H11634

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey	**BASIC HYDROGRAPHIC**
Field No.	**NRT1**
Registry No.	**H11634**

LOCALITY

State	**LOUISIANA**
General Locality	**ATCHAFALAYA RIVER**
Sub-locality	**HONEY ISLAND TO MORGAN CITY**

2006
CHIEF OF PARTY

MARK McMANN

LIBRARY & ARCHIVES

DATE:

NOAA FORM 77-28
(11-72)

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

REGISTRY No H11634

HYDROGRAPHIC TITLE SHEET

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. NRT1

State Louisiana

General Locality Atchafalaya River

Sub-Locality Honey Island to Morgan City

Scale 1:10,000 **Date of Survey** 9/28/2006 to 10/04/2006

Instructions dated August 25, 2006 **Project No.** OPR-K354-NRT1-06

Vessel NOAA Survey Launch 1211

Chief of party Mark McMann

Surveyed by Mark McMann, Eric Moore, Ian West, & Robert Ramsey

Soundings by echo sounder, hand lead, pole Singlebeam Echosounder

Graphic record scaled by N/A

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

Verification by Atlantic Hydrographic Branch

Soundings in fathoms *feet* at MLW MLLW MLLW

REMARKS: (1) All times are in Local Standard Time (LST).

(2) This is a basic Hydrographic Survey under the Navigable Area Concept.

(3) Horizontal Datum used was WGS84 and Projection was UTM Zone 15N.

(4) Verical Datum used was Mean Lower Low Water (MLLW).

Bold, Italic, Red notes in the Descriptive Report were made during office processing.

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537

U.S GOVERNMENT PRINTING OFFICE: 1976-665-661/1222 REGION NO.6

TABLE OF CONTENTS

DESCRIPTIVE REPORT

to accompany
Basic Hydrographic Survey H11634
OPR-K354-NRT1-06

Year of Survey: 2006
Navigation Response Team 1
NOAA Launch S1211
Mark McMann - Team Leader

A. AREA SURVEYED

This Basic Hydrographic Survey was conducted in accordance with the Project Letter Instructions for project OPR-K354-NRT1-06*, Morgan City, Louisiana. The instructions are dated August 24, 2006. ***Filed with original field records***

Morgan City, on the E side of Berwick Bay, has several landings with ample depths for river boats; vessels generally go alongside, because of the depths and currents in the river. The principal industries are fishing, ship building, cement, petroleum, carbon black, chemicals, sulfur, salt, menhaden, and some agriculture in the raising of rice and sugar. The city has ice and cold storage plants. Tugs in excess of 4,500 hp operate from Morgan City.

The Port of Morgan City is at the confluence of Atchafalaya River and the Intracoastal Waterway about 35 miles from deep water in the Gulf of Mexico. Numerous inland waterways that radiate from the port make it a center for offshore oil exploration and development. There is considerable commerce in seafood, shell, petroleum products, building cement, sand and gravel, oil-well pipe casing, machinery, and supplies, and chemicals. The Port of Morgan City can be contacted by telephone at 985-384-0850 and maintains a website at www.portofmc.com.

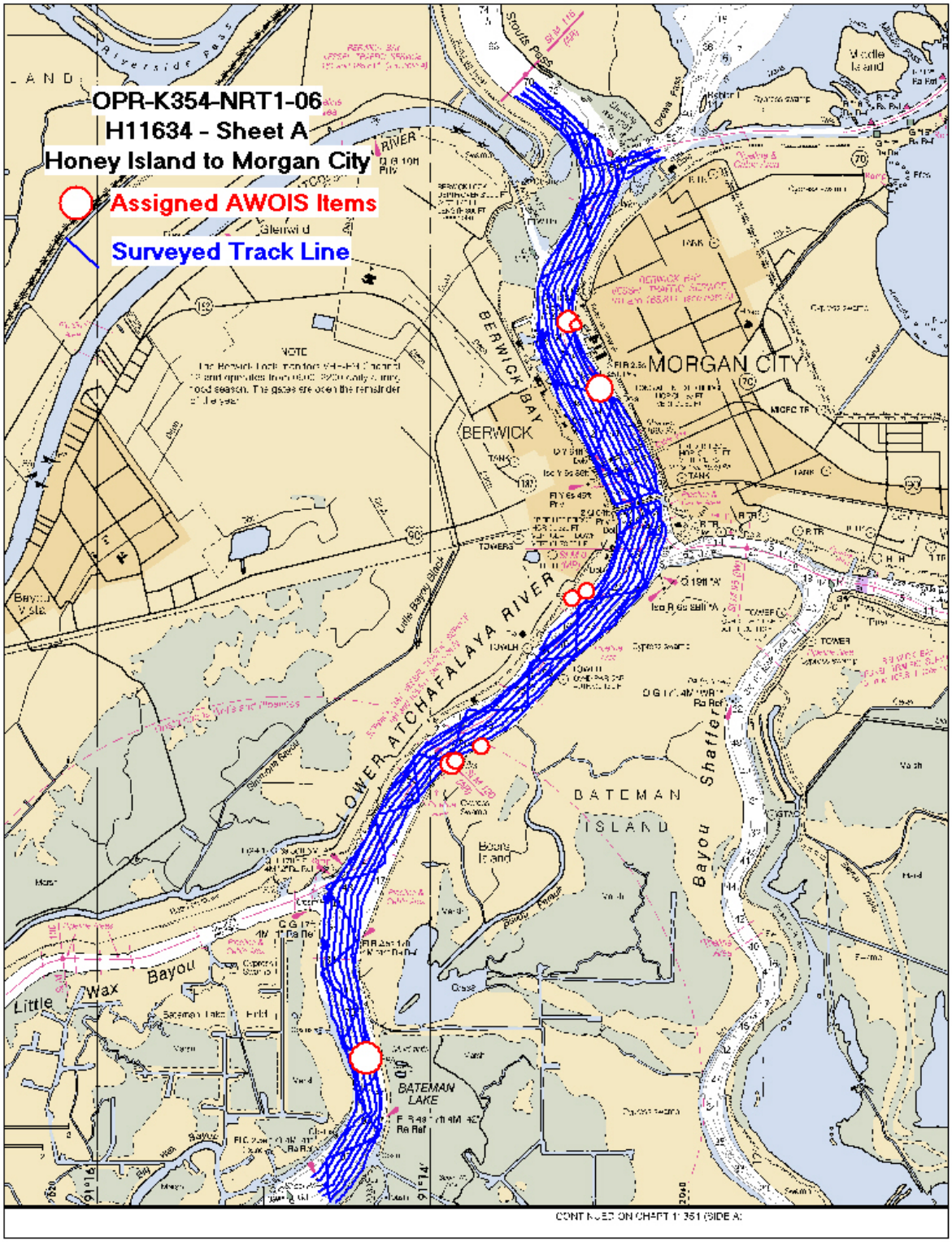
The area, surveyed by NRT1, consisted of approximately 1.4 square nautical miles (SNM) of the Atchafalaya River from Honey Island to Morgan City. Both singlebeam echosounder and side scan sonar were acquired within the survey limits, wherever possible.

Survey Limits for Sheet A, H11634 are as follows:

29.633° N	91.246° W
29.731° N	91.208° W

Survey Dates: September 28, 2006 (DN: 271) to October 04, 2006 (DN: 277)

Survey limits are displayed graphically on the following page.


OPR-K354-NRT1-06
H11634 - Sheet A
Honey Island to Morgan City
Assigned AWOIS Items
Surveyed Track Line
MORGAN CITY
BERWICK
BERWICK BAY
LOWER ATCHAFALAYA RIVER
BATEMAN ISLAND
Bayou Shafter
Little Wax Bayou
BATEMAN LAKE
Stouts Pass
Riverside Pass
Middle Island
Boone Island
Glenwild
Bayou Vista
CONTINUED ON CHART 11351 (SIDE A)

B. DATA ACQUISITION AND PROCESSING

B.1. EQUIPMENT

Data were acquired by Navigation Response Team 1 using survey Launch 1211. The vessel was configured as described in the Data Acquisition and Processing Report (DAPR)*. Major data acquisition systems are summarized below. ***Filed with original field records***

NOAA Survey Launch 1211 was used to acquire position, sounding, imagery, and sound velocity data. Positions were acquired with a Trimble DSM212L Differential GPS (DGPS) beacon receiver. Soundings were acquired with an ODOM CVX2 single-beam echosounder (SBES) system. Imagery was acquired with a stern-towed KLEIN 3000 side scan sonar (SSS) system. Water column sound velocity data was acquired with an ODOM Digibar Pro DB1200 sound velocity profiler. ***Concur.***

Due to a mischecked option in Hypack, soundings were collected in Local Standard Time (LST) instead of Greenwich Mean Time (GMT). ***Concur.***

B.2. QUALITY CONTROL

The integrity of the survey data for H11634 was insured by following the Field Procedures Manual v2.1, dated May, 2006, and the NOS Hydrographic Surveys Specifications and Deliverables Manual, dated June, 2006. ***Do not concur. See Evaluation Report.***

Differential GPS (DGPS) was used for all hydrographic data acquired on this survey. ***Concur.***

Side Scan Sonar

The side scan sonar system frequencies used were 100kHz and 500kHz. The recorder was set to 75 meter range. There were no water depths greater than 35 meters in areas where side scan data was collected. ***Concur.***

Daily confidence checks were conducted by observing side scan imagery in the vicinity of known contacts, such as buoys or mud waves. Side scan data were considered satisfactory if these contacts could be distinguished throughout the entire range of the side scan trace. The confidence checks were performed daily at both frequencies. Coverage of 200% was obtained wherever possible in the required survey areas and where water depth and/or hazards permitted. Side scan sonar coverage was conducted to the 12-foot depth curve where possible. ***Concur.***

All side scan contacts were selected during acquisition in SonarPro. Any contacts, which were determined to be significant, were developed immediately using the singlebeam echosounder. Because of this, no contacts were selected in CARIS. ***Concur.***

Crosslines

Crosslines were collected in a zig-zag pattern over the length of the project area. A total of 8.51 linear nautical miles (LNM) of crosslines were acquired by the field party. This is approximately 15 percent of mainscheme acquisition (55.35 LNM). A visual inspection of crossline data and main scheme data showed good comparison. ***Concur.***

Junctions

No junctioning surveys were provided for comparison with this project. ***Do not concur. See Evaluation Report.***

B.3. CORRECTIONS TO ECHO SOUNDING

Echosounder data were corrected for sound velocity using the methods defined in the DAPR*. A list of sound velocity profiles (SVP) can be found in the Daily Acquisition Log*, located in the Separates directory*. SVPs have also been added to the Pydro PSS for this project. ***Concur.***

Filed with original field records

C. VERTICAL AND HORIZONTAL CONTROL

C.1. VERTICAL CONTROL

All soundings were reduced to Mean Lower Low Water (MLLW) with preliminary observed water levels and preliminary zoning. ***See Evaluation Report.***

The operating water level stations at Stouts Pass, LA (876-4025), and Tesoro Marine Terminal, LA (876-4044) provided water level reducers for this project. ***See Evaluation Report.***

Verified water levels from the Tides & Currents website (http://tidesandcurrents.noaa.gov/olddata/) were downloaded and applied to all soundings for this sheet. Water level corrections were applied to the soundings using CARIS HIPS and SIPS v6.1. ***Concur.***

Zoning was provided on the project CD. The ZDF file provided with the tide requirements for this project included a zone, which was far removed from our survey area. This zone, WLA240A, was edited out of the ZDF file in the field. This was the only zone in the ZDF which was referenced to the Lawma - Amerada Pass, LA (876-4227) gauge. Because this gauge was not necessary, it was also edited out of the ZDF in the field tide data were not downloaded. ***See Evaluation Report.***

Because soundings were collected in LST, tides data was also downloaded from the website in LST. ***Concur.***

A Request for Approved Water Levels letter was sent to N/OPS1 on February 14, 2007 and is included in Appendix IV. ***Concur.***

C.2. HORIZONTAL CONTROL

The horizontal datum used for this survey is the World Geodetic System (WGS84), projected using UTM zone 15. The control reference station used for this survey was the USCG DGPS Beacon in the auto-select mode. ***Concur.***

Horizontal dilution of precision (HDOP) was monitored daily on Hypack. At no point did HDOP exceed 4.00, and adequate satellite coverage was maintained throughout the survey period. ***Concur.***

All positioning equipment was operated in a manner consistent with the manufacturer requirements and as described in the DAPR*. There were no equipment malfunctions which affected the positional quality of the data. ***Concur.*** ****Filed with original field records***

D. RESULTS AND RECOMMENDATIONS

D.1. CHART COMPARISON

There are four charts and two ENCs affected by this survey: ***Do not concur. See Evaluation Report.***

Chart	Edition	Print Date	Scale
11351	39th	11/2004	1:80,000
11352	38th	03/2005	1:175,000
11354	26th	11/2006	1:80,000
11355	27th	2/2006	1:40,000

ENC Cell	Last Updated	Corresponding Chart	Edition
US4LA21M	1/24/2007	11351	12
US4LA22M	1/16/2007	11354	11

General Agreement with Charted soundings

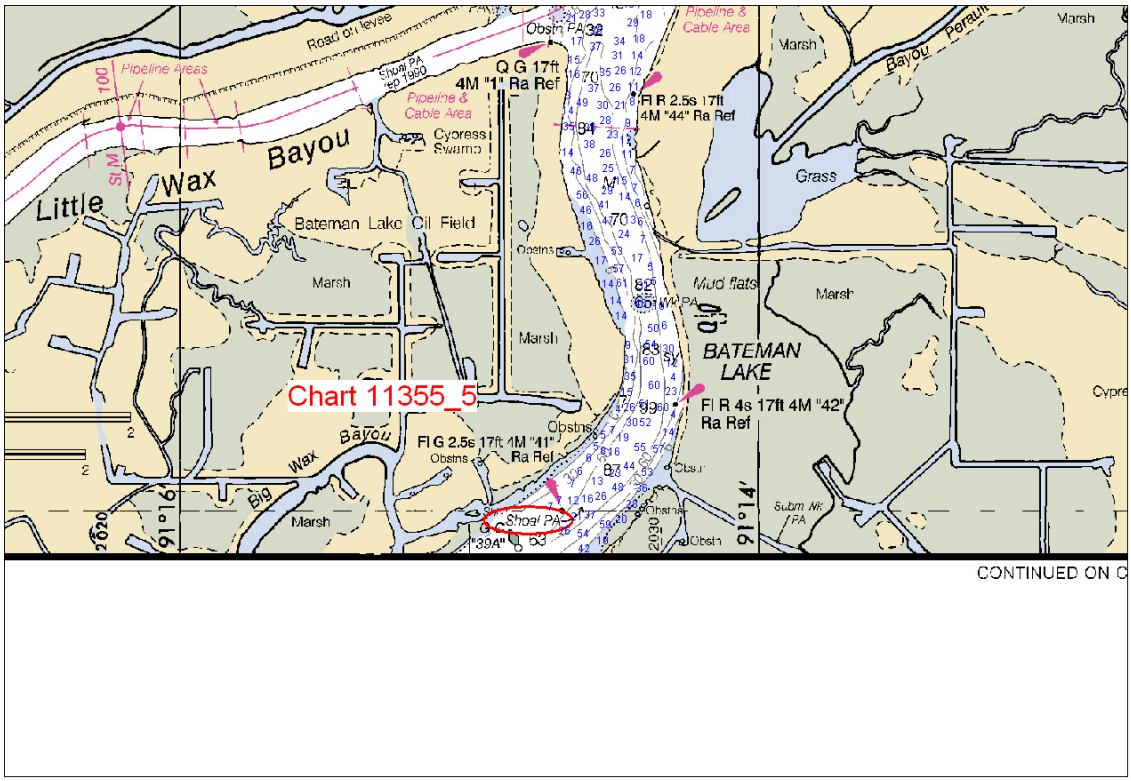
Massive shoaling was found down the entire length of this survey area. However, for the most part, surveyed depths were still deeper than the controlling depths stated in the 2006 Coast Pilot 34th Ed. and on chart 11351. Additionally, the typical vessel operating in this area does not draft enough water to be impacted by this shoaling. ***See Evaluation Report.***

Three areas were identified where the depths were less than that of the controlling depth. These items were submitted to the Marine Chart Division as Dangers to Navigation (DToNs). ***Concur.***

The scales of the charts, in the river, are not adequate to depict the detail necessary for the Port area. In some cases a single sounding takes up the entire width of the river. The hydrographer recommends that all currently charted soundings be replaced by the new surveyed depths. Additionally, the hydrographer recommends using the current survey data to create a more detailed chart or larger scale chart. ***See Evaluation Report.***

Finally, there are several areas on the chart, which are identified as "Shoals PA". These notations should be removed in areas where new soundings have been collected. ***Concur.***

See Below for graphics of the location of these "Shoal" notations.



