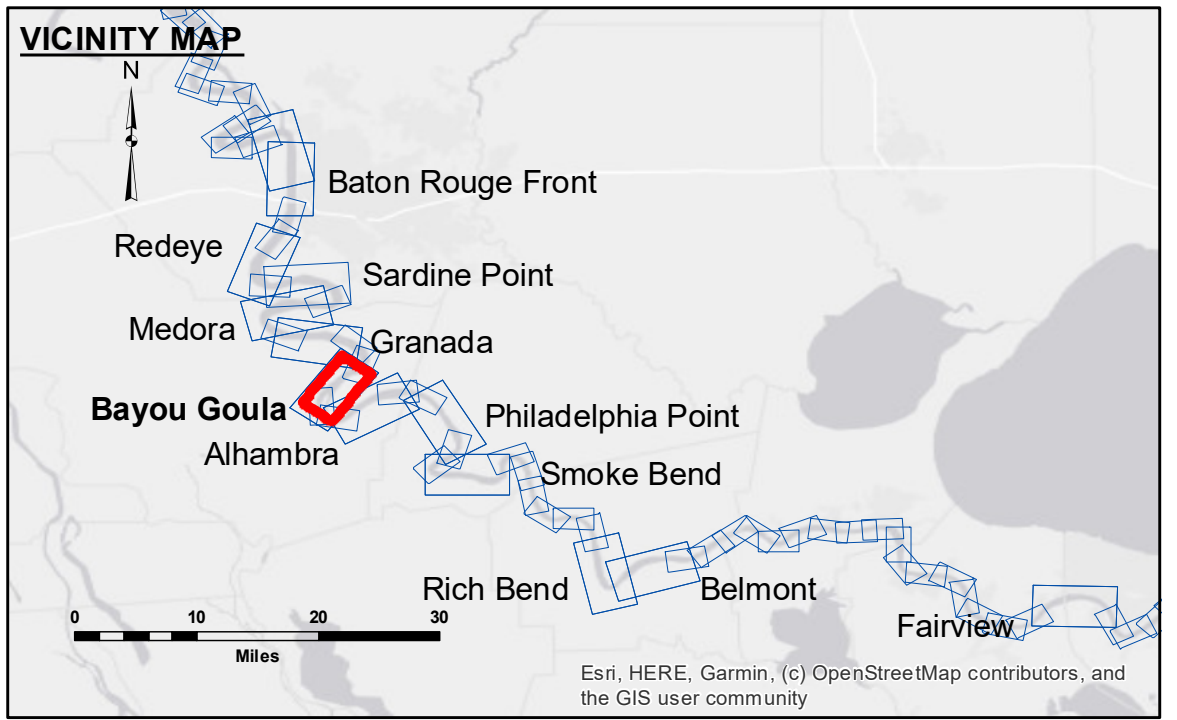


US Army Corps of Engineers District: CEMVN

DISCLAIMER: The data represents the results of data collection performed for a specific US Army Corps of Engineers project and is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results of any application of the data for other than its intended purpose. Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging, sedimentation, and channel migration. The user is responsible for the accuracy of the data and should not rely solely upon it. The information depicted on this map represents the results of a survey conducted on the date of the survey and is not intended to represent the general condition existing at that time.

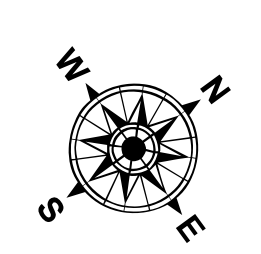
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	RYLAND/ADAMS
Recommended:	Chert, Survey Section
Plotted By:	BD
Checked By:	AC

MISSISSIPPI RIVER - B.R. TO GULF BAYOU GOULA CROSSING MD_13_GOU_20191023_CS
23 October 2019

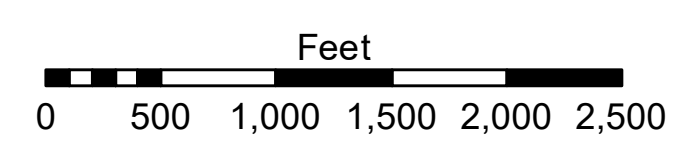


LEGEND

--- 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



LWRP: 1.8
Gage Reading: BR:20.9 D:12.7 USED:16.20 NAVD
Sea Conditions: CALM
Vessel Name: M/V VALENTOUR
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 (NAVD).

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.

2015 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.

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