H12617

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

DESCRIPTIVE REPORT

Type of Survey:	Navigable Area
Registry Number:	H12617

LOCALITY

State(s):	California
General Locality:	Long Beach, CA
Sub-locality:	San Pedro and Vicinity

2013

CHIEF OF PARTY
CDR David J Zezula, NOAA

LIBRARY & ARCHIVES

Date:

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY NUMBER:
HYDROGRAPHIC TITLE SHEET	**H12617**

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):	**California**
General Locality:	**Long Beach, CA**
Sub-Locality:	**San Pedro and Vicinity**
Scale:	**6000**
Dates of Survey:	**09/13/2013 to 11/03/2013**
Instructions Dated:	**08/01/2013**
Project Number:	**OPR-L318-FA-13**
Field Unit:	**NOAA Ship *Fairweather***
Chief of Party:	**CDR David J Zezula, NOAA**
Soundings by:	**Multibeam Echo Sounder**
Imagery by:	**Multibeam Echo Sounder Backscatter**
Verification by:	**Pacific 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/.

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Descriptive Report to Accompany Survey H12617

Project: OPR-L318-FA-13

Locality: Long Beach, CA

Sublocality: San Pedro and Vicinity

Scale: 1:6000

September 2013 - November 2013

NOAA Ship *Fairweather*

Chief of Party: CDR David J Zezula, NOAA

A. Area Surveyed

Sheet H12617 included all inshore breakwater areas West and North of the Long Beach Channel Enterance into San Pedro Bay and offshore areas from Pt .Fermin to Long Beach Pilot Operating Area.

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
33° 46" 37.43' N 118° 18" 9.94' W	33° 41" 33.44' N 118° 9" 51.09' W

Table 1: Survey Limits

The 4-meter depth contour and the MHW inshore limit were generally met with the following exceptions: Areas where vegetation (i.e., kelp) at or near the surface made it impossible to safely navigate the survey launch (Figure 1). Areas where moored vessels blocked access to the shoreline (Figure 2). Active dredging/ construction areas where disturbed bottom and staged heavy equipment made MBES data acquisition impractical or unsafe (Figure 3). Areas where launch maneuverability was questionable in small marina harbors (Figure 4).

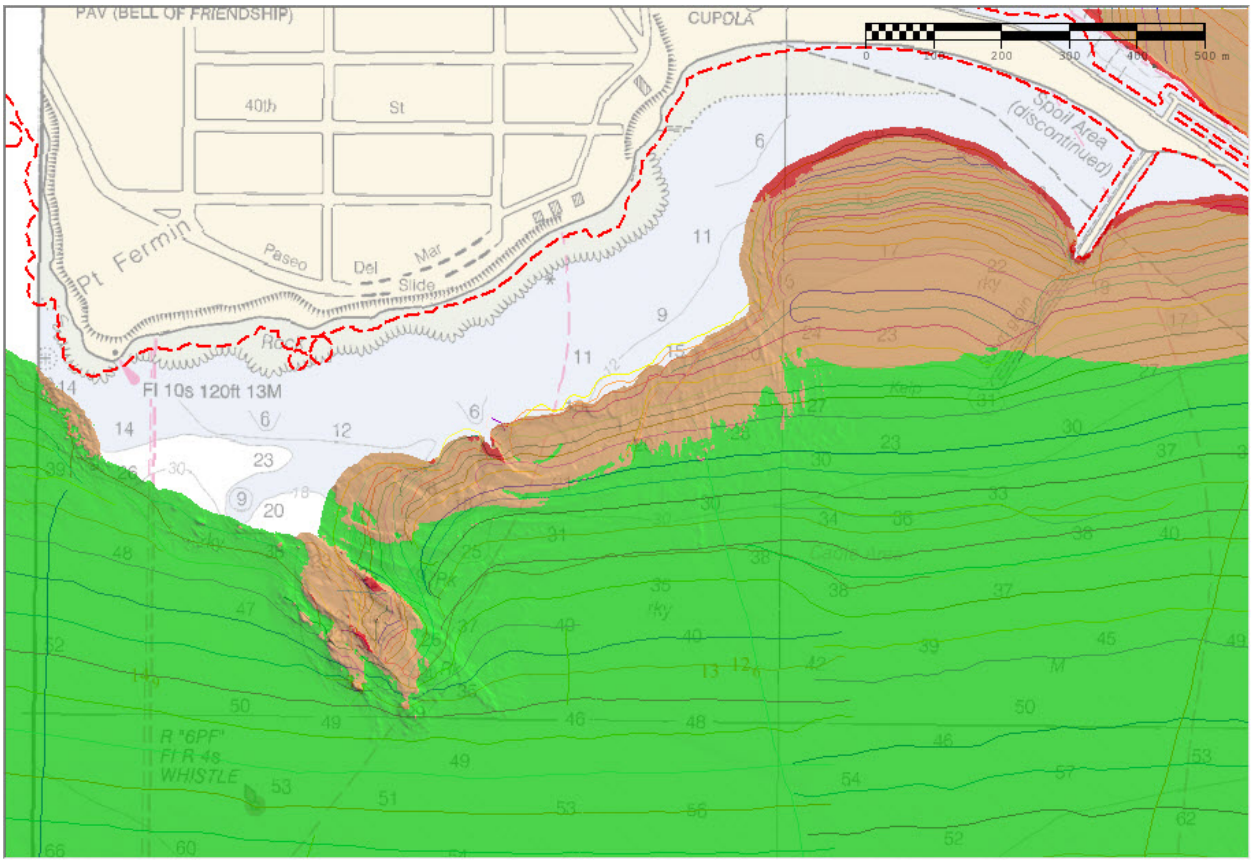


Figure 1: Multibeam coverage in the vicinity of Point Fermin. 4-meter contour (red) was not surveyed where kelp made it impossible.

Figure 2: Long-term moorage of vessels such as Sea Launch platform and Military Sealift Command ships seen here in the San Pedro West Basin obscured MBES coverage.

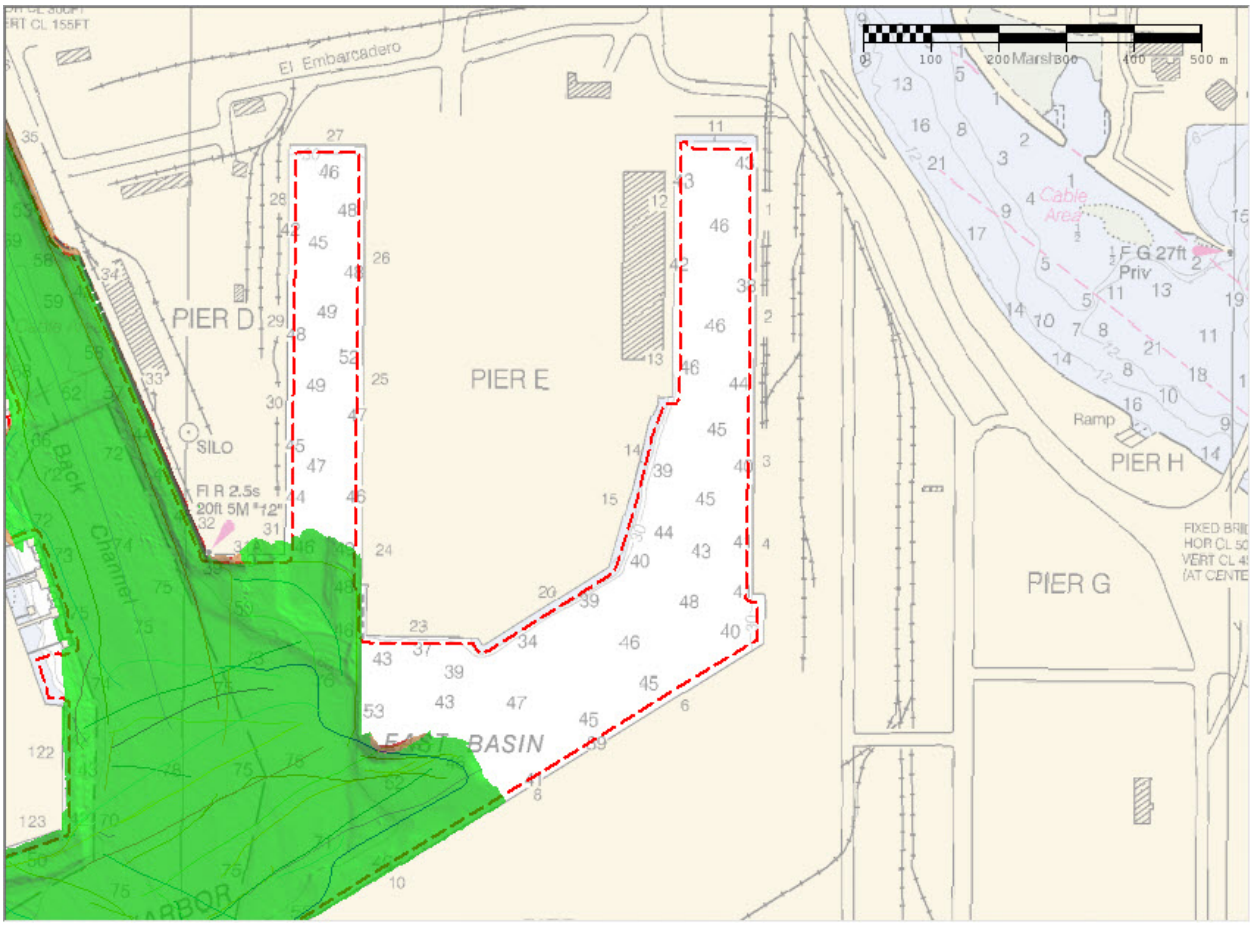


Figure 3: Graphic showing MBES coverage in San Pedro East Basin. Coverage extents were limited by active hydraulic dredging.

Figure 4: Multibeam coverage limited by small floating piers in marina's based on launch maneuverability.

A.2 Survey Purpose

The purpose of this project is to provide contemporary surveys to update National Ocean Service (NOS) nautical charting products. H12617 will address critical areas as identified in the 2012 NOAA Hydrographic Survey Priorities (NHSP).

A.3 Survey Quality

The survey is partially adequate to supersede previous data.

It is the opinion of the hydrographer, that all the surveyed (H12617) data is sufficient to supersede current data, with the exceptions noted in section D.2: Additional Results: Construction and Dredging.

A.4 Survey Coverage

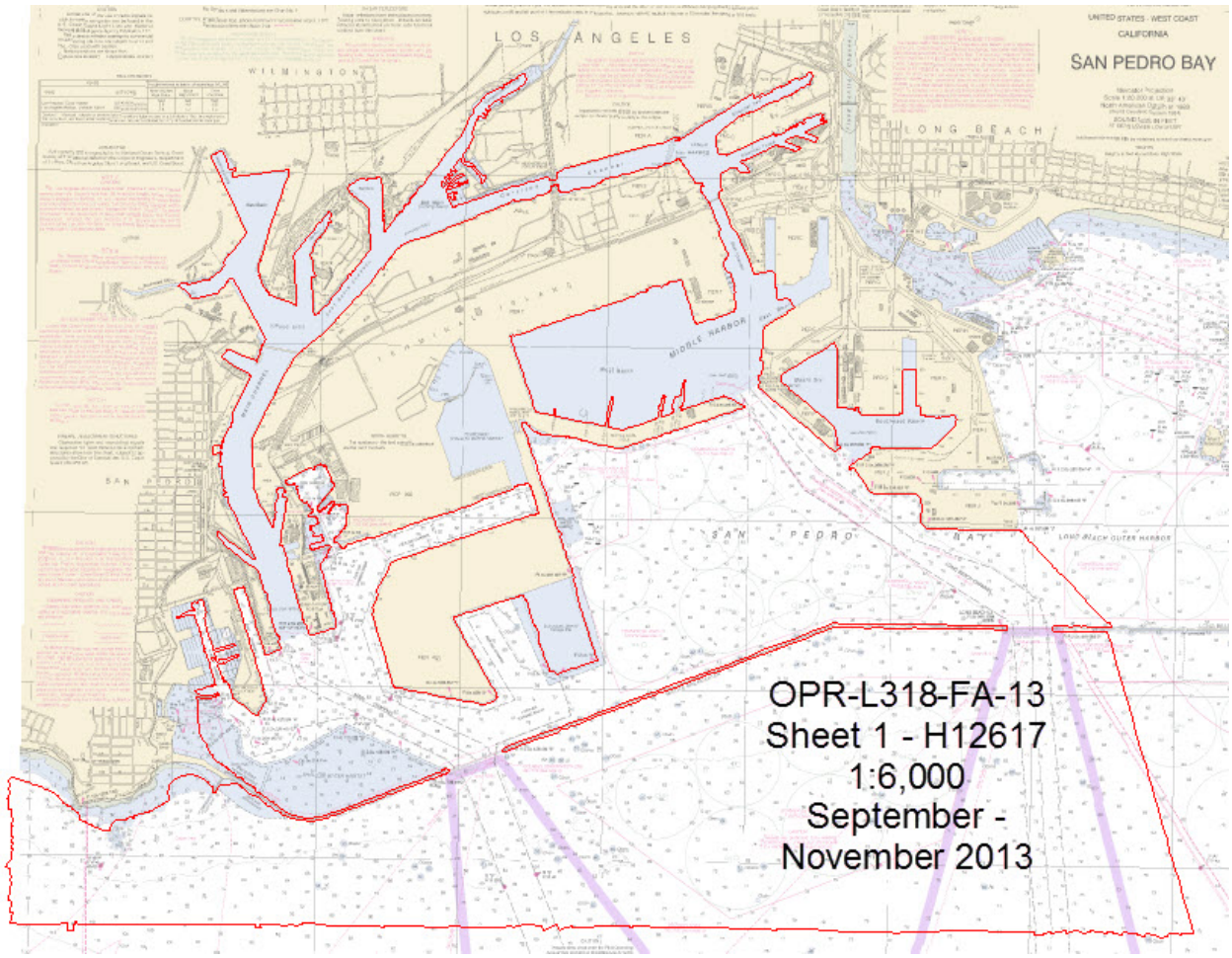


Figure 5: H12617 Survey Outline

The coverage requirements set forth in the Project Instructions were generally satisfied, with the exception of areas obscured by moored vessels and areas being actively dredged during the survey, detailed in section D.2: Additional Results: Construction and Dredging.

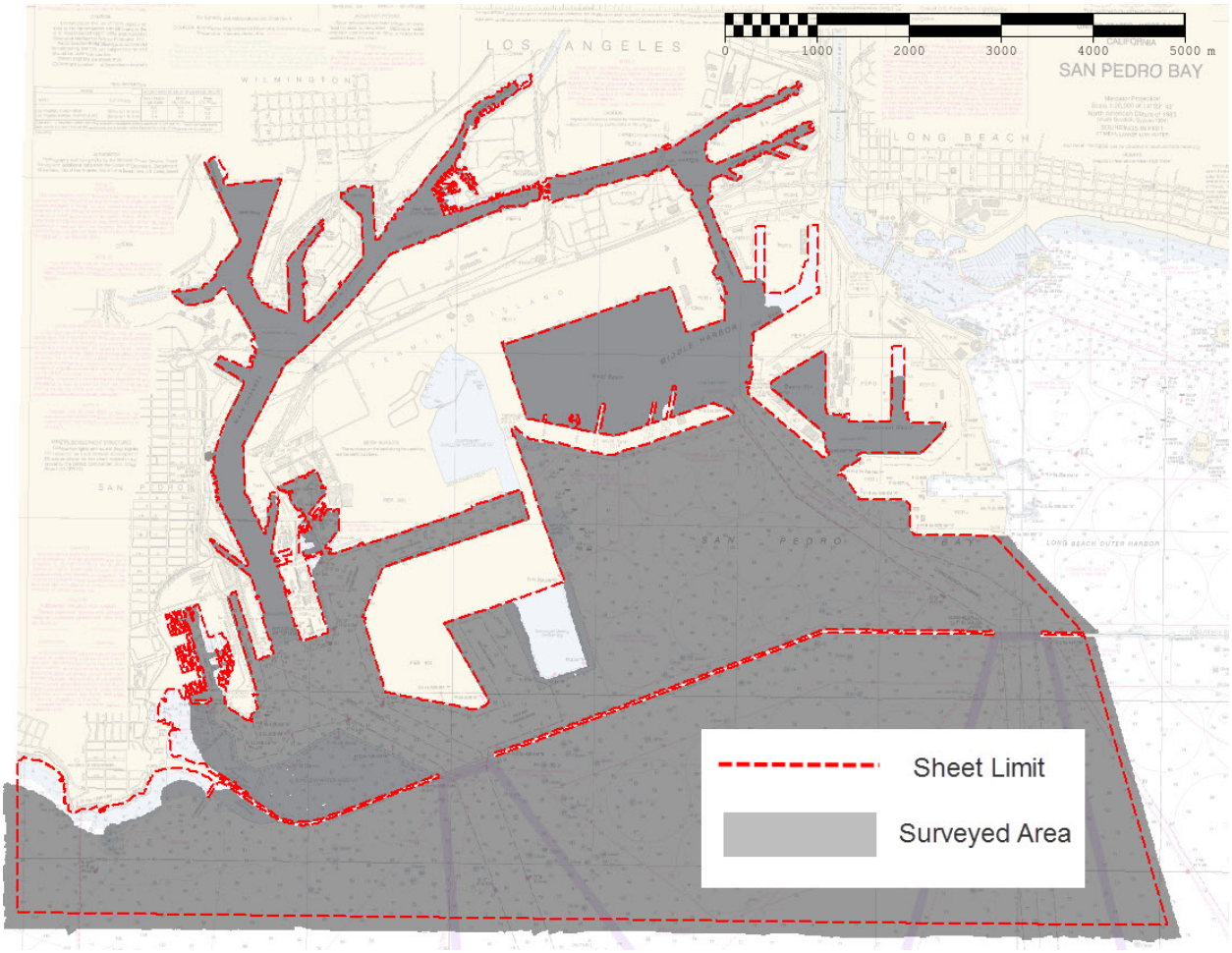
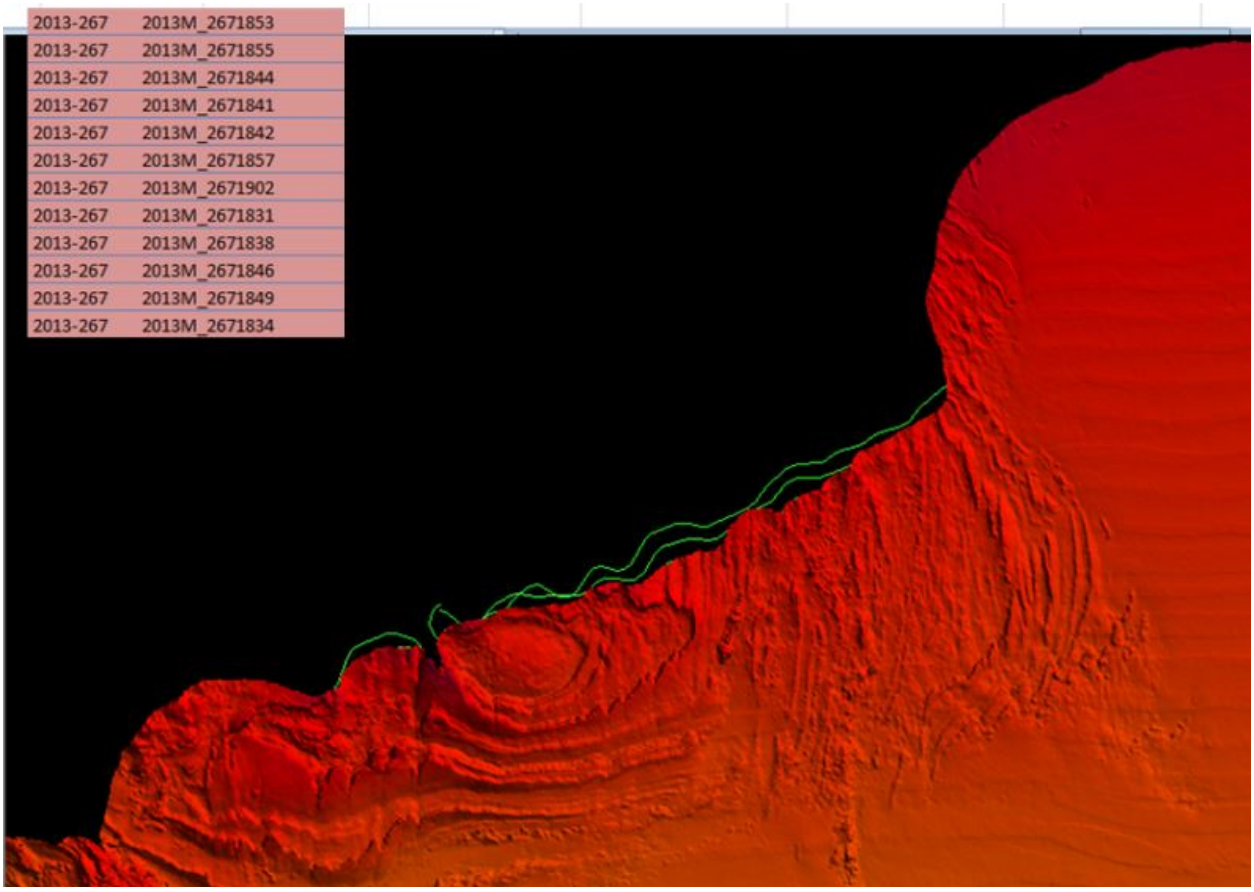


Figure 6: Graphic showing surveyed (H12617) area and assigned sheet limits.

In addition to the reported coverage exceptions, twelve corrupted lines of near shore bathymetry also caused loss of coverage. See Office Figure 1 below.



Office Figure 1. Rejected and unrecoverable inshore lines.

Additionally, two shoal areas within the survey limits were resolved with 25-meter Multibeam line spacing. Of the two Shallow Water Habitat areas within the survey area, where depth of between 4 and 8 meters were conducive to set line spacing, the area North of San Pedro Breakwater was not resolved with 100% multibeam. See Section D.1.8 and Figure 33.

A.5 Survey Statistics

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

	Vessel	***2805***	***2806***	***2807***	***Total***
LNM	**SBES Mainscheme**	0.00	0.00	0.00	0.00
	MBES Mainscheme	145.25	140.28	356.20	641.73
	Lidar Mainscheme	0.00	0.00	0.00	0.00
	SSS Mainscheme	0.00	0.00	0.00	0.00
	SBES/MBES Combo Mainscheme	0.00	0.00	0.00	0.00
	SBES/SSS Combo Mainscheme	0.00	0.00	0.00	0.00
	MBES/SSS Combo Mainscheme	0.00	0.00	0.00	0.00
	SBES/MBES Combo Crosslines	6.18	6.44	19.31	31.93
	Lidar Crosslines	0.00	0.00	0.00	0.00
Number of Bottom Samples					0
Number AWOIS Items Investigated					7
Number Maritime Boundary Points Investigated					0
Number of DPs					17
Number of Items Items Investigated by Dive Ops					0
Total Number of SNM					15.73

Table 2: Hydrographic Survey Statistics

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

Survey Dates	Julian Day Number
09/13/2013	256
09/14/2013	257
09/15/2013	258
09/16/2013	259
09/17/2013	260
09/18/2013	261
09/19/2013	262
09/24/2013	267
09/25/2013	268
09/26/2013	269
09/27/2013	270
09/28/2013	271
09/30/2013	273
11/01/2013	305
11/02/2013	306
11/03/2013	307

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:

Hull ID	*FA2805*	*FA2806*	*FA2807*
LOA	8.64 meters	8.64 meters	8.64 meters
Draft	1.12 meters	1.12 meters	1.12 meters

Table 4: Vessels Used

B.1.2 Equipment

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

Manufacturer	Model	Type
Reson	7125	MBES
Applanix	POS MV	Positioning and Attitude System
Reson	SVP-71	Sound Speed System
Sea-Bird Electronics	SBE 19 Plus	Conductivity, Temperature, and Depth Sensor

Table 5: Major Systems Used

B.2 Quality Control

B.2.1 Crosslines

Crosslines, acquired for this survey, totalled 4.97% of mainscheme acquisition.

Crosslines were collected, processed and compared in accordance with 5.2.4.3 of the HSSD. Surface differencing in CARIS BASE Editor was used to assess crossline agreement with main-scheme lines. 2 meter resolution surfaces were used for the differencing. This difference surface is submitted digitally in the Separates II folder.

Figure 7 is a statistical representation of crossline differences, which shows 95% of all nodes have a maximum deviation of +/- 0.17 meters.

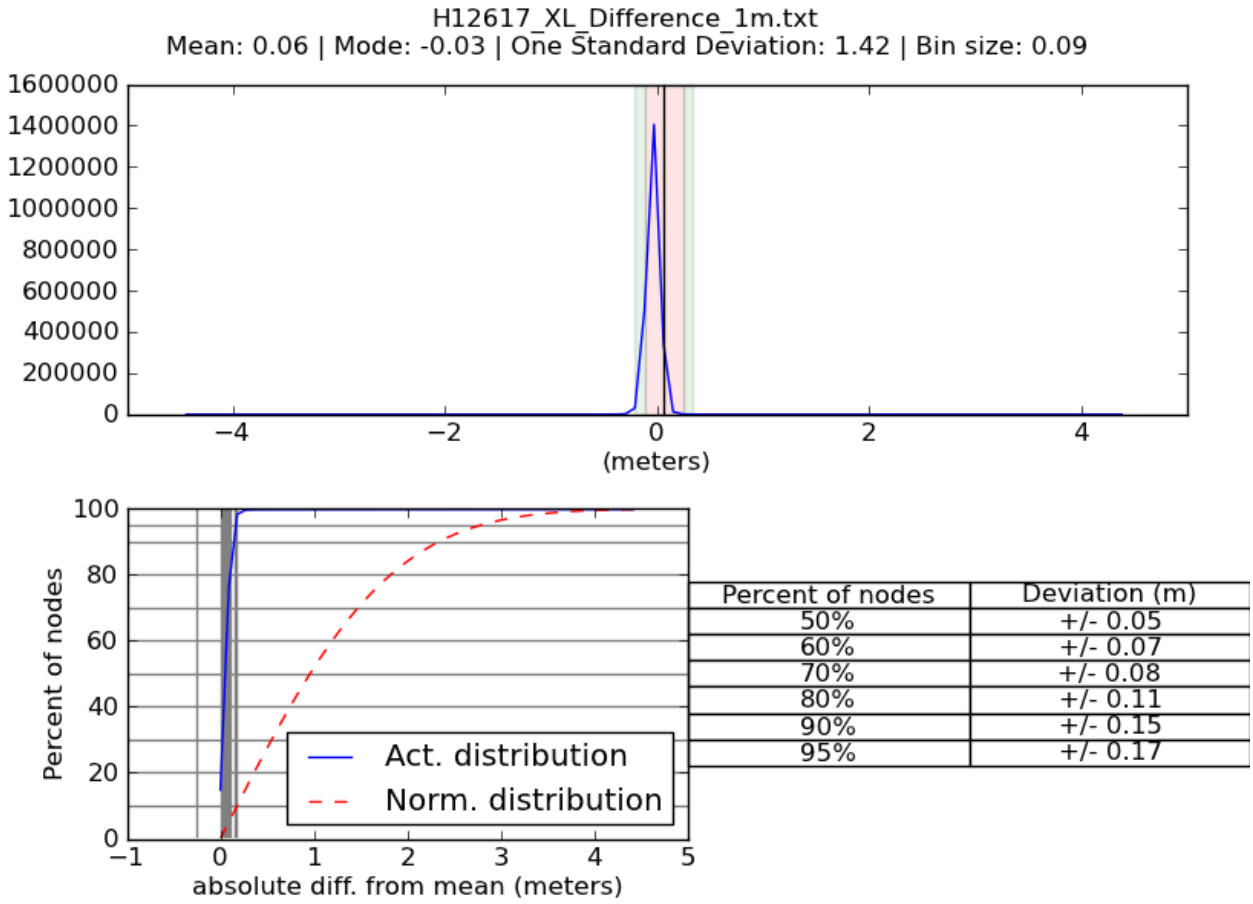


Figure 7: H12617 Crossline Difference Surface Statistical Graphic

B.2.2 Uncertainty

The following survey specific parameters were used for this survey:

Measured	Zoning
0.01 meters	0.08 meters

Table 6: Survey Specific Tide TPU Values

Hull ID	Measured - CTD	Measured - MVP	Surface
2805	2 meters/second		0.5 meters/second
2806	2 meters/second		0.5 meters/second
2807	2 meters/second		0.5 meters/second

Table 7: Survey Specific Sound Speed TPU Values

B.2.3 Junctions

Sheet H12617 junctions with sheets H12618 and H12619 of the same project. The areas of overlap between the sheets were reviewed in CARIS Subset Editor for sounding consistency and a difference surface was created and analyzed between sheet H12617 and the respective junctioning sheets. Sheet H12617 CUBE surfaces are in agreement with junction sheets, with over 95% of both adjoining surveys agreeing within total allowable vertical uncertainty.

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H12618	1:6000	2013	NOAA Ship FAIRWEATHER	E
H12619	1:10000	2013	NOAA Ship FAIRWEATHER	S

Table 8: Junctioning Surveys

H12618

Data collected on sheet H12617 were in general agreement with junction sheet H12618. Mean difference was -0.01 vertical meters, and 95% of the nodes were within 0.16 meters.

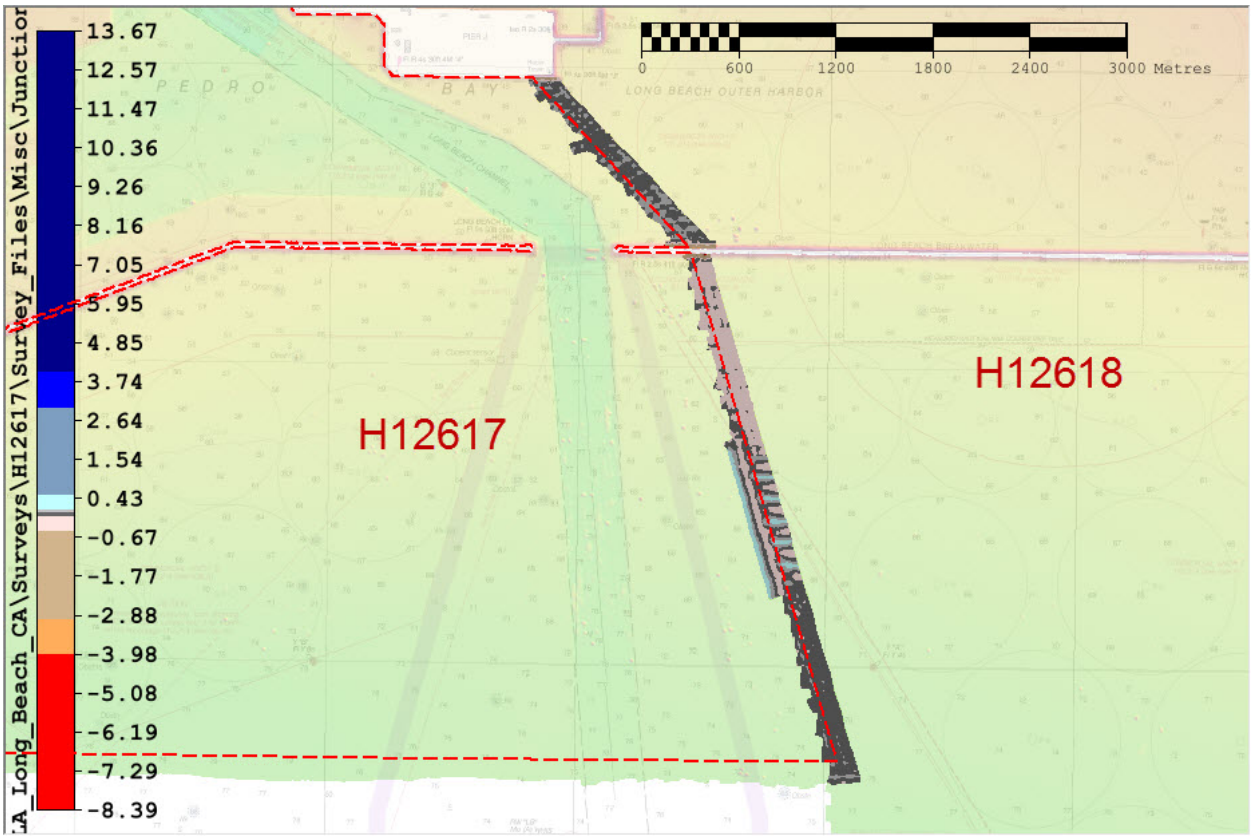


Figure 8: H12617/H12618 Junction Overview

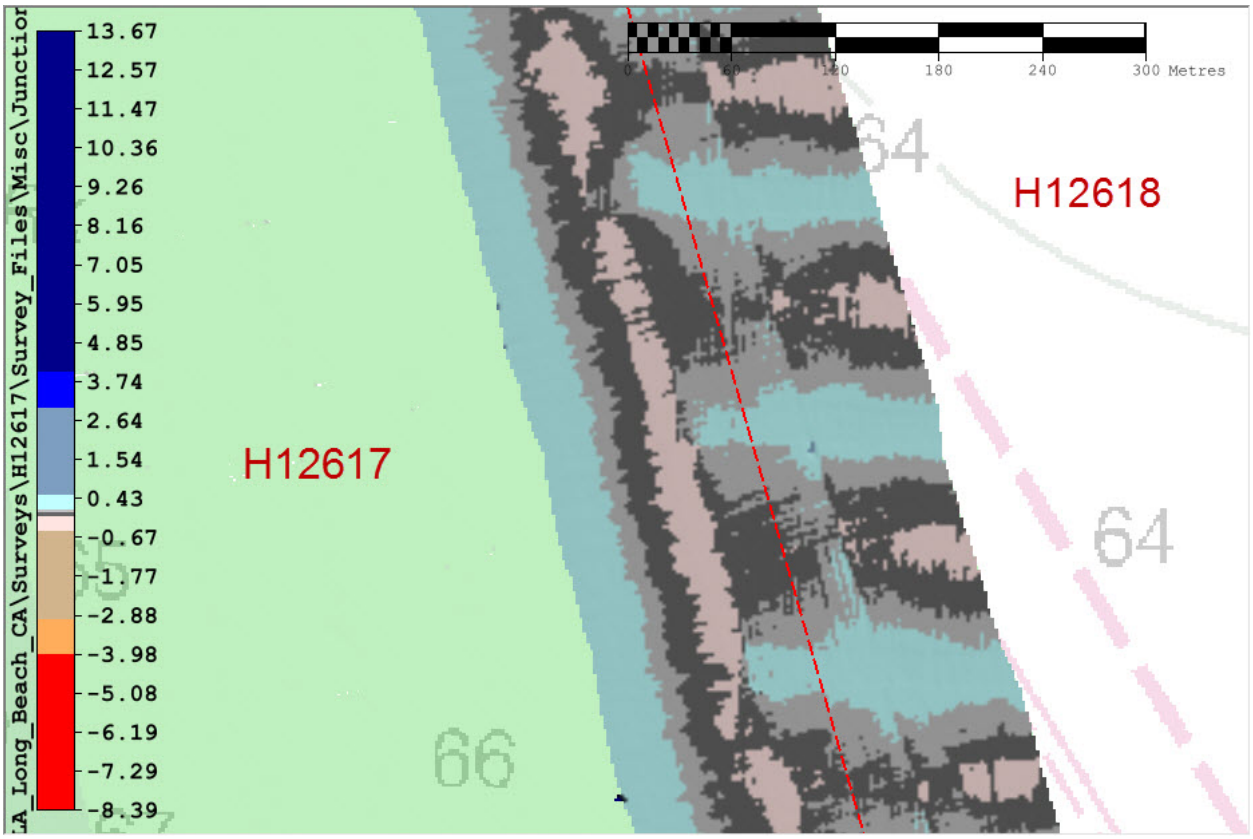
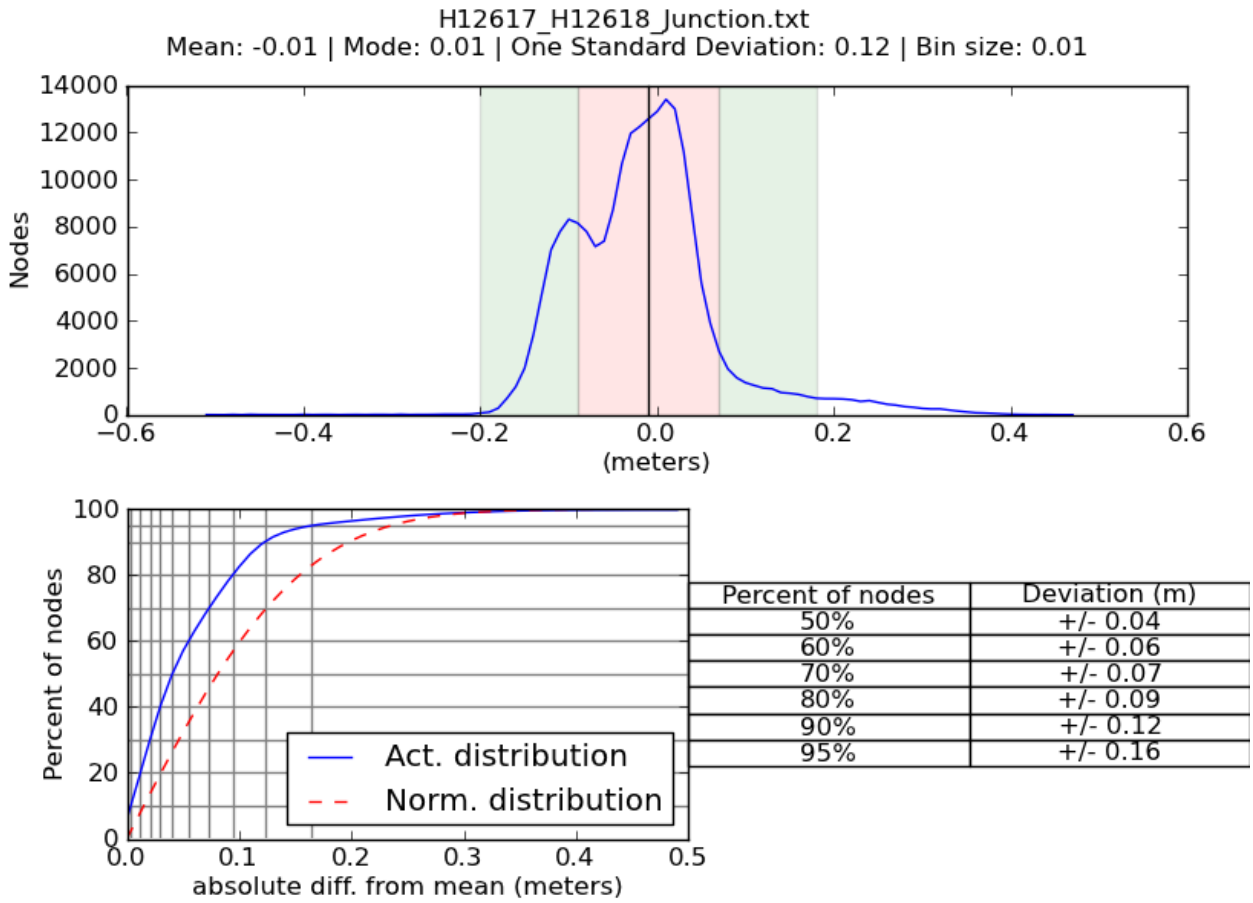


Figure 9: H12617/H12618 Junction Difference Surface Close View



Percent of nodes	Deviation (m)
50%	+/- 0.04
60%	+/- 0.06
70%	+/- 0.07
80%	+/- 0.09
90%	+/- 0.12
95%	+/- 0.16

Figure 10: Junction Difference Statistics for Comparison with H12618(2013)

H12619

Data collected on sheet H12617 were in general agreement with junction sheet H12619. Mean difference was -0.05 vertical meters, and 95% of the nodes were within 0.13 meters.

Figure 11: H12617/H12619 Junction Overview

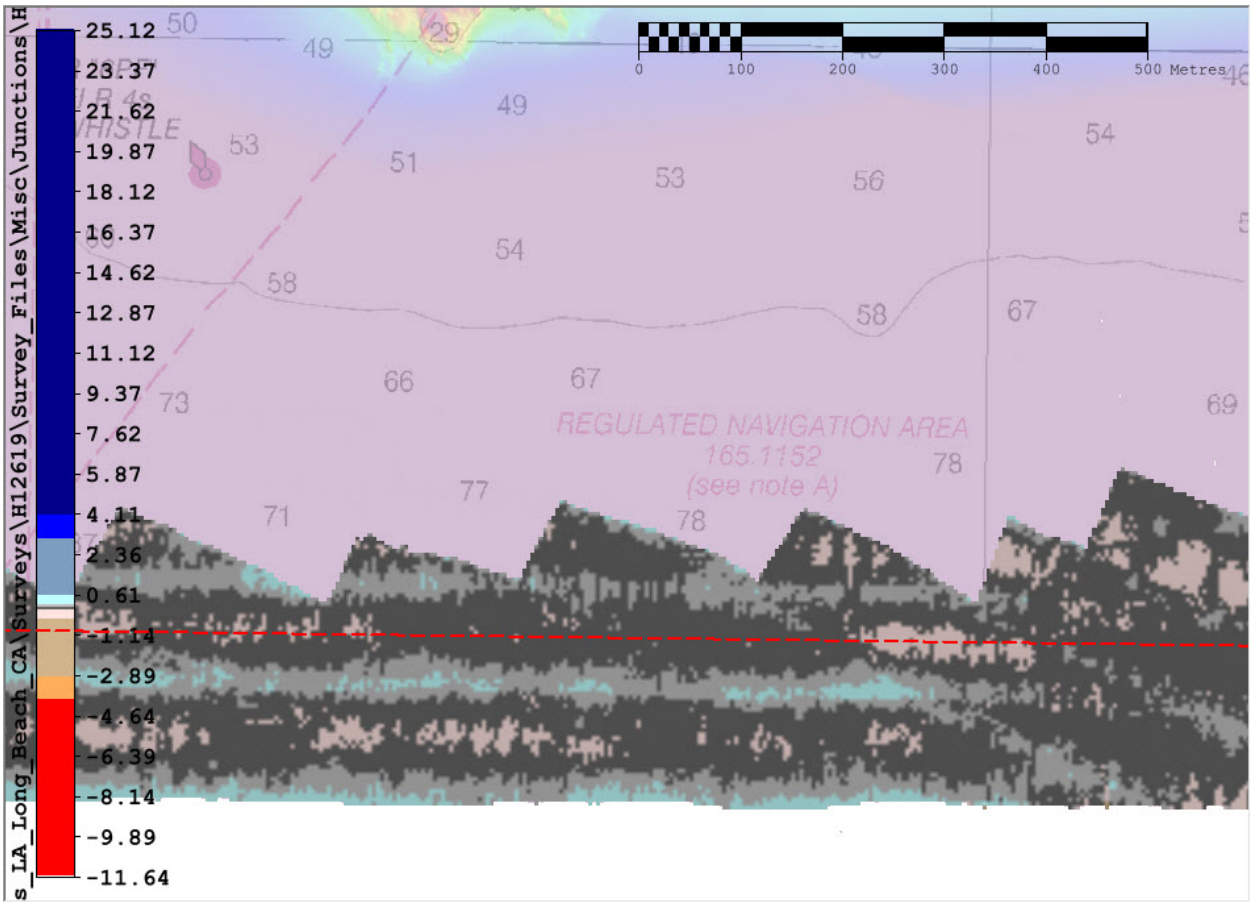
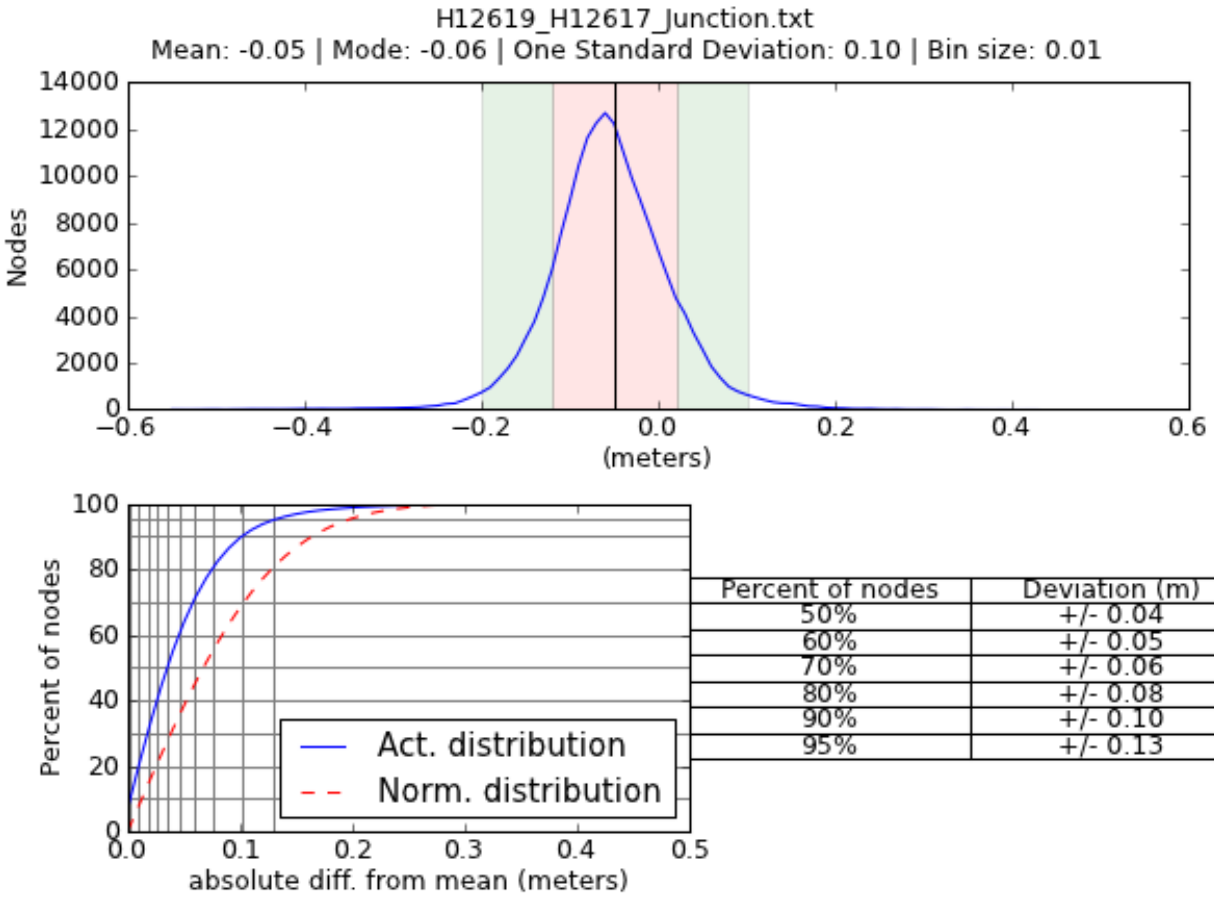


Figure 12: H12617/H12619 Junction Difference Surface Close View



Percent of nodes	Deviation (m)
50%	+/- 0.04
60%	+/- 0.05
70%	+/- 0.06
80%	+/- 0.08
90%	+/- 0.10
95%	+/- 0.13

Figure 13: Junction Difference Statistics for Comparison with H12619(2013)

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

There were no conditions or deficiencies that affected equipment operational effectiveness.

B.2.6 Factors Affecting Soundings

Effects of Submerged Kelp

Soundings, other than those representing the seafloor, resulted from the presence of kelp. Shallow areas in the vicinity of the breakwaters or near Pt. Fermin were surrounded by kelp, which produced prominent soundings. In cases where features likely to be vegetation were "attached" to the bottom, the sounding were

'accepted' and the resultant CUBE surfaces reflected this. Those soundings which were clearly detached from the seafloor, which the hydrographer determined to be noise and/or vegetation were 'rejected'.

Submerged features where the presence of vegetation made the least depth unclear in critical navigation areas were attributed as UWTROCs. They were assigned a 'Qualify of Sounding' Value of 'depth unknown' and an Office Note was included stating that the least depth could not be determined due to the presence of kelp. This was done based on the guidance from Physical Scientists Grant Froelich and Pete Holmberg (Submitted with Correspondence in Appendix 5)

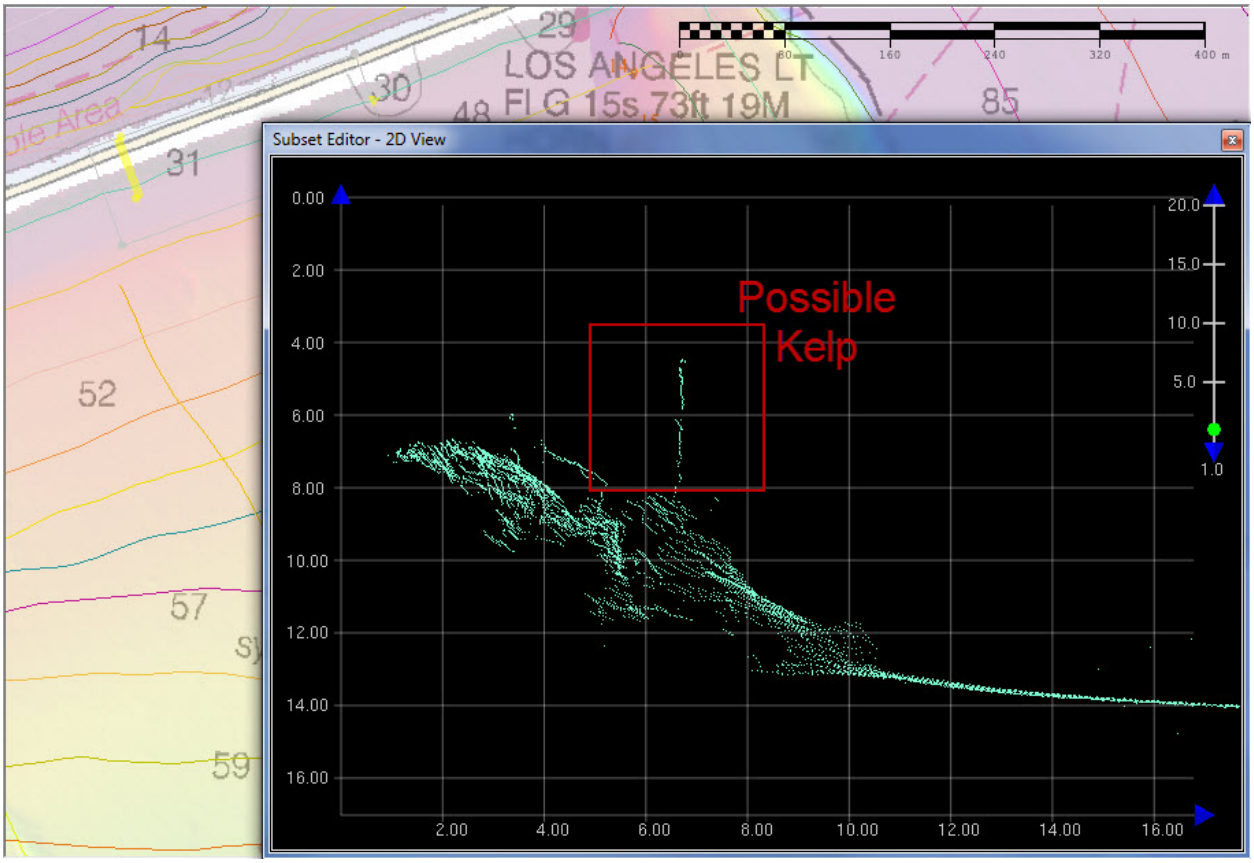


Figure 14: 2-D Subset view of seafloor adjacent to breakwater. Vertical features, likely to be buoyant kelp, cannot be definitively distinguished from the seafloor.

Atypical Seafloor Condition in Long Beach Channel Approach

Certain areas within the Long Beach Channel approach were especially difficult to survey with MBES, having extensive noise which made it difficult or impossible to discern the seafloor from the noise in the water column. It is the opinion of the hydrographer that commercial shipping traffic resulted in this phenomenon. Deep-draft vessels and harbor tugs frequent the channel, disturbing the seafloor. While the noise (observed with multiple launches over multiple days, but varying in severity and pattern) persisted and was difficult or impossible to distinguish from the seafloor, it lacked the repeatability that would be associated with an actual feature.

