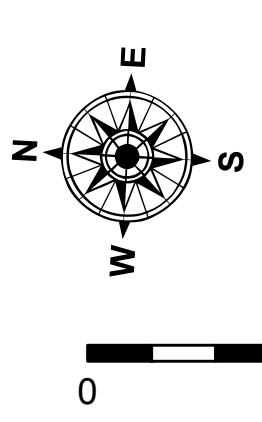


**LEGEND**

--- 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: RANGE E: 3.0 MLG  
 Sea Conditions: CALM  
 Vessel Name: MV TECHE  
 Survey Type: CONDITION  
 Sounding Frequency\*\*\*: LOW

Feet  
 0 400 800 1,200 1,600

587,000  
 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 73575 as of December 2013:  
 0.0' NAVD88 (OPUS 2013) = 0.8' MLLW = 1.8' 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.



**DISCLAIMER**  
 Distribution Liability: The data represents the results of data collection performed for a specific US Army Corps of Engineers project and is only valid for its intended use, control, time and accuracy specifications. The user is responsible for the results of any application 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, and channel migration. The user is responsible for the accuracy of the data and the Corps of Engineers accepts no responsibility for changes in the hydrographic conditions when developed after the date of the survey. Product maintainers should not rely solely upon this information.

U.S. ARMY CORPS OF ENGINEERS  
 NEW ORLEANS DISTRICT

Submitted:	Surveyed By: SURJH
Recommended:	Plotted By: BD
Approved:	Checked By: AC

**CALCASIEU SHIP CHANNEL  
 UPPER SHEET 9  
 CR\_09\_UPR\_20170511\_CS  
 11 May 2017**

**Sheet Reference Number  
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