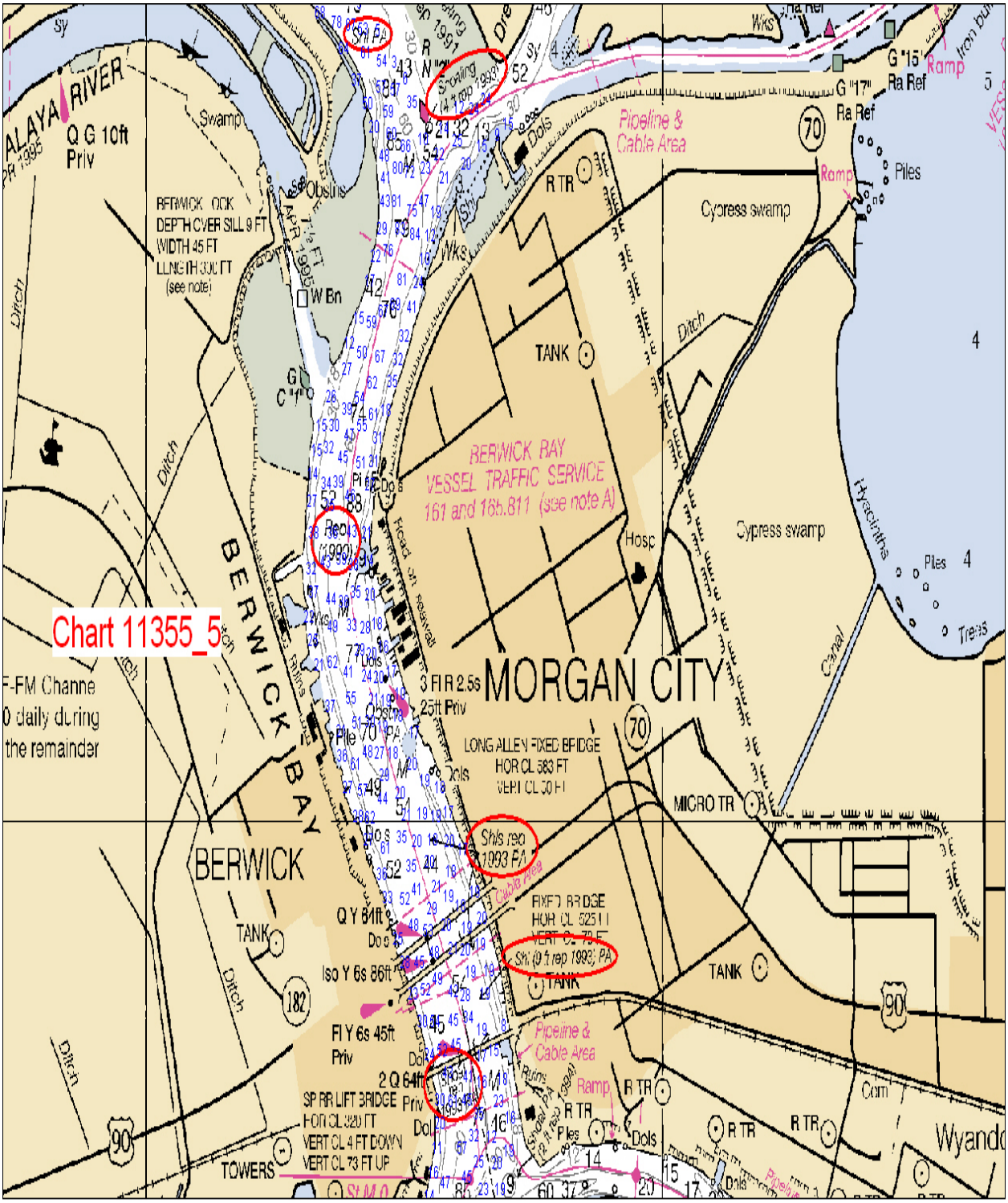
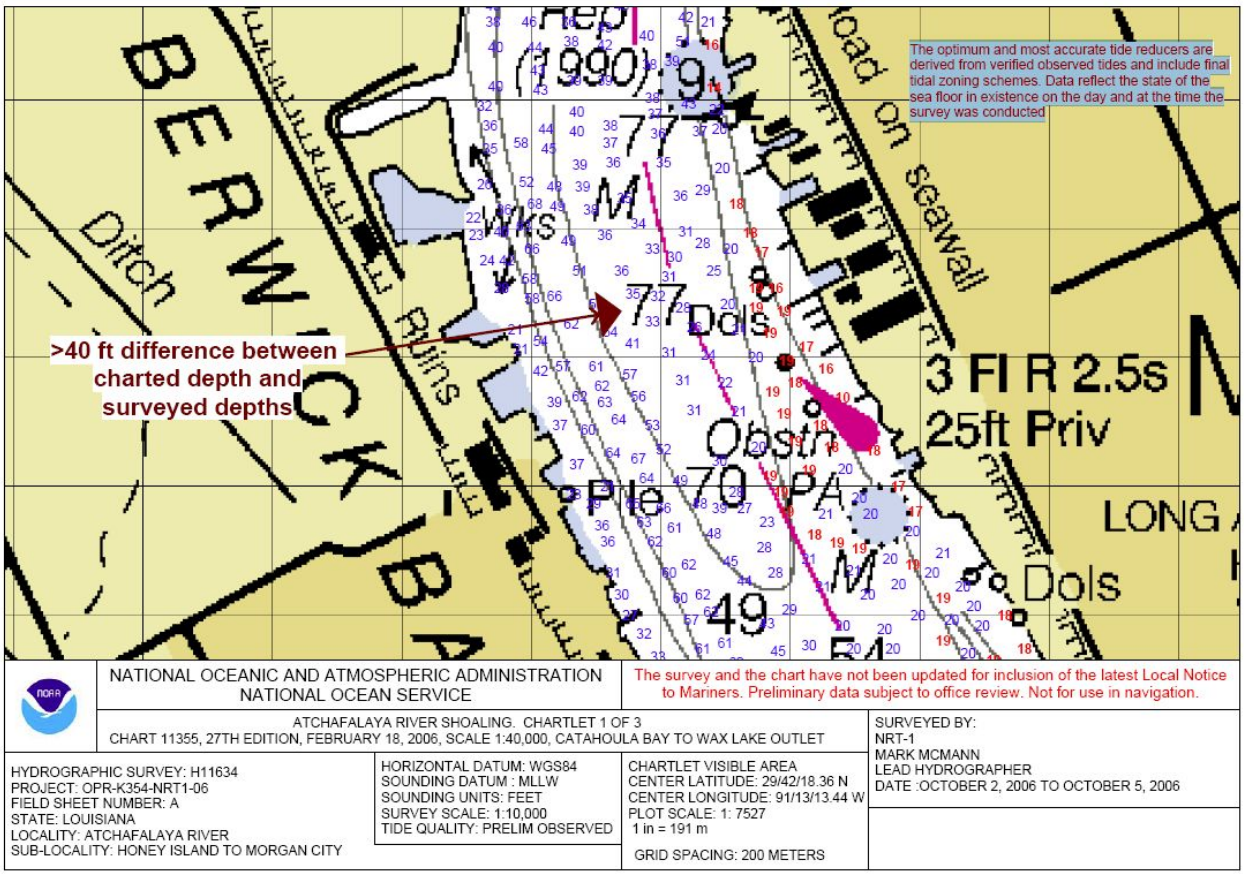
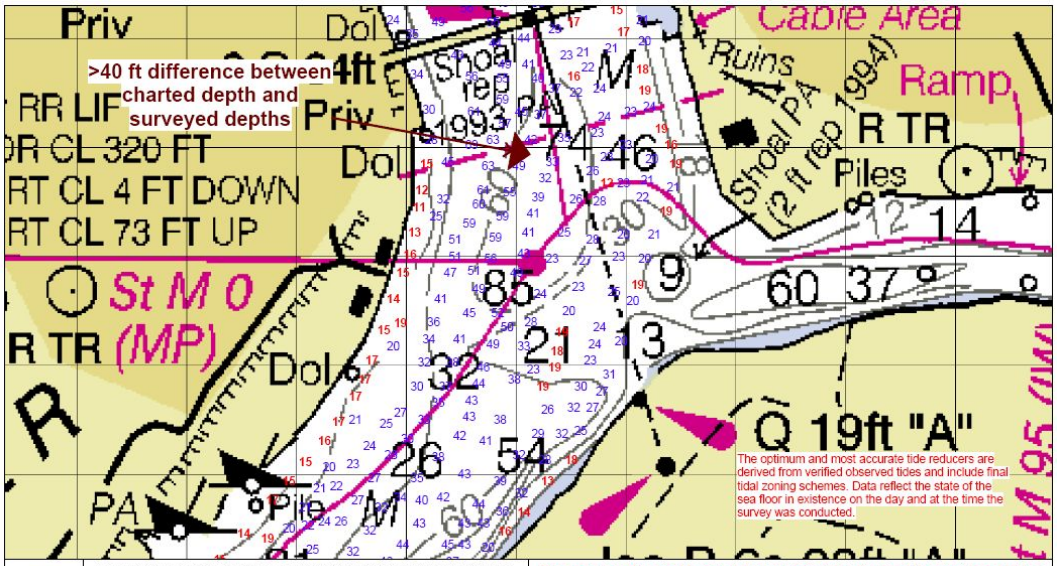
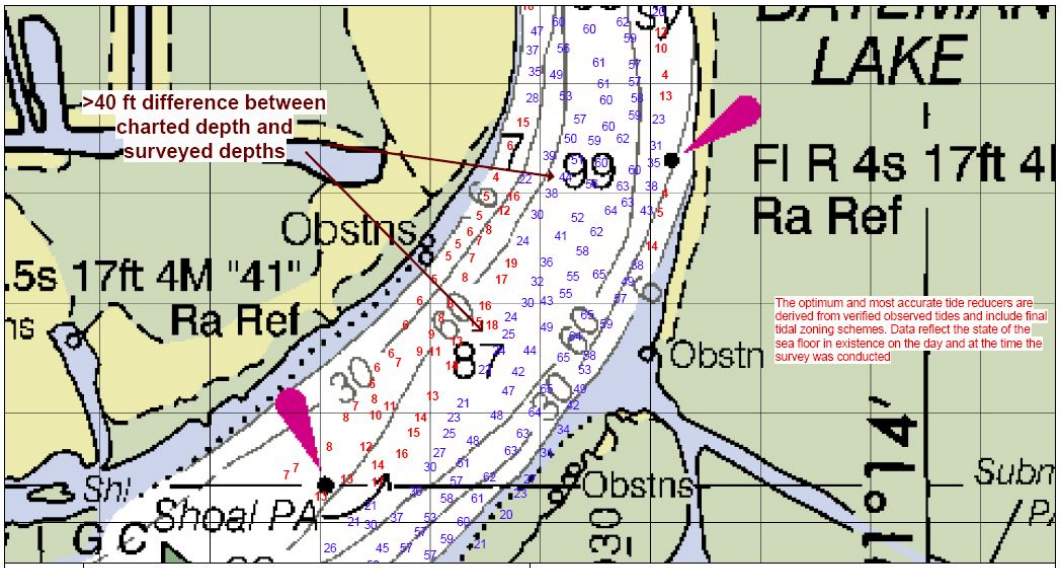


Chart 11355_5
BERWICK BAY
BERWICK
MORGAN CITY
BERWICK BAY VESSEL TRAFFIC SERVICE 161 and 165.811 (see note A)
Pipeline & Cable Area
Cypress swamp
TANK
Hosp
MICRO TR
LONG ALLEN FIXED BRIDGE
HOR CL 583 FT
VERT CL 30 FT
FIXED BRIDGE
HOR CL 525 FT
SP RR LIFT BRIDGE
HOR CL 320 FT
VERT CL 4 FT DOWN
VERT CL 73 FT UP
TOWERS
Ramp
Piles
Ditch
Swamp
Canal
Hyacinths
Trees
Wyando

See the chartlets on the following pages for examples of three areas of shoaling where the surveyed depths were greater than 40 feet shoaler than the charted depths. ***Concur.***




>40 ft difference between charted depth and surveyed depths
Priv
Dol
Shoal rep 1993 PA
Cable Area
Ruins
Ramp
Shoal PA (2 ft rep 1994)
R TR
Piles
RR LIF
R CL 320 FT
RT CL 4 FT DOWN
RT CL 73 FT UP
St M 0
R TR (MP)
Q 19ft "A"
The optimum and most accurate tide reducers are derived from verified observed tides and include final tidal zoning schemes. Data reflect the state of the sea floor in existence on the day and at the time the survey was conducted.
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
The survey and the chart have not been updated for inclusion of the latest Local Notice to Mariners. Preliminary data subject to office review. Not for use in navigation.
ATCHAFALAYA RIVER SHOALING. CHARTLET 2 OF 3
CHART 11355, 27TH EDITION, FEBRUARY 18, 2006, SCALE 1:40,000, CATAHOULA BAY TO WAX LAKE OUTLET
SURVEYED BY:
NRT-1
MARK MCMANN
LEAD HYDROGRAPHER
DATE :OCTOBER 2, 2006 TO OCTOBER 5, 2006
HYDROGRAPHIC SURVEY: H11634
PROJECT: OPR-K354-NRT1-06
FIELD SHEET NUMBER: A
STATE: LOUISIANA
LOCALITY: ATCHAFALAYA RIVER
SUB-LOCALITY: HONEY ISLAND TO MORGAN CITY
HORIZONTAL DATUM: WGS84
SOUNDING DATUM : MLLW
SOUNDING UNITS: FEET
SURVEY SCALE: 1:10,000
TIDE QUALITY: PRELIM OBSERVED
CHARTLET VISIBLE AREA
CENTER LATITUDE: 29/41/17.16 N
CENTER LONGITUDE: 91/12/45.00 W
PLOT SCALE: 1: 7527
1 in = 191 m
GRID SPACING: 200 METERS


>40 ft difference between charted depth and surveyed depths
LAKE
Fl R 4s 17ft 4l
Ra Ref
Obstns
.5s 17ft 4M "41"
Ra Ref
Obstn
Obstns
Shoal PA
The optimum and most accurate tide reducers are derived from verified observed tides and include final tidal zoning schemes. Data reflect the state of the sea floor in existence on the day and at the time the survey was conducted.
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
The survey and the chart have not been updated for inclusion of the latest Local Notice to Mariners. Preliminary data subject to office review. Not for use in navigation.
ATCHAFALAYA RIVER SHOALING. CHARTLET 3 OF 3
CHART 11355, 27TH EDITION, FEBRUARY 18, 2006, SCALE 1:40,000, CATAHOULA BAY TO WAX LAKE OUTLET
SURVEYED BY:
NRT-1
MARK MCMANN
LEAD HYDROGRAPHER
DATE :OCTOBER 2, 2006 TO OCTOBER 5, 2006
HYDROGRAPHIC SURVEY: H11634
PROJECT: OPR-K354-NRT1-06
FIELD SHEET NUMBER: A
STATE: LOUISIANA
LOCALITY: ATCHAFALAYA RIVER
SUB-LOCALITY: HONEY ISLAND TO MORGAN CITY
HORIZONTAL DATUM: WGS84
SOUNDING DATUM : MLLW
SOUNDING UNITS: FEET
SURVEY SCALE: 1:10,000
TIDE QUALITY: PRELIM OBSERVED
CHARTLET VISIBLE AREA
CENTER LATITUDE: 29/38/12.12 N
CENTER LONGITUDE: 91/14/26.88 W
PLOT SCALE: 1: 7527
1 in = 191 m
GRID SPACING: 200 METERS

AWOIS Item Investigations

There were a total of 9 AWOIS items assigned to the Field Party in Sheet A. Five of these were visible wrecks, which were observed by the field part to exist at the charted location. No DPs were obtained on any of these visible wrecks. The other four AWOIS items were submerged wrecks & obstructions. The radius of these items were covered using 200% SSS, where possible (in most cases, the radius extends onto shore). Only AWOIS item #13690 was identified in the SSS record. ***Concur.***

Additionally, two AWOIS items (13,711 & 13,692), which were located to the east of sheet A were assigned to the field party. Neither of these items was investigated by the field party, due to time constraints. ***Concur.***

Results of all AWOIS investigations are contained in Appendix II*. ***Concur.***

Dangers to Navigation

Three DToNs were submitted to the MCD on March 19, 2007. These items were three shoals (12 feet, 16feet, and 18 feet) found in the Atchafalya River in an area with a controlling depth of 20 feet. ***See Evaluation Report.***

A report, titled H11634_DToN, can be found in Appendix I* of this report. ***Concur.***

Shoreline

No shoreline features were investigated by the field party. ***Concur.***

D. 2. ADDITIONAL RESULTS

Aids to Navigation and Other Detached Positions

All Aids to Navigation in the survey area were found to be on station and serving their intended purpose. The field party has no recommendations on these Aids to Navigation. ***Concur.***

No Detached Positions (DPs) were collected during this survey. ***Concur.***

Ferry Routes

There are no charted or observed ferry routes within the survey area. Concur.

*Filed with original field records

Submarine Cables and Pipelines

There were many charted and observed submarine cables and pipelines within the survey area. The field party did not attempt to identify or position any submerged cables of pipelines. ***Concur with clarification. No pipelines or cables were seen in the side scan records for this survey.***

Bridges and Overhead Cables

The US 90 Bridge and a railroad bridge both cross the Atchafalaya River in this survey area. Both of these bridges exist as charted. There was one overhead cable that crossed the river in this survey area. This overhead cable exists as charted. The field party did not attempt to determine the vertical clearance of the bridges or overhead cable. ***Concur.***

APPROVAL SHEET

OPR-K354-NRT1-06
Basic Hydrographic Survey
Atchafalaya River
Honey Island to Morgan City
Louisiana
Registry No. H11634

Field operations for this basic hydrographic survey were conducted under my daily supervision with frequent checks of progress and adequacy. All field sheets, this Descriptive Report, and all accompanying records and data are approved.

This survey is adequate to supersede all prior surveys in common areas, and for application to the relevant NOS nautical charts.

Respectfully,
Submitted:

Mark McMann
Team Leader, Navigation Response Team 1

APPENDIX I – Danger To Navigation

H11634_DtoNs

Registry Number: H11634
State: Louisiana
Locality: Atchafalaya River
Sub-locality: Honey Island to Morgan City
Project Number: OPR-K354-NRT1-06
Survey Dates: 09/28/2006 - 10/04/2006

Charts Affected

Number	Version	Date	Scale
11354	26th Ed.	11/01/2006	1:40000
11355	27th Ed.	02/01/2006	1:40000
11351	39th Ed.	11/01/2004	1:80000
11352	38th Ed.	03/01/2005	1:175000
1116A	71st Ed.	09/01/2006	1:458596
11340	71st Ed.	09/01/2006	1:458596
411	51st Ed.	12/01/2006	1:2160000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	278/1	Shoal	3.76 m	29° 41' 23.146" N	091° 12' 39.706" W	---
1.2	40801/1	Shoal	4.91 m	29° 41' 29.452" N	091° 12' 41.895" W	---
1.3	17696/1	Shoal	5.65 m	29° 41' 13.636" N	091° 12' 42.835" W	---
1.4	3833/1	Sounding	5.67 m	29° 41' 57.901" N	091° 12' 53.345" W	---
1.5	5979/1	Sounding	5.67 m	29° 42' 08.093" N	091° 13' 02.508" W	---

1 - DR_DToN

1.1) 278/1

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 41' 23.146" N, 091° 12' 39.706" W

Least Depth: 3.76 m

Timestamp: 2006-277.11:08:12.776 (10/04/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-277 / 206_1107

Profile/Beam: 278/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Possible sonar contact observed in one pass of SSS. SBES investigation conducted in a star-shaped pattern. LD of 3.80m measured over contact.

This 12 ft sounding occurs in an area with a controlling depth of 20 ft.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-277/206_1107	278/1	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-276/sonar_data061003111300	0001	15.80	111.5	Secondary

Hydrographer Recommendations

Hydrographer recommends charting LD at surveyed position.

Cartographically-Rounded Depth (Affected Charts):

12ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

2fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 6:least depth known

TECSOU - 1:found by echo-sounder

VERDAT - 12:Mean lower low water

Office Notes

Concur. Chart current survey soundings.

Sounding has already been added to the continual update raster for chart 11355_5.

Feature Images

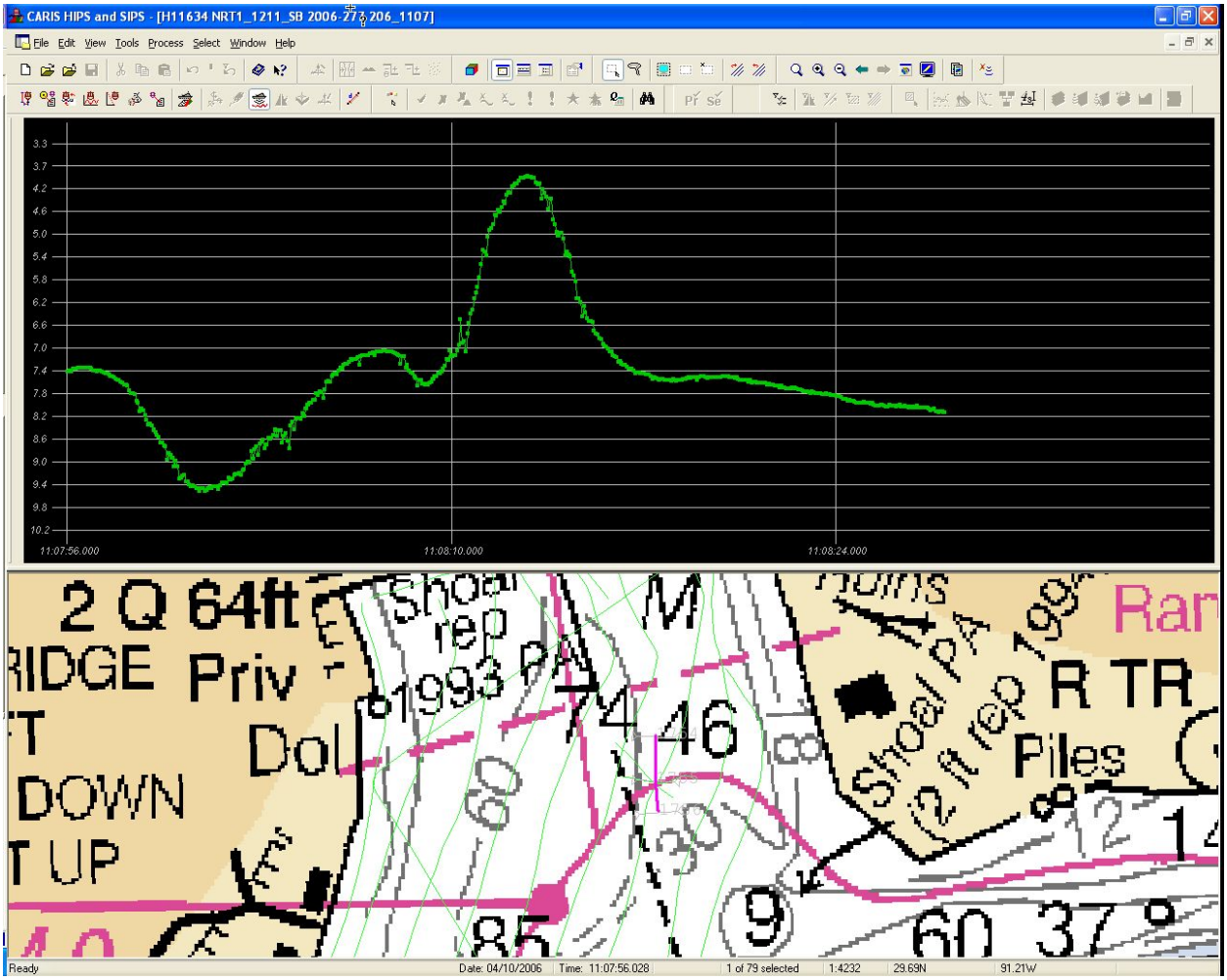


Figure 1.1.1

[Image file h:/compilation/h11634_k354-nrt1/ahb/pss/photos/sonar_da0001_s.tif does not exist.]

