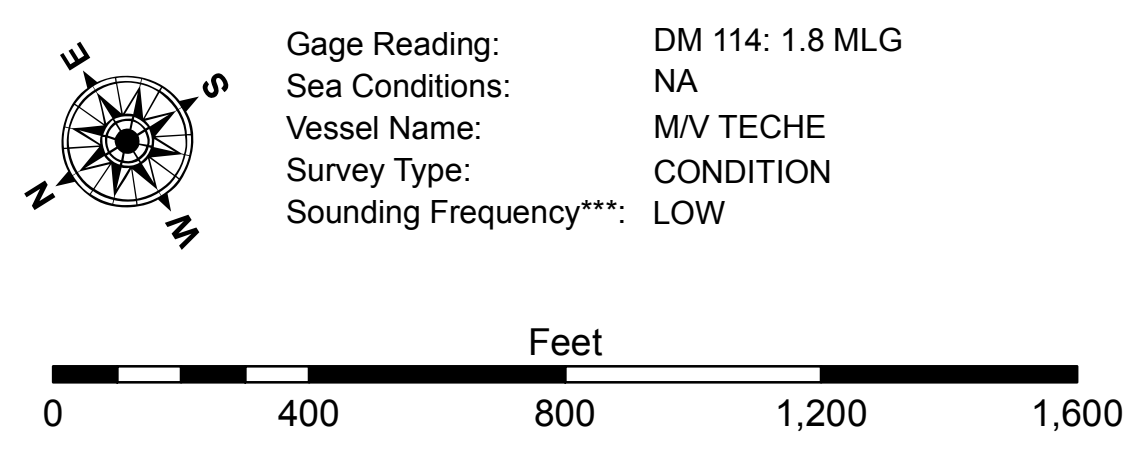


LEGEND

--- 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 73565 as of December 2013:
 0.0' NAVD83 (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. 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.



DISTRIBUTION LIABILITY: The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is only valid for its intended use, content, time and accuracy specifications. The user is responsible for the results. The user shall not be held liable for any damages or losses resulting from the use of this 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 changing hydrographic conditions which develop after the date of the survey. The user is responsible for verifying the accuracy of the data for their intended use. The user shall not be held liable for any damages or losses resulting from the use of this data for other than its intended purpose.
 The information depicted on this map represents the results of a survey conducted on or about the date indicated. It is not intended to represent the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	
Submitted:	Surveyed By: SJR, JDH
Recommended:	Plotted By: BTD
Approved:	Checked By: TAF

**CALCASIEU SHIP CHANNEL
 UPPER SHEET 5
 CR_05_UPR_20160628
 28 June 2016**

**Sheet Reference Number
 5 of 53**