H11989

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic Survey

Field No. N/A

Registry No. H11989

LOCALITY

State Oregon

General Locality Newport

Sublocality Approach to Yaquina Bay to McCaffrey Slough

2008

CHIEF OF PARTY

Kathryn Simmons

LIBRARY & ARCHIVES

DATE 29-Sep-08

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

HYDROGRAPHIC TITLE SHEET

REGISTRY No

H11989

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

FIELD No: N/A

State **Oregon**

General Locality **Newport**

Sub-Locality **Approaches to Yaquina Bay to McCaffery Slough**

Scale **1:5,000** Date of Survey **August 8 to September 29, 2008**

Instructions dated **8/1/2008** Project No. **OPR-M916-NRT3-08**

Vessel **NOAA Survey Launch S1212**

Chief of party **Kathryn Simmons**

Surveyed by **Kathryn Simmons, Kurt Mueller, Phillip Sparr**

Soundings by **SWMB Echosounder**

SAR by **CJ Barry** Compilation by **CJ Barry**

Soundings compiled in **Fathoms**

REMARKS: **All times are UTC. UTM Zone 10**

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. Revisions and end notes in red were generated during office processing. Page numbering may be interrupted or non sequential.

All pertinent records for this survey, including the Descriptive Report, are archived at the National Geophysical Data Center (NGDC) and can be retrieved via http://www.ngdc.noaa.gov/.

Descriptive Report to Accompany H11989

Scale 1:10000

2008

Navigation Response Team 3

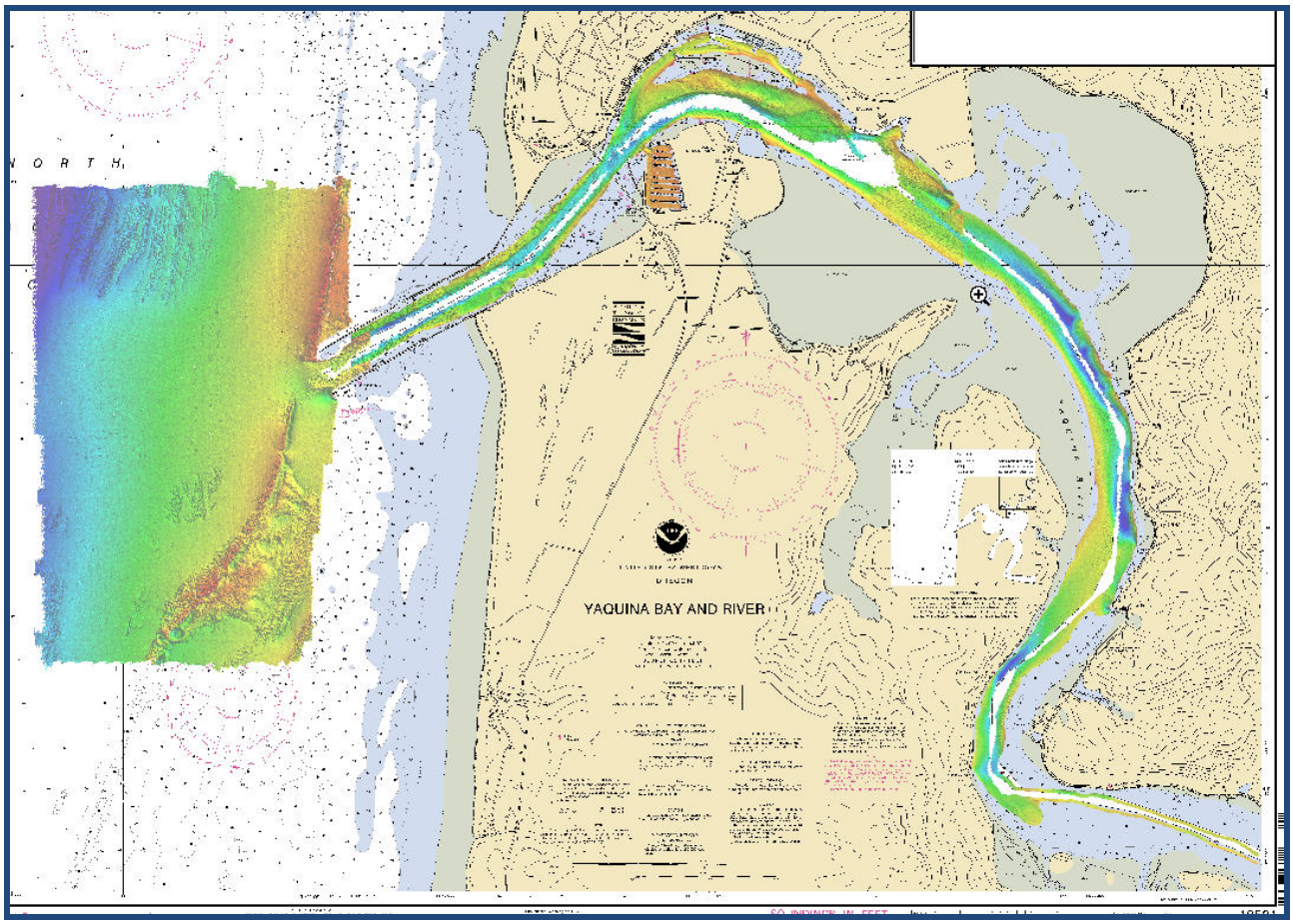
Team Leader: Kathryn Simmons

A. Area Surveyed

The project was conducted in response to a request from the regional Navigation Manager. Charted soundings outside the USACE maintained channel were reported to be unreliable with the most recent survey in the area performed back in the 1950s. It is the intent of this survey to supersede all bathymetry, seafloor features, and bottom characteristics within the assigned survey area as defined by these instructions for updating of NOAA chart 18581. It is also the intent of this survey to verify shoreline and features on the ENC.

H11989 is the only survey in Project S-M916-NRT3-08 and includes multibeam hydrography and side scan sonar data.

The total area of hydrography is approximately 3.6 square nautical miles as shown below:



B. DATA ACQUISITION AND PROCESSING

Data acquisition was conducted from August 8, 2008 (DN 221) through September 29, 2008 (DN 273).

B1. Equipment and Vessels

NRT3's survey vessel, NOAA Survey Launch S1212, is equipped with an Odom single beam transducer, a Klein side scan sonar system, and a Simrad EM3000 SWMB echosounder, and was used to acquire multibeam and side scan sonar data.

Launch S1212, a 27-foot, SeaArk Commander (SAMA115510000), was acquired in January 2001. In August 2004 the hull was extended to 30 feet to accommodate the weight of the two 150-horsepower Yamaha four-stroke outboards which power the vessel. The launch is eight feet wide, displaces 4.8 tons, has a static draft of 0.4 meters and is equipped with a Dell Pentium IV PC for running the primary acquisition software.

On April 23, 2008 survey launch S1212's original POSMV was sent to Applanix for repair and a temporary replacement was installed (SN 2254). This replacement unit was used for the entire survey.

Across-track artifacts observed in the preliminary SWMB base surfaces were examined and determined to have been caused by intermittent and short (<1 second) data gaps in the sensor data from the POS MV. Attempts to correct the problem were not successful and the artifacts persisted throughout the survey. This problem has since been corrected.

Also, during the course of the survey, the Klein Side Scan Sonar system developed an intermittent loss of telemetry which progressed to the point that the system became inadequate for data acquisition. Repeated attempts to troubleshoot the problem in the field were unsuccessful. The problem has since been resolved.[1]

See Data Acquisition and Processing Report (DAPR).

B2. Quality Control

Crossline Data

Crosslines acquired over the offshore portion of the survey total 7.41 nautical miles; crosslines were not acquired in the river channel. Crossline data were compared to mainscheme data using subset editor. No systematic or tidal errors were observed.[2]

See also Data Acquisition and Processing Report.

B3. Corrections to Echo Soundings

See Data Acquisition and Processing Report.

B4. Data Processing

Nine CARIS field sheets were created for this survey – Offshore Sheets: A_East_H11989, H11989A_W, B_West_H11989, H11989B_E; Inshore Sheets: H11989B, C, D, E, F and G. Single, half-meter surfaces were created for sheets C, D, E, F and G. Half-meter surfaces were also created for sheets A and B East and B West over the extent of Yaquina Reef. One and two-meter surfaces were created for Sheets A and B West All surfaces were created using the NOAA template for the CUBE algorithm.[3]

See also Data Acquisition and Processing Report.

C. VERTICAL AND HORIZONTAL CONTROL [4]

C1. Tides and Water Levels

See Data Acquisition and Processing Report.

C2. Horizontal Datum

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

C3. Position Control

See Data Acquisition and Processing Report.

D. RESULTS AND RECOMMENDATIONS

D1. Chart Comparison

Survey results were compared with the latest revisions of the largest scale, affected raster downloaded from NOAA's website at the end of survey. [5]

Chart No.	Edition	Edition Date	Scale	Downloaded
18581	18th	October, 2008	1:10000	12/16/2009
18561	12th	November, 2003	1:50000	12/16/2009

The ENC Cells for this survey are small scale and do not have sufficient detail for comparison.

ENC Cell	Edition	Update Application Date	Issue Date
US3OR01M	10	02/21/2008	03/19/2008
US3OR02M	8	09/22/2008	11/10/2008

Comparison of Soundings

Survey data were compared with the chart using contour lines and sounding plots generated by CARIS Field Sheet Editor, Pydro and Mapinfo/Vertical Mapper. Major changes include a number of rocky outcrops along the edge of the maintained channel which are significantly shoaler than charted. High points on these outcrops were submitted as DTONs. Five submerged outfalls were identified from SWMB data and were also submitted as DTONS.[6]

Comparison of Non-Sounding Features

Many existing cultural features were either charted incorrectly or missing from the chart. Position data were acquired over a number of new features while others were extrapolated from imagery provided by RSD. These features were imported into Notebook where S57 attributes were applied. The shoreline file accompanies this report. Supplemental information for the cartographer is included in the marker files.

AWOIS Items

There are thirteen AWOIS items within the limits of this survey. Four were assigned for full investigation and nine for information only. These items are addressed in and included in the Pydro-generated AWOIS feature report located in Appendix II.[7]

Dangers to Navigation

A number of dangers to navigation were identified and processed using CARIS Notebook. These DTONs were exported to S57 format and then inserted into Pydro where the Danger to Navigation Report was generated. A copy of the report is located in Appendix I.[8]

D2. Additional Results

Comparison with Prior Surveys

Prior surveys were not addressed.

Aids to Navigation

Aids to Navigation were verified and S57 attributes were recorded. See Notebook Shoreline Updates.[9]

Bridges, Cables, Pipelines

Charted bridges, cables, and pipelines were visually confirmed.

Statistics

Description	Quantities
Total Linear Nautical Miles	232.47
Mainscheme Multibeam	195.9
Side Scan Sonar	24.59
Development	4.57
Crosslines	7.41
Square Nautical Miles Hydrography	3.6
Square Nautical Miles SSS	2.19
Velocity Casts	32
Bottom Samples	0 [10]
AWOIS Items	4
Tide Stations Installed	0

Miscellaneous

The 18th edition of Chart 18581 was issued immediately after data collection was completed but before completion of data processing. The Port of Newport has been designated a new home port for NOAA vessels and is currently undergoing revisions in preparation for this event. This includes some dredging and pier construction.[11]

E. APPROVAL SHEET

Standard field surveying and processing procedures were followed in producing this survey in accordance with the Navigation Response Branch Operations Manual, the Field Procedures Manual and NOS Hydrographic Surveys Specifications and Deliverables.

The data were reviewed daily during acquisition and processing.

The digital data and supporting records have been reviewed by me, are considered complete and adequate for charting purposes, and are approved. All records are forwarded to Pacific Hydrographic Branch and should be attached to H11989 for final review and processing.

Approved and forwarded,

Kathryn Simmons
Team Leader

Revisions Compiled During Office Processing and Certification:

[1] During the SAR process no evidence of either survey launch S1212's POSMV issues, or of the Klein SSS telemetry issues, were seen and the data was determined to be within specifications.
[2] Concur
[3] In addition to those named a Yaquina Reef fieldsheet is included for a total of ten. Also, in addition to the grid resolutions named, A_E includes 1m, A_W includes 0.5m, B_E includes 1m and 2m, F includes 1m, and G includes 1m. Yaquina Reef is 0.5m resolution.
[4] No tide stations were established for this survey, and no Horizontal and Vertical Control Report was produced.
[5] During office review these chart editions were used: Chart 18581, 18th Ed, October 1, 2008, NTM date 12/4/10, and Chart 18561, 12th Ed, November 1, 2003, NTM date 12/4/10.
[6] See end note #8. No outfall DTONs were applied by MCD, or compiled to the HCell, but their geometry and attributes are given in $LINES Blue Notes.
[7] All 13 AWOIS items are Blue Noted in the HCell. Many of the nine not investigated are Blue Noted "Retain as charted". Three (50131, 50291 and 53708) were found to be duplicates on the wreck of the cargo ship John Aspin, and two of these are recommended for removal from the AWOIS database.
[8] 42 features were submitted as DTONs of which 2 (DTONs #7 and #12) were applied to the chart by MCD. A number of others were compiled to the HCell during office processing. All DTONs submitted to MCD are noted in the HCell using either the NINFOM field or a Blue Note.
[9] Per the Project Instructions, a list of US Coast Guard maintained ATONs was provided to NRT3 for positioning. See the HCell Report, Section 9, *Data Processing Notes*, for a table showing ATONs requiring updates to position and/or attribution. Updates should be made per the latest US Coast Guards Aids to Navigation Information System **(**ATONIS**)** database.
[10] Project Instructions required bottom samples, but none were collected. All charted bottom characteristics are Blue Noted "Retain".
[11] During survey operations and during office review of H11989, a number of soundings were found to be shoaler than the controlling depths in the Yaquina Bay and River Channel, along the edge of the channel and turning basin. The Northwestern Division, Portland District of the US Army Corp of Engineers was contacted regarding the shoal depths. The ACOE responded that the channel is dredged regularly, generally once per year, so the shoals discovered in 2008 are no longer valid. An updated "Yaquina Bay and River Channel Depths" tabulation has since been compiled to the most recent chart update, rendering the depth discrepancies Blue Noted in the HCell obsolete for this purpose. The e-mail correspondences and descriptions of shoals forwarded to the Portland District are included in the Descriptive Report package under Correspondence.

Remarks made in red were added during PHB office processing.

H11989 DTON Report

Registry Number: H11989

State: Oregon

Locality: Newport

Sub-locality: Approach to Yaquina Bay to McCaffery Slough

Project Number: OPR-M916-NRT3-08

Survey Dates: August 8. 2008 - September 29, 2008

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
18581	18th	10/01/2008	1:10,000 (18581_1)	USCG LNM: 05/05/2009 (12/08/2009) NGA NTM: None (12/19/2009)
18561	12th	11/01/2003	1:50,000 (18561_1)	[L]NTM: ?
18520	26th	10/01/2005	1:185,238 (18520_1)	[L]NTM: ?
18580	22nd	12/01/2005	1:191,730 (18580_1)	[L]NTM: ?
18003	20th	11/01/2006	1:736,560 (18003_1)	[L]NTM: ?
18007	33rd	02/01/2009	1:1,200,000 (18007_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

Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude
Danger 1	Obstruction	4.94 m	44° 35' 50.3" N	124° 00' 40.7" W
Danger 2	Obstruction	5.24 m	44° 36' 24.8" N	124° 00' 39.8" W
Danger 3	Rock	2.96 m	44° 36' 28.4" N	124° 00' 42.3" W
Danger 4	Obstruction	5.18 m	44° 36' 34.1" N	124° 00' 47.3" W
Danger 5	Obstruction	4.42 m	44° 36' 32.7" N	124° 00' 45.1" W
Danger6	Rock	5.40 m	44° 36' 49.9" N	124° 04' 13.8" W
Danger 7	Rock	3.80 m	44° 36' 49.7" N	124° 04' 26.4" W
Danger 8	Rock	4.80 m	44° 36' 40.7" N	124° 04' 35.6" W

