

H12413

U.S. Department of Commerce  
National Oceanic and Atmospheric Administration  
National Ocean Survey

**DESCRIPTIVE REPORT**

Type of Survey: Navigable Area

Registry Number: H12413

**LOCALITY**

State(s): New York

General Locality: Long Island Sound

Sub-locality: Approaches to Northport, NY

**2012**

CHIEF OF PARTY  
CDR Lawrence T. Krepp, NOAA

LIBRARY & ARCHIVES

Date:

**HYDROGRAPHIC TITLE SHEET**

**H12413**

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

State(s): **New York**

General Locality: **Long Island Sound**

Sub-Locality: **Approaches to Northport, NY**

Scale: **10000**

Dates of Survey: **08/08/2012 to 09/21/2012**

Instructions Dated: **05/08/2012**

Project Number: **OPR-B340-TJ-12**

Field Unit: **NOAA Ship *Thomas Jefferson***

Chief of Party: **CDR Lawrence T. Krepp, NOAA**

Soundings by: **Multibeam Echo Sounder Singlebeam Echo Sounder**

Imagery by: **Side Scan Sonar Multibeam Echo Sounder Backscatter**

Verification by: **Atlantic Hydrographic Branch**

Soundings Acquired in: **meters at Mean Lower Low Water**

Remarks:

*The purpose of this survey is to provide contemporary surveys to update National Ocean Service (NOS) nautical charts. All separates are filed with the hydrographic data. Any revisions to the Descriptive Report (DR) generated during office processing are shown in bold red italic text. The processing branch maintains the DR as a field unit product, therefore, all information and recommendations within the body of the DR are considered preliminary unless otherwise noted. The final disposition of surveyed features is represented in the OCS nautical chart update products. All pertinent records for this survey, including the DR, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via <http://www.ngdc.noaa.gov/>.*

# Table of Contents

|   |    |
|---|----|
| A. Area Surveyed.....                                     | 1  |
| A.1 Survey Limits.....                                    | 1  |
| A.2 Survey Purpose.....                                   | 2  |
| A.3 Survey Quality.....                                   | 3  |
| A.4 Survey Coverage.....                                  | 3  |
| A.5 Survey Statistics.....                                | 14 |
| B. Data Acquisition and Processing.....                   | 15 |
| B.1 Equipment and Vessels.....                            | 15 |
| B.1.1 Vessels.....  | 16 |
| B.1.2 Equipment.....                                      | 16 |
| B.2 Quality Control.....                                  | 16 |
| B.2.1 Crosslines.....                                     | 16 |
| B.2.2 Uncertainty.....                                    | 20 |
| B.2.3 Junctions.....                                      | 22 |
| B.2.4 Sonar QC Checks.....                                | 27 |
| B.2.5 Equipment Effectiveness.....                        | 27 |
| B.2.6 Factors Affecting Soundings.....                    | 27 |
| B.2.7 Sound Speed Methods.....                            | 27 |
| B.2.8 Coverage Equipment and Methods.....                 | 28 |
| B.3 Echo Sounding Corrections.....                        | 28 |
| B.3.1 Corrections to Echo Soundings.....                  | 28 |
| B.3.2 Calibrations.....                                   | 28 |
| B.4 Backscatter.....                                      | 29 |
| B.5 Data Processing.....                                  | 29 |
| B.5.1 Software Updates.....                               | 29 |
| B.5.2 Surfaces.....                                       | 29 |
| B.5.3 ERS Anomaly.....                                    | 30 |
| B.5.4 Density Compliance.....                             | 31 |
| B.5.5 Roll Offset 3101 on DN 239.....                     | 32 |
| B.5.6 Roll Offset for 3102 on DN 265.....                 | 34 |
| C. Vertical and Horizontal Control.....                   | 35 |
| C.1 Vertical Control.....                                 | 35 |
| C.2 Horizontal Control.....                               | 37 |
| C.3 Additional Horizontal or Vertical Control Issues..... | 37 |
| 3.3.1 SBETS.....  | 37 |
| 3.3.2 Jitter.....   | 37 |
| 3.3.3 Holidays not covered.....                           | 38 |
| D. Results and Recommendations.....                       | 39 |
| D.1 Chart Comparison.....                                 | 39 |
| D.1.1 Raster Charts.....                                  | 40 |
| D.1.2 Electronic Navigational Charts.....                 | 41 |
| D.1.3 AWOIS Items.....                                    | 41 |
| D.1.4 Maritime Boundary Points.....                       | 41 |

|  |    |
|--|----|
| D.1.5 Charted Features.....                          | 41 |
| D.1.6 Uncharted Features.....                        | 42 |
| D.1.7 Dangers to Navigation.....                     | 42 |
| D.1.8 Shoal and Hazardous Features.....              | 42 |
| D.1.9 Channels.....                                  | 42 |
| D.1.10 Bottom Samples.....                           | 43 |
| D.2 Additional Results.....                          | 44 |
| D.2.1 Shoreline.....                                 | 44 |
| D.2.2 Prior Surveys.....                             | 44 |
| D.2.3 Aids to Navigation.....                        | 44 |
| D.2.4 Overhead Features.....                         | 44 |
| D.2.5 Submarine Features.....                        | 44 |
| D.2.6 Ferry Routes and Terminals.....                | 44 |
| D.2.7 Platforms.....                                 | 44 |
| D.2.8 Significant Features.....                      | 45 |
| D.2.9 Construction and Dredging.....                 | 47 |
| D.2.10 Oyster Bed Replenishment and Ghost Traps..... | 47 |
| E. Approval Sheet.....                               | 49 |
| F. Table of Acronyms.....                            | 50 |

## List of Tables

|  |    |
|--|----|
| Table 1: Survey Limits.....                          | 1  |
| Table 2: Hydrographic Survey Statistics.....         | 14 |
| Table 3: Dates of Hydrography.....                   | 15 |
| Table 4: Vessels Used.....                           | 16 |
| Table 5: Major Systems Used.....                     | 16 |
| Table 6: Survey Specific Tide TPU Values.....        | 20 |
| Table 7: Survey Specific Sound Speed TPU Values..... | 21 |
| Table 8: Junctioning Surveys.....                    | 22 |
| Table 9: Submitted Surfaces.....                     | 30 |
| Table 10: NWLON Tide Stations.....                   | 36 |
| Table 11: Water Level Files (.tid).....              | 36 |
| Table 12: Tide Correctors (.zdf or .tc).....         | 36 |
| Table 13: USCG DGPS Stations.....                    | 37 |
| Table 14: Largest Scale Raster Charts.....           | 40 |
| Table 15: Largest Scale ENCs.....                    | 41 |

## List of Figures

|                                    |   |
|------------------------------------|---|
| Figure 1: H12413 Survey Limit..... | 2 |
| Figure 2: Coverage Inclusive.....  | 3 |
| Figure 3: Missed Area 1.....       | 4 |
| Figure 4: Missed Area 2.....       | 4 |



|   |    |
|---|----|
| Figure 5: Missed Area 3.....  | 5  |
| Figure 6: Missed Area 4.....  | 6  |
| Figure 7: Missed Area 5.....  | 7  |
| Figure 8: Missed Area 6.....  | 7  |
| Figure 9: Missed Area 7.....  | 8  |
| Figure 10: Missed Area 8.....   | 9  |
| Figure 11: Missed Area 9.....   | 10 |
| Figure 12: Missed Area 10.....  | 11 |
| Figure 13: Missed Area 11.....  | 12 |
| Figure 14: Missed Area Overview.....  | 13 |
| Figure 15: SSS coverage.....  | 13 |
| Figure 16: H12413 S222 XL subset.....   | 17 |
| Figure 17: H12413 3101 XL subset.....   | 18 |
| Figure 18: \H12413 3102 XL subset.....  | 18 |
| Figure 19: H12413 Crossline to Mainschem Difference Histogram.....  | 19 |
| Figure 20: H12413 STD DEV plotc crossline to mainscheme.....  | 20 |
| Figure 21: All Junctions.....   | 22 |
| Figure 22: H12413 sounding plot East side top section depicting good agreement to Junction H12414....                                       | 23 |
| Figure 23: H12413 sounding plot East side mid section depicting good agreement to Junction H12414....                                       | 24 |
| Figure 24: H12413 sounding plot East side bottom section depicting good agreement to Junction<br>H12414.....                                | 25 |
| Figure 25: H12413 sounding plot Northeast corner depicting good agreement to Junction H12415.....   | 26 |
| Figure 26: H12413 sounding plot North side left section depicting good agreement to Junction H12412.  | 26 |
| Figure 27: H12413 sounding plot North side mid section depicting good agreement to Junction<br>H12412.....                                  | 26 |
| Figure 28: H12413 sounding plot North side right section depicting good agreement to Junction<br>H12412.....                                | 26 |
| Figure 29: Reson artifact S steered/Sectoring.....  | 27 |
| Figure 30: H12413 CTD/MVP Locations.....  | 28 |
| Figure 31: ERS Anomaly.....   | 31 |
| Figure 32: H12413 Density plot 5 or more soundings per node.....  | 32 |
| Figure 33: Survey H12413 Launch 3101 DN239 STD DEV plot depicting Roll error with overview and<br>subset view.....                          | 33 |
| Figure 34: Survey H12413 Launch 3101 DN239 STD DEV plot depicting application of HVF roll correction<br>with overview and subset view ..... | 34 |
| Figure 35: 3102 DN 265 (light blue data) Roll Error.....  | 35 |
| Figure 36: 3102 DN 265 Roll Error Fixed.....  | 35 |
| Figure 37: Nav jitter.....  | 38 |
| Figure 38: H12413 sparse/rejected areas.....  | 39 |
| Figure 39: H12413 Eatons Neck shoaling.....   | 40 |
| Figure 40: Centerport Dredge.....   | 43 |
| Figure 41: Discrepancy between charted boundary line, and line referenced in Coast Pilot 2.....   | 43 |
| Figure 42: Shoaling1.....   | 45 |
| Figure 43: Shoaling2.....   | 46 |
| Figure 44: Perched Wreck.....   | 47 |

## Descriptive Report to Accompany Survey H12413

Project: OPR-B340-TJ-12

Locality: Long Island Sound

Sublocality: Approaches to Northport, NY

Scale: 1:10000

August 2012 - September 2012

**NOAA Ship *Thomas Jefferson***

Chief of Party: CDR Lawrence T. Krepp, NOAA

### A. Area Surveyed

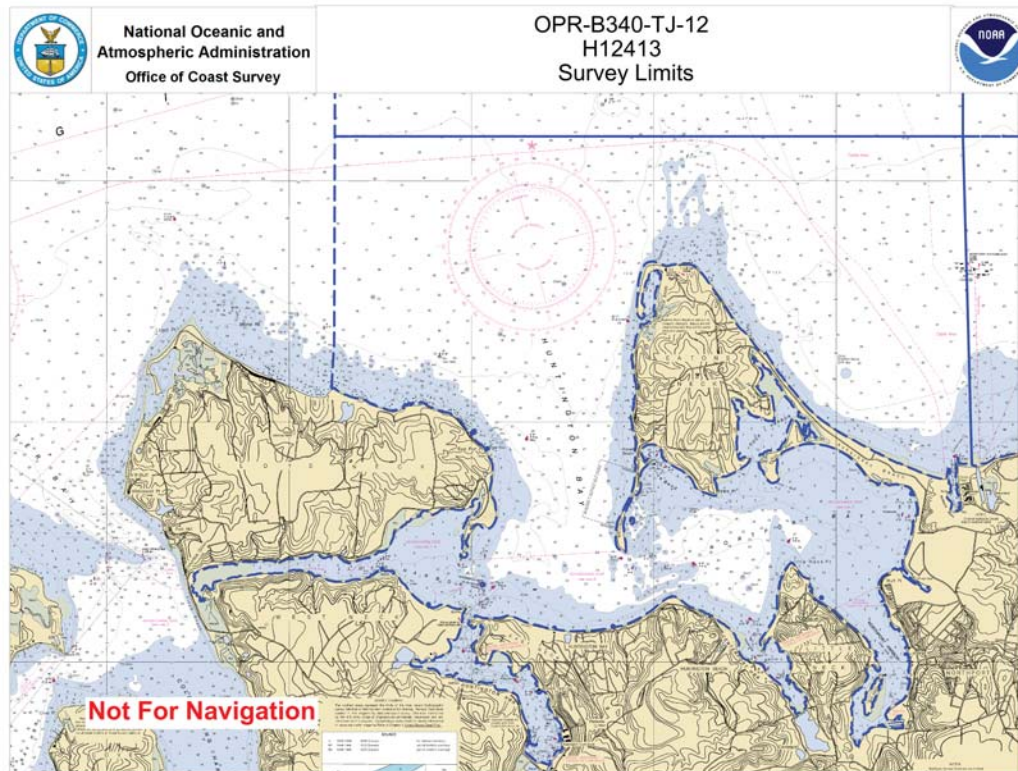
This hydrographic survey was completed as specified by Hydrographic Survey Project Instructions OPR-B340-TJ-12 signed 08 May 2012 and all other applicable direction. The survey area is located on the Northern shores of Long Island Sound, NY. North of Huntington, NY and encompassing the five harbors of Huntington and Northport Bays. This project will cover approximately 206 SNM of which 165 SNM are critical survey areas as designated in the NOAA Hydrographic Survey Priorities, 2010 edition.

#### A.1 Survey Limits

Data were acquired within the following survey limits:

| Northwest Limit  | Southeast Limit  |
|------------------|------------------|
| 40° 58" 27.69' N | 40° 52" 51.83' N |
| 73° 20" 29.47' W | 73° 29" 9.53' W  |

*Table 1: Survey Limits*



*Figure 1: H12413 Survey Limit*

The survey limit requirements were reduced either for safety or up to the 4m curve. See section D.1 Channels for additional information on reduced limits.

## **A.2 Survey Purpose**

This project is being conducted in support of NOAA's Office of Coast Survey to provide contemporary hydrographic data in order to update the nautical charting products and reduce the survey backlog within the area. In addition, data from this project will support the Long Island Sound Seafloor Mapping Initiative for the States of Connecticut and New York. This project also responds to the Coast Guard proposal to establish six anchorage grounds in Long Island Sound to increase safety for vessels through enhanced voyage planning by clearly indicating the location of anchorage grounds for ships proceeding to ports in New York. The USCG is requesting that NOAA confirm that their underwater surveys of Long Island Sound did not detect any wrecks at all in the locations being proposed for the anchorage areas. Data acquired for this project will be used by partners for species and habitat identification, infrastructure projects, ocean mapping, coastal hazards and geological investigations. Partners include the US Environmental Protection Agency, Connecticut Department of Environmental Protection, the University of Connecticut Marine Science Department, New York Department of Environmental Quality, and other organizations.

### A.3 Survey Quality

The entire survey is adequate to supersede previous data.

N/A

### A.4 Survey Coverage

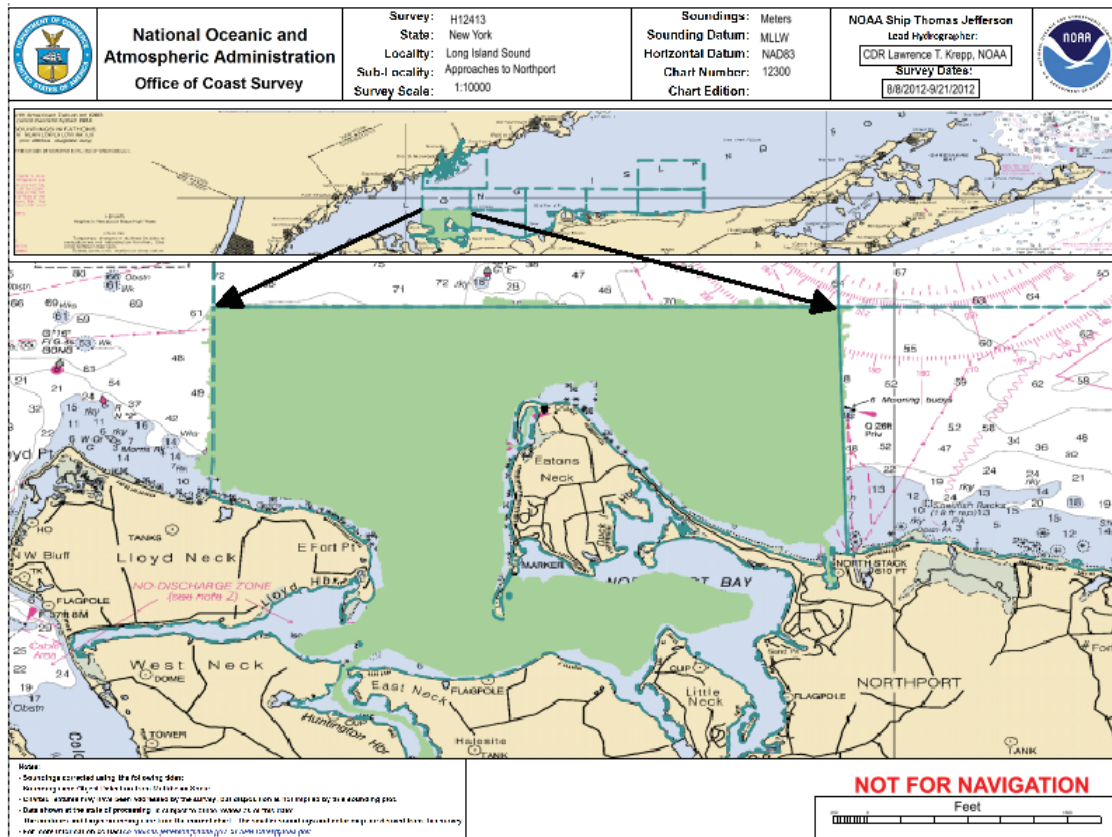


Figure 2: Coverage Inclusive

Complete MBES coverage was achieved in the assigned survey areas as per the project instructions except in foul areas. These areas are generally located very near shore, subject to dangerous wave action, and judged to be navigationally insignificant. All areas shown in figures 3-14 where survey H12413 coverage did not extend to the sheet limits or 4m curve and were considered foul. The areas are captioned "Missed Areas" and assigned items within the NALL line were not investigated. Due to time constraints, the inshore limit of the NALL line was not reached. This is noted in areas 3, 4, 5, 6, 7 and 9. All areas not covered by Object Detection multibeam were covered by 200% side scan except in areas 1, 9, and 10 and can be seen in the images below.



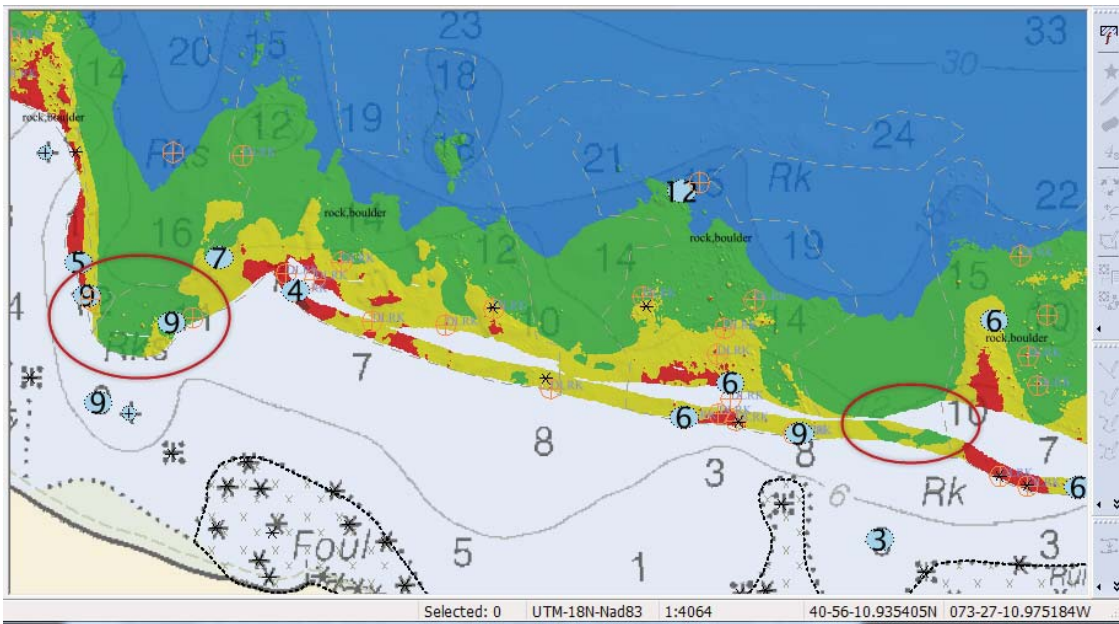


Figure 3: Missed Area 1

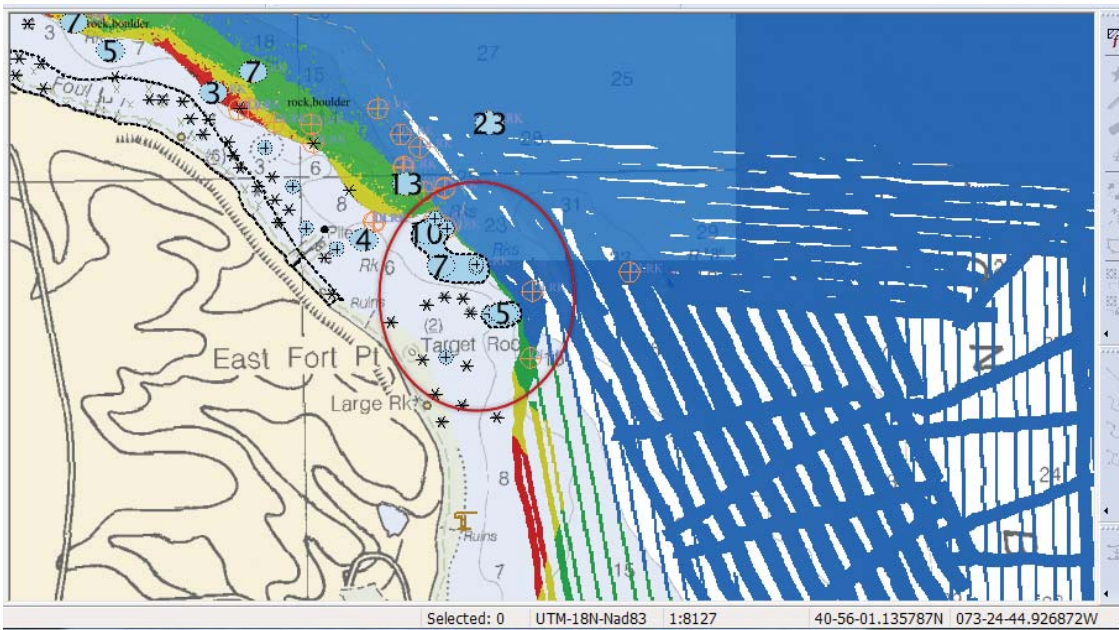


Figure 4: Missed Area 2

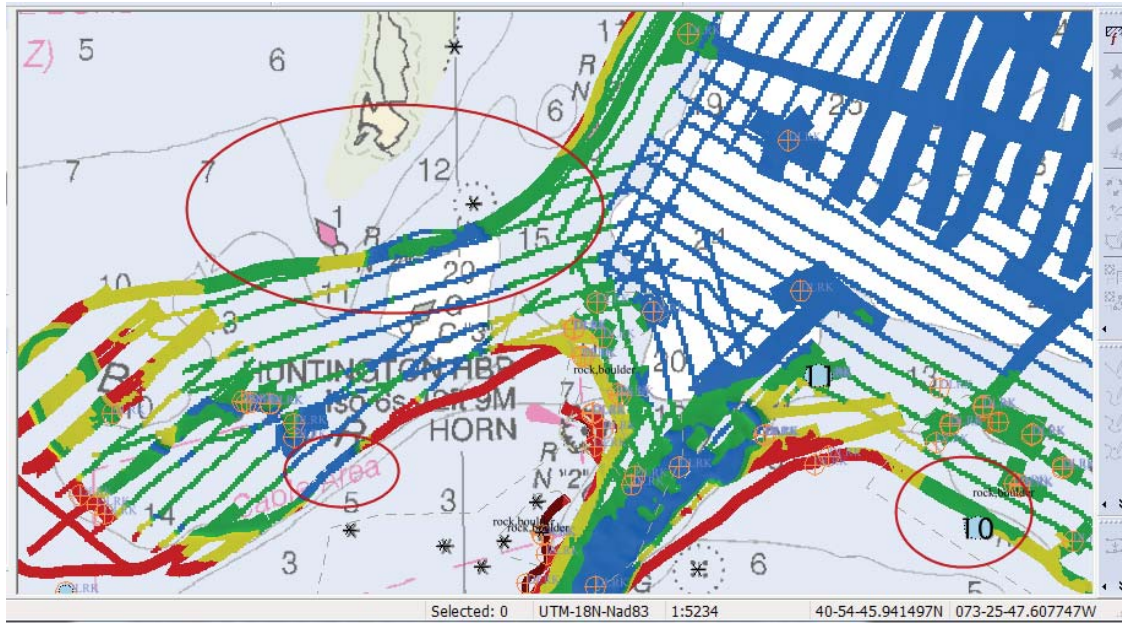


Figure 5: Missed Area 3

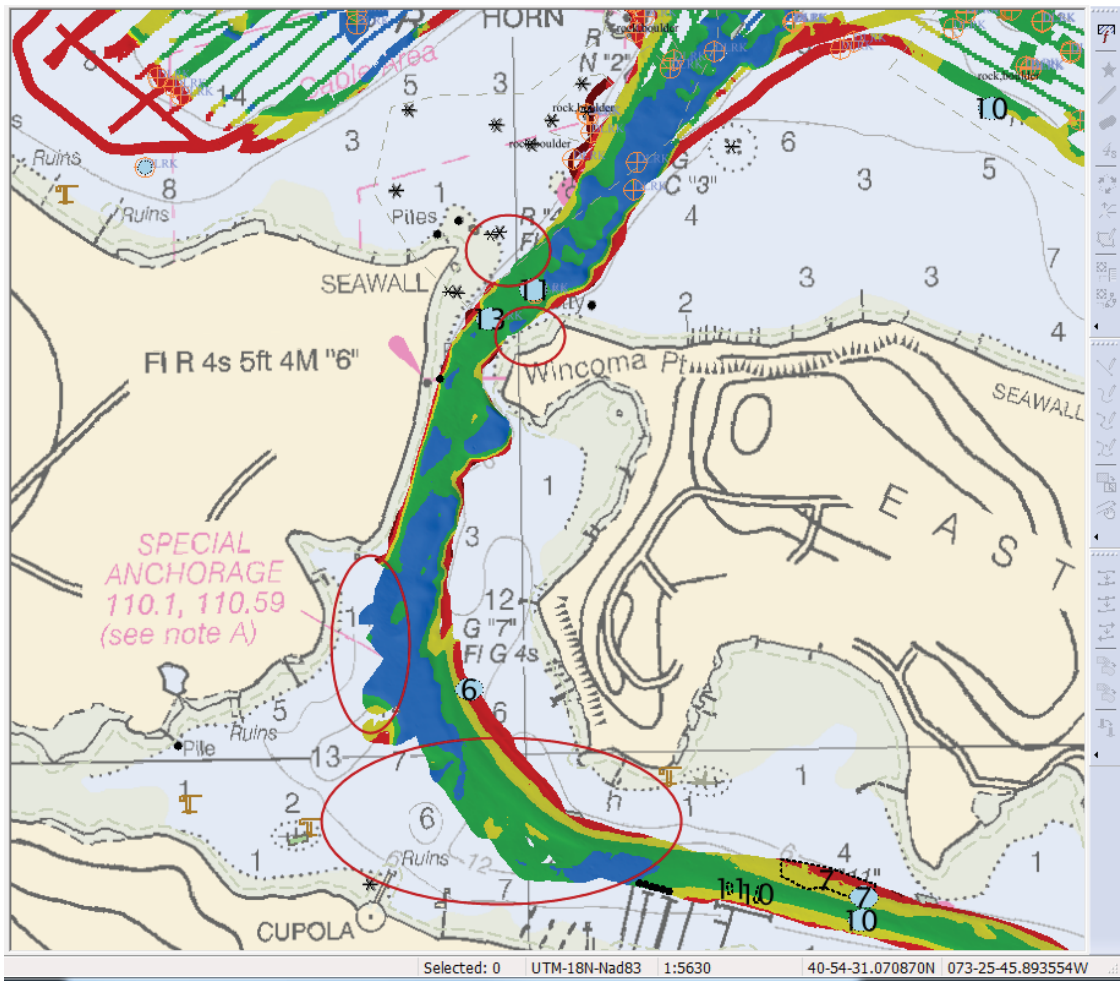


Figure 6: Missed Area 4



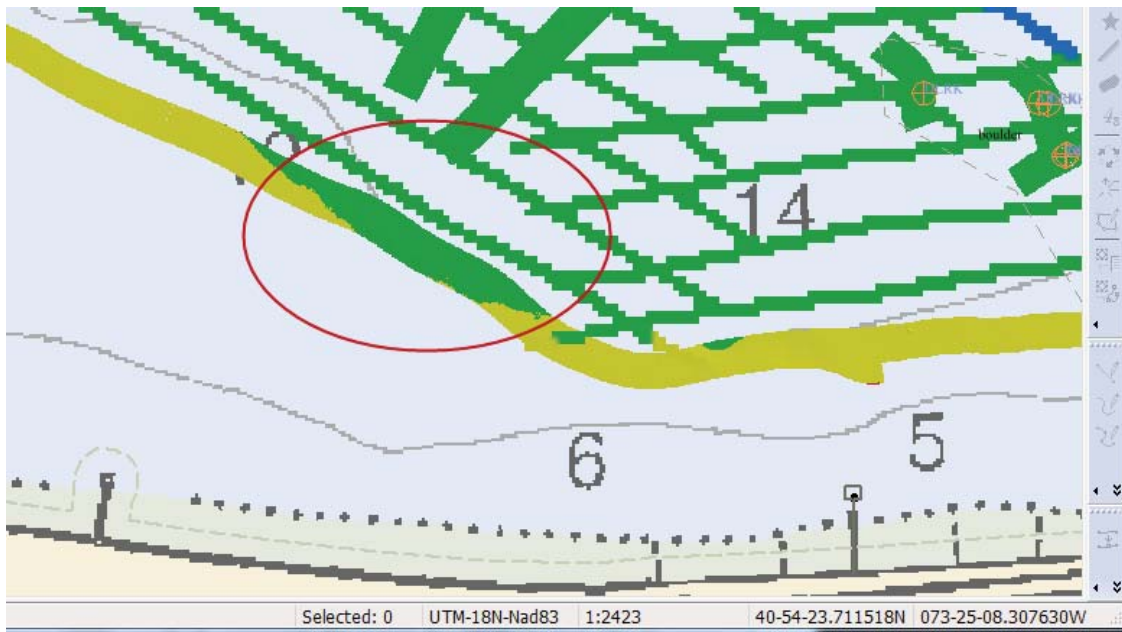


Figure 7: Missed Area 5



Figure 8: Missed Area 6



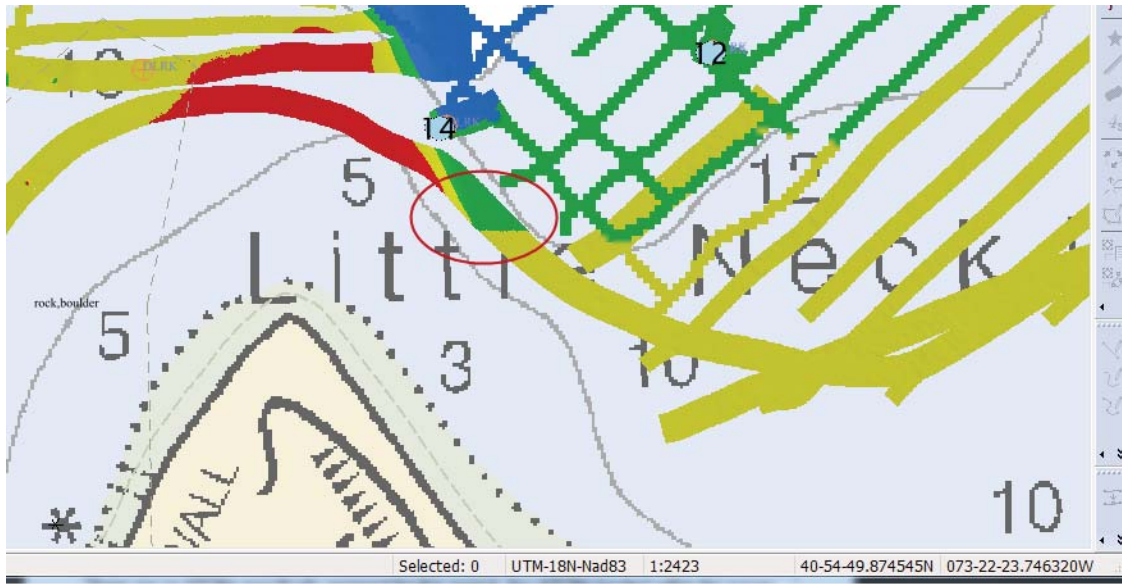


Figure 9: Missed Area 7

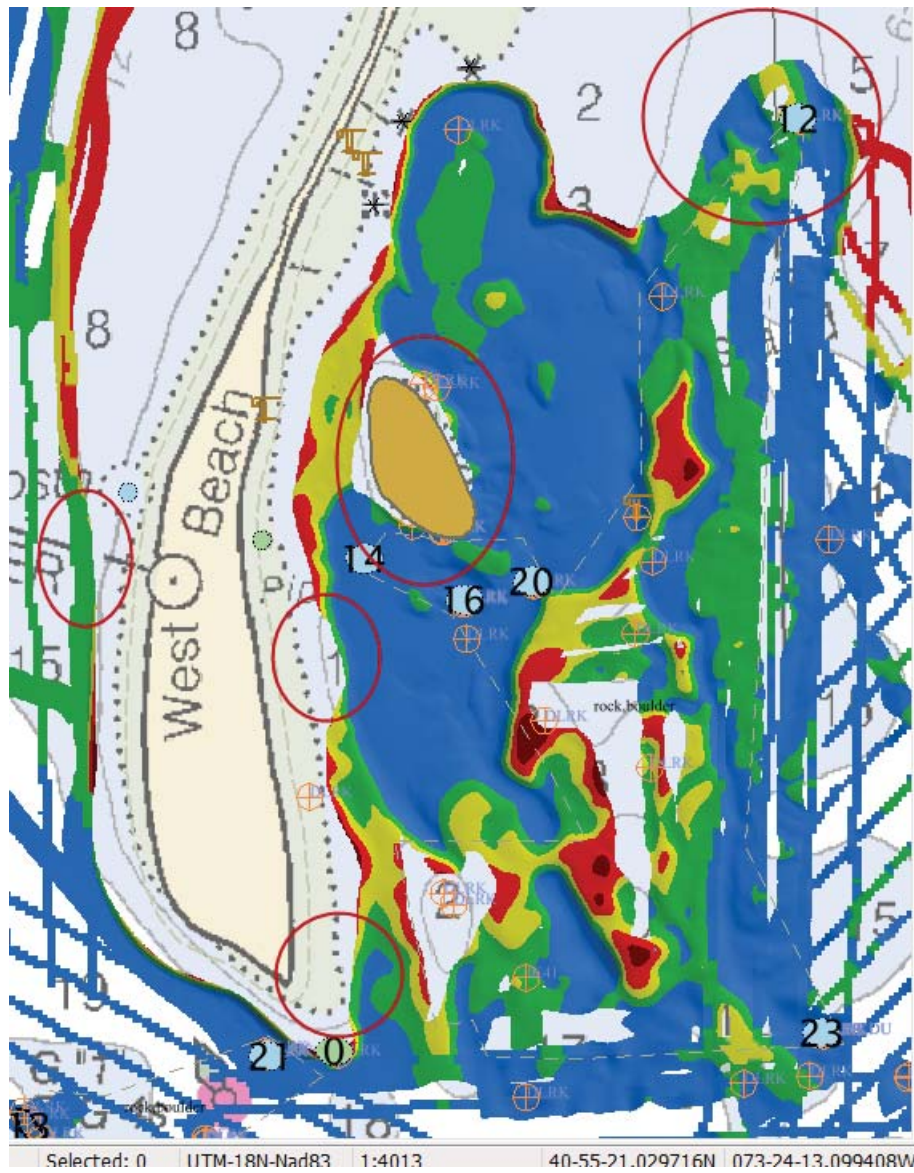
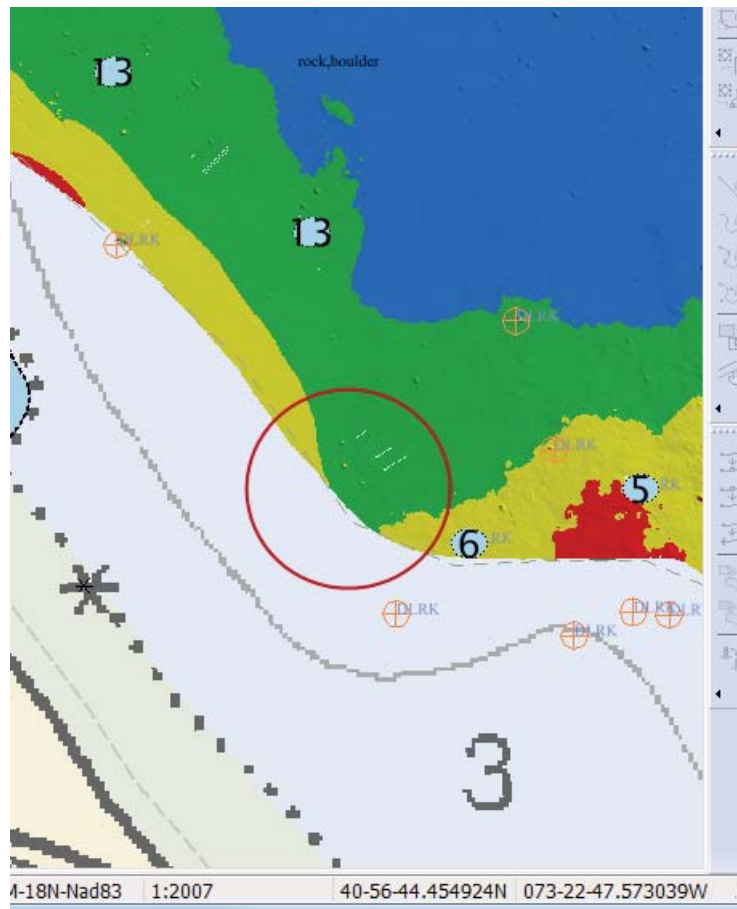


Figure 10: Missed Area 8



*Figure 11: Missed Area 9*

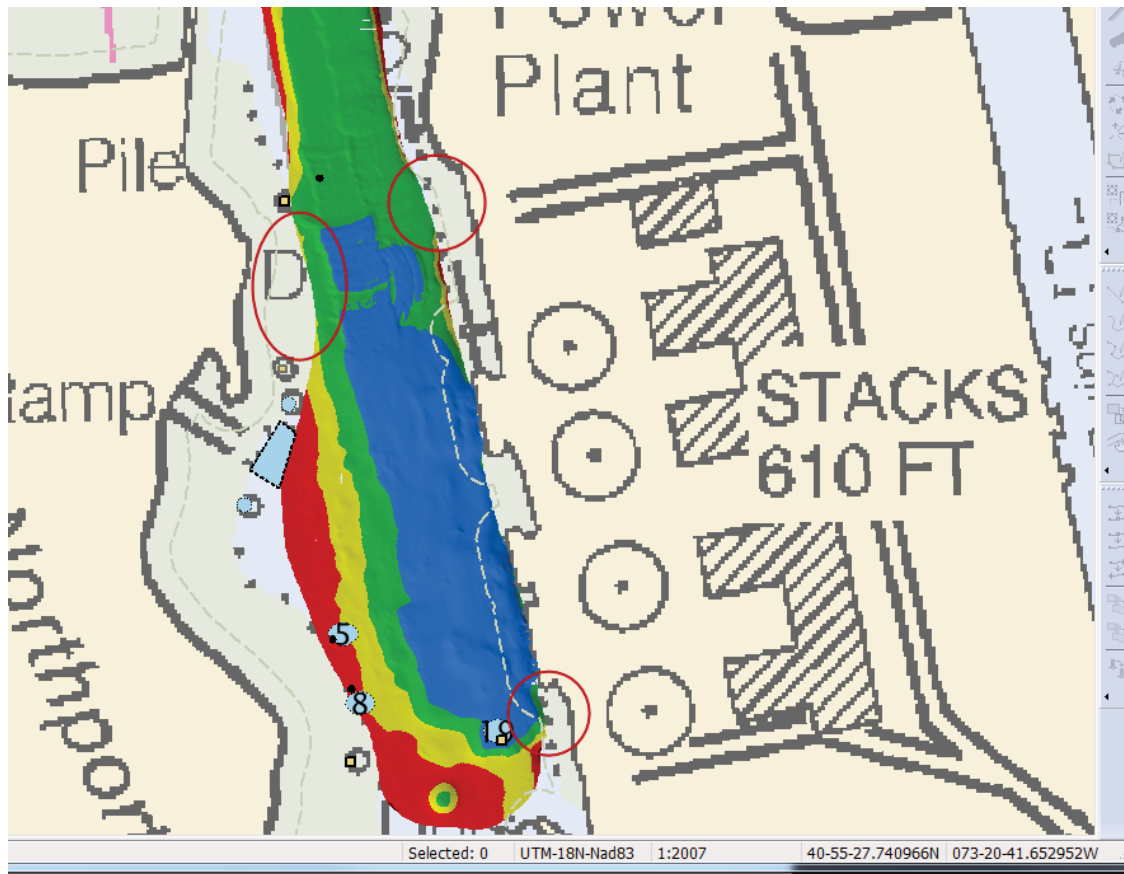
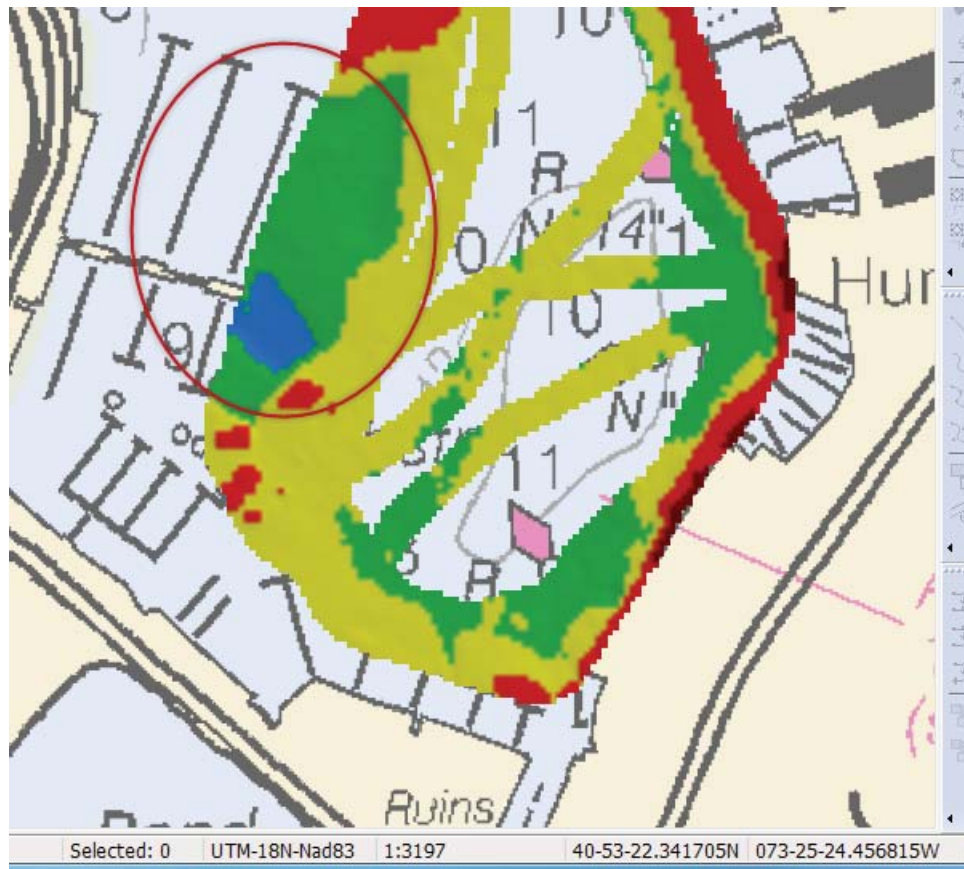


Figure 12: Missed Area 10



*Figure 13: Missed Area 11*



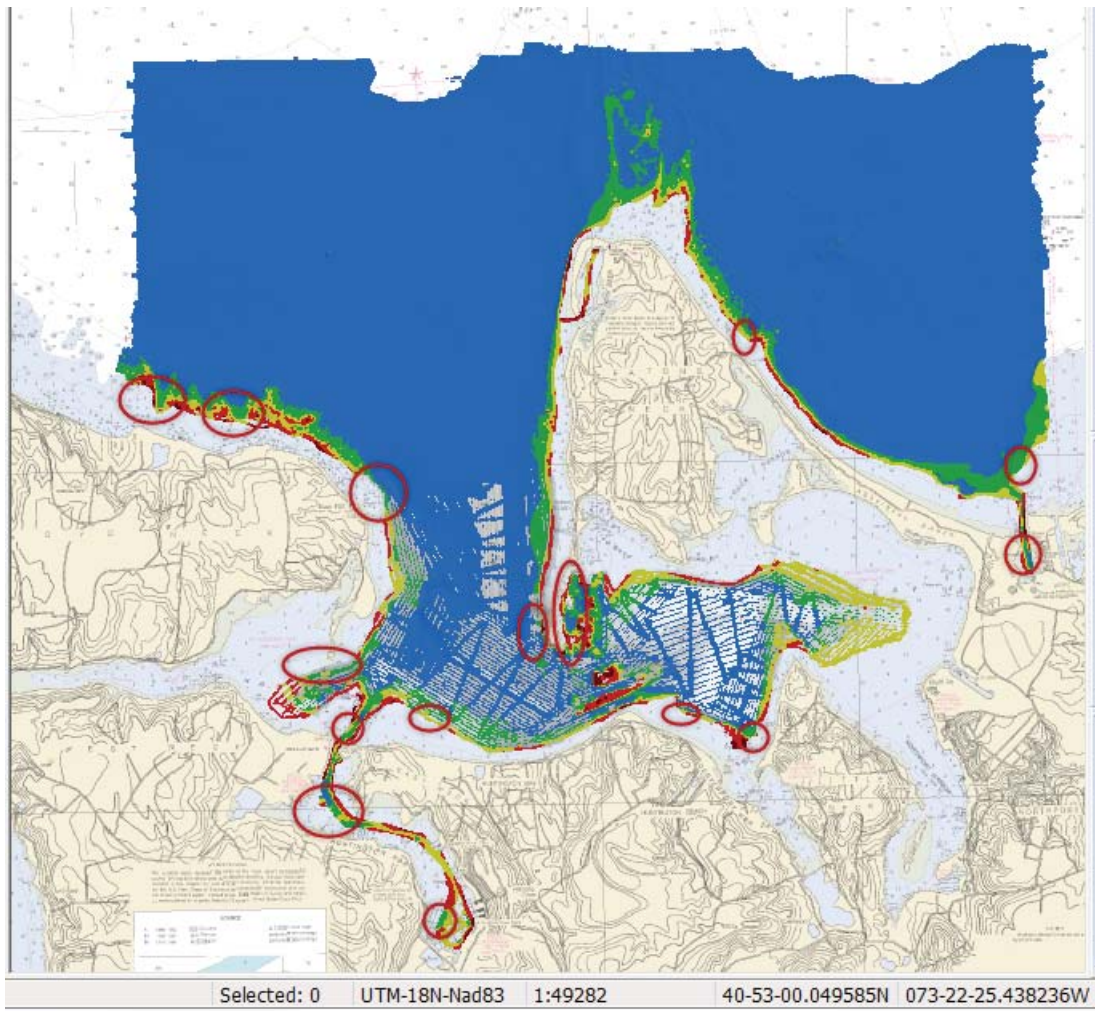


Figure 14: Missed Area Overview

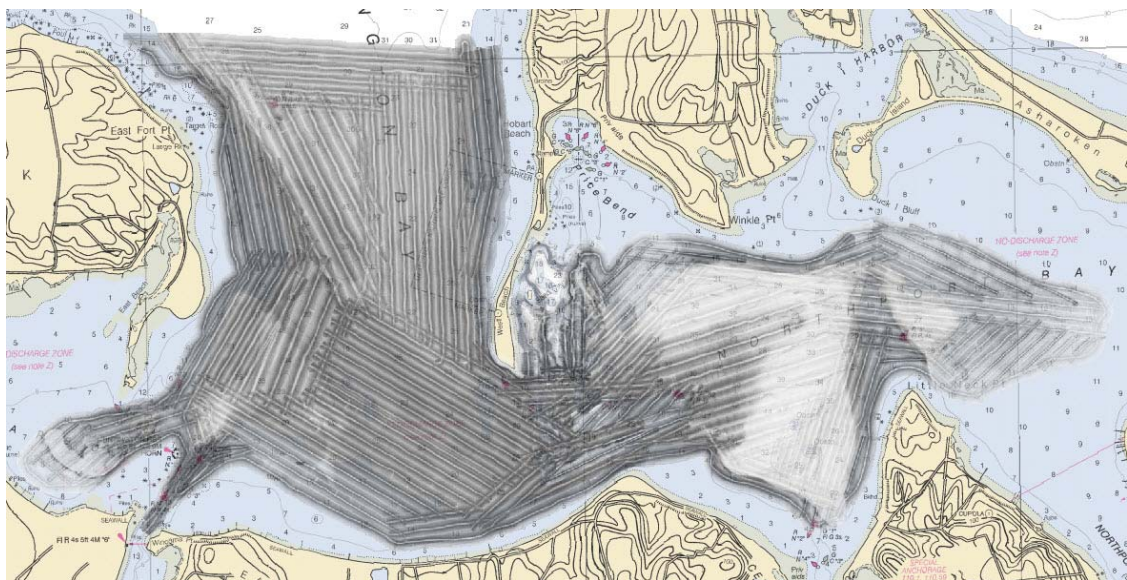


Figure 15: SSS coverage

## A.5 Survey Statistics

The following table lists the mainscheme and crossline acquisition mileage for this survey:

|   | <b>HULL ID</b>                            | <b>3101</b> | <b>3102</b> | <b>S222</b> | <b>Total</b> |
|---|---|-------------|-------------|-------------|--------------|
| <b>LNM</b>  | <b>SBES Mainscheme</b>                    | 135.4       | 0           | 0           | 135.4        |
|   | <b>MBES Mainscheme</b>                    | 222.4       | 323.1       | 392.3       | 937.8        |
|   | <b>Lidar Mainscheme</b>                   | 0           | 0           | 0           | 0            |
|   | <b>SSS Mainscheme</b>                     | 222.8       | 0           | 0           | 222.8        |
|   | <b>SBES/MBES<br/>Combo<br/>Mainscheme</b> | 0           | 0           | 0           | 0            |
|   | <b>SBES/SSS Combo<br/>Mainscheme</b>      | 0           | 0           | 0           | 0            |
|   | <b>MBES/SSS Combo<br/>Mainscheme</b>      | 0           | 0           | 0           | 222.8        |
|   | <b>SBES/MBES<br/>Combo Crosslines</b>     | 0           | 0           | 0           | 50.8         |
|   | <b>Lidar Crosslines</b>                   | 0           | 0           | 0           | 0            |
|   | <b>Number of Bottom<br/>Samples</b>       |             |             |             | 0            |
| <b>Number AWOIS Items<br/>Investigated</b>                  |   |             |             | 16          |              |
| <b>Number Maritime<br/>Boundary Points<br/>Investigated</b> |   |             |             | 0           |              |
| <b>Number of DPs</b>  |   |             |             | 0           |              |
| <b>Number of Items Items<br/>Investigated by Dive Ops</b>   |   |             |             | 0           |              |
| <b>Total Number of SNM</b>                                  |   |             |             | 14.88       |              |

Table 2: Hydrographic Survey Statistics

The following table lists the specific dates of data acquisition for this survey:

| <b>Survey Dates</b> | <b>Julian Day Number</b> |
|---------------------|--------------------------|
| 08/08/2012          | 221                      |
| 08/09/2012          | 222                      |
| 08/11/2012          | 224                      |
| 08/12/2012          | 225                      |
| 08/13/2012          | 226                      |
| 08/14/2012          | 227                      |
| 08/15/2012          | 228                      |
| 08/16/2012          | 229                      |
| 08/21/2012          | 234                      |
| 08/22/2012          | 235                      |
| 08/23/2012          | 236                      |
| 08/24/2012          | 237                      |
| 08/25/2012          | 238                      |
| 08/26/2012          | 239                      |
| 08/27/2012          | 240                      |
| 08/28/2012          | 241                      |
| 09/20/2012          | 264                      |
| 09/21/2012          | 265                      |

*Table 3: Dates of Hydrography*

## **B. Data Acquisition and Processing**

### **B.1 Equipment and Vessels**

Refer to the 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. Additional information to supplement sounding and survey data, and any deviations from the DAPR are discussed in the following sections.



