for tides and water levels. The largest contributing factor to water level errors in the Chandeleur Sound is meteorological influences which cannot be accounted for by zoning.

Recommendations were made in the Descriptive Report for Tidal Zoning submitted with prior survey D00140 that future surveys in this area use a subordinate gauge near the Chandeleur Islands. The hydrographer also recommends that future surveys in this area use water level corrections from local subordinate gauges or rely on ellipsoidally referenced survey (ERS) methodology for vertical control.

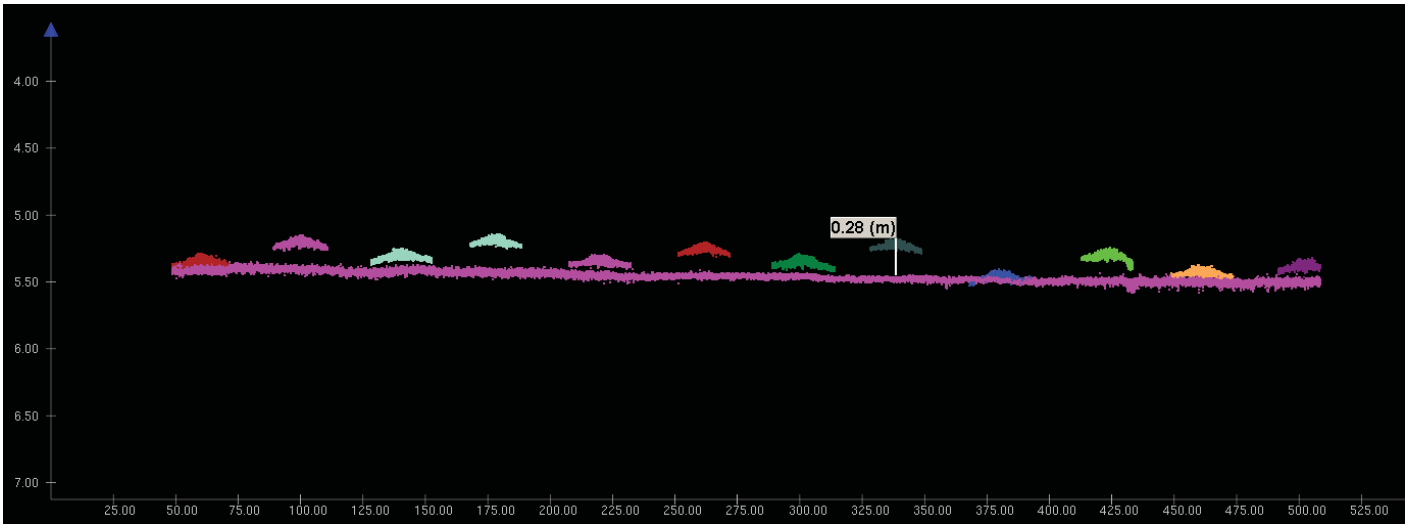


Figure 8: Example of tide zoning artifact seen within H12722

Side Scan Sonar Data Gaps

Additional side scan sonar acquisition occurred on June 2, 2015 (DN153) to fill previously unknown coverage holidays. This data acquisition occurred after the survey had been reported as complete. Data holidays were caused by missing ping datagrams in the XTF files and masked by default settings in the side scan sonar processing software. The missing sonar pings may have been caused by a bad solder on one of the SSS topside unit boards. SonarWiz is set to move pings and navigation points when it detects a gap in coverage in order to prevent an along-track holiday. This issue impacted survey lines 2015BL0460214 and 2015BL0690135. The Project Contracting Officer's Representative and Contracting Officer's Technical Representative were notified about this issue.

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.

There are five sound speed profiles which are more than 250 meters outside of the survey area. These profiles were acquired with the survey vessel's MVP at the ends of survey lines prior to or after a line turn. Casts are valid and have been applied to hydrography. Profile names: 1/27/2015 3:06, 3/7/2015 23:55, 3/8/2015 20:48, 3/10/2015 23:40, and 4/14/2015 15:31.

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.

Where 200% side scan coverage was required, demonstration of 200% coverage was achieved by producing two separate 100% 1 meter resolution mosaics. 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. Significant side scan sonar contacts were developed with multibeam sonar to obtain a least depth of the contact using multibeam Object Detection coverage requirements.

B.2.9 Density

The multibeam sonar Set Line Spacing sounding density requirement of 95% of all nodes populated with at least three soundings was verified by exporting the density child layer of the finalized CUBE surface to an ASCII text file and compiling statistics on the density values. More than 99.8% of all final CUBE surface nodes contained three or more soundings. Density statistics for all individual item investigation surfaces was reviewed and surpassed the requirement 95% of all nodes populated with at least five soundings.

B.3 Echo Sounding Corrections

B.3.1 Corrections to Echo Soundings

Data reduction procedures for survey H12722 are detailed in the DAPR. Since submitting the DAPR the S/V Blake's MRU Alignment values, which are used in TPU computations, have been updated. These values are reported in Table 6 of the DAPR and DAPR Appendix II and have been included in Figure 9 of this report. A summary of the multibeam processing logs is included Separate I Acquisition and Processing Logs of this report.

Total Propagated Uncertainty		
Field	Final Values	Source
MRU Align StdDev Gyro	0.179	Standard Deviation of OPR-J311-KR-14 patch test values for project
MRU Align StdDev Roll/Pitch	0.094	Standard Deviation of OPR-J311-KR-14 patch test values for project

Figure 9: Revised S/V Blake MRU Alignment Values

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 H12722 digital deliverables. Data were processed periodically in CARIS HIPS to evaluate backscatter quality but the processed data is not included with the deliverables.

B.5 Data Processing

B.5.1 Software Updates

The following software updates occurred after the submission of the DAPR:

Manufacturer	Name	Version	Service Pack	Hotfix	Installation Date	Use
CARIS	HIPS	8.1	0	13	06/07/2015	Processing

Table 9: Software Updates

The following Feature Object Catalog was used: 5.3.2

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
H12722_MB_4m_MLLW	CUBE	4.0 meters	3.15 meters - 6.19 meters	NOAA_4m	Multibeam sonar Set Line Spacing Coverage
H12722_MB_4m_MLLW_Final	CUBE	4.0 meters	3.15 meters - 6.19 meters	NOAA_4m	Finalized Multibeam sonar Set Line Spacing coverage
H12722_MB_50cm_MLLW_combined	CUBE	50 centimeters	3.73 meters - 6.45 meters	NOAA_0.5m	Object Detection Coverage
H12722_MB_50cm_MLLW_combined_Final	CUBE	50 centimeters	3.32 meters - 6.45 meters	NOAA_0.5m	Finalized Object Detection Coverage
H12722_100Percent	Mosaic	1.0 meters	-	N/A	First 100-percent coverage
H12722_200Percent	Mosaic	1.0 meters	-	N/A	Second 100- percent coverage

Table 10: Submitted Surfaces

Bathymetric grids were created relative to Mean Lower Low Water (MLLW) in CUBE format using Set Line Spacing and Object Detection resolution requirements as described in the HSSD.

The 50-centimeter combined surface includes all investigation data at object detection resolution. Field sheets and surfaces were also submitted for all significant individual investigations. The name of the investigation field sheets correspond to the primary side scan sonar contact name. Least depths for all significant contact investigations were added to the final surface with a designated sounding.

Additional designated soundings were added to depth surfaces as necessary in order to accurately represent the seafloor in accordance with the NOS HSSD.

C. Vertical and Horizontal Control

A complete description of the horizontal and vertical control for survey H12722 can be found in the OPR-J311-KR-14 Horizontal and Vertical Control Report (HVCR) submitted with this report. A summary of horizontal and vertical control for this survey follows.

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 NOAA Lab, MS	8741533
Bay Waveland Yacht Club, MS	8747437

Table 11: NWLON Tide Stations

File Name	Status
8741533.tid	Verified Observed
8747437.tid	Verified Observed

Table 12: Water Level Files (.tid)

File Name	Status
J311KR2014CORP_rev2.zdf	Final

Table 13: Tide Correctors (.zdf or .tc)

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.

During survey operations, some Differential Global Positioning System (DGPS) outages from the primary beacon (293 kHz) occurred. The system was manually switched to the secondary beacon (295 kHz) when the primary signal was lost. No data was acquired during DGPS beacon outages.

The following DGPS Stations were used for horizontal control:

DGPS Stations
English Turn, LA (293 kHz)
Eglin Air Force Base, FL (295 kHz)

Table 14: USCG DGPS Stations

D. Results and Recommendations

D.1 Chart Comparison

The majority of the chart comparison was performed by comparing H12722 depths to a digital surface generated from electronic navigational charts (ENCs) covering the survey area. A 50-meter product surface was generated from a triangular irregular network (TIN) created from the soundings, depth contours, and depth features for each ENC scale. An additional 50-meter HIPS product surface of the entire survey area was generated from the finalized MBES CUBE surfaces. The chart comparison was conducted by creating and reviewing the resultant difference surface. The chart comparison also included a review of all assigned charted features within the survey area.

The raster navigational chart (RNC) comparison was performed by manually comparing the RNCs covering the survey area to the corresponding ENCs 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
11363	1:80000	44	02/2013	04/28/2015	05/02/2015

Table 15: Largest Scale Raster Charts

11363

Coastal chart 11363 was compared to US4LA34M within the H12722 survey area. No differences were observed between the charts.

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?
US4LA34M	1:80000	29	01/06/2015	05/11/2015	NO

Table 16: Largest Scale ENCs

US4LA34M

In general, surveyed depths are between 0 to 10 feet deeper than charted. Depths were found to be 15 feet deeper than charted in the vicinity of a charted intertidal area and on the shoal side of two charted 6-foot contours as shown in Figure 10. The charted intertidal area was disproved by survey H12722.