Danger 9	Rock	4.10 m	44° 36' 43.6" N	124° 04' 28.0" W
Danger 10	Rock	5.00 m	44° 36' 48.8" N	124° 04' 28.5" W
Danger 11	Rock	5.30 m	44° 36' 51.8" N	124° 04' 20.8" W
Danger 12 South Reef	Rock	7.10 m	44° 35' 36.1" N	124° 05' 45.9" W
Danger 13 South Reef	Rock	8.11 m	44° 36' 28.0" N	124° 05' 06.3" W
Danger 14 South Reef	Rock	7.38 m	44° 35' 39.0" N	124° 05' 40.9" W
Danger 15 South Reef	Rock	4.08 m	44° 36' 15.3" N	124° 05' 10.5" W
Danger 16	Rock	6.16 m	44° 36' 44.2" N	124° 04' 41.4" W
---	Shoal	15.30 m	44° 36' 04.5" N	124° 05' 43.1" W
---	Rock	3.05 m	44° 36' 38.8" N	124° 04' 59.3" W
Danger 19	Rock	5.10 m	44° 36' 47.2" N	124° 04' 34.2" W
Danger 20	Rock	5.03 m	44° 36' 42.6" N	124° 00' 54.5" W
Danger 21	Rock	4.48 m	44° 36' 45.3" N	124° 00' 56.1" W
---	Rock	1.89 m	44° 36' 37.8" N	124° 00' 49.0" W
---	Rock	2.99 m	44° 36' 14.8" N	124° 00' 38.4" W
Danger 24	Obstruction	3.10 m	44° 37' 49.0" N	124° 02' 40.5" W
Danger 25	Obstruction	4.70 m	44° 37' 49.3" N	124° 03' 04.2" W
Danger 30	Obstruction	5.40 m	44° 37' 48.3" N	124° 03' 05.7" W
Danger 28	Obstruction	6.40 m	44° 37' 36.5" N	124° 03' 19.2" W
Danger 31	Obstruction	7.50 m	44° 37' 37.8" N	124° 03' 18.0" W
Danger 32	Obstruction	5.60 m	44° 37' 43.9" N	124° 03' 12.8" W
Danger 33	Obstruction	4.70 m	44° 37' 41.1" N	124° 03' 17.0" W
Danger 26	Obstruction	8.40 m	44° 37' 36.2" N	124° 03' 18.8" W
Danger 34	Obstruction	5.80 m	44° 37' 44.1" N	124° 03' 12.5" W
Danger 29	Obstruction	5.60 m	44° 37' 48.9" N	124° 03' 02.9" W
Danger 27	Rock	1.80 m	44° 37' 48.4" N	124° 03' 04.1" W
Seabed 1	GP	[None]	44° 36' 42.2" N	124° 04' 58.7" W
Seabed 3	GP	[None]	44° 37' 47.3" N	124° 03' 04.3" W
Outfall 3	GP	[None]	44° 37' 44.7" N	124° 03' 14.2" W
Outfall 4	GP	[None]	44° 37' 45.1" N	124° 03' 13.6" W
Outfall 5	GP	[None]	44° 37' 49.9" N	124° 03' 03.8" W
Outfall 1	GP	[None]	44° 37' 38.3" N	124° 03' 19.3" W
Outfall 2	GP	[None]	44° 37' 36.4" N	124° 03' 20.2" W
Seabed 2	GP	[None]	44° 36' 29.9" N	124° 04' 51.7" W

PHB Office note: Danger 17

PHB Office note: Danger 18

PHB Office note: Danger 22

PHB Office note: Danger 23

1 - Danger To Navigation

1.1) Danger 1

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 35' 50.3" N, 124° 00' 40.7" W
Least Depth:	4.94 m (= 16.21 ft = 2.701 fm = 2 fm 4.21 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 1
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

possibly remnants of marina now gone; plots over 18-foot contour

Hydrographer Recommendations

chart 16-foot sounding; revise contour

Cartographically-Rounded Depth (Affected Charts):

16ft (18581_1)

2 ¾fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

4.9m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - possibly remnants of marina now gone
	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 4.940 m
	VERDAT - 16:Mean high water

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #1, OBSTRN. DTON not applied to chart by MCD. Compiled to HCell as OBSTRN. May be the remains of a ruined pier.

Feature Images

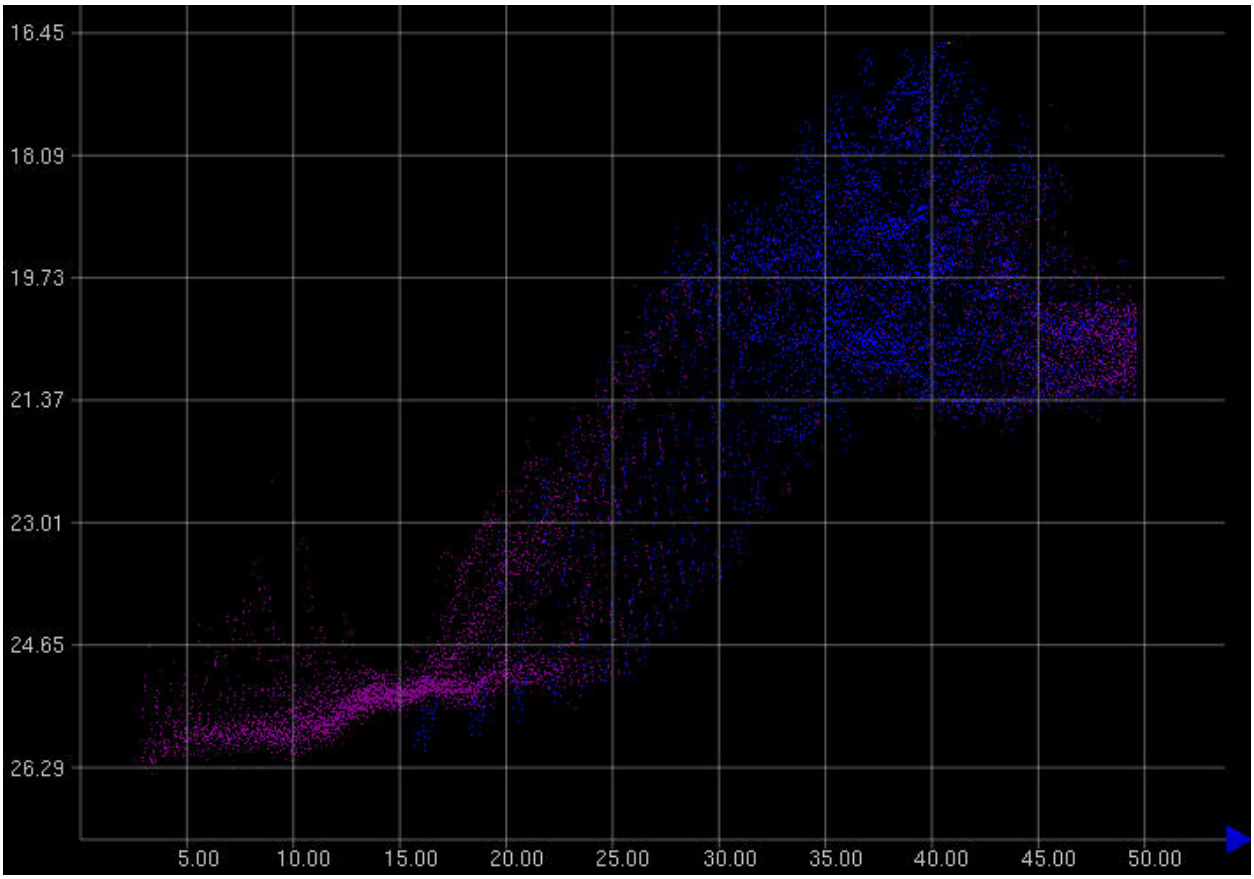


Figure 1.1.1

1.2) Danger 2

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 24.8" N, 124° 00' 39.8" W
Least Depth:	5.24 m (= 17.19 ft = 2.865 fm = 2 fm 5.19 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 2
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

plots seaward of 18-foot contour

Hydrographer Recommendations

chart 17-foot sounding; revise contour

Cartographically-Rounded Depth (Affected Charts):

17ft (18581_1)

2 ¾fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

5.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 5.240 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #2, Contour revision. DTON not applied to chart by MCD. Not compiled to the HCell.

Feature Images

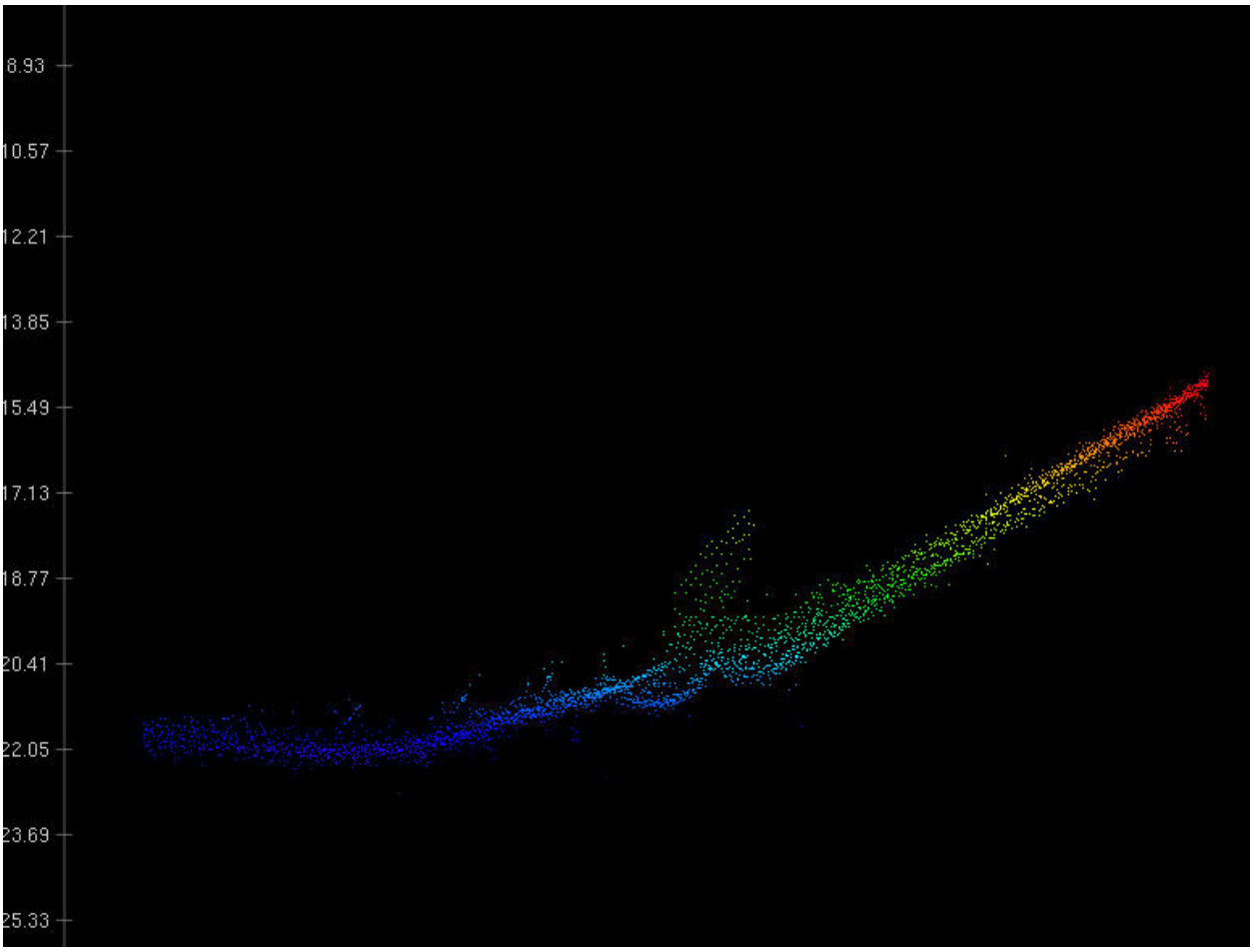


Figure 1.2.1

1.3) Danger 3

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 28.4" N, 124° 00' 42.3" W
Least Depth:	2.96 m (= 9.71 ft = 1.619 fm = 1 fm 3.71 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 3
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rocky shoreline; plots seaward of 12-foot contour

Hydrographer Recommendations

chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

9ft (18581_1)

1 ½fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

3.0m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 2.960 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #3, Contour revision. DTON not applied to chart by MCD. Not compiled to the HCell.

Feature Images

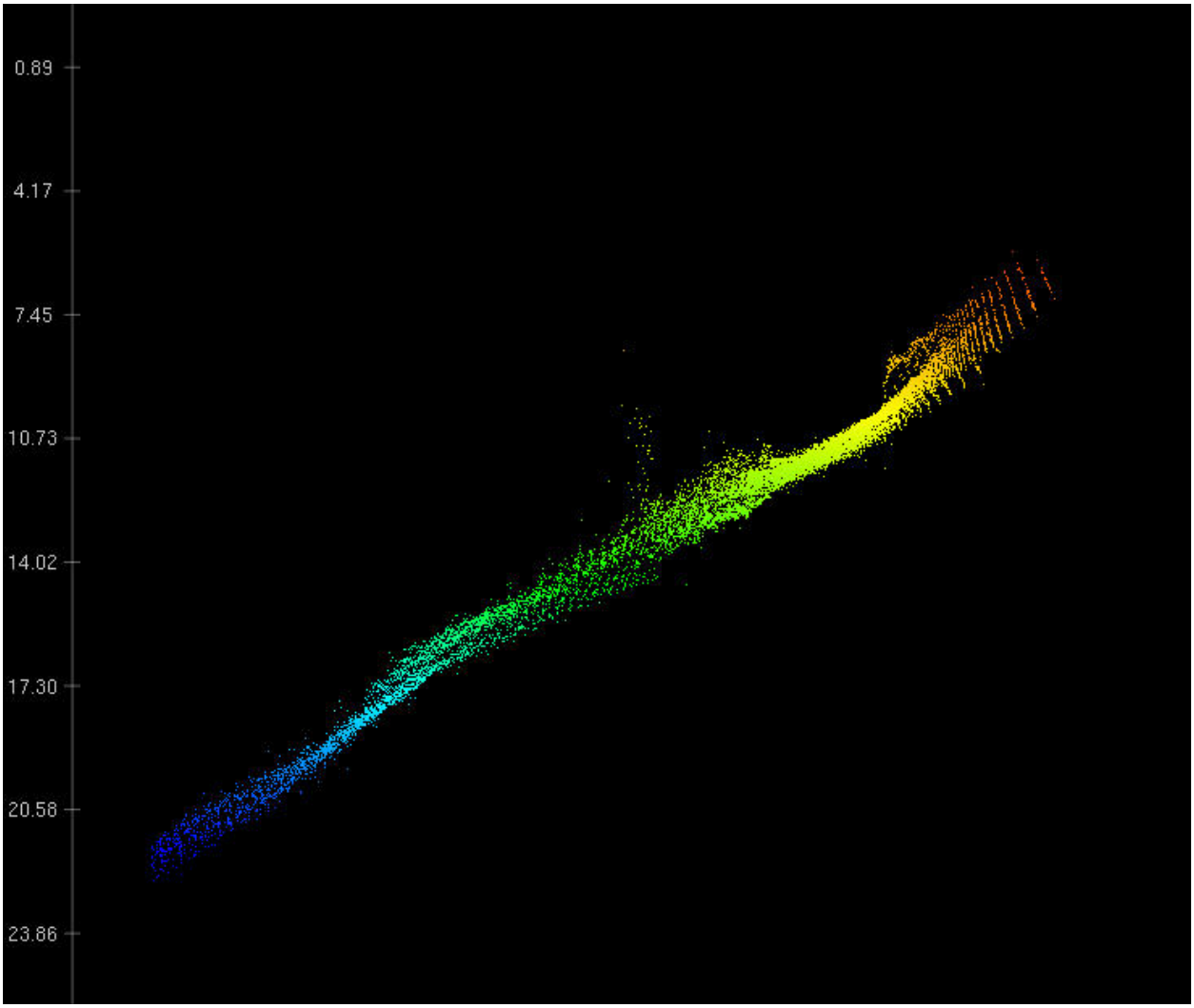


Figure 1.3.1

1.4) Danger 4

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 34.1" N, 124° 00' 47.3" W
Least Depth:	5.18 m (= 16.99 ft = 2.832 fm = 2 fm 4.99 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons

GP No.: Danger 4

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

plots seaward of 18-foot contour

Hydrographer Recommendations

chart surveyed sounding; revise contour

Cartographically-Rounded Depth (Affected Charts):

17ft (18581_1)

2 ¾fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

5.2m (501_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes:

QUASOU - 1:depth known

RECDAT - 20090514

SORDAT - 20080929

SORIND - US,US,survy,NRT3

TECSOU - 3:found by multi-beam

VALSOU - 5.180 m

VERDAT - 16:Mean high water

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #4, OBSTRN and contour revision. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