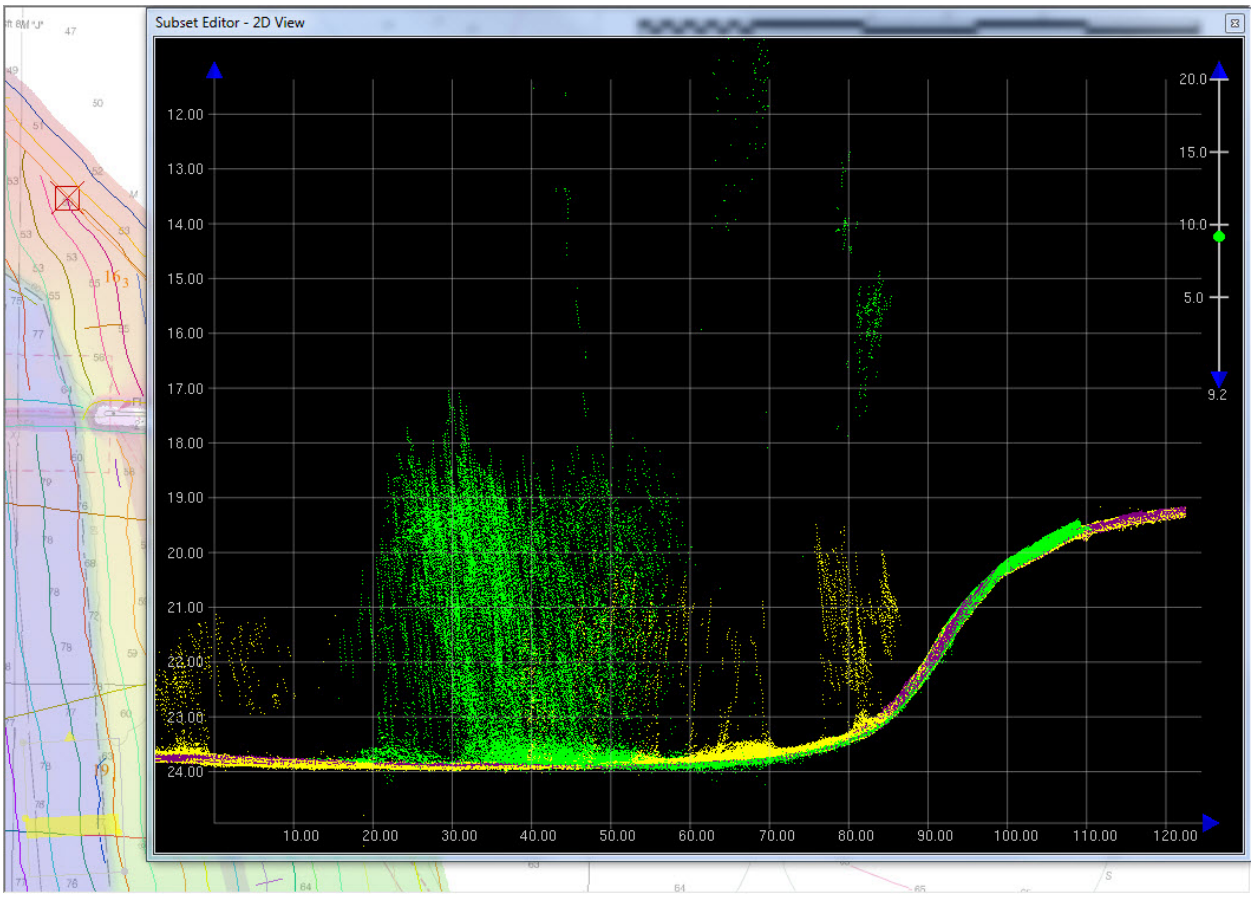


Figure 15: 2-D Subset view of 7125 data in Long Beach Channel Approach. Soundings colored by 'Day'. Three separate days are represented in this graphic.

B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: Sound speed measurements were conducted as discussed in the Data Acquisition Section of the DAPR.

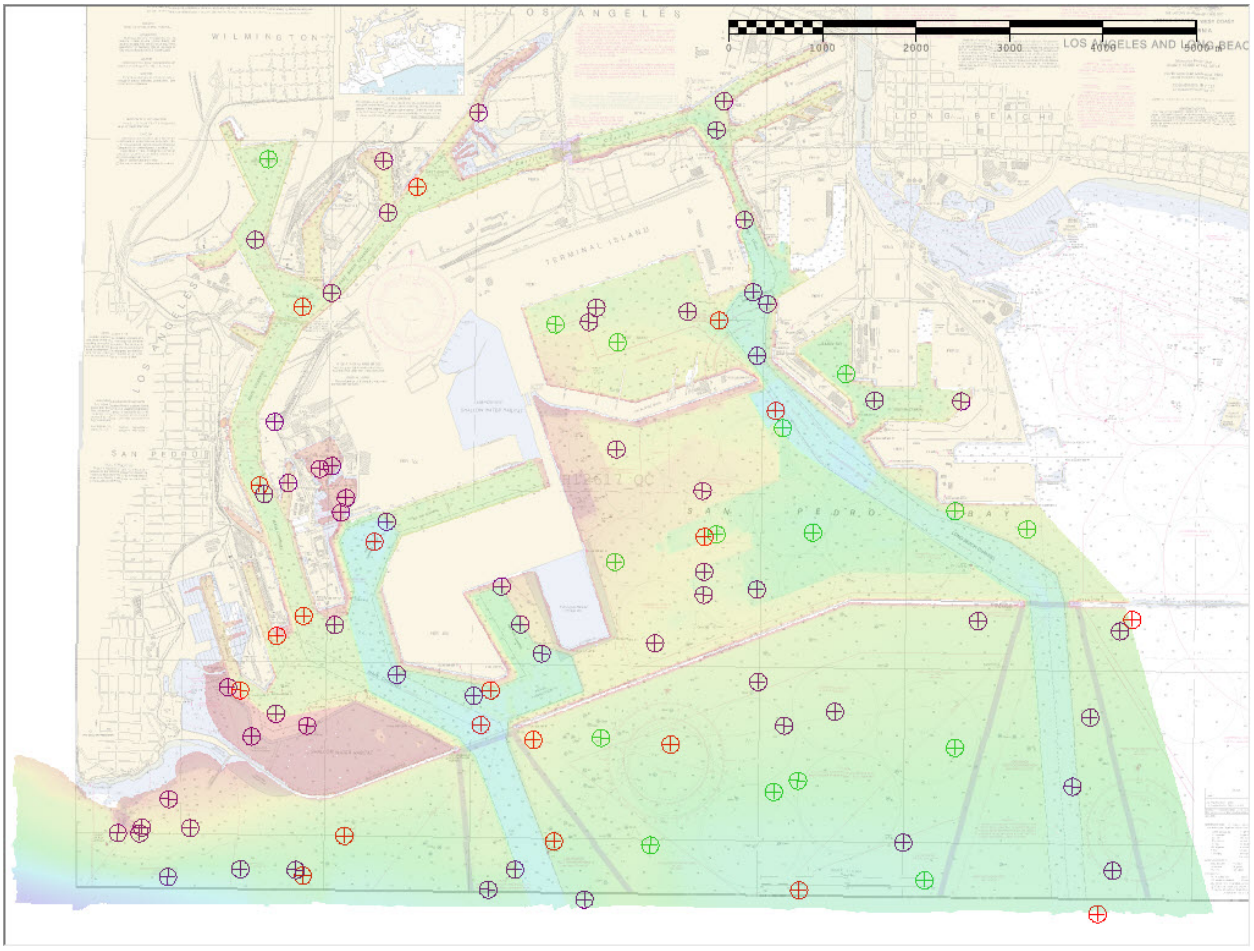


Figure 16: Graphic shows all casts for survey H12617 colored according to vessel.

B.2.8 Coverage Equipment and Methods

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

B.2.9 IHO Uncertainty

It was found that 100% of nodes in the combined 2-meter grid meet or exceed IHO Order 1 specifications for all depths of survey H2617, see Standards Compliance Review in Appendix V. To assess vertical accuracy standards, a child layer titled “IHO_1” was created for each of 1-meter and 2-meter finalized surfaces using the equation as stated in section C. 2.1 of the DAPR.

Figure 17: 2-meter Combined IHO Order 1 Surface

B.2.10 Density

Density requirements for the 1-meter and 2-meter finalized CUBE surfaces were satisfied with no less than 99.95% of finalized surface nodes containing five or more accepted soundings. See Standards Compliance Review in Appendix V.

Figure 18: Finalized surfaces showing density for respective depth ranges.

Density meets requirements, but there is no Appendix V. The compliance analysis can be found in Appendix II as correspondence.

B.2.11 Holiday Assessment

Complete multibeam coverage was obtained within the limits of H12617. For holidays larger than 3 contiguous surface nodes, the corresponding multibeam "side scan" was examined and no navigationally significant items were detected. Notable examples are shown in the figures below.
Approximately 40-50 additional holidays were observed in the 1 meter resolution CUBE surface between the 18 meter and 20 meter depth contours and were not observed the same depth range of the 2 meter CUBE surface. These holidays were generally less than 10 nodes and were caused by rejecting soundings in subset editor which were noise and "fliers" in the data, not accurately representing the seafloor. The aforementioned holidays in the 18-20 meter depth are found in a gently-sloping offshore region, and are not located in especially navigationally significant areas.

Figure 19: Holiday Near Berth 216

Figure 20: Holiday Near Termination of Channel Three

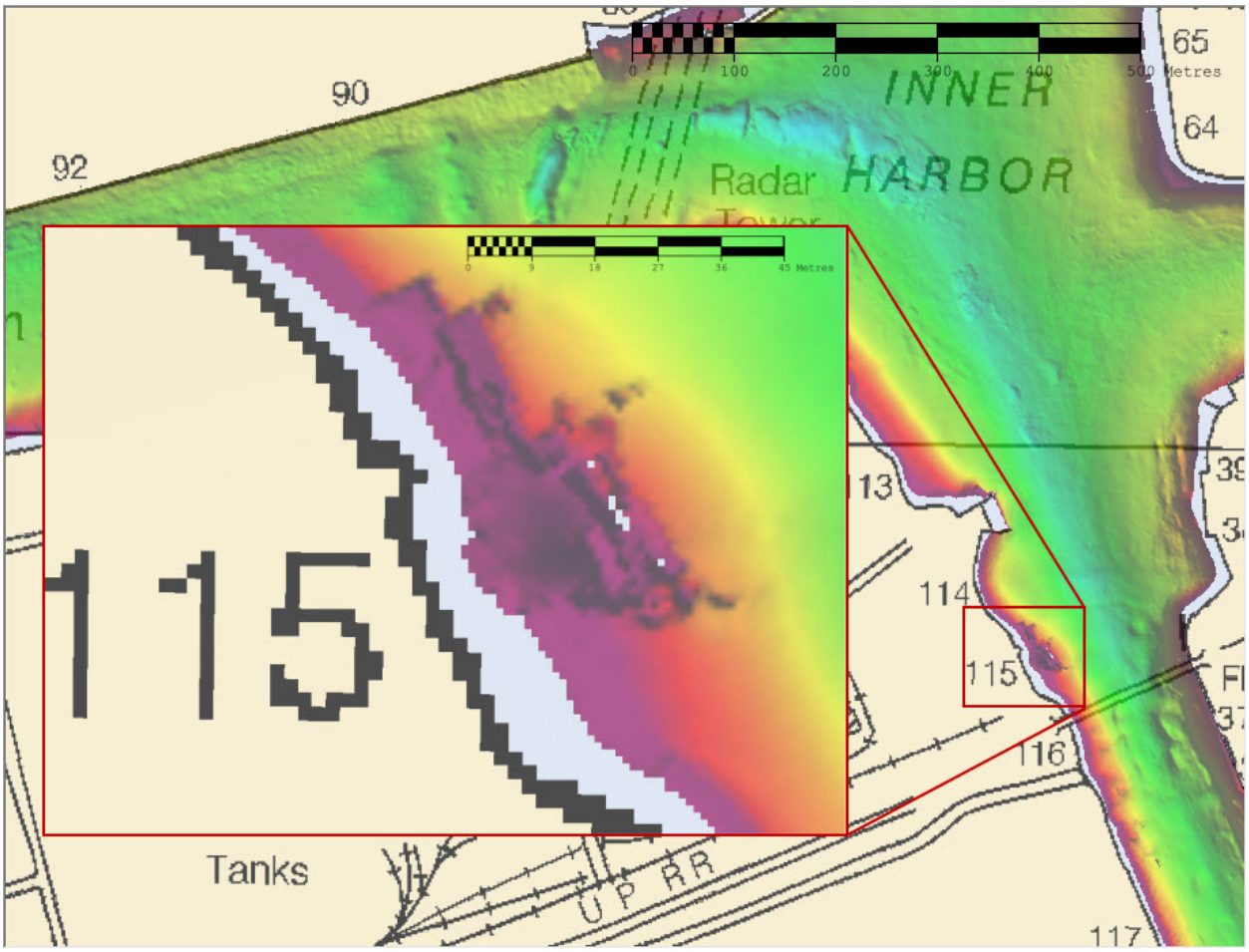


Figure 21: Holiday Near Berth 115 (Acoustic Shadow. Least Depth Attained)

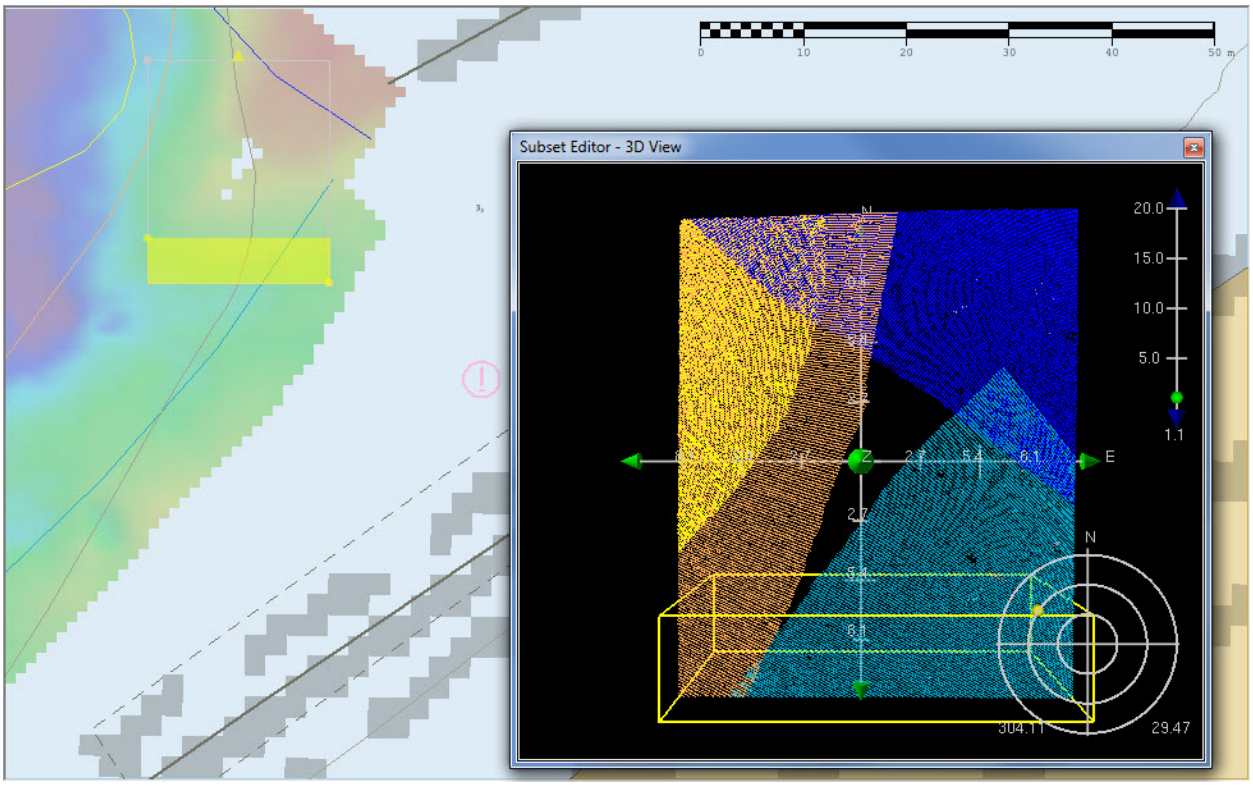


Figure 22: Holiday Near Termination of Consolidated Slip

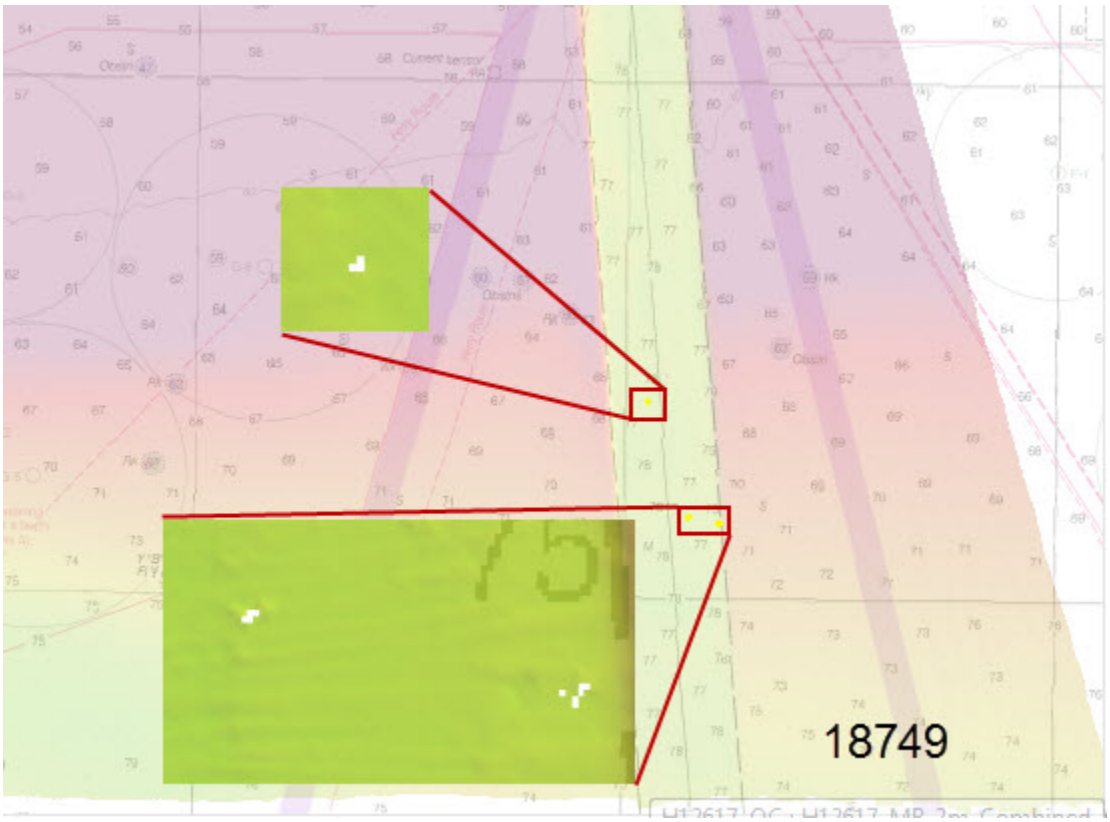


Figure 23: Long Beach Channel Holiday (Cleaned out Noise)

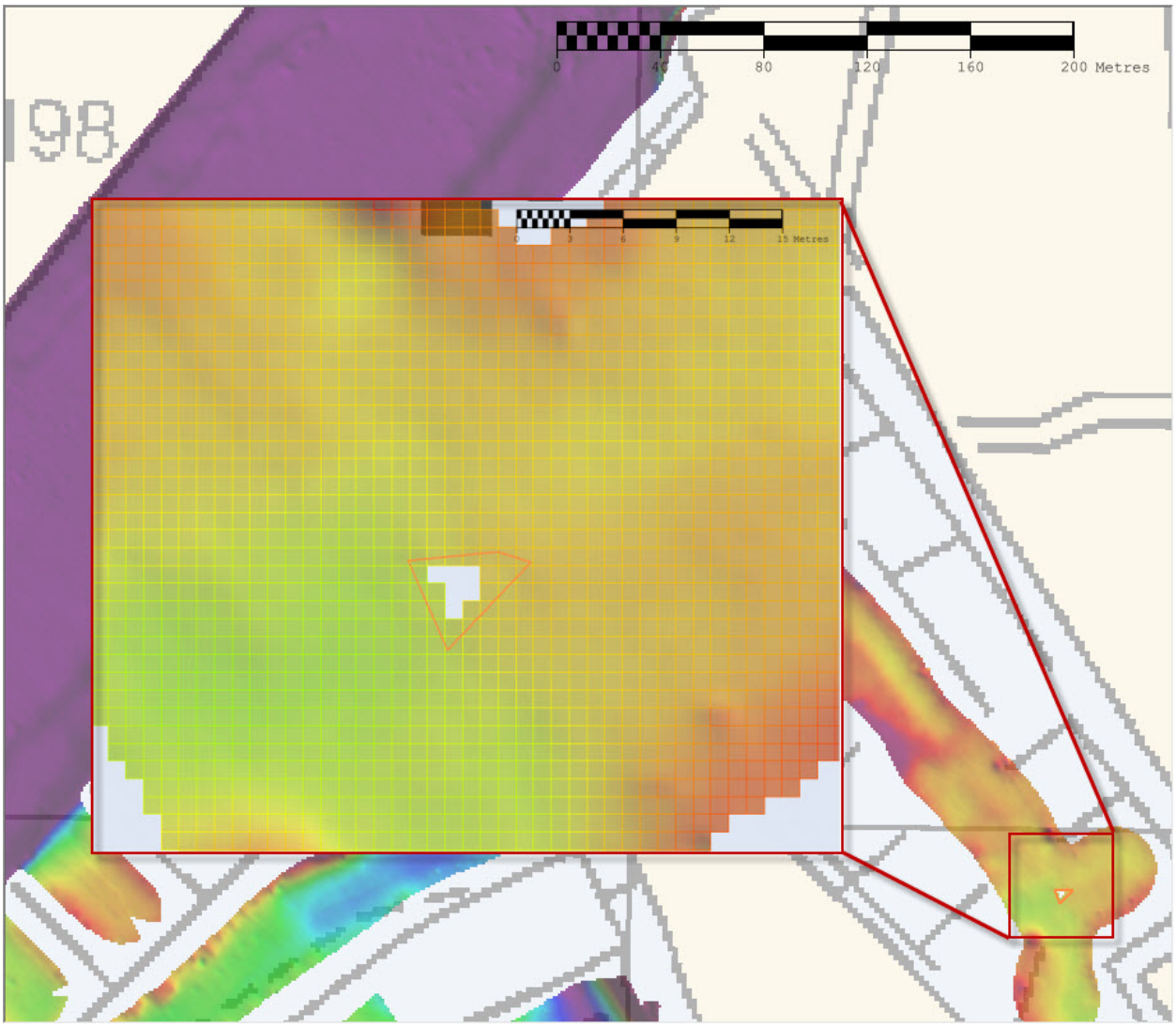


Figure 24: Holiday in Marina NE of East Basin

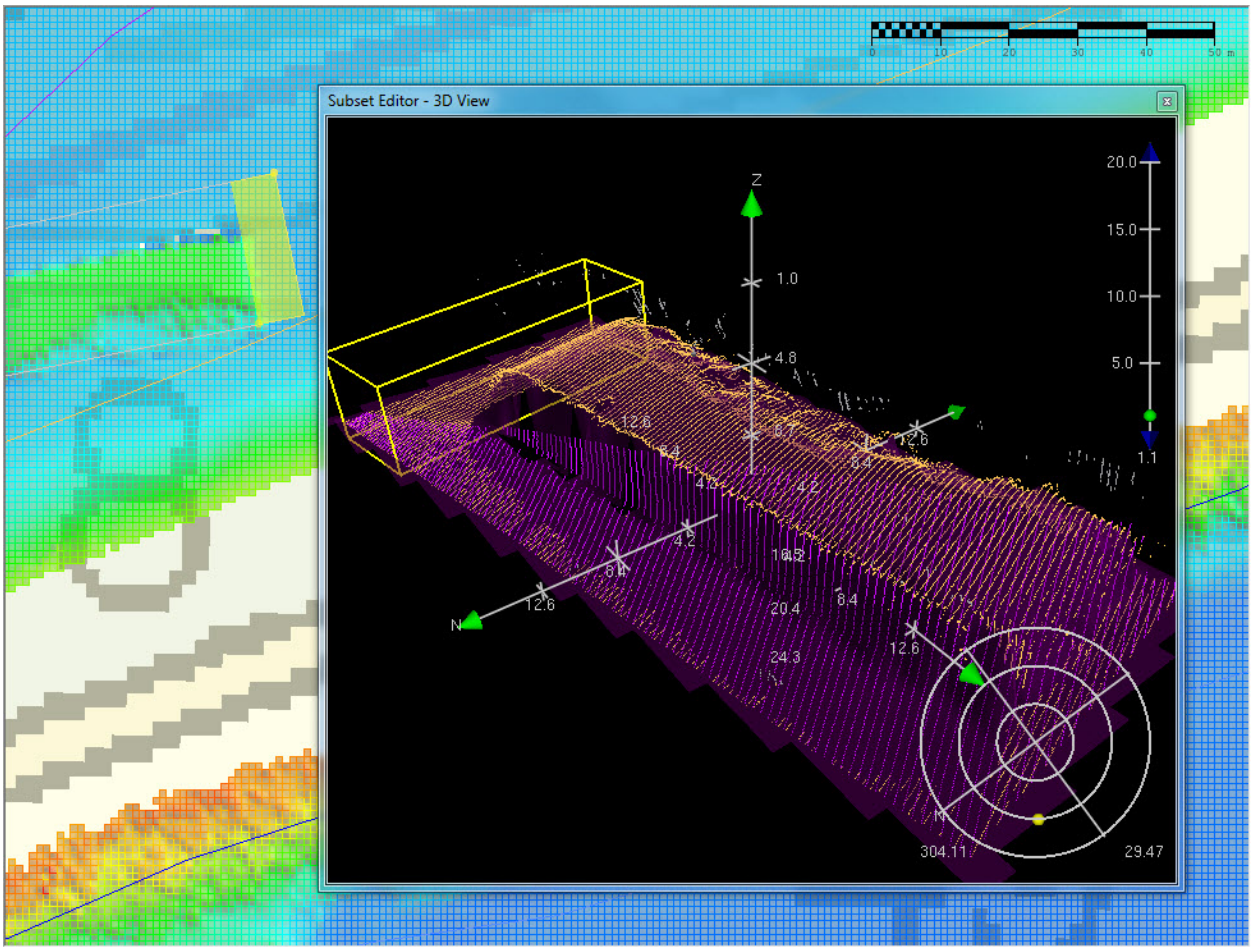


Figure 25: Holiday Over Wreck Inside Middle Breakwater (Acoustic Shadow. Least Depth Attained)

Figure 21 indicates the presence of an acoustic shadow as well as an assertion that the least depth was attained. There is no assurance the least depth was attained on this feature. Rather, the charted OBSTRN is located coincident with the acoustic shadow, and attributed with a shallower least depth than the surveyed least depth. Since no reliable least depth was obtained, feature should be charting as foul area, unknown least depth.

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

Raw Backscatter was logged as a 7k file and has been sent to the Processing Branch. Backscatter was not processed by the field unit.

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: NOAA Profile V_5_3

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
H12617_MB_1m_MLLW	CUBE	1 meters	-	NOAA_1m	Complete MBES
H12617_MB_2m_MLLW	CUBE	2 meters	-	NOAA_2m	Complete MBES
H12617_MB_1m_MLLW_Final	CUBE	1 meters	0 meters - 20 meters	NOAA_1m	Complete MBES
H12617_MB_2m_MLLW_Final	CUBE	2 meters	18 meters - 40 meters	NOAA_2m	Complete MBES
H12617_MB_2m_MLLW_Combined	CUBE	2 meters	0 meters - 40 meters	NOAA_2m	Complete MBES

Table 9: Submitted Surfaces

The NOAA CUBE parameters mandated in HSSD 2013 were used for the creation of all CUBE BASE surfaces in Survey H12617.
The entirety of the survey has been reviewed in subset editor due to the scale of the survey and the concentration of submerged features. In cases where soundings did not represent the true seafloor due to noise or 'fliers', soundings were rejected from use in the CUBE surface.

B.5.3 Data Logs

Data acquisition and processing notes are included in the acquisition and processing logs, and additional processing such as final tide and sound velocity application is noted in the H12617 Data Log spreadsheet. All data logs are submitted digitally in the Separates I folder.

B.5.4 Critical Soundings

Survey H12617 contained 148 soundings which were Designated in Caris HIPS. These Designated soundings were used to draw the CUBE surface to the sounding which accurately represented the seafloor in cases where the surface differed from the sounding more than the vertical IHO requirements allowed. The survey also contained 21 Examined soundings which were used to reference discrete points for feature creation and attribuition in CARIS Bathy Database.

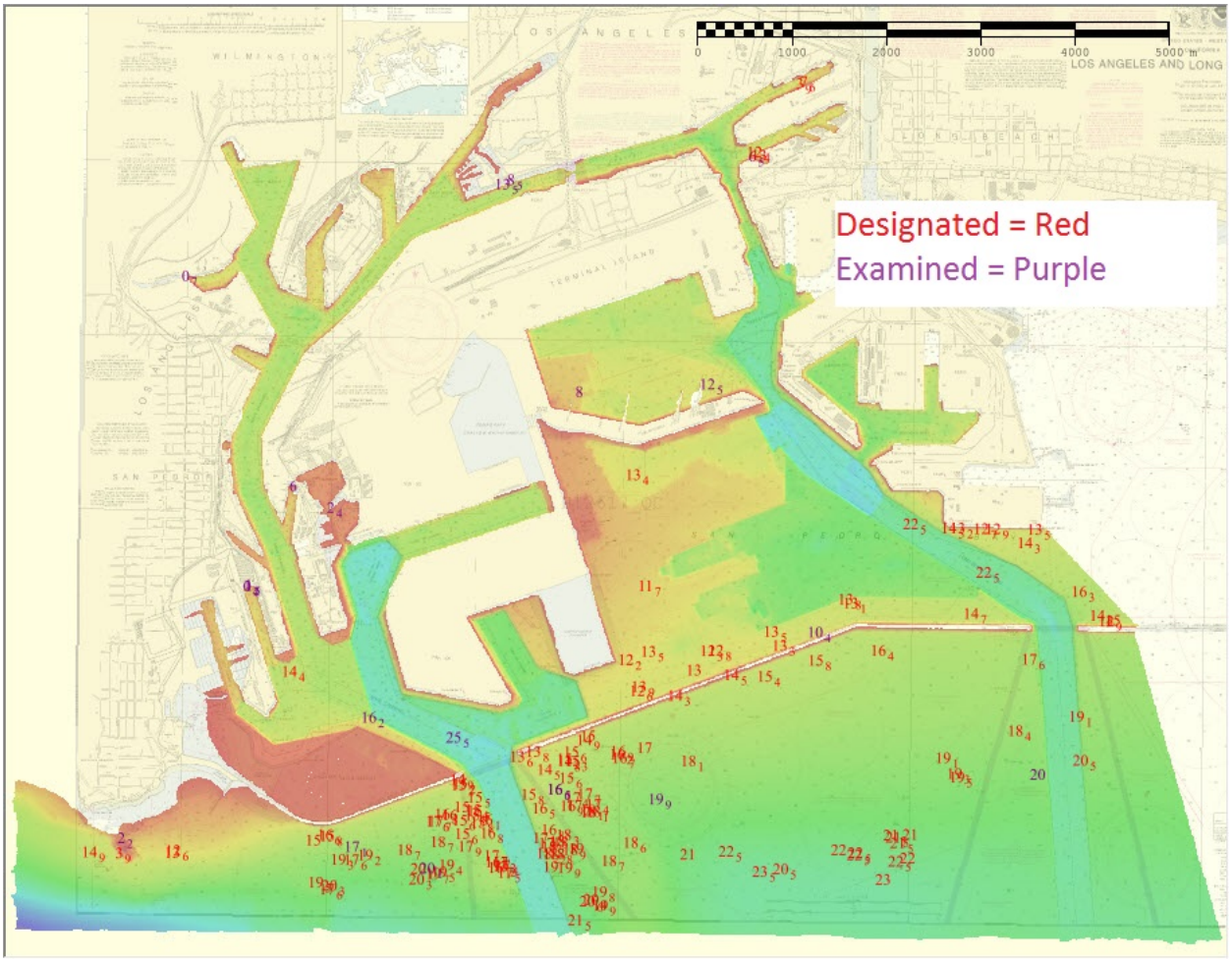


Figure 26: Survey H12617 Critical Soundings

B.5.5 Data Processing Deviations

All Crosslines soundings were filtered to 45° from nadir on each side. Select filtered crosslines soundings were re accepted in CARIS HIPS Subset Editor in order to provide coverage over what would have otherwise been a holiday.

C. Vertical and Horizontal Control

Additional information discussing the vertical or horizontal control for this survey can be found in the accompanying HVCR.

C.1 Vertical Control

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

Standard Vertical Control Methods Used:

Discrete Zoning

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

Station Name	Station ID
Los Angeles, CA	9410660

Table 10: NWLON Tide Stations

File Name	Status
9410660.tid	Final Approved

Table 11: Water Level Files (.tid)

File Name	Status
L318FA2013CORP_Rev.zdf	Final

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

A request for final approved tides was sent to N/OPS1 on 11/12/2013. The final tide note was received on 11/19/2013.

Preliminary zoning was accepted as the final zoning for project OPR-L318-FA-13

Tide note is attached.

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-11 North.

The following PPK methods were used for horizontal control:

Smart Base

Vessel kinematic data were post-processed using Applanix POSPac processing software and SmartBase Post Processed Kinematic methods described in the DAPR. Smooth Best Estimate of Trajectory (SBET) and associated error (RMS) data were applied to MBES data in CARIS HIPS with exceptions of some lines acquired by the following vessels on the following days:
2805 400kHz- DNs 258, 262, 267, 271, 273, 307
2806 400kHz- DN 257
2807-400kHz- DNs 256, 257, 261

For further details regarding the processing and quality control checks performed see the H12617 POSPac Processing Logs spreadsheet and the Applied SBET List spreadsheet located in the SBET folder with the GNSS data.

The following CORS Stations were used for horizontal control:

HVCR Site ID	Base Station ID
BLSA	Bolsa Chica Channel
CAT2	CAT2_SCGN_CS2000
CAT3	CAT3_SCGN_CS2008
CRHS	CRHS_SCGN_CS1999
CSDH	CSU Dominguez
FVPK	Fairview Park
HBCO	Harbor College
LBC1	Long Beach CC 1
LBC2	Long Beach CC 2
LBCH	Long Beach
MHMS	Markham Middle School
PVE3	Palos Verdes
PVHS	Peninsula High School
SACY	Santa Ana Corp. Yard
SBCC	SBCC_SCGN_CS1999
TORP	TORRANCE AIRPORT
TRAK	BOMMER CANYON
VTIS	Marine Exchange
WHYK	Whiting Regional Wilderness Park

Table 13: CORS Base Stations

The following DGPS Stations were used for horizontal control:

DGPS Stations
Point Loma (302 kHz)
Lompoc (321 kHz)

Table 14: USCG DGPS Stations

D. Results and Recommendations

D.1 Chart Comparison

A visual comparison was conducted between H12617 surveyed data and previously charted soundings and contours. Caris HIPS was used to create soundings and contours from a combined 2-meter resolution CUBE Base surface. NOAA RNCs 18746_1, 18749_1, 18751_1 were compared against surveyed soundings and contours.

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
18746	1:80000	39	06/2013	08/13/2013	08/24/2013
18749	1:20000	43	04/2010	08/13/2013	08/24/2013
18751	1:12000	46	08/2009	11/14/2013	11/14/2013

Table 15: Largest Scale Raster Charts

18746

Soundings from survey H12617 generally agree within one fathom with charted depths on chart 18746. Contours generated in Caris HIPS closely approximated the charted 5 and 10 fathom contours. Notable exceptions to this general agreement are listed and shown in the figures below.
-The 10-fathom depth contour has migrated nearer to the breakwater and drawn away from the two 9-fathom soundings on the east and west sides of the channel entrance.

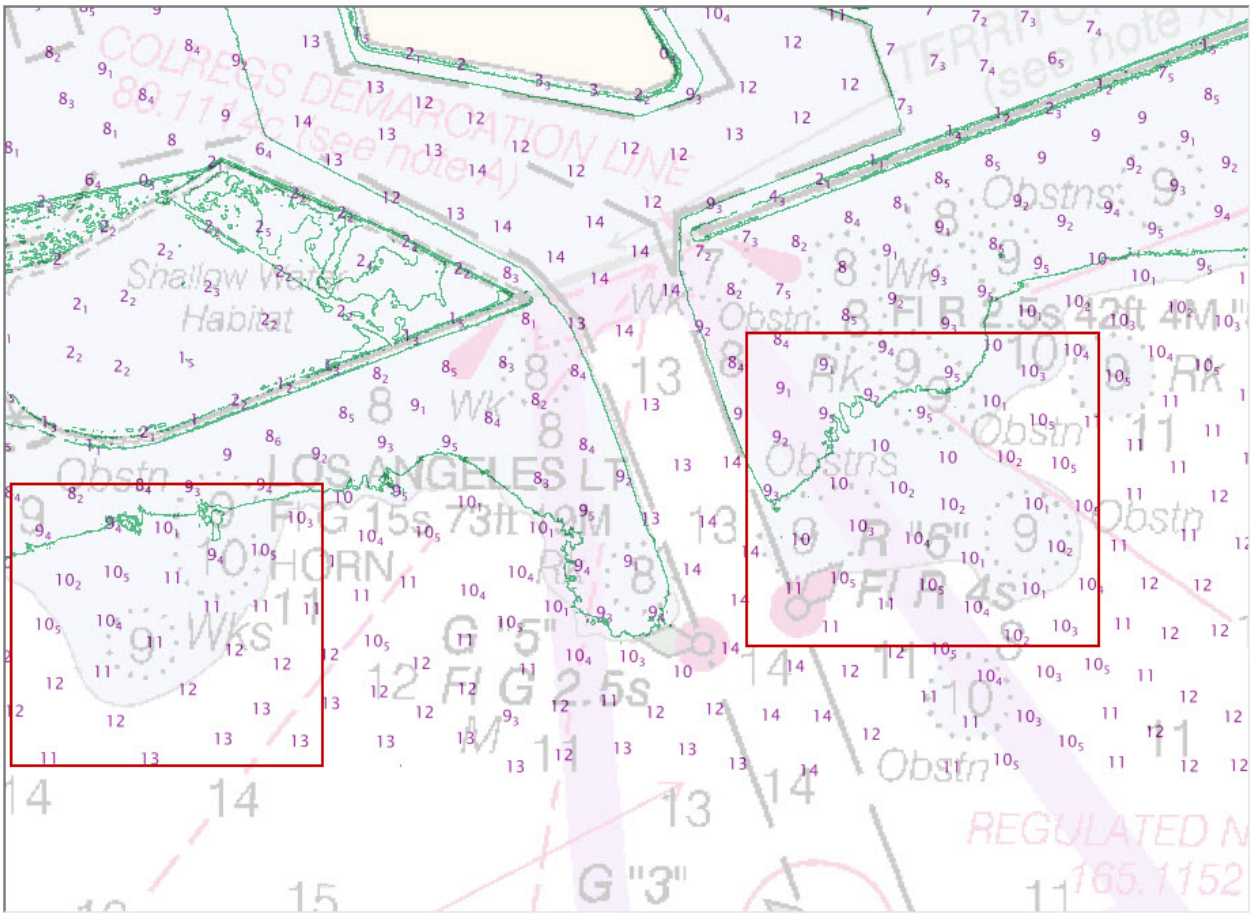


Figure 27: Chart 18746 comparison in vicinity of San Pedro Channel entrance.

18749

Soundings from survey H12617 generally agree within 3 feet with charted depths on chart 18749. Contours generated in Caris HIPS closely approximated the charted 6, 12, 20, 30, and 60 foot contours. Notable exceptions to this general agreement are listed and shown in the figures below.
-The 60-foot surveyed depth contour is apporimately 100 meters inshore of its previously charted location.

18751

Soundings from survey H12617 generally agree within one fathom with charted depths on chart 18751. Contours generated in Caris HIPS closely approximated the charted contours. Notable exceptions to this general agreement are listed and shown in the figures below.
-New previously uncharted basin exists between San Pedro berths 84 and 86.
-Previously charted inlets on the north end of Reservation Point off of the Main Channel have been closed off with an earthen dike. Water remained within the charted extents of the inlet at the time of survey.
-The northernmost portion of the San Pedro Southeast Basin (berths 229, 231, and 233) has been filled in, reducing its extents by approximately 330 meters.

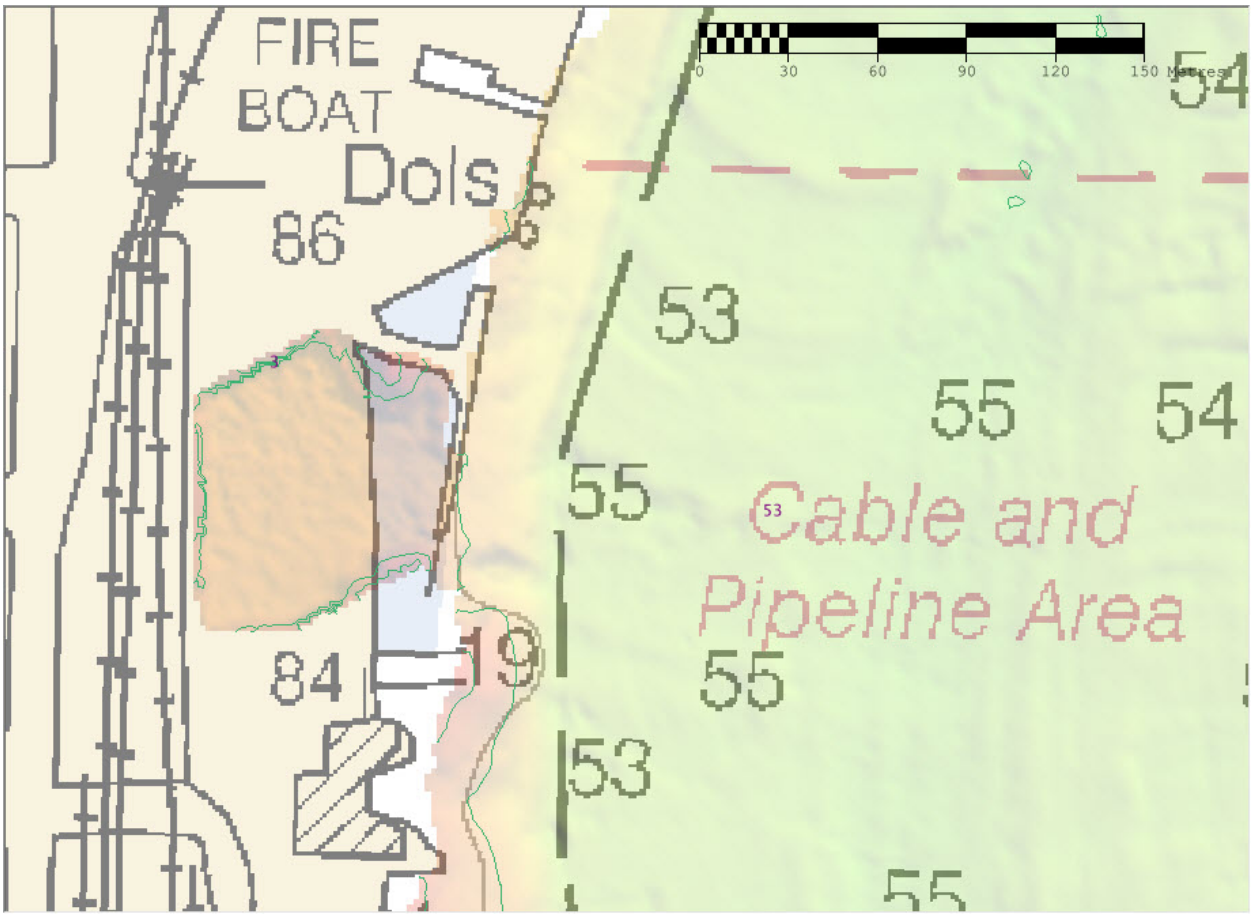


Figure 28: Uncharted basin of San Pedro Main Channel

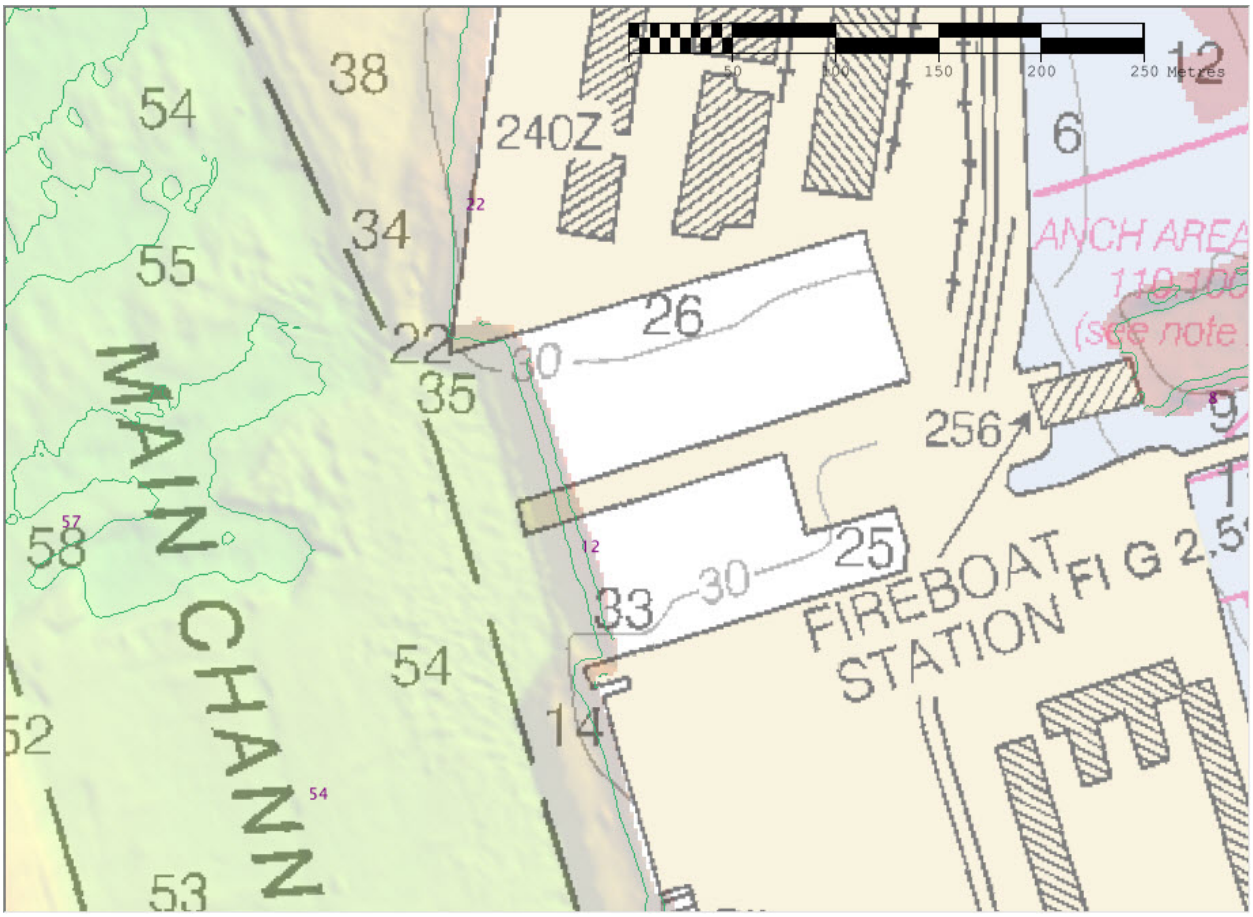


Figure 29: Closed-Off Inlets North of Reservation Point

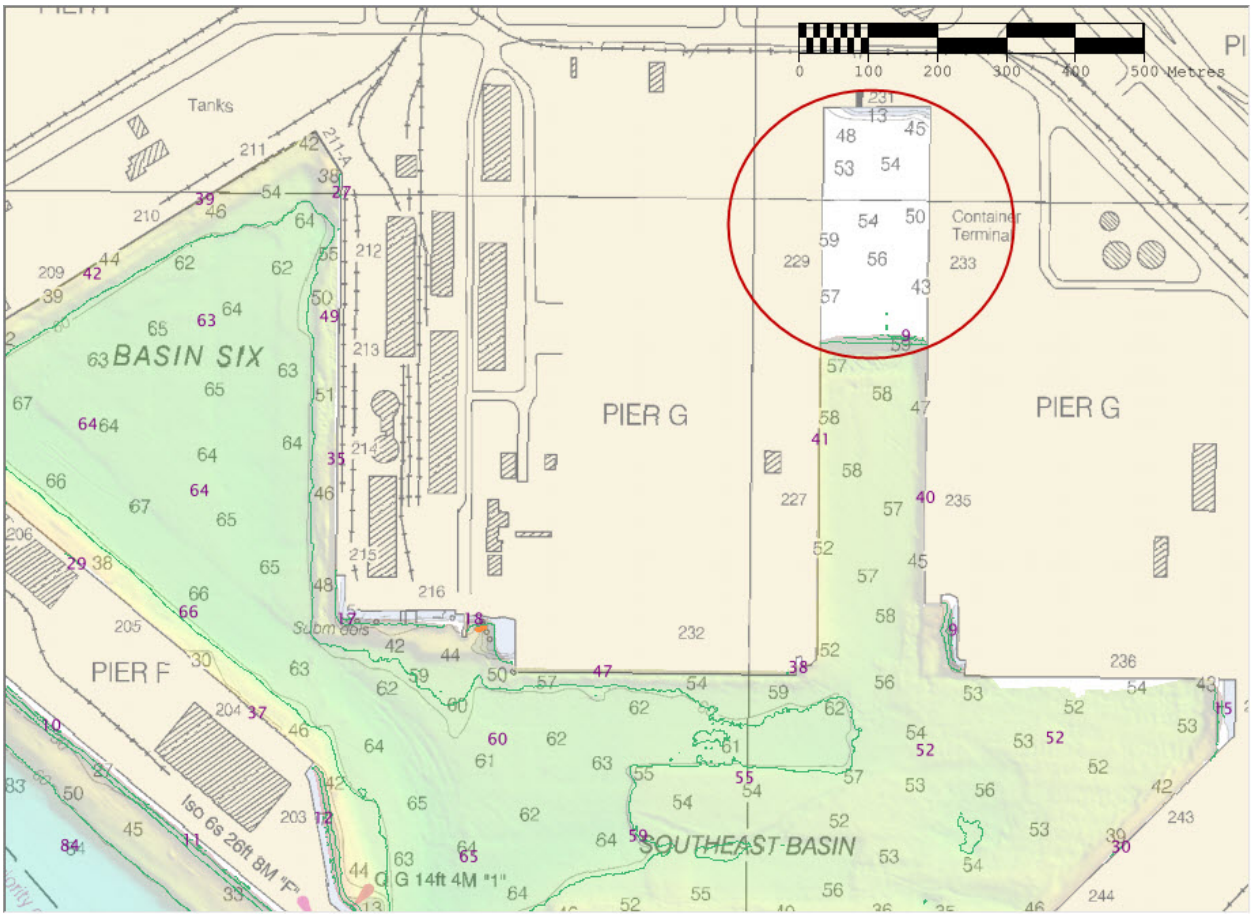


Figure 30: Inlet North of Southeast Basin Filled-in

Additional areas of changes to shoreline construction exist within the survey area. Charts should be updated per the digital files and most recent shoreline imagery or other source available.

D.1.2 Electronic Navigational Charts

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

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US4CA60M	1:80000	16	05/28/2013	08/09/2013	NO
US5CA62M	1:12000	38	02/26/2014	06/05/2013	NO

Table 16: Largest Scale ENCs

US4CA60M

Soundings from survey H12617 generally agree within one fathom with charted depths on ENC US4CA60M. Contours generated in Caris HIPS closely approximated the charted contours. Notable exceptions to this general agreement are listed and shown in the figures below.
-General decrease in seafloor height in near the East and West sides of the channel leading into the San Pedro Channel.

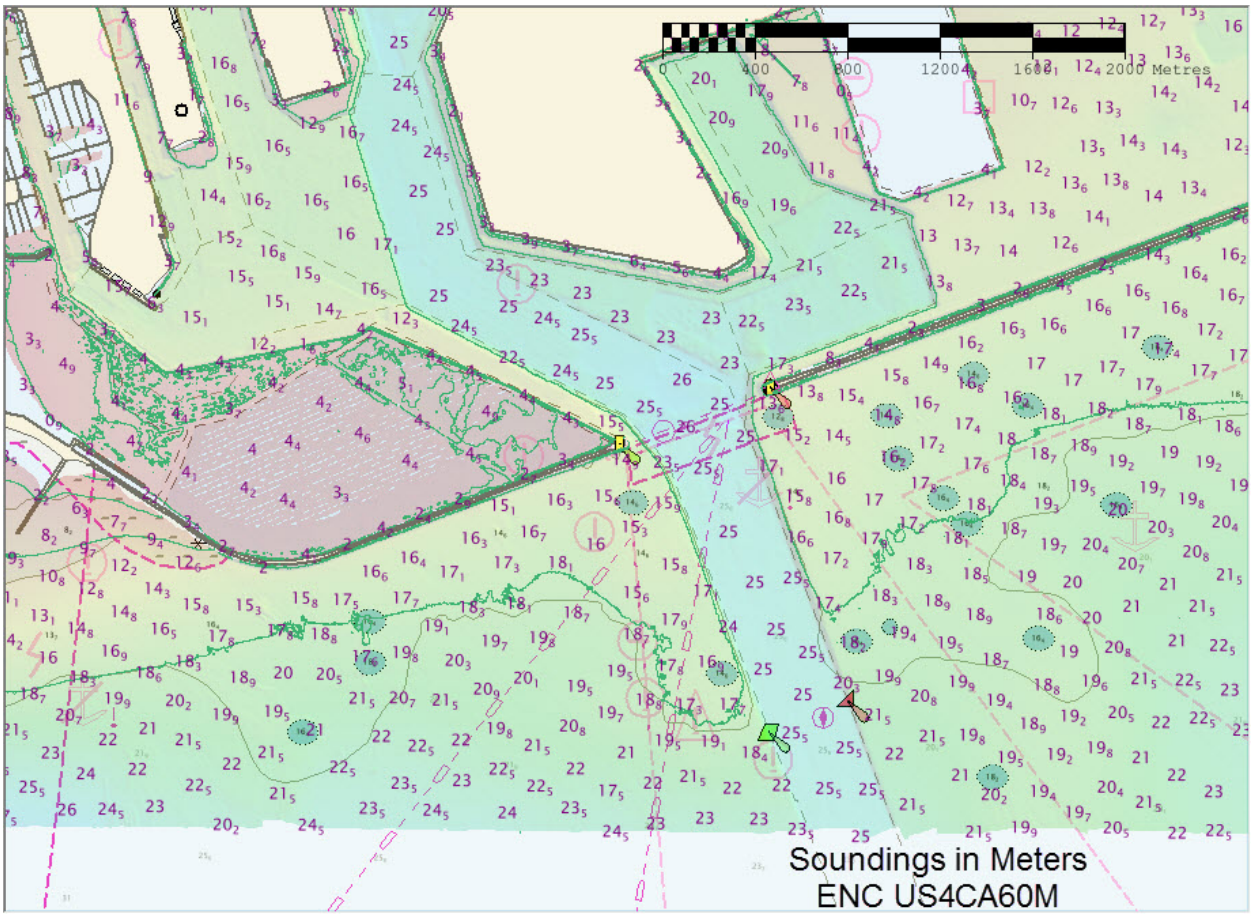


Figure 31: ENC US4CA60M comparison in vicinity of San Pedro Channel entrance.

