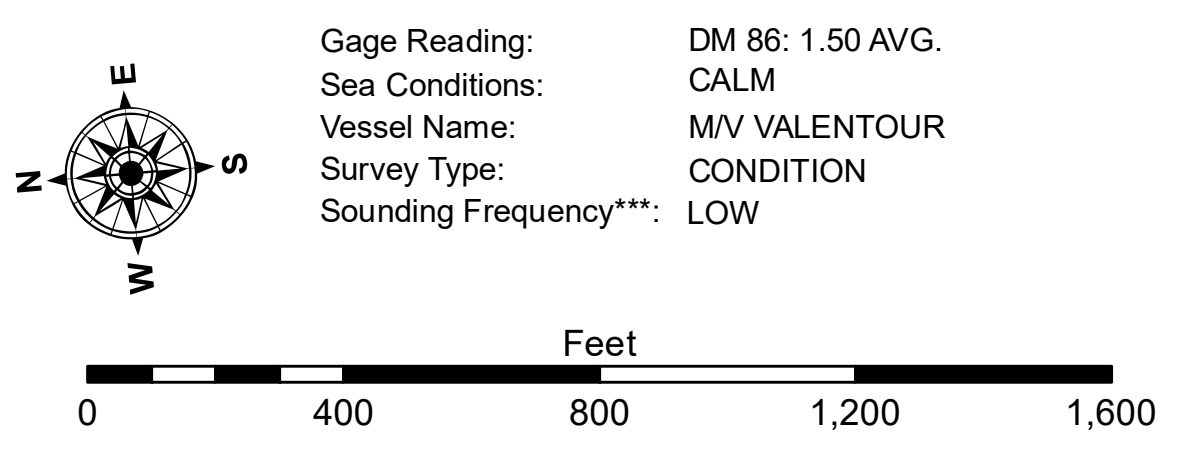


LEGEND		
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
— As-built Pipeline/Cable	⊗ Anchorage Area	☆ Beacon, General
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy
— Project Depth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



ACCESS LIMITS:
 Access Constraints: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were originally collected, and that the data are not to be used for any purpose other than that for which they were originally collected, and that the data are not to be used for any purpose other than that for which they were originally collected.
 Distribution Liability: The data represent the results of data collection sponsored by a specific US Army Corps of Engineers District. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data.
 Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging operations, channel shifts, and changes in bathymetry. The user is responsible for the results of any use of the data. The user is responsible for the results of any use of the data.

Submitted:	Surveyed By: JDH/JA
Recommended:	Plotted By: BD
Approved:	Checked By: AC

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT
 Chief, Waterways Maintenance Section

**CALCASIEU SHIP CHANNEL
 LOWER SHEET 13
 CR_13_LWR_20200303_CS
 03 March 2020**

**Sheet Reference Number
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