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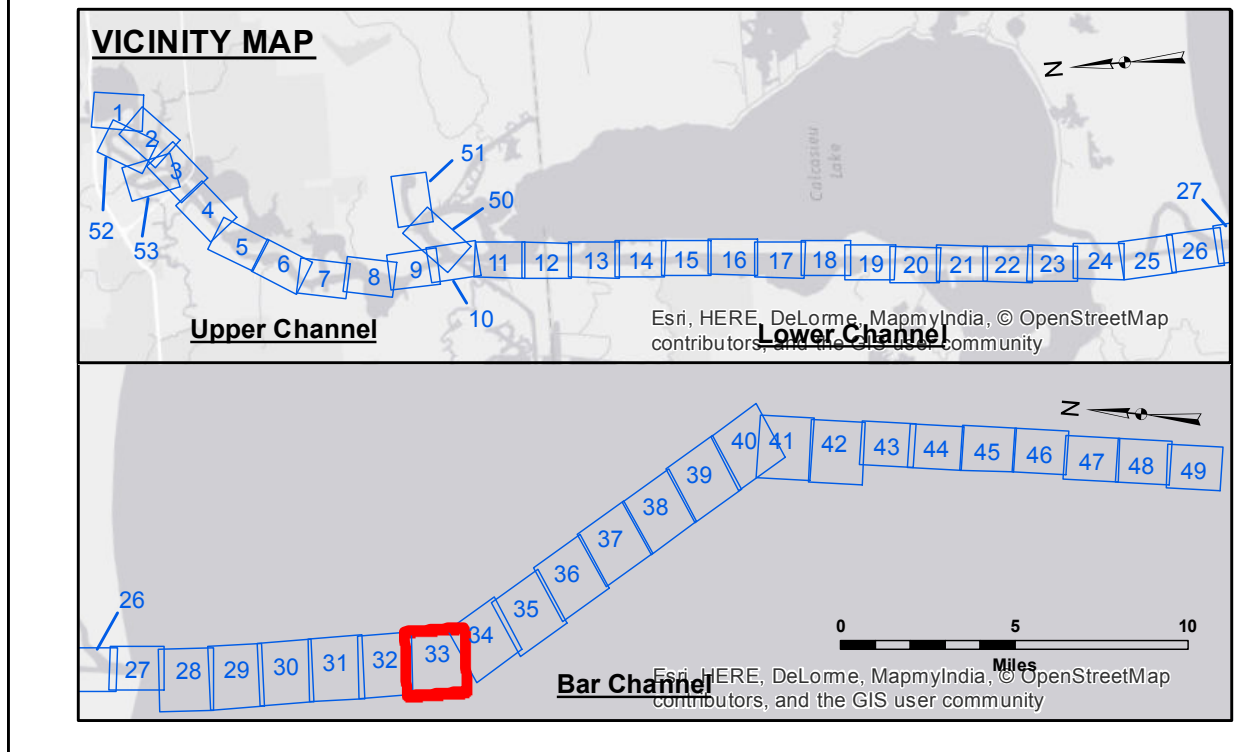
Submitted:	SFRS_JDH
Recommended:	AO
Checked By:	AO

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

CALCASIEU SHIP CHANNEL
BAR SHEET 33
CR_33_BARX_20160921
21 September 2016

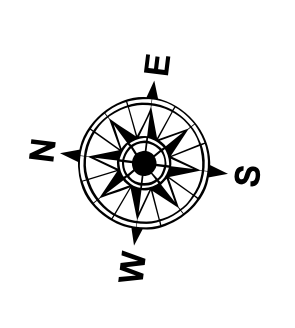
Sheet Reference Number
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Revision Number:
 15-9-2015000



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: CAMERON: 2.5 MLG AVG
 Sea Conditions: 1-3' SEAS
 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 page 73650 as of December 2013:
 0.0' NAVD88 (2009 55) = 1.3' MLLW = 2.3' 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. 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:
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