1.2) 40801/1

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 41' 29.452" N, 091° 12' 41.895" W

Least Depth: 4.91 m

Timestamp: 2006-276.12:53:57.104 (10/03/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-276 / 108_1211

Profile/Beam: 40801/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

16 ft sounding in a 20 ft controlling depth.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-276/108_1211	40801/1	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting surveyed depth.

Cartographically-Rounded Depth (Affected Charts):

16ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

2 ½fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 6:least depth known

TECSOU - 1:found by echo-sounder

VERDAT - 12:Mean lower low water

Office Notes

Concur. Chart current survey soundings.

Sounding has already been added to the continual update raster for chart 11355_5.

Feature Images

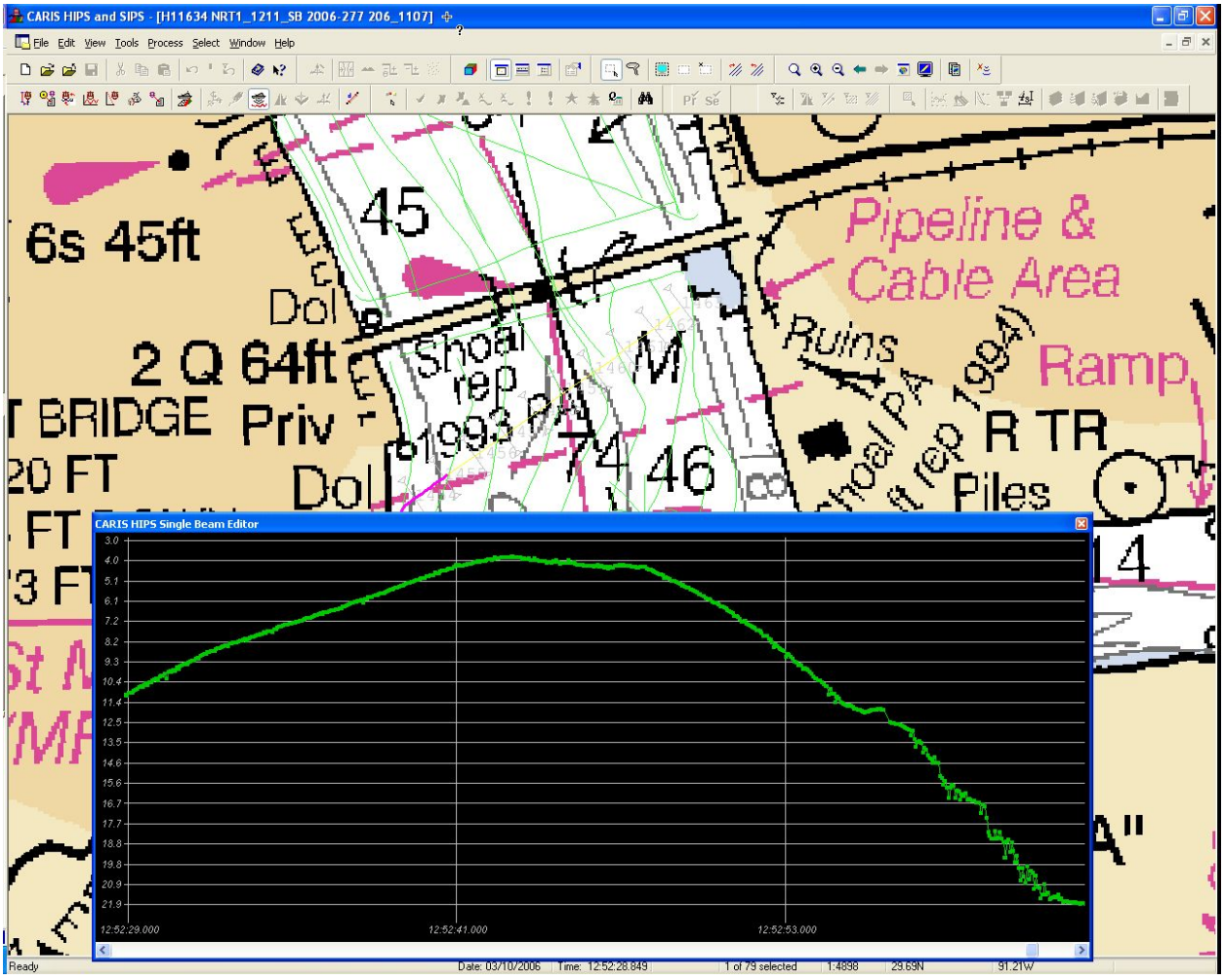


Figure 1.2.1

1.3) 17696/1

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 41' 13.636" N, 091° 12' 42.835" W

Least Depth: 5.65 m

Timestamp: 2006-271.14:06:32.650 (09/28/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-271 / 102_1347

Profile/Beam: 17696/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

18 ft sounding measured in an area with a controlling depth of 20ft.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-271/102_1347	17696/1	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting 18ft sounding.

Cartographically-Rounded Depth (Affected Charts):

18ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

3fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Attributes: QUASOU - 6:least depth known

TECSOU - 1:found by echo-sounder

VERDAT - 12:Mean lower low water

Office Notes

Concur. Chart current survey soundings.

Sounding has already been added to the continual update raster for chart 11355_5.

Feature Images

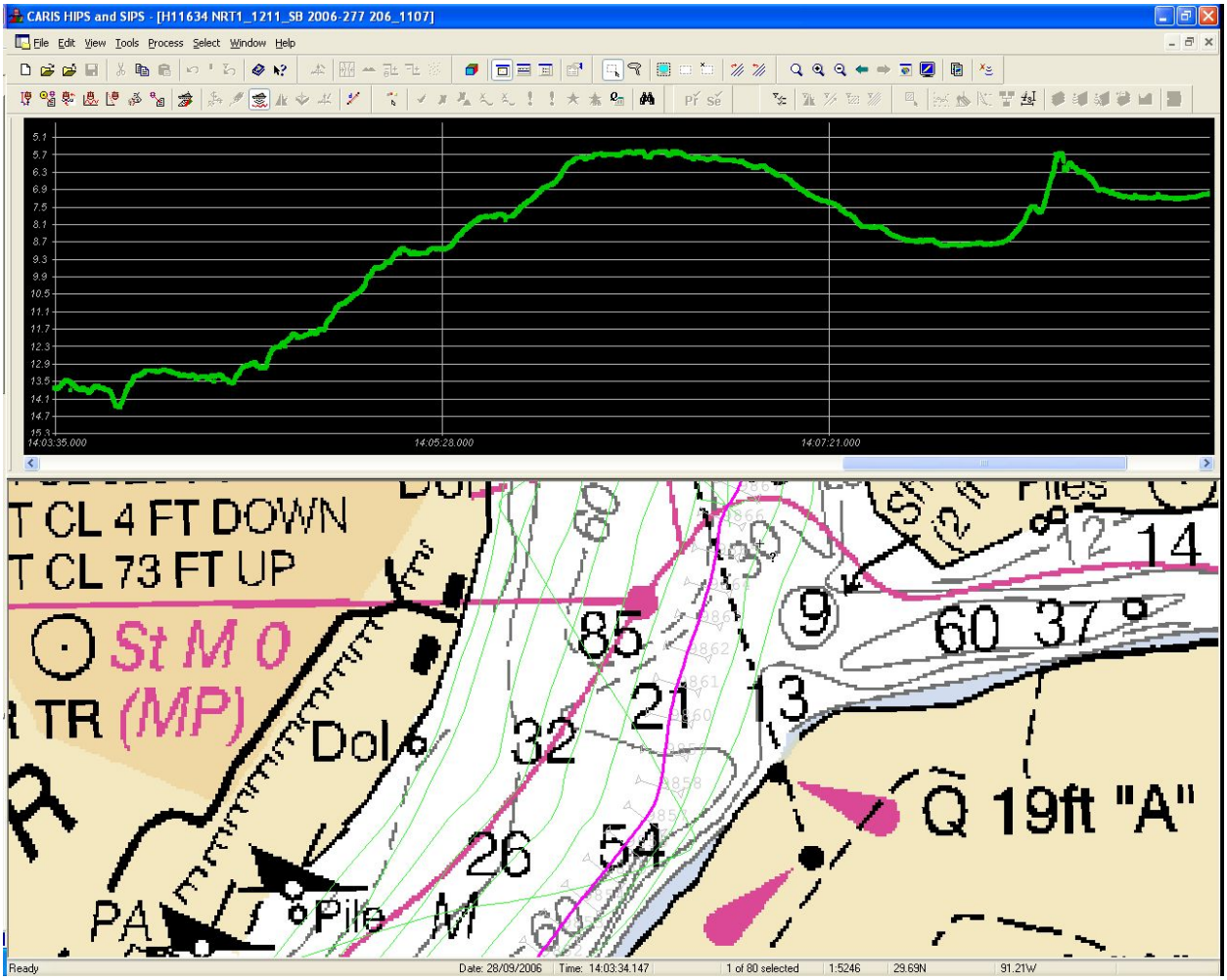


Figure 1.3.1

1.4) 3833/1

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 41' 57.901" N, 091° 12' 53.345" W

Least Depth: 5.67 m

Timestamp: 2006-275.15:17:54.565 (10/02/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-275 / 102_1513

Profile/Beam: 3833/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Surveyed with SBES, the channel is exhibiting evidence of extreme shoaling extending past the 30 foot curve. This 18 foot sounding is located in the vicinity of a charted 44ft.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-275/102_1513	3833/1	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

18ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

3fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

Office Notes

Chart current survey soundings.

1.5) 5979/1

DANGER TO NAVIGATION

Survey Summary

Survey Position: 29° 42' 08.093" N, 091° 13' 02.508" W

Least Depth: 5.67 m

Timestamp: 2006-276.13:07:04.375 (10/03/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-276 / 111_1300

Profile/Beam: 5979/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Surveyed with SBES, the channel is exhibiting evidence of extreme shoaling extending past the 30 foot curve.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-276/111_1300	5979/1	0.00	000.0	Primary

Hydrographer Recommendations

[None]

Cartographically-Rounded Depth (Affected Charts):

18ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

3fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Sounding (SOUNDG)

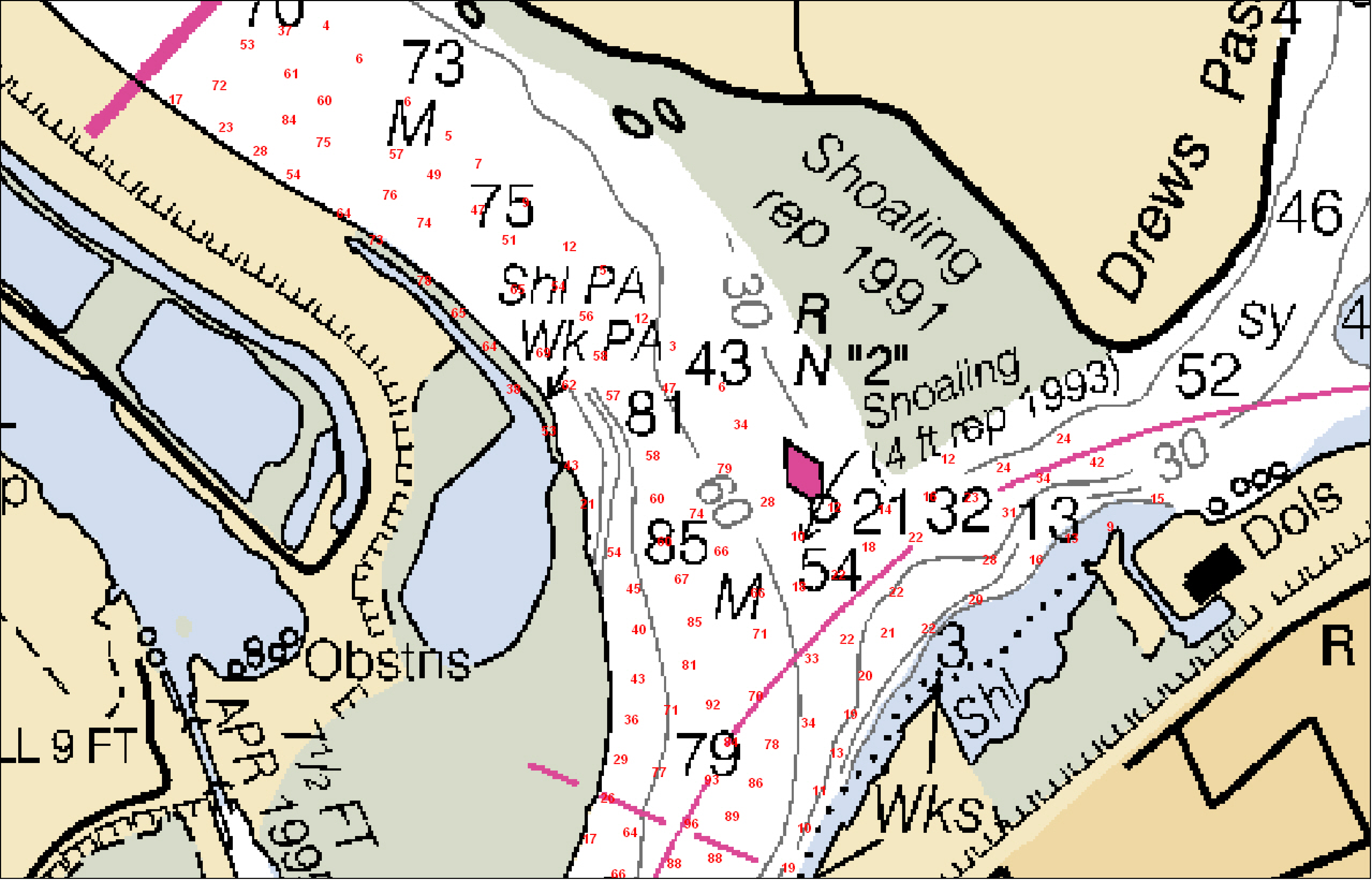
Office Notes

Chart current survey soundings.

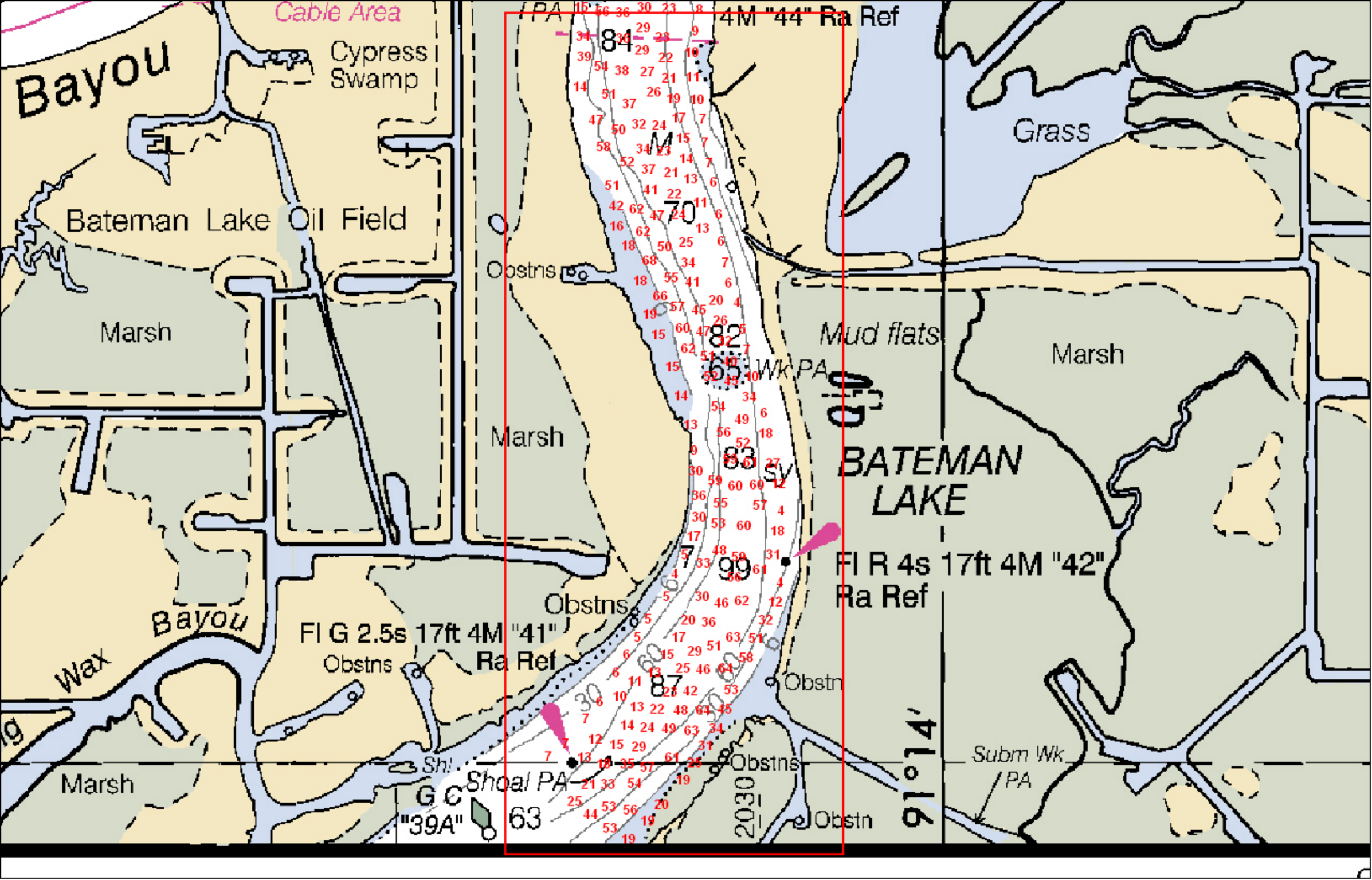
Danger to Navigation Report - AHB

Registry Number:	H11634
State:	Louisiana
Locality:	Atchafalaya River
Sub-Locality:	Honey Island to Morgan City
Project Number:	OPR-K354-NRT1-06
Survey Dates:	10/2/06 – 10/5/06
Vertical Datum:	Mean Lower Low Water
Charts Effected:	11354, 11355, 11351, 11352, 1116A, 11340, 411

Significant changes in shoreline were evident in this survey. Due to the extent of the changes, and with the approval of Mark Griffin of MCD Product Branch E, two proposed areas for DtoN Chartlets follow. Soundings from the survey are included in file H11634_Soundings.000 for use by Product Branch E when compiling the DtoN Chartlets. Two additional DtoNs are also attached.



