

H11286

NOAA FORM 76-35A

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

**DESCRIPTIVE REPORT**

*Type of Survey:* **Navigable Area**

*Registry Number:* **H11286**

**LOCALITY**

*State:* Louisiana

*General Locality:* Gulf of Mexico

*Sub-locality:* 10 NM SSW of Point au Fer

**2005**

CHIEFS OF PARTY  
**PS. Gene Parker & PS. Edward Owens**  
NOAA

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DATE

NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:  <h2 style="text-align: center; margin: 0;">H11286</h2>																																																								
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Remarks: <b><i>Bold, Italic, Red notes in Descriptive Report were made during Office Processing.</i></b>  1) <b><i>All Times are in UTC.</i></b> 2) <b><i>This is a Navigable Area Hydrographic Survey 200% Side Scan Sonar coverage..</i></b> 3) <b><i>Projection is NAD 83 UTM Zone 15.</i></b>																																																										

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**Descriptive Report to Accompany Hydrographic Survey H11286**

Project OPR-K354-TC-05  
 10 NM SSW of Point au Fer  
 Approaches to Atchafalaya River and Bay, Louisiana, Gulf of Mexico  
 Scale 1:20,000  
 January 25<sup>th</sup> -August 30<sup>th</sup> 2005

**NOAA Time Charter R/V DAVIDSON**  
 Lead Hydrographers: PS Gene Parker, NOAA  
 PS Edward Owens, NOAA  
 Final Survey Manager: PS Bryan Chauveau, NOAA

**A. AREA SURVEYED**

This hydrographic survey was completed as specified by Hydrographic Survey Letter Instructions OPR-K354-TC-05\*, dated December 16, 2004, the Amended Hydrographic Letter Instructions Change No.1\*, dated January 19, 2005, Change No. 2\* dated May 12, 2005 and the Draft Standing Project Instructions dated August 10, 2004. The survey area includes the approaches to the Atchafalaya Bay, Gulf of Mexico, Louisiana. *\* Data filed with original field records.*

**Corridor Survey Area Limits**

Northwest Corner	Northeast Corner	Southwest Corner	Southeast Corner
29° 13' 03.57" N Lat 91° 32' 34.93" W Long	29° 12' 15.20" N Lat 91° 30' 23.11" W Long	29° 10' 25.96" N Lat 91° 34' 58.35" W Long	29° 09' 28.63" N Lat 91° 32' 54.81" W Long

**North Polygon Survey Area Limits**

Northwest Corner	Northeast Corner	Southwest Corner	Southeast Corner
29° 14' 36.37" N Lat 91° 30' 04.42" W Long	29° 14' 28.68" N Lat 91° 29' 46.66" W Long	29° 12' 45.51" N Lat 91° 31' 45.57" W Long	29° 12' 35.41" N Lat 91° 31' 24.04" W Long

Data acquisition was conducted from January 19 to August 30, 2005 (Julian day numbers 025 to 242). Survey operations began on Sheet E on January 25, 2005 and continued until January 30, 2005 (Julian days 019 to 030) when survey operations were altered to a Shoal Recon. Shoal Recon commenced from January 30, 2005 until February 15, 2005 (Julian days 030 to 046). Survey operations then recommenced on Sheet E. Between January 19, 2005 and March 11, 2005 (Julian days 019 to 070) data was obtained across the southeast corner of Sheet E, however survey priorities required alteration of survey operational plans.

Owing to time constraints and survey priorities, the limits of H11286 E were modified on May 12, 2005 to include a “Corridor” approximately 2.1 nautical miles (nm) wide and 3.5 nm long around the entrance to the Atchafalaya Bay Entrance Channel, and a northern extension of this corridor (“North Polygon”) covering an area measuring 2.4 nm by 0.3 nm. This region is recognized as a critical navigable area to vessels approaching the Atchafalaya Bay channel.

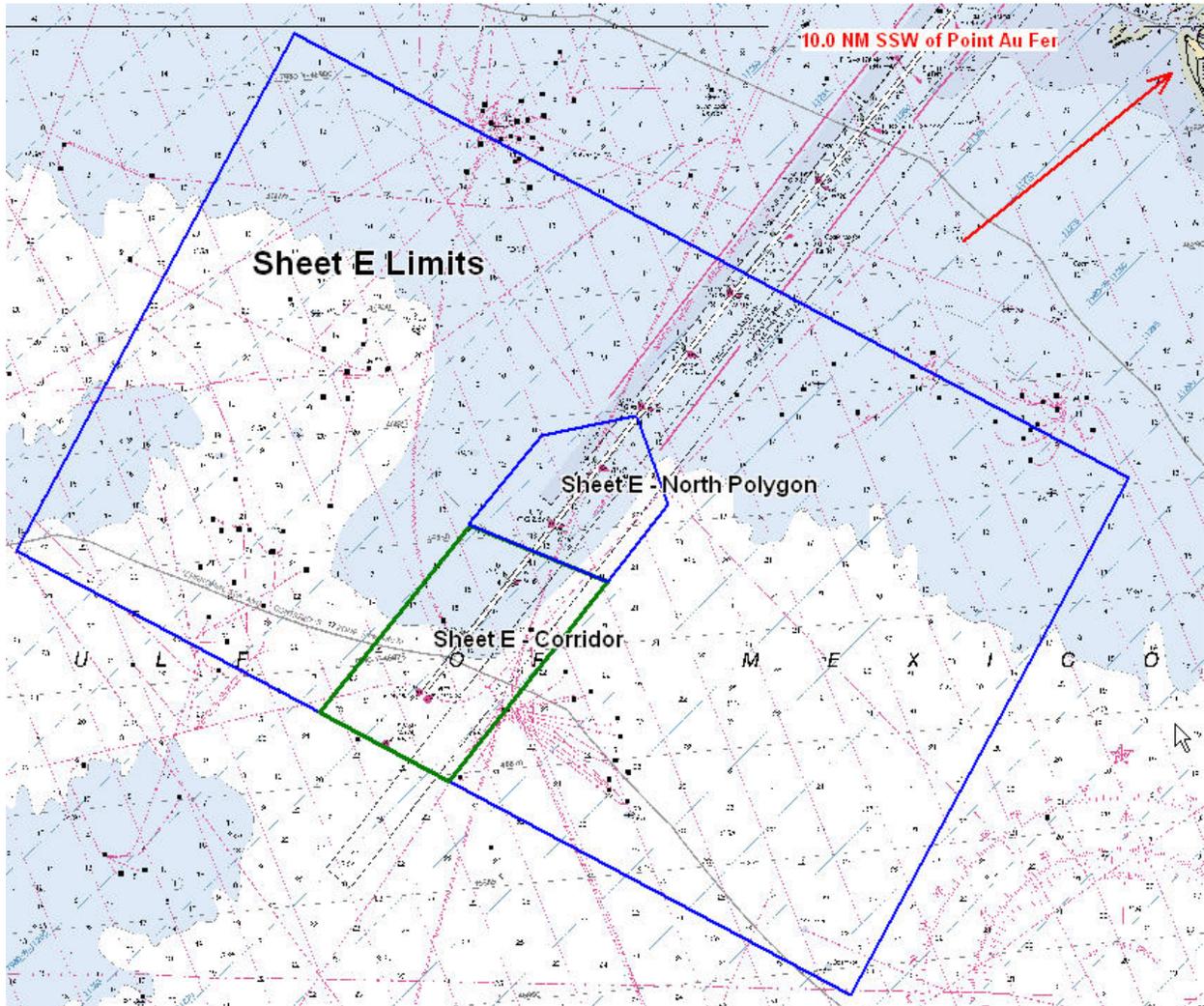


Figure 1— OPR-K354-TC-05 Survey H11286 limits.

## B. DATA ACQUISITION AND PROCESSING

Refer to *OPR-K354-TC-05 Data Acquisition and Processing Report (DAPR)\** for a complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods, submitted under a separate cover. Additional information to supplement sounding and survey data, and any deviations from the DAPR\* are included in this descriptive report. *\* Data filed with original field records.*

### B1. Equipment and Vessels

Data were acquired by the Launches R2 and D2. Launch D2 acquired 200% side-scan imagery, shallow-water multibeam soundings, and sound velocity profiles. Launch R2 acquired 100% and 200% side-scan imagery, high-resolution shallow water multibeam soundings, and sound velocity profiles. Vessel configurations, equipment operation and data acquisition and processing were consistent with specifications described in the DAPR\*. *\* Data filed with original field records.*

### B2. Quality Control

#### System Certification and Calibration

Refer to *OPR-K354-TC-05 Data Acquisition and Processing Report (DAPR)\** for a complete description of SAIC's quality assurance (QA) and quality control (QC) plan.

A system calibration survey was performed in Gulfport MS, on January 6-10 to verify sensor performance as well as tide, sound velocity, alignment and offset corrections. A calibration report is included as an appendix to the DAPR\*. *\* Data filed with original field records.*

#### B2.1 Data Acquisition

The Corridor section of survey H11286 required additional line planning in order to comply with the Specs and Deliverables. Due to reduced side scan sonar quality and reduced imaging range of 25 meters (m) to either side under poor water column conditions the Corridor required reduced line planning in order to obtain nearly 400% side scan sonar survey coverage. After data editing for sound velocity effects and poor side scan sonar image records nearly 100% multibeam survey coverage was obtained across the entirety of the survey area. *Concur.*

#### B2.2 Crosslines

Multibeam echosounder cross-lines totaled 43.84 nautical miles, comprising 4.07% of SWMB hydrography. (Note: Crossline mileage is skewed because 400% line plans were obtained across the Corridor area.) Crosslines were acquired with both launches, in order for a comparison of same-vessel soundings to be achieved. Crossline soundings were evaluated with respect to main scheme soundings in Caris HIPS subset editor and gridded BASE surface models. *See Evaluation Report.*

Crossline and mainscheme agreement varied with survey area and time. In the Corridor region agreement ranged between 5cm and 30cm (note: all crosslines had been obtained before the arrival of Hurricane Katrina). In the North Polygon, crosslines were not obtained until after the passage of Hurricane Katrina. Agreement was observed within 20 cm to either side of the channel, but a difference between 50 and 100 cm was observed within the channel. This is explained by sediment deposition in the channel as a direct result of the passage of Hurricane Katrina over the survey area. *Concur. See Evaluation Report for further discussion of soundings acquired in the federally maintained Atchafalaya Channel.*

**B2.3 Junctions and Prior Surveys**

There are no prior surveys completed within the past five years over the survey area. The following contemporary surveys junction with H11286:

<b>Registry #</b>	<b>Scale</b>	<b>Date</b>	<b>Junction side</b>
H11288	1:20,000	2005	South

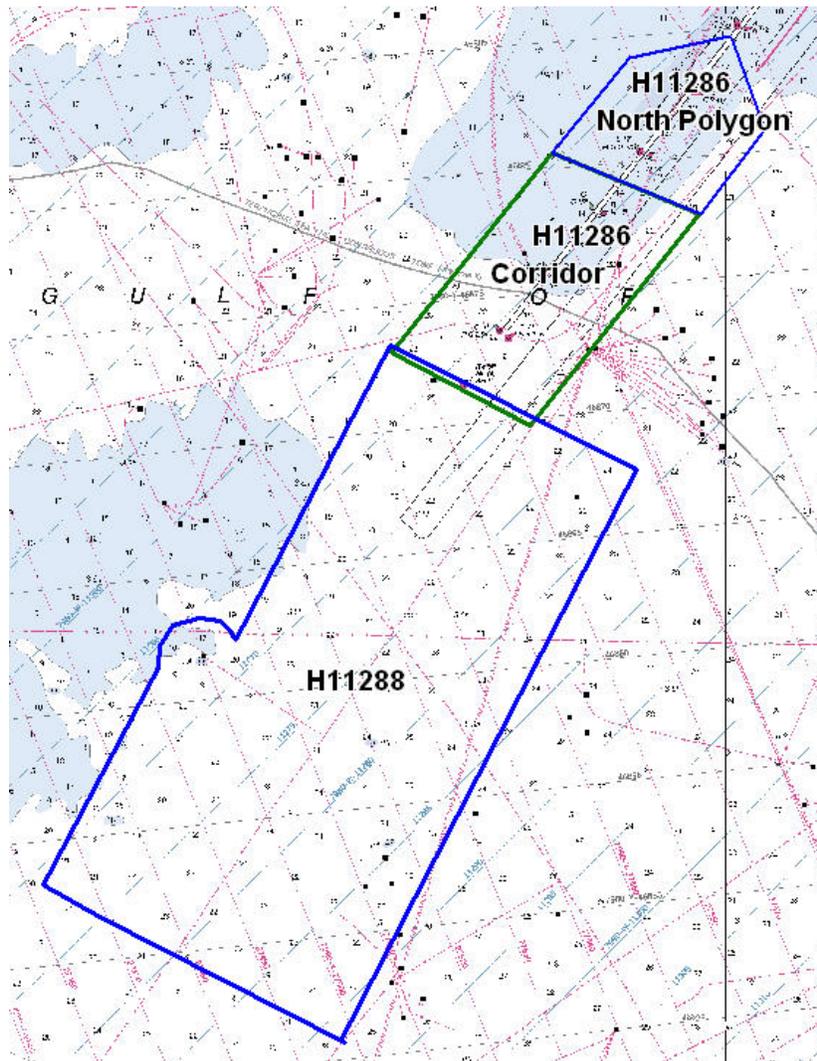


Figure 2 – H11286 Junction Survey.

This survey was acquired concurrently with H11288. Surveys were compared using survey-scale excessed depths in MapInfo and by directly comparing BASE surfaces in Caris HIPS. Depths between H11286 and H11288 were observed to agree within 30cm. **Concur.**

There were two prior surveys covering the same area as survey H11286 - survey H05953 (1935) and survey H05954 (1935). A comparison of soundings from survey H11286 with the common area of prior survey H05953 (1935) in the vicinity of 29° 10' 33.97" N Latitude, 91° 34' 31.90" W Longitude shows agreement within 1-2 feet. **Concur.**

A comparison with prior survey H05954 (1935) shows depths to be shoaler in all areas. The actual shoal depths varied by location as outlined in the following table:

Shoaler by – depths in feet	Latitude	Longitude
2 to 4	29° 10' 33.97" N	91° 34' 31.90" W
3 to 4	29° 10' 01.61" N	91° 32' 57.50" W
3 to 5	29° 10' 24.52" N	91° 33' 49.47" W
4 to 7	29° 10' 40.31" N	91° 33' 17.35" W
5 to 9	29° 11' 27.10" N	91° 33' 15.96" W
6 to 9	29° 10' 50.07" N	91° 32' 18.54" W
8 to 11	29° 11' 36.69" N	91° 31' 35.94" W
8 to 12	29° 12' 09.47" N	91° 33' 02.34" W
8 to 12	29° 11' 39.18" N	91° 32' 19.72" W
9 to 12	29° 12' 03.48" N	91° 30' 51.87" W
9 to 13	29° 12' 34.45" N	91° 32' 19.56" W
11 to 12	29° 13' 01.17" N	91° 31' 15.87" W
11 to 13	29° 12' 19.80" N	91° 31' 34.30" W
12 to 13	29° 13' 22.03" N	91° 30' 59.07" W
13 to 14	29° 14' 18.08" N	91° 30' 07.35" W

Table 1 – Comparison of survey H11286 (2005) with survey H05954 (1935).

