

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

Type of Survey

Hydrographic

Field No.

David Evans and Associates, Inc.

Registry No.

H11684

LOCALITY

State

LOUISIANA

General Locality

Mississippi Delta

Sublocality

Little Red Pass to West Bay

2007

CHIEF OF PARTY

Jonathan L. Dasler, PE (OR), PLS (OR,WA)

LIBRARY & ARCHIVES

DATE

HYDROGRAPHIC TITLE SHEET

H11684

INSTRUCTIONS – The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD No

David Evans and Associates, Inc.

State Louisiana

General Locality Mississippi Delta

Sub-Locality Little Red Pass to West Bay

Scale 1:10,000 Date of Survey July 20, 2007 to October 9, 2007

Instructions dated April 16, 2007 Project No. S-K977-KR-07-DEA

Vessel R/V Taku and R/V Chinook

Chief of party Jonathan L. Dasler, PE (OR) , PLS (OR,CA)

Surveyed by Shyla Allen, Michael Hill

Soundings by echo sounder, hand lead, pole Odom Echotrac MKIII, Odom CV-100, Reson 8101, EdgeTech 4200-FS and 4200-HSL

Graphic record scaled by N/A

Graphic record checked by N/A Automated Plot N/A

Verification by _____

Soundings in Meters at MLLW

REMARKS: All times are UTC.

The purpose of this contract is to detect and map debris for the Gulf of Mexico Marine Debris Project and provide NOAA with modern, accurate hydrographic survey data with which to update nautical charts of the assigned area.

SUBCONSULTANTS: Zephyr Marine, P.O. Box 1575, Petersburg, AK 99833

EMC, Inc., 209 Main Street, Greenwood, MS 38930

Red, bold, italic comments were added during office review.

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Acronyms and Abbreviations

AHB	Atlantic Hydrographic Branch
AWOIS	Automated Wreck and Obstruction Information System
BAG	Bathymetric Attributed Grid
CF	Charted Feature
CUBE	Combined Uncertainty and Bathymetry Estimator
DAPR	Data Acquisition and Processing Report
DEA	David Evans and Associates, Inc.
Dton	Danger to Navigation Report
DGPS	Differential Global Positioning System
DXF	Drawing Exchange Format
ENC	Electronic Navigation Charts
HIPS	Hydrographic Information Processing System
IHO	International Hydrographic Organization
LNM	U.S. Coast Guard Local Notice to Mariners
MCD	Marine Chart Division
MLLW	Mean Lower Low Water
MMS	Mineral Management Services
NAD 83	North American Datum of 1983
NOAA	National Oceanic and Atmospheric Administration
NOS	National Ocean Service
PA	Position Approximate
PD	Position Doubtful
R/V	Research Vessel
SOW	Statement of Work
UTM	Universal Transverse Mercator
VBES	Vertical Single Beam Echosoundings
ZDF	Zone Definition File

Descriptive Report to Accompany Hydrographic Survey H11684

S-K977-KR-07-DEA

Mississippi Delta, Louisiana

Little Red Pass to West Bay

Scale 1:10,000

July 2007 - October 2007

David Evans and Associates, Inc.

Lead Hydrographers: Jonathan L. Dasler, Jason C. Creech

A. AREA SURVEYED

David Evans and Associates, Inc. (DEA) conducted a hydrographic survey in the Gulf of Mexico. The survey area (Figure 1) is located in the state of Louisiana, west of the Mississippi River from Little Red Pass to West Bay.

The purpose of this survey was to provide accurate hydrographic data suitable for item detection and debris mapping in the project area. H11684 was conducted in accordance with the Statement of Work (SOW) for S-K977-KR-07-DEA, dated April 16, 2007.

The survey required 200% side scan sonar coverage collected in conjunction with continuous Vertical Single Beam Echo Soundings (VBES). The sonar was operated at 50-meter range scale with 80-meter mainscheme lines for each 100% coverage. Multibeam sonar data were collected over all significant contacts to determine least depth. Bottom samples were acquired on a 2,000-meter grid. There were no Automated Wreck and Obstruction Information System (AWOIS) items located within the survey boundary.

Data acquisition was conducted from July 20, 2007 (Day Number 201) to October 2, 2007 (Day Number 275). Please see Table 1 for specific dates of data acquisition.

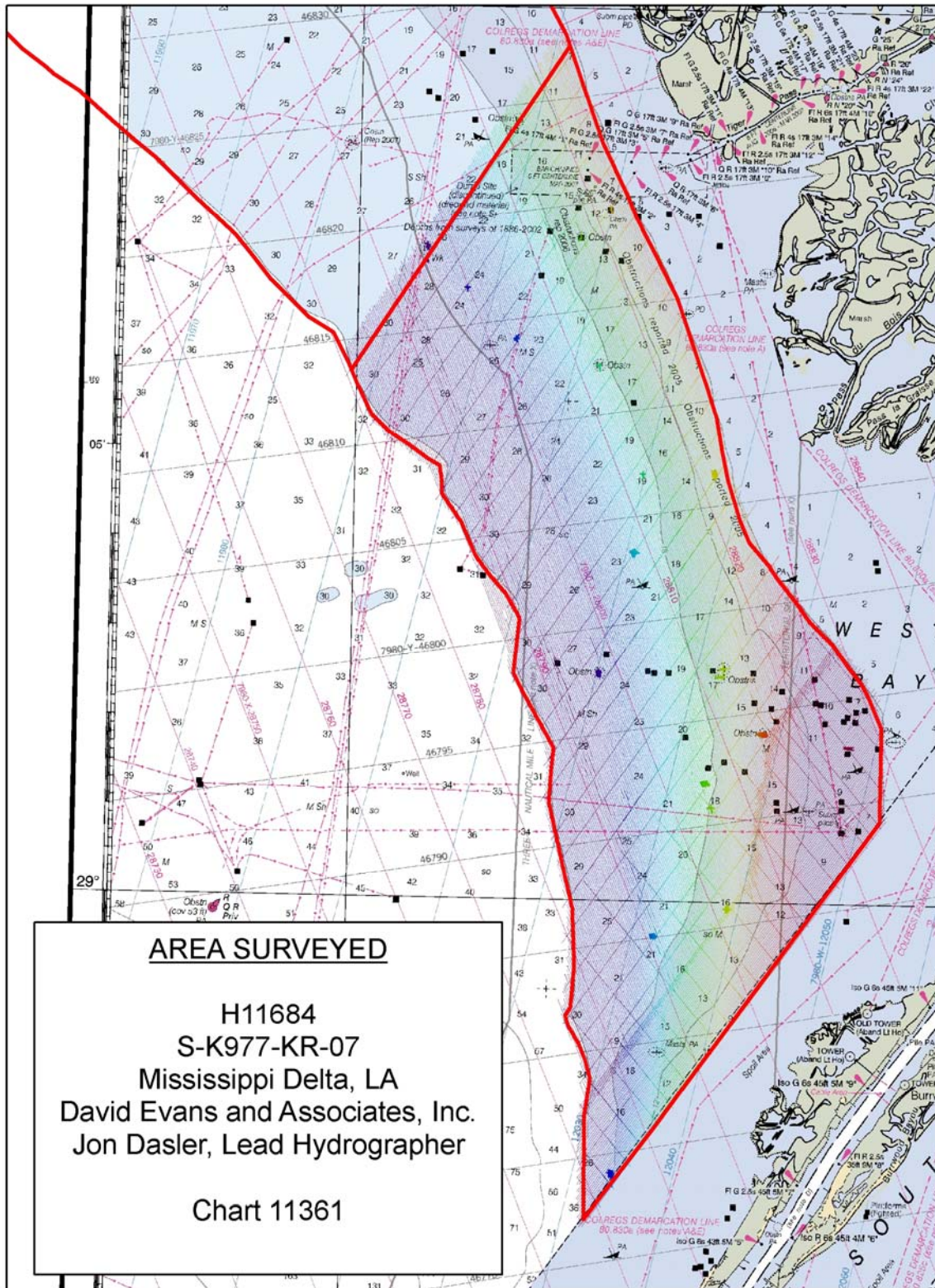


Figure 1. H11684 Survey Area

Table 1. H11684 Days of Acquisition

Dates of Acquisition	
Month	Dates
July 2007	20-21
August 2007	28-31
September 2007	1-5, 7-12, 17-18, 22-24, 26-28
October 2007	2,6, 9

The statistics for H11684 are provided in Table 2, as described in the National Oceanic Service, (NOS) *Hydrographic Surveys Specifications and Deliverables (June 2006)*.

Table 2. H11684 Survey Statistics

Survey Statistics	Research Vessel (R/V) TAKU	Research Vessel (R/V) CHINOOK	Total
VBES (mainscheme nm)	-	-	-
MBES (mainscheme nm)	-	-	-
LIDAR (mainscheme nm)	-	-	-
SSS (mainscheme nm)	-	-	-
Combination lines (SSS and VBES nm)	950.93	758.82	1709.75
Crosslines (VBES nm)	145.08	8.43	153.52
Lidar Crosslines (nm)	-	-	-
Developments (MBES nm)	16.25	-	16.25
Shoreline (nm)	-	-	-
Number of Bottom Samples			30
Number of Item Investigations that required additional survey effort	14	-	14
Total number of square nautical miles			34.63

B. DATA ACQUISITION AND PROCESSING

B1. Equipment

Equipment and vessels used for data acquisition and survey operations during this survey are listed below in Tables 3 and 4.

Table 3. R/V TAKU Equipment and Vessel Specifications

R/V TAKU	
Builder	Armstrong Marine
Design	Catamaran
Length Overall	28'
Beam	10.5'
Draft, Maximum	2"
Cruising Speed	27 knots
Max Survey Speed	8.5 knots
Echosounders	ODOM EchoTrac MKIII/CV-100 and RESON 8101
Side Scan Sonar	Edgetech 4200-HSL
Sound Velocity Equipment	Applied Microsystems Smart SV&P
Positioning & Attitude	Applanix POS/MV 320 v4

Table 4. R/V CHINOOK Equipment and Vessel Specifications

R/V CHINOOK	
Builder	Armstrong Marine
Design	Catamaran
Length Overall	28'
Beam	10.5'
Draft, Maximum	2"
Cruising Speed	27 knots
Max Survey Speed	8.5 knots
Echosounders	Odom CV-100
Side Scan Sonar	Edgetech 4200-FS
Sound Velocity Equipment	Applied Microsystems Smart SV&P
Positioning & Attitude	SPS750 and SPS550, Trimble DSM132

There were no vessel or equipment configurations used during data acquisition that deviated from those described in the *S-K977-KR-07-DEA Data Acquisition and Processing Report (DAPR)*, submitted under a separate cover.

B2. Quality Control

Quality control is discussed in detail in Section B of the *S-K977-KR-07-DEA DAPR*. The results from the positioning system comparison and leadline to multibeam comparison may be found in Separate I *Logs* and the sound velocity profile sensor weekly evaluation table may be found in Separate II *Sound Speed Data*. Single beam data were reviewed at multiple levels of data processing including hydrographic information processing system (HIPS) conversion, line

editing, subset editing, and analysis of anomalies revealed in uncertainty surfaces. Side scan data were reviewed multiple times for contacts with reviews occurring: real-time during data acquisition, during contact verification and bottom tracking, and again during mosaic generation. Significant side scan contacts were compared to multibeam during HIPS subset editing and compared to anomalies in the multibeam data sun-illuminated imagery.

B2.a Crosslines

A total of 154 nautical miles of VBES crosslines were acquired, comprising 9% of the mainscheme hydrography. Crosslines were run perpendicular to mainscheme lines across the entire survey.

The mainscheme bathymetry was manually compared to crosslines in CARIS subset mode, as well as, compared to multibeam investigation lines by creating a difference surface. Crosslines agreed well with differences within tolerance for an International Hydrographic Organization (IHO) Order 1 survey. A statistical Quality Control Report was generated in CARIS HIPS by comparing all the crosslines to a two-meter uncertainty weighted surface. Beam number was selected for output results. Since a single beam echo sounder was used for both mainscheme and crossline bathymetry, all beam numbers are reported as "one". The quality control report is included in Separate IV *Crossline Comparisons*. The results of the analysis exceeded the requirements set in the NOS *Hydrographic Surveys Specifications and Deliverables (June 2006)*.

B2.b Uncertainty

Uncertainty values of all nodes of the unfinalized two-meter uncertainty surface, range from 0.254 meters to 0.278 meters. There are no areas within the survey that exceed 0.5 meters, the minimum allowable error value for S-44 IHO Order 1 surveys. The "greater of the two" option was selected during the finalization process in HIPS. As a result, the uncertainty of the finalized surface and associated Bathymetric Attributed Grids (BAGs) increased for nodes where the standard deviation of the node was greater than the uncertainty.

B2.c Junctions

Depths from survey H11684 were compared to depths from survey H11683 by concurrently viewing the two sounding sets with a difference surface in CARIS HIPS. Survey H11683 junctions well with this survey; the comparison indicates no discernable differences between the two sounding sets. **Concur.**

B2.d Sonar System Quality Control Checks

Quality control checks were performed on periodic basis as required by the NOS *Hydrographic Surveys Specifications and Deliverables (June 2006)*. Methodology can be found in S-K977-KR-07-DEA DAPR, submitted under separate cover. The results from the positioning system checks and leadline-to-sonar comparison are included in the Separate I *Logs*. Sound speed profiler weekly evaluation tables are included in the Separate II *Sound Speed Data*.

Single beam data converted into CARIS and reviewed in the Single Beam Line Editor and by analysis of anomalies revealed in the uncertainty surface and contours.

Side scan data were evaluated multiple times for contacts, with reviews occurring during data acquisition, contact verification and bottom tracking and again during mosaic generation. Side scan contacts were compared to multibeam developments in CARIS.

Multibeam data were processed and reviewed in CARIS HIPS. The multibeam and single beam data were reviewed together in CARIS HIPS Subset mode with single beam mainscheme data to check for consistency, and then draped over side scan mosaics to review for contacts and least depths determination.

B2.e Unusual Conditions or Data Degradation

There were no unusual conditions that degraded data quality.

B2.f Additional Factors Affecting Corrections to Soundings

There were no additional factors that affected data quality.

B2.g Object Detection and Coverage Requirements

Survey speeds were adjusted so that object detection requirements were exceeded throughout the survey

Demonstration of 200% side scan sonar coverage was achieved by producing separate 100% and 200% 50-centimeter mosaics. All survey holidays were filled prior to the end of survey operations.

The Field Sheet *H11684* was used for the geographic extents of both single beam data and multibeam data. A two-meter uncertainty weighted surface was generated to demonstrate coverage. Multibeam was acquired only for least depths determination on significant contacts. Additional high resolution, 50-centimeter Combined Uncertainty and Bathymetry Estimator (CUBE) surfaces were created to ensure features were accurately portrayed.

B3. Corrections to Echo Soundings

Data reduction procedures for survey H11684 are detailed in the *S-K977-KR-07-DEA DAPR*, submitted under a separate cover.

The survey area for H11684 contained numerous bearing production platforms. The associated piles were marked as “Examined” and not included in the finalized bathymetric sounding set after they were positioned. This was done to ensure that the generated surface portrayed the true sea floor.

B3.a Deviations from DAPR

There are no deviations from the *S-K977-KR-07-DEA DAPR*.

B3.b Additional Calibration Tests

No additional calibration tests were required for this survey.

B4. Data Processing (Data Representation)

B4.a Single Beam

A single, two-meter uncertainty weighted surface of the single beam data is delivered with the complete single beam data set.

B4.b Multibeam

Final CUBE surface resolutions and depth ranges were set in accordance with the NOS *Hydrographic Surveys Specifications and Deliverables (June 2006)*. To accurately portray significant features, three high resolution 50-centimeter CUBE surfaces were created using three Field Sheets (*H11684_MBES_1of3*, etc.). When combined the three Field Sheets encompass the entire area of acquired multibeam bathymetry.

C. VERTICAL AND HORIZONTAL CONTROL

A complete description of horizontal and vertical control for survey H11683 can be found in the *S-J977-KR-07-DEA Horizontal and Vertical Control Report*, submitted under separate cover. A summary of horizontal and vertical control for this survey follows.

C1. Vertical Control

The vertical datum for this project is Mean Lower Low Water (MLLW). The operating NWLON station at Pilots Station East, SW Pass, LA (8760922) served as control for datum determination. The water level station is incorrectly listed as being in Mississippi in section 1.3.1 of the *S-K977-KR-07 SOW*. Data were reduced in CARIS HIPS using the zone definition file (ZDF) K977KR2007CORP. *See Evaluation Report.*

C2. Discussion of Tide Zoning

Tides were evaluated by visually comparing crosslines and adjacent lines in CARIS Subset. Tidal zoning is based on the primary water level station at Pilot Station East, LA (8760922) located near the southern extent of H11684 where South West Pass meets the Mississippi Delta.

C3. Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83). Position data consists of both geographic and projected coordinates. Projected coordinates are in meters using the Universal Transverse Mercator (UTM) Zone 16 projection. Differential Global Positioning System (DGPS) was the sole method of positioning, with differential corrections received from the U.S. Coast Guard beacon at English Turn, Louisiana (broadcast site ID 814 at 293 kilo Hertz).

No DGPS outages were experienced during the survey.

D. RESULTS AND RECOMMENDATIONS

D1. Chart Comparison

D1.a Survey Agreement with Chart

During the course of data acquisition and processing, H11684 was compared to the largest scale raster and electronic navigation charts (ENC). The results of these comparisons are described below, as well as in Sections D.2b through D.2f of this report.

A sounding plot for H11684 was created from the finalized, two-meter uncertainty surface in CARIS Field Sheet Editor. Contours were generated using a 30-meter uncertainty weighted surface exported from CARIS. Contours and soundings were created solely for comparison purposes and are not submitted as a final deliverable. In addition, for each multibeam investigation a CUBE field sheet was created. These field sheet were used to correlate the multibeam least depths to the side scan contact in the side scan contact database and are not submitted as a final deliverable.