### B.1.1 Vessels

The following vessels were used for data acquisition during this survey:

| <b>Hull ID</b> | <i>S222</i> | <i>3101</i> | <i>3102</i> |
|----------------|-------------|-------------|-------------|
| <b>LOA</b>     | 208 feet    | 31 feet     | 31 feet     |
| <b>Draft</b>   | 14.00 feet  | 5.17 feet   | 5.17 feet   |

*Table 4: Vessels Used*

### B.1.2 Equipment

The following major systems were used for data acquisition during this survey:

| <b>Manufacturer</b>  | <b>Model</b>           | <b>Type</b>                                |
|----------------------|------------------------|--|
| Reson                | 7125 ROV               | MBES                                       |
| Reson                | 7125 SV                | MBES                                       |
| Klein                | 5000 Light Weight      | SSS  |
| ODOM                 | CV200                  | SBES                                       |
| Seabird              | Seacat 19Plus          | Conductivity, Temperature and Depth Sensor |
| Rolls Royce          | Moving Vessel Profiler | Sound Speed System                         |
| Reson                | SVP71                  | Sound Speed System                         |
| Applied Micro System | Smart SV + T SSVS      | Sound Speed System                         |
| Applanix             | POS/MV v3 and 4        | Positioning and Attitude System            |
| Trimble              | SPS351                 | Positioning System                         |

*Table 5: Major Systems Used*

## B.2 Quality Control

### B.2.1 Crosslines

Crosslines, acquired for this survey, totalled 5.1% of mainscheme acquisition.

Multibeam and Verticalbeam echosounder crosslines totaled 50.8 nm comprising 4.7% of the mainscheme hydrography. A difference grid was created from mainscheme and crossline grids in Caris BathyData base. Statistics were run on the difference grid. The average difference between mainscheme and crossline grids was 0.009m. The std deviation was 0.112m. The difference grid statistic also showed that 99.9 % of the lines were within - 0.119meters. Larger values were attributed to Rocks and slopes. See H12413\_MS\_XL\_Diff.txt in Separates II.

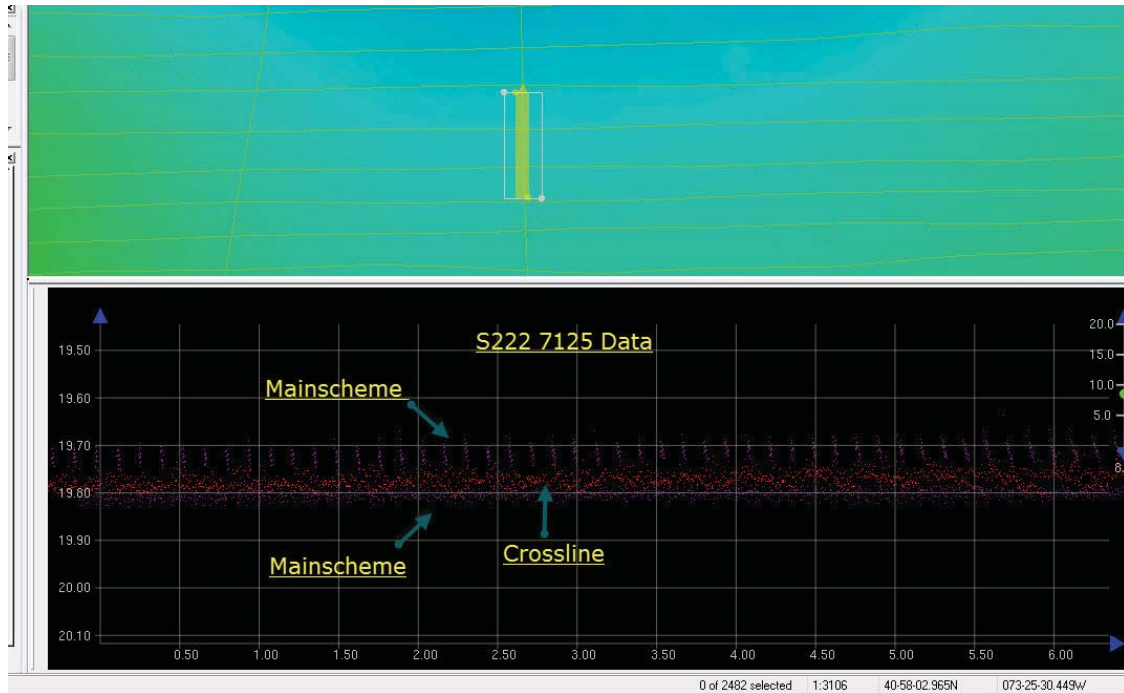


Figure 16: H12413\_S222\_XL\_subset

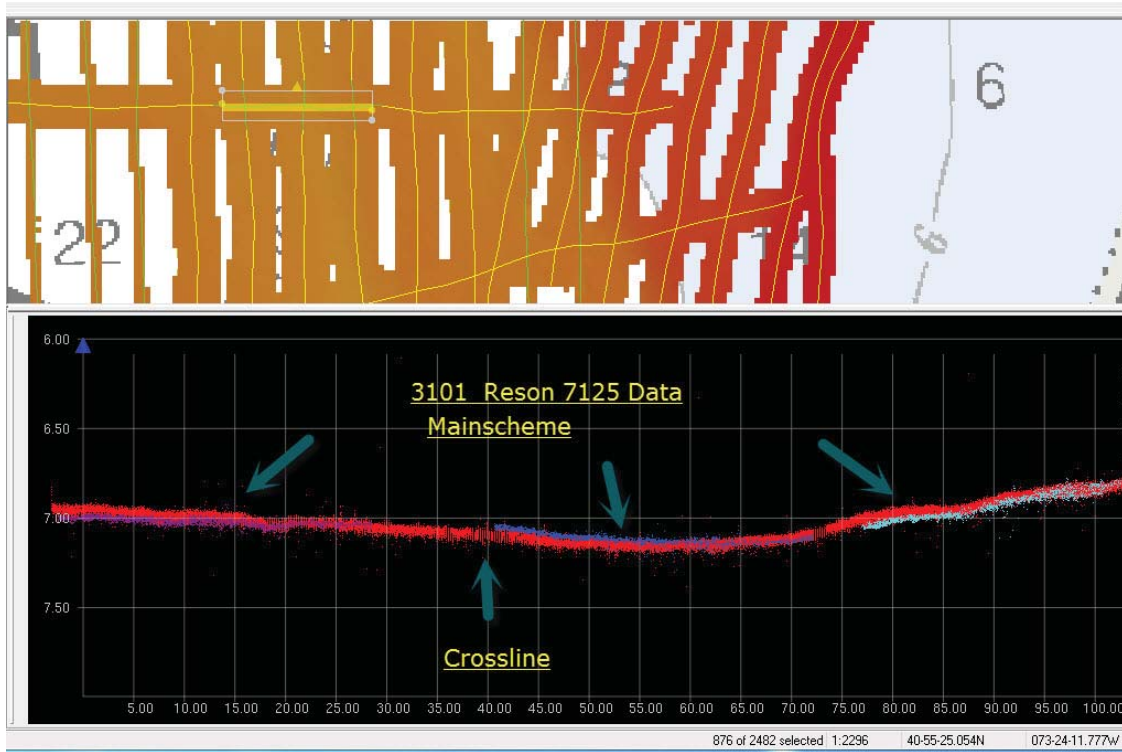


Figure 17: H12413\_3101\_XL\_subset

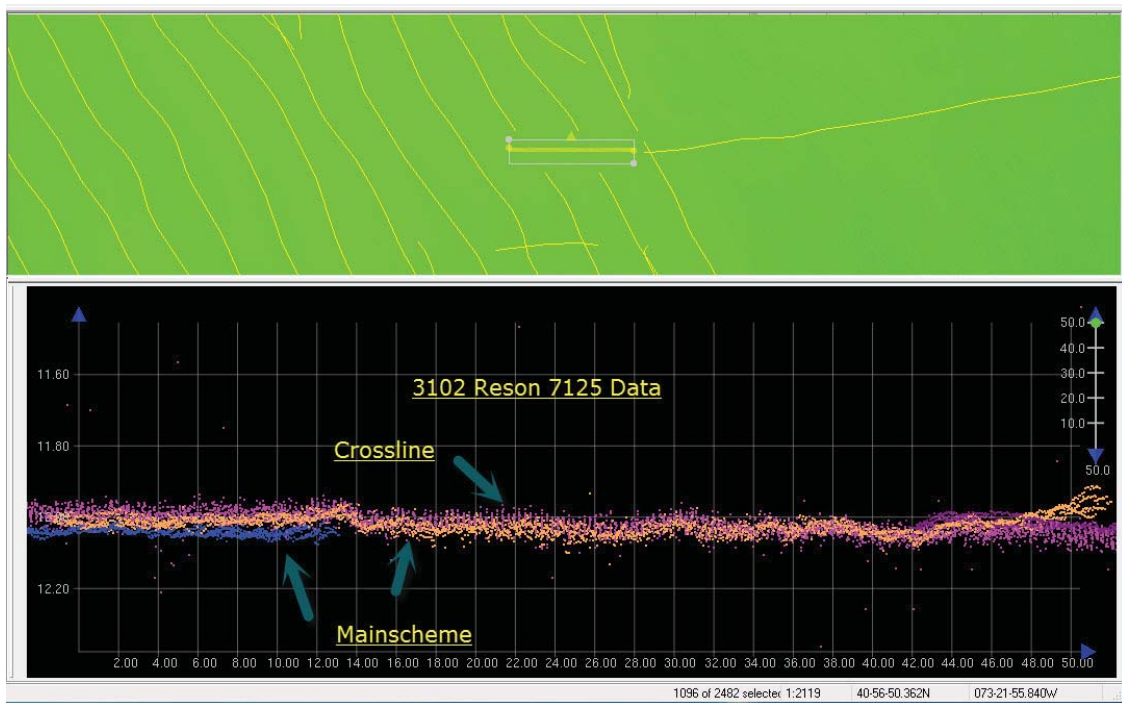


Figure 18: H12413\_3102\_XL\_subset

```
Dataset: H:\Surveys\H12413\CARIS\Fieldsheets\H12413\H12413_XL\H12413_MS_XL_diff.csar
Attribute layer: Diff
Feature layer: N/A
Attribute value bin size: 1 m

Statistical information:
Minimum: -22.613 m
Maximum: 2.376 m
Mean: 0.009 m
Area: N/A
Std_dev: 0.112 m
Total count: 2,879,653

Histogram bin centres and counts:
-22.1187 10
-21.1187 13
-20.1187 10
-19.1187 5
-18.1187 9
-17.1187 9
-16.1187 1
-15.1187 3
-14.1187 4
-13.1187 2
-12.1187 0
-11.1187 2
-10.1187 0
-9.1187 1
-8.1187 2
-7.1187 0
-6.1187 0
-5.1187 1
-4.1187 0
-3.1187 2
-2.1187 5
-1.1187 57
-0.1187 2,879,129
0.8813 363
1.8813 25
```

*Figure 19: H12413 Crossline to Mainschem Difference Histogram*



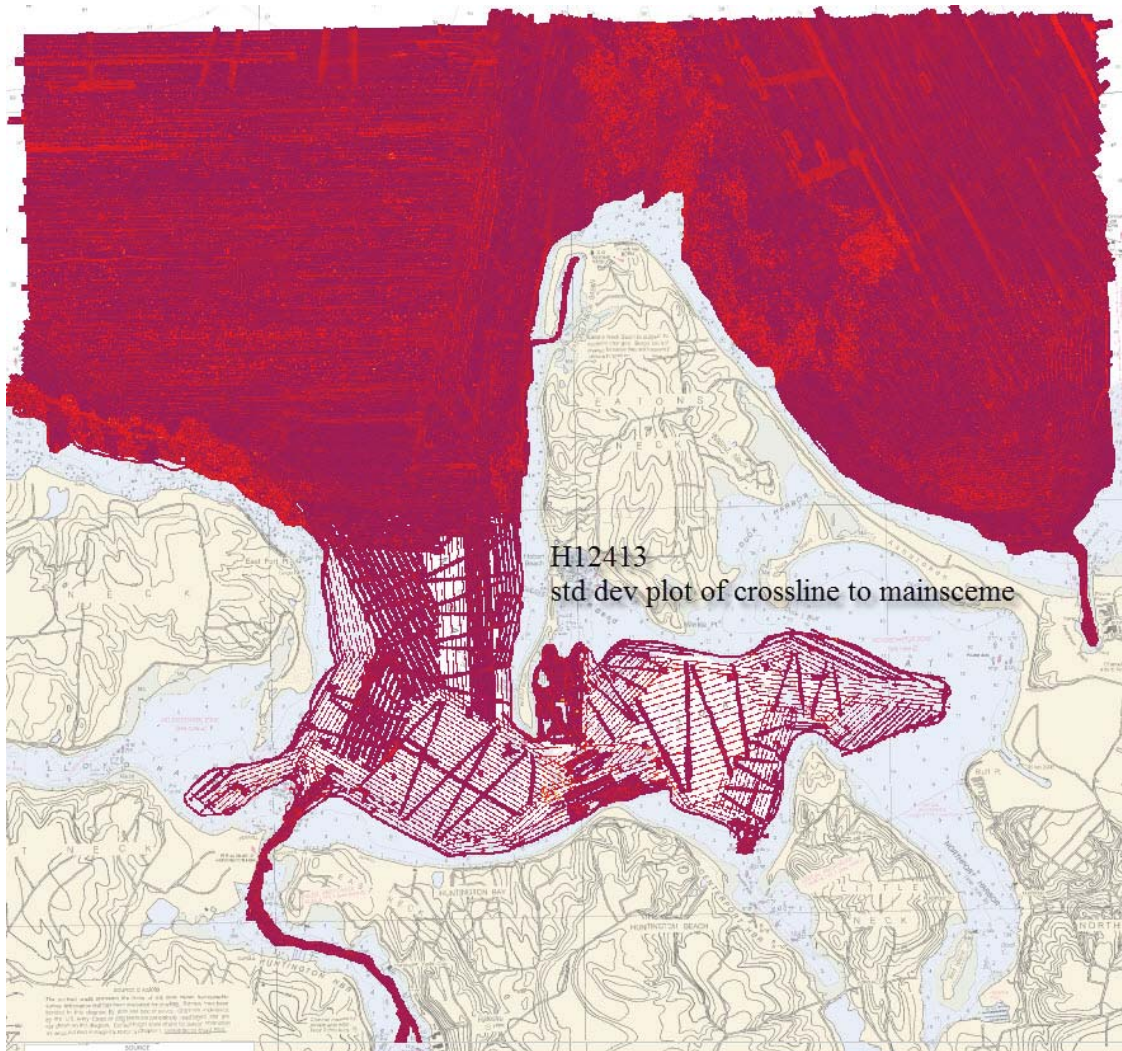


Figure 20: H12413 STD DEV plotc crossline to mainscene

**B.2.2 Uncertainty**

The following survey specific parameters were used for this survey:

| Measured     | Zoning      |
|--------------|-------------|
| 0.102 meters | 0.00 meters |

Table 6: Survey Specific Tide TPU Values

| Hull ID | Measured - CTD  | Measured - MVP    | Surface           |
|---------|-----------------|-------------------|-------------------|
| S222    | 4 meters/second | 1 meters/second   | 0.2 meters/second |
| 3101    | 4 meters/second | n/a meters/second | 0.2 meters/second |
| 3102    | 4 meters/second | n/a meters/second | 0.2 meters/second |

*Table 7: Survey Specific Sound Speed TPU Values*

Total Propagated Uncertainty values for survey H12413 were derived from field assigned values for water level and sound speed uncertainties. Uncertainty stemming from survey equipment and vessel configuration were set by the field unit in accordance with the NOAA Field Procedure Manual (ed 2012),( Appendix 4, table 4.9). Sound speed uncertainty was based on the frequency and location of CDT casts, in accordance with the guidance set by Appendix 4 of the FPM.

Tidal uncertainties were provided by NOAA's Center for Operational Oceanographic Products and Services (CO-OPS), and were applied to depth soundings using a Tidal Constituent and Residual Interpolator (TCARI) grid. TCARI automatically calculates the error associated with water level interpolation, which is then included in the CARIS HDCS lines. For this reason, no Tidal Uncertainties values were entered into the Tide Value section of the CARIS Compute TPU function. Total Propagated Uncertainty for ERS processed data was derived from the smooth best estimate trajectory(SBET), RMS error values,and separation model provided by HSD OPS. The uncertainties associated with ERS tides were entered under the measured portion Caris' Tide Uncertainty.

Total Propagated Uncertainty was then evaluated to ensure compliance with section 5.1.3 of NOAA's Hydrographic Survey Specification and Deliverables (ed 2012). First the maximum allowable uncertainty for each node was calculated. Second the ratio between actual uncertainty and maximum allowed uncertainty was found for each node. The resulting 'IHO\_ratio' layer was filtered using a colour map to show any areas where actual uncertainty exceeded the maximum allowed uncertainty. For the 50cm grids 166,569,673 nodes were evaluated and 99.99% were within IHO uncertainty. For the 2m grids 882,851 nodes were evaluated and 100% were within IHO uncertainty(No failed nodes). For the 4m grids 125,925 nodes were evaluated and 98.57% were within IHO uncertainty. Traditional Tide uncertainty was based on TCARI models. H2413\_List of TCARI.xlsx, can be found in Separates I



### B.2.3 Junctions

Three junction comparisons were completed for survey H12413. The junctions are H12412, H12414, and H12415 (Figure 16) and were from surveys of the same year 2012. Only xyz data was available at the time of the comparison. The comparison was made by inspection looking at each sounding from adjoining surveys. There was excellent agreement between all surveys and were not more than one foot difference. No disparities were observed. Major differences were attributed to slopes or rocks. All other junctions from other contemporary surveys specified in the project instructions did not intersect survey H12413.

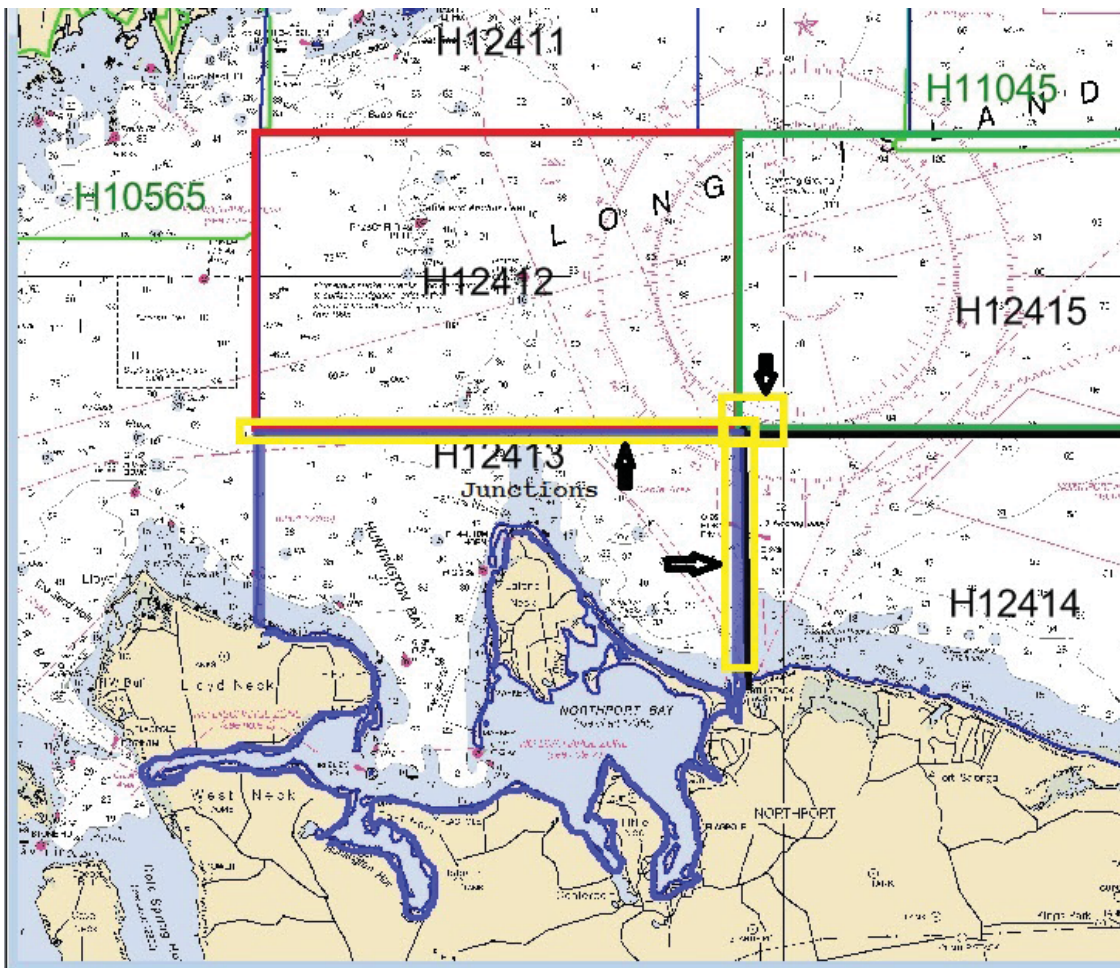


Figure 21: All Junctions

The following junctions were made with this survey:

| Registry Number | Scale   | Year | Field Unit                 | Relative Location |
|-----------------|---------|------|----------------------------|-------------------|
| H12414          | 1:10000 | 2012 | NOAA Ship THOMAS JEFFERSON | E                 |
| H12415          | 1:10000 | 2012 | NOAA Ship THOMAS JEFFERSON | NE                |
| H12412          | 1:10000 | 2012 | NOAA Ship THOMAS JEFFERSON | N                 |

Table 8: Junctioning Surveys

## H12414

On Junction H12413 to H12414, 95 % of the soundings examined were +/- 1 foot or less.

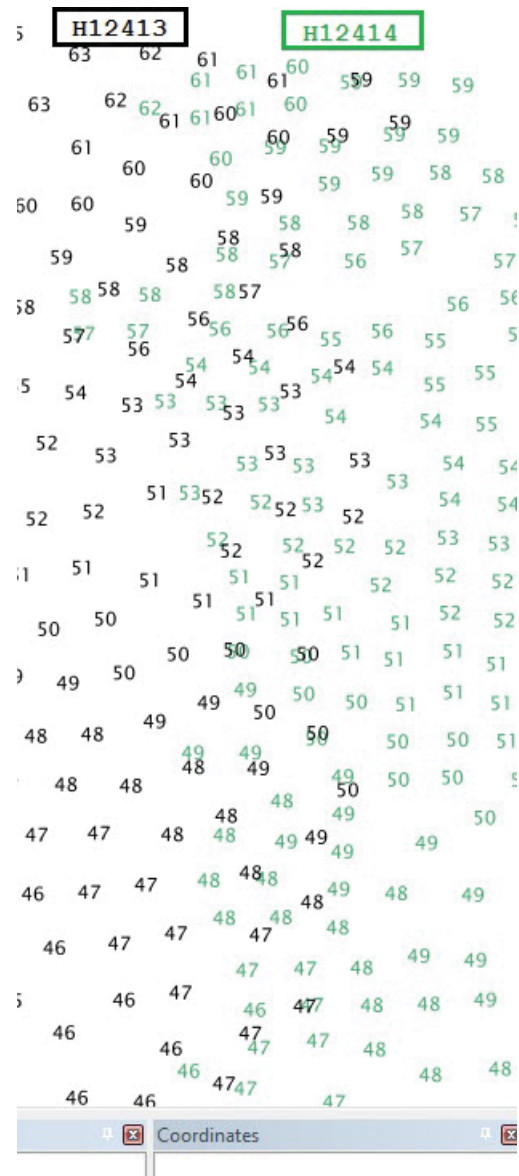


Figure 22: H12413 sounding plot East side top section depicting good agreement to Junction H12414



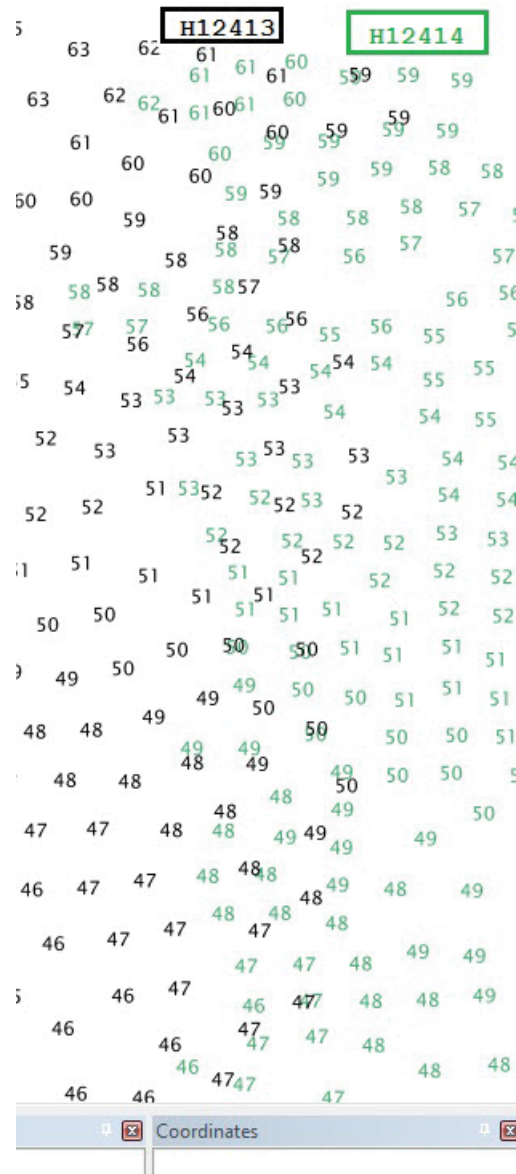


Figure 23: H12413 sounding plot East side mid section depicting good agreement to Junction H12414

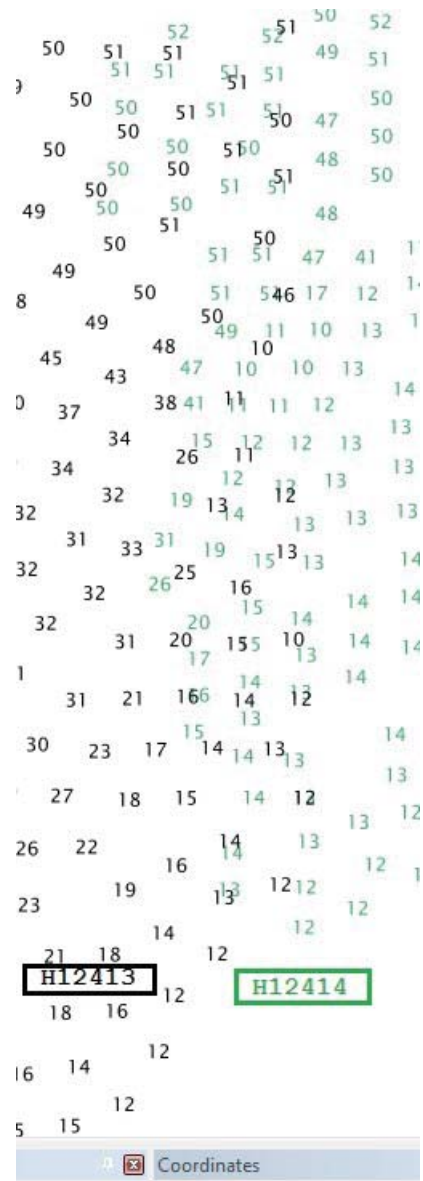


Figure 24: H12413 sounding plot East side bottom section depicting good agreement to Junction H12414 H12415

On Junction H1413 to H12414, 95% of the soundings examined were +/- 1 foot or less.

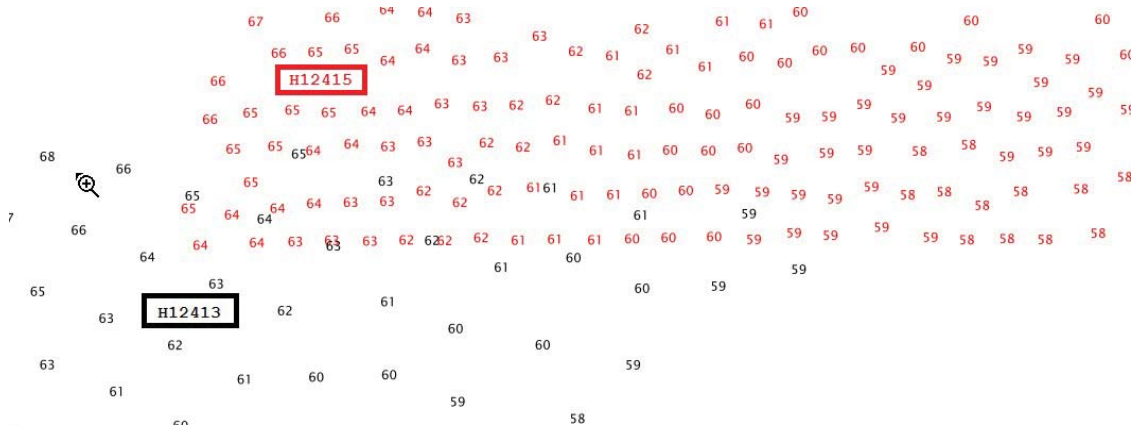


Figure 25: H12413 sounding plot Northeast corner depicting good agreement to Junction H12415  
 H12412

On Junction H1413 to H12412, 95 % of the soundings examined were +/- 1 foot or less.

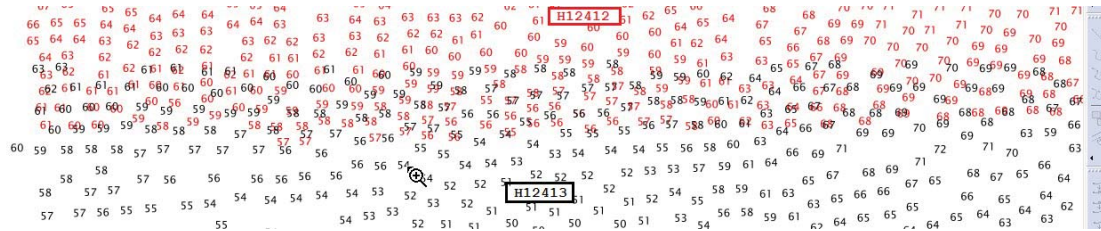


Figure 26: H12413 sounding plot North side left section depicting good agreement to Junction H12412

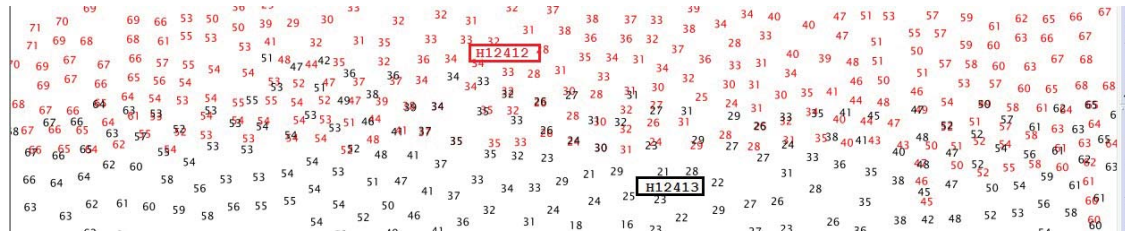


Figure 27: H12413 sounding plot North side mid section depicting good agreement to Junction H12412

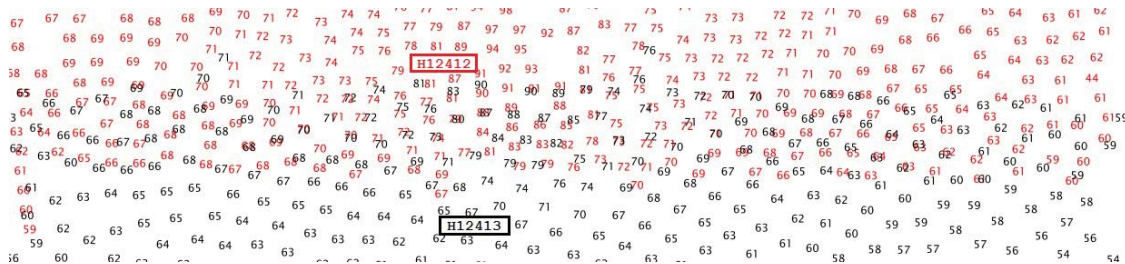


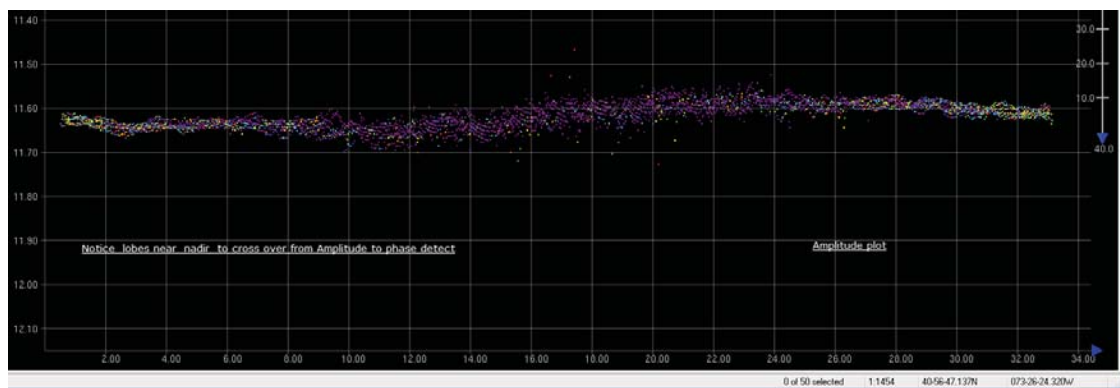
Figure 28: H12413 sounding plot North side right section depicting good agreement to Junction H12412

## B.2.4 Sonar QC Checks

Sonar system quality control checks were conducted as detailed in the quality control section of the DAPR.

## B.2.5 Equipment Effectiveness

An artifact appears in S222 7125 data acquired in H12413 in the form of an S. At this time it is being attributed to sectoring and beam steering algorithms improperly initiated in reson. The average error is within 5-10 cm. See [Reson\\_S\\_artifact\\_emailops050313.pdf](#) located in Supplemental\_Survey\_Records\_Correspondence. the image below is a snapshot of the artifact.



*Figure 29: Reson artifact S steered/Sectoring*

## B.2.6 Factors Affecting Soundings

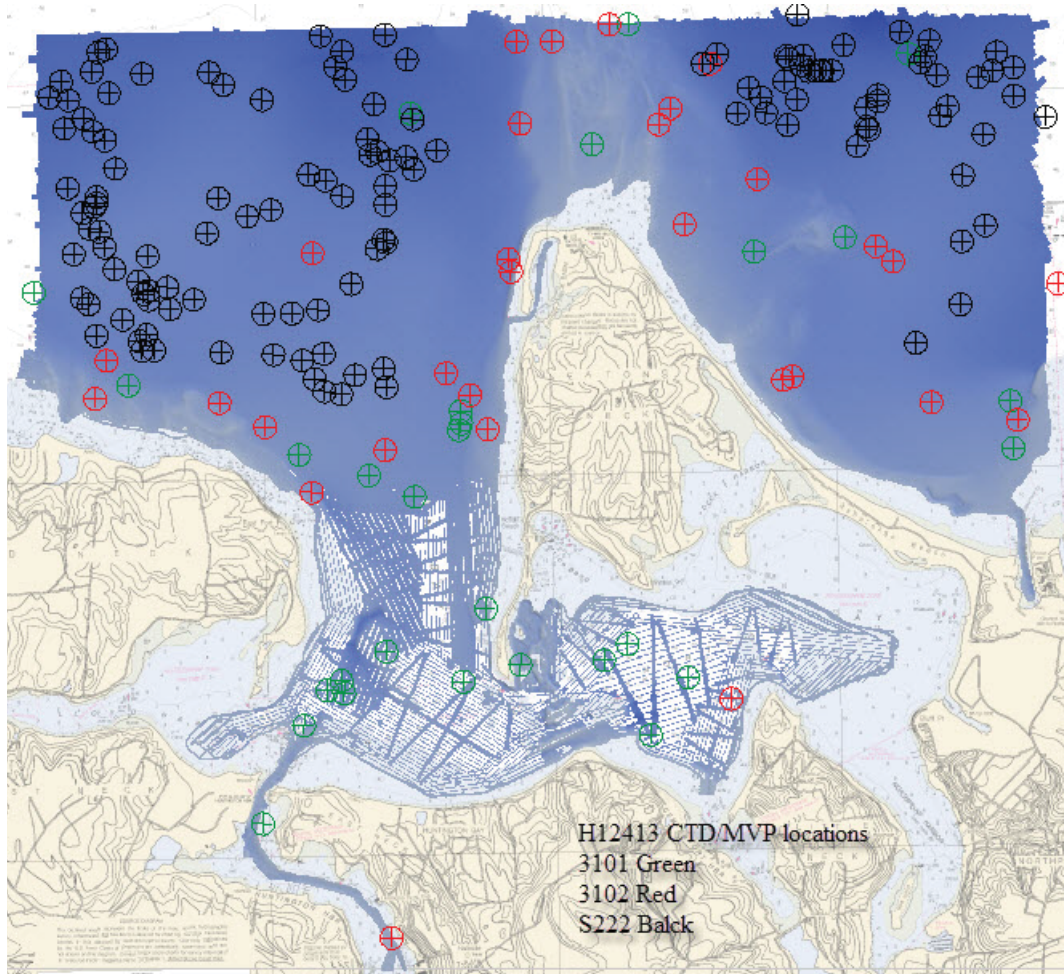
There were no other factors that affected corrections to soundings.

## B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: Moving vessel profiler casts for the ship were taken approximately every half hour, with an emphasis on the deepest part of each track line. CTD casts for the launches were taken every 2 hours or when the launch exceeded 3/4 nm radius of it's intended survey area. Slight frowns or smiles, indications of sound velocity issues, were slight and imperceptible and fell with NOS specifications.

No Zoning was implemented for this survey





*Figure 30: H12413 CTD/MVP Locations*

### **B.2.8 Coverage Equipment and Methods**

All equipment and survey methods were used as detailed in the DAPR.

## **B.3 Echo Sounding Corrections**

### **B.3.1 Corrections to Echo Soundings**

All data reduction procedures conform to those detailed in the DAPR.

### **B.3.2 Calibrations**

All sounding systems were calibrated as detailed in the DAPR.

## B.4 Backscatter

Backscatter was logged as a 7k file and submitted to the IOCM processing center and/or directly to NGDC, and is not included with the data submitted to the Branch. Quality Control consisted of processing and checking one line per day, per platform.

## B.5 Data Processing

### B.5.1 Software Updates

There were no software configuration changes after the DAPR was submitted.

The following Feature Object Catalog was used: The feature Object Catalogue is NOAAProfileField.xml (version 9/23/2012) located in Supplemental\_Survey\_Records\_Correspondence

### B.5.2 Surfaces

The following surfaces and/or BAGs were submitted to the Processing Branch:

| Surface Name               | Surface Type     | Resolution | Depth Range           | Surface Parameter | Purpose               |
|----------------------------|------------------|------------|-----------------------|-------------------|-----------------------|
| H12413_FS1_50cm_MLLW_Final | CUBE             | 0.5 meters | 0 meters - 20 meters  | NOAA_0.5m         | Object Detection      |
| H12413_FS2_50cm_MLLW_Final | CUBE             | 0.5 meters | 0 meters - 20 meters  | NOAA_0.5m         | Object Detection      |
| H12413_FS3_50cm_MLLW_Final | CUBE             | 0.5 meters | 0 meters - 20 meters  | NOAA_0.5m         | Object Detection      |
| H12413_FS4_50cm_MLLW_Final | CUBE             | 0.5 meters | 0 meters - 20 meters  | NOAA_0.5m         | Object Detection      |
| H12413_FS1_2m_MLLW_Final   | CUBE             | 2.0 meters | 18 meters - 40 meters | NOAA_2m           | Complete MBES         |
| H12413_FS2_2m_MLLW_Final   | CUBE             | 2.0 meters | 18 meters - 40 meters | NOAA_2m           | Complete MBES         |
| H12413_FS3_2m_MLLW_Final   | CUBE             | 2.0 meters | 18 meters - 40 meters | NOAA_2m           | Complete MBES         |
| H12413_FS4_2m_MLLW_Final   | CUBE             | 2.0 meters | 0 meters - 20 meters  | NOAA_2m           | Complete MBES         |
| H12413_VB_Unc_4m_Final     | BASE Uncertainty | 4.0 meters | 0 meters - 20 meters  | NOAA_4m           | SBES Set Line Spacing |

| Surface Name            | Surface Type | Resolution | Depth Range                | Surface Parameter | Purpose       |
|-------------------------|--------------|------------|----------------------------|-------------------|---------------|
| H12413_Combined_4m_MLLW | CUBE         | 4.0 meters | 0.09 meters - 29.38 meters | NOAA_4m           | Complete MBES |
| H12413_100_SSS_Mosaic   | SSS Mosaic   | 1.0 meters | 0 meters - 29.38 meters    | N/A               | 100% SSS      |
| H12413_200_SSS_Mosaic   | SSS Mosaic   | 1.0 meters | 0 meters - 29.38 meters    | N/A               | 200% SSS      |

*Table 9: Submitted Surfaces*

### **B.5.3 ERS Anomaly**

Occasionally an anomaly occurred in the ERS data causing slight shifts in altitude, which produced a resultant change in depth. In a non-threshold std-deviation plot these lines can be clearly seen. In most cases these fell within IHO spec and were retained with ERS applications being the preferred choice over the TCARI model which produced less favorable results. Other lines where TCARI was the only choice due to invalid ERS data are listed in H2413\_List of TCARI.xlsx located in Separates I

ERS Altitude Anomaly Comparison S222 DN228 lines 560-1555 and 548-1637

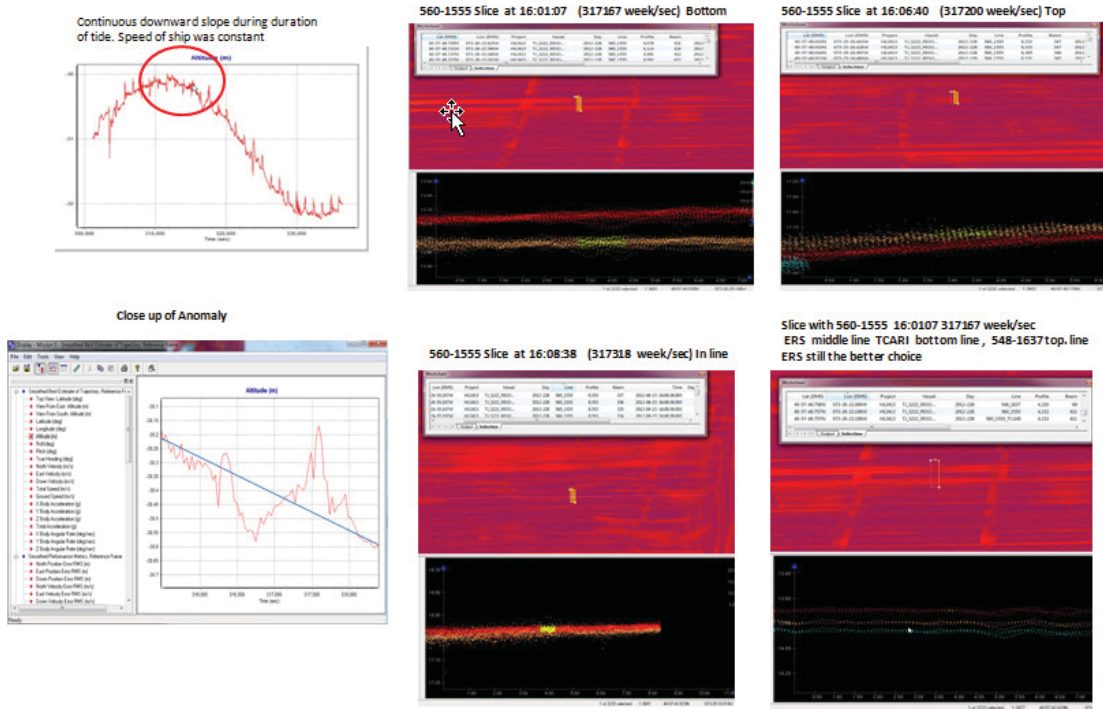


Figure 31: ERS Anomaly

**B.5.4 Density Compliance**

A Density compliance analysis was performed. All field sheets passed the 95 percentile with 5 or more soundings per node. The lowest was Vertical beam at 97.94%. See Density Reports in Separates II.



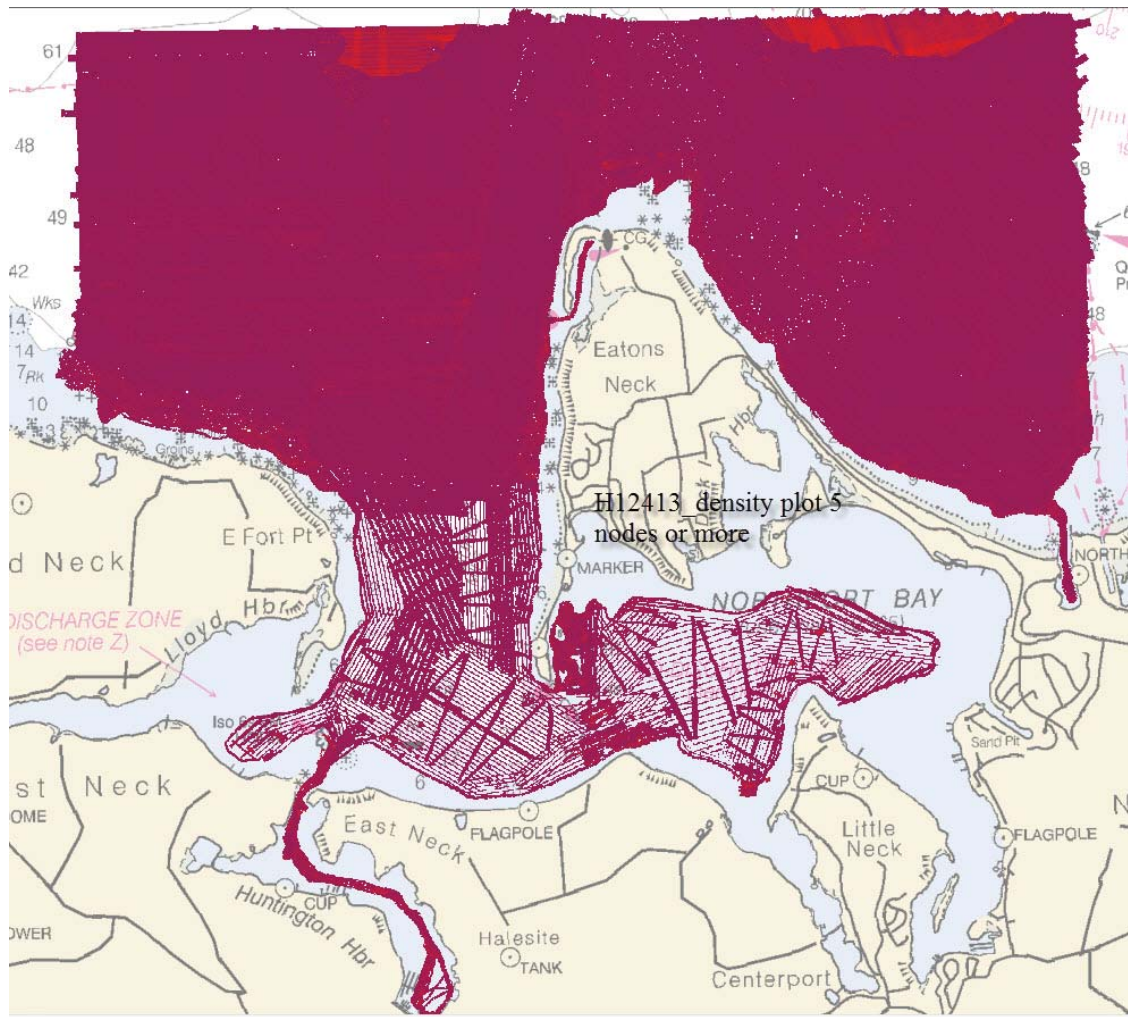
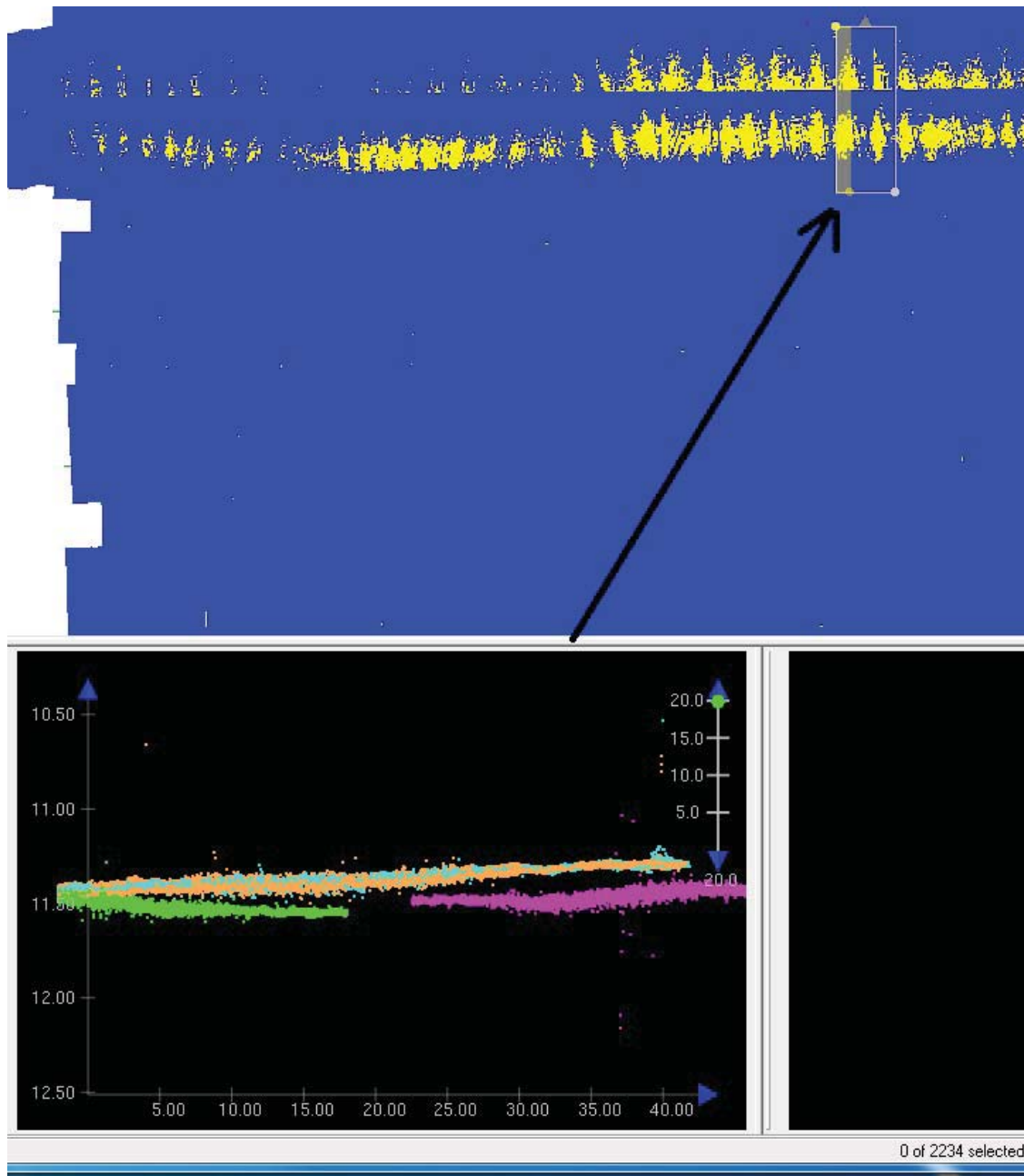


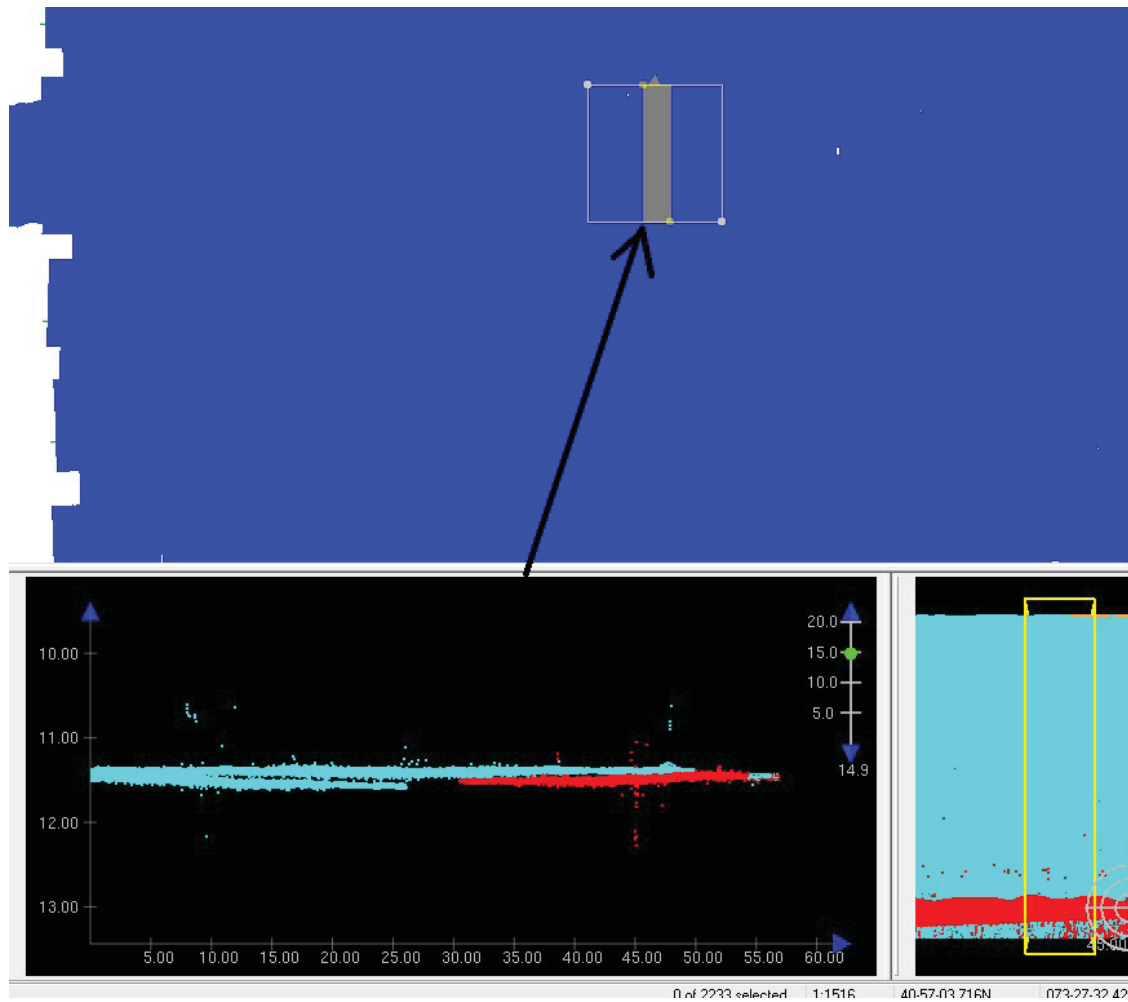
Figure 32: H12413 Density plot 5 or more soundings per node

### B.5.5 Roll Offset 3101 on DN 239

A roll error was observed on launch 3101 DN 239. The hvf was updated for a roll value of  $-0.490$  for the time period of survey on day 239 for sheet H12413. Possible reason was inaccurate deployment of MB arm. Additional information can be found in the DAPR.