Shoaling rep 1991
Shl PA
Wk PA
R
N "2"
Shoaling (4 ft rep 1993)
Sy
Obstns
Dols
Shl
Wks
R


Cable Area
Bayou
Cypress Swamp
Bateman Lake Oil Field
Marsh
Marsh
Obstns
PA
4M "44" Ra Ref
Grass
Mud flats
Marsh
Wk PA
BATEMAN LAKE
Fl R 4s 17ft 4M "42" Ra Ref
Obstns
Fl G 2.5s 17ft 4M "41" Ra Ref
Obstns
Bayou
Wax
Marsh
Shoal PA
G C "39A"
63
Obstn
Obstns
Obstn
Subm Wk PA
2030
91°14'
84
70
82
83
99
87

APPENDIX II – Survey Features Report

1. AWOIS ITEMS

2. UNCHARTED ITEMS

H11634 AWOIS Items

Registry Number: H11634
State: Louisiana
Locality: Atchafalaya River
Sub-locality: Honey Island to Morgan City
Project Number: OPR-K354-NRT1-06
Survey Date: 10/04/2006

Charts Affected

Number	Version	Date	Scale
11354	26th Ed.	11/01/2006	1:40000
11355	27th Ed.	02/01/2006	1:40000
11351	39th Ed.	11/01/2004	1:80000
11352	38th Ed.	03/01/2005	1:175000
1116A	71st Ed.	09/01/2006	1:458596
11340	71st Ed.	09/01/2006	1:458596
411	51st Ed.	12/01/2006	1:2160000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
1.2	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
1.3	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
1.4	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
1.5	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
1.6	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---
1.7	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---
1.8	UNKNOWN	AWOIS	[no data]	[no data]	[no data]	---
1.9	#13684 - UNKNOWN	Wreck	10.25 m	29° 40' 11.886" N	091° 13' 53.086" W	13684

1 - DR_AWOIS

1.1) AWOIS #13683 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 29° 38' 38.290" N, 091° 14' 23.340" W

Historical Depth: [None]

Search Radius: 150

Search Technique: S2,ES

Technique Notes: [None]

History Notes:

****UNKNOWN SOURCE-- UNKNOWN SOURCE ADDED WRECK BEFORE 1967. L-313/67-- USACE; A 65 FOOT SOUNDING AND A DOTTED DANGER CURVE REPLACED THE WRECK SYMBOL AND IT WAS LABELED: WK PA. (ENTERED CEH 8/2006)

Survey Summary

Charts Affected: 11355_5, 11351_1, 11354_3, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

AWOIS raidus covered with 200% SSS. Wk not observed in SSS data. Shoaler sounding than 65 ft recorded in the area with VBES.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 13683	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends removing danger curve and "Wk" notation. Hydrographer further recommends charting surveyed soundings in area.

S-57 Data

[None]

Office Notes

Concur. Remove danger curve and "Wk" notation, chart present survey soundings.

1.2) AWOIS #13685 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 29° 40' 11.800" N, 091° 13' 51.100" W

Historical Depth: [None]

Search Radius: 75

Search Technique: VS,DI,S2,SD,ES

Technique Notes: [None]

History Notes:

BP182422-- 2004; ADDED VISIBLE WRECK AND REVISED LABEL TO WKS FROM WK. (ENTERED CEH 8/2006)

Survey Summary

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_3, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Visible Wk observed by field party as charted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 13685	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommend retaining Wk as charted.

S-57 Data

[None]

Office Notes

Concur. Retain as Charted.

1.3) AWOIS #13686 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 29° 40' 16.450" N, 091° 13' 41.770" W

Historical Depth: [None]

Search Radius: 75

Search Technique: VS,DI,SD,S2,ES

Technique Notes: [None]

History Notes:

L1756/77-- 1977, USPS; VISIBLE WRECK WAS ADDED WITH A POSITION APPROXIMATE 29°40'15.7"N - 091°13'41.4"W (NAD '27). (ENTERED CEH 8/06)

Survey Summary

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_3, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Visible Wk observed by field party at charted location.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 13686	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends retaining Wk as charted.

S-57 Data

[None]

Office Notes

Concur. Retain as Charted.

1.4) AWOIS #13687 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 29° 41' 03.000" N, 091° 13' 09.000" W

Historical Depth: [None]

Search Radius: 75

Search Technique: VS,SD,DI,S2,ES

Technique Notes: [None]

History Notes:

LNM 32/91-- USCG 8TH DISTRICT: VISIBLE WRECK ADDED TO CHART IN POSITION APPROXIMATE LOCATION AT 29/41/03.0 - 91/13/09.0. (ENTERED CEH 8/2006)

Survey Summary

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_3, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Visible Wk observed by field party at charted location.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 13687	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends retaining charted Wk removing "PA" notation.

S-57 Data

[None]

Office Notes

Concur. Retain as Charted.

1.5) AWOIS #13688 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 29° 41' 05.200" N, 091° 13' 03.800" W

Historical Depth: [None]

Search Radius: 75

Search Technique: VS,SD,DI,ES,S2

Technique Notes: [None]

History Notes:

****UNKNOWN SOURCE ADDED A VISIBLE WRECK BETWEEN 1999 AND 2003. (ENTERED CEH 8/2006)

Survey Summary

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Visible Wk observed by field party at charted location.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 13688	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends retaining charted Wk.

S-57 Data

Geo object 1: Wreck (WRECKS)

Office Notes

Concur. Retain as Charted.

1.6) AWOIS #13689 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 29° 42' 09.000" N, 091° 12' 59.000" W

Historical Depth: [None]

Search Radius: 125

Search Technique: S2,ES,DI

Technique Notes: [None]

History Notes:

LNM 11/06-- USCG 8TH USCG; AN OBSTRUCTION, STUMP, WAS FOUND AT 29/42/09.0 - 091/12/59.0. (ENTERED CEH 8/2006)

Survey Summary

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Entire AWOIS radius covered with 200%SSS. Subm Obstn not observed in SSS data.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 13689	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends removing charted Obstn and charting surveyed depths in area.

S-57 Data

[None]

Office Notes

Concur. Remove charted obstn.

1.7) AWOIS #13691 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 29° 42' 30.000" N, 091° 13' 10.500" W

Historical Depth: [None]

Search Radius: 100

Search Technique: S2,ES,DI

Technique Notes: [None]

History Notes:

LNM 10/93-- USCG 8TH DISTRICT; A 9 FOOT OBSTRUCTION REPORTED IN 1990 AT 29/42/30.0 - 91/13/10.5. (ENTERED CEH 8/2006)

Survey Summary

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Entire AWOIS search radius covered with 200% SSS. Subm Obstn not observed in SSS data.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 13691	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends removing charted Obstn and charting surveyed depths in area.

S-57 Data

[None]

Office Notes

Concur. Remove charted obstn.

1.8) AWOIS #13690 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 29° 42' 29.000" N, 091° 13' 07.600" W

Historical Depth: [None]

Search Radius: 50

Search Technique: VS,SD,DI,S2,ES

Technique Notes: [None]

History Notes:

BP182422-- 2004; VISIBLE WRECK ADDED AT 29/42/29.0 - 91/13/07.6. (ENETERED CEH 8/2006)

Survey Summary

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Visible Wk observed by field party at charted location.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 13690	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends retaining Wk as charted.

S-57 Data

[None]

Office Notes

Concur. Retain as Charted.

1.9) #13684 - UNKNOWN

Primary Feature for AWOIS Item #13684

Search Position: 29° 40' 10.900" N, 091° 13' 52.600" W

Historical Depth: [None]

Search Radius: 100

Search Technique: S2,ES

Technique Notes: [None]

History Notes:

*****UNKNOWN SOURCE-- A DOTTED DANGER CURVE WITH BLUE TINT AND LABELED: WK WAS ADDED TO THE CHART BEFORE 1972 BY UNKNOWN SOURCE. THE CHARTED LOCATION OF THIS WRECK IS 29°40'10.9"N - 091°13'52.6"W. (ENTERED CEH 8/2006)

Survey Summary

Survey Position: 29° 40' 11.886" N, 091° 13' 53.086" W

Least Depth: 10.25 m

Timestamp: 2006-277.09:42:27.453 (10/04/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-277 / 211_0941

Profile/Beam: 526/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_3, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Two submerged barges observed on two passes with SSS. Contacts developed with SBES in a star shaped pattern. LD of 10.34m obtained on barges. Height of barges is approximately 2.7m.

Shoal depth loacted on edge of currently charted danger curve.

AWOIS 13684. AWOIS raidus covered with 200% SSS (where possible).

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-277/211_0941	526/1	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-276/sonar_data061003094800	0001	12.33	051.3	Secondary
h11634/nrt1_1211_klein3000hf_500sss/2006-276/sonar_data061003090600	0001	16.30	091.8	Secondary
AWOIS	AWOIS # 13684	33.16	336.9	Secondary

Hydrographer Recommendations

Hydrpgrapher recommends adding Subm Wk symbol to chart, removing the danger curve, and charting surveyed depths in the area.

Cartographically-Rounded Depth (Affected Charts):

33ft (11354_2, 11355_5, 11351_1, 11354_3, 11354_6, 11352_1)

5 ½fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	CONVIS - 2:not visual conspicuous
	HEIGHT - 2.7 m
	TECSOU - 1,2:found by echo-sounder,found by side scan sonar
	VALSOU - 10.253 m
	VERDAT - 12:Mean lower low water
	WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart wks with least depth 33ft.

Feature Images

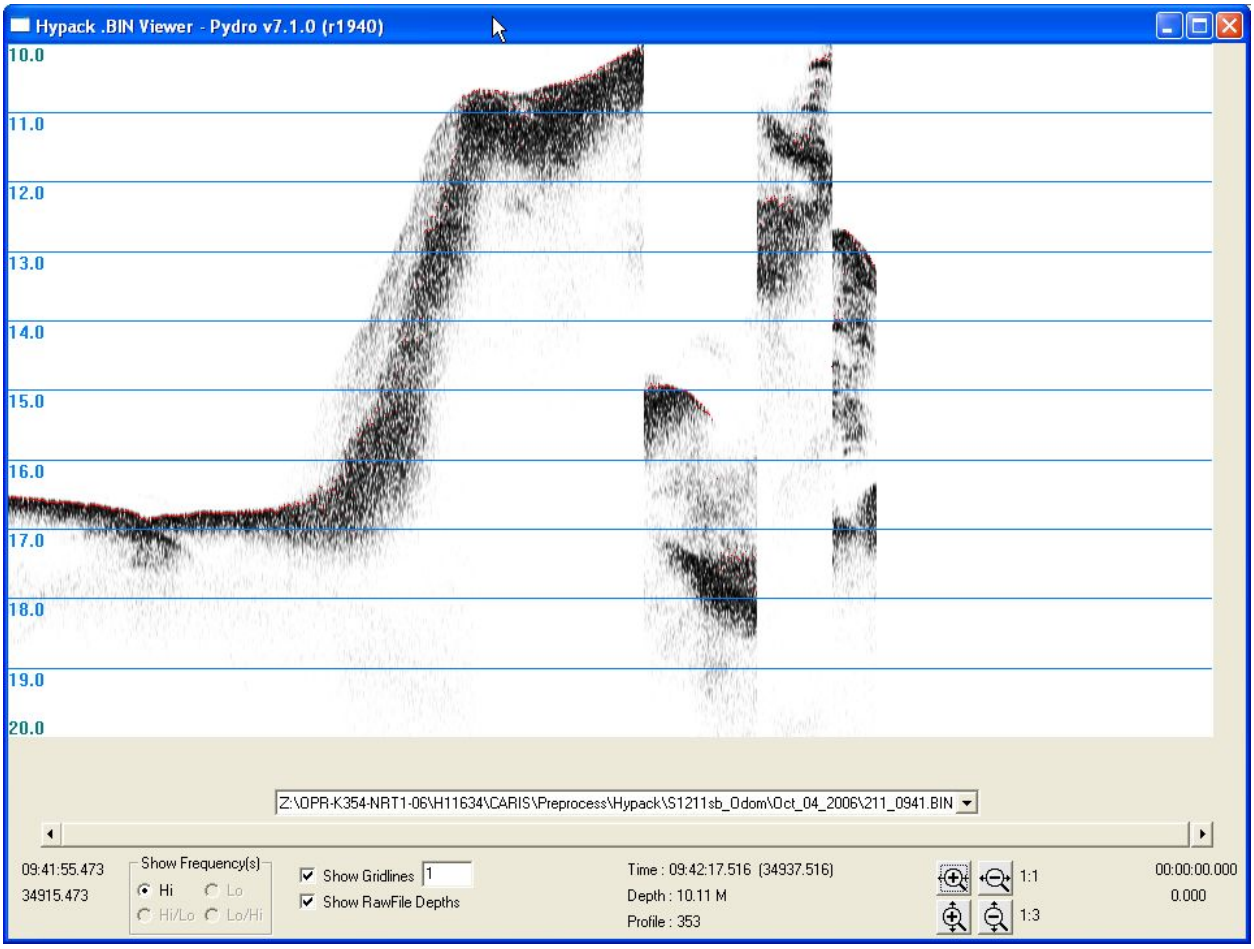


Figure 1.9.1

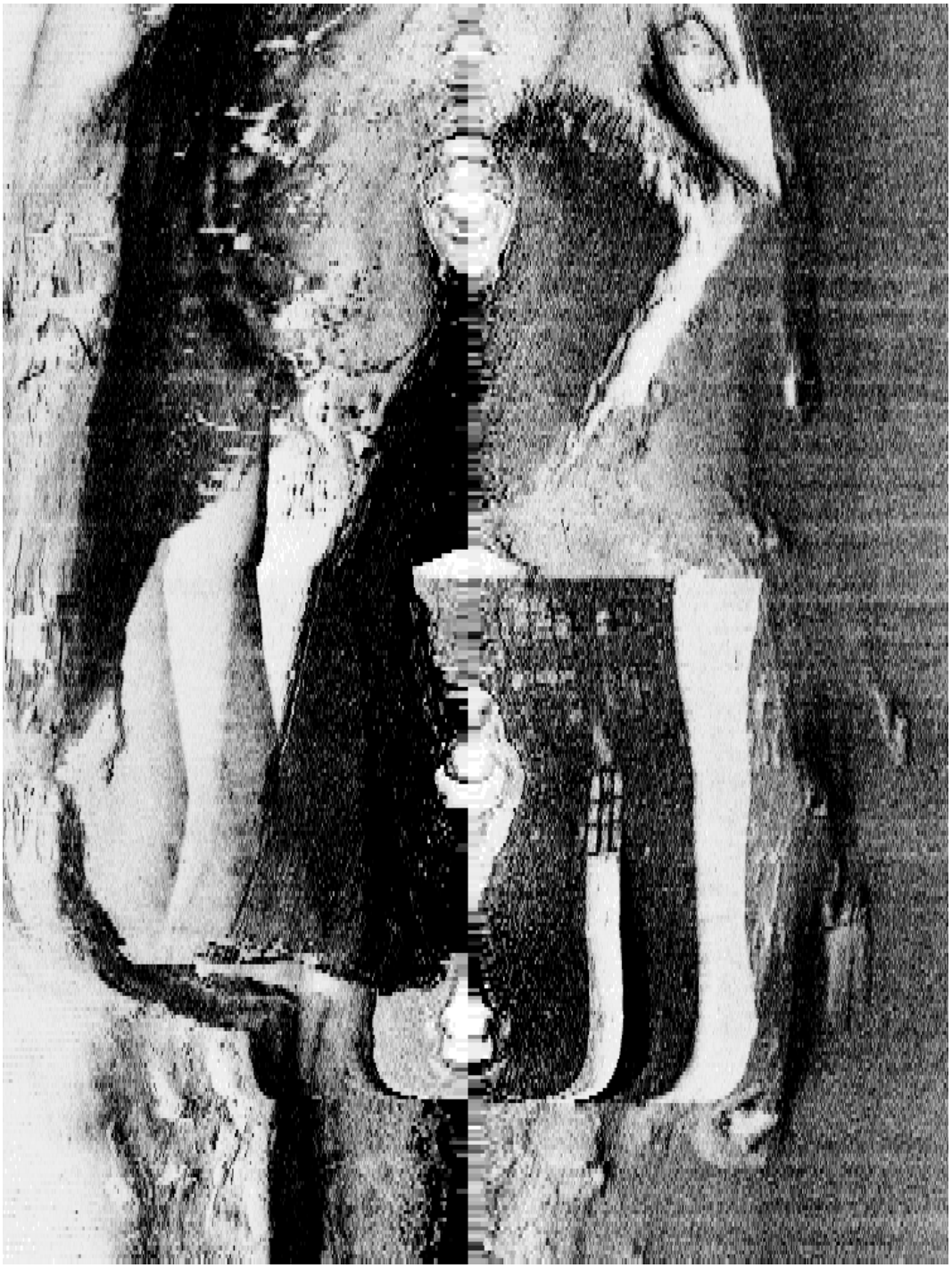


Figure 1.9.2

H11634 Uncharted Items

Registry Number: H11634

State: Louisiana

Locality: Atchafalaya River

Sub-locality: Honey Island to Morgan City

Project Number: OPR-K354-NRT1-06

Survey Dates: 10/04/2006 - 02/26/2007

Charts Affected

Number	Version	Date	Scale
11354	26th Ed.	11/01/2006	1:40000
11355	27th Ed.	02/01/2006	1:40000
11351	39th Ed.	11/01/2004	1:80000
11352	38th Ed.	03/01/2005	1:175000
1116A	71st Ed.	09/01/2006	1:458596
11340	71st Ed.	09/01/2006	1:458596
411	51st Ed.	12/01/2006	1:2160000

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	0003	SSS	[None]	29° 42' 15.411" N	091° 13' 02.092" W	---
1.2	0005	Dolphin	[None]	29° 42' 14.205" N	091° 13' 01.972" W	---
1.3	0002	Wreck	[None]	29° 39' 15.980" N	091° 14' 37.809" W	---
1.4	0002	SSS	[None]	29° 41' 27.956" N	091° 12' 36.751" W	---
1.5	497/1	Wreck	15.89 m	29° 42' 25.756" N	091° 13' 19.026" W	---
1.6	428/1	Wreck	13.99 m	29° 43' 26.055" N	091° 13' 09.586" W	---
1.7	512/1	Wreck	8.24 m	29° 42' 17.581" N	091° 13' 19.096" W	---
1.8	124/1	Sounding	10.94 m	29° 42' 24.449" N	091° 13' 20.471" W	---
1.9	349/1	Wreck	6.39 m	29° 42' 10.593" N	091° 13' 14.502" W	---
1.10	580/1	Wreck	9.19 m	29° 39' 14.052" N	091° 14' 38.683" W	---

1 - DR_UnCharted

1.1) 0003

Survey Summary

Survey Position: 29° 42' 15.411" N, 091° 13' 02.092" W

Least Depth: [None]

Timestamp: 2007-057.07:44:16 (02/26/2007)

Survey Line: h11634 / nrt1_1211_klein3000hf_500sss / 2006-275 / sonar_data061002142600

Contact/Point: 0003/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Visible Pile. No DP taken.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002142600	0003	0.00	000.0	Primary

Hydrographer Recommendations

Hydrograper recommends charting pile at location of SSS contact.