H11684 contours and soundings were compared in CARIS HIPS to the depths and contours on the charts listed in Table 5.

Table 5. Charts compared to H11684

RNC Name	RNC Scale	RNC Edition	RNC Edition Date	RNC Issue Date	RNC Latest NtM	USCG Cleared Through Date	ENC Name	ENC Issue Date
11361_1	1:80,000	74	9/1/07	1/12/08	1/8/08	1/22/08	US4LA33M US4LA30M	1/9/08

H11684 depths were compared to the charted soundings on Chart 11361_1 and the corresponding ENCs: US4LA33M and US4LA30M. Although depths on the raster and corresponding electronic were identical, there is a noticeable difference between the agreement of the current survey depths and the ENC.

Depths from survey H11684 are generally two feet to six feet deeper than ENC US4LA33M, with difference increasing to the east. The current survey is approximately one to two feet deeper than ENC US4LA30M. The hydrographer thoroughly examined the results of the weekly leadline-to-sonar comparisons in order to determine if the difference between the charted depth and the current survey may have been a result of the unaccounted offset. No systematic offset was observed between the leadline and sonar. The single beam data was also examined against the multibeam data with differences averaging less than 0.05 meters. The hydrographer believes the deepening trend to be the result of the transitional nature of the river delta.

The latest electronic and raster versions of Chart 11361 were reviewed to ensure that all U.S. Coast Guard Local Notice to Mariners (LNM) issued during survey acquisition were applied to the largest scale charts and addressed by this survey. LNM were issued for all submitted dangers to navigation, however only the electronic versions of the charts have been updated with submitted dangers to navigation (Dtons). *The RNCs have since been updated.*

D1.b Comparison to Significant Shoals

Survey area H11684 does not contain any significant shoals. *Concur.*

D1.c Comparison to Charted Features

A unique item investigation number was assigned by DEA personnel to each of the 119 charted features (CF) contained in survey H11684. The charted feature designation was done to aid in tracking features during data acquisition and processing and to simplify reporting. These numbers are used throughout this report, designated by an item number. A copy of the tracking sheet is included in Appendix V *Supplemental Survey Records and Correspondence*. The data is also provided in a drawing exchange file (DXF) file format and included in the digital data accompanying this report.

The charted features included forty-three 43 platforms, 8 position approximate (PA) items 2 aids to navigation and 66 reported obstructions.

Charted Reported Obstructions:

The ENC US4LA33M contains 66 discreet features charted as reported (REP) in the area common to H11684. The corresponding raster Chart 11361, simply notes “Obstructions rep 2006” and “Obstructions reported 2005.” These features correspond to DEA CF #4 through DEA CF #69. All 66 reported obstructions (Figure 2) were disproved with 200% side scan sonar. The hydrographer recommends removing these obstructions from the charts. *Concur.*

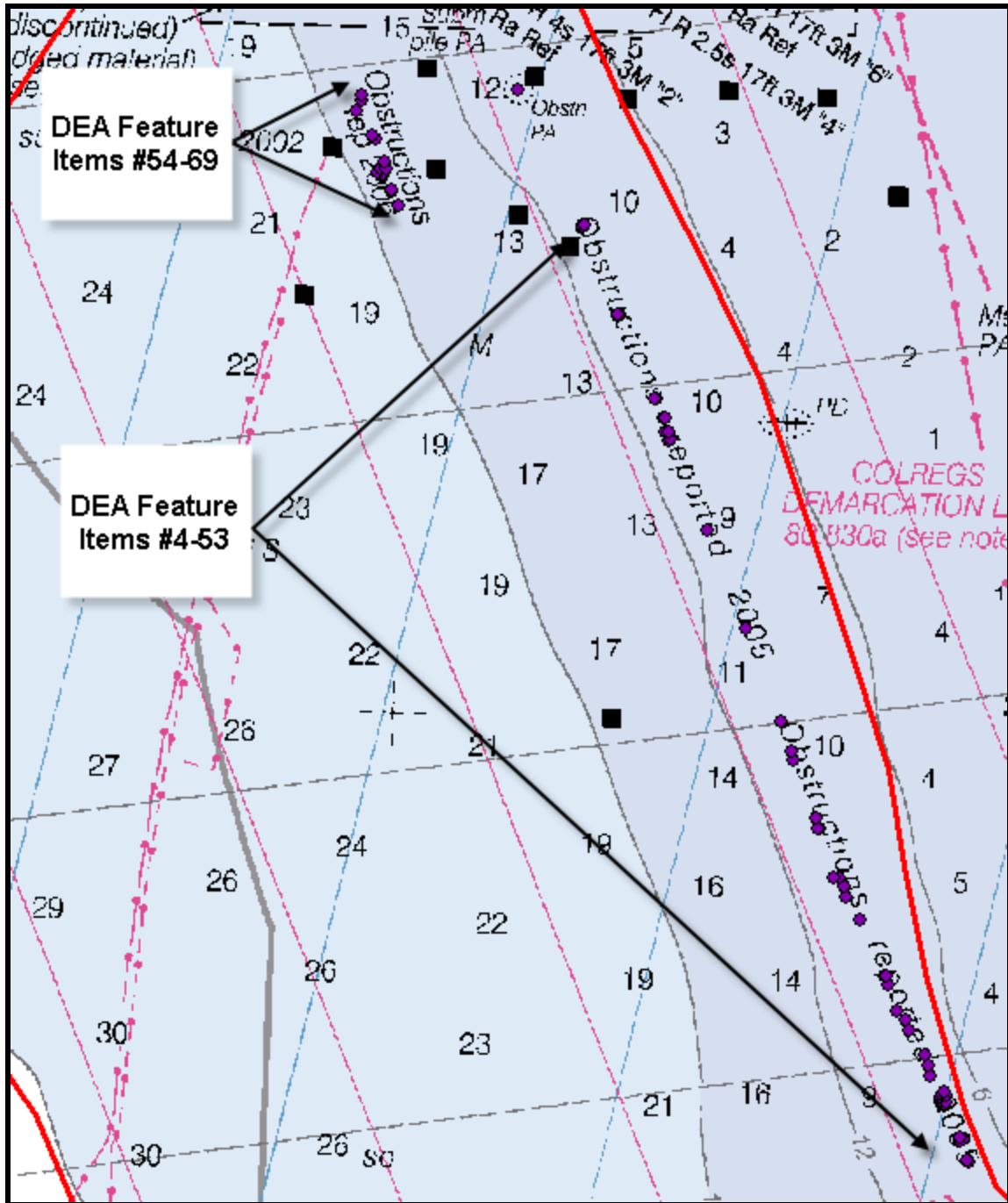


Figure 2. H11684 Disproved Obstructions

Charted Position Approximate Features:

- The Obstn PA (DEA CF # 71) at 29-07-58.227N, 89-26-56.539W was disproved with 200% side scan sonar. The Hydrographer recommends removing the annotation and danger symbol from the chart. **Concur.**

- The Obstrn PA (DEA CF # 70) at 29-07-42.002N, 89-26-51.38W was disproved with 200% side scan sonar. The Hydrographer recommends removing the annotation and symbol from the chart. **Concur.**
- All ~~six~~ **seven** wrecks on H11684 are charted as position approximate (DEA CF #164-169). All wrecks (Table 6) were disproved with 200% side scan sonar. The Hydrographer recommends removing the annotations and symbols from the chart. **Concur.**

Table 6. Disproved PA Wrecks

TARGET	Charted Latitude (DMS)	Charted Longitude (DMS)	Source	Status	Contacts
164	28-58-19.586N	89-25-58.538W	US4LA30M	Disproved-Wreck Mast PA	N/A
165	29-01-02.001N	89-24-17.509W	US4LA30M	Disproved-Wreck PA	N/A
166	29-00-59.147N	89-24-04.629W	US4LA30M	Disproved-Wreck PA	N/A
167	29-01-26.478N	89-23-27.214W	US4LA30M	Disproved-Wreck PA	N/A
168	29-03-28.57N	89-26-15.093W	US4LA33M	Disproved-Wreck PA	N/A
169	29-06-10.344N	89-28-17.303W	US4LA33M	Disproved-Wreck PA	N/A
	29-01-03.11N	089-24-05.79W	US4LA33M	Disproved- Wreck PA	N/A

The hydrographer recommends removing all disproved items from the charts. **Concur.**

D1.d Comparison of Soundings in Designated Anchorages and Along Channels

There are no anchorage grounds in survey H11684.

A small section of Bar Channel, which leads to Tiger Pass, is included in H11684 survey area. H11684 survey depths in the maintained channel range from 13 feet to 22 feet; deeper than the charted maintained centerline depth of nine feet.

D1.e Automated Wreck and Obstruction Information System (AWOIS) Investigations

There are no assigned AWOIS items located within the limits of survey H11684.

D1.f New Submerged Features

All significant submerged features located in H11684 were submitted to the Atlantic Hydrographic Branch (AHB) as DtoNs.

D1.g Dangers to Navigation

Eight (8) DtoNs were located in survey H11684 and submitted to AHB. The original DtoN submission package is included in Appendix I *Danger to Navigation Reports*. Additional correspondence related to DtoNs is included in Appendix V *Supplemental Survey Record and Correspondence*.

All of the least depths submitted in the Dton submissions were preliminary and reduced to MLLW using unverified water levels. Since submission, the Dtons have been reduced to MLLW with zoned verified water levels. All Dtons are included in the S-57 feature file and should be charted as depicted in the file.

With the exception of DEA submitted Dton #1, the raster chart has not been updated with H11684 submitted dangers; however, the electronic versions of the chart have been updated (Table 7). *The RNCs have since been updated.*

Table 7. H11684 Dton Charting Status

Dton	Surveyed Latitude (DMS)	Surveyed Longitude (DMS)	Feature	Applied to Raster Chart	Applied to ENC	AHB Submitted to MCD	Local Notice to Mariners Edition
Dton 1	29-00-52.4664N	089-23-43.1303W	Pile	11361_1	US4LA30m	Yes	47/07
Dton 2	29-08-44.268N	089-27-59.472W	Obstn	No	US4LA33m	Yes	50/07
Dton 3	29-07-26.0754N	089-27-09.8994W	Obstn	No	US4LA33m	Yes	50/07
Dton 4	29-06-00.000N	089-26-53.556W	Obstn	No	US4LA33m	Yes	50/07
Dton 5	29-01-54.0114N	089-24-41.3274W	Obstn	No	US4LA30m	Yes	50/07
Dton 6	29-02-32.7834N	089-26-49.1634W	Obstn	No	US4LA30m	Yes	50/07
Dton 7	29-02-37.1754N	089-25-13.9074W	Obstn	No	US4LA30m	Yes	50/07
Dton 8	29-02-31.9200N	089-25-15.7080W	Obstn	No	US4LA30m	Yes	50/07

D2. Additional Results

D2.a Shoreline Investigations

Shoreline verification was not required for survey H11684.

D2.b Comparison with Prior Surveys

Comparison with prior surveys was not required under this task order.

D2.c Aids to Navigation (AtoN)

The aid to navigation within H11684 survey limits were found to be correctly charted and serve their intended purpose.

D2.d Overhead Clearance

There are no overhead bridges, cables or other structures, which would impact overhead clearance in the survey area.

D2.e Cables, Pipelines and Offshore Structures

Cable Area

H11684 does not contain any cable areas.

Pipelines

Numerous pipelines were found in H11684 survey area. All pipelines that were exposed in the side scan record were reported to the Regional Navigation Manager, Tim Osborn and NOAA.

Offshore Structures: Production Platforms

Numerous oil production platforms are concentrated in H11684 survey area. The submitted S-57 feature file contains all new and verified platforms contained within the survey area. The positions of verified charted platforms are from the ENC's.

In addition to the required verification or disproof of all the charted offshore platforms in the survey area, NOAA's Marine Chart Division requested that DEA verify or disprove platforms from additional sources¹. To do this, NOAA supplied spreadsheets listing platforms as positioned by the Mineral Management Services (MMS) and the United States Coast Guard (USCG).

DEA deconflicted the platforms NOAA provided with the platforms located on Chart 11361. There was one additional feature not found of the chart; a platform from the USCG database. All platforms were then assigned a unique item investigation number by DEA personnel and added to the master feature tracking spreadsheet along with the location source. This spreadsheet is included in Appendix V *Supplemental Survey Record and Correspondence*.

Charted Production Platforms

Thirty-four (34) charted platforms were verified by H11684 shown in Table 8. All were charted correctly.

Table 8. Verified Charted Production Platforms

DEA Feature ID	Charted Latitude (DMS)	Charted Longitude (DMS)	Source	Contacts
75	29-00-48.679N	89-23-41.391W	US4LA30M	246-191822-S,246-203800-S,265-210625-P,
76	29-00-50.087N	89-23-28.975W	US4LA30M	246-172657-P,265-194842-S
77	29-01-02.5N	89-24-31.126W	US4LA30M	255-150532-S,255-163204-P, 267-155503-S
78	29-01-03.209N	89-23-42.108W	US4LA30M	247-133854-S, 265-232921-P,265-234526-P, 270-164215-P

¹See Appendix V - Supplemental Records and Correspondence-Crescent Moegling (personal communication, August 02, 2007) Re: Platforms in GOM.

DEA Feature ID	Charted Latitude (DMS)	Charted Longitude (DMS)	Source	Contacts
79	29-01-07.918N	89-24-31.73W	US4LA30M	255-164023-S, 267-160422-P
80	29-01-09.588N	89-23-41.744W	US4LA30M	260-172322-S,260-173915-S,266-123721-P
81	29-01-28.409N	89-24-56.711W	US4LA30M	242-134332-P,260-131300-P,267-210853-P
82	29-01-30.522N	89-25-23.74W	US4LA30M	240-191658-P,253-211631-S,240-160622-S
83	29-01-34.439N	89-25-12.41W	US4LA30M	241-163543-P,254-162059-S,254-164235-S
84	29-01-41.862N	89-23-38.112W	US4LA30M	260-135945-P,260-140026-P,266-161349-P
85	29-01-44.998N	89-23-15W	US4LA30M	260-172939-P,266-124319-P,266-124720-P,266-124729-S
86	29-01-50.74N	89-25-42.391W	US4LA30M	246-160823-P,246-180411-P,253-181423-P
87	29-02-01.388N	89-23-55.277W	US4LA30M	255-172617-S,267-162810-S
88	29-02-02.789N	89-24-33.279W	US4LA30M	243-172818-P,255-211435-P,260-132028-P
89	29-02-02.789N	89-23-31.898W	US4LA30M	255-152744-P,266-171108-S,266-174306-S,270-163225-P
90	29-02-03.152N	89-23-41.035W	US4LA30M	255-145547-S,255-162211-P,267-154446-S
92	29-02-09.531N	89-23-31.898W	US4LA30M	255-144712-P,266-175013-P
95	29-02-13.999N	89-23-58.992W	US4LA30M	255-184050-S,267-180751-P
96	29-02-14.492N	89-24-50.134W	US4LA30M	243-130811-S,243-150807-S,270-210012-S,271-152225-P
97	29-02-15N	89-24-03.003W	US4LA30M	255-185818-S,255-185316-S,255-203603-P,260-185025-P
99	29-02-22.653N	89-24-29.282W	US4LA30M	243-215232-S,245-211114-S,267-193930-P
100	29-02-31.171N	89-24-04.424W	US4LA30M	267-182220-S,269-123723-P,269-123916-P,270-135113-S,270-154517-S
101	29-02-33.648N	89-26-07.249W	US4LA30M	246-190025-P,253-153929-P,253-162526-P,253-162525-P
102	29-02-33.778N	89-25-56.226W	US4LA30M	246-150344-P,253-190102-P
104	29-02-34.707N	89-24-51.213W	US4LA30M	243-171726-P,260-131555-S
105	29-02-35.754N	89-25-22.296W	US4LA30M	242-154000-P,267-211843-S,269-162854-P
106	29-02-39.811N	89-27-21.992W	US4LA30M	250-124646-P,250-135034-P,252-142341-S,252-142345-S,252-153504-S,271-210940-S,275-162902-S
107	29-02-46.41N	89-26-44.178W	US4LA30M	248-153350-P,252-135828-P
109	29-06-59.288N	89-27-39.744W	US4LA33M	241-181952-P,254-150423-S,255-131548-S
112	29-07-24.452N	89-27-09.767W	US4LA33M	243-160301-P,243-160253-P,261-131957-S,270-123441-S
113	29-7-29.06N	89-27-34.628W	US4LA33M	242-171422-S,269-174220-S,270-214901-P,270-233925-P
115	29-07-45.38N	89-27-12.676W	US4LA33M	243-181725-P,260-123146-P,255-220530-P
116	29-08-5.233N	89-27-06.098W	US4LA33M	244-123007-S
N/A	29-03-37.9296	089-28-20.5320W	US4LA33M	255-132810-S, 253-184156-S

- Production Platform (DEA Feature #75) is made up of three platforms connected by scaffolding. The platform extends beyond raster feature and is approximately 100 meters in length.

New Production Platforms:

Five (5) new platforms were found by H11684 and are listed in Table 9. The new platforms are submitted with the S-57 feature file.

Table 9. New Production Platforms

DEA Feature ID	Surveyed Latitude (DMS)	Surveyed Longitude (DMS)	Status	Contacts
N/A	29-02-08.398N	89-23-40.985W	Located 100 meters from disproved Production Platform DEA Feature #91	267-161516-S,255-162146-S
N/A	29-02-08.213N	89-24-14.345W	Oil Well	255-192901-P,255-191302-P
N/A	29-02-11.681N	89-23-28.298W	Located 103 meters from disproved Production Platform DEA Feature #93	255-144743-S,255-152855-P,266-174415-P
N/A	29-02-12.413N	89-24-39.014W	Located 60 meters from disproved Production Platform DEA Feature #94	243-172937-P, 260-131915-S,243-172054-P
N/A	29-02-36.265N	89-25-12.169W	New Feature, Production Platform, Near DTON7,	271-193706-P,242-202004-S, 242-182716-S,

Disproved Charted Production Platforms:

The following nine production platforms were disproved with 200% side scan sonar and visual search (Table 10).