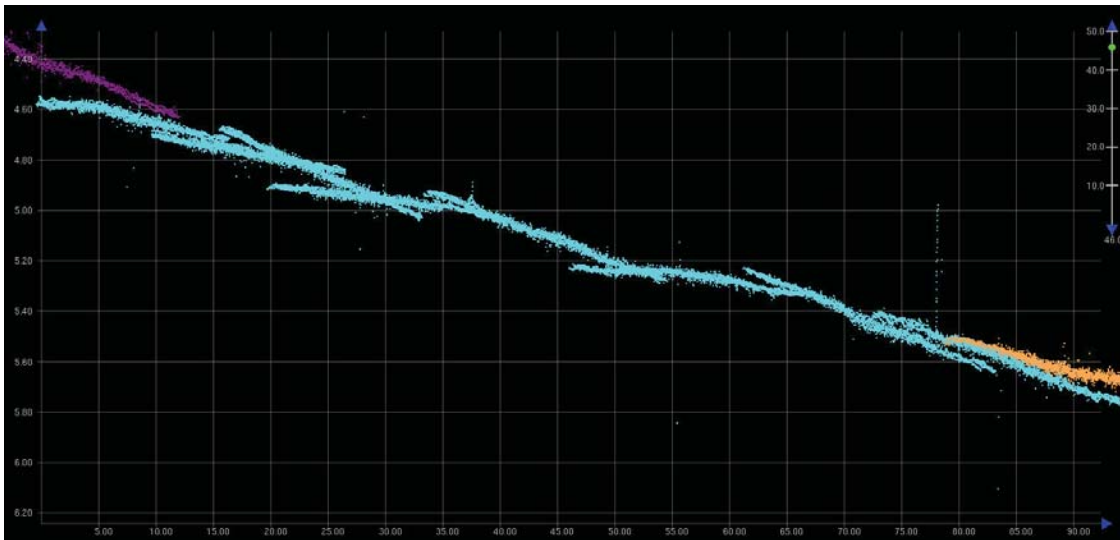
*Figure 33: Survey H12413 Launch 3101 DN239 STD DEV plot depicting Roll error with overview and subset view.*



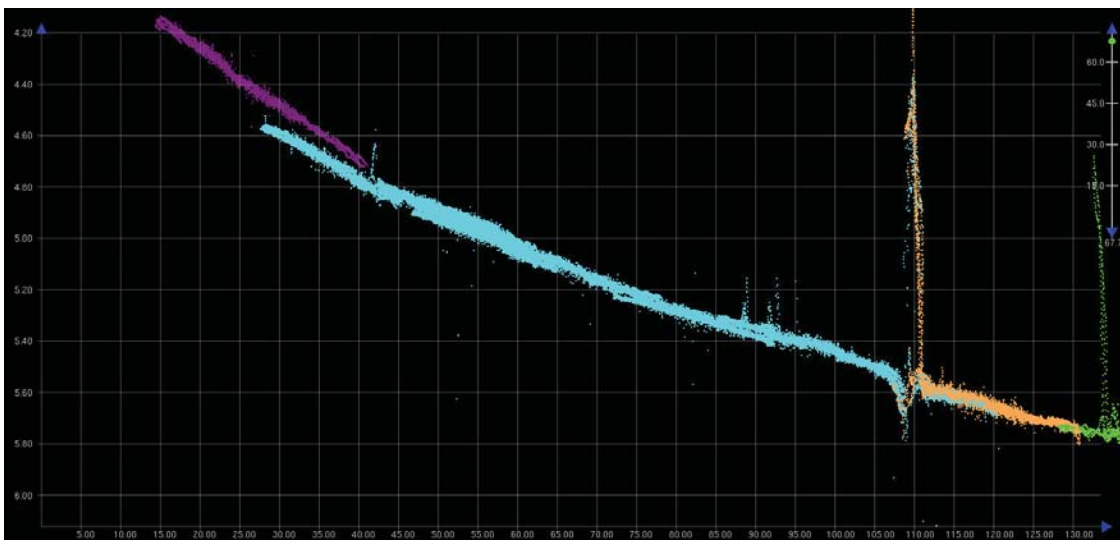
*Figure 34: Survey H12413 Launch 3101 DN239 STD DEV plot depicting application of HVF roll correction with overview and subset view*

### **B.5.6 Roll Offset for 3102 on DN 265**

A roll offset was observed on DN265 for vessel 3102. The assumption is that the sonar arm was not fully deployed. An appropriate entry was made in the HVF to reflect the computed position of the sonar arm. This value was used through time stamp 1606. Data after that time did not present with the roll offset. There was considerable time between 1606 and the next line and it is assumed that the sonar arm was brought in and then fully deployed.



*Figure 35: 3102 DN 265 (light blue data) Roll Error*



*Figure 36: 3102 DN 265 Roll Error Fixed*

## C. Vertical and Horizontal Control

No HVCR was generated for H12413.

### C.1 Vertical Control

The vertical datum for this project is Mean Lower Low Water.

Standard Vertical Control Methods Used:

TCARI

The following National Water Level Observation Network (NWLON) stations served as datum control for this survey:

| <b>Station Name</b> | <b>Station ID</b> |
|---------------------|-------------------|
| Kings Point, NY     | 8516945           |
| New Haven, CT       | 8467150           |
| Bridge Port, CT     | 8467150           |

*Table 10: NWLON Tide Stations*

| <b>File Name</b> | <b>Status</b>  |
|------------------|----------------|
| 8516945.tid      | Final Approved |
| 8467150.tid      | Final Approved |
| 8465707.tid      | Final Approved |

*Table 11: Water Level Files (.tid)*

| <b>File Name</b>  | <b>Status</b> |
|---|---------------|
| The tide corrector file B340TJ2012_Rev.tc is located in the CARIS Tide folder for Verified tides. | Final         |

*Table 12: Tide Correctors (.zdf or .tc)*

A request for final approved tides was sent to N/OPS1 on 10/03/2012. The final tide note was received on 10/11/2012.

Non-Standard Vertical Control Methods Used:

VDatum

Ellipsoid to Chart Datum Separation File:

2012\_B340\_VDatum\_Ellip\_MLLW.xyz resides in GNSS \_Data



Occasional anomalies occurred with ERS data in which case TCARI was used. A total of 86 files were processed with TCARI all others with ERS. See H2413\_List of TCARI.xlsx. located in Separates I.

## C.2 Horizontal Control

The horizontal datum for this project is North American Datum of 1983 (NAD83).

The projection used for this project is UTM 18 North.

Moriches was the preferred beacon for this survey. Acushnet was the second choice during outages or reduced power.

The following DGPS Stations were used for horizontal control:

| DGPS Stations                |
|------------------------------|
| Moriches, NY Site 803 293khz |
| Acushnet, MA Site 772 306khz |

*Table 13: USCG DGPS Stations*

## C.3 Additional Horizontal or Vertical Control Issues

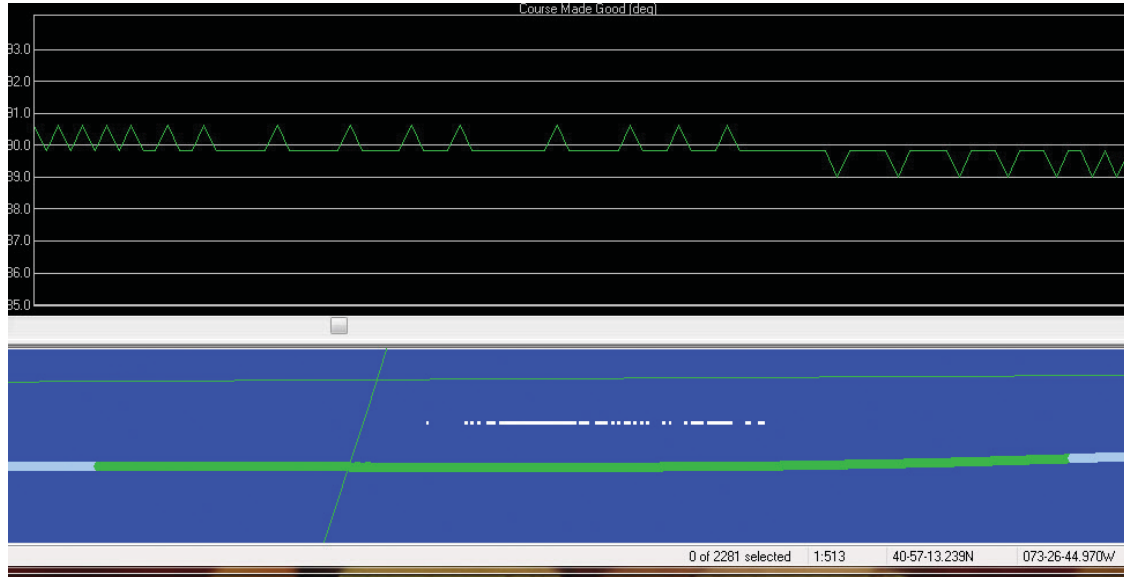
### 3.3.1 SBETS

SBETS were not applied to TCARI data. The majority of the survey used VDATUM for waterline corrections to observed depths.

### 3.3.2 Jitter

An anomaly that appears to be jitter was observed in the navigation data. It is possible that high space weather (a K4 event) exacerbated positioning issues for S222 data on DN229 line 519-2020. A K4 is geomagnetic disturbance that can affect space vehicle operation. The anomaly was centered at 40 47 12N, 73 26 44W and S222, DN226, 495\_1532 40 57 03N, 073 26 52W. Before smoothing was applied a holiday

of 150-200 meters was observed due to horizontal positioning errors up to 1 meter. Once smoothing was applied to the data the horizontal error was within specification and no holiday was observed.



*Figure 37: Nav jitter*

### 3.3.3 Holidays not covered

The following are major holidays encountered due to rejection and or sparse data acquisition.

rejected/sparse section 40 58 10N 073 27 27W

rejected/sparse section 40 58 15N 073 27 15W

rejected/sparse section 40 58 15N 073 25 53W

rejected/sparse section 40 56 13N 073 24 55W

Some areas were SSS Holidays but covered by ODMB. Huntington Basin was not completely covered due to the density of anchored small boats.

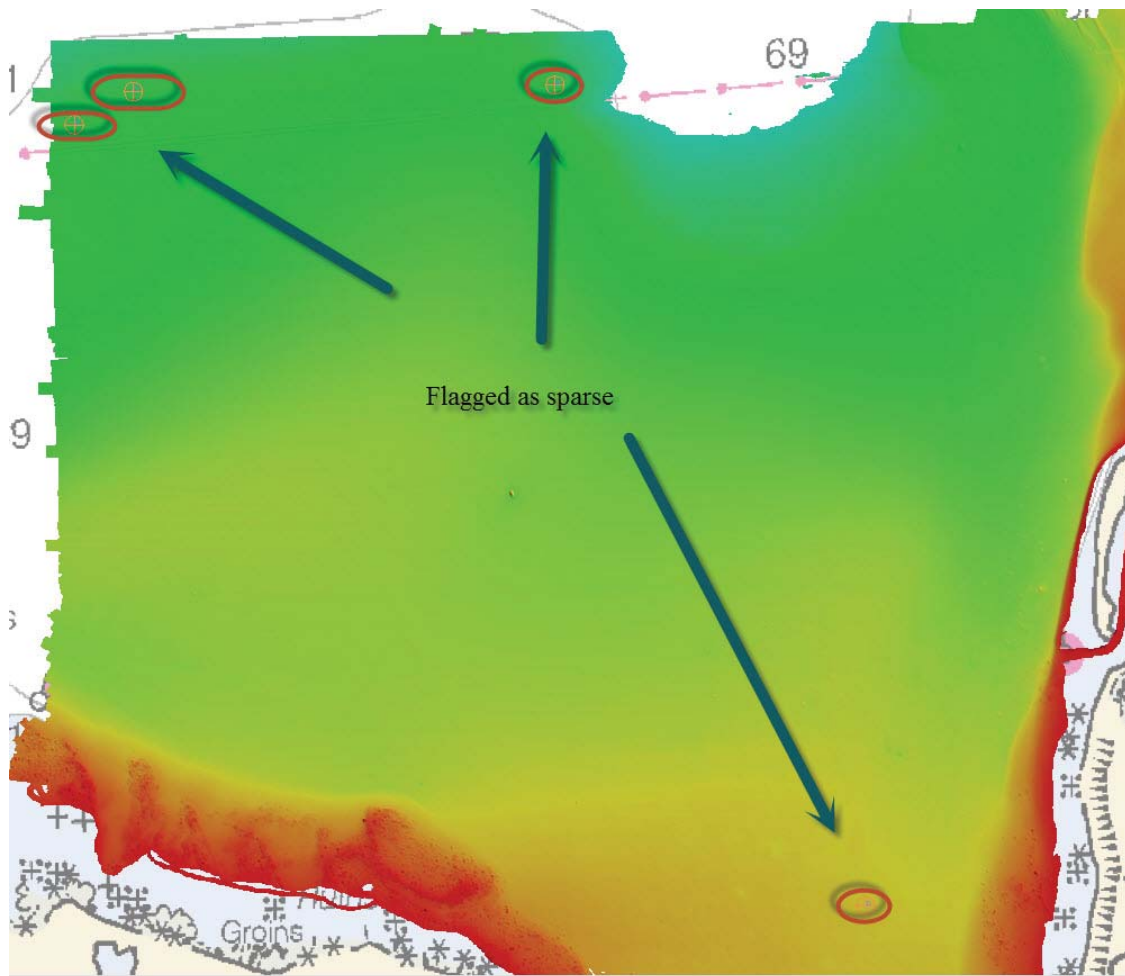


Figure 38: H12413 sparse/rejected areas

## D. Results and Recommendations

### D.1 Chart Comparison

The method employed for chart comparison was accomplished by creating a digital surfaces from the survey data, turning on soundings and comparing them to the raster and ENC charts. Comparisons of Features are noted in the Final Feature file as either new, retained, or deleted items. A lattice was also used to look for evidence of shoaling. The lattice forms a triangle between three or four charted depths. Surveyed depths inside the resulting rectangle or triangle were compared to the charted depths. Major differences are noted below.

**D.1.1 Raster Charts**

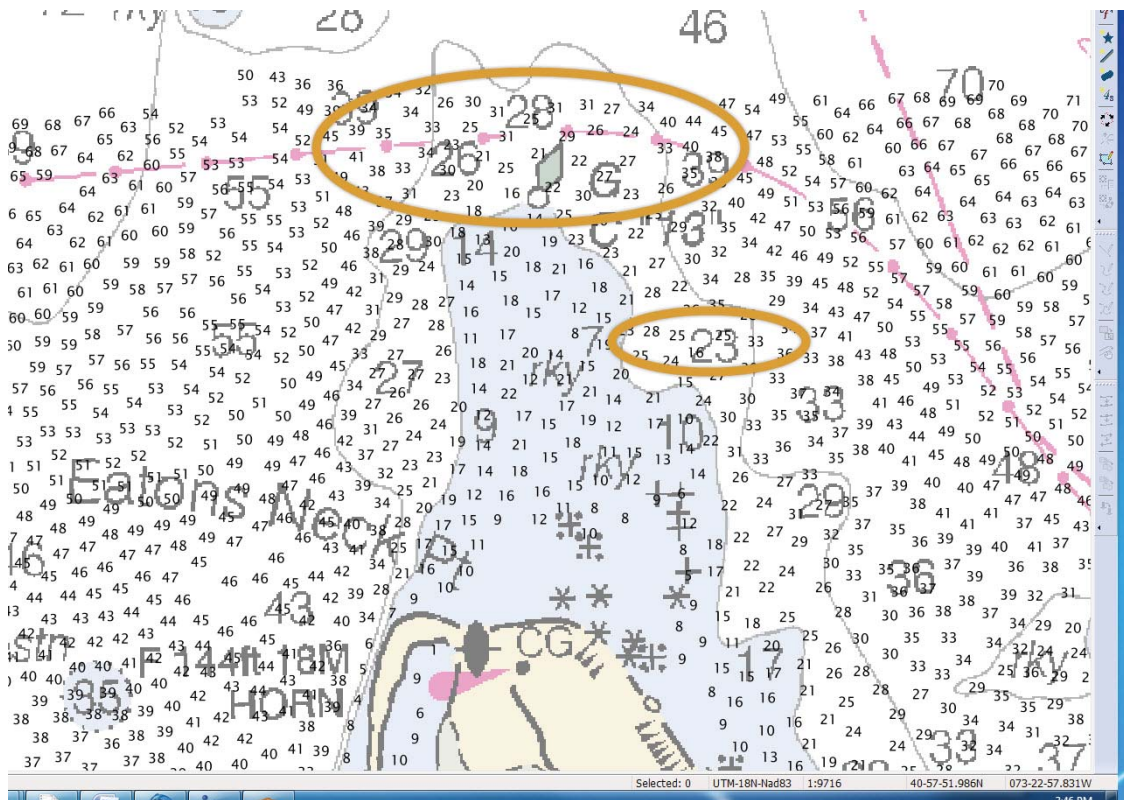
The following are the largest scale raster charts, which cover the survey area:

| Chart | Scale   | Edition | Edition Date | LNM Date   | NM Date    |
|-------|---------|---------|--------------|------------|------------|
| 12365 | 1:20000 | 26      | 03/2001      | 02/25/2012 | 02/25/2012 |

*Table 14: Largest Scale Raster Charts*

12365

Overall, 95 percent of the surveyed soundings were within range of the charted depths. Shoaling can be seen north of Eatons Neck Pt with 5 foot differences. Charted shoal soundings just north of Buoy C "13" prevent transit and are not considered dangers. Isolated uncharted rocks contribute to this rocky area. Many charted pier faces in area were observed to be slightly different than chart. New shoreline is needed to adequately depict them on the raster and chart.



*Figure 39: H12413 Eatons Neck shoaling*

### D.1.2 Electronic Navigational Charts

The following are the largest scale ENC's, which cover the survey area:

| ENC      | Scale   | Edition | Update Application Date | Issue Date | Preliminary? |
|----------|---------|---------|-------------------------|------------|--------------|
| US5NY14M | 1:20000 | 1       | 03/16/2011              | 03/16/2011 | NO           |

*Table 15: Largest Scale ENC's*

#### US5NY14M

Comments are in accordance with raster Comparison 12365.

### D.1.3 AWOIS Items

H12413 included five AWOIS items assigned for full investigation. Three AWOIS items were duplicates with the same AWOIS number, 2641,6811 and 11382 . An additional eight AWOIS items included for information only were covered by object detection MB or SSS during the course of the survey. A total of 16 AWOIS items can be referred to in the Final Feature File H12413\_FFF.000 included in section S-57\_Features of this report.

### D.1.4 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

### D.1.5 Charted Features

A total of 4 charted features labeled PA, ED, PD, or Rep fell within the bounds of survey H12413. They are:

|                                  |           |            |             |
|----------------------------------|-----------|------------|-------------|
| Obstn cleared to 26              | Disproved | 40 54 36 N | 073 22 57 W |
| Marker Pa rep                    | Disproved | 40 55 16N  | 073 23 30 W |
| Wreck PA rep 1994                | Disproved | 40 56 32 N | 073 26 20 W |
| Obstn Shellfish Racks (24ft rep) | Disproved | 40 56 2 3N | 071 21 53 W |

For a full description of all AWOIS items, refer to the Final Feature File H12413\_FFF.000 included in section S-57\_Features of this report.



### **D.1.6 Uncharted Features**

There are 146 previously uncharted features that were discovered during the course of survey H12413. For a full description of all AWOIS items, refer to the Final Feature File H12413\_FFF.000 included in section S-57\_Features of this report.

### **D.1.7 Dangers to Navigation**

Danger to Navigation Reports are included in Appendix I of this report.

### **D.1.8 Shoal and Hazardous Features**

Shoaling was observed in various locations throughout the survey, mainly: east of Northport Bay; north of Eatons Neck Point, near buoy G C"13"; and east of Eatons Neck. Additional shoals in the form of Rocks and Rocky areas have been identified.

### **D.1.9 Channels**

No federally maintained channels exist for this survey, however privately funded dredging of Centerport Channel was completed October of 2011. The channel was dredged to a depth of 12ft, however the current survey found 11ft depths at the mouth of the channel, North of the the R N"2" buoy. For further information refer to documents Centerport Dredging.pdf, Centerport Harbor dredging2.pdf, and H12413\_NavigationInterests\_centerport.doc, all of which are located in section Project\_Reports.

Three designated anchorage areas exist. Two of those areas have discrepancy's between Coast Pilot and the Chart. See section Coast Pilot report for details.

There are five no discharge zones and a measured mile area in this survey and appear to be charted appropriately. There are also three Special Anchorages noted on the chart, encompassing Huntington Harbor, Centerport Harbor, and Northport Harbor. The hydrographer notes a discrepancy between the charted boundary lines for Huntington and Centerport harbors, and the boundaries listed in section 110.59 of Coast Pilot 2.

There were no precautionary areas, safety fairways, traffic separation schemes, pilot boarding areas, or channel and range lines within the survey limits.

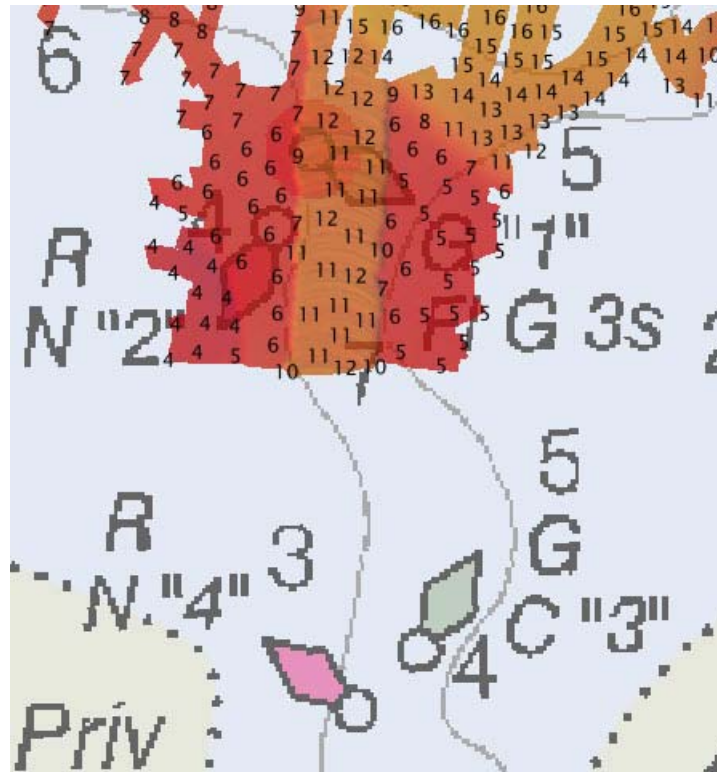


Figure 40: Centerport Dredge

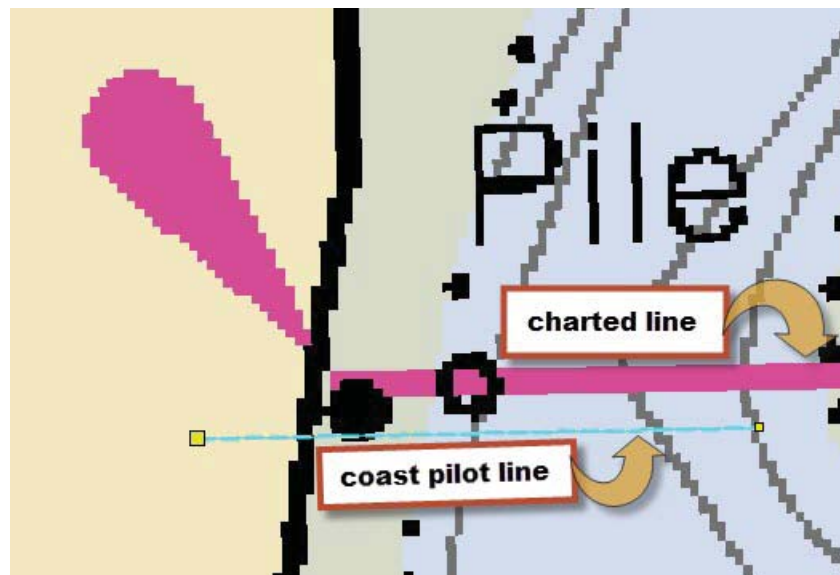


Figure 41: Discrepancy between charted boundary line, and line referenced in Coast Pilot 2.

#### D.1.10 Bottom Samples

No bottom samples were required for this survey. See in Appedix 5, Fwd\_ Updated Proposed Bottom Samples OPR-B340-TJ-12.pdf"

## **D.2 Additional Results**

### **D.2.1 Shoreline**

The hydrographer recommends that RSD update the shoreline for Huntington Harbor and Northport Basin.

### **D.2.2 Prior Surveys**

No prior survey comparisons exist for this survey.

### **D.2.3 Aids to Navigation**

There are fifty ATONS on this survey and they appear to be charted appropriately.

### **D.2.4 Overhead Features**

Overhead features do not exist for this survey.

### **D.2.5 Submarine Features**

There is one pipeline located within the bounds of the survey, beginning at Northport Basin, continuing north of Eatons Neck, then extending west. A cable area starts at West Neck and ends at Huntington Harbor Light. There is also a cable area beginning at the entrance to Northport Basin, and extending north. All appear to be charted appropriately.

### **D.2.6 Ferry Routes and Terminals**

No ferry routes or terminals exist for this survey.

### **D.2.7 Platforms**

The Northport Platform West is located on the border between surveys H12413, and H12414 to the east. Several special purpose buoys surrounding the platform are addressed in both surveys, as are AWOIS item #11382, and a charted obstruction. The hydrographer recommends using depths from survey H12413 to updated AWIOS item #11382 and the charted obstruction as they are shoaler than the depths found by H12414. For a full description, refer to the Final Feature File H12413\_FFF.000 included in section S-57\_Features of this report. See also the Final Feature File included in survey H12414

### D.2.8 Significant Features

Shoaling was observed northwest of Little Neck Point and south of buoy R N"4". Additionally, many wrecks perched at odd angles were found in both Huntington Harbor, and Northport Basin. The possibility of movement or shifting of the wrecks should be noted.

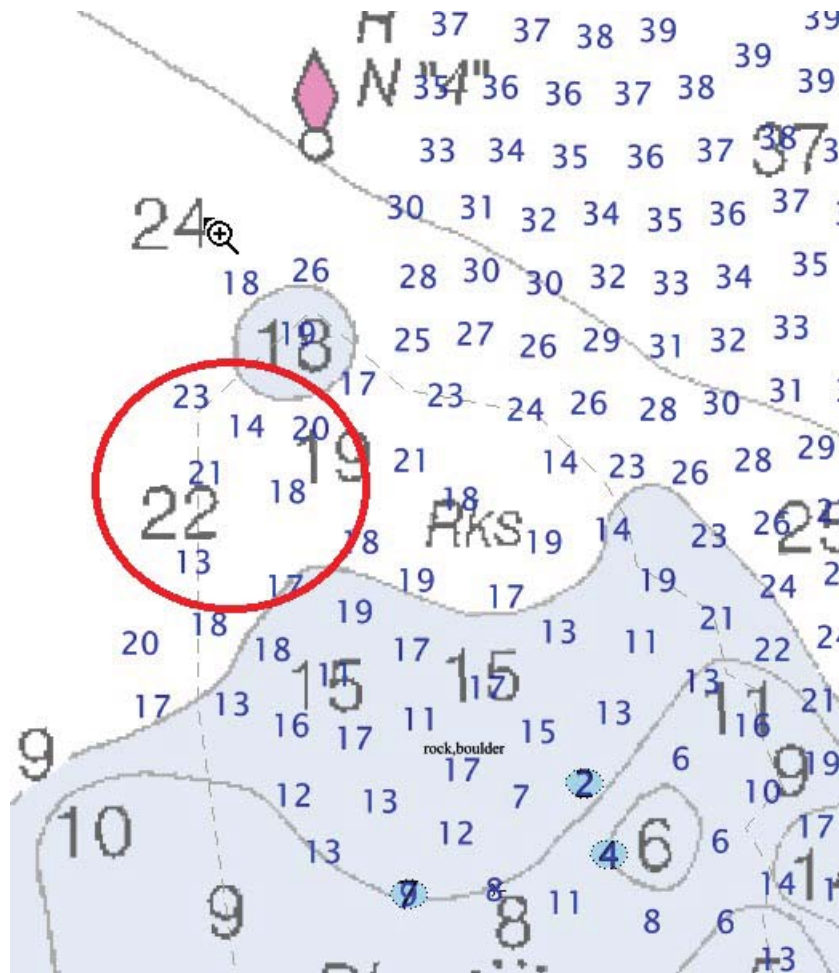


Figure 42: Shoaling1

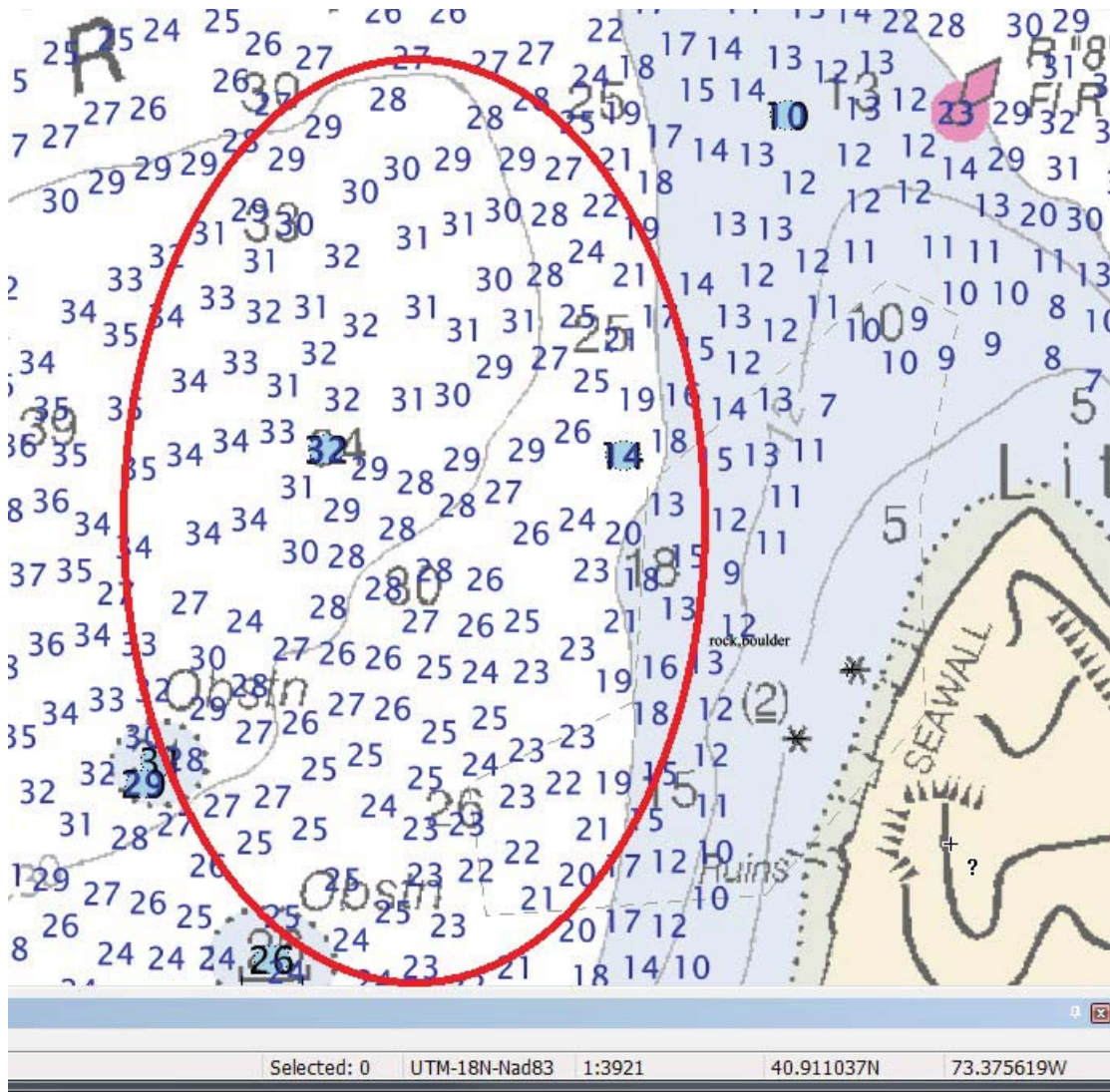


Figure 43: Shoaling2



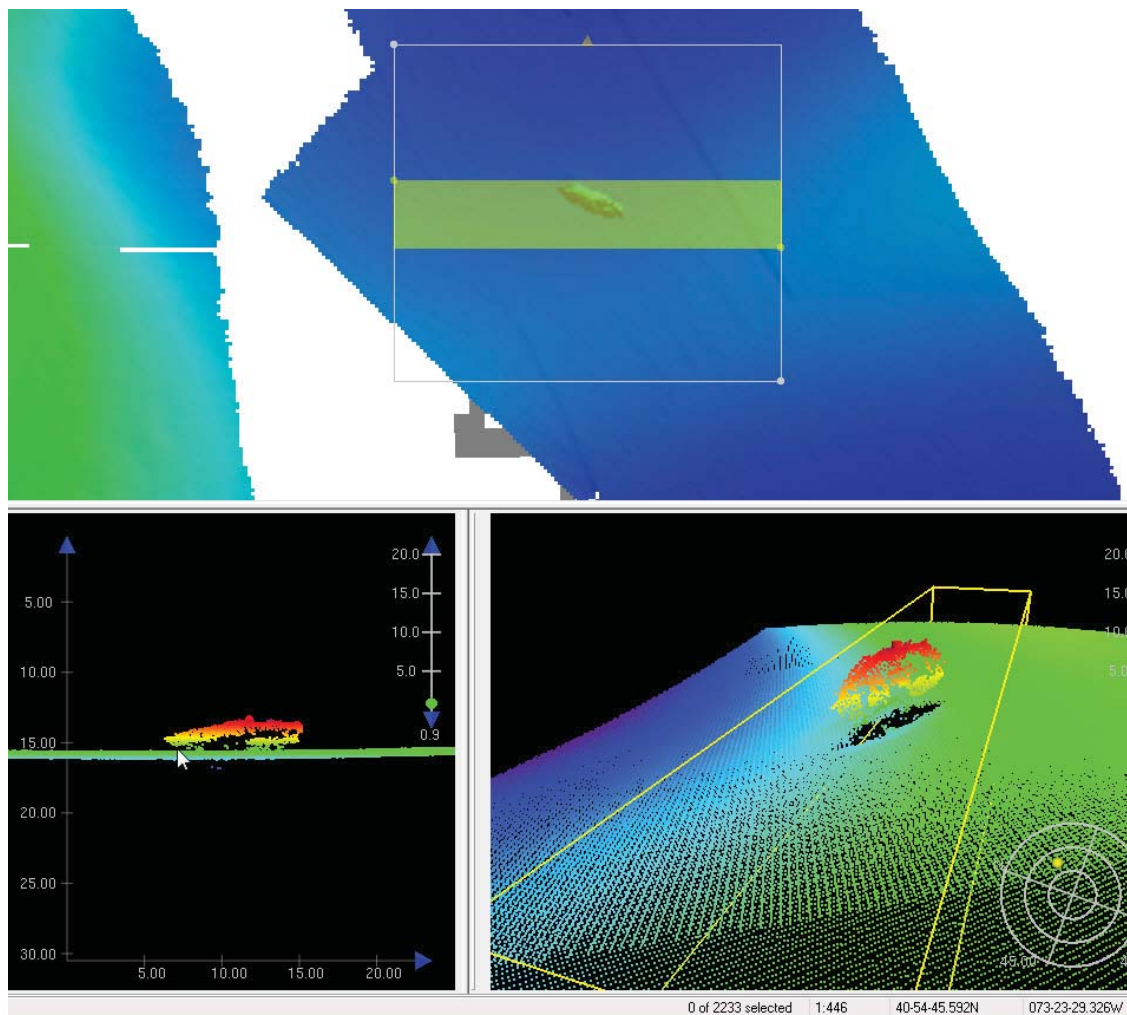


Figure 44: Perched Wreck

### D.2.9 Construction and Dredging

Present and/or planned construction or dredging exists within the survey limits, but was not investigated. A dredging project funded by the town of Huntington was completed in October of 2011, however the dredging activity was not reported to the Thomas Jefferson at the time of the survey. Instead of fully investigating Centerport Harbor entrance, data collection was stopped at the 4m curve per the project instructions. The hydrographer does note 11ft depths mouth of the channel, near the R N"2" buoy. See Centerport\_Dredging in section Project\_Reports

### D.2.10 Oyster Bed Replenishment and Ghost Traps

The Towns of Centerport and Huntington are undertaking a shellfish replenishment project. There is also a Ghost Trap program to remove abandoned fish traps. Based on these reports the hydrographer notes that many of the obstructions found in Huntington Harbor and Northport Bay are actually traps. A meeting between the Town officials, the hatchery programs, and the Northeast Navigation Manager may be beneficial

in confirming sites shellfish sites and trapping areas. See ACOE\_Dredging\_OysterSeeding in section Project\_Reports.

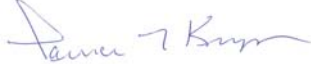

## E. Approval Sheet

As Chief of Party, Field operations for this hydrographic survey were conducted under my direct supervision, with frequent personal checks of progress and adequacy. I have reviewed the attached survey data and reports.

All field sheets, this Descriptive Report, and all accompanying records and data are approved. All records are forwarded for final review and processing to the Processing Branch.

The survey data meets or exceeds requirements as set forth in the NOS Hydrographic Surveys and Specifications Deliverables Manual, Field Procedures Manual, Standing and Letter Instructions, and all HSD Technical Directives. These data are adequate to supersede charted data in their common areas. This survey is complete and no additional work is required with the exception of deficiencies noted in the Descriptive Report.

add

| Approver Name                         | Approver Title           | Approval Date | Signature   |
|---------------------------------------|--------------------------|---------------|---|
| Commander Lawrence<br>T. Krepp, NOAA  | Commanding Officer       | 08/05/2013    |   |
| Lieutenant Megan<br>R. Guberski, NOAA | Field Operations Officer | 08/05/2013    |  |
| Peter Lewit                           | Chief Survey Technician  | 08/05/2013    |   |

## F. Table of Acronyms

| <b>Acronym</b> | <b>Definition</b>                                   |
|----------------|---|
| <b>AHB</b>     | Atlantic Hydrographic Branch                        |
| <b>AST</b>     | Assistant Survey Technician                         |
| <b>ATON</b>    | Aid to Navigation                                   |
| <b>AWOIS</b>   | Automated Wreck and Obstruction Information System  |
| <b>BAG</b>     | Bathymetric Attributed Grid                         |
| <b>BASE</b>    | Bathymetry Associated with Statistical Error        |
| <b>CO</b>      | Commanding Officer                                  |
| <b>CO-OPS</b>  | Center for Operational Products and Services        |
| <b>CORS</b>    | Continually Operating Reference Station             |
| <b>CTD</b>     | Conductivity Temperature Depth                      |
| <b>CEF</b>     | Chart Evaluation File                               |
| <b>CSF</b>     | Composite Source File                               |
| <b>CST</b>     | Chief Survey Technician                             |
| <b>CUBE</b>    | Combined Uncertainty and Bathymetry Estimator       |
| <b>DAPR</b>    | Data Acquisition and Processing Report              |
| <b>DGPS</b>    | Differential Global Positioning System              |
| <b>DP</b>      | Detached Position                                   |
| <b>DR</b>      | Descriptive Report                                  |
| <b>DTON</b>    | Danger to Navigation                                |
| <b>ENC</b>     | Electronic Navigational Chart                       |
| <b>ERS</b>     | Ellipsoidal Referenced Survey                       |
| <b>ERZT</b>    | Ellipsoidally Referenced Zoned Tides                |
| <b>FFF</b>     | Final Feature File                                  |
| <b>FOO</b>     | Field Operations Officer                            |
| <b>FPM</b>     | Field Procedures Manual                             |
| <b>GAMS</b>    | GPS Azimuth Measurement Subsystem                   |
| <b>GC</b>      | Geographic Cell                                     |
| <b>GPS</b>     | Global Positioning System                           |
| <b>HIPS</b>    | Hydrographic Information Processing System          |
| <b>HSD</b>     | Hydrographic Surveys Division                       |
| <b>HSSD</b>    | Hydrographic Survey Specifications and Deliverables |

| <b>Acronym</b> | <b>Definition</b>                                  |
|----------------|--|
| <b>HSTP</b>    | Hydrographic Systems Technology Programs           |
| <b>HSX</b>     | Hypack Hysweep File Format                         |
| <b>HTD</b>     | Hydrographic Surveys Technical Directive           |
| <b>HVCR</b>    | Horizontal and Vertical Control Report             |
| <b>HVF</b>     | HIPS Vessel File                                   |
| <b>IHO</b>     | International Hydrographic Organization            |
| <b>IMU</b>     | Inertial Motion Unit                               |
| <b>ITRF</b>    | International Terrestrial Reference Frame          |
| <b>LNM</b>     | Local Notice to Mariners                           |
| <b>LNM</b>     | Linear Nautical Miles                              |
| <b>MCD</b>     | Marine Chart Division                              |
| <b>MHW</b>     | Mean High Water                                    |
| <b>MLLW</b>    | Mean Lower Low Water                               |
| <b>NAD 83</b>  | North American Datum of 1983                       |
| <b>NAIP</b>    | National Agriculture and Imagery Program           |
| <b>NALL</b>    | Navigable Area Limit Line                          |
| <b>NM</b>      | Notice to Mariners                                 |
| <b>NMEA</b>    | National Marine Electronics Association            |
| <b>NOAA</b>    | National Oceanic and Atmospheric Administration    |
| <b>NOS</b>     | National Ocean Service                             |
| <b>NRT</b>     | Navigation Response Team                           |
| <b>NSD</b>     | Navigation Services Division                       |
| <b>OCS</b>     | Office of Coast Survey                             |
| <b>OMAO</b>    | Office of Marine and Aviation Operations (NOAA)    |
| <b>OPS</b>     | Operations Branch                                  |
| <b>MBES</b>    | Multibeam Echosounder                              |
| <b>NWLON</b>   | National Water Level Observation Network           |
| <b>PDBS</b>    | Phase Differencing Bathymetric Sonar               |
| <b>PHB</b>     | Pacific Hydrographic Branch                        |
| <b>POS/MV</b>  | Position and Orientation System for Marine Vessels |
| <b>PPK</b>     | Post Processed Kinematic                           |
| <b>PPP</b>     | Precise Point Positioning                          |
| <b>PPS</b>     | Pulse per second                                   |



| <b>Acronym</b> | <b>Definition</b>                            |
|----------------|--|
| <b>PRF</b>     | Project Reference File                       |
| <b>PS</b>      | Physical Scientist                           |
| <b>PST</b>     | Physical Science Technician                  |
| <b>RNC</b>     | Raster Navigational Chart                    |
| <b>RTK</b>     | Real Time Kinematic                          |
| <b>SBES</b>    | Singlebeam Echosounder                       |
| <b>SBET</b>    | Smooth Best Estimate and Trajectory          |
| <b>SNM</b>     | Square Nautical Miles                        |
| <b>SSS</b>     | Side Scan Sonar                              |
| <b>ST</b>      | Survey Technician                            |
| <b>SVP</b>     | Sound Velocity Profiler                      |
| <b>TCARI</b>   | Tidal Constituent And Residual Interpolation |
| <b>TPU</b>     | Total Propagated Error                       |
| <b>TPU</b>     | Topside Processing Unit                      |
| <b>USACE</b>   | United States Army Corps of Engineers        |
| <b>USCG</b>    | United States Coast Guard                    |
| <b>UTM</b>     | Universal Transverse Mercator                |
| <b>XO</b>      | Executive Officer                            |
| <b>ZDA</b>     | Global Positioning System timing message     |
| <b>ZDF</b>     | Zone Definition File                         |

APPENDIX I  
TIDES AND WATER LEVELS



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NOAA Ship THOMAS JEFFERSON (MOA-TJ)  
439 West York St  
Norfolk, VA 23510-1145

October 03, 2012

MEMORANDUM FOR: Gerald Hovis, Chief, Products and Services Branch, N/OPS3

FROM: Commander Lawrence T. Krepp, NOAA Ship THOMAS JEFFERSON (MOA-TJ)

SUBJECT: Request for Approved Tides/Water Levels

Please provide the following data:

1. Tide Note
2. Final TCARI grid
3. Six Minute Water Level data (Co-ops web site)

Transmit data to the following:

NOAA Ship THOMAS JEFFERSON (MOA-TJ)  
439 West York St  
Norfolk, VA 23510-1145

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

Project No.: OPR-B340-TJ-12  
Registry No.: H12413  
State: New York  
Locality: Long Island Sound  
Sublocality: Approaches to Northport, NY

Attachments containing:

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

cc: MOA-TJ



---

| Year_DOY | Min Time | Max Time |
|----------|----------|----------|
| 2012_221 | 13:21:06 | 20:56:24 |
| 2012_222 | 19:38:29 | 20:59:28 |
| 2012_224 | 13:29:26 | 21:16:51 |
| 2012_225 | 12:43:55 | 21:13:09 |
| 2012_226 | 12:25:38 | 21:08:20 |
| 2012_227 | 12:31:00 | 21:19:16 |
| 2012_228 | 12:38:19 | 21:17:36 |
| 2012_229 | 12:23:38 | 21:13:52 |
| 2012_234 | 13:26:27 | 21:15:54 |
| 2012_235 | 12:19:48 | 21:14:36 |
| 2012_236 | 12:13:43 | 21:25:48 |
| 2012_237 | 12:13:47 | 19:33:42 |
| 2012_238 | 13:02:20 | 20:02:14 |
| 2012_239 | 14:01:09 | 19:32:00 |
| 2012_240 | 12:36:06 | 13:51:34 |
| 2012_241 | 13:24:39 | 17:20:37 |
| 2012_264 | 16:02:46 | 20:54:17 |
| 2012_265 | 12:56:29 | 21:16:49 |



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

**TIDE NOTE FOR HYDROGRAPHIC SURVEY**

**DATE :** October 04, 2012

**HYDROGRAPHIC BRANCH:** Atlantic  
**HYDROGRAPHIC PROJECT:** OPR-B340-TJ-2012  
**HYDROGRAPHIC SHEET:** H12413

**LOCALITY:** Approaches to Northport, Long Island Sound, NY  
**TIME PERIOD:** August 08 - September 21, 2012

**TIDE STATION USED:** New Haven, CT 846-5705  
Lat. 41° 17.0' N Long. 72° 54.5' W  
**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 1.946 meters

**TIDE STATION USED:** Bridgeport, CT 846-7150  
Lat. 41° 10.4' N Long. 73° 10.9' W  
**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 2.129 meters

**Tide STATION USED:** Kings Point, NY 851-6945  
Lat. 40° 48.6' Long. 73° 45.9' W  
**PLANE OF REFERENCE (MEAN LOWER LOW WATER):** 0.000 meters  
**HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE:** 2.268 meters

**REMARKS: RECOMMENDED GRID**

Please use the TCARI grid "B340TJ2012\_Rev.tc" as the final grid for project OPR-B340-TJ-2012, Registry No. H12413, during the time period between August 08 and September 21, 2012.

**Refer to attachments for grid 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).

**HOVIS.GERALD**  
**D.THOMAS.13**  
**65860250**

Digitally signed by  
HOVIS.GERALD.THOMAS.1365860250  
DN: c=US, o=U.S. Government,  
ou=DoD, ou=PKI, ou=OTHER,  
cn=HOVIS.GERALD.THOMAS.1365860  
250  
Date: 2012.10.11 08:28:16 -04'00'

CHIEF, PRODUCTS AND SERVICES BRANCH





# Preliminary as Final TCARI grid for OPR-B340-TJ-2012 (Revised), Registry No. H12413

## Approaches to Northport, Long Island Sound, NY

### APPROACHES TO NEW YORK NANTUCKET SHOALS TO FIVE FATHOM BANK

**LORAN-C**  
GENERAL EXPLANATION

**RATES ON THIS CHART**  
1980-N 1980-A 1980-Y

**CAUTION**  
This chart is a preliminary chart and is subject to change without notice.

**NOTES**  
1. This chart is a preliminary chart and is subject to change without notice.

**REVISIONS**  
This chart is a preliminary chart and is subject to change without notice.

**ABBREVIATIONS**  
This chart is a preliminary chart and is subject to change without notice.

**EXPLANATIONS**  
This chart is a preliminary chart and is subject to change without notice.

**NOTES**  
This chart is a preliminary chart and is subject to change without notice.

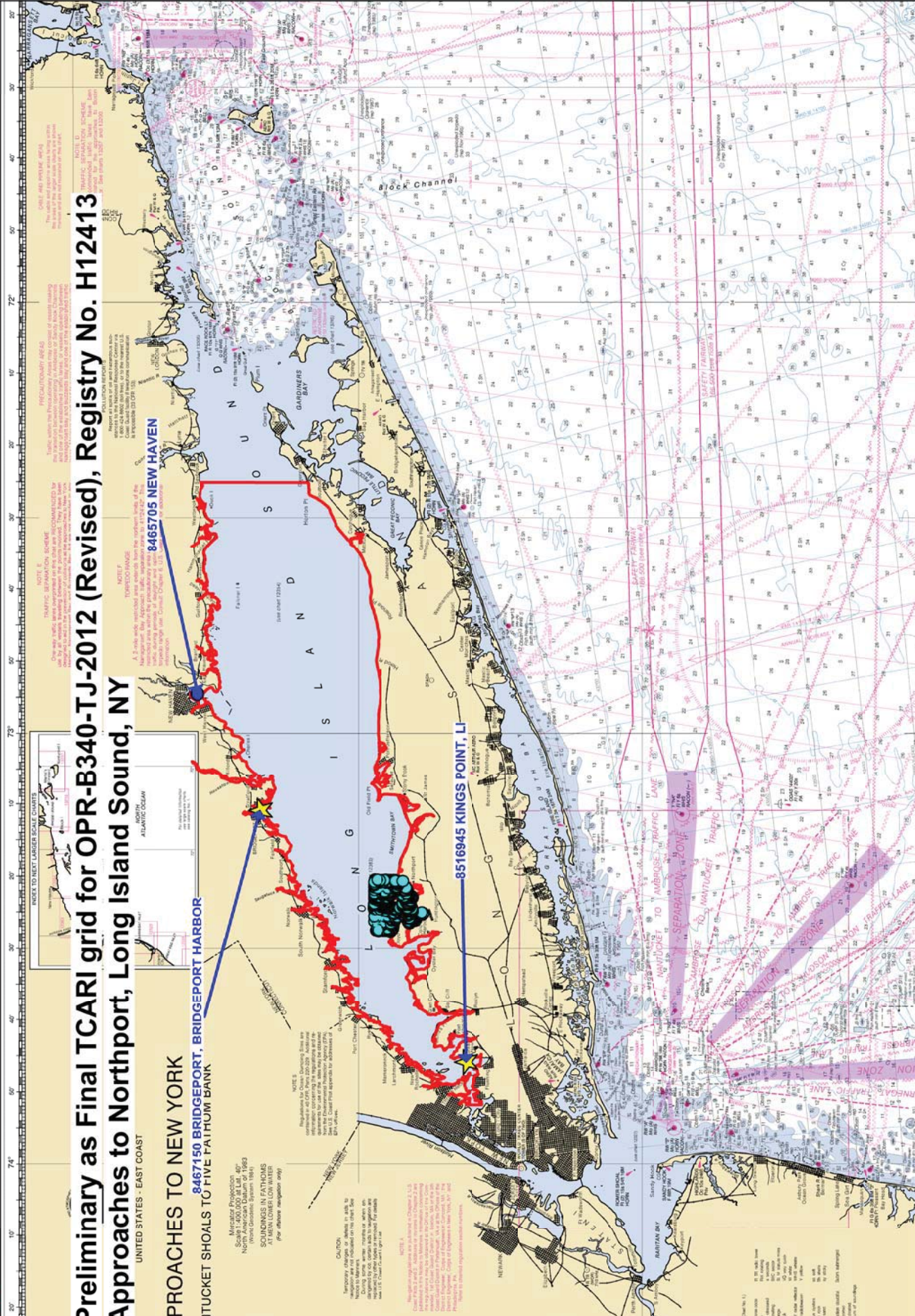
**ABBREVIATIONS**  
This chart is a preliminary chart and is subject to change without notice.