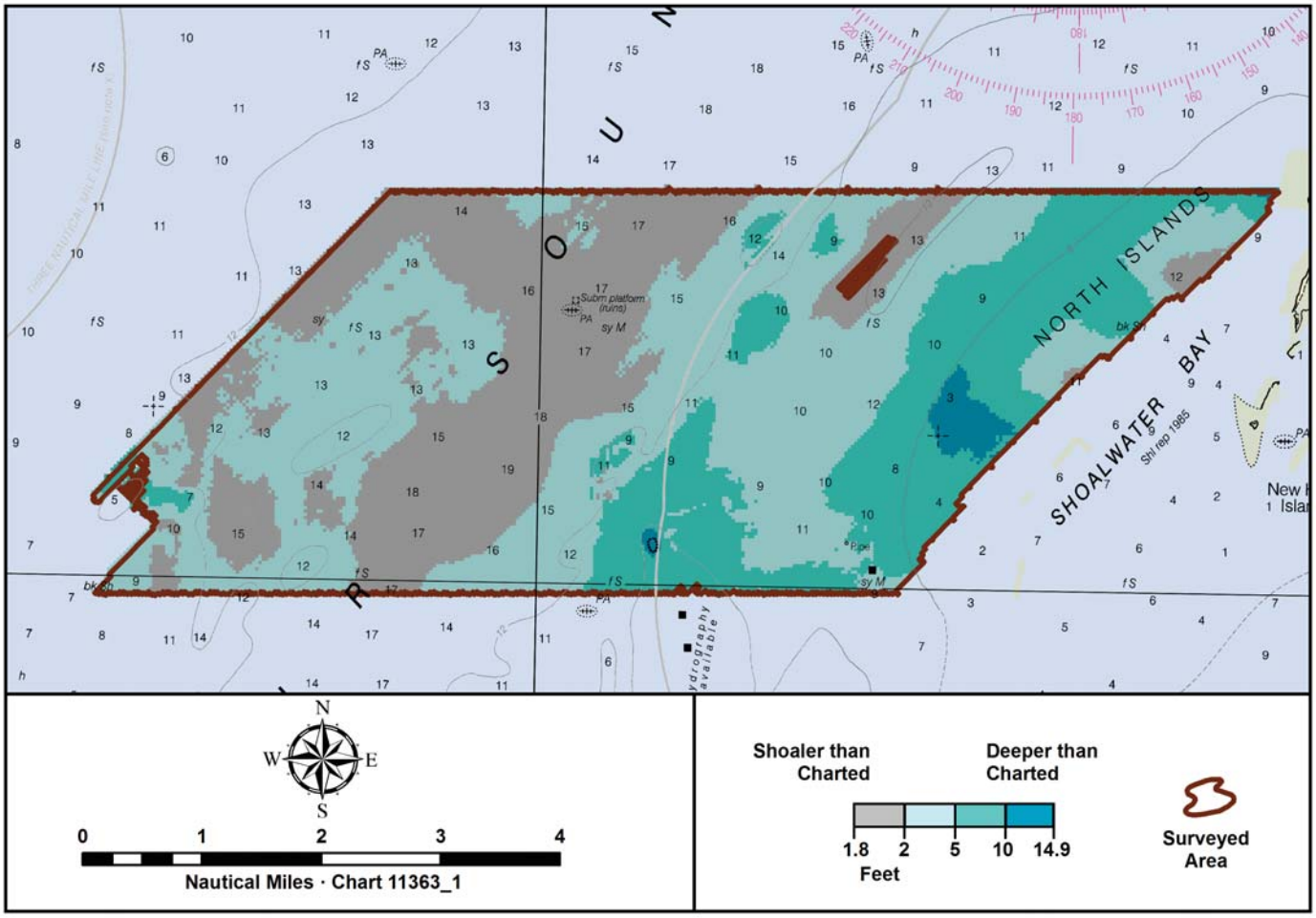


Figure 10: Depth Difference between H12722 and chart US4LA34M

D.1.3 AWOIS Items

No AWOIS Items were assigned for this survey.

D.1.4 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.5 Charted Features

The Wreck showing Masts PA (Position Approximate) charted within the survey area has been disproved by the survey. The Wreck showing Masts PA has been included in the Final Feature File (FFF) with a description of 'Delete'.

The survey area does not contain any charted features labeled as Reported, Position Doubtful (PD), or Existence Doubtful (ED).

Charted features assigned in the CSF are portrayed in the H12722 FFF as surveyed and denoted with the Assignment Flag of 'Assigned'.

D.1.6 Uncharted Features

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

D.1.7 Dangers to Navigation

One Danger to Navigation (DtoN) was submitted for this survey. This DtoN was added to the charts using preliminary survey data.

D.1.8 Shoal and Hazardous Features

A shoal depicted by the 6-foot contour along the eastern side of the survey area has been disproved by the survey. Survey coverage, which was acquired to the four meter inshore limit, extended up to 1,800 meters shoreward of the charted 6-foot contour.

The 6-foot contour and intertidal area charted along the southern edge of the survey area have also been disproved. Surveyed depths in this area are deeper than charted with no soundings of 6 feet or shoaler located by the survey. The depth area feature representing the charted intertidal area has been included in the FFF with a description of 'Delete'.

Multiple 12-foot shoals charted throughout the survey area have been disproved. The 12-foot contour in the southwestern corner of the survey area has retreated 300 to 850 meters to the southwest of its charted location.

D.1.9 Channels

The H12722 survey area does not contain any anchorage areas, maintained navigation channels or channel lines.

D.1.10 Bottom Samples

Seven bottom samples were acquired on April 10, 2015 (DN100) and April 11, 2015 (DN101). 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

A shoreline investigation was not performed for this survey. The OPR-J311-KR-14 Project Instructions required a limited shoreline verification, but the shoreline of the Chandeleur and New Harbor Islands lies one to five nautical miles to the east of the 4-meter inshore limit, in waters too shallow and hazardous for safe navigation of the survey vessel.

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

No Aids to Navigation (AtoNs) were charted or located within the H12722 survey area.

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

No submarine cables or tunnels were charted or located within the H12722 survey area.

A section of an uncharted submarine pipeline was discovered during survey operations and reported to AHB and the NOAA Central Gulf Coast Navigation Manager. While not charted, the Louisiana Department of Natural Resource's Strategic Online Natural Resources Information System (SONRIS) depicts a pipeline in this location which extends through the H12722 survey area. The pipeline owner, who was contacted by the Navigation Manager, reported that the pipeline was in the process of being removed. Correspondence related to this issue is included in Appendix II of this report. The section of pipeline that was visible in the survey

has been portrayed in the FFF as a pipeline feature. The feature was included to facilitate data review and is not recommended for charting.

Another section of this pipeline was found protruding from the water. This baring feature was reported as DtoN 1.

The SONRIS database includes several other pipelines within the survey area which are not charted. 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

The Submerged platform (ruins) charted within the survey area has been disproved by the survey. This feature has been included in the FFF with a description of 'Delete'.

The Platform charted in the southeast corner of the survey area has also been disproved. A plugged and abandoned wellhead was surveyed in this location. The platform feature has been included in the FFF with a description of 'Delete'. An obstruction with baring height depicting the wellhead is included in the FFF with a description of 'New'.

D.2.8 Significant Features

There was no additional information of scientific or practical value observed during the survey. There were no unusual submarine features or anomalous tidal or environmental conditions observed during the survey that impacted the quality of the survey or worthy of charting.

D.2.9 Construction and Dredging

No construction or dredging activities were observed during survey operations.

D.2.10 New Survey Recommendation

The hydrographer recommends that future surveys in Chandeleur Sound extend to the 2-meter contour. Vessels transiting through Chandeleur Sound do so in waters shallower than this survey's inshore depth limit. The hydrographer also recommends additional survey efforts to the east, south, and west of this survey given the dramatic depth differences from the current chart.

D.2.11 Inset Recommendation

No new insets are recommended for this area.

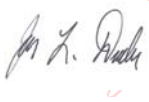
E. Approval Sheet

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
Data Acquisition and Processing Report	2015-04-24
Horizontal and Vertical Control Report	2015-07-17

Approver Name	Approver Title	Approval Date	Signature
Jonathan L. Dasler, PE, PLS, CH	NSPS/THSOA Certified Hydrographer, Chief of Party	07/16/2015	 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: 2015.07.16 08:08:16 -07'00'
Jason Creech, CH	NSPS/THSOA Certified Hydrographer, Lead Hydrographer	07/16/2015	 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: 2015.07.16 08:10:44 -07'00'

APPENDIX I

TIDE NOTE AND GRAPHICS

H12722
TIMES OF HYDROGRAPHY

Project: OPR-J311-KR-14
Contractor Name: David Evans and Associates, Inc.
Date: April 14, 2015
Inclusive Dates: January 25, 2015 - April 14, 2015
Field work is complete
Time (UTC)

Day Number	Date	Start Time	End Time
25	01/25/2015	6:23:44	23:36:00
27	01/27/2015	3:17:37	11:20:13
28	01/28/2015	21:29:55	22:31:25
35	02/04/2015	0:49:55	1:50:19
45	02/14/2015	19:18:06	23:24:52
46	02/15/2015	0:07:00	23:11:36
63	03/04/2015	3:53:25	23:49:22
64	03/05/2015	0:26:36	12:33:11
66	03/07/2015	8:14:53	23:42:16
67	03/08/2015	0:36:29	23:49:48
68	03/09/2015	0:14:04	23:48:05
69	03/10/2015	0:14:47	23:37:07
70	03/11/2015	14:49:36	19:25:55
100	04/10/2015	22:51:57	23:37:16
101	04/11/2015	0:05:52	23:52:51
102	04/12/2015	0:11:19	23:49:08
103	04/13/2015	0:04:52	0:40:28
104	04/14/2015	12:02:34	15:29:23