Table 10. Disproved Charted Production Platforms

DEA Feature ID	Charted Latitude (DMS)	Charted Longitude (DMS)	Source	Status	Contacts
91	29-02-5.644N	89-23-38.839W	US4LA30M	Disproved, Located New Platform-90m from chd location	255-162146-S,267-161516-S
93	29-02-10.954N	89-23-25.307W	US4LA30M	Disproved, Located New Platform-103m from chd location	255-144743-S,255-152855-P,266-174415-P
94	29-02-11.39N	89-24-36.947W	US4LA30M	Disproved, Located New Platform-60m from chd location	243-172054-P,243-172937-P,260-131915-S
98	29-02-18.405N	89-23-37.367W	US4LA30M	Disproved	N/A
103	29-02-34.707N	89-26-12.718W	US4LA30M	Disproved	N/A
108	29-05-34.861N	89-26-26.977W	US4LA33M	Disproved	N/A
110	29-07-9.894N	89-26-38.314W	US4LA33M	Disproved	N/A
111	29-07-16.288N	89-26-51.111W	US4LA33M	Disproved	N/A
114	29-07-43.957N	89-26-47.81W	US4LA33M	Disproved-exposed pipeline	244-155848-P

- DEA charted platforms #91, #93 and #94 were disproved; however, new platforms were located in the vicinity. The new features are included in the S-57 feature file. The hydrographer recommends removing charted platform #91, #93 and #94 and adding the new platforms in the S-57 attributed positions. **Concur.**

United States Coast Guard (USCG):

USCG platform (DEA feature item #228) was disproved with 200% side scan sonar. This platform is not charted and, as such, no cartographic action is required. **Concur.**

D2.f Environmental Conditions and Scientific Significance

The survey area contains significant biomass in the water column which resulted in some biologic contacts. These contacts were disproved when comparing the corresponding 100% coverage.

Besides numerous production platforms on the survey area, H11684 does not contain areas of heightened scientific significance.

D.2.g. Construction Projects

No construction or dredging activities were observed during survey operations.

D2.h Bottom Characteristics

Thirty-one (31) bottom samples were collected for survey H11684. Bottom characteristics are attributed in the S-57 feature file. A table listing the position and description of obtained bottom samples is included in Appendix V *Supplemental Survey Records and Correspondence*, along with photographs of each sample.

E. LETTER OF APPROVAL



DAVID EVANS
AND ASSOCIATES INC.

LETTER OF APPROVAL

S-K977-KR-07-DEA
REGISTRY NO. H11684

This report and the accompanying data are respectfully submitted.

Field operations contributing to the accomplishment of survey H11684 were conducted under my direct supervision with frequent personal checks of progress and adequacy. This report and associated data have been closely reviewed and are considered complete and adequate as per the *Statement of Work*.

Jonathan L. Dasler, PE (OR) , PLS (OR,CA)
Lead Hydrographer

Jason Creech
Lead Hydrographer

David Evans and Associates, Inc.
October 2007

APPENDIX I
DANGER TO NAVIGATION RECORDS

From: Helen Stewart [Helen.Stewart@noaa.gov]
Sent: Monday, September 24, 2007 12:36 PM
To: mcd.dton@noaa.gov; Helen.Stewart@noaa.gov; Castle.E.Parker@noaa.gov;
Jason Creech; Robert.Newton@noaa.gov; Stephen.Gottschalk@noaa.gov
Subject: Re: DTONS for H11683 and H11684

Attachments: H11683_DTONS_1_thru_5.zip; H11684_DTON_1.zip

Once more, with attachments this time.

Helen

Helen Stewart wrote:

> Greetings,
>
> Attached are two .zip files containing AHB-reviewed DTON information
> for DEA surveys H11683 and H11684. These surveys are part of the Gulf
> Coast Debris Mapping Program. Five DTONS are submitted for H11683.
> One DTON is submitted for H11684.

H11684 DTON 1

Registry Number: H11684
State: Louisiana
Locality: Gulf of Mexico
Sub-locality: Little Red Pass to West Bay
Project Number: S-K977-KR-07
Survey Date: 09/06/2007

The following DTON report addresses three piles awash in West Bay, LA.

Charts Affected

Number	Version	Date	Scale
11361	73rd Ed.	02/01/2006	1:80000
11366	10th Ed.	05/01/2006	1:250000
1115A	41st Ed.	03/01/2005	1:456394
11360	41st Ed.	03/01/2005	1:456394
1116A	71st Ed.	09/01/2006	1:458596
11340	71st Ed.	09/01/2006	1:458596
11006	32nd Ed.	08/01/2005	1:875000
411	51st Ed.	12/01/2006	1:2160000

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	GP	0.00 m	29° 00' 52.466" N	089° 23' 43.130" W	---

1 - Danger To Navigation

1.1) GP No. - 1 from H11684_dton1.xls**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 29° 00' 52.466" N, 089° 23' 43.130" W
Least Depth: 0.00 m
Timestamp: 2007-249.00:00:00.000 (09/06/2007)
GP Dataset: H11684_dton1.xls
GP No.: 1
Charts Affected: 11361_1, 11366_1, 1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1

Remarks:

Three awash pilings were located near charted oil platform approximately 10 meters northwest of charted oil platform.

Positions are referenced from the USCG DGPS beacon at English Turn, Louisiana. Horizontal Datum is North American Datum of 1983 (NAD83).

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11684_dton1.xls	1	0.00	000.0	Primary

Hydrographer Recommendations

Chart "Piles awash" in the present survey position.

Dton submission is preliminary. No survey data have been submitted to nor verified by AHB.

Cartographically-Rounded Depth (Affected Charts):

0ft (11361_1)

0fm (1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1)

0fm 0ft (11366_1)

S-57 Data

Geo object 1: Pile (PILPNT)
Attributes: CATPLE - 4:tripodal
 CONVIS - 2:not visual conspicuous

HEIGHT - 0 m

RECDAT - 20070921

SORDAT - 20070906

SORIND - US,US,surve,H11684

[Image file H:/SAR/NOT LOADED/INCOMING/H11684_DMP-S-K977-DEA/KR_DtoN/DtoN#1/AHB
DtoN/H11684_dton1_sss.JPG does not exist.]

[Image file H:/SAR/NOT LOADED/INCOMING/H11684_DMP-S-K977-DEA/KR_DtoN/DtoN#1/AHB
DtoN/H11684_dton1_chrt.JPG does not exist.]

[Image file H:/SAR/NOT LOADED/INCOMING/H11684_DMP-S-K977-DEA/KR_DtoN/DtoN#1/AHB
DtoN/H11684_dton1_sss2.JPG does not exist.]

H11684 DTONs 2 and 3

Registry Number: H11684
State: Louisiana
Locality: Gulf of Mexico
Sub-locality: Little Red Pass to West Bay
Project Number: S-K977-KR-07
Survey Date: 10/07/7

The following report contains information pertaining to two Dangers to Navigation for survey H11684.

Charts Affected

Number	Version	Date	Scale
11361	73rd Ed.	02/01/2006	1:80000
11366	10th Ed.	05/01/2006	1:250000
1115A	41st Ed.	03/01/2005	1:456394
11360	41st Ed.	03/01/2005	1:456394
1116A	71st Ed.	09/01/2006	1:458596
11340	71st Ed.	09/01/2006	1:458596
11006	32nd Ed.	08/01/2005	1:875000
411	51st Ed.	12/01/2006	1:2160000

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude
1.1	Obstruction	3.11 m	29° 07' 26.075" N	089° 27' 09.899" W
1.2	Obstruction	4.60 m	29° 08' 44.268" N	089° 27' 59.472" W

1 - Danger To Navigation

1.1) GP No. - 2 from DTON2_3_template.txt**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 29° 07' 26.075" N, 089° 27' 09.899" W
Least Depth: 3.11 m
Timestamp: 07-280.00:00:00.000 (10/07/0007)
GP Dataset: DTON2_3_template.txt
GP No.: 2
Charts Affected: 11361_1, 11366_1, 1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1

Remarks:

The feature is an obstruction of unknown type, resembling a segment of pipe, that rises approximately 2.74m (9 feet) from the natural sea floor. Soundings were corrected to MLLW using preliminary water levels from gauge 876-0922.

This DTON was submitted by contract field party David Evans and Associates (DEA) to Atlantic Hydrographic Branch for review.

Feature Correlation

Address	Feature	Range	Azimuth	Status
DTON2_3_template.txt	2	0.00	000.0	Primary

Hydrographer Recommendations

Chart a dangerous obstruction, least depth 10.2 feet, in the present survey position.

Cartographically-Rounded Depth (Affected Charts):

10ft (11361_1)
 1 ¾fm (1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1)
 1fm 4ft (11366_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 3.10896 m

WATLEV - 3:always under water/submerged

1.2) GP No. - 1 from DTON2_template.txt**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 29° 08' 44.268" N, 089° 27' 59.472" W
Least Depth: 4.60 m
Timestamp: 07-280.00:00:00.000 (10/07/0007)
GP Dataset: DTON2_template.txt
GP No.: 1
Charts Affected: 11361_1, 11366_1, 1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1

Remarks:

The feature is an obstruction of unknown type, resembling a segment of pipe, extending vertically into the water column. This obstruction rises approximately 4.4 feet (1.34m) from the natural sea floor. Depths were corrected to MLLW using preliminary water levels from gauge 876-0922.

This DTON was submitted by the contract field party David Evans and Associates to Atlantic Hydrographic Branch for review.

Feature Correlation

Address	Feature	Range	Azimuth	Status
DTON2_template.txt	1	0.00	000.0	Primary

Hydrographer Recommendations

Chart a dangerous obstruction, least depth 15 feet, in the present survey position.

Cartographically-Rounded Depth (Affected Charts):

15ft (11361_1)
 2 ½fm (1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1)
 2fm 3ft (11366_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: TECSOU - 2,3:found by side scan sonar,found by multi-beam
 VALSOU - 4.60248 m

WATLEV - 3:always under water/submerged

From: Stephen Gottschalk [Stephen.Gottschalk@noaa.gov]
Sent: Thursday, November 29, 2007 11:59 AM
To: mcd.dton@noaa.gov
Cc: Doug Baird; gene_parker; Jason Creech; Helen.Stewart@noaa.gov;
Robert.Newton@noaa.gov
Subject: H11684 Dtons 4 through 8, 5 obstructions, AHB to MCD submission

Attachments: H11684_dtons_4to8.zip; Card for Stephen Gottschalk

Good Day,

Please find attached a zip file concerning survey H11684 Dangers to Navigation 4 through 8 for submission to Marine Chart Division (MCD). The information submitted by the contractor is preliminary and has not been verified; the survey is ongoing and has not been submitted to AHB.

The contents of the attached WinZip file were generated at Atlantic Hydrographic Branch by the Contract Data Section. The attached zip file contains a Dton Letter (PDF) and a Pydro XML file.

If you have any questions, please direct them back to me.

Thank you,
Stephen Gottschalk

Registry Number: H11684
State: Louisiana
Locality: Gulf of Mexico
Sub-locality: Little Red Pass to West Bay
Project Number: S-K977-KR-07
Survey Dates: 10/06/2007 - 10/09/2007

Charts Affected

Number	Version	Date	Scale
11361	73rd Ed.	02/01/2006	1:80000
11366	10th Ed.	05/01/2006	1:250000
1115A	41st Ed.	03/01/2005	1:456394
11360	41st Ed.	03/01/2005	1:456394
1116A	71st Ed.	09/01/2006	1:458596
11340	71st Ed.	09/01/2006	1:458596
11006	32nd Ed.	08/01/2005	1:875000
411	51st Ed.	12/01/2006	1:2160000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	11 ft Obstruction #4	GP	3.41 m	29° 06' 00.000" N	089° 26' 53.556" W	---
1.2	9 ft Obstruction # 5	GP	2.83 m	29° 01' 54.011" N	089° 24' 41.327" W	---
1.3	2 ft Obstruction #6	GP	0.79 m	29° 02' 32.783" N	089° 26' 49.163" W	---
1.4	4 ft Obstruction #7	GP	1.40 m	29° 02' 37.175" N	089° 25' 13.907" W	---
1.5	14 ft Obstruction #8	GP	4.33 m	29° 02' 31.920" N	089° 25' 15.708" W	---

1 - DToNs

1.1) 11 ft Obstruction #4

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 06' 00.000" N, 089° 26' 53.556" W
Least Depth: 3.41 m
Timestamp: 2007-282.00:00:00.000 (10/09/2007)
GP Dataset: H11684_dtons_4to8.xls
GP No.: 1
Charts Affected: 11361_1, 11366_1, 1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1

Remarks:

Positions are referenced from the USCG DGPS beacon at English Turn, Louisiana. Horizontal Datum is North American Datum of 1983 (NAD83).

Depths were acquired with a Reson 8101 Multibeam Sonar. Depths are corrected using preliminary tides (876-0922).

The obstruction is 15.1 ft long and rises approximately 10.4 ft from the natural sea floor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11684_dtons_4to8.xls	1	0.00	000.0	Primary

Hydrographer Recommendations

Chart an 11 ft obstruction at the given location.

Cartographically-Rounded Depth (Affected Charts):

- 11ft (11361_1)
- 1 ¾fm (1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1)
- 1fm 5ft (11366_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 RECDAT - 20071129

SORDAT - 20071009

SORIND - US,US,surve,H11684

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 3.41376 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

The information contained within this report is preliminary. The survey data have not been received nor verified by AHB.