**EXPLANATIONS**  
This chart is a preliminary chart and is subject to change without notice.

**NOTES**  
This chart is a preliminary chart and is subject to change without notice.

**ABBREVIATIONS**  
This chart is a preliminary chart and is subject to change without notice.

**EXPLANATIONS**  
This chart is a preliminary chart and is subject to change without notice.



INDEX TO NEXT LARGER SCALE CHARTS

ATLANTIC OCEAN

BRIDGEPORT HARBOR

8467150 BRIDGEPORT, BRIDGEPORT HARBOR

8465705 NEW HAVEN

8516945 KINGS POINT, LI

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

74° 30' 00" W

74° 45' 00" W

75° 00' 00" W

75° 15' 00" W

75° 30' 00" W

75° 45' 00" W

76° 00' 00" W

76° 15' 00" W

76° 30' 00" W

76° 45' 00" W

77° 00' 00" W

77° 15' 00" W

77° 30' 00" W

77° 45' 00" W

78° 00' 00" W

78° 15' 00" W

78° 30' 00" W

78° 45' 00" W

79° 00' 00" W

40° 00' 00" N

40° 15' 00" N

40° 30' 00" N

40° 45' 00" N

41° 00' 00" N

41° 15' 00" N

41° 30' 00" N

41° 45' 00" N

42° 00' 00" N

42° 15' 00" N

42° 30' 00" N

42° 45' 00" N

43° 00' 00" N

43° 15' 00" N

43° 30' 00" N

43° 45' 00" N

44° 00' 00" N

44° 15' 00" N

44° 30' 00" N

44° 45' 00" N

45° 00' 00" N

45° 15' 00" N

45° 30' 00" N

45° 45' 00" N

46° 00' 00" N

46° 15' 00" N

46° 30' 00" N

46° 45' 00" N

47° 00' 00" N

47° 15' 00" N

47° 30' 00" N

47° 45' 00" N

48° 00' 00" N

48° 15' 00" N

48° 30' 00" N

48° 45' 00" N

49° 00' 00" N

49° 15' 00" N

49° 30' 00" N

49° 45' 00" N

50° 00' 00" N

50° 15' 00" N

50° 30' 00" N

50° 45' 00" N

51° 00' 00" N

51° 15' 00" N

51° 30' 00" N

51° 45' 00" N

52° 00' 00" N

52° 15' 00" N

52° 30' 00" N

52° 45' 00" N

53° 00' 00" N

53° 15' 00" N

53° 30' 00" N

53° 45' 00" N

54° 00' 00" N

54° 15' 00" N

54° 30' 00" N

54° 45' 00" N

55° 00' 00" N

55° 15' 00" N

55° 30' 00" N

55° 45' 00" N

56° 00' 00" N

56° 15' 00" N

56° 30' 00" N

56° 45' 00" N

57° 00' 00" N

57° 15' 00" N

57° 30' 00" N

57° 45' 00" N

58° 00' 00" N

58° 15' 00" N

58° 30' 00" N

58° 45' 00" N

59° 00' 00" N

59° 15' 00" N

59° 30' 00" N

59° 45' 00" N

60° 00' 00" N

60° 15' 00" N

60° 30' 00" N

60° 45' 00" N

61° 00' 00" N

61° 15' 00" N

61° 30' 00" N

61° 45' 00" N

62° 00' 00" N

62° 15' 00" N

62° 30' 00" N

62° 45' 00" N

63° 00' 00" N

63° 15' 00" N

63° 30' 00" N

63° 45' 00" N

63° 00' 00" N

63° 15' 00" N

63° 30' 00" N

63° 45' 00" N

64° 00' 00" N

64° 15' 00" N

64° 30' 00" N

64° 45' 00" N

65° 00' 00" N

65° 15' 00" N

65° 30' 00" N

65° 45' 00" N

66° 00' 00" N

66° 15' 00" N

66° 30' 00" N

66° 45' 00" N

67° 00' 00" N

67° 15' 00" N

67° 30' 00" N

67° 45' 00" N

68° 00' 00" N

68° 15' 00" N

68° 30' 00" N

68° 45' 00" N

69° 00' 00" N

69° 15' 00" N

69° 30' 00" N

69° 45' 00" N

70° 00' 00" N

70° 15' 00" N

70° 30' 00" N

70° 45' 00" N

71° 00' 00" N

71° 15' 00" N

71° 30' 00" N

71° 45' 00" N

72° 00' 00" N

72° 15' 00" N

72° 30' 00" N

72° 45' 00" N

73° 00' 00" N

73° 15' 00" N

73° 30' 00" N

73° 45' 00" N

74° 00' 00" N

74° 15' 00" N

74° 30' 00" N

74° 45' 00" N

75° 00' 00" N

75° 15' 00" N

75° 30' 00" N

75° 45' 00" N

76° 00' 00" N

76° 15' 00" N

76° 30' 00" N

76° 45' 00" N

77° 00' 00" N

77° 15' 00" N

77° 30' 00" N

77° 45' 00" N

78° 00' 00" N

78° 15' 00" N

78° 30' 00" N

78° 45' 00" N

79° 00' 00" N

79° 15' 00" N

79° 30' 00" N

79° 45' 00" N

80° 00' 00" N

80° 15' 00" N

80° 30' 00" N

80° 45' 00" N

81° 00' 00" N

81° 15' 00" N

81° 30' 00" N

81° 45' 00" N

81° 00' 00" N

81° 15' 00" N

81° 30' 00" N

81° 45' 00" N

82° 00' 00" N

82° 15' 00" N

82° 30' 00" N

82° 45' 00" N

83° 00' 00" N

83° 15' 00" N

83° 30' 00" N

83° 45' 00" N

84° 00' 00" N

84° 15' 00" N

84° 30' 00" N

84° 45' 00" N

85° 00' 00" N

85° 15' 00" N

85° 30' 00" N

85° 45' 00" N

86° 00' 00" N

86° 15' 00" N

86° 30' 00" N

86° 45' 00" N

87° 00' 00" N

87° 15' 00" N

87° 30' 00" N

87° 45' 00" N

88° 00' 00" N

&lt;





19 November 2012

MEMORANDUM TO: Jeffrey Ferguson  
Chief, Hydrographic Surveys Division

FROM: Lawrence T. Krepp, CDR/NOAA  
Commanding Officer

SUBJECT: H12413 Interim Deliverables

As per the project instructions for OPR-B340-TJ-12, NOAA Ship *Thomas Jefferson* was tasked with providing a recommendation on the vertical transformation technique to be used for each sheet. This recommendation is based upon an analysis of crossline data processed with TCARI tidal zoning and VDatum ERS. This analysis was performed using Pydro's Post Acquisition Tools.

### **Crossline Analysis**

Crosslines from H12413 were parallel processed with one set of depths reduced to MLLW via TCARI tidal zoning and the other set reduced via VDatum ERS. Pydro's Post Acquisition Tool "Compare Time Series Data" yielded the following results:

#### **File-wise Statistics**

##### **3101)**

ERS\_Time\_Series\_TJ\_3101\_Reson7125\_400khz\_MiddlePD.txt | H:\Surveys\H12413\Descriptive Report\Separates\IV\_Crossline\_Comparisons\ERS\_TCARI\_Times\_series  
- (minus)  
TCARI\_Time\_series\_TJ\_3101\_Reson7125\_400khz\_MiddlePD.txt | H:\Surveys\H12413\Descriptive Report\Separates\IV\_Crossline\_Comparisons\ERS\_TCARI\_Times\_series  
**N,mean,stdev = 122397,0.130,0.055**

##### **3102)**

ERS\_Time\_Series\_TJ\_3102\_Reson7125\_400KHZ\_MiddlePD.txt | H:\Surveys\H12413\Descriptive Report\Separates\IV\_Crossline\_Comparisons\ERS\_TCARI\_Times\_series  
- (minus)  
TCARI\_Time\_series\_TJ\_3102\_Reson7125\_400KHZ\_MiddlePD.txt | H:\Surveys\H12413\Descriptive Report\Separates\IV\_Crossline\_Comparisons\ERS\_TCARI\_Times\_series  
**N,mean,stdev = 43891,0.032,0.028**

##### **S222)**

ERS\_Time\_Series\_TJ\_S222\_RESON7125\_STBD\_MiddlePD.txt | H:\Surveys\H12413\Descriptive Report\Separates\IV\_Crossline\_Comparisons\ERS\_TCARI\_Times\_series  
- (minus)  
TCARI\_Time\_series\_TJ\_S222\_RESON7125\_STBD\_MiddlePD.txt | H:\Surveys\H12413\Descriptive Report\Separates\IV\_Crossline\_Comparisons\ERS\_TCARI\_Times\_series  
**N,mean,stdev = 56356,-0.086,0.032**



## **Sensor-wise Statistics**

-----  
**MiddlePD: N,mean,stdev = 222644,0.056,0.101**

## **Discussion**

Results of the analysis showed that the mean difference between ERS and TCARI tidal corrections was 5.6cm with a standard deviation of 10.1cm. The largest contributor was 3101. A detailed analysis of 3101's crosslines was conducted.

To analyze where the difference in 3101's crosslines was coming from, two grids of 3101's crosslines were created: one with ERS applies and one with TCARI applied. These grids were then compared against the VBES grid's shoal attribute. (These crosslines were primarily crosslines over the VBES lines and the larger differences between ERS and TCARI were in the area of the VBES data). The difference between ERS and the VBES on average was 3.6cm whereas the difference between TCARI and the VBES lines was 17.8cm. Based on this, it is assumed that 3101 experienced a tidal problem on the two days that crosslines were run and that that is the source of the larger differences between ERS and TCARI.

## **Recommendation**

Our recommendation is to utilize ERS VDatum for tidal corrections for this survey. The results of the analysis show that there are only minor differences between sounding data reduced to MLLW using TCARI and ERS VDatum. This difference is less than the uncertainty of the VDatum model (10.2cm).

## APPENDIX II

### SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDENCE

No supplemental survey records or correspondence

APPENDIX III

SURVEY FEATURES REPORT

AWOIS - thirteen  
DTONs - two  
Maritime Boundary - none  
Wrecks - thirty-nine



# H12413 AWOIS

**Registry Number:** H12413  
**State:** New York  
**Locality:** Long Island Sound  
**Sub-locality:** Approaches to Northport, NY  
**Project Number:** OPR-B340-TJ-12  
**Survey Date:** 08/08/2012 - 09/21/2012

## Charts Affected

| Number | Edition | Date       | Scale (RNC)   | RNC Correction(s)*   |
|--------|---------|------------|---|--|
| 12365  | 27th    | 09/01/2012 | 1:20,000 (12365_1)  | USCG LNM: 10/8/2013 (1/21/2014)<br>CHS NTM: None (12/27/2013)<br>NGA NTM: 5/10/1997 (2/1/2014) |
| 12364  | 38th    | 07/01/2008 | 1:40,000 (12364_20)<br>1:20,000 (12364_18)<br>1:20,000 (12364_17) | [L]NTM: ?  |
| 12363  | 40th    | 06/01/2005 | 1:80,000 (12363_1)  | [L]NTM: ?  |
| 12300  | 47th    | 05/01/2008 | 1:400,000 (12300_1)   | [L]NTM: ?  |
| 13006  | 34th    | 05/01/2007 | 1:675,000 (13006_1)   | [L]NTM: ?  |
| 5161   | 13th    | 10/01/2003 | 1:1,058,400 (5161_1)  | [L]NTM: ?  |
| 13003  | 49th    | 04/01/2007 | 1:1,200,000 (13003_1)   | [L]NTM: ?  |

\* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## Features

| No. | Name        | Feature Type | Survey Depth | Survey Latitude | Survey Longitude | AWOIS Item |
|-----|-------------|--------------|--------------|-----------------|------------------|------------|
| 1.1 | AWOIS 6811  | Wreck        | 10.89 m      | 40° 57' 01.3" N | 073° 27' 05.3" W | 6811       |
| 1.2 | AWOIS 2641  | Wreck        | 6.68 m       | 40° 57' 15.1" N | 073° 26' 02.9" W | 2641       |
| 1.3 | AWOIS 11382 | Obstruction  | 13.69 m      | 40° 57' 15.2" N | 073° 20' 31.9" W | 11382      |
| 1.4 | OBSTRUCTION | AWOIS        | [no data]    | [no data]       | [no data]        | ---        |
| 1.5 | OBSTRUCTION | AWOIS        | [no data]    | [no data]       | [no data]        | ---        |
| 1.6 | OBSTRUCTION | AWOIS        | [no data]    | [no data]       | [no data]        | ---        |
| 1.7 | OBSTRUCTION | AWOIS        | [no data]    | [no data]       | [no data]        | ---        |
| 1.8 | SOUNDING    | AWOIS        | [no data]    | [no data]       | [no data]        | ---        |

|      |             |       |           |           |           |     |
|------|-------------|-------|-----------|-----------|-----------|-----|
| 1.9  | OBSTRUCTION | AWOIS | [no data] | [no data] | [no data] | --- |
| 1.10 | OBSTRUCTION | AWOIS | [no data] | [no data] | [no data] | --- |
| 1.11 | OBSTRUCTION | AWOIS | [no data] | [no data] | [no data] | --- |
| 1.12 | MARKER      | AWOIS | [no data] | [no data] | [no data] | --- |
| 1.13 | WRECK       | AWOIS | [no data] | [no data] | [no data] | --- |

## 1.1) AWOIS 6811

### Primary Feature for AWOIS Item #6811

**Search Position:** 40° 57' 01.3" N, 073° 27' 05.2" W  
**Historical Depth:** 10.36 m  
**Search Radius:** 200  
**Search Technique:** S4,DI,ES  
**Technique Notes:** [None]

#### History Notes:

##### HISTORY

H5142/31WD--34 FT. GROUNDING, CLEARED BY 34 FT.,LOCATED IN LAT 40-57-04.8N, LONG 73-26-58.0W (SCALED FROM SURVEY AT 1:20,000). (ENTERED MSM 6/88)

FE321SS/88--OPR-B660-HE-88; 400% SSS COVERAGE USING 50M RANGE SCALE FOR COMPLETE SEARCH AREA WITH ONE SIGNIFICANT CONTACT; DIVER INVESTIGATION REVEALED CYLINDRICAL METAL WRECKAGE ENTANGLED WITH FISHING NETS ON ONE END; DIVER COULD NOT IDENTIFY NATURE OF WRECKAGE DUE TO POOR VISIBILITY; HIGHEST POINT WAS FOUND TO BE ON THE TOP OF THE CYLINDER NEAR WHAT HAD BEEN A HATCH OR DOOR IN THE WRECKAGE; LORAN C RATES: 9960-W 15285.4, 9960-X 26806.8, 9960-Y 43951.1, 9960-Z 60017.0; FOUND APPROXIMATELY 237M WSW FROM THE REPORTED POSITION OF THE WIRE DRAG GROUNDING; HYDROGRAPHER AND EVALUATOR RECOMMENDED REVISING CHARTED SYMBOL TO OBSTR (WRECKAGE) WITH A LEAST OF 34 FT. (UPDATED MSM 4/90)

H10348/90-- OPR-B285-AHP; NOT ADDRESSED BY HYDROGRAPHER. BROUGHT FORWARD. (UP 2/5/93, SJV)

### Survey Summary

**Survey Position:** 40° 57' 01.3" N, 073° 27' 05.3" W  
**Least Depth:** 10.89 m (= 35.71 ft = 5.952 fm = 5 fm 5.71 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_AWOIS.000  
**FOID:** 0\_0001351192 00001(FFFE00149E180001)

**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

WRECKS/remrks: Wreck was found 20m south of position listed in AWOIS database, but still inside circle of charted dangers wreck circle.

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| H12413_AWOIS.000 | 0_0001351192 00001 | 0.00  | 000.0   | Primary             |
| AWOIS_EXPORT     | AWOIS # 6811       | 1.66  | 232.0   | Secondary (grouped) |

### Hydrographer Recommendations

move wreck 20 m south

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

35ft (12365\_1, 12364\_20, 12363\_1)

6fm (12300\_1, 13006\_1, 13003\_1)

10.9m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)

**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSON - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413  
 TECSOU - 3:found by multi-beam  
 VALSOU - 10.885 m  
 WATLEV - 3:always under water/submerged

### Office Notes

**SAR Note:** The feature is visible in the full MBES data. Recommend to move it 23 meters to the South of the charted location.

COMPILE: Concur. Delete charted dangerous wreck, least depth 34 feet. Add a dangerous wreck least depth 35.71 ft in present survey position. Update AWOIS database with present survey findings.



### Feature Images

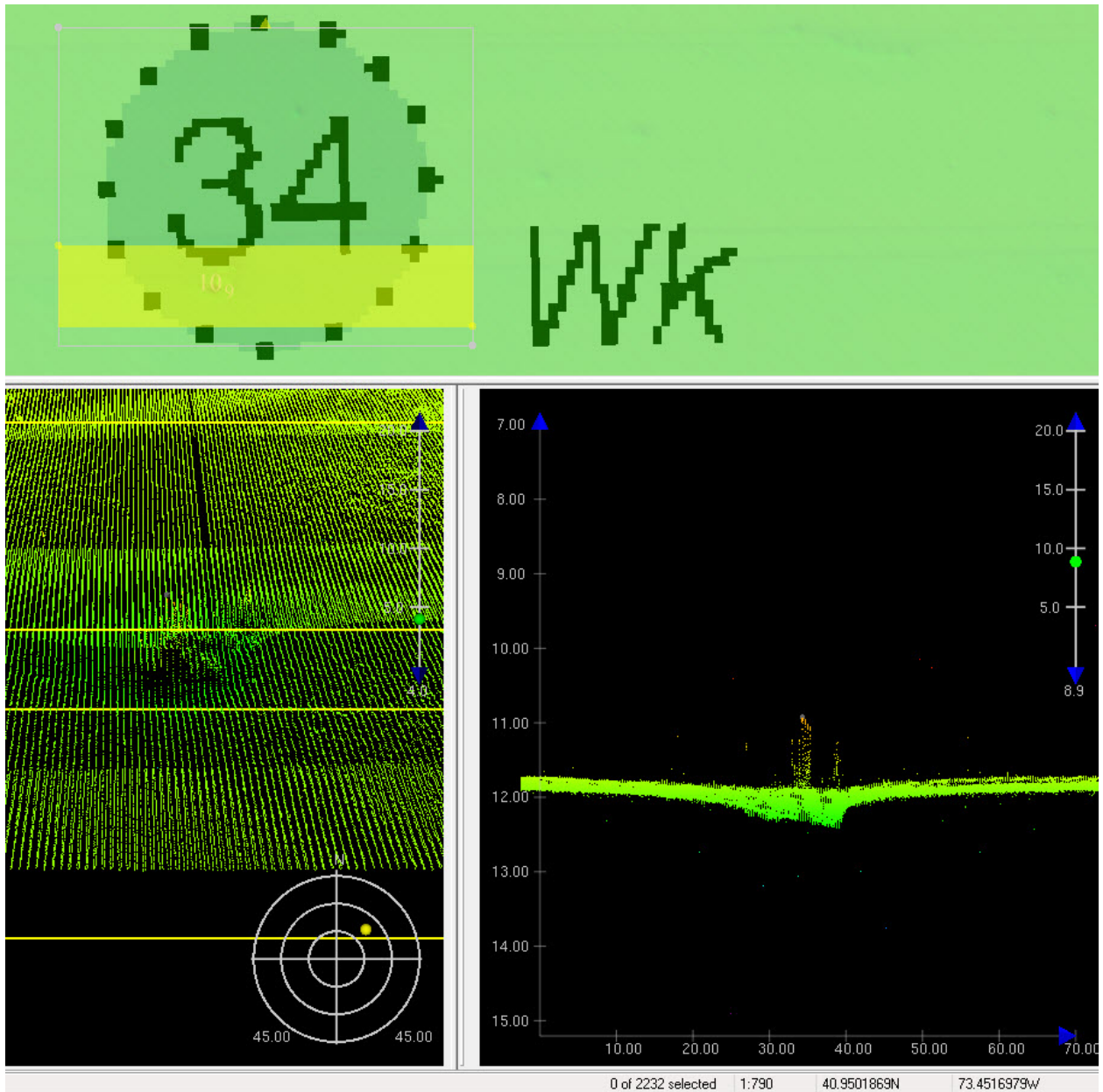


Figure 1.1.1

## 1.2) AWOIS 2641

### Primary Feature for AWOIS Item #2641

**Search Position:** 40° 57' 15.3" N, 073° 26' 02.8" W  
**Historical Depth:** 6.71 m  
**Search Radius:** 700  
**Search Technique:** S2,DI,SD,##  
**Technique Notes:** [None]

#### History Notes:

##### SURVEY REQUIREMENT COMMENTS

LOCAL DIVERS MAY PROVIDE ADDITIONAL DATA TO AID IN LOCATING WRECK. CONDUCT INVESTIGATION AROUND LORAN RATES RATHER THAN GEOGRAPHIC POSITION.

##### HISTORY

CL723/63--CGS/COE; TUG. SANK 12/30/62 AT ENTRANCE TO HUNTINGTON BAY AND ABANDONED BY STEERS SAND AND GRAVEL CORP. COE INVESTIGATION SHOWED WK TO BE LYING ON EVEN KEEL, ORIENTED NE-SW, 20 FT LD(MLW). COE CONSIDERED REMOVAL UNJUSTIFIED SINCE POSES NO HAZARD TO NAVIGATION; PUBLISHED IN NM19/63 AND NM30/63.

FE321SS/88--OPR-B660-HE-88; WRECK LOCATED ON FIRST SSS LINE RUN THROUGH THE SEARCH RADIUS; DIVER INVESTIGATION FOUND STACK AND FLYING BRIDGE, BUT THE HIGHEST POINT ON WRECK WAS FOUND TO BE A MOUNTING FOR A SEARCH LIGHT ON TOP OF THE PILOT HOUSE; WITH A LEAST DEPTH OF 22 FT.; WRECK IS AN 80 FT. STEEL TUG RESTING UPRIGHT ON A MUDDY BOTTOM IN ABOUT 41 FT. OF WATER; WRECK IS INTACT AND RISES ABOUT 18 FT ABOVE THE BOTTOM; THERE IS A RAISED SUPERSTRUCTURE WHICH HAS A HIGH SMOKE STACK AND A RAISED PILOT HOUSE; APPEARS TO BE AN OCEAN GOING TUG; HAS A DAVIT OR SIMILAR STRUCTURE ON PORT QUARTER; LORAN RATES EXACTLY MATCH THOSE PROVIDED BY MR. TARACKA BELOW; HYDROGRAPHER AND EVALUATOR RECOMMENDED CHARTING A SUNKEN DANGEROUS WRECK WITH A LEAST DEPTH OF 22 FT. IN LAT 40-57-15.311N, LONG 73-26-02.780W. (ENTERED MSM 4/90)

H10348/90-- OPR-B285-AHP; NOT ADDRESSED BY HYDROGRAPHER. BROUGHT FORWARD. (UP 2/5/93, SJV)

## DESCRIPTION

195 LORAN C RATES PROVIDED BY MR. RICHARD TARACKA, GREENWICH, CT. POLICE DEPARTMENT, TEL. 203-622-8007; 9960-X 26798.6, 9960-Y 43951.4. (ENTERED MSM 2/89)

## Survey Summary

**Survey Position:** 40° 57' 15.1" N, 073° 26' 02.9" W  
**Least Depth:** 6.68 m (= 21.91 ft = 3.652 fm = 3 fm 3.91 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_AWOIS.000  
**FOID:** 0\_0001351187 00001(FFFE00149E130001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

WRECKS/remrks: Wreck was found 30m south of position listed in AWOIS database. Located inside currently charted dangers wreck circle.

## Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| H12413_AWOIS.000 | 0_0001351187 00001 | 0.00  | 000.0   | Primary             |
| AWOIS_EXPORT     | AWOIS # 2641       | 8.05  | 206.2   | Secondary (grouped) |

## Hydrographer Recommendations

Update wreck to current position and update depth to 4 meters.

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

22ft (12365\_1, 12364\_20, 12363\_1)

3 ½fm (12300\_1, 13006\_1, 13003\_1)

6.7m (5161\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area

NINFOM - Chart wreck  
QUASOU - 6:least depth known  
SORDAT - 20120921  
SORIND - US,US,graph,H12413  
TECSOU - 3:found by multi-beam  
VALSOU - 6.678 m  
WATLEV - 3:always under water/submerged

### **Office Notes**

SAR Note: Feature updated by SAR reviewer. Feature is visible in full MBES coverage. Recommend to move the wreck 20 meters to the south of the charted location. The least depth remains 22ft.

COMPILE: Concur. Delete charted dangerous wreck, least depth 22 feet. Add a dangerous wreck least depth 21.91 ft in present survey position. Update AWOIS database with present survey findings.

### Feature Images

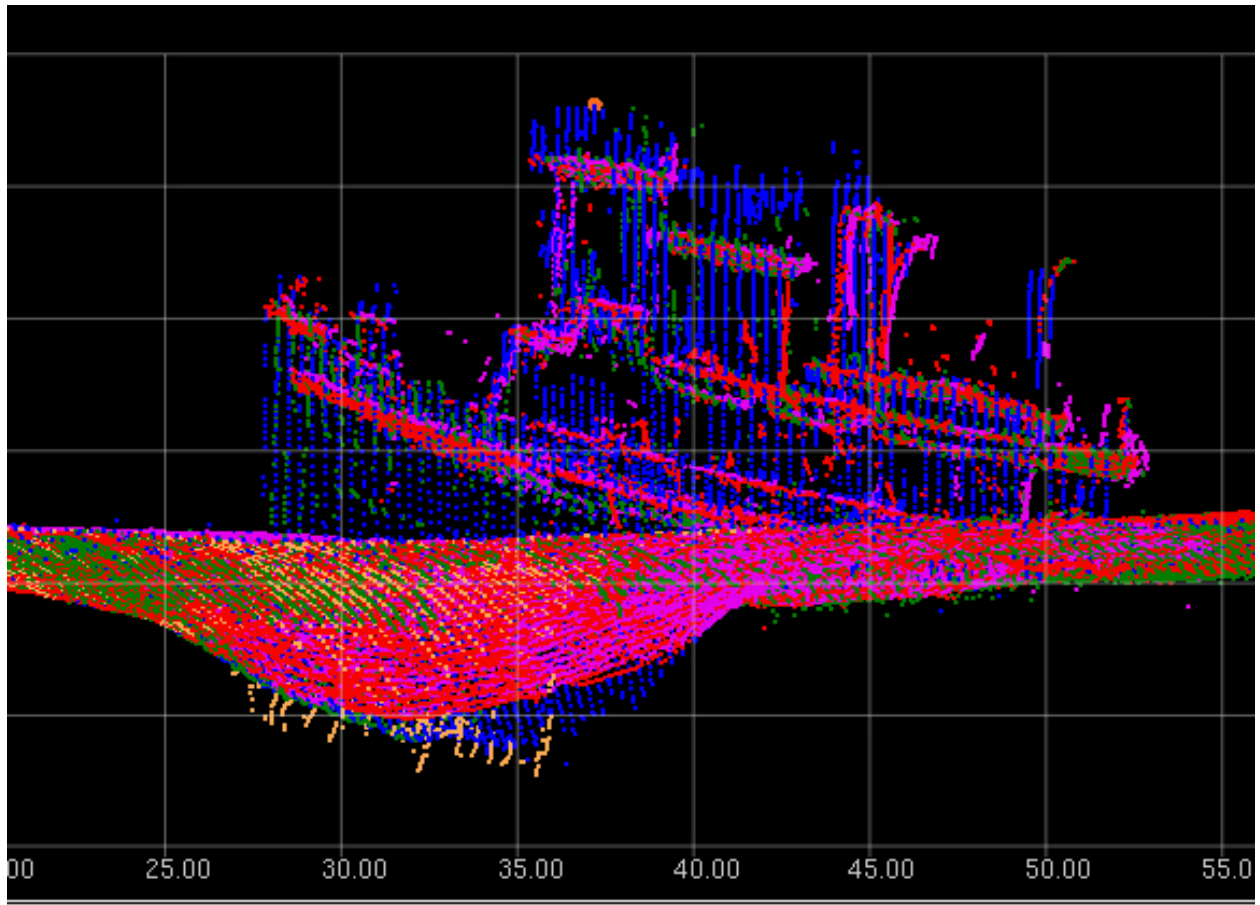


Figure 1.2.1



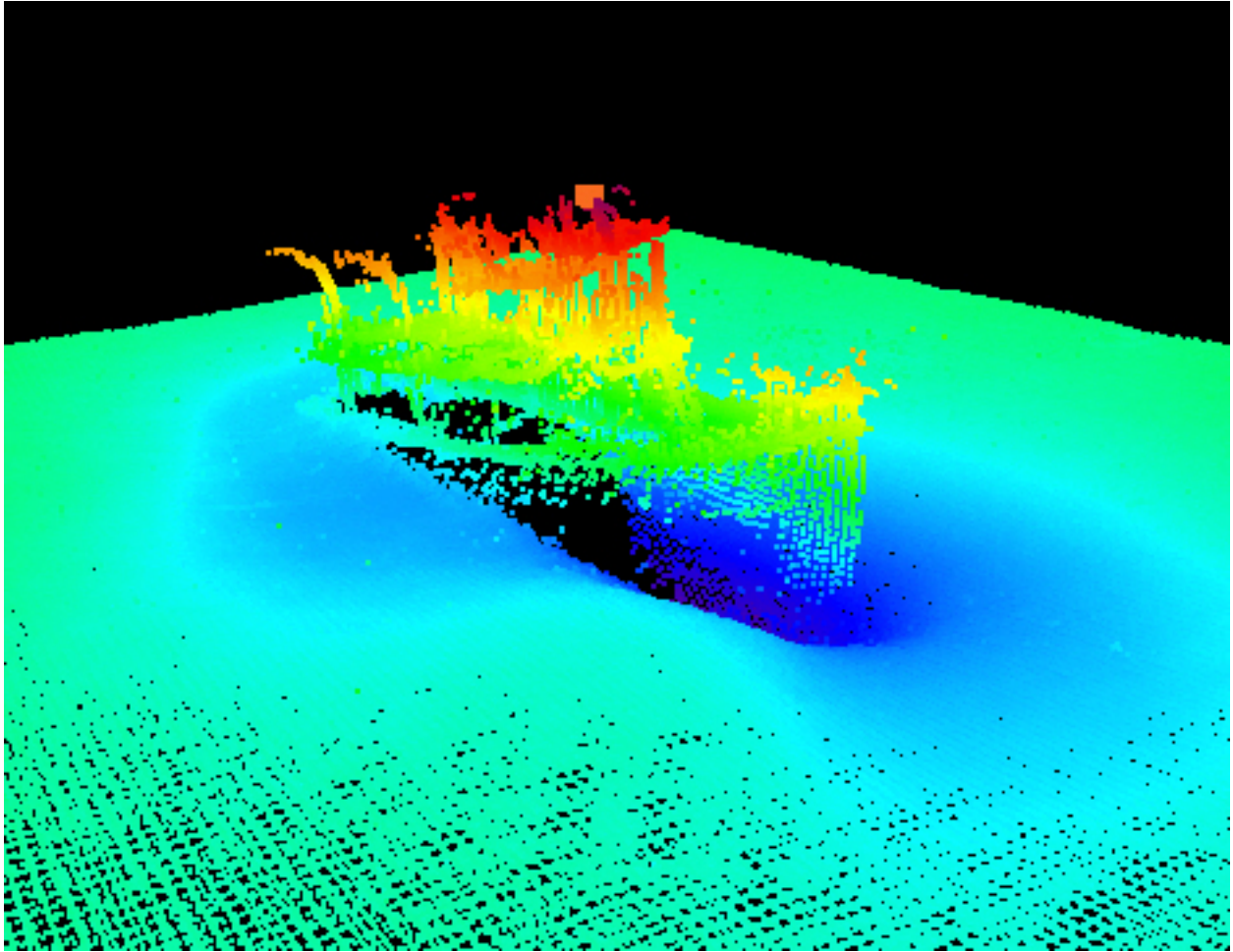


Figure 1.2.2

### 1.3) AWOIS 11382

#### Primary Feature for AWOIS Item #11382

**Search Position:** 40° 57' 15.4" N, 073° 20' 31.2" W  
**Historical Depth:** [None]  
**Search Radius:** 0  
**Search Technique:** MB, SSS  
**Technique Notes:** [None]

#### History Notes:

HISTORY

\*\*\*NOTE: AWOIS POSITION IS THAT OF THE UNLOADING FACILITIES.\*\*\*

NM27/66--USN; CONSTRUCTION OF OFFSHORE UNLOADING FACILITIES WILL BE IN PROGRESS UNTILL THE END OF SEPTEMBER IN THE VICINITY OF 40°57'16" N., 73°20'32" W.

CL1000/66--C DRAWING PLANS OF THE OFFSHORE UNLOADING FACILITIES AND THE PIPE LEADING OUT TO IT. 24" WELDED STEEL PIPE LINE CONCRETE JACKETED AND 4" WELDED STEEL PIPE LINE CONCRETE JACKETED TO BE BURIED IN A TRENCH APPROXIMATELY 5' BELOW THE NATURAL BOTTOM.

SCALED POSITION: UNDERGROUND PIPE EXTENENDS FROM LAT 40-57-08.29N, LONG 073-20-30.66W TO LAT 40-55-38.39N, LONG 073-20-27.02W (NAD 83).

S00002/02--S-B600-RU--Obstruction looks like some sort of twisted metal. Obstruction very close to mooring buoy "C"; Chart 45ft Obstrn in Lat. 40°57'15.35", Long. 73°20'31.84" (RES 9/20/07).

#### Survey Summary

**Survey Position:** 40° 57' 15.2" N, 073° 20' 31.9" W  
**Least Depth:** 13.69 m (= 44.92 ft = 7.487 fm = 7 fm 2.92 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_AWOIS.000  
**FOID:** 0\_ 0001351229 00001(FFFE00149E3D0001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

OBSTRN/remrks: Obstruction was found on current survey, as well as OPR-B340-TJ-12, H12414. Shoalest depth found on this survey.

## Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| H12413_AWOIS.000 | 0_0001351229 00001 | 0.00  | 000.0   | Primary             |
| AWOIS_EXPORT     | AWOIS # 11382      | 17.63 | 255.1   | Secondary (grouped) |

## Hydrographer Recommendations

Retain as charted

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

45ft (12365\_1, 12364\_20, 12363\_1)

7 ½fm (12300\_1, 13006\_1, 13003\_1)

13.7m (5161\_1)

## S-57 Data

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

**Attributes:** EXPSOU - 2:shoaler than range of depth of the surrounding depth area

NINFOM - Chart obstruction

QUASOU - 6:least depth known

SORDAT - 20120921

SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 13.692 m

WATLEV - 3:always under water/submerged

## Office Notes

**SAR Note:**The feature is visible in the full MBES coverage data. Recommend to move the feature 17 meters to the South West.

**COMPILE:** Concur. Delete charted dangerous obstruction, least depth 45 feet. Add a dangerous obstruction least depth 44.92 ft in present survey position. Update AWOIS database with present survey findings.

### Feature Images

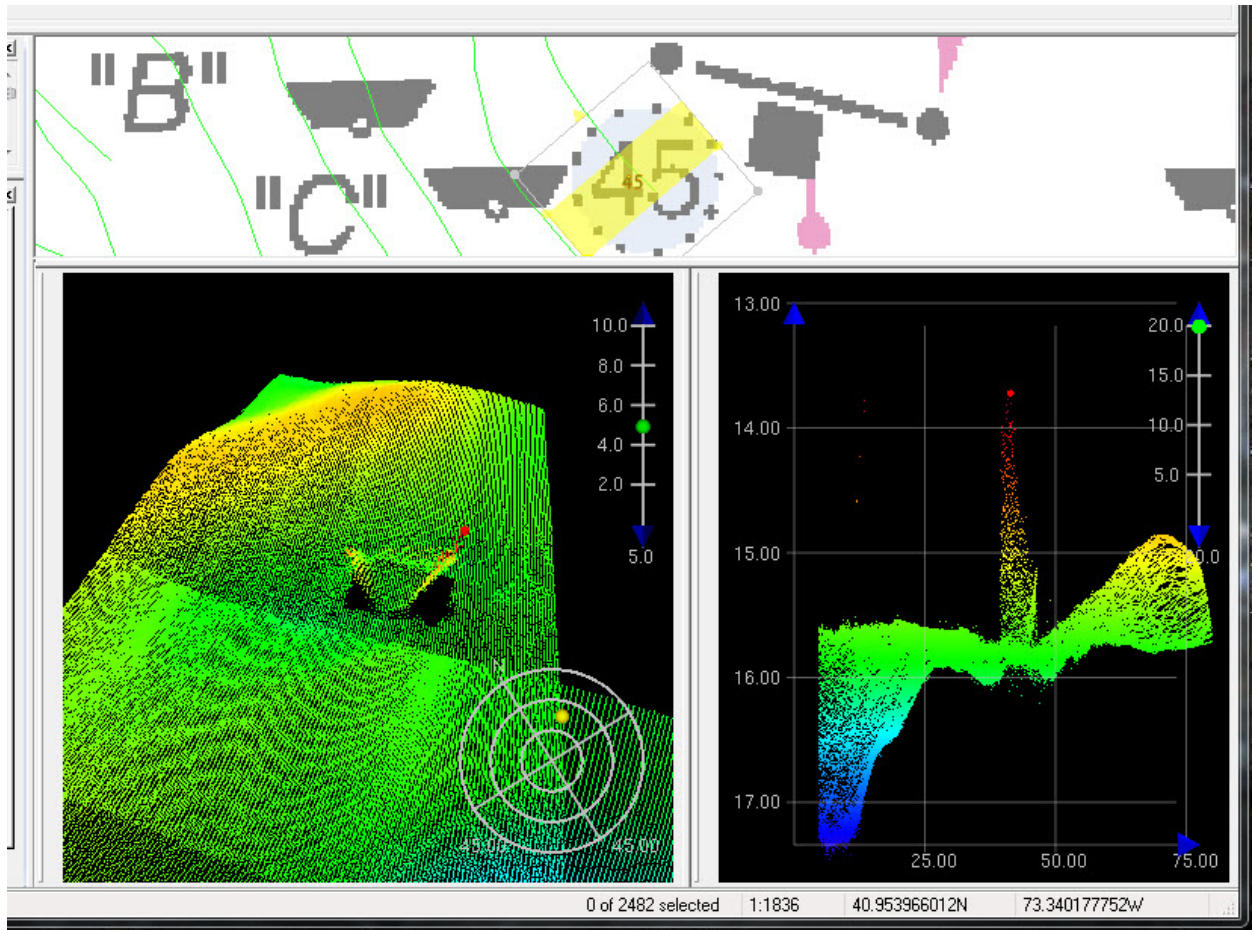


Figure 1.3.1

## 1.4) AWOIS 11822 - OBSTRUCTION

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 56' 24.3" N, 073° 21' 52.4" W  
**Historical Depth:** [None]  
**Search Radius:** 500  
**Search Technique:** SD, S2, SWMB, DI  
**Technique Notes:** [None]

**History Notes:**

HISTORY

CL386/92-- APPLICATION (PERMIT NO. 15855) DATED 4/20/90 TO PLACE OFF-BOTTOM SHELLFISH CULTURE RACKS (CLAMS/OYSTERS) IN LONG ISLAND SOUND BY MARK LASORSA, 3311 UNION BLVD. EAST ILSLIP, NY 11730, TEL. 516-277-9875 TO USACE. WILL BE LOCATED IN APPROX. LAT. 40-56-24N, LONG. 73-21-54W. ORIGINAL CONSTRUCTION MODIFIED ON 1/15/91. RACKS WILL BE 20 FEET BY 20 FEET (VICE 12 FEET BY 12 FEET) AND BE CONSTRUCTED OF 4-INCH WIDE STEEL CHANNEL, WELDED AND BOLTED TOGETHER (VICE TREATED LUMBER). TOTAL OF 35 RACKS WILL HOLD 162 TRAYS. LAYOUT PLAN IS 5 ROWS, 30 FEET APART, 7 RACKS PER ROW. 24 FEET OF WATER OVER RACKS. RACKS WILL BE PLACED IN A RECTANGULAR LAYOUT WITHIN A 250-FOOT RADIUS CIRCLE. CHARTED AS "SHELLFISH RACKS (24 FT REP)". NOS FOLLOW-UP REQUEST DATED 5/10/91 RE. COMPLETION DATE RESULTED IN REPLY THAT PROJECT WAS ONGOING. SPECIAL CONDITION OF PERMIT REQUIRED OWNER TO REMOVE STRUCTURES WHEN WHEN NO LONGER IN USE. ATTEMPTS TO CONTACT OWNER AT TEL. NO. ABOVE BY N/CS31 (4/8/03) UNSUCCESSFUL. OUT OF SERVICE. (ENT 4/8/03, SJV)

### Survey Summary

**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 11822      | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351148 00001 | 0.00  | 000.0   | Secondary (grouped) |

## Hydrographer Recommendations

[None]

### S-57 Data

[None]

### Office Notes

SAR Note: The feature is not visible in the full MBES data.

COMPILE: Concur. No indication of obstruction found during present survey operations. Delete AWOIS 11822, a dangerous obstruction, least depth 24 feet rep., found only on raster 12365, not on ENC US5NY14M. Update the area with present survey depths and update the AWOIS database.



## 1.5) AWOIS 6701 - OBSTRUCTION

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 54' 36.6" N, 073° 22' 57.4" W  
**Historical Depth:** 7.92 m  
**Search Radius:** 100  
**Search Technique:** [None]  
**Technique Notes:** [None]

#### History Notes:

##### HISTORY

CL912/62--NEW YORK TRAP ROCK CORP. ADVISES A LOAD OF CRUSHED ì  
STONE WAS LOST AT ENTRANCE TO CENTERPORT HARBOR IN 30 FEET, ABOUT ì  
1,900 YDS. 46 DEG. 30 SEC. FROM CHARTED TANK (LAT. 40-53-57N, ì  
LONG 73-23-54W). POS. OF OBSTR. SCALED IN APPROX. POS. LAT ì  
40-54-36.2N, LONG 73-22-59.0W.

NM33/62--MADE INTO CHART LETTER, ABOVE.

FE191 (FE NO.5,1963)--SPECIAL PROJECT 2-63, CENERPORT HARBOR, ì  
LONG ISLAND OBSTRUCTION; LD BY FATHOMETER OF 26 FT.; CLEARED TO ì  
26 FT

CL512/63--PRELIMINARY REPORT ON ABOVE WD PROJECT; NO TRACE OF ì  
TRAP ROCK FOUND. BOTTOM CHARACTER VERY SOFT MUD. (ENT 5/88 SJV)

H10351/90-- OPR-B285-AHP; OBSTRUCTION LOCATED BY FATHOMETER ì  
WITH ECHO SOUNDER DEPTH OF 7.4 METERS (24 FEET) IN LAT. ì  
40-54-34.57N, LONG. 73-23-00.88W. NO DIVE INVESTIGATION DUE POOR ì  
WATER QUALITY. ITEM NOT DISPROVED. BROUGHT FORWARD TO SUPPLEMENT ì  
PRESENT SURVEY. ADDITIONAL WORK RECOMMENDED. (UP 7/26/93, SJV)

### Survey Summary

**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

## Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 6701       | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351126 00001 | 7.79  | 178.8   | Secondary (grouped) |

## Hydrographer Recommendations

[None]

## S-57 Data

[None]

## Office Notes

SAR Note: The feature was not verified in the full coverage MBES data or the 200% side scan sonar.

COMPILE: Concur. Consider AWOIS 6701 disproved. Delete charted dangerous obstruction, wire drag clearance depth 26 feet and update the area with present survey depths. Update the AWOIS database as well.

## 1.6) AWOIS 6704 - OBSTRUCTION

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 54' 38.4" N, 073° 25' 25.9" W  
**Historical Depth:** [None]  
**Search Radius:** 250  
**Search Technique:** BD,DI  
**Technique Notes:** [None]

**History Notes:**

HISTORY

CL1553/68--D.G. RUSHFORD, COMMANDER, USESSA, CHIEF, N.Y. FIELD ì  
 OFFICE TO DIRECTOR, C, ESSA: INFO. RECIEVED FROM VESSEL ì  
 STRIKING OBJECT AT 4.5 TO 5 FT. MLW (LOCATED ON CHART SECTION). ì  
 REPORTED BY ROBERT L. HALL, 262 RAY AVE. HUNTINGTON, N.Y. (TEL. ì  
 516-HA 1-3439. VESSEL NEEDED REPAIRS AS A RESULT OF INCIDENT. ì  
 RECOMMEND OBSTRUCTION BE CHARTED PENDING INVESTIGATION (COPY TO ì  
 3CGD, AIDS TO NAV. SECTION)  
 NM44/68--OBSTRUCTION COVERED 4.5 FT AT MLW REP. IN APPROX. POS. ì  
 LAT 40-54-38.0N, LONG 73-25-27.5W. (ENT 5/88 SJV)  
 H10351/90-- OPR-B285-AHP; DIVER AND ECHO SOUNDER INVESTIGATIONS ì  
 DISPROVED ITEM. CHART AS SURVEYED. 3.2-METER SHOAL IN LAT. ì  
 40-54-38.46N, LONG. 73-25-25.68W. SCATTERED ROCKS IN 10-METER ì  
 CIRCLE. (UP 7/26/93, SJV)

### Survey Summary

**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 6704       | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351125 00001 | 0.67  | 167.7   | Secondary (grouped) |

## Hydrographer Recommendations

[None]

### S-57 Data

[None]

### Office Notes

SAR Note: The feature is disproven using full MBES coverage and side scan sonar data. No item 1.3 meters deep is seen within 250 meters of the charted location. SS imagery portrays isolated rocks but none that fit AWOIS 6704 description.

COMPILE: Concur. Consider AWOIS 6704 disproved by the present survey. Delete the charted rock with a least depth of 10 feet. Update the chart with present survey depths. Update AWOIS database for item 6704.

## 1.7) AWOIS 6736 - OBSTRUCTION

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 54' 49.2" N, 073° 24' 27.4" W  
**Historical Depth:** [None]  
**Search Radius:** 75  
**Search Technique:** [None]  
**Technique Notes:** [None]

**History Notes:**

HISTORY

H5143WD/31--11 FEET OVER WRECKAGE WITH 17 FEET SOFT MUD SURROUNDING. SCALED FROM CHART 12365 (1:20,000) IN LAT 40-54-48.8N, LONG 73-24-29.0W.

CL61961--COE TO USC NO INDICATION OF CHARTED 11 FT. OBSTR. DURING FATHOMETER OPS. (BP61083). (ENT SRB 6/88)

H10351/90-- OPR-B285-AHP; ECHO SOUNDER INVESTIGATION NEGATIVE. DIVE NOT POSSIBLE DUE POOR WATER QUALITY. EVALUATOR RECOMMENDS RETAINING AS CHARTED. ADDITIONAL WORK RECOMMENDED. (UP 7/26//93, SJV)

### Survey Summary

**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 6736       | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351117 00001 | 0.34  | 175.7   | Secondary (grouped) |

## Hydrographer Recommendations

[None]

### S-57 Data

[None]

### Office Notes

SAR Note: No evidence of 11ft wreckage or obstruction is seen in the full MBES coverage data. A 14ft obstruction was surveyed and located approximately 12.5m to the west. Recommend to chart surveys depths within the common area.

COMPILE: Concur. Item is presently charted as depth only. Update the chart with present survey depths. Update AWOIS database for item 6736.



## 1.8) AWOIS 6737 - SOUNDING

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 55' 08.3" N, 073° 24' 05.4" W  
**Historical Depth:** [None]  
**Search Radius:** 100  
**Search Technique:** ES,BD,DI,##  
**Technique Notes:** [None]

#### History Notes:

SURVEY REQUIREMENT COMMENTS

USE BOTTOM DRAG IF OBSTRUCTION (PINNACLE ROCK) IS SUSPECTED.

HISTORY

CL1347/82--USPS; REVISED 8 FOOT SOUNDING (FROM COE BP61084/61) ì  
 TO 4.5 FOOT SOUNDING REP (1982) IN APPROX. POS. LAT 40-55-08.0N, ì  
 LONG 73-24-01.0W. DEPTH MEASURED BY LEAD LINE AFTER BOAT WENT ì  
 AGROUND. DEPTH AROUND "THIS LUMP" WAS IN EXCESS OF 10 FEET. (ENT ì  
 SJV 6/88)

H10351/90-- OPR-B285-AHP; ECHO SOUNDER INVESTIGATION NEGATIVE. ì  
 EVALUATOR RECOMMENDS RETAINING AS CHARTED. NOTE: COAST GUARD ì  
 STATED BOTTOM CHANGES CONTINUOUSLY DUE TO CURRENTS IN AREA. (UP ì  
 7/26/93, SJV)

### Survey Summary

**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 6737       | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351146 00001 | 0.00  | 000.0   | Secondary (grouped) |

## Hydrographer Recommendations

[None]

### S-57 Data

[None]

### Office Notes

SAR Note: There is no evidence in the full MBES data of this feature.

COMPILE: Concur. Consider item disproved. Item was not charted. Update AWOIS database for item 6737.

## 1.9) AWOIS 6809 - OBSTRUCTION

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 56' 59.8" N, 073° 24' 46.4" W  
**Historical Depth:** 10.36 m  
**Search Radius:** 200  
**Search Technique:** S4,DI,ES  
**Technique Notes:** [None]

#### History Notes:

##### HISTORY

H5142/31WD--34 FT. GROUNDING, CLEARED BY 34 FT., LOCATED IN LAT. 40-56-59.5N, LONG 73-24-48.0W (SCALED FROM SURVEY AT 1:20,000 SCALE).(ENTERED MSM 6/88)  
 FE321SS/88--OPR-B660-HE-88; 400% SSS USING 50 M RANGE SCALE FOR FULL SEARCH RADIUS; NO SIGNIFICANT SSS CONTACTS FOUND; FATHOMETER RECORDS INDICATE THE BOTTOM IS RELATIVELY FLAT AND FREE OF OBSTRUCTIONS; HYDROGRAPHER AND EVALUATOR RECOMMENDED DELETING ITEM FROM CHART. (UPDATED MSM 4/90)

### Survey Summary

**Charts Affected:** 12364\_17, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 6809       | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351135 00001 | 0.00  | 000.0   | Secondary (grouped) |

### Hydrographer Recommendations

[None]

## S-57 Data

[None]

## Office Notes

SAR Note: The feature is not verified in the full coverage MBES data.

COMPILE: Concur. Item is uncharted. Update area with present survey depths. Update AWOIS database for item 6809 with present survey findings.

## 1.10) AWOIS 6810 - OBSTRUCTION

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 56' 57.8" N, 073° 24' 55.1" W  
**Historical Depth:** 10.36 m  
**Search Radius:** 200  
**Search Technique:** S4,DI,ES  
**Technique Notes:** [None]

#### History Notes:

##### HISTORY

H5142/31WD--34 FT. GROUNDING, CLEARED BY 34 FT., LOCATED IN LAT 40-56-57.4N, LONG 73-24-56.7W (SCALED FROM SURVEY AT 1:20,000).(ENTERED MSM 6/88)

FE321SS/88--OPR-B660-HE-88; 400% SSS COVERAGE, USING 50 M RANGE SCALE, FOR COMPLETE SEARCH RADIUS WITH NO SIGNIFICANT CONTACTS; FATOMETER RECORD INDICATE THAT THE BOTTOM IS RELATIVELY FLAT AND FREE OF OBSTRUCTIONS; HYDROGRAPHER AND EVALUATOR RECOMMENDED DELETING CHARTED OBSTRUCTION FROM THE CHART. (UPDATED MSM 4/90)

### Survey Summary

**Charts Affected:** 12364\_17, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 6810       | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351158 00001 | 0.00  | 000.0   | Secondary (grouped) |

### Hydrographer Recommendations

[None]

## S-57 Data

[None]

## Office Notes

SAR Note: The feature is not visible in the full coverage MBES data.

COMPILE: Concur. Item is uncharted. Update area with present survey depths. Update AWOIS database for item 6810 with present survey findings.



## 1.11) AWOIS 6815 - OBSTRUCTION

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 56' 50.9" N, 073° 24' 32.2" W  
**Historical Depth:** 7.01 m  
**Search Radius:** 100  
**Search Technique:** S4,DI,##  
**Technique Notes:** [None]

#### History Notes:

SURVEY REQUIREMENT COMMENTS

TOW AT 2.5 KNOTS ON 50 - 75 M RANGE SCALE.

#### HISTORY

CL64/32--CGS; LIST OF CRITICAL SHOALS FROM H5142WD AND H5143WD; PILING LOCATED IN LAT 40-56-50.57N, LONG73-24-33.77W (CONVERTED FROM METERS TO SECONDS); 23 FT. SOUNDING IN SURROUNDING 38 FT. DEPTHS.

