

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.

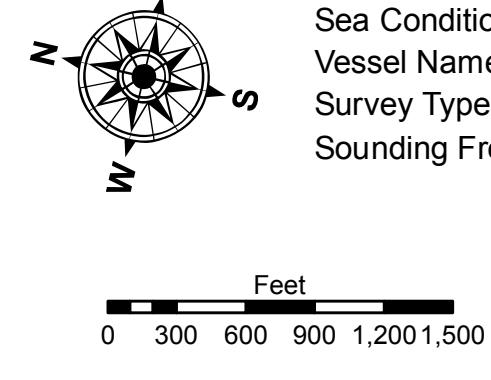
The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE crew.
2010 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.

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: RR:43.65 KL:46.4 USED:44.1 NGVD
Gage Reading:
Sea Conditions: CALM
Vessel Name: OB-189
Survey Type: CONDITION
Sounding Frequency***: HIGH



DISCLAIMER: The data represents the results of data collection processing for a specific US Army Corps of Engineers project. It is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results. The application of the data for other than its intended purpose. Data Contaminants: Hydrographic survey data is subject to change due to several factors including but not limited to dredging, shifting sandbars, and other channel changes. The user should verify the hydrographical conditions when developing after the date of the survey. The information depicted on this map represents the results of a survey conducted under the general condition existing at that time. Internal use. Product maintainers should not rely solely upon it.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: SP-JH
Recommended: Chief, Survey Section	Plotted By: BD
Approved: Chief, Waterways Maintenance Section	Checked By: AC

**MISSISSIPPI RIVER - SHALLOW DRAFT
SMITHLAND - SHEET 1
MS_09_SM1_20170413_CS
13 April 2017**

**Sheet Reference Number
9 of 39**

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