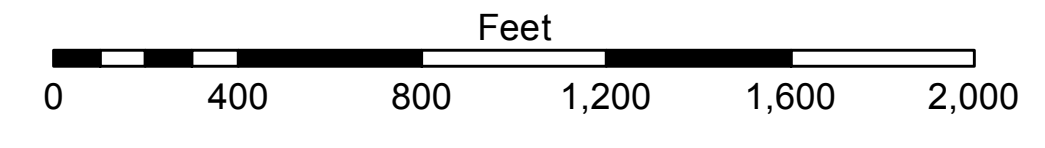
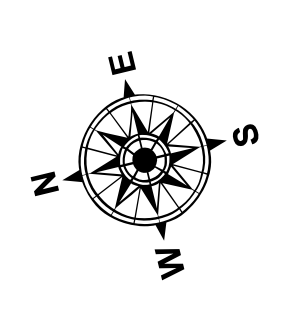


LEGEND

--- Federal Navigation Channel	● Cable Area	□ Borrow Area	■ -12' and above
— Federal Navigation Center Line	■ Placement Area	● Shoalest Sounding**	■ -12' to -15'
— As-built Pipeline/Cable	□ Anchorage Area	☆ Beacon, General	■ -15' to -18'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -18' and below
— Project Depth Contour	✘ Wrecks-Submerged	◆ Green Navigation Buoy	



Gage Reading: PETIT CAILLOU: 1.7 MLG
 Sea Conditions: CALM
 Vessel Name: OB-167
 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 76305 as of August 2014:
 0.0' NAVD88 (OPUS 2010) = 0.42' MLLW (2007-2011) = 1.34' MLG
 Distances on the Houma Nav. Canal 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.
 2010 Aerial Photography data source: NAIP
 Reference is N.O.A.A. Navigation Chart No. 11355.
 ** 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.

US Army Corps of Engineers District: CEMVN

ACCESS LIMITS
 The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that they are not to be used for any purpose other than that for which they were prepared, and that the United States Government makes no warranty, expressed or implied, regarding the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data. The recipient shall indemnify and hold the United States Government harmless from and against all claims, damages, and expenses, including reasonable attorneys' fees, that may be incurred by the United States Government in connection with the use of the data. The recipient shall also indemnify and hold the United States Government harmless from and against all claims, damages, and expenses, including reasonable attorneys' fees, that may be incurred by the United States Government in connection with the use of the data. The recipient shall also indemnify and hold the United States Government harmless from and against all claims, damages, and expenses, including reasonable attorneys' fees, that may be incurred by the United States Government in connection with the use of the data.

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT

Submitted:	Surveyed By: SP-JH
Recommended: Chief, Survey Section	Plotted By: AO
Approved: Chief, Waterways Maintenance Section	Checked By: AO

**HOUMA NAVIGATION CANAL
 BAR CHANNEL
 HN_17_BAR_20161222
 22 December 2016**

**Sheet Reference Number
 17 of 19**

Revision Number:
 3.8.0-20150202