H5143/31WD--VERIFIED SURVEY CONTAINING ABOVE INFORMATION. (ENTERED MSM 6/88)

FE321SS/88--OPR-B660-HE-88; 400% SSS COVERAGE, 50M RANGE SCALE, FOR 100M RADIUS; ONLY CONTACT FOUND WITHIN THE SEARCH RADIUS WAS INSIGNIFICANT AND DID NOT JUSTIFY FURTHER DEVELOPMENT; A GROUP OF LINEAR FEATURES LYING ON THE BOTTOM WAS LOCATED APPROXIMATELY 200M FROM THE REPORTED POSITION; ONE OF THESE COULD POSSIBLY BE THE ITEM; NO OTHER CONTACTS RESEMBLING A PILING WAS FOUND; ITEM IS CONSIDERED DISPROVED; HYDROGRAPHER AND EVALUATOR RECOMMENDED DELETING FROM THE CHART. (UPDATED MSM 4/90)

H10348/90-- OPR-B285-AHP; REFER TO FE321SS/88 ABOVE FOR CHARTING DISPOSITION. (UP 11/17/04, SJV)

### Survey Summary

**Charts Affected:** 12364\_17, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

## Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 6815       | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351157 00001 | 0.00  | 000.0   | Secondary (grouped) |

## Hydrographer Recommendations

[None]

## S-57 Data

[None]

## Office Notes

SAR Note: The feature is not visible in the full MBES data.

COMPILE: Concur with conditions. Item is uncharted. A new obstruction with a least depth of 31 feet in 39 feet of water was found in the vicinity of the AWOIS item, 5m to the southwest. Update AWOIS database for item 6815 with present survey findings.

## 1.12) AWOIS 14971 - MARKER

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 55' 16.4" N, 073° 23' 31.0" W  
**Historical Depth:** [None]  
**Search Radius:** 200  
**Search Technique:** [None]  
**Technique Notes:** [None]

#### History Notes:

[None]

### Survey Summary

**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 14971      | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351149 00001 | 4.41  | 277.1   | Secondary (grouped) |

### Hydrographer Recommendations

[None]

### S-57 Data

[None]

### Office Notes

**SAR Note:** The feature is not evident in the 200% side scan sonar data. The feature submitted in the final feature file was 5 meters away from the location provided in the csf and prf.

**COMPILE:** Concur. Delete AWOIS 14971, a beacon special purpose. It is no longer marking a wreck. Note there is a wreck 100 m southwest AWOIS 14971.

## 1.13) AWOIS 14972 - WRECK

### No Primary Survey Feature for this AWOIS Item

**Search Position:** 40° 56' 32.2" N, 073° 26' 20.8" W  
**Historical Depth:** [None]  
**Search Radius:** 200  
**Search Technique:** [None]  
**Technique Notes:** [None]

#### History Notes:

[None]

### Survey Summary

**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source           | Feature            | Range | Azimuth | Status              |
|------------------|--------------------|-------|---------|---------------------|
| AWOIS_EXPORT     | AWOIS # 14972      | 0.00  | 000.0   | Primary             |
| H12413_AWOIS.000 | 0_0001351108 00001 | 4.83  | 110.2   | Secondary (grouped) |

### Hydrographer Recommendations

[None]

### S-57 Data

[None]

### Office Notes

**SAR Note:** A wreck is not visible within the MBES complete coverage data. AWOIS database history is blank; no information regarding the feature is documented.

**COMPILE:** Concur. Delete AWOIS 14972, a charted dangerous sunken wreck, PA (rep 1994) and update area with present survey depths. Update AWOIS database with present survey findings.

# H12413 Dangers to Navigation

**Registry Number:** H12413  
**State:** New York  
**Locality:** Long Island Sound  
**Sub-locality:** Approaches to Northport, NY  
**Project Number:** OPR-B340-TJ-12  
**Survey Dates:** 08/08/2012- 09/21/2012

## Charts Affected

| Number | Edition | Date       | Scale (RNC)                                | RNC Correction(s)*   |
|--------|---------|------------|--|--|
| 12365  | 27th    | 09/01/2012 | 1:20,000 (12365_1)                         | USCG LNM: 10/8/2013 (1/21/2014)<br>CHS NTM: None (12/27/2013)<br>NGA NTM: 5/10/1997 (2/1/2014) |
| 12364  | 38th    | 07/01/2008 | 1:40,000 (12364_20)<br>1:20,000 (12364_18) | [L]NTM: ?  |
| 12363  | 40th    | 06/01/2005 | 1:80,000 (12363_1)                         | [L]NTM: ?  |
| 12300  | 47th    | 05/01/2008 | 1:400,000 (12300_1)                        | [L]NTM: ?  |
| 13006  | 34th    | 05/01/2007 | 1:675,000 (13006_1)                        | [L]NTM: ?  |
| 5161   | 13th    | 10/01/2003 | 1:1,058,400 (5161_1)                       | [L]NTM: ?  |
| 13003  | 49th    | 04/01/2007 | 1:1,200,000 (13003_1)                      | [L]NTM: ?  |

\* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## Features

| No. | Name                        | Feature Type | Survey Depth | Survey Latitude | Survey Longitude | AWOIS Item |
|-----|-----------------------------|--------------|--------------|-----------------|------------------|------------|
| 1.1 | 0.29 ft Obstruction - DtoN2 | GP           | [None]       | 40° 54' 53.2" N | 073° 24' 17.2" W | ---        |
| 1.2 | 4 ft Wreck - DtoN1          | Wreck        | 1.22 m       | 40° 54' 33.3" N | 073° 24' 07.0" W | ---        |

## 1.1) 0.29 ft Obstruction - DtoN2

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 40° 54' 53.2" N, 073° 24' 17.2" W  
**Least Depth:** [None]  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)** [None] ; **TVU (TPEv)** [None]  
**Timestamp:** 1981-001.00:00:00.000 (01/01/1981)  
**Dataset:** H12413\_DtoN.000  
**FOID:** 0\_ 0001351145 00001(FFFE00149DE90001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

[None]

#### Feature Correlation

| Source          | Feature             | Range | Azimuth | Status  |
|-----------------|---------------------|-------|---------|---------|
| H12413_DtoN.000 | 0_ 0001351145 00001 | 0.00  | 000.0   | Primary |

#### Hydrographer Recommendations

[None]

#### S-57 Data

**Geo object 1:** Cartographic symbol (\$CSYMB)  
**Attributes:** NINFOM - See HR Section 5.1  
 NTXTDS - ENC US5NY14M,ED18,Update 1

#### Office Notes

SAR: DtoN #2 is not considered verified as obstruction. The shoal depth is part of the sloping shoreline; the VALSOU is 0.29ft at MLLW. Recommend to chart survey depths within the common area. The shoal depth is part of the sloping shoreline. Recommend to update shoreline.

COMPILE: Concur. Shoal depth appears to be part of sloping shoreline. Update shoreline. See HR Section 5.1.



## 1.2) 4 ft Wreck - DtoN1

### DANGER TO NAVIGATION

#### Survey Summary

**Survey Position:** 40° 54' 33.3" N, 073° 24' 07.0" W  
**Least Depth:** 1.22 m (= 3.99 ft = 0.664 fm = 0 fm 3.99 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_DtoN.000  
**FOID:** 0\_ 0001351193 00001(FFFE00149E190001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

WRECKS/remrks: Wreck Found on shoal

#### Feature Correlation

| Source          | Feature             | Range | Azimuth | Status  |
|-----------------|---------------------|-------|---------|---------|
| H12413_DtoN.000 | 0_ 0001351193 00001 | 0.00  | 000.0   | Primary |

#### Hydrographer Recommendations

Add New Wreck

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

4ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

0 ½fm (12300\_1, 13006\_1, 13003\_1)

1.2m (5161\_1)

#### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known

SORDAT - 20120921

SORIND - US,US,graph,H12413

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

VALSOU - 1.215 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The Danger to Navigation features were included in the submitted Descriptive Report. During the Survey Review and Acceptance it was noted that these features had not been applied to the nautical chart. Inquiry with NDB indicated that the field unit had not officially submitted the DtoN. AHB has verified the features as per survey data.

COMPILE: Concur. Delete charted dangerous wreck, least depth 4 feet. Chart dangerous wreck, least depth 3.98 ft in present survey position.

### Feature Images

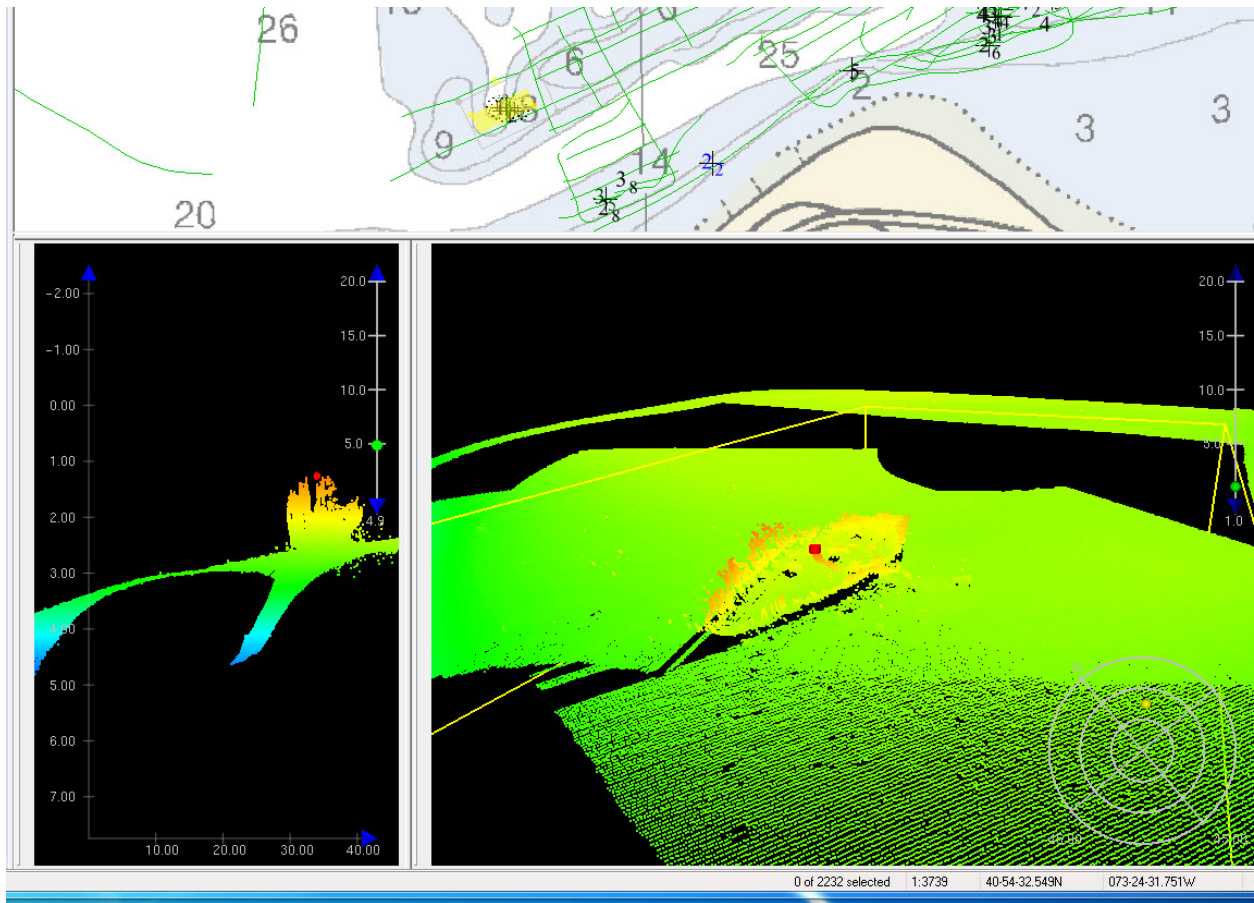


Figure 1.2.1

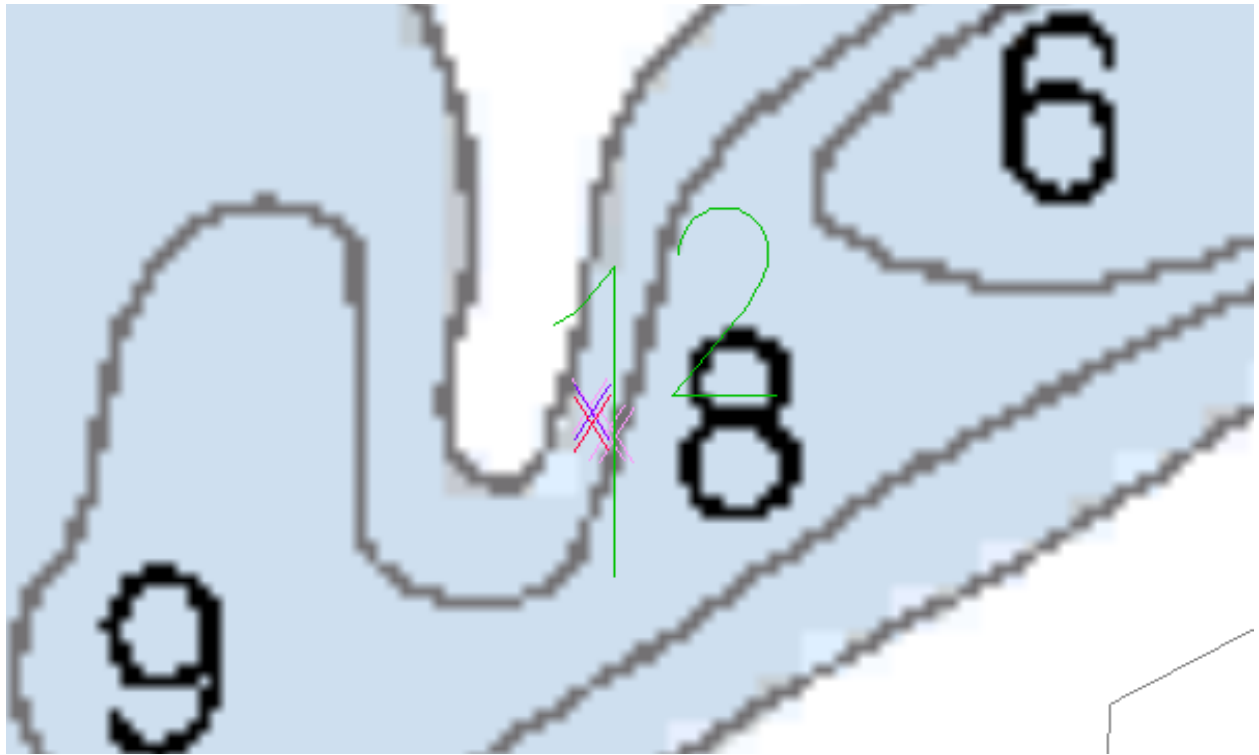
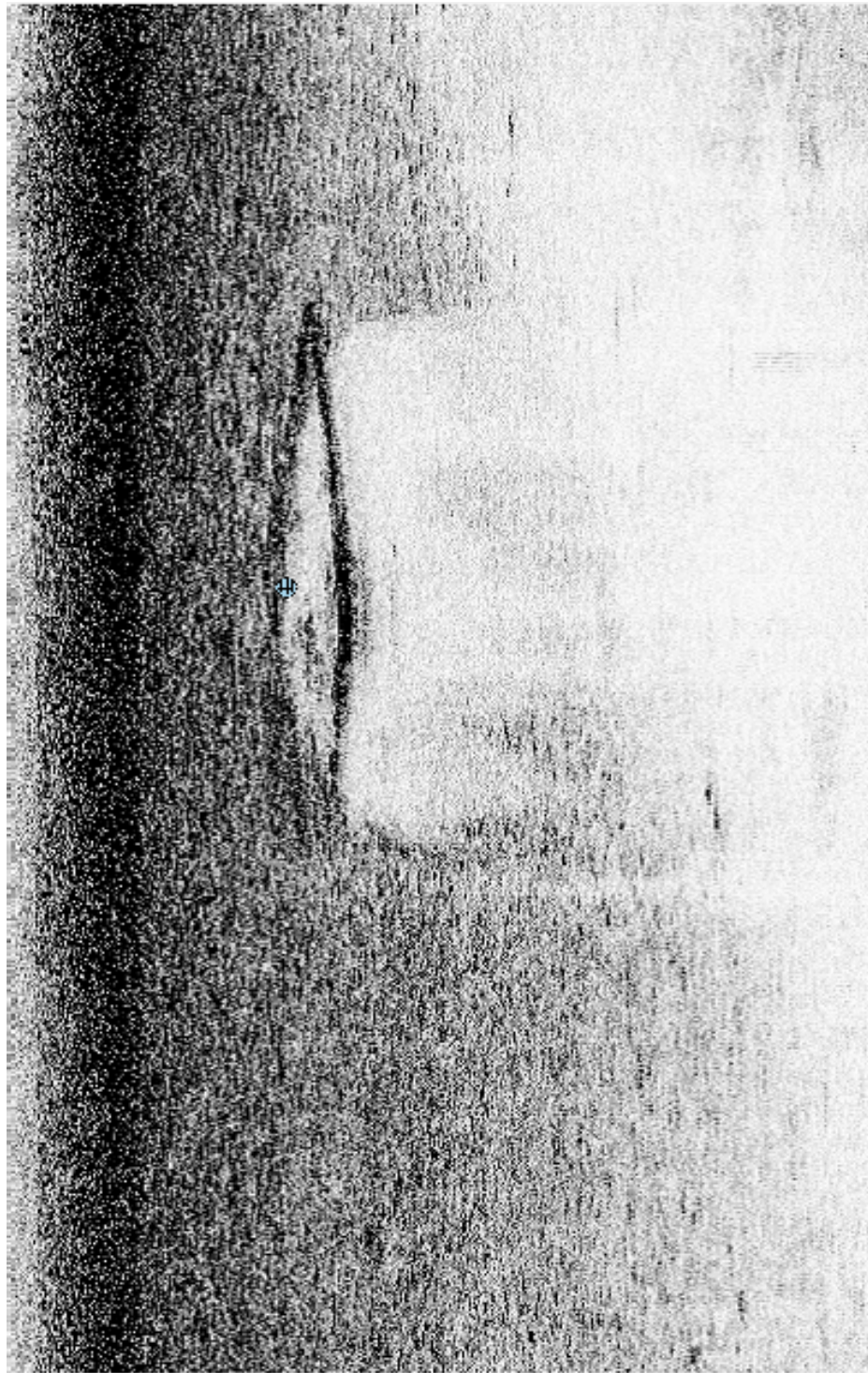


Figure 1.2.2



*Figure 1.2.3*

# H12413 Wrecks

**Registry Number:** H12413  
**State:** New York  
**Locality:** Long Island Sound  
**Sub-locality:** Approaches to Northport, NY  
**Project Number:** OPR-B340-TJ-12  
**Survey Date:** 08/08/2012 - 09/21/2012

## Charts Affected

| Number | Edition | Date       | Scale (RNC)                                | RNC Correction(s)*   |
|--------|---------|------------|--|--|
| 12365  | 27th    | 09/01/2012 | 1:20,000 (12365_1)                         | USCG LNM: 10/8/2013 (1/21/2014)<br>CHS NTM: None (12/27/2013)<br>NGA NTM: 5/10/1997 (2/1/2014) |
| 12364  | 38th    | 07/01/2008 | 1:40,000 (12364_20)<br>1:20,000 (12364_18) | [L]NTM: ?  |
| 12363  | 40th    | 06/01/2005 | 1:80,000 (12363_1)                         | [L]NTM: ?  |
| 12300  | 47th    | 05/01/2008 | 1:400,000 (12300_1)                        | [L]NTM: ?  |
| 13006  | 34th    | 05/01/2007 | 1:675,000 (13006_1)                        | [L]NTM: ?  |
| 5161   | 13th    | 10/01/2003 | 1:1,058,400 (5161_1)                       | [L]NTM: ?  |
| 13003  | 49th    | 04/01/2007 | 1:1,200,000 (13003_1)                      | [L]NTM: ?  |

\* Correction(s) - source: last correction applied (last correction reviewed--"cleared date")

## Features

| No. | Name          | Feature Type | Survey Depth | Survey Latitude | Survey Longitude | AWOIS Item |
|-----|---------------|--------------|--------------|-----------------|------------------|------------|
| 1.1 | H12413_Wk26   | Wreck        | 12.76 m      | 40° 57' 22.7" N | 073° 27' 24.6" W | ---        |
| 1.2 | H12413_Wk33   | Wreck        | 11.40 m      | 40° 57' 32.3" N | 073° 26' 15.0" W | ---        |
| 1.3 | H12413_Wk27   | Wreck        | 12.88 m      | 40° 57' 42.0" N | 073° 26' 08.0" W | ---        |
| 1.4 | 9.45 ft wreck | Wreck        | 2.88 m       | 40° 53' 58.4" N | 073° 25' 59.7" W | ---        |
| 1.5 | H12413_Wk07   | Wreck        | 3.47 m       | 40° 54' 24.5" N | 073° 25' 58.9" W | ---        |
| 1.6 | H12413_Wk35   | Wreck        | 5.14 m       | 40° 53' 54.0" N | 073° 25' 55.5" W | ---        |
| 1.7 | H12413_Wk28   | Wreck        | 9.01 m       | 40° 56' 29.4" N | 073° 25' 51.2" W | ---        |
| 1.8 | H12413_Wk37   | Wreck        | 3.51 m       | 40° 53' 53.0" N | 073° 25' 46.1" W | ---        |

|      |                |       |         |                 |                  |     |
|------|----------------|-------|---------|-----------------|------------------|-----|
| 1.9  | 13.09 ft wreck | Wreck | 3.99 m  | 40° 53' 52.8" N | 073° 25' 44.0" W | --- |
| 1.10 | H12413_Wks38   | Wreck | 2.30 m  | 40° 53' 53.5" N | 073° 25' 40.4" W | --- |
| 1.11 | 7.74 ft wreck  | Wreck | 2.36 m  | 40° 53' 52.9" N | 073° 25' 38.2" W | --- |
| 1.12 | H12413_Wk09    | Wreck | 3.20 m  | 40° 53' 51.0" N | 073° 25' 36.9" W | --- |
| 1.13 | H12413_Wk10    | Wreck | 2.27 m  | 40° 53' 52.2" N | 073° 25' 36.7" W | --- |
| 1.14 | H12413_Wk06    | Wreck | 4.96 m  | 40° 55' 09.2" N | 073° 25' 36.4" W | --- |
| 1.15 | 32.92 ft wreck | Wreck | 10.95 m | 40° 56' 51.7" N | 073° 25' 25.5" W | --- |
| 1.16 | H12413_Wk32    | Wreck | 3.43 m  | 40° 53' 45.9" N | 073° 25' 22.3" W | --- |
| 1.17 | H12413_Wk08    | Wreck | 2.67 m  | 40° 53' 14.3" N | 073° 25' 16.4" W | --- |
| 1.18 | H12413_Wk24    | Wreck | 5.96 m  | 40° 54' 42.4" N | 073° 25' 12.7" W | --- |
| 1.19 | H12413_Wk25    | Wreck | 9.84 m  | 40° 56' 43.4" N | 073° 25' 06.8" W | --- |
| 1.20 | H12413_Wk05    | Wreck | 7.94 m  | 40° 55' 22.5" N | 073° 25' 06.7" W | --- |
| 1.21 | H12413_Wk36    | Wreck | 2.92 m  | 40° 53' 18.1" N | 073° 25' 01.6" W | --- |
| 1.22 | H12413_Wk31    | Wreck | 6.34 m  | 40° 54' 43.4" N | 073° 24' 38.9" W | --- |
| 1.23 | H12413_Wk30    | Wreck | 4.22 m  | 40° 55' 07.4" N | 073° 24' 15.7" W | --- |
| 1.24 | H12413_Wk34    | Wreck | 5.41 m  | 40° 55' 19.7" N | 073° 24' 12.2" W | --- |
| 1.25 | H12413_Wk21    | Wreck | 7.22 m  | 40° 54' 53.5" N | 073° 23' 58.8" W | --- |
| 1.26 | H12413_Wk14    | Wreck | 6.68 m  | 40° 55' 08.0" N | 073° 23' 40.8" W | --- |
| 1.27 | H12413_Wk13    | Wreck | 5.83 m  | 40° 55' 11.4" N | 073° 23' 37.6" W | --- |
| 1.28 | H12413_Wk12    | Wreck | 5.06 m  | 40° 55' 14.5" N | 073° 23' 34.8" W | --- |
| 1.29 | H12413_Wk18    | Wreck | 9.08 m  | 40° 54' 43.9" N | 073° 23' 29.6" W | --- |
| 1.30 | H12413_Wk19    | Wreck | 13.13 m | 40° 54' 45.3" N | 073° 23' 26.2" W | --- |
| 1.31 | H12413_Wk11    | Wreck | 8.84 m  | 40° 54' 41.8" N | 073° 23' 02.1" W | --- |
| 1.32 | H12413_Wk15    | Wreck | 7.17 m  | 40° 55' 09.9" N | 073° 23' 00.7" W | --- |
| 1.33 | 32.56 ft wreck | Wreck | 9.94 m  | 40° 54' 51.1" N | 073° 22' 55.1" W | --- |
| 1.34 | H12413_Wk23    | Wreck | 4.25 m  | 40° 54' 50.8" N | 073° 22' 44.1" W | --- |
| 1.35 | H12413_Wk17    | Wreck | 2.17 m  | 40° 55' 20.9" N | 073° 22' 39.9" W | --- |
| 1.36 | H12413_Wk16    | Wreck | 3.05 m  | 40° 55' 17.8" N | 073° 22' 29.0" W | --- |
| 1.37 | H12413_Wk29    | Wreck | 5.21 m  | 40° 55' 09.5" N | 073° 22' 28.7" W | --- |
| 1.38 | H12413_Wk01    | Wreck | 4.24 m  | 40° 54' 53.1" N | 073° 22' 24.6" W | --- |
| 1.39 | H12413_Wk22    | Wreck | 3.59 m  | 40° 54' 54.6" N | 073° 22' 16.8" W | --- |

1.40 30.02 ft wreck Wreck 9.14m 40°56'26.0"N 073°25'32.3"W



## 1.1) H12413\_Wk26

### Survey Summary

**Survey Position:** 40° 57' 22.7" N, 073° 27' 24.6" W  
**Least Depth:** 12.76 m (= 41.86 ft = 6.976 fm = 6 fm 5.86 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351185 00001(FFFE00149E110001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: An uncharted wreck was found with Reson 7125 MBES.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351185 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart a wreck.

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

42ft (12365\_1, 12364\_20, 12363\_1)

7fm (12300\_1, 13006\_1, 13003\_1)

12.8m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 12.758 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is verified with full MBES coverage.

COMPILE: Concur. Chart a dangerous wreck, least depth 41.86 ft in the present survey position.

### Feature Images

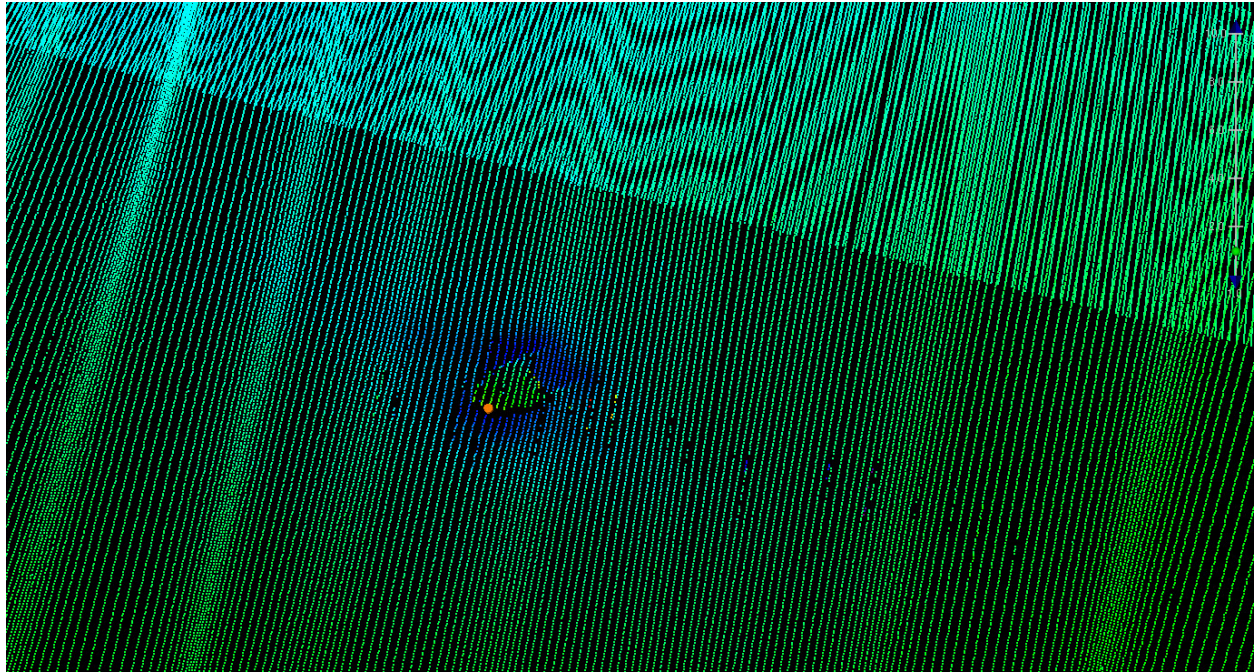


Figure 1.1.1

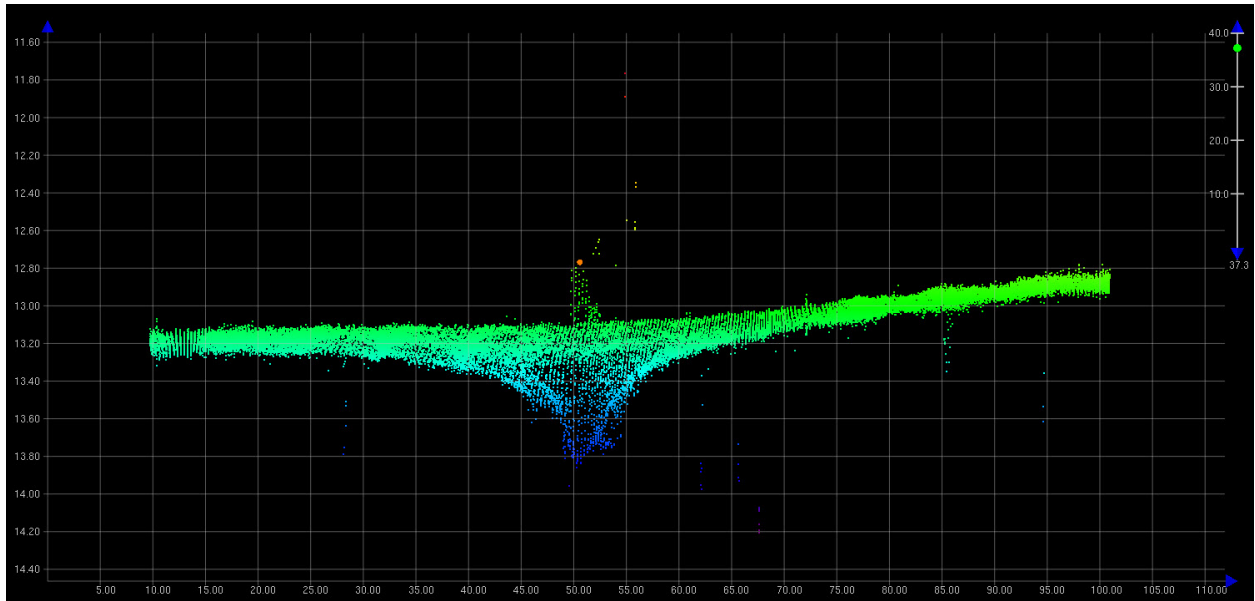


Figure 1.1.2

## 1.2) H12413\_Wk33

### Survey Summary

**Survey Position:** 40° 57' 32.3" N, 073° 26' 15.0" W  
**Least Depth:** 11.40 m (= 37.40 ft = 6.234 fm = 6 fm 1.40 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351213 00001(FFFE00149E2D0001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: An uncharted wreck was found with Reson 7125 OD MBES.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351213 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart a wreck

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

37ft (12365\_1, 12364\_20, 12363\_1)

6 ¼fm (12300\_1, 13006\_1, 13003\_1)

11.4m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 11.401 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES coverage data.

COMPILE: Concur. Chart a dangerous wreck, least depth 37.40 ft in the present survey position.



### Feature Images

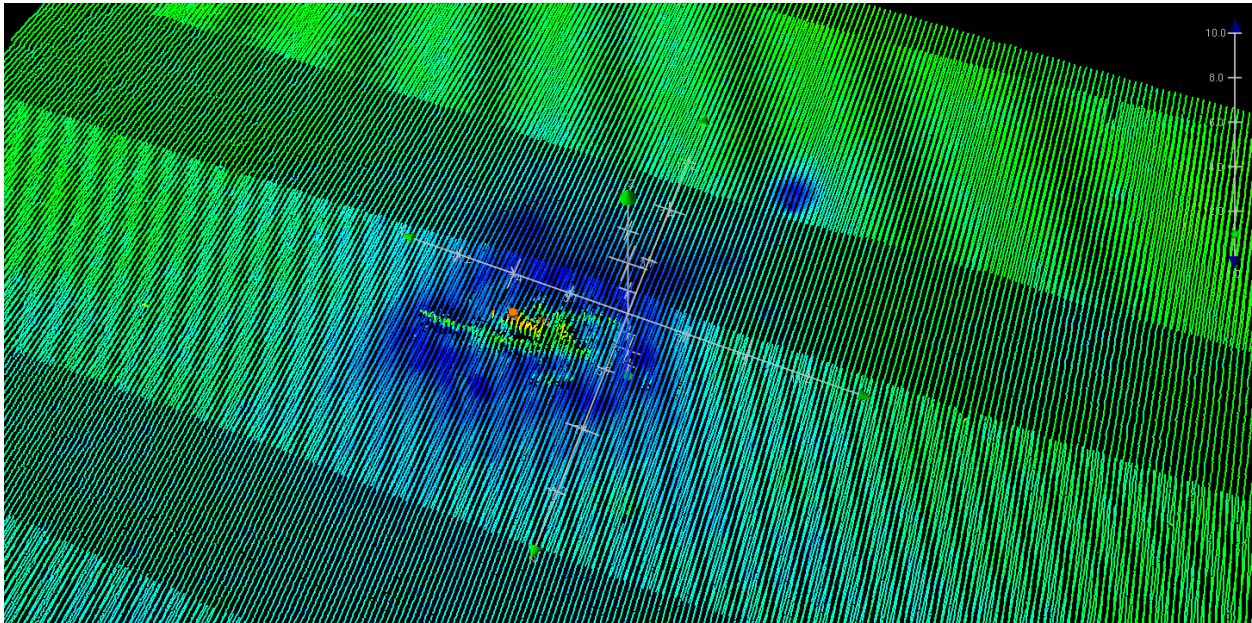


Figure 1.2.1

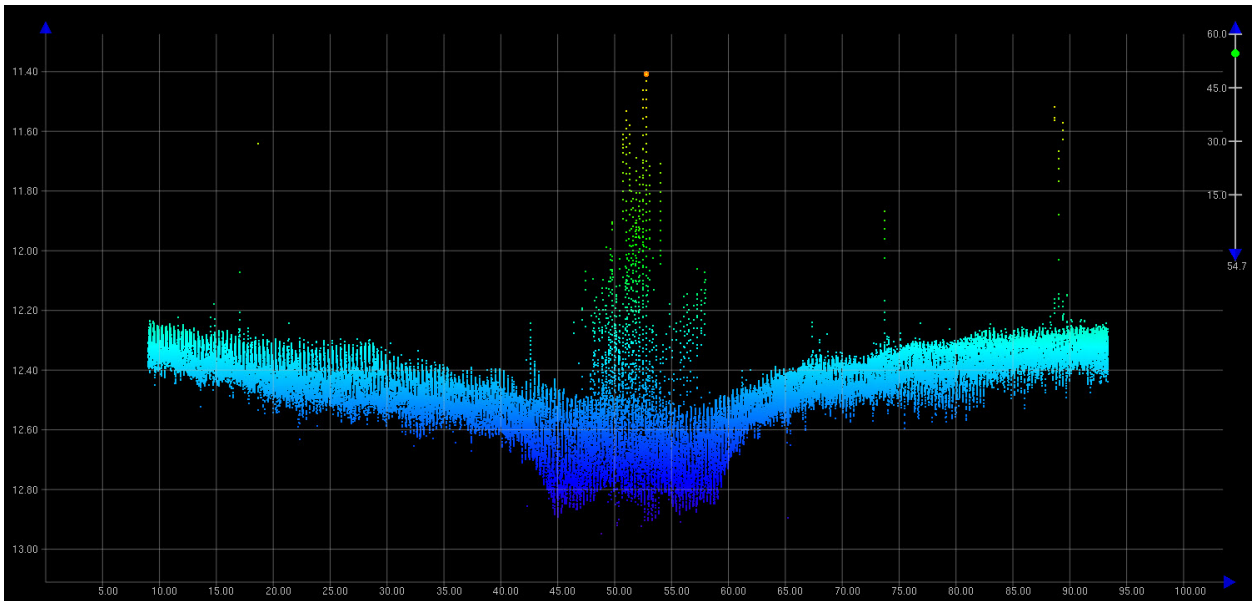


Figure 1.2.2

### 1.3) H12413\_Wk27

## Survey Summary

**Survey Position:** 40° 57' 42.0" N, 073° 26' 08.0" W  
**Least Depth:** 12.88 m (= 42.26 ft = 7.043 fm = 7 fm 0.26 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351254 00001(FFFE00149E560001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: An uncharted wreck was found with Reson 7125 MBES.

## Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351254 00001 | 0.00  | 000.0   | Primary |

## Hydrographer Recommendations

Chart a wreck.

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

42ft (12365\_1, 12364\_20, 12363\_1)

7fm (12300\_1, 13006\_1, 13003\_1)

12.9m (5161\_1)

## S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413



TECSOU - 3:found by multi-beam

VALSOU - 12.880 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES coverage data.

COMPILE: Concur. Chart a dangerous wreck, least depth 42.26 ft in the present survey position.

### Feature Images

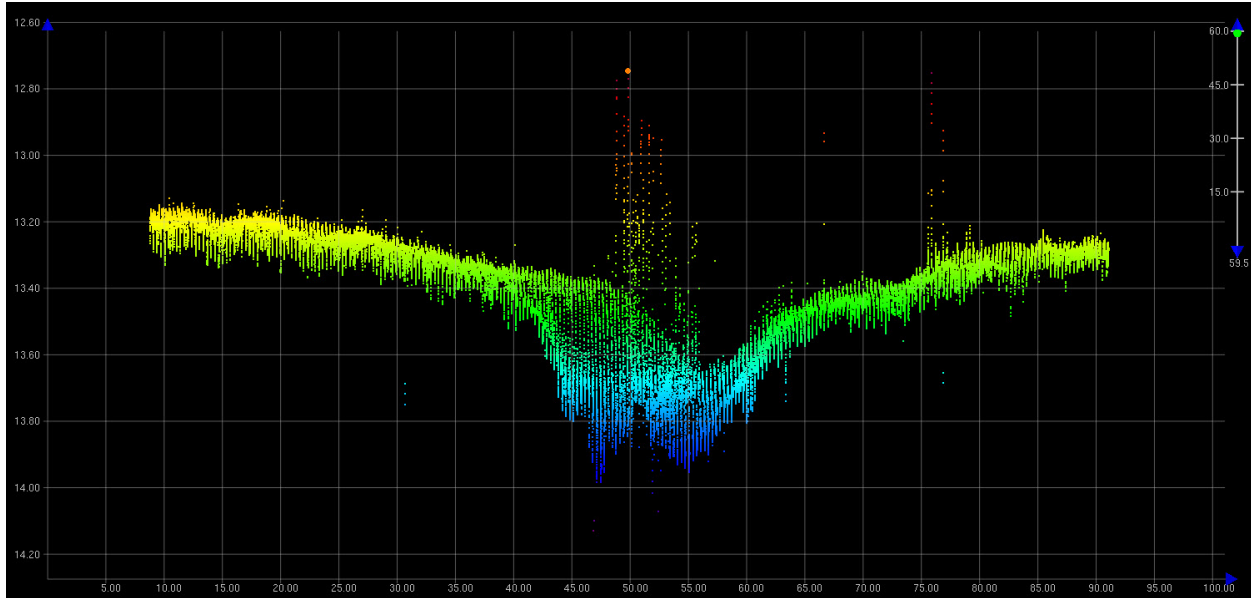


Figure 1.3.1

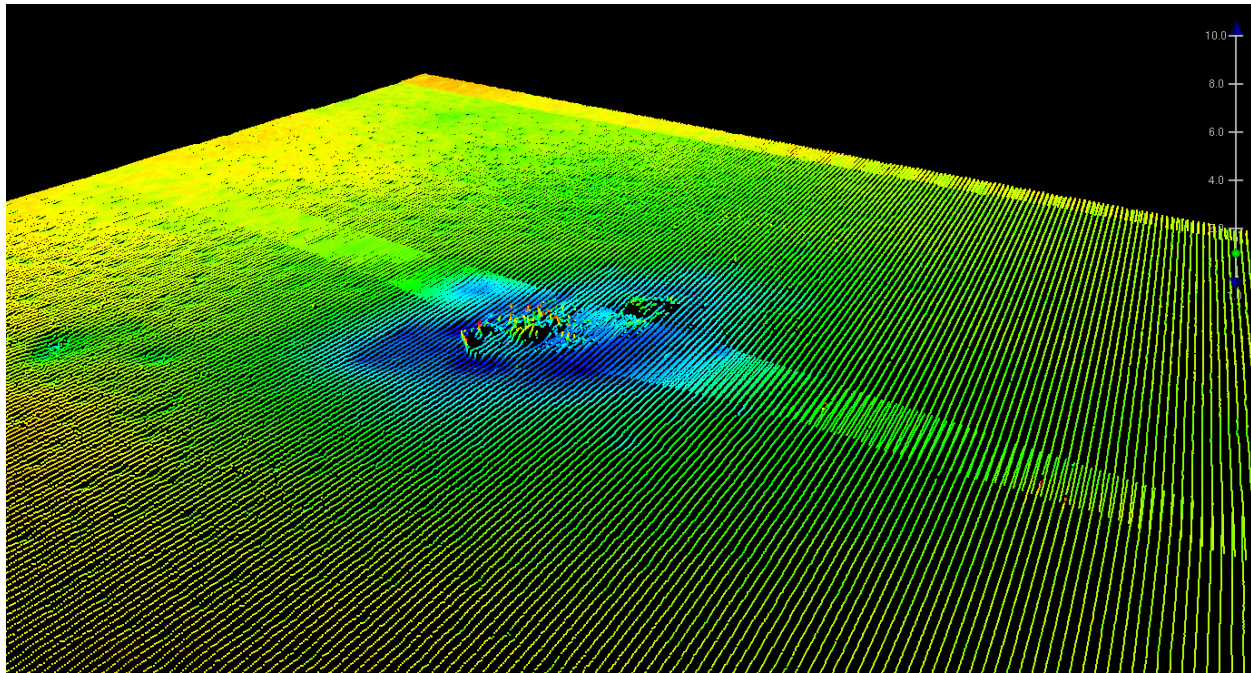


Figure 1.3.2

## 1.4) 9.45 ft wreck

### Survey Summary

**Survey Position:** 40° 53' 58.4" N, 073° 25' 59.7" W  
**Least Depth:** 2.88 m (= 9.45 ft = 1.575 fm = 1 fm 3.45 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351239 00001(FFFE00149E470001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351239 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

[None]

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

9ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ½fm (12300\_1, 13006\_1, 13003\_1)

2.9m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 3:deeper than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 2.880 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck was added by the SAR reviewer and is visible in the full MBES coverage data.

COMPILE: Concur. Chart a dangerous wreck, least depth 9.45 ft in the present survey position.

### Feature Images

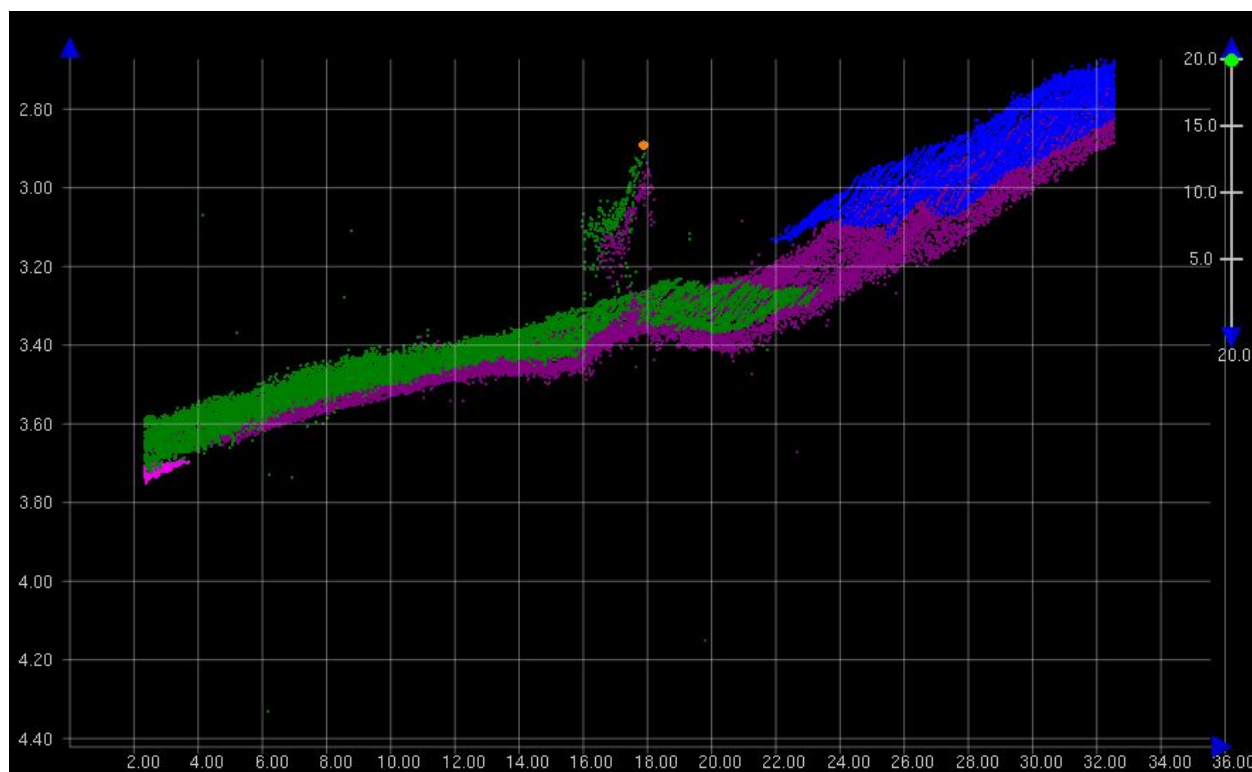


Figure 1.4.1

## 1.5) H12413\_Wk07

### Survey Summary

**Survey Position:** 40° 54' 24.5" N, 073° 25' 58.9" W  
**Least Depth:** 3.47 m (= 11.40 ft = 1.900 fm = 1 fm 5.40 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351236 00001(FFFE00149E440001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: smal hull of boat found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351236 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wk

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

11ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ¾fm (12300\_1, 13006\_1, 13003\_1)

3.5m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 3.474 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in both the full MBES coverage and 200% side scan sonar.

COMPILE: Concur. Chart a dangerous wreck, least depth 11.40 ft in the present survey position.



### Feature Images

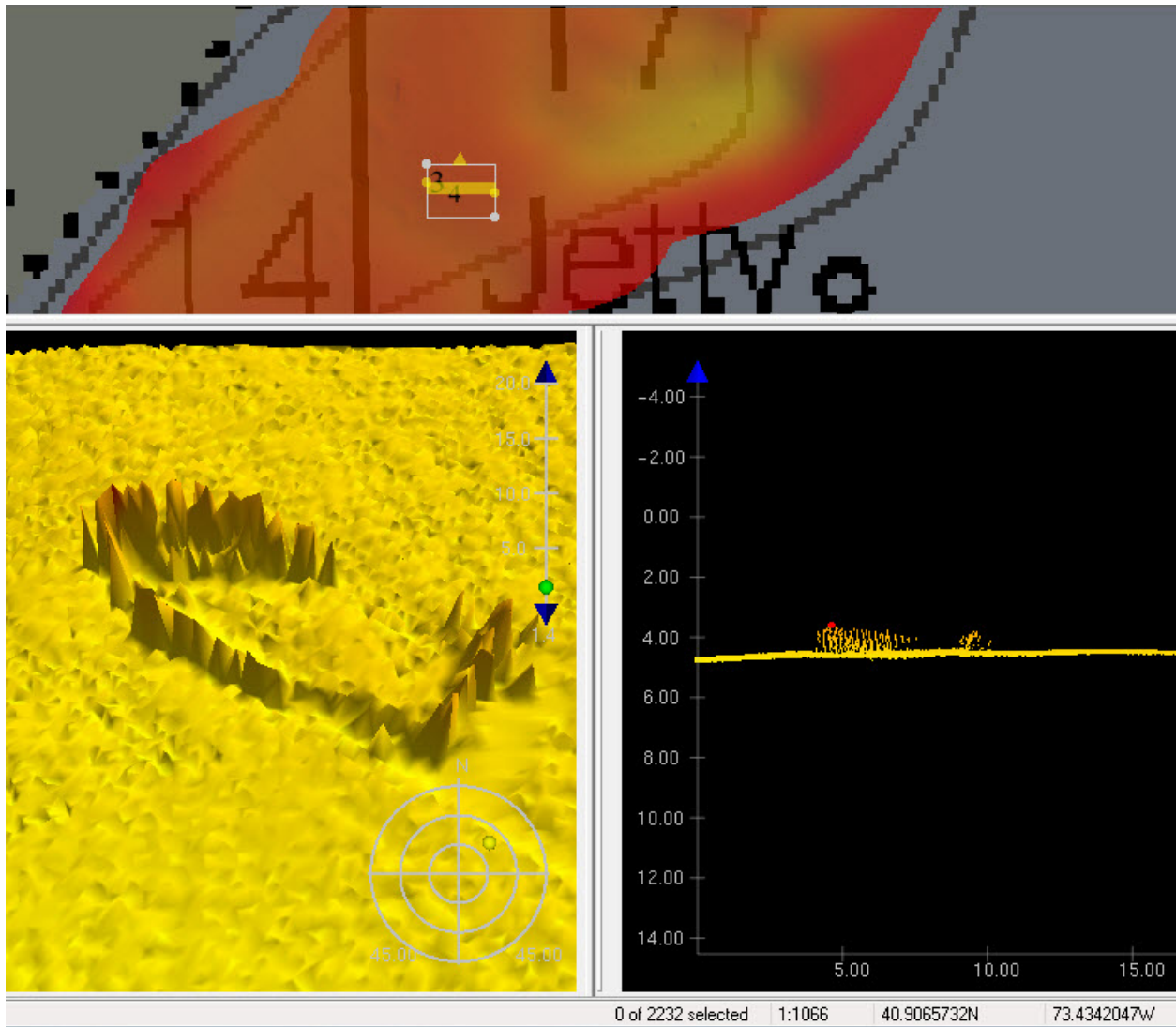


Figure 1.5.1

## 1.6) H12413\_Wk35

### Survey Summary

**Survey Position:** 40° 53' 54.0" N, 073° 25' 55.5" W  
**Least Depth:** 5.14 m (= 16.86 ft = 2.811 fm = 2 fm 4.86 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351201 00001(FFFE00149E210001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Found wreck.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351201 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart wreck

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

17ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2  $\frac{3}{4}$ fm (12300\_1, 13006\_1, 13003\_1)

5.1m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 5.140 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES data.

COMPILE: Concur. Chart a dangerous wreck, least depth 16.86 ft in the present survey position.