US5CA62M

Soundings from survey H12617 generally agree within one fathom with charted depths on ENC US4CA62M. Contours generated in Caris HIPS closely approximated the charted contours. Notable exceptions are listed in previous chart comparisons above.

D.1.3 AWOIS Items

Seven AWOIS items with search radii were assigned for investigation for survey H12617. All AWOIS items are contained within the Final Feature File unless they are disproved and have no corresponding charted feature.

#50243- Complete MBES coverage of the search radius produced a contact 163m NW of the published position. The dimensions of the contact are approximately 8m in length, 3m width, and 1m height. The contact was assigned a least depth and added to the Final Feature File, but is not believed to be the AWOIS wreck. Sheet Manager recommends removing AWOIS 50243 from the registry.

#50335- A submerged contact was observed with complete multibeam coverage within the search radius. The contact was assigned a least depth of 19.53 meters and added to the Final Feature File as a AWOIS feature.

#50036- Radius searched with complete MBES. No contacts were detected. Sheet Manager recommends removing AWOIS 50036 from the registry.

#52594- Radius searched with complete MBES. No contacts were detected. Sheet Manager recommends removing AWOIS 52594 from the registry.

#50202- Radius searched with complete MBES. No contacts were detected. Sheet Manager recommends removing AWOIS 50202 from registry.

#50961- Radius searched with complete MBES. No contacts were detected. Sheet Manager recommends removing AWOIS 50961 from registry.

#54115- Due to heavy kelp growth and shallow water, this item was located inshore of the NALL and, therefore, not addressed.

The field was assigned 46 total AWOIS items that were not Maritime Boundary items. Not all of these assigned AWOIS items are currently charted on the most recent chart editions. All assigned AWOIS items and charting recommendations are included in the attached Feature Report and in the digital charting product.

D.1.4 Maritime Boundary Points

Maritime Boundary Points were assigned for this survey, but were not addressed due to heavy kelp, which made them unreachable.

D.1.5 Charted Features

All assigned features for survey H12617 were investigated or attributed as 'Not Addressed' if they were inshore of the NALL. All addressed charted features are included in the Final Feature File.

D.1.6 Uncharted Features

The Final feature file included 52 features with the Description attribute 'New'.

During office processing additional features were identified and recommended for charting.

D.1.7 Dangers to Navigation

There were no Dangers to Navigation (DTON) submitted for H12617, however, there was a DTON submitted with H12619 in a common junction area with this survey. CARIS BASE surfaces honor the DTON in H12617, but it is not included in the final feature file.

One DTON was identified during office review and submitted to the Nautical Data Branch on July 15th, who provided receipt of the DTON report on July 17th. DTON Report attached.

D.1.8 Shoal and Hazardous Features

Two shoal areas within the survey limits were resolved with 25-meter Multibeam line spacing. The figures below show the two Shallow Water Habitat areas where depth of between 4 and 8 meters were conducive to set line spacing.

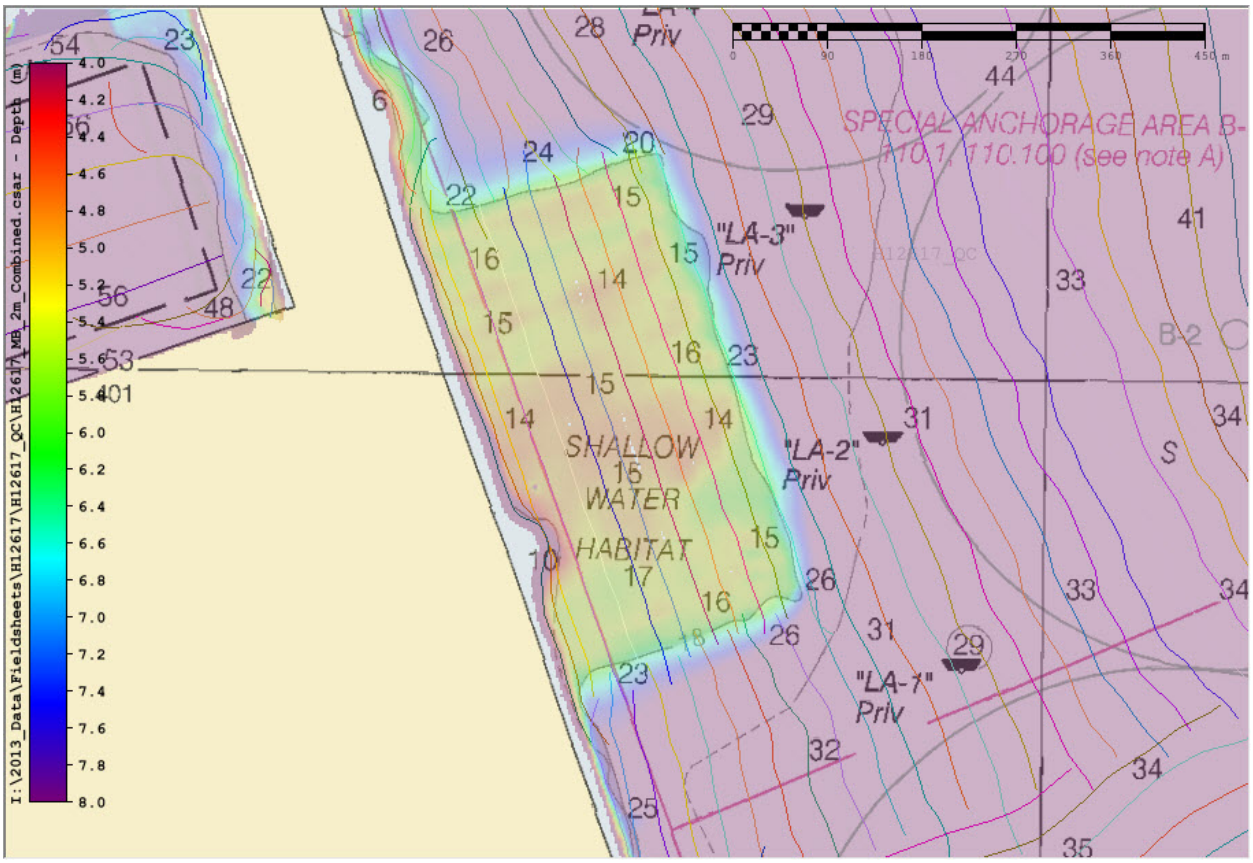


Figure 32: 25-meter Line-Spacing Area East of Pier 400

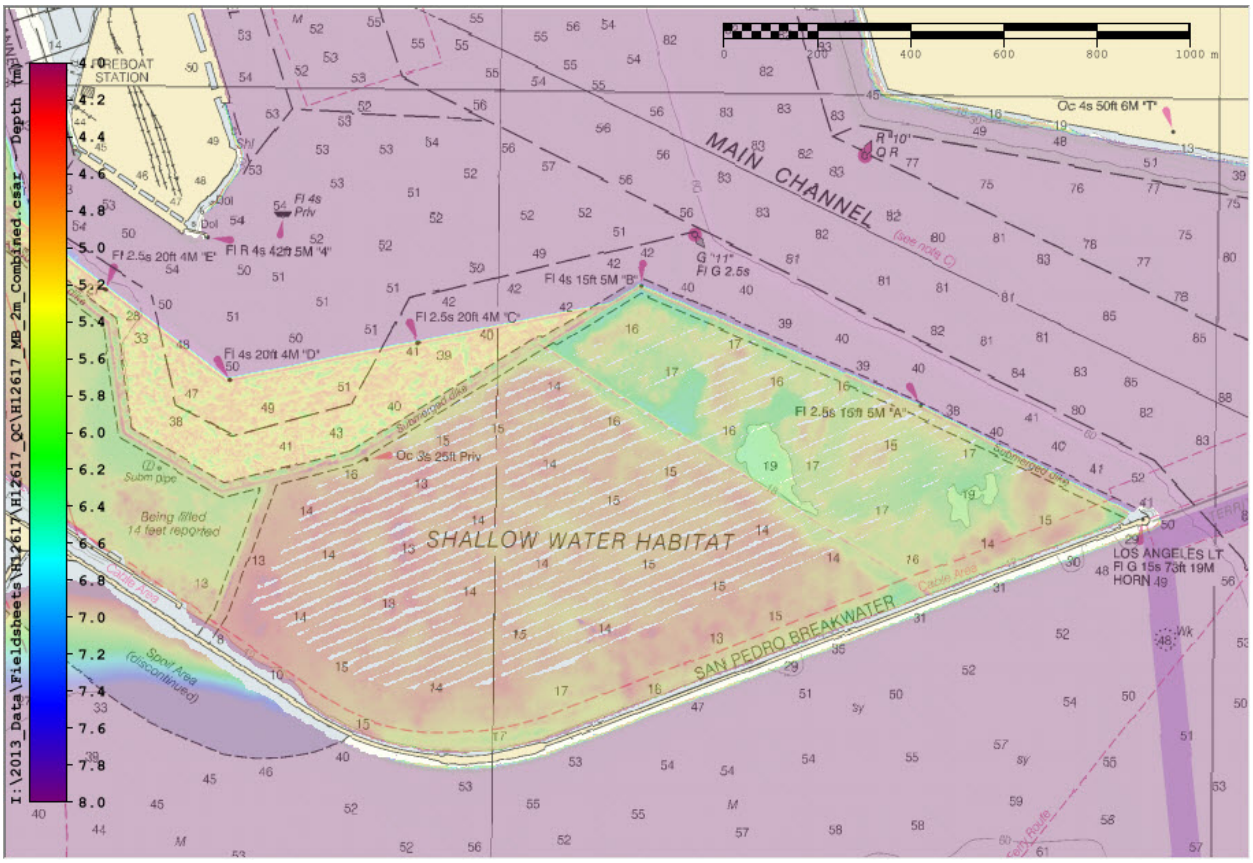


Figure 33: 25-Meter Line Spacing Area North of San Pedro Breakwater

D.1.9 Channels

There was general agreement between charted soundings and surveyed soundings in all channel areas within survey H12617. Special anchorage areas B-1 and B-9 contained soundings which were shoaler than those charted. See figures below.

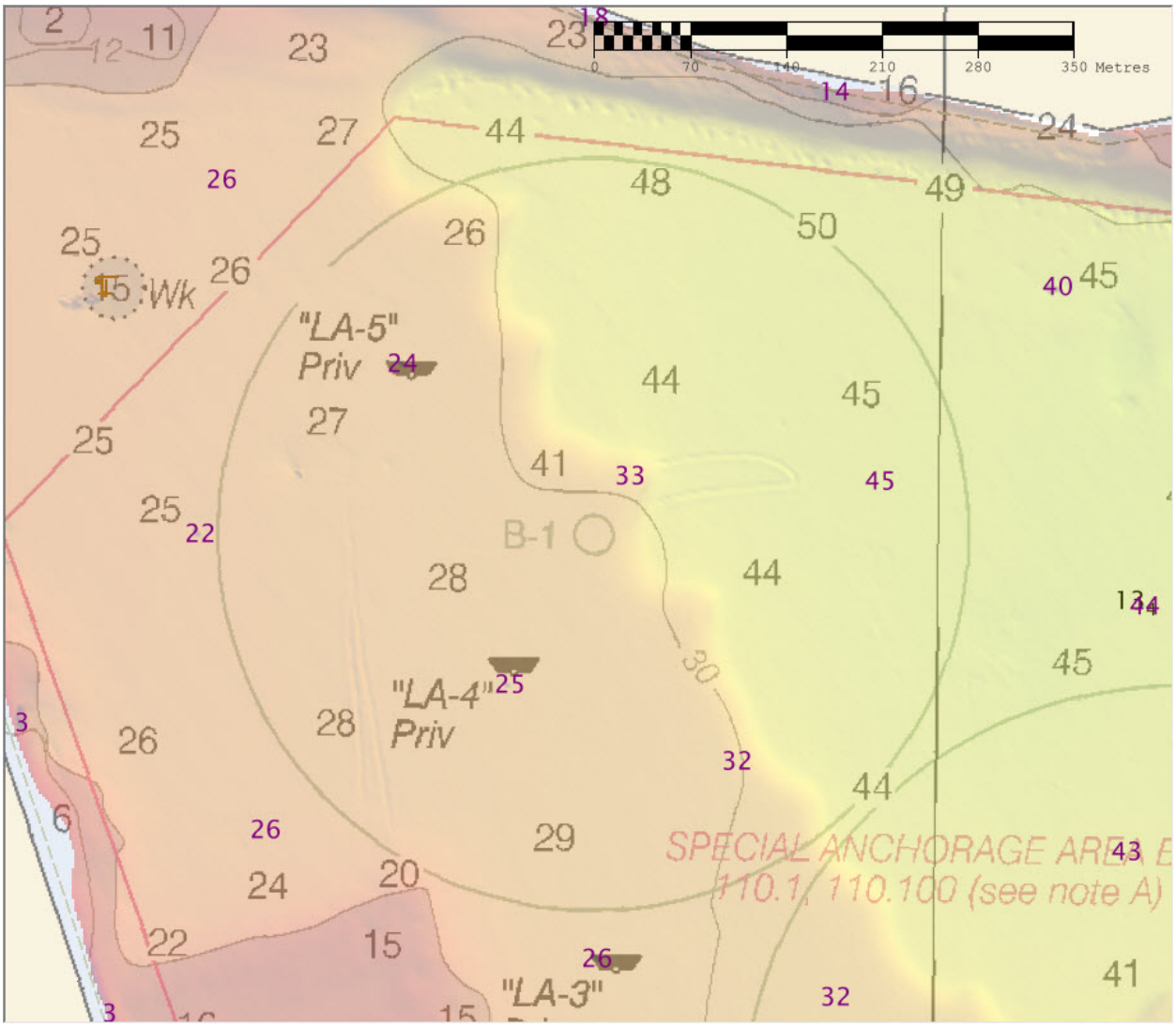


Figure 34: Special Anchorage Area B-1 with Surveyed Soundings

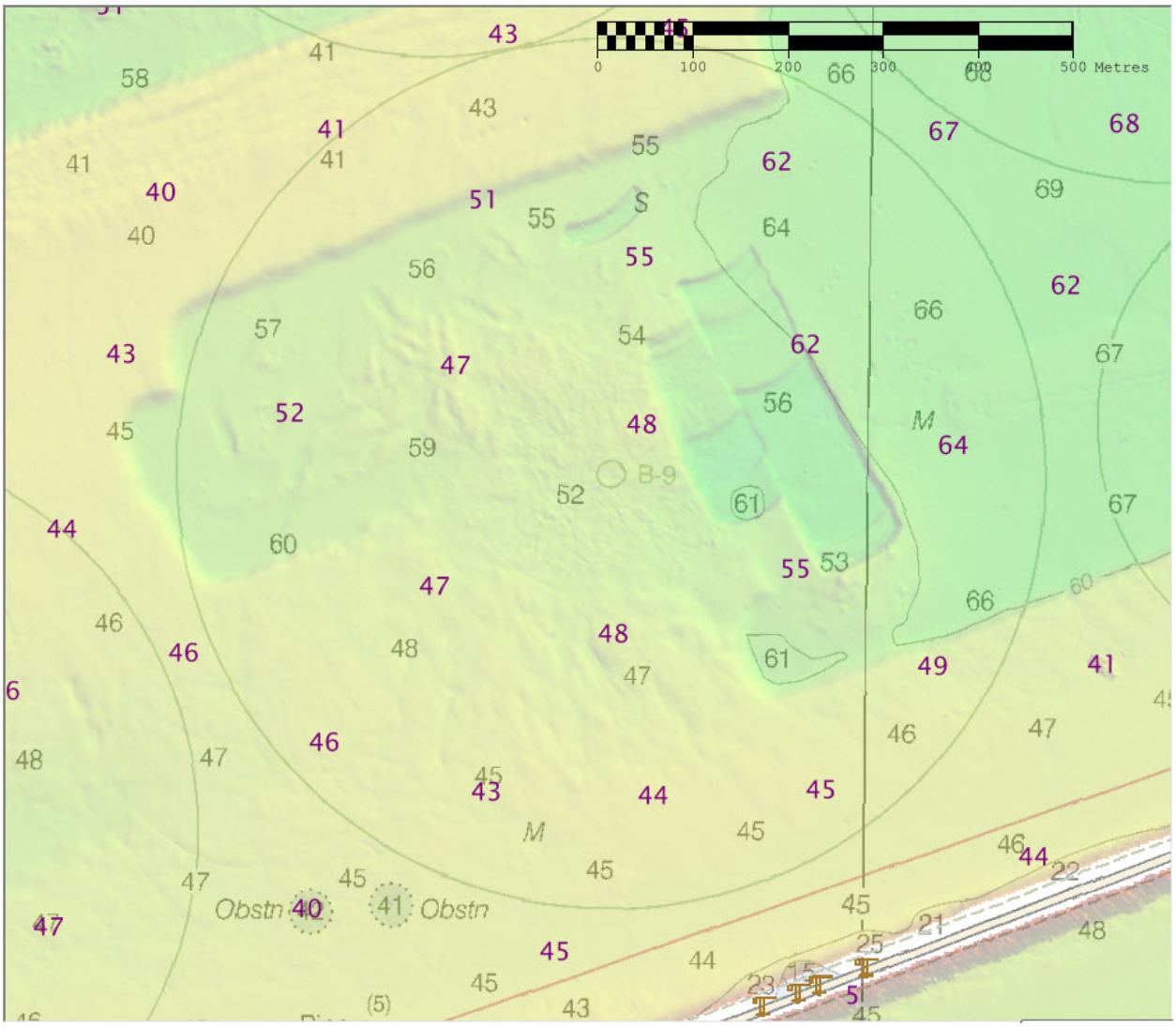


Figure 35: Special Anchorage Area B-9 with Surveyed Soundings

D.1.10 Bottom Samples

No bottom samples were required for this survey.

D.2 Additional Results

D.2.1 Shoreline

Fairweather personnel conducted limited shoreline verification within the limits of survey H12617. Annotations, information, and diagrams collected on DP forms and boat sheets during field operations are scanned and included in the digital Separates I folder. Shoreline verification procedures for survey H12617 conform to those detailed in the DAPR.

Select shoreline features (e.g. floating piers) from ENC US5CA52M that were not depicted by the source shoreline file were imported into the Final Feature File for verification and de-conflicted to the best of the field's ability.

Survey H12617 encompasses an active port with many significant changes to the piers and shoreline features. This area would be best served by having new ortho-imagery flown to supplement the findings of this survey. Figures below detail examples of the significant changes to H12617's shoreline.

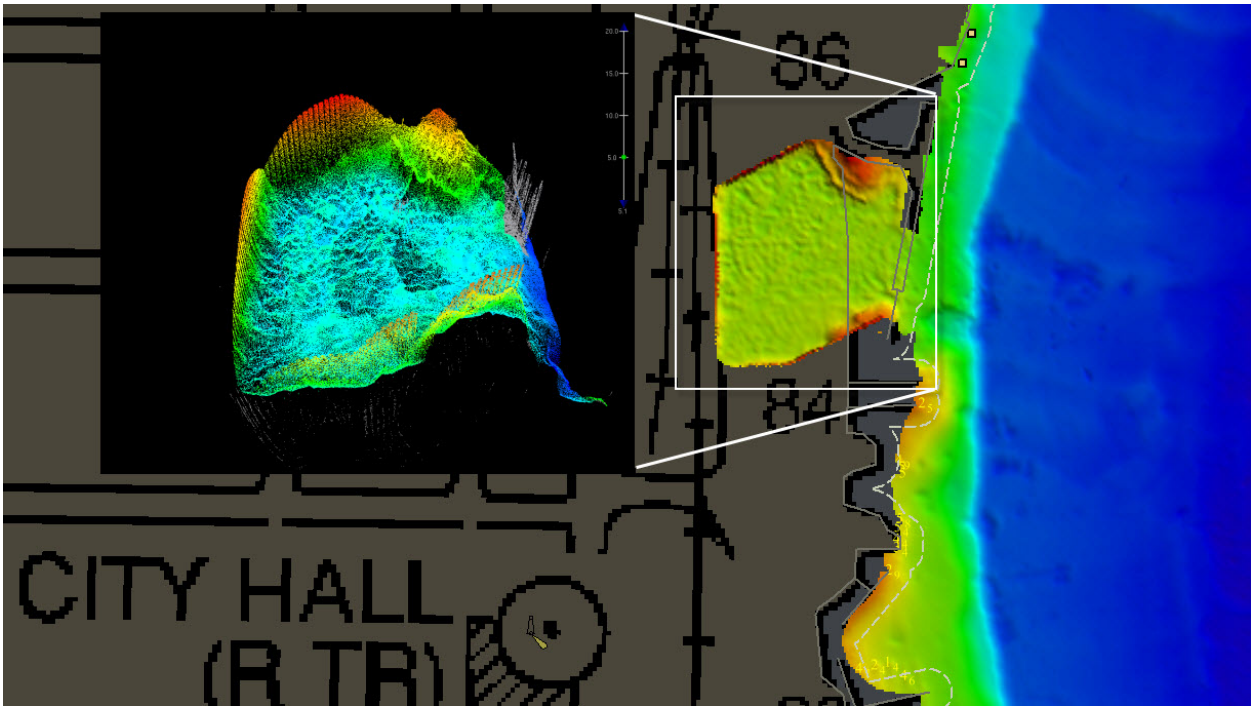


Figure 36: Newly dredged basin with retaining wall located near the San Pedro City Hall.

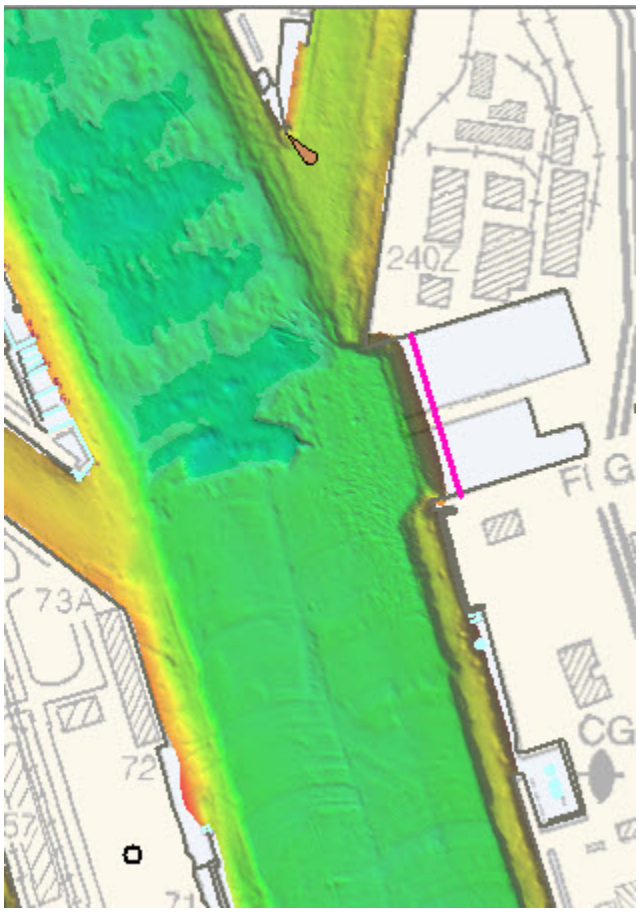


Figure 37: New earthen dike located North of the LA Coast Guard Base.

D.2.2 Prior Surveys

Prior survey comparisons exist for this survey, but were not investigated.

D.2.3 Aids to Navigation

All ATONs addressed on sheet H12617 were serving there intended purpose and were positioned as charted. The Feature File details which ATONs were addressed.

D.2.4 Overhead Features

Overhead features exist for this survey, but were not investigated.

D.2.5 Submarine Features

There are many charted Cable and/or Pipeline Areas within survey H12617. Inspection of the charted pipeline areas in CARIS HIPS Subset Editor did not show any evidence of cables, pipelines, or any other noteworthy submerged features in the areas.

A charted sewer was verified with complete MBES between the San Pedro Pier 400 Channel and the Submerged Material Storage Site.

An uncharted submerged feature was found with MBES 780 meters ESE of Pt. Fermin. The features appears similar in nature to the aforementioned charted sewer and was added to the Final Feature File. See Figure below.

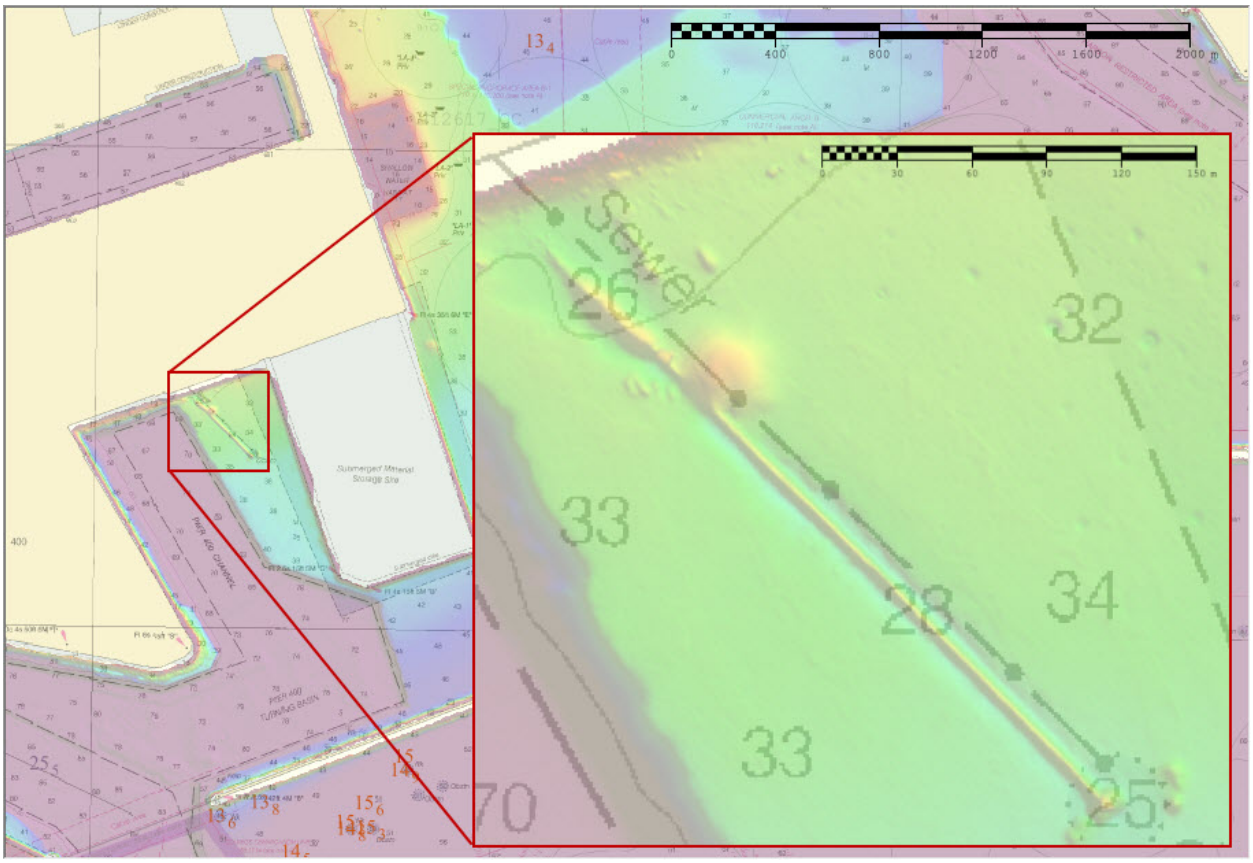


Figure 38: Charted Sewer near Pier 400

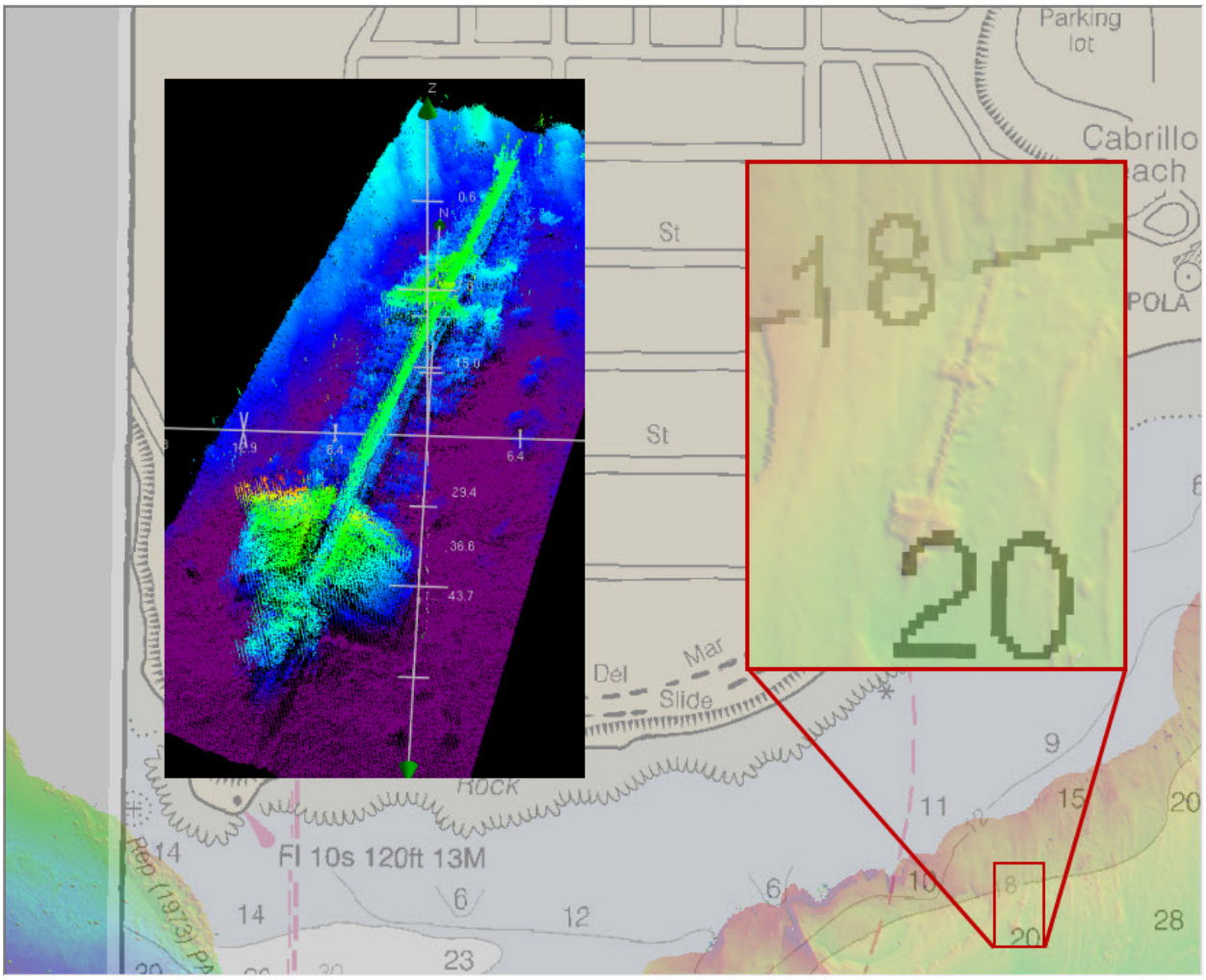


Figure 39: Uncharted Submerged Feature 780m ESE of Pt. Fermin

D.2.6 Ferry Routes and Terminals

Ferry routes and/or terminals exist for this survey, but were not investigated.

D.2.7 Platforms

No platforms exist for this survey.

D.2.8 Significant Features

D.2.9 Construction and Dredging

A hydraulic dredge was present and actively dredging during the times of survey for H12617. A combination of the dredge itself, its pipeline, support vessels, anchors, and turbidity made surveying impossible

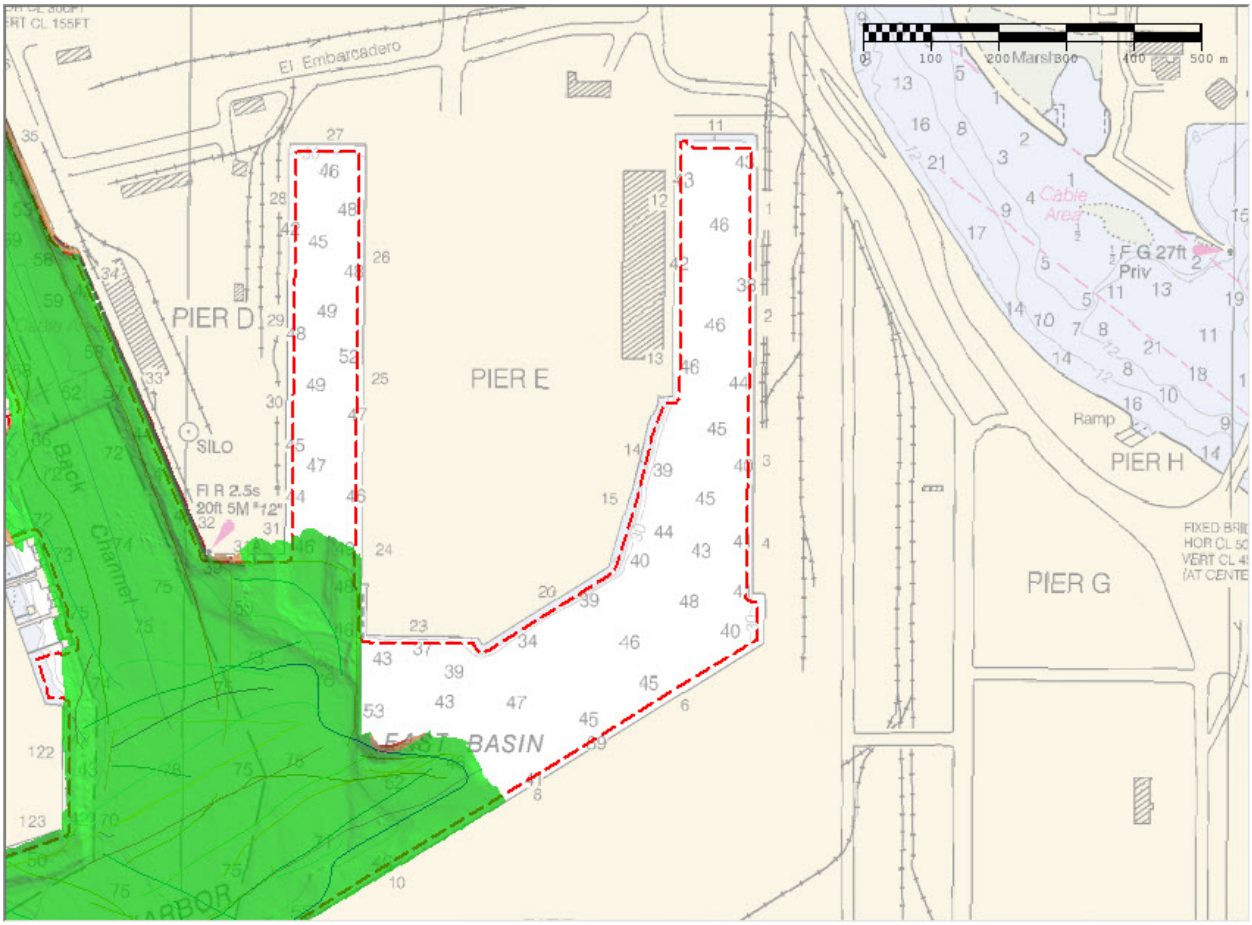


Figure 40: East Basin Dredging Area

D.2.10 New Survey Recommendations

Due to dredging activity near the San Pedro East Basin, areas were either unnavigable or disturbed by hydraulic dredging. These areas are marked in the Final Feature File as Ice Areas (ICEARE) and it is in recommendation of the hydrographer that these areas be reevaluated when dredging activities have ceased. This ICEARE is for information only and should not be charted.

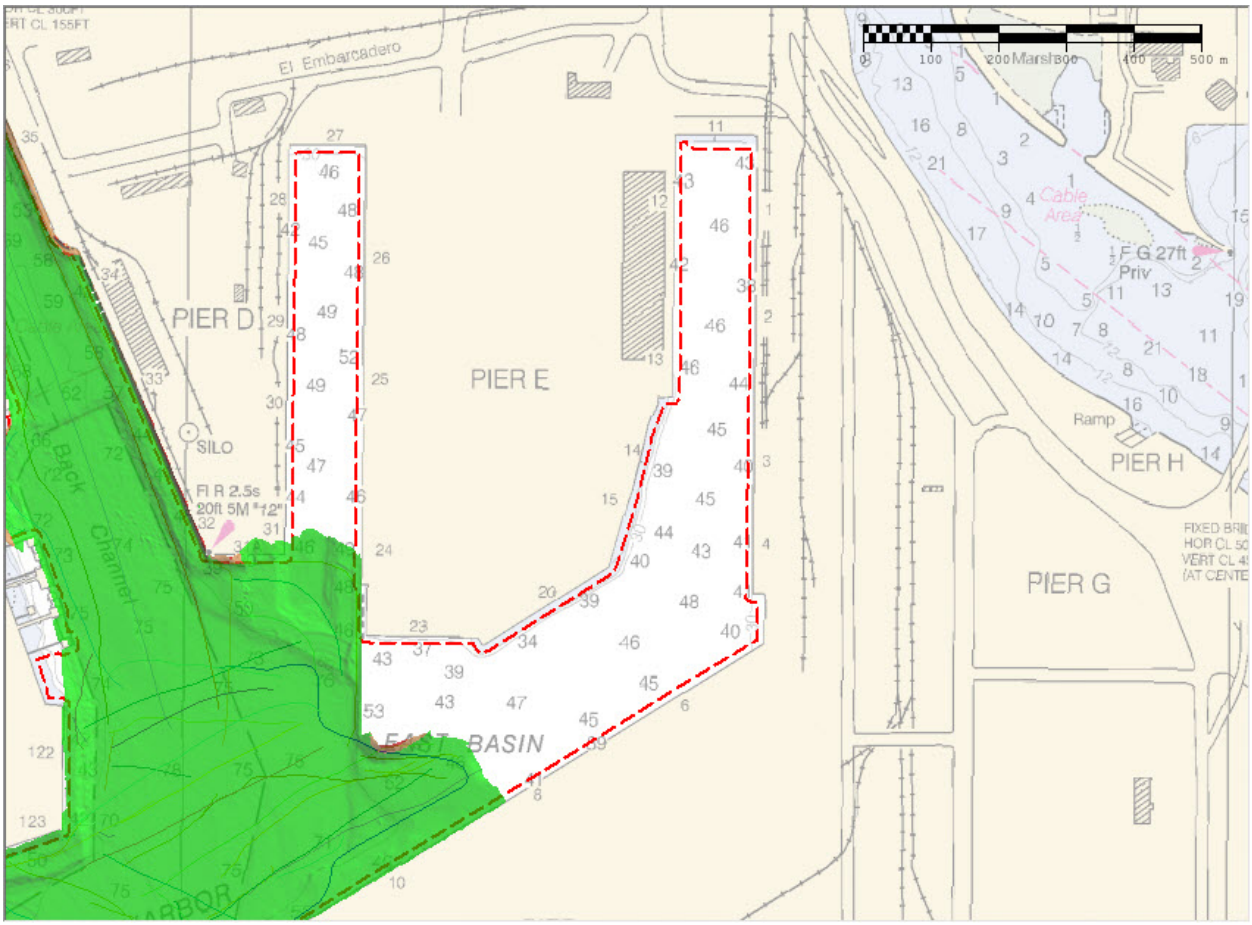


Figure 41: Area of active dredging at time of survey.

D.2.11 New Inset Recommendations

No new insets are recommended for this area.

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, 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.

Report Name	Report Date Sent
Data Acquisition and Processing Report	2014-06-10
Coast Pilot Report	2013-11-15

Approver Name	Approver Title	Approval Date	Signature
CDR David J. Zezula, NOAA	Commanding Officer	06/10/2014	David Zezula 2014.06.11 08:25:27 -09'00'
LT Ryan A. Wartick, NOAA	Field Operations Officer	06/10/2014	Ryan Wartick cn=Ryan Wartick, o=Fairweather, ou=OMAO, email=ryan.wartick@noaa.gov, c=US 2014.06.11 10:01:07 -08'00'
HCST Tami M. Beduhn	Chief Survey Technician	06/10/2014	Tami Beduhn 2014.06.11 03:42:17 -08'00'
HSST David T. Francksen	Sheet Manager	06/10/2014	Departed Ships's Company

F. Table of Acronyms

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

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

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

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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : November 15, 2013

HYDROGRAPHIC BRANCH: Pacific
HYDROGRAPHIC PROJECT: OPR-L318-FA-2013
HYDROGRAPHIC SHEET: H12617

LOCALITY: San Pedro and Vicinity, Long Beach, CA
TIME PERIOD: September 13 - November 02, 2013

TIDE STATION USED: 9410660 Los Angeles, CA
Lat. 33° 43.2'N Long. 118° 16.3' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.448 meters

REMARKS: RECOMMENDED ZONING

Preliminary zoning is accepted as the final zoning for project OPR-L318-FA-2013, H12617, during the time period between September 13 - November 02, 2013.

Please use the zoning file L318FA2013CORP_Rev submitted with the project instructions for OPR-L318-FA-2013. Zones PAC9 and PAC9A are the applicable zones for H12617.

Refer to attachments for zoning information.

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

HOVIS.GERALD.THOMAS.1365860250

Digitally signed by HOVIS.GERALD.THOMAS.1365860250
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=OTHER, cn=HOVIS.GERALD.THOMAS.1365860250
Date: 2013.11.19 12:10:19 -05'00'

CHIEF, PRODUCTS AND SERVICES BRANCH


Preliminary as Final Tidal Zoning for
OPR-L318-FA-2013 (Revised), Registry No. H12617
San Pedro and Vicinity, Long Beach, CA
PAC9A
Time Corrector 0 mins
Range Corrector x 1.00
Reference 9410660
9410660 Los Angeles, CA
PAC9
Time Corrector 0 mins
Range Corrector x 0.97
Reference 9410660
0
25
nautical miles
Scale: 1:1,690,000
bing
Image courtesy of NASA State of Michigan

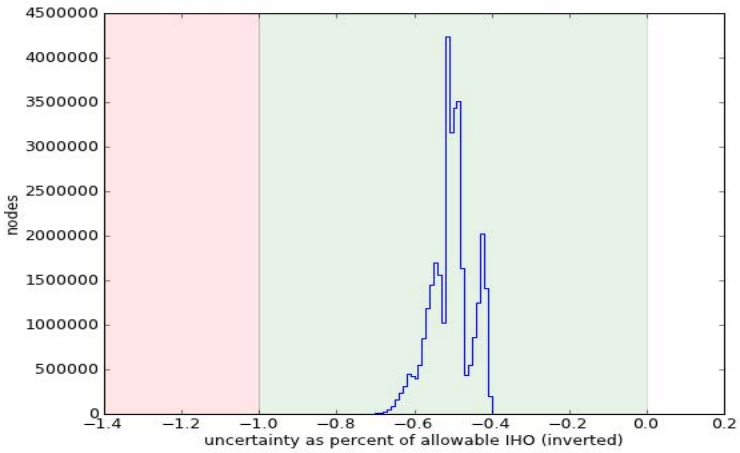
H12617_1m_final

The finalized surface has 33250163 nodes with 2890398966 soundings.

Uncertainty Standards

100.00% | PASS

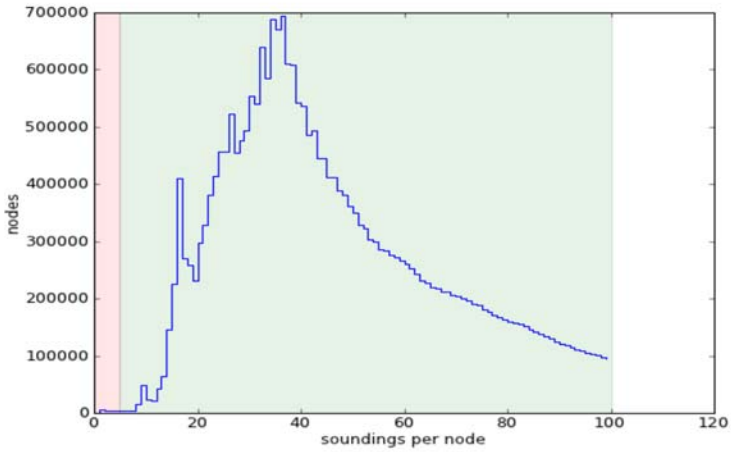
Nodes with Uncertainty less then or equal allowable IHO error **100.00%** (33250147/33250163).



Object Detection Coverage

99.95% | PASS

Nodes with 5 or more soundings **99.95%** (33232064/33250163).
Sounding count average is **86.93** soundings per node.
Sounding count mode is **37** soundings per node.



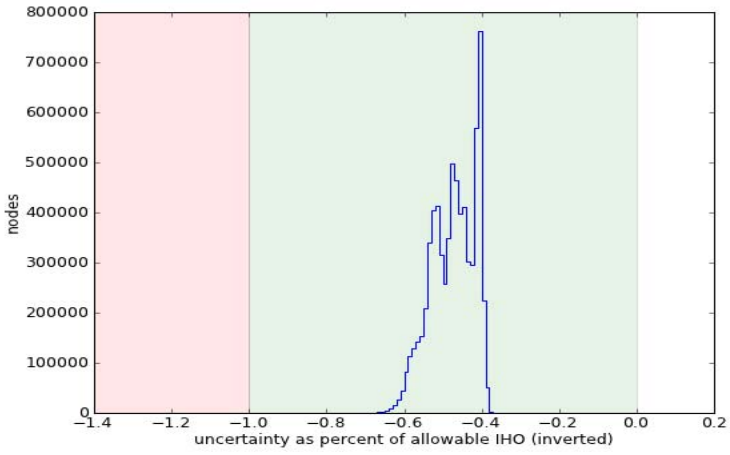
H12617_2m_final

The finalized surface has 6988905 nodes with 751417456 soundings.

Uncertainty Standards

100.00% | PASS

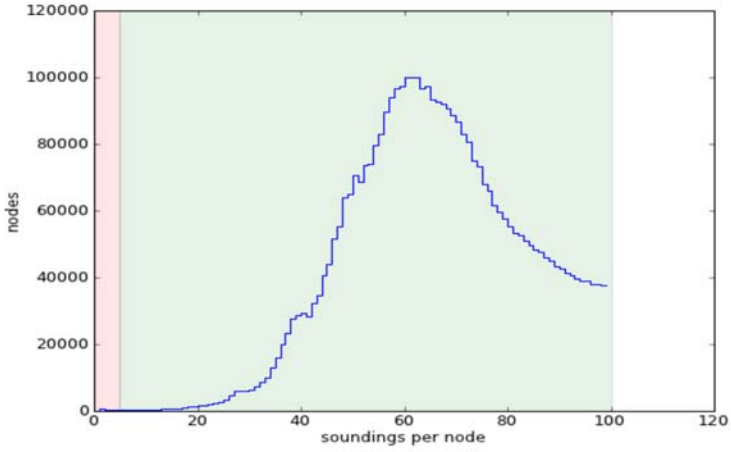
Nodes with Uncertainty less then or equal allowable IHO error **100.00%** (6988905/6988905).



Object Detection Coverage

99.98% | PASS

Nodes with 5 or more soundings **99.98%** (6987262/6988905).
Sounding count average is **107.52** soundings per node.
Sounding count mode is **63** soundings per node.



H12617 Feature Report

Registry Number: H12617
State: California
Locality: Long Beach, CA
Sub-locality: San Pedro
Project Number: OPR-L318-FA-13
Survey Dates: 9/13/13 - 11/3/13

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
18751	46th	08/01/2009	1:12,000 (18751_1)	USCG LNM: 6/10/2014 (6/10/2014) NGA NTM: 6/22/1996 (6/21/2014)
18749	42nd	08/01/2008	1:20,000 (18749_1)	[L]NTM: ?
18746	37th	08/01/2007	1:80,000 (18746_1)	[L]NTM: ?
18740	42nd	03/01/2007	1:234,270 (18740_1)	[L]NTM: ?
18022	35th	08/01/2005	1:868,003 (18022_1)	[L]NTM: ?
18020	38th	10/01/2007	1:1,444,000 (18020_1)	[L]NTM: ?
501	12th	11/01/2002	1:3,500,000 (501_1)	[L]NTM: ?
530	32nd	06/01/2007	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

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

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	GP	[None]	33° 46' 19.1" N	118° 14' 54.3" W	---
1.2	Obstruction	[None]	33° 46' 20.0" N	118° 14' 53.1" W	---
1.3	GP	[None]	33° 46' 21.0" N	118° 14' 52.6" W	---
1.4	Wreck	17.97 m	33° 41' 50.0" N	118° 15' 58.4" W	---
1.5	Obstruction	19.53 m	33° 41' 52.4" N	118° 16' 03.0" W	---
1.6	Obstruction	20.55 m	33° 41' 58.9" N	118° 12' 51.8" W	---
1.7	Obstruction	20.10 m	33° 41' 59.0" N	118° 12' 51.3" W	---
1.8	Wreck	17.64 m	33° 42' 00.3" N	118° 15' 48.2" W	---

1.9	Obstruction	18.22 m	33° 42' 03.3" N	118° 14' 26.3" W	---
1.10	Obstruction	17.60 m	33° 42' 03.8" N	118° 13' 54.8" W	---
1.11	Obstruction	17.10 m	33° 42' 04.8" N	118° 15' 48.1" W	---
1.12	Rock	0.00 m	33° 42' 06.3" N	118° 17' 23.4" W	---
1.13	Rock	0.00 m	33° 42' 17.1" N	118° 17' 42.3" W	---
1.14	Wreck	15.34 m	33° 42' 22.3" N	118° 15' 03.9" W	---
1.15	Rock	17.30 m	33° 42' 22.4" N	118° 13' 43.0" W	---
1.16	Rock	16.10 m	33° 42' 23.6" N	118° 14' 12.2" W	---
1.17	Wreck	20.10 m	33° 42' 26.5" N	118° 11' 30.1" W	---
1.18	GP	[None]	33° 42' 30.1" N	118° 15' 03.3" W	---
1.19	GP	[None]	33° 42' 34.5" N	118° 16' 34.4" W	---
1.20	Wreck	14.60 m	33° 42' 35.1" N	118° 14' 21.0" W	---
1.21	Wreck	[None]	33° 42' 35.5" N	118° 16' 44.7" W	---
1.22	Wreck	13.60 m	33° 42' 36.4" N	118° 14' 40.5" W	---
1.23	Obstruction	20.04 m	33° 42' 36.9" N	118° 11' 14.3" W	---
1.24	Obstruction	15.20 m	33° 42' 40.5" N	118° 14' 07.2" W	---
1.25	Obstruction	16.10 m	33° 42' 44.7" N	118° 13' 36.7" W	---
1.26	GP	[None]	33° 42' 45.1" N	118° 15' 38.2" W	---
1.27	Wreck	2.10 m	33° 42' 47.0" N	118° 14' 19.3" W	---
1.28	Obstruction	15.50 m	33° 42' 51.1" N	118° 13' 03.3" W	---
1.29	Wreck	[None]	33° 42' 55.2" N	118° 13' 28.2" W	---
1.30	Obstruction	15.44 m	33° 43' 01.1" N	118° 12' 07.6" W	---
1.31	Wreck	13.04 m	33° 43' 07.3" N	118° 13' 29.9" W	---
1.32	Rock	13.17 m	33° 43' 30.6" N	118° 12' 24.0" W	---
1.33	GP	[None]	33° 44' 00.1" N	118° 15' 03.3" W	---
1.34	Wreck	[None]	33° 44' 03.9" N	118° 15' 58.1" W	---
1.35	Wreck	4.50 m	33° 44' 21.0" N	118° 14' 23.5" W	---
1.36	Rock	5.19 m	33° 44' 25.2" N	118° 13' 45.2" W	---
1.37	Obstruction	[None]	33° 44' 35.5" N	118° 14' 00.5" W	---
1.38	Obstruction	8.07 m	33° 44' 42.5" N	118° 14' 18.6" W	---
1.39	Obstruction	12.10 m	33° 44' 45.2" N	118° 13' 24.0" W	---
1.40	GP	[None]	33° 44' 54.0" N	118° 16' 27.1" W	---
1.41	GP	[None]	33° 45' 06.0" N	118° 14' 30.6" W	---
1.42	GP	[None]	33° 45' 13.8" N	118° 13' 57.0" W	---
1.43	GP	[None]	33° 45' 36.3" N	118° 15' 26.2" W	---
1.44	GP	[None]	33° 45' 45.2" N	118° 15' 27.3" W	---

1.45	GP	[None]	33° 45' 49.2" N	118° 15' 25.1" W	---
1.46	GP	[None]	33° 45' 53.0" N	118° 14' 31.2" W	---
1.47	Obstruction	1.20 m	33° 45' 53.6" N	118° 13' 19.0" W	---
1.48	GP	[None]	33° 46' 15.2" N	118° 14' 58.5" W	---
2.1	Wreck	12.81 m	33° 46' 14.9" N	118° 12' 51.2" W	---
2.2	Wreck	7.49 m	33° 46' 18.2" N	118° 12' 43.5" W	---
2.3	Wreck	5.72 m	33° 46' 23.2" N	118° 14' 51.8" W	---
2.4	Wreck	5.53 m	33° 46' 24.0" N	118° 14' 55.8" W	---
2.5	Wreck	3.35 m	33° 46' 28.5" N	118° 14' 51.4" W	---
2.6	Wreck	3.40 m	33° 46' 28.5" N	118° 14' 51.0" W	---
2.7	Wreck	3.92 m	33° 46' 28.8" N	118° 12' 47.5" W	---
2.8	Wreck	3.02 m	33° 46' 29.3" N	118° 14' 49.6" W	---
2.9	Wreck	4.23 m	33° 46' 29.4" N	118° 14' 49.2" W	---
2.10	Wreck	5.66 m	33° 42' 47.3" N	118° 14' 17.9" W	---
2.11	Wreck	10.36 m	33° 43' 19.4" N	118° 13' 58.7" W	---
2.12	Wreck	10.43 m	33° 43' 20.4" N	118° 12' 37.9" W	---
2.13	Wreck	8.14 m	33° 43' 34.1" N	118° 16' 32.4" W	---
2.14	Wreck	3.62 m	33° 43' 56.5" N	118° 14' 18.8" W	---
2.15	Wreck	0.87 m	33° 44' 10.6" N	118° 14' 25.8" W	---
2.16	Wreck	4.83 m	33° 44' 11.8" N	118° 15' 55.2" W	---
2.17	Wreck	6.45 m	33° 44' 15.2" N	118° 14' 21.0" W	---
2.18	Wreck	8.19 m	33° 44' 15.7" N	118° 16' 41.5" W	---
2.19	Wreck	7.85 m	33° 44' 16.6" N	118° 14' 18.0" W	---
2.20	Wreck	5.06 m	33° 44' 20.7" N	118° 14' 23.9" W	---
2.21	Wreck	11.86 m	33° 44' 21.3" N	118° 13' 56.6" W	---
2.22	Wreck	7.10 m	33° 44' 25.5" N	118° 13' 46.7" W	---
2.23	Wreck	9.70 m	33° 44' 50.6" N	118° 12' 46.4" W	---
2.24	Wreck	2.84 m	33° 44' 55.5" N	118° 12' 55.4" W	---
2.25	Wreck	3.98 m	33° 45' 48.6" N	118° 15' 26.0" W	---
2.26	Wreck	12.49 m	33° 45' 50.1" N	118° 14' 58.2" W	---
2.27	Obstruction	1.96 m	33° 45' 52.9" N	118° 13' 19.0" W	---
2.28	Wreck	8.38 m	33° 45' 54.6" N	118° 14' 46.1" W	---
2.29	Wreck	12.09 m	33° 45' 55.8" N	118° 14' 40.5" W	---
2.30	Wreck	10.48 m	33° 45' 56.8" N	118° 14' 13.5" W	---
2.31	Wreck	4.85 m	33° 45' 57.0" N	118° 14' 08.2" W	---
2.32	Wreck	3.57 m	33° 45' 59.6" N	118° 15' 04.2" W	---

2.33	Wreck	3.61 m	33° 46' 01.9" N	118° 14' 55.5" W	---
3.1	Obstruction	5.27 m	33° 43' 48.8" N	118° 16' 37.6" W	---

1 - Charted Features

1.1) US 0000118228 00001

Survey Summary

Survey Position:	33° 46' 19.1" N, 118° 14' 54.3" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118228 00001(02260001CDD40001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS item 50957

Hydrographer Recommendations

remove AWOIS item

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	SORDAT - 20131103
	SORIND - US,US,graph,H12617

Office note: Inshore of NALL, however this was reported in 1977. Aerial imagery shows no wreck in this location - where the water is shallow enough to be clear. Presumably has been removed in the meanwhile.