## B2.4 Data Quality Factors

### Sound Velocity Profiles

SAIC ISS2000 acquisition software applies sound velocity correction in pseudo-real-time during echosounder acquisition. Sound velocity profiles were collected often to characterize the variable and complex water column conditions in the survey area. Surface sound velocity was monitored continuously on Survey Launch R2 with the Reson 8125 SWMB to ensure correct beam formation. Surface sound velocity was used by the 8125 system for correct beam formation on the flat-faced transducer for directional accuracy. Changes in surface sound velocity were also evaluated as an indicator of changes in the water column sound velocity. In general, there was good agreement of depths between overlapping outer beams of survey lines. There is no indication of significant sound velocity errors in the final base surface. **Concur.**

### Water level correction

Predicted water levels were applied to all sounding data in pseudo-real-time during acquisition by SAIC personnel. Prior to 8/16/2005, observed tides from the primary tide gauge were applied to soundings prior to NOAA quality review in Caris HIPS/SIPS. Following 8/16/2005, after the removal of tide station 876-4311 (discussed in Vertical Control section C1.2 below) observed water levels from the secondary tide gauge 877-1510 (acting as the primary reference station as of DN 228 through to the end of the survey) were applied. Predicted tides based on the (removed) primary tide station 876-4311 were applied to the final day of surveying after the passage of hurricane Katrina. After the end of the field season final tides were applied at the Atlantic Hydrographic Branch during office processing. *Concur. Approved water levels with final tide zoning were applied to all sounding data by the field processor.*

Soundings from crosslines and overlapping lines were examined using 3-D sounding subsets and base surfaces to identify temporal variation of water level modeling. Tidal artifacts were present across all survey lines but were within total error budget tolerance. Application of final tides could not correct these tidal errors within the data. Error measurements between 20 and 30 cm were present across the Corridor and North Polygon, differing among lines by day and time. Across the AWOIS Item an error of 40 cm was identified present in the raw data, attempts to correct for this error had no effect on the data. This error occurred on the day of the tide gauge removal (DN 228) and is inherent to the raw data itself. Across the other days of data acquisition over the AWOIS Item the identified tidal error ranged between 20 and 35 cm. This tidal error can be partially explained by the soft sediment type that makes up the seafloor (further detailed in the next section). *See Evaluation Report.*

### Residual Sounding Fliers and Noise

Bathymetry data was reviewed in Caris HIPS for accuracy and to remove residual fliers and noise. Caris-generated weighted bathymetry, standard deviation, and shoal-biased surfaces were used as aids in data cleaning and feature identification. Residual gross flyers and noise were identified and flagged as rejected. The total range of standard deviation was reduced to a value that corresponded to general bathymetric relief for the survey area. Soundings from multiple lines and side-scan imagery were evaluated when possible to distinguish noise from bathymetric features. *Concur.*

The shallow water depths, high water column turbidity, and fine classified sediment made up the seabed across the survey area. These characteristics created difficulties with acoustic signal penetration of the soft sediment and thus weakened the return signal. Object and feature detection within the side scan records were affected by these environmental water column characteristics and directly related to signal attenuation. Bathymetric development of isolated features was not an issue, as most features were comprised of hard materials thus the return signal was stronger than the attenuated signal in the soft sediment. *Concur.*

The Atchafalaya River is the primary tributary for sediment discharge from the Mississippi River. The sediments distributed into the Gulf of Mexico are most often classified as fine. The

survey area, being quite shallow (average 12 feet depth), is highly affected by wind and currents, causing a high turbidity in the water column, extending from the surface to the bottom. This high water column turbidity sustains suspended fine sediments along the seabed and directly contributes to the 20-30 cm error present in the data, varying both by day and time (as well as reducing the effective range of side scan sonar imaging). *See Evaluation Report.*

### Systematic Errors

Bathymetric data was evaluated to identify systematic errors in data correctors including motion, attitude, tide and sound velocity. Sun illuminated surface Digital Terrain Models (DTMs) indicate minor heave artifacts. These heave artifacts are sea-state dependent and did not occur on all days, or on all lines during a single day. The magnitude of these heave errors is within the IHO Total Sounding Error Budget Model, 95% Confidence Level.

During acquisition, bathymetry was acquired with two different echosounder systems: RESON 8125, and RESON 8101. The observed depth difference between these two systems is caused by differences in operating frequency. This difference in water bottom data is visible in the completed BASE surface, particularly where a crossline acquired by one system crosses orthogonally to a mainscheme survey line acquired by another system. This difference is generally less than 0.2m and is thus within total error specifications. *Concur.*

### Swath Angle Filtering and Total Propagated Error (TPE)

All MBES soundings were filtered to within 60 degrees of nadir for multibeam echosounder bathymetry to increase confidence in sounding accuracy and minimize sound velocity errors.

Raw soundings were not filtered for TPE. BASE surfaces were created from soundings filtered for TPE values that met IHO Order 1 tolerance. TPE filtering increased the confidence of sounding accuracy based upon system parameter settings in the Caris Vessel Configuration File (.hvf). Caris configuration files were created from manufacturer system performance specifications and offsets provided by SAIC from the System Acceptance Test (SAT)\*. *Concur.*  
*\* Data filed with original field records.*

BASE Surfaces and Mosaics

The following BASE Surfaces and Mosaics were submitted as part of this survey:

<u>BASE Surfaces</u>	<u>Resolution</u>	<u>Side Scan Mosaics</u>	<u>Resolution</u>
DtoNs_H11286	2m	H11286_Awois-12125_sss100	2m
AWOIS_H11286	2m	H11286_Awois-12124_sss200	2m
Corridor_H11286	2m	H11286_corr_poly_100_2m	2m
NPoly_H11286	2m	H11286_corr_poly_200_2m	2m
H11286_Final_Combined	2m	100_2m (Corridor sss)	2m
		200_2m (Corridor sss)	2m
		300_2m (Corridor sss)	2m
		400_2m (Corridor sss)	2m

Table 2 – BASE Surfaces and Side Scan Mosaics submitted for H11286.

*See Evaluation Report.*

Sounding Coverage

As per the Letter Instructions, this survey was conducted using 200% Side Scan Sonar coverage with “skunk striped” swath multibeam bathymetry and multibeam developments over identified features. The North Polygon area was covered by 100% multibeam while the Corridor and AWOIS Item were not surveyed with 100% multibeam sonar. The Corridor and AWOIS Item were surveyed by side scan sonar at 50 m line spacing to obtain 200% coverage. Multibeam data was collected along with the side scan sonar data resulting in a “skunk striped” effect across the survey area. *Concur.*

### B.3 Corrections to Echo Soundings

#### Water Level Datum Reduction

HDSC sounding data were reduced to mean lower-low water (MLLW) using preliminary tides first, then approved tides during field processing, from the primary station at Eugene Island, LA (876-4311) and secondary station at Galveston Pleasure Pier, TX (877-1510), adjusted for zoned range and amplitude correctors provided by CO-OPS as specified in the project instructions (illustrated in figure 3). All other datum reduction procedures conform to those outlined in the DAPR\*. *Concur.*

*\* Data filed with original field records.*

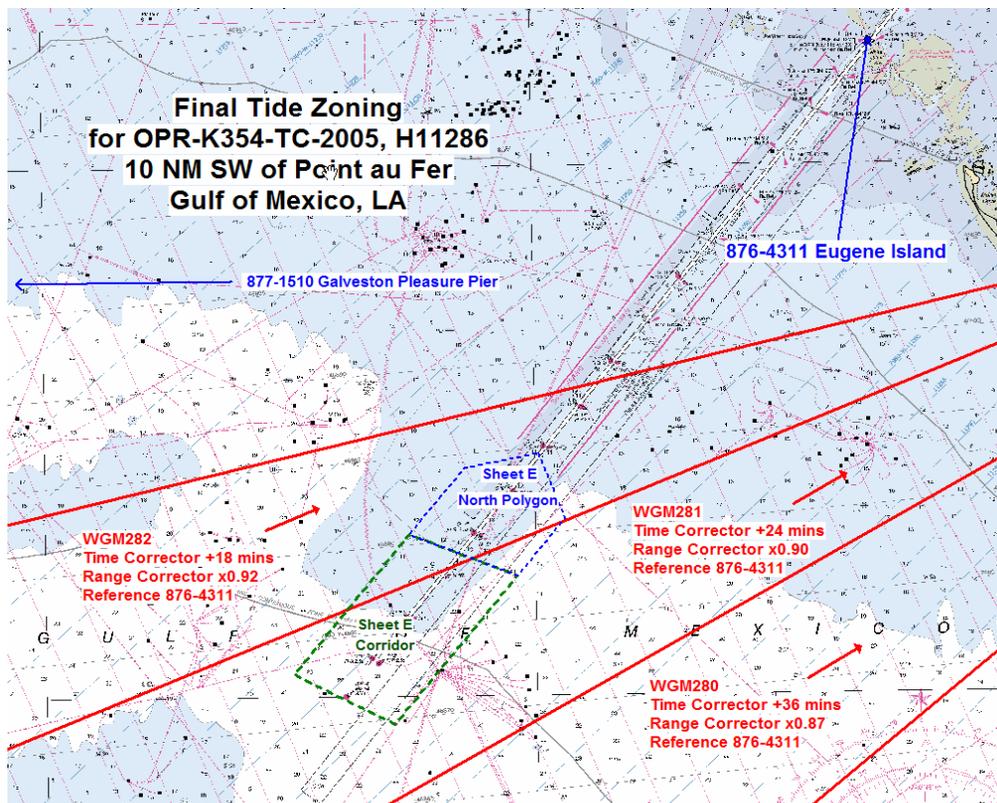


Figure 3 – Final Tide Zoning.

## C. VERTICAL AND HORIZONTAL CONTROL

A complete description of vertical and horizontal control for survey H11286 can be found in the *OPR-K354-TC-05 Horizontal and Vertical Control Report*, submitted as an appendix to the DAPR.\* A summary of horizontal and vertical control for this survey follows.

*\*Data filed with original field records.*

### C.1 Horizontal Control

The horizontal datum for this project is the North American Datum of 1983 (NAD83). Differential GPS (DGPS) was the sole method of positioning. Differential corrections from U.S. Coast Guard beacons at English Turn, LA (293 kHz) and Galveston, TX (296 kHz) were utilized during this survey. DGPS Confidence checks were performed daily by comparing positions acquired by primary (POS/MV) and secondary (Trimble MS 750) positioning systems on the launches.

No horizontal control stations were established by the field party for this survey. *Concur.*

### C.2 Vertical Control

The vertical datum for this project is Mean Lower-Low Water (MLLW). The operating National Water Level Observation Network (NWLON) station at Galveston Pleasure Pier, TX (877-1510) and tertiary water level station at Eugene Island, LA (876-4311) serve as datum control for H11286. Predicted water levels with preliminary tide zoning were applied on-line during acquisition. Preliminary unverified water levels with preliminary tide zoning were applied to all sounding data during postprocessing.

At 2054 UTC on August 16<sup>th</sup>, the old U.S. Coast Guard Eugene Island light tower was removed by a contractor under contract to the Coast Guard. The Eugene Island water level station was mounted to this light tower. The contractor recognized the NOAA water level gauge and contacted the Navigation Services Division's Gulf Coast Navigation Manager who was informed of this event. Correspondence concerning the removal of this water level station is located in Appendix V.

Final approved (verified) tides with final tide zoning were applied during final processing at the Atlantic Hydrographic Branch. A request for delivery of final approved (verified) tides for this survey was forwarded to N/OPS1 on October 3, 2005 in accordance with the FPM and project letter instructions. Final tidal zoning was received on October 24, 2005. As stated in the Approved Tide Note, approved tides will have Eugene Island (876-4311) as the primary gauge prior to August 16<sup>th</sup> and Galveston Pleasure Pier (877-1510) as the primary gauge subsequent to August 16<sup>th</sup>. A copy of the Approved Tide Note is located in Appendix IV. *See Evaluation Report.*

## D. RESULTS AND RECOMMENDATIONS

### D.1 Automated Wreck and Obstruction Information System (AWOIS) Investigations

Only one assigned AWOIS item within the original limits of H11286 was investigated during this survey. Survey priorities prevented investigation of the other five assigned AWOIS Items.

AWOIS item #12125, a dangerous sunken wreck PA (barge) in the vicinity of 29°09'00"N Latitude, 91°30'00"W Longitude was investigated using 100% and 200% SSS and correlating multibeam across the search radius. No feature was detected in the AWOIS search area. AWOIS #12125 is considered disproved. It is recommended the dangerous sunken wreck PA be removed from the chart. *Concur. Further discussion of this AWOIS item is included in Appendix II of the Descriptive Report.*

### D.2 Chart Comparison

Survey H11286 was compared with chart 11351 (39th Ed.; November 2004, 1:80,000, Corrected through NM Nov 13/04, Corrected through LNM Nov 2/04). Chart comparison was performed in Pydro using survey-scale excessed soundings and in MapInfo using survey-scale and chart-scale excessed soundings exported from Pydro.

In the North Polygon section the survey soundings are 1-2 ft. shoaler than the charted soundings. In the Corridor section, the survey soundings are either in agreement with the charted soundings or are 1-2 ft. shoaler, except in the northeast portion seaward of the 18 ft. contour line. In this northeast portion of the Corridor the survey soundings are 4-9 ft. shoaler than the charted soundings. *Concur.*

The 18 ft. contour line has migrated offshore from its previously charted location. To the west of the Atchafalaya Bay Entrance Channel the 18 ft. contour has migrated from 165 m to over 470 m offshore. To the east of the Atchafalaya Bay Entrance Channel the 18 ft. contour has migrated from 410 m to over 7,700 m offshore. Similarly, the 12 ft. contour line to the west of the Entrance Channel has migrated offshore from 250 m to over 1,070 m and to the east of the Entrance Channel from 1,025 m to over 10,100 m offshore. *Concur.*

The following shows the contour migration as identified during the “Shoal Recon”:  
*See Evaluation Report.*

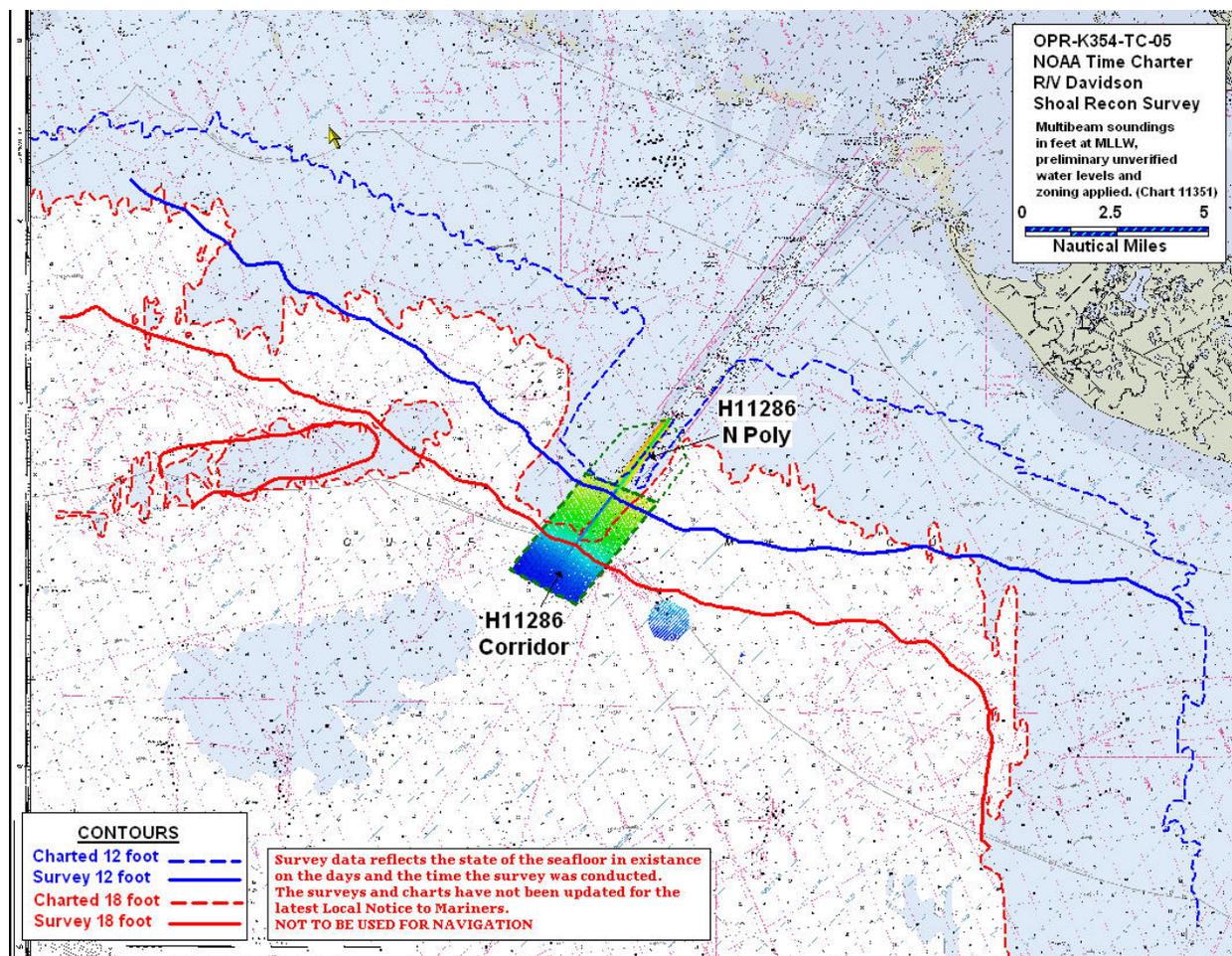


Figure 4 – Contour migration as discovered during “Shoal Recon”

### D.3 Shoreline

There is no shoreline within the sheet limits of survey H11286. *Concur.*

### D.4 Charted Features

There are many charted oil platforms across the survey area. All platforms except one (reference Appendix 1) were identified in their charted locations. Several pipelines and cables within the survey area are buried and not visible in either side-scan imagery or multibeam digital terrain models. The hydrographer has no recommendation for these features. *Concur.*

There are no ferry routes, bridges, or overhead cable crossings within the limits of the survey. *Concur.*

### D.5 Dangers to Navigation

Three Dangers to Navigation (DtNs) were found and reported to the Marine Charting Division (MCD) for verification and final submission to the Eighth Coast Guard District. A copy of each

Danger to Navigation Report is included in Appendix I and a copy of the final report will be inserted by AHB following verification and submission to the U.S Coast Guard. Dangers 4, 5, and 6 were located in a federal maintained channel and submitted to the Navigation Response Branch's Gulf of Mexico Regional Navigation Manager and not submitted to MCD.