Feature Images

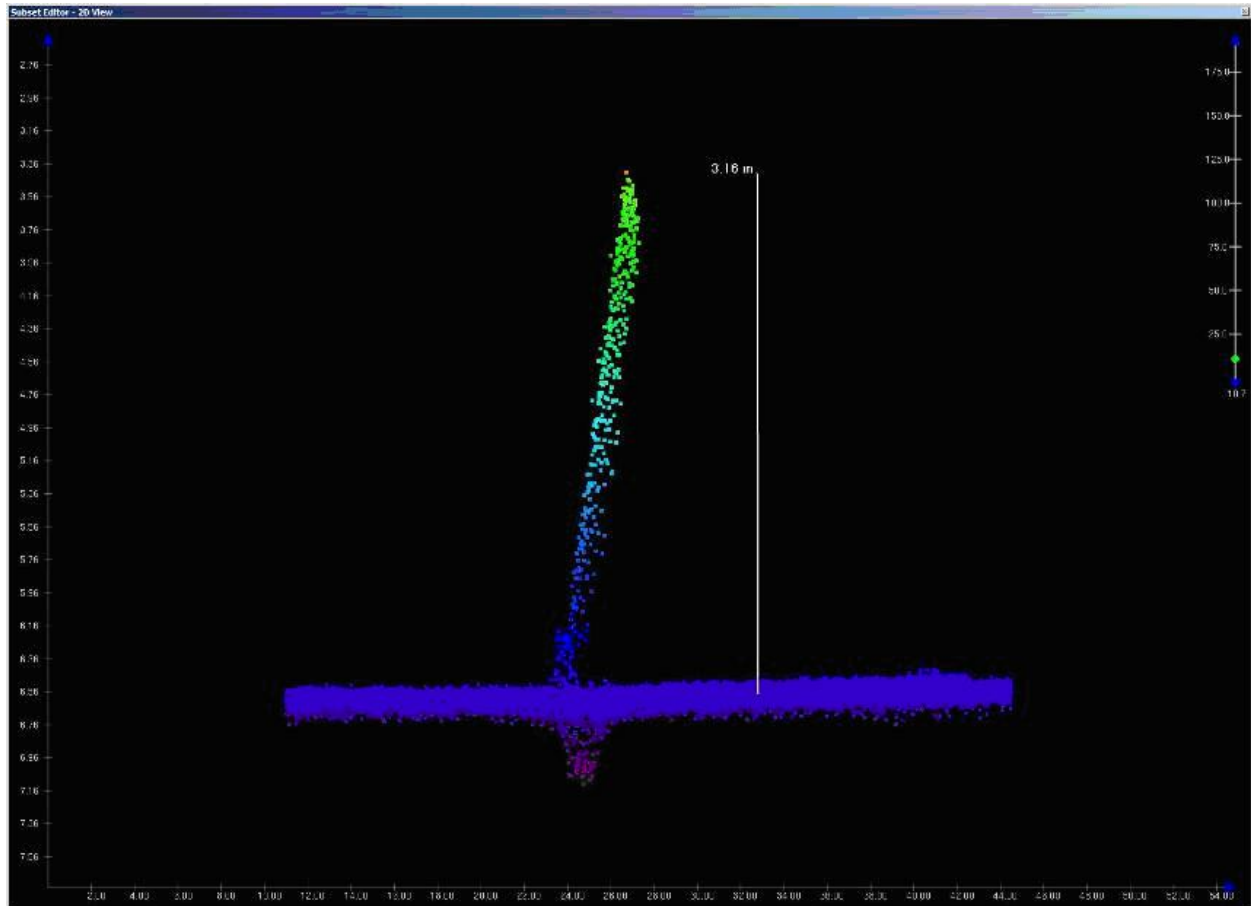


Figure 1.1.1

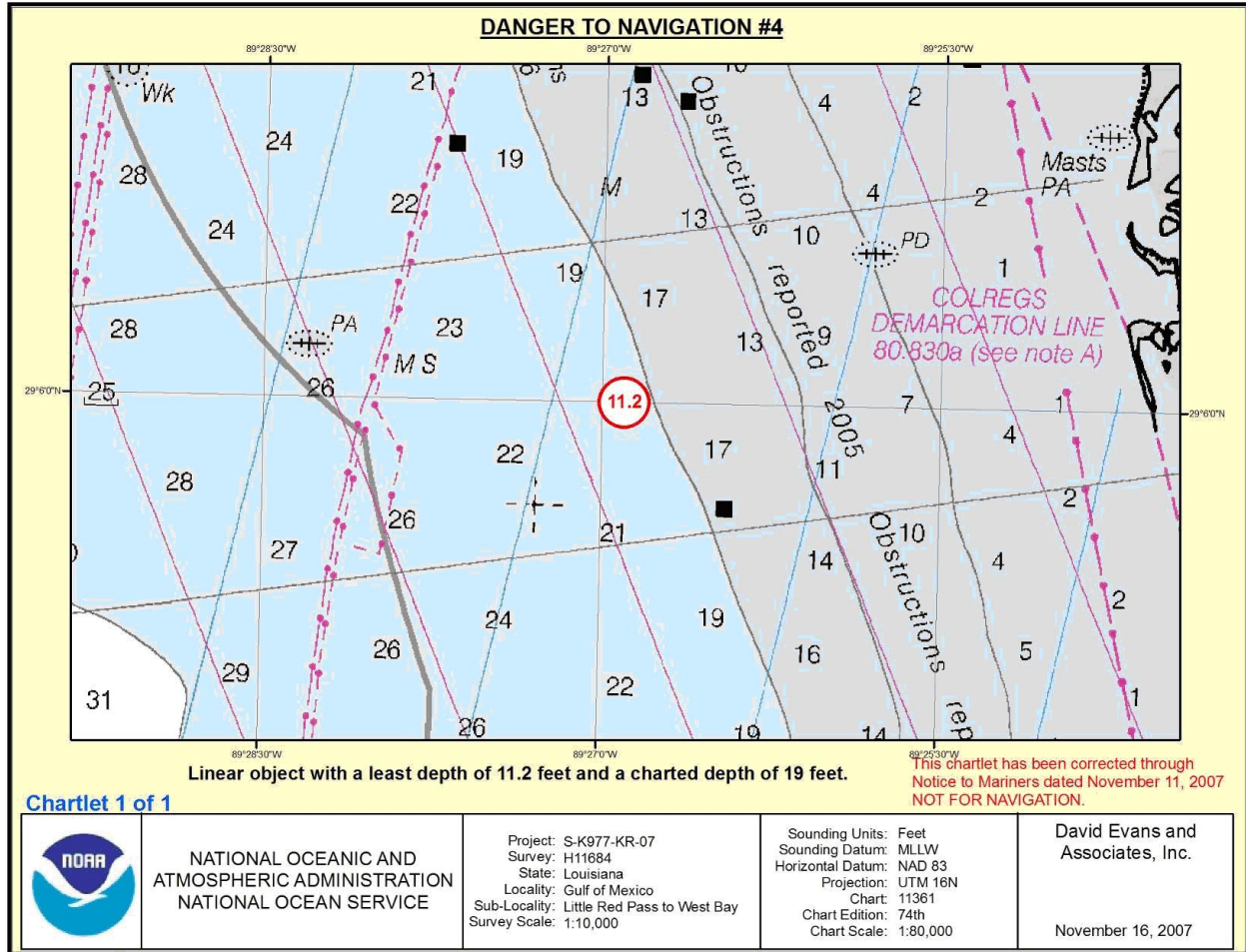


Figure 1.1.2

1.2) 9 ft Obstruction # 5

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 01' 54.011" N, 089° 24' 41.327" W
Least Depth: 2.83 m
Timestamp: 2007-279.00:00:00.000 (10/06/2007)
GP Dataset: H11684_dtons_4to8.xls
GP No.: 2
Charts Affected: 11361_1, 11366_1, 1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1

Remarks:

Positions are referenced from the USCG DGPS beacon at English Turn, Louisiana. Horizontal Datum is North American Datum of 1983 (NAD83).

Depths were acquired with a Reson 8101 Multibeam Sonar. Depths are corrected using preliminary tides (876-0922).

The obstruction is 7.5 ft long and rises approximately 3.5 ft from the natural sea floor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11684_dtons_4to8.xls	2	0.00	000.0	Primary

Hydrographer Recommendations

Chart a 9 ft obstruction at the given location.

Cartographically-Rounded Depth (Affected Charts):

9ft (11361_1)

1 ½fm (1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1)

1fm 3ft (11366_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 RECDAT - 20071129

SORDAT - 20071006

SORIND - US,US,surve,H11684

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 2.83464 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

The information contained within this report is preliminary. The survey data have not been received nor verified by AHB.

Feature Images

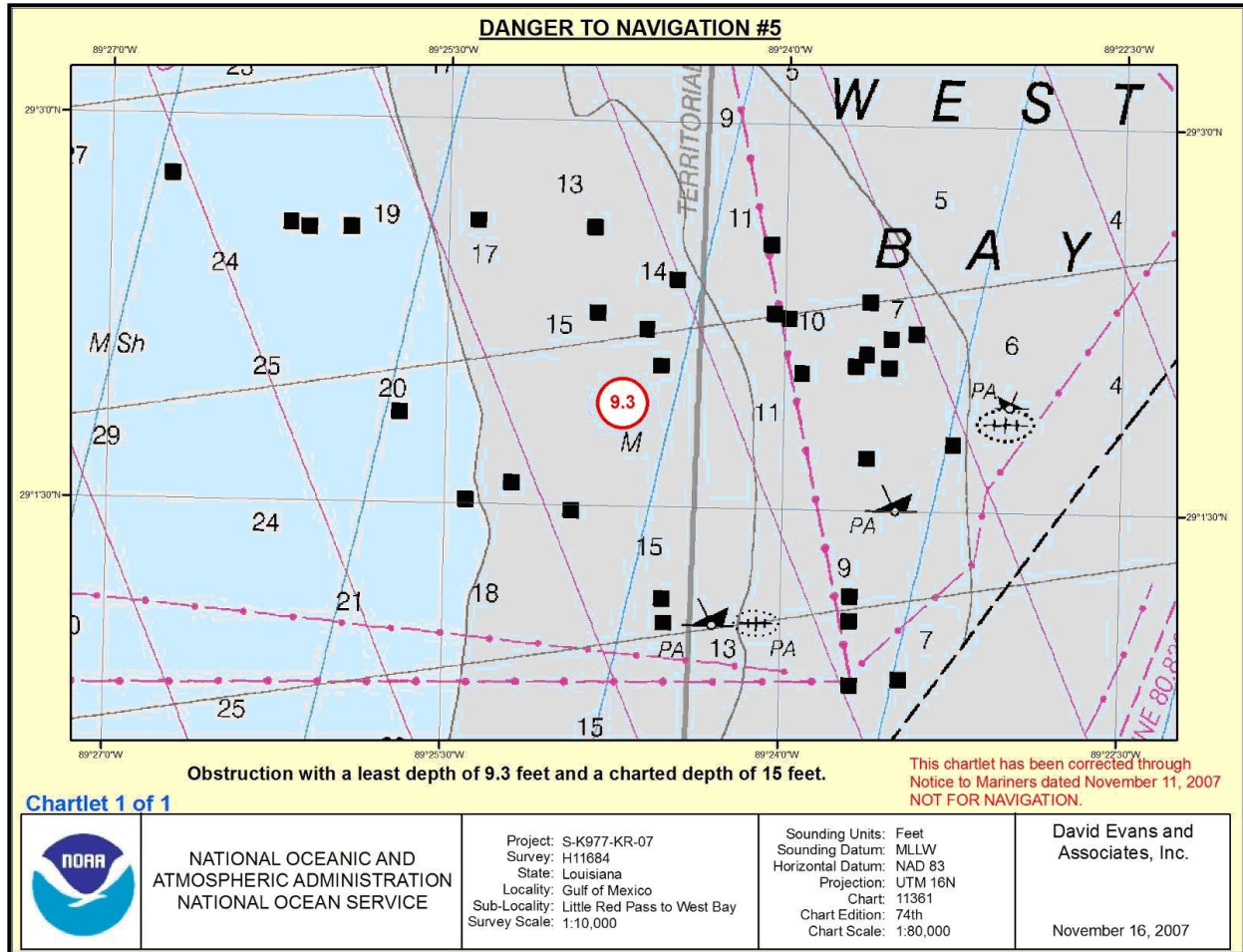


Figure 1.2.1

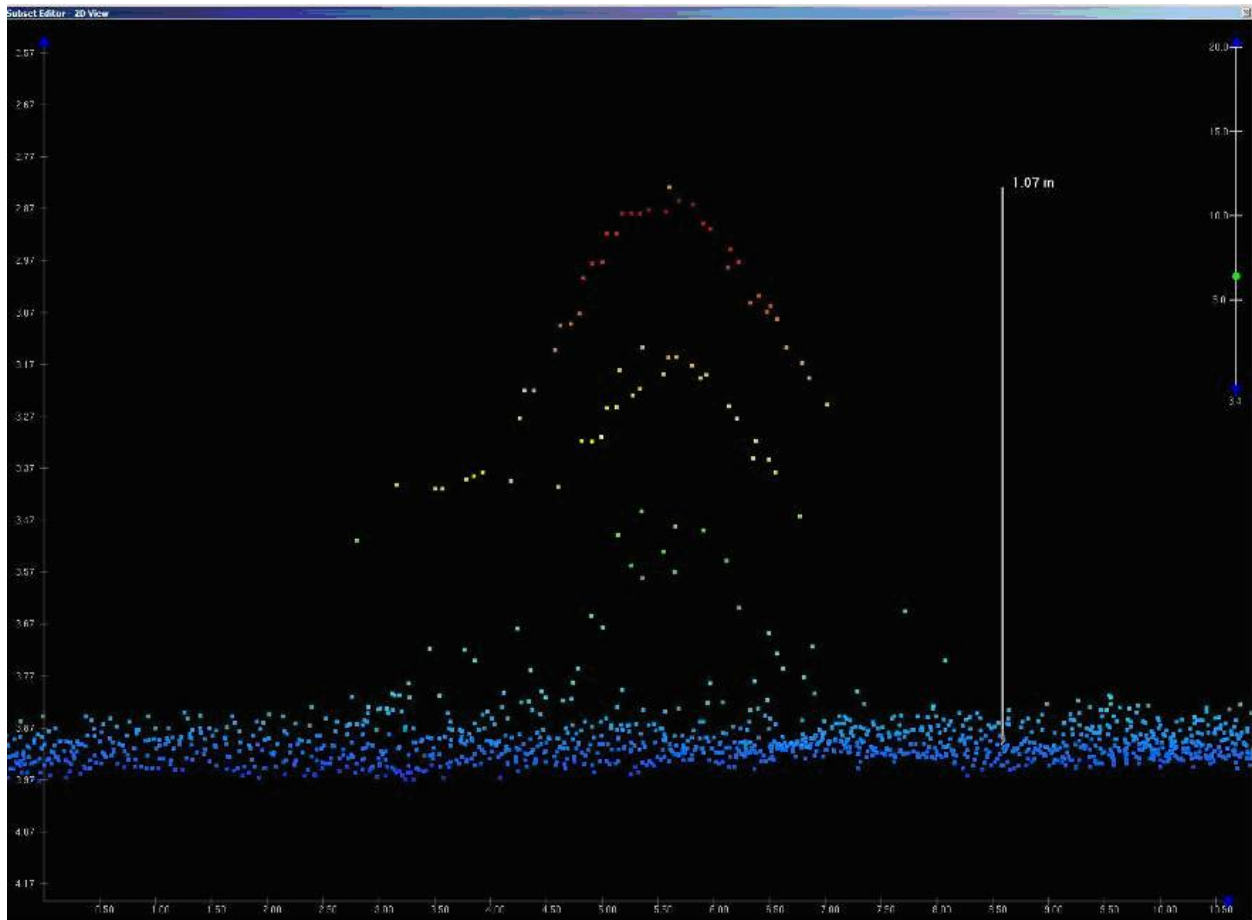


Figure 1.2.2

1.3) 2 ft Obstruction #6

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 02' 32.783" N, 089° 26' 49.163" W
Least Depth: 0.79 m
Timestamp: 2007-282.00:00:00.000 (10/09/2007)
GP Dataset: H11684_dtons_4to8.xls
GP No.: 3
Charts Affected: 11361_1, 11366_1, 1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1

Remarks:

Positions are referenced from the USCG DGPS beacon at English Turn, Louisiana. Horizontal Datum is North American Datum of 1983 (NAD83).

Depths were acquired with a Reson 8101 Multibeam Sonar. Depths are corrected using preliminary tides (876-0922).

The obstruction appears to be a fishing net that is 34 ft long, and anchored to the bottom and floating approximately 26 ft above the natural sea floor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11684_dtons_4to8.xls	3	0.00	000.0	Primary

Hydrographer Recommendations

Chart a 2 ft obstruction at the given location.

Cartographically-Rounded Depth (Affected Charts):

- 2ft (11361_1)
- 0 ¼fm (1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1)
- 0fm 2ft (11366_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known

RECDAT - 20071129

SORDAT - 20071006

SORIND - US,US,surve,H11684

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 0.79248 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

The information contained within this report is preliminary. The survey data have not been received nor verified by AHB.

Feature Images

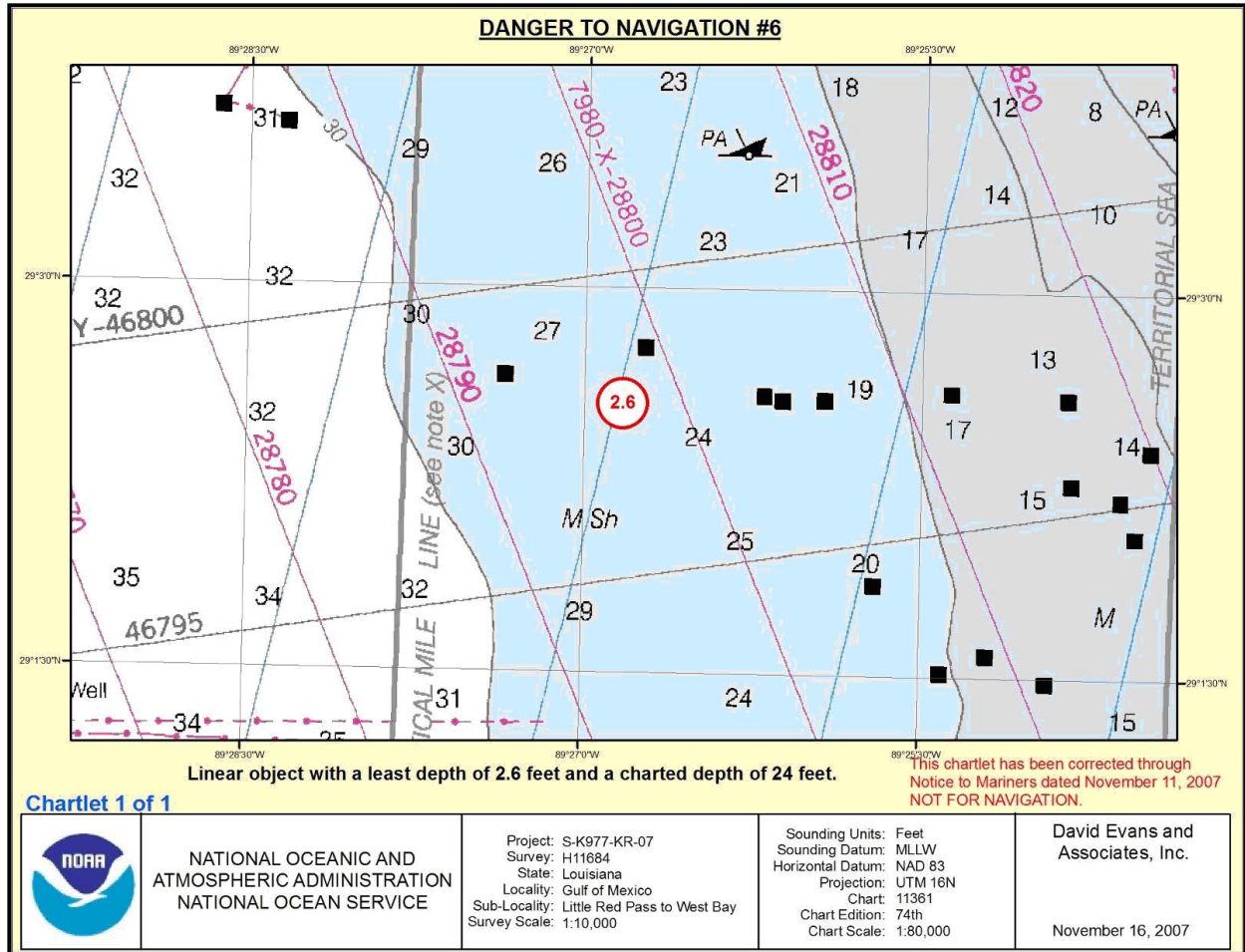


Figure 1.3.1

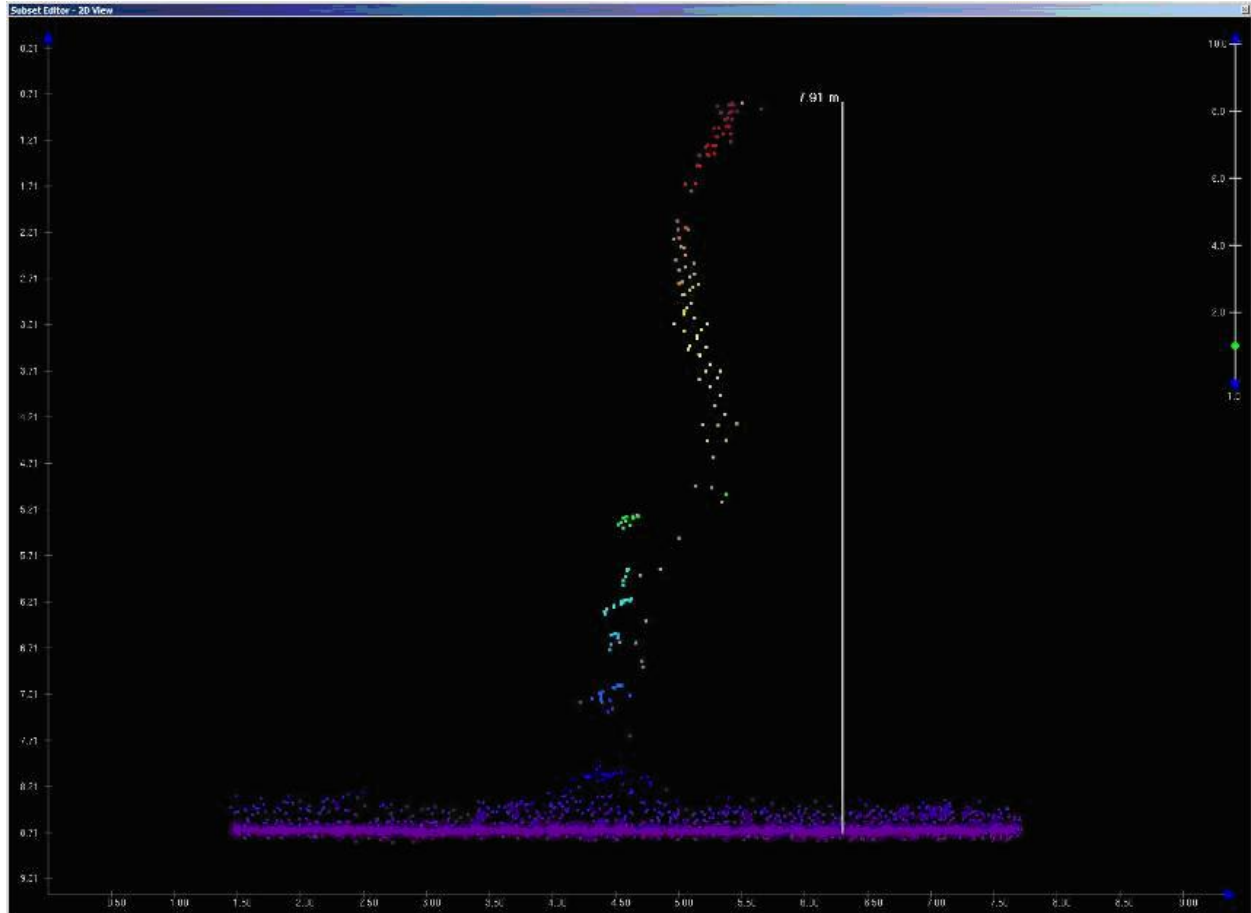


Figure 1.3.2

1.4) 4 ft Obstruction #7

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 02' 37.175" N, 089° 25' 13.907" W
Least Depth: 1.40 m
Timestamp: 2007-279.00:00:00.000 (10/06/2007)
GP Dataset: H11684_dtons_4to8.xls
GP No.: 4
Charts Affected: 11361_1, 11366_1, 1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1

