



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:** DM 114: 2.30 MLG  
**Sea Conditions:** CALM  
**Vessel Name:** M/V TECHE  
**Survey Type:** CONDITION  
**Sounding Frequency\*\*\*:** LOW

**Vertical Datum:**  
 Soundings are shown in feet and indicate depths below Mean Low Gulf Datum (MLG).  
 Datum Relationships for gage 73565 as of December 2013:  
 0.0' NAVD88 (OPUS 2013) = 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.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.

**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 73565 as of December 2013:  
 0.0' NAVD88 (OPUS 2013) = 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.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 United States Army Corps of Engineers (USACE) and is provided for informational purposes only. It is not intended to be used for any purpose other than that for which it was prepared. The user is responsible for the accuracy, completeness, and reliability of the information for any particular purpose of the user. The USACE does not warrant the accuracy, completeness, or reliability of the information for any purpose other than that for which it was prepared. The USACE does not accept any liability for damages or losses, including consequential damages, arising from the use of this information. The user is responsible for the accuracy, completeness, and reliability of the information for any particular purpose of the user. The USACE does not warrant the accuracy, completeness, or reliability of the information for any purpose other than that for which it was prepared. The USACE does not accept any liability for damages or losses, including consequential damages, arising from the use of this information.

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

**CALCASIEU SHIP CHANNEL  
 UPPER SHEET 5  
 CR\_05\_UPR\_20170720\_CS  
 20 July 2017**

**Sheet Reference Number  
 5 of 53**