1.2) US 0000116873 00001

Charting Action is Not Addressed

Survey Summary

Survey Position:	33° 46' 20.0" N, 118° 14' 53.1" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2009-213.00:00:00.000 (08/01/2009)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116873 00001(02260001C8890001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 50944

Hydrographer Recommendations

SAR: Retain

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	CATOBS - 1:snag / stump
	INFORM - H9671/77--OPR-411-FA-77; 1:5 000; PILE LOCATED IN LAT 33-46-19.7N LONG 118-14-52.4W; 4.4 FT ABOVE MLLW IN 12.1 FT (MLLW); SUBM AT HIGH TIDE; EVALUATOR RECOMMENDS CHARTING AS PILE COVERS/UNCOVERS 4 FT MLLW. (ENTERED MSM 7/85) ****PILE WAS NOT APPLIED TO THE CHART REASON UNKNOWN. F00484/01-02--OPR-L418-NRB; SSS (fixes 50-71 60- 62) revealed no evidence of pile at the charted location. A pile in ruins rising two feet off the bottom was visually observed at MLLW and positioned at Latitude 33:46:19.8838N Longitude 118:14:54.1341W. A second pile was also observed submerged one foot at MLLW and was located at Latitude 33:46:20.0123N; Longitude 118:14:53.0895W. EVALUATOR COMMENTS: Concur with clarification. Delete the submerged pile note and pile. Chart pile in ruins as shown on the smooth sheet.
	QUASOU - 2:depth unknown
	SORDAT - 20090800
	SORIND - US,US,graph,Chart 18751

WATLEV - 3:always under water/submerged

Office note: Concur.

1.3) US 0000118231 00001

Survey Summary

Survey Position:	33° 46' 21.0" N, 118° 14' 52.6" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118231 00001(02260001CDD70001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS item 50958

Hydrographer Recommendations

remove AWOIS item

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	INFORM - 50958 HISTORY H9671/77--OPR-411-FA-77; 1:5 000; SUBM WK LOCATED IN LAT 33-46-26.2N LONG 118-14-49.5W; WOODEN SAILING VESSEL APPROX 250 FT LONG 50 FT WIDE; BOWSPRIT SUPERSTRUCTURE AND AFTERMASTS ARE GONE; FOREMAST EXTENDS ABOVE WATER AND FORMS PILING FOR PIER IN LAT 33-46-21.6N LONG 118-14-49.0W; SMALL STEEL TUG BOAT RESTS ON TOP OF WOODEN HULK'S STERN IN LAT 33-46-20.6N LONG 118-14-49.9W; LEAST DEPTH OF 6 FT IN LAT 33-46-20.9N LONG 118-14-49.4W HYDROGRAPHER AND EVALUATOR RECOMMEND CHARTING WK WITH LEAST DEPTH. (ENTERED MSM 7/85) SORDAT - 20131103

Office Notes: Do not conour, wreck visible in multibeam on either side of charted peir. Recomend charting a wreck area. Shoalest point is 10.509ft at 33-46-21.702N 118-14-52.206W

1.4) US 0000116974 00001

Survey Summary

Survey Position:	33° 41' 50.0" N, 118° 15' 58.4" W
Least Depth:	17.97 m (= 58.97 ft = 9.828 fm = 9 fm 4.97 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116974 00001(02260001C8EE0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: Verified with complete MBES

Hydrographer Recommendations

SAR: Update with new depth

Cartographically-Rounded Depth (Affected Charts):

59ft (18751_1, 18749_1)

9 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

17.9m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 17.973 m
	WATLEV - 3:always under water/submerged

Feature Images

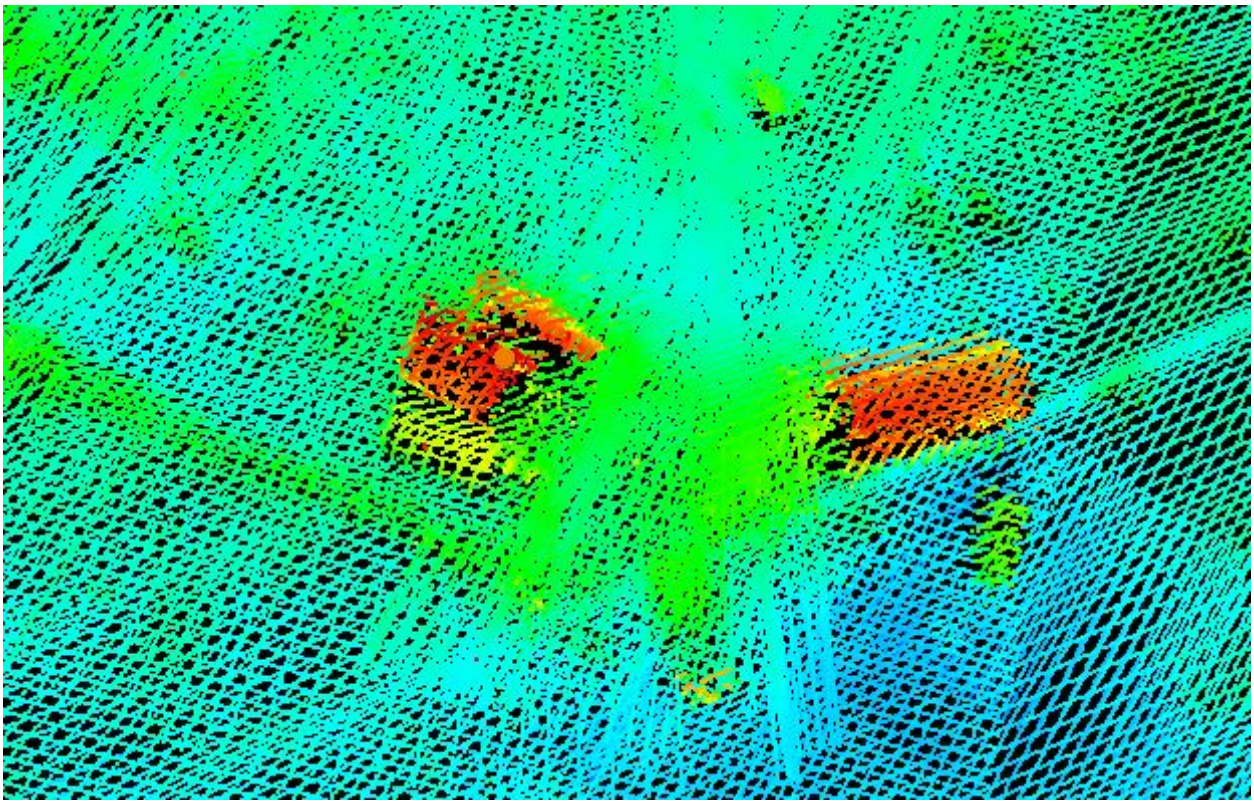


Figure 1.4.1

Office note: Concur , chart with depth 58.966ft

1.5) US 0000117635 00001

Survey Summary

Survey Position:	33° 41' 52.4" N, 118° 16' 03.0" W
Least Depth:	19.53 m (= 64.07 ft = 10.679 fm = 10 fm 4.07 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117635 00001(02260001CB830001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: New obstrution found with MBES within AWOIS 50335 Radius

Hydrographer Recommendations

Add to chart and update AWOIS Item 50335 in Database

Cartographically-Rounded Depth (Affected Charts):

64ft (18751_1, 18749_1)

10 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

19.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 19.530 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

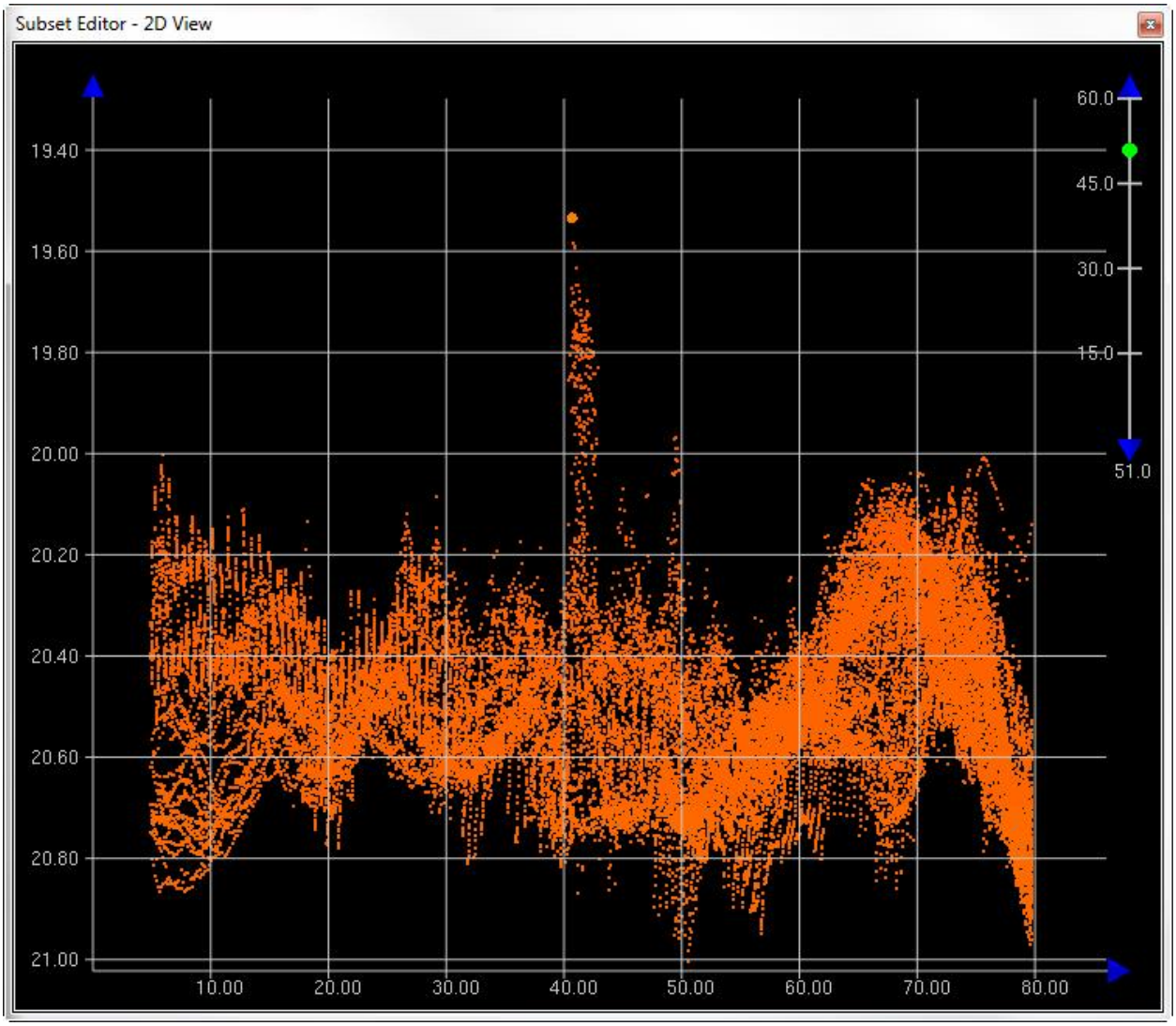


Figure 1.5.1

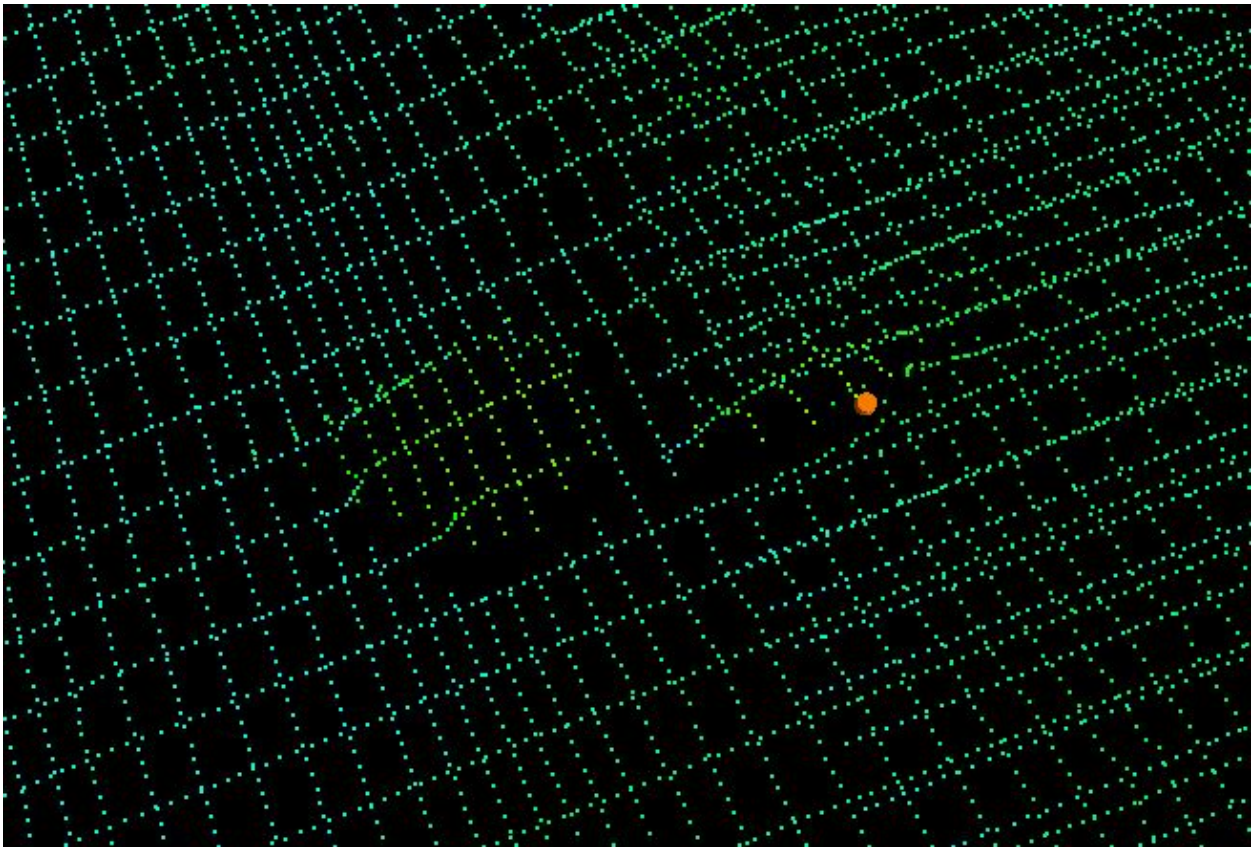


Figure 1.5.2

1.6) US 0000117636 00001

Survey Summary

Survey Position:	33° 41' 58.9" N, 118° 12' 51.8" W
Least Depth:	20.55 m (= 67.43 ft = 11.239 fm = 11 fm 1.43 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117636 00001(02260001CB840001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: Charted rock repositioned and least depth updated with MBES

Hydrographer Recommendations

Chart at new position and update depth

Cartographically-Rounded Depth (Affected Charts):

67ft (18751_1, 18749_1)

11ft (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

20.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H10998/01 -- OPR-L325-KR-00; OBSTRUCTION RISING 11.8 FEET OFF OF THE SEAFLOOR AND HAS A LEAST DEPTH OF 65.8 FEET. THE OBJECT IS APPROXIMATELY FIVE METERS IN LENGTH AND FIVE METERS WIDE. THE OBJECT LIES BETWEEN THE G-5 AND G-6 ANCHORAGE AREAS. IT IS RECOMMENDED THAT THE OBSTRUCTION BE CHARTED WITH A DEPTH OF 66 FEET AT LATITUDE 33-41-59.01N AND LONGITUDE 118-12-51.51W.(UPDATED 3/9/05 JRS) Duplicate entry with AWOIS #52336. QUASOU - 6:least depth known SORDAT - 20131103 SORIND - US,US,graph,H12617 TECSOU - 3:found by multi-beam VALSOU - 20.554 m

WATLEV - 3:always under water/submerged

Office Note: Concur. This is the same feature are 1.7 below.

Feature Images

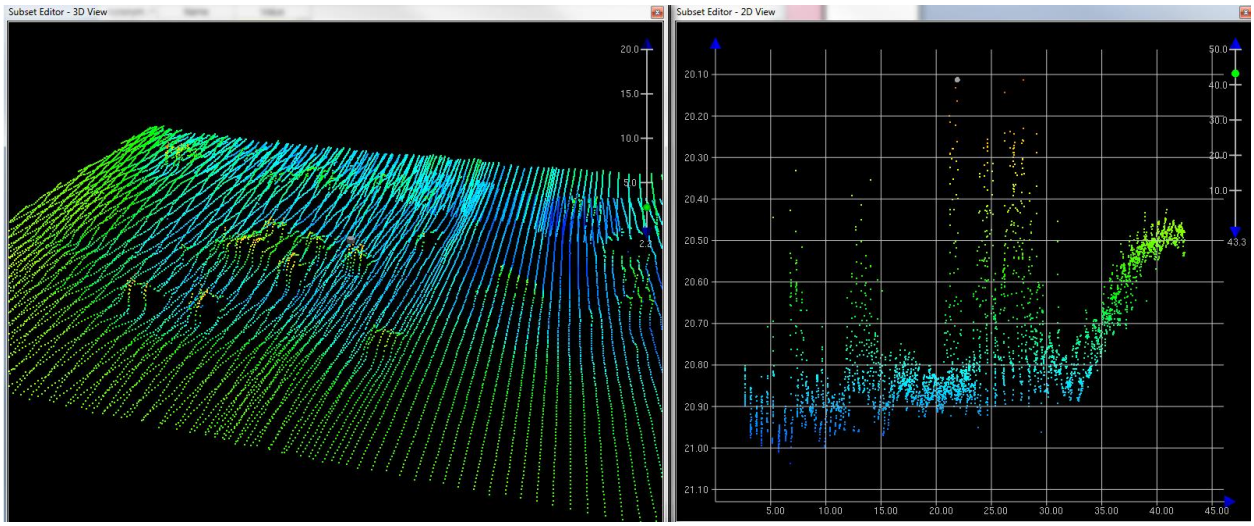


Figure 1.6.1

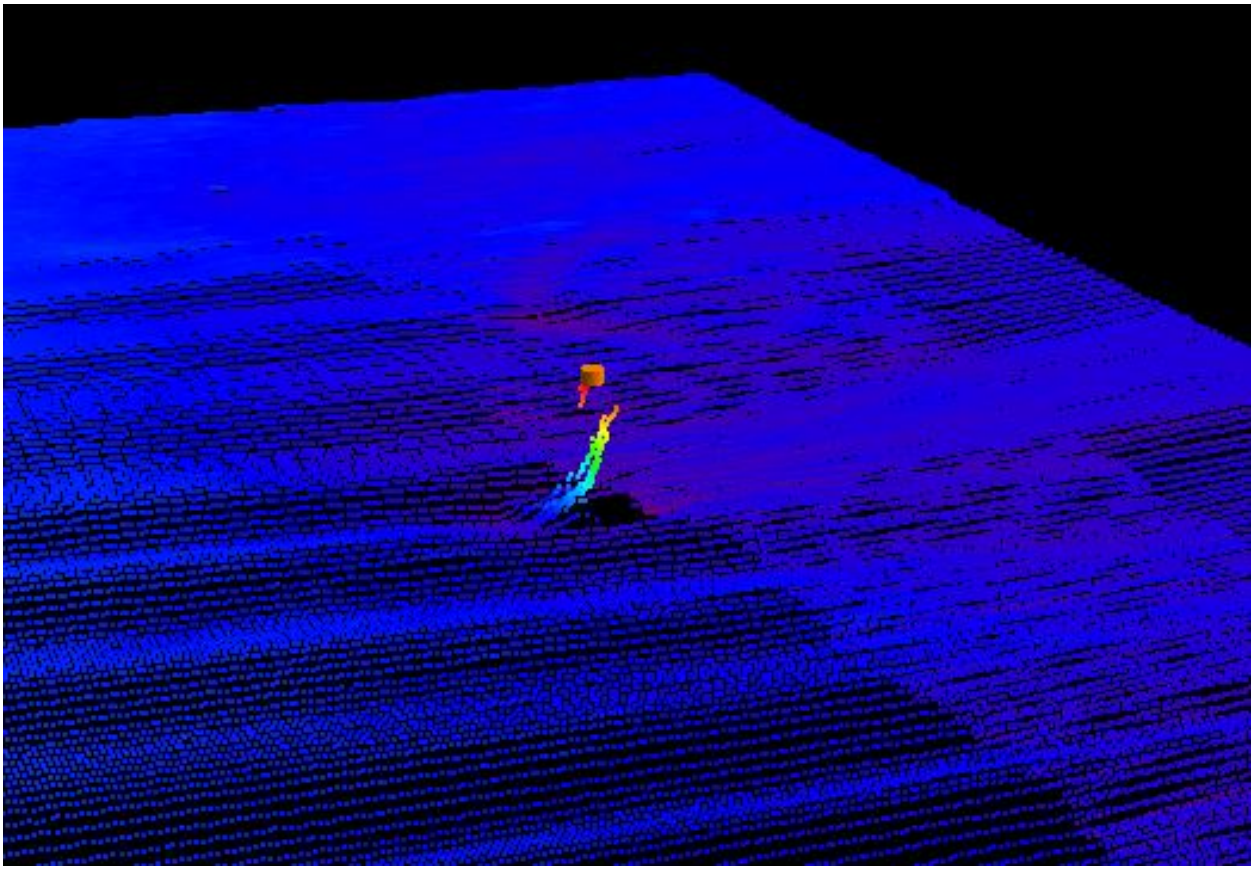


Figure 1.6.2

1.7) US 0000116643 00001

Survey Summary

Survey Position:	33° 41' 59.0" N, 118° 12' 51.3" W
Least Depth:	20.10 m (= 65.94 ft = 10.991 fm = 10 fm 5.94 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116643 00001(02260001C7A30001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53227. Reposition Charted (18751) obstruction

Hydrographer Recommendations

Reposition to Southwest

Cartographically-Rounded Depth (Affected Charts):

66ft (18751_1, 18749_1)

11fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

20.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20001205
	SORIND - US,US,graph,H-10998
	VALSOU - 20.100 m
	WATLEV - 3:always under water/submerged

Office Note: Concur, item is previous feature . Chart per feature 1.6

1.8) US 0000116608 00001

Survey Summary

Survey Position:	33° 42' 00.3" N, 118° 15' 48.2" W
Least Depth:	17.64 m (= 57.87 ft = 9.646 fm = 9 fm 3.87 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116608 00001(02260001C7800001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 53228

Hydrographer Recommendations

Retain position, update least depth

Cartographically-Rounded Depth (Affected Charts):

58ft (18751_1, 18749_1)

9 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

17.6m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	INFORM - H10998/01 -- OPR-L325-KR-00; WRECK THAT FOUND WITH A LD OF 59.1 FEET. THE WRECK IS APPROXIMATELY 26 FEET IN LENGTH. IT IS RECOMMENDED THAT THE WRECK BE CHARTED WITH A DEPTH OF 59 FEET AT LATITUDE 33-42-00.31N AND LONGITUDE 118-15-48.31W. (UPDATED 3/9/05 JRS).
	QUASOU - 6:least depth known
	SORDAT - 20001205
	SORIND - US,US,graph,H-10998
	TECSOU - 3:found by multi-beam
	VALSOU - 17.640 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

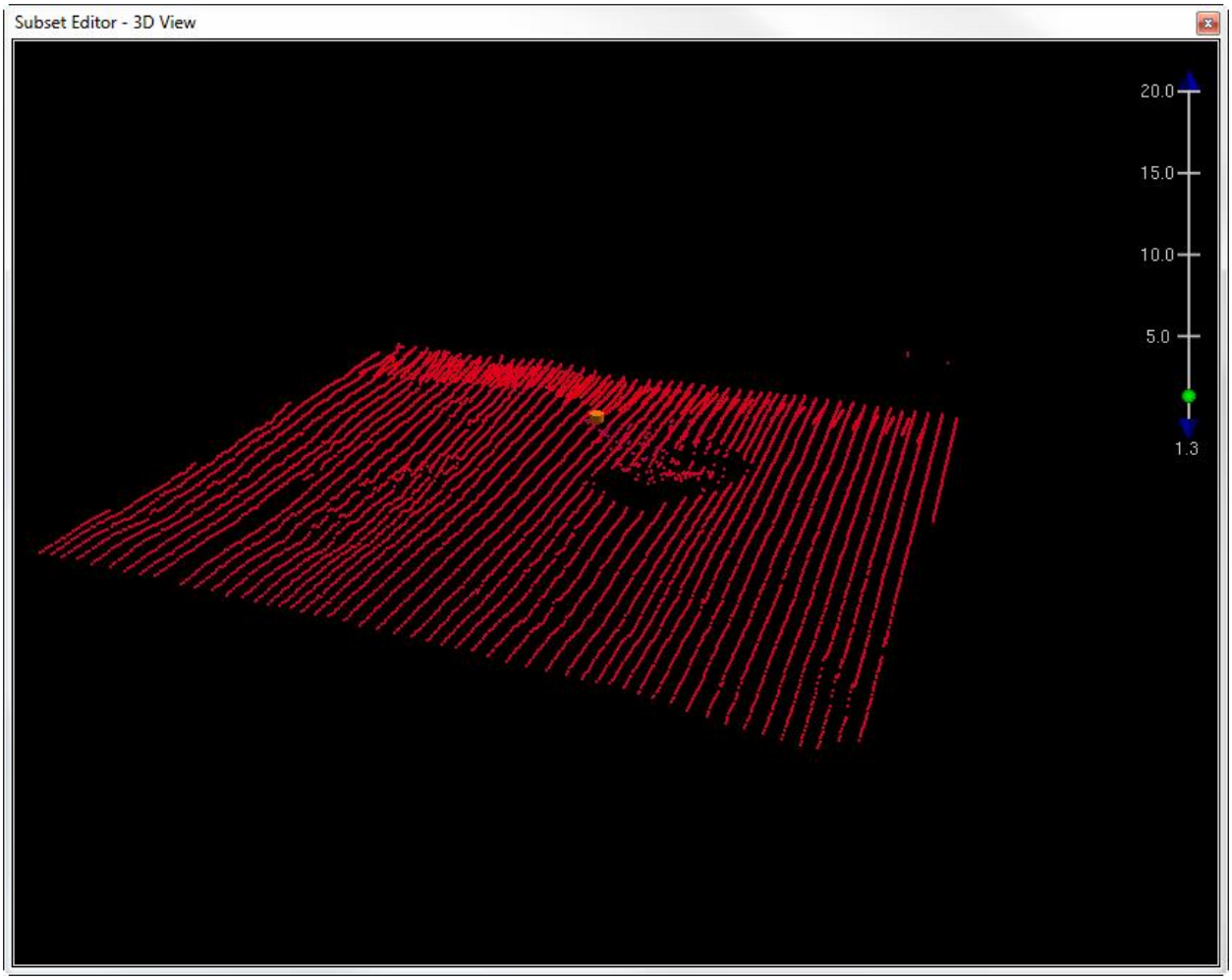


Figure 1.8.1

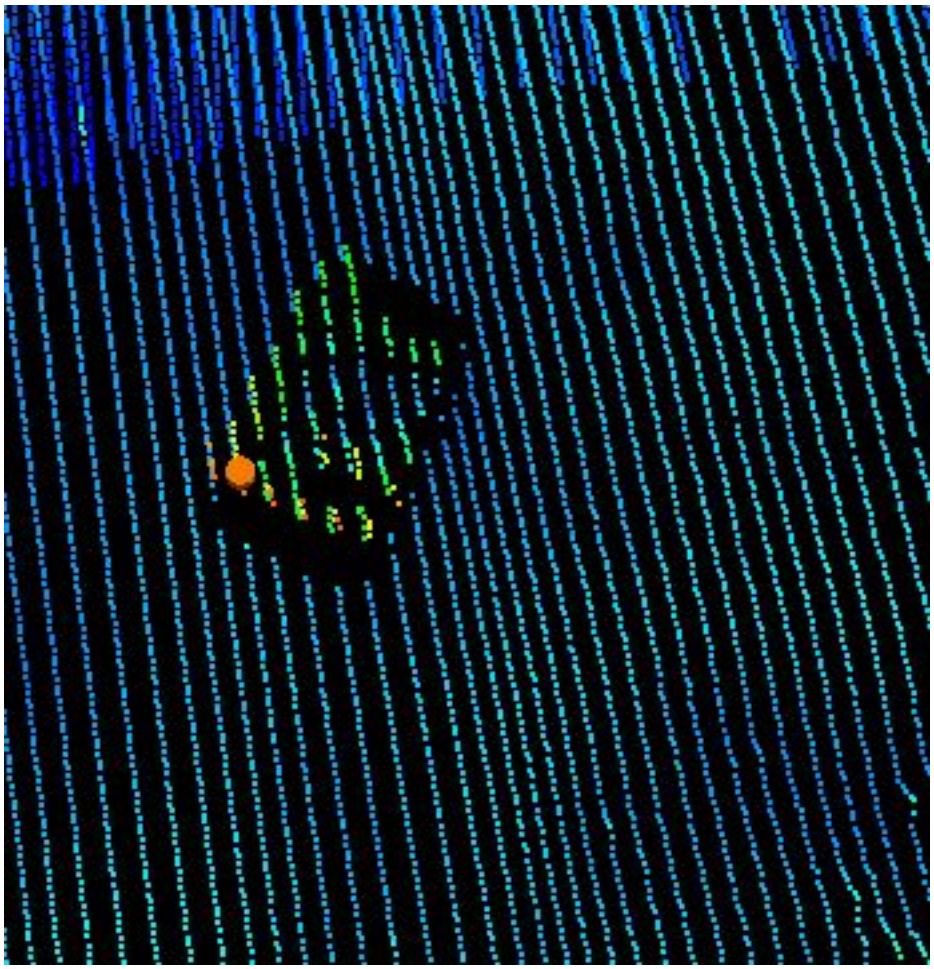


Figure 1.8.2

1.9) US 0000117643 00001

Survey Summary

Survey Position:	33° 42' 03.3" N, 118° 14' 26.3" W
Least Depth:	18.22 m (= 59.78 ft = 9.963 fm = 9 fm 5.78 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117643 00001(02260001CB8B0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53232. Retain position, update depth. Surveyed with 100% MBES

Hydrographer Recommendations

Retain position, update depth

Cartographically-Rounded Depth (Affected Charts):

60ft (18751_1, 18749_1)

10fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

18.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H10998/01 -- OPR-L325-KR-00; OBSTRUCTION FOUND WITH A LD OF 55 FEET AND IS LOCATED APPROXIMATELY 90 METERS EAST OF THE LOS ANGELES CHANNEL. IT IS RECOMMENDED THAT THE OBSTRUCTION BE CHARTED WITH A DEPTH OF 55 FEET AT LATITUDE 33-42-03.32N AND LONGITUDE 118-14-26.41W. (UPDATED 3/9/05 JRS). QUASOU - 6:least depth known SORDAT - 20001205 SORIND - US,US,graph,H-10998 TECSOU - 3:found by multi-beam VALSOU - 18.220 m WATLEV - 3:always under water/submerged

Office Note: Do not concur. There is no navigationally significant object in this location, simply a gentle slope of the seabed. Recommend charting as 59.993 ft sounding not feature.

Feature Images

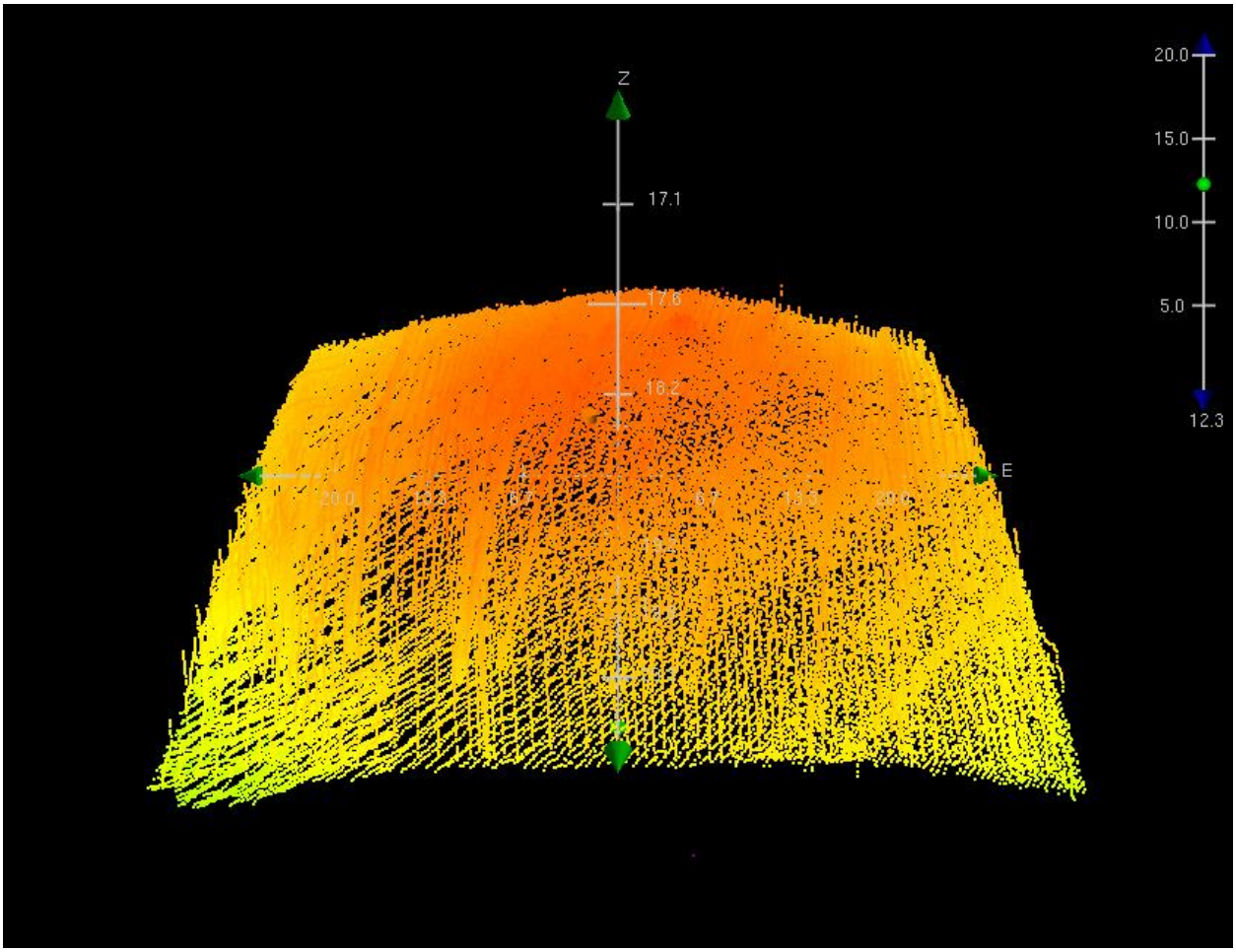


Figure 1.9.1

1.10) US 0000117575 00001

Survey Summary

Survey Position:	33° 42' 03.8" N, 118° 13' 54.8" W
Least Depth:	17.60 m (= 57.74 ft = 9.624 fm = 9 fm 3.74 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117575 00001(02260001CB470001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53234. Not observed with complete MBES

Hydrographer Recommendations

Remove from chart

Cartographically-Rounded Depth (Affected Charts):

57ft (18751_1, 18749_1)

9 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

17.6m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H10998/01 -- OPR-L325-KR-00; OBSTRUCTION FOUND WITH A LEAST DEPTH OF 58 FEET. IT IS LOCATED IN THE LOS ANGELES CHANNEL AND ANCHORAGE AREA G-5. IT IS RECOMMENDED THAT THIS OBSTRUCTION BE CHARTED WITH A LEAST DEPTH OF 58 FEET AT LATITUDE 33-42-03.87N AND LONGITUDE 118-13-55.03W. (UPDATED 3/9/05 JRS). QUASOU - 6:least depth known SORDAT - 20001205 SORIND - US,US,graph,H-10998 VALSOU - 17.600 m WATLEV - 3:always under water/submerged

Office Note: Concur

1.11) US 0000117651 00001

Survey Summary

Survey Position:	33° 42' 04.8" N, 118° 15' 48.1" W
Least Depth:	17.10 m (= 56.10 ft = 9.350 fm = 9 fm 2.10 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117651 00001(02260001CB930001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53231. Retain position, update depth. Surveyed with 100% MBES

Hydrographer Recommendations

Update depth of charted obstruction

Cartographically-Rounded Depth (Affected Charts):

56ft (18751_1, 18749_1)

9 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

17.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H10998/01 -- OPR-L325-KR-00; OBSTRUCTION FOUND WITH A LD OF 55 FEET. IT IS RECOMMENDED THAT THE OBSTRUCTION BE CHARTED WITH A DEPTH OF 55 FEET AT LATITUDE 33-42-04.89N AND LONGITUDE 118-15-48.33W. (UPDATED 3/9/05 JRS). QUASOU - 6:least depth known SORDAT - 20001205 SORIND - US,US,graph,H-10998 TECSOU - 3:found by multi-beam VALSOU - 17.100 m WATLEV - 3:always under water/submerged

Office Note. Do not concur, there is no navigationally significant OBSTRN here, just the gentle slope of the seafloor. Recommend deleting OBSTRN and charting 56.308ft sounding

Feature Images

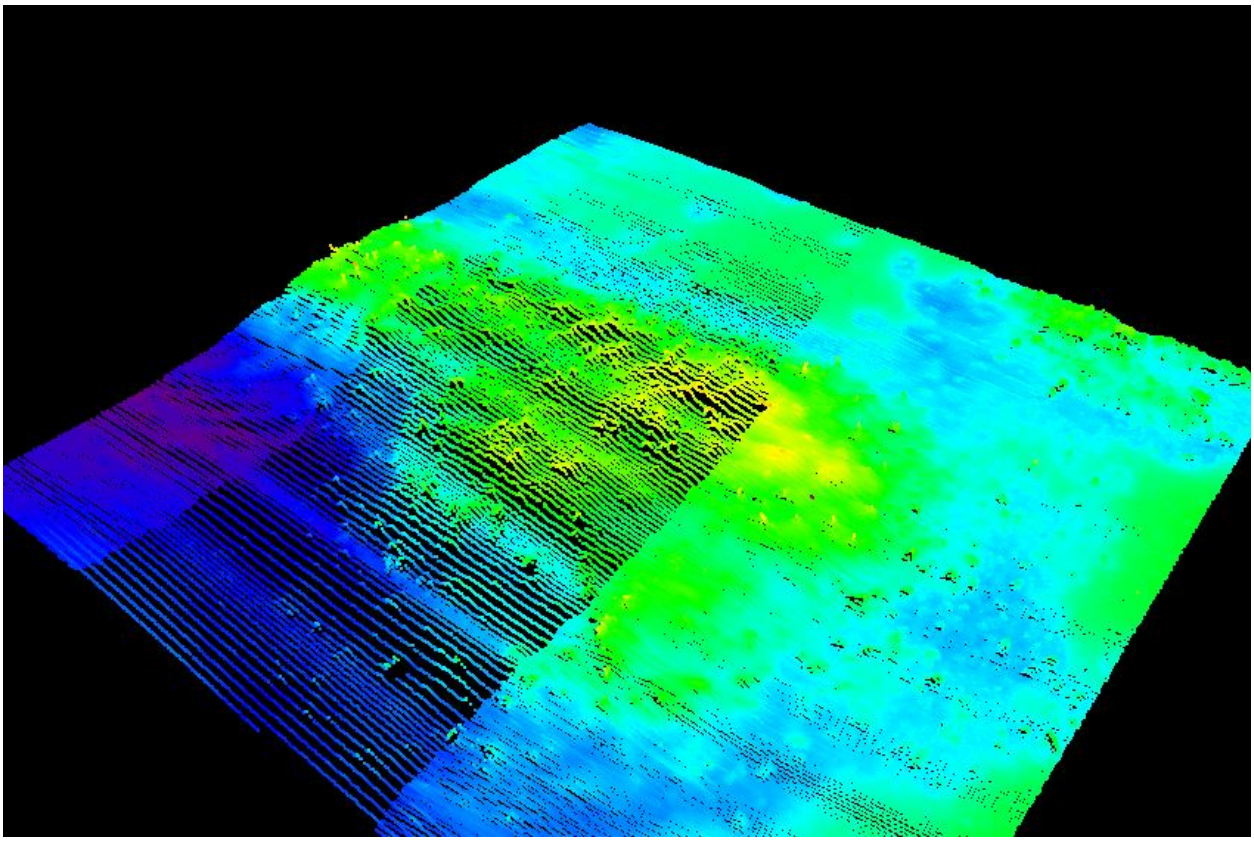


Figure 1.11.1

1.12) US 0000117568 00001

Survey Summary

Survey Position:	33° 42' 06.3" N, 118° 17' 23.4" W
Least Depth:	0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2001-335.00:00:00.000 (12/01/2001)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117568 00001(02260001CB400001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

UWTROC/remrks: Maritime Boundary. Charted (18751) rock position disproved with complete MBES

Hydrographer Recommendations

Chart at new position

Cartographically-Rounded Depth (Affected Charts):

0ft (18751_1, 18749_1)

0fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

0.0m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	SORDAT - 20011201
	SORIND - US,US,graph,Chart 18751
	VALSOU - 0.000 m
	WATLEV - 5:awash

Office Note: Concur

1.13) US 0000117583 00001

Charting Action is Not Addressed

Survey Summary

Survey Position:	33° 42' 17.1" N, 118° 17' 42.3" W
Least Depth:	0.00 m (= 0.00 ft = 0.000 fm = 0 fm 0.00 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.01:01:01.001 (01/01/1981)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117583 00001(02260001CB4F0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

UWTROC/remrks: AWOIS 54115. Inshore of NALL. Further investigation prohibited due to kelp.

Hydrographer Recommendations

Retain in AWOIS Database

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	INFORM - Reported
	SORDAT - 19730000
	SORIND - US,US,graph,Chart 18751
	VALSOU - 0.000 m
	WATLEV - 5:awash

Office Note: Concur

1.14) US 0000116887 00001

Survey Summary

Survey Position:	33° 42' 22.3" N, 118° 15' 03.9" W
Least Depth:	15.34 m (= 50.34 ft = 8.390 fm = 8 fm 2.34 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116887 00001(02260001C8970001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 52891. Verified with complete MBES

Hydrographer Recommendations

SAR: Update with new least depth

Cartographically-Rounded Depth (Affected Charts):

50ft (18751_1, 18749_1)

8 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

15.3m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck

INFORM - HISTORY CL32/84--6/11/84 USPS: SUNKEN VESSEL WITH ABOUT 3 TO 4 FEET OF THE BOW ABOVE THE WATER. THE VESSEL IS IN THE ANCHORAGE AREA JUST SOUTH OF THE QUEEN MARY AND DOME. THE SUNKEN VESSEL COULD BE HAZERDOUS TO VESSELS ATTEMPTING TO ANCHOR DURING DARKNESS. IT IS LOCATED AT APPROXIMATLEY LAT 33-44-56.00N LONG 118-11-15.00W (NAD 27). NOTE ON REPORT STATES THAT VESSEL IS 100 YDS EAST OF SHORE AND 300 YDS SOUTH OF DOME. CL353/86--1/27/86 USPS: WRECK AS NOTED ON CHART IS NO LONGER VISABLE. APPROXIMATE POSITION IS LAT 33-44-56.00N LONG 118-11-15.00W (NAD 27). (ENTERED 11/01 BY PSH) F00484/01-02--OPR-L418-NRB; Investigation located a small obstruction described as cylindrical and approximately 1.5 meters in diameter and 1.0 meter long - but not a wreck (see dive report attached). Remove charted submerged wreck PA. Chart submerged obstruction PA at the AWOIS position. The obstruction was not shown on the smooth sheet as no detached position was taken by the hydrographer.

QUASOU - 6:least depth known

SORDAT - 20131103

SORIND - US,US,graph,H12617

TECSOU - 3:found by multi-beam

VALSOU - 15.344 m

WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

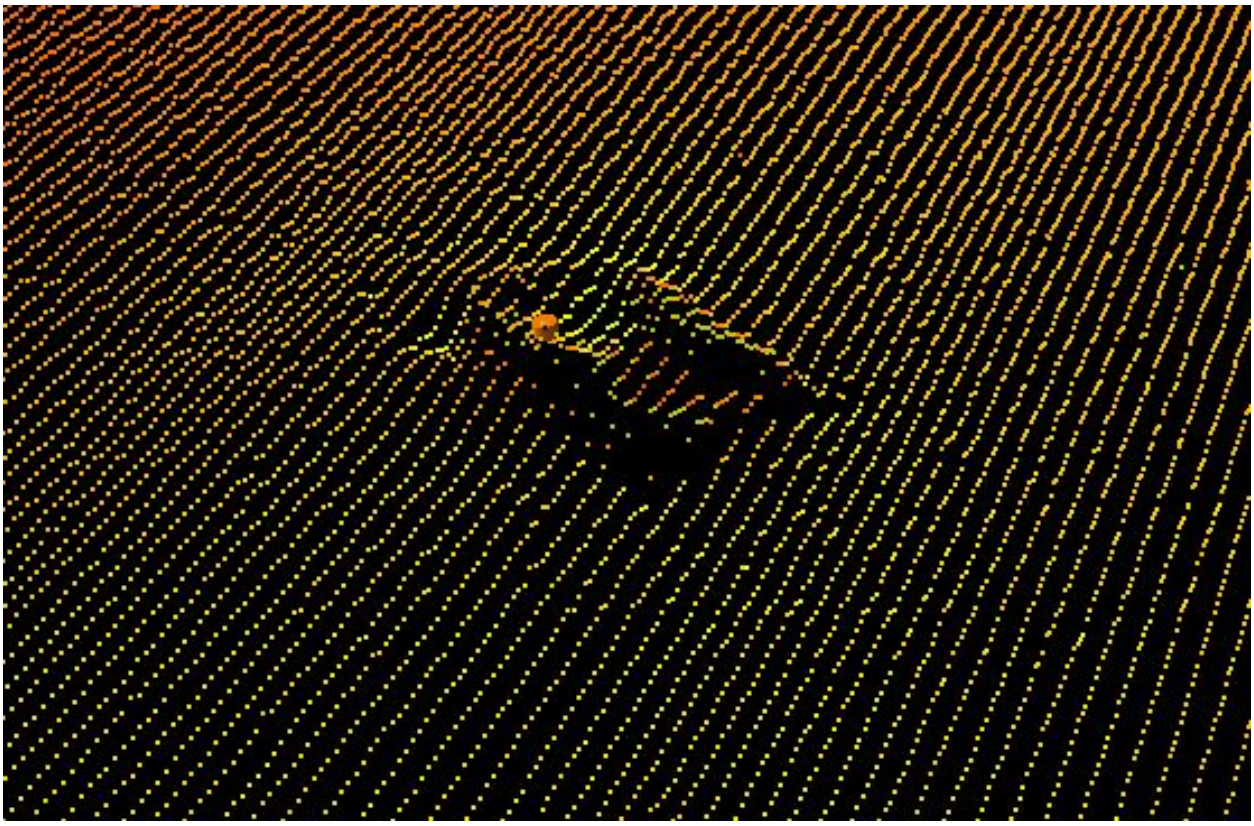


Figure 1.14.1

1.15) US 0000118441 00001

Survey Summary

Survey Position:	33° 42' 22.4" N, 118° 13' 43.0" W
Least Depth:	17.30 m (= 56.76 ft = 9.460 fm = 9 fm 2.76 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118441 00001(02260001CEA90001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

UWTROC/remrks: AWOIS 53230. SAR: AWOIS item not seen in MBES

Hydrographer Recommendations

Delete RK

Cartographically-Rounded Depth (Affected Charts):

57ft (18751_1, 18749_1)

9 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

17.3m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	INFORM - H10998/01 -- OPR-L325-KR-00; ROCK WITH A LD OF 57.5 FEET IT IS LOCATED WITHIN THE G-1 ANCHORAGE AREA. THE CHARTED DEPTH IN THE AREA IS 64 FEET. IT IS RECOMMENDED THAT THIS ROCK BE CHARTED WITH A LEAST DEPTH OF 57 FEET AT LATITUDE 33-42-22.40N AND LONGITUDE 118-13-43.18W. (UPDATED 3/9/05 JRS). QUASOU - 6:least depth known SORDAT - 20001205 SORIND - US,US,graph,H-10998 VALSOU - 17.300 m WATLEV - 3:always under water/submerged

Office Note: Concur, delete rock.

1.16) US 0000117569 00001

Survey Summary

Survey Position:	33° 42' 23.6" N, 118° 14' 12.2" W
Least Depth:	16.10 m (= 52.82 ft = 8.804 fm = 8 fm 4.82 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117569 00001(02260001CB410001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

UWTROC/remrks: AWOIS 53229. Charted UWTROC position disproved

Hydrographer Recommendations

Chart at new position

Cartographically-Rounded Depth (Affected Charts):

53ft (18751_1, 18749_1)

8 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

16.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20001205
	SORIND - US,US,graph,H-10998
	VALSOU - 16.100 m
	WATLEV - 3:always under water/submerged

Office Note: No rock at this location. Delete

1.17) US 0000117586 00001

Survey Summary

Survey Position:	33° 42' 26.5" N, 118° 11' 30.1" W
Least Depth:	20.10 m (= 65.94 ft = 10.991 fm = 10 fm 5.94 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117586 00001(02260001CB520001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 53225. Retain position, update depth, surveyed with 100% MBES

Hydrographer Recommendations

Retain position, update depth

Cartographically-Rounded Depth (Affected Charts):

66ft (18751_1, 18749_1)

11fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

20.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	INFORM - H10998/01 -- OPR-L325-KR-00; SUNKEN BARGE WITH A LD OF 59.0 FEET. LOCATED 0.9 NAUTICAL MILES SOUTH OF THE LONG BEACH BREAKWATER LIGHT. THE BARGE IS 45 FEET IN LENGTH 13 FEET WIDE AND RISES OFF OF THE SEAFLOOR EIGHT FEET. IT IS RECOMMENDED THAT THE WRECK BE CHARTED WITH A DEPTH OF 59 FEET AT LATITUDE 33-42-26.47N AND LONGITUDE 118-11-30.16W. (UPDATED 3/9/05 JRS)
	QUASOU - 6:least depth known
	SORDAT - 20001205
	SORIND - US,US,graph,H-10998
	TECSOU - 3:found by multi-beam
	VALSOU - 20.100 m

WATLEV - 3:always under water/submerged

Office Note: Chart wreck with least depth 65.207ft.