Remarks:

Positions are referenced from the USCG DGPS beacon at English Turn, Louisiana. Horizontal Datum is North American Datum of 1983 (NAD83).

Depths were acquired with a Reson 8101 Multibeam Sonar. Depths are corrected using preliminary tides (876-0922).

The obstruction is 13.1 ft long and rises approximately 12.7 ft from the natural sea floor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11684_dtons_4to8.xls	4	0.00	000.0	Primary

Hydrographer Recommendations

Chart a 4 ft obstruction at the given location.

Cartographically-Rounded Depth (Affected Charts):

- 4ft (11361_1)
- 0 ¾fm (1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1)
- 0fm 4ft (11366_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known
 RECDAT - 20071129

SORDAT - 20071006

SORIND - US,US,surve,H11684

TECSOU - 2,3:found by side scan sonar,found by multi-beam

VALSOU - 1.40208 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

The information contained within this report is preliminary. The survey data have not been received nor verified by AHB.

Feature Images

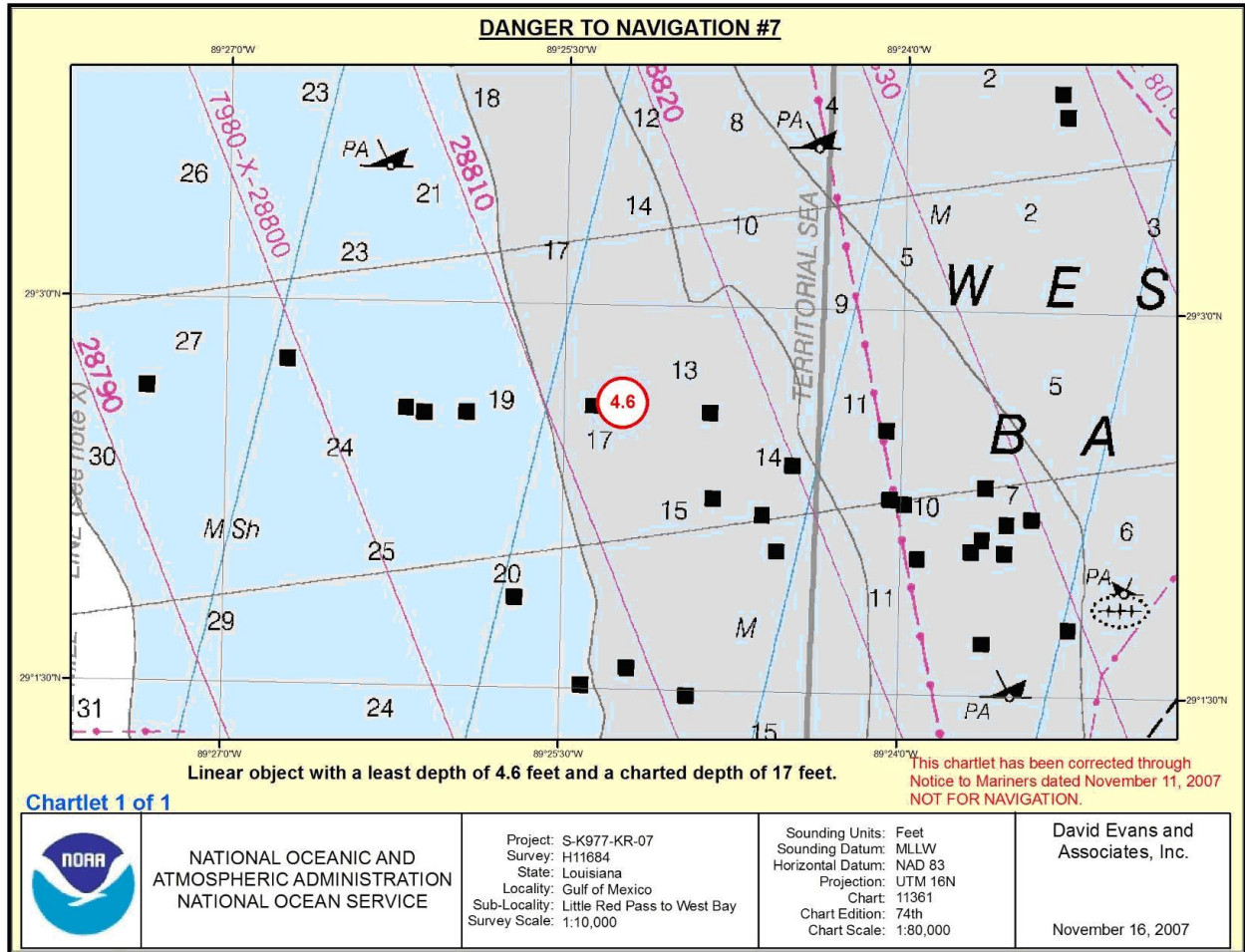


Figure 1.4.1

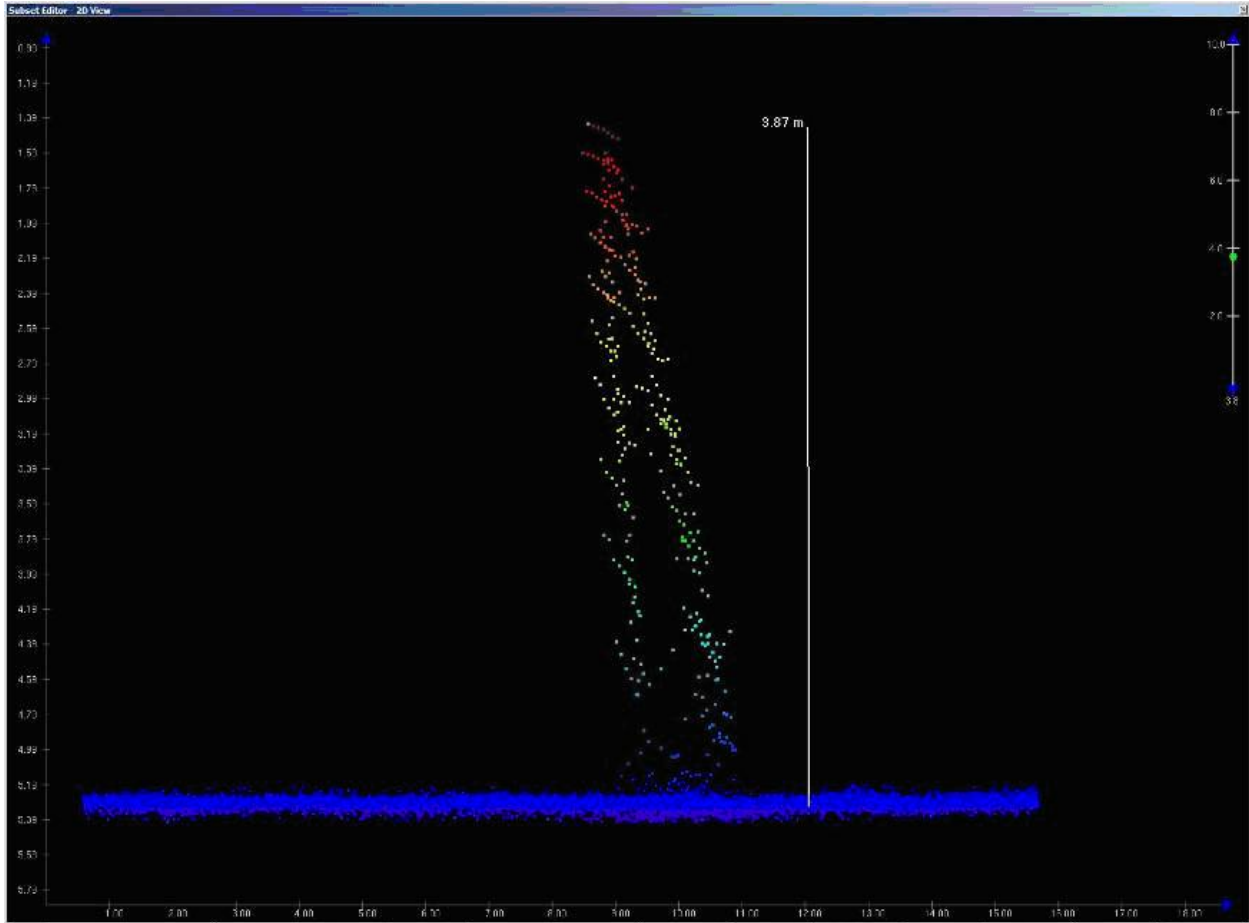


Figure 1.4.2

1.5) 14 ft Obstruction #8

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 02' 31.920" N, 089° 25' 15.708" W
Least Depth: 4.33 m
Timestamp: 2007-279.00:00:00.000 (10/06/2007)
GP Dataset: H11684_dtons_4to8.xls
GP No.: 5
Charts Affected: 11361_1, 11366_1, 1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1

Remarks:

Positions are referenced from the USCG DGPS beacon at English Turn, Louisiana. Horizontal Datum is North American Datum of 1983 (NAD83).

Depths were acquired with a Reson 8101 Multibeam Sonar. Depths are corrected using preliminary tides (876-0922).

The obstruction is 56 ft long and could be an exposed pipeline with what appears to be a ghost net rising approximately 3.5 ft from the natural sea floor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
H11684_dtons_4to8.xls	5	0.00	000.0	Primary

Hydrographer Recommendations

Chart a 14 ft obstruction at the given location.

Cartographically-Rounded Depth (Affected Charts):

- 14ft (11361_1)
- 2 ¼fm (1115A_1, 11360_1, 1116A_1, 11340_1, 11006_1, 411_1)
- 2fm 2ft (11366_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 6:least depth known

RECDAT - 20071129
SORDAT - 20071006
SORIND - US,US,surve,H11684
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 4.32816 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

The information contained within this report is preliminary. The survey data have not been received nor verified by AHB.