S-57 Data

Geo object 1: Pile (PILPNT)

Office Notes

Concur.

1.2) 0005

Survey Summary

Survey Position: 29° 42' 14.205" N, 091° 13' 01.972" W

Least Depth: [None]

Timestamp: 2007-057.08:00:21 (02/26/2007)

Survey Line: h11634 / nrt1_1211_klein3000hf_500sss / 2006-275 / sonar_data061002160400

Contact/Point: 0005/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Visible Dol. No DP taken on Dol.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002160400	0005	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002160400	0004	23.62	218.4	Secondary (grouped)

Hydrographer Recommendations

Hydrographer recommends charting visible dol at location of SSS contact.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)

Attributes: CATMOR - 1:dolphin

VERDAT - 12:Mean lower low water

WATLEV - 2:always dry

Office Notes

Do not concur. Item correlates with charted dolphin. Retain charted dolphin.

1.3) 0002

Survey Summary

Survey Position: 29° 39' 15.980" N, 091° 14' 37.809" W

Least Depth: [None]

Timestamp: 2007-057.08:58:44 (02/26/2007)

Survey Line: h11634 / nrt1_1211_klein3000hf_500sss / 2006-276 / sonar_data061003102700

Contact/Point: 0002/1

Charts Affected: 11355_5, 11351_1, 11354_3, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Subm Wk. Not Investigated. Height as determined from SSS shadow = 2.21m.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_klein3000hf_500sss/2006-276/sonar_data061003102700	0002	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting Subm Wk. at location of SSS contact. Hydrographer also recommends investigating at a later date to determine LD.

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

TECSOU - 2:found by side scan sonar

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart subm wk LD unknown.

Feature Images

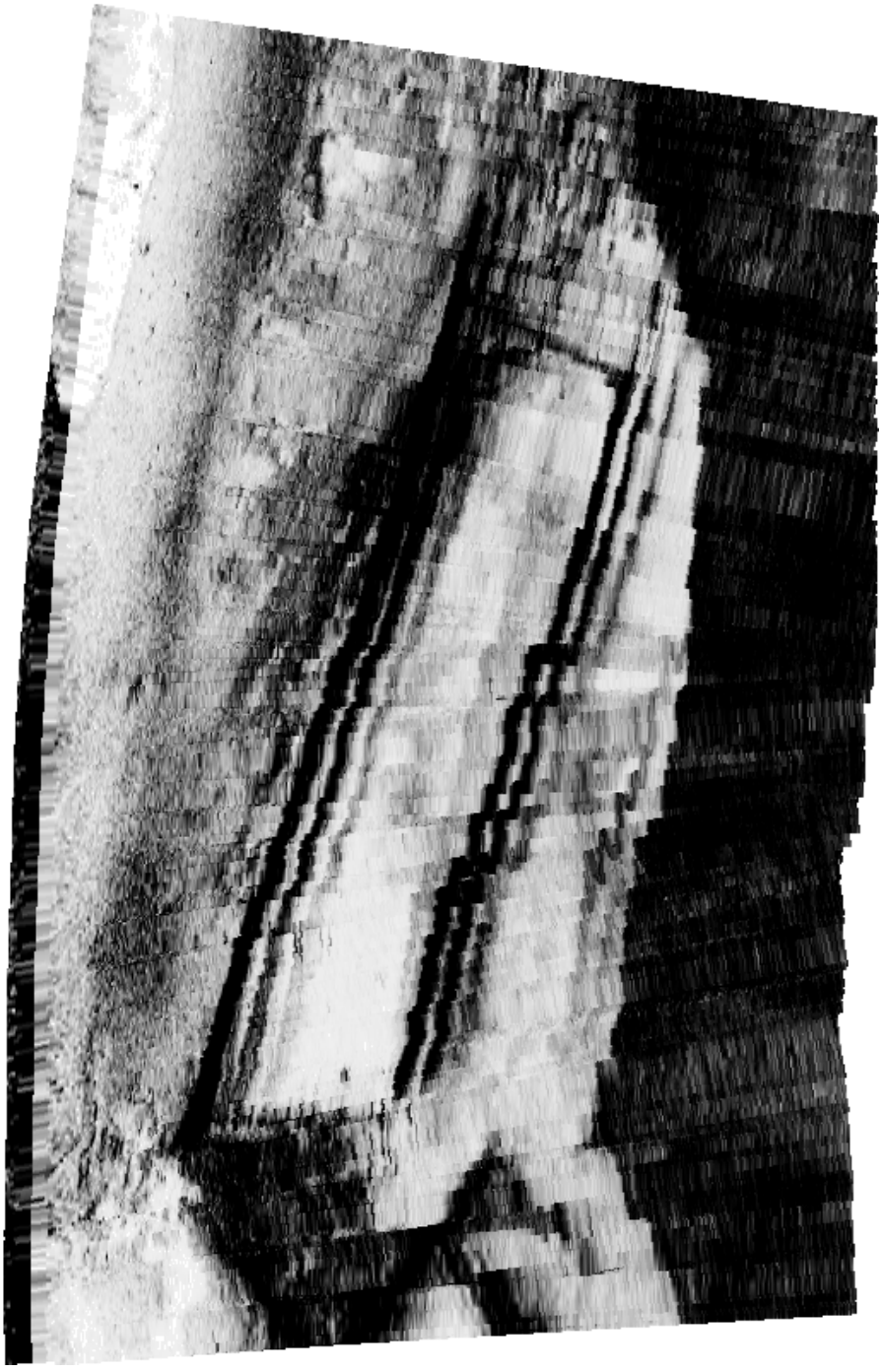


Figure 1.3.1

1.4) 0002

Survey Summary

Survey Position: 29° 41' 27.956" N, 091° 12' 36.751" W

Least Depth: [None]

Timestamp: 2007-057.09:12:46 (02/26/2007)

Survey Line: h11634 / nrt1_1211_klein3000hf_500sss / 2006-276 / sonar_data061003112700

Contact/Point: 0002/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Center of 2 Visible Dols. No DPs taken on Dols.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_klein3000hf_500sss/2006-276/sonar_data061003112700	0002	0.00	000.0	Primary

Hydrographer Recommendations

Hydrographer recommends charting Dols at location of SSS contact.

S-57 Data

Geo object 1: Mooring/warping facility (MORFAC)

Office Notes

Concur with clarification. Dolphins are charted on ENC USLA13M in this position. Update charts to match ENC.

1.5) 497/1

Survey Summary

Survey Position: 29° 42' 25.756" N, 091° 13' 19.026" W

Least Depth: 15.89 m

Timestamp: 2006-277.10:50:28.431 (10/04/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-277 / 229_1049

Profile/Beam: 497/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Subm Wk. located on 3 adjacent lines of SSS. Wk investegated in SBES, using a star shaped pattern. Shoalest sounding on subm wk = 15.93m.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-277/229_1049	497/1	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-271/sonar_data060928103200	0001	7.91	223.1	Secondary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002131100	0002	10.90	170.4	Secondary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002161900	0005	12.18	164.6	Secondary

Hydrographer Recommendations

Hydrographer recommends charting Subm Wk at survey location.

Cartographically-Rounded Depth (Affected Charts):

52ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

8 ¾fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

HEIGHT - 2.18 m

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 15.893 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart subm wk.

Feature Images

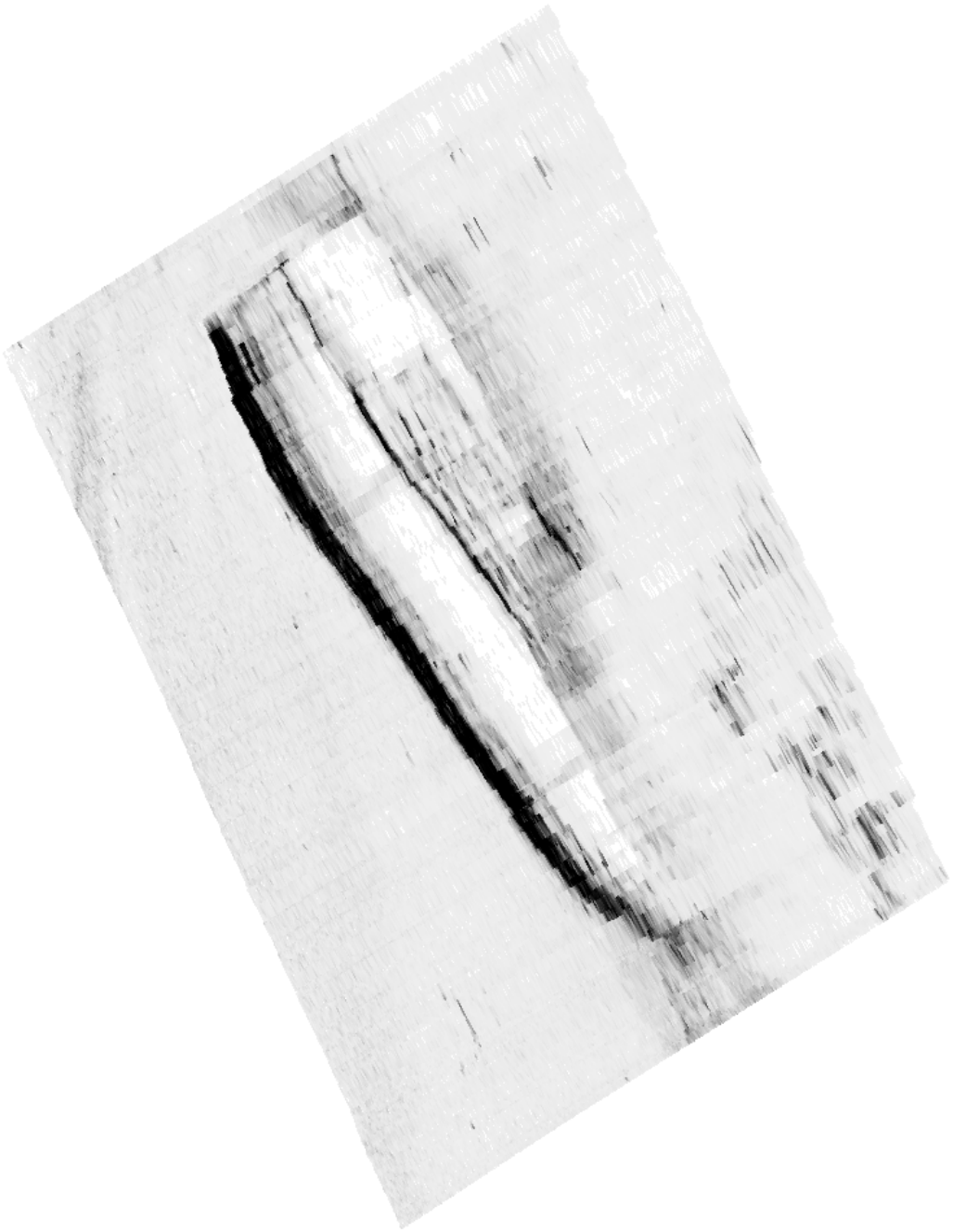


Figure 1.5.1

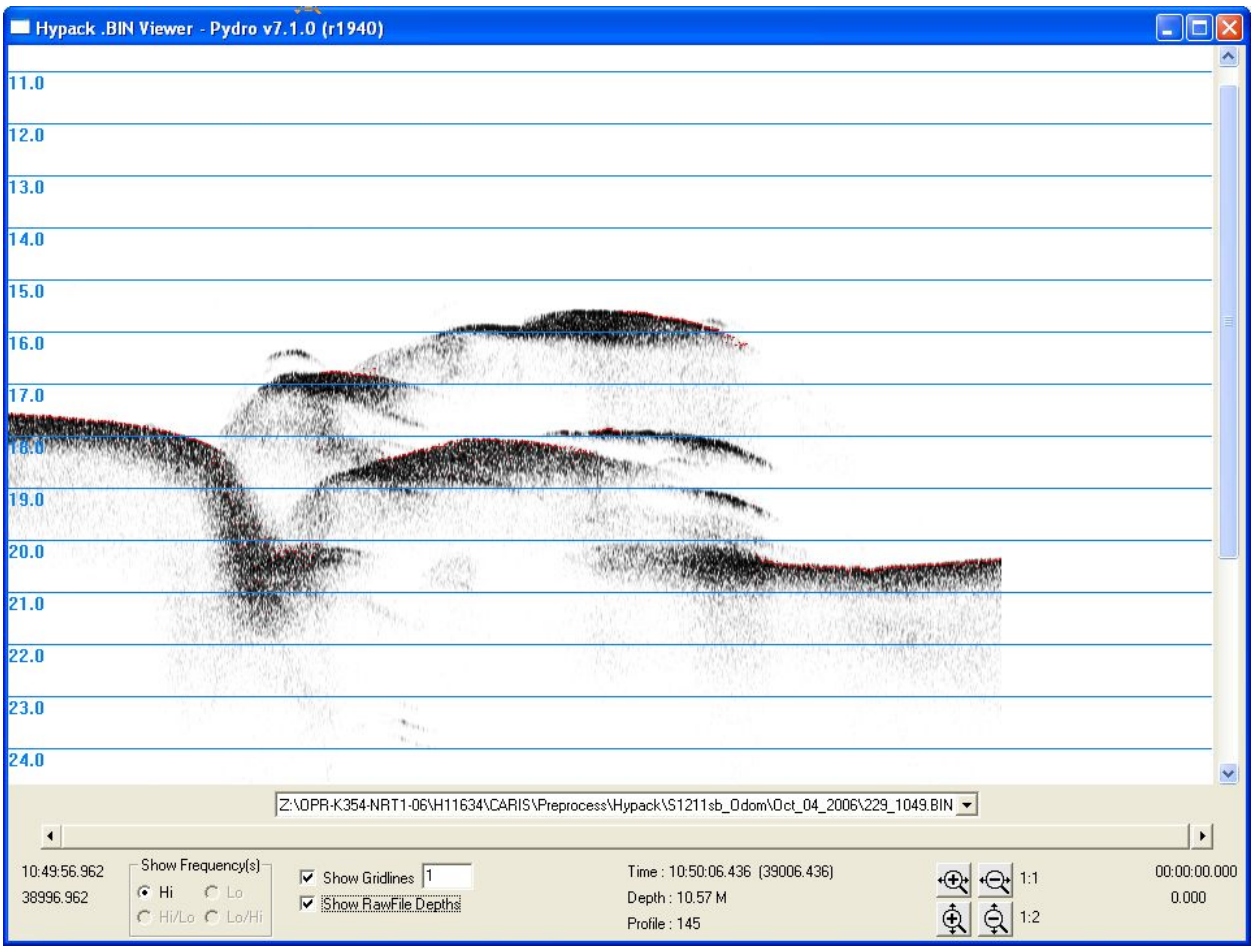

Hypack .BIN Viewer - Pydro v7.1.0 (r1940)
11.0
12.0
13.0
14.0
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
Z:\OPR-K354-NRT1-06\H11634\CARIS\Preprocess\Hypack\S1211sb_Odom\Oct_04_2006\229_1049.BIN
10:49:56.962
38996.962
Show Frequency(s)
Hi
Lo
Hi/Lo
Lo/Hi
Show Gridlines
1
Show RawFile Depths
Time : 10:50:06.436 (39006.436)
Depth : 10.57 M
Profile : 145
1:1
1:2
00:00:00.000
0.000

Figure 1.5.2

1.6) 428/1

Survey Summary

Survey Position: 29° 43' 26.055" N, 091° 13' 09.586" W

Least Depth: 13.99 m

Timestamp: 2006-277.10:42:38.738 (10/04/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-277 / 228_1042

Profile/Beam: 428/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Submerged barge identified on several passes of SSS. Barge was investegated with SBES in a star-shaped pattern. LD of 14.04m was obtained for a height of 2.25m

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-277/228_1042	428/1	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002140900	0001	12.55	206.8	Secondary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002153300	0001	13.91	229.8	Secondary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002131100	0001	14.19	240.3	Secondary

Hydrographer Recommendations

Hydrographer recommends charting Subm Wk.

Cartographically-Rounded Depth (Affected Charts):

46ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

7 ½fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 13.995 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Remove wk PA from chart. Chart subm wk.

Feature Images

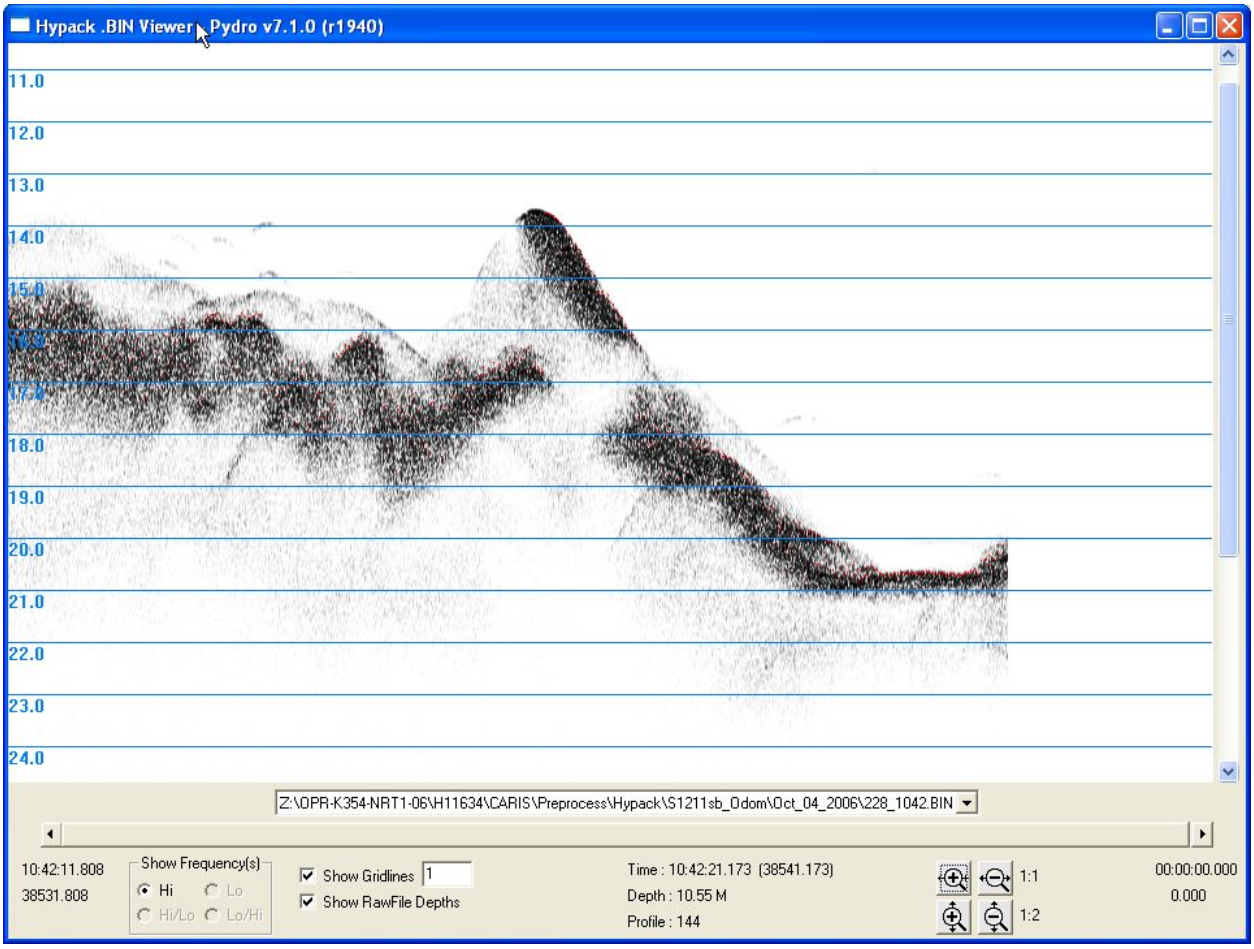


Figure 1.6.1

Figure 1.6.2

1.7) 512/1

Survey Summary

Survey Position: 29° 42' 17.581" N, 091° 13' 19.096" W

Least Depth: 8.24 m

Timestamp: 2006-277.10:11:55.193 (10/04/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-277 / 221_1011

Profile/Beam: 512/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Subm wk observed SSS on 2 passes. Wk investigated with SBES in star shaped pattern. Least depth observed was 8.28m.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-277/221_1011	512/1	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002161900	0004	6.96	159.1	Secondary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002144700	0001	15.80	180.2	Secondary

Hydrographer Recommendations

Hydrographer recommends charting submerged wk.