Feature Images

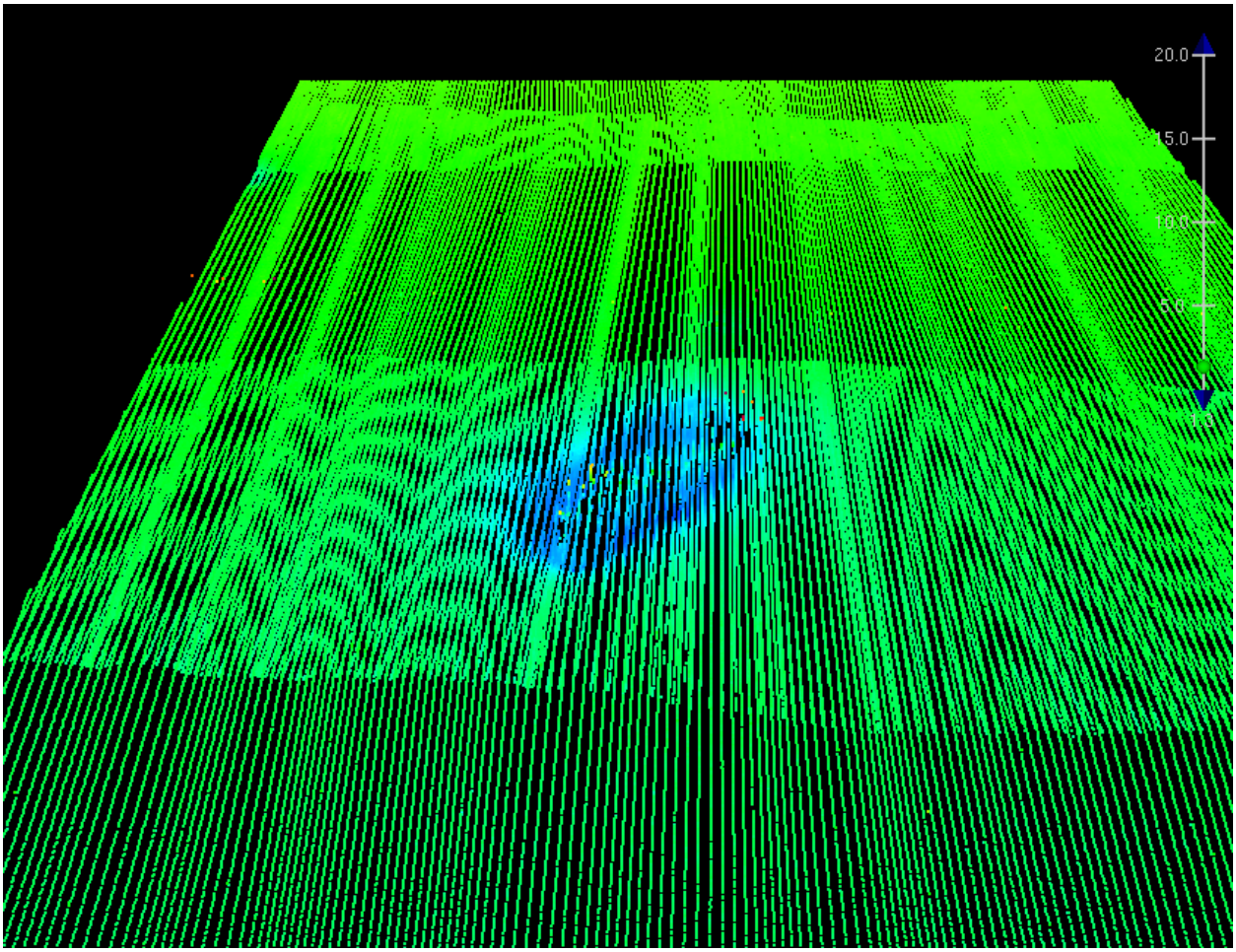


Figure 1.17.1

1.18) US 0000117965 00001

Survey Summary

Survey Position:	33° 42' 30.1" N, 118° 15' 03.3" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117965 00001(02260001CCCD0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS 50036. No wreck found in search radius.

Hydrographer Recommendations

Delete uncharted AWOIS item

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	INFORM - 50036 HISTORY NM DATED 5/23/23 DESCRIPTION 24 NO.1618; TUG; POSITION ACCURACY WITHIN 1 MILE; SUBSEQUENTLY REPORTED REMOVED (SOURCE UNK) Duplicate AWOIS with #50 334 SORDAT - 20131103 SORIND - US,US,graph,H12617

Office Note: Concur

1.19) US 0000118652 00001

Survey Summary

Survey Position:	33° 42' 34.5" N, 118° 16' 34.4" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118652 00001(02260001CF7C0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: SAR: Not seen in field or in bathy

Hydrographer Recommendations

Do not chart

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	INFORM - CL1007/2000; POSITION OF BAIT BARGE REVISED TO POS. 33-42-36.0 N 118-16-39.0 W F00484/01-02--OPR-L418-NRB; Two bait barges are moored at positions Latitude 33/42/34.4736N Longitude 118/16/34.32W and Latitude 33/42/36.7668N Longitude 118/16/30.4356W . Positions were recorded on the two mooring buoys. No lights were observed on the buoys; however the barge structures are lighted. Updated 4/4 MCR

Office Note: Concur, AWOIS item 52865

1.20) US 0000116615 00001

Survey Summary

Survey Position:	33° 42' 35.1" N, 118° 14' 21.0" W
Least Depth:	14.60 m (= 47.90 ft = 7.983 fm = 7 fm 5.90 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116615 00001(02260001C7870001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 52593. Depth and position verified with MBES

Hydrographer Recommendations

SAR: Update with new depth

Cartographically-Rounded Depth (Affected Charts):

48ft (18751_1, 18749_1)

8fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

14.6m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck

INFORM - HISTORY LNM41/74 (9/4/74) -- A 21 FT SAILBOAT SANK AT APPROX. POS. 078 DEGREES TRUE 1100 YARDS FROM LA LIGHT. NO GP GIVEN IN LNM BY THE 11TH USCGD. PRESENT POSITION SCALED FROM CHART 18751 (38TH ED.). LNM42/74 (9/11/74) -- THE 21 FT SAILBOAT REPORTED SUNK IN APPROX. POS. 078 DEGREES TRUE 1100 YARDS FROM LA LIGHT COULD NOT BE LOCATED IN A SURVEY CONDUCTED BY THE USCG. H9580 (1975) -- NOAA SHIP RAINIER ACQUIRED SOUNDINGS OVER THE AREA AT 20 METER INTERVALS BUT SPACING WAS INADEQUATE TO DISPROVE THE EXISTENCE OF THE 21 FT SAILBOAT AND THE WRECK WAS RETAINED AS PRESENTLY CHARTED. H10998/01 -- OPR-L325-KR-00; CONTACT ON A VESSEL WITH A LEAST DEPTH OF 48.7 FEET. THE WRECK IS AN INTACT VESSEL MEASURING APPROXIMATELY 30 FEET LONG BY 13 FEET WIDE. WK WAS LOCATED 260 METERS SOUTHEAST OF THE REPORTED POSITION IN IT IS EVALUATOR RECOMMENDS THE WRECK BE CHARTED WITH A DEPTH OF 48 FEET AT LAT. 33°42¿34.984¿N AND LONG. 118°14¿21.032¿W. AND REMOVE THE CHARTED ""PD"". (UPDATED 3/9/05 JRS)

QUASOU - 6:least depth known

SORDAT - 20131103

SORIND - US,US,graph,H12617

VALSOU - 14.600 m

WATLEV - 3:always under water/submerged

Office Note: Concur, least depth 48.543 feet.

Feature Images

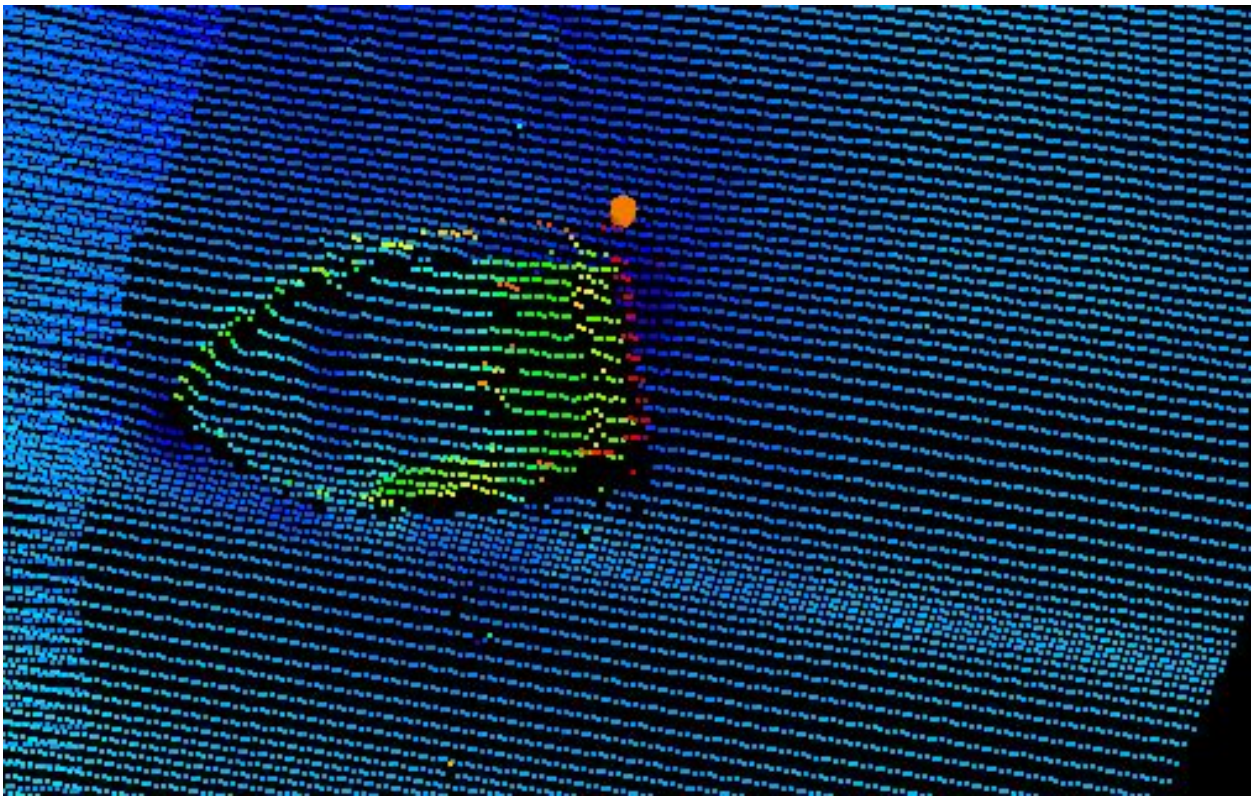


Figure 1.20.1

1.21) US 0000117295 00001

Charting Action is Not Addressed

Survey Summary

Survey Position:	33° 42' 35.5" N, 118° 16' 44.7" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2001-335.00:00:00.000 (12/01/2001)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117295 00001(02260001CA2F0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 52864. Inshore of NALL

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	QUASOU - 2:depth unknown
	SORDAT - 20011201
	SORIND - US,US,graph,Chart 18751
	WATLEV - 3:always under water/submerged

Office Note: Concur

1.22) US 0000117613 00001

Survey Summary

Survey Position:	33° 42' 36.4" N, 118° 14' 40.5" W
Least Depth:	13.60 m (= 44.62 ft = 7.437 fm = 7 fm 2.62 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117613 00001(02260001CB6D0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 52592. Charted H-10998 wreck Position verified with MBES, updated for least depth

Hydrographer Recommendations

SAR: Delete feature.

Cartographically-Rounded Depth (Affected Charts):

44ft (18751_1, 18749_1)

7 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

13.6m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck

INFORM - HISTORY NM48/68 (11/30/68) -- THE 86 FT ""F/V SOUTHERN EXPLORER"" SUNK IN APPROX. POS. LAT 33-42-36.0N LONG 118-14-37W NEAR THE EAST SIDE OF THE ENTANCE TO LOS ANGELES MAIN CHANNEL. NM3/69 (1/18/69) -- WRECK REPORTED TO BE COVERED BY 2 FT OF WATER AT LOW WATERLYING IN AN EAST-WEST DIRECTION. NM41/69 (10/11/69) -- THE WRECK ""F/V SOUTHERN EXPLORER"" IS NO LONGER A HAZARD. LNM58/69 -- THE STATUS OF THE CHARTED WRECK WAS CHANGED TO (36 FT REP). LNM67/69 -- REF LNM58/69 H9580 (1975) -- NOAA SHIP RAINIER INVESTIGATED THE EXISTENCE OF THE SUBMERGED WRECK PA (36 FT REP) AND WAS VERIFIED BY THE PRESENT SURVEY USING AN ECHO SOUNDER. ONLY SCATTERED PIECES OF HE WRECK WAS FOUND AT THE CHARTED LOCATION BY DIVERS. ECHOGRAM TRACES OF THE WRECK WERE RECORDED TO 4.4 FMS OR 26 FT IN LAT 33-42-36.0N LONG 118-14-36.6W (APPROX. 40 METERS SOUTHEAST OF IT'S CHARTED POSITION). H10998/01 -- OPR-L325-KR-00; 250 METER SIDE SCAN SONAR AND MULTIBEAM COVERAGE OF THE SEARCH AREA RESULTED IN NO CONTACT LOCATED. IT IS RECOMMENDED THAT THE WRECK BE REMOVED FROM THE CHART. EVALUATOR RECOMMENDS REMOVING THE 26 WK FROM CHART (UPDATED 3/9/05 JRS).

QUASOU - 6:least depth known

SORDAT - 20001205

SORIND - US,US,graph,H-10998

TECSOU - 3:found by multi-beam

VALSOU - 13.600 m

WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

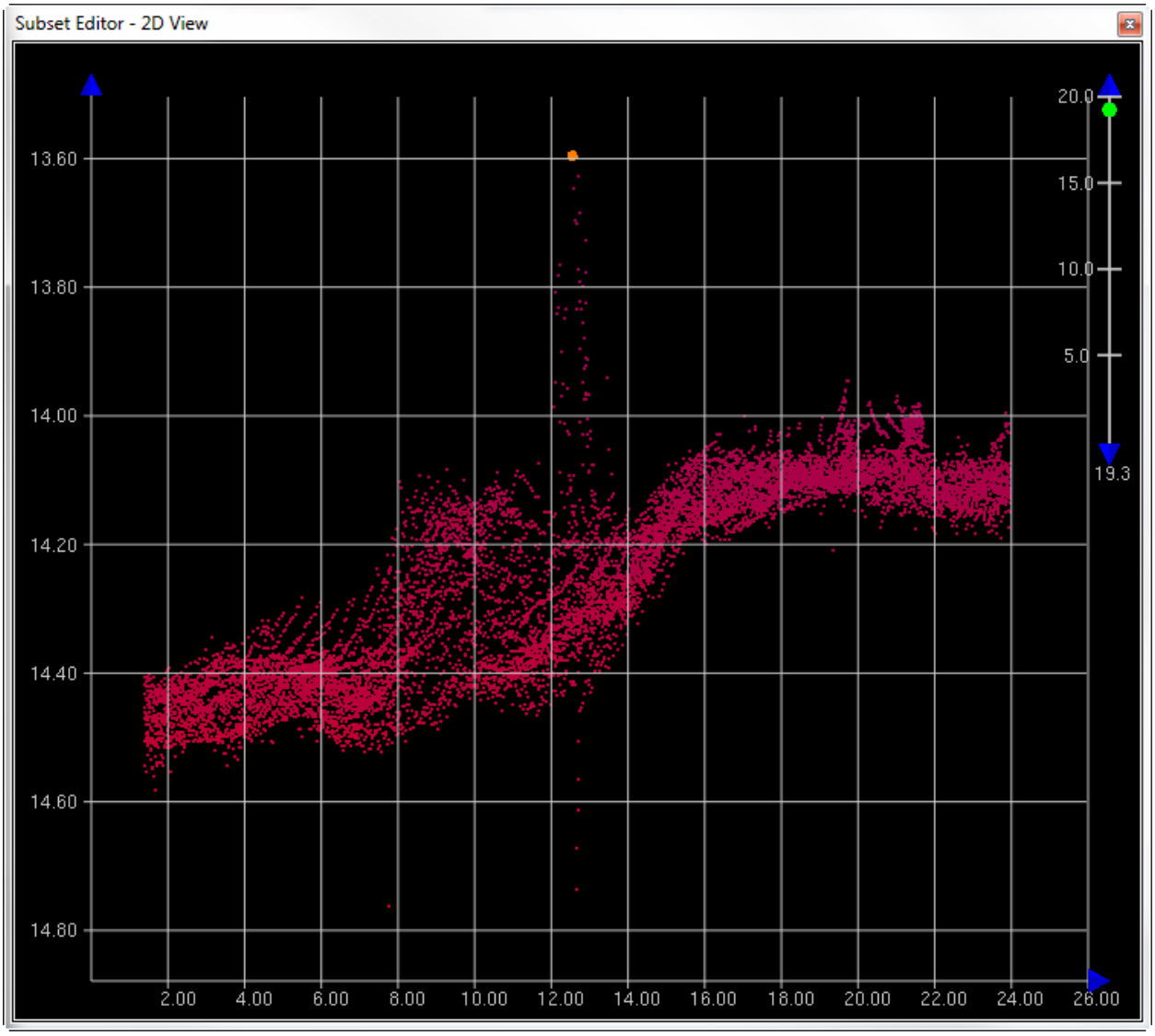


Figure 1.22.1

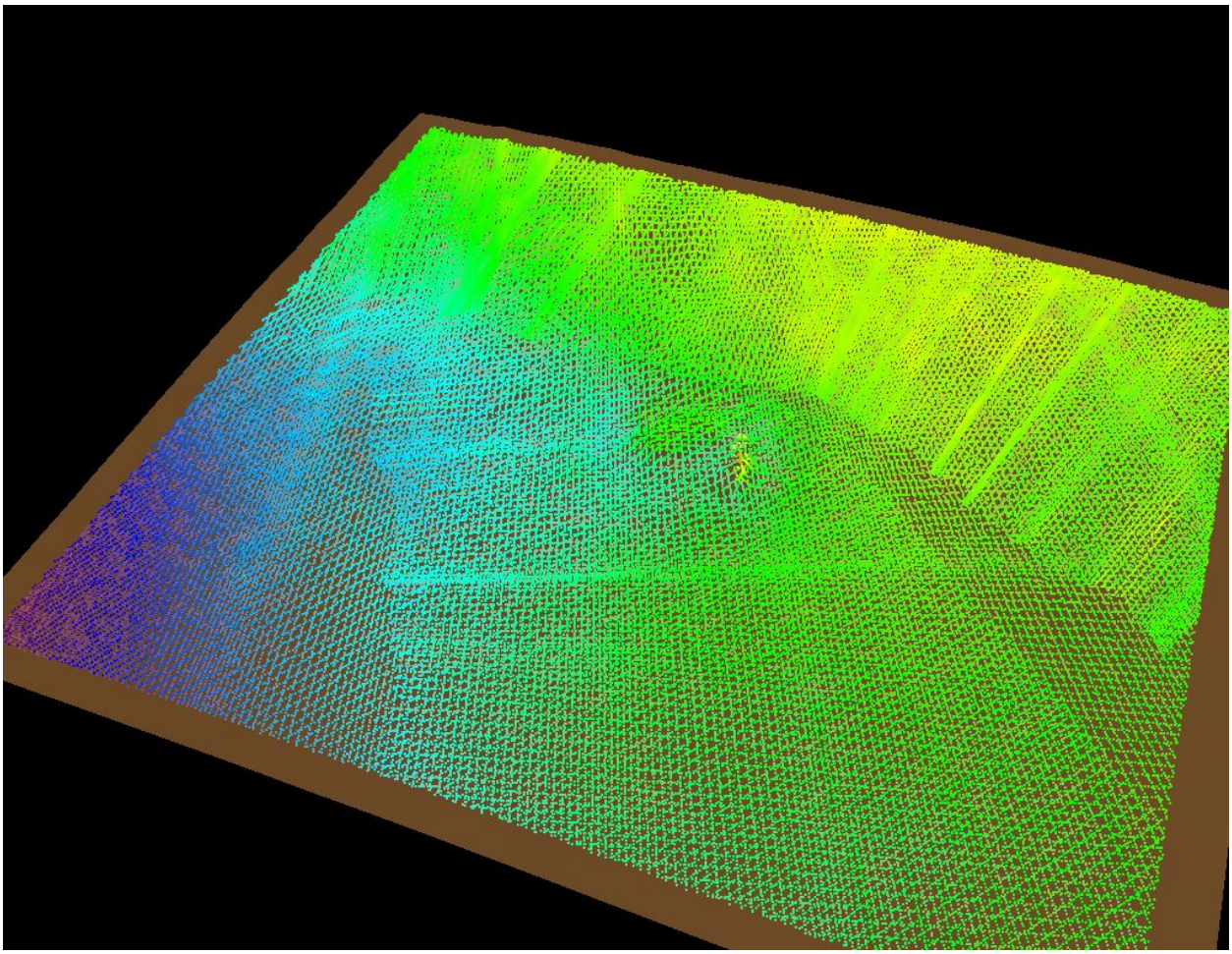


Figure 1.22.2

1.23) US 0000117618 00001

Survey Summary

Survey Position:	33° 42' 36.9" N, 118° 11' 14.3" W
Least Depth:	20.04 m (= 65.76 ft = 10.960 fm = 10 fm 5.76 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117618 00001(02260001CB720001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53241. Retain position, update depth

Hydrographer Recommendations

Retain position, update least depth

Cartographically-Rounded Depth (Affected Charts):

66ft (18751_1, 18749_1)

11fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

20.0m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H10998/01 -- OPR-L325-KR-00; OBSTRUCTION WITH A LEAST DEPTH OF 57.5 FEET. IT IS RECOMMENDED THAT THE OBSTRUCTION BE CHARTED WITH A LEAST DEPTH OF 57 FEET AT LATITUDE 33-42-36.81N AND LONGITUDE 118-11-14.47W. (UPDATED 3/9/05 JRS) QUASOU - 6:least depth known SORDAT - 20001205 SORIND - US,US,graph,H-10998 TECSOU - 3:found by multi-beam VALSOU - 20.043 m WATLEV - 3:always under water/submerged

Office Note: Concur, least depth 65.758ft

Feature Images

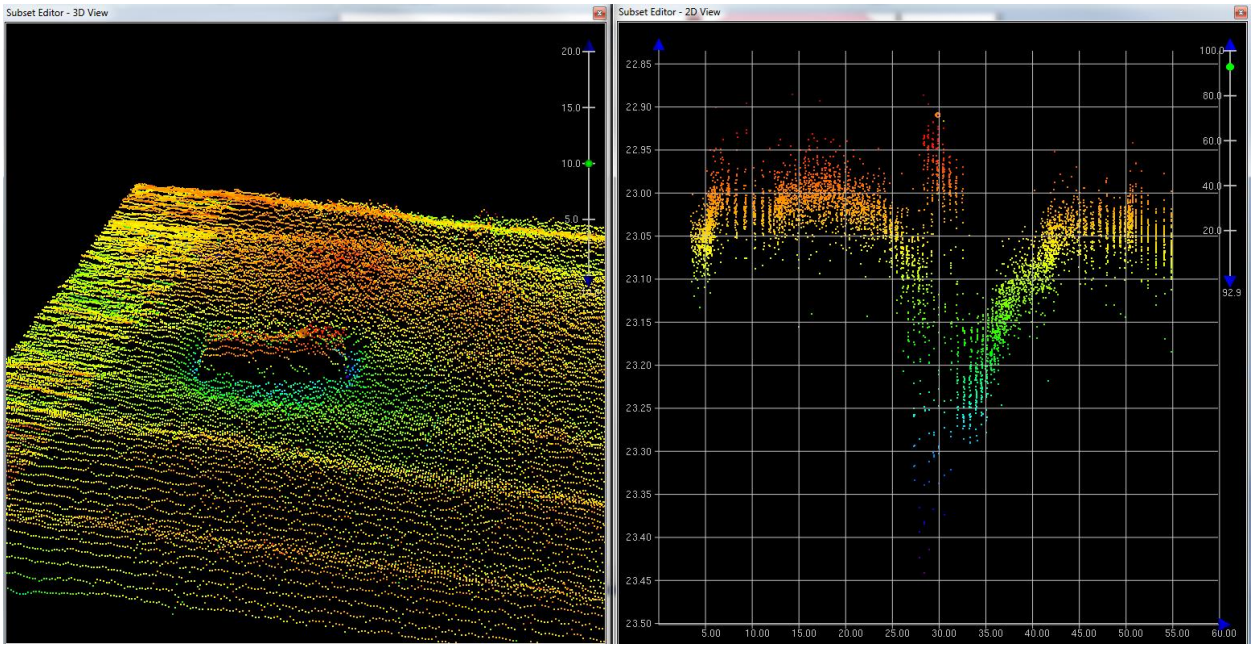


Figure 1.23.1

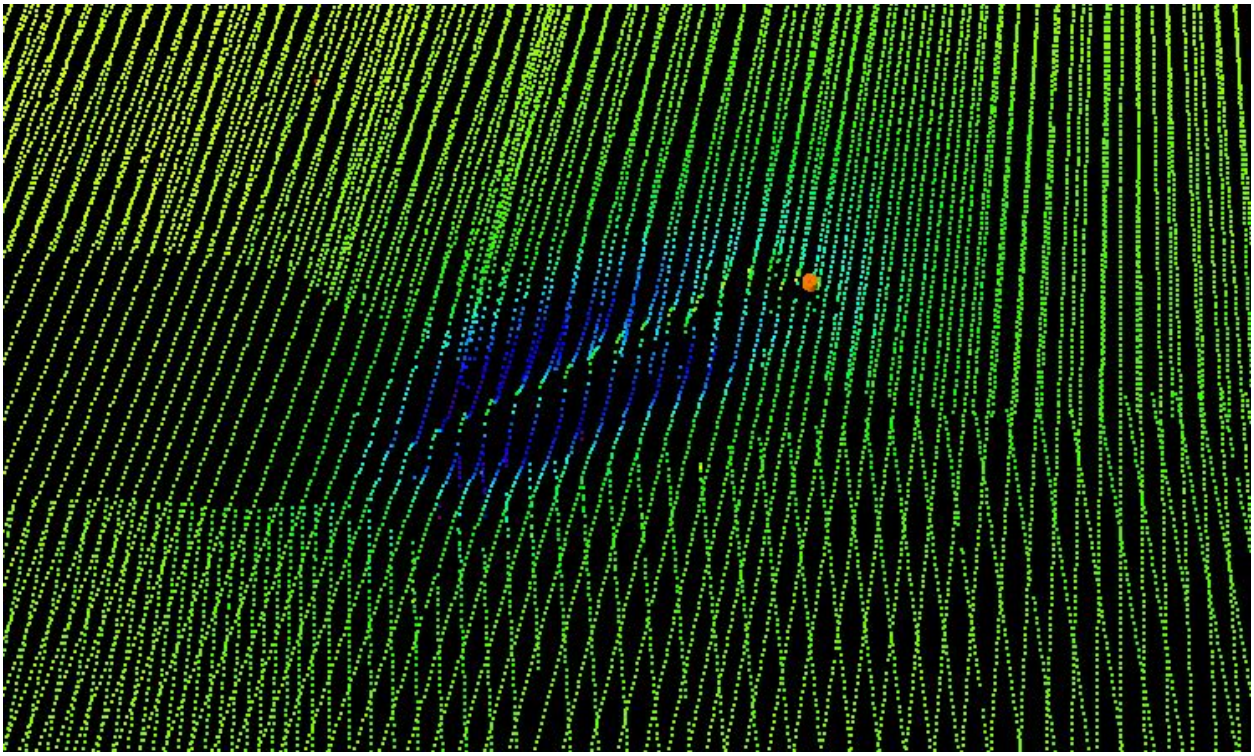


Figure 1.23.2

1.24) US 0000117579 00001

Survey Summary

Survey Position:	33° 42' 40.5" N, 118° 14' 07.2" W
Least Depth:	15.20 m (= 49.87 ft = 8.311 fm = 8 fm 1.87 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117579 00001(02260001CB4B0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53233. Not observed with complete MBES

Hydrographer Recommendations

Remove from chart

Cartographically-Rounded Depth (Affected Charts):

50ft (18751_1, 18749_1)

8 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

15.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H10998/01 -- OPR-L325-KR-00; OBSTRUCTION FOUND WITH A LEAST DEPTH OF 50 FEET. IT IS LOCATED APPROXIMATELY 0.5 NAUTICAL MILES EAST OF THE LOS ANGELES. IT IS RECOMMENDED THAT THE OBSTRUCTION BE CHARTED WITH A LEAST DEPTH OF 50 FEET AT LATITUDE 33-42-40.48N AND LONGITUDE 118-14-07.33W. (UPDATED 3/9/05 JRS). QUASOU - 6:least depth known SORDAT - 20001205 SORIND - US,US,graph,H-10998 VALSOU - 15.200 m WATLEV - 3:always under water/submerged

Office Note: Concur

1.25) US 0000116592 00001

Survey Summary

Survey Position:	33° 42' 44.7" N, 118° 13' 36.7" W
Least Depth:	16.10 m (= 52.82 ft = 8.804 fm = 8 fm 4.82 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116592 00001(02260001C7700001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53235. Not observed with complete MBES

Hydrographer Recommendations

Remove from chart

Cartographically-Rounded Depth (Affected Charts):

53ft (18751_1, 18749_1)

8 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

16.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H10998/01 -- OPR-L325-KR-00; OBSTRUCTION FOUND WITH A LEAST DEPTH OF 53 FEET. IT IS RECOMMENDED THAT THIS OBSTRUCTION BE CHARTED WITH A LD OF 53 FEET AT LATITUDE 33-42-44.69N AND LONGITUDE 118-13-36.75W. (UPDATED 3/9/05 JRS). QUASOU - 6:least depth known SORDAT - 20001205 SORIND - US,US,graph,H-10998 VALSOU - 16.100 m WATLEV - 3:always under water/submerged

Office Note: Concur

1.26) US 0000118013 00001

Survey Summary

Survey Position:	33° 42' 45.1" N, 118° 15' 38.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118013 00001(02260001CCFD0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS 50243 not found in search radius

Hydrographer Recommendations

submit disproval for AWOIS

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	SORDAT - 20131103
	SORIND - US,US,graph,H12617

Office Note: Concur

1.27) US 0000117596 00001

Survey Summary

Survey Position:	33° 42' 47.0" N, 118° 14' 19.3" W
Least Depth:	2.10 m (= 6.89 ft = 1.148 fm = 1 fm 0.89 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2001-335.00:00:00.000 (12/01/2001)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117596 00001(02260001CB5C0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New position of charted wreck to the NE.

Hydrographer Recommendations

Delete charted wreck and chart new position.

Cartographically-Rounded Depth (Affected Charts):

7ft (18751_1, 18749_1)

1fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

2.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20011201
	SORIND - US,US,graph,Chart 18751
	VALSOU - 2.100 m
	WATLEV - 3:always under water/submerged

Office Note: Concur. Chart new wreck at 33-42-47.268N 118-14-17.862W, 18.573 feet.

1.28) US 0000117455 00001

Survey Summary

Survey Position:	33° 42' 51.1" N, 118° 13' 03.3" W
Least Depth:	15.50 m (= 50.85 ft = 8.476 fm = 8 fm 2.85 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2000-340.00:00:00.000 (12/05/2000)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117455 00001(02260001CACF0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53236. Not observed with complete MBES

Hydrographer Recommendations

Remove from chart

Cartographically-Rounded Depth (Affected Charts):

51ft (18751_1, 18749_1)

8 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

15.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H11881/2008 -- AWOIS item (53236) is a 51 ft obstruction on the edge of the survey coverage at 33-42-51.07N 118-13-03.33W and was not found in the multibeam data. Since it falls on the edge of coverage and no formal investigation was conducted the obstruction feature was imported from the ENC to be retained until a formal investigation is conducted. (ETR 07/21/09) H10998/01 -- OPR-L325-KR-00; OBSTRUCTION FOUND WITH A LEAST DEPTH OF 51 FEET. IT IS LOCATED ON THE NORTH EDGE OF THE G-2 ANCHORAGE AREA. IT IS RECOMMENDED THAT THIS OBSTRUCTION BE CHARTED WITH A LEAST DEPTH OF 51 FEET AT LATITUDE 33-42-51.13N AND LONGITUDE 118-13-03.49W. (UPDATED 3/9/05 JRS). QUASOU - 6:least depth known SORDAT - 20001205 SORIND - US,US,graph,H-10998

VALSOU - 15.500 m

WATLEV - 3:always under water/submerged

Office Note: Concur

1.29) US 0000117612 00001

Survey Summary

Survey Position:	33° 42' 55.2" N, 118° 13' 28.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1982-231.00:00:00.000 (08/19/1982)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117612 00001(02260001CB6C0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 52594. Wreck disproved with 100% MBES

Hydrographer Recommendations

Remove from chart and AWOIS database

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	INFORM - HISTORY LNM34/82 (8/18/82) -- A 40 FT F/V SUNK IN APPROX. POS. LAT 33-42-55N LONG 118-13-25W BY THE MIDDLE BREAKWATER IN ABOUT 50 FT DEPTHS. PRESENTLY CHARTED AS A DANGEROUS SUBM WK PA. H10998/01 -- OPR-L325-KR-00; APPROXIMATELY ONE-THIRD OF THE 750 METER SEARCH AREA FALLS INSIDE OF THE MIDDLE BREAKWATER AND WAS NOT COVERED DURING THIS SURVEY. HOWEVER THE WRECK WAS REPORTED OUTSIDE OF THE BREAKWATER. SIDE SCAN SONAR COVERAGE OF THE SEARCH AREA OUTSIDE OF THE BREAKWATER RESULTED IN TWO CONTACTS. BOTH OF THESE CONTACTS ARE ON WHAT APPEARS TO BE A ROCK PILE WHICH IS CLEARLY NOT THE REPORTED 40-FOOT FISHING VESSEL. EVALUATOR RECOMMENDS THAT THE WRECK BE REMOVED FROM THE CHART. (UPDATED 3/9/05 JRS)
	OBJNAM - U.S.Coast Guard(USCG)
	QUASOU - 2:depth unknown
	SORDAT - 19820819
	SORIND - US,US,reprt,11thCGD,LNM 34/82
	WATLEV - 3:always under water/submerged

Office Note: Concur

1.30) US 0000117615 00001

Survey Summary

Survey Position:	33° 43' 01.1" N, 118° 12' 07.6" W
Least Depth:	15.44 m (= 50.64 ft = 8.441 fm = 8 fm 2.64 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117615 00001(02260001CB6F0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53240. Retain position, update depth, surveyed with 100% MBES

Hydrographer Recommendations

Retain position, update depth

Cartographically-Rounded Depth (Affected Charts):

50ft (18751_1, 18749_1)

8 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

15.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 15.436 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

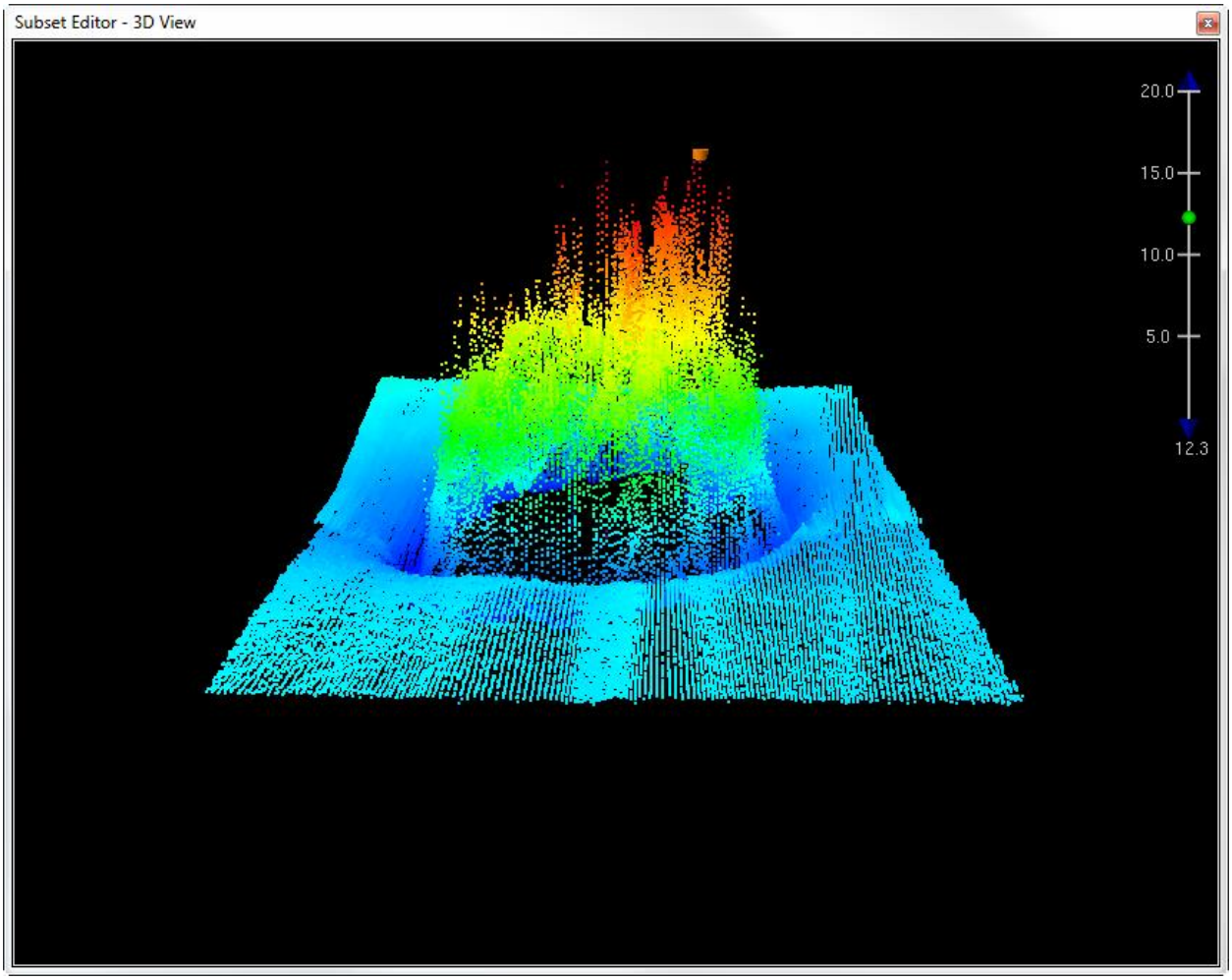


Figure 1.30.1

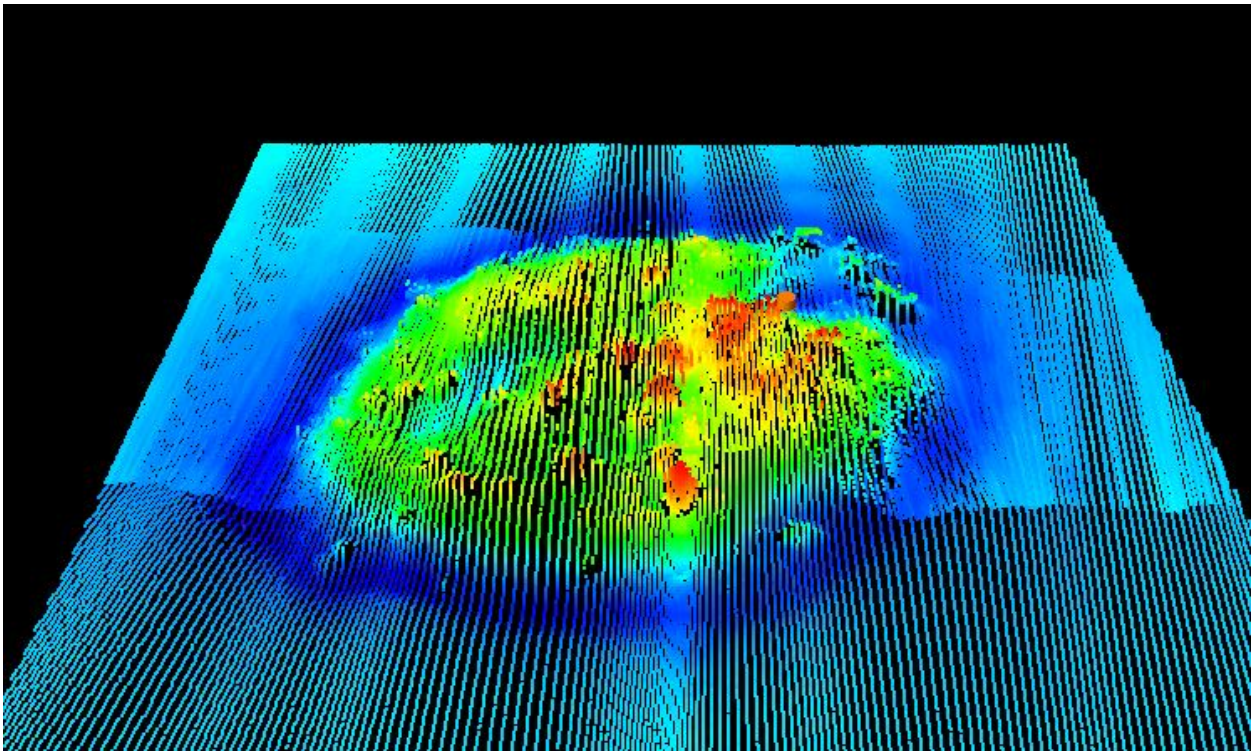


Figure 1.30.2

1.31) US 0000117571 00001

Survey Summary

Survey Position:	33° 43' 07.3" N, 118° 13' 29.9" W
Least Depth:	13.04 m (= 42.79 ft = 7.131 fm = 7 fm 0.79 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117571 00001(02260001CB430001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 53254. Verified with MBES

Hydrographer Recommendations

SAR: Update with new depth

Cartographically-Rounded Depth (Affected Charts):

43ft (18751_1, 18749_1)

7fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

13.0m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	INFORM - L 231/02-- A 35 FT OBSTRUCTION WAS LOCATED AT33/43/07.277N - 118/13/29.931W. L 1557/03-- REVISED OBSTRUCTION TO 35 FT WRECK AT 33/43/07.2N - 118/13/29.9W. BRITISH ADMIRALTY-- A DISCREPENCE REPORT FROM THE BRITISH ADMIRALTY REVISED THE 35 FT WRECK TO 43 FT WRECK AT 33/43/07.277N - 118/13/29.931W. (ENTERED CEH 6/05)
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 13.042 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

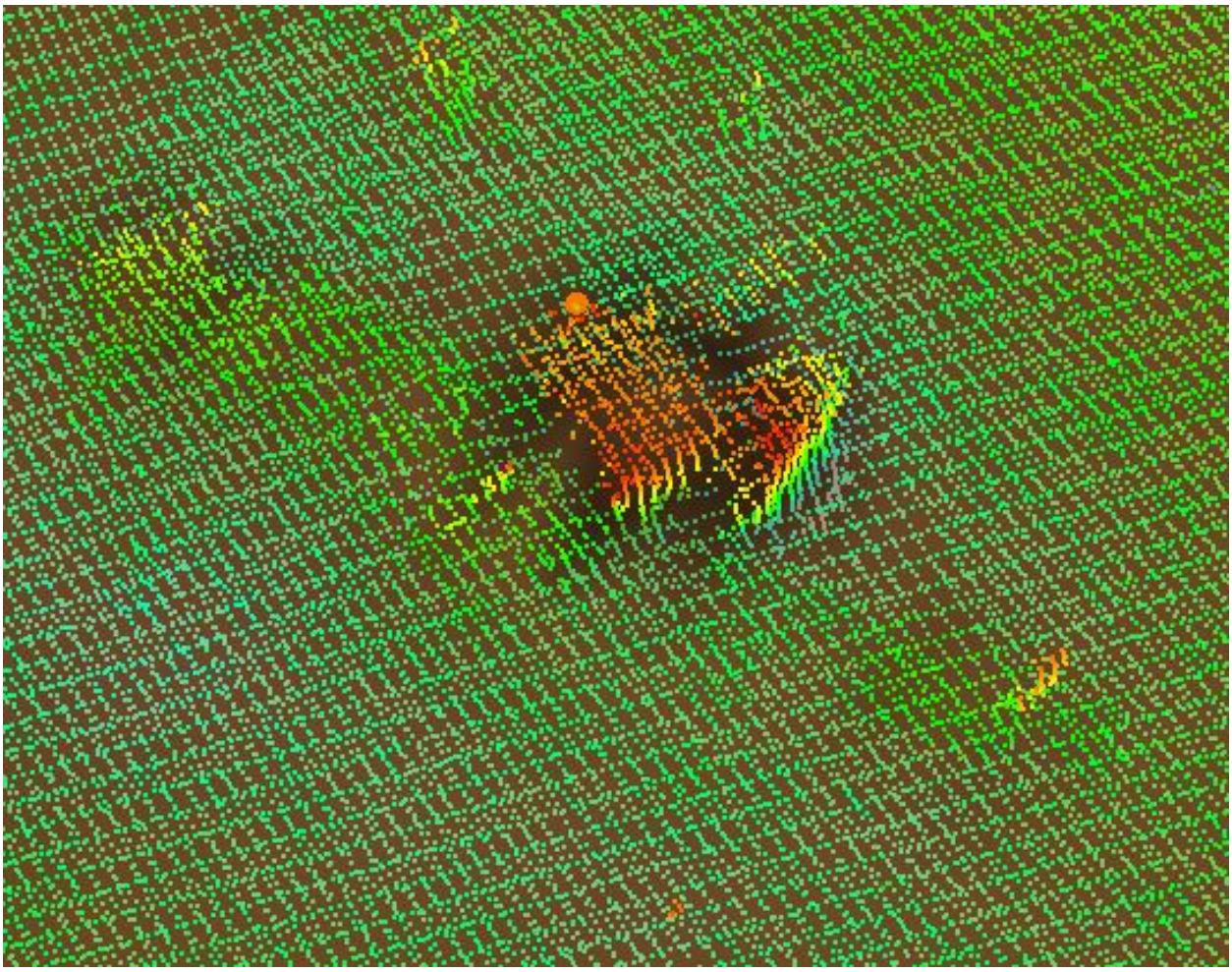


Figure 1.31.1

1.32) US 0000116522 00001

Survey Summary

Survey Position:	33° 43' 30.6" N, 118° 12' 24.0" W
Least Depth:	13.17 m (= 43.20 ft = 7.200 fm = 7 fm 1.20 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116522 00001(02260001C72A0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

UWTROC/remrks: AWOIS 53255. UWTROC verified with MBES

Hydrographer Recommendations

SAR: Update with new depth

Cartographically-Rounded Depth (Affected Charts):

43ft (18751_1, 18749_1)

7 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

13.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	INFORM - L 231-02-- A 43 FT OBSTRUCTION CHART WITH A LABELED RKS WAS LOCATED AT 33/43/30.590N - 118/12/24.037W. (ENTERED CEH 6/05)
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 13.168 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

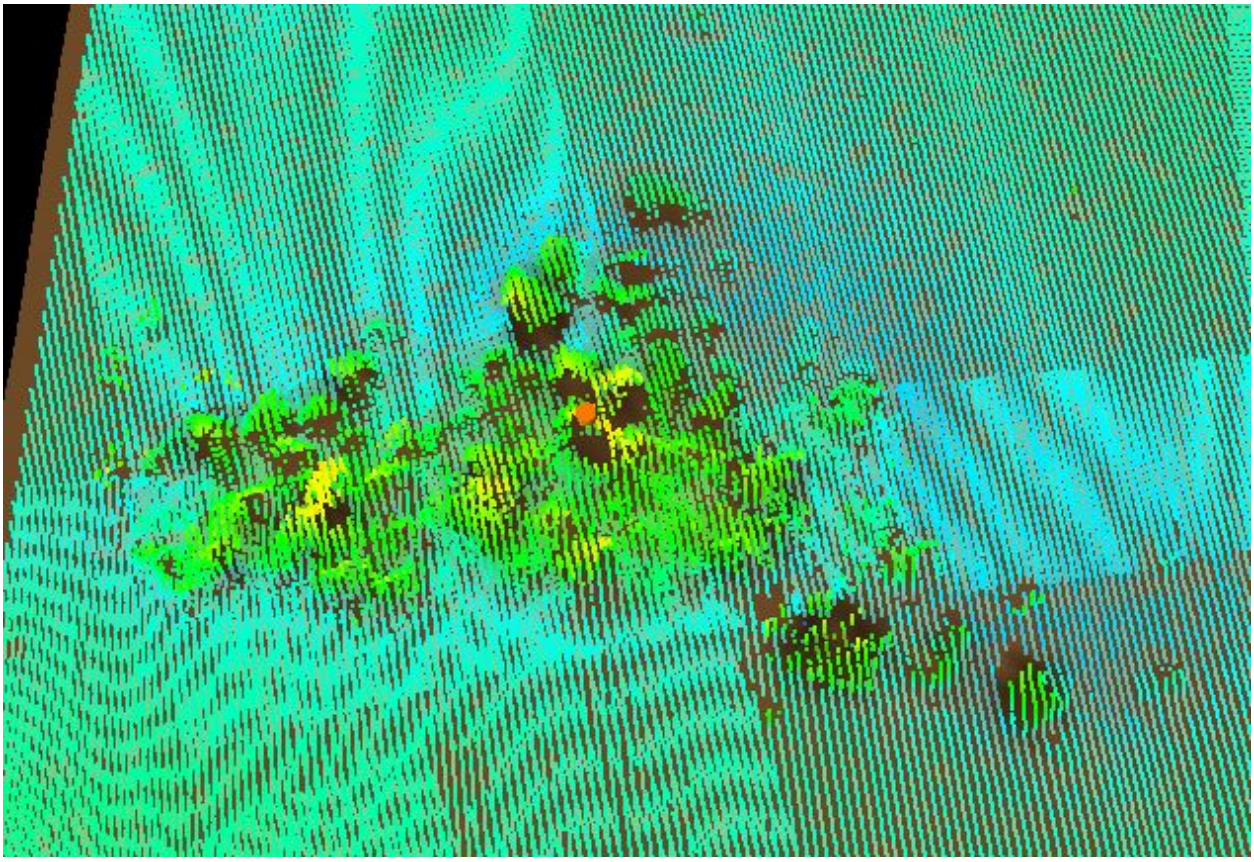


Figure 1.32.1

1.33) US 0000118427 00001

Survey Summary

Survey Position:	33° 44' 00.1" N, 118° 15' 03.3" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118427 00001(02260001CE9B0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

[None]

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	INFORM - 20 SCH; STRANDED JAN. 1 1934 ON TERMINAL ISLAND; 523 TONS GP DOUBTFUL LOCATES VICINITY OF SAN PEDRO BAY ONLY

Office Note: AWOIS 50202, no charted feature or visible feature in survey data at this location.

1.34) US 0000116759 00001

Charting Action is Not Addressed

Survey Summary

Survey Position:	33° 44' 03.9" N, 118° 15' 58.1" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2001-335.00:00:00.000 (12/01/2001)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116759 00001(02260001C8170001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: Inshore of NALL

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	QUASOU - 2:depth unknown
	SORDAT - 20011201
	SORIND - US,US,graph,Chart 18751
	WATLEV - 3:always under water/submerged

Office Note: Concur

1.35) US 0000117054 00001

Survey Summary

Survey Position:	33° 44' 21.0" N, 118° 14' 23.5" W
Least Depth:	4.50 m (= 14.76 ft = 2.461 fm = 2 fm 2.76 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2002-116.00:00:00.000 (04/26/2002)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117054 00001(02260001C93E0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 52887. Wreck verified with complete MBES

Hydrographer Recommendations

Delete wreck (AWOIS item 52887), replace with new position and depth

Cartographically-Rounded Depth (Affected Charts):

15ft (18751_1, 18749_1)

2 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

4.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	QUASOU - 6:least depth known
	SORDAT - 20020426
	SORIND - US,US,graph,FE-00484
	TECSOU - 3:found by multi-beam
	VALSOU - 4.500 m
	WATLEV - 3:always under water/submerged

Office Note: Chart wreck least depth 16.614ft at 33-44-20.742N 118-14-23.928W

1.36) US 0000117063 00001

Survey Summary

Survey Position:	33° 44' 25.2" N, 118° 13' 45.2" W
Least Depth:	5.19 m (= 17.02 ft = 2.837 fm = 2 fm 5.02 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117063 00001(02260001C9470001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

UWTROC/remrks: AWOIS 52886. Verified with complete MBES

Hydrographer Recommendations

SAR: Update existing feature with new least known depth sounding

Cartographically-Rounded Depth (Affected Charts):

17ft (18751_1, 18749_1)

2 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

5.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	INFORM - HISTORY CL518/80--4/15/80 USCG 11TH DIST.: A ROCK MOUND OBSTRUCTION EXISTS IN POSITION LAT 33-44-25.00N LONG 118-13-42.00W (NAD 27) CLOSE TO THE NAVY MOLE. APPROXIMATELY PERPENDICULAR TO THE MOLE FROM 170 FEET SOUTH OF THE MOLE TO 300 FEET SOUTH OF THE MOLE. THE TOP IS APPROXIMATLEY -19 FT. MLLW AND GROUND IS -28.5 FEET AT THE HIGHEST POINT. (ENTERED 11/01 BY PSH) F00484/01-02--OPR-L418-NRB; A large obstruction was observed on the sonargram; the contacts were plotted and developed. Hydrography located a least depth of 16 feet at the above location. chart 16 Rk at latitude 33/44/25.29N longitude 118/13/45.38W. Updated 4/4 MCR QUASOU - 6:least depth known SORDAT - 20131103 SORIND - US,US,graph,H12617

VALSOU - 5.189 m

WATLEV - 3:always under water/submerged

Office Note: Concur, chart as obstruction.