Feature Images

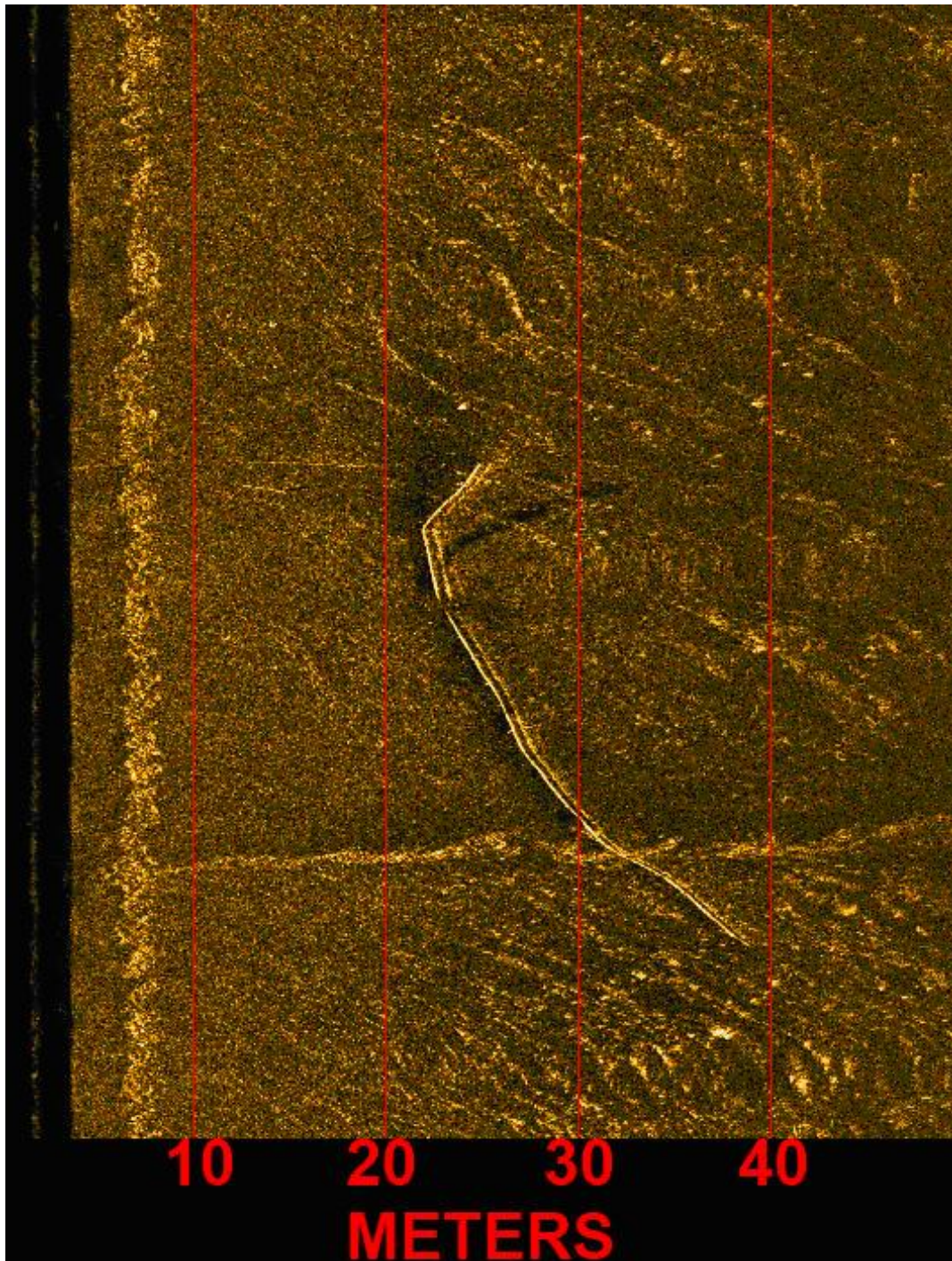


Figure 1.5.1

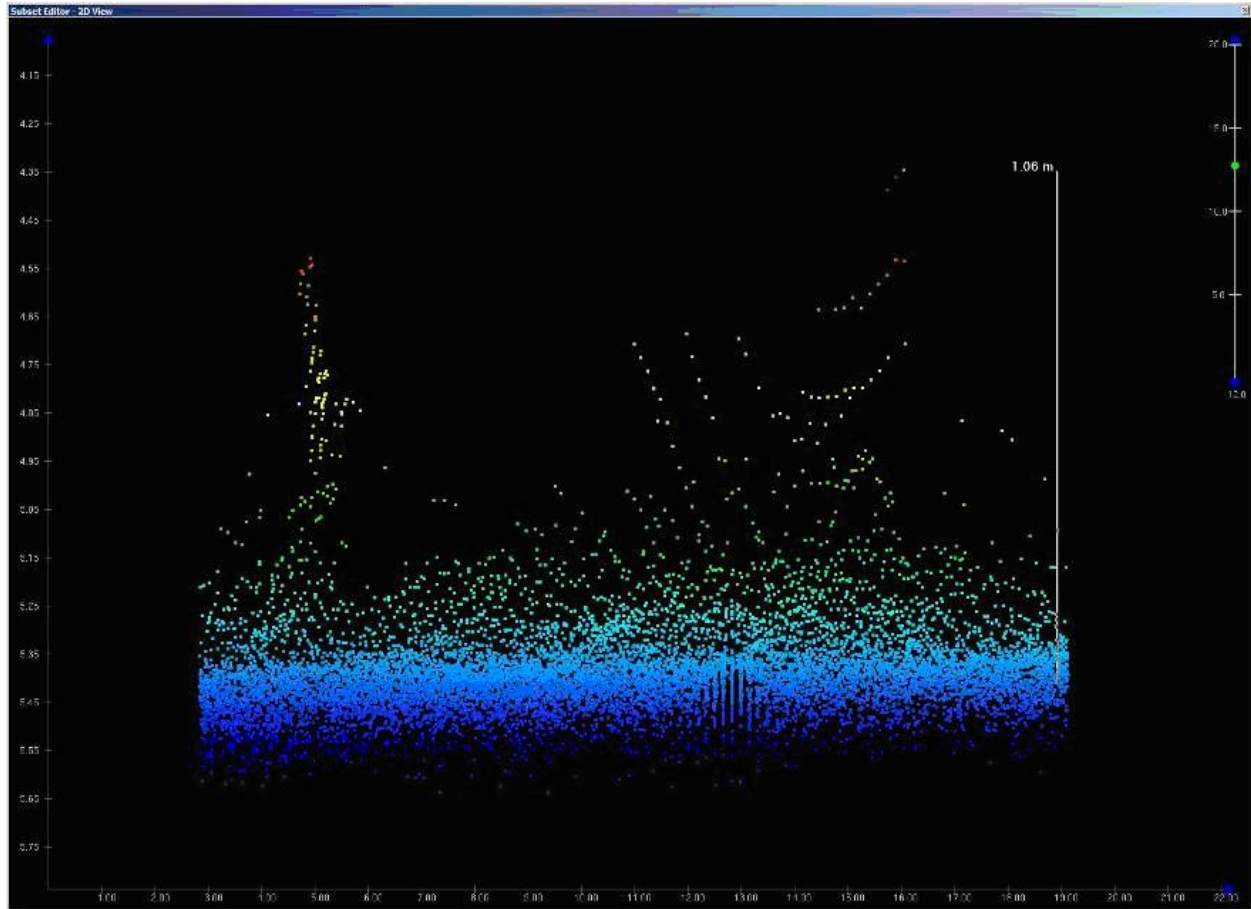


Figure 1.5.2

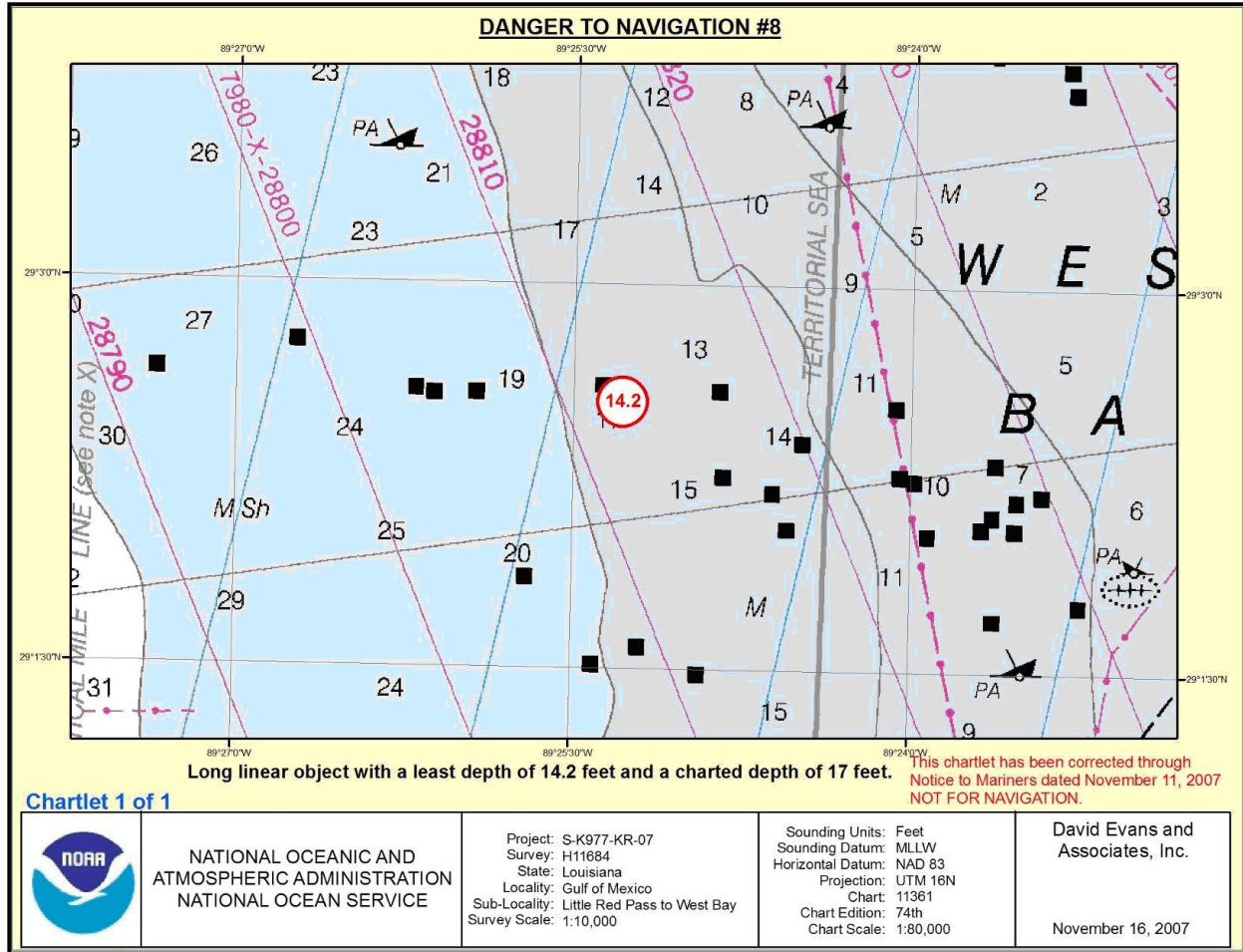


Figure 1.5.3

APPENDIX II
SURVEY FEATURE REPORT

NOT APPLICABLE

APPENDIX III
FINAL PROGRESS SKETCH AND SURVEY OUTLINE

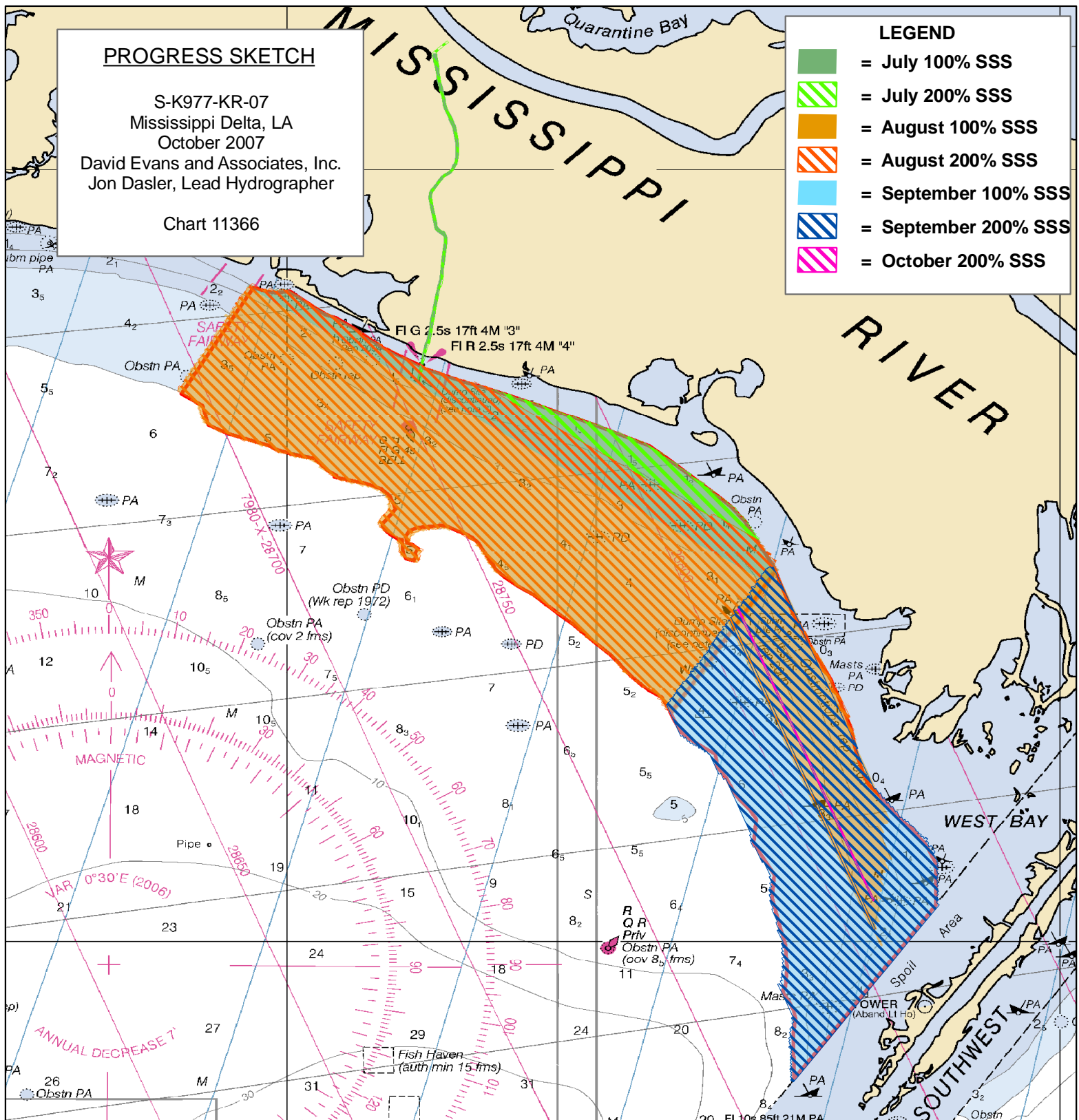
PROGRESS SKETCH

S-K977-KR-07
 Mississippi Delta, LA
 October 2007
 David Evans and Associates, Inc.
 Jon Dasler, Lead Hydrographer

Chart 11366

LEGEND

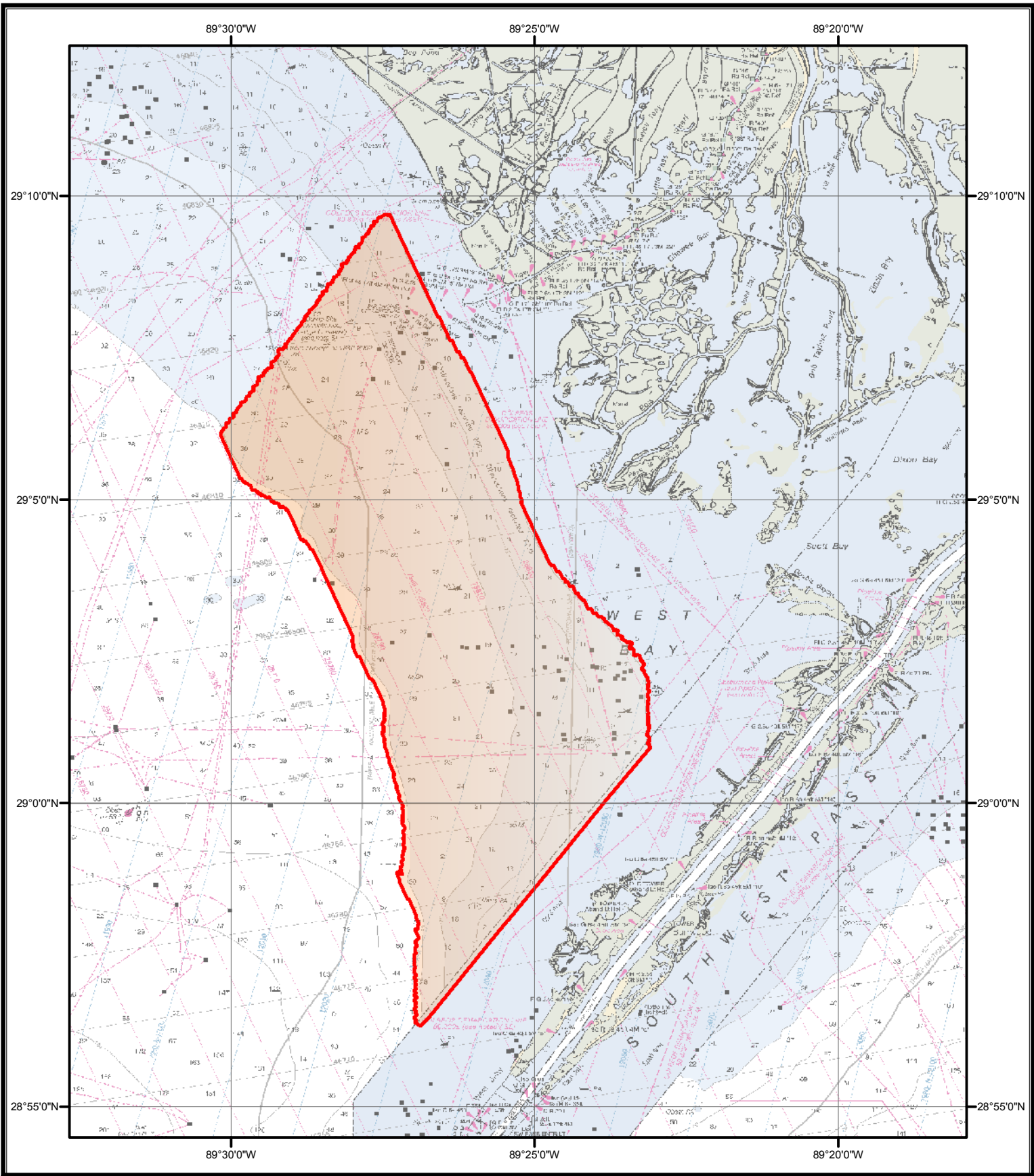
- = July 100% SSS
- = July 200% SSS
- = August 100% SSS
- = August 200% SSS
- = September 100% SSS
- = September 200% SSS
- = October 200% SSS



Sheet	Reg No	Started	Percent	Completed	Submitted	SQ NM
Empire Channel		7/5/2007	100.0%	10/2/2007		0.00
A	H11683	7/9/2007	100.0%	10/9/2007		0.00
B	H11684	7/20/2007	100.0%	10/9/2007		0.13

Down time	July	August	September	October
Weather - Day	11.8	9.0	9.6	3.7
Equipment - Day	1.8	1.1	0.0	0.0
Other - Day	0.0	0.0	3.5	2.5

Accomplished	July	August	September	October
LNM SSS/SB	739.8	2205.2	1513.3	7.4
SQ NM	8.44	56.62	28.33	0.13
Bottom Samples	0	27	4	60
AWOIS Investigations	0	0	0	0
Other Investigations	0	52	0	44
Tide Gauges Installed/Removed	0	0	0	0
Days at Sea	27	31	29	9



0 0.5 1 2
Nautical Miles

SURVEY OUTLINE

H11684
S-K977-KR-07
Mississippi Delta
David Evans and Associates, Inc.
Jon Dasler, Lead Hydrographer
Chart 11361

APPENDIX IV
TIDES AND WATER LEVELS

S-K977-KR-DEA-07
H11684
Time of Hydrography

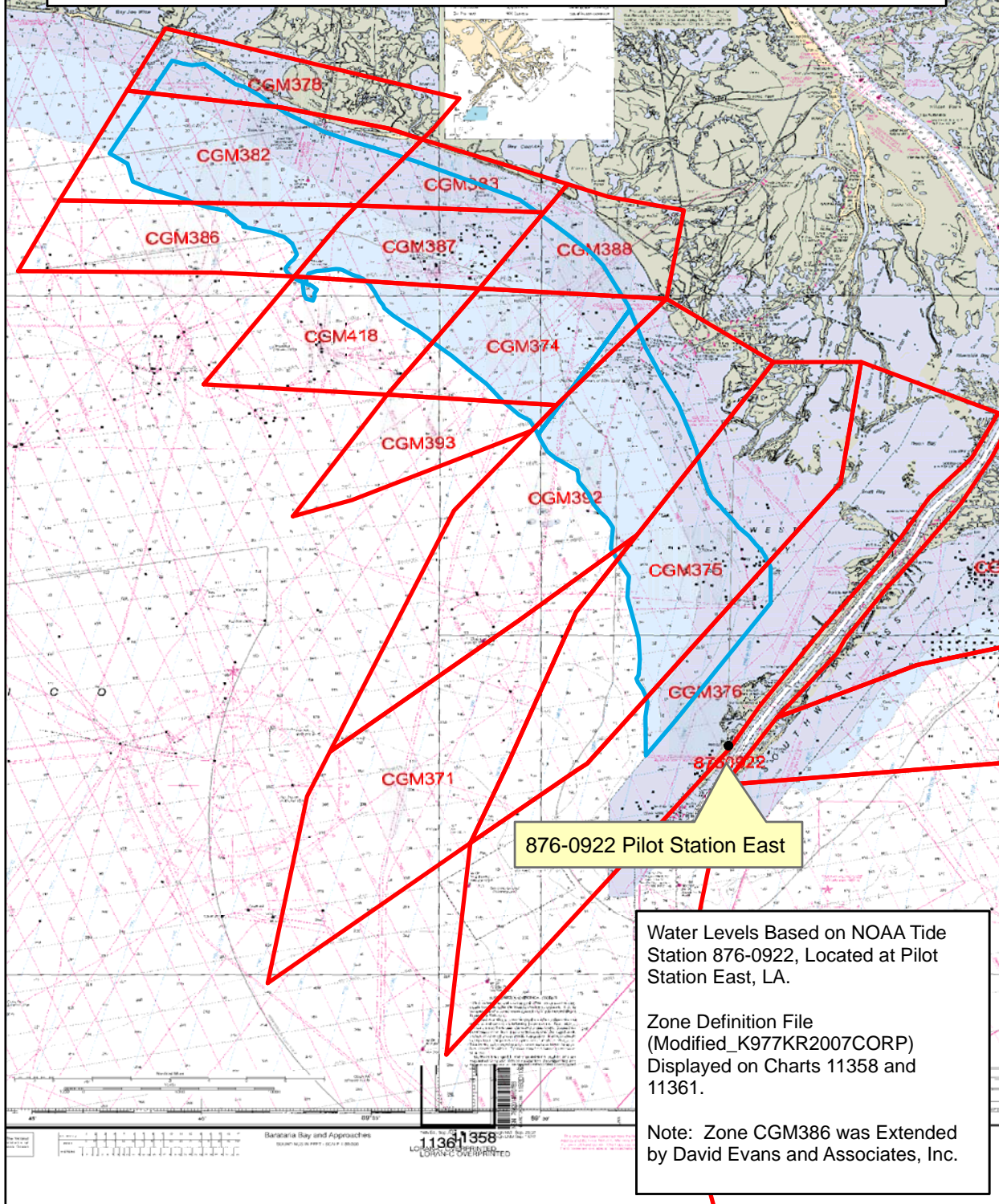
Day	Min. Time	Max. Time
2007-201	16:19:36	21:29:17
2007-202	12:44:35	22:25:07
2007-240	14:34:55	20:02:52
2007-241	13:09:28	20:39:00
2007-242	12:35:57	22:22:48
2007-243	12:35:31	22:53:41
2007-244	12:18:06	22:36:53
2007-245	12:18:46	22:44:56
2007-246	13:08:57	22:45:20
2007-247	12:16:41	19:32:38
2007-248	12:24:45	17:46:48
2007-250	12:24:42	20:02:13
2007-251	12:34:47	19:37:45
2007-252	12:32:34	22:17:39
2007-253	12:27:43	22:15:10
2007-254	12:41:53	17:55:38
2007-255	12:51:46	22:51:33
2007-260	12:11:00	21:20:15
2007-261	13:04:49	14:04:08
2007-265	16:54:41	23:59:58
2007-266	0:00:02	18:22:32
2007-267	15:40:38	22:10:53
2007-269	12:15:05	17:55:00
2007-270	12:20:17	23:50:27
2007-271	12:26:37	22:44:09
2007-275	13:35:01	16:51:13
2007-279	13:20:52	17:32:33
2007-282	12:05:10	19:14:23