Cartographically-Rounded Depth (Affected Charts):

27ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

4 ½fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 8.244 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart subm wk.

Feature Images

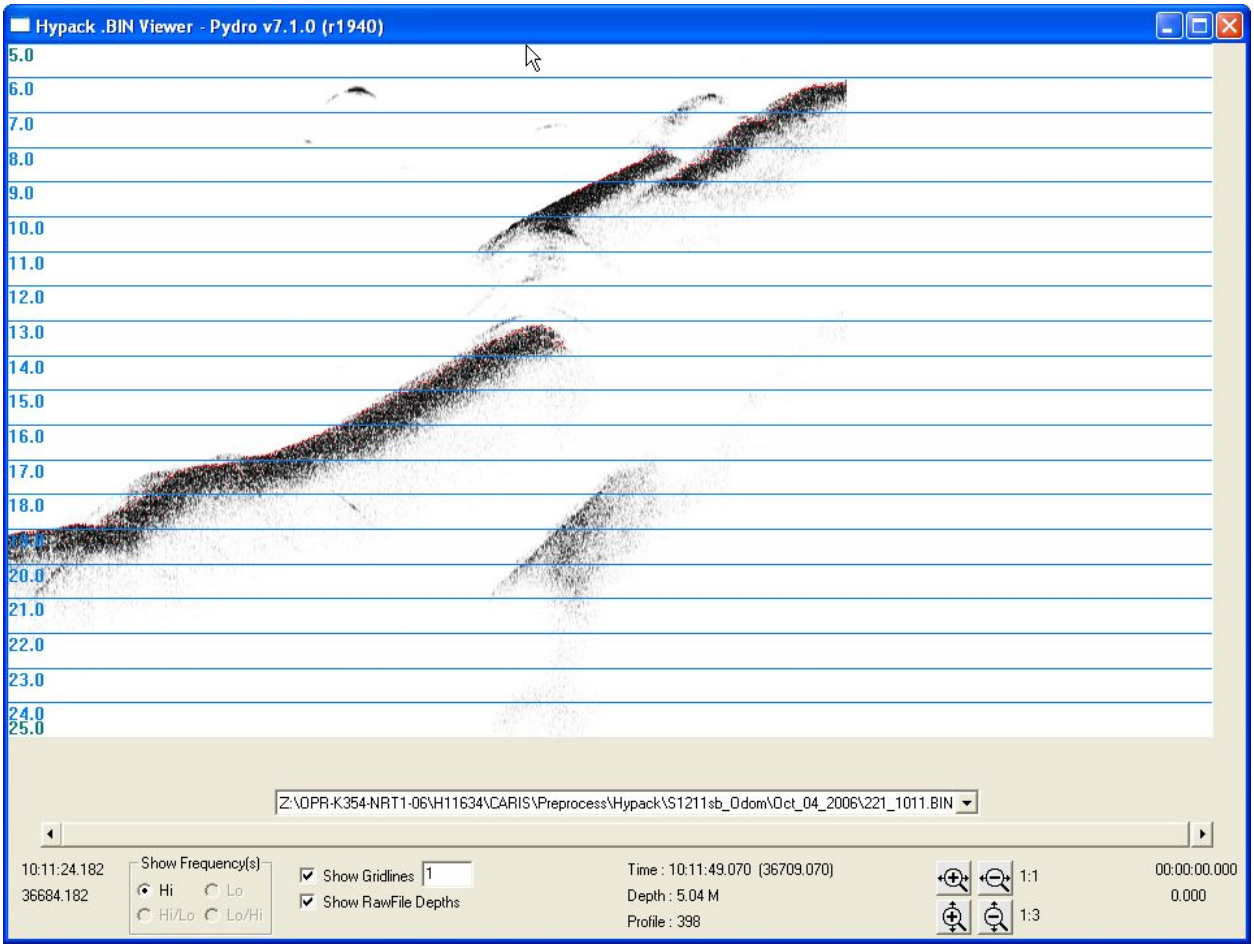


Figure 1.7.1

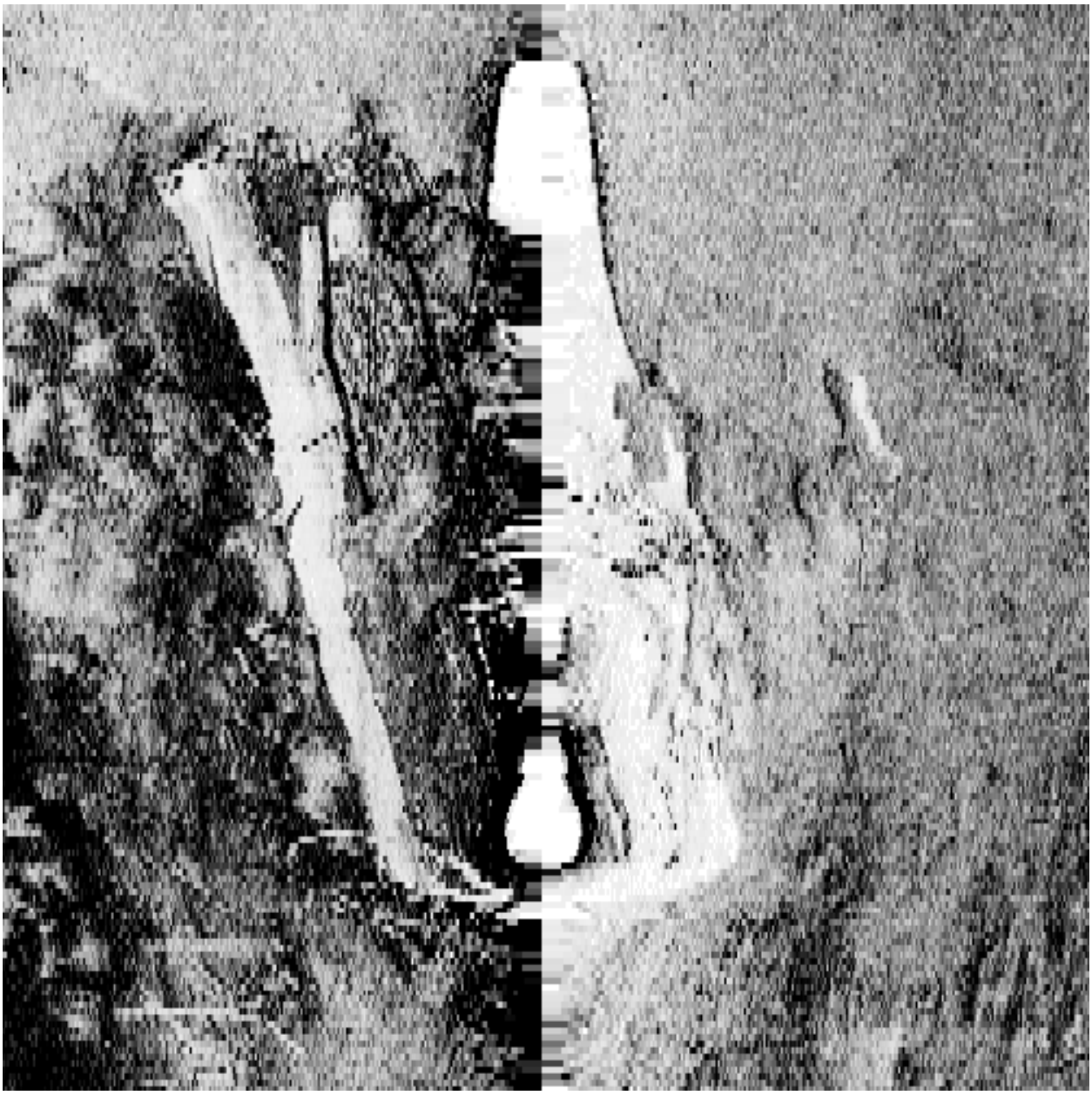


Figure 1.7.2

1.8) 124/1

Survey Summary

Survey Position: 29° 42' 24.449" N, 091° 13' 20.471" W

Least Depth: 10.94 m

Timestamp: 2006-277.10:19:52.392 (10/04/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-277 / 225_1019

Profile/Beam: 124/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Two submerged barges, oriented perpendicular to each other, were observed on two passes of SSS. A SBES investigation was conducted in a star-shaped pattern over the barges. A least depth of 10.97m was found with a height of 3.5 meters.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-277/225_1019	124/1	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002161900	0006	10.05	322.3	Secondary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002131100	0003	10.39	296.3	Secondary

Hydrographer Recommendations

Hydrographer recommends removing charted "Wk" noation and arrows from chart and charting Subm Wks at location of LD.

Cartographically-Rounded Depth (Affected Charts):

36ft (11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1)

6fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CONVIS - 2:not visual conspicuous

HEIGHT - 3.5 m

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 10.935 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Remove charted wks PA. Chart two subm wks in surveyed position.

Feature Images

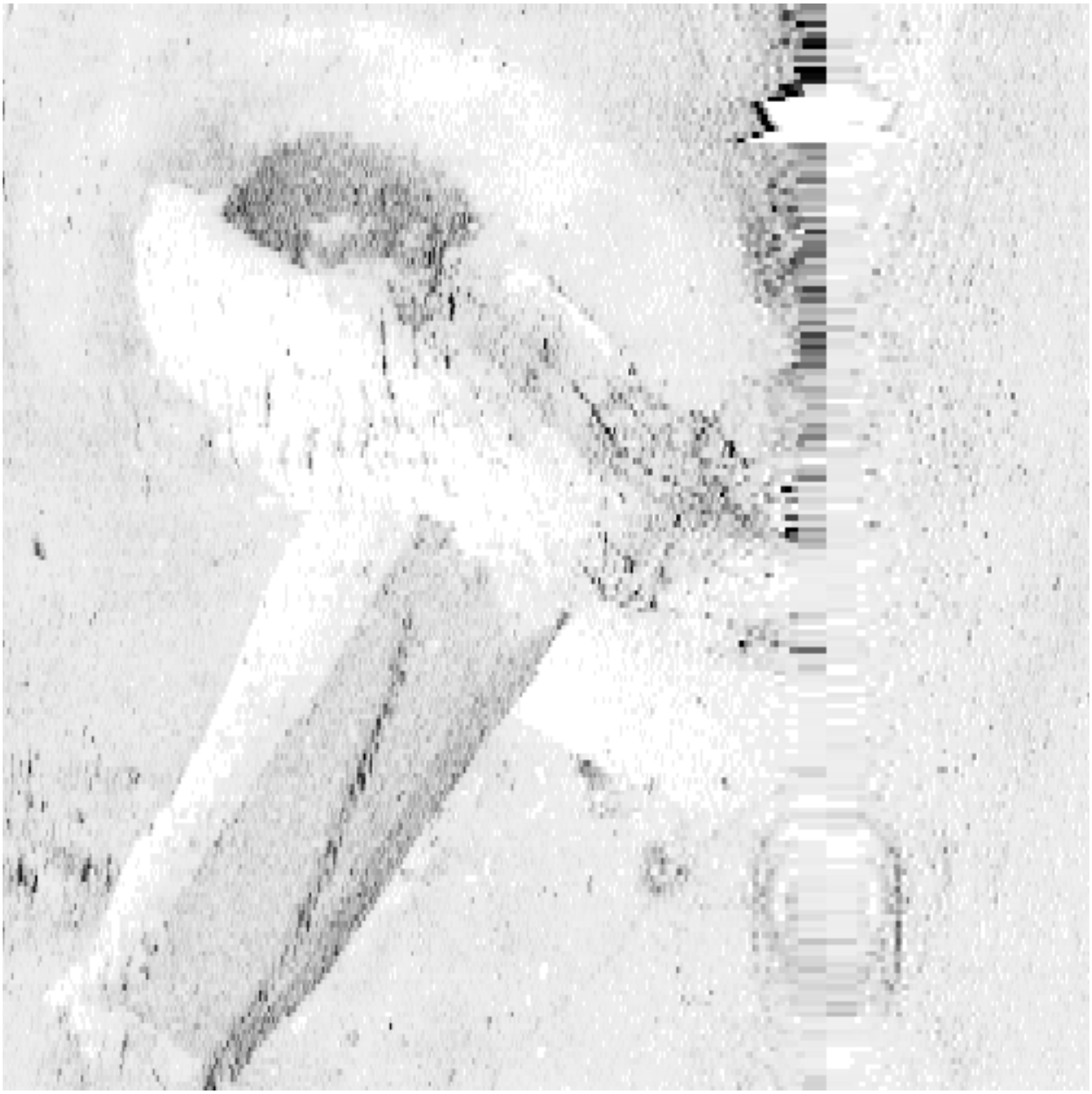
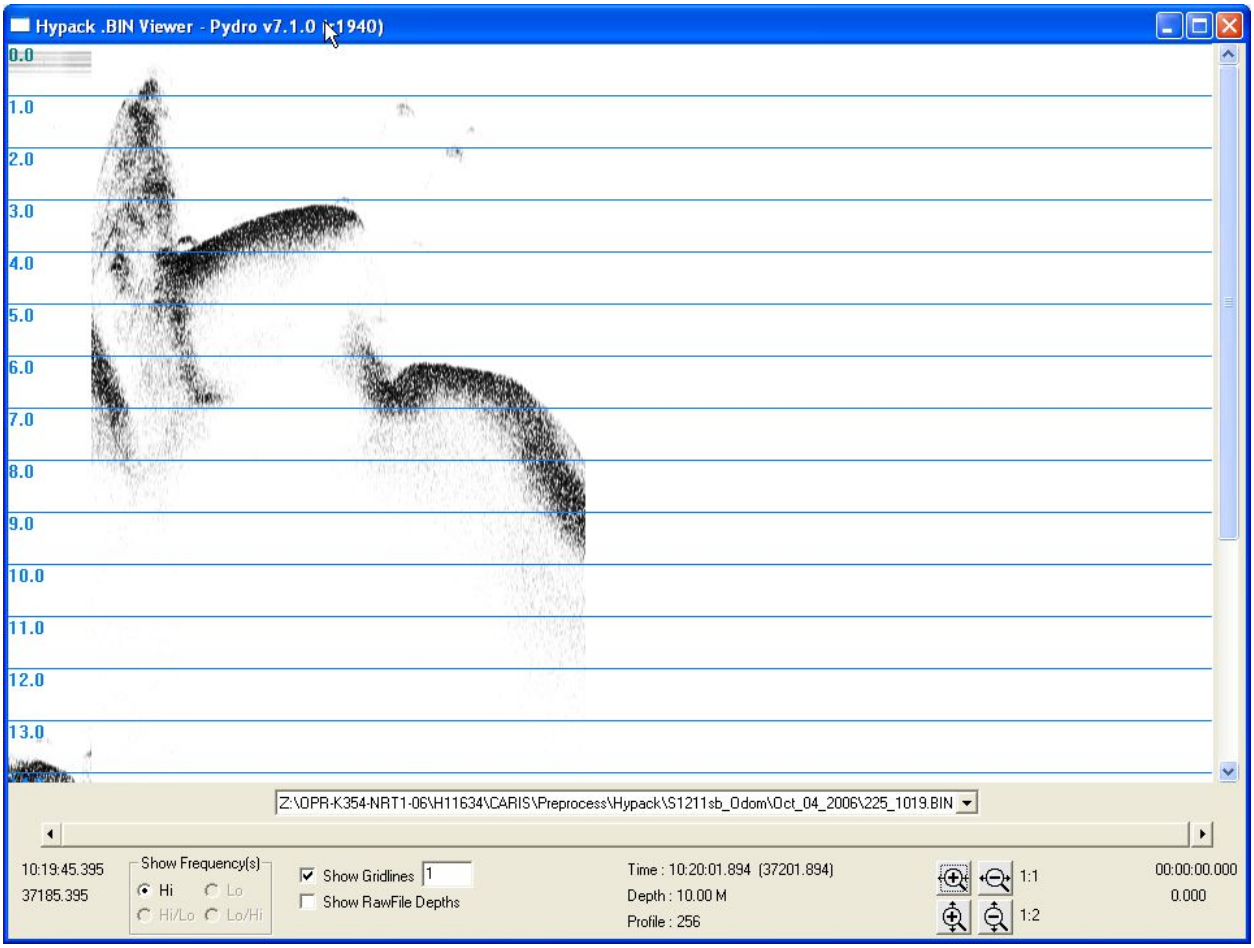


Figure 1.8.1


Hypack .BIN Viewer - Pydro v7.1.0 (x1940)
0.0
1.0
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3.0
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5.0
6.0
7.0
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9.0
10.0
11.0
12.0
13.0
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Hi
Lo
Hi/Lo
Lo/Hi
Show Gridlines
1
Show RawFile Depths
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Depth : 10.00 M
Profile : 256
1:1
1:2
00:00:00.000
0.000

Figure 1.8.2

1.9) 349/1

Survey Summary

Survey Position: 29° 42' 10.593" N, 091° 13' 14.502" W

Least Depth: 6.39 m

Timestamp: 2006-277.10:05:06.499 (10/04/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-277 / 219_1004

Profile/Beam: 349/1

Charts Affected: 11354_2, 11355_5, 11351_1, 11354_1, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Two subm Wks observed in SSS data. SBES investigation was conducted in a star-shaped pattern. LD of 6.43m was obtained over Wk for height of 6.48m.

This item was not determined to be a DToN because it is still deeped than the project depth of 20ft reported in the 2006 Coast Pilot 34th Ed.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-277/219_1004	349/1	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-275/sonar_data061002161900	0003	4.46	234.9	Secondary

Hydrographer Recommendations

Hydrographer recommends charting Subm Wk.

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes:

CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

HEIGHT - 6.48 m

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 6.392 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Chart two submerged wrecks.