Feature Images

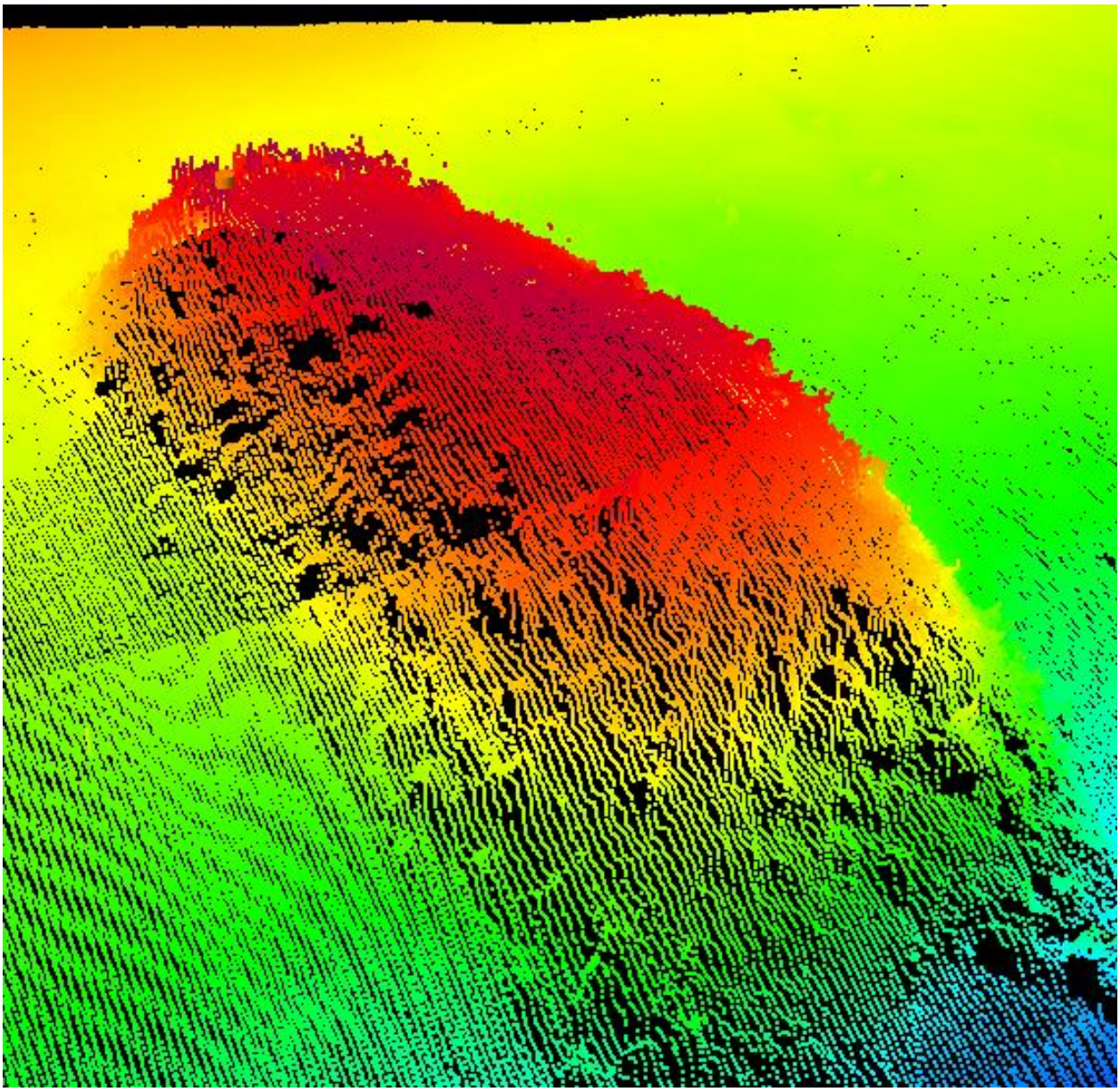


Figure 1.36.1

1.37) US 0000117079 00001

Survey Summary

Survey Position:	33° 44' 35.5" N, 118° 14' 00.5" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2006-264.00:00:00.000 (09/21/2006)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117079 00001(02260001C9570001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 50947. Not observed with complete MBES

Hydrographer Recommendations

Remove from chart

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H9671/77--OPR-411-FA-77; 1:5 000; PIER 12 IN LAT 33-44-34N LONG 118-13-57W HAS BEEN REMOVED; THE FOLLOWING OBSTRUCTIONS WERE FOUND DURING HYDROGRAPHY IN THE AREA OF THE FORMER PIER: A CONCRETE PILE AND SCATTERED STEEL RUBBLE FOUND WITH LEAST DEPTH OF 35FT IN LAT 33-44-36N LONG 118-13-58W; RAILINGS AND OTHER DEBRIS COVERING 10FT DIAMETER AREA WITH LEAST DEPTH OF 29 FT IN LAT 33-44-33.4N LONG 118-13-56.8W; ITEMS INSPECTED BY DIVERS; EVALUATOR RECOMMENDED CHARTING PIER IN RUINS AND ADDING OBSTRS. (ENTERED MSM 7/85) F00597-- 2006; A scattered pile of loose debris was identified by using SSS. A least depth of 42 feet was acquired over the pile of debris. There was no evidence of the charted pier in ruins in either the SSS imagery or the digital terrain model. Recommened to delete the chart pier in ruins and chart the dangerous obstruction with the least depth of 42 feet at 33°44'35.5"" - 118°14'00.5"". (updated CEH 6/2008)" QUASOU - 6:least depth known SORDAT - 20060921 SORIND - US,US,graph,FE-00507 TECSOU - 3:found by multi-beam WATLEV - 3:always under water/submerged

Office Note: Concur

1.38) US 0000117616 00001

Survey Summary

Survey Position:	33° 44' 42.5" N, 118° 14' 18.6" W
Least Depth:	8.07 m (= 26.48 ft = 4.413 fm = 4 fm 2.48 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117616 00001(02260001CB700001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 50963. Charted obstruction verified for position with MBES, update height

Hydrographer Recommendations

Update depth of charted obstruction

Cartographically-Rounded Depth (Affected Charts):

26ft (18751_1, 18749_1)

4 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

8.0m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - H9671/77--OPR-411-FA-77; 1:5 000; PINNACLE WITH LEAST DEPTH OF 26 FT LOCATED IN LAT 33-44-42.3N LONG 118-14-15.4W IN 38 FT OF WATER; 15 M LINE SPACING CONFIRMED LOCALIZED NATURE OF FEATURE; HYDROGRAPHER AND EVALUATOR RECOMMEND CHARTING PINNACLE. (ENTERED MSM 7/85) F00507-- 2006; This item is a cluster of three large and numerous obstructions on a small rise on the bottom. SSS and MBES was used in the investigation. a least depth of 24 feet was found. This charted obstruction was revised by A DTON that revised the obstn from 26 to 24 foot obstn. Chart has already been updated as of 6/18/2008. (updated CEH 6/2008) QUASOU - 6:least depth known SORDAT - 20131103 SORIND - US,US,graph,H12617 TECSOU - 3:found by multi-beam

VALSOU - 8.071 m

WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

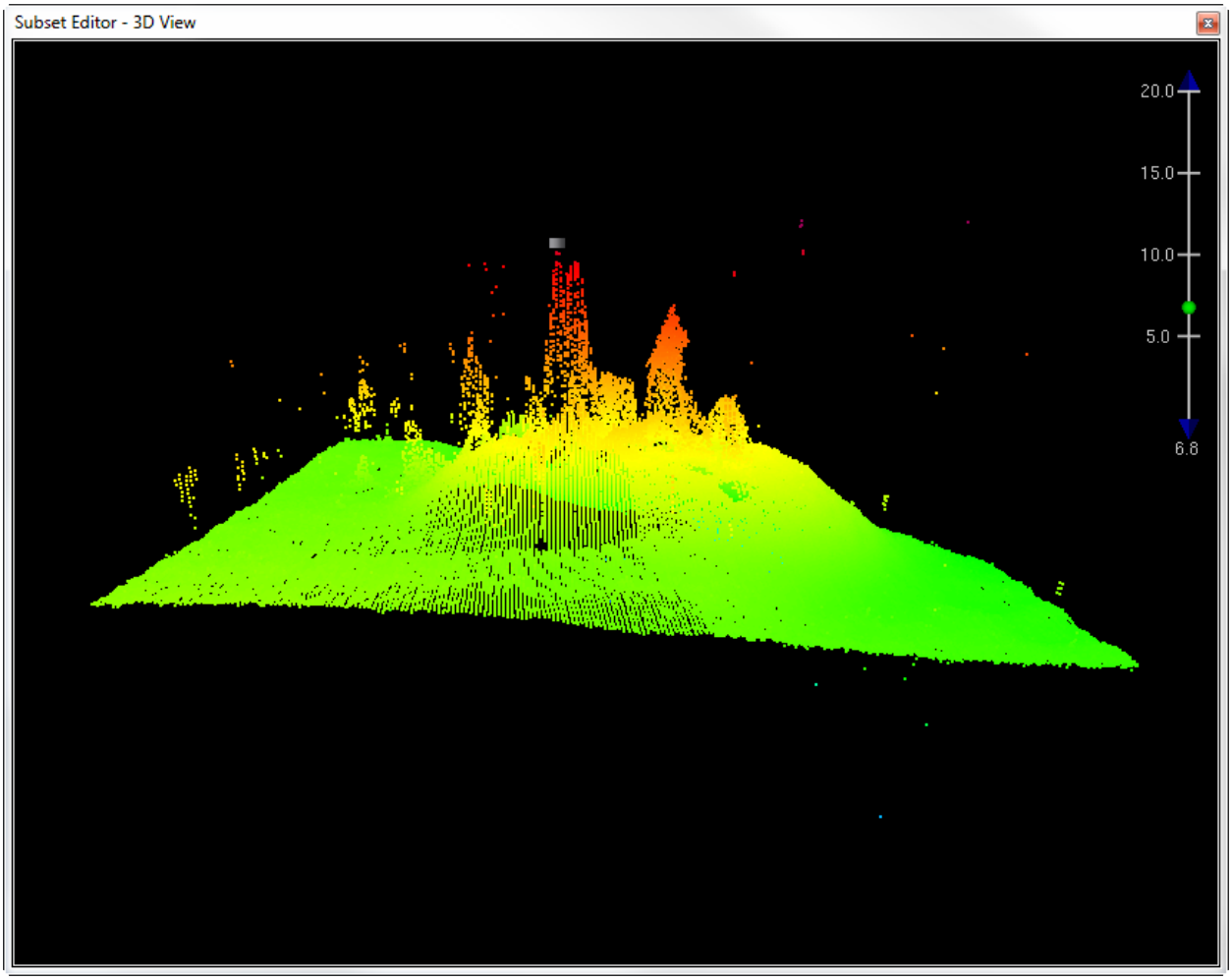


Figure 1.38.1

1.39) US 0000117588 00001

Survey Summary

Survey Position:	33° 44' 45.2" N, 118° 13' 24.0" W
Least Depth:	12.10 m (= 39.70 ft = 6.616 fm = 6 fm 3.70 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2006-264.00:00:00.000 (09/21/2006)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117588 00001(02260001CB540001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 53697. Charted obstruction position disproved with MBES

Hydrographer Recommendations

Chart in new position

Cartographically-Rounded Depth (Affected Charts):

39ft (18751_1, 18749_1)

6 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

12.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - F00507-2006-- OPR-L418-NRT6-05; A large cluster of rocks or debris was found during the side scan sonar investigation. No bathymetery data for this feature. Recommended to chart dangerous OBSTN. (Entered CEH 6/2008)
	QUASOU - 6:least depth known
	SORDAT - 20060921
	SORIND - US,US,graph,FE-00507
	TECSOU - 3:found by multi-beam
	VALSOU - 12.100 m
	WATLEV - 3:always under water/submerged

Office Note: Charted obstruction exits at 33-44-45.153N 118-13-24.081W, least depth of 41.250ft.

Feature Images

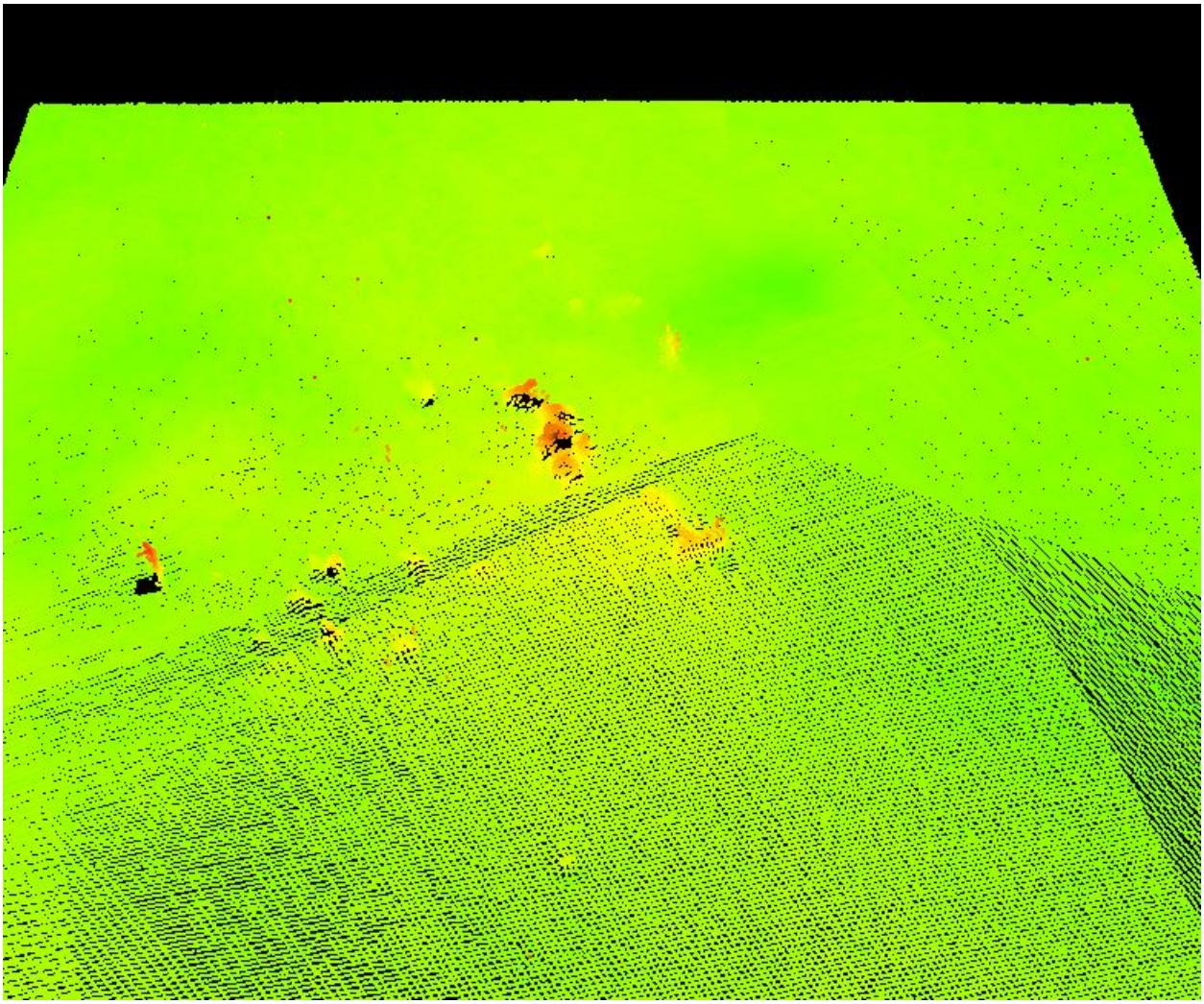


Figure 1.39.1

1.40) US 0000118428 00001

Survey Summary

Survey Position:	33° 44' 54.0" N, 118° 16' 27.1" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118428 00001(02260001CE9C0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

AWOIS 52873. No dolphin observed at this location.

Hydrographer Recommendations

SAR: Delete. This item is not currently charted, persisting in the AWOIS database from which is should be deleted.

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	INFORM - **** DOLPHINS APPEAR ON 1992 EDITION OF CHART 18751 SOURCE UNKNOWN. POS. 33-44-53.95 N 118-16-27.1 W AND 33-44-55.55 N 118-16-26.26 W NAD 83 F00484/01-02--OPR-L418-NRB; Delete dol charted at latitude 33:44:55.55N longitude 118:16:26.26W; chart new pier as shown on Field Sheet. Retain south dol and chart as drawn on Field Sheet. Updated 4/4 MCR

Office Note: Concur

1.41) US 0000118249 00001

Survey Summary

Survey Position:	33° 45' 06.0" N, 118° 14' 30.6" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118249 00001(02260001CDE90001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: SAR: AWOIS item 50964 not seen at this location.

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	INFORM - History H9671/77--OPR-411-FA-77; 1:5 000; SUNKEN STEEL BARGE 40 X 100 FT. IS RESTING ON THE BOTTOM IN LAT 33-45-05.8N LONG 118-14-27.3W; LEAST DEPTH OF 10 FT MLLW; ORIENTED PARALLEL TO SHORE; HYDROGRAPHER AND EVALUATOR RECOMMEND CHARTING SUBM WK. (ENTERED MSM 7/85)

Office Note: Concur. Remove feature

1.42) US 0000118246 00001

Survey Summary

Survey Position:	33° 45' 13.8" N, 118° 13' 57.0" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118246 00001(02260001CDE60001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS item not seen at this location

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	INFORM - H9671/77--OPR-411-FA-77; 1:5 000: PIER 4 HAS BEEN REMOVED; HYDRO REVEALED GENERAL SHOALING (TO 27 FT) AS WELL AS SUSPICIOUS SPIKES; AREA OF FORMER PIER SWEPT BY OTTERBOARD TO 20 FT WITH ONE HANG AT LAT 33-45-13.6N LONG 118-13-53.7W; DIVER INVESTIGATION FOUND PILE WITH 10.7 FT LEAST DEPTH (MLLW); SEVERAL OTHER PILES OBSERVED BUT NONE WITH DEPTHS LESS THAN 20 FT; EVALUATOR RECOMMENDED CHARTING RUINS AND OBSTR. (ENTERED MSM 7/85) SORDAT - 20131103 SORIND - US,US,graph,H12617

Office Note: Concur. Remove feature. AWOIS number is 50945

1.43) US 0000118117 00001

Survey Summary

Survey Position:	33° 45' 36.3" N, 118° 15' 26.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118117 00001(02260001CD650001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS radius examined sufficiently to disprove AWOIS item 50961

Hydrographer Recommendations

Delete AWOIS 50961

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	NTXTDS - 50961 HISTORY H9671/77--OPR-411-FA-77; 1:5 000; REMAINS OF STEEL VESSEL FOUND IN LAT 33-45-36.1N LONG 118-15-22.9W; COVERED BY 13FT MLLW; PUBLISHED IN LNM 13/77. (ENTERED MSM 7/85) SORDAT - 20131103

Office Note: Concur. Remove feature

1.44) US 0000118119 00001

Survey Summary

Survey Position:	33° 45' 45.2" N, 118° 15' 27.3" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118119 00001(02260001CD670001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS item not observed in area

Hydrographer Recommendations

Delete AWOIS 50959

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	NTXTDS - 50959 HISTORY H9671/77--OPR-411-FA-77;1:5 000; BUOY IN LAT 33-45-45N LONG 118-15-24W MARKS SUBM CRANE APPROX 100 FT OFF BERTH 192; 15 FT OF WATER OVER CRANE; BUOY ON CHANNEL SIDE OF CRANE; EVALUATOR LEAVES CHARTING TO DISCRETION OF COMPILER; PUBLISHED IN LNM 13/77. (ENTERED MSM 7/85)

Office Note: Concur. Remove feature

1.45) US 0000118120 00001

Survey Summary

Survey Position:	33° 45' 49.2" N, 118° 15' 25.1" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118120 00001(02260001CD680001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS item not seen

Hydrographer Recommendations

Delete AWOIS 50960

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	NTXTDS - 50960 HISTORY H9671/77--OPR-411-FA-77; 1:5 000; SUBM BARGE LOCATED IN LAT 33-45-49N LONG 118-15-21.8W; COVERED BY 14 FT MLLW; 70 FT LONG; PUBLISHED IN LNM 13/77. (ENTERED MSM 7/85)

Office Note: Concur. Remove feature. A surveyed wreck with least depth of 13.048 feet located 30m SE of AWOIS item 50960 at 33-45-48.6N 118-15-25.9W

1.46) US 0000118130 00001

Survey Summary

Survey Position:	33° 45' 53.0" N, 118° 14' 31.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118130 00001(02260001CD720001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

$CSYMB/remrks: AWOIS item 52882 not found in area

Hydrographer Recommendations

delete AWOIS item 52882

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	INFORM - H9671/77--OPR: DOLPHIN PREVIOUSLY CHARTED AS A VISIBLE OBSTRUCTION. NOW CHARTED AS AN OBSTRUCTION LOCATED IN LAT 33-45-52.96N LONG 118-14-31.14W (NAD 83). (ENTERED 11/01 BY PSH) F00484/01-02--OPR-L418-NRB; New concrete mooring platform located at AWOIS position. Chart platform as shown on smooth sheet. Updated 4/4 MCR

Office Note: Concur. Remove feature.

1.47) US 0000118241 00001

Survey Summary

Survey Position:	33° 45' 53.6" N, 118° 13' 19.0" W
Least Depth:	1.20 m (= 3.94 ft = 0.656 fm = 0 fm 3.94 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2009-213.00:00:00.000 (08/01/2009)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118241 00001(02260001CDE10001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: AWOIS 52883. SAR: This is the original charted feature, whose depth is shoaler than the least depth recorded by MBES.

Hydrographer Recommendations

Compare with newer feature and retain either of the two

Cartographically-Rounded Depth (Affected Charts):

4ft (18751_1, 18749_1)

0 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

1.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - HISTORY CL240/74--3/4/74 USCG AUX: 6 INCH THICK CONCRETE SLAB EXTENDING 2 FEET OR 2 INCHES (ILLEGIBLE NOTES IN CHART LETTER) ABOVE WATER IN THE POSITION LAT 33-45-53.00N LONG 118-13-15.00W (NAD 27). POSITION SHOWN ON ENCLOSED GRAPHIC WAS USED IN LIEU OF POSITION GIVEN IN REPORT. CHARTED IN POS. LAT.33-45-53.65 N LONG.118-13-18.9 W (NAD 83). (ENTERED 11/01 BY PSH) F00484/01-02--OPR-L418-NRB; A slab approximately 21 meters by 10 meters was located and is centered at latitude 33:45:53.26N longitude 118:13:18.9W. Dimensions were defined by development hydrography. The buoy which is intended to mark the slab was located inshore of the slab at latitude 33:45:53.107N longitude 118:13:19.419W (Position No. 7481 DN 044) A least depth of 4 foot at MLLW was located on an obstruction at latitude 33/45/53.54N longitude 118/13/19.02W. Delete note ""slab PA"" and chart a 4 Obstruction and soundings as shown on smooth sheet."

QUASOU - 6:least depth known

SORDAT - 20090800

SORIND - US,US,graph,Chart 18751

VALSOU - 1.200 m

WATLEV - 3:always under water/submerged

Office note: Chart obstruction as obstruction area. Least depth unknown.

1.48) US 0000116523 00001

Survey Summary

Survey Position:	33° 46' 15.2" N, 118° 14' 58.5" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2001-335.00:00:00.000 (12/01/2001)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116523 00001(02260001C72B0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

SLCONS/remrks: AWOIS 52879. Not observed with complete MBES

Hydrographer Recommendations

Remove from chart

S-57 Data

Geo object 1:	Shoreline Construction (SLCONS)
Attributes:	CATSLC - 4:pier (jetty)
	CONDTN - 2:ruined
	INFORM - **** RUINS APPEAR ON 1968 EDITION OF CHART 18751 SOURCE UNKNOWN TP00393/72--RUINS NOT VISIBLE REVISED TO SUBMERGED F00484/01-02--OPR-L418-NRB; Irregular terrain and several small contacts were observed on the sonargram within the AWOIS search radius. Retain submerged ruins as charted. Udated 4/4 MCR
	SORDAT - 20011201
	SORIND - US,US,graph,Chart 18751
	WATLEV - 3:always under water/submerged

Office Note: Concur. Remove feature.

2 - New Features

2.1) US 0000118155 00001

Survey Summary

Survey Position:	33° 46' 14.9" N, 118° 12' 51.2" W
Least Depth:	12.81 m (= 42.03 ft = 7.005 fm = 7 fm 0.03 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118155 00001(02260001CD8B0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

42ft (18751_1, 18749_1)

7fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

12.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 12.810 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

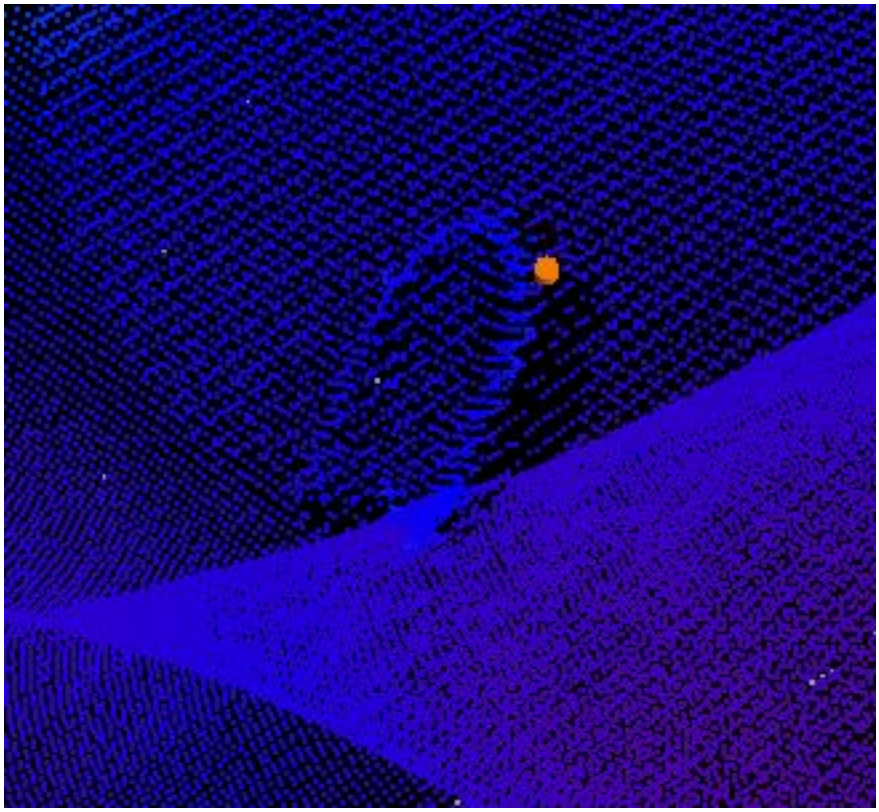


Figure 2.1.1

2.2) US 0000118157 00001

Survey Summary

Survey Position:	33° 46' 18.2" N, 118° 12' 43.5" W
Least Depth:	7.49 m (= 24.58 ft = 4.097 fm = 4 fm 0.58 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118157 00001(02260001CD8D0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

charte new wreck

Cartographically-Rounded Depth (Affected Charts):

24ft (18751_1, 18749_1)

4fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

7.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 7.492 m

Office Note: Concur

Feature Images

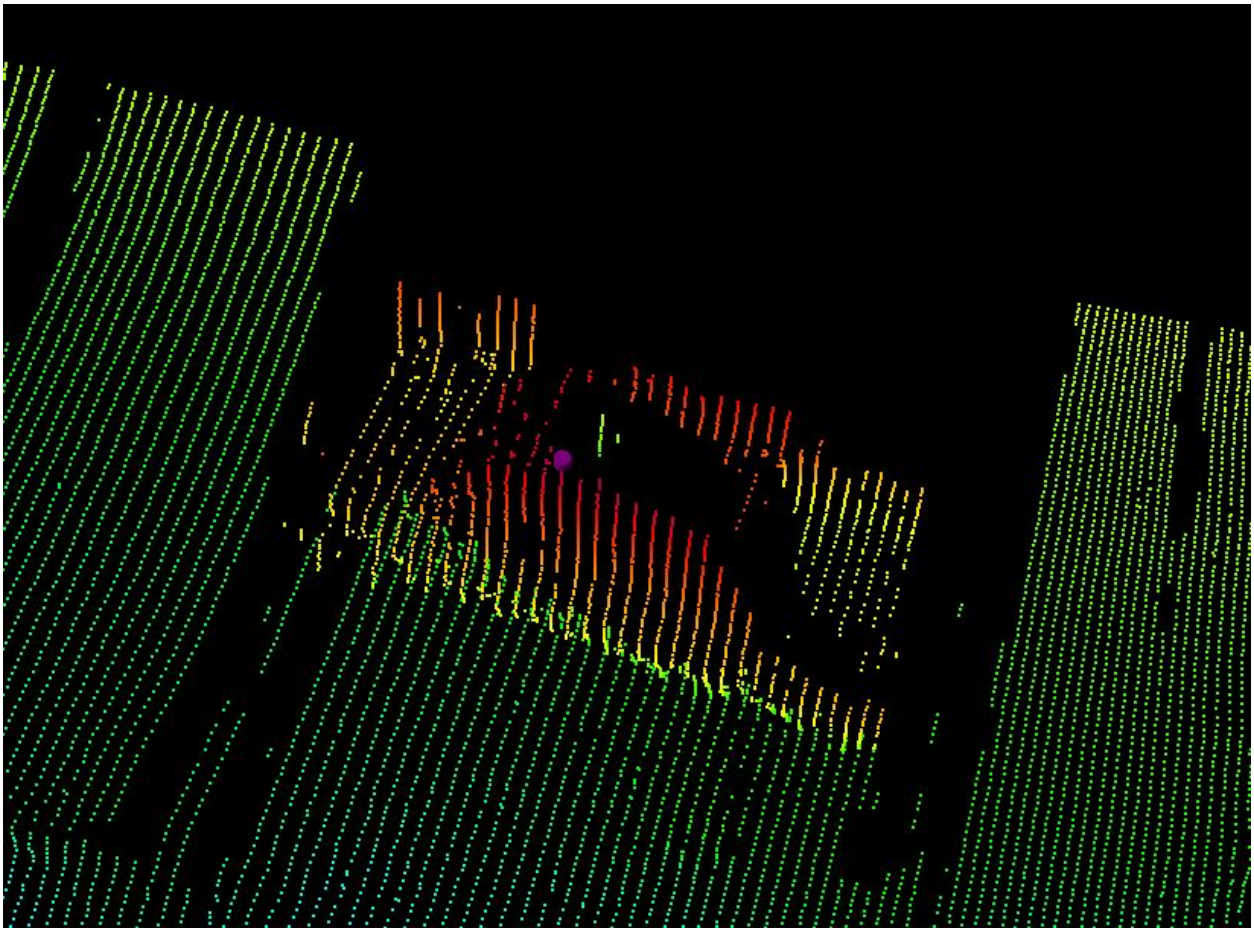


Figure 2.2.1

2.3) US 0000118232 00001

Survey Summary

Survey Position:	33° 46' 23.2" N, 118° 14' 51.8" W
Least Depth:	5.72 m (= 18.78 ft = 3.129 fm = 3 fm 0.78 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118232 00001(02260001CDD80001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: partially submerged wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

19ft (18751_1, 18749_1)

3fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

5.7m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 5.723 m
	WATLEV - 3:always under water/submerged

Office note: A 10ft obstruction (snag) is at position given, not a wreck. Not navigationaly siginifanct at scale. More prominate wreck and shoaling in the vicinity.

Feature Images

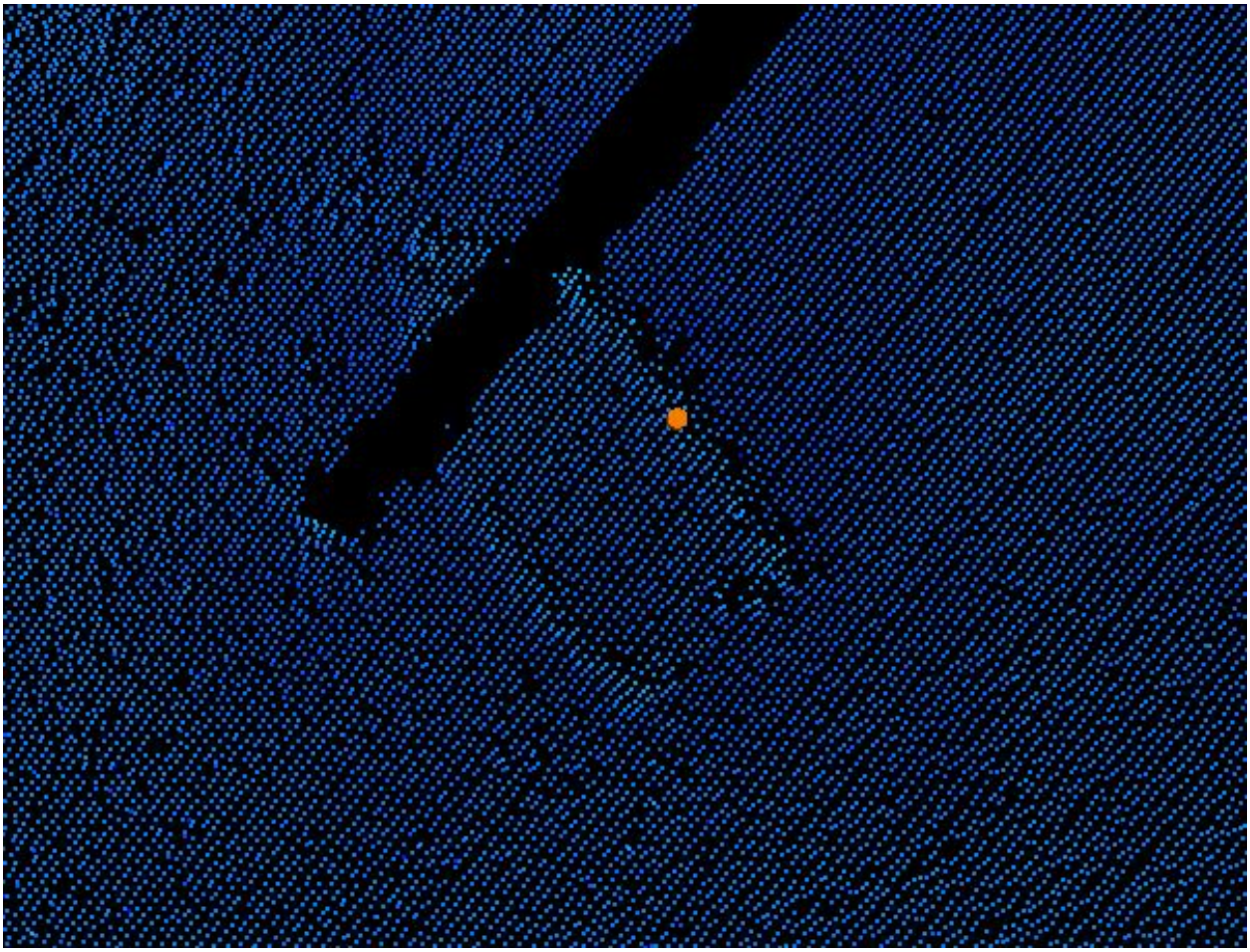


Figure 2.3.1

2.4) US 0000118227 00001

Survey Summary

Survey Position:	33° 46' 24.0" N, 118° 14' 55.8" W
Least Depth:	5.53 m (= 18.14 ft = 3.023 fm = 3 fm 0.14 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118227 00001(02260001CDD30001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

18ft (18751_1, 18749_1)

3fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

5.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 5.528 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

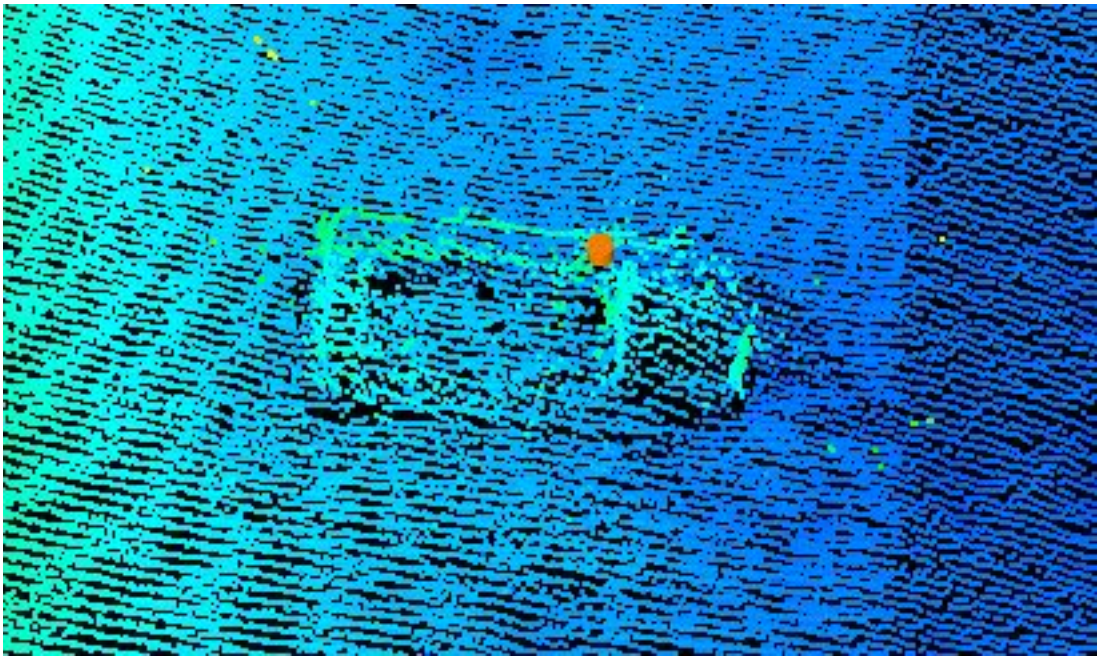


Figure 2.4.1

2.5) US 0000118234 00001

Survey Summary

Survey Position:	33° 46' 28.5" N, 118° 14' 51.4" W
Least Depth:	3.35 m (= 10.98 ft = 1.830 fm = 1 fm 4.98 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118234 00001(02260001CDDA0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new WRECK

Cartographically-Rounded Depth (Affected Charts):

11ft (18751_1, 18749_1)

1 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

3.3m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 3.346 m
	WATLEV - 3:always under water/submerged

Office note: Wreck is in an area of multiple wrecks and obstructions. Recommend charting area as foul ground.

Feature Images

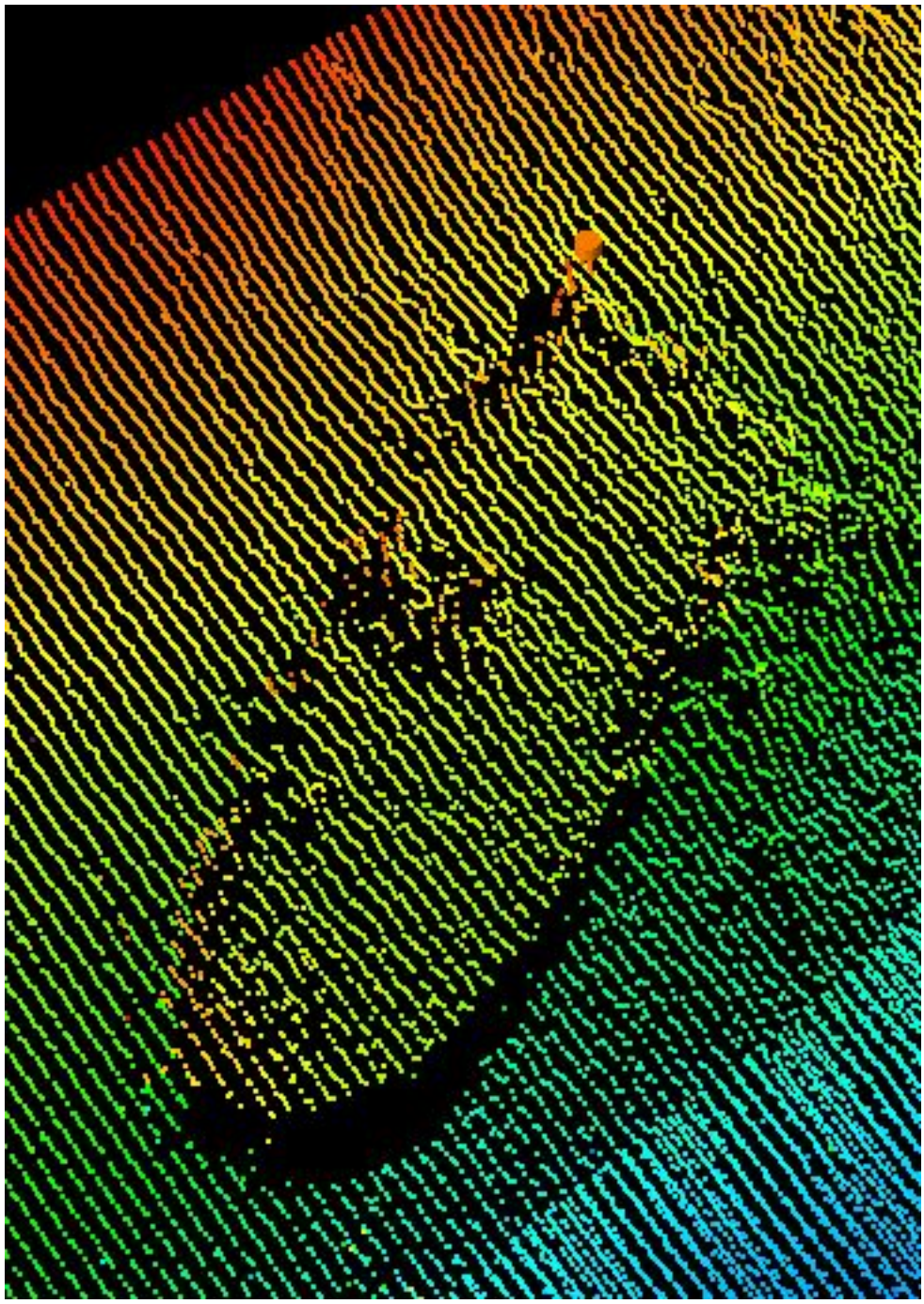


Figure 2.5.1

2.6) US 0000118235 00001

Survey Summary

Survey Position:	33° 46' 28.5" N, 118° 14' 51.0" W
Least Depth:	3.40 m (= 11.14 ft = 1.857 fm = 1 fm 5.14 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118235 00001(02260001CDDB0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

11ft (18751_1, 18749_1)

1 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

3.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 3.396 m
	WATLEV - 3:always under water/submerged

Office note: Wreck is in an area of multiple wrecks and obstructions. Recommend charting area as foul ground.

Feature Images

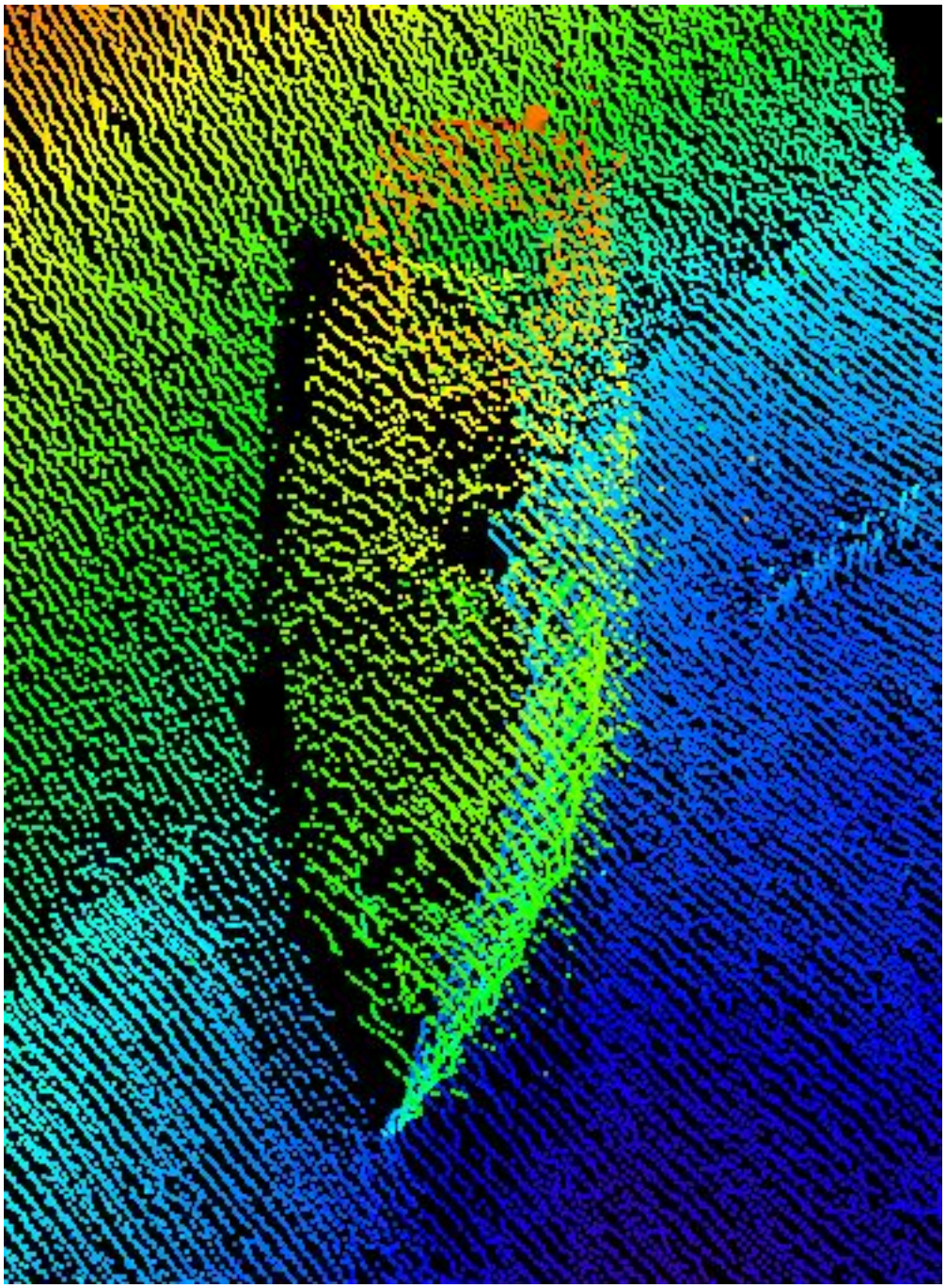


Figure 2.6.1

2.7) US 0000116787 00001

Survey Summary

Survey Position:	33° 46' 28.8" N, 118° 12' 47.5" W
Least Depth:	3.92 m (= 12.84 ft = 2.141 fm = 2 fm 0.84 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000116787 00001(02260001C8330001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New 20m wreck found with MBES

Hydrographer Recommendations

Chart new wreck.

Cartographically-Rounded Depth (Affected Charts):

13ft (18751_1, 18749_1)

2fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

3.9m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	QUASOU - 1:depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 3.915 m
	WATLEV - 3:always under water/submerged

Office Note: Concur. Wreck complied as sounding with foul ground.

Feature Images

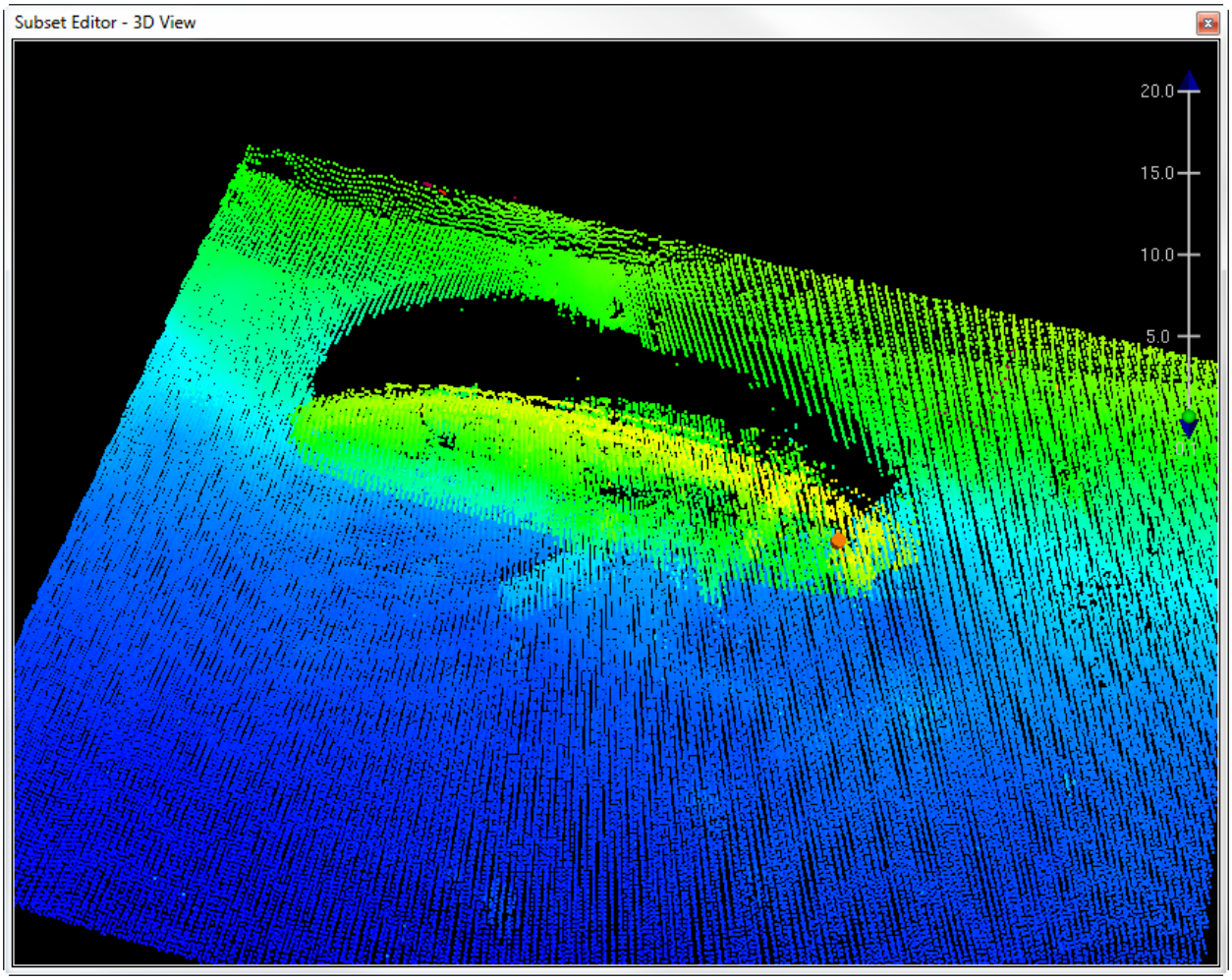


Figure 2.7.1

2.8) US 0000118236 00001

Survey Summary

Survey Position:	33° 46' 29.3" N, 118° 14' 49.6" W
Least Depth:	3.02 m (= 9.92 ft = 1.654 fm = 1 fm 3.92 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118236 00001(02260001CDDC0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck, on side

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

10ft (18751_1, 18749_1)

1 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

3.0m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 3.025 m
	WATLEV - 3:always under water/submerged

Office note: Wreck is in an area of multiple wrecks and obstructions. Recommend charting area as foul ground.

Feature Images

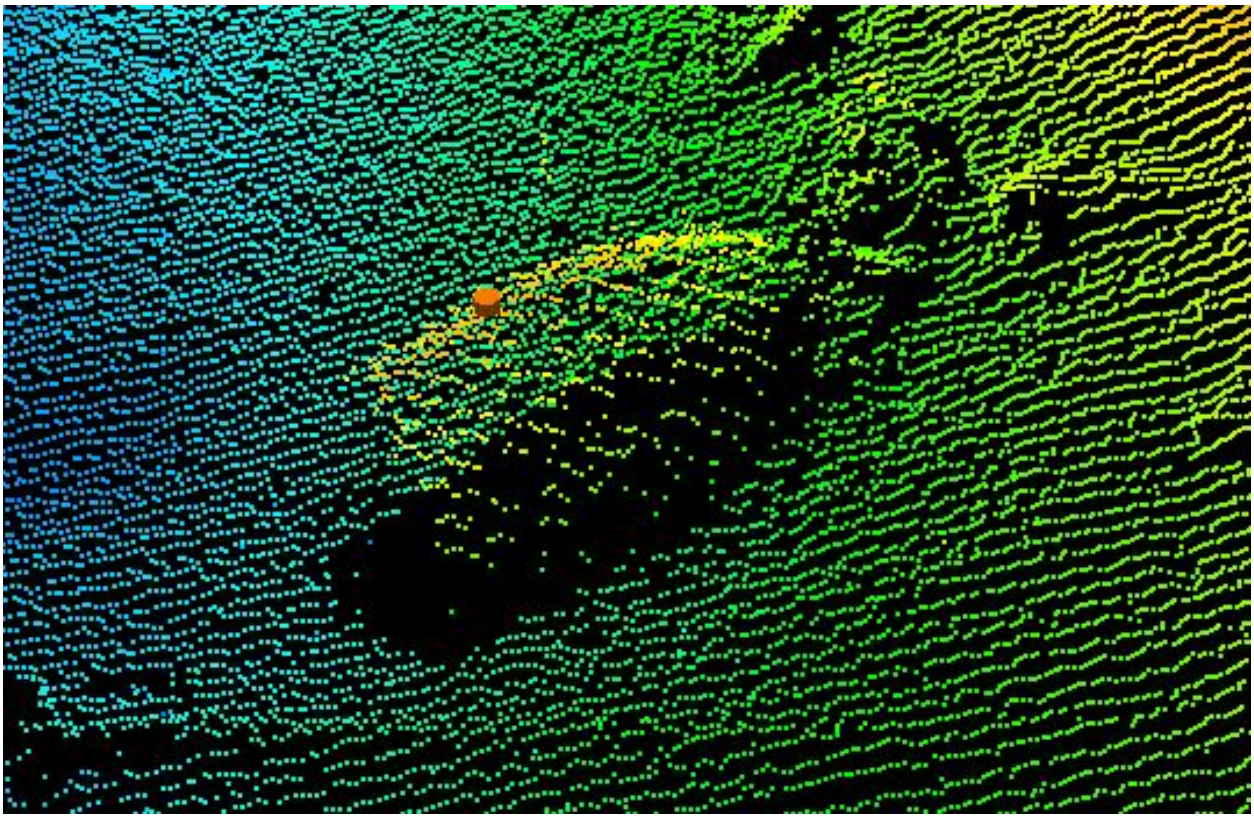


Figure 2.8.1

2.9) US 0000118237 00001

Survey Summary

Survey Position:	33° 46' 29.4" N, 118° 14' 49.2" W
Least Depth:	4.23 m (= 13.87 ft = 2.312 fm = 2 fm 1.87 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118237 00001(02260001CDDD0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

14ft (18751_1, 18749_1)

2 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

4.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 4.228 m
	WATLEV - 3:always under water/submerged

Office note: Wreck is in an area of multiple wrecks and obstructions. Recommend charting area as foul ground.

