



LEGEND

--- Federal Navigation Channel	○ Cable Area	□ Borrow 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 -10'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -10' to -20'
— Project Depth Contour	✈ Wrecks-Submerged	◆ Green Navigation Buoy	■ -20' to -30'
			■ -30' to -35'
			■ -35' to -40'
			■ -40' to 45'
			■ -45' and below

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 bathymeter settings.

LWRP: 1.4
Gage Reading: BR:29.25 D:20.07 USED:20.00 NGVD
Sea Conditions: CALM
Vessel Name: M/V OB189
Survey Type: CONDITION
Sounding Frequency***: HIGH

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



DISCLAIMER:
The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the Government makes no warranty, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information. The user is responsible for the results. The user shall indemnify, defend and hold the United States Government harmless from and against all claims, damages, losses and expenses, including reasonable attorneys' fees, that may be incurred by the United States Government as a result of the use of the information furnished hereunder. The information depicted on this map represents the results of a survey conducted on or about the date of the survey. The user is responsible for the results of the survey. The user shall indemnify, defend and hold the United States Government harmless from and against all claims, damages, losses and expenses, including reasonable attorneys' fees, that may be incurred by the United States Government as a result of the use of the information furnished hereunder.

Submitted:	Checked By:
Recommended:	Checked By:
Approved:	Checked By:
Surveyed By: DR,PS	Plotted By: BID
Checked By: MSK	Checked By: MSK

**MISSISSIPPI RIVER - B.R. TO GULF
SMOKE BEND RECON
MR_22_SMB_20160303
03 March 2016**

**Sheet Reference Number
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