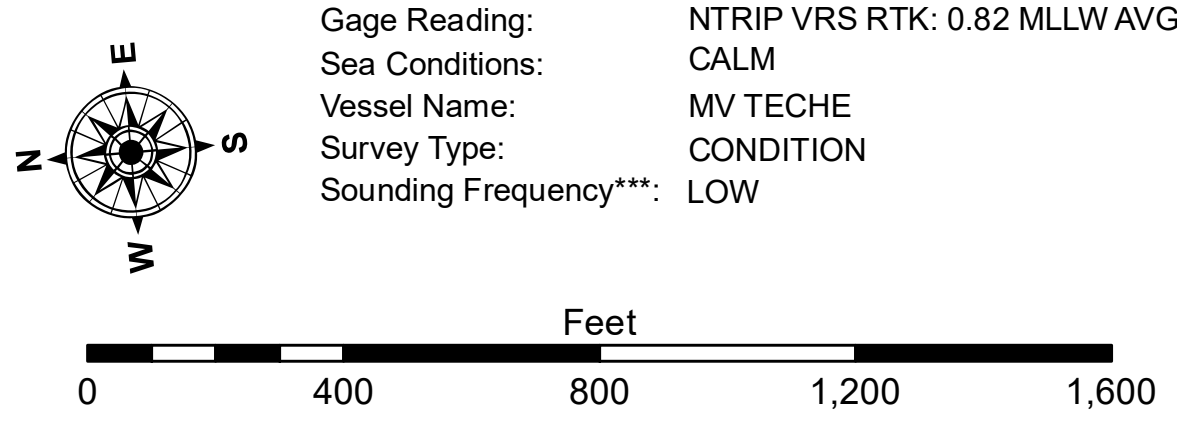


LEGEND		
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
— As-built Pipeline/Cable	⊗ Anchorage Area	☆ Beacon, General
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy
— Project Depth Contour	⊗ Wrecks-Submerged	◆ Green Navigation Buoy
		■ -16' and above
		■ -16' to -21'
		■ -21' to -26'
		■ -26' to -33'
		■ -33' to -39'
		■ -39' to -41'
		■ -41' to -43'
		■ -43' 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 Lower Low Water Datum (MLLW).  
 Datum Relationships for gage 73595 as of December 2013:  
 0.0' NAVD83 (OPUS 2013) = 0.9' MLLW = 1.9' 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 base on and provided by the U.S. Coast Guard and USACE survey crews.  
 2022 Aerial Photography data source: PAR LLC  
 Reference is N.O.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:**  
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the Government makes no warranty, expressed or implied, concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information furnished. Application of the data for other than its intended purpose is at the user's risk. The user is responsible for the results obtained. The user shall indemnify and hold the United States Government harmless from and against all claims, damages, losses and expenses, including reasonable attorneys' fees, which may be incurred by the United States Government as a result of the use of the data for other than its intended purpose.  
 The information depicted on this map represents the results of a survey conducted on or about the date of the survey. The information is not intended to represent the general condition existing at that time.  
 Distribution Liability: The data represents the results of data collection sponsored by a specific US Army Corps of Engineers District. The data is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results obtained. The user shall indemnify and hold the United States Government harmless from and against all claims, damages, losses and expenses, including reasonable attorneys' fees, which may be incurred by the United States Government as a result of the use 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, shoaling, and other changes in the channel. The user is responsible for the results of the hydrographic conditions when developed after the date of the survey. The user shall indemnify and hold the United States Government harmless from and against all claims, damages, losses and expenses, including reasonable attorneys' fees, which may be incurred by the United States Government as a result of the use of the data for other than its intended purpose.

Submitted:	Surveyed By: SP/SK
Recommended: Chief, Survey Section	Plotted By: BD
Approved: Chief, Waterways Maintenance Section	Checked By: AD/JH

**CALCASIEU SHIP CHANNEL  
 LOWER SHEET 13  
 CR\_13\_LWR\_20230216\_CS  
 16 February 2023**

**Sheet Reference Number  
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