<u>DtoN</u>	<u>Description</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Date Submitted</u>
1	Uncharted Platform	29° 07' 24.45" N	91° 27' 13.89" W	January 29, 2005
2	Obstruction	29° 08' 02.47" N	91° 27' 42.84" W	March 13, 2005
3	Obstruction	29° 09' 55.18" N	91° 33' 48.29" W	July 28, 2005
4	Obstruction – shoaling in Atchafalaya Bay Entrance Channel	29° 12' 53.89" N	91° 31' 24.00" W	October 3, 2005 – Submitted to NRB Nav Manager
5	Obstruction – shoaling in Atchafalaya Bay Entrance Channel	29° 14' 16.39" N	91° 30' 11.33" W	October 3, 2005 – Submitted to NRB Nav Manager
6	Obstruction – shoaling in Atchafalaya Bay Entrance Channel	29° 13' 18.32" N	91° 30' 59.48" W	October 3, 2005 – Submitted to NRB Nav Manager

Table 3 – Dangers to Navigation identified in this survey, with their submission date.

*One additional DTON was identified during office processing. See Evaluation Report and Appendix I for a detailed description of DTON #7.*

## D.6 Aids to Navigation

All Aids to Navigation in the survey area were identified in their charted locations and considered to be on station and serve their intended purpose. The hydrographer has no additional recommendations for charting Aids to Navigation. *Concur.*

## D.7 Bottom Samples

Bottom samples were not collected due to time and weather limitations. Recommend to retain all charted bottom characteristics within the common area of H11286. *Concur.*

## D.8 Adequacy of Survey

This survey is considered complete and adequate to supersede charted depths in common areas for requirements specified in the Project Letter Instructions. *See Evaluation Report.*

## Recommendations for Additional Work

On August 29, 2005, Hurricane Katrina made landfall as a Category  $\forall$  **IV** storm near Southwest Pass, Louisiana. Owing to dangerous sea and weather conditions, R/V Davidson was forced to evacuate the survey area but returned on August 30 for the last day of H11286 survey operations. Following the storm, R/V Davidson returned to the survey area to assess whether the storm caused any significant shoaling over the survey area. Sediment deposition was noted (see DtoNs

4-6) in the Atchafalaya Bay Entrance Channel and the US Army Corps of Engineers was notified of the need for additional dredging. *See Evaluation Report.*

**E. APPROVAL**

All Lead Hydrographers in charge of this survey maintained the standard field surveying and processing procedures were followed in producing this examination in accordance with the Hydrographic Manual (Fourth Edition), Hydrographic Survey Guidelines, Field Procedures Manual, and the NOS Hydrographic Surveys Specifications and Deliverables, March 2003 Edition.

The digital data and supporting records have been reviewed, are considered complete and adequate for charting purposes, and are approved. All records are forwarded for final review and processing to N/CS33, Atlantic Hydrographic Branch.

Survey H11286 is complete and adequate to supersede charted soundings in their common areas. No additional work is required for this survey.

Listed below are supplemental reports submitted separately that contain additional information relevant to this survey:

Title	Date Sent	Office
Data Acquisition and Processing Report for OPR-K354-TC-05	Pending	N/CS33
Horizontal and Vertical Control Report for OPR-K354-TC-05	Pending	N/CS33
Tides and Water Levels Package for OPR-K354-TC-05	Pending	N/OPS1
Coast Pilot Report for OPR-K354-TC-05	Pending	N/CS26

Approved and Forwarded:   
 Gene Parker  
 Physical Scientist, NOAA  
 Lead Hydrographer

Approved and Forwarded:   
 Edward Owens  
 Physical Scientist, NOAA  
 Lead Hydrographer

In addition, the following individuals were also responsible for overseeing data acquisition and processing of this survey:

Survey Manager:   
 Bryan Chauveau  
 Physical Scientist, NOAA

# Appendix I: Danger to Navigation

This appendix contains all Danger to Navigation reports submitted to Marine Chart Division by the field party for survey H11286.

# H11286 Danger to Navigation

**Registry Number:** H11286  
**State:** LA  
**Locality:** Gulf of Mexico  
**Sub-locality:** 10 NM SW of Point au Fer  
**Project Number:** OPR-K354-TC-05  
**Survey Dates:** 01/26/2005 - 08/30/2005

## Charts Affected

Number	Version	Date	Scale
11351	39th Ed.	11/01/2004	1:80000
11354	25th Ed.	04/01/2005	1:80000
11356	37th Ed.	01/01/2006	1:80000
11352	38th Ed.	03/01/2005	1:175000
1116A	70th Ed.	08/01/2005	1:458596
11340	70th Ed.	08/01/2005	1:458596
411	50th Ed.	09/01/2005	1:2160000

## Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Submitted DTON2	Obstruction	1.49 m	029° 08' 02.469" N	91° 27' 42.840" W	---
1.2	Buoy block-submitted DTON3	Obstruction	6.38 m	029° 09' 55.183" N	91° 33' 48.294" W	---
1.3	Submitted DTON-4; 6233/4	Sounding	4.08 m	029° 12' 53.893" N	91° 31' 23.996" W	---
1.4	Submitted DTON-5; 3548/105	Sounding	4.38 m	029° 14' 16.394" N	91° 30' 11.328" W	---
1.5	Submitted DTON-6; 10067/91	Sounding	4.27 m	029° 13' 18.316" N	91° 30' 59.477" W	---
1.6	DTON 7	Obstruction	3.63 m	029° 12' 04.216" N	91° 31' 51.558" W	---
1.7	uncharted platform, submitted as DTON1	Platform (oil or gas)	3.48 m	029° 07' 24.454" N	91° 27' 13.891" W	---

## 1.1) Submitted DT0N2

# DANGER TO NAVIGATION

### Survey Summary

**Survey Position:** 029° 08' 02.469" N, 91° 27' 42.840" W  
**Least Depth:** 1.49 m  
**Timestamp:** 2005-070.20:47:23.845 (03/11/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-070 / r2mba05070\_d03  
**Profile/Beam:** 2914/240  
**Charts Affected:** 11351\_1, 11356\_1, 11352\_1, 1116A\_1, 11340\_1, 411\_1

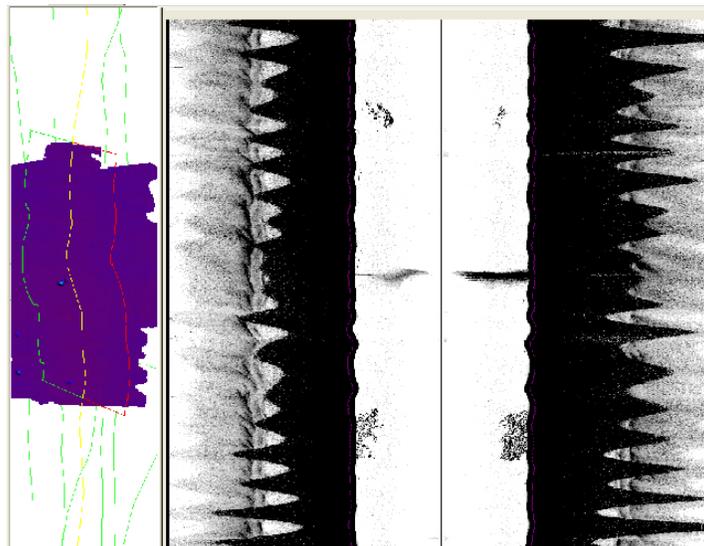
**Remarks:**

Developed side scan contacts with Reson 8125 high resolution multibeam. Determined to be an Obstrn at the endof a charted pipeline. Data evaluations indicates an obstruction to be a pipe rising vertically in the water columnfrom the seafloor emitting gas plume. SWMB backscatter data interpretation validates hydrographer'sconclusion.

Additional note: Obstrn vertically rises 5.4m from the seafloor. Least Depth is 1.5m in 6.9m of water. Applied Preliminary Unverified water levels. Reported as a Danger to Navigation.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-070/r2mba05070_d03	2914/240	0.00	000.0	Primary
h11286/r2_sss_100/2005-065/r2_065_050306155000	0001	6.35	067.9	Secondary
h11286/r2_sss_100_lf/2005-065/r2_065_050306155000	0001	6.35	067.9	Secondary



## Hydrographer Recommendations

Chart 1.5m (5-ft) Sounding on Obstn located at 29°08'02.469"N 091°27'42.840"W.

Uncharted Obstruction identified and developed with multibeam.

Field Notes at Survey Time: Developed side scan contacts with Reson 8125 high resolution multibeam. Determined to be an Obstn at the end of a charted pipeline. Data evaluations indicates an obstruction to be a pipe rising vertically in the water column from the seafloor emitting gas plume. SWMB backscatter data interpretation validates hydrographer's conclusion.

Additional note: Obstn vertically rises 5.4m from the seafloor. Least Depth is 1.5m in 6.9m of water. Applied Preliminary Unverified water levels. Reported as a Danger to Navigation.

The feature was submitted to the GOM Navigation Manager to report to USCG and MMS. The owner of the well was notified in order to repair the leaking well head. Upon review of the item at the end of the survey indicated that nothing had changed in regards to the status of the feature. The least depth is not the true depth of the well, but due to the MB system pinging on the gas plume, data editor was not able to isolate the the feature to the true depth. So, the final outcome of data editing remained conservative. After application of final tides depth was unchanged.

### Cartographically-Rounded Depth (Affected Charts):

5ft (11351\_1, 11356\_1, 11352\_1)

0 ¾fm (1116A\_1, 11340\_1, 411\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** CATOBS - 2:wellhead  
 INFORM - Uncharted Obstruction identified and developed with multibeam.  
 NATCON - 7:metal  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 2,3:found by side scan sonar,found by multi-beam  
 VALSOU - 1.491 m  
 VERDAT - 12:Mean lower low water  
 WATLEV - 3:always under water/submerged

## Office Notes

Concur. Chart a dangerous obstruction, least depth 5 feet (1.5m) at the present survey location at Latitude 29°08'02.469" N, Longitude 091°27'42.840" W.

This obstruction is presently charted on Chart 11351, 39th Edition, Nov/04. Retain as charted.

## 1.2) Buoy block-submitted DT0N3

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 029° 09' 55.183" N, 91° 33' 48.294" W  
**Least Depth:** 6.38 m  
**Timestamp:** 2005-207.15:34:00.130 (07/26/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-207 / r2mba05207\_d07  
**Profile/Beam:** 773/38  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

The feature is a possible defunct buoy block (roughly 3m x 3m in dimension), with a least depth of 20.94 ft, approximately 210m SE of the surveyed position of the RW "A" Mo (A) BELL buoy. It was located with 200% SSS (Klein 3000) and developed with multibeam (Reson 8125). The multibeam data was processed using preliminary unverified tides.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-207/r2mba05207_d07	773/38	0.00	000.0	Primary
h11286/r2_sss_100/2005-207/r2_207_050726155000	0001	0.78	078.2	Secondary
h11286/tpe_r2_mb_0/2005-207/r2mba05207_d09	585/87	1.81	280.4	Secondary
h11286/r2_sss_100/2005-207/r2_207_050726153300	0001	1.93	240.3	Secondary
h11286/r2_sss_100/2005-207/r2_207_050726154100	0001	4.67	301.0	Secondary
h11286/r2_sss_100/2005-140/r2_140_050520190400	0001	10.86	300.2	Secondary
h11286/r2_sss_100_lf/2005-026/r2_026_050126203200	0001	12.89	292.8	Secondary
h11286/d2_sss_200/2005-168/d2_168_050617180000	0001	13.73	293.2	Secondary
h11286/d2_sss_200/2005-025/d2_025_050125202600	0001	15.56	271.7	Secondary
h11286/d2_sss_200_lf/2005-025/d2_025_050125202600	0001	15.56	271.7	Secondary
h11286/d2_sss_200/2005-173/d2_173_050622212300	0001	16.22	280.6	Secondary
h11286/tpe_d2_mb_0/2005-173/d2mba05173_d15	17567/12	16.42	279.0	Secondary

## Hydrographer Recommendations

The hydrographer recommends charting the feature as a dangerous 21 ft Obstn.

### Cartographically-Rounded Depth (Affected Charts):

21ft (11351\_1)

3 ½fm (1116A\_1, 11340\_1, 411\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** INFORM - The feature is a possible defunct buoy block (roughly 3m x 3m in dimension), with a least depth of 20.94 ft, approximately 210m SE of the surveyed position of the RW "A" Mo (A) BELL buoy. It was located with 200% SSS (Klein 3000) and developed with multibeam (Reson 8125). The multibeam data was processed using preliminary unverified tides.

NATCON - 2:concreted

QUASOU - 6:least depth known

STATUS - 1:permanent

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

VALSOU - 6.379 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur. Chart an obstruction, least depth 21 feet (6.4m) at the present survey location in Latitude 29°09'55.183" N, Longitude 091°33'48.294" W.

This obstruction is presently charted on Chart 11351, 39th Edition, Nov/04. Retain as charted.



**1.3) Submitted DTON-4; 6233/4****DANGER TO NAVIGATION****Survey Summary**

**Survey Position:** 029° 12' 53.893" N, 91° 31' 23.996" W  
**Least Depth:** 4.08 m  
**Timestamp:** 2005-237.17:19:50.231 (08/25/2005)  
**Survey Line:** h11286 / tpe\_d2\_mb\_0 / 2005-237 / d2mba05237\_d15  
**Profile/Beam:** 6233/4  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

**Remarks:**

Side Scan identified a contact which was also located in multibeam. Contact is 1.4 m height, with a least depth of 13 feet, on the edge of the channel in 5.47m depth of water. - submitted to NRB Nav Manager 10/3/2005

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11286/tpe_d2_mb_0/2005-237/d2mba05237_d15	6233/4	0.00	000.0	Primary
h11286/tpe_r2_mb_0/2005-235/r2mba05235_d02	2555/14	1.42	002.7	Secondary

**Hydrographer Recommendations**

An obstruction was located within the channel exceeding the minimum controlled depth of 15 feet as noted on chart 11351. The obstruction is located at 29°12'53.89N Latitude, 91°31'-23.00W Longitude with a least depth of 13.37 feet (4.077m).

Defer final charting decisions to Marine Chart Division Update Services Branch.

**Cartographically-Rounded Depth (Affected Charts):**

13ft (11351\_1)

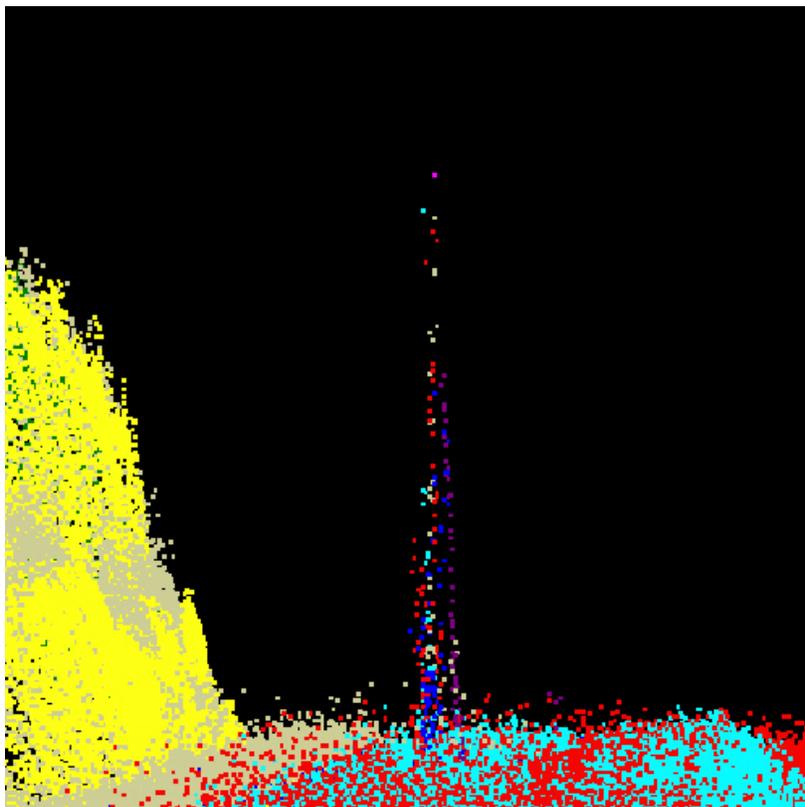
2 ¼fm (1116A\_1, 11340\_1, 411\_1)

**S-57 Data**

[None]

## Office Notes

Dredging operations were performed by the Army Corps of Engineers in the Atchafalaya Channel from May 3-July 5, 2006. This obstruction was not found during dredging operations, and the channel in the area was found to be clear of objects. This object was disproved by the ACOE dredge survey. Defer final charting disposition of the federally maintained Atchafalaya Bay Channel to Marine Charting Division, Nautical Data Branch Source Information Unit.



**1.4) Submitted DTON-5; 3548/105****DANGER TO NAVIGATION****Survey Summary**

**Survey Position:** 029° 14' 16.394" N, 91° 30' 11.328" W  
**Least Depth:** 4.38 m  
**Timestamp:** 2005-235.14:00:29.927 (08/23/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-235 / r2mba05235\_d04  
**Profile/Beam:** 3548/105  
**Charts Affected:** 11351\_1, 11354\_3, 1116A\_1, 11340\_1, 411\_1

**Remarks:**

Survey data revealed dredge spoil mounds with a least depth of 14.38 feet (4.38m) exceeding the minimum controlled depth of 15 feet as noted on chart 11351 within the USACE maintained Atchafalaya Bay entrance channel.