Feature Images

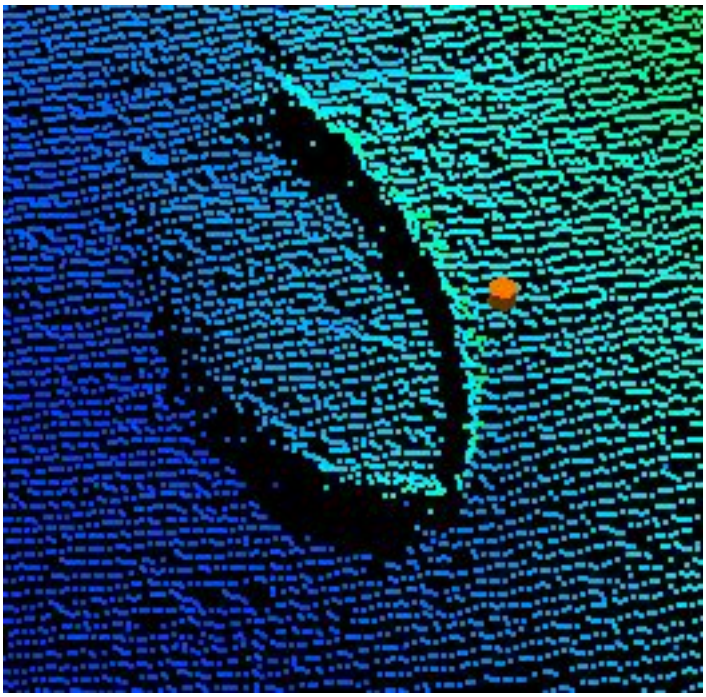


Figure 2.9.1

2.10) US 0000117668 00001

Survey Summary

Survey Position:	33° 42' 47.3" N, 118° 14' 17.9" W
Least Depth:	5.66 m (= 18.57 ft = 3.095 fm = 3 fm 0.57 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117668 00001(02260001CBA40001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: Chart new wreck.

Hydrographer Recommendations

New position and depth of charted wreck.

Cartographically-Rounded Depth (Affected Charts):

18ft (18751_1, 18749_1)

3fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

5.6m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 5.661 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

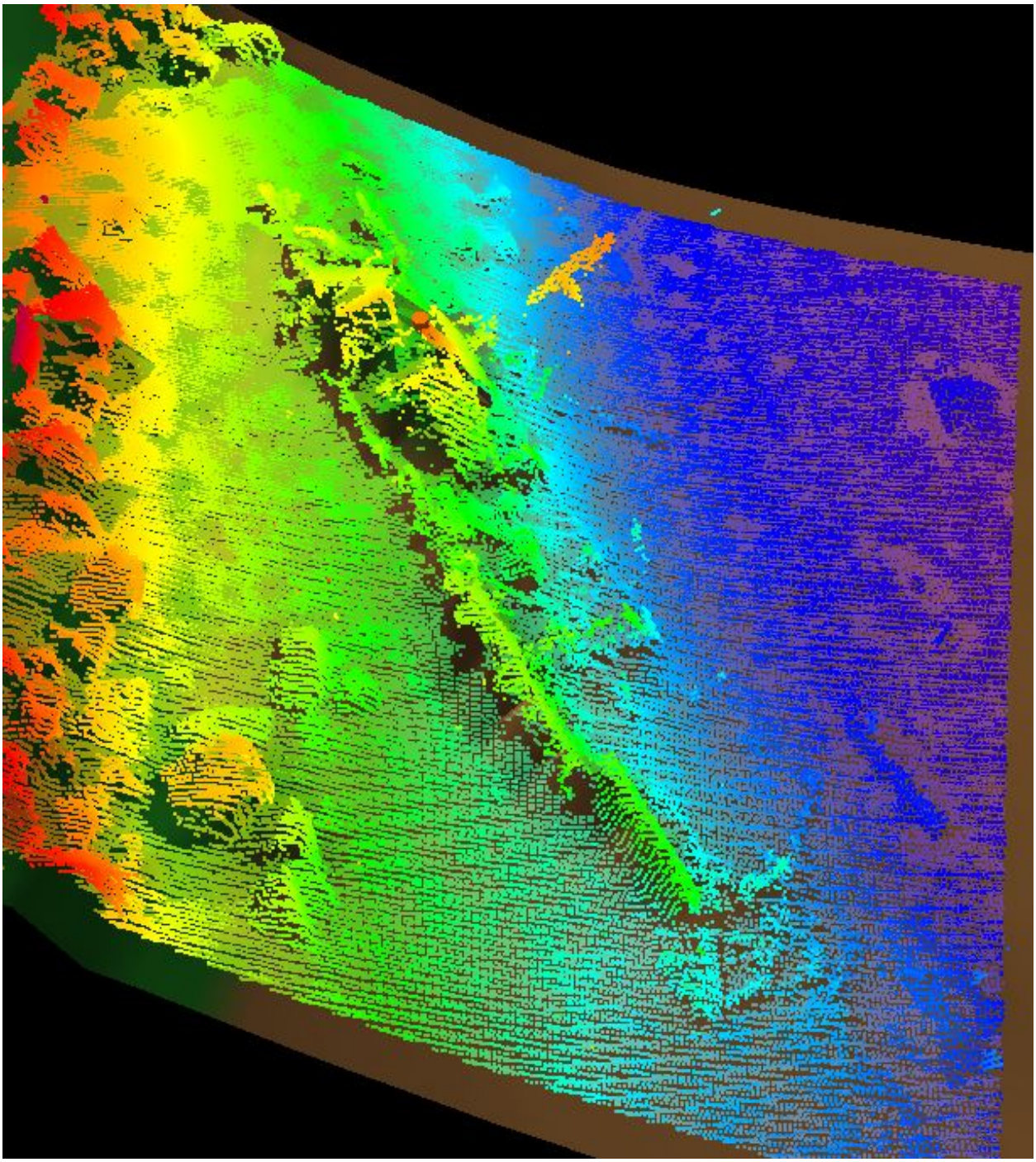


Figure 2.10.1

2.11) US 0000117981 00001

Survey Summary

Survey Position:	33° 43' 19.4" N, 118° 13' 58.7" W
Least Depth:	10.36 m (= 33.99 ft = 5.665 fm = 5 fm 3.99 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117981 00001(02260001CCDD0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New Wreck

Hydrographer Recommendations

Chart new wreck

Cartographically-Rounded Depth (Affected Charts):

34ft (18751_1, 18749_1)

5 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

10.3m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 10.361 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

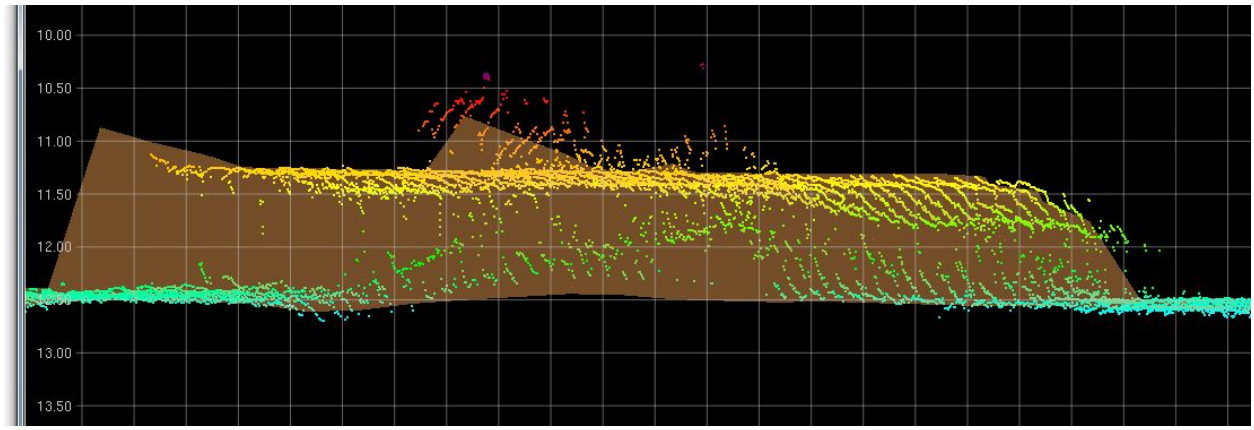


Figure 2.11.1

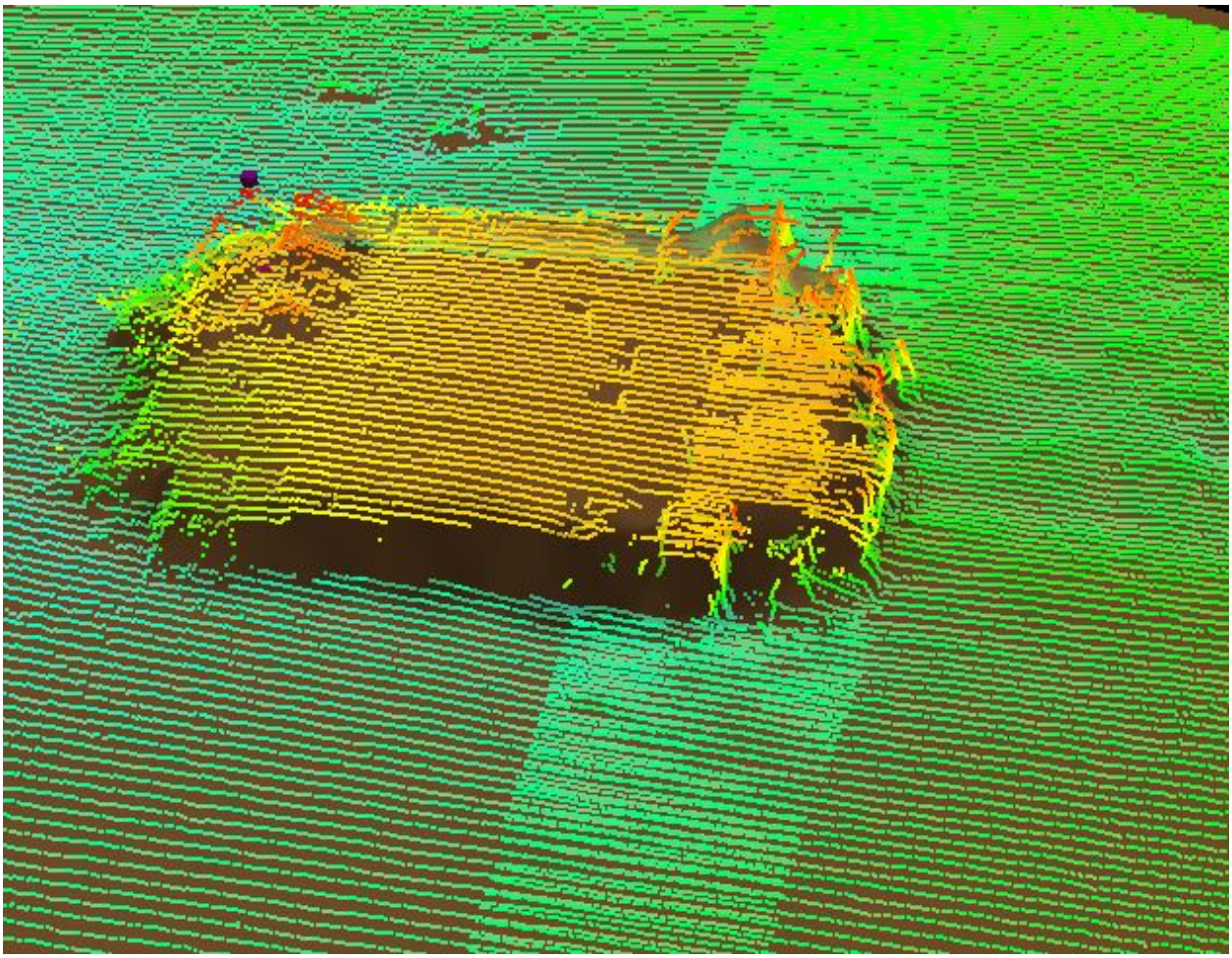


Figure 2.11.2

2.12) US 0000117630 00001

Survey Summary

Survey Position:	33° 43' 20.4" N, 118° 12' 37.9" W
Least Depth:	10.43 m (= 34.21 ft = 5.702 fm = 5 fm 4.21 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117630 00001(02260001CB7E0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New wreck observed with complete MBES

Hydrographer Recommendations

Chart new wreck.

Cartographically-Rounded Depth (Affected Charts):

34ft (18751_1, 18749_1)

5 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

10.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 10.427 m
	WATLEV - 3:always under water/submerged

Office Note: Concur. Chart wreck are least depth 33.993ft.

Feature Images

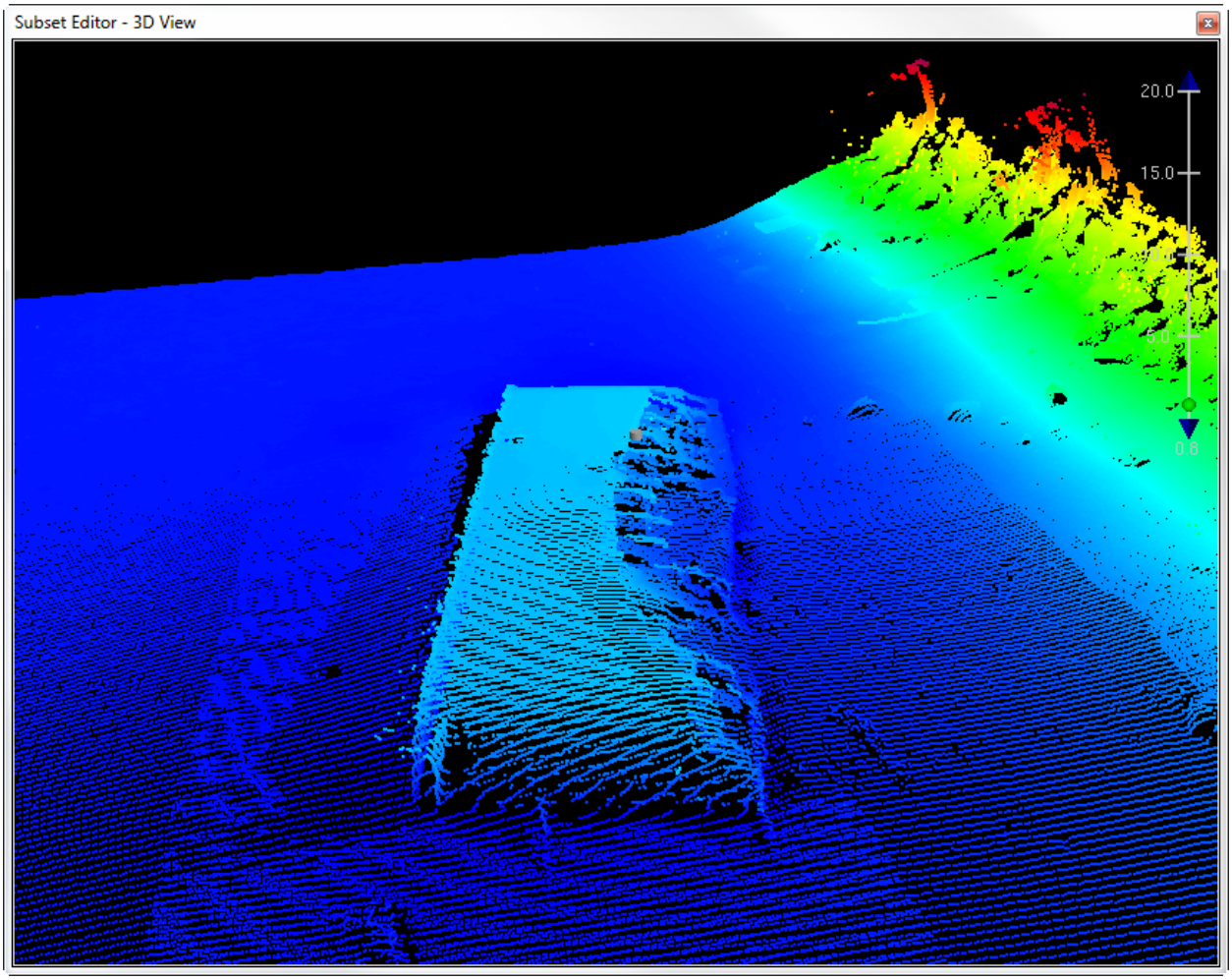


Figure 2.12.1

2.13) US 0000118078 00001

Survey Summary

Survey Position:	33° 43' 34.1" N, 118° 16' 32.4" W
Least Depth:	8.14 m (= 26.70 ft = 4.450 fm = 4 fm 2.70 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118078 00001(02260001CD3E0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: Uncharted wreck

Hydrographer Recommendations

Chart new wreck

Cartographically-Rounded Depth (Affected Charts):

26ft (18751_1, 18749_1)

4 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

8.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 8.138 m
	WATLEV - 3:always under water/submerged

Office Note: Concur. Compiled with an adjacent obstrucion within an obstruction area.

Feature Images

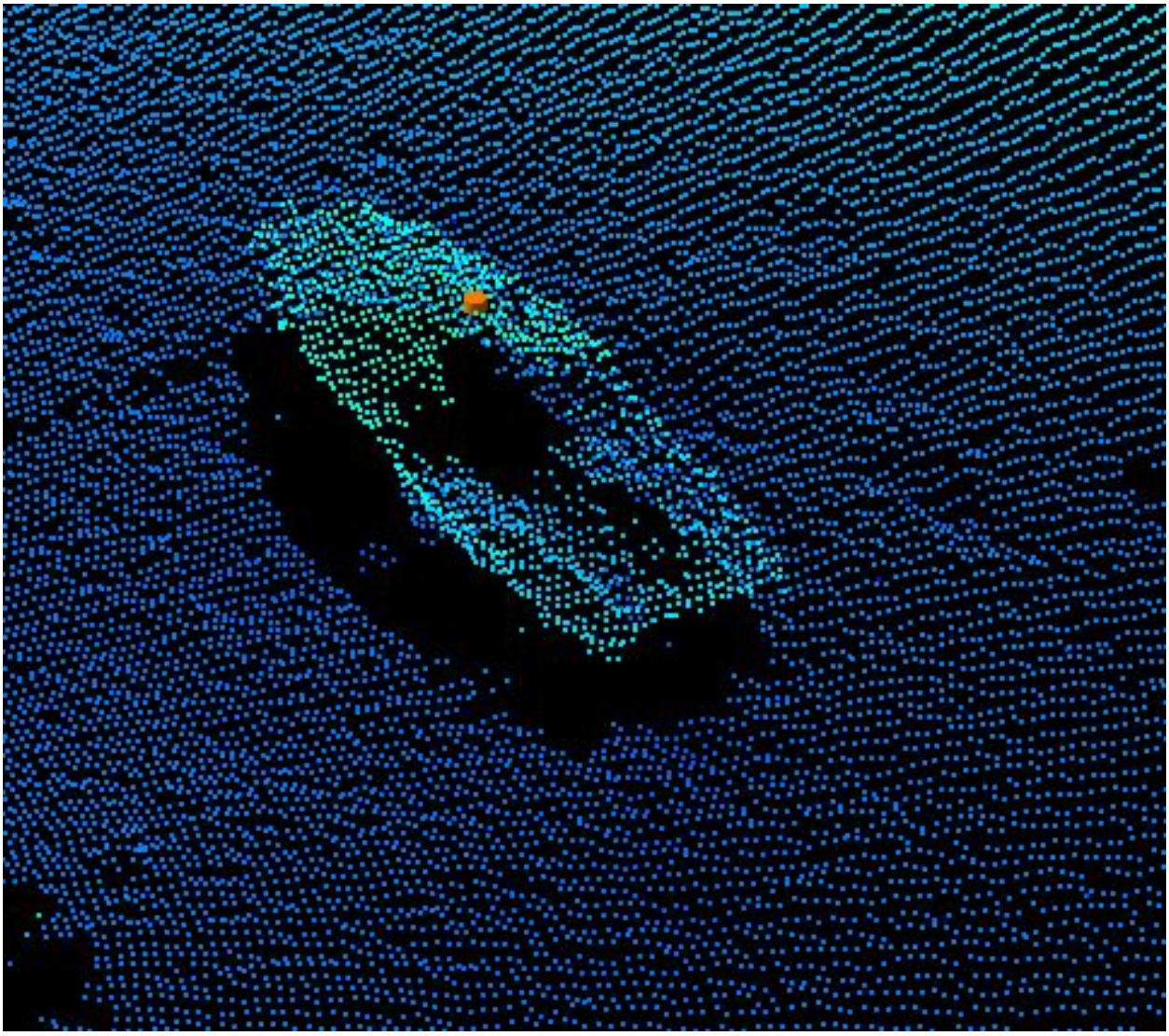


Figure 2.13.1

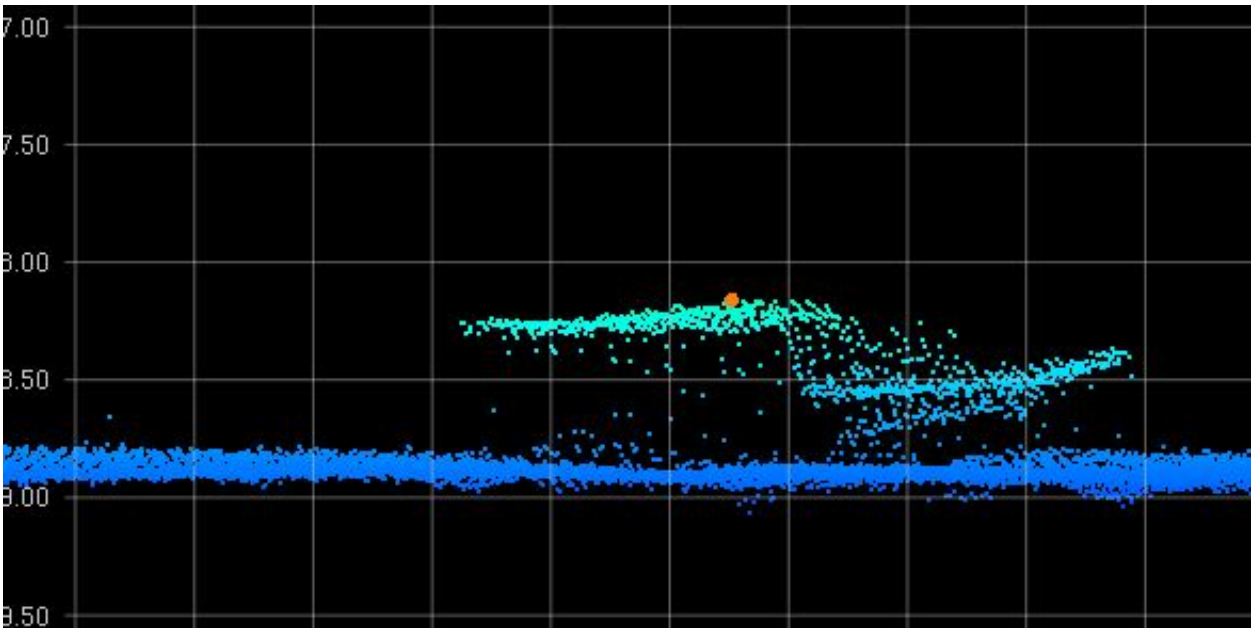


Figure 2.13.2

2.14) US 0000118393 00001

Survey Summary

Survey Position:	33° 43' 56.5" N, 118° 14' 18.8" W
Least Depth:	3.62 m (= 11.89 ft = 1.981 fm = 1 fm 5.89 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118393 00001(02260001CE790001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck has only been partially ensonified. A portion of unsonified exists and may contain a shoaler least depth than is in the data.

Hydrographer Recommendations

chart new WRECKS

Cartographically-Rounded Depth (Affected Charts):

12ft (18751_1, 18749_1)

2fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

3.6m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 2:shoaler than range of depth of the surrounding depth area
	QUASOU - 1:depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 3.623 m
	WATLEV - 3:always under water/submerged

Office Note: Concur with clarification, chart depth unknown.

Feature Images

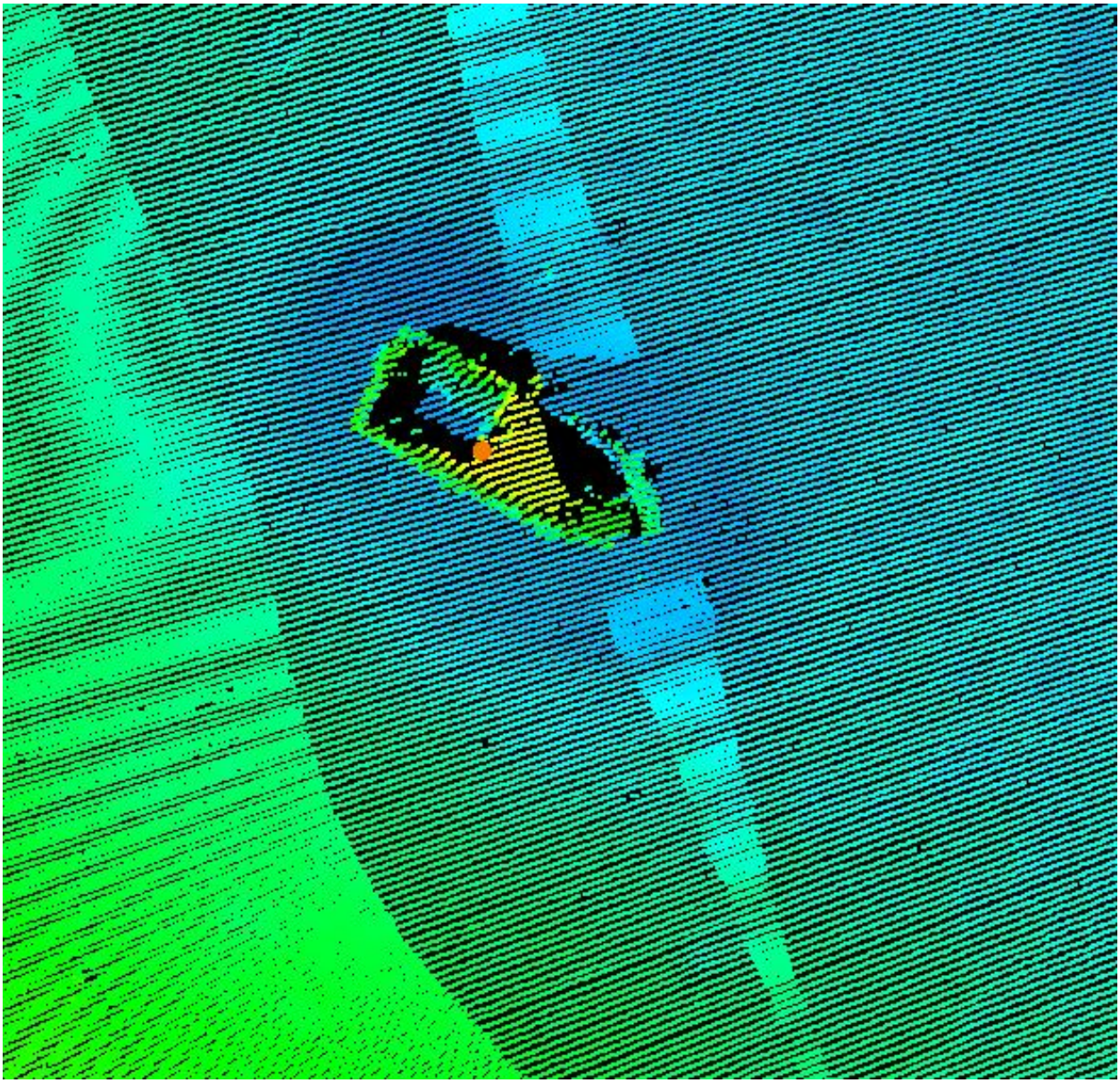


Figure 2.14.1

2.15) US 0000118395 00001

Survey Summary

Survey Position:	33° 44' 10.6" N, 118° 14' 25.8" W
Least Depth:	0.87 m (= 2.86 ft = 0.476 fm = 0 fm 2.86 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118395 00001(02260001CE7B0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

3ft (18751_1, 18749_1)

0 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

0.8m (501_1, 50_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
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 0.871 m
	WATLEV - 3:always under water/submerged

Office Note: Concur with clarification, chart depth unknown.

Feature Images

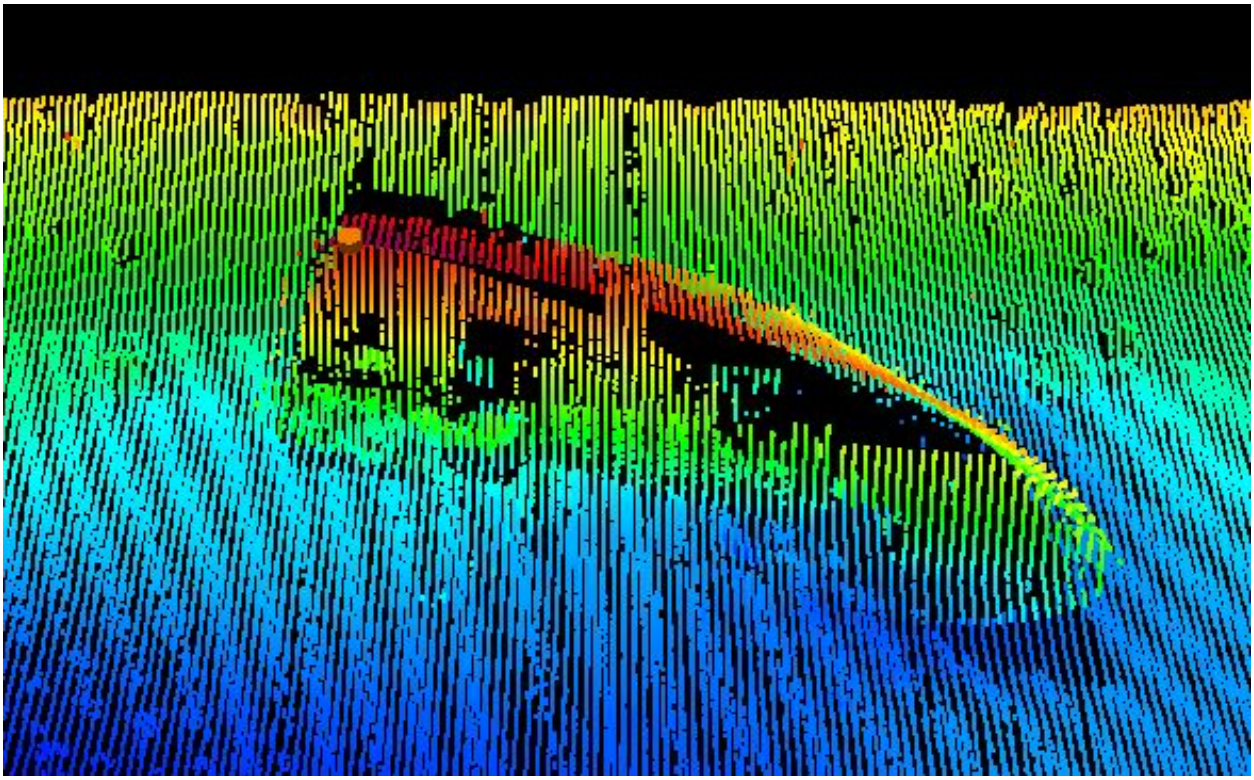


Figure 2.15.1

2.16) US 0000118024 00001

Survey Summary

Survey Position:	33° 44' 11.8" N, 118° 15' 55.2" W
Least Depth:	4.83 m (= 15.85 ft = 2.642 fm = 2 fm 3.85 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118024 00001(02260001CD080001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

16ft (18751_1, 18749_1)

2 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

4.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 4.831 m
	WATLEV - 3:always under water/submerged

Office Note: Feature is within a currently charted area of pier ruins. Retain charted ruins.

Feature Images

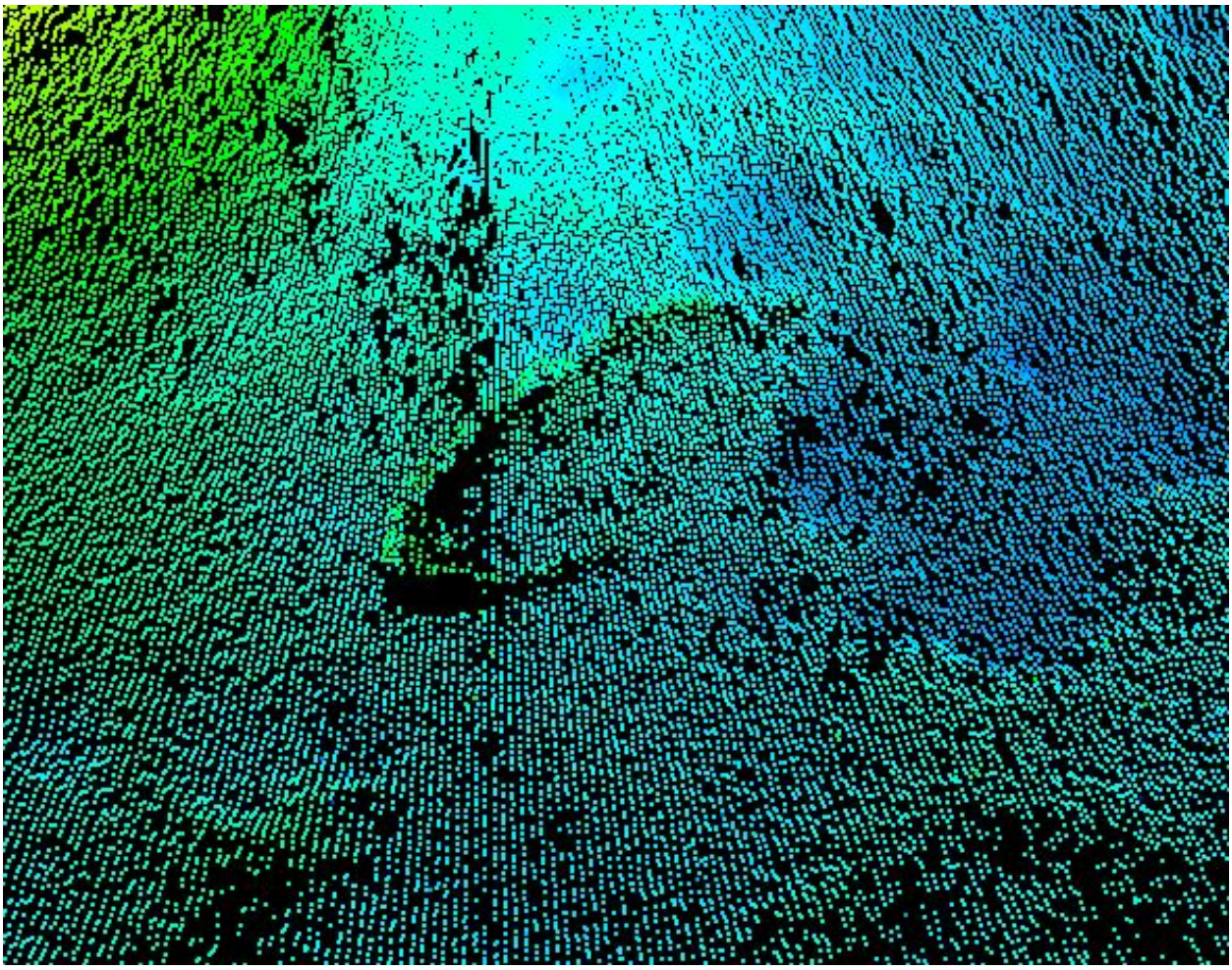


Figure 2.16.1

2.17) US 0000117641 00001

Survey Summary

Survey Position:	33° 44' 15.2" N, 118° 14' 21.0" W
Least Depth:	6.45 m (= 21.16 ft = 3.527 fm = 3 fm 3.16 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117641 00001(02260001CB890001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New wreck found with MBES

Hydrographer Recommendations

Chart new wreck

Cartographically-Rounded Depth (Affected Charts):

21ft (18751_1, 18749_1)

3 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

6.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 6.450 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

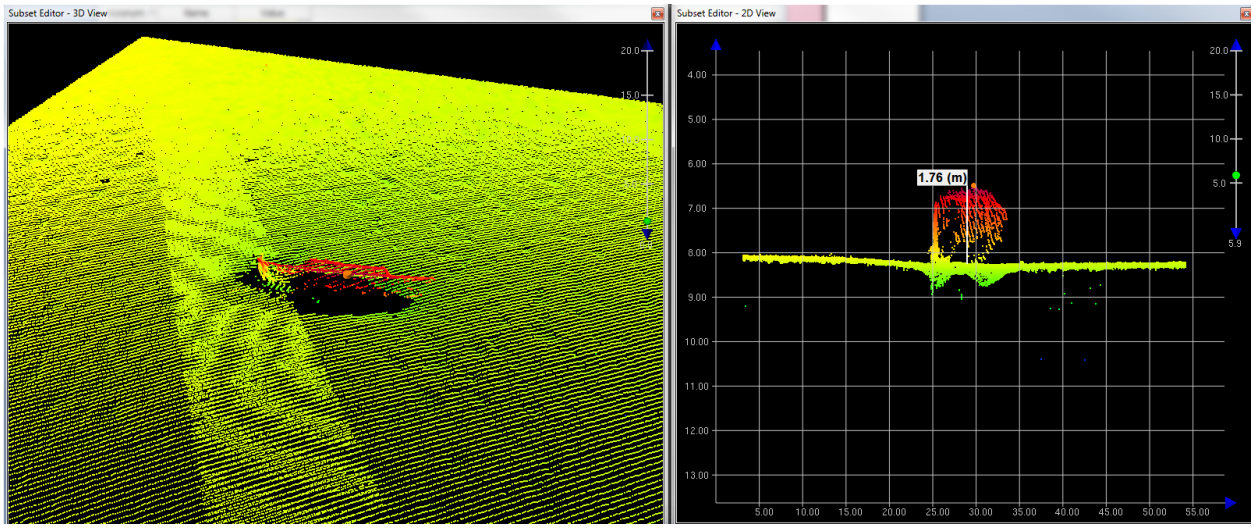


Figure 2.17.1

2.18) US 0000118092 00001

Survey Summary

Survey Position:	33° 44' 15.7" N, 118° 16' 41.5" W
Least Depth:	8.19 m (= 26.86 ft = 4.477 fm = 4 fm 2.86 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118092 00001(02260001CD4C0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new WRECK

Cartographically-Rounded Depth (Affected Charts):

27ft (18751_1, 18749_1)

4 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

8.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 8.188 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

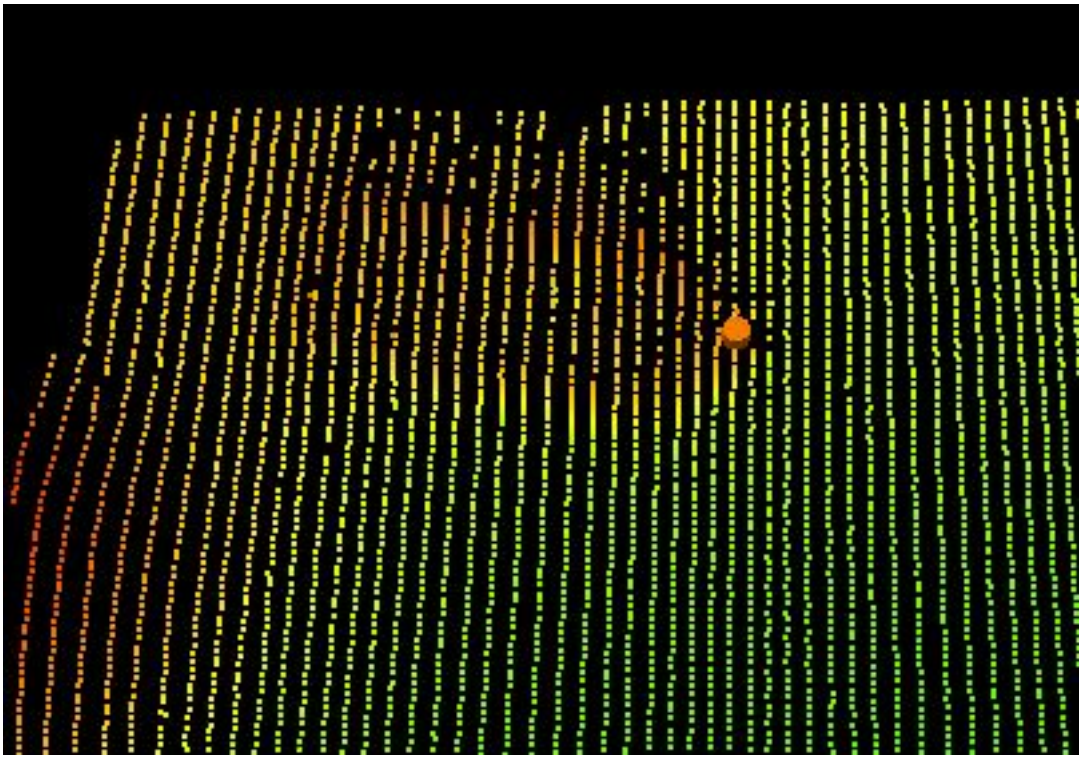


Figure 2.18.1

2.19) US 0000118390 00001

Survey Summary

Survey Position:	33° 44' 16.6" N, 118° 14' 18.0" W
Least Depth:	7.85 m (= 25.77 ft = 4.295 fm = 4 fm 1.77 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118390 00001(02260001CE760001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

26ft (18751_1, 18749_1)

4 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

7.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 7.854 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

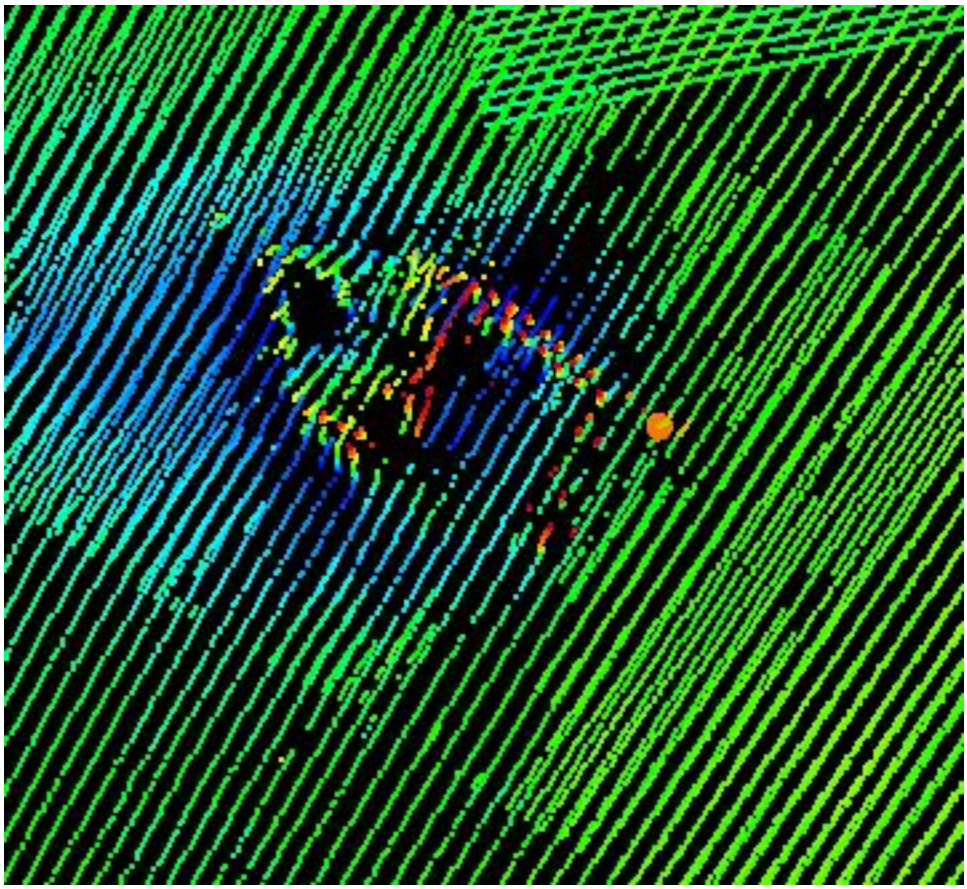


Figure 2.19.1

2.20) US 0000118388 00001

Survey Summary

Survey Position:	33° 44' 20.7" N, 118° 14' 23.9" W
Least Depth:	5.06 m (= 16.61 ft = 2.769 fm = 2 fm 4.61 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118388 00001(02260001CE740001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: AWOIS 52887. Updated position and depth

Hydrographer Recommendations

chart existing wreck in this position

Cartographically-Rounded Depth (Affected Charts):

16ft (18751_1, 18749_1)

2 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

5.0m (501_1, 50_1)

S-57 Data

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

INFORM - CL1475/84--8/29/84 USCG AUX: SUNKEN BOAT WITH ITS HELM AND CONNING TOWER PARTIALLY EXPOSED. TWO WHITE LIGHTS ARE AFFIXED TO THE ANTENAS. IT IS IN APPROXIMATLEY 22 FEET OF WATER. CURRENT POSITION IS LAT 33-44-23.00N LONG 118-14-20.00W (NAD 27). LNM8/85--2/685 11TH CGD: THE SAN PEDRO BAY WRECK LIGHTED BUOY WR2 HAS BEEN PERMANENTLY ESTABLISHED IN APPROXIMATE POSITION LAT 33-44-21.00N LONG 118-14-20.40W (NAD 83) IN 18 FEET OF WATER. THIS IS A RED BUOY THAT SHOWS A QUICK FLASHING RED LIGHT WITH NOMINAL RANGE OF 3 MILES. THE MINIMUM CLEARENCE OVER THE WRECK MARKED BY THIS BUOY IS 10 FEET M.L.L.W.. THE SAN PEDRO BAY TEMPORARY LIGHTED WRECK BUOY WR ADVISED TO LOCAL NOTICE TO MARINERS 7/85 IN APPROXIMATE POSITION LAT 33-44-21.00N LONG 118-14-20.00W (NAD 83) HAS BEEN DISCONTINUED. (ENTERED 11/01 BY PSH)
F00484/01-02--OPR-L418-NRB; Divers encountered poor visibility and could not identify the wreckage; however the diver least depth gauge recorded 15.5 feet at the high point at the above position. Hydrographic development defined the limits of the wreckage which is 28 meters long and oriented at approximately 73 degrees. Chart wreck with depth of 15 feet centered at Latitude 33/44/20.864N Longitude 118/14/23.6724W. Updated 4/4 MCR

QUASOU - 6:least depth known

SORDAT - 20131103

SORIND - US,US,graph,H12617

TECSOU - 3:found by multi-beam

VALSOU - 5.064 m

WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

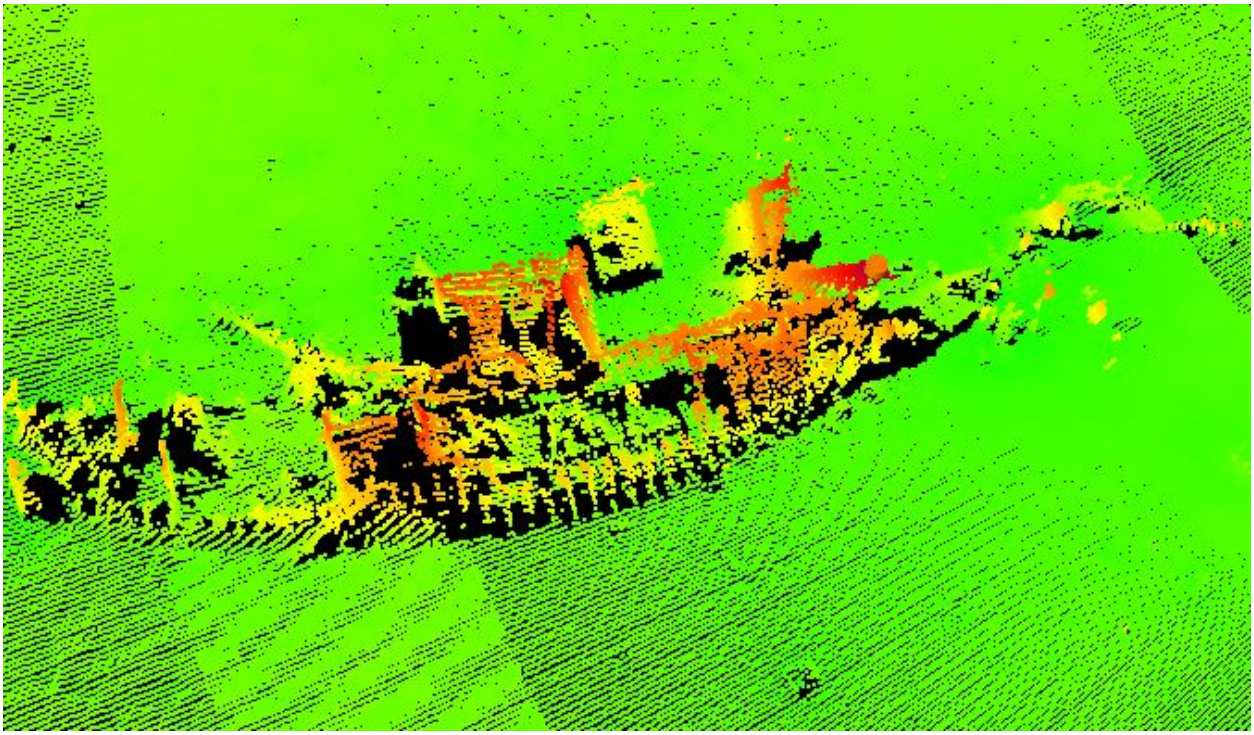


Figure 2.20.1

2.21) US 0000117658 00001

Survey Summary

Survey Position:	33° 44' 21.3" N, 118° 13' 56.6" W
Least Depth:	11.86 m (= 38.91 ft = 6.485 fm = 6 fm 2.91 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117658 00001(02260001CB9A0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New wreck observed with complete MBES

Hydrographer Recommendations

Chart new wreck

Cartographically-Rounded Depth (Affected Charts):

39ft (18751_1, 18749_1)

6 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

11.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 11.860 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

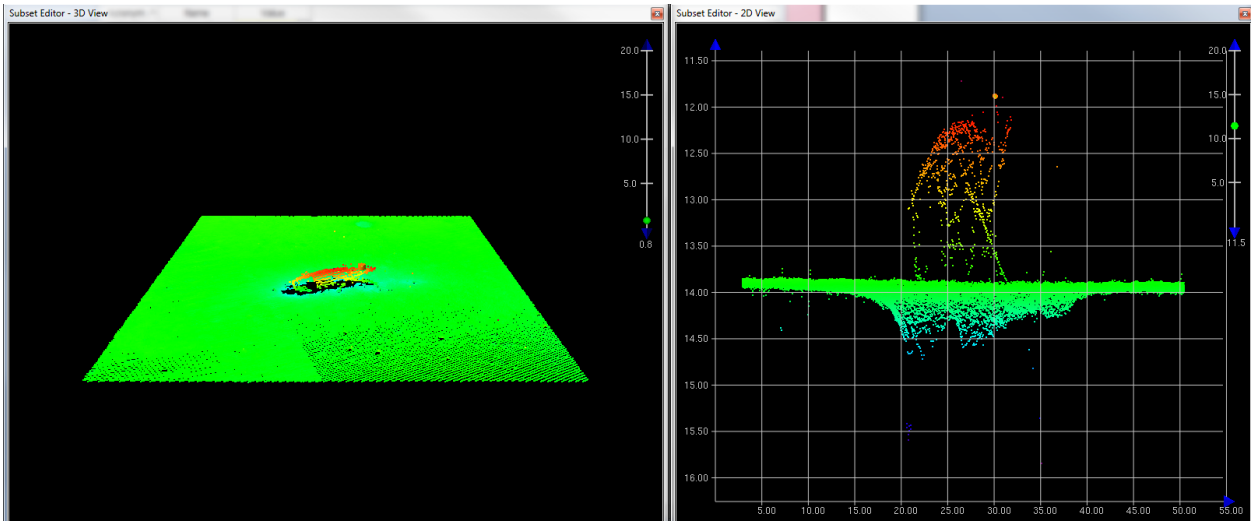


Figure 2.21.1

2.22) US 0000118385 00001

Survey Summary

Survey Position:	33° 44' 25.5" N, 118° 13' 46.7" W
Least Depth:	7.10 m (= 23.30 ft = 3.883 fm = 3 fm 5.30 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118385 00001(02260001CE710001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

23ft (18751_1, 18749_1)

3 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

7.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 2:dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 7.102 m
	WATLEV - 3:always under water/submerged

Office Note: Not navigationaly significant given location on slope and neighboring features.

Feature Images

Figure 2.22.1

2.23) US 0000117625 00001

Survey Summary

Survey Position:	33° 44' 50.6" N, 118° 12' 46.4" W
Least Depth:	9.70 m (= 31.82 ft = 5.304 fm = 5 fm 1.82 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117625 00001(02260001CB790001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: Possible wreck observed with complete MBES

Hydrographer Recommendations

chart new wreck.

