



LEGEND

--- Federal Navigation Channel	○ Cable Area	■ Shoaling Area	■ 0' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ 0' to -5'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	■ -5' to -9'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	□ -9' and below
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	

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 USACE IENC U35LM236.

** 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.

LWRP: 14.2
Gage Reading: KL:30.2 RR:27.3 USED:27.30 NGVD
Sea Conditions: CALM
Vessel Name: M/V OB 189
Survey Type: CONDITION
Sounding Frequency***: HIGH

Scale: 0 300 600 900 1,200 1,500 Feet



DISTRICT: CEMVN
ACCESS: Public
Access: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were originally collected, expressed, or implied concerning the accuracy, completeness, readability, usability or suitability for any particular purpose of the recipient. The user is responsible for the results obtained from the use of the data for other than its intended purpose. The application of the data for other than its intended purpose is at the user's risk. The user is responsible for the results obtained from the use of the data for other than its intended purpose.
Data: Constant hydrographic survey data is subject to change rapidly due to several factors including but not limited to changing bathymetry, sedimentation, and channel migration. The user is responsible for the results obtained from the use of the data for other than its intended purpose. The user is responsible for the results obtained from the use of the data for other than its intended purpose.
 The information depicted on this map represents the results of a survey conducted on or about the date shown in the title block. The user is responsible for the results of a survey conducted on or about the date shown in the title block. The user is responsible for the results of a survey conducted on or about the date shown in the title block.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT			
Submitted:	Surveyed By:	Plotted By:	Checked By:
	DR, JH	BTD	HJ
Recommended:	Chief, Survey Section		
Approved:	Chief, Waterways Maintenance Section		

**MISSISSIPPI RIVER - SHALLOW DRAFT
 SMITHLAND - SHEET 1
 MS_09_SM1_20150225
 25 February 2015**

**Sheet Reference Number
 9 of 39**

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