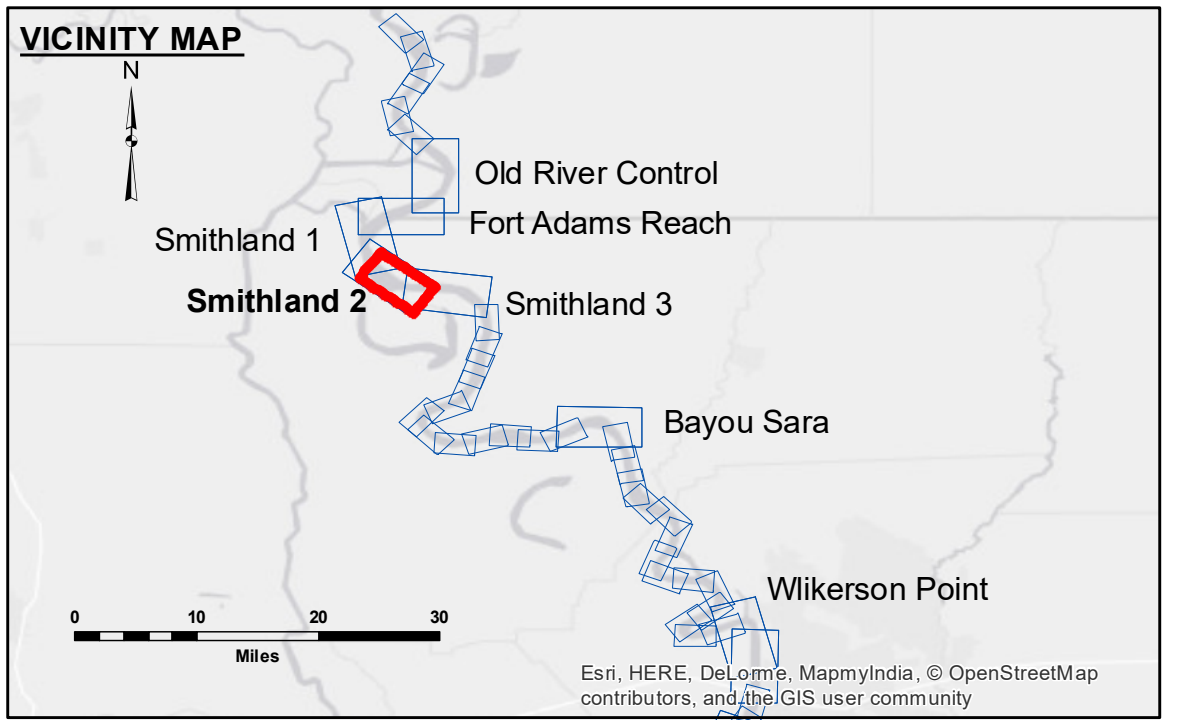


DISCLAIMER: The data represents the results of data collection processing for a specific US Army Corps of Engineers project. It is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results. The application of the data for other than its intended purpose is not warranted. The user should not rely on the data for critical decisions. The user should consult the project engineer for more information. The user should not rely on the data for critical decisions. The user should consult the project engineer for more information.

Submitted:	Surveyed By:	Plotted By:	Checked By:
	RYLAND/RHODEN	BD	AC
Recommended:	U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Approved:	Sheet, Waterways Maintenance Section		

**MISSISSIPPI RIVER - SHALLOW DRAFT
SMITHLAND - SHEET 2
MS_10_SM2_20180605_CS
05 June 2018**



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	

LWRP: 13.1
Gage Reading: RR:42.2 BR:25.9 USED:41.60 NGVD
Sea Conditions: CALM
Vessel Name: M/V OB189
Survey Type: CONDITION
Sounding Frequency:** HIGH

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.

**Sheet Reference Number
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