S-K977-DEA-2007 Mississippi Delta, LA
Final Time and Range Correctors for Water Level Pilot
Station East
876-0922

H11684

<u>Zone</u>	<u>Time Corrector(mins)</u>	<u>Range Ratio</u>	<u>Final Water Levels Reference Station</u>
CGM371	6	x1.06	8760922
CGM374	18	x1.10	8760922
CGM375	6	x1.10	8760922
CGM376	0	x1.06	8760922
CGM392	12	x1.14	8760922

Final Tidal Zoning for S-K977-DEA-2007
Mississippi Delta, LA
H11683 and H11684



876-0922 Pilot Station East

Water Levels Based on NOAA Tide Station 876-0922, Located at Pilot Station East, LA.

Zone Definition File (Modified_K977KR2007CORP) Displayed on Charts 11358 and 11361.

Note: Zone CGM386 was Extended by David Evans and Associates, Inc.

APPENDIX V
SUPPLEMENTAL SURVEY AND CORRESPONDENCE

From: Crescent Moegling [Crescent.Moegling@noaa.gov]
Sent: Thursday, August 02, 2007 10:13 AM
To: Shyla Allen
Subject: [Fwd: Re: Platforms in the GOM]

Also, I wanted to make sure that the platforms are not making it into the weekly reports.

Thanks!

----- Original Message -----
Subject: Re: Platforms in the GOM
Date: Thu, 02 Aug 2007 13:11:16 -0400
From: Crescent Moegling <crescent.moegling@noaa.gov>
Organization: National Oceanic and Atmospheric Administration
To: Shyla Allen <sna@deainc.com>
CC: Jon Dasler <Jld@deainc.com>
References: <469293B8.1080503@noaa.gov>

Hi Shyla,

Did you have a chance to look over these spreadsheets? How is this coming along in your survey operations?

Thanks,

Crescent Moegling wrote:

> Hi Jon,
>
> NOAA's Marine Chart Division would like to chart the platforms that
> fall within the survey limits of K977. I have attached some files that
> depict the locations of platforms from several different sources. What
> MCD has requested is two things:
>
> 1. verify/disprove the existence of the platforms listed in the
> attached spreadsheets using main scheme SSS imagery 2. position
> platforms not in the attached spreadsheets using main scheme SSS
> imagery - no additional
>
> Can you have a look at this and let me know if you think this will
> impact your work plan at all?
>

--
Crescent Moegling
NOAA Hydrographic Surveys Division
Physical Scientist
301.713.2700 x111

--
Crescent Moegling
NOAA Hydrographic Surveys Division
Physical Scientist
301.713.2700 x111

From: Jason Creech
Sent: Wednesday, March 12, 2008 11:43 AM
To: John Staly; Shyla Allen
Subject: RE: Platforms in the GOM

OK

I spoke with Gene.

DR

We need to include a table of the platforms. We can still have a general discussion but underneath we should include tables. One for charted, one for new platforms, one for disproved.

We should include Lat/Long (DMS), identifier if possible, and a way to identify a photo that was submitted. He doesn't want us to submit an independent digital spreadsheet, but wants it inserted as a table in the DR. He didn't discuss this but if we have source info for the platforms it may be nice to include.

S-57

Should include all platforms within our area. In the INFORM we should include either "Exists as charted" or "Uncharted platform, recommend charting"

Give me a call with questions.
Thanks and sorry for any confusion.

-----Original Message-----

From: John Staly
Sent: Wednesday, March 12, 2008 11:14 AM
To: Jason Creech; Shyla Allen
Subject: RE: Platforms in the GOM

Thanks Jason.

-----Original Message-----

From: Jason Creech
Sent: Wednesday, March 12, 2008 11:07 AM
To: Shyla Allen; John Staly
Subject: RE: Platforms in the GOM

I'm going to check with Gene on this.

-----Original Message-----

From: Shyla Allen
Sent: Wednesday, March 12, 2008 11:05 AM
To: John Staly
Cc: Jason Creech
Subject: FW: Platforms in the GOM

Not sure if MCD really wants all the charted features to be S-57 attributed.

-----Original Message-----

From: Crescent Moegling [mailto:Crescent.Moegling@noaa.gov]
Sent: Monday, July 09, 2007 1:00 PM
To: Jon Dasler
Cc: Jason Creech; Shyla Allen
Subject: Platforms in the GOM

Hi Jon,

NOAA's Marine Chart Division would like to chart the platforms that fall within the survey limits of K977. I have attached some files that depict the locations of platforms from several different sources. What MCD has requested is two things:

1. verify/disprove the existence of the platforms listed in the attached spreadsheets using main scheme SSS imagery
2. position platforms not in the attached spreadsheets using main scheme SSS imagery - no additional

Can you have a look at this and let me know if you think this will impact your work plan at all?

--

Crescent Moegling
NOAA Hydrographic Surveys Division
Physical Scientist
301.713.2700 x111

S-K977-KR-DEA-07
H11684
DEA Feature List

TARGET	Easting	Northing	OBJNAM	S57_DESC	In Charted Location	MB Least Depth	DP	Photo	SSS Coverage	Visible in SSS	100% SSS File	200% SSS File	Office Resolved	S57	Source	Processing Remarks and Disprova	Contact
1	261483.460	3225580.400	Tiger Pass Light 2	pile beacon	Y	NA	NA	Y	Y	Y	2007CH2441320	2007CH2451731	Y	BCNLAT	US4LA33M	DEA Feature #1, 'Tiger Pass Light 2' Charted correctly.	244-140646-P, 245-195828-S
2	261520.030	3225824.702	Tiger Pass Light 1	pile beacon	Y	NA	NA	Y	Y	N	2007CH2451910	2007CH2441418	Y	BCNLAT	US4LA33M	DEA Feature #2, 'Tiger Pass Light 1' Charted Correctly.	245-175620-P, 244-142957-P
4	264665.624	3218016.360			Y	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
5	264649.105	3218021.680			Y	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
6	264605.172	3218141.124			Y	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
7	264628.264	3218152.585			Y	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	244-170147-P (debris)
8	264609.995	3218162.941			Y	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
9	264515.151	3218360.135			Y	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
10	264520.808	3218379.940			Y	NA	NA	N	Y	Y	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
11	264520.808	3218379.942			Y	NA	NA	N	Y	Y	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
12	264490.347	3218417.413			Y	NA	NA	N	Y	Y	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
13	264495.485	3218425.289			Y	NA	NA	N	Y	Y	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
14	264527.912	3218427.612			Y	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
15	264515.200	3218447.796			N	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	244-170026-P offset
16	264426.310	3218551.230			N	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
17	264410.876	3218609.324			N	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
18	264396.603	3218631.341			N	NA	NA	N	Y	N	2007CH2451611	2007CH2441615	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
19	264295.454	3218826.867			N	NA	NA	N	Y	N	2007CH2451611	2007CH2441518	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
20	264294.743	3218834.851			N	NA	NA	N	Y	N	2007CH2451611	2007CH2441518	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
21	264274.957	3218894.031			N	NA	NA	N	Y	N	2007CH2451611	2007CH2441518	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
22	264217.453	3218949.006			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441518	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
23	264160.580	3219119.524			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441518	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
24	264149.550	3219169.833			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441518	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
25	264149.550	3219169.833			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441518	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
26	263989.420	3219519.520			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441518	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
27	263986.076	3219660.905			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
28	263986.820	3219721.862			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
29	263861.861	3219764.138			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
30	263826.895	3219785.855			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
31	263737.712	3220086.543			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
32	263725.528	3220089.783			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
33	263716.950	3220148.712			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
34	263716.950	3220148.712			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
35	263716.950	3220148.712			N	NA	NA	N	Y	N	2007CH2451709	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
36	263562.878	3220566.316			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
37	263492.450	3220753.059			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
38	263278.598	3221328.283			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
39	263043.735	3221943.795			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
40	262787.127	3222498.790			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
41	262805.121	3222504.601			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
42	262778.046	3222548.994			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
43	262794.681	3222549.646			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
44	262766.785	3222638.984			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
45	262772.155	3222644.749			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
46	262727.328	3222761.235			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
47	262711.530	3222763.553			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
48	262479.025	3223274.436			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
49	262487.693	3223280.229			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
50	262477.524	3223286.422			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
51	262262.363	3223835.801			N	NA	NA	N	Y	N	2007CH2451812	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
52	262276.435	3223839.494			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
53	262276.874	3223842.535			N	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OBSTRN	US4LA33M	Disproved REP 2005 Obstrn	
54	261115.647	3223965.267			N	NA	NA	N	Y	N	2007TA2711639	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
55	261075.383	3224047.796			N	NA	NA	N	Y	N	2007TA2711639	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
56	261078.255	3224059.690			N	NA	NA	N	Y	N	2007TA2711639	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
57	261003.994	3224147.909			N	NA	NA	N	Y	N	2007TA2711758	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
58	261008.387	3224148.814			N	NA	NA	N	Y	N	2007TA2711758	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
59	261015.465	3224152.651			N	NA	NA	N	Y	N	2007TA2711758	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
60	261023.478	3224159.457			N	NA	NA	N	Y	N	2007TA2711758	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
61	260985.176	3224168.226			N	NA	NA	N	Y	N	2007TA2711758	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
62	261011.842	3224188.590			N	NA	NA	N	Y	N	2007TA2711639	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
63	261042.488	3224189.942			N	NA	NA	N	Y	N	2007TA2711639	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
64	261029.452	3224236.040			N	NA	NA	N	Y	N	2007TA2711639	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
65	260978.091	3224373.591			N	NA	NA	N	Y	N	2007TA2711639	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
66	260952.298	3224385.050			N	NA	NA	N	Y	N	2007TA2711639	2007CH2422032	Y	OBSTRN	US4LA33M	Disproved REP 2006 Obstrn	
67	260849.771	3224553.595			N	NA	NA	N	Y	N							

TARGET	Easting	Northing	OBJNAM	S57_DESC	In Charted Location	MB Least Depth	DP	Photo	SSS Coverage	Visible in SSS	100% SSS File	200% SSS File	Office Resolved	S57	Source	Processing Remarks and Disprova	Contact
82	263994.175	3213193.784		production platform	Y	NA	NA	Y	Y	Y	2007TA2532104	2007CH2401912	Y	OFSPFL	US4LA30M	DEA Feature # 82, Production Platform, charted correctly.	240-191658-P.253-211631-S.240-160622-S
83	264302.954	3213307.982		production platform	Y	NA	NA	Y	Y	Y	2007TA2541520	2007CH2411534	Y	OFSPFL	US4LA30M	DEA Feature # 83, Production Platform, charted correctly.	241-163543-P.254-162059-S.254-164235-S
84	266859.545	3213484.950		production platform	NA	NA	NA	Y	Y	Y	2007TA2601355	2007TA2661545	Y	OFSPFL	US4LA30M	DEA Feature #84, Production Platform, charted correctly.	260-135945-P.260-140026-P.266-161349-F
85	267487.217	3213568.859	PANACO-101-63	production platform	NA	NA	NA	Y	Y	Y	2007TA2601656	2007TA2661245	Y	OFSPFL	US4LA30M	DEA Feature #85, Production Platform, Charted Correctly	260-172939-P.266-124319-P.266-124720-P.266
86	263502.009	3213826.502		production platform	Y	NA	NA	Y	Y	Y	2007TA2531720	2007CH2461709	Y	OFSPFL	US4LA30M	DEA Feature #86, Production Platform, Charted Correctly.	246-160823-P.246-180411-P.253-181423-F
87	266407.076	3214095.808		production platform	NA	NA	NA	Y	Y	Y	2007TA2551715	2007TA2671622	Y	OFSPFL	US4LA30M	DEA Feature #87, Production Platform, Charted Correctly.	255-172617-S.267-162810-S
88	265379.722	3214159.574		production platform	Y	NA	NA	Y	Y	Y	2007TA2552113	2007CH2431725	Y	OFSPFL	US4LA30M	DEA Feature #88, Production Platform, Charted Correctly.	243-172818-P.255-211435-P.260-132028-F
89	267040.631	3214125.779		production platform	NA	NA	NA	Y	Y	Y	2007TA2551431	2007TA2661708	Y	OFSPFL	US4LA30M	DEA Feature #89, Production Platform, Charted Correctly.	255-152744-P.266-171108-S.266-174306-S.270-163225-P
90	266794.080	3214141.738		production platform	NA	NA	NA	Y	Y	Y	2007TA2551431	2007TA2671540	Y	OFSPFL	US4LA30M	DEA Feature #90, Production Platform, Charted Correctly.	255-145547-S.255-162211-P.267-154446-S
91	266855.142	3214217.201		production platform	NA	NA	NA	Y	Y	Y	2007TA2551431	2007TA2671600	Y	OFSPFL	US4LA30M	Disproved, Located New Platform-90m from chd location	255-162146-S.267-161516-S
92	267044.830	3214332.890		production platform	NA	NA	NA	Y	Y	Y	2007TA2551431	2007TA2661727	Y	OFSPFL	US4LA30M	DEA Feature #92, Production Platform, Charted Correctly.	255-144712-P.266-175013-P
93	267224.231	3214373.084		production platform	NA	NA	NA	Y	Y	Y	2007TA2551511	2007TA2661708	Y	OFSPFL	US4LA30M	Disproved, Located New Platform-103m from chd location	255-144743-S.255-152855-P.266-174415-F
94	265286.248	3214426.459		production platform	Y	NA	NA	Y	Y	Y	2007TA2601219	2007CH2431725	Y	OFSPFL	US4LA30M	Disproved, Located New Platform-60m from chd location	243-172054-P.243-172937-P.260-131915-S
95	266315.215	3214486.171	PANACO-101-62	production platform	NA	NA	NA	Y	Y	Y	2007TA2551832	2007TA2671159	Y	OFSPFL	US4LA30M	DEA Feature #95, Production Platform, Charted Correctly.	255-184050-S.267-180751-P
96	264931.176	3214529.350		production platform	Y	NA	NA	Y	Y	Y	2007TA2702000	2007CH2431302	Y	OFSPFL	US4LA30M	DEA Feature #96, Production Platform, Charted Correctly.	243-130811-S.243-150807-S.270-210012-S.271-152225-P
97	266207.316	3214518.251	PANACO-101-64	production platform	NA	NA	NA	Y	Y	Y	2007TA2551848	2007TA2552031	Y	OFSPFL	US4LA30M	DEA Feature # 97, Production Platform, Charted Correctly.	255-185818-S.255-185316-S.255-203603-P.260-185025-P
98	266902.500	3214609.715		production platform	NA	NA	NA	N	Y	N	2007TA2551636	2007TA2671640	Y	OFSPFL	US4LA30M	Disproved	
99	265500.712	3214768.740		production platform	Y	NA	NA	Y	Y	Y	2007CH2425011	2007CH2432149	Y	OFSPFL	US4LA30M	DEA Feature # 99, Production Platform, Charted Correctly.	243-215232-S.245-211114-S.267-193930-F
100	266178.968	3215017.896		production platform	N	NA	NA	Y	Y	N	2007TA2701406	2007TA2691239	Y	OFSPFL	US4LA30M	DEA Feature #100, Production Platform, Charted Correctly.	267-182220-S.269-123723-P.269-123916-P.270-135113-S.270-154517-S
101	262857.192	3215161.707		production platform	Y	NA	NA	Y	Y	Y	2007TA2531603	2007CH2461850	Y	OFSPFL	US4LA30M	DEA Feature # 100, Production Platform, Charted Correctly.	246-190025-P.253-153829-P.253-162526-P.253-162525-P
102	263154.782	3215159.551	PANACO-101-16	production platform	Y	NA	NA	Y	Y	Y	2007TA2531839	2007CH2461413	Y	OFSPFL	US4LA30M	DEA Feature # 102, Production Platform, Charted Correctly.	243-171726-P.260-131555-S
103	262709.992	3215197.621		production platform	NA	NA	NA	N	Y	N	2007TA2531339	2007CH2462135	Y	OFSPFL	US4LA30M	Disproved	
104	264915.036	3215152.277		production platform	Y	NA	NA	Y	Y	Y	2007TA2601219	2007CH2431618	Y	OFSPFL	US4LA30M	DEA Feature # 104, Production Platform, Charted Correctly.	242-154000-P.267-211843-S.269-162854-F
105	264074.801	3215201.382		production platform	Y	NA	NA	Y	Y	Y	2007TA2691615	2007CH2421702	Y	OFSPFL	US4LA30M	DEA Feature # 105, Production Platform, Charted Correctly.	250-124646-P.250-135034-P.252-142341-S.252-142345-S.252-153504-S.271-210940-S.275-162902-S
106	260838.090	3215393.845	PAN-WD-56-AJ	production platform	Y	NA	NA	N	Y	N	2007TA2501224	2007CH2431302	Y	OFSPFL	US4LA30M	DEA Feature # 106, Production Platform, Charted Correctly.	248-153350-P.252-135828-P
107	261866.069	3215575.704		production platform	Y	NA	NA	Y	Y	Y	2007TA2521330	2007CH2481449	Y	OFSPFL	US4LA30M	DEA Feature # 107, Production Platform, Charted Correctly.	
108	262438.992	3220752.929		production platform	Y	NA	NA	Y	Y	N	2007TA2711639	2007CH2422141	Y	OFSPFL	US4LA33M	Disproved	
109	260524.595	3223392.846		production platform	Y	NA	NA	Y	Y	Y	2007TA2541409	2007CH2411806	Y	OFSPFL	US4LA33M	DEA Feature # 109, Production Platform, Charted Correctly.	241-181952-P.254-150423-S.255-131548-S
110	262192.746	3223684.830		production platform	Y	NA	NA	N	Y	N	2007CH2451910	2007CH2441218	Y	OFSPFL	US4LA33M	Disproved	
111	261850.594	3223889.188		production platform	Y	NA	NA	Y	Y	Y	2007CH2452218	2007CH2431940	Y	OFSPFL	US4LA33M	Disproved	
112	261351.318	3224150.625		production platform	Y	NA	NA	Y	Y	Y	2007TA2611304	2007CH2431513	Y	OFSPFL	US4LA33M	DEA Feature # 112, Production Platform, Charted Correctly.	243-160301-P.243-160253-P.261-131957-S.270-123441-S
113	260682.797	3224307.038		production platform	Y	NA	NA	Y	Y	Y	2007CH2702136	2007CH2431725	Y	OFSPFL	US4LA33M	DEA Feature #100, Production Platform, Charted Correctly.	242-171422-S.269-174220-S.270-214901-P.270-233925-P
114	261957.485	3224738.708		production platform	Y	NA	NA	N	Y	N	2007CH2451731	2007CH2441418	Y	OFSPFL	US4LA33M	Disproved-exposed pipeline	244-155848-P
115	261286.063	3224796.525		production platform	Y	NA	NA	Y	Y	Y	2007TA2552113	2007CH2431725	Y	OFSPFL	US4LA33M	DEA Feature # 115, Production Platform, Charted Correctly.	243-181725-P.260-123146-P.255-220530-F
116	261477.164	3225404.205		production platform	Y	NA	NA	Y	Y	Y	2007CH2452011	2007CH2441218	Y	OFSPFL	US4LA33M	DEA Feature # 116, Production Platform, Charted Correctly.	244-123007-S
164	262900.057	3207301.087		wreck showing mast/masts	N	NA	NA	N	Y	N	2007TA271421	2007CH2601532	Y	WRECKS	US4LA30M	Disproved-Wreck Mast PA	
165	265752.070	3212283.208		wreck showing any portion of h	N	NA	NA	N	Y	N	2007TA2551532	2007TA2661647	Y	WRECKS	US4LA30M	Disproved-Wreck PA	
166	266065.786	3212295.747		dangerous wreck	N	NA	NA	N	Y	N	2007TA2601430	2007TA2661510	Y	WRECKS	US4LA30M	Disproved-Wreck PA	
167	267070.619	3213100.146		wreck showing any portion of h	N	NA	NA	N	Y	N	2007TA2601656	2007TA2661245	Y	WRECKS	US4LA30M	Disproved-Wreck PA	
168	262605.165	3216944.087		wreck showing any portion of h	N	NA	NA	N	Y	N	2007TA2532104	2007CH2361236	Y	WRECKS	US4LA33M	Disproved-Wreck PA	
169	259444.772	3221961.016		dangerous wreck	N	NA	NA	N	Y	N	2007TA2521330	2007CH2481337	Y	WRECKS	US4LA33M	Disproved-Wreck PA	
228	263931.861	3221033.957		production platform	N	NA	NA	N	Y	N	2007CH2442212	2007CH2442053	Y	OFSPFL	USCG_NOAA	USCG Production Platform Disproved	