Cartographically-Rounded Depth (Affected Charts):

32ft (18751_1, 18749_1)

5 ¼fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

9.7m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 9.700 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

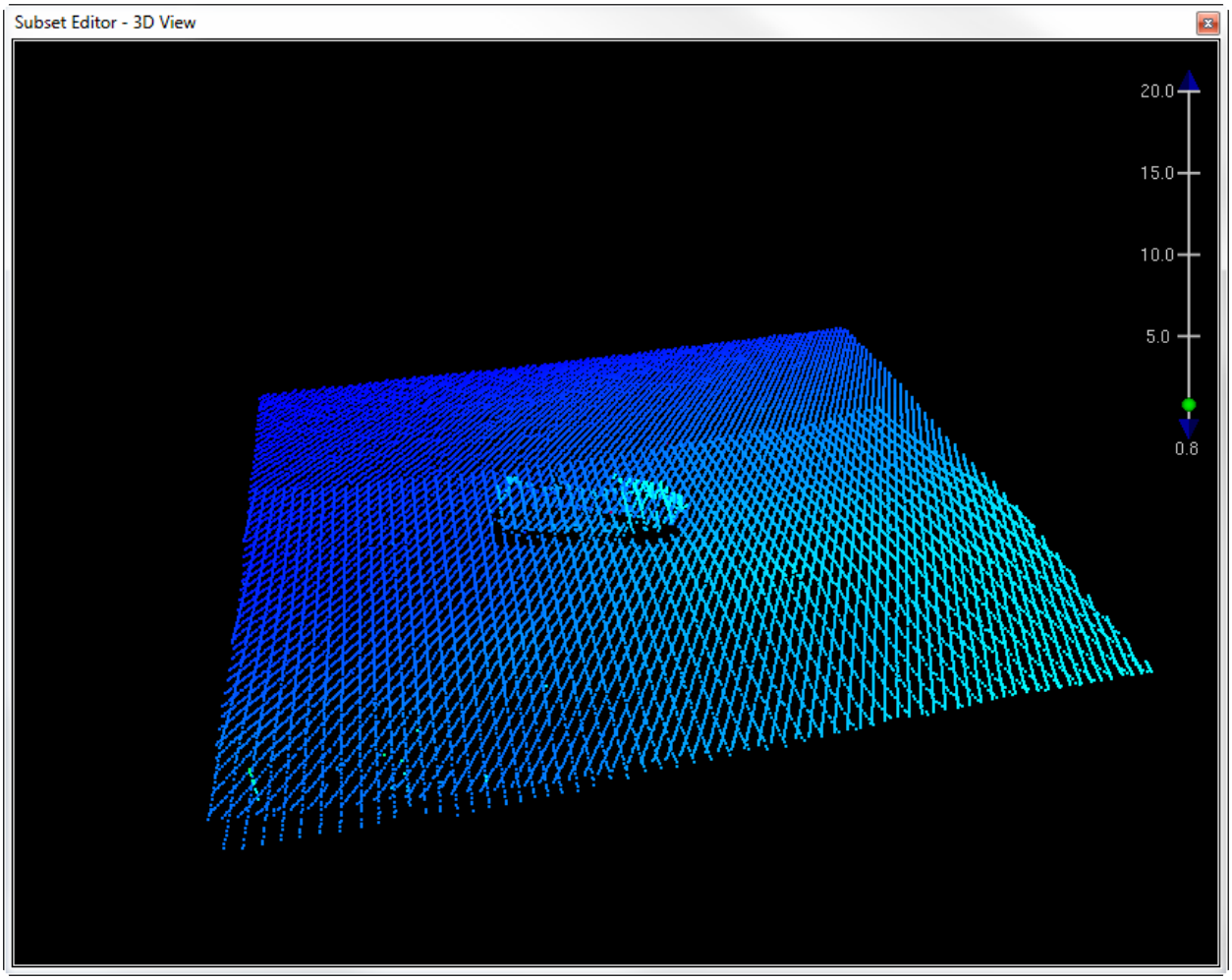


Figure 2.23.1

2.24) US 0000117336 00001

Survey Summary

Survey Position:	33° 44' 55.5" N, 118° 12' 55.4" W
Least Depth:	2.84 m (= 9.31 ft = 1.551 fm = 1 fm 3.31 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117336 00001(02260001CA580001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New wreck found by MBES

Hydrographer Recommendations

Chart new wreck

Cartographically-Rounded Depth (Affected Charts):

9ft (18751_1, 18749_1)

1 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

2.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 5:wreck showing any portion of hull or superstructure
	QUASOU - 1:depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 2.837 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

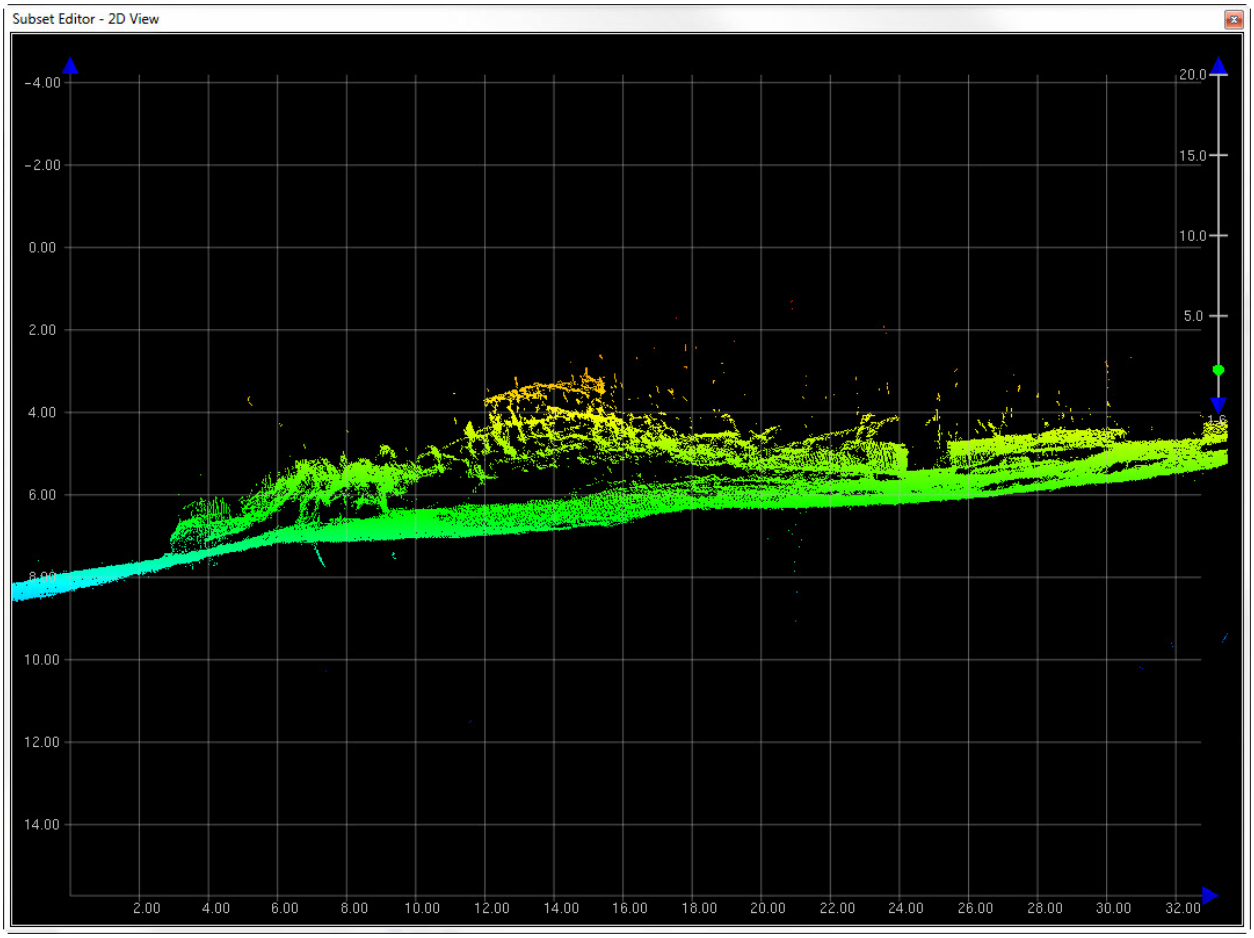


Figure 2.24.1

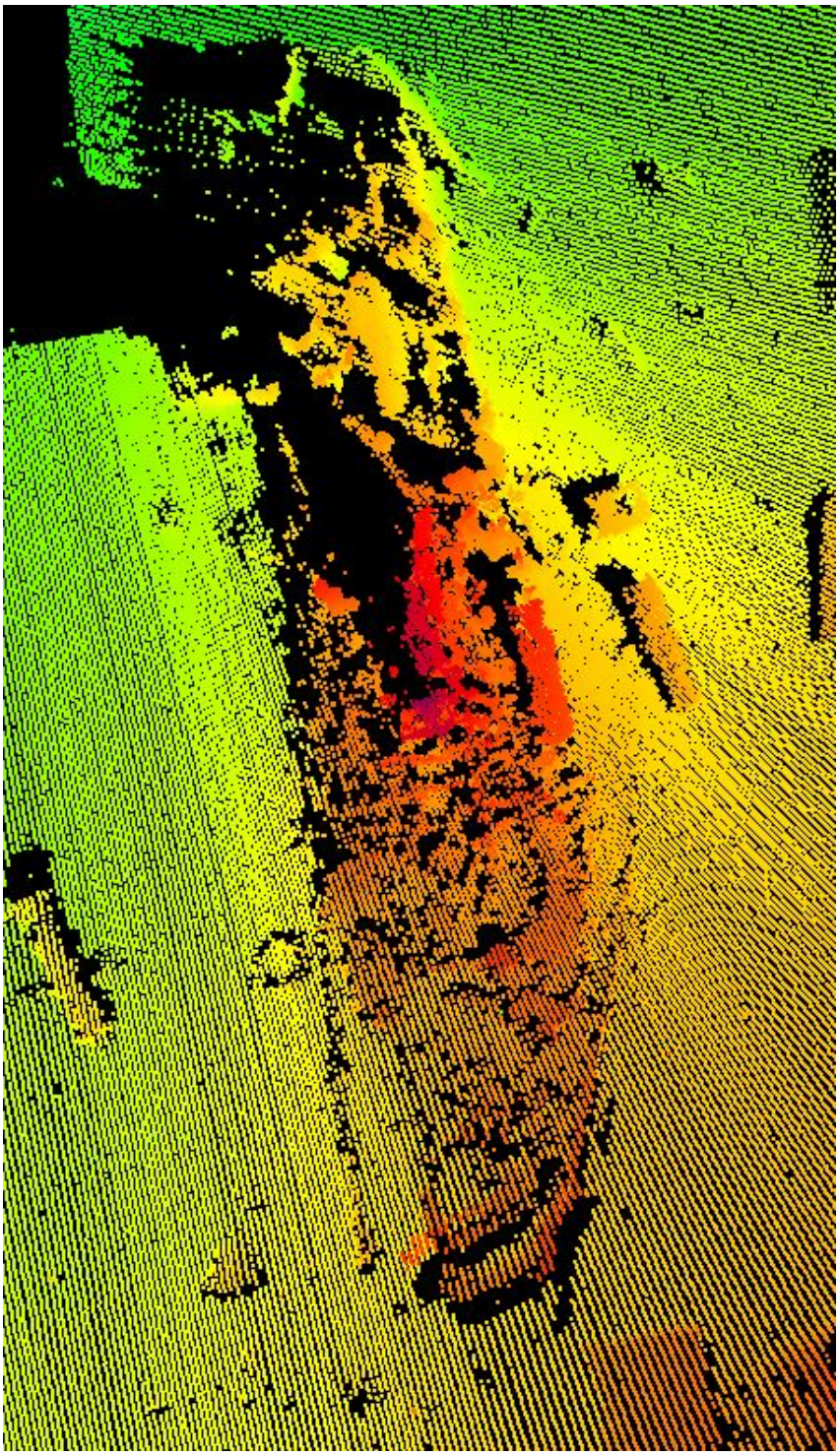


Figure 2.24.2

2.25) US 0000118124 00001

Survey Summary

Survey Position:	33° 45' 48.6" N, 118° 15' 26.0" W
Least Depth:	3.98 m (= 13.05 ft = 2.175 fm = 2 fm 1.05 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118124 00001(02260001CD6C0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New wreck

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

13ft (18751_1, 18749_1)

2fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

4.0m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 3.977 m
	WATLEV - 3:always under water/submerged

Office Note: Concur. May be associated with AWOIS 50960

Feature Images

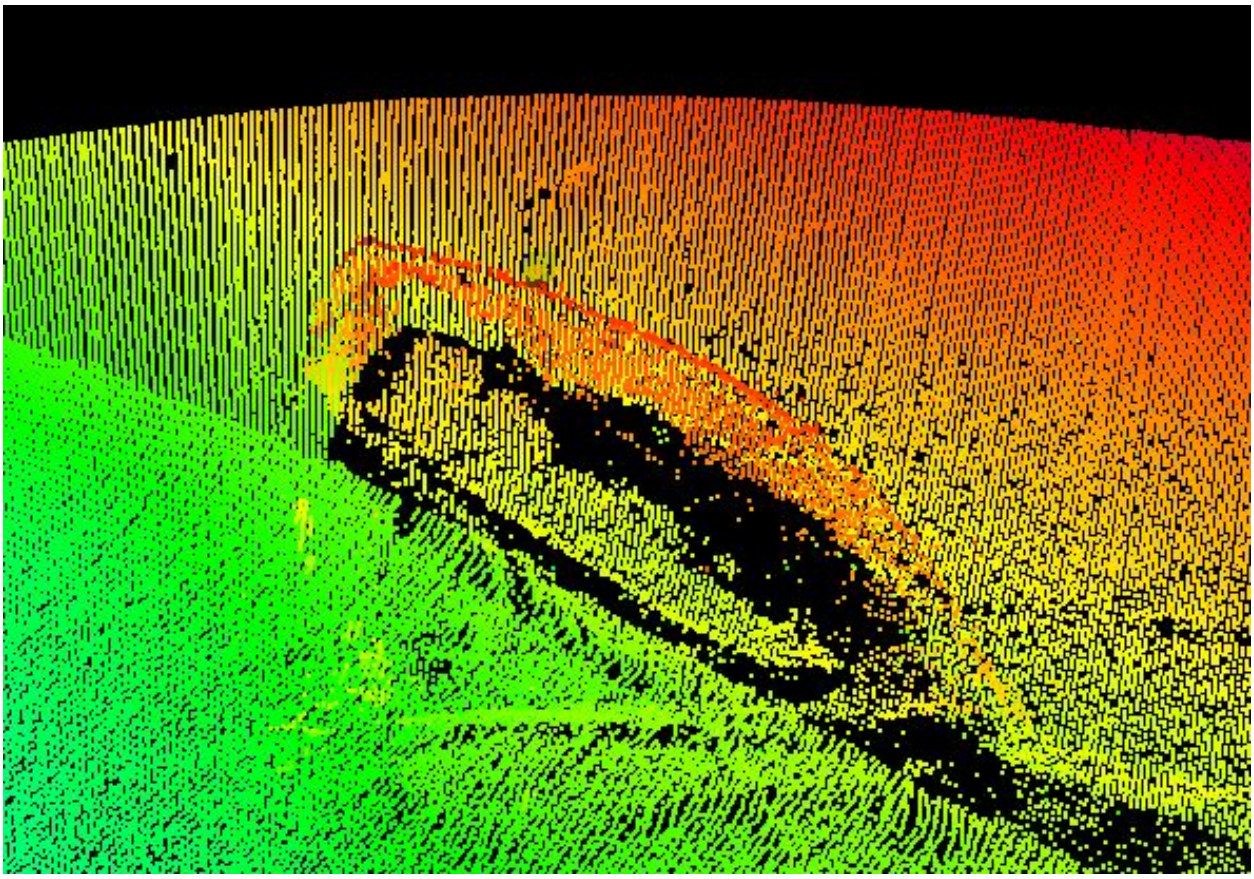


Figure 2.25.1

2.26) US 0000118126 00001

Survey Summary

Survey Position:	33° 45' 50.1" N, 118° 14' 58.2" W
Least Depth:	12.49 m (= 40.98 ft = 6.831 fm = 6 fm 4.98 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118126 00001(02260001CD6E0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New Wreck found in MBES

Hydrographer Recommendations

chart new WRECK

Cartographically-Rounded Depth (Affected Charts):

41ft (18751_1, 18749_1)

6 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

12.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 12.492 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

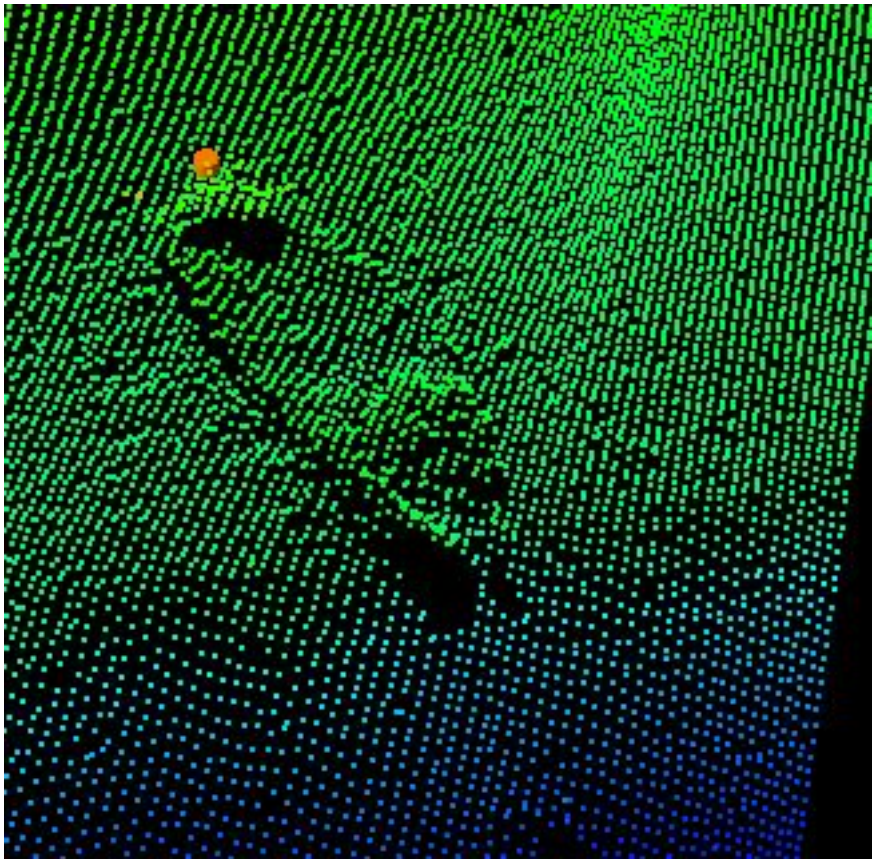


Figure 2.26.1

2.27) US 0000118240 00001

Survey Summary

Survey Position:	33° 45' 52.9" N, 118° 13' 19.0" W
Least Depth:	1.96 m (= 6.42 ft = 1.070 fm = 1 fm 0.42 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118240 00001(02260001CDE00001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: Very large subsurface ruined structure. Least depth not ensured with MBES, there is a section not ensonified.

Hydrographer Recommendations

chart new OBSTRN

Cartographically-Rounded Depth (Affected Charts):

6ft (18751_1, 18749_1)

1fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

1.9m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 1:depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 1.956 m
	WATLEV - 3:always under water/submerged

Office note: Charting area as obstruction, least depth unknown.

Feature Images

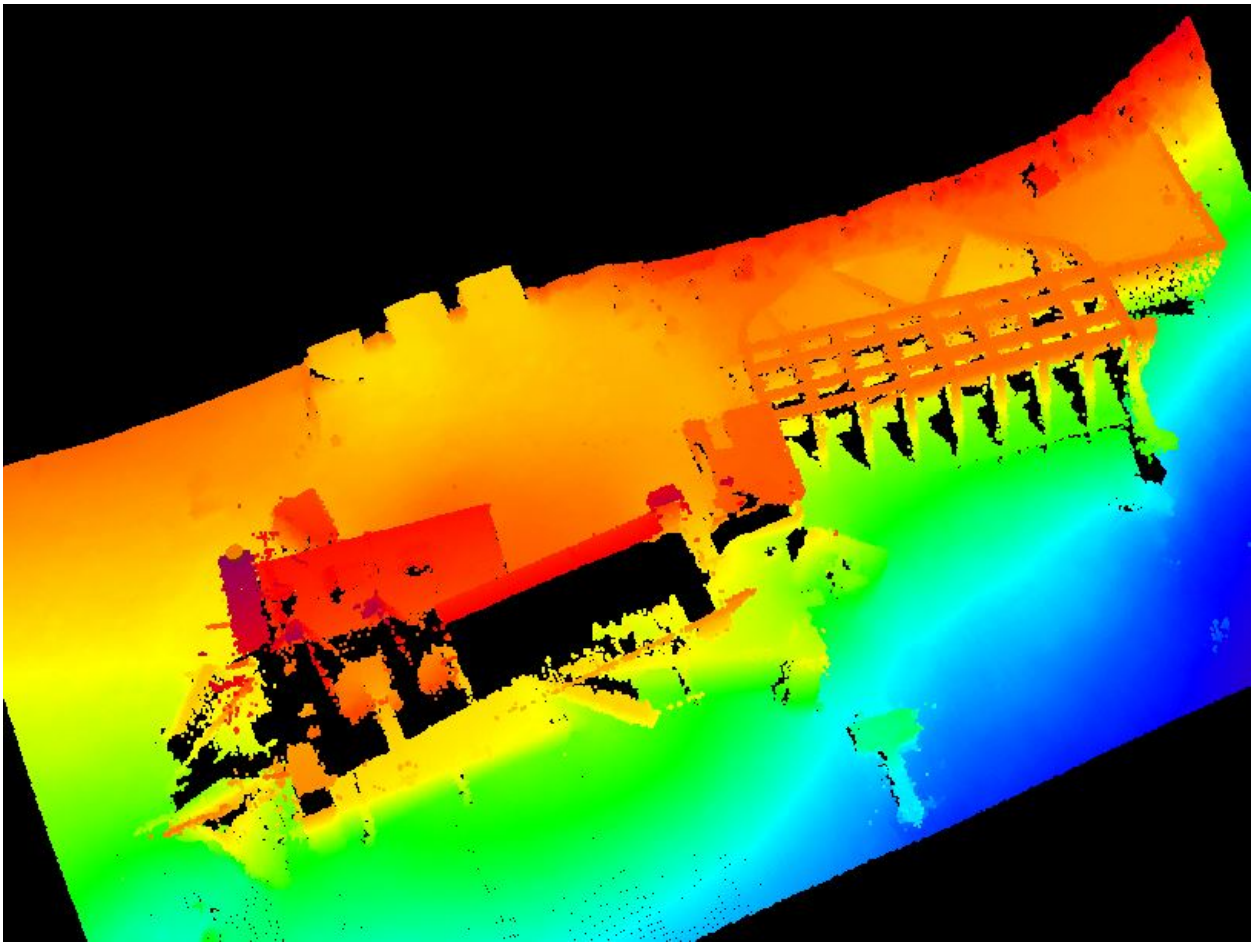


Figure 2.27.1

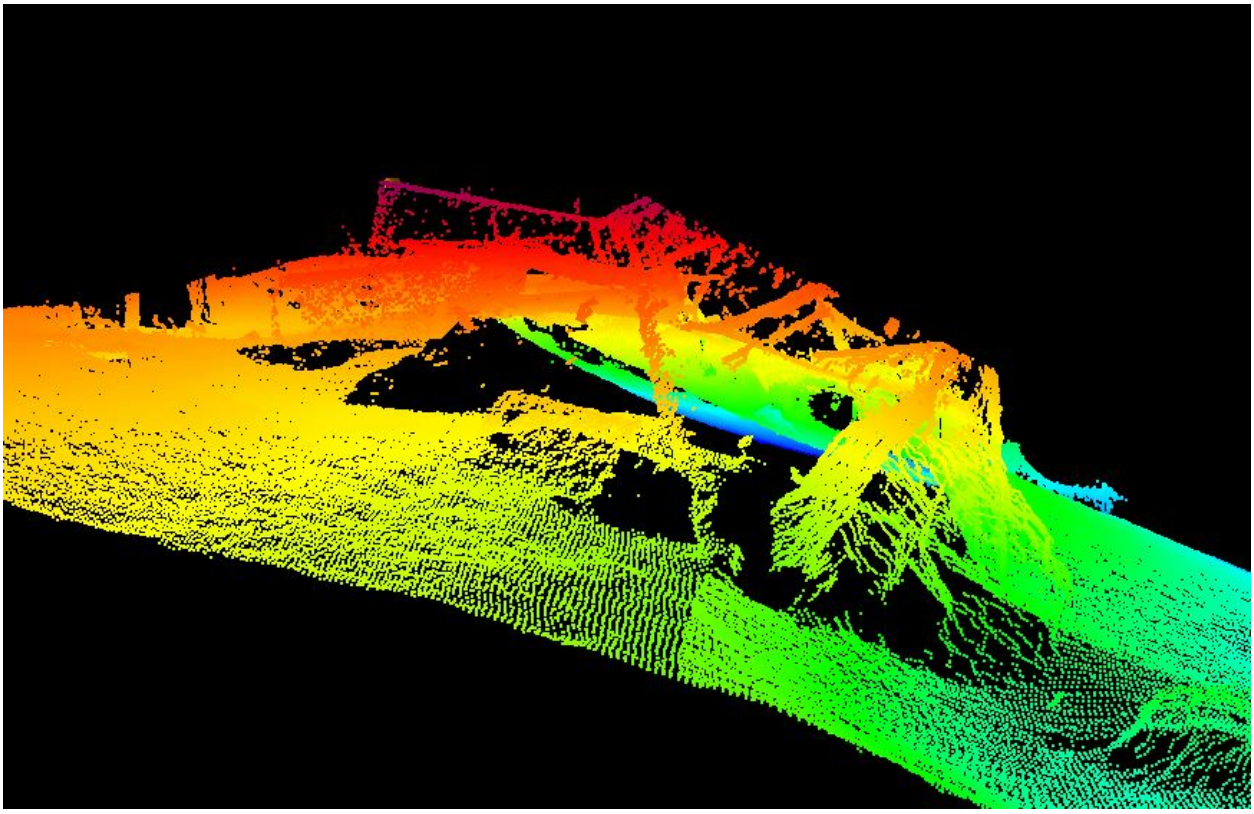


Figure 2.27.2

2.28) US 0000117634 00001

Survey Summary

Survey Position:	33° 45' 54.6" N, 118° 14' 46.1" W
Least Depth:	8.38 m (= 27.48 ft = 4.580 fm = 4 fm 3.48 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117634 00001(02260001CB820001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: New wreck found with MBES

Hydrographer Recommendations

Chart new wreck

Cartographically-Rounded Depth (Affected Charts):

27ft (18751_1, 18749_1)

4 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

8.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 8.376 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

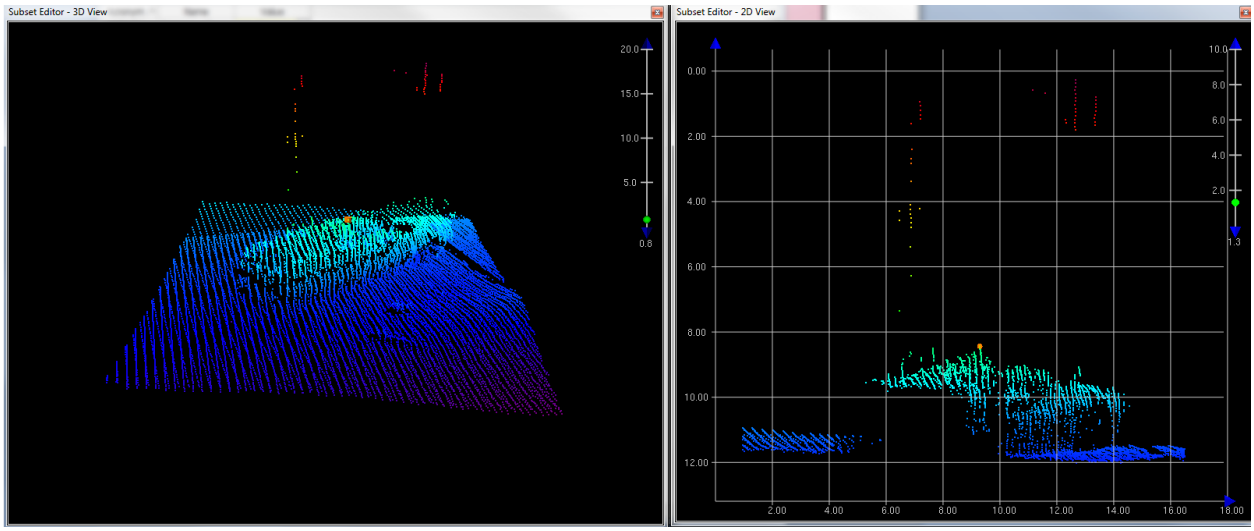


Figure 2.28.1

2.29) US 0000118129 00001

Survey Summary

Survey Position:	33° 45' 55.8" N, 118° 14' 40.5" W
Least Depth:	12.09 m (= 39.66 ft = 6.609 fm = 6 fm 3.66 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118129 00001(02260001CD710001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: new wreck found in MBES

Hydrographer Recommendations

charte new wreck

Cartographically-Rounded Depth (Affected Charts):

39ft (18751_1, 18749_1)

6 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

12.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 12.087 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

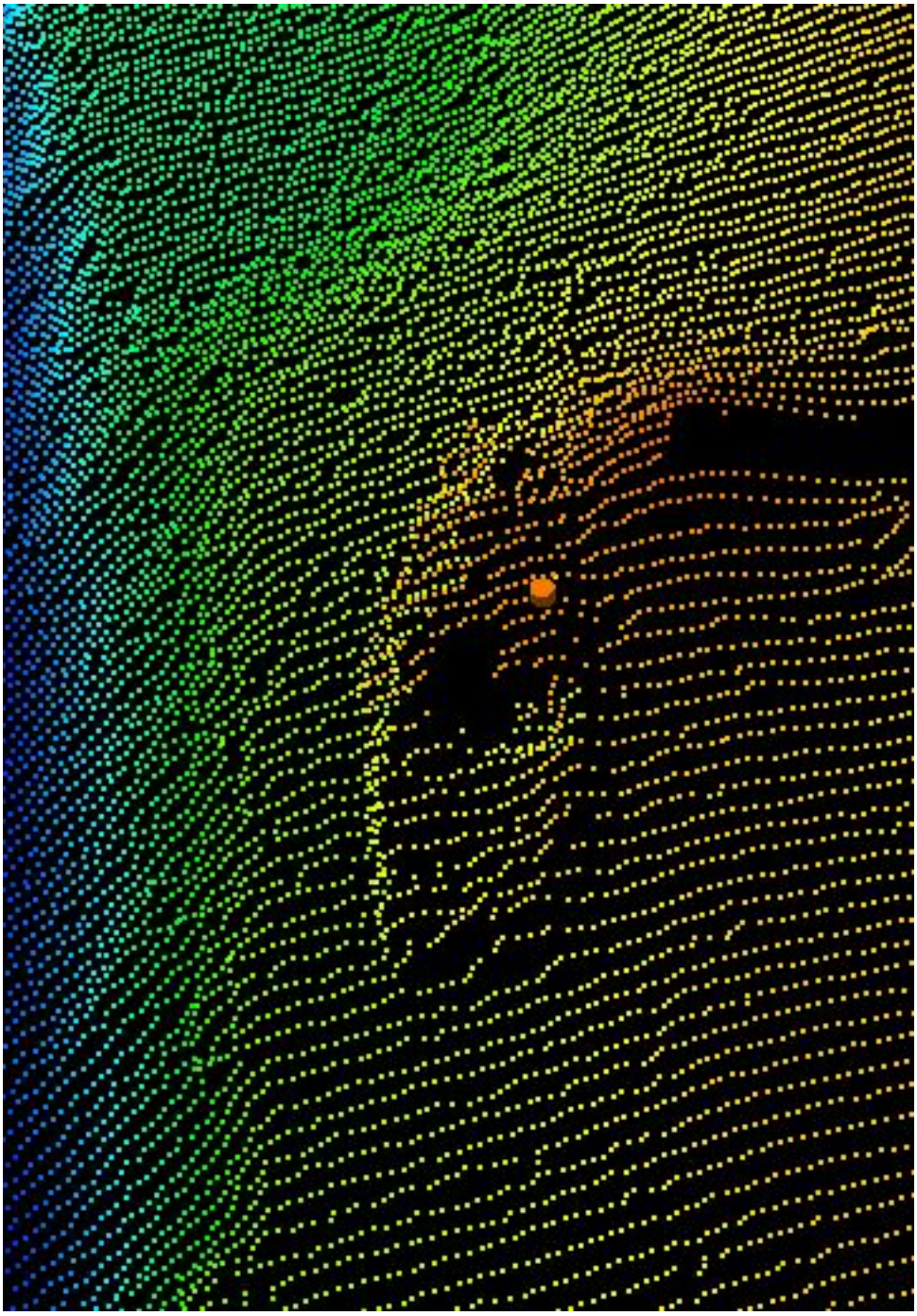


Figure 2.29.1

2.30) US 0000118136 00001

Survey Summary

Survey Position:	33° 45' 56.8" N, 118° 14' 13.5" W
Least Depth:	10.48 m (= 34.39 ft = 5.732 fm = 5 fm 4.39 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118136 00001(02260001CD780001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: new wreck

Hydrographer Recommendations

chartre new wreck

Cartographically-Rounded Depth (Affected Charts):

34ft (18751_1, 18749_1)

5 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

10.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 10.483 m
	WATLEV - 3:always under water/submerged

Office Note: Due to proximity to neighboring obstruction, not recomended for charting.

Feature Images

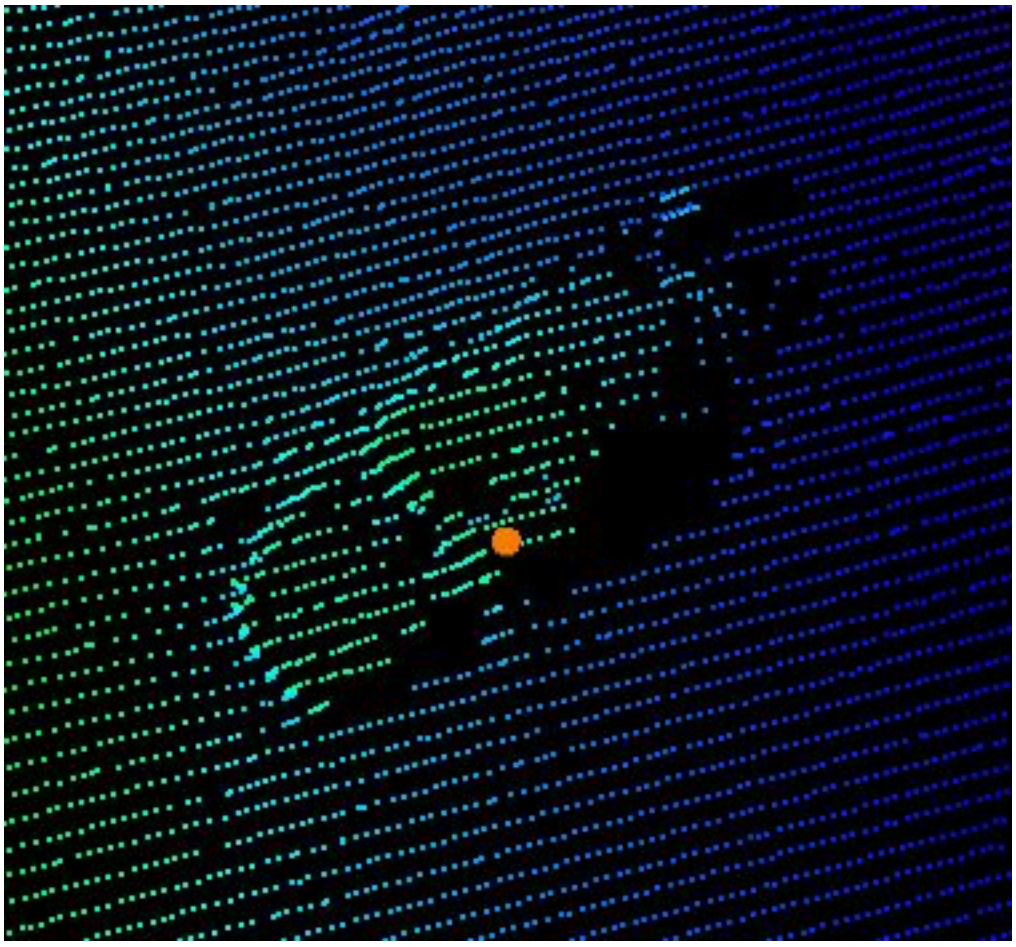


Figure 2.30.1

2.31) US 0000118138 00001

Survey Summary

Survey Position:	33° 45' 57.0" N, 118° 14' 08.2" W
Least Depth:	4.85 m (= 15.91 ft = 2.651 fm = 2 fm 3.91 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118138 00001(02260001CD7A0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: Wreck sound in review

Hydrographer Recommendations

Chart new WRECK

Cartographically-Rounded Depth (Affected Charts):

16ft (18751_1, 18749_1)

2 ½fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

4.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 4.848 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

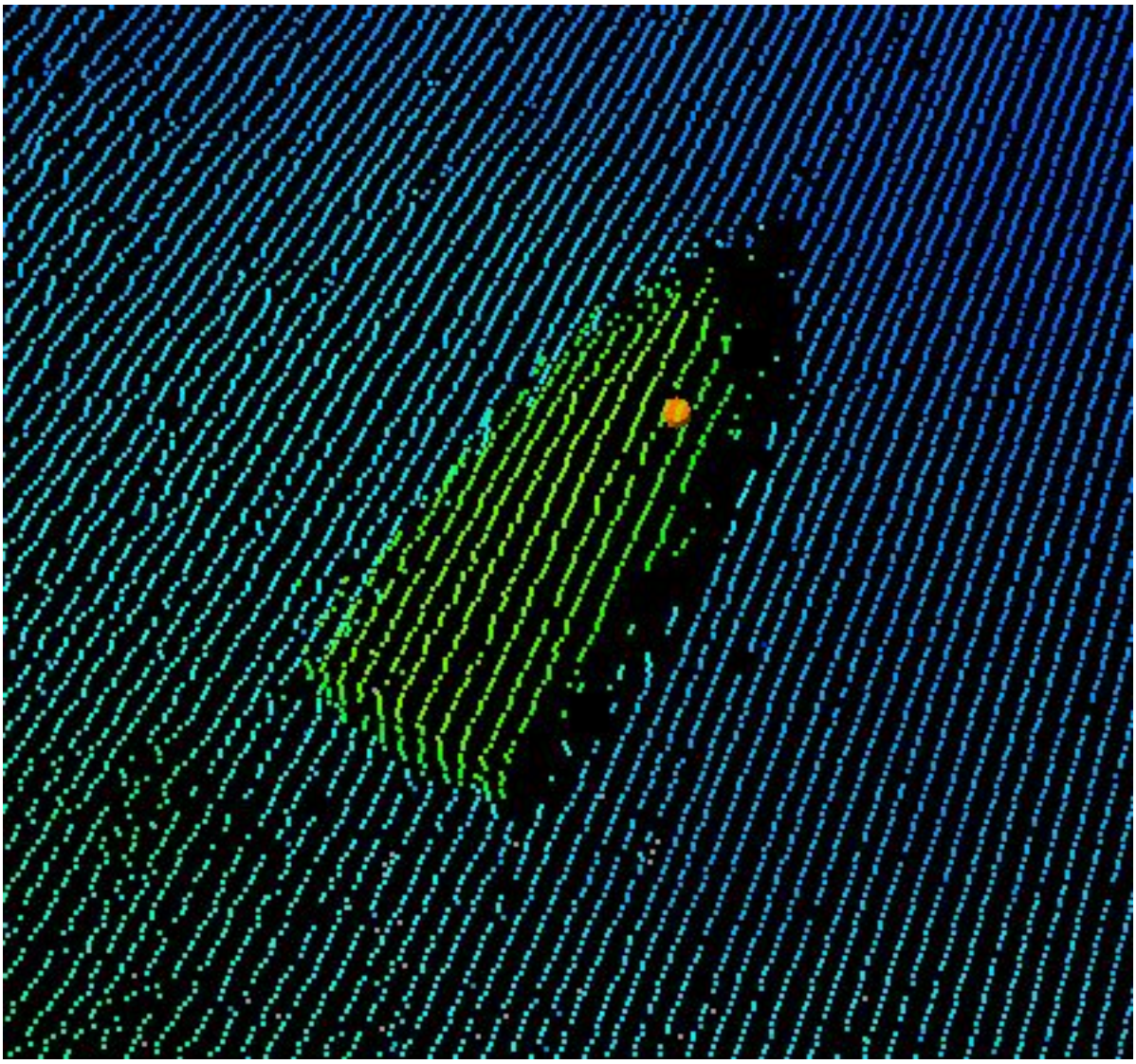


Figure 2.31.1

2.32) US 0000118221 00001

Survey Summary

Survey Position:	33° 45' 59.6" N, 118° 15' 04.2" W
Least Depth:	3.57 m (= 11.72 ft = 1.954 fm = 1 fm 5.72 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118221 00001(02260001CDCD0001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: overturned boat

Hydrographer Recommendations

chart new WRECK

Cartographically-Rounded Depth (Affected Charts):

11ft (18751_1, 18749_1)

2fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

3.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 3.573 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

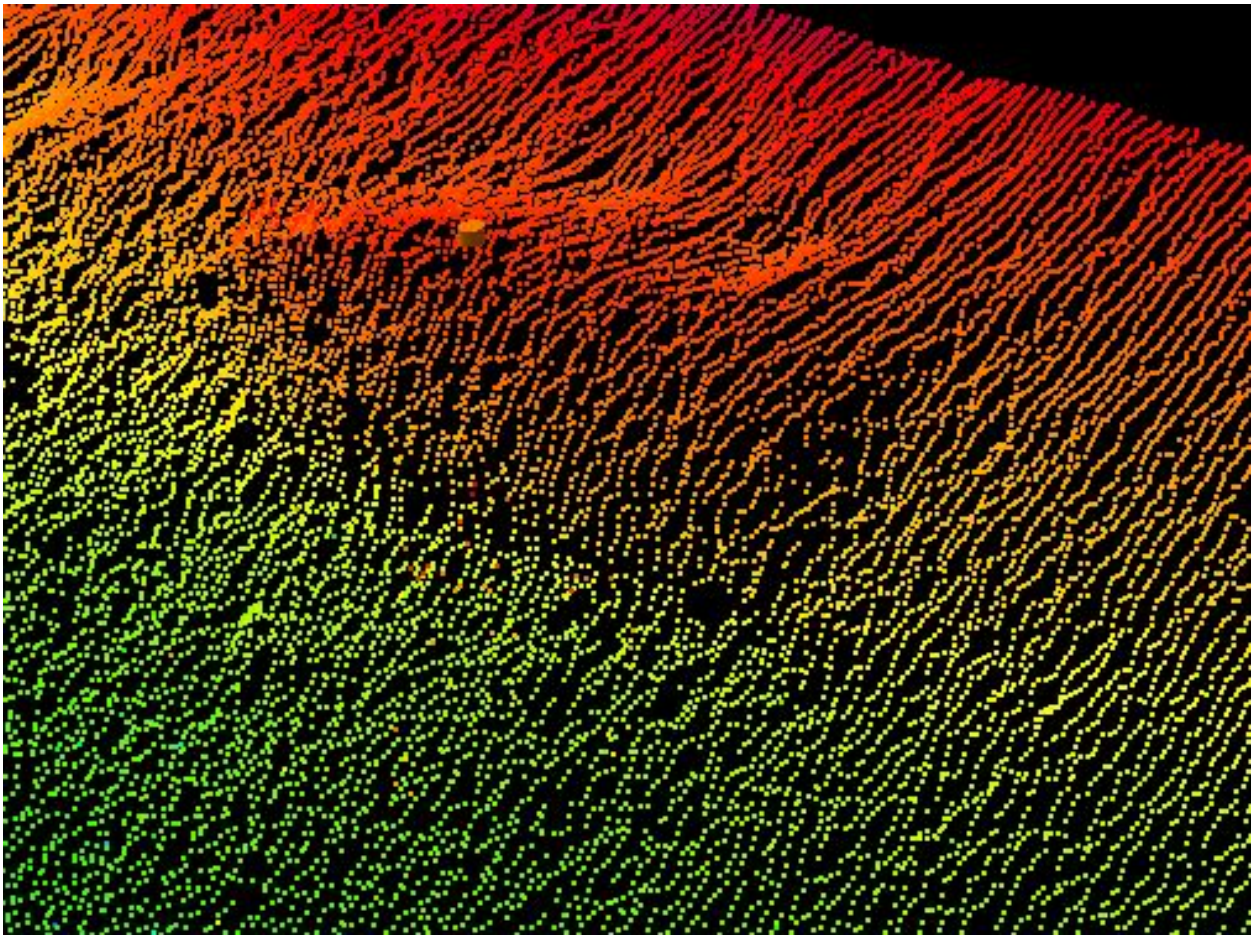


Figure 2.32.1

2.33) US 0000118224 00001

Survey Summary

Survey Position:	33° 46' 01.9" N, 118° 14' 55.5" W
Least Depth:	3.61 m (= 11.84 ft = 1.974 fm = 1 fm 5.84 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000118224 00001(02260001CDD00001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

WRECKS/remrks: uncharted small wrecked boat

Hydrographer Recommendations

chart new wreck

Cartographically-Rounded Depth (Affected Charts):

12ft (18751_1, 18749_1)

2fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

3.6m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 1:non-dangerous wreck
	EXPSOU - 1:within the range of depth of the surrounding depth area
	QUASOU - 6:least depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 3.610 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

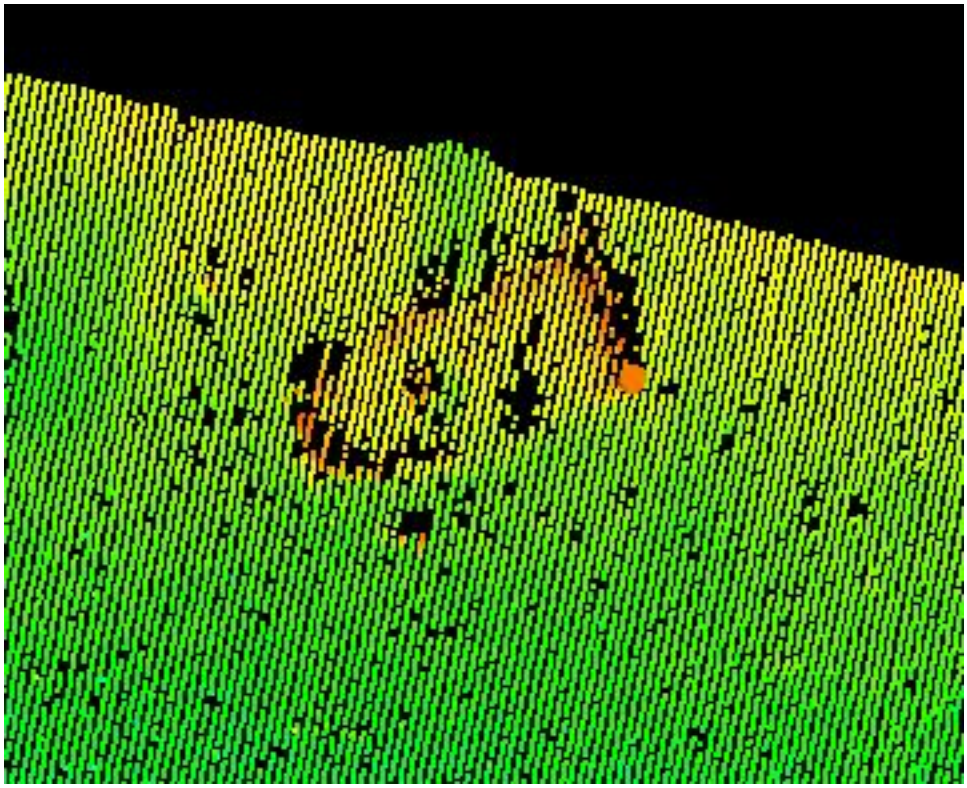


Figure 2.33.1

3 - Dangers To Navigation

3.1) US 0000117780 00001

DANGER TO NAVIGATION

Survey Summary

Survey Position:	33° 43' 48.8" N, 118° 16' 37.6" W
Least Depth:	5.27 m (= 17.30 ft = 2.883 fm = 2 fm 5.30 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2013-307.00:00:00.000 (11/03/2013)
Dataset:	H12617_Feature_Report_Office.000
FOID:	US 0000117780 00001(02260001CC140001)
Charts Affected:	18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

OBSTRN/remrks: New OBSTRN feature is navigationally significant

Hydrographer Recommendations

Recommend charting new OBSTRN

Cartographically-Rounded Depth (Affected Charts):

17ft (18751_1, 18749_1)

2 ¾fm (18746_1, 18740_1, 18022_1, 18020_1, 530_1)

5.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	EXPSOU - 2:shoaler than range of depth of the surrounding depth area
	INFORM - Cultural artifact poses navigational danger to deep draft vessels
	QUASOU - 1:depth known
	SORDAT - 20131103
	SORIND - US,US,graph,H12617
	TECSOU - 3:found by multi-beam
	VALSOU - 5.273 m
	WATLEV - 3:always under water/submerged

Office Note: Concur

Feature Images

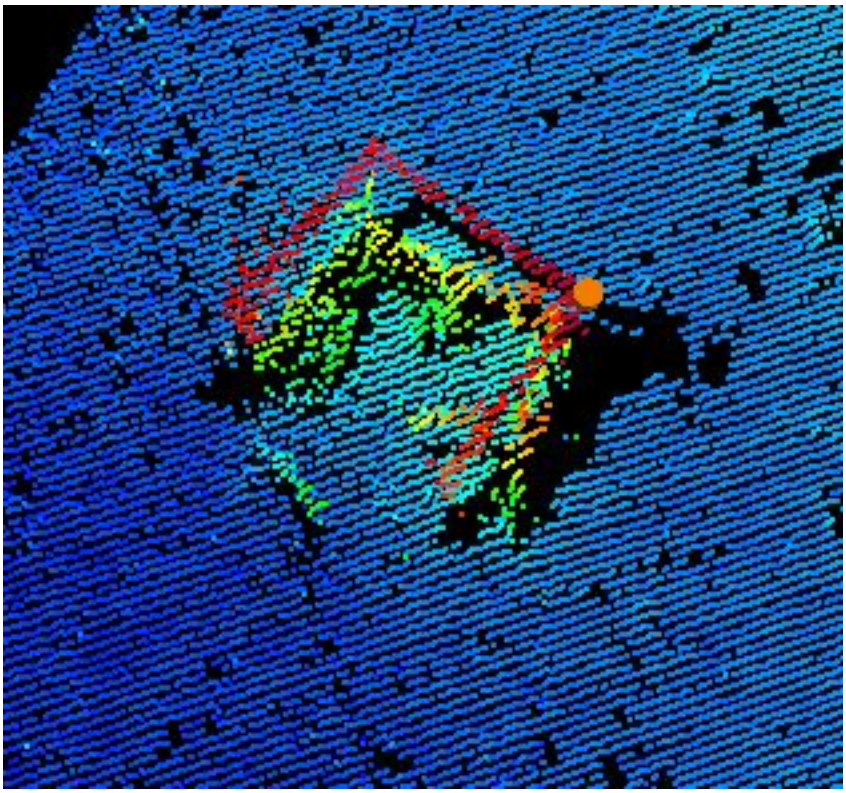


Figure 3.1.1

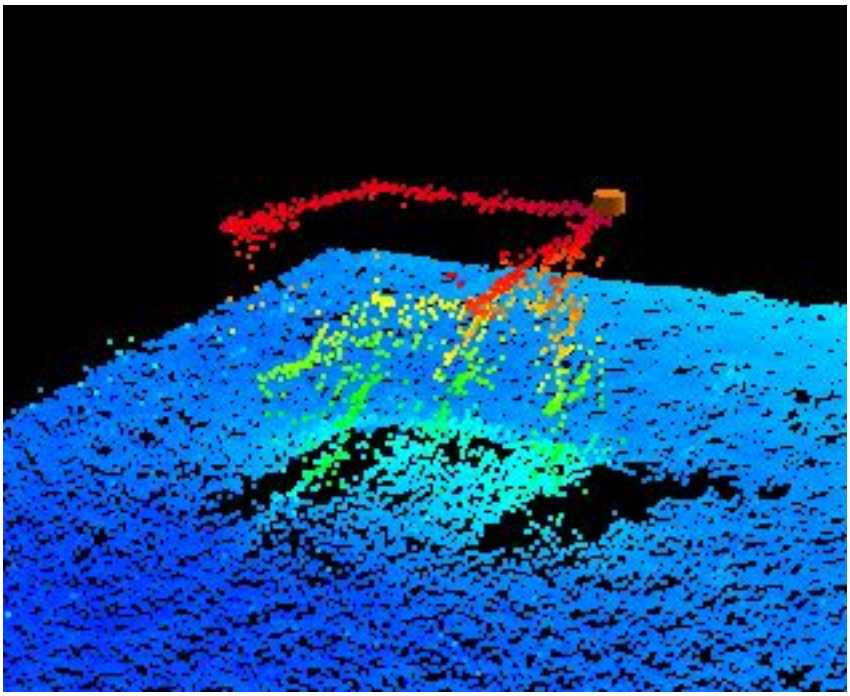


Figure 3.1.2

APPROVAL PAGE

H12617

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

- H12617_DR.pdf
- Collection of depth varied resolution BAGS
- Processed survey data and records
- H12617_GeoImage.pdf

The survey evaluation and verification has been conducted according current OCS Specifications.

Digitally signed by HOLMBERG.PETER.SCOTT.1365886101
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=OTHER, cn=HOLMBERG.PETER.SCOTT.1365886101
Date: 2015.01.22 15:07:55 -08'00'

Approved:_____

Peter Holmberg
Cartographic Team Lead, Pacific Hydrographic Branch

The survey has been approved for dissemination and usage of updating NOAA's suite of nautical charts.

Digitally signed by EVANS.BENJAMIN.K.1237217094
Reason: I am approving this document
Date: 2015.01.22 15:27:22 -08'00'

Approved:_____

CDR Ben Evans, NOAA
Chief, Pacific Hydrographic Branch