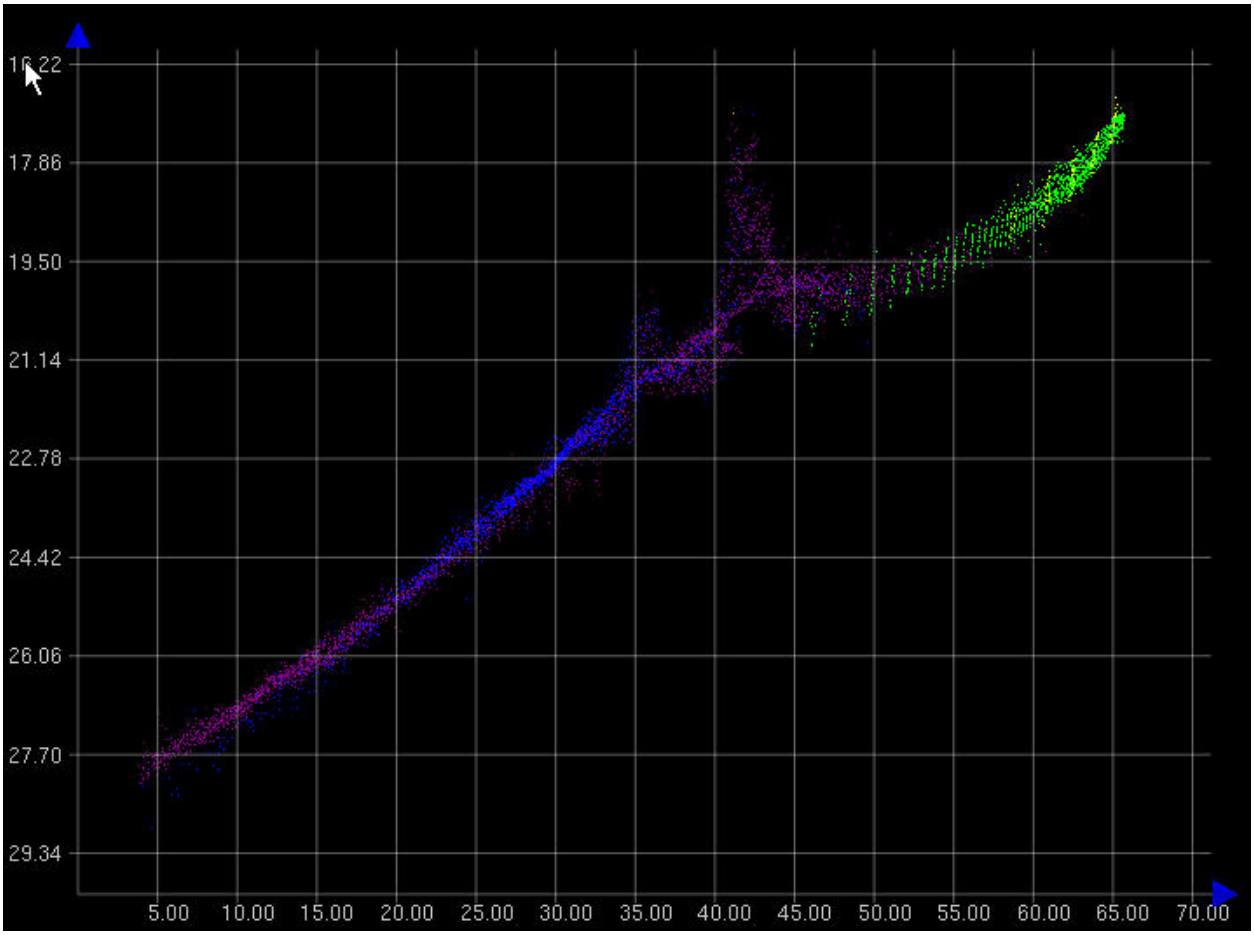


Figure 1.4.1

1.5) Danger 5

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 32.7" N, 124° 00' 45.1" W
Least Depth:	4.42 m (= 14.50 ft = 2.417 fm = 2 fm 2.50 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 5
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

plots seaward of 18-foot contour

Hydrographer Recommendations

chart surveyed sounding; revise contour

Cartographically-Rounded Depth (Affected Charts):

14ft (18581_1)

2 ¼fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

4.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 4.420 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #5, OBSTRN and contour revision. DTON not applied to chart by MCD. DTON not compiled to HCell. (Another sounding chosen nearby.)

Feature Images

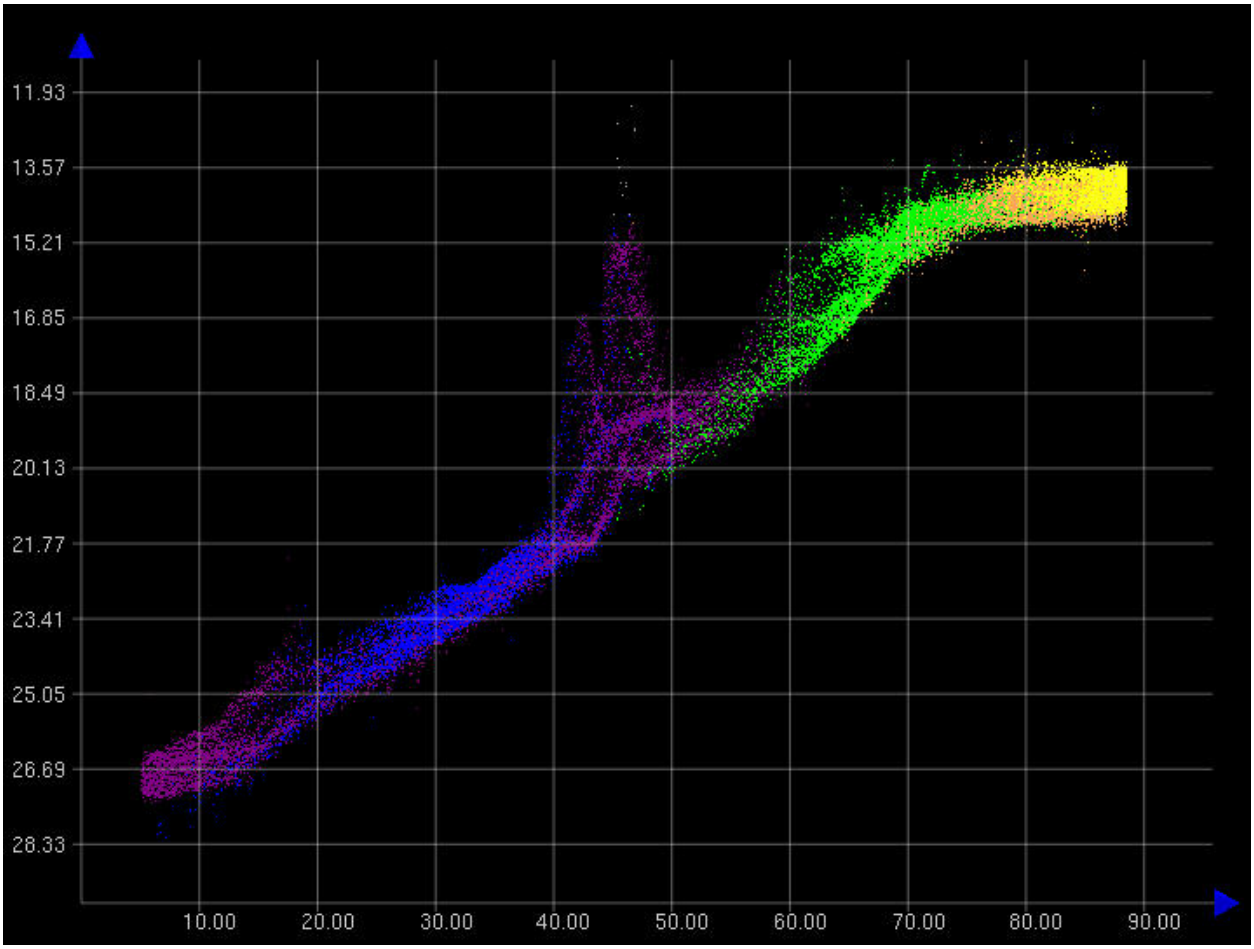


Figure 1.5.1

1.6) Danger6

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 49.9" N, 124° 04' 13.8" W
Least Depth:	5.40 m (= 17.72 ft = 2.953 fm = 2 fm 5.72 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 6
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

seaward high point on rock outcrop; plots over 21-foot charted depth

Hydrographer Recommendations

delete 21-foot depth; chart surveyed depth

Cartographically-Rounded Depth (Affected Charts):

17ft (18581_1)

3fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

5.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 5.400 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #6, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a sounding inside a rocky seabed area.

Feature Images

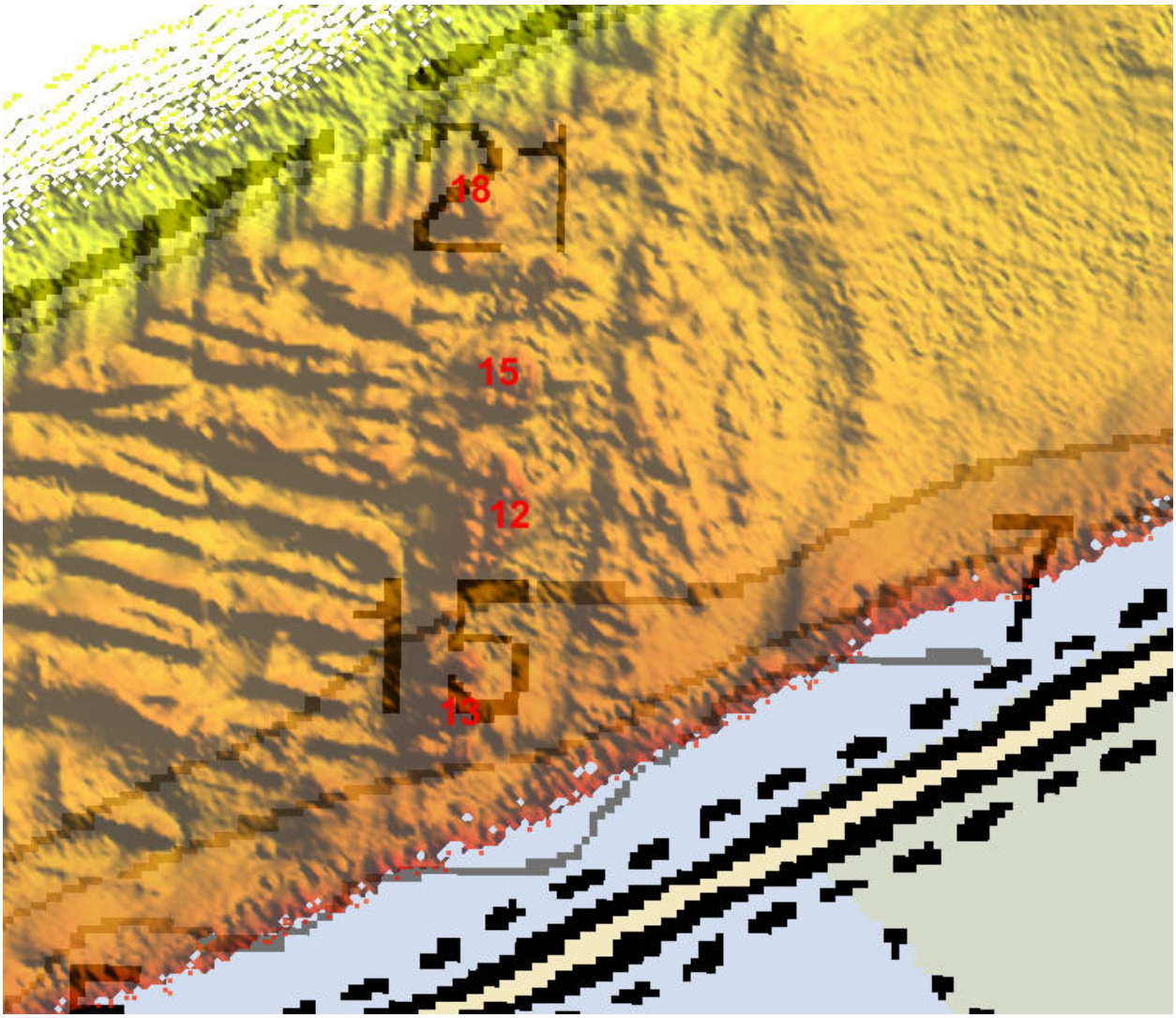


Figure 1.6.1

1.7) Danger 7

DANGER TO NAVIGATION

Survey Summary

Survey Position: 44° 36' 49.7" N, 124° 04' 26.4" W

Least Depth: 3.80 m (= 12.47 ft = 2.078 fm = 2 fm 0.47 ft)

TPU (±1.96σ): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]

Timestamp: [None]

GP Dataset: ChartGPs - ENC H11989_Dtons

GP No.: Danger 7

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

seaward high point on rock outcrop; plots adjacent to 22-foot charted depth

Hydrographer Recommendations

delete 22-foot charted depth; chart surveyed depth

Cartographically-Rounded Depth (Affected Charts):

12ft (18581_1)

2fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

3.8m (501_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes:

QUASOU - 1:depth known

RECDAT - 20090514

SORDAT - 20080929

SORIND - US,US,survy,NRT3

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 3.800 m

VERDAT - 16:Mean high water

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #7, UWTROC. DTON applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

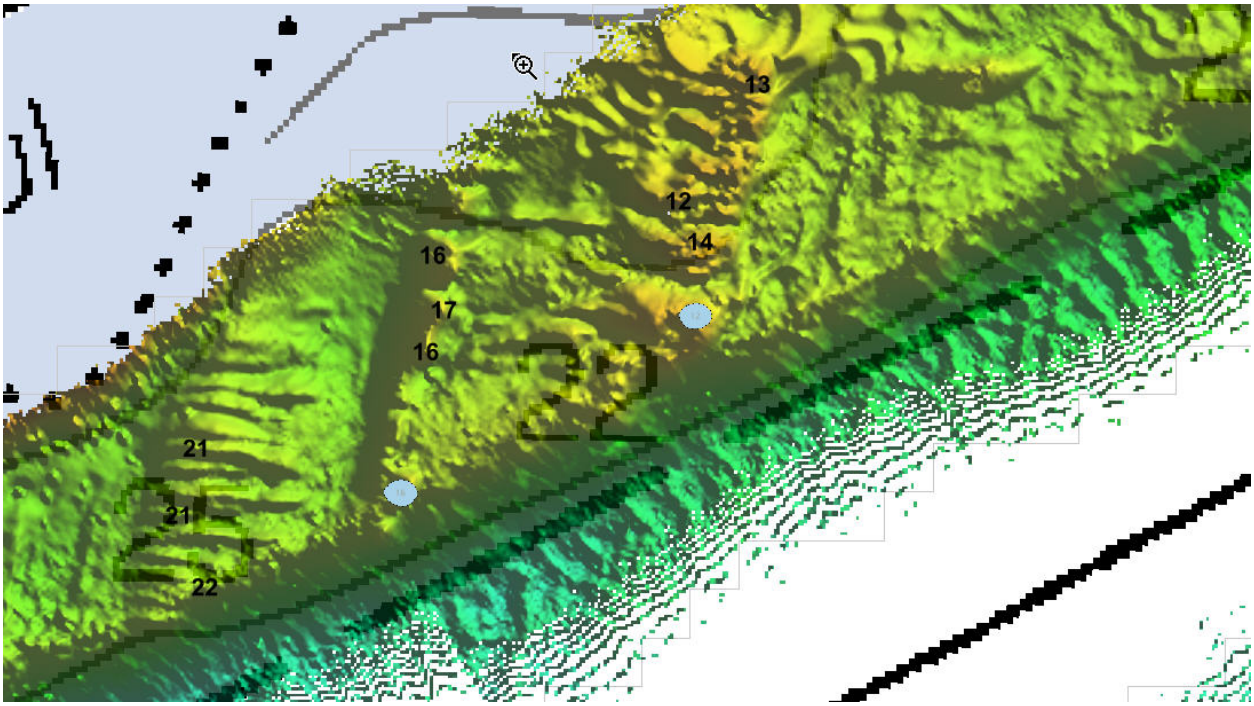


Figure 1.7.1

1.8) Danger 8

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 40.7" N, 124° 04' 35.6" W
Least Depth:	4.80 m (= 15.75 ft = 2.625 fm = 2 fm 3.75 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 8
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rock outcrop; plots adjacent to 25-foot chart depth

Hydrographer Recommendations

delete 25-foot charted depth; chart surveyed sounding; revise contour

Cartographically-Rounded Depth (Affected Charts):

15ft (18581_1)

2 ½fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

4.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 4.800 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #8, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

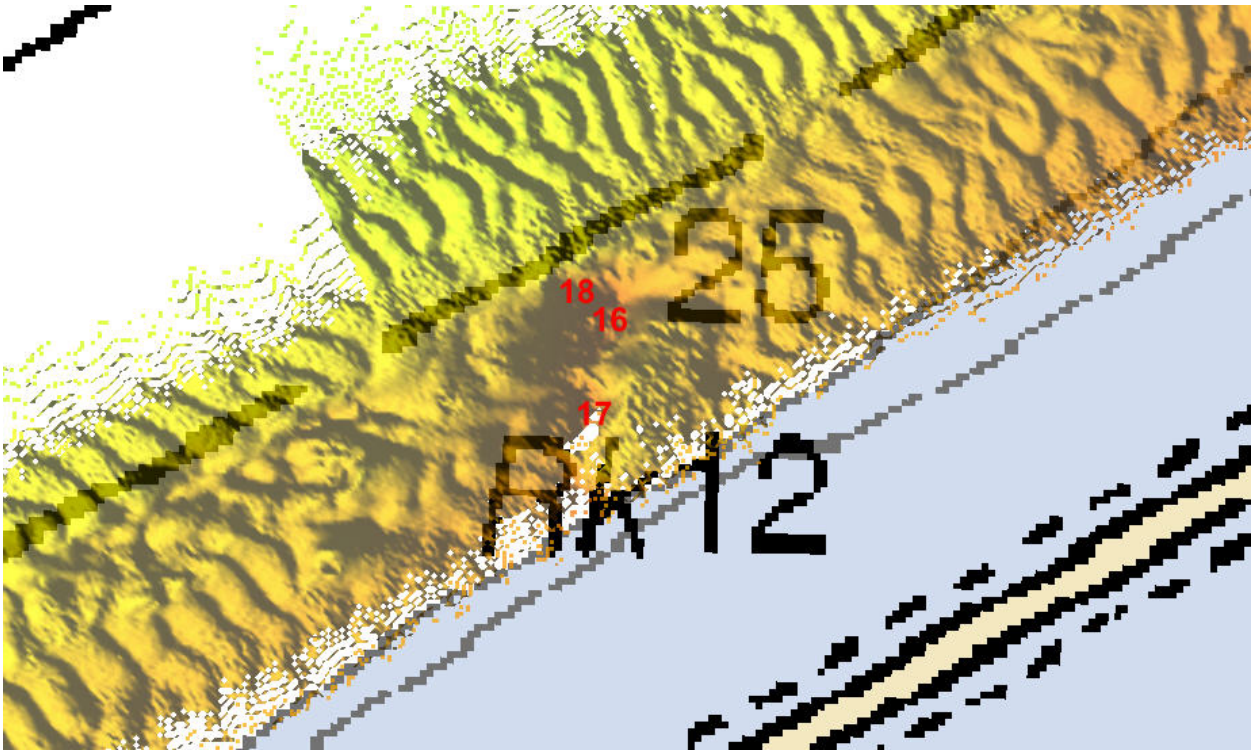


Figure 1.8.1

1.9) Danger 9

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 43.6" N, 124° 04' 28.0" W
Least Depth:	4.10 m (= 13.45 ft = 2.242 fm = 2 fm 1.45 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 9
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rock outcrop

Hydrographer Recommendations

chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

13ft (18581_1)

2 ¼fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

4.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 4.100 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #9, UWTROC. DTON not applied to chart by MCD. Shoaler sounding 15 meters to the south and inside a rocky seabed area was compiled to the HCell.