Feature Images

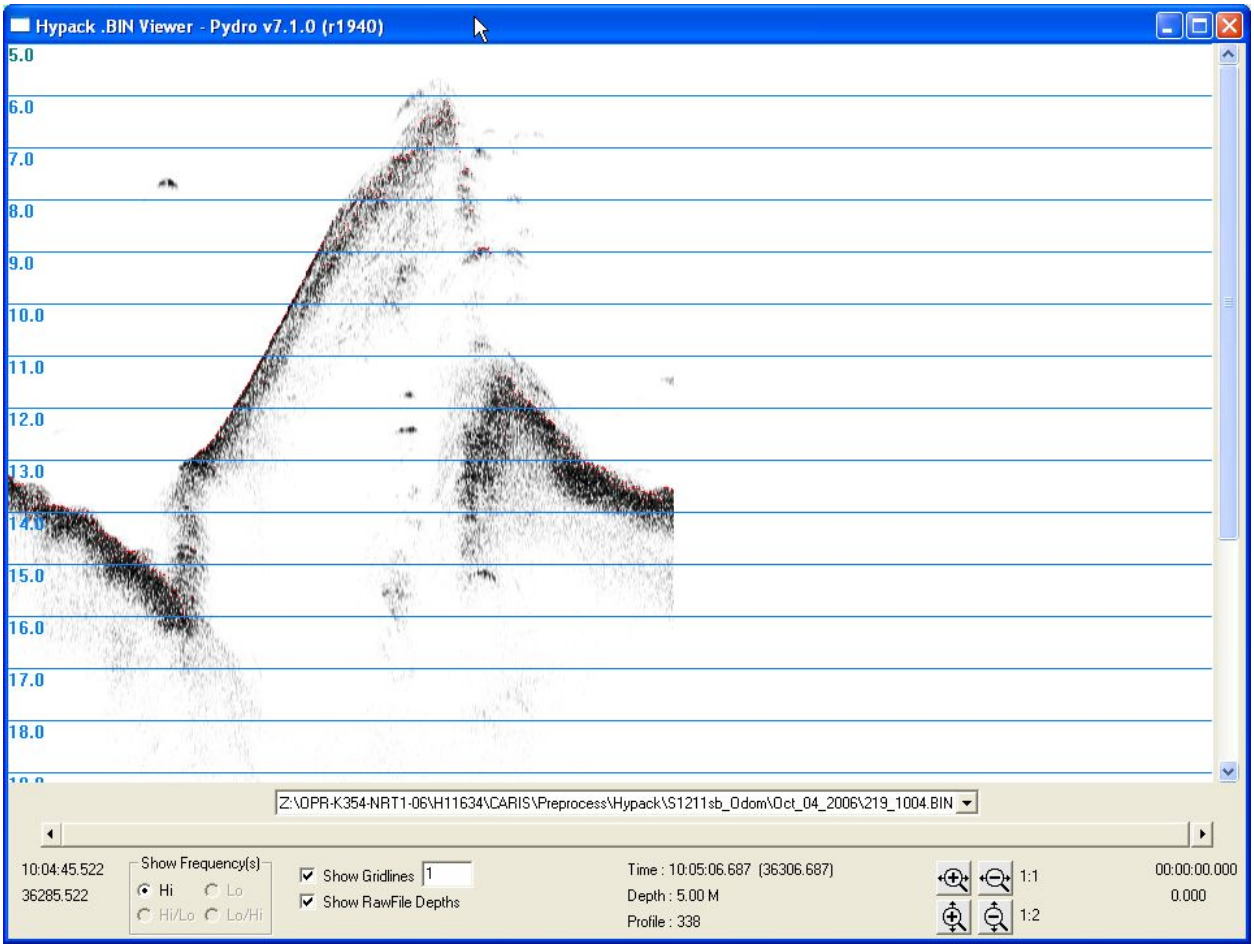


Figure 1.9.1

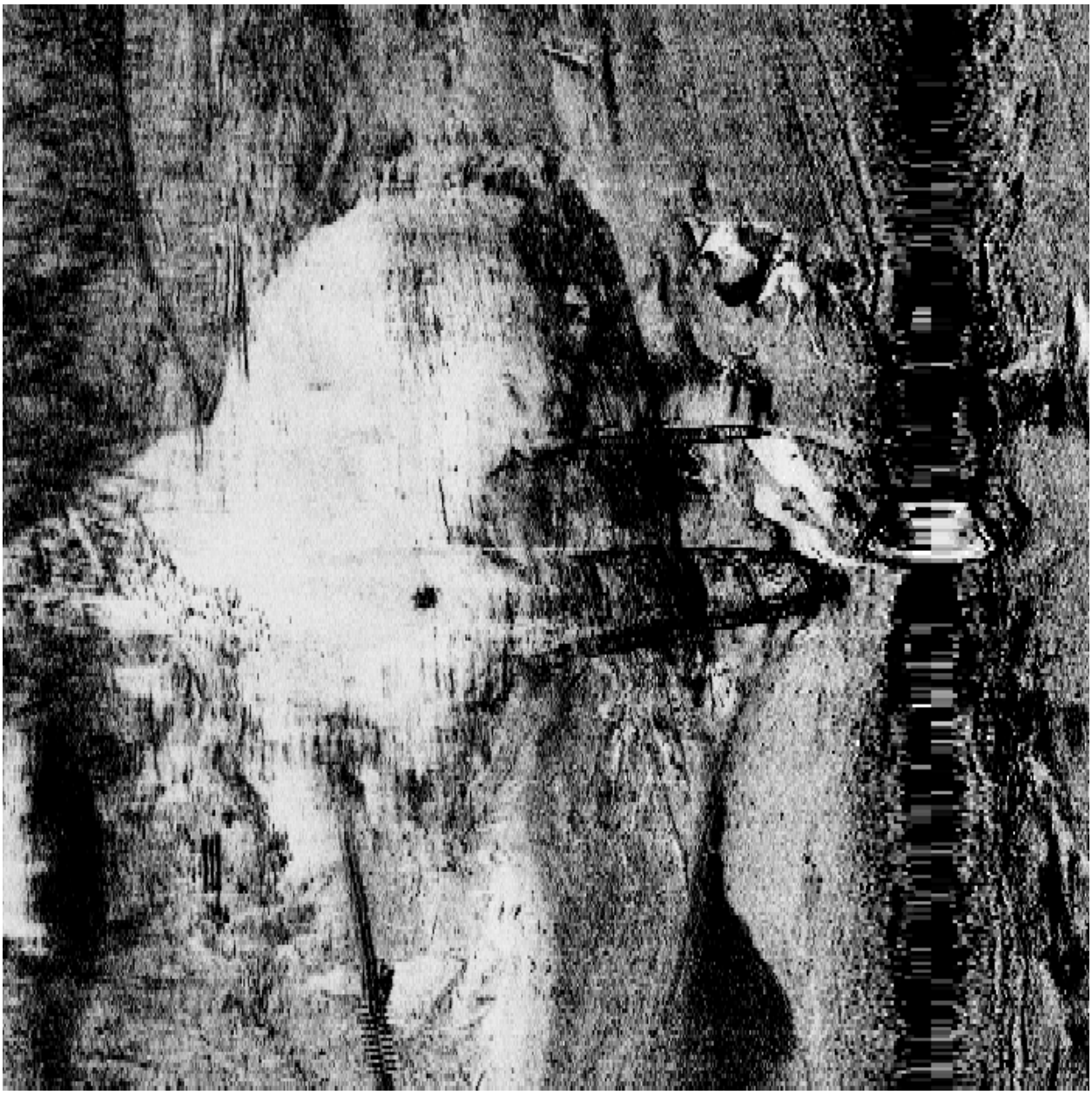


Figure 1.9.2

1.10) 580/1

Survey Summary

Survey Position: 29° 39' 14.052" N, 091° 14' 38.683" W

Least Depth: 9.19 m

Timestamp: 2006-277.09:22:16.615 (10/04/2006)

Survey Line: h11634 / nrt1_1211_sb / 2006-277 / 204_0921

Profile/Beam: 580/1

Charts Affected: 11355_5, 11351_1, 11354_3, 11354_6, 11352_1, 1116A_1, 11340_1, 411_1

Remarks:

Subm Wk found by SSS investigated with SBES in a star shaped pattern. Shoalest sounding found on Wk = 9.28m. Wk appears to be approx 4m high from sbes record. Wk is located adjacent to a slope and LD is deeper than this surrounding area.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h11634/nrt1_1211_sb/2006-277/204_0921	580/1	0.00	000.0	Primary
h11634/nrt1_1211_klein3000hf_500sss/2006-276/sonar_data061003102700	0001	10.78	276.1	Secondary

Hydrographer Recommendations

Hydrographer recommends charting Subm Wk at location of surveyed LD.

Cartographically-Rounded Depth (Affected Charts):

30ft (11355_5, 11351_1, 11354_3, 11354_6, 11352_1)

5fm (1116A_1, 11340_1, 411_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 1:non-dangerous wreck

CONVIS - 2:not visual conspicuous

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 9.186 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart submerged wreck.

Wreck has already been added to the continual update raster chart.

Feature Images

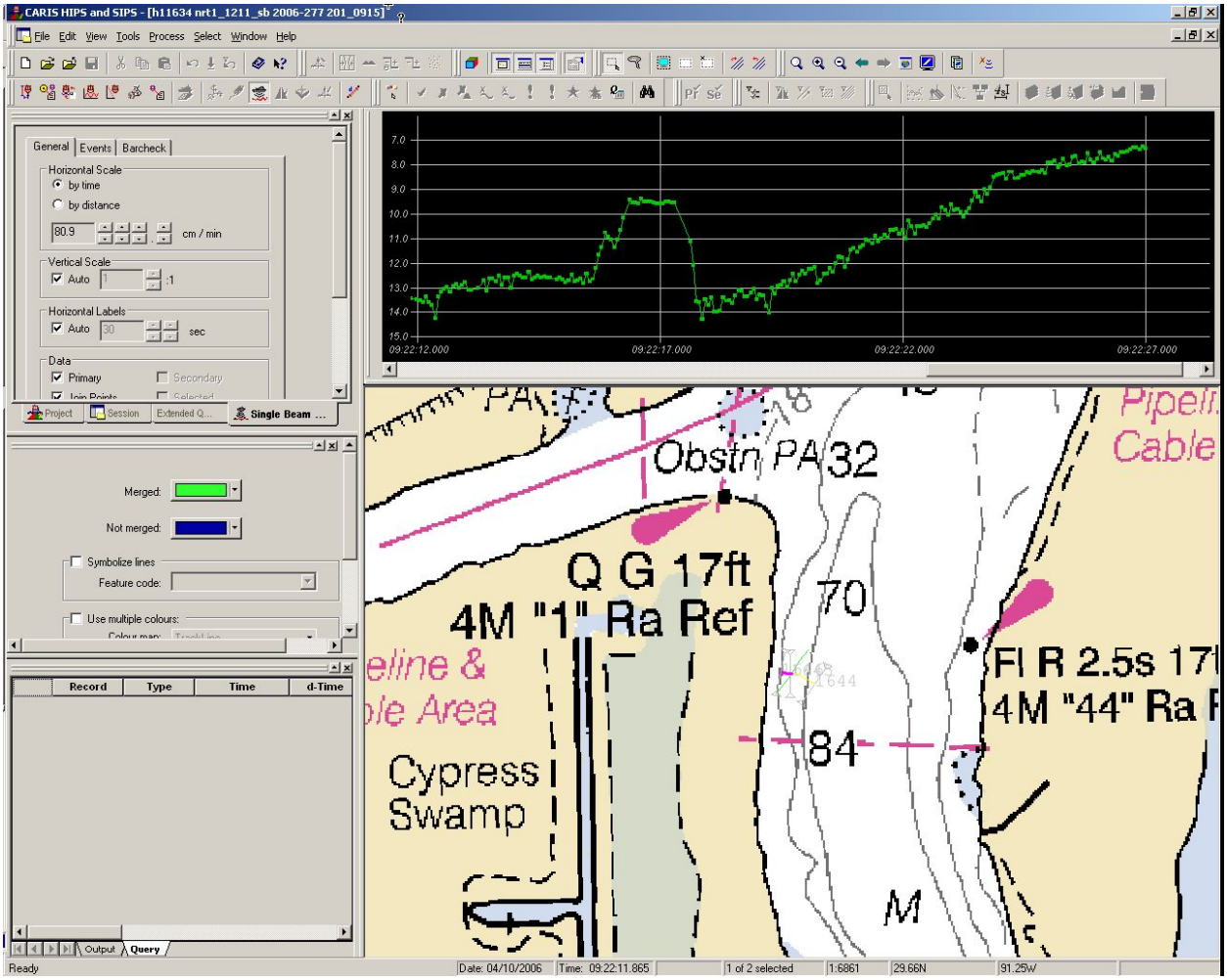


Figure 1.10.1

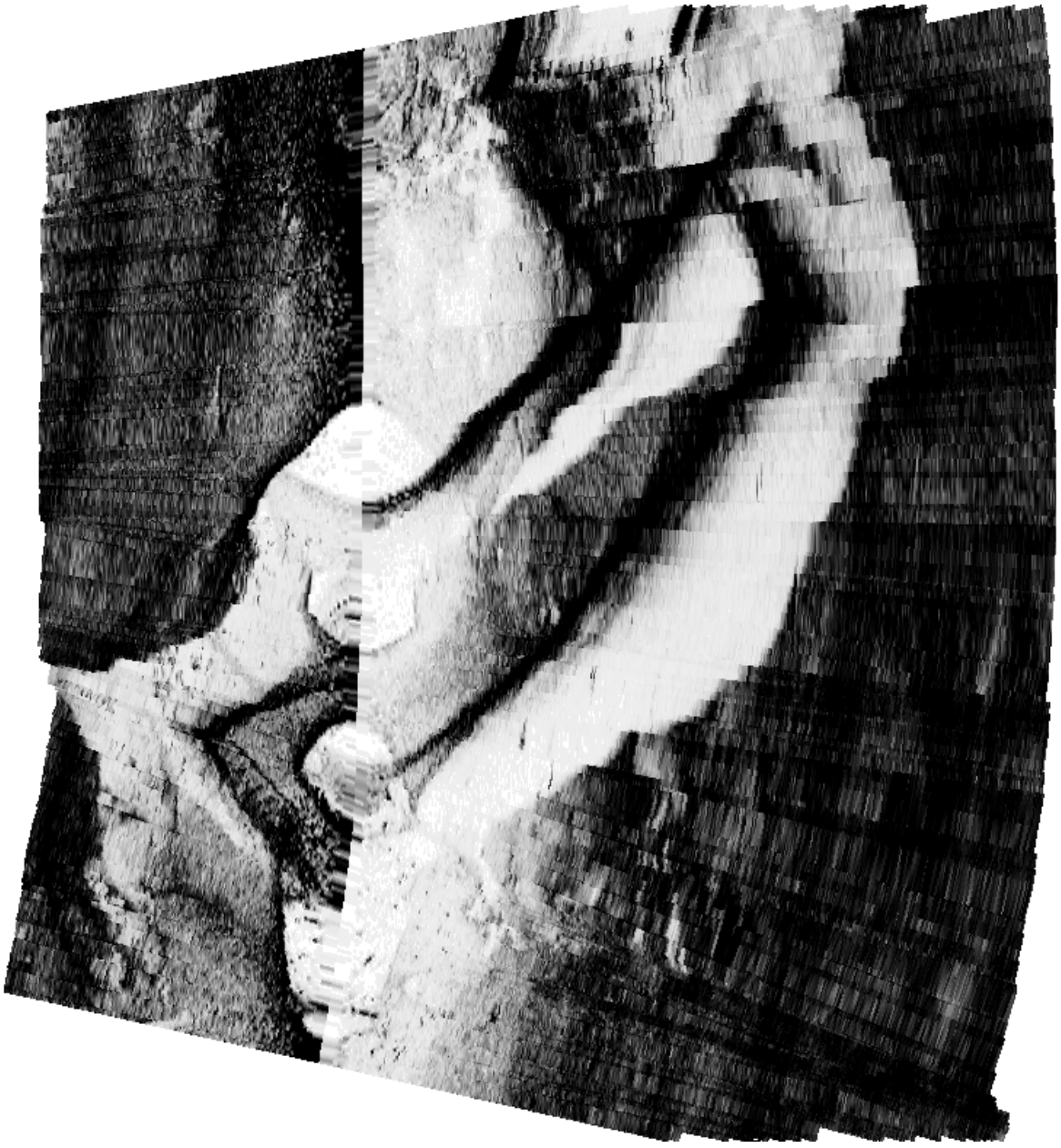
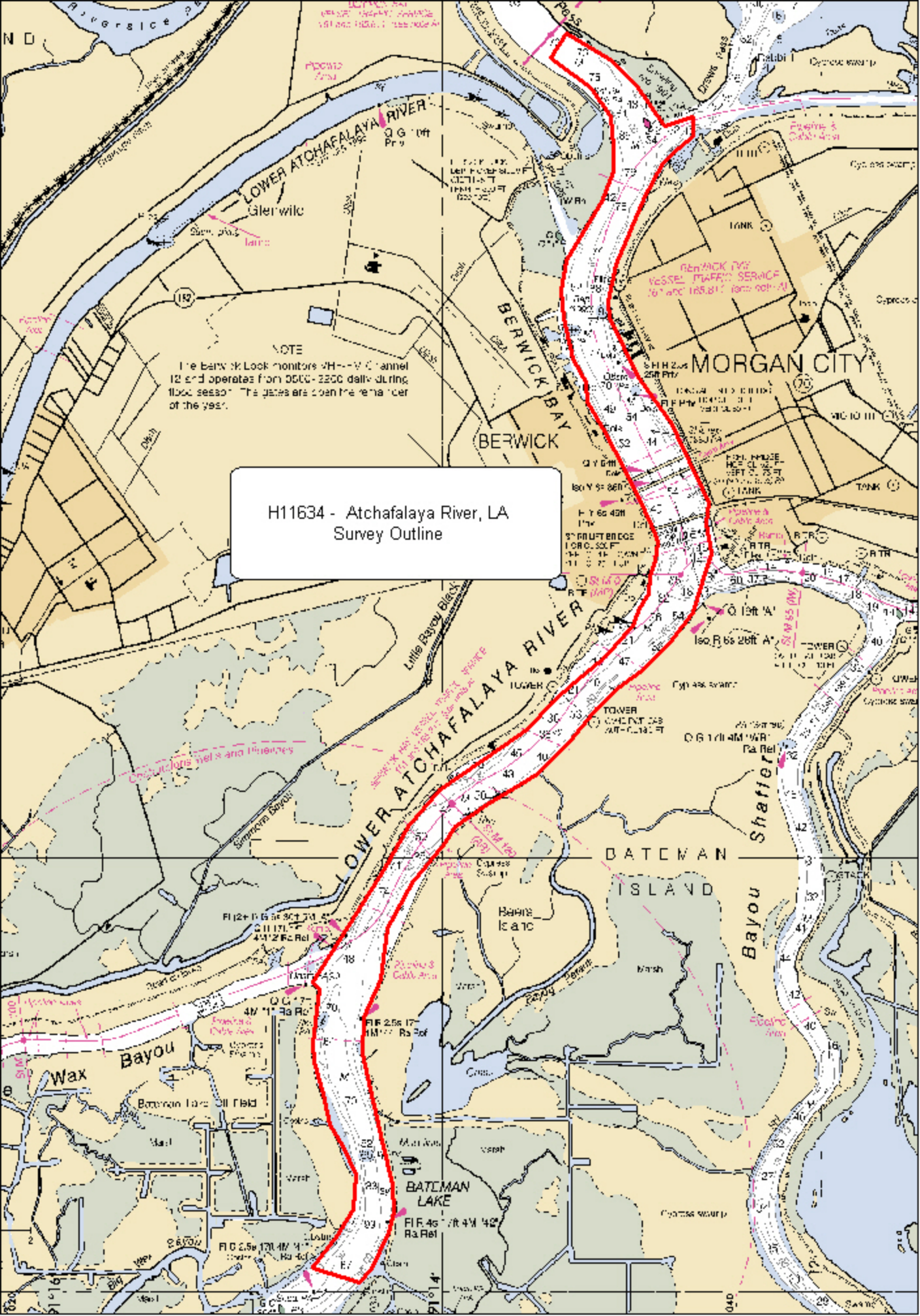


