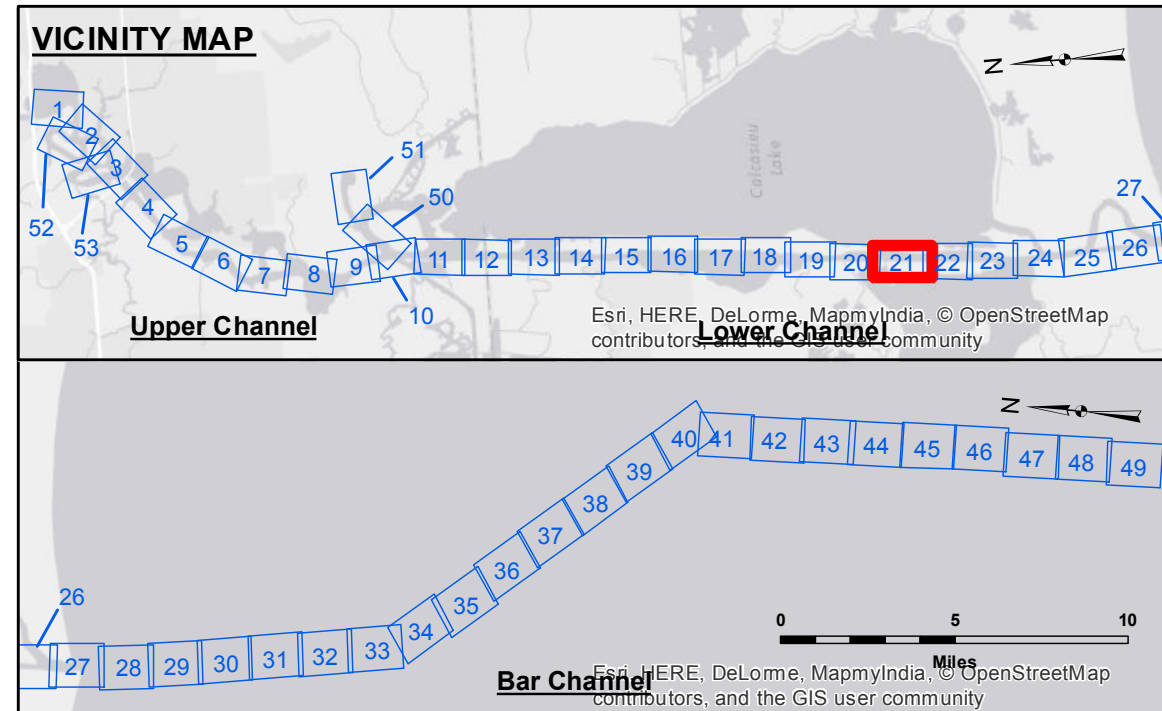


**DISCLAIMER:** The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were collected, and that the user is responsible for the results of any use of the data.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

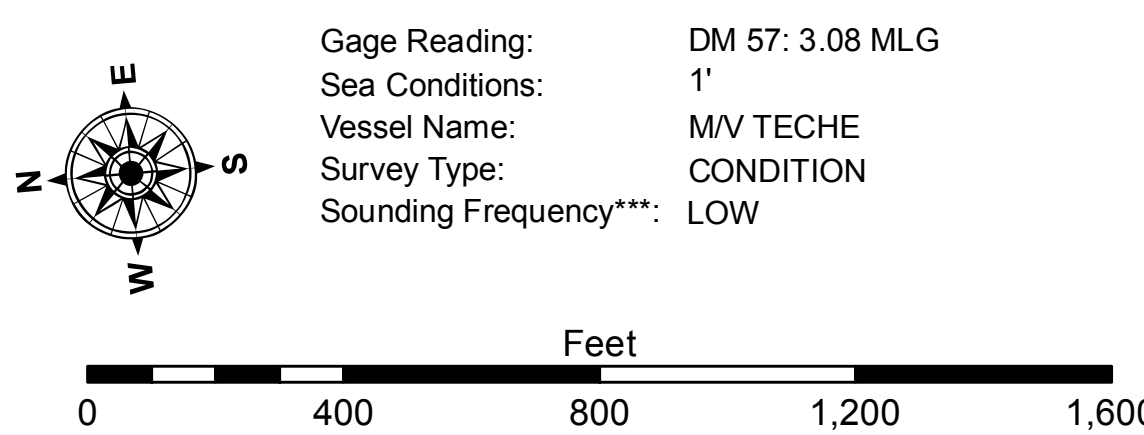
Submitted:	Surveyed By:	Plotted By:	Checked By:
	SPS:JH	BD	AC
Recommended:	Chief, Survey Section		
Approved:	Chief, Waterways Maintenance Section		

**CALCASIEU SHIP CHANNEL  
LOWER SHEET 21  
CR\_21\_LWR\_20170910\_CS\_POSTSTORM  
10 September 2017**

**Sheet Reference Number  
21 of 53**



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 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.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.