

Access/Use: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that they are not to be used for any purpose other than that for which they were prepared, and that the user is responsible for the results of any use. The user is responsible for the results of any use. The user is responsible for the results of any use. The user is responsible for the results of any use.

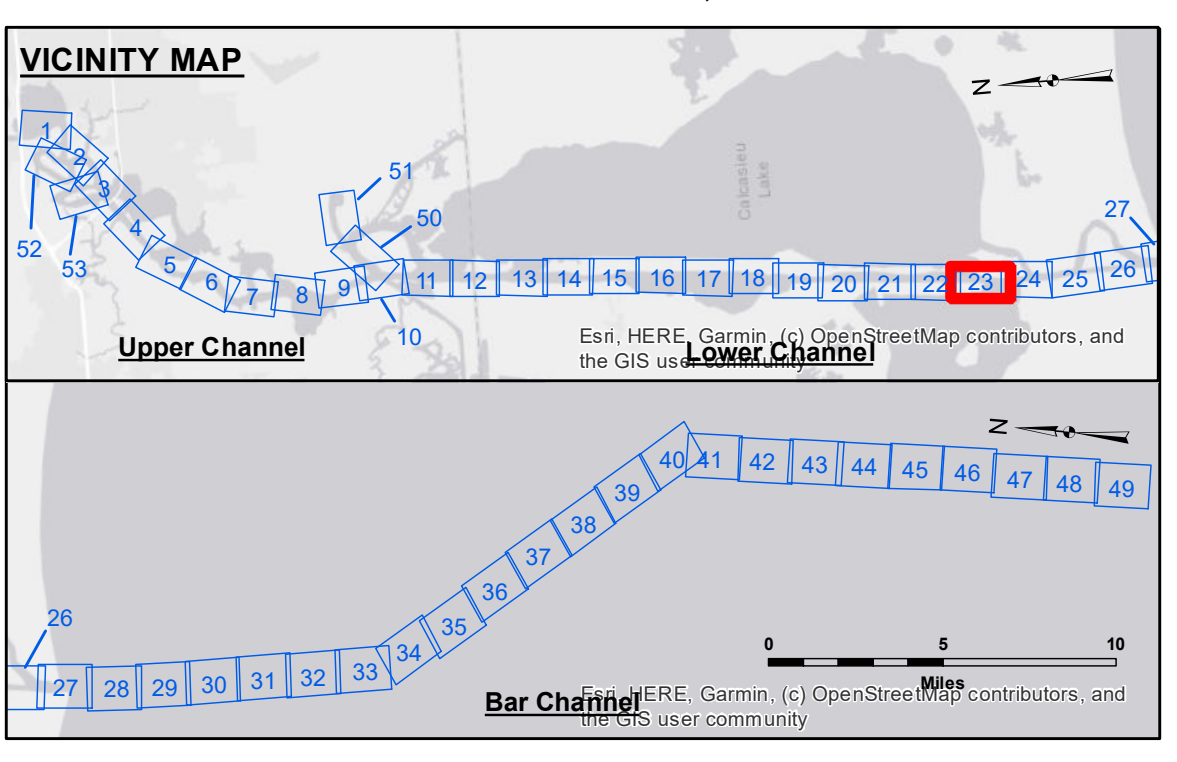
Distribution Liability: The data represent the results of a collection of data for a specific US Army Corps of Engineers project. It is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results of any use. The user is responsible for the results of any use. The user is responsible for the results of any use.

Data Constraints: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging operations, channel shifts, and other factors. The user is responsible for the results of any use. The user is responsible for the results of any use. The user is responsible for the results of any use.

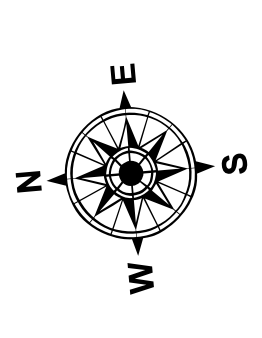
U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Surveyed By: RYLAND/ADAMS	Plotted By: BD
Submitted:	Checked By: AC
Recommended:	Chief, Survey Section
Approved:	Chief, Waterways Maintenance Section

**CALCASIEU SHIP CHANNEL
LOWER SHEET 23
CR_23_LWR_20191205_CS
05 December 2019**

**Sheet Reference Number
23 of 53**



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



Gage Reading: DM 57: 1.20 MLLW
Sea Conditions: CALM
Vessel Name: M/V VALENTOUR
Survey Type: CONDITION
Sounding Frequency***: LOW

Feet
0 400 800 1,200 1,600

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 73625 as of December 2013: 0.0' NAVD83 (2009.55) = 1.2' MLLW = 2.2' 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.