Feature Images

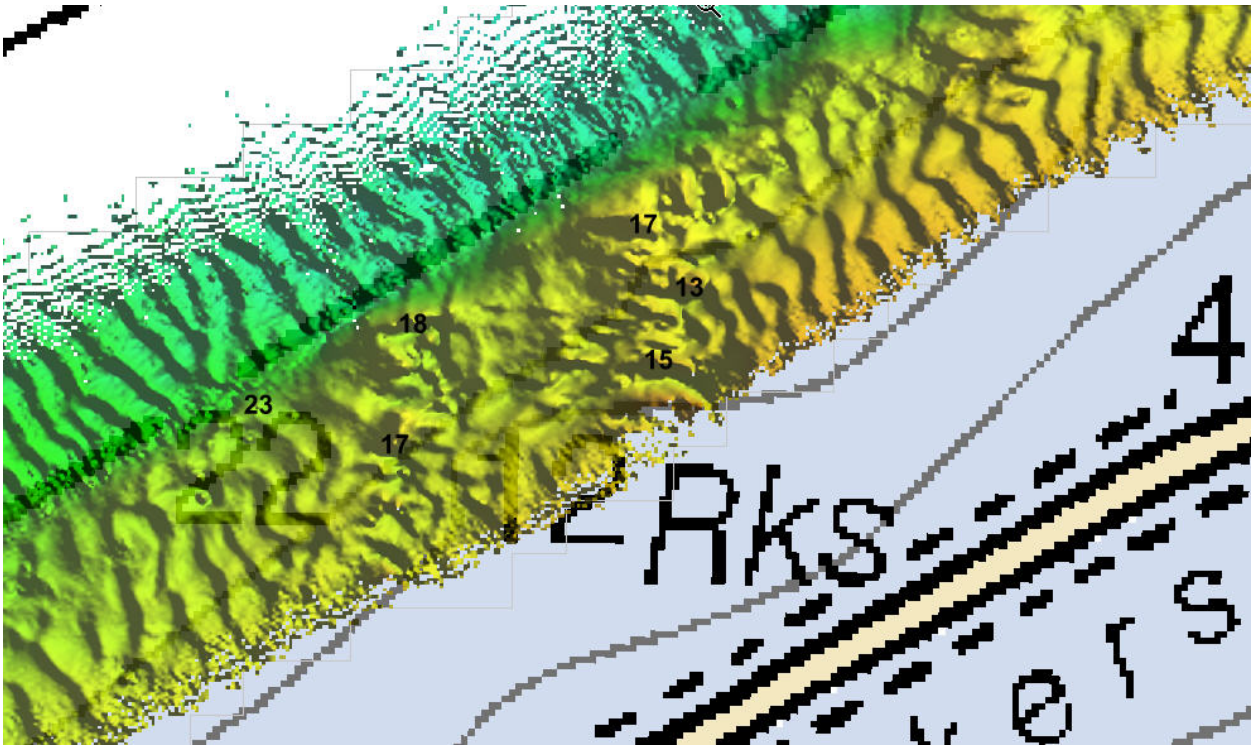


Figure 1.9.1

1.10) Danger 10

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 48.8" N, 124° 04' 28.5" W
Least Depth:	5.00 m (= 16.40 ft = 2.734 fm = 2 fm 4.40 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 10
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rock outcrop

Hydrographer Recommendations

chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

16ft (18581_1)

2 ¾fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

5.0m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 5.000 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #10, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

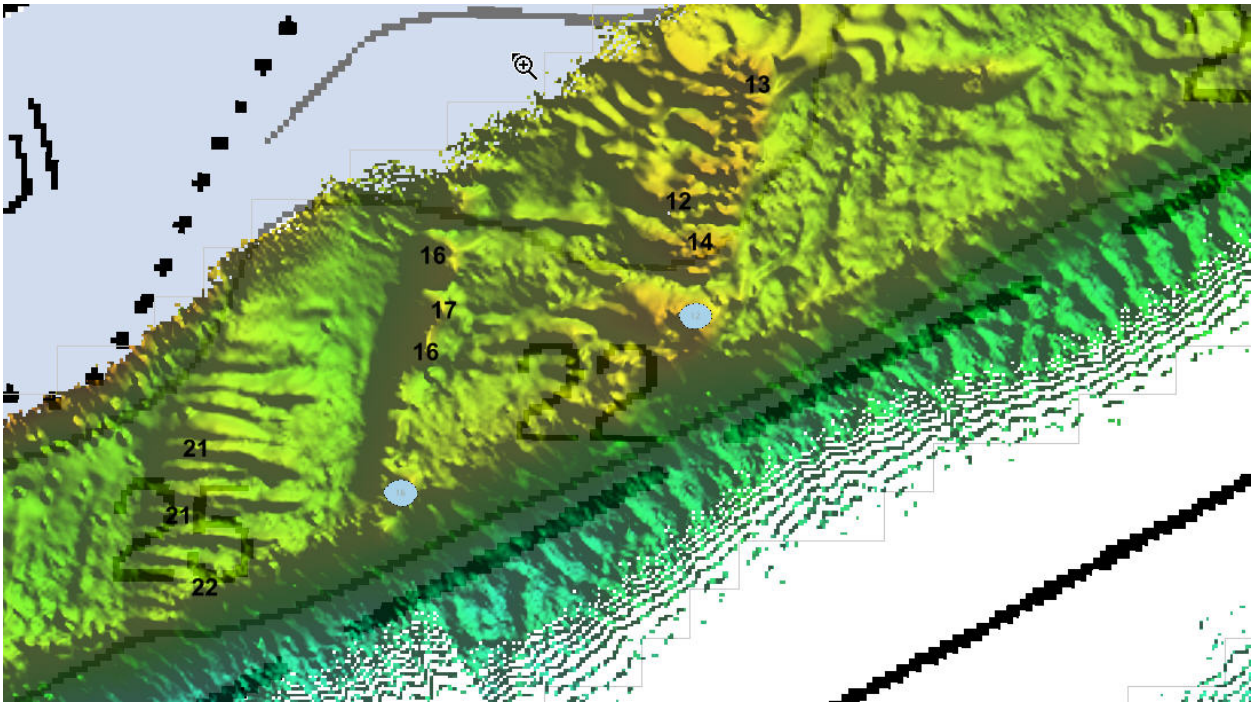


Figure 1.10.1

1.11) Danger 11

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 51.8" N, 124° 04' 20.8" W
Least Depth:	5.30 m (= 17.39 ft = 2.898 fm = 2 fm 5.39 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 11
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rock outcrop; seaward of 18-foot contour; adjacent to maintained channel

Hydrographer Recommendations

Chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

17ft (18581_1)

2 ¾fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

5.3m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 5.300 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #11, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

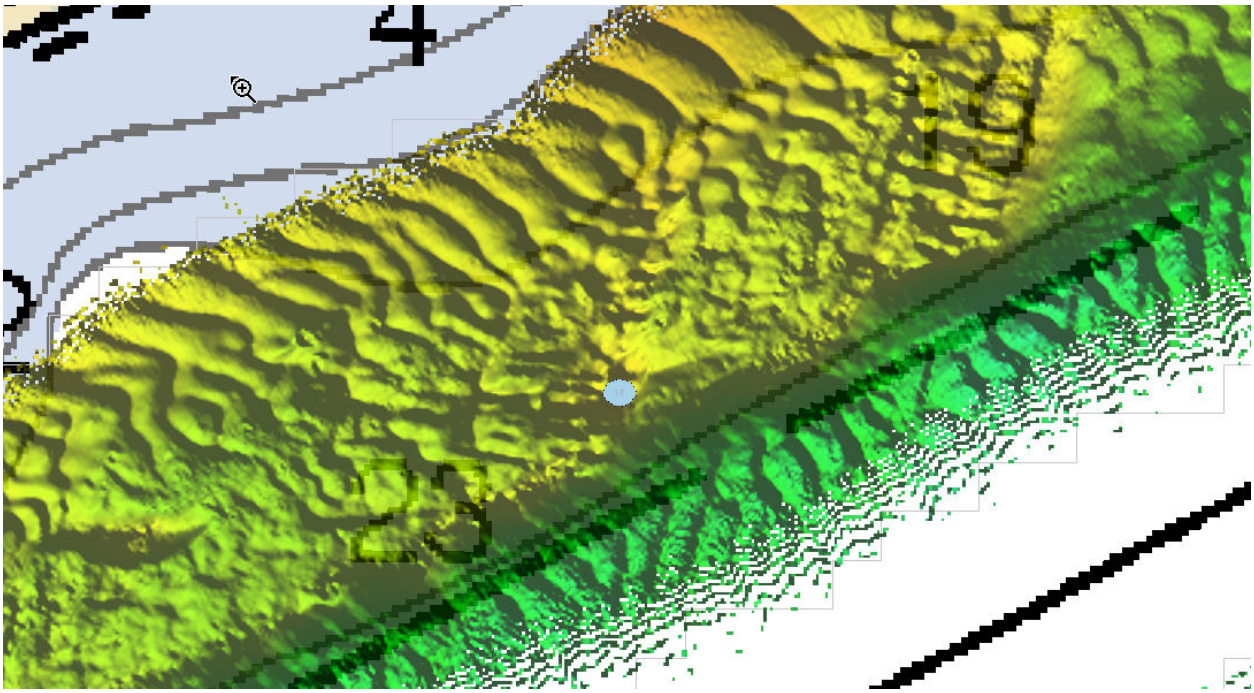


Figure 1.11.1

1.12) Danger 12 South Reef

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 35' 36.1" N, 124° 05' 45.9" W
Least Depth:	7.10 m (= 23.29 ft = 3.882 fm = 3 fm 5.29 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 12
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Plots over 31-foot charted sounding

Hydrographer Recommendations

Delete charted 31-foot depth; chart surveyed depth

Cartographically-Rounded Depth (Affected Charts):

23ft (18581_1)

3 ¾fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

7.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	OBJNAM - South Reef
	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 7.100 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #12, UWTROC. DTON applied to chart by MCD as a sounding. Compiled to HCell as a sounding inside a rocky seabed area.

Feature Images

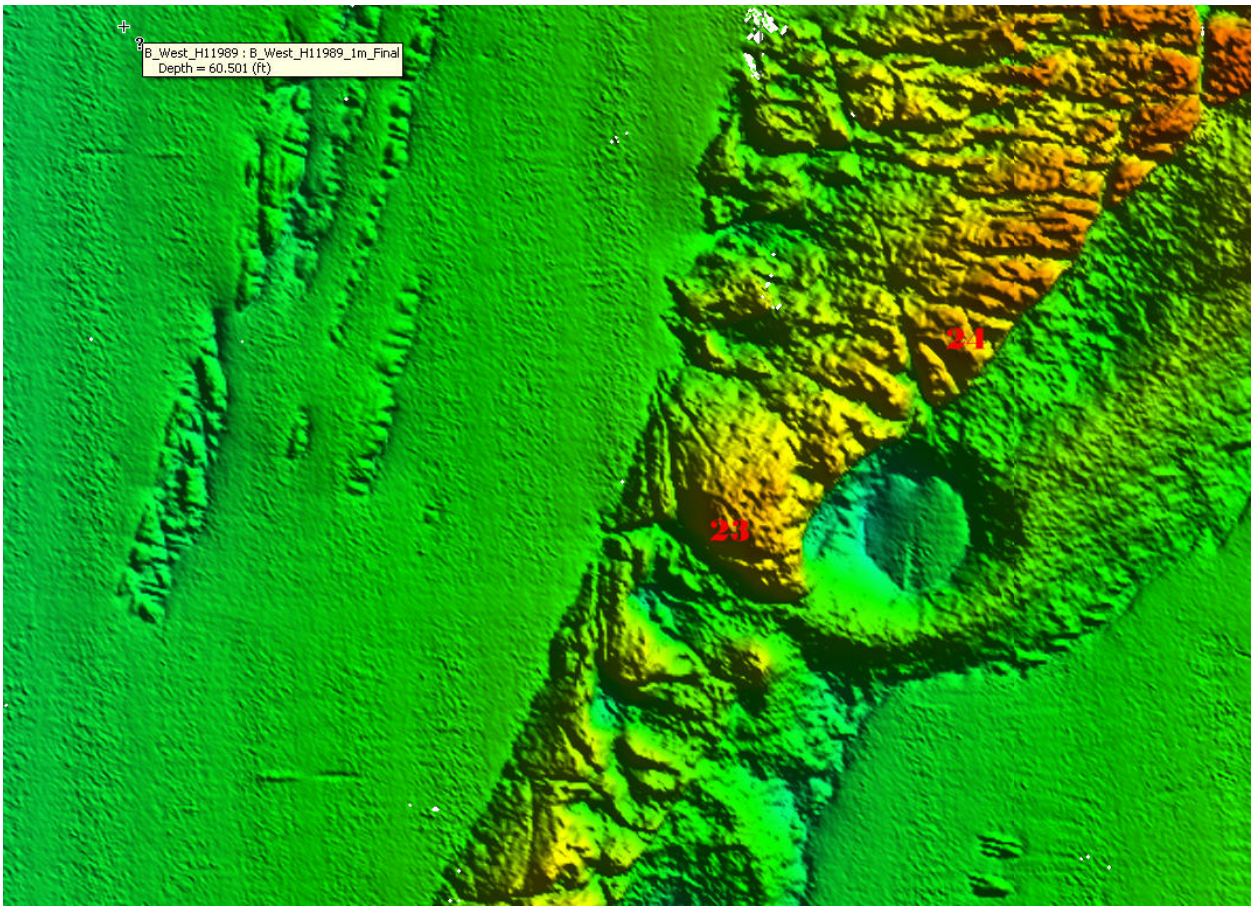


Figure 1.12.1

1.13) Danger 13 South Reef

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 28.0" N, 124° 05' 06.3" W
Least Depth:	8.11 m (= 26.61 ft = 4.435 fm = 4 fm 2.61 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 13
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

25 meters from edge of maintained channel

Hydrographer Recommendations

Delete charted 34-foot depth; chart surveyed depth

Cartographically-Rounded Depth (Affected Charts):

26ft (18581_1)

4 ¼fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

8.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	INFORM - 25 meters from edge of maintained channel
	OBJNAM - South Reef
	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 8.110 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #13, UWTROC. DTON applied to chart by MCD as a sounding. Compiled to HCell as a sounding inside a rocky seabed area.

