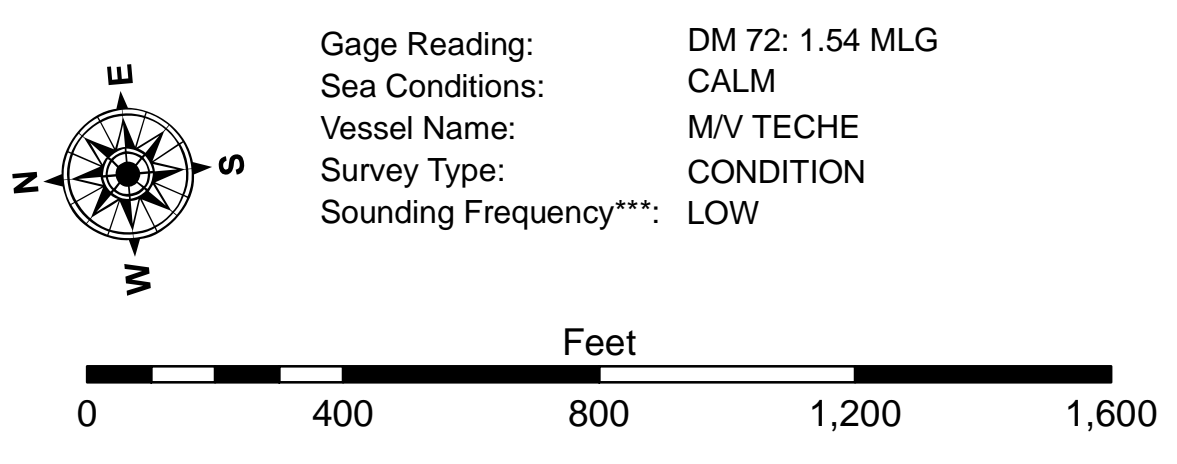


LEGEND			
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*	-15' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	-15' to -20'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	-20' to -25'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction 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 gauge 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 data are not warranted for accuracy, completeness, reliability, usability or suitability for any particular purpose of the recipient. The user is responsible for the results of any use of the data. The recipient agrees to indemnify the United States Government from and hold it harmless from any and all claims, damages, costs and expenses, including reasonable attorneys' fees, that may be incurred by the United States Government as a result of the recipient's use of the data. The recipient may not transfer these data to others without also transferring this Disclaimer. The information depicted on this map represents the results of a survey conducted on or about the date shown on the map. It is considered that the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: SR: JH	Plotted By: BD
Recommended:	Checked By: AC	Checked By: AC

**CALCASIEU SHIP CHANNEL
LOWER SHEET 19
CR_19_LWR_20180129_CS
29 January 2018**

**Sheet Reference Number
19 of 53**