H12722
FINAL TIDE NOTE

DATE: April 14, 2015

HYDROGRAPHIC BRANCH: Atlantic Hydrographic Branch
HYDROGRAPHIC PROJECT: OPR-J311-KR-14
HYDROGRAPHIC SURVEY: H12722

LOCALITY: Western Vicinity of Lake Borgne, LA
SUB-LOCALITY: Shoalwater Bay

TIME PERIOD [1] : January 25, 2015 - April 14, 2015

TIDE STATIONS USED:

Station Name	Station ID	Type	Latitude	Longitude
Pascagoula NOAA Lab, MS	8741533	Control	30° 22.1' N	88° 33.8' W
Bay Waveland Yacht Club, MS	8747437	Control	30° 19.6' N	89° 19.5' W

PLANE OF REFERENCE (MEAN LOWER LOW WATER) :

8741533	0.000m
8747437	0.000m

HEIGHT OF MEAN HIGH WATER ABOVE PLANE OF REFERENCE:

8741533	0.440m
8747437	0.497m

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

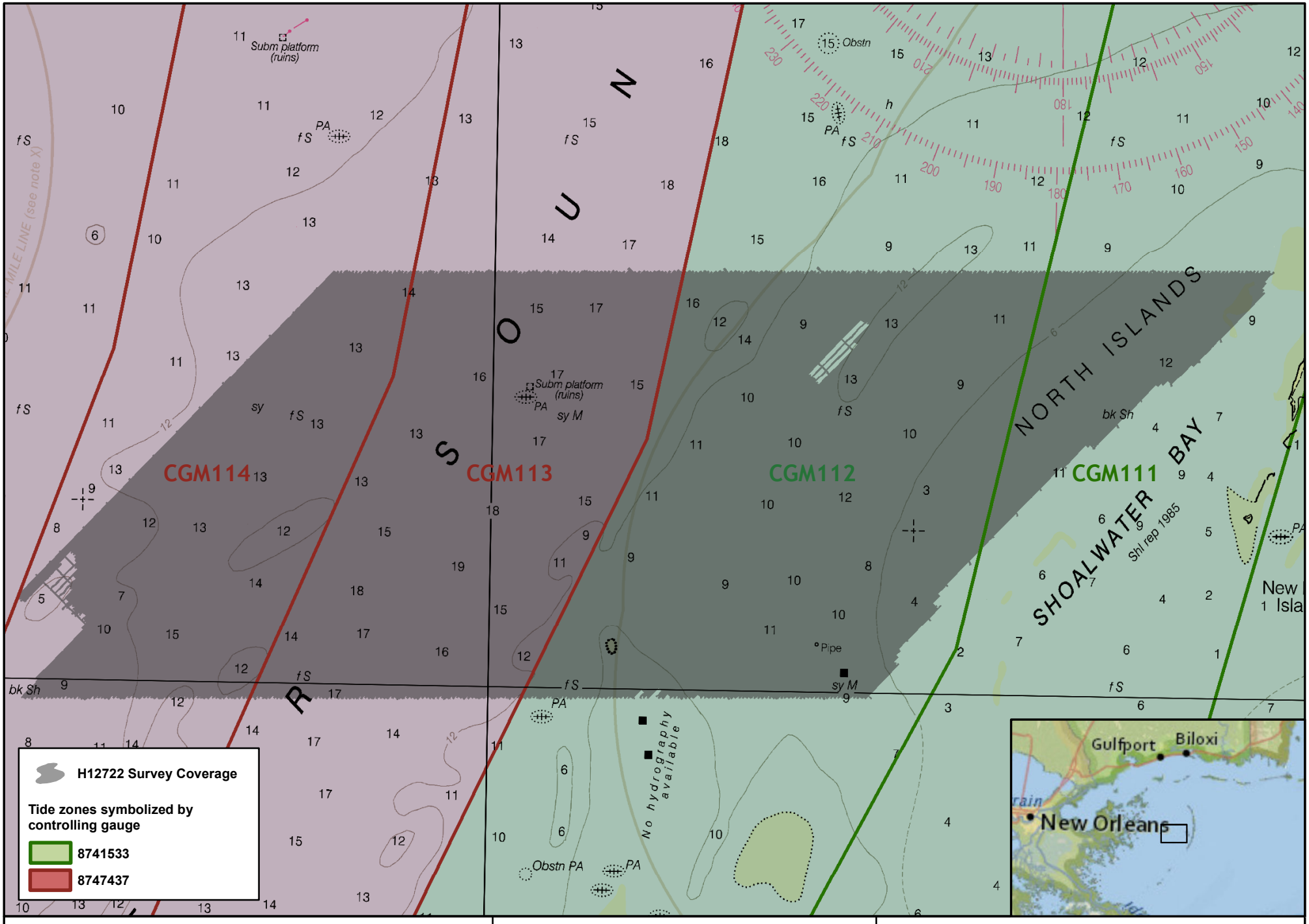
http://tidesandcurrents.noaa.gov/benchmarks.html?id=8741533

http://tidesandcurrents.noaa.gov/benchmarks.html?id=8747437

H12722
FINAL TIDE NOTE ZONING

Zone	Time Corrector (Mins)	Range Ratio	Reference Station
CGM111	24	0.91	8741533
CGM112	30	0.91	8741533
CGM113	-48	0.84	8747437
CGM114	-42	0.87	8747437

NOTE: Final soundings were reduced to chart datum using a revised version of the zoning scheme that was originally provided with the tides project instructions. The revision did not impact the zoning scheme covering the survey area.



H12722
Final Tide Zoning Chartlet

OPR-J311-KR-14
Western Vicinity of Lake Borgne, LA
David Evans and Associates, Inc.
Chart 11363

APPENDIX II

SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE

Jason Creech

From: Tim Osborn <tim.osborn@noaa.gov>
Sent: Wednesday, February 04, 2015 12:24 PM
To: kdiliberto@mantires.com; jkrentel@mintires.com
Cc: Jason Creech; Ledet, David ; Authement, Adam F BOSN2; jean.marchese@bsee.gov; Karl.Morgan@LA.GOV; john.rodi@boem.gov; ann.glazner@boem.gov; lars.herbst@bsee.gov; michael.prendergast@bsee.gov; Gatz, James C LCDR; Jim Stark; Castle Parker
Subject: NOAA Surveying- Chandeleur Sound- Full Bottom Surveys-Separated Pipeline within H12722
Attachments: H12722 separated pipeline.jpg; H12722_DtoN2_3D.jpg; H12722_DtoN2_3D_2.jpg; Survey Vessel Blake 1.jpg

Ms. Keliberto, Ms Krentel

Hello from NOAA and the Office of Coast Survey.

A survey team working for NOAA, David Evans and Associates, has been implementing a survey and mapping/charting update program for the Chandeleur Sound area.

Mr. Jason Creech, project manager for David Evans, sent us the attached imagery from the survey vessel of a sunken platform and a set of pieces of a pipeline that was found on the water bottom not too far from the old wrecked and sunken platform.

The State - LA DNR - database on platforms and pipelines was checked. The platform appears to be a Manti asset per the following links

http://sonlite.dnr.state.la.us/sundown/cart_prod/cart_con_wellinfo2?p_WSN=226949

http://ucmwww.dnr.state.la.us/ucmsearch/FindDocuments.aspx?idx=xwellserialnumber&val=226949

Can you confirm this information for us? Also, can you confirm if the separated pipeline is (or was) part of the platform structure and pipelines that were part of the field that Manti had in this area?

Thank you for your attention on this.

Tim Osborn
NOAA Office of Coast Survey, Central Gulf
337-254-5933 office mobile
337-291-2111 office
tim.osborn@noaa.gov

To: Tim.Osborn@noaa.gov, castle.e.parker@noaa.gov
CC: Jld@deainc.com, Christina Fandel - NOAA Federal <christina.fandel@noaa.gov>

Hi Tim and Gene

We have located what appears to be a pipeline separated from the seafloor in the H12722 survey area. I have attached a few screen grabs of the MBES data that have been sent in from our survey vessel. The least depth on the shoalest section of pipeline is 15 feet (4.751m) with predicted tides applied. The position of this depth is 29-52.70561N 088-59.29032W. The approximate length of these 3 sections is just over 100 meters. The data in these images are uncleaned and preliminary. I have a call out to the survey vessel in order to get a better idea of what's going on in the water column. It appears that the data in the water column is likely a specular return off of the pipeline. We are going to try to get a few passes of full water column over the feature.