### Feature Images

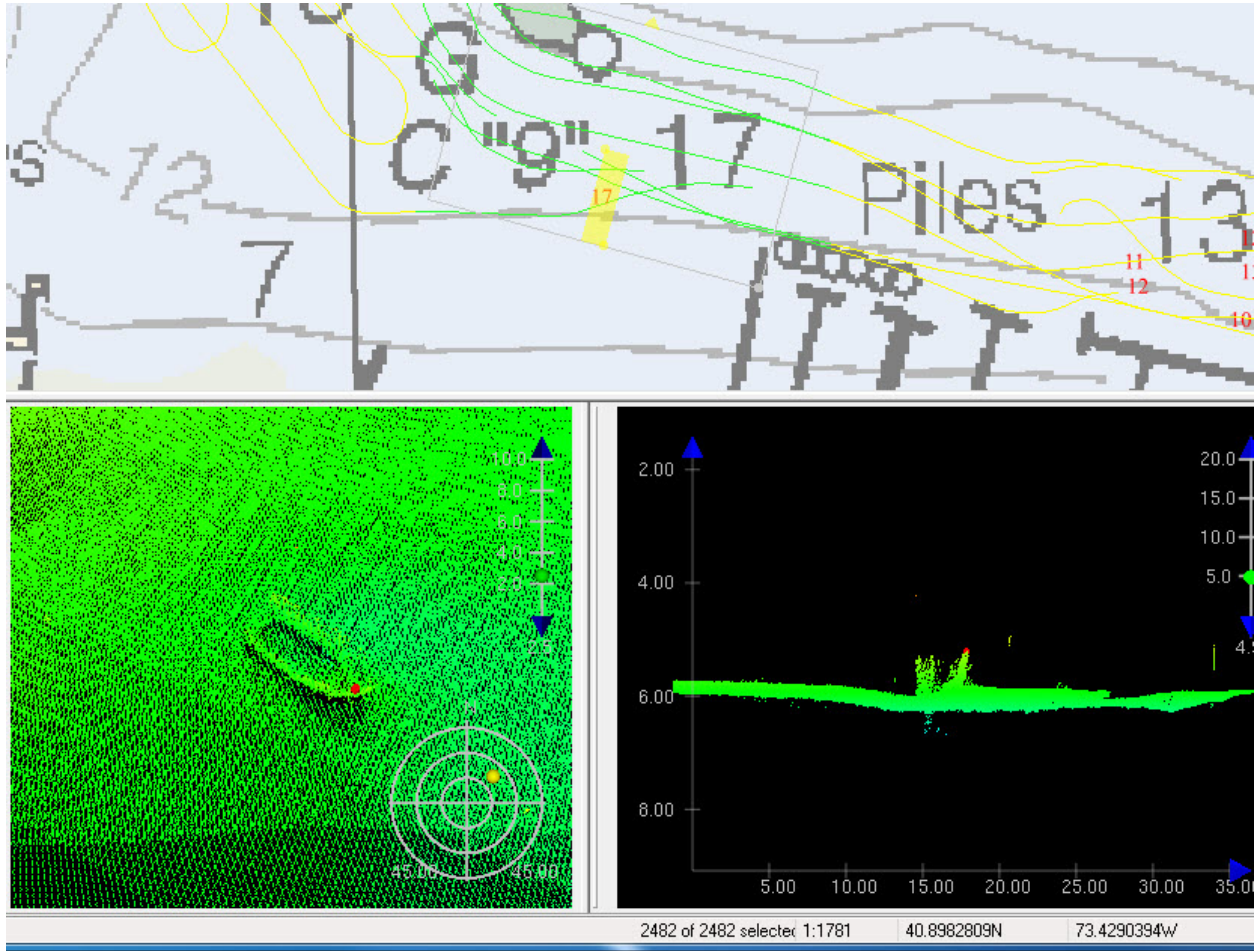


Figure 1.6.1

## 1.7) H12413\_Wk28

### Survey Summary

**Survey Position:** 40° 56' 29.4" N, 073° 25' 51.2" W  
**Least Depth:** 9.01 m (= 29.54 ft = 4.924 fm = 4 fm 5.54 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351195 00001(FFFE00149E1B0001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: An uncharted wreck was found with Reson 7125 MBES.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351195 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart a wreck.

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

29ft (12365\_1, 12364\_20, 12363\_1)

4  $\frac{3}{4}$ fm (12300\_1, 13006\_1, 13003\_1)

9.0m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 9.005 m

WATLEV - 3:always under water/submerged

### **Office Notes**

SAR Note: The feature is visible in the full MBES coverage.

COMPILE: Concur. Chart a dangerous wreck, least depth 29.54 ft in the present survey position.



### Feature Images

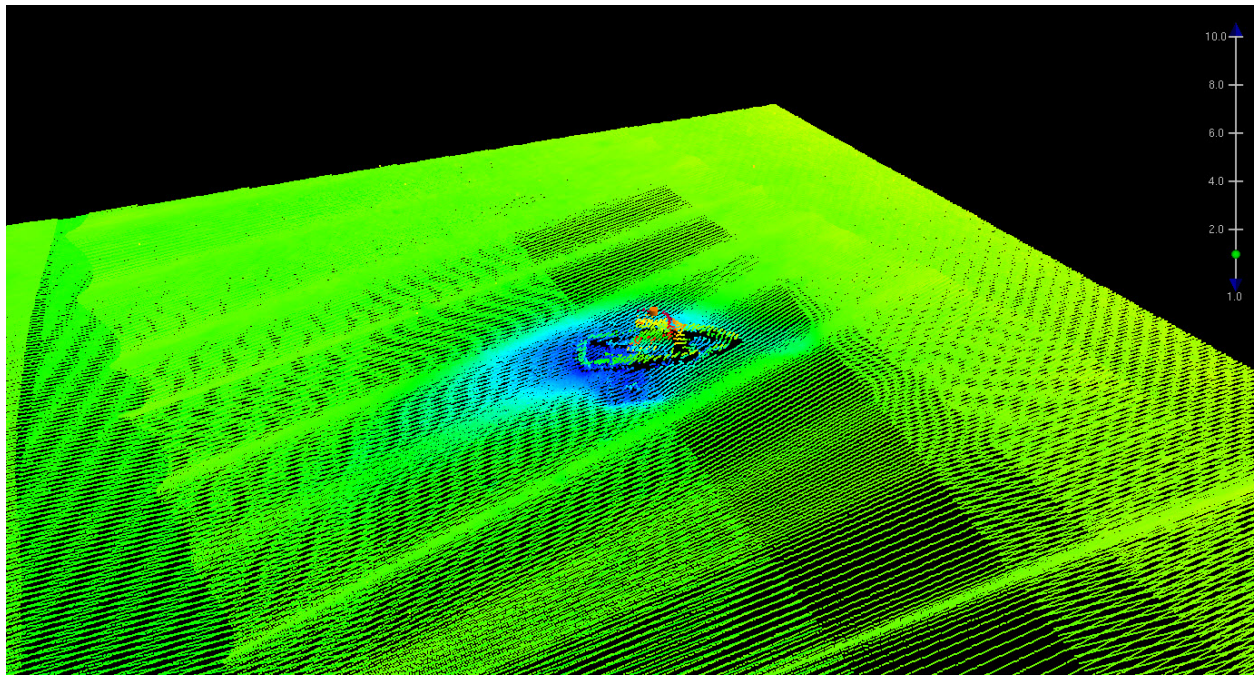


Figure 1.7.1

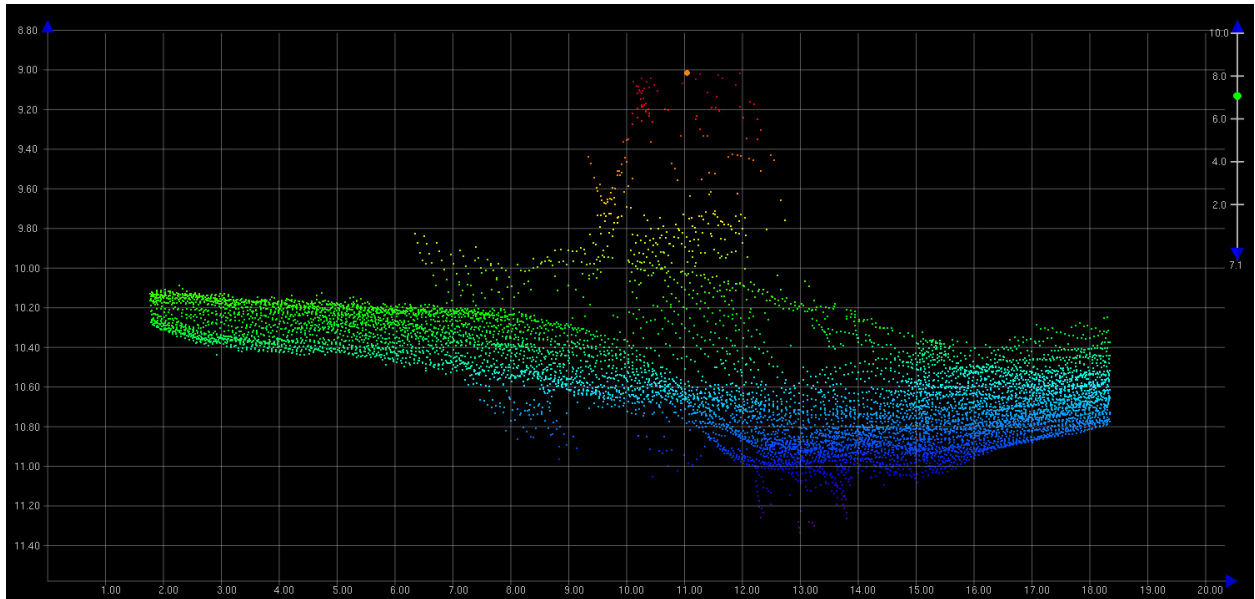


Figure 1.7.2



## 1.8) H12413\_Wk37

### Survey Summary

**Survey Position:** 40° 53' 53.0" N, 073° 25' 46.1" W  
**Least Depth:** 3.51 m (= 11.51 ft = 1.918 fm = 1 fm 5.51 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351244 00001(FFFE00149E4C0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wreck and Obstns found in area

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351244 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart New Wk

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

11ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ¾fm (12300\_1, 13006\_1, 13003\_1)

3.5m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921

SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 3.507 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES data.

COMPILE: Concur. Chart a dangerous wreck, least depth 11.51 ft in the present survey position.



## 1.9) 13.09 ft wreck

### Survey Summary

**Survey Position:** 40° 53' 52.8" N, 073° 25' 44.0" W  
**Least Depth:** 3.99 m (= 13.09 ft = 2.182 fm = 2 fm 1.09 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351207 00001(FFFE00149E270001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351207 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

[None]

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

13ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2fm (12300\_1, 13006\_1, 13003\_1)

4.0m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 3.990 m

WATLEV - 3:always under water/submerged

### **Office Notes**

SAR Note: Wreck added by SAR reviewer. Wreck is visible in the full MBES coverage data.

COMPILE: Concur. Chart a dangerous wreck, least depth 13.09 ft in the present survey position.

### Feature Images

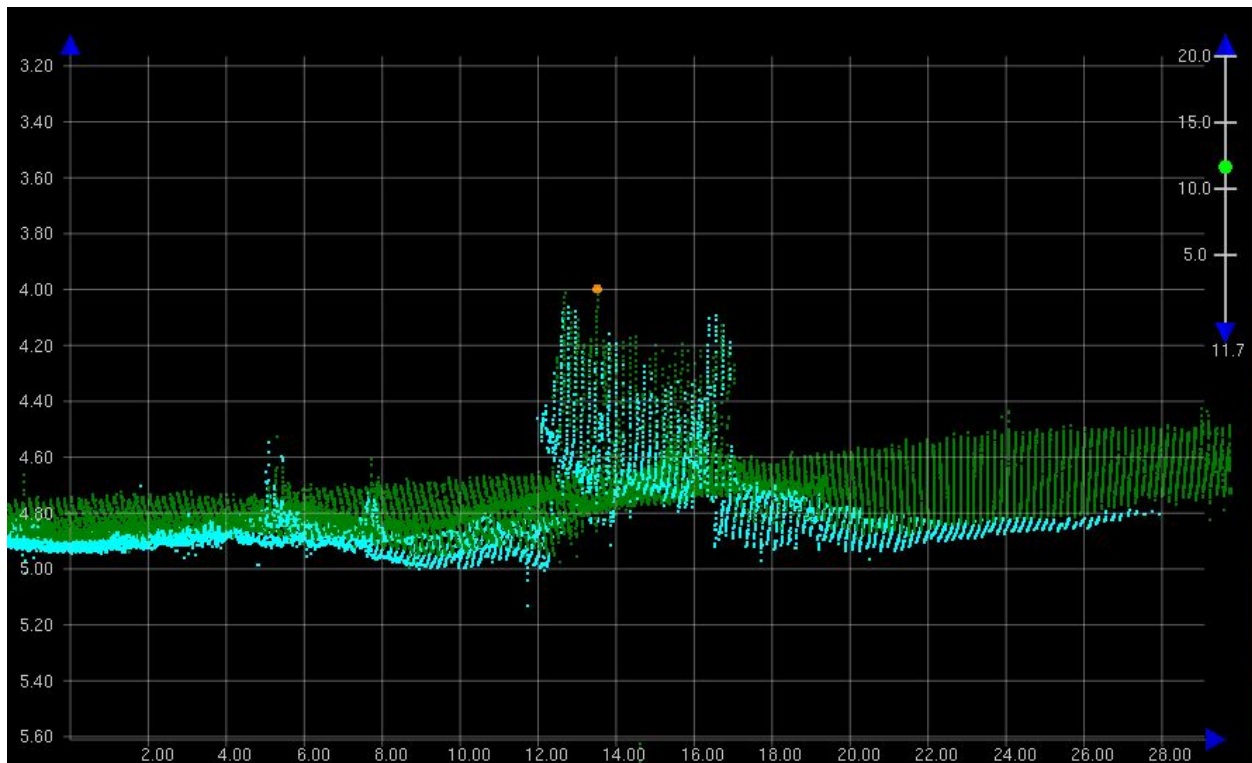


Figure 1.9.1

## 1.10) H12413\_Wks38

### Survey Summary

**Survey Position:** 40° 53' 53.5" N, 073° 25' 40.4" W  
**Least Depth:** 2.30 m (= 7.54 ft = 1.257 fm = 1 fm 1.54 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351203 00001(FFFE00149E230001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wks and Obstns found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351203 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

chart New Wk

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

7ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ¼fm (12300\_1, 13006\_1, 13003\_1)

2.3m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONVIS - 2:not visual conspicuous  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921



SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 2.299 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES coverage.

COMPILE: Concur. Chart a dangerous wreck, least depth 7.54 ft in the present survey position.

### Feature Images

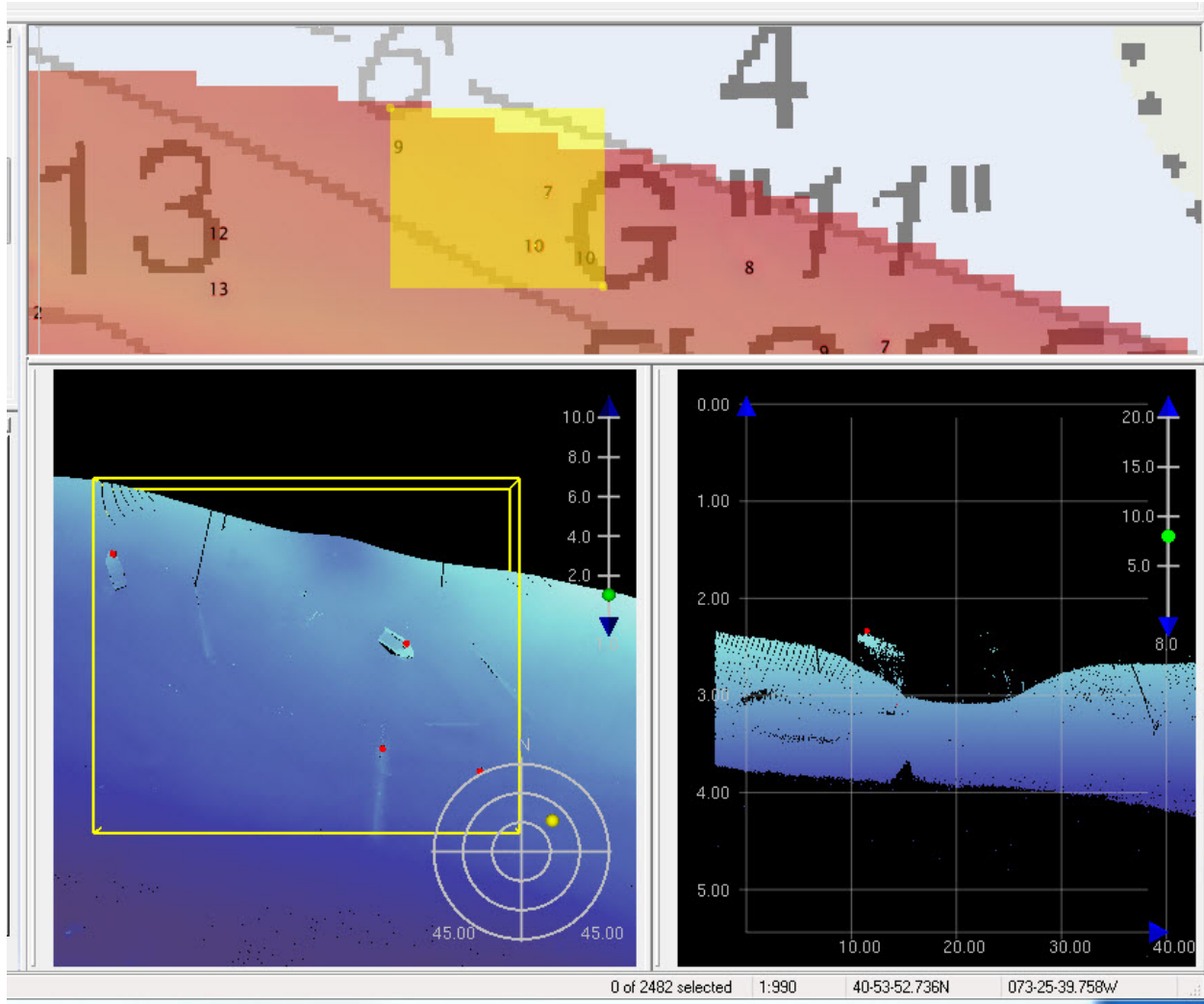


Figure 1.10.1

## 1.11) 7.74 ft wreck

### Survey Summary

**Survey Position:** 40° 53' 52.9" N, 073° 25' 38.2" W  
**Least Depth:** 2.36 m (= 7.74 ft = 1.290 fm = 1 fm 1.74 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351246 00001(FFFE00149E4E0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351246 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

[None]

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

7ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ¼fm (12300\_1, 13006\_1, 13003\_1)

2.4m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 2.360 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: Wreck added by SAR reviewer. Wreck visible in the full coverage MBES data.

COMPILE: Concur. Chart a dangerous wreck, least depth 7.74 ft in the present survey position.

### Feature Images

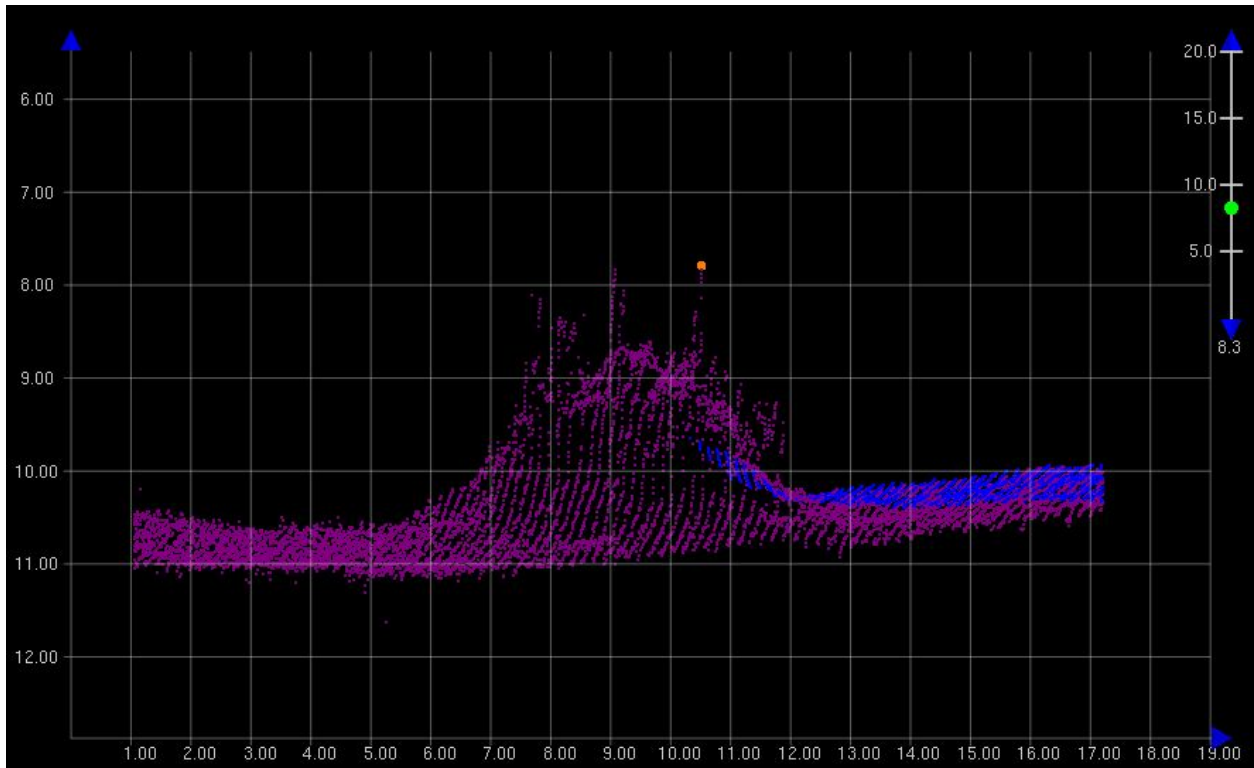


Figure 1.11.1

## 1.12) H12413\_Wk09

### Survey Summary

**Survey Position:** 40° 53' 51.0" N, 073° 25' 36.9" W  
**Least Depth:** 3.20 m (= 10.50 ft = 1.750 fm = 1 fm 4.50 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351232 00001(FFFE00149E400001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wk found lying on side

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351232 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wk

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

10ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ¾fm (12300\_1, 13006\_1, 13003\_1)

3.2m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 3.201 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES data.

COMPILE: Concur. Chart a dangerous wreck, least depth 10.50 ft in the present survey position.



### Feature Images

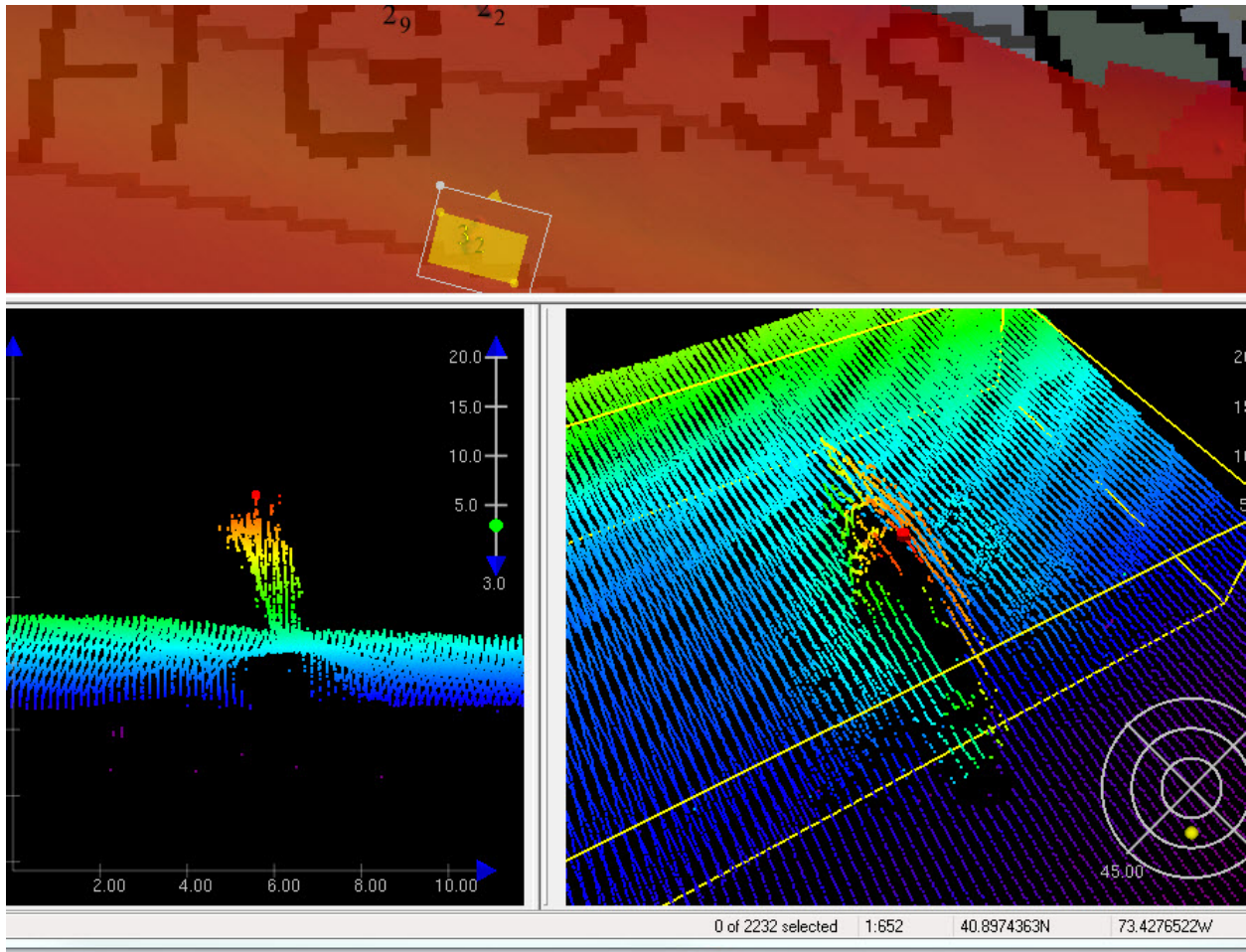


Figure 1.12.1

## 1.13) H12413\_Wk10

### Survey Summary

**Survey Position:** 40° 53' 52.2" N, 073° 25' 36.7" W  
**Least Depth:** 2.27 m (= 7.43 ft = 1.239 fm = 1 fm 1.43 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351226 00001(FFFE00149E3A0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Found wreck

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351226 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart wreck

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

7ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ¼fm (12300\_1, 13006\_1, 13003\_1)

2.3m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 2.266 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES data.

COMPILE: Concur. Chart a dangerous wreck, least depth 7.43 ft in the present survey position.

### Feature Images

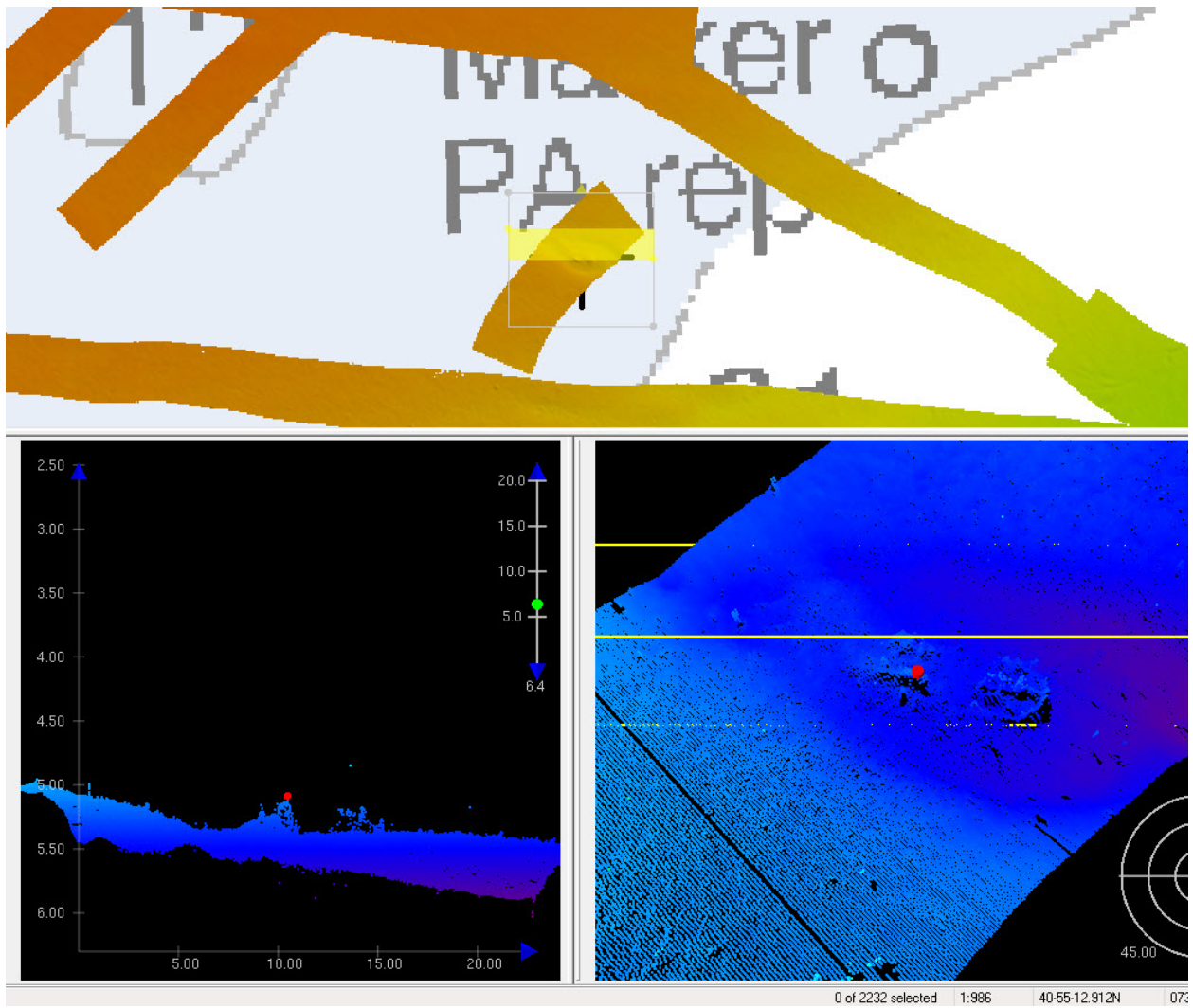


Figure 1.13.1

## 1.14) H12413\_Wk06

### Survey Summary

**Survey Position:** 40° 55' 09.2" N, 073° 25' 36.4" W  
**Least Depth:** 4.96 m (= 16.28 ft = 2.714 fm = 2 fm 4.28 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351248 00001(FFFE00149E500001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wreck Found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351248 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Least depth of wreck already captured by charted soundings. Hydrographer recommends not charting.

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

16ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2 ¾fm (12300\_1, 13006\_1, 13003\_1)

5.0m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 4.963 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in both the full MBES and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 16.28 ft in the present survey position.

### Feature Images

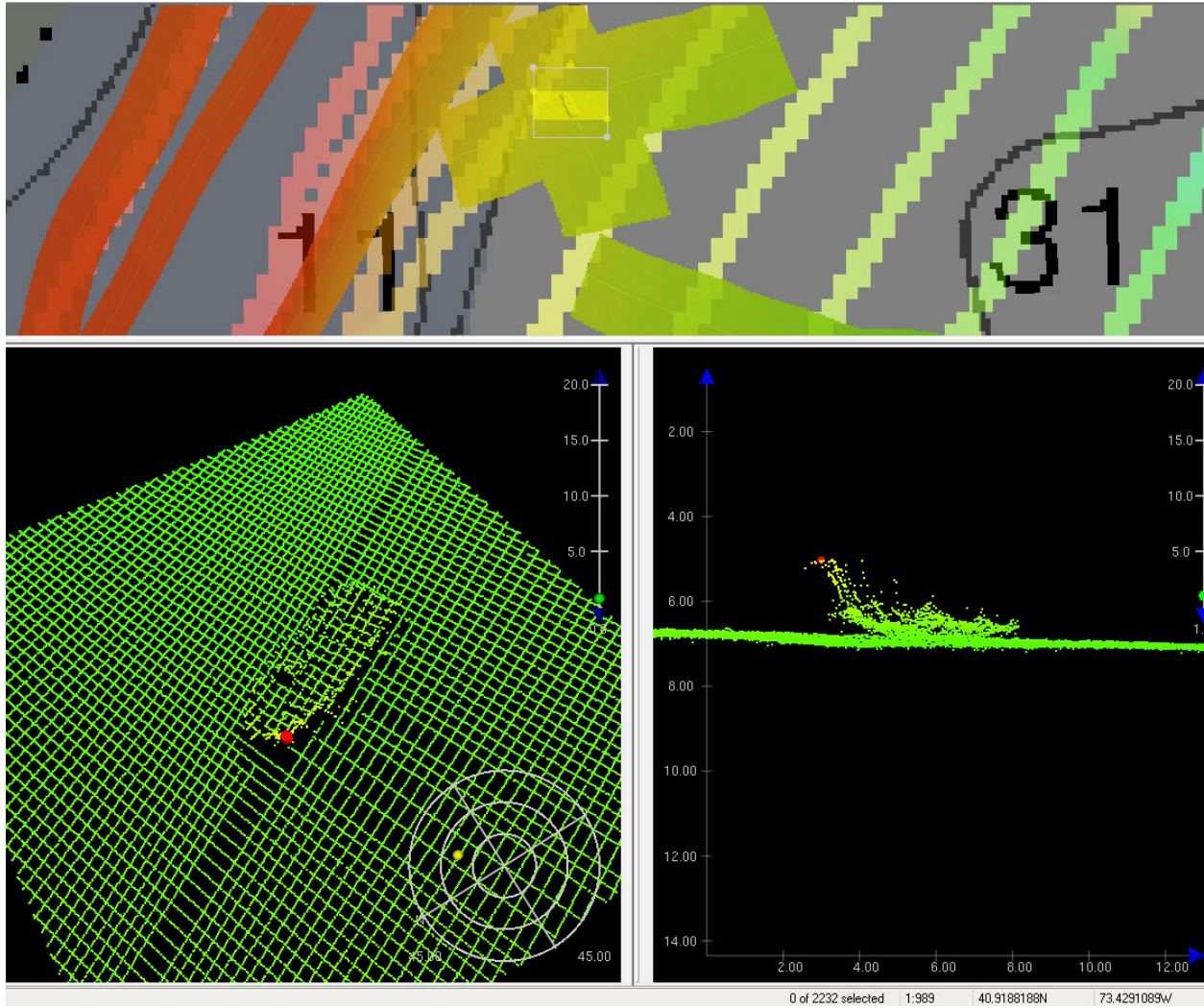


Figure 1.14.1



## 1.15) 35.92 ft wreck

### Survey Summary

**Survey Position:** 40° 56' 51.7" N, 073° 25' 25.5" W  
**Least Depth:** 10.95 m (= 35.92 ft = 5.987 fm = 5 fm 5.92 ft)  
**TPU (±1.96σ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351194 00001(FFFE00149E1A0001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351194 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

[None]

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

36ft (12365\_1, 12364\_20, 12363\_1)

6fm (12300\_1, 13006\_1, 13003\_1)

10.9m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 1:non-dangerous wreck  
 CONVIS - 1:visual conspicuous  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921

SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 10.949 m

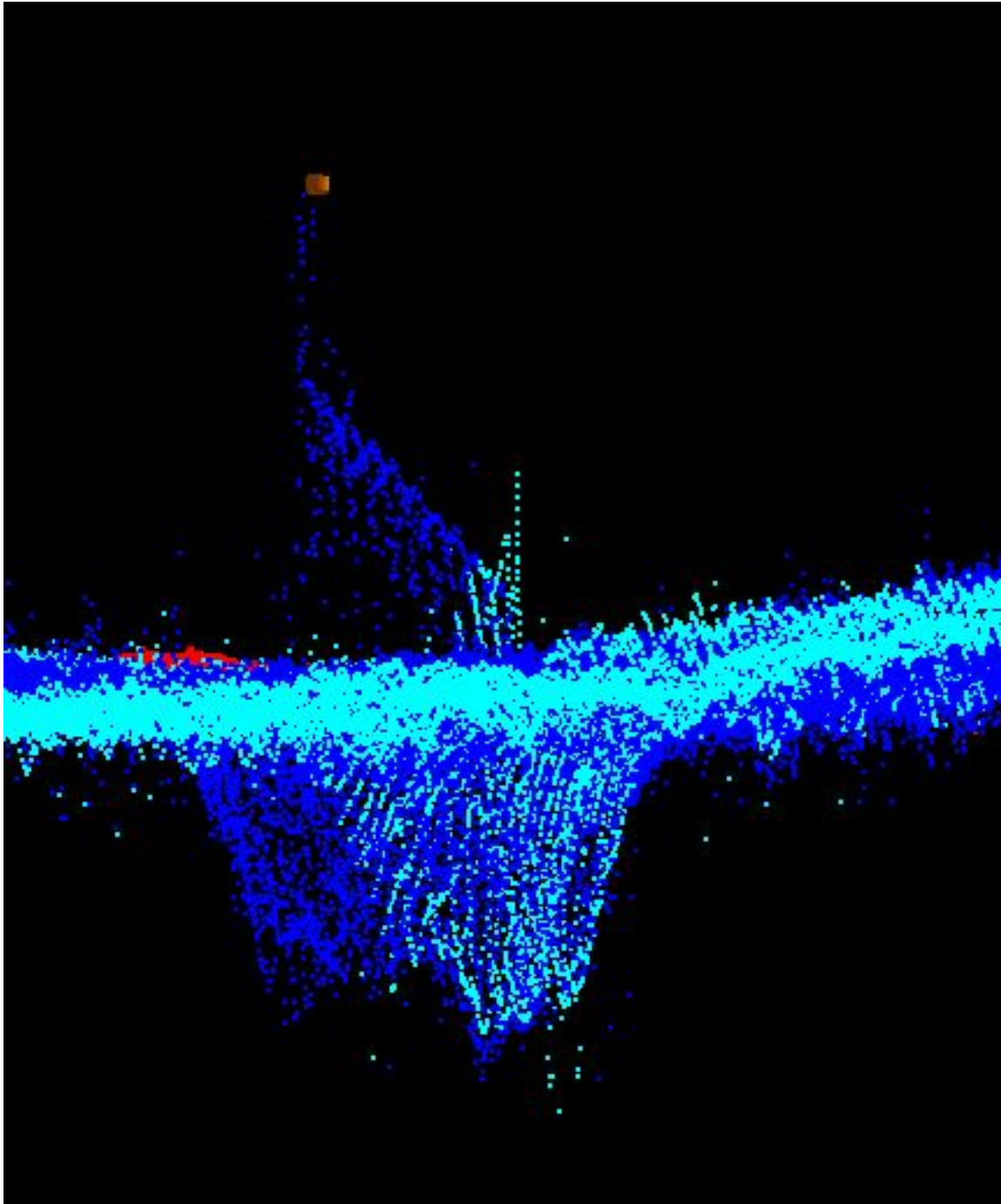
WATLEV - 3:always under water/submerged

## Office Notes

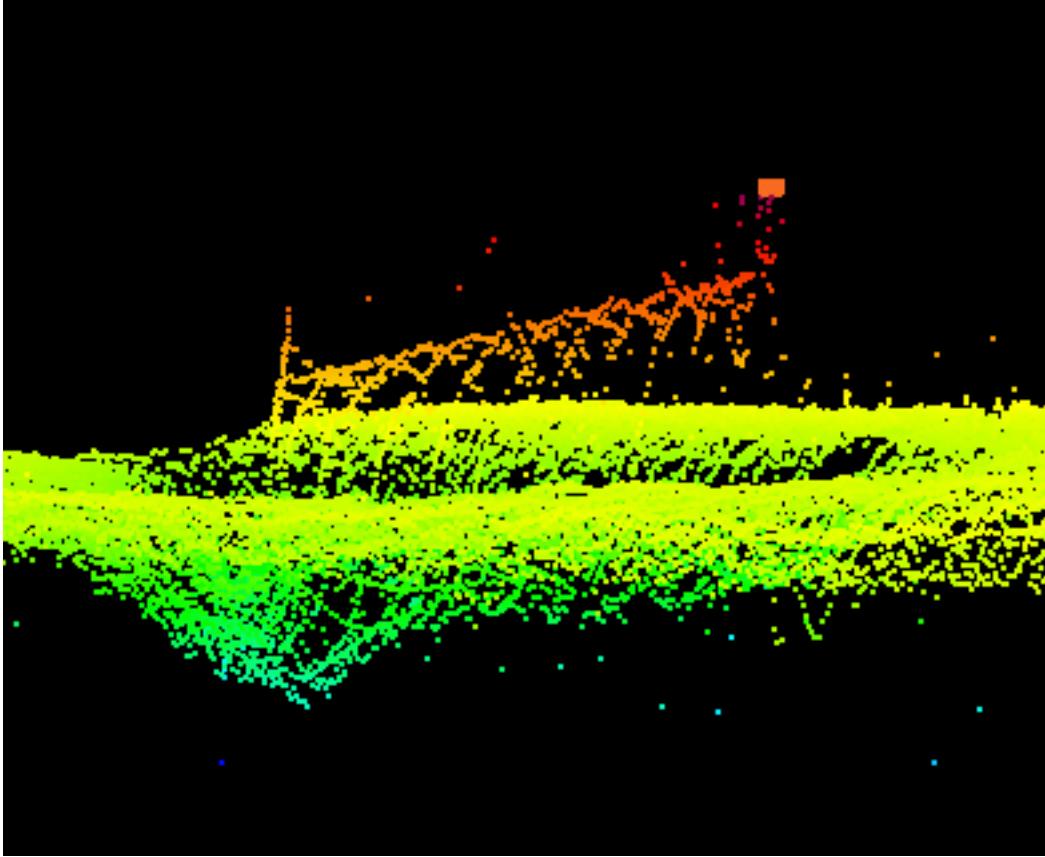
SAR Note: The feature was added by the SAR reviewer. The feature is visible in the full MBES coverage data.

COMPILE: Concur. Chart a dangerous wreck, least depth 35.92 ft in the present survey position.

## Feature Images



*Figure 1.15.1*



*Figure 1.15.2*

## 1.16) H12413\_Wk32

### Survey Summary

**Survey Position:** 40° 53' 45.9" N, 073° 25' 22.3" W  
**Least Depth:** 3.43 m (= 11.25 ft = 1.875 fm = 1 fm 5.25 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351234 00001(FFFE00149E420001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Small wreck located at survey position with multibeam

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351234 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add wreck

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

11ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ¾fm (12300\_1, 13006\_1, 13003\_1)

3.4m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 3.429 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES data.

COMPILE: Concur. Chart a dangerous wreck, least depth 11.25 ft in the present survey position.

### Feature Images

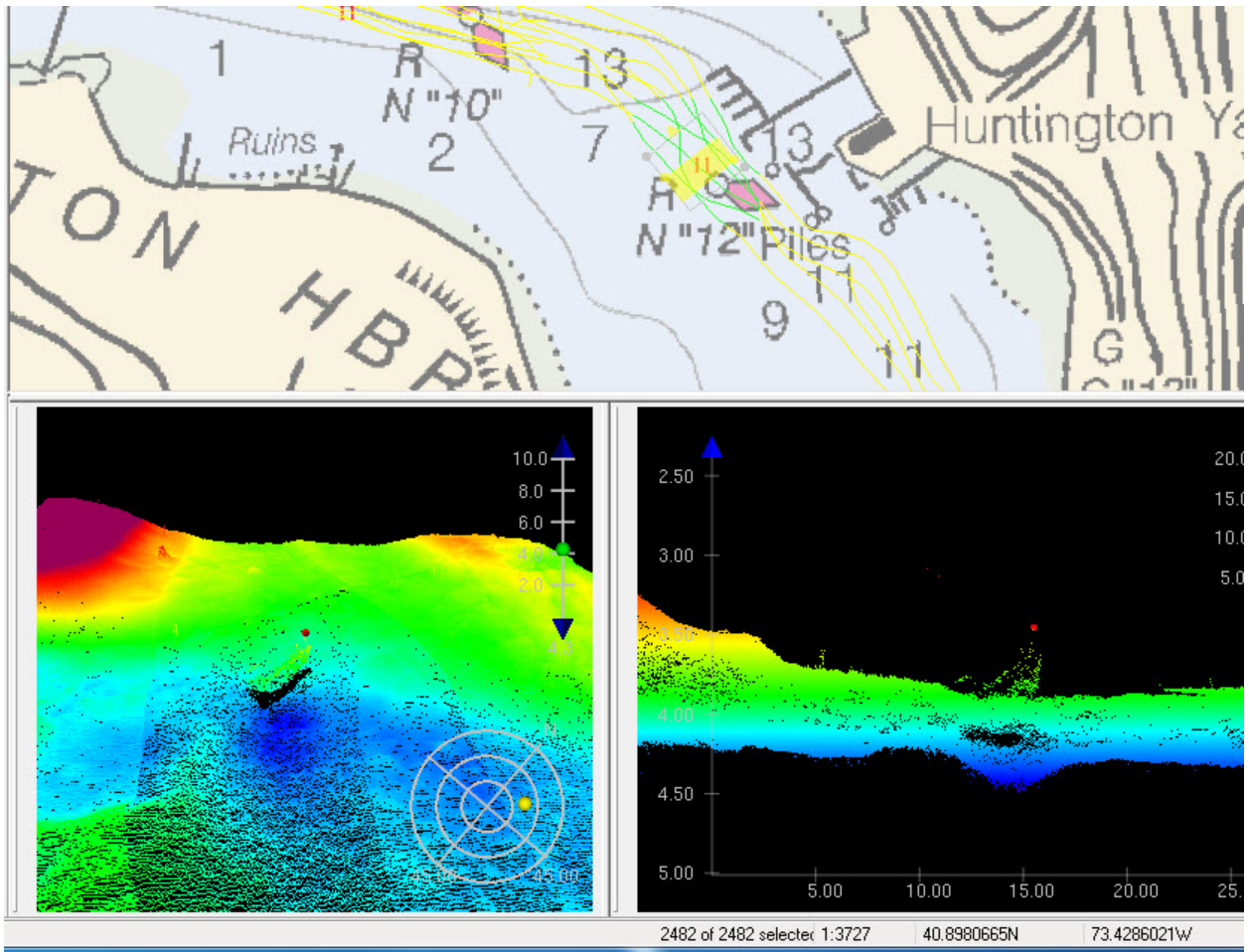


Figure 1.16.1



## 1.17) H12413\_Wk08

### Survey Summary

**Survey Position:** 40° 53' 14.3" N, 073° 25' 16.4" W  
**Least Depth:** 2.67 m (= 8.76 ft = 1.459 fm = 1 fm 2.76 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351233 00001(FFFE00149E410001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Item is a wreck, upside down

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351233 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

update location of wreck

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

9ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ½fm (12300\_1, 13006\_1, 13003\_1)

2.7m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 2.669 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature should be moved 10 meters to the South The feature is visible in the full MBES sonar data.

COMPILE: Concur. Delete charted dangerous 9 foot obstruction. Chart a dangerous wreck, least depth 8.75 ft in the present survey position.

### Feature Images

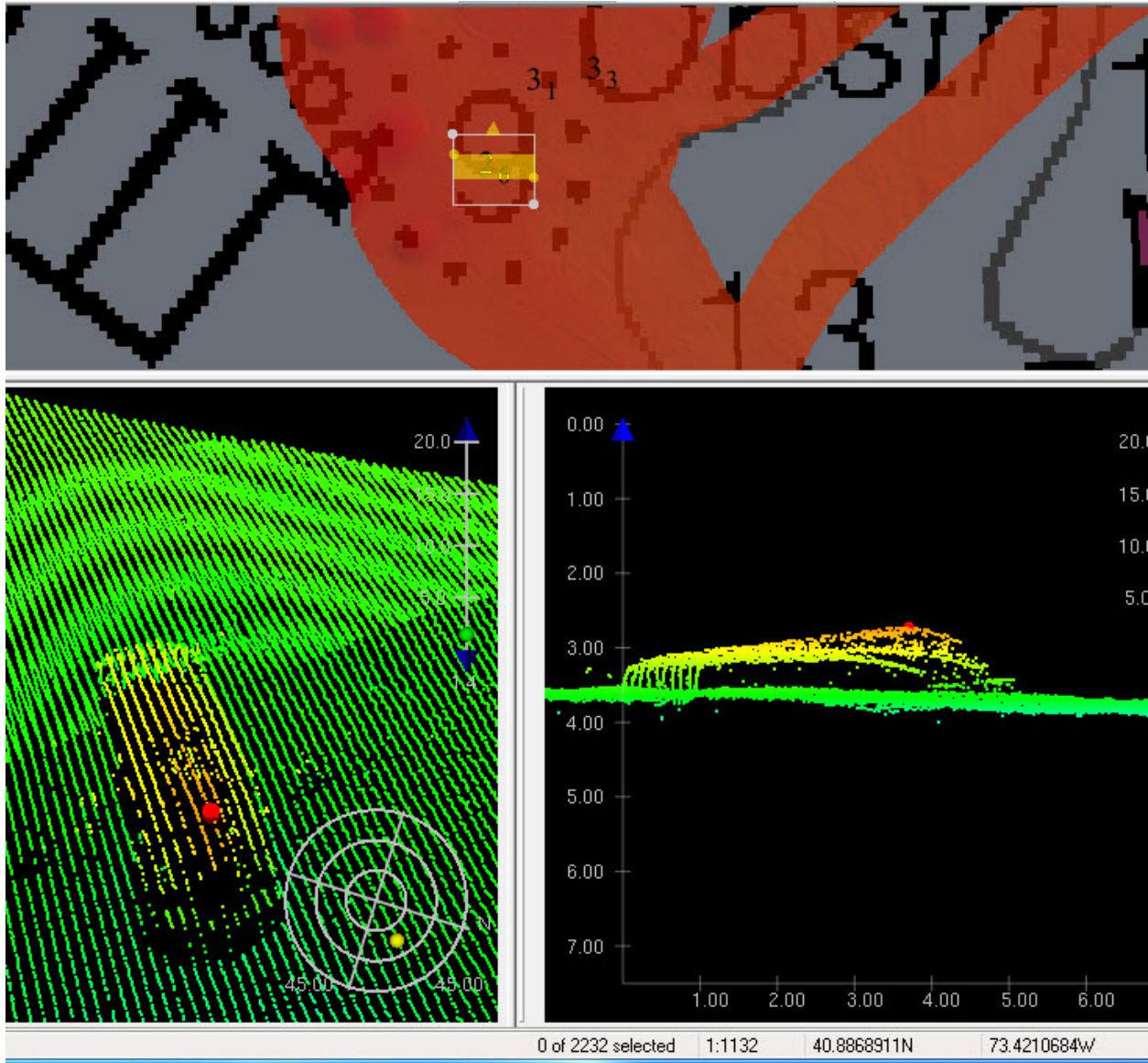


Figure 1.17.1

## 1.18) H12413\_Wk24

### Survey Summary

**Survey Position:** 40° 54' 42.4" N, 073° 25' 12.7" W  
**Least Depth:** 5.96 m (= 19.54 ft = 3.256 fm = 3 fm 1.54 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351231 00001(FFFE00149E3F0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Found new wreck.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351231 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart wreck.

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

19ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

3 ¼fm (12300\_1, 13006\_1, 13003\_1)

6.0m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 5.955 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES coverage and 200% side scan sonar.

COMPILE: Concur. Chart a dangerous wreck, least depth 19.54 ft in the present survey position.

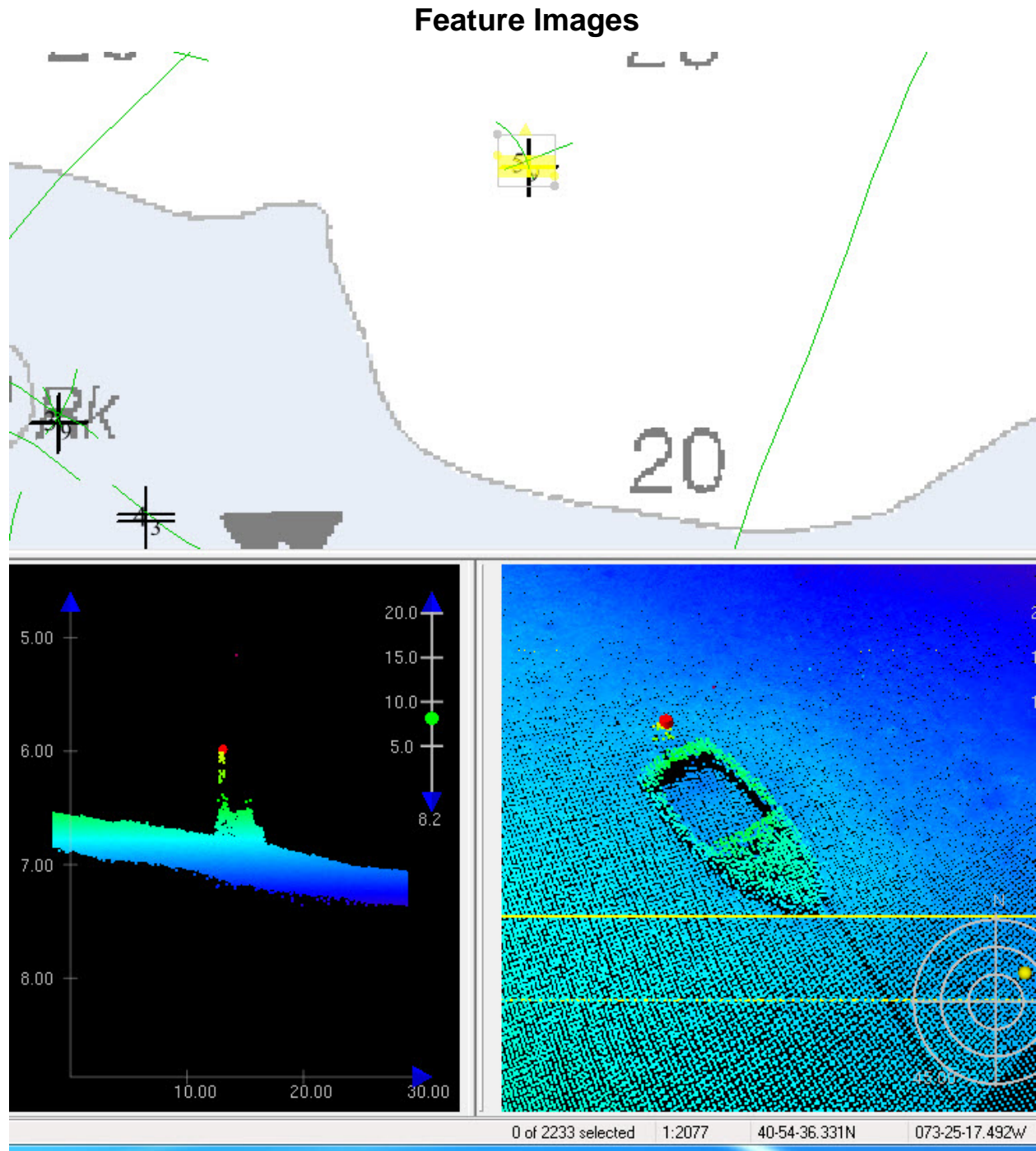


Figure 1.18.1

## 1.19) H12413\_Wk25

### Survey Summary

**Survey Position:** 40° 56' 43.4" N, 073° 25' 06.8" W  
**Least Depth:** 9.84 m (= 32.28 ft = 5.379 fm = 5 fm 2.28 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351235 00001(FFFE00149E430001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: An uncharted wreck was found with object detection MB.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351235 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart a wreck.

