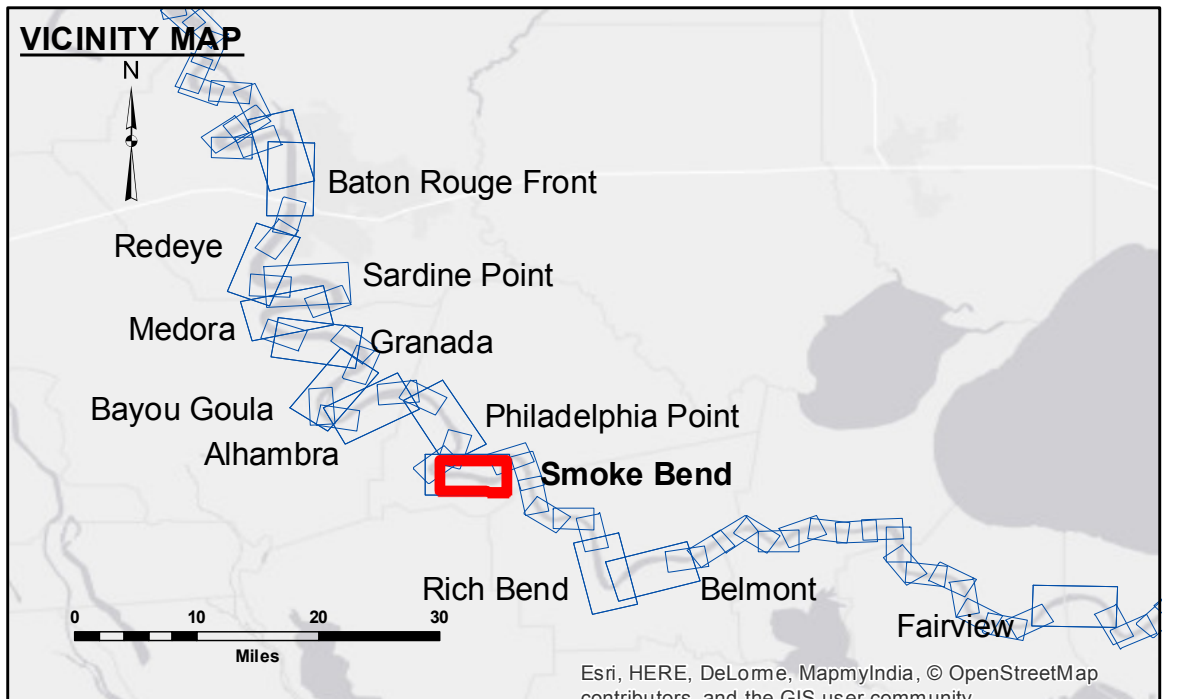


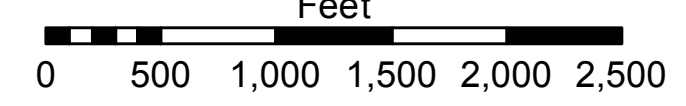
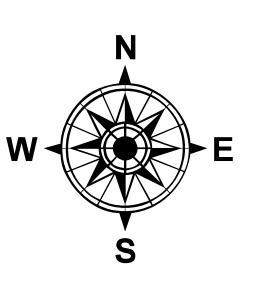
DISCLAIMER
 The information depicted on this map represents the results of a survey conducted by the U.S. Army Corps of Engineers. The user is responsible for the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information. The user is responsible for the results of the application of the data for other than its intended purpose. Data contained in this survey data is subject to change due to several factors including but not limited to dredging, sedimentation, and other natural processes. The U.S. Army Corps of Engineers does not assume any liability for changes in the hydrographical conditions when developed after the date of the survey. The information depicted on this map represents the results of a survey conducted by the U.S. Army Corps of Engineers. The user is responsible for the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information. The user is responsible for the results of the application of the data for other than its intended purpose. Data contained in this survey data is subject to change due to several factors including but not limited to dredging, sedimentation, and other natural processes. The U.S. Army Corps of Engineers does not assume any liability for changes in the hydrographical conditions when developed after the date of the survey. The information depicted on this map represents the results of a survey conducted by the U.S. Army Corps of Engineers. The user is responsible for the accuracy, completeness, reliability, usability or suitability for any particular purpose of the information. The user is responsible for the results of the application of the data for other than its intended purpose. Data contained in this survey data is subject to change due to several factors including but not limited to dredging, sedimentation, and other natural processes. The U.S. Army Corps of Engineers does not assume any liability for changes in the hydrographical conditions when developed after the date of the survey.

Submitted:	Checked By:
Recommended:	Checked By:
Approved:	Checked By:
Surveyed By:	DS/JH
Plotted By:	BD
Checked By:	AC

MISSISSIPPI RIVER - B.R. TO GULF
SMOKE BEND RECON
MR_22_SMB_20170208
08 February 2017



LEGEND	
--- Federal Navigation Channel	0' and above
— Federal Navigation Center Line	0' to -5'
— As-built Pipeline/Cable	-5' to -10'
..... Unconfirmed Pipeline/Cable	-10' to -20'
— Project Depth Contour	-20' to -30'
○ Cable Area	-30' to -35'
□ Placement Area	-35' to -40'
□ Anchorage Area	-40' to -45'
⊗ Obstruction Point	-45' and below
✶ Wrecks-Submerged	
□ Borrow Area	
● Shoalest Sounding**	
☆ Beacon, General	
◆ Red Navigation Buoy	
◆ Green Navigation Buoy	



LWRP: 1.4
 Gage Reading: BR:27.3 D:18.8 USED:18.7 NGVD
 Sea Conditions: CALM
 Vessel Name: OB-189
 Survey Type: CONDITION
 Sounding Frequency***: HIGH

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 Low Water Reference Plane 2007 (NGVD).
 Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.
 The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE crew.
 2010 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.
 Reference is N.O.A. Navigation Chart No. 11370.
 ** 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.

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