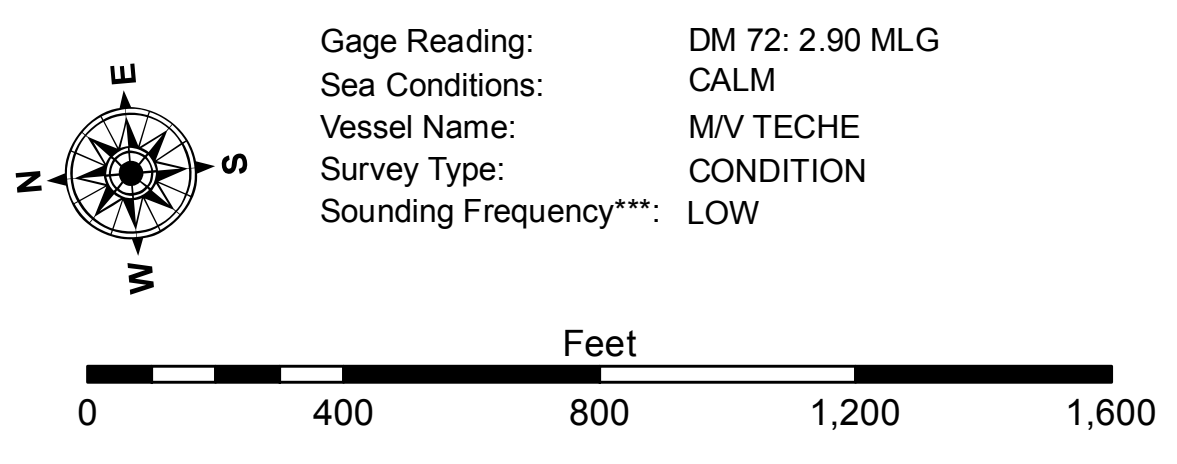


LEGEND		
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
— As-built Pipeline/Cable	⊗ Anchorage Area	★ Beacon, General
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy
— Project Depth Contour	⊗ Wrecks-Submerged	◆ Green Navigation Buoy



**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 73615 as of December 2013:  
 0.0' NAVD83 (2009.55) = 1.1' MLLW = 2.1' 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.  
 2015 Aerial Photography data source: NAIP  
 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, regarding the accuracy, completeness, reliability, 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 shall indemnify and hold the United States Government harmless from all claims, damages, costs and expenses, including reasonable attorneys' fees, that may be incurred by the United States Government as a result of the use of this information. The information depicted on this map represents the results of a survey conducted on or about the date shown on the map. The information is provided for informational purposes only and is not intended to be used for any other purpose. The user shall be responsible for any changes in the information depicted on this map. The user shall be responsible for any changes in the information depicted on this map. The user shall be responsible for any changes in the information depicted on this map.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: SJR/JH	Plotted By: BD
Recommended:	Checked By: AC	Checked By: AC
Chief, Waterways Maintenance Section		

**CALCASIEU SHIP CHANNEL  
 LOWER SHEET 20  
 CR\_20\_LWR\_20170718\_AD  
 18 July 2017**

**Sheet Reference Number  
 20 of 53**