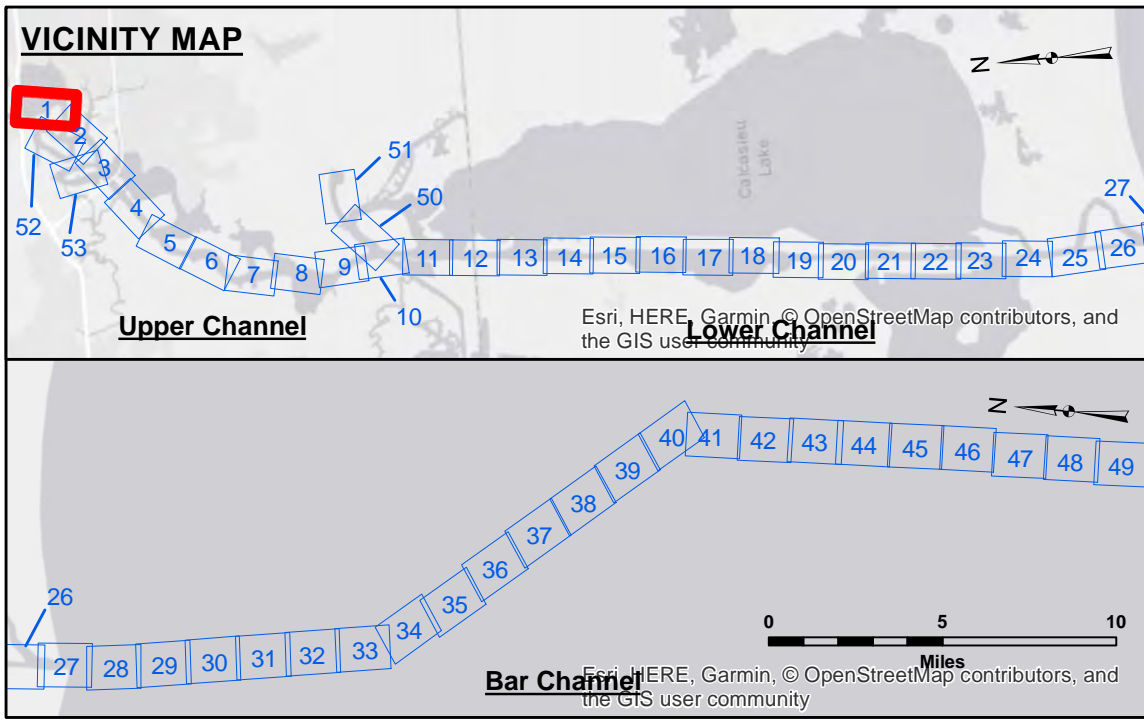
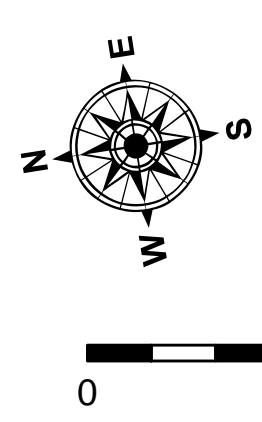


Sheet 2



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		Beacon, General
			Red Navigation Buoy
			Green Navigation Buoy
	Fluff Thickness (feet)*		Shoalest Sounding**
	-16' and above		
	-16' to -21'		
	-21' to -26'		
	-26' to -28'		
	-28' to -34'		
	-34' to -36'		
	-36' to -38'		
	-38' and below		



Gage Reading: LAKE CHARLES: 2.87 MLLW AVG.
 Sea Conditions: CHOPPY
 Vessel Name: OB-189
 Survey Type: CONDITION
 Sounding Frequency***: LOW

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 (MLLW).
 Datum Relationships for gage 73550 as of December 2013:
 0.0 NAVD83 (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 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.

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

**CALCASIEU SHIP CHANNEL
 UPPER SHEET 1
 CR_01_UPR_20190522_CS
 22 May 2019**

**Sheet Reference Number
 1 of 53**

Revision Number:
 3.12-2016/811

DISCLAIMER
 The information depicted on this map represents the results of a hydrographic survey conducted by the U.S. Army Corps of Engineers. The user of this information is advised that the data is not intended for use in any other application and is not to be used for any purpose other than that for which it was collected. The user is responsible for the results of any application of the data for other than its intended purpose. The information depicted on this map represents the results of a hydrographic survey conducted by the U.S. Army Corps of Engineers. The user of this information is advised that the data is not intended for use in any other application and is not to be used for any purpose other than that for which it was collected. The user is responsible for the results of any application of the data for other than its intended purpose.

