

LC CURVE DATA
 $\Delta = 30^\circ 13'$
 $D = 1^\circ 00'$
 $T = 1546.85'$
 $L = 3021.67'$
 $R = 5729.58'$

GULF OF MEXICO

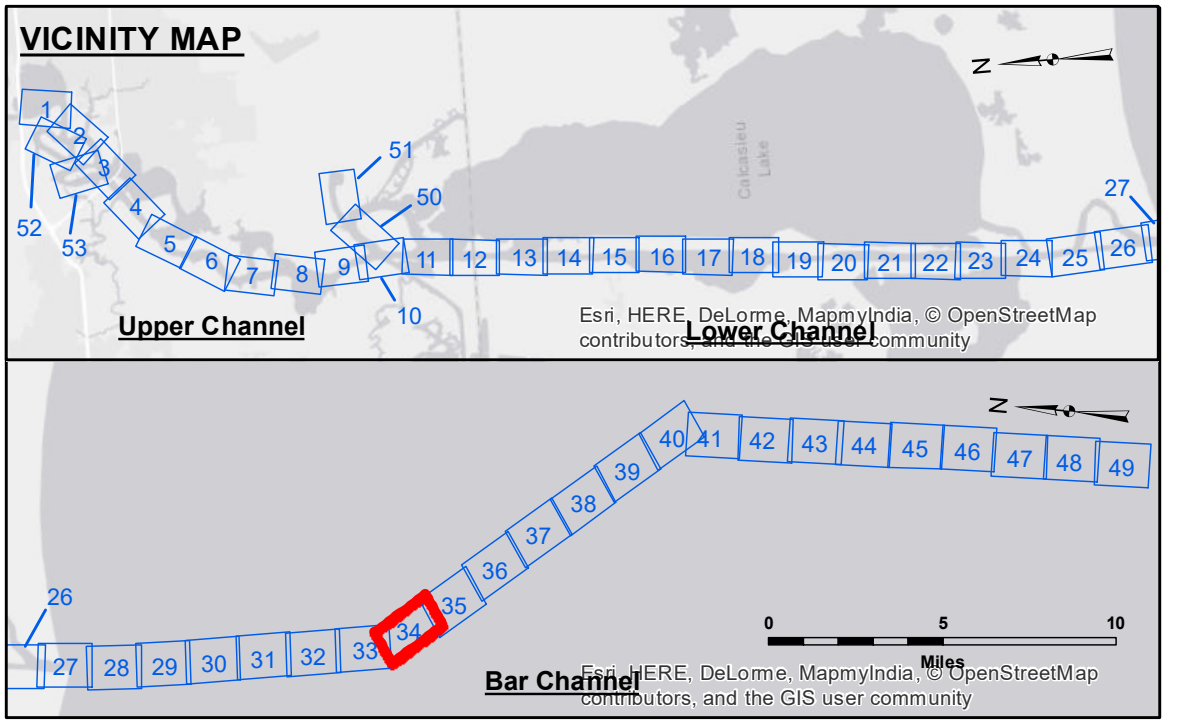
**SITE NO. 2
DISPOSAL AREA**



DISCLAIMER
 The information depicted on this map represents the results of a hydrographic survey conducted by the United States Army Corps of Engineers. The data represents the results of a collection of soundings for a specific US Army Corps of Engineers project. The user is responsible for the accuracy, reliability, usability, or suitability for any particular purpose of the information. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

Submitted:	Surveyed By:	JH/PS
Recommended:	Plotted By:	BD
Approved:	Chief, Survey Section	AC
	Chief, Waterways Maintenance Section	

**CALCASIEU SHIP CHANNEL
BAR SHEET 34
CR_34_BAR_20190115_CS
15 January 2019**



LEGEND

--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*	■ -16' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ -16' to -21'
— As-built Pipeline/Cable	⊗ Anchorage Area	★ Beacon, General	■ -21' to -26'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -26' to -33'
— Project Depth Contour	⊗ Wrecks-Submerged	◆ Green Navigation Buoy	■ -33' to -39'
			■ -39' to -41'
			■ -41' to -43'
			■ -43' 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 Lower Low Water Datum (MLLW). Datum Relationships for gage 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.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.

Gage Reading: CAMERON: 1.55 MLLW AVG.
 Sea Conditions: CALM
 Vessel Name: M/V LAFORCHE
 Survey Type: CONDITION
 Sounding Frequency***: LOW

**Sheet Reference Number
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