NEW	Platform. Located 100 meters from disproved Production Platform DEA Feature #91	267-161516-S.255-162146-S
NEW	Oil Well	255-192901-P.255-191302-P
NEW	Platform. Located 103 meters from disproved Production Platform DEA Feature #93	255-144743-S.255-152855-P.266-174415-P
NEW	Platforms. Located 60 meters from disproved Production Platform DEA Feature #94	243-172937-P.260-131915-S.243-172054-P
NEW	Platform. Near DTON7	271-193706-P.242-202004-S.242-182716-S.
Dion 1	Added to raster and ENC. Subm Pile. LNM 47/07	246-205457-P.265-221814-P
Dion 2	Obstin. Not added to raster chart. Added to US4LA33M. LNM 50/07	271-180023-P
Dion 3	Obstin. Not added to raster chart. Near DEA Features # 112 Added to US4LA33M. LNM 50/08	243-160301-P.243-160253-P.270-123441-S.270-194431-S
Dion 4	Obstin. Not added to raster chart. Added to US4LA33M. LNM 50/09	242-163735-S
Dion 5	Obstin. Not added to raster chart. Added to US4LA30M. LNM 50/07	271-133630-P
Dion 6	Obstin-snag on pipeline. Not added to raster chart. Added to US4LA30M. LNM 50/08	250-140711-P.251-161442-S
Dion 7	Obstin. Not added to raster chart. Added to US4LA30M. LNM 50/09	242-182728-S
Dion 8	Obstin-exposed pipeline. Not added to raster chart. Added to US4LA30M. LNM 50/10	270-223230-P

- Disproved Items
- New items
- Charted Correctly
- Submitted Dangers

S-K977-KR-07 BOTTOM SAMPLING

H11684, Sheet B

Sample	Time (UTC)	Day Number	Longitude	Latitude	Raw Depth (m)	COLOR	NATSUR	NATQUA
B1	14:48:51	282	-89.44593654	28.94564388	9.31	7,8	1,3	6,0
B2	14:42:56	282	-89.43579295	28.96125690	7.77	7,8	1,3	6,0
B3	14:37:10	282	-89.42510952	28.97636277	6.07	7,8	1,3	6,0
B4	14:31:49	282	-89.41477685	28.99217682	4.98	7,8	1,3	6,0
B5	14:24:18	282	-89.40335690	29.00788035	3.57	7,8	1,3	6,0
B6	14:10:03	282	-89.39349357	29.02316365	2.82	7,8	1,3	6,0
B7	19:52:00	276	-89.39978706	29.04788261	2.89	7,8,2	1,3,0	5,6,0
B8	14:04:20	282	-89.41083072	29.03196595	4.36	7,8	1,3	6,0
B9	13:58:31	282	-89.42082518	29.01707397	5.65	7,8	1,3	6,0
B10	13:49:53	282	-89.43188874	29.00145298	7.55	2,7	1,3	6,0
B11	13:43:35	282	-89.44189597	28.98598571	9.21	7,8	1,3	6,0
B12	13:36:12	282	-89.44934285	29.01036433	10.02	7,8	1,3	6,0
B13	13:30:17	282	-89.43822676	29.02628696	8.24	7,8	1,3	6,0
B14	13:24:02	282	-89.42845021	29.04230174	6.73	7,8	1,3	6,0
B15	19:41:08	276	-89.41734653	29.05757311	4.63	7,8,2	1,2,0	5,6,0
B16	19:27:29	276	-89.42491125	29.08201664	4.96	7,8,2	1,2,3	5,6,0
B17	13:08:47	282	-89.43528972	29.06730169	7.00	7,8	1,3	6,0
B18	12:46:49	282	-89.44600211	29.05170194	8.64	7,8	1,3	6,0
B19	12:53:35	282	-89.45596677	29.03595587	9.92	7,8	1,3	6,0
B20	12:39:06	282	-89.46372176	29.06103797	9.94	7,8	1,3	6,0
B21	13:02:32	282	-89.45258934	29.07658828	8.46	7,8	1,3	6,0
B22	19:15:18	276	-89.44254186	29.09199764	6.33	7,8,2	1,2,3	5,6,0
B23	18:36:59	269	-89.43113848	29.10763063	4.85	7,8,0	2,3,4	5,6,0
B24	18:52:23	269	-89.44907071	29.11695803	6.10	7,8,0	2,3,4	5,6,0
B25	19:03:11	276	-89.45948070	29.10119786	7.53	7,2,0	2,3,4	5,6,0
B26	12:19:04	282	-89.47020294	29.08598822	9.46	7,8,0	1,3,17	6,0,0
B27	12:27:14	282	-89.47939483	29.07576949	10.52	7,8	1,3	6,0
B28	12:10:34	282	-89.48759796	29.09549567	10.24	7,8,0	1,3,17	6,0,0
B29	19:23:53	269	-89.47716545	29.11067483	8.98	7,2,0	2,3,4	5,6,0
B30	20:00:32	269	-89.46636083	29.12694467	7.26	7,8,2,0	2,3,4,17	5,6,0,0
B31	18:42:54	276	-89.45619639	29.14175886	4.96	7,8,0,0	2,3,4,17	5,6,0,0

























B 13





















B 22

10-01-2007

B 23



B 24





B 26



B 27



B 28



B 29



B30



B 3 1

10/03/2007



**ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT to ACCOMPANY
SURVEY H11684 (2007)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

B. DATA ACQUISITION AND PROCESSING

B.1 DATA PROCESSING

The following software was used to process data at the Atlantic Hydrographic Branch:

HSTP PYDRO version 8.7 r2586
CARIS HIPS/SIPS version 6.1 SP2 HF 1-4
CARIS Bathym Manager version 2.1 SP1 HF 1-8
DKART INSPECTOR, version 5.0 Build 707
CARIS HOM version 3.3
CARIS S57 Composer version 1.0

B.2. QUALITY CONTROL

No supporting documentation pertaining to the DGPS position checks or lead-line comparisons reported in the DR was submitted with the DR or DAPR.

B.2.1. H-Cell

The source of bathymetry for the H-Cell is the 4-m resolution combined surface *H11684_Combined_4m.hns*, which was generated from the following surfaces:

H11684_MBES_CUBE_1of3_50cm.bag
H11684_MBES_CUBE_2of3_50cm_Final.hns (the submitted bag was modified)
H11684_MBES_CUBE_3of3_50cm.bag
H11684_VBES_2m_Extract_Shoal.hns (extracted shoal layer from submitted bag)

The SS sounding layer was generated using a shoal-biased, 120-meter radius selection criteria.

The contours in the H-Cell were created from a TIN (triangulated irregular network) generated from the SS sounding layer. The contours were generated at the *.75-ft values and then renamed to the *.00-ft values to maintain NOAA rounding-logic parity with the SS soundings

Also refer to the appended pre-compilation report for additional H-Cell process metadata. The H11684 CARIS H-Cell final deliverables include the following products:

H11684_CS.000	1:80,000 Scale	H11684 H-Cell with chart-scale selected soundings, features, and bluenotes
H11684_SS.000	n/a	H11684 Selected Soundings

C. VERTICAL AND HORIZONTAL CONTROL

A 0.053-meter shift exists between the verified water level data applied by the field and the verified water level data downloaded by the AHB compiler for QC purposes. The “AHB verified data”, downloaded from the CO-OPS website <http://tidesandcurrents.noaa.gov/olddata/>, are uniformly 0.053 meters less than the corresponding “DEA verified data” (see Fig. 1). The AHB water level data were not applied to the bathymetry data.

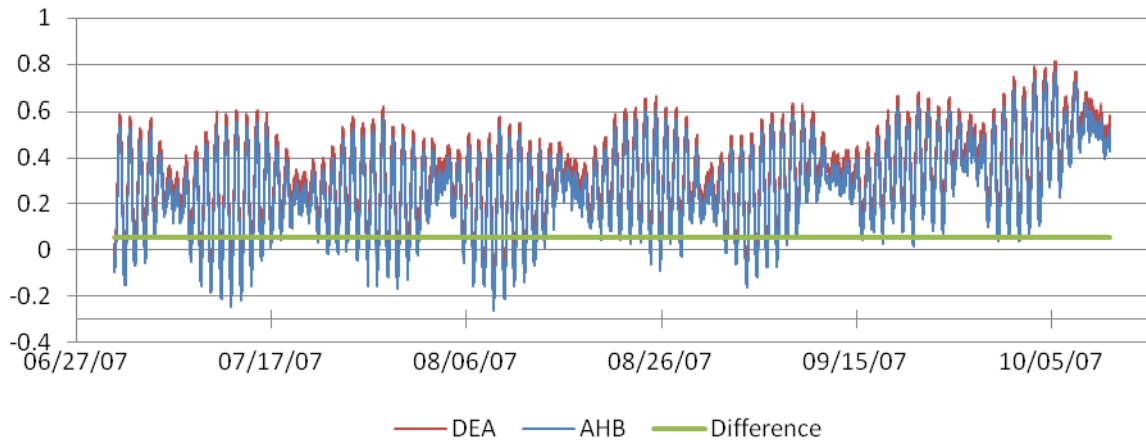


Figure 1: Verified-water-levels shift (876-0922)

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zone 16. Office ENC processing of this survey required translating the datum to meet S-57 ENC requirements.

D. RESULTS AND RECOMMENDATIONS

The following charts were used during compilation.

<u>RNC</u>	<u>Scale</u>	<u>Edition</u>	<u>Updated through LNM</u>
11361	1:80,000	74	02/03/09

<u>ENC</u>	<u>Edition</u>	<u>Update</u>	<u>Issue Date</u>
US4LA30M	13	5	20090123
US4LA33M	16	1	20081031

D.1.1 Hydrography

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section “D” and Appendix 1 & 2 of the Descriptive Report, except for the following:

D.3. MISCELLANEOUS

Chart compilation was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland. See Section D.1. of this report for a list of the Raster Charts and Electronic Navigation Charts (ENC) used for compiling the present survey:

D.4. ADEQUACY OF SURVEY

The present survey is adequate to supersede the charted bathymetry within the common area. Any features not specifically addressed either in the H-Cell BASE Cell File or the Blue Notes should be retained as charted. Refer to the Descriptive Report for further recommendations by the hydrographer.

Depth List: 0.000
 0.914
 1.829
 3.658
 5.486
 9.144
 18.288

- b. Output Options:
 - i. Create contour lines:
 - 1. Line Object: DEPCNT
 - 2. Value Attribute: VALDCO

- V. SOUNDING SELECTION:
 - a. Selection Criteria:
 - i. Radius
 - ii. Shoal biased
 - iii. Use Single-Defined Radius: 80 distance on ground (m)
 - iv. Filter: Interpolated !=1

- VI. FEATURES:
 - a. Brought in from Survey
 Total No. H11684
 - b. Brought in from ENC
 ENC: #US4LA33M &US4LA30M
 Total No. 2

- VII. META-OBJECTS:
 - a. M_COVR attributes

Acronym	Value
INFORM	H11684, S-KR-07-DEA, David Evans & Associates, Inc.
SORDAT	20071009
CATCOV	Coverage available
SORIND	US,US,survy,H11684

- b. M_QUAL attributes

Acronym	Value
CATZOC	Zone of confidence B
INFORM	H11684, S-KR-07-DEA, David Evans & Associates, Inc.
POSACC	10
SORDAT	20071009
SORIND	20071009
SUREND	20071009
SURSTA	20070720
TECSOU	Found by multibeam

- c. DEPRE attributes

Acronym	Value
DRVALV 1	
DRVALV2	
SORDAT	20071009
SORIND	20071009

INFORM

H11684, S-KR-07-DEA, David Evans & Associates, Inc.

d. M_CSCL attributes

Acronym	Value
CSCALE	
INFORM	
SORDAT	
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VIII. NOTES:

Towards the Northward end of the survey there is a dump site that is only partial in the survey boundaries; however, for this reason the included location was Blue Noted because the survey date range depicted on the chart needs to be updated with a new range from “1886-2002” to “1886-2007.”

There is a charted 10 ft wreck at 29-07.32N; 089-29.12W that is not addressed in this survey, but is retained and the depth is updated in the northward adjacent survey H11684.

There are 66 discreet features that are depicted in the Raster Chart in three areas as simple notes (i.e. “Obstructions rep 2006” etc); however, all 66 obstructions have been disproved by 200% SSS, and the notes have been Blue Noted for removal. The current ENC has chosen to individual depict each of the 66 obstructions instead of noting them, and those features should also be removed.

Further notes can be found in the survey’s DR Word Format document.

APPROVAL SHEET
H11684

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, representation of critical depths, cartographic symbolization, and verification or disproval of charted data. All revisions and additions made to the H-Cell files during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with National Ocean Service and Office of Coast Survey requirements except where noted in the Descriptive Report and the Evaluation Report.

All final products have undergone a comprehensive review per the Hydrographic Surveys Division Office Processing Manual and are verified to be accurate and complete except where noted.

Casie Carrott
Hydrographic Intern
Atlantic Hydrographic Branch

Nicholas A. Forfinski
Physical Scientist
Atlantic Hydrographic Branch

I have reviewed the H-Cell files, accompanying data, and reports. This survey and accompanying Marine Chart Division deliverables meet National Ocean Service requirements and standards for products in support of nautical charting except where noted.

Approved: _____
CDR Shepard M. Smith, NOAA
Chief, Atlantic Hydrographic Branch