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

32ft (12365\_1, 12364\_20, 12363\_1)

5 ¼fm (12300\_1, 13006\_1, 13003\_1)

9.8m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413



TECSOU - 3:found by multi-beam

VALSOU - 9.838 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES coverage.

COMPILE: Concur. Chart a dangerous wreck, least depth 32.28 ft in the present survey position.

### Feature Images

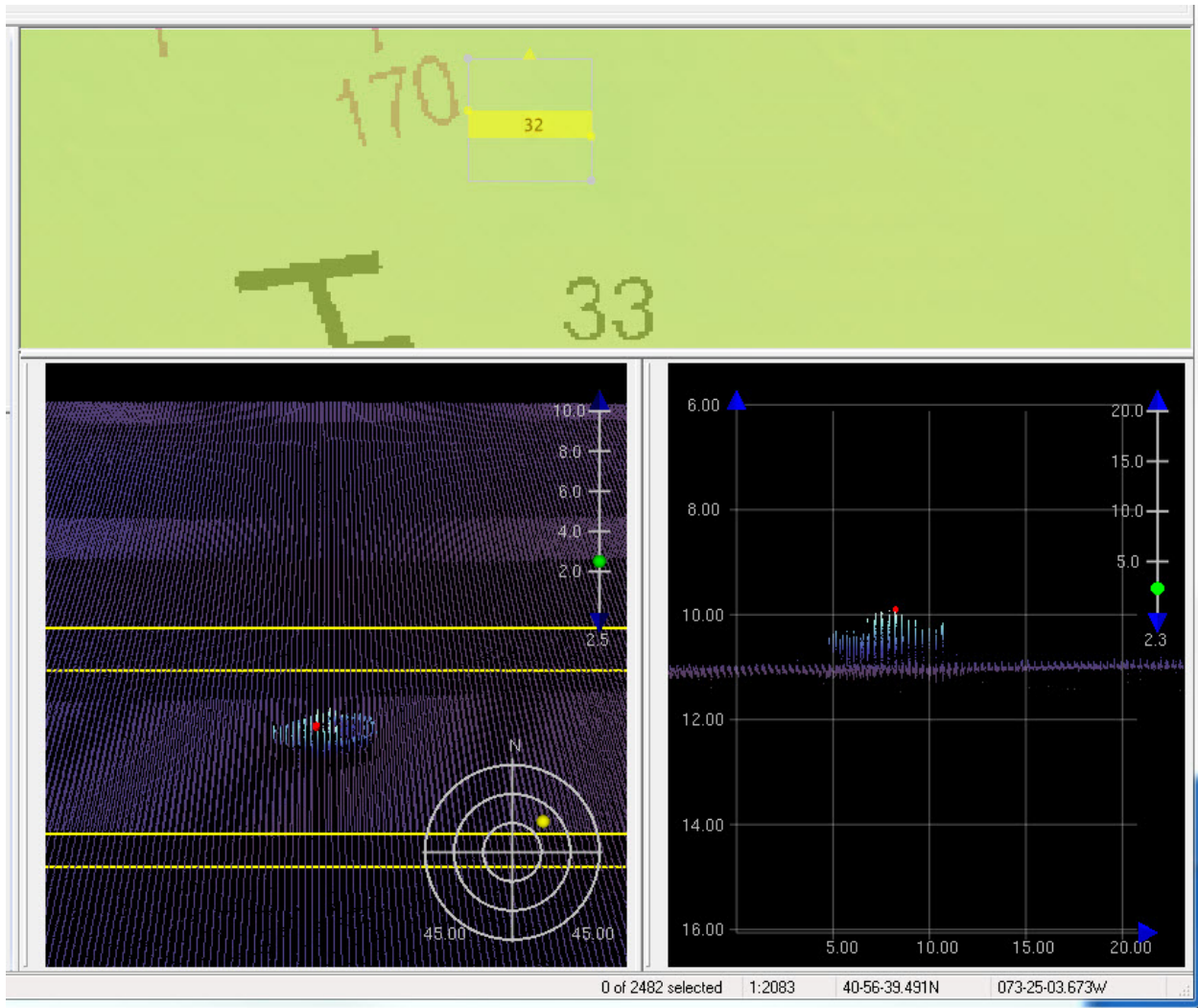


Figure 1.19.1

## 1.20) H12413\_Wk05

### Survey Summary

**Survey Position:** 40° 55' 22.5" N, 073° 25' 06.7" W  
**Least Depth:** 7.94 m (= 26.04 ft = 4.340 fm = 4 fm 2.04 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351196 00001(FFFE00149E1C0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wreck found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351196 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wk

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

26ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

4 ¼fm (12300\_1, 13006\_1, 13003\_1)

7.9m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 7.937 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: Wreck is visible in both the full MBES and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 26.04 ft in the present survey position.

### Feature Images

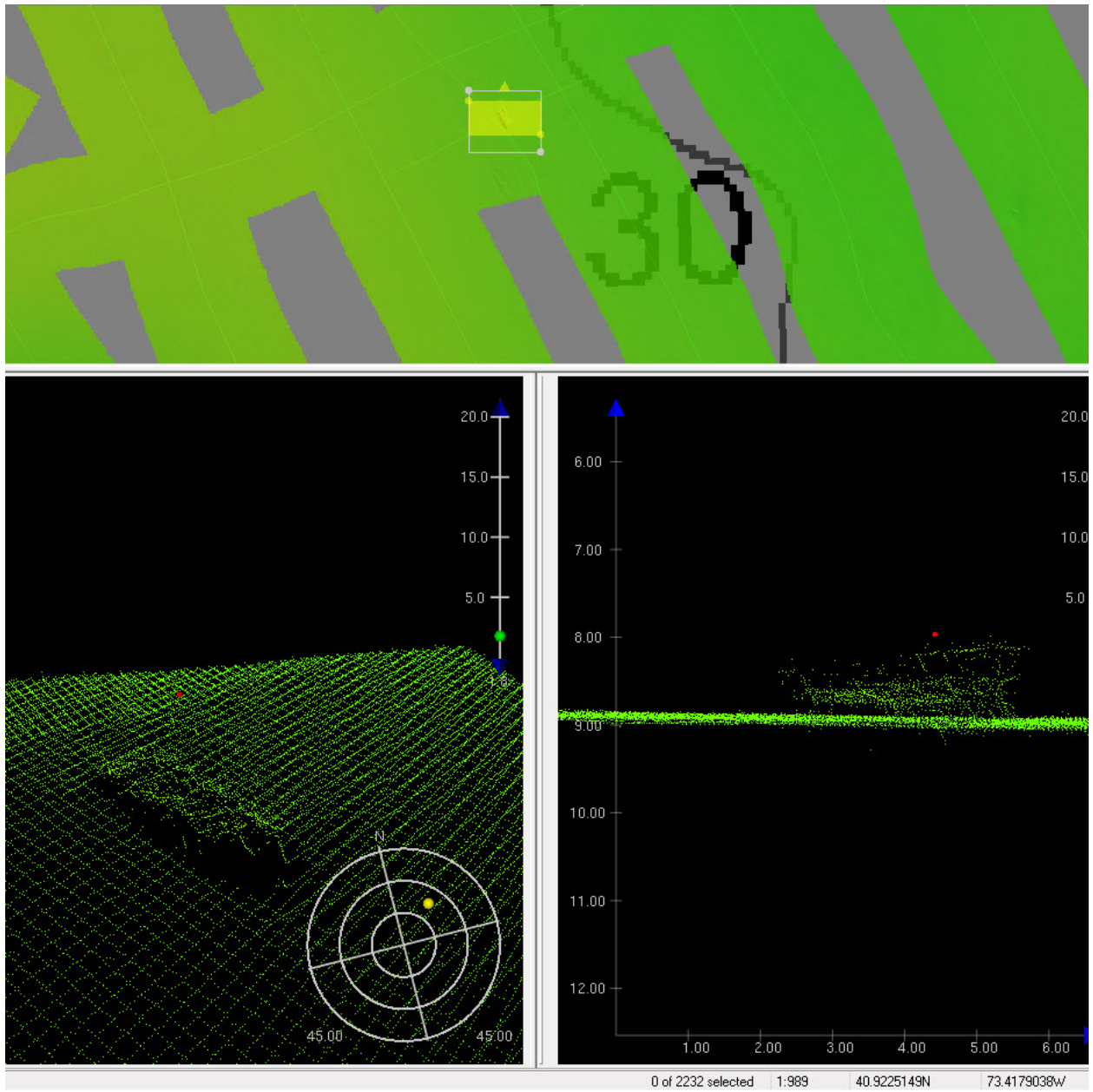


Figure 1.20.1

## 1.21) H12413\_Wk36

### Survey Summary

**Survey Position:** 40° 53' 18.1" N, 073° 25' 01.6" W  
**Least Depth:** 2.92 m (= 9.60 ft = 1.599 fm = 1 fm 3.60 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351228 00001(FFFE00149E3C0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wreck found in MB

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351228 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart new Wk

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

9ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ½fm (12300\_1, 13006\_1, 13003\_1)

2.9m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 2.925 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES data.

COMPILE: Concur. Chart a dangerous wreck, least depth 9.60 ft in the present survey position.



### Feature Images

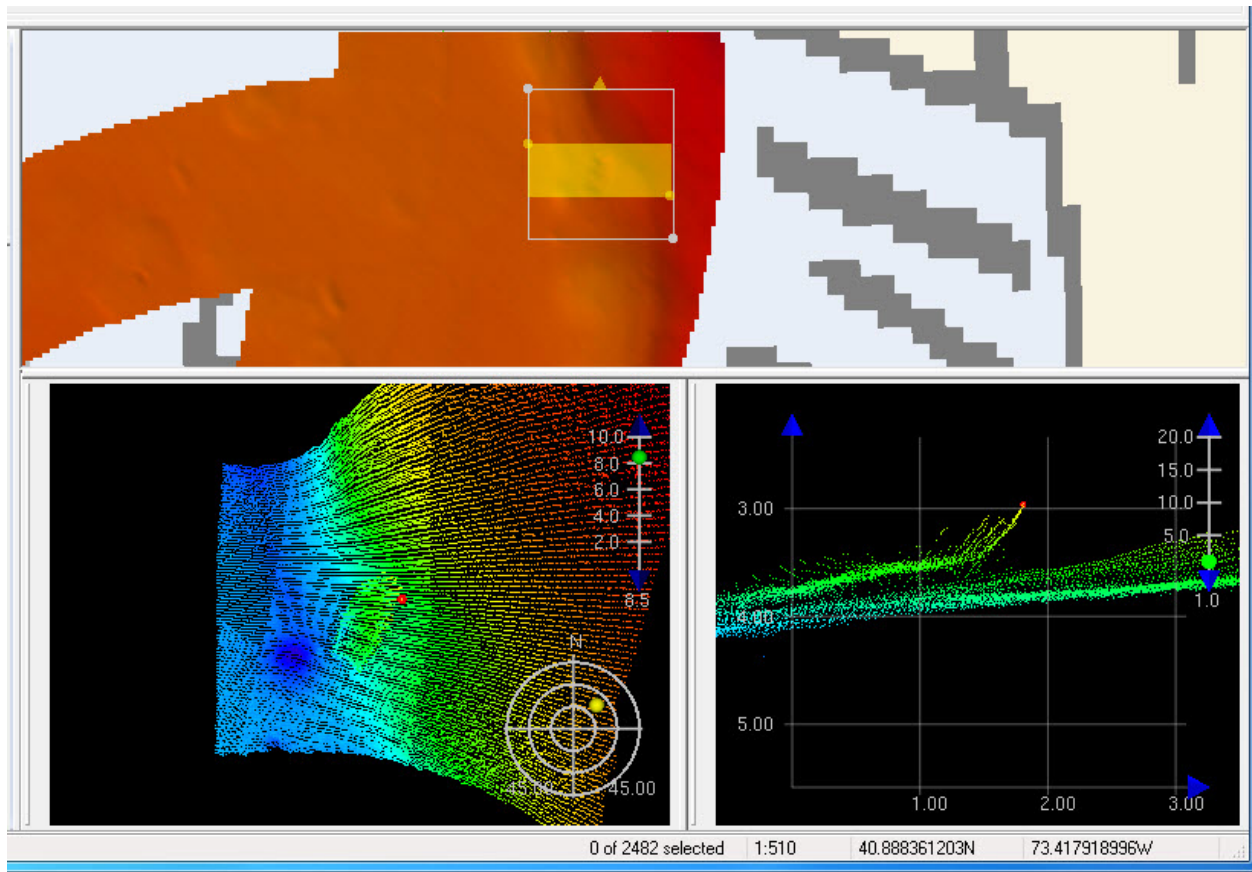


Figure 1.21.1

## 1.22) H12413\_Wk31

### Survey Summary

**Survey Position:** 40° 54' 43.4" N, 073° 24' 38.9" W  
**Least Depth:** 6.34 m (= 20.79 ft = 3.465 fm = 3 fm 2.79 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351190 00001(FFFE00149E160001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: An uncharted wreck was found object detection MB and 200% SSS.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351190 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wreck

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

21ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

3 ½fm (12300\_1, 13006\_1, 13003\_1)

6.3m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 6.336 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 20.79 ft in the present survey position.

### Feature Images

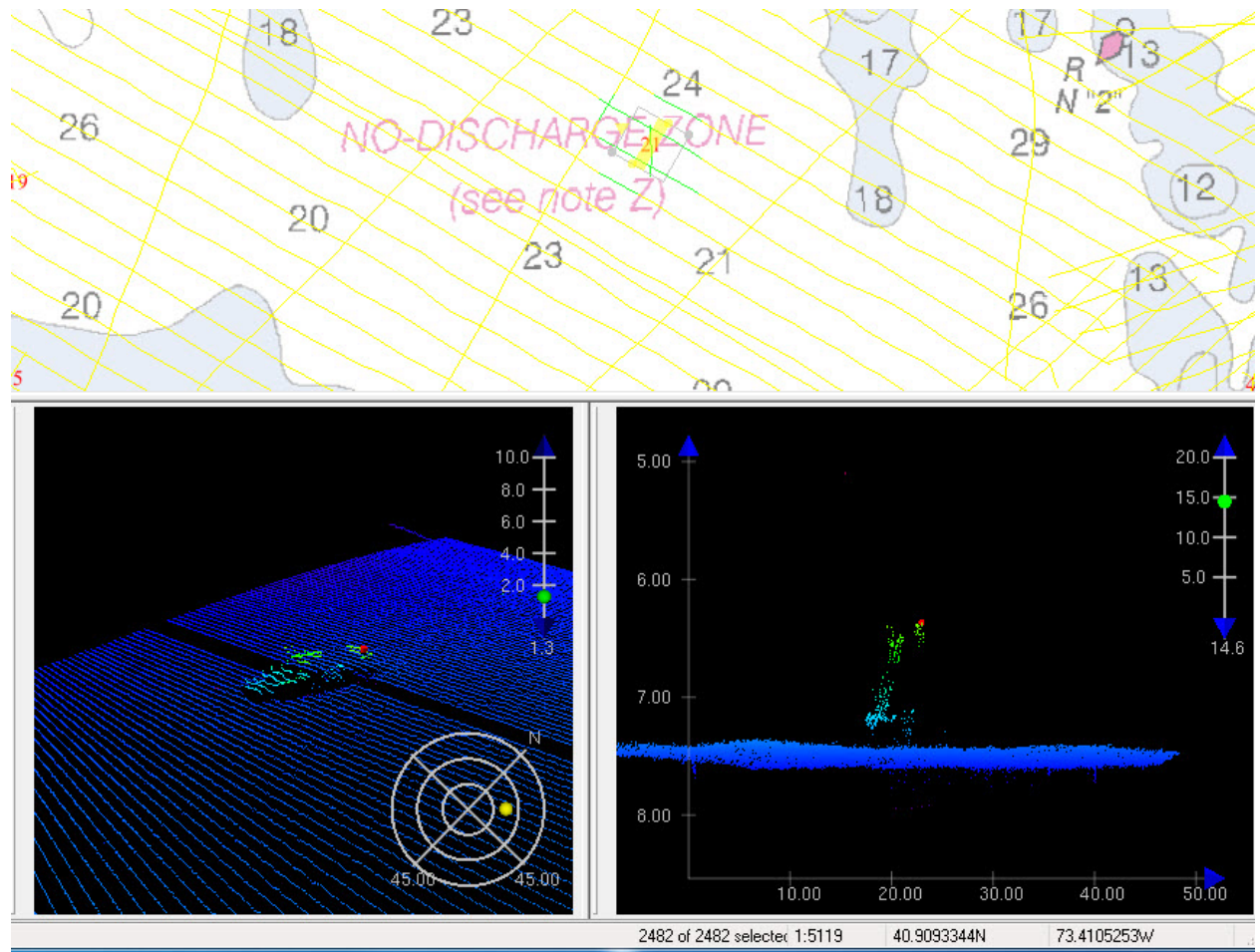


Figure 1.22.1

## 1.23) H12413\_Wk30

### Survey Summary

**Survey Position:** 40° 55' 07.4" N, 073° 24' 15.7" W  
**Least Depth:** 4.22 m (= 13.85 ft = 2.309 fm = 2 fm 1.85 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351198 00001(FFFE00149E1E0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Chart a wreck.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351198 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

An uncharted wreck was found with Reson 7125 OD MBES.

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

14ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2 ¼fm (12300\_1, 13006\_1, 13003\_1)

4.2m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 4.223 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the complete MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 13.86 ft in the present survey position.

### Feature Images

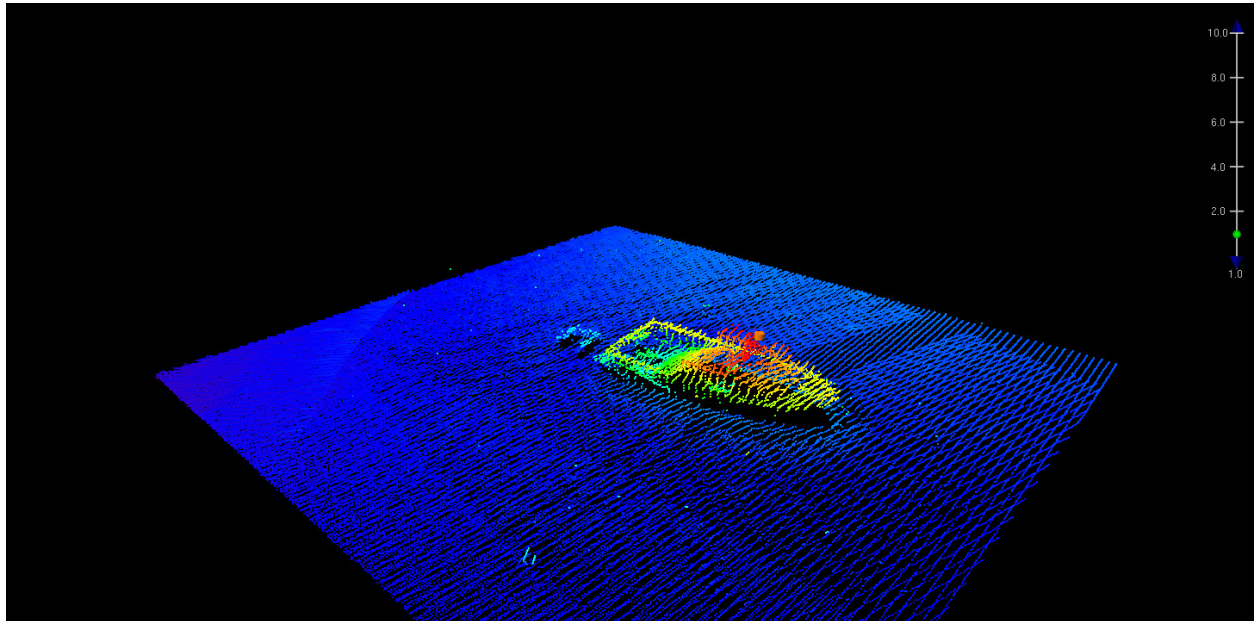


Figure 1.23.1

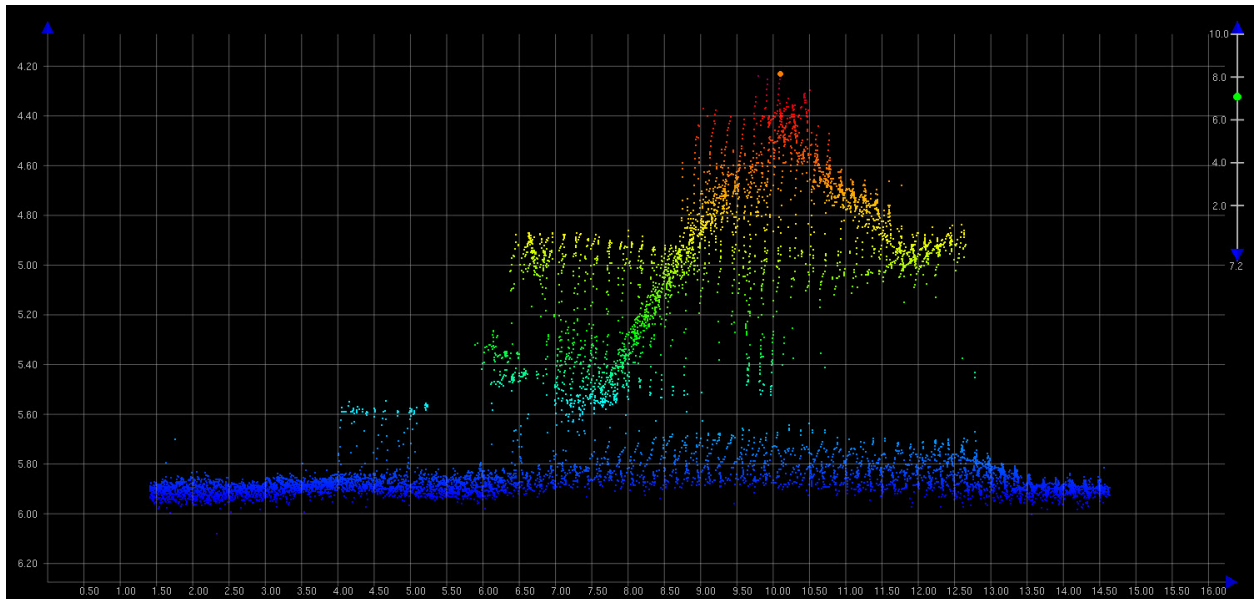


Figure 1.23.2



## 1.24) H12413\_Wk34

### Survey Summary

**Survey Position:** 40° 55' 19.7" N, 073° 24' 12.2" W  
**Least Depth:** 5.41 m (= 17.75 ft = 2.958 fm = 2 fm 5.75 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351197 00001(FFFE00149E1D0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Found wreck.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351197 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart wreck

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

17ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

3fm (12300\_1, 13006\_1, 13003\_1)

5.4m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 5.409 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES data.

COMPILE: Concur. Chart a dangerous wreck, least depth 17.75 ft in the present survey position.

### Feature Images

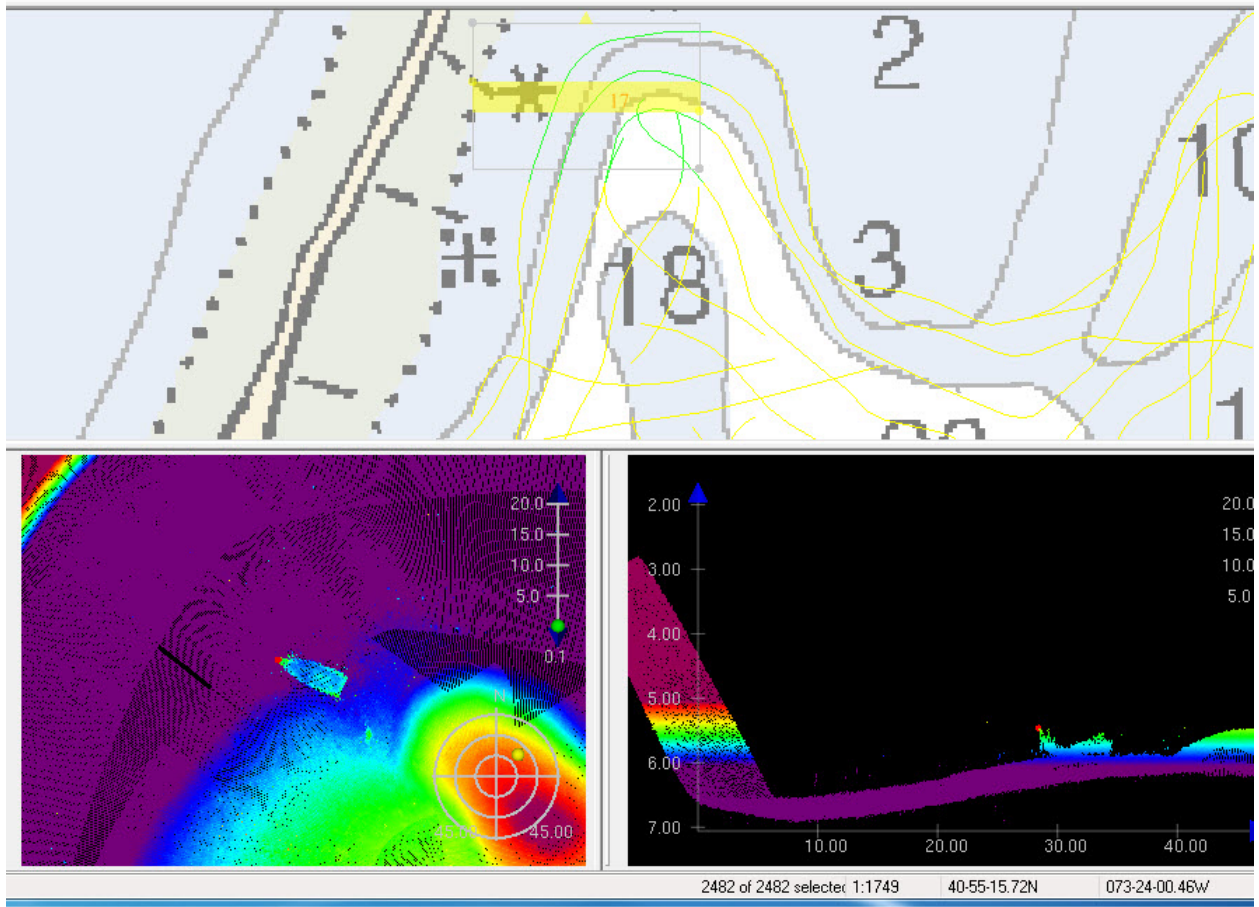


Figure 1.24.1

## 1.25) H12413\_Wk21

### Survey Summary

**Survey Position:** 40° 54' 53.5" N, 073° 23' 58.8" W  
**Least Depth:** 7.22 m (= 23.69 ft = 3.948 fm = 3 fm 5.69 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351211 00001(FFFE00149E2B0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wreck found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351211 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

add New Wk

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

23ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

4fm (12300\_1, 13006\_1, 13003\_1)

7.2m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 7.221 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES data and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 23.69 ft in the present survey position.

### Feature Images

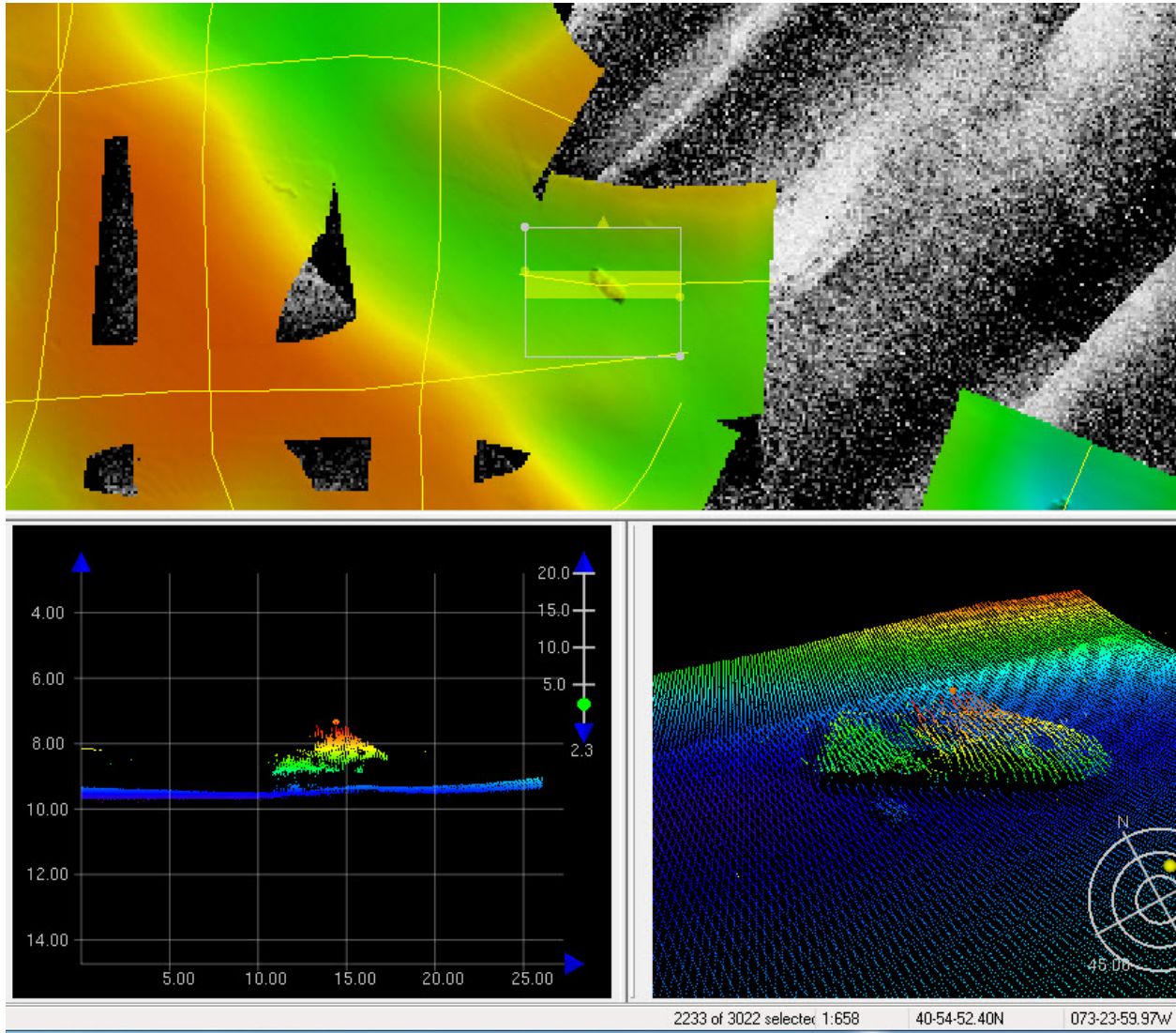


Figure 1.25.1

## 1.26) H12413\_Wk14

### Survey Summary

**Survey Position:** 40° 55' 08.0" N, 073° 23' 40.8" W  
**Least Depth:** 6.68 m (= 21.92 ft = 3.653 fm = 3 fm 3.92 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351250 00001(FFFE00149E520001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wrecks found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351250 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wk

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

22ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

3 ½fm (12300\_1, 13006\_1, 13003\_1)

6.7m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413



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

VALSOU - 6.680 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 21.92 ft in the present survey position.

### Feature Images

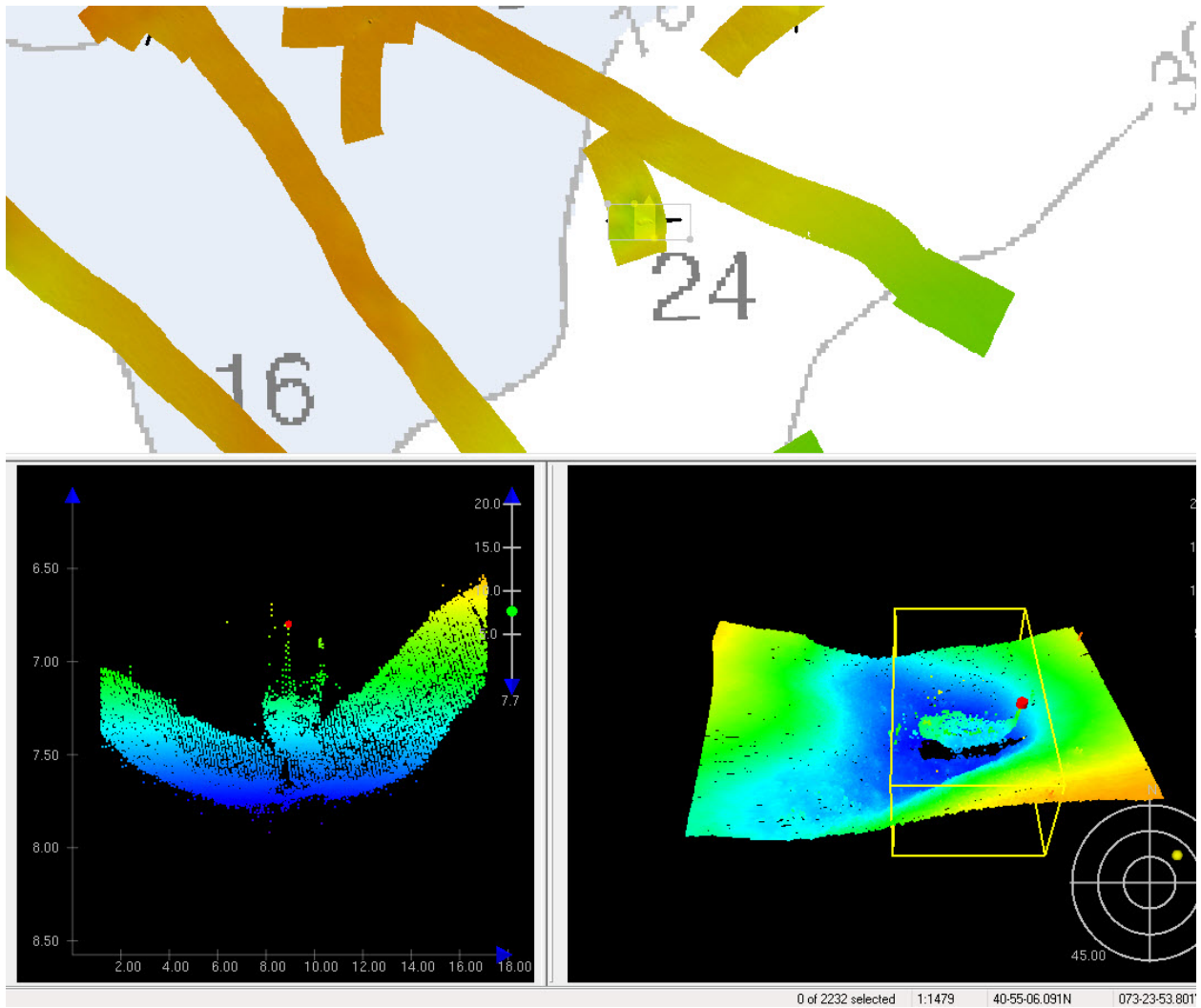


Figure 1.26.1

## 1.27) H12413\_Wk13

### Survey Summary

**Survey Position:** 40° 55' 11.4" N, 073° 23' 37.6" W  
**Least Depth:** 5.83 m (= 19.13 ft = 3.188 fm = 3 fm 1.13 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351240 00001(FFFE00149E480001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wrecks found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351240 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wk

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

19ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

3 ¼fm (12300\_1, 13006\_1, 13003\_1)

5.8m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 5.831 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 19.13 ft in the present survey position.

### Feature Images

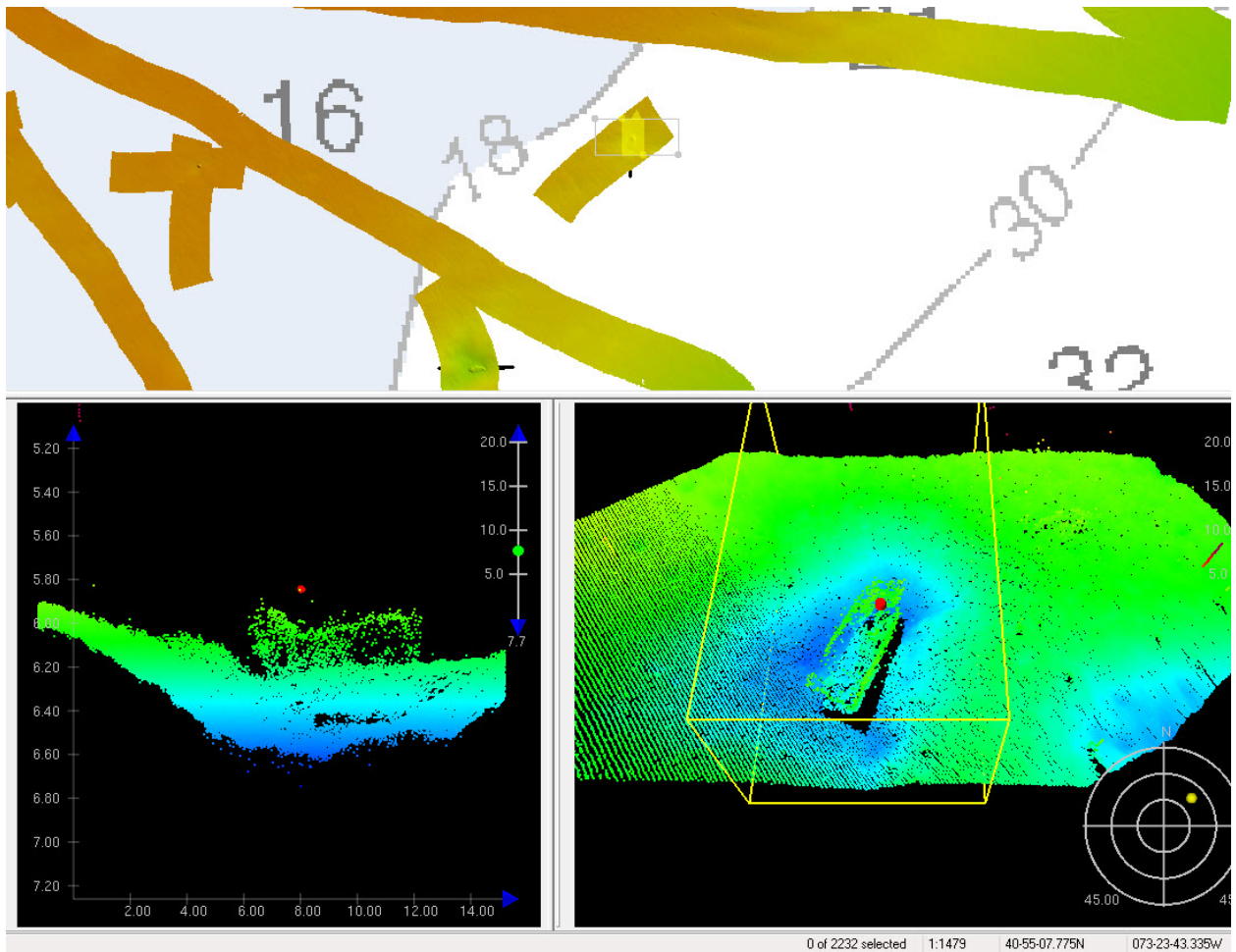


Figure 1.27.1

## 1.28) H12413\_Wk12

### Survey Summary

**Survey Position:** 40° 55' 14.5" N, 073° 23' 34.8" W  
**Least Depth:** 5.06 m (= 16.61 ft = 2.768 fm = 2 fm 4.61 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351199 00001(FFFE00149E1F0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wreck found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351199 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add new Wreck

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

16ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2 ¾fm (12300\_1, 13006\_1, 13003\_1)

5.1m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 5.063 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES coverage and the 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 16.61 ft in the present survey position. Note, AWOIS 14971, a marker PA reported, is charted 100 m northeast but was not found during present survey operations.



### Feature Images

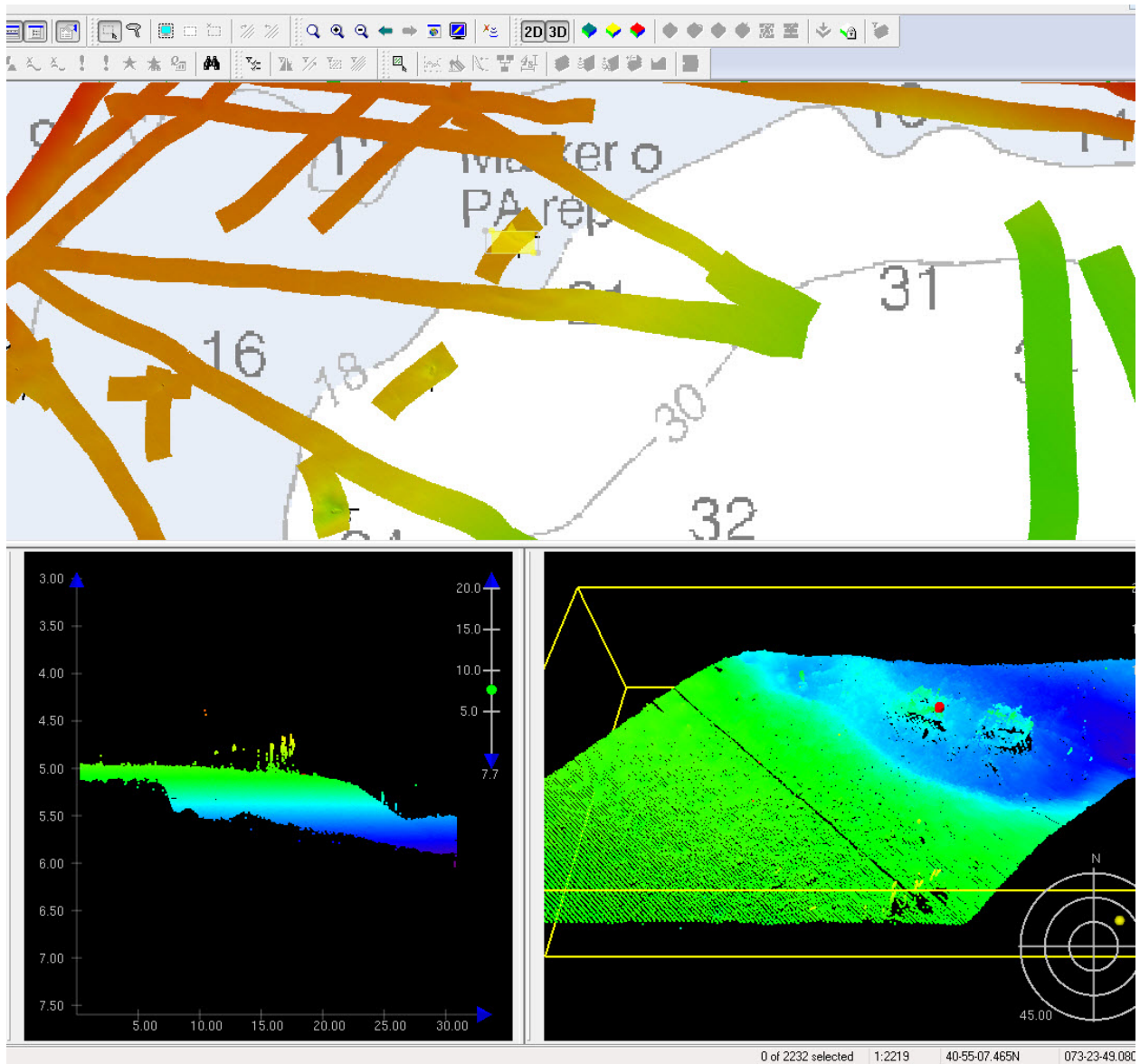


Figure 1.28.1

## 1.29) H12413\_Wk18

### Survey Summary

**Survey Position:** 40° 54' 43.9" N, 073° 23' 29.6" W  
**Least Depth:** 9.08 m (= 29.78 ft = 4.963 fm = 4 fm 5.78 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351230 00001(FFFE00149E3E0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Overturned Wk Found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351230 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart wreck.

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

30ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

5fm (12300\_1, 13006\_1, 13003\_1)

9.1m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 9.076 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is evident in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 29.78 ft in the present survey position.

### Feature Images

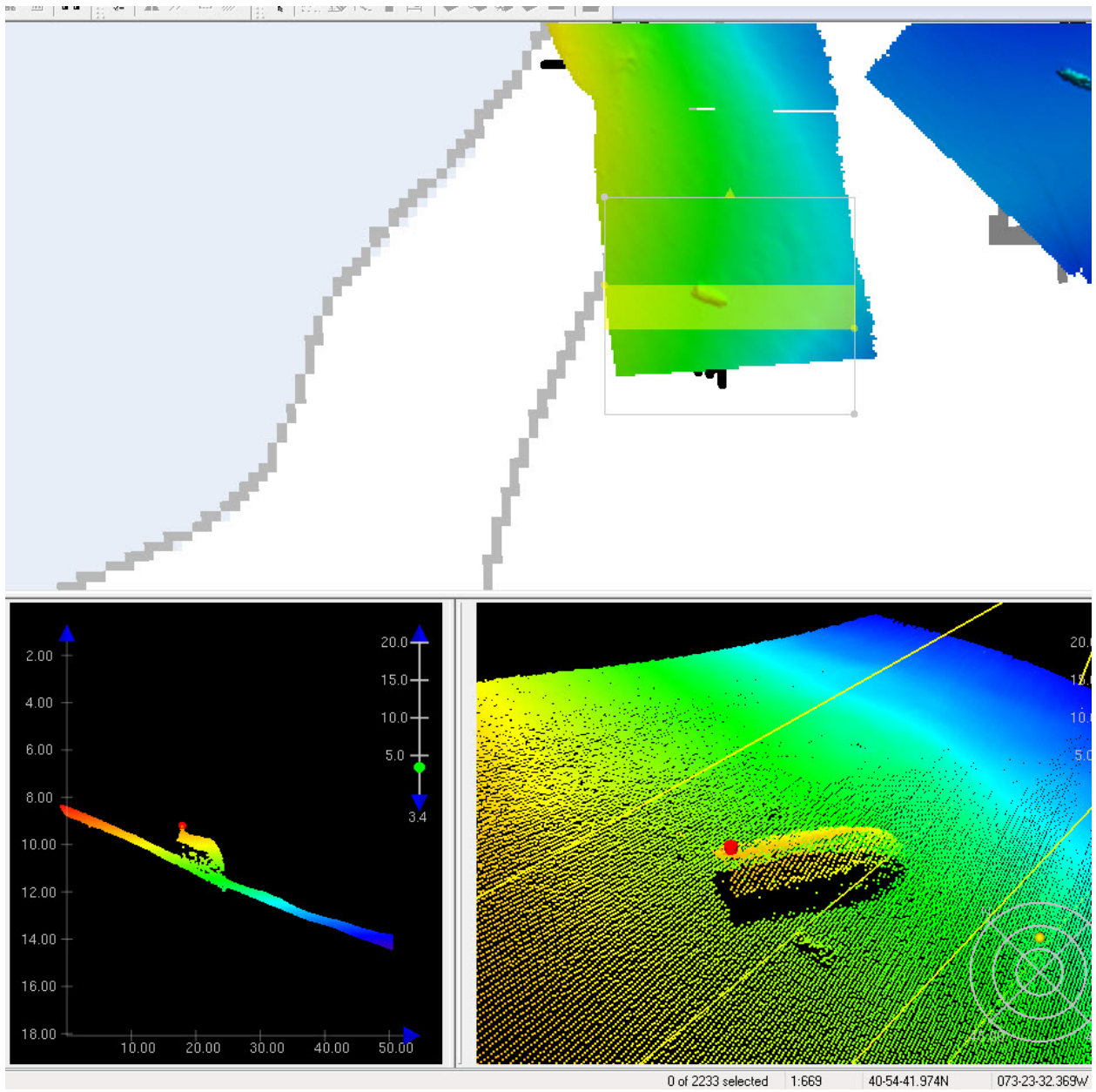


Figure 1.29.1

## 1.30) H12413\_Wk19

### Survey Summary

**Survey Position:** 40° 54' 45.3" N, 073° 23' 26.2" W  
**Least Depth:** 13.13 m (= 43.08 ft = 7.181 fm = 7 fm 1.08 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351189 00001(FFFE00149E150001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Overturned Wk Found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351189 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Chart wreck.

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

43ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

7fm (12300\_1, 13006\_1, 13003\_1)

13.1m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 13.132 m

WATLEV - 3:always under water/submerged

### **Office Notes**

SAR Note: The feature is visible in the full MBES coverage and the 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 43.08 ft in the present survey position.

### Feature Images

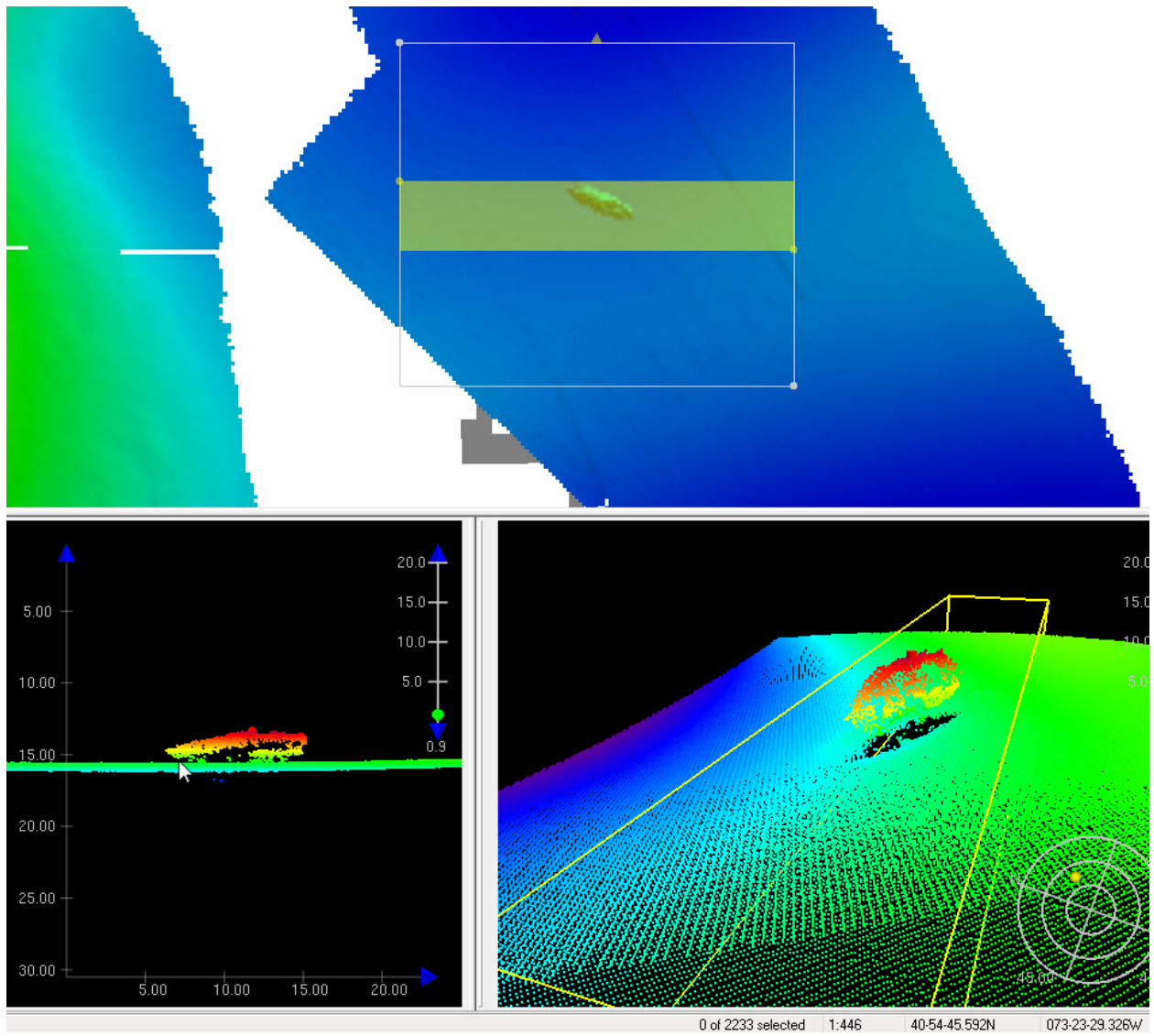


Figure 1.30.1

## 1.31) H12413\_Wk11

### Survey Summary

**Survey Position:** 40° 54' 41.8" N, 073° 23' 02.1" W  
**Least Depth:** 8.84 m (= 29.00 ft = 4.833 fm = 4 fm 5.00 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351191 00001(FFFE00149E170001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Found wreck.

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351191 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Wreck is located in a hole, and does not project above the general level of the sea floor. Hydrographer recommends not charting.

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

29ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

4  $\frac{3}{4}$ fm (12300\_1, 13006\_1, 13003\_1)

8.8m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921



SORIND - US,US,graph,H12413

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

VALSOU - 8.839 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is located in a hole but since its least depth is shoaler than that of the surrounding depths, the SAR reviewer would recommend to update the featuere to the current position and not delete it as the field unit suggests.

