U.S. ARMY CORPS OF ENGINEERS 581,000 578,000 575,000 US Army Corps of Engineers District: CEMVN DISPOSAL AREA 15 CALCASIEU SHIP CHANNEL LOWER SHEET 11 CR_11_LWR_20220726_CS 26 July 2022 581,000 578,000 575,000 NOTES: Horizontal Coordinate System: North American Datum of 1983 (NAD83), projected to the State Plane VICINITY MAP Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet. **LEGEND** Vertical Datum: -16' and above DM86: 1.75 MLLW Gage Reading: Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW). Datum Relationships for gage 73595 as of December 2013: 0.0' NAVD88 (OPUS 2013) = 0.9' MLLW = 1.9' MLG or 0.0' MLLW = 1.0' MLG 3 Fluff Thickness (feet)* CALM -16' to -21' Sea Conditions: --- Federal Navigation Channel Cable Area OB-167 -21' to -26' Vessel Name: 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 — Federal Navigation Center Line Placement Area Shoalest Sounding** Distances on the Calcasieu River are shown at 1 mile intervals. CONDITION Survey Type: -26' to -33' Esri, HERE Garmin, (c) Lower Channel Sounding Frequency***: LOW The location of navigation aids are base on and provided by the U.S. Coast Guard **Upper Channel** [__] Anchorage Area As-built Pipeline/Cable Beacon, General -33' to -39' and USACE survey crews. -39' to -41' ∅ Obstruction Point Unconfirmed Pipeline/Cable 2022 Aerial Photography data source: PAR LLC Red Navigation Buoy Sheet -41' to -43' Reference is N.O.A.A. Navigation Chart No. 11339. — Project Depth Contour Wrecks-Submerged Reference -43' and below **Green Navigation Buoy** 800 1,200 * Difference between high and low frequency elevations where greater than 1.0'. Number 400 ** Shoalest Sounding per Quarter per Reach. 11 **of** 53 27 28 29 30 31 32 33 34 *** 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 consoldiated bottom Revison Number: material. Low frequency accuracies may vary depending on channel conditions and fathometer 4.2-20200420