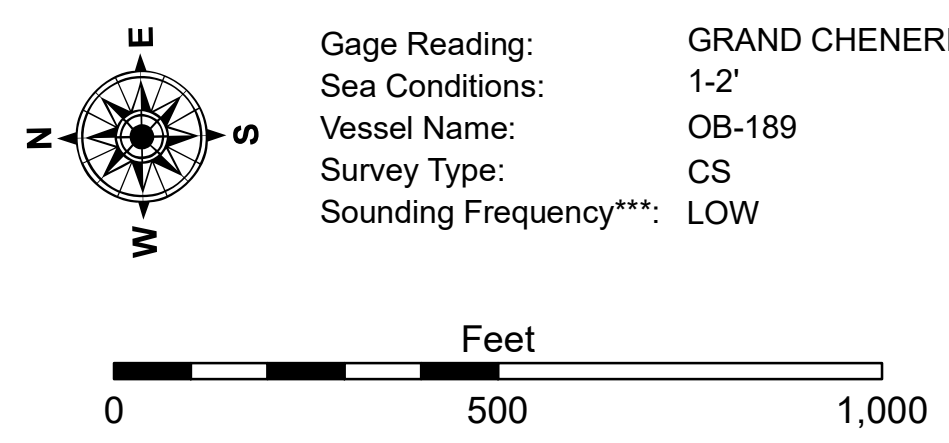


**LEGEND**

|                                  |                     |                         |
|----------------------------------|---------------------|-------------------------|
| --- Federal Navigation Channel   | ○ Cable Area        | □ Borrow Area           |
| — Federal Navigation Center Line | ■ Placement Area    | ● Shoalest Sounding**   |
| — As-built Pipeline/Cable        | □ Anchorage Area    | ★ Beacon, General       |
| ..... Unconfirmed Pipeline/Cable | ⊗ Obstruction Point | ◆ Red Navigation Buoy   |
| — Project Depth Contour          | ⚓ Wrecks-Submerged  | ◆ Green Navigation Buoy |



Gage Reading: GRAND CHENERE: 3.55 MLG  
 Sea Conditions: 1-2'  
 Vessel Name: OB-189  
 Survey Type: CS  
 Sounding Frequency\*\*\*: LOW

**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 Mean Low Gulf Datum (MLG).  
 The location of navigation aids are base on and provided by the U.S. Coast Guard.  
 2015 Aerial Photography data source: NAIP. 1998 DOQQ imagery shown in green from USGS.  
 Reference is N.O.A. Navigation Chart No. 11344 and 11348.  
 \*\* 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.



**DISCLAIMER:**  
 Distribution Liability: The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. The user is responsible for the accuracy, completeness, and reliability of the data for its intended use. The user is responsible for the application of the data for other than its intended purpose.  
 Data: Constantine Hydrographic survey data is subject to change rapidly due to several factors including but not limited to changing hydrographic conditions when developing after the date of the survey. The US Army Corps of Engineers accepts no responsibility for changes in the hydrographic conditions when developing after the date of the survey. Product maintainers should not rely solely upon this internal use.

U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT

|  |                    |
|--|--------------------|
| Submitted:                                     | Surveyed By: JH/PS |
| Recommended: Chief, Survey Section             | Plotted By: BD     |
| Approved: Chief, Waterways Maintenance Section | Checked By: AC     |

**MERMENTAU RIVER  
 BAR CHANNEL  
 MM\_02\_BAR\_20181023\_CS  
 23 October 2018**

**Sheet  
 Reference  
 Number  
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