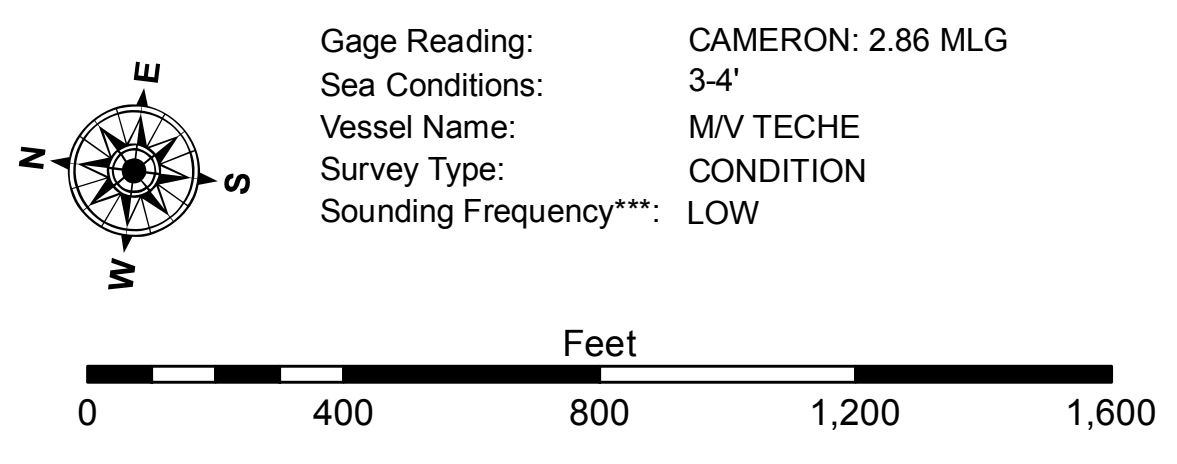


LEGEND

| | | | |
|----------------------------------|---------------------|---------------------------|----------------|
| --- Federal Navigation Channel | ● Cable Area | 3 Fluff Thickness (feet)* | -15' and above |
| — Federal Navigation Center Line | □ Placement Area | ● Shoalest Sounding** | -15' to -20' |
| — As-built Pipeline/Cable | □ Anchorage Area | ★ Beacon, General | -20' to -25' |
| Unconfirmed Pipeline/Cable | ⊗ Obstruction Point | ◆ Red Navigation Buoy | -25' to -32' |
| — Project Depth Contour | ✈ Wrecks-Submerged | ◆ Green Navigation Buoy | -32' to -38' |
| | | | -38' to -40' |
| | | | -40' to -42' |
| | | | -42' 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 Mean Low Gulf Datum (MLG). Datum Relationships for gage 73650 as of December 2013: 0.0' NAVD88 (2009.55) = 1.3' MLLW = 2.3' MLG or 0.0' MLLW = 1.0' MLG

Distances on the Calcasieu River are shown at 1 mile intervals.

The location of navigation aids are based on and provided by the U.S. Coast Guard and USACE survey crews.

2015 Aerial Photography data source: NAIP

Reference is N.O.A.A. Navigation Chart No. 11339.

* Difference between high and low frequency elevations where greater than 1.0'.

** 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

Access Constraints: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the United States Government makes no warranty, expressed, or implied concerning the accuracy, completeness, readability, usability or suitability for any particular purpose of the information furnished. The user is responsible for the results obtained from the use of this information. The user is responsible for the results obtained from the use of this information. The user is responsible for the results obtained from the use of this information.

These data are being furnished to you under the authority of the U.S. Army Corps of Engineers and are not to be used for any purpose other than that for which they were prepared. The user is responsible for the results obtained from the use of this information. The user is responsible for the results obtained from the use of this information.

The information depicted on this map represents the results of a hydrographic survey conducted on the date indicated. It is not intended to represent the general condition existing at that time.

| | |
|--------------|-----------------------|
| Submitted: | Surveyed By: SJR, JDH |
| Recommended: | Plotted By: BTJ |
| Approved: | Checked By: ATO |

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT

CALCASIEU SHIP CHANNEL
BAR SHEET 31
CR_31_BAR_20160712
12 July 2016

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