Figure 1.10.2

APPENDIX III - Survey Outline


H11634 - Atchafalaya River, LA
Survey Outline
LOWER ATCHAFALAYA RIVER
BERWICK BAY
BERWICK
MORGAN CITY
Glenwild
NOTE
The Berwick Lock monitors VHF-FM Channel 12 and operates from 0500 - 2300 daily during flood season. The gates are open the remainder of the year.
Little Bayou Black
Simmons Bayou
BATEMAN ISLAND
Bayou Shaffer
Bayou Wax
BATEMAN LAKE
Bears Island
Marsh
Cypress swamp
TANK
TOWER

APPENDIX IV - Tides and Water Levels

February 14, 2007

MEMORANDUM FOR: Chief, Requirements and Development Division, N/OPS1

FROM: Mark McMann, NRT-1

SUBJECT: Request for Approved Tides/Water Levels

Please provide the following data:

1. Tide Note
2. Final zoning in MapInfo and .MIX format
3. Six Minute Water Level data (Co-ops web site)

Transmit data to the following:

NOAA/NOS/Atlantic Hydrographic Branch
N/CS33, Building #2
439 West York Street
Norfolk, VA 23510
ATTN: Chief AHB

NOAA, NRT-1
c/o Bon Secour NWR
State Hwy 180
Gulf Shores, AL 36542

These data are required for the processing of the following hydrographic survey:

Project No.:	OPR-K354-NRT1-06
Registry No.:	H11634
State:	Louisiana
Locality:	Atchafalaya River
Sublocality:	Honey Island to Morgan City

Attachments containing:
1) an Abstract of Times of Hydrography,
2) digital MID MIF files of the track lines from Pydro

cc: N/CS33

Generated by Pydro v7.1.0 (r1940) on Wed Feb 14 19:13:12 2007 [UTC]

Year_DOY	Min Time	Max Time
2006_271	10:33:35	14:32:14
2006_275	12:41:30	16:33:52
2006_276	07:58:18	13:28:56
2006_277	09:12:38	11:12:21

UNITED STATES DEPARMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : August 7, 2007

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: OPR-K354-NRT1-2006
HYDROGRAPHIC SHEET: H11634

LOCALITY: Honey Island to Morgan city, Atchafalaya River, LA
TIME PERIOD: September 28 - October 4, 2006

TIDE STATION USED: 876-4025 Stouts Pass
Lat. 29° 44.7'N Long. 91° 13.8' W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.247 meters

REMARKS: RECOMMENDED ZONING
Use zone(s) identified as: WLA269, WLA270, WLA271, WLA272 and WLA273

Refer to attachments for zoning information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time on the 1983-2001 National Tidal Datum Epoch (NTDE).

for _____
CHIEF, PRODUCTS AND SERVICES DIVISION

Tide Requirements for OPR-K354-NRT1-2006
Atchafalaya Bay to Morgan City
MC/CM 09/27/2006

5.0. TIDES

5.1. Purpose: All tide requirements in these instructions are in direct support of hydrographic survey operations.

5.2 through 5.6. Refer to Standing Instructions.

5.7. Vertical Datums:
Refer to Standing Instructions.

5.7.1. The operating National Water Level Observation Network (NWLON) station at Galveston Pleasure Pier, TX (877-1510) will serve as datum control for the survey area. Therefore, it is critical that this station remain in operation during all periods of hydrography.

5.7.1.1. Water level data acquisition monitoring
Refer to Standing Instructions.

5.7.1.2. Water level station operation and maintenance
Refer to Standing Instructions.

5.7.1.3. No leveling is required at Galveston Pleasure Pier, TX (877-1510) by NOAA's NRT1 personnel.

5.8. Water Level Station Requirements: The operating water level stations at Stouts Pass, LA (876-4025), Tesoro Marine Terminal, LA (876-4044), and Lawma - Amerada Pass, LA (876-4227) will also provide water level reducers for this project, reiterating the importance of their operation during all periods of hydrography. See Sections 5.7.1.1. and 5.7.1.2. concerning responsibilities.

5.8.1. There are no subordinate water level stations required for this project.

5.8.1.2. This section is not applicable for this project.

5.8.1.3 Tide Component Error Estimation: The estimated tidal error contribution to the total survey error budget in the vicinity of Atchafalaya Bay and Morgan City is 0.13 meters, and includes the estimated gauge measurement error, tidal datum computation error, and tidal zoning error. It should be noted that the tidal error component can be significantly greater than stated if a substantial meteorological event or condition should occur during time of hydrography.

5.9. Zoning: For hydrography in the area of Atchafalaya Bay and Morgan City, Stouts Pass, LA (876-4025), Tesoro Marine Terminal, LA (876-4044), and Lawma - Amerada Pass, LA (876-4227) are the reference stations for predicted tides. Predictions may be retrieved in one month

increments over the Internet from the CO-OPS Home Page at http://tidesandcurrents.noaa.gov/olddata and then clicking on "Predicted Water Level". Predictions are six-minute time series data relative to MLLW in metric units on Greenwich Mean Time. Apply the following time and height correctors to the predicted tides at Stouts Pass, LA (876-4025), Tesoro Marine Terminal, LA (876-4044), and Lawma - Amerada Pass, LA (876-4227) during the acquisition and preliminary processing phases of this project for correcting all sounding data.

Zone Name	**Time Corrector(mins)**	**Range Ratio**	**Predicted Reference**
WLA240A	0	x1.00	876-4227
WLA263	-108	x1.73	876-4044
WLA264	-96	x1.60	876-4044
WLA265	-78	x1.53	876-4044
WLA266	-60	x1.40	876-4044
WLA267	-48	x1.33	876-4044
WLA268	-36	x1.27	876-4044
WLA269	-24	x1.20	876-4044
WLA270	-12	x1.07	876-4044
WLA271	+6	x1.00	876-4044
WLA272	-12	x0.86	876-4025
WLA272A	-12	x0.92	876-4025
WLA273	0	x0.98	876-4025

NOTE: The tide corrector values referenced to Stouts Pass, LA (876-4025), Tesoro Marine Terminal, LA (876-4044), and Lawma - Amerada Pass, LA (876-4227) are provided in the zoning file "K354NRT1CORP" for this project and are in the fourth set of correctors designated as TS4. Longitude and latitude coordinates are in decimal degrees. Negative (-) longitude is a MapInfo representation of west longitude.

NOTE: For time corrections, a negative (-) time correction indicates that the time of tide in that zone is earlier than (before) the predicted tides at the reference station, whereas, a positive (+) time correction indicates that the time of tide in that zone is later than (after) the predicted tides at the reference station. For height corrections, the water level heights **relative to MLLW** at the reference station are multiplied by the range ratio to estimate the water level heights relative to MLLW in the applicable zone.

Water level gauges for this project have been installed by CO-OPS prior to the start of the survey. Upon completion of project OPR-K354-NRT1-2006, submit a Pydro generated request for smooth tides, with times of hydrography abstract and mid/mif tracklines attached. Forward this request to smooth.tides@noaa.gov .
CO-OPS will review the times of hydrography, final tracklines, and six-minute water level data from all applicable water level gauges. After review, CO-OPS will send a notice indicating that the tidal zoning scheme sent with the project instructions has been approved for final zoning. If there are any discrepancies, CO-OPS will make the appropriate adjustments and forward a revised tidal zoning scheme to the field group and processing branch for final processing.

5.9.1. Zoning Diagram(s) A zoning diagram, created in MapInfo, is to assist with the zoning provided in Section 5.9.

5.9.2. Tidebot:
Refer to Standing Instructions.

5.10. Tidal Records:

Refer to Standing Instructions on what data records, reports and requests to submit to CO-OPS and the address where these documents should be submitted too.

APPENDIX V – Supplemental Records and Correspondence

Subject: Re: DtoN Question H11634 (Atchafalaya River)
Date: Thu, 01 Nov 2007 16:13:11 -0400
From: Shepard Smith <Shep.Smith@noaa.gov>
To: Sarah Eggleston <Sarah.Eggleston@noaa.gov>
CC: Jeffrey Ferguson <Jeffrey.Ferguson@noaa.gov>, Mark Griffin <Mark.Griffin@noaa.gov>
References: 1

Sarah,

Talked to Mark. MCD is going to do a DTON Chartlet.

Step 1: AHB will put together a DTON package with:
-Short cover letter (survey source, datums, etc)
-SS file-just soundings in an S-57 format
-Send via the normal DTON route.
-MCD will do the DTON Chartlet.

Step 2: Mark will request shoreline from RSD to support a better chart update.
Step 3: AHB will go through the features in the survey and put together a proper H-Cell, most likely including bluenotes for all the funny changes this survey will require. This will be sent through normal channels. In addition, AHB will prioritize H11635 to ensure it also meets this schedule for a new chart edition.
Step 4: MCD will compile this survey, others in the area, new shoreline, and likely issue a new chart edition with the changes.

Mark-did I capture this right?

Shep

Sarah Eggleston wrote:

> I have attached an image of the northern section of survey H11634 for which there are a few DtoN/Anti-DtoN questions.
>
> -Sarah

Subject:
Emailing: 11022007DtoN Report.pdf, H11634_Soundings.000
Date:
Fri, 02 Nov 2007 14:18:32 -0400
From:
Shepard Smith <Shep.Smith@noaa.gov>
To:
mcd.dton@noaa.gov
CC:
Jeffrey Ferguson <Jeffrey.Ferguson@noaa.gov>, Sarah Eggleston <Sarah.Eggleston@noaa.gov>, Mark Griffin <Mark.Griffin@noaa.gov>, Castle E Parker <Castle.E.Parker@noaa.gov>, Mark Mcmann <Mark.Mcmann@noaa.gov>, Lawrence T Krepp <Lawrence.T.Krepp@noaa.gov>

Lyn et al,

This is fairly unusual, but I think everyone knows this is coming. Attached is a recommendation and supporting data for MCD (PBE-Griffin) to make two DTON chartlets based on some sounding data from an NRT survey in the Achafalaya River (Morgan City). The .000 file contains only soundings. In addition, the attached report contains two DTON soundings outside the areas of the recommended chartlets.

Let me know ASAP if you have any questions or concerns with this submission.

Thanks,

Shep

ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT FOR H11634 (2006)

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 7.3
MapInfo Professional 9.0
CARIS HIPS/SIPS version 6.1 SP1 HF 1-6
CARIS Bathy DataBASE version 2.1 HF 1-3
CARIS HOM ENC version 3.3 SP3 HF 1-7
DKART INSPECTOR, version 5.0 Build 732

B.2 QUALITY CONTROL

B.2.1 DATA QUALITY FACTORS

BASE Surfaces and Mosaics

One 2-meter BASE Surface was generated by the office processor during in-office review. The resulting BASE surface was imported to CARIS BASE Manager for preliminary H-Cell processing.

Junctions

Surveys H11635 and H11634 were collected concurrently. Soundings between the two show agreement to within a foot.

B.3 H-CELL

The field unit did not submit any BASE surfaces for this survey. The object detection requirement for this survey was met by acquiring side scan sonar data. The AHB BASE Surface for Survey H11634 was filtered in CARIS HIPS to meet IHO Order I specifications. The BASE Surface model serves as the bathymetric and feature presentation source for all cartographic components incorporated within the submitted

Electronic Navigational Chart (ENC) exchange file.

No TPE values were available for this survey, therefore the product of the survey is a Caris swath-angle BASE grid at 2-meter resolution which contains depth, sounding density, standard deviation, mean, shoal, and deep sounding child layers. The finalized depth layer incorporating designated depths was used as the source of a 2m grid from which soundings were selected. The soundings were extracted from the 2m resolution surface model at a spacing interval of 6mm at 1:10,000 scale. Soundings were truncated to millimeter precision and converted to whole feet (NOAA rounding regime) in HOM.

No chart scale selected soundings were chosen, as final sounding and contour selection has been left to the discretion of MCD pending new updated shoreline. See Appendix V. Supplemental Correspondence for more information.

The CARIS H-Cell file *H11634_all_layers.des* was created in CARIS HOM to produce the following Base Cell final products:

US411634_CU.000	**1:10,000 Scale**	**H-Cell without Chart Scale Soundings**
US411634_SS.000	**1:10,000 Scale**	**H11635 Survey Scale Soundings**
US411634_FF.000	**1:10,000 Scale**	**H11635 Feature File**

The completed H-Cell was exported as a Base Cell File (ENC.000) in S-57 format with all values in metric units. The metric equivalent ENC.000 file was then converted to NOAA chart values (ENC_CU.000) with all values measured in feet. Chart compilation was performed by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

B.4 DKART

This survey has two visible wreck AWOIS items that lay outside the main survey area and are contained within individual depth areas. Both items were visually identified and have no correlating depth nor height values. When running tests in DKART an error, “value of drval2 not found in valdco sequence <DepthArea>”, occurred for both individual depth areas. It is suspected that this is due to the fact that there are no soundings within either depth area and cannot be corrected. These two errors were ignored.

C. VERTICAL AND HORIZONTAL CONTROL

Final vertical correction processing was completed by the office processor for H11634 using final approved zoning and water level data provided by N/OPSI CO-OPS. Due to the field collecting data in LST rather than UTC, all tides information was downloaded in LST.

Due to instability issues at the Tesoro Marine Terminal, LA (876-4044) gauge, final zoning was based solely on the gauge at Stouts Pass (876-4025).

Horizontal control used for this survey during data acquisition is based upon the World Geodetic System-84 (WGS-84), UTM projection zone 15. Office ENC processing of this survey required translating the datum to meet S-57 ENC requirements. The horizontal geodetic datum was translated to Latitude and Longitude (LLDG) World Geodetic System-84 (WGS-84) during Caris HOM processing. The S-57 H-CELL format serves as the exchange file submitted to Marine Chart Division.

D. RESULTS AND RECOMMENDATIONS

D.1 CHART COMPARISON

11351 (26th Edition, June./07)
Corrected through NM June 16/04
Corrected through LNM June 12/07

11352 (39th Edition, June/07)
Corrected through NM June 16/04
Corrected through LNM June 5/07

11354 (26th Edition, Nov. /06)
Corrected through NM Nov. 11/06
Corrected through LNM Nov. 07/06

11355 (27th Edition, Feb./07)
Corrected through NM Feb. 18/04
Corrected through LNM Feb. 07/07

ENC Comparison

US4LA13M
Wax Lake Outlet to Forked Island, LA
Application Date Apr. 19, 2007
Issue Date Nov. 01, 2007
Chart 11350

US4LA22M

Morgan City to Port Allen
Application Date May 1, 2007
Issue Date May 23, 2007
Chart 11354

HYDROGRAPHY

D.1.1 Charted Soundings and Items

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section "D" of the Descriptive Report except as follows:

Chart comparison showed evidence of major shoreline changes throughout the survey area; in some areas the shoreline has moved up to 200 meters. While most of the shoaling is deeper than tabulated depths, two areas were considered to have changed enough to warrant DtoN submissions. See section D.5 in this report for more information.

The field unit did not complete bottom samples. All SBDARE objects were carried forward from the ENC.

It is recommended that the following shoal notes be removed and the current survey depths be used to update the chart.

Shoal PA	29°43′32.0538″ N	91°13′07.8924″ W	11351,11352,11355_5
Shoal PA	29°43′19.90128″ N	91°12′55.12428″ W	11351,11355_5
Shls Rep 1993 PA	29°41′58.14924″ N 29°41′45.03048″ N	91°12′53.62128″ W 91°12′43.8444″ W	11355_5
Shl(9ft rep 1990) PA	29°41′39.45948″ N	91°12′42.35184″ W	11351,11352,11355_5
Shl Rep and in same pos. Wk PA (disproved)	29°41′29.77728″ N	91°12′47.98656	11355_5 11351
Shoal PA	29°38′00.9924″ N	91°14′36.33612″ W	11352,11355_5

Additionally, the following charted items were not addressed by the field unit, but were evident in the side scan sonar records in their charted positions and serving their intended purpose. Recommend retaining as charted.

Dolphin	29°42′21.1172412″ N	91°13′05.9345045″ W
Dolphin	29°42′20.2795212″ N	91°13′05.5226645″ W
Dolphin	29°42′15.9998413″ N	91°13′04.0002245″ W
Dolphin	29°42′14.4540013″ N	91°13′02.7805445″ W
Dolphin	29°42′06.0516016″ N	91°12′53.5141445″ W
Dolphin	29°42′03.8685616″ N	91°12′51.0207845″ W
Dolphin	29°41′27.9564025″ N	91°12′36.7514645″ W
Pile	29°42′15.4108813″ N	91°13′02.0922245″ W

The present survey is adequate to supersede the charted hydrography within the common area.

D.2 COMPARISON WITH PRIOR SURVEYS

A comparison with prior surveys was not done during office processing in accordance with section 4 of the memorandum titled "Changes to Hydrographic Survey Processing", dated May 24, 1995.

D.5 DTONS

Due to significant shoreline changes and shoaling, two DtoN Chartlets were sent to MCD covering the entire northern and entire southern ends of the survey area. See Appendix I for more information regarding this DtoN.

Two additional point DtoNs were also submitted by AHB:

An 18ft sounding marking the edge of shoaling extending past the 30ft curve in position 29° 41' 57.901" N, 091° 12' 53.345" W.

An 18ft sounding marking the edge of shoaling extending past the 30ft curve in position 29° 42' 08.093" N, 091° 13' 02.508" W

D.8 ADEQUACY OF SURVEY

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

MISCELLANEOUS

ENC products were created by Atlantic Hydrographic Branch personnel, Norfolk, Virginia, using CARIS HOM v3.3. ENC products and electronic data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

Chart compilation was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland. The following NOS charts were used for compilation of the present survey:

11351 (40th Edition, June./07
Corrected through NM June 16/07
Corrected through LNM June 12/07

11352 (39th Edition, June/07)
Corrected through NM June 16/04
Corrected through LNM June 5/07

11354 (26th Edition, Nov. /06)
Corrected through NM Nov. 11/06
Corrected through LNM Nov. 07/06

11355 (27th Edition, Feb./07)
Corrected through NM Feb. 18/04
Corrected through LNM Feb. 07/07

ENC Comparison

US4LA13M
Wax Lake Outlet to Forked Island, LA
Application Date Apr. 19, 2007
Issue Date Nov. 01, 2007
Chart 11350

US4LA22M
Morgan City to Port Allen
Application Date May 1, 2007
Issue Date May 23, 2007
Chart 11354

Christopher Hare
AWOIS Check
2008.01.03 10:15:51
-05'00'

APPROVAL SHEET
H1634

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Sarah M Eggleston
2007.12.20 15:09:54
-05'00'

Date: _____

Sarah Eggleston
Physical Scientist
Atlantic Hydrographic Branch

All final products have undergone a comprehensive review as per the Atlantic Hydrographic Branch Processing Manual and are verified to be accurate and complete except where noted in the Evaluation Report.

Helen Stewart
Atlantic Hydrographic
Branch, Norfolk, Virginia
2007.12.20 15:08:58
-05'00'

Date: _____

Helen Stewart
Physical Scientist
Atlantic Hydrographic Branch

I have reviewed the ENC exchange file (*.000), accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

Approved:

Shepard Smith
I am approving this
document
2007.12.20 15:11:24 -05'00'

Date: _____

Shep Smith
Lieutenant Commander, NOAA
Chief, Atlantic Hydrographic Branch