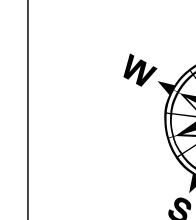
**LEGEND**

- Federal Navigation Channel
- Federal Navigation Center Line
- As-built Pipeline/Cable
- ..... Unconfirmed Pipeline/Cable
- Project Depth Contour
- Cable Area
- Placement Area
- Anchorage Area
- Obstruction Point
- Wrecks-Submerged
- Borrow Area
- Shoalest Sounding\*\*
- ★ Beacon, General
- ◆ Red Navigation Buoy
- ◆ Green Navigation Buoy

- |                |
|----------------|
| 0' and above   |
| 0' to -5'      |
| -5' to -10'    |
| -10' to -20'   |
| -20' to -30'   |
| -30' to -35'   |
| -35' to -40'   |
| -40' to -45'   |
| -45' and below |

**LWRP:** 1.7  
**Gage Reading:** BR:16.0 D:9.25 USED:11.20 NGVD  
**Sea Conditions:** CALM  
**Vessel Name:** OB-189  
**Survey Type:** CONDITION  
**Sounding Frequency\*\*\*:** HIGH



Feet  
0 500 1,000 1,500 2,000 2,500

**NOTES:**

Horizontal Coordinate System:  
North American Datum of 1983 (NAD83), projected to the State Plane  
Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet.

Vertical Datum:  
Soundings are shown in feet and indicate depths below Low Water Reference Plane 2007 (NGVD).  
Distances on the Mississippi River, above and below Head of Passes are shown  
at 1 mile intervals.

The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE crew.  
2010 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.  
Reference is N.O.A.A. Navigation Chart No. 11370.

\*\* Shoalest Sounding per Quarter per Reach.

\*\*\* High frequency (200 kHz) survey data represents the first signal return at a sounding  
location and will include suspended solids, known as "fluff", if present. Low frequency (20 kHz)  
survey data normally penetrates through this "fluff" layer to depict elevations of consolidated bottom  
material. Low frequency accuracies may vary depending on channel conditions and fathometer  
settings.

**Sheet  
Reference  
Number**  
**16 of 97**

Revision Number:  
3.8.0-20150202

  
US Army Corps  
of Engineers  
District: CEMVN

Distribution liability: The data represents the results of data collection/processing for a specific US Army Corps of Engineers activity and indicates the general existing conditions as such. It is not to be used for engineering or scientific purposes. The user is responsible for the results of its application for other than its intended purpose.  
Data Constraints: Hydrographic survey data is subject to change due to several factors including but not limited to dredging activities and natural shoaling and scouring processes. The U.S. Army Corps of Engineers does not warrant the data in the hydrographic conditions shown on the map. The data is intended for U.S. Army Corps of Engineers use only. The information depicted on this map represents the results of a survey conducted on this date and can only be considered to represent the general condition existing at that time.

**U.S. ARMY CORPS OF ENGINEERS**  
NEW ORLEANS DISTRICT  
Surveyed By: DR.IH  
Submitted: \_\_\_\_\_  
Recommended: One I Survey Section  
Approved: One I Waterways Maintenance Section  
Checked By: AC

**MISSISSIPPI RIVER - B.R. TO GULF**  
**ALHAMBRA RECON**  
**MR\_16\_ALH\_20160908**  
**08 September 2016**