It is possible these may no longer be present after the passage of hurricane Katrina, which deposited between 0.5 and 1.0m of sediment in the channel. - submitted to NRB Nav Manager 10/3/2005

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-235/r2mba05235_d04	3548/105	0.00	000.0	Primary
h11286/tpe_d2_mb_0/2005-237/d2mba05237_d19	3885/89	12.58	281.0	Secondary
h11286/tpe_d2_mb_0/2005-237/d2mba05237_d19	3885/89	12.58	281.0	Secondary
h11286/tpe_d2_mb_0/2005-237/d2mba05237_d19	4070/61	32.60	006.8	Secondary
h11286/tpe_d2_mb_0/2005-237/d2mba05237_d19	4070/61	32.60	006.8	Secondary
h11286/tpe_d2_mb_0/2005-237/d2mba05237_d19	4191/18	54.54	014.7	Secondary (grouped)
h11286/tpe_d2_mb_0/2005-237/d2mba05237_d19	4191/18	54.54	014.7	Secondary (grouped)

## Hydrographer Recommendations

Dredge spoils were located within the channel limits that exceed the minimum controlled depth of 15 feet controlled depths as noted on chart 11351. Dredged material is within the defined channel limits at 29°14'16.39"N Latitude, 91°30'11.33"W Longitude. Dredge spoils extend from 29°14'17.02"N Latitude, 91°30'09.85"W Longitude to 29°14'14.69N Latitude, 91°30'11.84"W Longitude, in an area approximately 115m long by 30m wide.

The USACE controlled depths for this channel are 15 feet. Defer final charting decisions to Marine Chart Division Update Services Branch.

### Cartographically-Rounded Depth (Affected Charts):

14ft (11351\_1, 11354\_3)

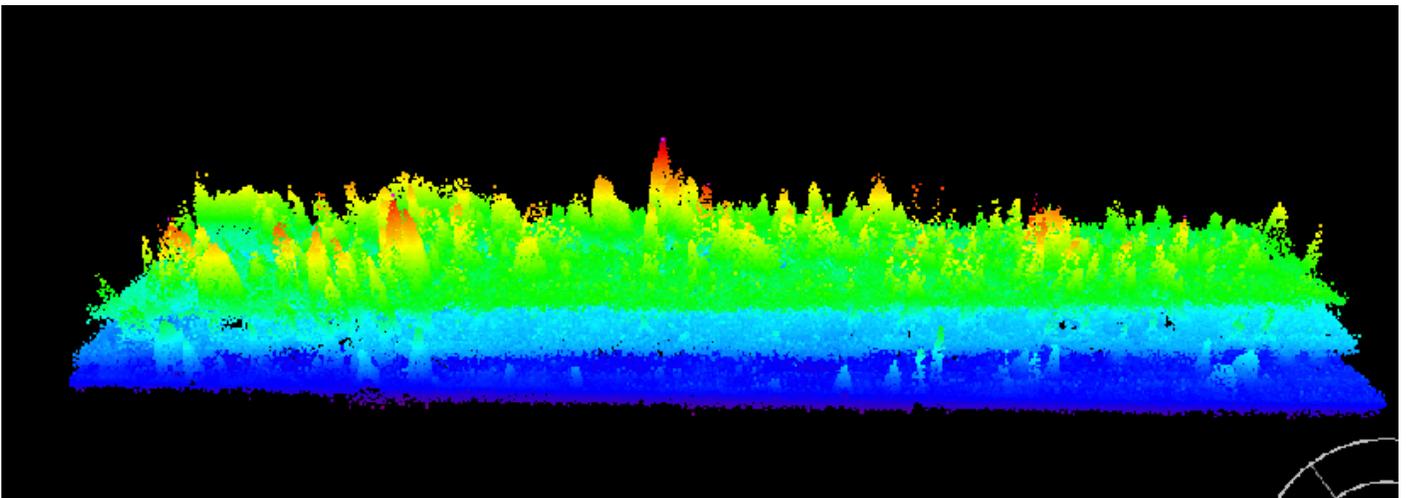
2 ¼fm (1116A\_1, 11340\_1, 411\_1)

## S-57 Data

[None]

## Office Notes

Dredging operations were performed by the Army Corps of Engineers in the Atchafalaya Channel from May 3-July 5, 2006. These dredge spoils were removed during dredging operations. This object was disproved by the ACOE dredge survey. Defer final charting disposition of the federally maintained Atchafalaya Bay Channel to Marine Charting Division, Nautical Data Branch Source Information Unit.



**1.5) Submitted DT0N-6; 10067/91****DANGER TO NAVIGATION****Survey Summary**

**Survey Position:** 029° 13' 18.316" N, 91° 30' 59.477" W  
**Least Depth:** 4.27 m  
**Timestamp:** 2005-242.21:36:42.868 (08/30/2005)  
**Survey Line:** h11286 / tpe\_d2\_mb\_0 / 2005-242 / d2mba05242\_d17  
**Profile/Beam:** 10067/91  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

**Remarks:**

Three areas of 14 foot shoaling were identified in the Atchafalaya Bay Entrance Channel from multibeam cross lines run after the passage of hurricane Katrina. - submitted to NRB Nav Manager 10/3/2005

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11286/tpe_d2_mb_0/2005-242/d2mba05242_d17	10067/91	0.00	000.0	Primary

**Hydrographer Recommendations**

Shoaling has occurred in the Entrance Channel to Atchafalaya Bay, LA in the wake of hurricane Katrina.

14 foot depths were noted at the following locations -

- 1) Latitude 29°13'55.50"N, Longitude 90°30'26.04"W in an area approximately 100m long by 40m wide.
- 2) Latitude 29°13'37.51"N, Longitude 91°30'44.28W in an area approximately 150m long by 50m wide.
- 3) Latitude 29°13'18.32"N, Longitude 91°30'59.50"W in an area approximately 125m long by 35m wide.

Chart 11351 indicated minimum controlled depths for Atchafalaya Bay entrance channel are 15 feet. Defer final charting decisions to Marine Chart Division Update Services Branch.

**Cartographically-Rounded Depth (Affected Charts):**

14ft (11351\_1)

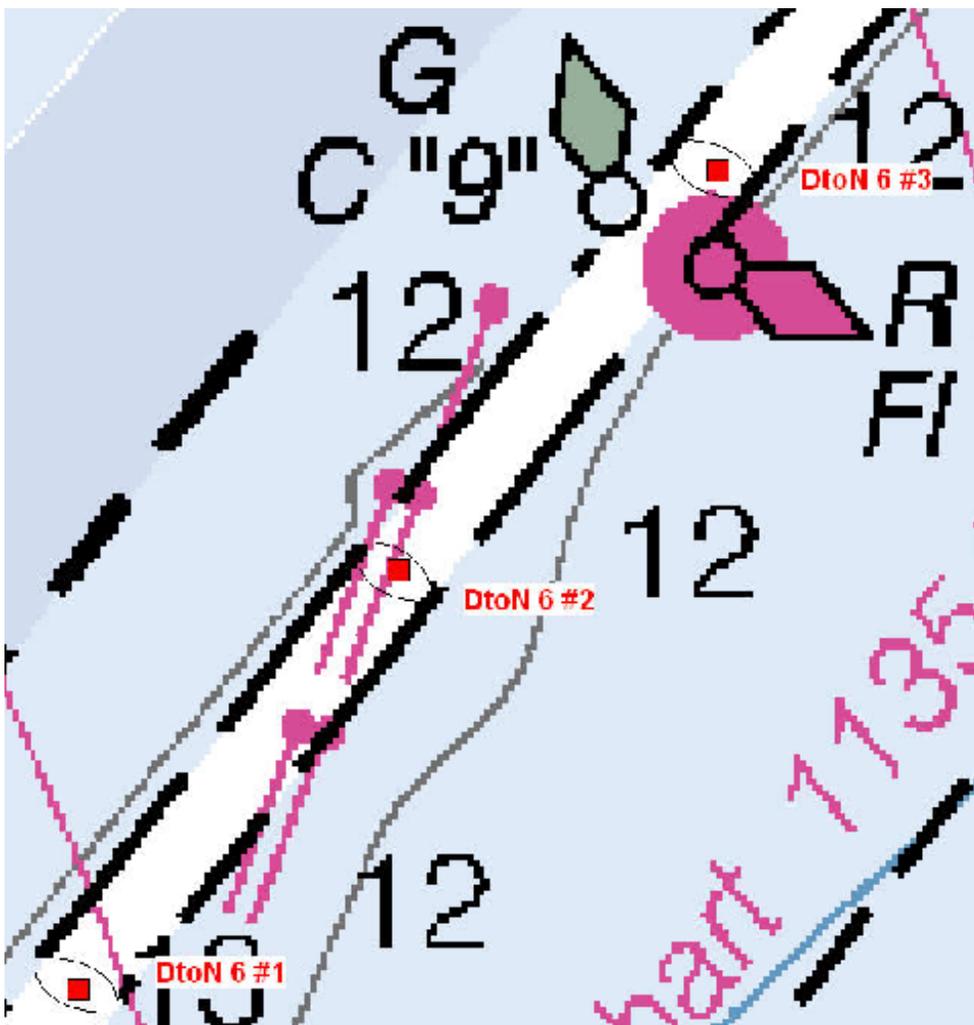
2 ¼fm (1116A\_1, 11340\_1, 411\_1)

### S-57 Data

[None]

### Office Notes

Dredging operations were performed by the Army Corps of Engineers in the Atchafalaya Channel from May 3-July 5, 2006. This shoaling was resolved during dredging operations. This object was disproved by the ACOE dredge survey. Defer final charting disposition of the federally maintained Atchafalaya Bay Channel to Marine Charting Division, Nautical Data Branch Source Information Unit.



## 1.6) DT0N 7

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 029° 12' 04.216" N, 91° 31' 51.558" W  
**Least Depth:** 3.63 m  
**Timestamp:** 2005-193.17:09:49.134 (07/12/2005)  
**Survey Line:** h11286 / tpe\_d2\_mb\_0 / 2005-193 / d2mba05193\_d25  
**Profile/Beam:** 704/13  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

An obstruction was identified, is present on 2 days and 3 lines of multibeam (MB) bathy in addition to side scan sonar.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_d2_mb_0/2005-193/d2mba05193_d25	704/13	0.00	000.0	Primary
h11286/tpe_d2_mb_0/2005-193/d2mba05193b_d23	1032/78	1.39	116.8	Secondary
h11286/tpe_r2_mb_0/2005-172/r2mba05172_d14	22187/240	2.25	157.8	Secondary
h11286/r2_sss_100/2005-172/r2_172_050621205300	0002	3.04	171.0	Secondary
h11286/r2_sss_100/2005-140/r2_140_050520180100	0002	3.60	165.0	Secondary

#### Hydrographer Recommendations

Chart an Obstrn with a least depth of 12 feet.

#### Cartographically-Rounded Depth (Affected Charts):

12ft (11351\_1)

2fm (1116A\_1, 11340\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

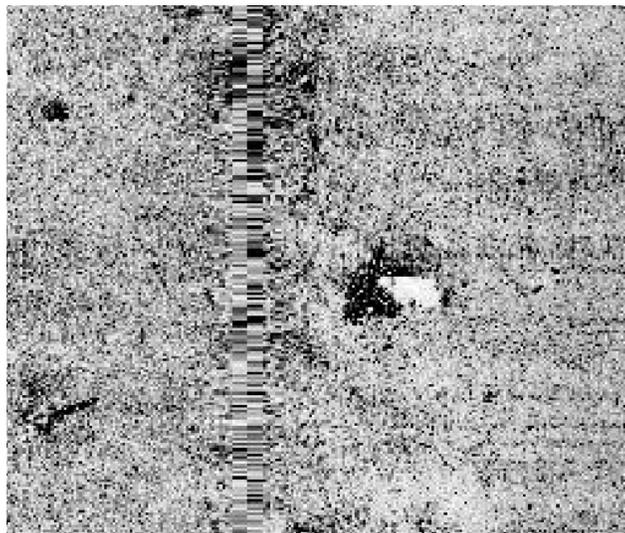
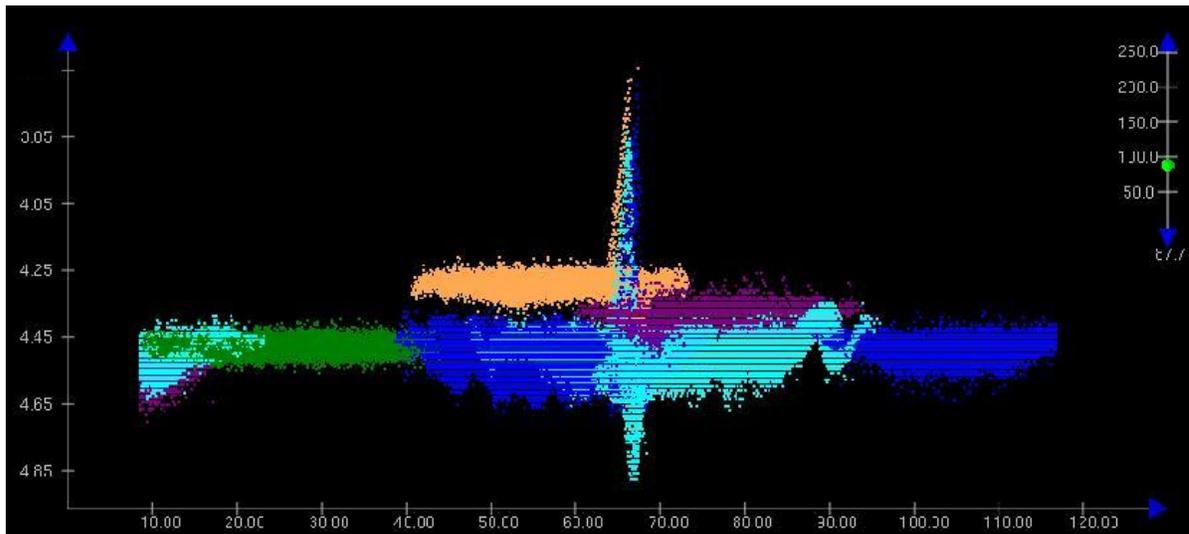
**Attributes:** INFORM - An obstruction was identified, is present on 2 days and 3 lines of multibeam (MB) bathy in addition to side scan sonar.

QUASOU - 6:least depth known  
STATUS - 1:permanent  
TECSOU - 2,3:found by side scan sonar,found by multi-beam  
VALSOU - 3.634 m  
VERDAT - 12:Mean lower low water  
WATLEV - 3:always under water/submerged

### Office Notes

Concur. Chart a dangerous obstruction, least depth 12 feet (3.63) at the present survey location in Latitude 29°12'04.216" N, Longitude 091°31'51.558" W.

This obstruction is not presently charted on Chart 11351, 39th Edition, Nov/04.



## 1.7) uncharted platform, submitted as DT0N1

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 029° 07' 24.454" N, 91° 27' 13.891" W  
**Least Depth:** 3.48 m  
**Timestamp:** 2005-026.17:48:14.846 (01/26/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-026 / r2mba05026\_d06  
**Profile/Beam:** 52723/239  
**Charts Affected:** 11351\_1, 11356\_1, 11352\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Item: Satellite Well, Status: Uncharted, Platform GEI EI83A

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-026/r2mba05026_d06	52723/239	0.00	000.0	Primary
h11286/r2_sss_100/2005-053/r2_053_050222204700	0001	2.54	043.7	Secondary
h11286/r2_sss_100_lf/2005-053/r2_053_050222204700	0001	2.54	043.7	Secondary
h11286/r2_sb_0/2005-070/r2sba05070_d10	4955/1	12.43	005.8	Secondary (grouped)

#### Hydrographer Recommendations

It is recommended that an oil field platform be charted in position Lat. 29°07'24.454" N, Lon. -091°27'13.891"W.

#### Cartographically-Rounded Depth (Affected Charts):

11ft (11351\_1, 11356\_1, 11352\_1)

1 ¾fm (1116A\_1, 11340\_1, 411\_1)

#### S-57 Data

**Geo object 1:** Offshore platform (OFSPLF)  
**Attributes:** CATOFP - 2:production platform  
 CONVIS - 1:visual conspicuous

## Office Notes

Concur with clarification. This production platform was submitted as a DTON to the Marine Charting Division, which charted the feature on the continual maintenance raster as an "Obstn PA." Recommend deleting the charted Obstn PA at 29°07'24.454" N, 91°27'13.891" W. Defer final charting recommendations of this platform to Marine Charting Division, Nautical Data Branch Source Information Unit.