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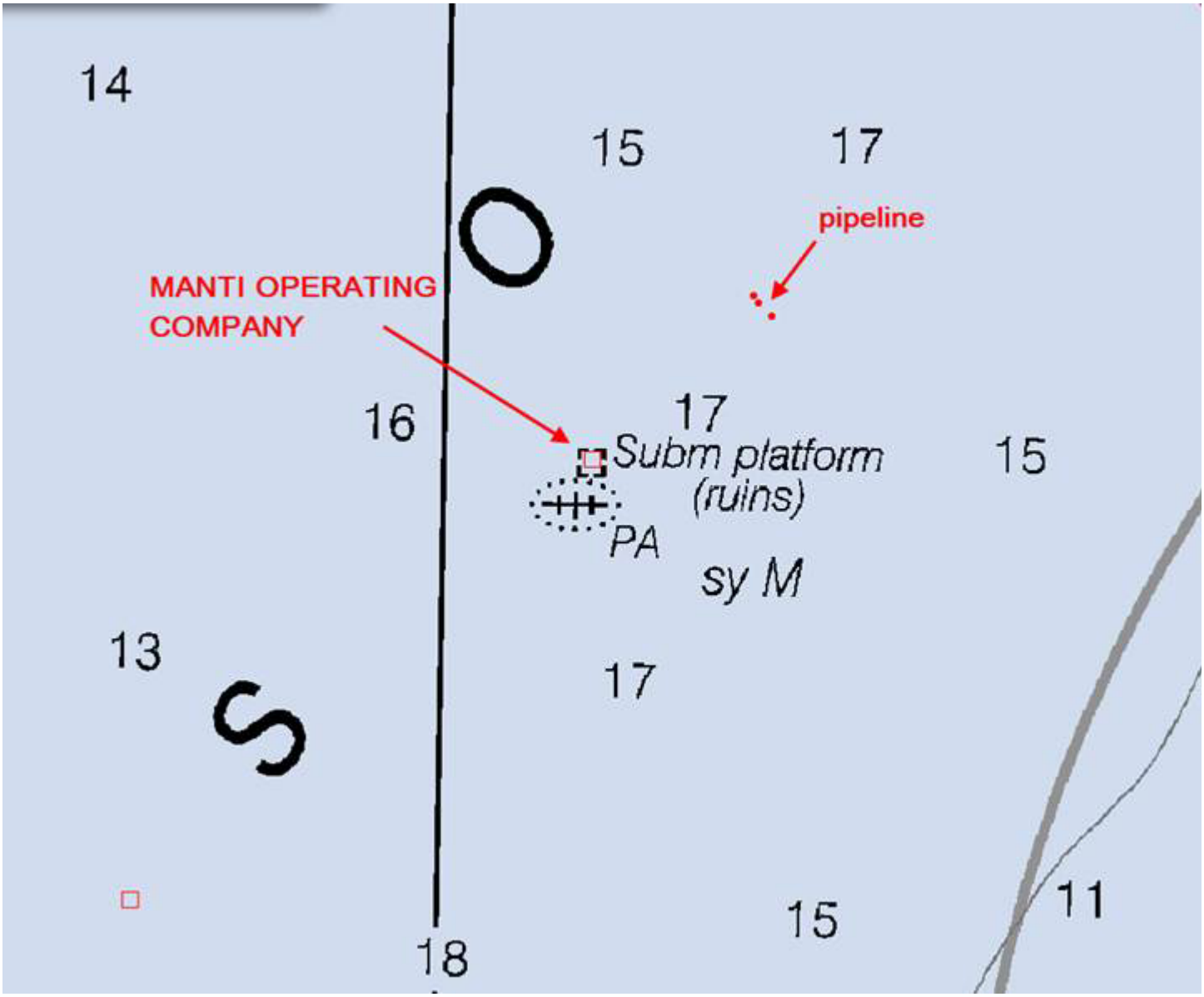
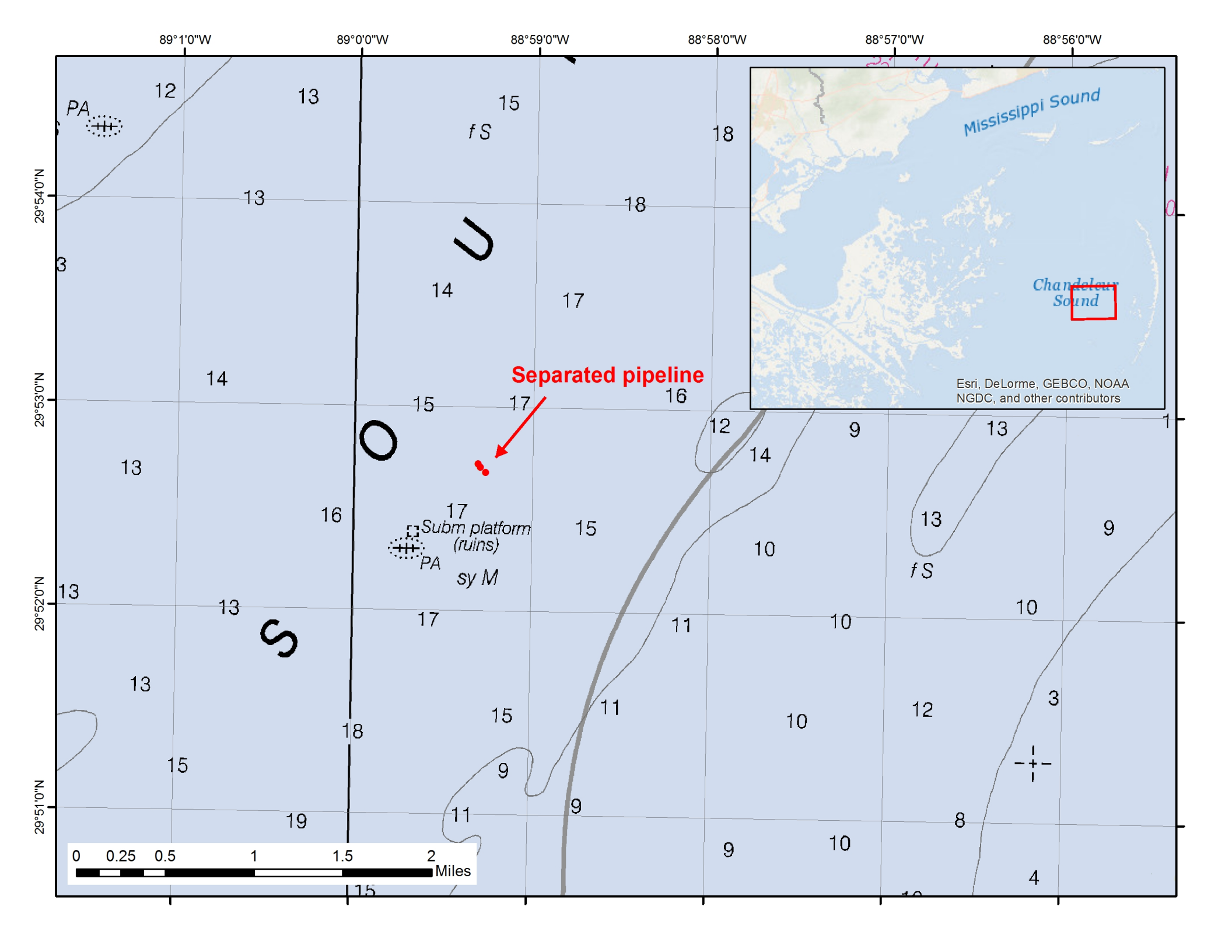
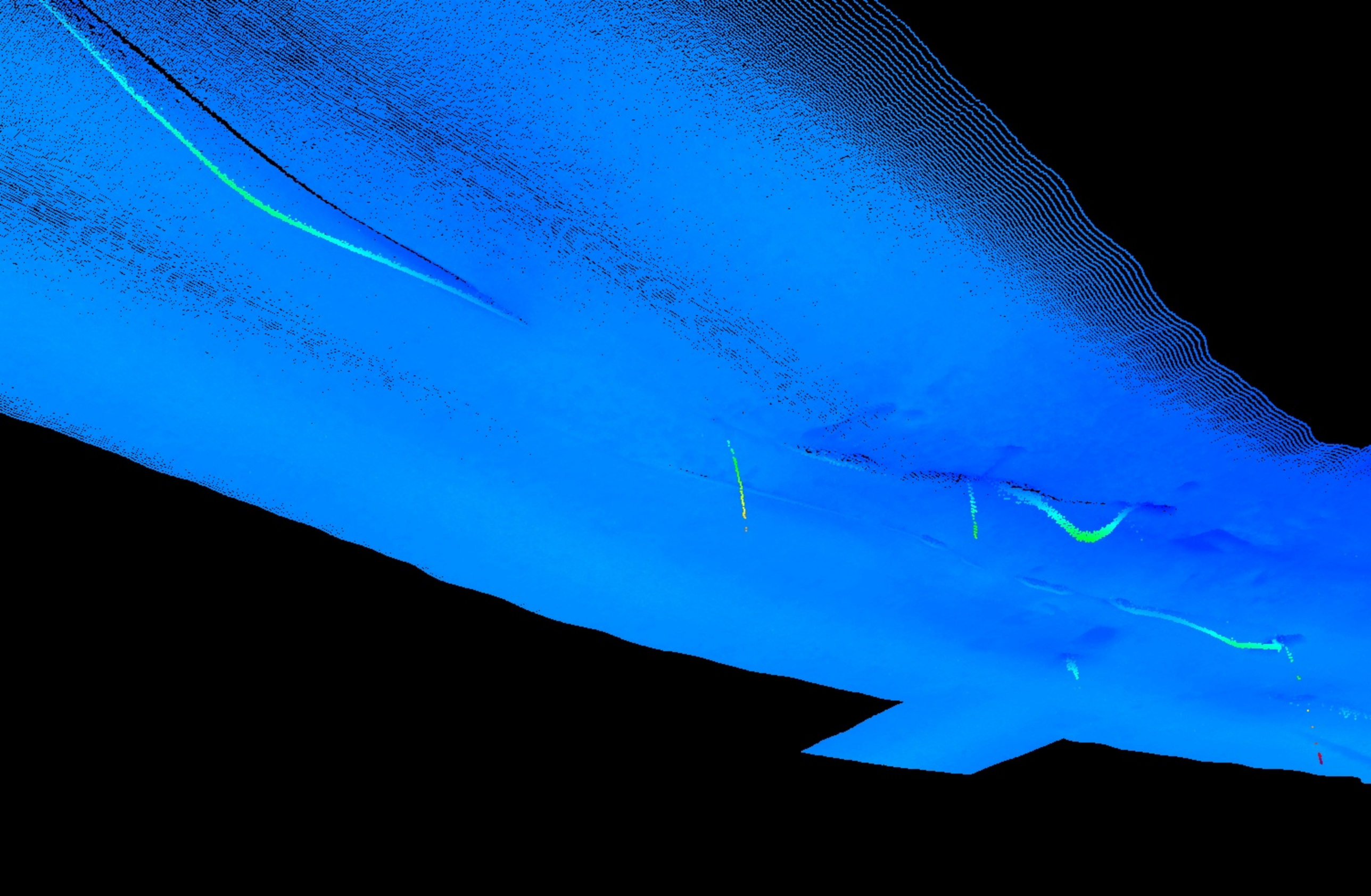
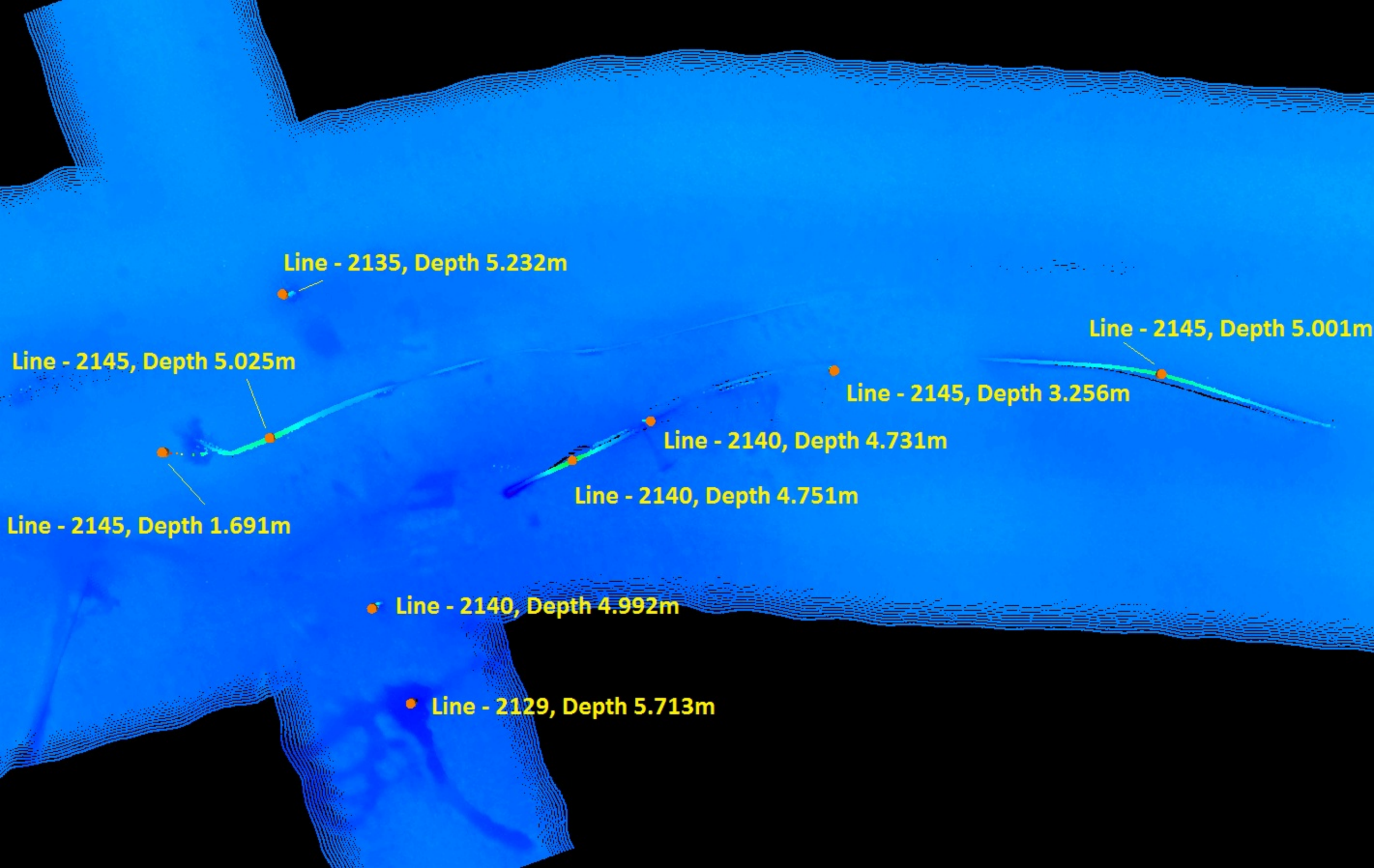
Thanks,
Jason


