U.S. ARMY CORPS OF ENGINEERS 509,000 503,000 506,000 CALCASIEU LAKE US Army Corps of Engineers District: CEMVN LIGHT 64 LL = 45.7 MLLW LIGHT 65 LIGHT 63 DEPT. OF 36" BRINE EL. -8.0' N CALCASIEU SHIP CHANNEL LOWER SHEET 21 CR_21_LWR_20230208_CS 2023 2,641,000 506,000 509,000 503,000 NOTES: Horizontal Coordinate System: VICINITY MAP North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet. **LEGEND** Vertical Datum: -16' and above NTRIP VRS RTK: 1.30 MLLW AVG Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW). Datum Relationships for gage 73625 as of December 2013: Gage Reading: 3 Fluff Thickness (feet)* CHOP -16' to -21' Sea Conditions: --- Federal Navigation Channel Cable Area 0.0' NAVD88 (2009.55) = 1.2' MLLW = 2.2' MLG or 0.0' MLLW = 1.0' MLG **MV TECHE** -21' to -26' Vessel Name: 11 12 13 14 15 16 17 18 19 20 21 22 — 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) OpenStr the GIS user Channel Sounding Frequency***: LOW The location of navigation aids are base on and provided by the U.S. Coast Guard **Upper Channel** As-built Pipeline/Cable Anchorage Area -33' to -39' Beacon, General and USACE survey crews. -39' to -41' ∅ Obstruction Point ---- Unconfirmed Pipeline/Cable 2022 Aerial Photography data source: PAR LLC Sheet Red Navigation Buoy -41' to -43' Reference is N.O.A.A. Navigation Chart No. 11339. Wrecks-Submerged — Project Depth Contour Reference -43' and below Green Navigation Buoy 400 1,200 * Difference between high and low frequency elevations where greater than 1.0'. Number ** Shoalest Sounding per Quarter per Reach. 21 **of** 53 *** 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) Revison Number: 4.2-20200420 survey data normally penetrates through this "fluff" layer to depict elevations of consoldiated bottom material. Low frequency accuracies may vary depending on channel conditions and fathometer