## Appendix II: Significant Features

# H11286 Office Processing Report

**Registry Number:** H11286  
**State:** LA  
**Locality:** Gulf of Mexico  
**Sub-locality:** 10 NM SW of Point au Fer  
**Project Number:** OPR-K354-TC-05  
**Survey Dates:** 02/20/2005 - 08/25/2005

## Charts Affected

Number	Version	Date	Scale
11351	39th Ed.	11/01/2004	1:80000
11354	25th Ed.	04/01/2005	1:80000
11356	37th Ed.	01/01/2006	1:80000
11352	38th Ed.	03/01/2005	1:175000
1116A	70th Ed.	08/01/2005	1:458596
11340	70th Ed.	08/01/2005	1:458596
411	50th Ed.	09/01/2005	1:2160000

## Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Red buoy, lighted	[None]	029° 10' 36.984" N	91° 33' 14.376" W	---
1.2	Platform (oil or gas)	[None]	029° 11' 00.565" N	91° 31' 03.789" W	---
1.3	Horizontally banded buoy, lighted	[None]	029° 09' 59.889" N	91° 33' 53.951" W	---
1.4	Platform (oil or gas)	[None]	029° 10' 28.608" N	91° 32' 00.952" W	---
1.5	Red buoy, lighted	[None]	029° 11' 27.261" N	91° 32' 32.788" W	---
1.6	Platform (oil or gas)	[None]	029° 11' 35.779" N	91° 31' 34.762" W	---
1.7	Red buoy, lighted	[None]	029° 12' 13.310" N	91° 31' 52.320" W	---
1.8	Platform (oil or gas)	[None]	029° 09' 12.698" N	91° 30' 04.462" W	---
1.9	Platform (oil or gas)	[None]	029° 09' 22.051" N	91° 30' 19.058" W	---
1.10	Green buoy, lighted	3.92 m	029° 12' 17.267" N	91° 31' 58.143" W	---
1.11	Red buoy, lighted	3.39 m	029° 13' 00.652" N	91° 31' 10.358" W	---
1.12	Green buoy, lighted	5.83 m	029° 11' 29.375" N	91° 32' 39.566" W	---

1.13	Green buoy, lighted	6.56 m	029° 10' 43.185" N	91° 33' 21.849" W	---
1.14	Green buoy, lighted	3.81 m	029° 13' 04.398" N	91° 31' 16.342" W	---
2.1	Sounding	4.73 m	029° 10' 41.486" N	91° 32' 16.158" W	---
2.2	Obstruction	4.13 m	029° 11' 18.343" N	91° 31' 31.298" W	---
2.3	Sounding	3.10 m	029° 12' 55.320" N	91° 32' 33.725" W	---
2.4	Obstruction	3.50 m	029° 12' 47.532" N	91° 32' 47.195" W	---
2.5	Obstruction	4.78 m	029° 10' 31.703" N	91° 31' 58.381" W	---
2.6	Obstruction	5.24 m	029° 09' 20.000" N	91° 30' 23.750" W	---
2.7	Obstruction	5.57 m	029° 09' 13.929" N	91° 30' 10.315" W	---
2.8	Obstruction	3.36 m	029° 13' 30.625" N	91° 30' 44.075" W	---
3.1	AWOIS	[no data]	[no data]	[no data]	---
3.2	AWOIS	[no data]	[no data]	[no data]	---
3.3	AWOIS	[no data]	[no data]	[no data]	---
3.4	AWOIS	[no data]	[no data]	[no data]	---
3.5	AWOIS	[no data]	[no data]	[no data]	---
3.6	AWOIS	[no data]	[no data]	[no data]	---

# **1 - Charted Features**

## 1.1) Contact/Point - 0001/1 from h11286 / d2\_sss\_200 / 2005-168 / d2\_168\_050617215600

### Survey Summary

**Survey Position:** 029° 10' 36.984" N, 91° 33' 14.376" W  
**Least Depth:** [None]  
**Timestamp:** 2005-168.22:10:27 (06/17/2005)  
**Survey Line:** h11286 / d2\_sss\_200 / 2005-168 / d2\_168\_050617215600  
**Contact/Point:** 0001/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

SAIC contact Buoy Charted R "2" Fl R 2.5s buoy

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/d2_sss_200/2005-168/d2_168_050617215600	0001	0.00	000.0	Primary
ChartGPs - Digitized	1	1.31	282.2	Secondary (grouped)
h11286/r2_sss_100/2005-140/r2_140_050520183100	0001	4.95	005.0	Secondary
h11286/d2_sss_200/2005-052/d2_052_050221214100	0001	7.95	173.8	Secondary
h11286/d2_sss_200_lf/2005-052/d2_052_050221214100	0001	7.95	173.8	Secondary
h11286/d2_sss_200/2005-053/d2_053_050222214300	0001	10.19	213.5	Secondary
h11286/d2_sss_200_lf/2005-053/d2_053_050222214300	0001	10.19	213.5	Secondary
h11286/r2_sss_100/2005-172/r2_172_050621173900	0001	11.08	076.2	Secondary
h11286/d2_sss_200/2005-174/d2_174_050623161900	0001	13.47	078.7	Secondary
h11286/r2_sss_100/2005-207/r2_207_050726164100	0001	53.08	049.9	Secondary (grouped)

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Buoy, lateral (BOYLAT)  
**Attributes:** BOYSHP - 6:barrel (tun)

CATLAM - 1:port-hand lateral mark

COLOUR - 3:red

### **Office Notes**

Concur. Defer final charting disposition to Marine Chart Division, Nautical Data Branch.

## 1.2) Contact/Point - 0002/1 from h11286 / r2\_sss\_100 / 2005-051 / r2\_051\_050220214200

### Survey Summary

**Survey Position:** 029° 11' 00.565" N, 91° 31' 03.789" W  
**Least Depth:** [None]  
**Timestamp:** 2005-051.21:58:33 (02/20/2005)  
**Survey Line:** h11286 / r2\_sss\_100 / 2005-051 / r2\_051\_050220214200  
**Contact/Point:** 0002/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

charted platform, location not exactly as charted. MCD action recommended.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/r2_sss_100/2005-051/r2_051_050220214200	0002	0.00	000.0	Primary
h11286/r2_sss_100_lf/2005-051/r2_051_050220214200	0002	0.00	000.0	Secondary

### Hydrographer Recommendations

Refer to MCD Update Services Branch for chart update.

### S-57 Data

**Geo object 1:** Offshore platform (OFSPFL)  
**Attributes:** CATOFP - 2:production platform  
 CONVIS - 1:visual conspicuous  
 INFORM - charted platform, location not exactly as charted. MCD action recommended.  
 STATUS - 1:permanent

### Office Notes

Concur with clarification. Defer final charting disposition to Marine Charting Division, Nautical Data Branch Source Information Unit.

### 1.3) Contact/Point - 0005/1 from h11286 / r2\_sss\_100 / 2005-026 / r2\_026\_050126211500

#### Survey Summary

**Survey Position:** 029° 09' 59.889" N, 91° 33' 53.951" W  
**Least Depth:** [None]  
**Timestamp:** 2005-127.07:27:51 (05/07/2005)  
**Survey Line:** h11286 / r2\_sss\_100 / 2005-026 / r2\_026\_050126211500  
**Contact/Point:** 0005/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Buoy RW "A" Mo (A) BELL was found by the field party to be on station and serving its intended purpose.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/r2_sss_100/2005-026/r2_026_050126211500	0005	0.00	000.0	Primary
h11286/d2_sss_200/2005-168/d2_168_050617173300	0002	0.42	241.6	Secondary
h11286/d2_sss_200/2005-174/d2_174_050623132500	0001	2.77	048.5	Secondary
h11286/d2_sss_200/2005-047/d2_047_050216200100	0001	7.42	280.7	Secondary
h11286/d2_sss_200_lf/2005-047/d2_047_050216200100	0001	7.42	280.7	Secondary
h11286/r2_sss_100/2005-207/r2_207_050726160500	0001	16.87	086.9	Secondary
h11286/r2_sss_100/2005-207/r2_207_050726153300	0002	24.07	123.3	Secondary

#### Hydrographer Recommendations

Retain as charted.

#### S-57 Data

**Geo object 1:** Buoy, safe water (BOYSAW)  
**Attributes:** BOYSHP - 6:barrel (tun)  
 COLOUR - 1,3:white,red

## Office Notes

Concur.

## 1.4) Contact/Point - 0001/1 from h11286 / d2\_sss\_200 / 2005-138 / d2\_138\_050518155200

### Survey Summary

**Survey Position:** 029° 10' 28.608" N, 91° 32' 00.952" W  
**Least Depth:** [None]  
**Timestamp:** 2005-138.16:05:23 (05/18/2005)  
**Survey Line:** h11286 / d2\_sss\_200 / 2005-138 / d2\_138\_050518155200  
**Contact/Point:** 0001/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

SAIC contact - charted oil platform

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/d2_sss_200/2005-138/d2_138_050518155200	0001	0.00	000.0	Primary
h11286/d2_sss_200/2005-172/d2_172_050621152100	0001	4.15	063.9	Secondary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Offshore platform (OFSPLF)  
**Attributes:** CATOFP - 1:oil derrick / rig  
 CONVIS - 1:visual conspicuous  
 INFORM - SAIC contact - charted oil platform  
 STATUS - 1:permanent

### Office Notes

Concur. Defer final charting disposition to Marine Charting Division, Nautical Data Branch Source Information Unit.

## 1.5) Contact/Point - 0002/1 from h11286 / d2\_sss\_200 / 2005-168 / d2\_168\_050617195000

### Survey Summary

**Survey Position:** 029° 11' 27.261" N, 91° 32' 32.788" W  
**Least Depth:** [None]  
**Timestamp:** 2005-168.20:15:17 (06/17/2005)  
**Survey Line:** h11286 / d2\_sss\_200 / 2005-168 / d2\_168\_050617195000  
**Contact/Point:** 0002/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

SAIC contact - Charted RN "4" buoy was found by the field party to be on station and serving its intended purpose.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/d2_sss_200/2005-168/d2_168_050617195000	0002	0.00	000.0	Primary
h11286/d2_sss_200/2005-173/d2_173_050622201200	0001	5.30	135.2	Secondary
h11286/r2_sss_100/2005-174/r2_174_050623185000	0001	7.84	153.5	Secondary
h11286/r2_sss_100/2005-140/r2_140_050520152100	0002	8.12	110.5	Secondary
h11286/r2_sss_100/2005-168/r2_168_050617151700	0001	40.08	309.6	Secondary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Buoy, lateral (BOYLAT)  
**Attributes:** BOYSHP - 6:barrel (tun)  
 CATLAM - 1:port-hand lateral mark  
 COLOUR - 3:red

## Office Notes

Concur.

## 1.6) Contact/Point - 0002/1 from h11286 / d2\_sss\_200 / 2005-169 / d2\_169\_050618194600

### Survey Summary

**Survey Position:** 029° 11' 35.779" N, 91° 31' 34.762" W  
**Least Depth:** [None]  
**Timestamp:** 2005-169.19:58:55 (06/18/2005)  
**Survey Line:** h11286 / d2\_sss\_200 / 2005-169 / d2\_169\_050618194600  
**Contact/Point:** 0002/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

SAIC contact - charted oil platform

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/d2_sss_200/2005-169/d2_169_050618194600	0001	0.00	000.0	Primary
h11286/d2_sss_200/2005-169/d2_169_050618194600	0002	0.45	151.2	Secondary (grouped)
h11286/d2_sss_200/2005-172/d2_172_050621172200	0001	2.73	069.2	Secondary (grouped)
h11286/r2_sss_100/2005-174/r2_174_050623144100	0001	3.26	203.8	Secondary (grouped)
h11286/r2_sss_100/2005-169/r2_169_050618182900	0001	11.98	041.2	Secondary
h11286/r2_sss_100/2005-169/r2_169_050618175600	0001	20.47	110.2	Secondary
h11286/r2_sss_100/2005-171/r2_171_050620202800	0001	20.59	111.8	Secondary

### Hydrographer Recommendations

Retain platform ANR-105-1 as charted.

### S-57 Data

**Geo object 1:** Offshore platform (OFSPLF)  
**Attributes:** CATOFP - 1:oil derrick / rig  
 CONVIS - 1:visual conspicuous  
 INFORM - SAIC contact - charted oil platform  
 STATUS - 1:permanent

## Office Notes

Concur. Defer final charting disposition to Marine Charting Division, Nautical Data Branch Source Information Unit.

## 1.7) Contact/Point - 0001/1 from h11286 / d2\_sss\_200 / 2005-174 / d2\_174\_050623135500

### Survey Summary

**Survey Position:** 029° 12' 13.310" N, 91° 31' 52.320" W  
**Least Depth:** [None]  
**Timestamp:** 2005-174.13:58:50 (06/23/2005)  
**Survey Line:** h11286 / d2\_sss\_200 / 2005-174 / d2\_174\_050623135500  
**Contact/Point:** 0001/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Buoy R N "6" was found by the field party to be on station and serving its intended purpose.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/d2_sss_200/2005-174/d2_174_050623135500	0001	0.00	000.0	Primary
h11286/r2_sss_100/2005-140/r2_140_050520155100	0001	2.66	295.3	Secondary
h11286/d2_sss_200/2005-168/d2_168_050617170300	0001	4.94	196.6	Secondary
h11286/r2_sss_100/2005-174/r2_174_050623185000	0002	9.24	299.4	Secondary
h11286/d2_sss_200/2005-168/d2_168_050617202000	0001	10.95	303.4	Secondary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Buoy, lateral (BOYLAT)  
**Attributes:** BOYSHP - 6:barrel (tun)  
 CATLAM - 1:port-hand lateral mark  
 COLOUR - 3:red

## Office Notes

Concur.

## 1.8) Contact/Point - 0001/1 from h11286 / r2\_sss\_100 / 2005-228 / r2\_228\_050816180200

### Survey Summary

**Survey Position:** 029° 09' 12.698" N, 91° 30' 04.462" W  
**Least Depth:** [None]  
**Timestamp:** 2005-228.18:10:38 (08/16/2005)  
**Survey Line:** h11286 / r2\_sss\_100 / 2005-228 / r2\_228\_050816180200  
**Contact/Point:** 0001/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Oil rig.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/r2_sss_100/2005-228/r2_228_050816180200	0001	0.00	000.0	Primary
h11286/r2_sss_200/2005-233/r2_233_050821151900	0001	5.49	290.3	Secondary
h11286/r2_sss_100/2005-228/r2_228_050816190500	0002	17.51	058.2	Secondary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Offshore platform (OFSPLF)  
**Attributes:** CATOFP - 1:oil derrick / rig  
 CONVIS - 1:visual conspicuous  
 INFORM - Oil rig.

### Office Notes

Concur with clarification. Defer final charting disposition to Marine Charting Division, Nautical Data Branch Source Information Unit.

## 1.9) Contact/Point - 0002/1 from h11286 / r2\_sss\_100 / 2005-228 / r2\_228\_050816180200

### Survey Summary

**Survey Position:** 029° 09' 22.051" N, 91° 30' 19.058" W  
**Least Depth:** [None]  
**Timestamp:** 2005-228.18:13:21 (08/16/2005)  
**Survey Line:** h11286 / r2\_sss\_100 / 2005-228 / r2\_228\_050816180200  
**Contact/Point:** 0002/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Oil Rig.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/r2_sss_100/2005-228/r2_228_050816180200	0002	0.00	000.0	Primary
h11286/d2_sss_200/2005-055/d2_055_050224142400	0001	11.04	115.6	Secondary
h11286/r2_sss_200/2005-233/r2_233_050821173100	0001	21.73	117.8	Secondary
h11286/r2_sss_200/2005-233/r2_233_050821144600	0001	54.21	197.8	Secondary (grouped)

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Offshore platform (OFSPLF)  
**Attributes:** CATOFP - 1:oil derrick / rig  
 CONVIS - 1:visual conspicuous  
 INFORM - Oil Rig.

### Office Notes

Concur. Defer final charting disposition to Marine Charting Division, Nautical Data Branch Source Information Unit.

## 1.10) Profile/Beam - 26487/22 from h11286 / tpe\_d2\_mb\_0 / 2005-140 / d2mba05140\_d09

### Survey Summary

**Survey Position:** 029° 12' 17.267" N, 91° 31' 58.143" W  
**Least Depth:** 3.92 m  
**Timestamp:** 2005-140.18:48:37.737 (05/20/2005)  
**Survey Line:** h11286 / tpe\_d2\_mb\_0 / 2005-140 / d2mba05140\_d09  
**Profile/Beam:** 26487/22  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Charted buoy C "5" was found by the field party to be on station and serving its intended purpose.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_d2_mb_0/2005-140/d2mba05140_d09	26487/22	0.00	000.0	Primary
h11286/r2_sss_100/2005-140/r2_140_050520142300	0001	26.33	325.3	Secondary
h11286/d2_sss_200/2005-174/d2_174_050623141400	0001	26.53	329.9	Secondary
h11286/r2_sss_100_lf/2005-019/r2_019_050119193600	0003	27.47	324.8	Secondary
h11286/d2_sss_200/2005-140/d2_140_050520184800	0001	28.10	335.3	Secondary
h11286/d2_sss_200_lf/2005-140/d2_140_050520184800	0001	28.10	335.3	Secondary
h11286/tpe_r2_mb_0/2005-140/r2mba05140_d03	6447/240	31.27	289.9	Secondary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Buoy, lateral (BOYLAT)  
**Attributes:** BOYSHP - 6:barrel (tun)  
 CATLAM - 2:starboard-hand lateral mark  
 COLOUR - 4:green

## Office Notes

Concur.

## 1.11) Profile/Beam - 19893/89 from h11286 / tpe\_d2\_mb\_0 / 2005-233 / d2mba05233\_d08

### Survey Summary

**Survey Position:** 029° 13' 00.652" N, 91° 31' 10.358" W  
**Least Depth:** 3.39 m  
**Timestamp:** 2005-233.20:49:58.825 (08/21/2005)  
**Survey Line:** h11286 / tpe\_d2\_mb\_0 / 2005-233 / d2mba05233\_d08  
**Profile/Beam:** 19893/89  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Buoy R N "8" was found by the field party to be on station and serving its intended purpose.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_d2_mb_0/2005-233/d2mba05233_d08	19893/89	0.00	000.0	Primary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Buoy, lateral (BOYLAT)  
**Attributes:** BOYSHP - 6:barrel (tun)  
 CATLAM - 1:port-hand lateral mark  
 COLOUR - 3:red

### Office Notes

Concur.