14
15
17
pipeline
MANTI OPERATING
COMPANY
16
17
Subm platform
(ruins)
15
PA
sy M
13
17
15
11
18


89°1'0"W
89°0'0"W
88°59'0"W
88°58'0"W
88°57'0"W
88°56'0"W
29°54'0"N
29°53'0"N
29°52'0"N
29°51'0"N
Separated pipeline
Subm platform (ruins)
PA
sy M
f S
Mississippi Sound
Chandeleur Sound
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors
0 0.25 0.5 1 1.5 2 Miles




Line - 2135, Depth 5.232m
Line - 2145, Depth 5.025m
Line - 2145, Depth 5.001m
Line - 2145, Depth 3.256m
Line - 2140, Depth 4.731m
Line - 2140, Depth 4.751m
Line - 2145, Depth 1.691m
Line - 2140, Depth 4.992m
Line - 2129, Depth 5.713m

Jason Creech

From: Tim Osborn <tim.osborn@noaa.gov>
Sent: Wednesday, February 11, 2015 10:27 AM
To: Boudreaux, Holly
Cc: 'jkrentel@mantires.com'; 'kdiliberto@mantires.com'; rhelm@sabaloenergy.com; Jason Creech; Castle Parker; Authement, Adam F BOSN2; Gatz, James C LCDR; Rachel Medley
Subject: Re: FW: NOAA Surveying- Chandeleur Sound- Full Bottom Surveys-Separated Pipeline within H12722

Holly

Thank you for the notice and the information on this removal work.

Can you please let us know when the project is completed? An details like a bottom clearance survey would be very helpful.

Tim

NOAA OCS

On 2/5/2015 12:57 PM, Boudreaux, Holly wrote:

> Hi Tim,
>
> Manti is currently in the process of doing the Site Clearance work for this work.
>
> Please let me know if I can be of assistance to you on anything.
>
> Best regards,
> John Chance Land Surveys, Inc.
>
> **Holly C. Boudreaux**
> Project Manager
>
> T +1 337 268 3290 |M +1 337 849 4412
> hboudreaux@fugro.com | www.jchance.com
> 200 Dulles Drive, Lafayette, LA 70506 USA
>
> **From:** Tim Osborn [mailto:tim.osborn@noaa.gov]
> **Sent:** Thursday, February 05, 2015 11:16 AM
> **To:** Jason Creech
> **Cc:** Authement, Adam F BOSN2; Karl.Morgan@LA.GOV; Johnson, Ricardo; jkrentel@mantires.com; kdiliberto@mantires.com; Gatz, James C LCDR; jstark; Castle Parker
> **Subject:** RE: NOAA Surveying- Chandeleur Sound- Full Bottom Surveys-Separated Pipeline within H12722

Jason

Thank you. I am hopeful that Karl Morgan of LA DNR and the Manti Inc. representatives (copied) can confirm that these structures actually will be removed in the near future.

From: Jason Creech <Jasc@deainc.com>
To: Tim Osborn <tim.osborn@noaa.gov>, Karl Morgan <Karl.Morgan@LA.GOV>
CC: Castle Parker <castle.e.parker@noaa.gov>, Ledet, David <David.P.Ledet@uscg.mil>, Authement, Adam F BOSN2 <Adam.F.Authement@uscg.mil>, Gatz, James C LCDR <James.C.Gatz@uscg.mil>, Jim Stark <jstark@gicaonline.com>, Jon Dasler <Jld@deainc.com>

Tim

Here is a link to permits along this line. I've attached the newest permit document from 1/16/15. The section of pipeline that we located is shown on page 38 of 61 at the pipeline junction in Block 14.

http://ucmwww.dnr.state.la.us/ucmsearch/FindDocuments.aspx?idx=xrefnum&val=P20131632&qtype=eq

Jason

From: Tim Osborn [mailto:tim.osborn@noaa.gov]
Sent: Wednesday, February 04, 2015 1:36 PM
To: Karl Morgan; Jason Creech
Cc: Castle Parker; Ledet, David ; Authement, Adam F BOSN2; Gatz, James C LCDR; Jim Stark; Jon Dasler
Subject: Re: NOAA Surveying- Chandeleur Sound- Full Bottom Surveys-Separated Pipeline within H12722

Karl

Thank you.

Jason

Can you compare this to the surveys?

Thanks.

Tim

On 2/4/2015 3:24 PM, Karl Morgan wrote:

> We have a permit from Manti to remove the platform and pipelines. You can view the permit and plats under CUP Authorization link found in the permit documents at the link below:
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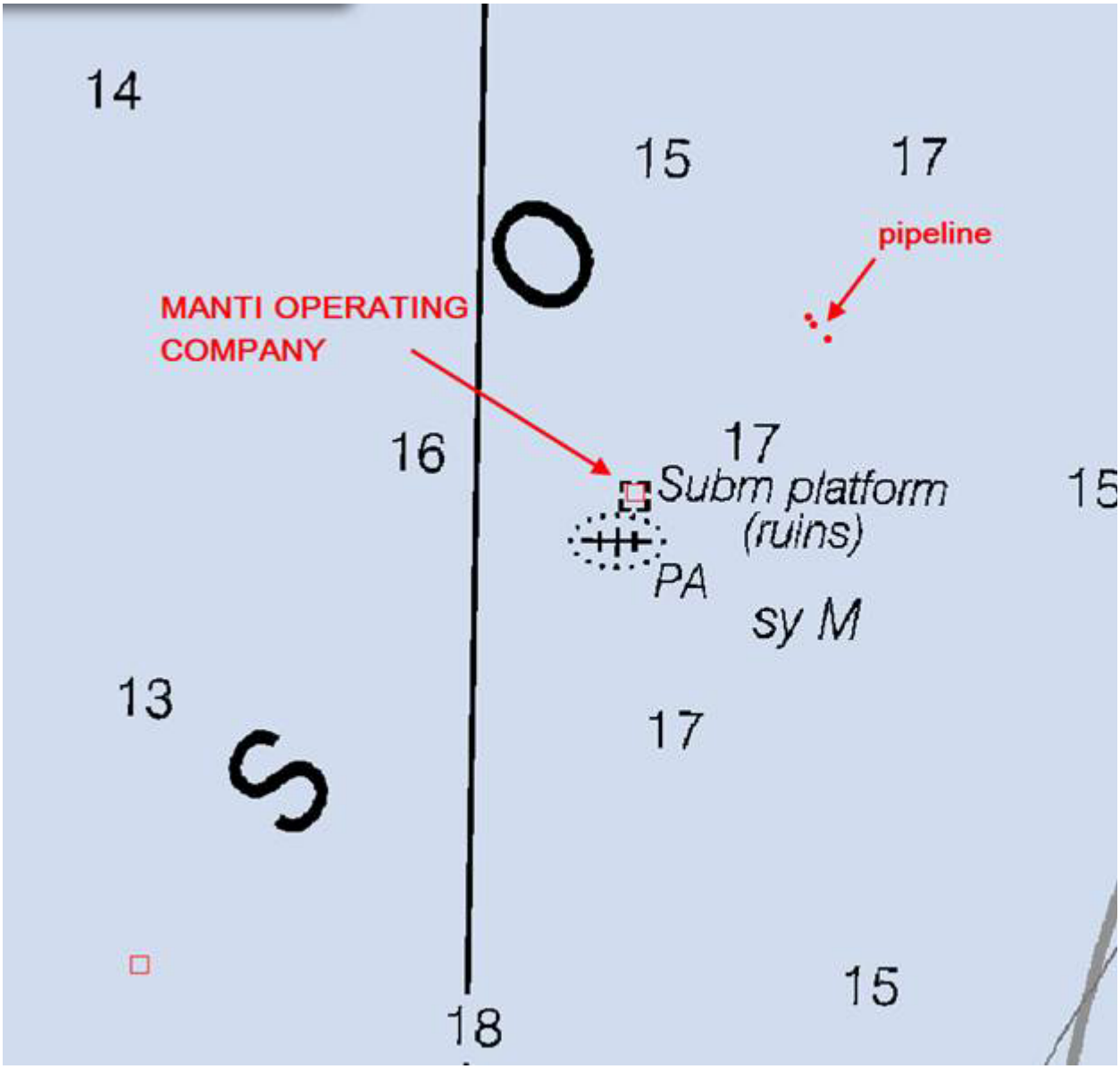

communication and destroy all copies.
COMPUTER SYSTEM USE/CONSENT NOTICE
This message was sent from a computer system which is the property of the State of Louisiana and the Department of Natural Resources (DNR). It is for authorized business use only. Users (authorized or unauthorized) have no explicit or implicit expectation of privacy. Any or all uses of this system and all files on this system may be intercepted, monitored, recorded, copied, audited, inspected, and disclosed to Department of Natural Resources and law enforcement personnel. By using this system the user consents to such interception, monitoring, recording, copying, auditing, inspection, and disclosure at the discretion of DNR.

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Holly C. Boudreaux
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<Adam.F.Authement@uscg.mil>, Gatz, James C LCDR <James.C.Gatz@uscg.mil>, Jim Stark <jstark@gicaonline.com>, Jon Dasler <Jld@deainc.com>

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CC: Jld@deainc.com, Christina Fandel - NOAA Federal <christina.fandel@noaa.gov>

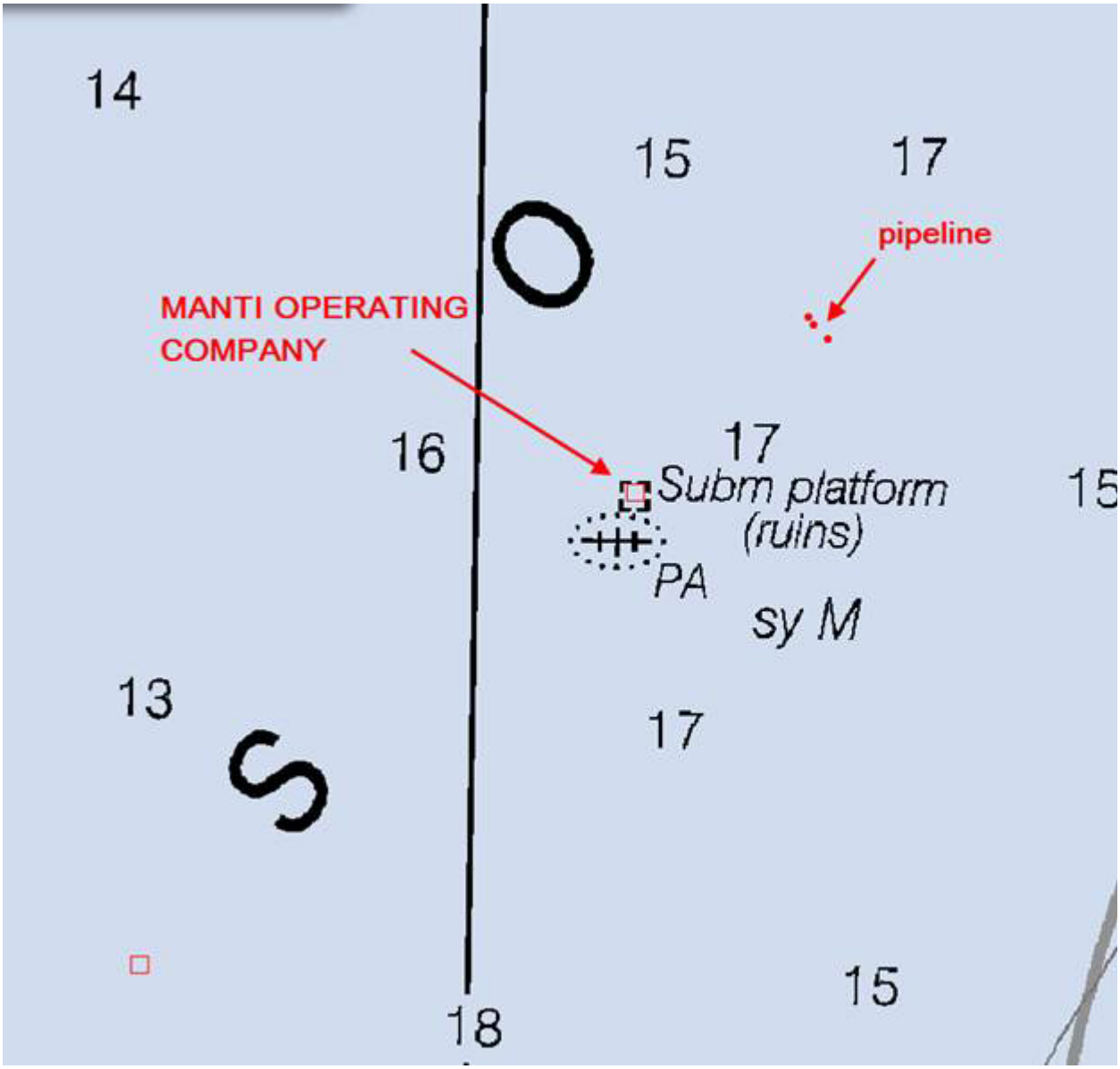
Hi Tim and Gene

We have located what appears to be a pipeline separated from the seafloor in the H12722 survey area. I have attached a few screen grabs of the MBES data that have been sent in from our survey vessel. The least depth on the shoalest section of pipeline is 15 feet (4.751m) with predicted tides applied. The position of this depth is 29-52.70561N 088-59.29032W. The approximate length of these 3 sections is just over 100 meters. The data in these images are uncleaned and preliminary. I have a call out to the survey vessel in order to get a better idea of what's going on in the water column. It appears that the data in the water column is likely a specular return off of the pipeline. We are going to try to get a few passes of full water column over the feature.

I've also attached a chartlet showing the location of this data.

Please let me know how you'd like us to proceed. I believe in the past AHB has avoided dton submission on similar features and Tim has contacted BOEM directly. I have reviewed the BOEM pipeline database and find nothing published in the area.

Thanks,
Jason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pipeline
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S/V BLADE

From: Jason Creech
Sent: Monday, March 09, 2015 6:31 PM
To: castle.e.parker@noaa.gov; Tim Osborn (Tim.Osborn@noaa.gov)
Cc: Christina Fandel - NOAA Federal; Jon Dasler (Jld@deainc.com)
Subject: H12722 Baring Pipeline
Attachments: H12722 Baring pipe.jpg

Gene and Tim

The Blake came across a baring section of pipeline today. It's completely out of the water. See attached. As reported in the image, the position of the baring feature is
29 50.37827 N
88 57.01320W

I just reported this to the USCG District 8 watch stander over the phone since it's after hours and an immediate hazard. I also let them know I'd be reporting this through official NOAA channels.

This is the same section of pipeline that we've already reported sections separated from the seafloor to the NW.

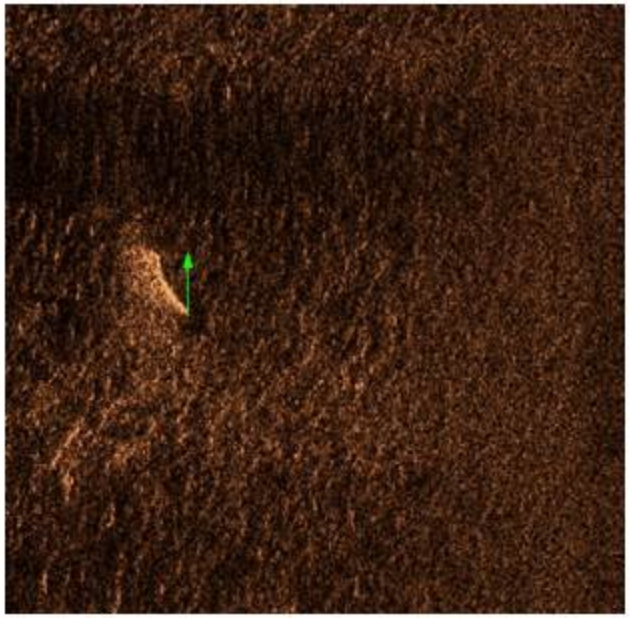
How would you like us to proceed with reporting this?

