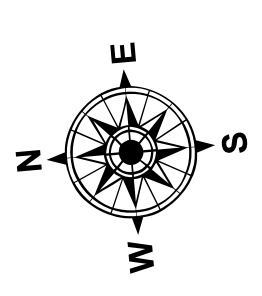


LEGEND			
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*	-15' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	-15' to -20'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	-20' to -25'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction 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



Gage Reading: HACKBERRY: 3.7 MLG
 Sea Conditions: 1' SEAS
 Vessel Name: MV TECHE
 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 Low Gulf Datum (MLG).
 Datum Relationships for gage 73600 as of December 2013:
 0.0' NAVD83 (OPUS 2010) = 1.0' MLLW = 2.0' 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.



DISCLAIMER:
 The information depicted on this map represents the results of a survey conducted by the U.S. Army Corps of Engineers. It is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the results of any application of the data for other than its intended purpose. The U.S. Army Corps of Engineers does not accept responsibility for changes in the hydrographical conditions when developed after the date of the survey. Product maintainers should not rely solely upon it.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted: PS, JH	Surveyed By: PS, JH
Recommended: CH, Survey Section	Plotted By: AO
Approved: Chief, Waterways Maintenance Section	Checked By: AO

**CALCASIEU SHIP CHANNEL
 LOWER SHEET 16
 CR_16_LWR_20170909_CS_POSTSTORM
 09 September 2017**

**Sheet Reference Number
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