Feature Images

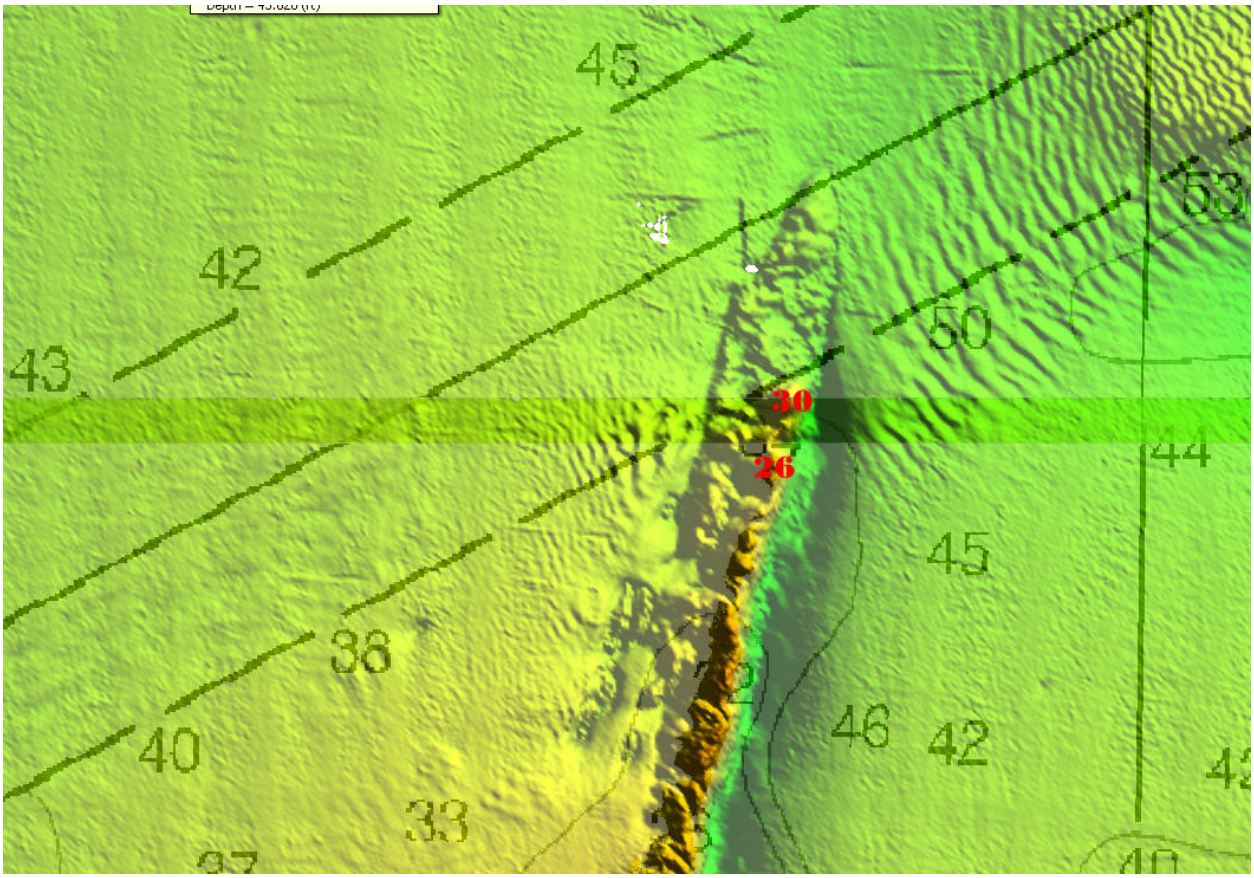


Figure 1.13.1

1.14) Danger 14 South Reef

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 35' 39.0" N, 124° 05' 40.9" W
Least Depth:	7.38 m (= 24.21 ft = 4.035 fm = 4 fm 0.21 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 14
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on South Reef; plots over 50-foot contour

Hydrographer Recommendations

chart surveyed sounding; revise contour

Cartographically-Rounded Depth (Affected Charts):

24ft (18581_1)

4fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

7.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	OBJNAM - South Reef
	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 7.380 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #14, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a sounding inside a rocky seabed area.

Feature Images

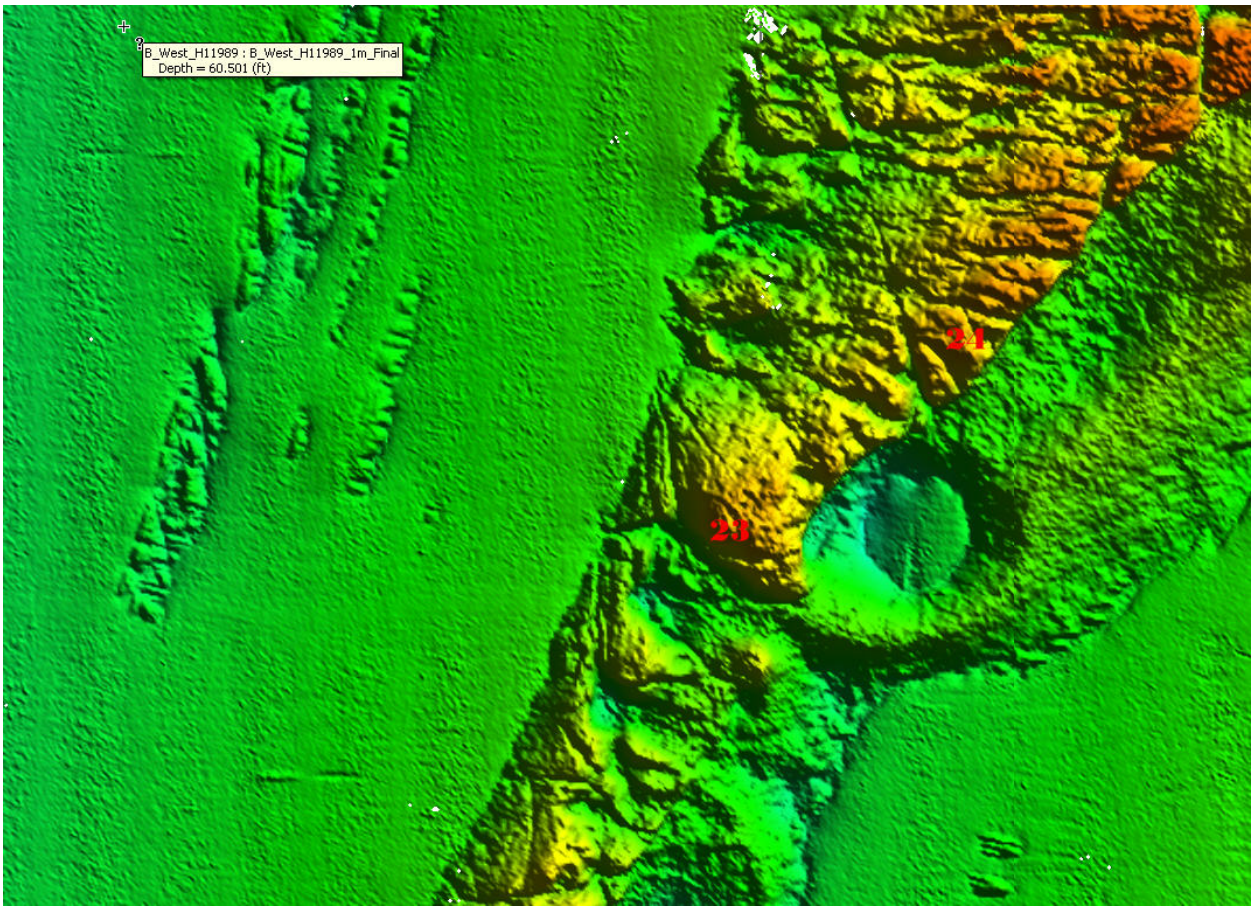


Figure 1.14.1

1.15) Danger 15 South Reef

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 15.3" N, 124° 05' 10.5" W
Least Depth:	4.08 m (= 13.39 ft = 2.231 fm = 2 fm 1.39 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 15
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

High point on South Reef; plots adjacent to 20-foot charted depth

Hydrographer Recommendations

delete 20; chart 13-foot depth

Cartographically-Rounded Depth (Affected Charts):

13ft (18581_1)

2 ¼fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

4.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	OBJNAM - South Reef
	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 4.080 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #15, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

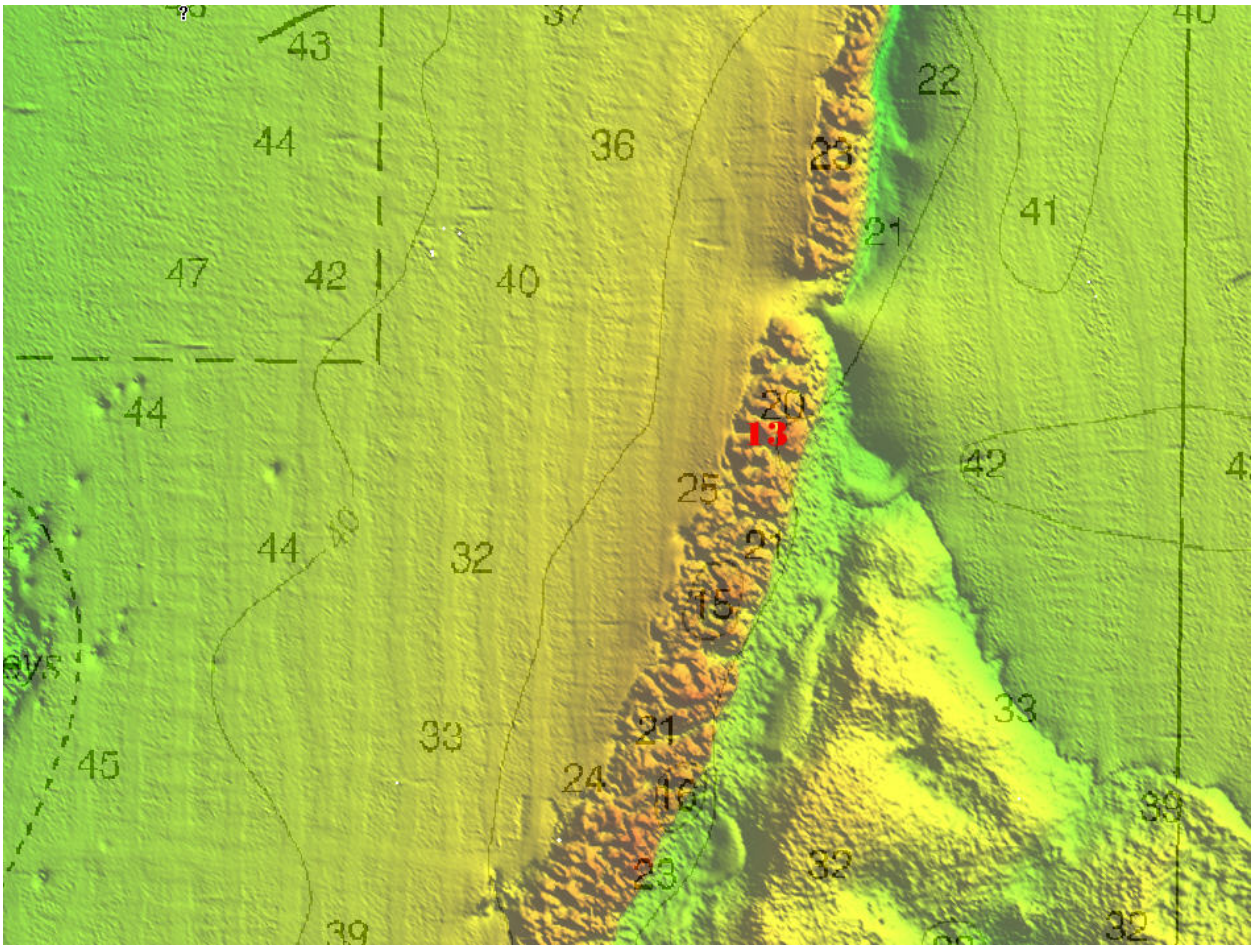


Figure 1.15.1

1.16) Danger 16

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 44.2" N, 124° 04' 41.4" W
Least Depth:	6.16 m (= 20.21 ft = 3.368 fm = 3 fm 2.21 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 16
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

plots over 27-foot charted depth

Hydrographer Recommendations

delete 27; chart 20-foot surveyed depth

Cartographically-Rounded Depth (Affected Charts):

20ft (18581_1)

3 ¼fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

6.2m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 6.160 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #16, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

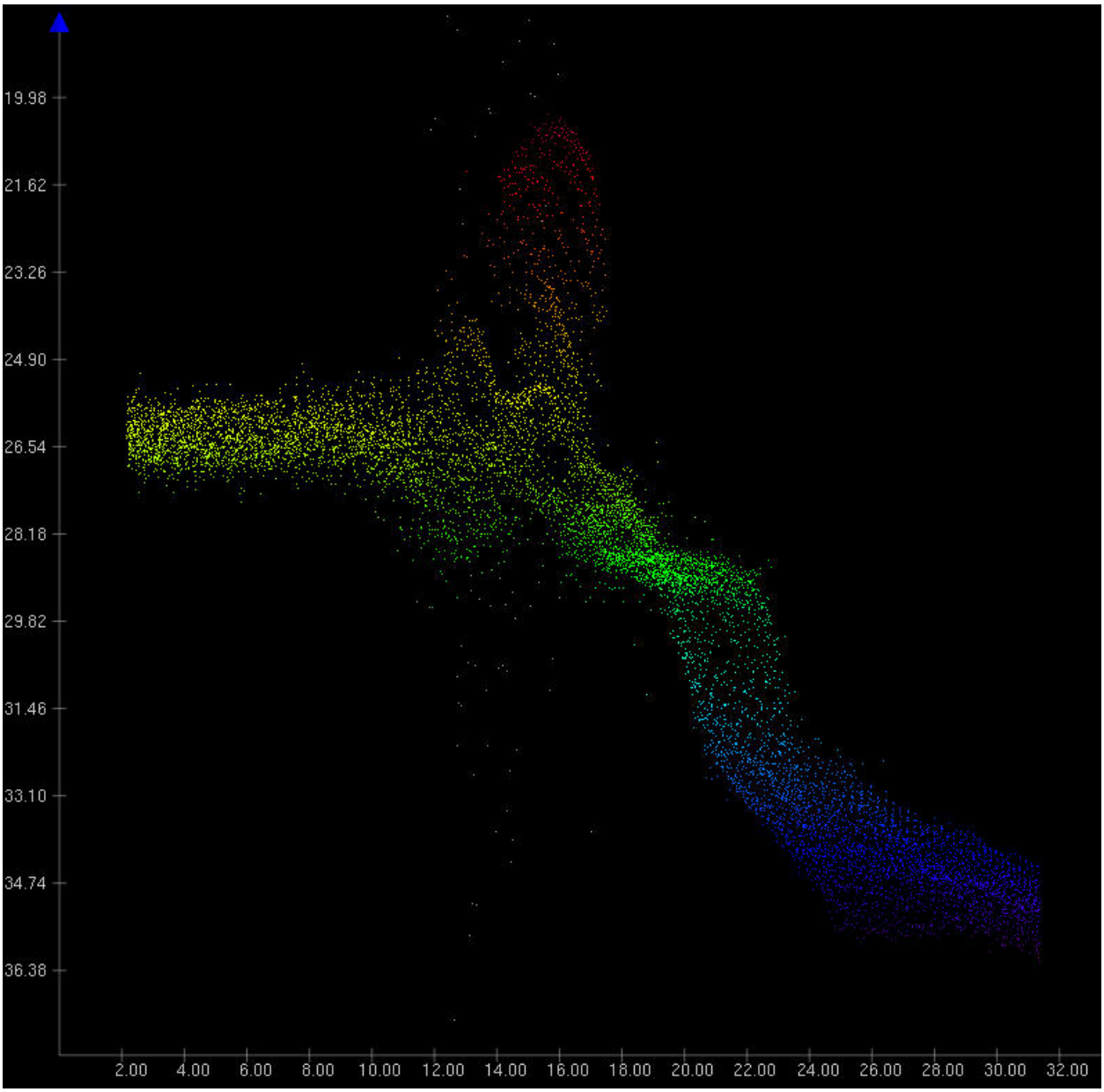


Figure 1.16.1

1.17) GP No. - Danger 17 from ChartGPs - ENC H11989_Dtons

DANGER TO NAVIGATION

Survey Summary

Survey Position: 44° 36' 04.5" N, 124° 05' 43.1" W

Least Depth:	15.30 m (= 50.20 ft = 8.366 fm = 8 fm 2.20 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 17
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Plots 144 meters seaward 50-foot contour

Hydrographer Recommendations

chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

50ft (18581_1)

8 ¼fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

15.3m (501_1, 50_1)

S-57 Data

Geo object 1:	Sounding (SOUNDG)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	TECSOU - 3:found by multi-beam
	VERDAT - 16:Mean high water

PHB Office notes: DTON #17, Shoal sounding. DTON not applied to chart by MCD. DTON compiled to HCell as a sounding.

1.18) GP No. - Danger 18 from ChartGPs - ENC H11989_Dtons

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 38.8" N, 124° 04' 59.3" W
Least Depth:	3.05 m (= 10.01 ft = 1.668 fm = 1 fm 4.01 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]

Timestamp: [None]

GP Dataset: ChartGPs - ENC H11989_Dtons

GP No.: Danger 18

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

plots seaward of 18 foot contour

Hydrographer Recommendations

chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

10ft (18581_1)

1 ½fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

3.1m (501_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes:

QUASOU - 1:depth known

RECDAT - 20090514

SORDAT - 20080929

SORIND - US,US,survy,NRT3

TECSOU - 3:found by multi-beam

VALSOU - 3.050 m

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #18, Shoal sounding. DTON not applied to chart by MCD. DTON not compiled to HCell.