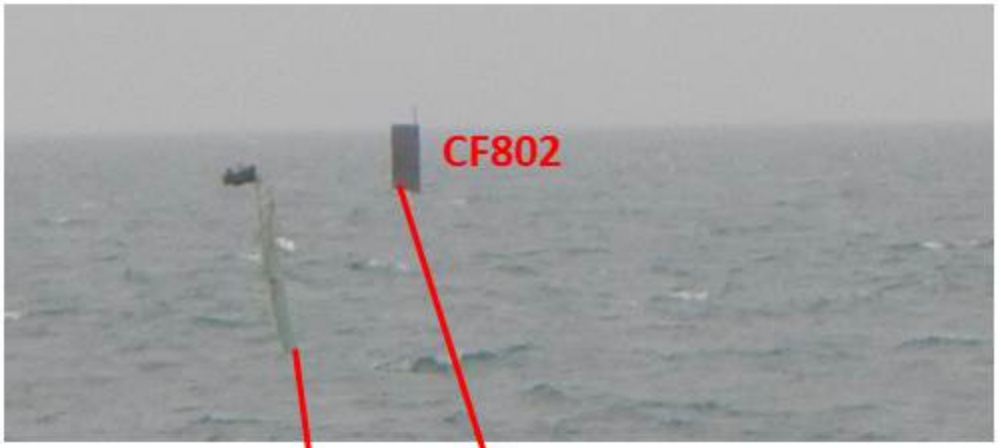
Jason

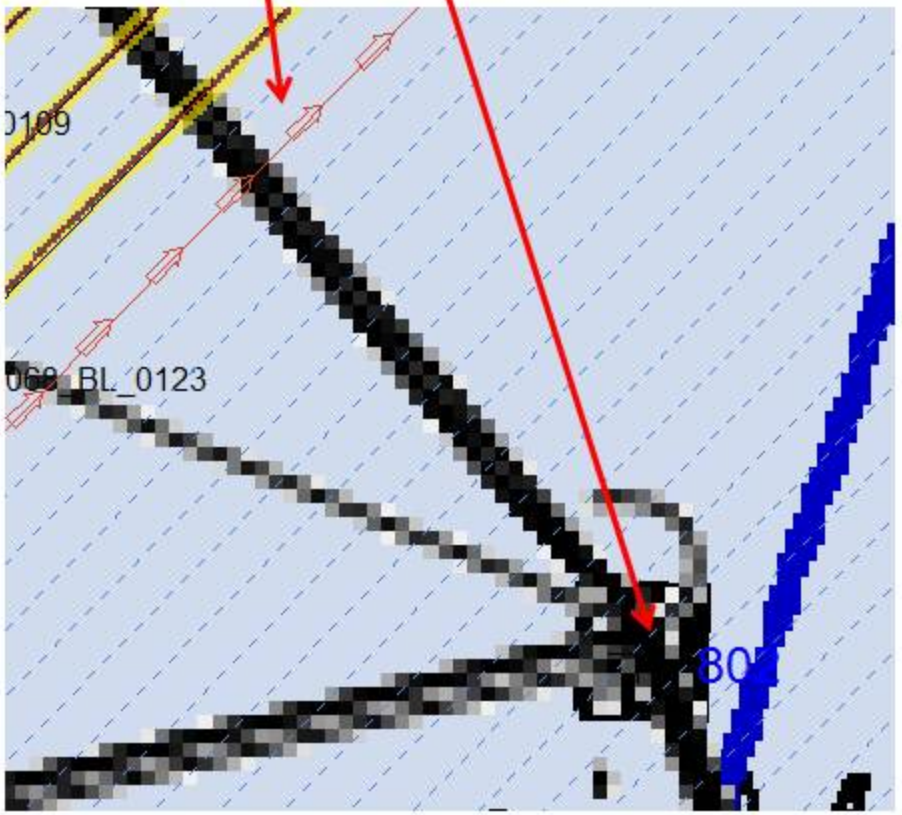
Jason Creech, CH | Senior Associate, Nautical Charting Program Manager
David Evans and Associates, Inc. | Marine Services Division | www.deamarine.com
t: 360.314.3200 | c: 804.516.7829 | jasc@deainc.com

DAVID EVANS AND ASSOCIATES INC. MARINE SERVICES

Follow us on LinkedIn | Twitter | Facebook | YouTube







Exposed Pipeline close to pipeline position from LA DMR data.
Position from Sonarwiz - Lat: 29°50.37827'N Long: 88°57.01320W

From: Castle Parker - NOAA Federal <castle.e.parker@noaa.gov>
Sent: Wednesday, March 11, 2015 6:02 AM
To: OCS NDB - NOAA Service Account
Cc: Matthew Jaskoski - NOAA Federal; Michael Gonsalves - NOAA Federal; Lori Powdrell - NOAA Federal; Christina Fandel - NOAA Federal; Tim Osborn - NOAA Federal; Jason Creech; Tiffany Squyres - NOAA Federal
Subject: H12722 DtoN #1 Exposed Pipe submission to NDB
Attachments: H12722 DtoN #1 Exposed Pipe.zip

Good day,

Please find attached compressed file for H12722 DtoN #1 for submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD). This danger submission contains an uncharted -8ft Obstruction (exposed pipe).

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 the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.

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: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>
Sent: Wednesday, March 11, 2015 12:01 PM
To: Castle Parker - NOAA Federal
Cc: Matthew Jaskoski - NOAA Federal; Michael Gonsalves - NOAA Federal; Lori Powdrell - NOAA Federal; Christina Fandel - NOAA Federal; Tim Osborn - NOAA Federal; Jason Creech; Tiffany Squyres - NOAA Federal; NSD Coast Pilot; Benjamin K Evans - NOAA Federal; James Crocker - NOAA Federal; Matt Kroll - NOAA Federal; Nautical Data Branch; Tara Wallace - NOAA Federal; Pearce Hunt - NOAA Federal; Allison Wittrock - 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
Subject: Re: H12722 DtoN #1 Exposed Pipe submission to NDB
Attachments: H12722 DtoN #1 Exposed Pipe.zip

L490-2015 and DD-25957 have been registered by the Nautical Data Branch and directed to PBG for processing.

The DtoN reported is an exposed pipe obstruction in Shoalwater Bay, MS.

The following chart is affected:

11363 kapp 55

The following ENC is affected:

US4LA34M

References:

H12722

OPR-J311-KR-14

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

From:	Tim Osborn
To:	Castle Parker; Jason Creech
Subject:	Fwd: RE: H12722 Baring Pipeline- DTON and structures found in NOAA DEA Surveying
Date:	Thursday, April 16, 2015 4:59:07 PM

FYI. Removal operations underway according to the report below.

-------- Forwarded Message --------
Subject: RE: H12722 Baring Pipeline
Date: Thu, 16 Apr 2015 20:53:11 +0000
From: Boudreaux, Holly <HBoudreaux@fugro.com>
To: 'Ledet, David P CIV' <David.P.Ledet@uscg.mil>
CC: Karl.Morgan@LA.GOV <Karl.Morgan@LA.GOV>, Tim Osborn <tim.osborn@noaa.gov>

Mr. Ledet,

Just to give you an update, I don't know if it's marked but I do know there are crews currently on location adjacent to the pipe currently working on removing it.

Best regards,
John Chance Land Surveys, Inc.

Holly C. Boudreaux
Project Manager

T +1 337 268 3290 |M +1 337 849 4412
hboudreaux@fugro.com | www.jchance.com
200 Dulles Drive, Lafayette, LA 70506 USA

-----Original Message-----
From: Ledet, David P CIV [mailto:David.P.Ledet@uscg.mil]
Sent: Tuesday, April 14, 2015 8:53 AM
To: Boudreaux, Holly
Cc: Karl.Morgan@LA.GOV; Tim Osborn; Ledet, David P CIV
Subject: RE: H12722 Baring Pipeline

In accordance with 33 CFR, Part 64, the hazard to navigation must be marked with a yellow buoy displaying a flashing yellow light (no more than 30 flashers per minute) until the pipeline e is either buried or removed. Please let me know when the buoy is set so I can update the Local Notice to Mariners.

Thank you,

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

-----Original Message-----
From: Boudreaux, Holly [mailto:HBoudreaux@fugro.com]
Sent: Tuesday, April 14, 2015 8:48 AM
To: Ledet, David P CIV
Cc: Karl.Morgan@LA.GOV; Tim Osborn
Subject: RE: H12722 Baring Pipeline

I do not believe so.

-----Original Message-----
From: Ledet, David P CIV [mailto:David.P.Ledet@uscg.mil]
Sent: Tuesday, April 14, 2015 7:01 AM

To: Boudreaux, Holly
Cc: Karl.Morgan@LA.GOV; Tim Osborn; Ledet, David P CIV
Subject: RE: H12722 Baring Pipeline

Thanks Holly.....Is the obstruction marked with an aid to navigation?

Respectfully,

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

-----Original Message-----
From: Boudreaux, Holly [mailto:HBoudreaux@fugro.com]
Sent: Monday, April 13, 2015 3:01 PM
To: Ledet, David P CIV
Cc: Karl.Morgan@LA.GOV; Tim Osborn
Subject: RE: H12722 Baring Pipeline

Hi Mr. Ledet,

As of today, I have no confirmation the line was removed. As soon as I hear something I will let you.