## 1.12) Profile/Beam - 19555/238 from h11286 / tpe\_r2\_mb\_0 / 2005-140 / r2mba05140\_d03

### Survey Summary

**Survey Position:** 029° 11' 29.375" N, 91° 32' 39.566" W  
**Least Depth:** 5.83 m  
**Timestamp:** 2005-140.14:46:25.412 (05/20/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-140 / r2mba05140\_d03  
**Profile/Beam:** 19555/238  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Buoy G "3" G 4s was found by the field party to be on station and serving its intended purpose.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-140/r2mba05140_d03	19555/238	0.00	000.0	Primary
h11286/r2_sss_100/2005-174/r2_174_050623164100	0002	1.98	060.1	Secondary
h11286/d2_sss_200/2005-174/d2_174_050623141400	0002	5.29	218.6	Secondary
h11286/r2_sss_100_lf/2005-019/r2_019_050119193600	0001	6.33	202.3	Secondary
h11286/d2_sss_200/2005-140/d2_140_050520194100	0002	9.42	268.1	Secondary
h11286/d2_sss_200_lf/2005-140/d2_140_050520194100	0002	9.42	268.1	Secondary
h11286/r2_sss_100/2005-140/r2_140_050520142300	0003	12.07	244.8	Secondary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Buoy, lateral (BOYLAT)  
**Attributes:** BOYSHP - 6:barrel (tun)  
 CATLAM - 2:starboard-hand lateral mark  
 COLOUR - 4:green

## Office Notes

Concur.

### 1.13) Profile/Beam - 31637/1 from h11286 / tpe\_r2\_mb\_0 / 2005-140 / r2mba05140\_d03

#### Survey Summary

**Survey Position:** 029° 10' 43.185" N, 91° 33' 21.849" W  
**Least Depth:** 6.56 m  
**Timestamp:** 2005-140.14:59:50.947 (05/20/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-140 / r2mba05140\_d03  
**Profile/Beam:** 31637/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Buoy G "1" Fl G 2.5s was found by the field party to be on station and serving its intended purpose.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-140/r2mba05140_d03	31637/1	0.00	000.0	Primary
h11286/r2_sss_100/2005-140/r2_140_050520145300	0001	6.83	352.4	Secondary
h11286/d2_sss_200/2005-140/d2_140_050520194100	0001	7.87	009.2	Secondary
h11286/d2_sss_200_lf/2005-140/d2_140_050520194100	0001	7.87	009.2	Secondary
h11286/r2_sss_100/2005-173/r2_173_050622190400	0001	11.86	003.2	Secondary
h11286/d2_sss_200/2005-174/d2_174_050623172400	0001	12.78	011.0	Secondary
h11286/d2_sss_200_lf/2005-053/d2_053_050222214300	0003	14.81	135.5	Secondary
h11286/d2_sss_200/2005-053/d2_053_050222214300	0002	15.24	068.2	Secondary
h11286/d2_sss_200_lf/2005-053/d2_053_050222214300	0002	15.24	068.2	Secondary
h11286/d2_sss_200/2005-173/d2_173_050622205800	0002	15.84	021.9	Secondary
h11286/r2_sss_100/2005-174/r2_174_050623164100	0003	16.86	011.5	Secondary

#### Hydrographer Recommendations

Retain as charted.

#### S-57 Data

**Geo object 1:** Buoy, lateral (BOYLAT)

**Attributes:** BOYSHP - 6:barrel (tun)  
CATLAM - 2:starboard-hand lateral mark  
COLOUR - 4:green

## Office Notes

Concur.

## 1.14) Profile/Beam - 4763/211 from h11286 / tpe\_r2\_mb\_0 / 2005-234 / r2mba05234\_d04

### Survey Summary

**Survey Position:** 029° 13' 04.398" N, 91° 31' 16.342" W  
**Least Depth:** 3.81 m  
**Timestamp:** 2005-234.15:48:12.111 (08/22/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-234 / r2mba05234\_d04  
**Profile/Beam:** 4763/211  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Buoy G "7" Fl G 2.5s was found by the field party to be on station and serving its intended purpose.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-234/r2mba05234_d04	4763/211	0.00	000.0	Primary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

**Geo object 1:** Buoy, lateral (BOYLAT)  
**Attributes:** BOYSHP - 6:barrel (tun)  
 CATLAM - 2:starboard-hand lateral mark  
 COLOUR - 4:green

### Office Notes

Concur.

## **2 - New Features**

## 2.1) Profile/Beam - 19524/10 from h11286 / tpe\_d2\_mb\_0 / 2005-172 / d2mba05172\_d12

### Survey Summary

**Survey Position:** 029° 10' 41.486" N, 91° 32' 16.158" W  
**Least Depth:** 4.73 m  
**Timestamp:** 2005-172.20:29:22.323 (06/21/2005)  
**Survey Line:** h11286 / tpe\_d2\_mb\_0 / 2005-172 / d2mba05172\_d12  
**Profile/Beam:** 19524/10  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

After application of final tides, a 1 m pipe was found in the multibeam. Chart a pipe with a least depth of 4.7m (15 ft.)

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_d2_mb_0/2005-172/d2mba05172_d12	19524/10	0.00	000.0	Primary

### Hydrographer Recommendations

Chart a pipe with a least depth of 4.7m (15 ft.)

### S-57 Data

[None]

### Office Notes

Do not concur. It was determined during office review that this feature is not a valid feature based on the submitted bathymetric and side scan imagery. Contact correlation and validation does not exist within the other data files within the common area. It is recommend to chart present survey soundings in all common areas.

## 2.2) Profile/Beam - 1198/93 from h11286 / tpe\_d2\_mb\_0 / 2005-193 / d2mba05193\_d35

### Survey Summary

**Survey Position:** 029° 11' 18.343" N, 91° 31' 31.298" W  
**Least Depth:** 4.13 m  
**Timestamp:** 2005-193.18:39:07.636 (07/12/2005)  
**Survey Line:** h11286 / tpe\_d2\_mb\_0 / 2005-193 / d2mba05193\_d35  
**Profile/Beam:** 1198/93  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

An obstruction was identified in MB and SSS. MB development was run; the feature located, and is of a significant height. Contact height is 0.7 m, in only 4.8 m of water, with a least depth of 12 feet.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_d2_mb_0/2005-193/d2mba05193_d35	1198/93	0.00	000.0	Primary
h11286/tpe_d2_mb_0/2005-172/d2mba05172_d05	12339/63	0.44	093.4	Secondary
h11286/d2_sss_200/2005-051/d2_051_050220225100	0001	0.51	065.1	Secondary
h11286/tpe_d2_mb_0/2005-172/d2mba05172_d08	1337/45	0.69	106.1	Secondary
h11286/d2_sss_200/2005-172/d2_172_050621160900	0001	1.58	143.9	Secondary
h11286/tpe_d2_mb_0/2005-193/d2mba05193_d34	1654/23	1.92	142.6	Secondary
h11286/tpe_d2_mb_0/2005-193/d2mba05193_d34	1671/29	2.09	178.2	Secondary
h11286/r2_sss_100/2005-171/r2_171_050620135900	0001	4.75	325.0	Secondary

### Hydrographer Recommendations

Chart an Obstn with a least depth of 13 feet.

#### Cartographically-Rounded Depth (Affected Charts):

13ft (11351\_1)

2 ¼fm (1116A\_1, 11340\_1, 411\_1)

## S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** INFORM - An obstruction was identified in MB and SSS. MB development was run; the feature located, and is of a significant height. Contact height is 0.7 m, in only 4.8 m of water, with a least depth of 12 feet.

QUASOU - 6:least depth known

STATUS - 1:permanent

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

VALSOU - 4.125 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur. Chart a dangerous obstruction, least depth 13 feet (4.1m) in Latitude 29°11'18.343" N, Longitude 091°31'31.298" W.

## 2.3) Profile/Beam - 37283/214 from h11286 / tpe\_r2\_mb\_0 / 2005-138 / r2mba05138\_d18

### Survey Summary

**Survey Position:** 029° 12' 55.320" N, 91° 32' 33.725" W  
**Least Depth:** 3.10 m  
**Timestamp:** 2005-138.20:24:33.156 (05/18/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-138 / r2mba05138\_d18  
**Profile/Beam:** 37283/214  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

A feature was identified in MB, MB development acquired; feature is a natural shoal that extends 0.65m from the seafloor with a least depth of 10 feet.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-138/r2mba05138_d18	37283/214	0.00	000.0	Primary
h11286/r2_sss_100/2005-176/r2_176_050625193200	0001	41.66	263.8	Secondary

### Hydrographer Recommendations

Chart the 10 foot shoal depth.

### S-57 Data

[None]

### Office Notes

Concur with clarification. Chart present survey soundings in all common areas.

## 2.4) Profile/Beam - 3353/11 from h11286 / tpe\_r2\_mb\_0 / 2005-176 / r2mba05176\_d06

### Survey Summary

**Survey Position:** 029° 12' 47.532" N, 91° 32' 47.195" W  
**Least Depth:** 3.50 m  
**Timestamp:** 2005-176.15:19:52.963 (06/25/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-176 / r2mba05176\_d06  
**Profile/Beam:** 3353/11  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Possible pipe or well head identified in multibeam and side scan. No time for development lines to be run due to survey priorities.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-176/r2mba05176_d06	3353/11	0.00	000.0	Primary

### Hydrographer Recommendations

Chart an Obstrn with a least depth of 11 feet.

#### Cartographically-Rounded Depth (Affected Charts):

11ft (11351\_1)

1 ¾fm (1116A\_1, 11340\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)

**Attributes:** INFORM - Possible pipe or well head identified in multibeam and side scan. No time for development lines to be run due to survey priorities.

QUASOU - 6:least depth known

STATUS - 1:permanent

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

VALSOU - 3.505 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur. Chart an obstruction with least depth 11 feet (3.5m) in Latitude 29°12'47.532" N, Longitude 091°32'47.195" W.

## 2.5) Profile/Beam - 257/1 from h11286 / tpe\_r2\_mb\_0 / 2005-207 / r2mba05207\_d20

### Survey Summary

**Survey Position:** 029° 10' 31.703" N, 91° 31' 58.381" W  
**Least Depth:** 4.78 m  
**Timestamp:** 2005-207.17:20:43.169 (07/26/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-207 / r2mba05207\_d20  
**Profile/Beam:** 257/1  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

POLE STANDING 20 FEET ABOVE SURFACE 12.2 M TO STBD

check photo Pipe\_hoc\_ei\_63b.JPG, HOC\_EI\_63\_A\_1.JPG, HOC\_EI\_63\_A\_2.JPG, Hoc\_ei\_63\_a\_3.jpg

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-207/r2mba05207_d20	257/1	0.00	000.0	Primary
h11286/tpe_r2_mb_0/2005-207/r2mba05207_d21	224/236	0.94	109.9	Secondary
h11286/d2_sss_200/2005-138/d2_138_050518155200	0002	1.19	040.6	Secondary
h11286/d2_sss_200/2005-172/d2_172_050621152100	0002	2.74	042.3	Secondary
h11286/r2_sss_100/2005-207/r2_207_050726171900	0001	5.10	330.8	Secondary
h11286/r2_sss_100/2005-207/r2_207_050726172300	0001	5.79	106.0	Secondary

### Hydrographer Recommendations

Hydrographer recommends charting feature as a dolphin.

#### Cartographically-Rounded Depth (Affected Charts):

15ft (11351\_1)

2 ½fm (1116A\_1, 11340\_1, 411\_1)

### S-57 Data

**Geo object 1:** Pile (PILPNT)  
**Attributes:** CATPLE - 3:post

CONVIS - 1:visual conspicuous

HEIGHT - -6.1 m

INFORM - Pipe (flare pipe)

OBJNAM - Flare Pipe

RECDAT - 20050726

SORDAT - 20050726

### **Office Notes**

Do not concur. The feature is a flare pipe with no indication that it is intended to be used for mooring. Chart an exposed flare pipe in Latitude 29°10'31.703" N, Longitude 091°31'58.381" W.

## 2.6) Profile/Beam - 990/212 from h11286 / tpe\_r2\_mb\_0 / 2005-228 / r2mba05228\_d16

### Survey Summary

**Survey Position:** 029° 09' 20.000" N, 91° 30' 23.750" W  
**Least Depth:** 5.24 m  
**Timestamp:** 2005-228.19:07:57.490 (08/16/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-228 / r2mba05228\_d16  
**Profile/Beam:** 990/212  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

1st of 2 pipes/ capped wells as present in side scan and multibeam - this is the largest - 1m height - present in mb line - r2mba05238\_d29. There is a 0.4 m difference between mb lines, present in the raw data. SVP applied was very similar, draft difference was 0.03m and all other correctors were accounted for. The only remaining difference is tides. Shoalest sounding is to be selected for shoal depths.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-228/r2mba05228_d16	990/212	0.00	000.0	Primary
h11286/tpe_r2_mb_0/2005-228/r2mba05228_d16	990/212	0.00	000.0	Secondary
h11286/tpe_r2_mb_0/2005-228/r2mba05228_d16	1052/77	13.54	266.7	Secondary (grouped)

### Hydrographer Recommendations

Chart a pipe with a depth of 17 feet.

#### Cartographically-Rounded Depth (Affected Charts):

17ft (11351\_1)

2 ¾fm (1116A\_1, 11340\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** CATOBS - 2:wellhead  
 INFORM - Shoaler of 2 capped wellheads  
 NATCON - 7:metal

QUASOU - 6:least depth known

STATUS - 1:permanent

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

VALSOU - 5.242 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### **Office Notes**

Concur with clarification. The feature is the shoaler of two capped wellheads located approximately 13m apart. Chart dangerous obstructions, least depth 17 feet (5.2m) in Latitude 29°09'20.000" N, Longitude 091°30'23.740" W.

## 2.7) Profile/Beam - 3175/85 from h11286 / tpe\_r2\_mb\_0 / 2005-228 / r2mba05228\_d16

### Survey Summary

**Survey Position:** 029° 09' 13.929" N, 91° 30' 10.315" W  
**Least Depth:** 5.57 m  
**Timestamp:** 2005-228.19:10:23.169 (08/16/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-228 / r2mba05228\_d16  
**Profile/Beam:** 3175/85  
**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

Definite contact in mb lines, 0.8m height. Correlated with mb contact r2mba05238\_d26-109/43. There is a 0.4 m difference between mb lines, present in the raw data. SVP applied was very similar, draft difference was 0.03m and all other correctors were accounted for. The only remaining difference is tides. Shoalest sounding is to be selected for least depth.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-228/r2mba05228_d16	3175/85	0.00	000.0	Primary
h11286/tpe_r2_mb_0/2005-228/r2mba05228_d16	3175/85	0.00	000.0	Secondary
h11286/tpe_r2_mb_0/2005-238/r2mba05238_d26	109/43	1.09	225.6	Secondary
h11286/r2_sss_100/2005-228/r2_228_050816190500	0001	6.63	136.7	Secondary

### Hydrographer Recommendations

Chart a pipe with a least depth of 18 feet.

#### Cartographically-Rounded Depth (Affected Charts):

18ft (11351\_1)

3fm (1116A\_1, 11340\_1, 411\_1)

### S-57 Data

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** CATOBS - 2:wellhead

INFORM - Definite contact in mb lines, 0.8m height. Correlated with mb contact r2mba05238\_d26-109/43. There is a 0.4 m difference between mb lines, present in the raw data. SVP applied was very similar, draft difference was 0.03m and all other correctors were accounted for. The only remaining difference is tides. Shoalest sounding is to be selected for least depth.

NATCON - 7:metal

QUASOU - 6:least depth known

STATUS - 1:permanent

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

VALSOU - 5.574 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

### Office Notes

Concur with clarification. Chart a dangerous obstruction, least depth 18 feet (5.5 m) in Latitude 29°09'13.929" N, Longitude 091°30'10.315" W.

**2.8) Profile/Beam - 253/48 from h11286 / tpe\_r2\_mb\_0 / 2005-237 / r2mba05237\_d15**

**Survey Summary**

**Survey Position:** 029° 13' 30.625" N, 91° 30' 44.075" W  
**Least Depth:** 3.36 m  
**Timestamp:** 2005-237.17:11:39.652 (08/25/2005)  
**Survey Line:** h11286 / tpe\_r2\_mb\_0 / 2005-237 / r2mba05237\_d15  
**Profile/Beam:** 253/48  
**Charts Affected:** 11351\_1, 11354\_3, 1116A\_1, 11340\_1, 411\_1

**Remarks:**

Contact present in 3 lines of multibeam, 0.4 m height in 3.7m of water with a least depth of 11 feet.

**Feature Correlation**

Address	Feature	Range	Azimuth	Status
h11286/tpe_r2_mb_0/2005-237/r2mba05237_d15	253/48	0.00	000.0	Primary

**Hydrographer Recommendations**

Chart an Obstrn with a least depth of 11 feet.