1.19) Danger 19

DANGER TO NAVIGATION

Survey Summary

Survey Position: 44° 36' 47.2" N, 124° 04' 34.2" W

Least Depth: 5.10 m (= 16.73 ft = 2.789 fm = 2 fm 4.73 ft)

TPU (±1.96σ): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]

Timestamp: [None]

GP Dataset: ChartGPs - ENC H11989_Dtons

GP No.: Danger 19

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rocky outcrop; 30 meters from channel

Hydrographer Recommendations

chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

16ft (18581_1)

2 ¾fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

5.1m (501_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes:

INFORM - 30 meters from channel

QUASOU - 1:depth known

RECDAT - 20090514

SORDAT - 20080929

SORIND - US,US,survy,NRT3

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 5.100 m

VERDAT - 16:Mean high water

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #19, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

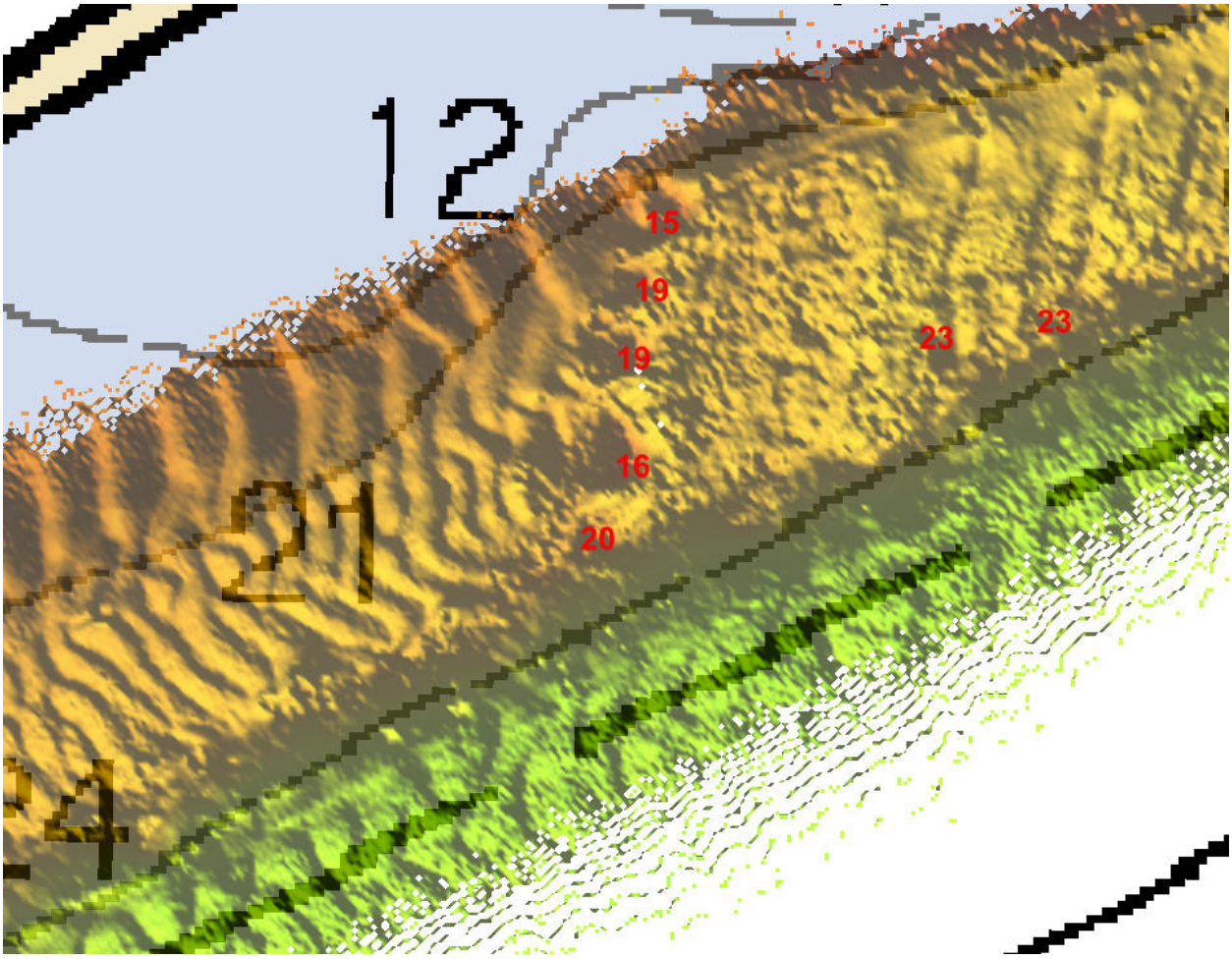


Figure 1.19.1

1.20) Danger 20

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 42.6" N, 124° 00' 54.5" W
Least Depth:	5.03 m (= 16.50 ft = 2.750 fm = 2 fm 4.50 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 20

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rocky area

Hydrographer Recommendations

delete charte 23-foot charted depth; chart surveyed depth

Cartographically-Rounded Depth (Affected Charts):

16ft (18581_1)

2 ¾fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

5.0m (501_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes:

INFORM - high point on rocky area

QUASOU - 1:depth known

RECDAT - 20090514

SORDAT - 20080929

SORIND - US,US,survy,NRT3

STATUS - 1:permanent

TECSOU - 3:found by multi-beam

VALSOU - 5.030 m

VERDAT - 16:Mean high water

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #20, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a sounding inside a rocky seabed area.

Feature Images

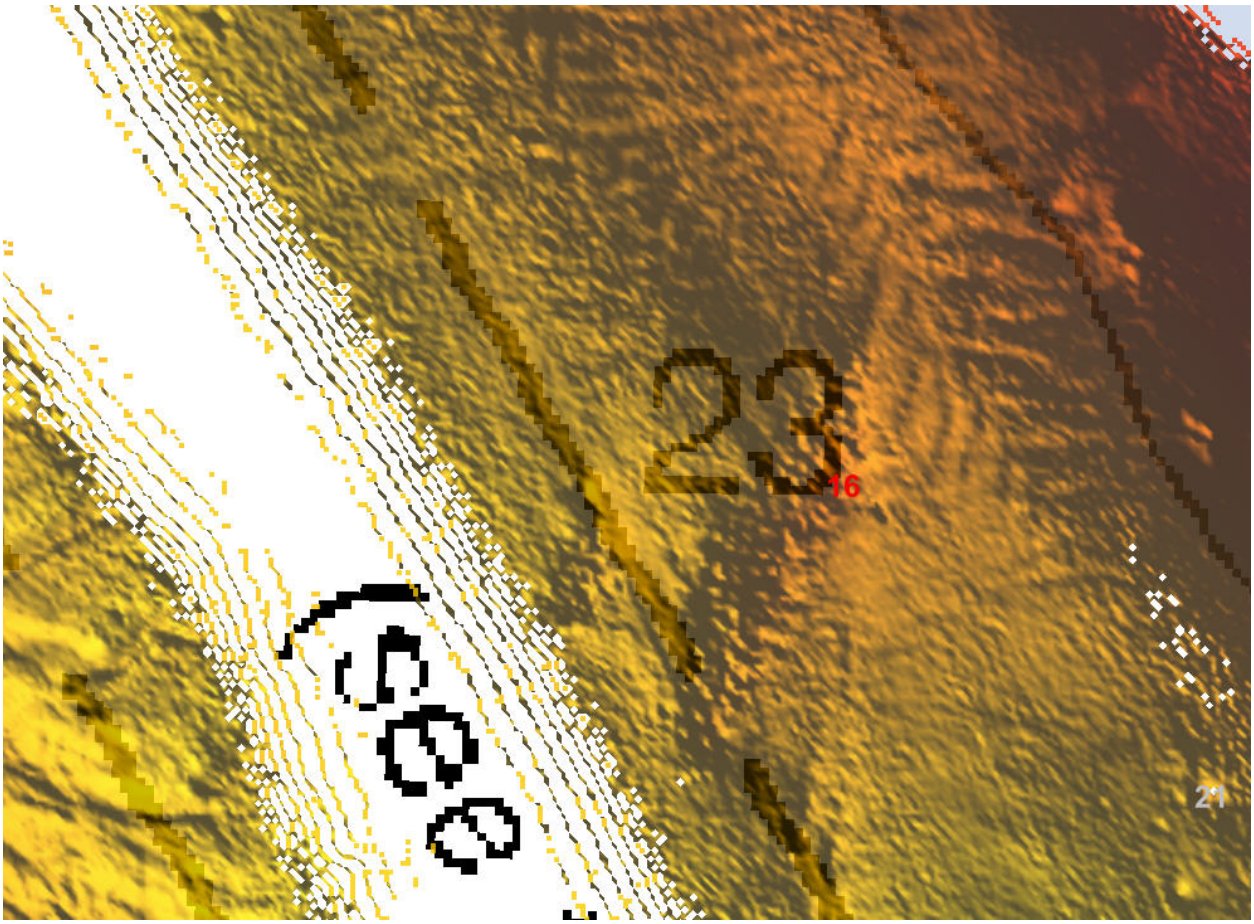


Figure 1.20.1

1.21) Danger 21

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 45.3" N, 124° 00' 56.1" W
Least Depth:	4.48 m (= 14.70 ft = 2.450 fm = 2 fm 2.70 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_Dtons
GP No.:	Danger 21
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

shoal is seaward of 18-foot curve

Hydrographer Recommendations

chart surveyed sounding; revise contour

Cartographically-Rounded Depth (Affected Charts):

14ft (18581_1)

2 ½fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

4.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - US,US,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 4.480 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #21, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

Feature Images

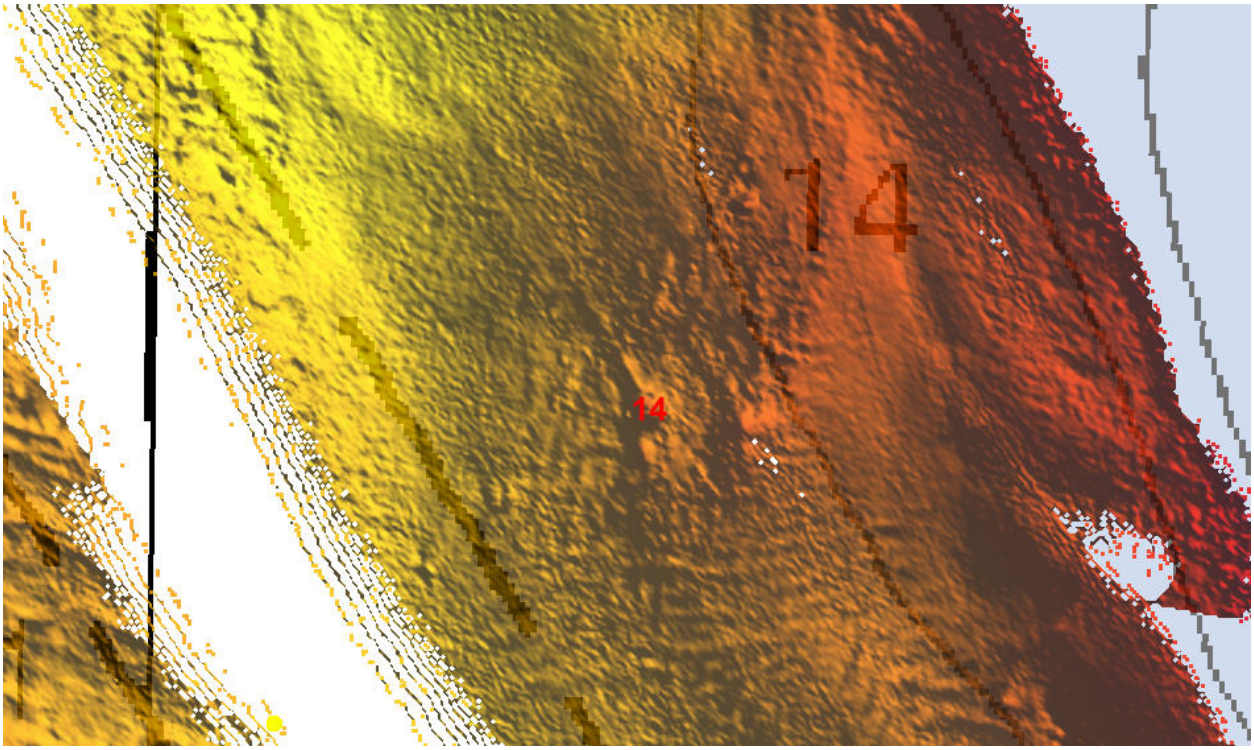


Figure 1.21.1

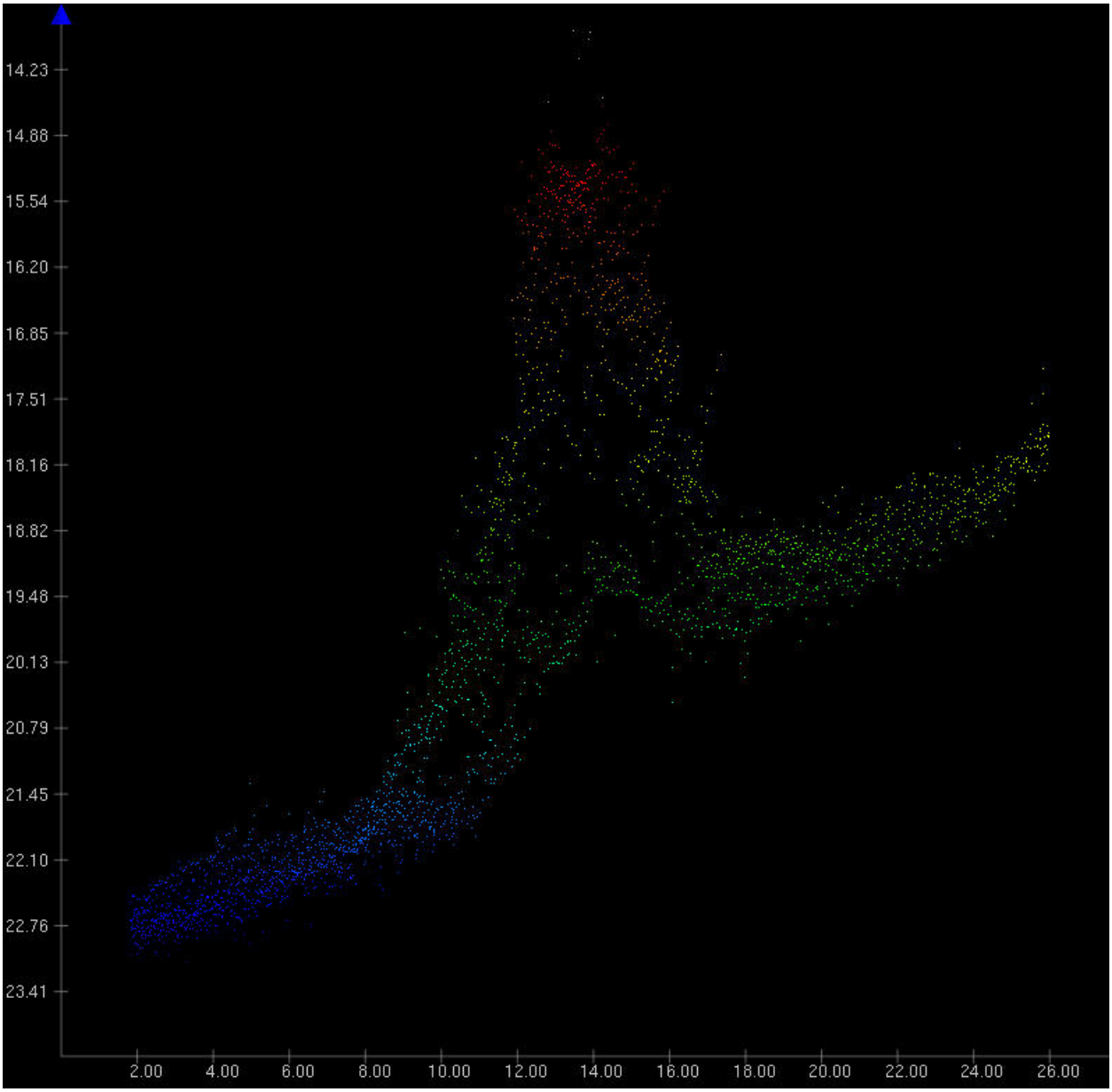


Figure 1.21.2

1.22) GP No. - Danger 22 from ChartGPs - ENC H11989_Dtons

DANGER TO NAVIGATION

Survey Summary

Survey Position: 44° 36' 37.8" N, 124° 00' 49.0" W

Least Depth: 1.89 m (= 6.20 ft = 1.033 fm = 1 fm 0.20 ft)

TPU (±1.96σ): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]

Timestamp: [None]

GP Dataset: ChartGPs - ENC H11989_Dtons

GP No.: Danger 22

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rocky shoreline

Hydrographer Recommendations

Chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

6ft (18581_1)

1fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

1.9m (501_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes:

INFORM - high point on rocky shoreline

QUASOU - 1:depth known

SORDAT - 20080929

SORIND - US,US,survy,NRT3

TECSOU - 3:found by multi-beam

VALSOU - 1.890 m

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #22, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

1.23) GP No. - Danger 23 from ChartGPs - ENC H11989_Dtons

DANGER TO NAVIGATION

Survey Summary

Survey Position: 44° 36' 14.8" N, 124° 00' 38.4" W

Least Depth: 2.99 m (= 9.81 ft = 1.635 fm = 1 fm 3.81 ft)

TPU (±1.96σ): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]

Timestamp: [None]

GP Dataset: ChartGPs - ENC H11989_Dtons

GP No.: Danger 23

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on rocky shoreline

Hydrographer Recommendations

chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

10ft (18581_1)

1 ½fm (18561_1, 18580_1, 18003_1, 18007_1, 530_1)

3.0m (501_1, 50_1)

S-57 Data

Geo object 1: Underwater rock / awash rock (UWTROC)

Attributes:

INFORM - high point on rocky shoreline

QUASOU - 1:depth known

SORDAT - 20080929

SORIND - US,US,survy,NRT3

TECSOU - 3:found by multi-beam

VALSOU - 2.990 m

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #23, UWTROC. DTON not applied to chart by MCD. Compiled to HCell as a submerged rock inside a rocky seabed area.