Thanks,
Holly

-----Original Message-----
From: Ledet, David P CIV [mailto:David.P.Ledet@uscg.mil]
Sent: Monday, April 13, 2015 12:55 PM
To: Boudreaux, Holly
Cc: Karl.Morgan@LA.GOV; Tim Osborn; Ledet, David P CIV
Subject: RE: H12722 Baring Pipeline

Good afternoon Mrs. Boudreaux,

I am looking for confirmation that the pipeline obstruction has been removed? I would like to update the Local Notice to Mariners.

Thanks,

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

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Sent: Wednesday, March 11, 2015 8:07 AM
To: Boudreaux, Holly
Cc: Karl.Morgan@LA.GOV; 'Tim Osborn'; Ledet, David P CIV
Subject: RE: H12722 Baring Pipeline

Good morning Ms. Boudreaux,

I issued a broadcast notice to mariners and a local notice to mariners concerning the visible pipeline. Please let me know when your company has removed the old pipeline so I can update the broadcast notice to mariners and a local notice to mariners.

Thank you,

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

-----Original Message-----
From: Tim Osborn [mailto:tim.osborn@noaa.gov]
Sent: Tuesday, March 10, 2015 4:38 PM
To: Boudreaux, Holly
Cc: Ledet, David P CIV; Karl.Morgan@LA.GOV
Subject: Re: H12722 Baring Pipeline

Holly

Thank you and that is very good to hear.

You may want to use the survey team for a post removal clearance survey. Removal from the charts of these dangers to navigation require a good field survey showing the bottom is free of hazards. The survey group working out there now has done a lot of clearance and documentation jobs.

Thank you.

Tim

On 3/10/2015 9:36 AM, Boudreaux, Holly wrote:

> Good morning,
>
> Yes it is contracted to be removed but waiting on weather.
>
> Let me know if you need anything else.
>
> Sent from my iPhone
>
> On Mar 10, 2015, at 8:16 AM, "Tim Osborn - NOAA Federal" <tim.osborn@noaa.gov> wrote:
>
>> Holly
>>
>> Is this included in your removal work?
>>
>> Thank you.
>>
>> Tim
>>
>>> From: "Jason Creech" <Jasc@deainc.com>
>>> Date: March 9, 2015 at 8:31:08 PM CDT
>>> To: <castle.e.parker@noaa.gov>, <Tim.Osborn@noaa.gov>
>>> Cc: "Christina Fandel - NOAA Federal" <christina.fandel@noaa.gov>, <Jld@deainc.com>
>>> Subject: H12722 Baring Pipeline
>>>
>>> Gene and Tim
>>>
>>> The Blake came across a baring section of pipeline today. It's completely out of the water. See attached. As reported in the image, the position of the baring feature is
>>>
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>>>
>>> 88 57.01320W
>>>
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This is the same section of pipeline that we've already reported sections separated from the seafloor to the NW.

How would you like us to proceed with reporting this?

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

<image003.jpg>

Follow us on LinkedIn <http://www.linkedin.com/company/16154?trk=tyah> | Twitter <https://twitter.com/DEA_Marine> | Facebook <http://www.facebook.com/#%21/pages/David-Evans-and-Associates-Inc/153018394822270> | YouTube <http://www.youtube.com/user/DEAMarineServices>

<H12722 Baring pipe.jpg>

From: Tim Osborn - NOAA Federal
To: Castle Parker; Jason Creech
Cc: karl.morgan@la.gov
Subject: Re: H12722 DtoN #1 Exposed Pipe submission to NDB
Date: Wednesday, March 11, 2015 9:10:09 AM

Gene

I was able track this hazard to an owner and to a contracted company, Fugro (working for the owner of the hazard). They state they are mobilizing to remove this pipe and associated pipelines in the near future. I asked for a report and documentation when this is completed.

On Mar 11, 2015, at 8:03 AM, Castle Parker - NOAA Federal <castle.e.parker@noaa.gov> wrote:

> Good day,
>
> Please find attached compressed file for H12722 DtoN #1 for submission to Nautical Data Branch (NDB) and Marine Chart Division (MCD). This danger submission contains an uncharted -8ft Obstruction (exposed pipe).
>
> 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 the attached WinZip file were generated at AHB. The attached zip file contains a DtoN Letter (PDF), associated image files, and a Pydro XML file.
>
> 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: Tim Osborn - NOAA Federal
To: Castle Parker; Jason Creech
Cc: karl.morgan@la.gov
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> *NOAA Office of Coast Survey*
> *Atlantic Hydrographic Branch*
> *Hydrographic Team Lead / Physical Scientist*
> *castle.e.parker@noaa.gov*
> *office (757) 441-6746 x115*

Castle Parker - NOAA Federal

From: Tim Osborn
Sent: Wednesday, December 09, 2015 12:03 PM
To: Castle Parker - NOAA Federal
Cc: Matthew Jaskoski - NOAA Federal; Edward Owens - NOAA Federal
Subject: Re: H12722 Baring Pipeline- DTON and structures found in NOAA DEA Surveying

Gene

Fugro/John Chance, Inc (the contractor hired to remove these) reports that this work has been completed in the removal of this.

I have a asked for a completion report for documentation.

Tim

On 11/30/2015 7:34 AM, Castle Parker - NOAA Federal wrote:

> Good day Tim,
> I am in the final stages of the survey review for H12722. Do you know or have you received any salvage documentation regarding the pipelines that were in the process of being removed? As well as the exposed pipe that was submitted as a DtoN located in 29-50-22.695N 088-57-00.783W (H12722 DtoN #1). AHB has communication from you stating that the work was in progress; it would be good to have a definitive answer as to whether or not the obstruction, an exposed pipe was removed. If documentation could be found, it would alter the course of the feature's chart application.
>
> Thanks of your time and consideration with this issue.
> Regards,
> Gene

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: Tim Osborn [mailto:tim.osborn@noaa.gov]
Sent: Thursday, April 16, 2015 4:59 PM
To: Castle Parker; Jason Creech
Subject: Fwd: RE: H12722 Baring Pipeline- DTON and structures found in NOAA DEA Surveying

FYI. Removal operations underway according to the report below.

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Subject: RE: H12722 Baring Pipeline
Date: Thu, 16 Apr 2015 20:53:11 +0000
From: Boudreaux, Holly <HBoudreaux@fugro.com>
To: 'Ledet, David P CIV' <David.P.Ledet@uscg.mil>
CC: Karl.Morgan@LA.GOV <Karl.Morgan@LA.GOV>, Tim Osborn <tim.osborn@noaa.gov>

Mr. Ledet,

Just to give you an update, I don't know if it's marked but I do know there are crews currently on location adjacent to the pipe currently working on removing it.

Best regards,
John Chance Land Surveys, Inc.

Holly C. Boudreaux
Project Manager

T +1 337 268 3290 |M +1 337 849 4412
hboudreaux@fugro.com | www.jchance.com
200 Dulles Drive, Lafayette, LA 70506 USA

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From: Ledet, David P CIV [mailto:David.P.Ledet@uscg.mil]
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To: Boudreaux, Holly
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Subject: RE: H12722 Baring Pipeline

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Cc: Ledet, David P CIV; Karl.Morgan@LA.GOV
Subject: Re: H12722 Baring Pipeline

Holly

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Sent from my iPhone

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Holly

Is this included in your removal work?

Thank you.

Tim

From: "Jason Creech" <Jasc@deainc.com>
Date: March 9, 2015 at 8:31:08 PM CDT
To: <castle.e.parker@noaa.gov>, <Tim.Osborn@noaa.gov>
Cc: "Christina Fandel - NOAA Federal" <christina.fandel@noaa.gov>, <Jld@deainc.com>
Subject: H12722 Baring Pipeline

Gene and Tim

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88 57.01320W

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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

<image003.jpg>

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF CONSERVATION

STEPHEN CHUSTZ
SECRETARY

JAMES H. WELSH
COMMISSIONER OF CONSERVATION

August 18, 2015

Manti Exploration Operating, LLC – OC M342
800 N. Shoreline Blvd.
Corpus Christi, TX 78401
Attn: Robert Helm

RE: SITE CLEARANCE APPLICATION NO. 14-0052
SL 17397 NO. 002 – SN 227706
Chandeleur Sound 35 Platform
SL 14055 NO. 001 Platform
Chandeleur Sound Block 31 Field – FC 2479
Saint Bernard Parish, LA

Gentlemen:

Your Site Clearance Verification Survey has been received and reviewed. All information appears to be in order and indicates a cleared site. If you have any questions or comments, contact Gavin Broussard at 225/342-5513 (voice) or 225/342-2584 (fax).

Yours very truly,

JAMES H. WELSH
COMMISSIONER OF CONSERVATION

JHW:gdb

cc: **Site Clearance Application No. 14-0052**

BOBBY JINDAL
GOVERNOR

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF CONSERVATION

STEPHEN CHUSTZ
SECRETARY

JAMES H. WELSH
COMMISSIONER OF CONSERVATION

August 18, 2015

Manti Exploration Operating, LLC – OC M342
800 N. Shoreline Blvd.
Corpus Christi, TX 78401
Attn: Robert Helm

RE: SITE CLEARANCE APPLICATION NO. 15-0001
VUC; SL 17557 NO. 001 – SN 227631
Chandeleur Sound West Block 28 Field – FC 2516
Saint Bernard Parish, LA

Gentlemen:

Your Site Clearance Verification Survey has been received and reviewed. All information appears to be in order and indicates a cleared site. If you have any questions or comments, contact Gavin Broussard at 225/342-5513 (voice) or 225/342-2584 (fax).

Yours very truly,

JAMES H. WELSH
COMMISSIONER OF CONSERVATION

JHW:gdb

cc: **Site Clearance Application No. 15-0001**

APPROVAL PAGE

H12722

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

- H12722_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12711_H12712_H12720_H12721_H12722_GeoImage.pdf

The survey evaluation and verification has been conducted according to 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