**Cartographically-Rounded Depth (Affected Charts):**

11ft (11351\_1, 11354\_3)  
 1 ¾fm (1116A\_1, 11340\_1, 411\_1)

**S-57 Data**

**Geo object 1:** Obstruction (OBSTRN)  
**Attributes:** INFORM - Contact present in 3 lines of multibeam, 0.4 m height in 3.7m of water with a least depth of 11 feet.  
 QUASOU - 6:least depth known  
 STATUS - 1:permanent  
 TECSOU - 3:found by multi-beam  
 VALSOU - 3.359 m  
 VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

## Office Notes

Concur. Chart an obstruction with least depth 11 feet (3.3m) in Latitude 29°13'30.625" N, Longitude 091°30'44.075" W.

## **3 - AWOIS Features**

### 3.1) AWOIS #12121 - UNKNOWN

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 029° 16' 00.000" N, 91° 34' 60.000" W  
**Historical Depth:** [None]  
**Search Radius:** 1000  
**Search Technique:** S2,MB,ES,DI,SD  
**Technique Notes:** Run lines at 25 meter line spacing with a SWMB to locate item, if not found run parallel splits between the first set of recon lines. Conduct search within a minimum bounding square or the search radius.

**History Notes:**

CGD8 LNM 201/01. 05/12/01; REPORTS THE DANGEROUS SUNKEN WRECK, PA, OF A HELICOPTER IN LAT. 29/16/00.00. N, LON. 091/35/00.00W. (NAD83). (ENTERED 12/03 BY KRW)

#### Survey Summary

**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

**Remarks:**

AWOIS Item #12121 was not investigated due to survey priorities.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
SheetE_revised	AWOIS # 12121	0.00	000.0	Primary

#### Hydrographer Recommendations

Retain as charted.

#### S-57 Data

[None]

#### Office Notes

Concur.

## 3.2) AWOIS #12123 - JEANNE ANN

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 029° 14' 04.000" N, 91° 32' 30.300" W  
**Historical Depth:** [None]  
**Search Radius:** 500  
**Search Technique:** MB, DI  
**Technique Notes:** Run lines at 25 meter line spacing with a SWMB to locate item, if not found run parallel splits between the first set of recon lines. Conduct search within a minimum bounding square or the search radius.

#### History Notes:

CGD8 LNM 50/96, 12/174/96; REPORTS THE DANGEROUS SUNKEN WRECK, PA, OF THE 70 FT FISHING VESSEL JEANNE ANN IN LAT. 29/14/04.0 N, LON. 091/32/30.30 W. (NAD83) (ENTERED 12/03 BY KRW)

### Survey Summary

**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

AWOIS Item #12123 was not investigated due to survey priorities.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
SheetE_revised	AWOIS # 12123	0.00	000.0	Primary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

[None]

### Office Notes

Concur.

### 3.3) AWOIS #12124 - UNKNOWN

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 029° 14' 00.800" N, 91° 36' 30.400" W  
**Historical Depth:** [None]  
**Search Radius:** 1000  
**Search Technique:** S2,MB,ES,DI,SD  
**Technique Notes:** Run lines at 25 meter line spacing with a SWMB to locate item, if not found run parallel splits between the first set of recon lines. Conduct search within a minimum bounding square or the search radius.

#### History Notes:

CGD8 LNM 11/73 02/12/73; REPORTS THE DANGEROUS SUNKEN WRECK, PA, OF A 50 FT BY 20 FT WATER BARGE, MARKED WITH A BUOY AND QUICK FLASHING RED LIGHT (NO LONGER IN EXISTANCE) IN LAT. 29/14/00.00 N, LON. 091/36.5 W. (NAD27) (ENTERED 12/03 BY KRW)

#### Survey Summary

**Charts Affected:** 11351\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

AWOIS Item #12124 was not investigated due to survey priorities.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
SheetE_revised	AWOIS # 12124	0.00	000.0	Primary

#### Hydrographer Recommendations

Retain as charted.

#### S-57 Data

[None]

## Office Notes

Concur.

### 3.4) AWOIS #12125 - UNKNOWN

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 029° 09' 00.800" N, 91° 30' 00.400" W  
**Historical Depth:** [None]  
**Search Radius:** 1000  
**Search Technique:** S2,MB,ES,DI,SD  
**Technique Notes:** Run lines at 25 meter line spacing with a SWMB to locate item, if not found run parallel splits between the first set of recon lines. Conduct search within a minimum bounding square or the search radius.

#### History Notes:

CGD8 LNM 20/71 03/11/71; REPORTS THE DANGEROUS SUNKEN WRECK, PA, OF A BARGE IN LAT. 29//09/00 N. LON. 091/30/00 W. (NAD27) (ENTERED 12/03 BY KRW)

#### Survey Summary

**Charts Affected:** 11351\_1, 11356\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

AWOIS Item covered by 100% and 200% SSS, no feature found. Item is considered disproved.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
SheetE_revised	AWOIS # 12125	0.00	000.0	Primary

#### Hydrographer Recommendations

Remove dangerous Wreck PA from the chart.

#### S-57 Data

[None]

#### Office Notes

Concur. Delete the charted Wreck PA at Latitude 29°09'00.800" N, Longitude 091°30'00.400" W. Chart current survey depths in common areas.

### 3.5) AWOIS #12127 - DUMP SITE

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 029° 15' 55.000" N, 91° 28' 00.000" W  
**Historical Depth:** [None]  
**Search Radius:** 500  
**Search Technique:** S2,ES,DI,SD  
**Technique Notes:** 100 METERS BEYOND ITS CHARTED BOUNDARIES WITH IN THE SHEET LIMITS.

#### History Notes:

THE AWOIS POSITION IS THE APPROXIMATE CHARTED CENTER OF THE DUMP SITE. CHART LETTER 835/2000, 9/22/2000; REPORTS THE EXISTANCE OF AN OCEAN DUMPING SITE EAST OF AND PARALLEL TO THE ATCHAFALAYA RIVER BAR CHANNEL APPROXIMATELY 18.5 MILES LONG WITH AN AVERAGE DEPTH OF 16 FT. THE CENTER OF THE DUMP SITE IS LOCATED IN LAT. 29/15/55.0 N, LON. 091/28/00 W. (NAD83). THE BOUNDARY COORDINATES OF THE RECTANGULAR SHAPED SITE ARE AS FOLLOWS: LAT. 29/20/59.92 N, LON. 91/23/33.23 W. (NAD83); LAT. 29/20/43.94 N, LON. 91/23/09.73 W. (NAD83); LAT. 29/08/15.46 N, LON. 91/34/51.02 W. (NAD83); LAT. 29/07/29.43 N, LON. 91/34/27.51 W. (NAD83). INVESTIGATE SITE WITH IN 100 FT OF SHEET LIMITS. (ENTERED 12/03 BY KRW)

### Survey Summary

**Charts Affected:** 11351\_1, 11354\_3, 11356\_1, 11352\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

AWOIS Item #12127 was not investigated due to survey priorities.

### Feature Correlation

Address	Feature	Range	Azimuth	Status
SheetE_revised	AWOIS # 12127	0.00	000.0	Primary

### Hydrographer Recommendations

Retain as charted.

### S-57 Data

[None]

## Office Notes

Concur.

### 3.6) AWOIS #12738 - OBSTRUCTION

#### No Primary Survey Feature for this AWOIS Item

**Search Position:** 029° 06' 53.700" N, 91° 26' 51.660" W  
**Historical Depth:** [None]  
**Search Radius:** 500  
**Search Technique:** S2, MB, DI  
**Technique Notes:** [None]

#### History Notes:

CL 763(2004) 06/07/2004; REPORTS AN UNDERWATER OBSTRUCTION OF UNKNOWN DEPTH AND SIZE IN LAT. 29/06/53.7 N, LON. 091/26/51.66 W(NAD83).THE NOTICE WAS PUBLISHED IN THE "LOUISIANA COASTLINE QUARTERLY".

#### Survey Summary

**Charts Affected:** 11351\_1, 11356\_1, 11352\_1, 1116A\_1, 11340\_1, 411\_1

#### Remarks:

AWOIS Item #12738 was not investigated due to survey priorities.

#### Feature Correlation

Address	Feature	Range	Azimuth	Status
SheetE_revised	AWOIS # 12738	0.00	000.0	Primary

#### Hydrographer Recommendations

Retain as charted.

#### S-57 Data

[None]

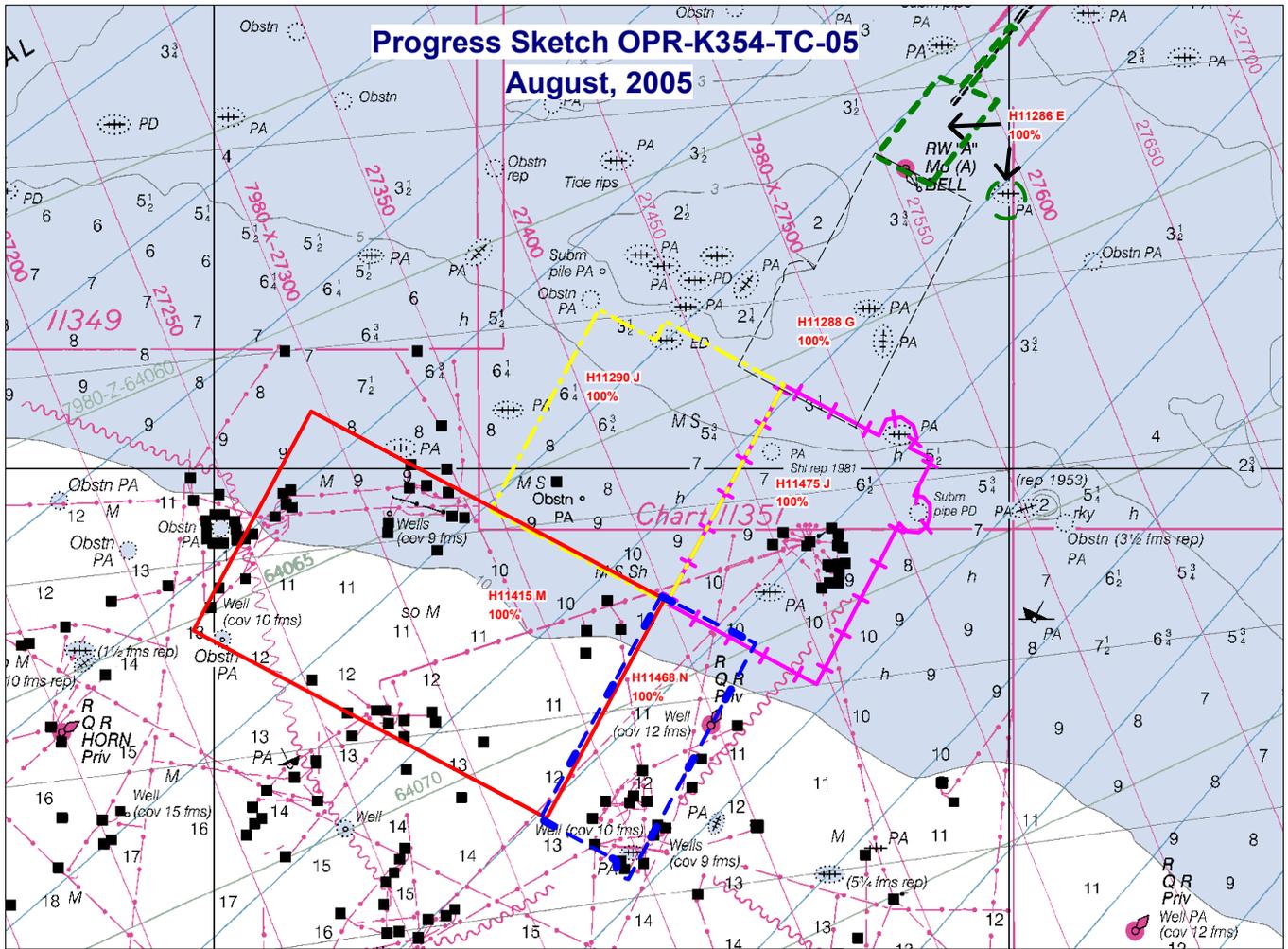
#### Office Notes

Concur.

## Appendix III: Project Sketch

# Progress Sketch OPR-K354-TC-05

August, 2005



Project	Month	LNH_Hydr	LNH_MB	SV_Casts	Bottom_Sam	AWOIS_Items	Tide_Gauge_Inst	DAS	DTime equip_H	DTime_Weather_	D_Time_other_t
OPR-K35	JAN	1,445.00	1,445.00	130.00	1.00	0.00	0.00	20.00	9.00	69.00	85.00
OPR-K35	FEB	1,864.00	1,864.00	326.00	0.00	0.00	0.00	26.00	2.50	132.00	78.00
OPR-K35	MAR	2,164.80	2,164.80	216.00	26.00	3.00	0.00	19.00	42.00	59.50	96.60
OPR-K35	APR	2,429.00	2,429.00	226.00	29.00	0.00	0.00	20.00	8.25	37.00	71.00
OPR-K35	MAY	2,538.00	2,538.00	298.00	0.00	0.00	0.00	19.00	126.00	208.00	129.00
OPR-K35	JUN	857.00	857.00	124.00	0.00	0.00	0.00	14.00	0.00	60.00	0.00
OPR-K35	JUL	1,474.20	1,474.20	258.00	35.00	0.00	0.00	28.00	5.00	149.50	0.00
OPR-K35	AUG	2,399.55	2,399.55	286.00	36.00	5.00	0.00	21.00	10.00	76.70	232.50

Project	Sheet_Letter	H_num	HQ_Est_SNM	CumIPercCompPrev	CumIPercCompCur	SNM_CompCurN	CumSNMcon
OPR-K354	K	H11291	109	0	0	0	0.00
OPR-K354	E	H11286	108	24	24	0	26.00
OPR-K354	F	H11287	108	0	0	0	0.00
OPR-K354	G	H11288	108	5	15	11	16.00
OPR-K354	H	H11289	108	0	0	0	0.00
OPR-K354	S		109	0	0	0	0.00
OPR-K354	R		109	0	0	0	0.00
OPR-K354	Q		109	0	0	0	0.00
OPR-K354	P		109	0	0	0	0.00
OPR-K354	N	H11468	30	85	100	16	30.01
OPR-K354	M	H11415	109	100	100	0	109.00
OPR-K354	L		109	0	0	0	0.00
OPR-K354	J1	H11290	54	100	100	0	52.75
OPR-K354	J2	H11475	55	100	100	0	47.81
OPR-K354	E-corr	H11286	7	100	100	0	7.43
OPR-K354	G-corr	H11288	17	30	100	12	33.42

## Appendix IV: Tides and Water Levels

October 03, 2005

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

FROM: PS Edward Owens, Castle Eugene Parker, Dave Sinson, NOAA Time Charter R/V Davidson

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:

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

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

Project No.: OPR-K354-TC-05  
Registry No.: H11286  
State: Louisiana  
Locality: Gulf of Mexico  
Sublocality: 10 NM SW of Point au Fer

Attachments containing:

- 1) an Abstract of Times of Hydrography,
- 2) digital MID MIF files of the track lines from pydro on CD/diskette

cc: N/CS33

Year_DOY	Min Time	Max Time
2005_070	20:47:23	21:24:59
2005_138	13:10:40	22:25:02
2005_139	12:54:37	22:11:26
2005_140	13:03:17	20:09:39
2005_168	13:43:35	22:20:03
2005_169	12:59:56	22:20:55
2005_171	13:01:35	22:21:14
2005_172	13:13:31	21:49:47
2005_173	13:03:48	21:46:21
2005_174	13:20:03	22:27:59
2005_175	12:54:25	21:23:52
2005_176	13:13:56	20:52:25
2005_193	14:21:16	23:52:59
2005_207	15:11:34	17:24:47
2005_228	16:23:02	22:06:52
2005_229	13:26:59	19:25:52
2005_233	14:25:04	22:58:04
2005_234	14:38:57	23:05:07
2005_235	13:17:04	22:20:29
2005_236	22:04:56	22:51:44
2005_237	13:38:36	23:19:37
2005_238	22:58:39	23:28:14
2005_242	14:30:51	23:06:30



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

**TIDE NOTE FOR HYDROGRAPHIC SURVEY**

**DATE :** October 17, 2005

**HYDROGRAPHIC BRANCH:** Atlantic Hydrographic Branch  
**HYDROGRAPHIC PROJECT:** OPR-K354-TC-2005  
**HYDROGRAPHIC SHEET:** H11286

**LOCALITY:** 10 NM SW of Point au Fer, Gulf of Mexico, LA  
**TIME PERIOD:** January 29 - August 30, 2005

**TIDE STATION USED:** Galveston Pleasure Pier, TX 877-1510  
Lat. 29 17.1' N Long. 094 47.3' W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.563 meters

**TIDE STATION USED:** Eugene Island, LA 876-4311  
Lat. 29 22.3' N Long. 091 23.1' W

**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 0.555 meters

**REMARKS: RECOMMENDED ZONING**

**Use zone(s) identified as:** WGM280, WGM281 & WGM282

**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).

**Note 2:** The tide gauge at Eugene Island was destroyed before closing levels could be completed. A datum check was performed to establish Eugene Island's stability. Eugene Island was deemed stable and can be used for tidal correctors up until August 16th, 2005.