1.24) Danger 24

DANGER TO NAVIGATION

Survey Summary

Survey Position: 44° 37' 49.0" N, 124° 02' 40.5" W

Least Depth: 3.10 m (= 10.17 ft = 1.695 fm = 1 fm 4.17 ft)

TPU (±1.96σ): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]

Timestamp: [None]

GP Dataset: ChartGPs - ENC H11989_new_DTONS

GP No.: Danger 1

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

obstruction in marina

Hydrographer Recommendations

chart sounding on obstruction

Cartographically-Rounded Depth (Affected Charts):

10ft (18581_1)

1 ¾fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

3.1m (501_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes:

QUASOU - 1:depth known

RECDAT - 20090514

SORDAT - 20080929

SORIND - us,us,survy,NRT3

TECSOU - 3:found by multi-beam

VALSOU - 3.100 m

VERDAT - 16:Mean high water

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #24, OBSTRN. DTON not applied to chart by MCD. DTON not compiled to HCell.

Feature Images

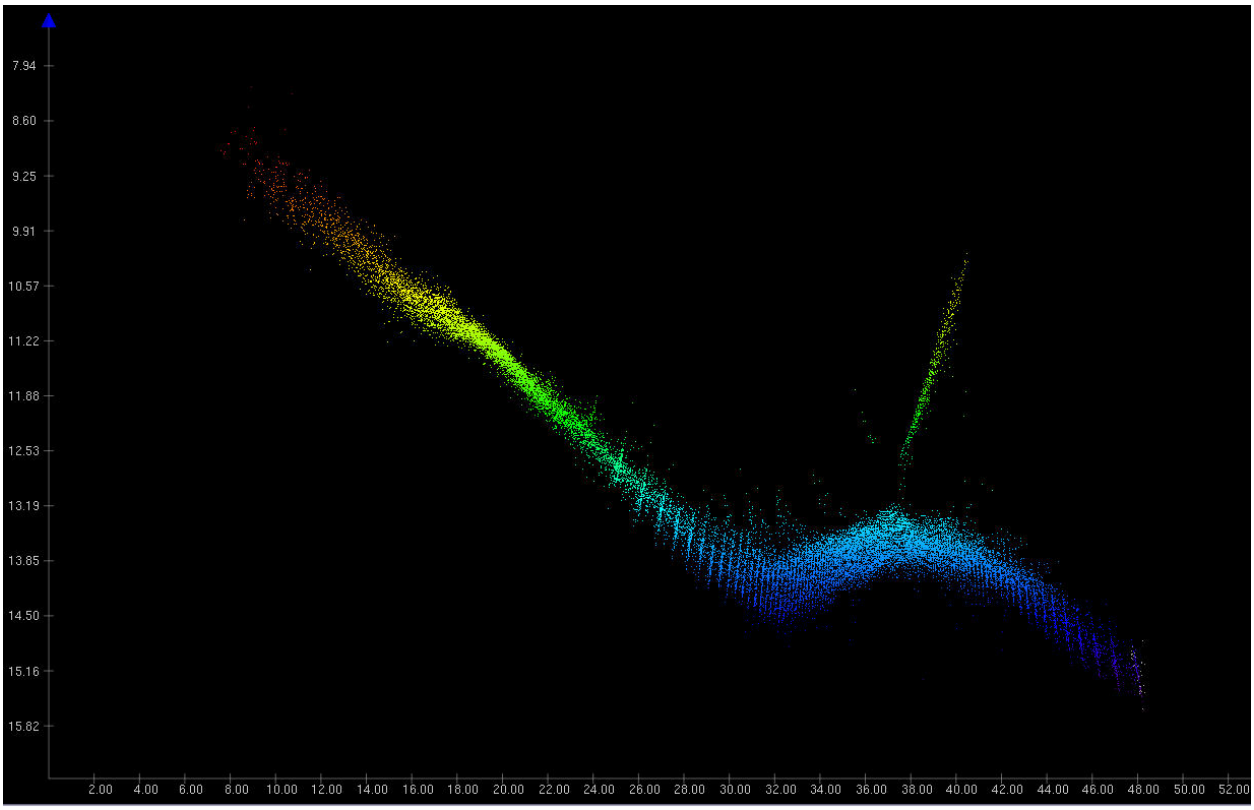


Figure 1.24.1

1.25) Danger 25

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 49.3" N, 124° 03' 04.2" W
Least Depth:	4.70 m (= 15.42 ft = 2.570 fm = 2 fm 3.42 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_new_DTONS
GP No.:	Danger 2
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

shoal sounding plots on 18-foot contour

Hydrographer Recommendations

chart surveyed depth

Cartographically-Rounded Depth (Affected Charts):

15ft (18581_1)

2 ½fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

4.7m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 4.700 m
	VERDAT - 12:Mean lower low water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #25, OBSTRN. DTON not applied to chart by MCD. DTON compiled to HCell as OBSTRN.

Feature Images

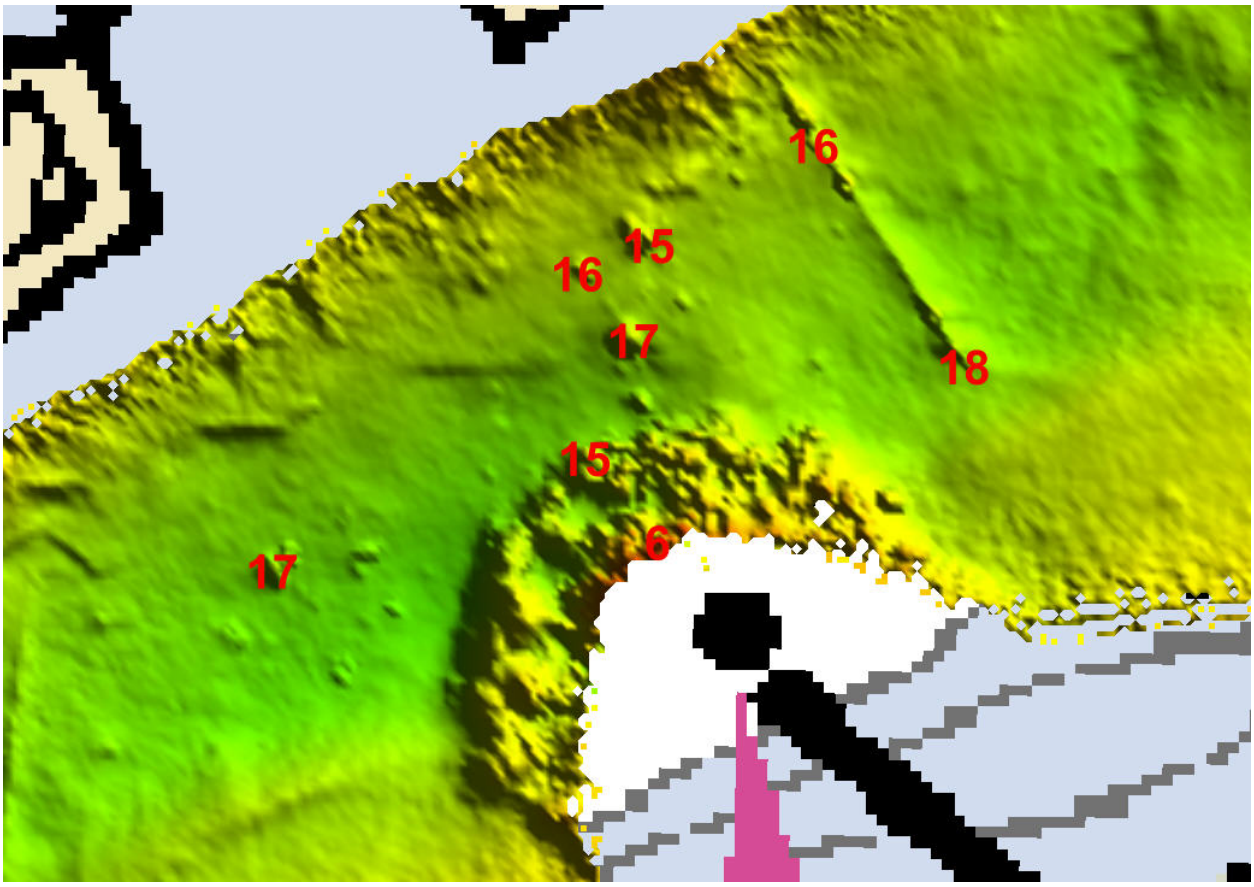


Figure 1.25.1

1.26) Danger 30

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 48.3" N, 124° 03' 05.7" W
Least Depth:	5.40 m (= 17.72 ft = 2.953 fm = 2 fm 5.72 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC H11989_new_DTONS
GP No.:	Danger 4
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

plots adjacent to 21-foot charted sounding

Hydrographer Recommendations

Delete 21; chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

17ft (18581_1)

3fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

5.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - sounding on shoal
	QUASOU - 1:depth known
	RECDAT - 20090514
	TECSOU - 3:found by multi-beam
	VALSOU - 5.400 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #30, OBSTRN/Shoal sounding. DTON not applied to chart by MCD. DTON not compiled to HCell.

Feature Images

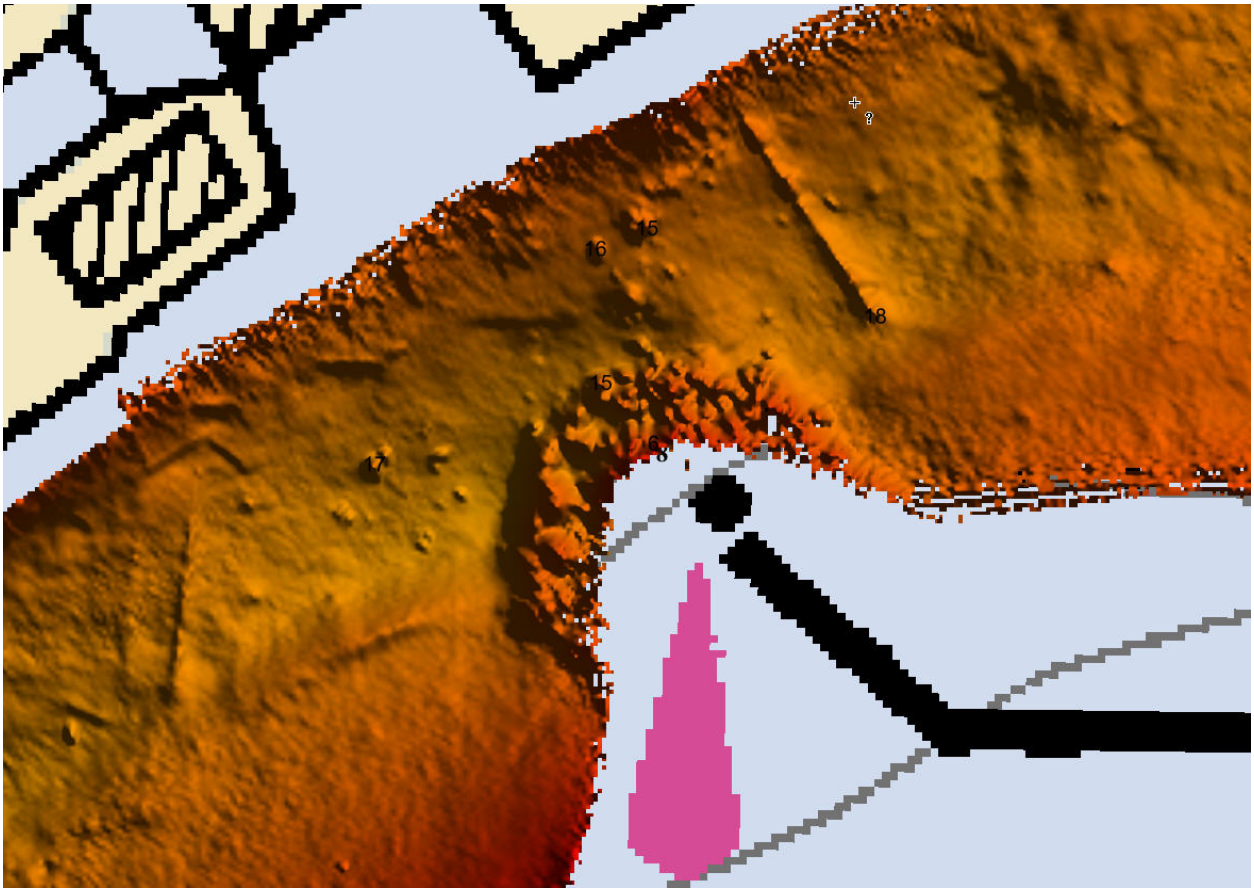


Figure 1.26.1

1.27) Danger 28

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 36.5" N, 124° 03' 19.2" W
Least Depth:	6.40 m (= 21.00 ft = 3.500 fm = 3 fm 3.00 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Danger 1
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

possibly submerged charted dol

Hydrographer Recommendations

chart sounding on obstruction

Cartographically-Rounded Depth (Affected Charts):

21ft (18581_1)

3 ½fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

6.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 1:depth known
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 6.400 m
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #28, OBSTRN. DTON not applied to chart by MCD. DTON compiled to HCell as OBSTRN.

Feature Images

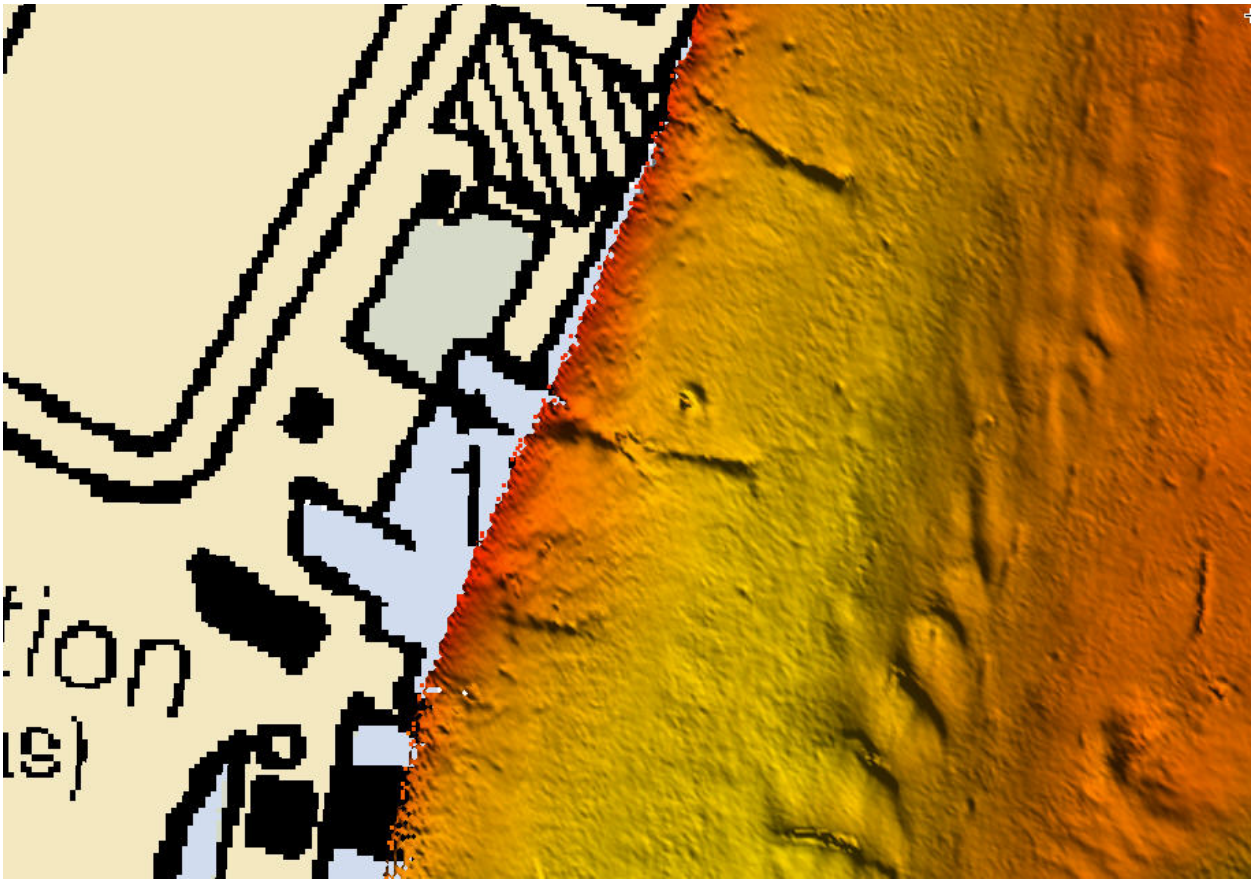


Figure 1.27.1

1.28) Danger 31

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 37.8" N, 124° 03' 18.0" W
Least Depth:	7.50 m (= 24.61 ft = 4.101 fm = 4 fm 0.61 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Danger 2
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

offshore end outfall pipe

Hydrographer Recommendations

chart as depicted

Cartographically-Rounded Depth (Affected Charts):

24ft (18581_1)

4fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

7.5m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - offshore end outfall pipe
	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 7.500 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #31, OBSTRN. DTON not applied to chart by MCD. DTON not compiled to HCell. (Seaward extent of outfall.) See also DTON "Outfall 1".

