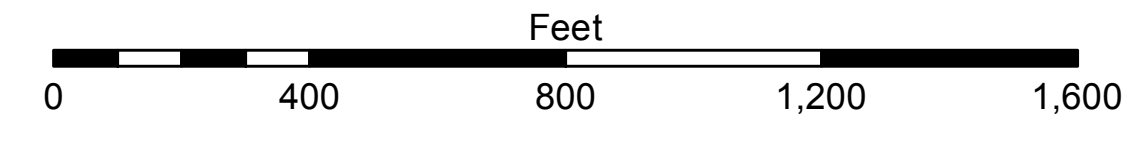
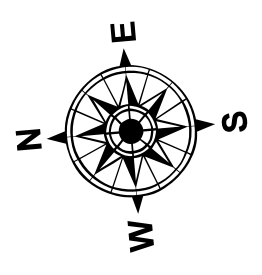


LEGEND

--- 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: RNG D/HACKBERRY: 3.0 MLG AVG
 Sea Conditions: NA
 Vessel Name: M/V TECHE
 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 Low Gulf Datum (MLG). Datum Relationships for gage 73595 as of December 2013: 0.0' NAVD83 (OPUS 2013) = 0.9' MLLW = 1.9' 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 under contract to the U.S. Army Corps of Engineers. The information is provided for informational purposes only and is not intended to be used for any other purpose. The user is responsible for the results of any use of this information. The U.S. Army Corps of Engineers does not warrant the accuracy, reliability, or availability of any information provided on this map. The user is responsible for the results of any use of this information. The U.S. Army Corps of Engineers does not warrant the accuracy, reliability, or availability of any information provided on this map. The user is responsible for the results of any use of this information.

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

Submitted:	Surveyed By: SJR,JDH
Recommended:	Plotted By: AO
Checked:	Checked By: TF
Approved:	Chief, Waterways Maintenance Section

**CALCASIEU SHIP CHANNEL
 LOWER SHEET 11
 CR_11_LWR_20160705
 05 July 2016**

**Sheet Reference Number
 11 of 53**