**Note 3:** Use tide data from the appropriate station with applicable zoning correctors for each zone according to the order in which they are listed in the Tidezone corrector file (\*.ZDF). For example, tide station one (TS1) would be the first choice for an applicable zone followed by TS2, etc. when data are not available.



CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION



Appendix V:  
Supplemental Survey Records and Correspondence

Eugene Island station.txt

Subject:

Re: Eugene Island Tide Station Out of Operation

From:

"James M Crocker" <James.M.Crocker@noaa.gov>

Date:

Tue, 23 Aug 2005 17:53:40 UT

To:

"Tim Osborn" <Tim.Osborn@noaa.gov>, "Tom Landon" <thomas.Landon@noaa.gov>, "Swallow Jon" <Jon.Swallow@noaa.gov>, "Baird Doug" <Doug.Baird@noaa.gov>, "Wong Cary" <Cary.Wong@noaa.gov>

CC:

"Larry Neeson" <Larry.Neeson@noaa.gov>, "Warren Krug" <Warren.Krug@noaa.gov>, "David MacFarland" <David.MacFarland@noaa.gov>, "Tod Schattgen" <Tod.Schattgen@noaa.gov>, "NOAA Rep" <noaarep.davidson@rmx2.rydex.com>, "brian.baldwin@noaa.gov" <brian.baldwin@noaa.gov>, "Mike Aslaksen" <Mike.Aslaksen@noaa.gov>, "Ed Martin" <Ed.Martin@noaa.gov>, "Danley Howard" <Howard.Danley@noaa.gov>, "Steven Barnum" <steven.barnum@noaa.gov>

Hi Tim,

Do you have a date when it was removed? The gauge is required to be in operation for the Time Charter Project as a tertiary water level station with Galveston Pleasure pier as the primary. Unfortunately the data acquisition is not scheduled to end until Aug. 30th. Don't know what the impact of the removal will have on the data being acquired.

Cary or Tom,

What are your thoughts regarding water level data to support the Time Charter Project OPR-K354-TC-05?

Regards,

Jim

Tim Osborn wrote:

>> A contractor, Gulf South, called from Abbeville, Louisiana. The  
>> company was contracted to demo the old USCG Eugene Island platform  
>> that held the NOAA tide station in the Atchafalaya Bay. They took out  
>> the platform with a barge and crane but recognized the tide station.  
>> They contacted the USCG Morgan City and they gave them my contact  
>> information.

>>  
>> The tide station is sitting over in Abbeville and I'll go and pick it  
>> up this Thursday. Apparently, it is in good condition. We need to  
>> look at finding a new location for it to support the hydro and aerial  
>> photography.

>>  
>> Tim

>>

>>

>> --

>> [Image]

>>

Hi Tim,

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Eugene Island station.txt

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>  
> Tim  
>  
>  
> --

James Crocker <james.m.crocker@noaa.gov>  
Staff Assistant / Time Charter Manager  
Office of Coast Survey  
Atlantic Hydrographic Branch  
James Crocker  
Staff Assistant / Time Charter Manager  
Office of Coast Survey  
Atlantic Hydrographic Branch

<james.m.crocker@noaa.gov>  
439 West York St.  
Norfolk  
VA  
23510  
USA

Mobile:  
757-615-2793  
Fax:  
757-441-6601  
Work:  
757-441-6726  
Additional Information:

Last Name

Crocker

First Name

LCDR James M.

Version

Eugene Island station.txt

2.1

Part 1.1.1.2

Content-Type:  
text/html  
Content-Encoding:  
7bit

C:\Documents and Settings\tim.osborn.SPOT\My Documents\NOAA card 2.jpg

Content-Type:  
image/jpeg  
Content-Encoding:  
base64

Atch\_channel\_obstn\_1.txt

Subject: Obstruction in Atch River  
Date: Thu, 31 Aug 2006 13:57:35 -0500  
From: "Dietrich, Kirk E MVN" <Kirk.E.Dietrich@mvn02.usace.army.mil>  
To: Helen.Stewart@noaa.gov  
CC: Tim.Osborn@noaa.gov

Hello Helen, I read your email where it states the position of an obstruction that was found and that it was submitted as a Danger to Navigation on Oct 3, 2005. The Corps has just completed dredging over and past the position of the obstruction returning the channel to the authorized 20' depth. I don't have any documentation on the reporting or removal of this that I'm aware of at this moment, more information may change that.

TIM, did you guys find this when ya'll surveyed the channels post-Katrina?

Do you have a phone number I can call and talk to you about this?

Thank you,  
Kirk Dietrich  
504-862-2494

-----  
subject: Re: Obstruction in Atch River  
Date: Tue, 05 Sep 2006 13:18:03 -0400  
From: <Helen.Stewart@noaa.gov>  
To: "Dietrich, Kirk E MVN" <Kirk.E.Dietrich@mvn02.usace.army.mil>  
CC: Tim.Osborn@noaa.gov

Good afternoon,

The obstruction and evidence of shoaling were submitted to the Nav manager for transmission to you. As they were located in the controlled channel, they were not submitted to MCD as official DTONs as they are in your area of purview.

Atch\_channel\_obstn\_1.txt

Tim, can you shed some more light on this? I am doing the in-office review here, and as such know only what I've been told (in this case, in the survey descriptive report).

My phone number here in Norfolk is 757-831-5343.

Regards,  
Helen Stewart  
Physical Scientist, Atlantic Hydrographic Branch

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

From: Tim.Osborn@noaa.gov  
Date: Tuesday, September 5, 2006 4:18 pm  
Subject: Re: Obstruction in Atch River

- > Helen
- >
- > A quick conference call would be good with the Kirk at COE.
- >
- > Kirk- do you have the post dredge drawings or depictions from the
- > recent project that shows the area of the reported obstruction now
- > clear and
- > with a COE reported depth of 20 feet?
- >
- > Would a call on Wednesday at 11:00 cst be possible?

**ATLANTIC HYDROGRAPHIC BRANCH  
EVALUATION REPORT FOR H11286 (2005)**

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:

MapInfo version 8.5  
HSTP PYDRO version 6.8.0  
CARIS HIPS/SIPS version 6.0 SP2 HF 1-16  
CARIS BASE Editor version 2.0  
CARIS GIS Version 4.4a  
CARIS HOM ENC version 3.3 SP3  
DKART INSPECTOR, version 5.0 Build 732 SP 1

**B.2 QUALITY CONTROL**

**B.2.2 CROSS LINES**

The field unit acquired the required amount of cross line data for the Corridor region of the survey. The percentage of crossline lineal nautical mileage to mainscheme lineal mileage for the North Polygon is appropriate for 200% coverage of the area. The acquisition of 400% coverage over this area was conducted in order to resolve a specific data problem and was not required by Letter Instructions. The percentage of crossline-to-mainscheme lineal nautical mileage acquired over this region is satisfactory.

A CARIS crossline-to-mainscheme QC report was not conducted by the field processor. A QC report was generated by the office processor. The results were found to be satisfactory and meet the IHO Order 1 Specification.

**B.2.4 DATA QUALITY FACTORS**

Water Level Correction

A data artifact with a magnitude on the order of 40cm was observed in multibeam survey lines acquired on August 16<sup>th</sup>, 2005. All water level corrector files were applied with final tide zoning to the survey lines. Although the data was acquired near a tide zone boundary, the error is persistent across all lines acquired that day and does not show any discrepancy at the tide zone boundary itself. This error is thus thought to be either an incorrectly applied transducer depth offset or a tide bust related to the removal of the Eugene Island water level station. This error cannot be corrected in postprocessing. The magnitude of this error is between 30 and 40cm, which is within the IHO Order 1 error budget for 6 meters water depth (approximately 51 cm).

#### Residual Sounding Fliers and Noise

Due to the soft bottom type, a small systematic error in the product grid due to excessive multibeam penetration, particularly by nadir beams, was apparent in the final surface. The 20-30cm error present in the data is within the error budget for an IHO Order 1 survey in 6-10m water.

#### BASE Surfaces and Mosaics

Thirteen coverage BASE Surfaces and one combined BASE surface were generated by the office processor during in-office review. The combined BASE surface was generated at 2m resolution and imported to CARIS BASE Editor for preliminary H-Cell processing.

### B.3

#### H-CELL

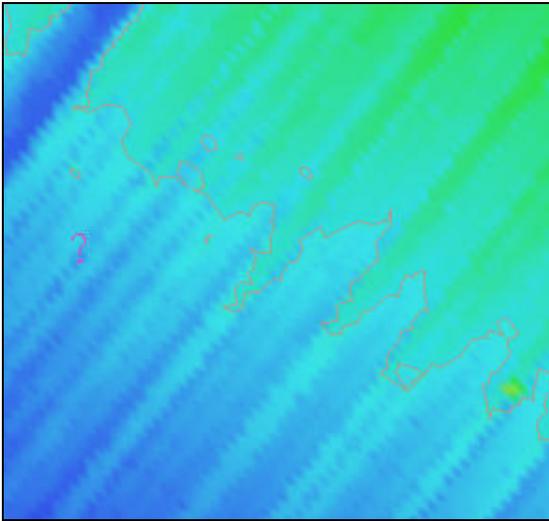
The H-Cell was compiled using *H-Cell Specifications V.1.1* and *H-Cell Guidelines V. 2.1*.

The field unit submitted a collection of BASE grids generated at 2m resolution. The object detection requirement for this survey was met by acquiring side scan sonar data. All AHB BASE Surfaces for Survey H11286 were 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. A single isolated line was acquired in the far southeast of the survey area. This line is included in the final BAG but is not included in the final BASE Cell file.

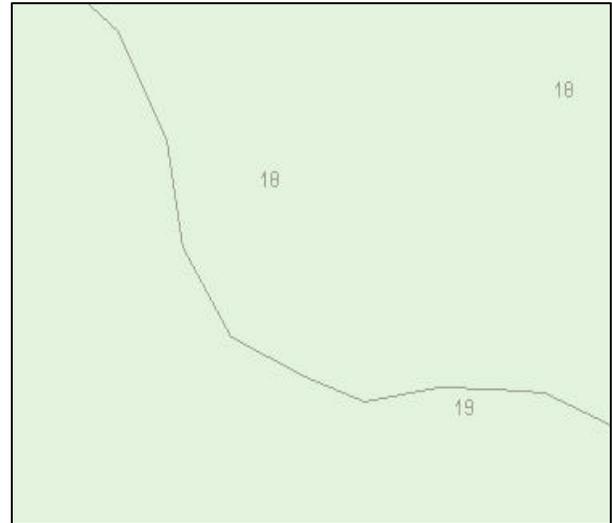
The product of the survey, *H11286\_2m\_comb\_all.hns*, is a 2-meter resolution combined uncertainty-weighted grid with uncertainty-weighted depth, sounding density, generalized nodes, and designated sounding child layers. A generalized product surface, *H11286\_80kgen\_40m\_cntrs.hns*, was created at chart scale for creating curves. This generalized product surface was created at 1:80,000 scale, with a generalization radius of 400m and resolution of 40 meters. Depth curves were extracted from this surface. Contours were created using standard NOAA depth curves with rounding at a meter-to-(foot plus 0.75). The generalized surface *H11286\_80kgen\_40m\_cntrs.hns* should not be used for creation of any other cartographic products for survey H11286. A separate product surface, *H11286\_2m\_082107\_Final.hns*, was generated for the creation of a survey-scale sounding set. Soundings were extracted at 5mm at 1:20,000 scale and exported to a CARIS .HOB file. This grid was then exported to a .BAG file for archival.

The sounding and contour sets were imported from CARIS Field Sheet Editor to CARIS HOM. Depth area and contour feature objects were created using contour and perimeter lines imported from Field Sheet Editor. Soundings were selected by hand to approximate the sounding distribution of the existing raster chart (11351). Soundings were truncated to millimeter precision during HOM processing and export to the metric S-57 exchange file with the default CARIS environmental value of (-1,-1, T). Following export into the metric S-57 exchange set, this environmental value was reset to the NOAA standard charting values (0, 0, N) to convert the metric sounding values to whole feet (NOAA rounding regime).

Two different multibeam echosounder systems (RESON 8101 and RESON 8125) were used to acquire bathymetry data. Differences in the operating frequency of these sonar systems led to a "striping" effect in the final surface. Although the magnitude of this artifact is small and within specification, the water bottom is so flat over the survey area that this small artifact led to large distortion of depth contours in the survey area. These depth contours were manually smoothed during office processing.



**Figure 1: Unsmoothed contour (gray)**



**Figure 2: Smoothed contour (gray) with soundings**

As prescribed in the H-Cell specification, the federally maintained Atchafalaya Bay Channel is not compiled in the H-Cell. The boundaries of the channel were digitized from raster chart 11351 (39<sup>th</sup> Ed, Nov/04).

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 depth values listed 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.

## **C. VERTICAL AND HORIZONTAL CONTROL**

### **C.1 HORIZONTAL CONTROL**

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83), UTM projection zone 15. Office Base Cell File processing of this survey required translating the datum to meet S-57 ENC requirements. The horizontal geodetic datum was translated in CARIS HOM to Latitude and Longitude (LLDG) World Geodetic System-84 (WGS-84) prior to exporting the CARIS map file to the S-57 ENC (H-CELL) format. The S-57 H-CELL format serves as the exchange file submitted to Marine Chart Division.

## C.2 VERTICAL CONTROL

Verified water levels with final tide zoning were applied to all sounding data. Due to a program bug in the CARIS HIPS Tide Editor, two separate tide zoning files were created (H11286CORF.zdf and 8771510\_H11286CORF.zdf). Water levels were applied to all sounding data from the beginning of the survey until 2054 UTC on August 16<sup>th</sup>, 2005 (DN228) with the CO-OPS supplied zoning file, H11286CORF.zdf. From August 17<sup>th</sup>, 2005 (DN229) until the end of the survey, the primary gauge was unavailable and the CARIS bug caused the HIPS Tide Editor "load tides" module to fail in absence of the primary gauge. The file 8771510\_H11286CORF.zdf file was created by removing all references to the Eugene Island gauge (876-4311) and designating the Galveston Pleasure Pier gauge as primary (877-1510). Use of the modified zoning file corrected the problem.

## D. RESULTS AND RECOMMENDATIONS

### D.1 CHART COMPARISON

#### 11351 (39<sup>th</sup> Edition, Nov./04)

Corrected through NM Nov. 13/04

Corrected through LNM Nov. 2/04

#### 11340 (71<sup>st</sup> Edition, Sep. /06)

Corrected through NM Sep. 16/06

Corrected through LNM Sep. 5/06

#### ENC Comparison

#### US4LA21M

Point au Fer to Marsh Island, LA

Application Date Aug. 4, 2006

Issue Date Nov. 9, 2006

Chart 11351

## 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.

The federally maintained Atchafalaya Bay Channel was surveyed during H11286. Shoaling in the channel was noted in crosslines surveyed following the passage of Hurricane Katrina. Information regarding this evidence of shoaling and three obstructions in the federally maintained channel was forwarded to the Gulf Coast Regional Navigation Manager, who

forwarded the information to the U.S. Army Corps of Engineers (USACE), New Orleans district. The Atchafalaya Bay Channel was dredged to its project depth of 20 feet from May 3<sup>rd</sup>, 2006 to July 5<sup>th</sup>, 2006. Confirmation that these shoals and obstructions were removed was provided by USACE to Atlantic Hydrographic Branch during a telephone conversation on September 6, 2006. Correspondence regarding these items is contained in Appendix V to the Descriptive Report.

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.

Several vertical-beam echosounder lines were acquired as the H11286 Shoal Recon survey. The shoal recon lines are not considered part of Survey H11286 and soundings from these lines are not included in the H-Cell deliverable. These lines were compiled at AHB as chart letter and submitted to MCD as a Danger to Navigation. As of January 11, 2007, this data has not been applied to chart 11351, chart 11340, or ENC US4LA21M.

## **D.5 DTONS**

Seven Dangers to Navigation (DTONs) were identified by the field party. No DTONs were found by the office processor. Four DTONs were submitted to MCD through normal channels. The remainders were submitted to the Central Gulf Coast Navigation Manager for dissemination to all interested parties as they were located in a federally maintained channel. For discussion of objects in the federally maintained channel, refer to section D.1.1 of this report. Refer to Appendix I of the Descriptive Report for further information on all DTONs identified in survey H11286.

## **D.8 ADEQUACY OF SURVEY**

The present survey is adequate to supersede the charted hydrography within the common area. This is an adequate navigable area survey. 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 (39<sup>th</sup> Edition, Nov./04)**

Corrected through NM Nov. 13/04

Corrected through LNM Nov. 2/04

### **11340 (71<sup>st</sup> Edition, Sep. /06)**

Corrected through NM Sep. 16/06

Corrected through LNM Sep. 5/06

## **ENC Comparison**

### **US4LA21M**

Point au Fer to Marsh Island, LA

Application Date Aug. 4, 2006

Issue Date Nov. 9, 2006

Chart 11351

APPROVAL SHEET  
H11286

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.

\_\_\_\_\_ Date: \_\_\_\_\_  
**Helen Stewart**  
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.

\_\_\_\_\_ Date: \_\_\_\_\_  
**Castle E. Parker**  
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: \_\_\_\_\_ Date: \_\_\_\_\_  
**Shep Smith**  
Lieutenant Commander, NOAA  
Chief, Atlantic Hydrographic Branch