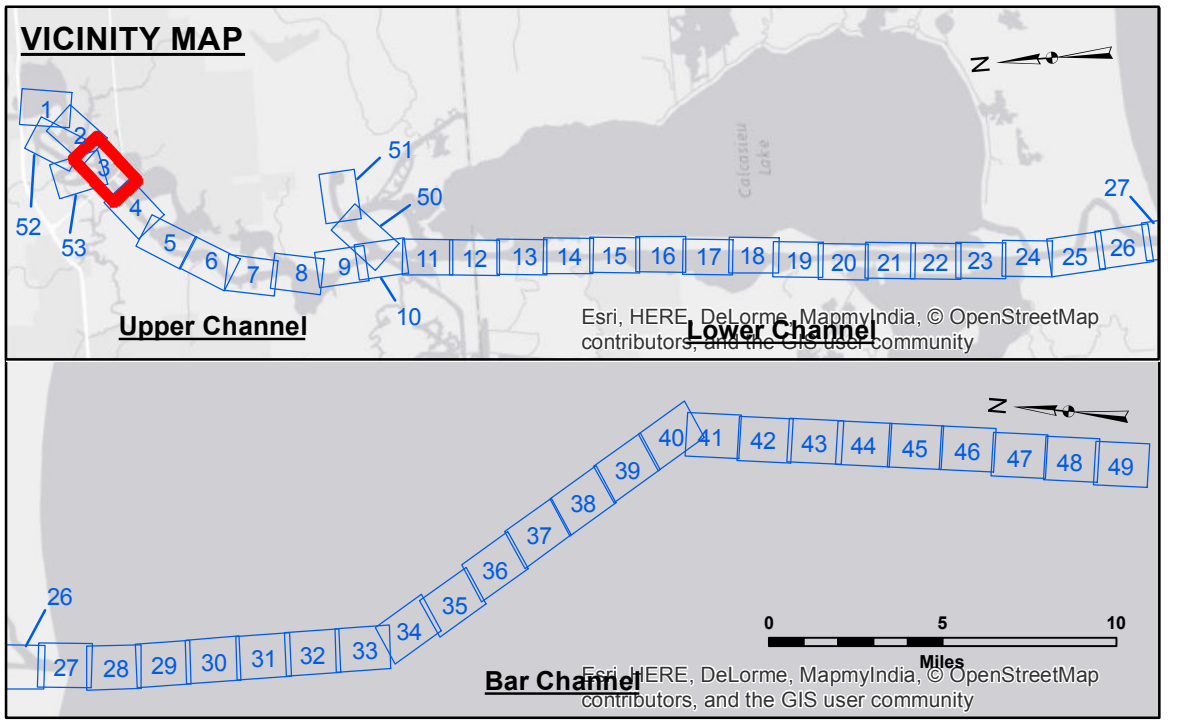


DISCLAIMER
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were prepared, or implied concerning the accuracy, completeness, reliability, usability or suitability for any particular purpose of the recipient. The user is responsible for the results of any use of the data. The United States Government does not warrant, represent or make any statement, express or implied, regarding the accuracy, completeness, reliability, usability or suitability 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, sedimentation, channel migration, and other changes in the hydrographical conditions which develop after the date of the survey. The information depicted on this map represents the results of a survey conducted on or about the date indicated and is not intended to represent the general condition existing at that time.
 Distribution Liability: The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is only valid for its intended use, content, time and accuracy specifications. The user is responsible for the results of any use of the data. The United States Government does not warrant, represent or make any statement, express or implied, regarding the accuracy, completeness, reliability, usability or suitability of the data for other than its intended purpose.

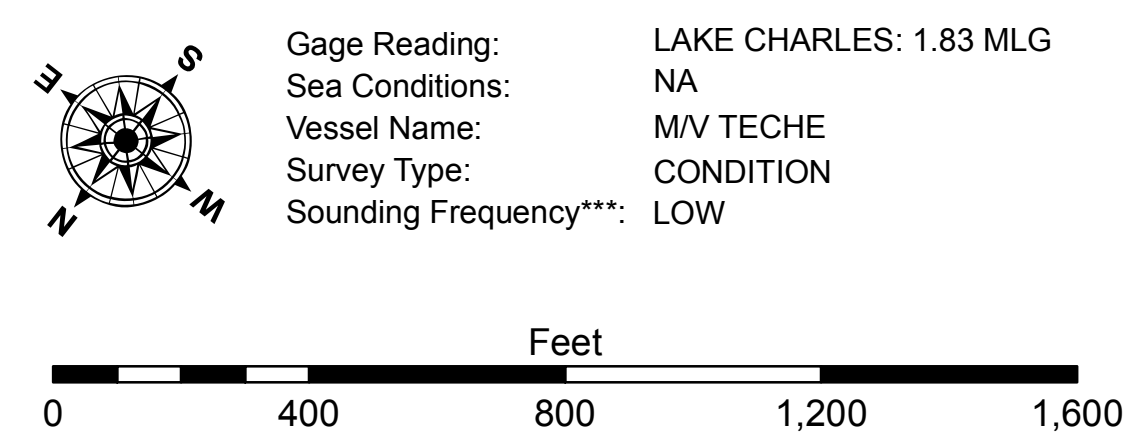
Submitted:	Surveyed By: SJR_JDH
Recommended:	Plotted By: BTD
Approved:	Checked By: TAF

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL
 UPPER SHEET 3
 CR_03_UPR_20160628
 28 June 2016**



LEGEND		Fluff Thickness (feet)*	
--- Federal Navigation Channel	○ Cable Area	3	-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



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 73550 as of December 2013:
 0.0' NAVD88 (OPUS 2010) = 0.6' MLLW = 1.6' 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.

**Sheet Reference Number
 3 of 53**