

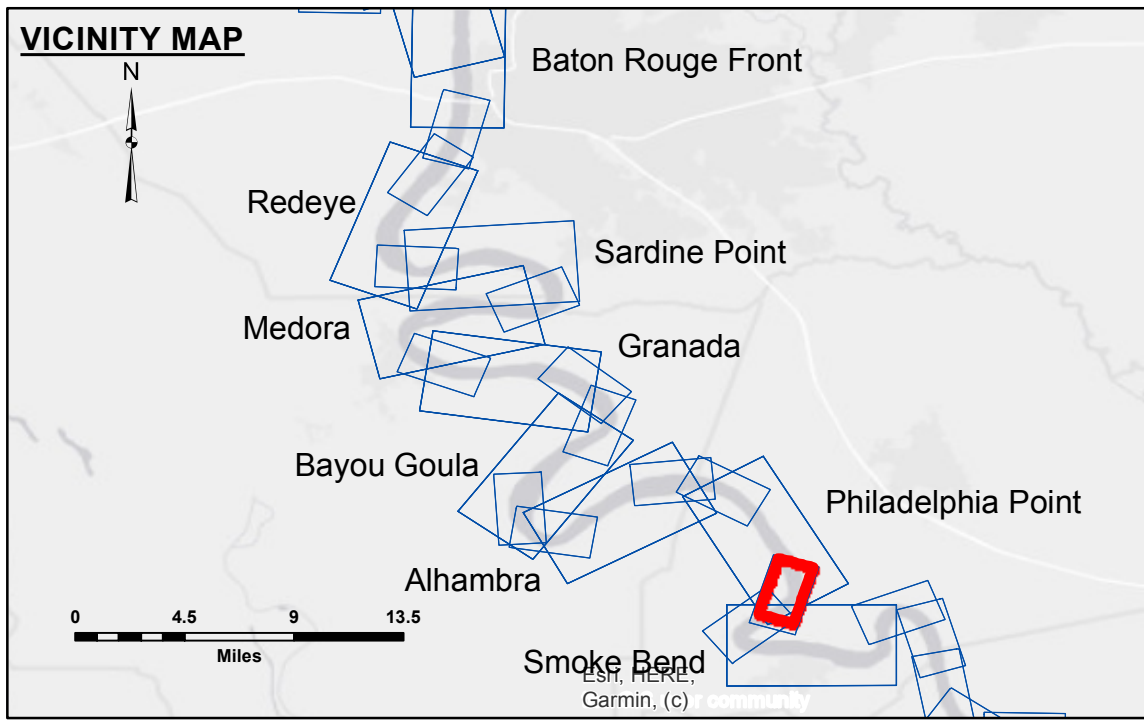
**DISCLAIMER:** The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not intended for navigation purposes. The user is responsible for the results of the application of the data for other than its intended purpose.

**DATA CONSTRAINTS:** Hydrographic survey data is subject to change due to several factors including but not limited to changing hydrographic conditions which develop after the date of the survey. The user should verify the accuracy of the data in the hydrographic conditions which develop after the date of the survey. The user should not rely solely on this data for navigation purposes.

**PRECISION:** The information depicted on this map represents the results of a survey conducted in accordance with the standards and procedures of the U.S. Army Corps of Engineers. The information is not intended to represent the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: RYLAND/ADAMS	Plotted By: AO
Recommended:	Chief, Survey Section	Checked By: AO
Approved:	Chief, Waterways Maintenance Section	

**MISSISSIPPI RIVER - B.R. TO GULF**  
**MARCHAND**  
**MD\_20\_MCHX\_20210324\_CS**  
**24 March 2021**



**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 -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 (NAVD). Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.

The location of navigation aids are based on and provided by the U.S. Coast Guard and USACE crew.  
2017 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.  
Reference is N.O.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.

LWRP: 1.5  
Gage Reading: BR:34.9D:24.5 USED:25.6 NAVD  
Sea Conditions: CALM  
Vessel Name: M/V VALENTOUR  
Survey Type: CONDITION  
Sounding Frequency\*\*\*: HIGH

**Sheet Reference Number**  
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