COMPILE: Concur. Delete charted obstruction with a least depth of 31 feet. Chart a dangerous wreck, least depth 29.00 ft in the present survey position. Note the wreck is in a hole with shoaler surrounding soundings. Feature had previously been charted as an obstruction, but appears to be a wreck.

### Feature Images

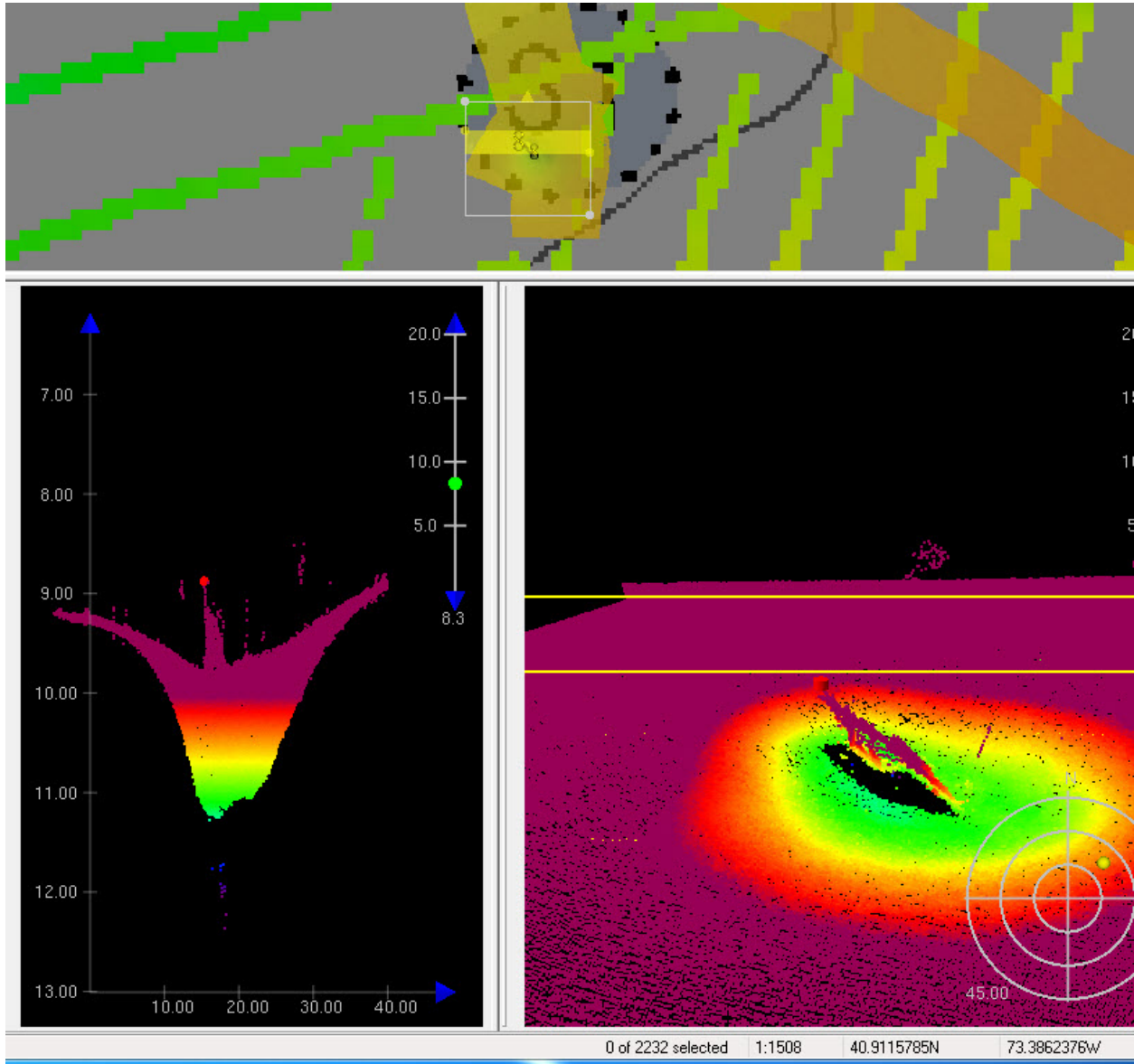


Figure 1.31.1

## 1.32) H12413\_Wk15

### Survey Summary

**Survey Position:** 40° 55' 09.9" N, 073° 23' 00.7" W  
**Least Depth:** 7.17 m (= 23.52 ft = 3.920 fm = 3 fm 5.52 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351242 00001(FFFE00149E4A0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: New Wk Found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351242 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wk

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

23ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

3  $\frac{3}{4}$ fm (12300\_1, 13006\_1, 13003\_1)

7.2m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONRAD - 2:not radar conspicuous  
 CONVIS - 2:not visual conspicuous  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known

SORDAT - 20120921

SORIND - US,US,graph,H12413

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

VALSOU - 7.169 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 23.52 ft in the present survey position.

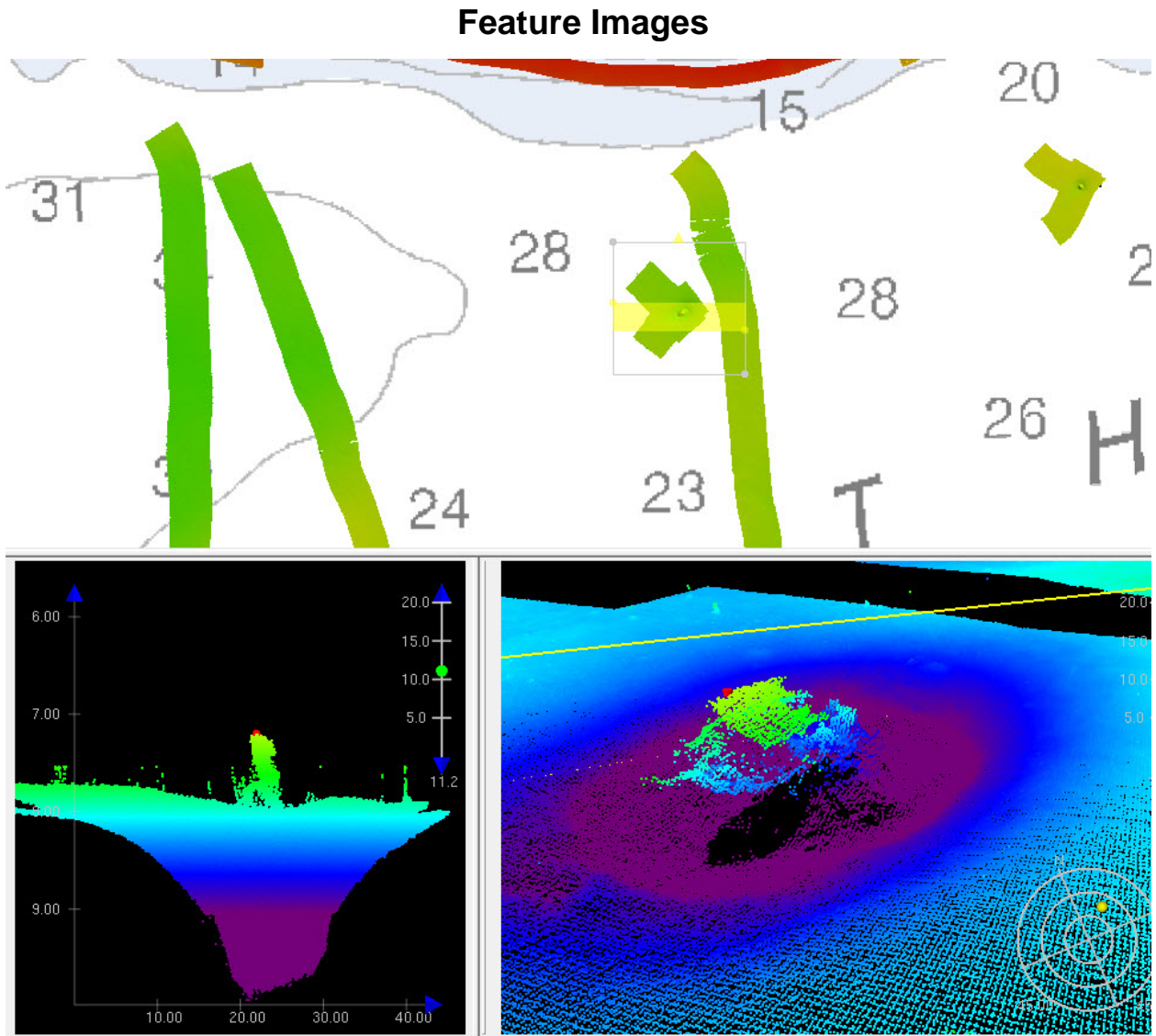


Figure 1.32.1

## 1.33) 32.56 ft wreck

### Survey Summary

**Survey Position:** 40° 54' 51.1" N, 073° 22' 55.1" W  
**Least Depth:** 9.94 m (= 32.60 ft = 5.433 fm = 5 fm 2.60 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351133 00001(FFFE00149DDD0001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351133 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

[None]

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

32ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

5 ¼fm (12300\_1, 13006\_1, 13003\_1)

9.9m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413  
 TECSOU - 3:found by multi-beam

VALSOU - 9.935 m

WATLEV - 3:always under water/submerged

### **Office Notes**

SAR Note: The wreck is visible in the full MBES coverage data.

COMPILE: Concur. Chart a dangerous wreck, least depth 32.56 ft in the present survey position.

### Feature Images

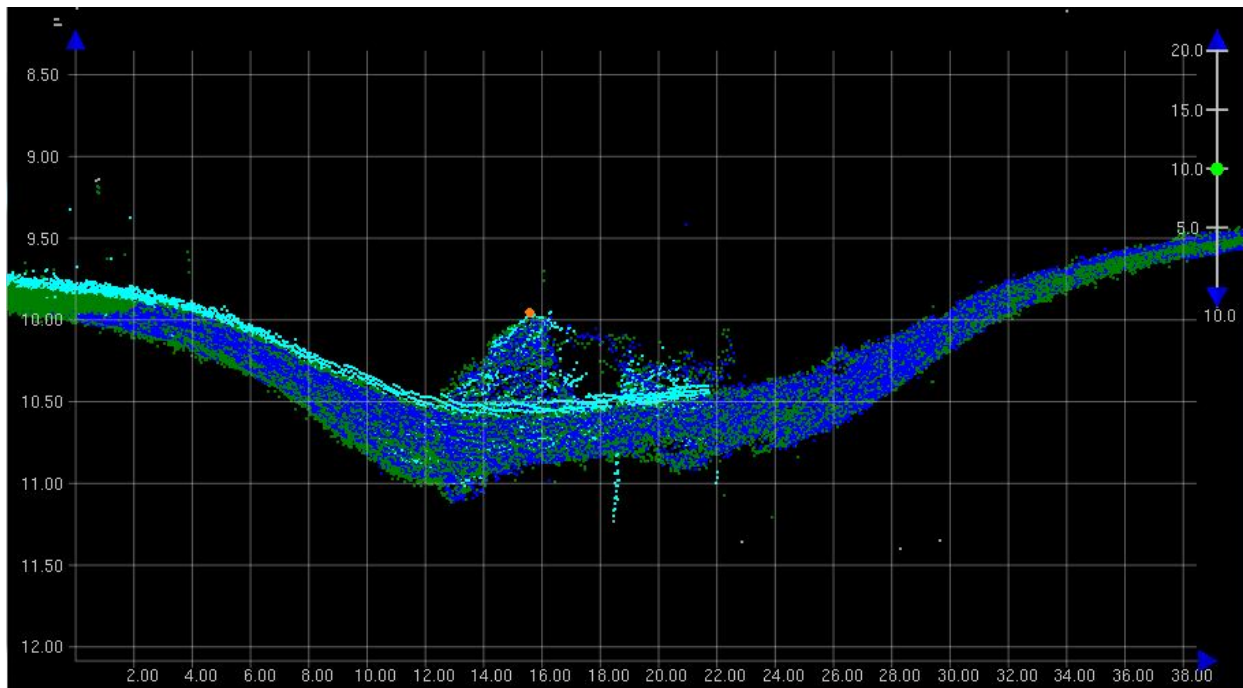


Figure 1.33.1



## 1.34) H12413\_Wk23

### Survey Summary

**Survey Position:** 40° 54' 50.8" N, 073° 22' 44.1" W  
**Least Depth:** 4.25 m (= 13.95 ft = 2.325 fm = 2 fm 1.95 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351224 00001(FFFE00149E380001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wreck found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351224 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add new Wk

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

14ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2 ¼fm (12300\_1, 13006\_1, 13003\_1)

4.3m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 4.252 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 13.95 ft in the present survey position.

### Feature Images

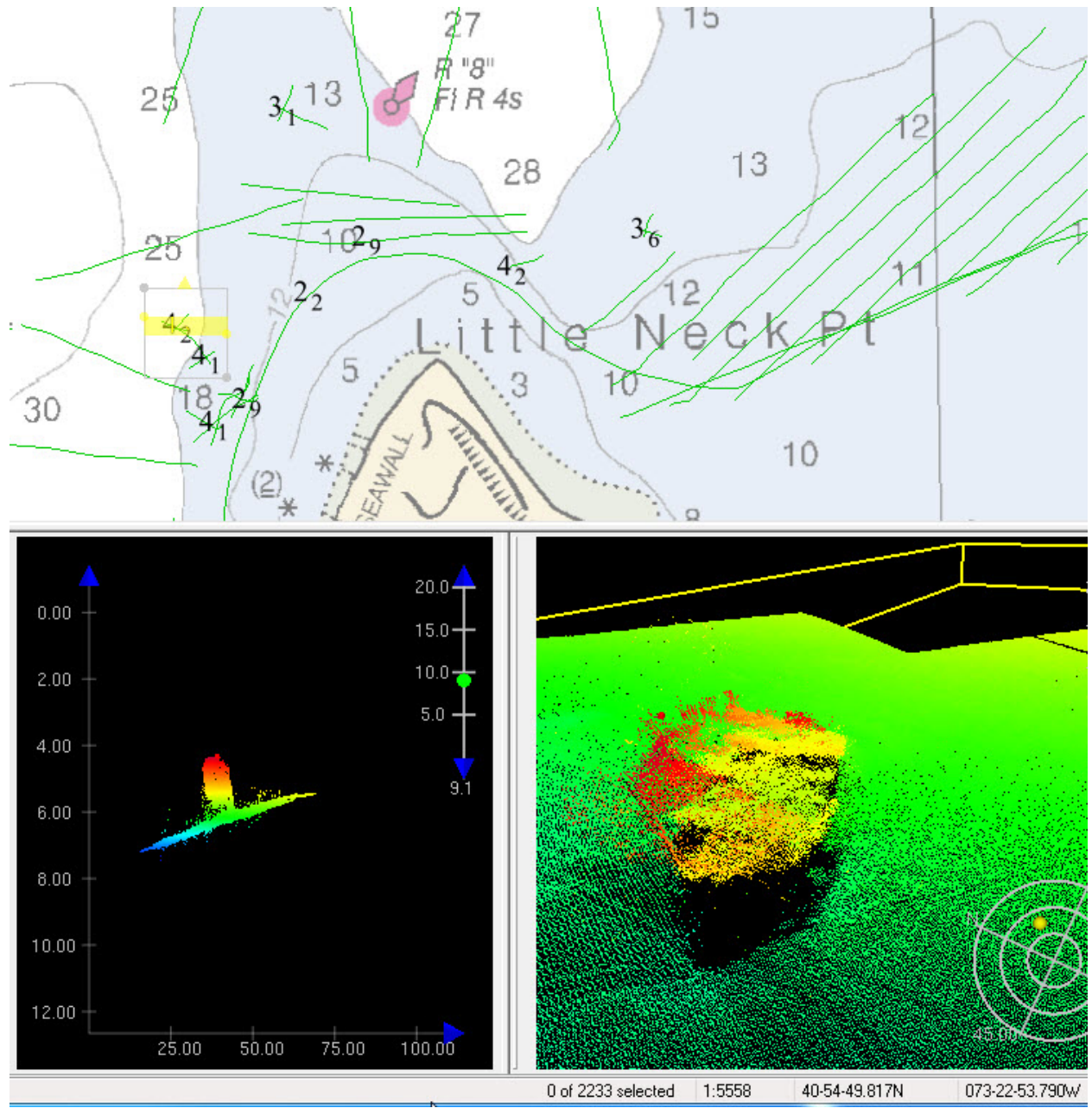


Figure 1.34.1

## 1.35) H12413\_Wk17

### Survey Summary

**Survey Position:** 40° 55' 20.9" N, 073° 22' 39.9" W  
**Least Depth:** 2.17 m (= 7.11 ft = 1.184 fm = 1 fm 1.11 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351237 00001(FFFE00149E450001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Subm Wk found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351237 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

add new Wk

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

7ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1fm (12300\_1, 13006\_1, 13003\_1)

2.2m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONRAD - 2:not radar conspicuous  
 CONVIS - 2:not visual conspicuous  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known

SORDAT - 20120921

SORIND - US,US,graph,H12413

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

VALSOU - 2.166 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 7.11 ft in the present survey position.

### Feature Images

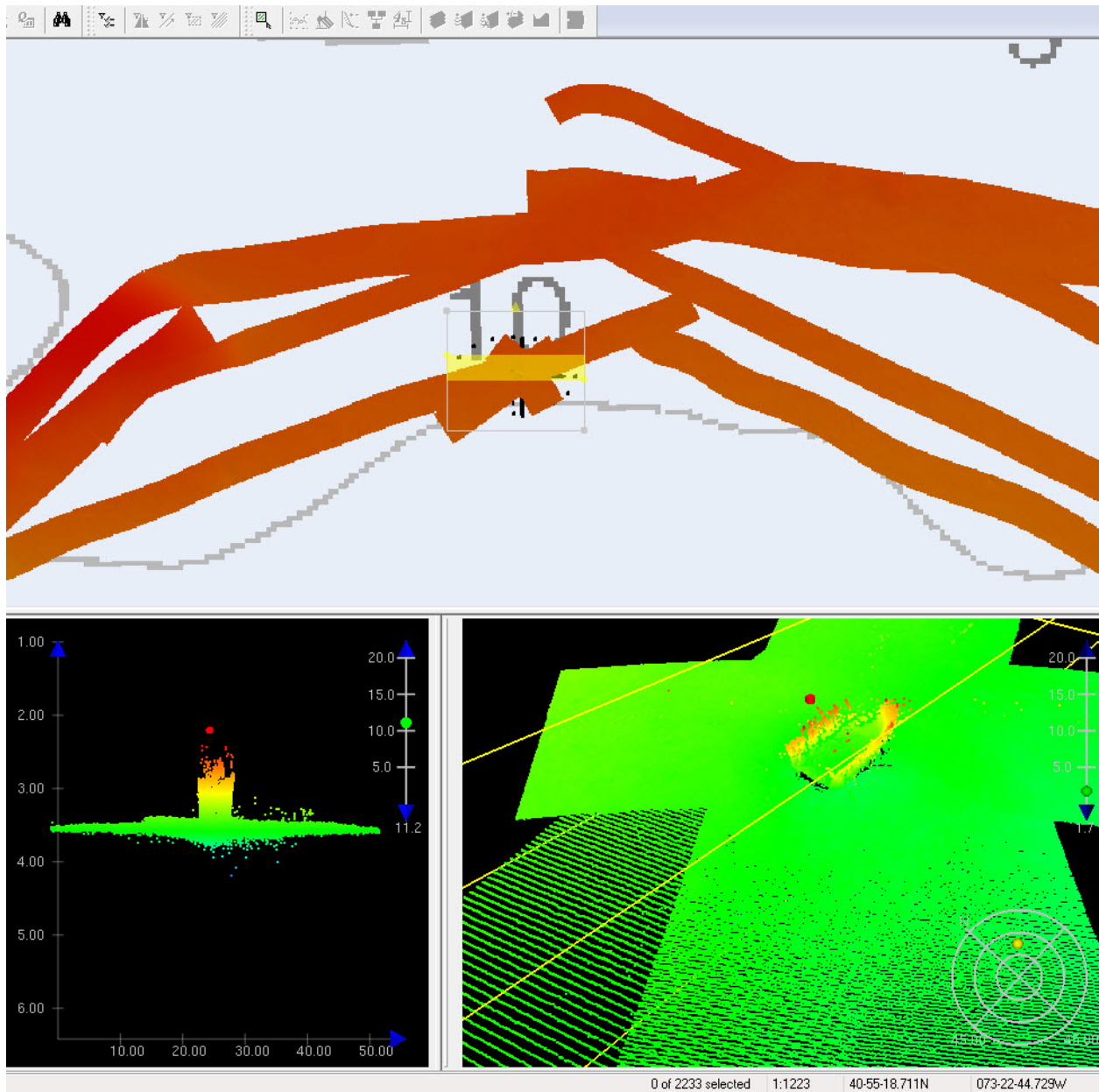


Figure 1.35.1

## 1.36) H12413\_Wk16

### Survey Summary

**Survey Position:** 40° 55' 17.8" N, 073° 22' 29.0" W  
**Least Depth:** 3.05 m (= 10.00 ft = 1.666 fm = 1 fm 4.00 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351238 00001(FFFE00149E460001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wk on side found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351238 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wk

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

10ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

1 ½fm (12300\_1, 13006\_1, 13003\_1)

3.0m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 3.047 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 10.0 ft in the present survey position.



### Feature Images

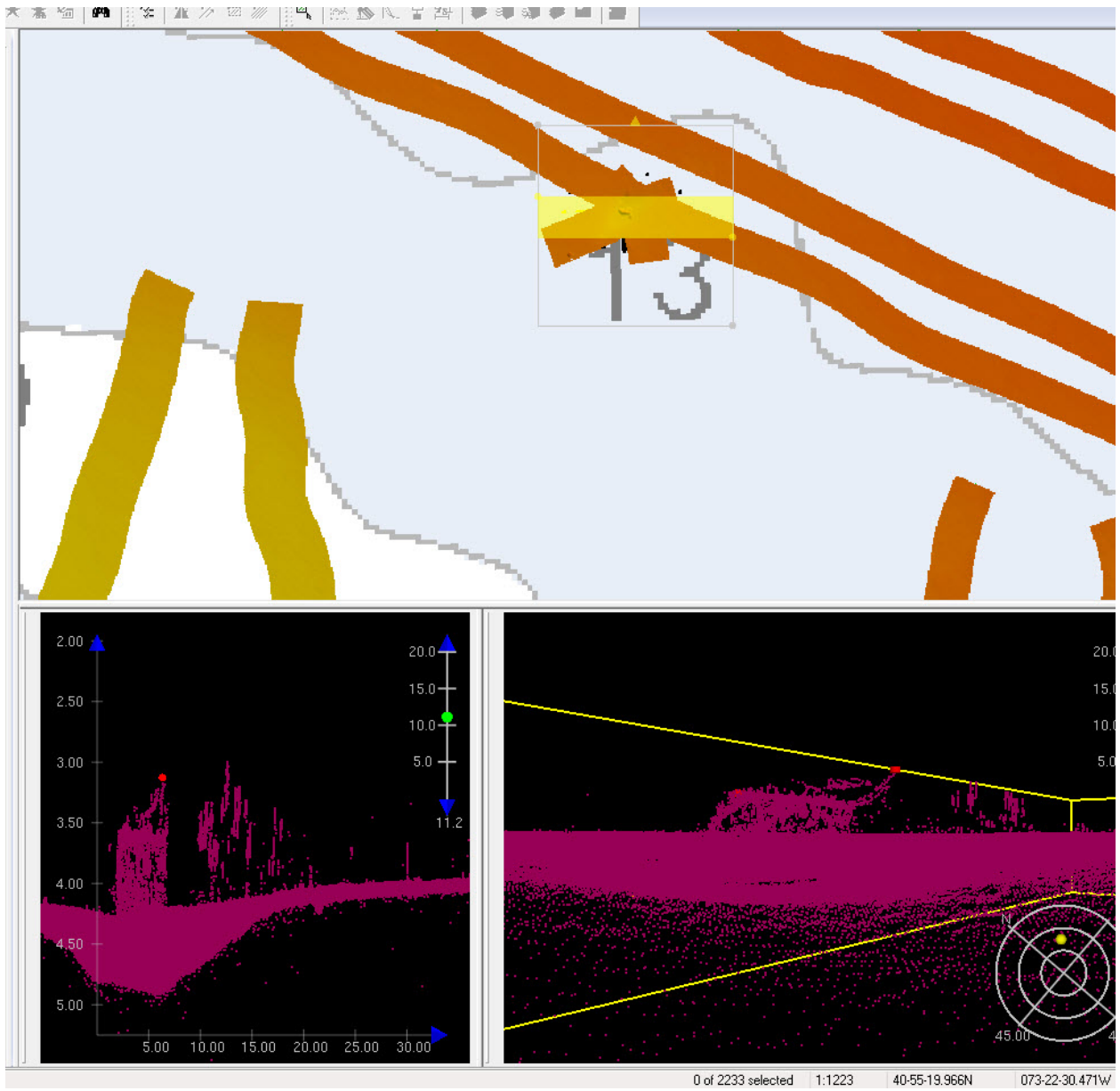


Figure 1.36.1

## 1.37) H12413\_Wk29

### Survey Summary

**Survey Position:** 40° 55' 09.5" N, 073° 22' 28.7" W  
**Least Depth:** 5.21 m (= 17.09 ft = 2.848 fm = 2 fm 5.09 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351205 00001(FFFE00149E250001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Subm Wk found

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351205 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

add new Wk

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

17ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2  $\frac{3}{4}$ fm (12300\_1, 13006\_1, 13003\_1)

5.2m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 CONRAD - 2:not radar conspicuous  
 CONVIS - 2:not visual conspicuous  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known

SORDAT - 20120921

SORIND - US,US,graph,H12413

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

VALSOU - 5.209 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 17.09 ft in the present survey position.

### Feature Images

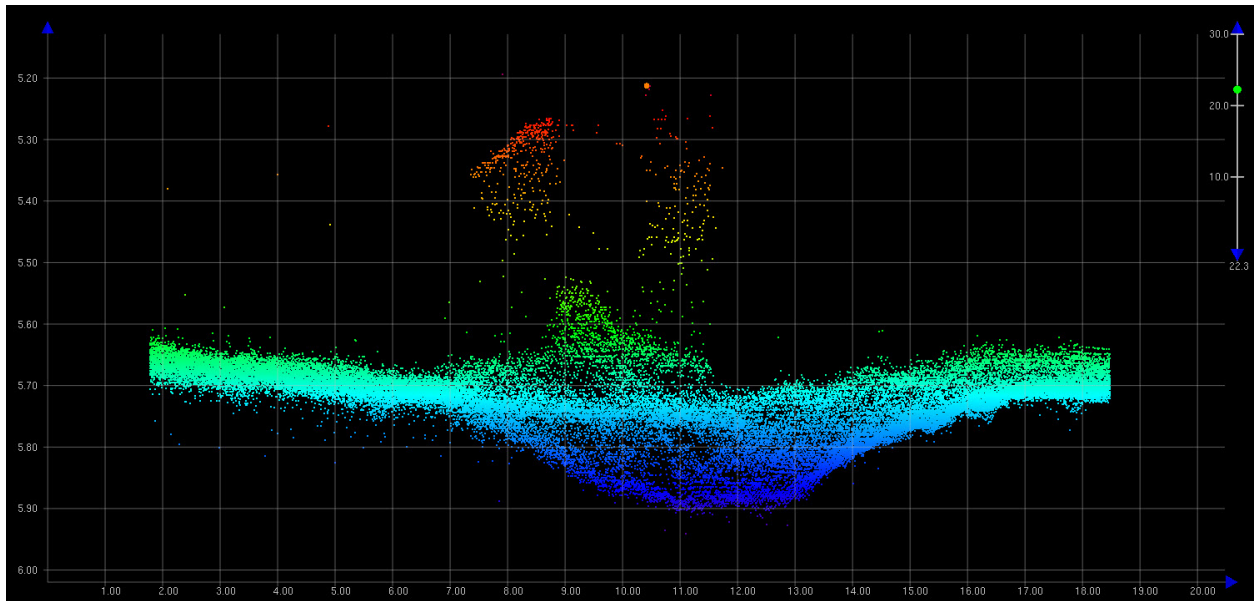


Figure 1.37.1

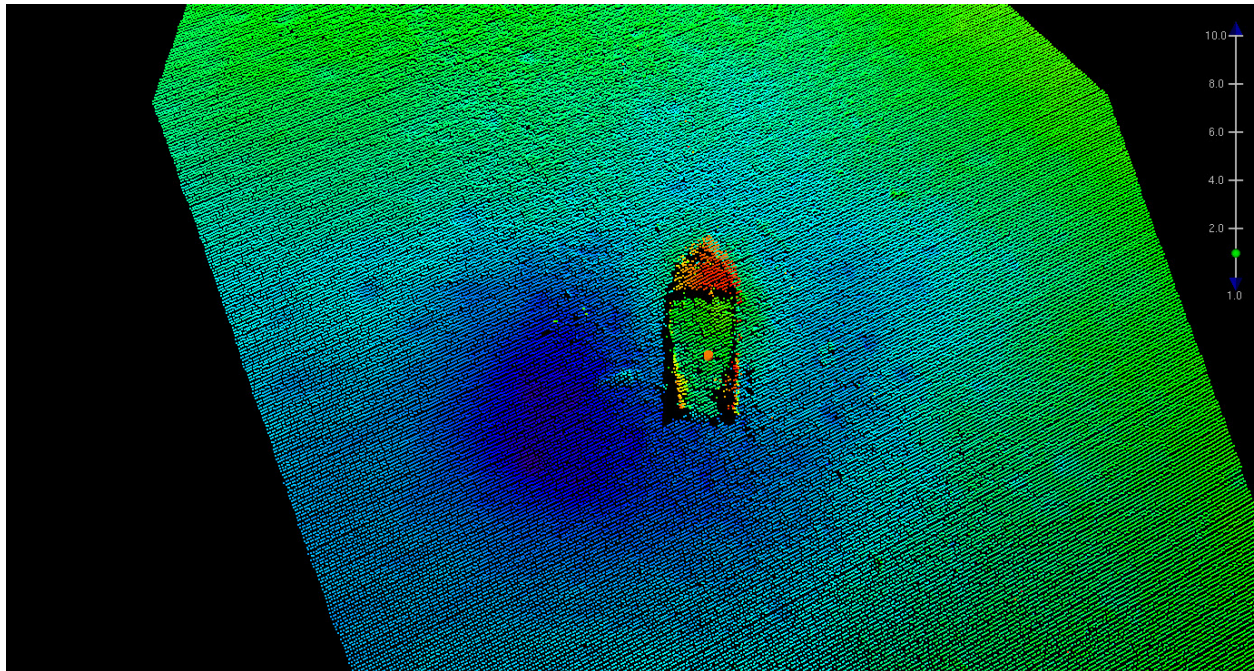


Figure 1.37.2

**1.38) H12413\_Wk01****Survey Summary**

**Survey Position:** 40° 54' 53.1" N, 073° 22' 24.6" W  
**Least Depth:** 4.24 m (= 13.90 ft = 2.317 fm = 2 fm 1.90 ft)  
**TPU ( $\pm 1.96\sigma$ ):** **THU (TPEh)** [None] ; **TVU (TPEv)** [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351209 00001(FFFE00149E290001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

**Remarks:**

WRECKS/remrks: Wk found on side

**Feature Correlation**

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351209 00001 | 0.00  | 000.0   | Primary |

**Hydrographer Recommendations**

Add New Wk

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

14ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2 ¼fm (12300\_1, 13006\_1, 13003\_1)

4.2m (5161\_1)

**S-57 Data**

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413

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

VALSOU - 4.237 m

WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The wreck is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 13.90 ft in the present survey position.

### Feature Images

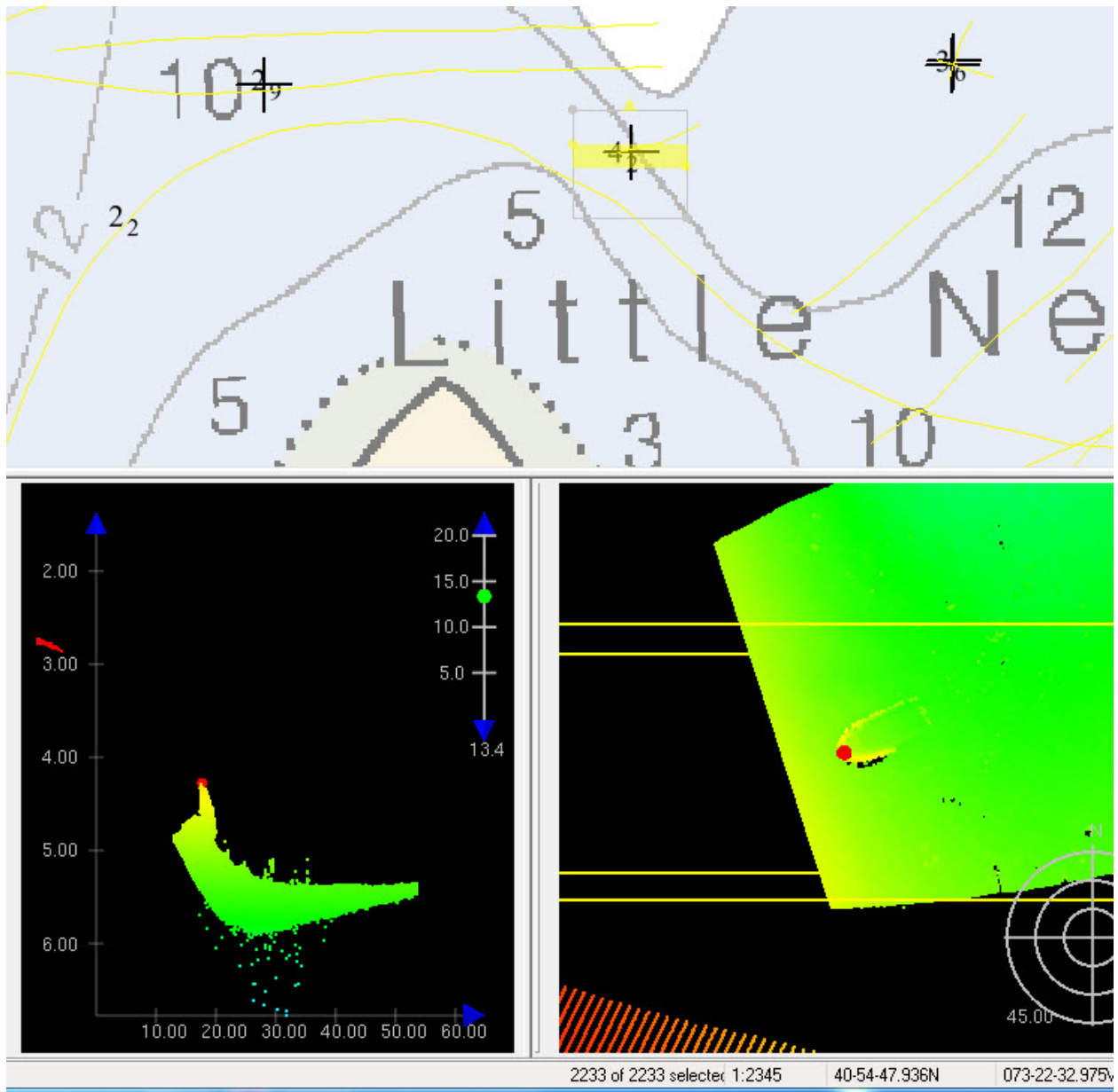


Figure 1.38.1



## 1.39) H12413\_Wk22

### Survey Summary

**Survey Position:** 40° 54' 54.6" N, 073° 22' 16.8" W  
**Least Depth:** 3.59 m (= 11.78 ft = 1.964 fm = 1 fm 5.78 ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351252 00001(FFFE00149E540001)  
**Charts Affected:** 12364\_18, 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

WRECKS/remrks: Wk found on side

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351252 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

Add New Wk

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

12ft (12364\_18, 12365\_1, 12364\_20, 12363\_1)

2fm (12300\_1, 13006\_1, 13003\_1)

3.6m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - 2:dangerous wreck  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921  
 SORIND - US,US,graph,H12413



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

VALSOU - 3.591 m

WATLEV - 3:always under water/submerged

### **Office Notes**

SAR Note: The feature is visible in the full MBES coverage and 200% side scan sonar data.

COMPILE: Concur. Chart a dangerous wreck, least depth 11.78 ft in the present survey position.

### Feature Images

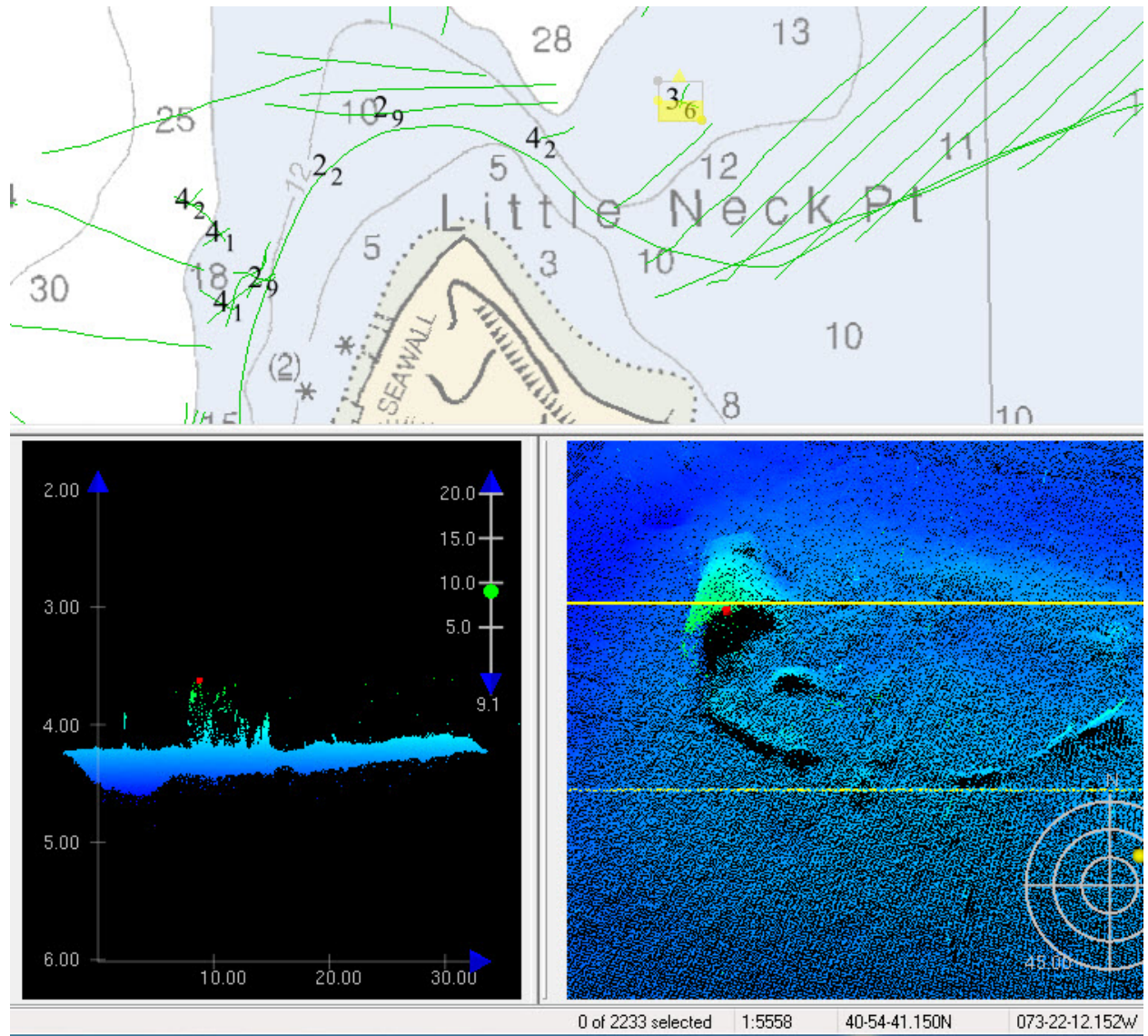


Figure 1.39.1

## 1.40) 30.02 ft wreck

### Survey Summary

**Survey Position:** 40-56-26.0" N, 073-25-32.3 W  
**Least Depth:** 9.14 m (= 30.02 ft = 5.987 fm = 6 fm 30.02ft)  
**TPU ( $\pm 1.96\sigma$ ):** THU (TPEh) [None] ; TVU (TPEv) [None]  
**Timestamp:** 2012-265.00:00:00.000 (09/21/2012)  
**Dataset:** H12413\_Wrecks.000  
**FOID:** 0\_0001351194 00001(FFFE00149E1A0001)  
**Charts Affected:** 12365\_1, 12364\_20, 12363\_1, 12300\_1, 13006\_1, 5161\_1, 13003\_1

#### Remarks:

[None]

### Feature Correlation

| Source            | Feature            | Range | Azimuth | Status  |
|-------------------|--------------------|-------|---------|---------|
| H12413_Wrecks.000 | 0_0001351194 00001 | 0.00  | 000.0   | Primary |

### Hydrographer Recommendations

[None]

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

30ft (12365\_1, 12364\_20, 12363\_1)

6fm (12300\_1, 13006\_1, 13003\_1)

9.14m (5161\_1)

### S-57 Data

**Geo object 1:** Wreck (WRECKS)  
**Attributes:** CATWRK - Value is unknown  
 EXPSOU - 2:shoaler than range of depth of the surrounding depth area  
 NINFOM - Chart wreck  
 QUASOU - 6:least depth known  
 SORDAT - 20120921

SORIND - US,US,graph,H12413

TECSOU - 3:found by multi-beam

VALSOU - 9.14 m

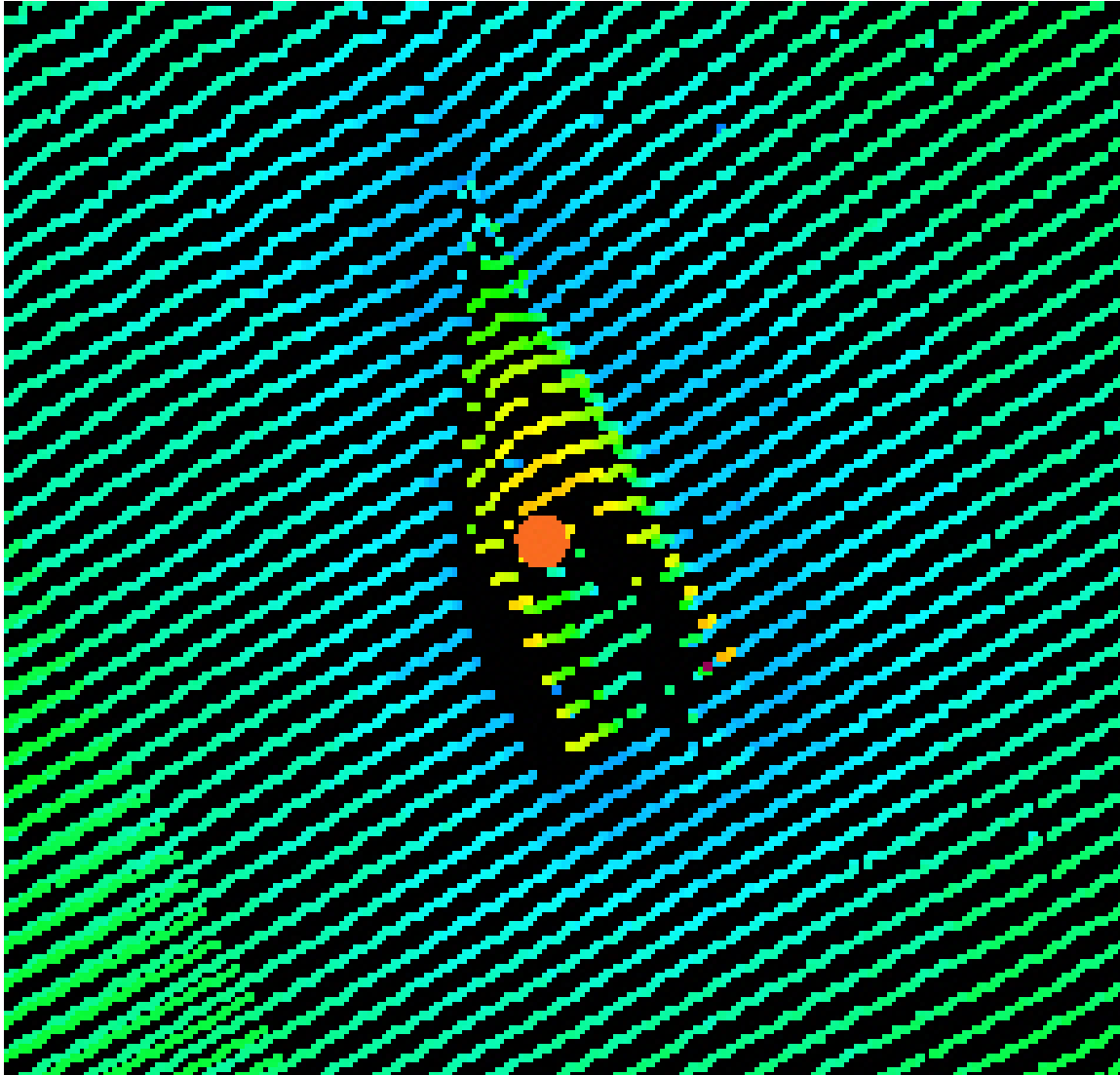
WATLEV - 3:always under water/submerged

## Office Notes

SAR Note: The feature was added by the SAR reviewer. It is visible in the full MBES coverage. The feature has similar shape to a bow of a wreck. Defer charting disposition to AHB Compiler. Dimensions are approximately 5m long by 2m wide. Is it a wreck or rock... without side scan, unable to positively identify feature type.

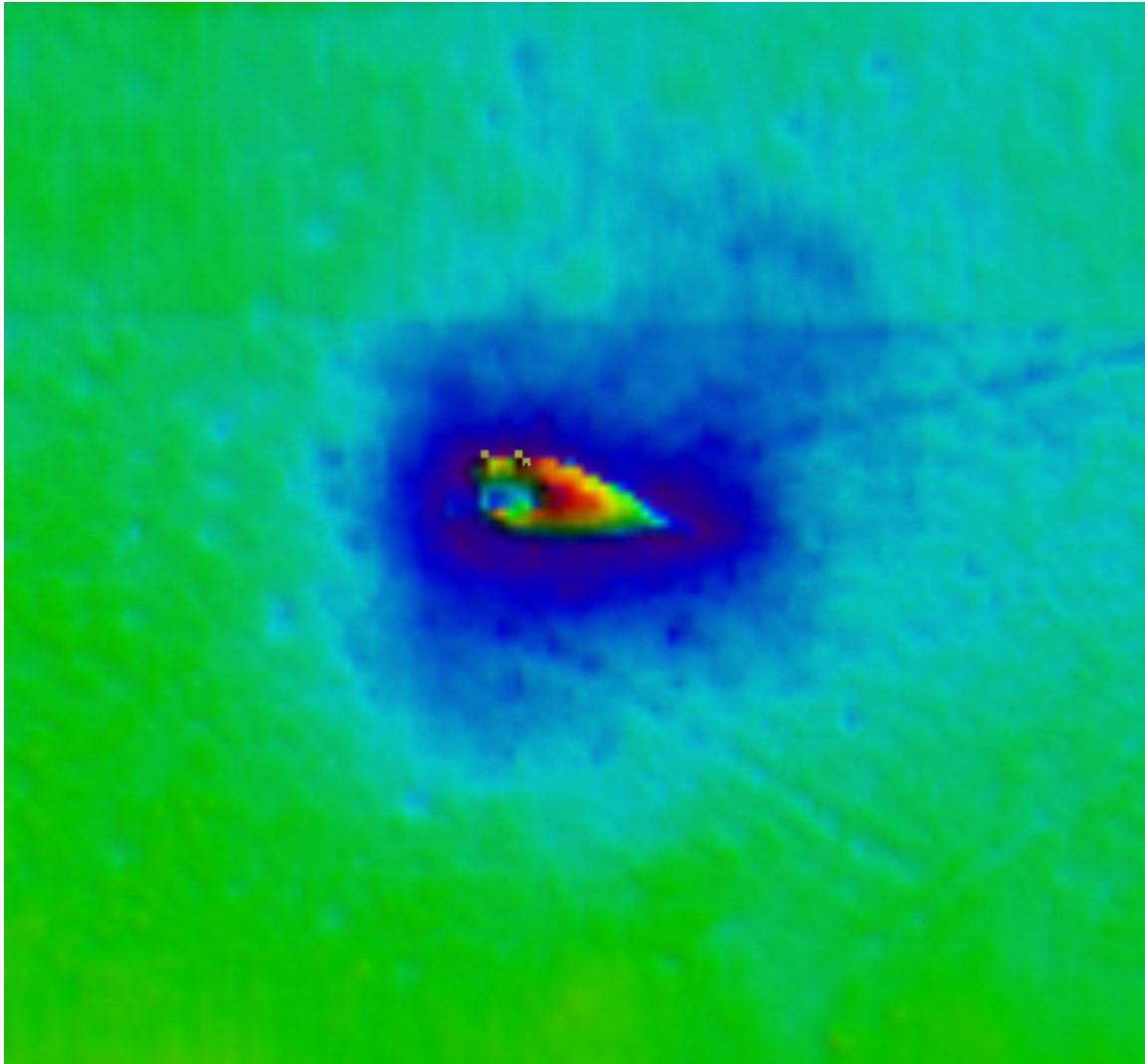
COMPILE: Concur. Chart a dangerous wreck, least depth 30.02 ft in the present survey position.

## Feature Images



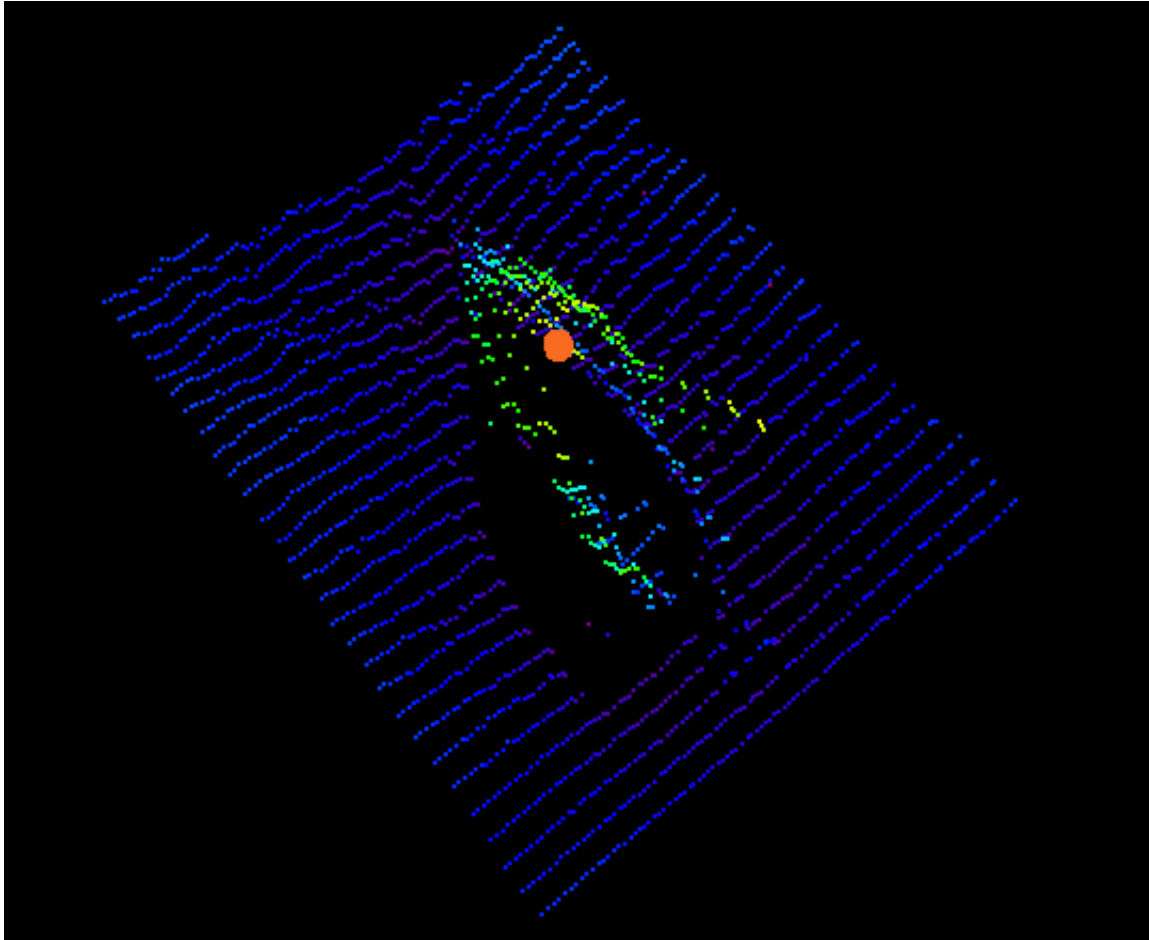
*Figure 1.15.1*

## Feature Images



*Figure 1.15.1*

## Feature Images



*Figure 1.15.1*

APPROVAL PAGE

H12413

Data meet or exceed current specifications as certified by the OCS survey acceptance review process. Descriptive Report and survey data except where noted are adequate to supersede prior surveys and nautical charts in the common area.

The following products will be sent to NGDC for archive

- H12413\_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12413\_GeoImage.pdf

The survey evaluation and verification has been conducted according current OCS Specifications, and the survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Approved: \_\_\_\_\_

**LCDR Abigail Higgins, NOAA**  
Chief, Atlantic Hydrographic Branch