Feature Images

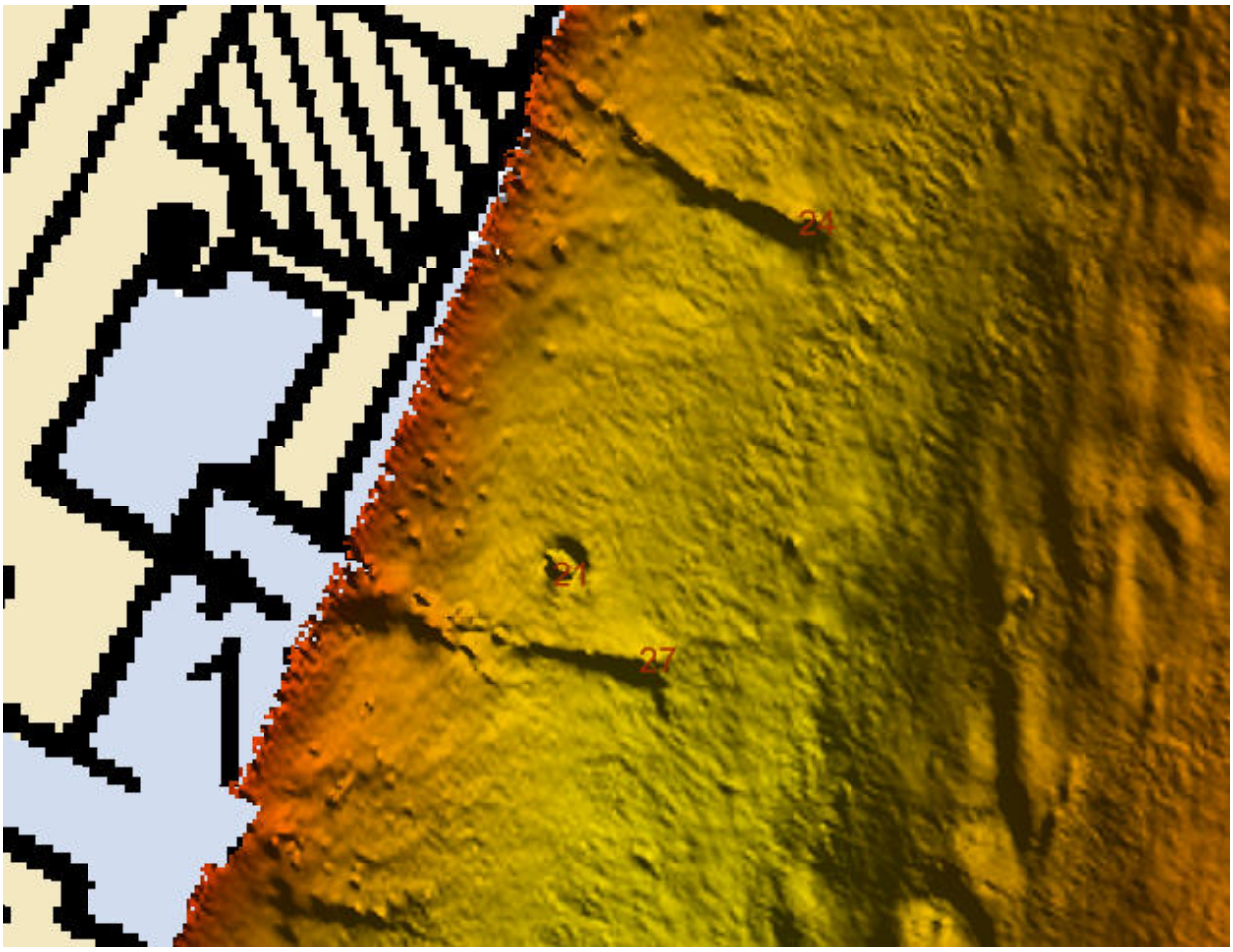


Figure 1.28.1

1.29) Danger 32

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 43.9" N, 124° 03' 12.8" W
Least Depth:	5.60 m (= 18.37 ft = 3.062 fm = 3 fm 0.37 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Danger 4

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

offshore end submerged outfall

Hydrographer Recommendations

chart outfall

Cartographically-Rounded Depth (Affected Charts):

18ft (18581_1)

3fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

5.6m (501_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes:

QUASOU - 1:depth known

RECDAT - 20090514

SORDAT - 20080929

SORIND - us,us,survy,NRT3

TECSOU - 3:found by multi-beam

VALSOU - 5.600 m

VERDAT - 16:Mean high water

WATLEV - 3:always under water/submerged

PHB Office notes: DTON #32, OBSTRN. DTON not applied to chart by MCD. DTON not compiled to HCell. (Seaward extent of outfall.) See also DTON "Outfall 3".

Feature Images

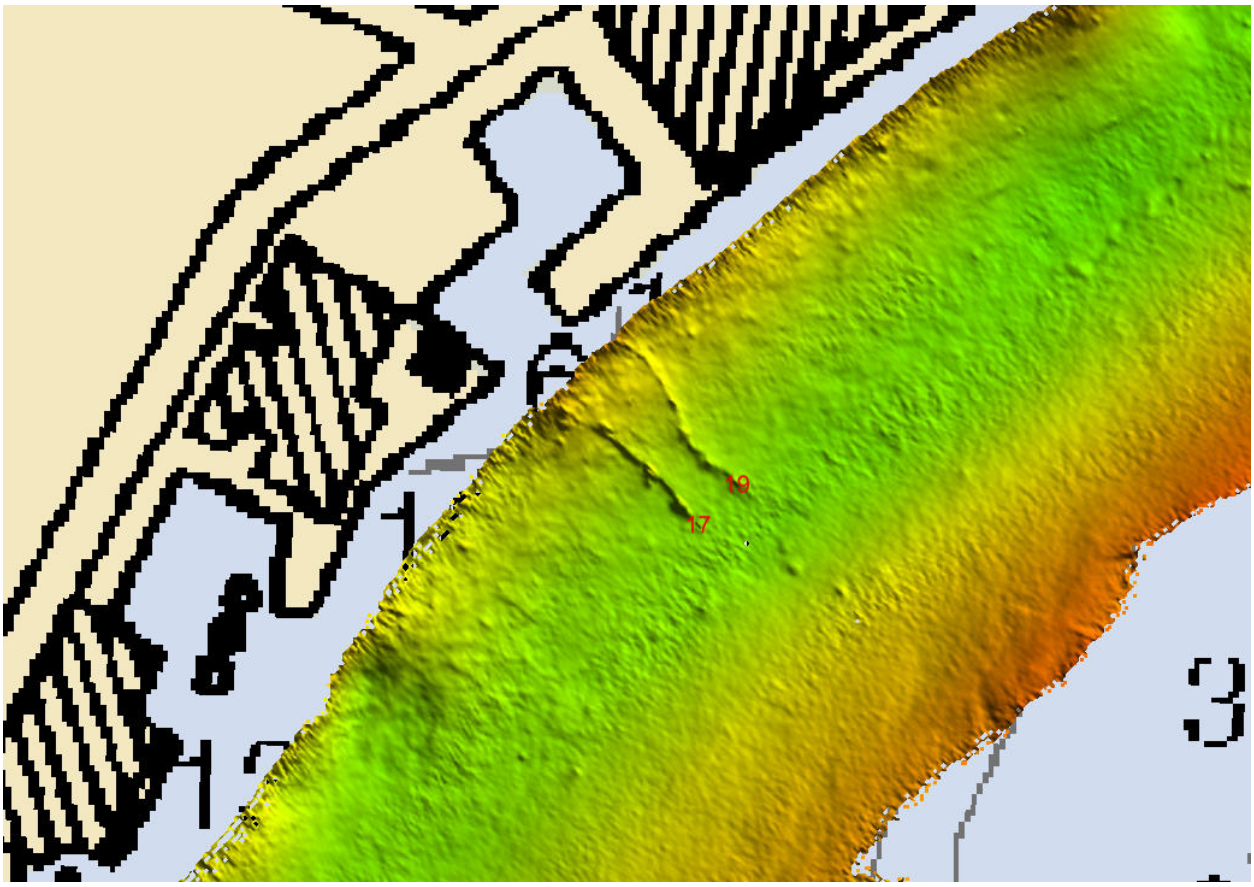


Figure 1.29.1

1.30) Danger 33

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 41.1" N, 124° 03' 17.0" W
Least Depth:	4.70 m (= 15.42 ft = 2.570 fm = 2 fm 3.42 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Danger 5
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

high point on shoal; plots seaward of 18-foot contour

Hydrographer Recommendations

chart sounding

Cartographically-Rounded Depth (Affected Charts):

15ft (18581_1)

2 ½fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

4.7m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 1:depth known
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 4.700 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #33, OBSTRN. DTON not applied to chart by MCD. DTON not compiled to HCell.

1.31) Danger 26

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 36.2" N, 124° 03' 18.8" W
Least Depth:	8.40 m (= 27.56 ft = 4.593 fm = 4 fm 3.56 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Danger 6
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

offshore end outfall

Hydrographer Recommendations

Chart outfall as depicted

Cartographically-Rounded Depth (Affected Charts):

27ft (18581_1)

4 ½fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

8.4m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - offshore end outfall
	QUASOU - 1:depth known
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 8.400 m
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #26, OBSTRN. DTON not applied to chart by MCD. DTON not compiled to HCell as OBSTRN. (Seaward extent of outfall.) See also DTON "Outfall 2".

Feature Images

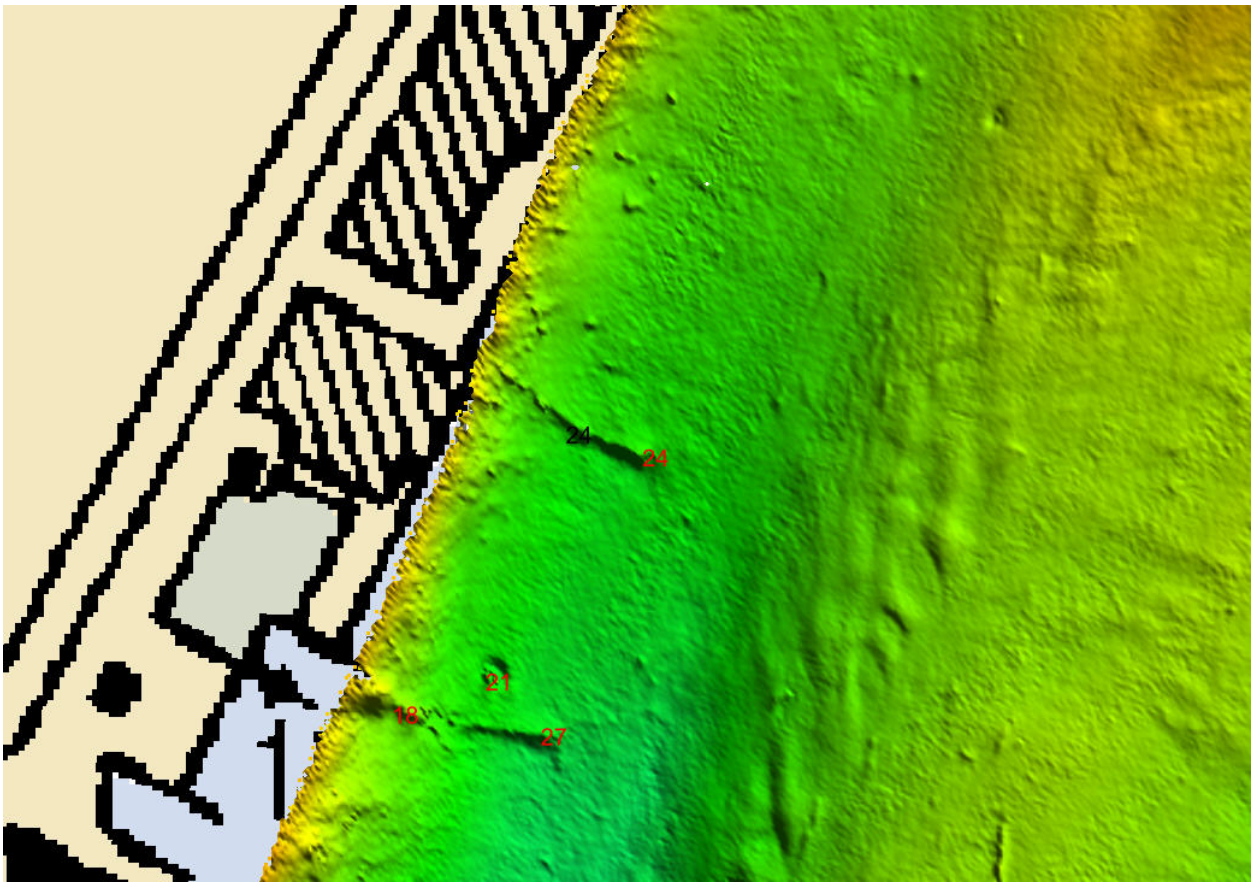


Figure 1.31.1

1.32) Danger 34

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 44.1" N, 124° 03' 12.5" W
Least Depth:	5.80 m (= 19.03 ft = 3.171 fm = 3 fm 1.03 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Danger 8
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

offshore end submerged outfall

Hydrographer Recommendations

chart outfall as depicted

Cartographically-Rounded Depth (Affected Charts):

19ft (18581_1)

3fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

5.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 1:depth known
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 5.800 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #34, OBSTRN. DTON not applied to chart by MCD. DTON not compiled to HCell. (Seaward extent of outfall.) See also DTON "Outfall 4".

Feature Images

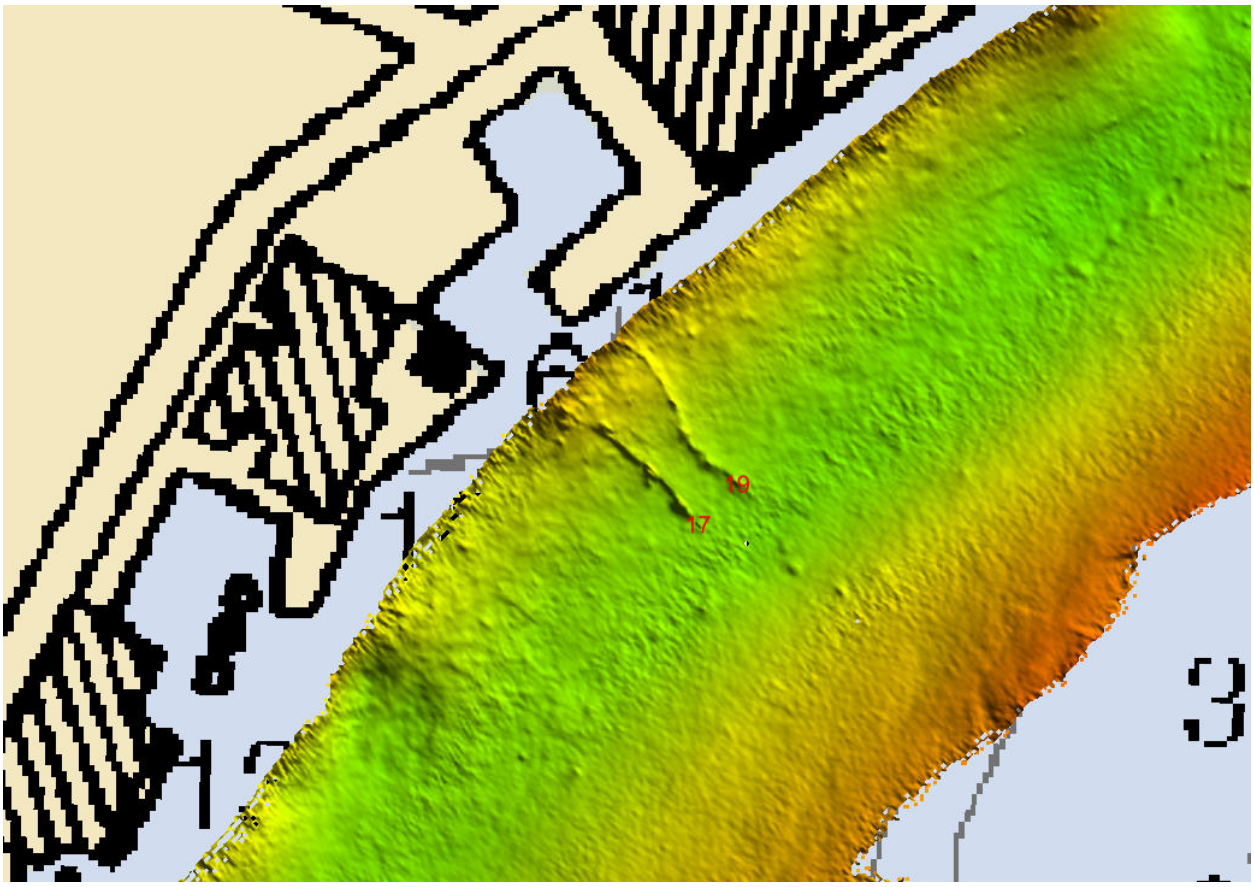


Figure 1.32.1

1.33) Danger 29

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 48.9" N, 124° 03' 02.9" W
Least Depth:	5.60 m (= 18.37 ft = 3.062 fm = 3 fm 0.37 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Danger 10
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

offshore end submerged pipeline

Hydrographer Recommendations

chart pipeline as depicted

Cartographically-Rounded Depth (Affected Charts):

18ft (18581_1)

3fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

5.6m (501_1, 50_1)

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	INFORM - offshore end submerged pipeline
	QUASOU - 1:depth known
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	STATUS - 1:permanent
	TECSOU - 3:found by multi-beam
	VALSOU - 5.600 m
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #29, OBSTRN. DTON not applied to chart by MCD. DTON not compiled to HCell. (Seaward extent of outfall.) See also DTON "Outfall 5".

Feature Images

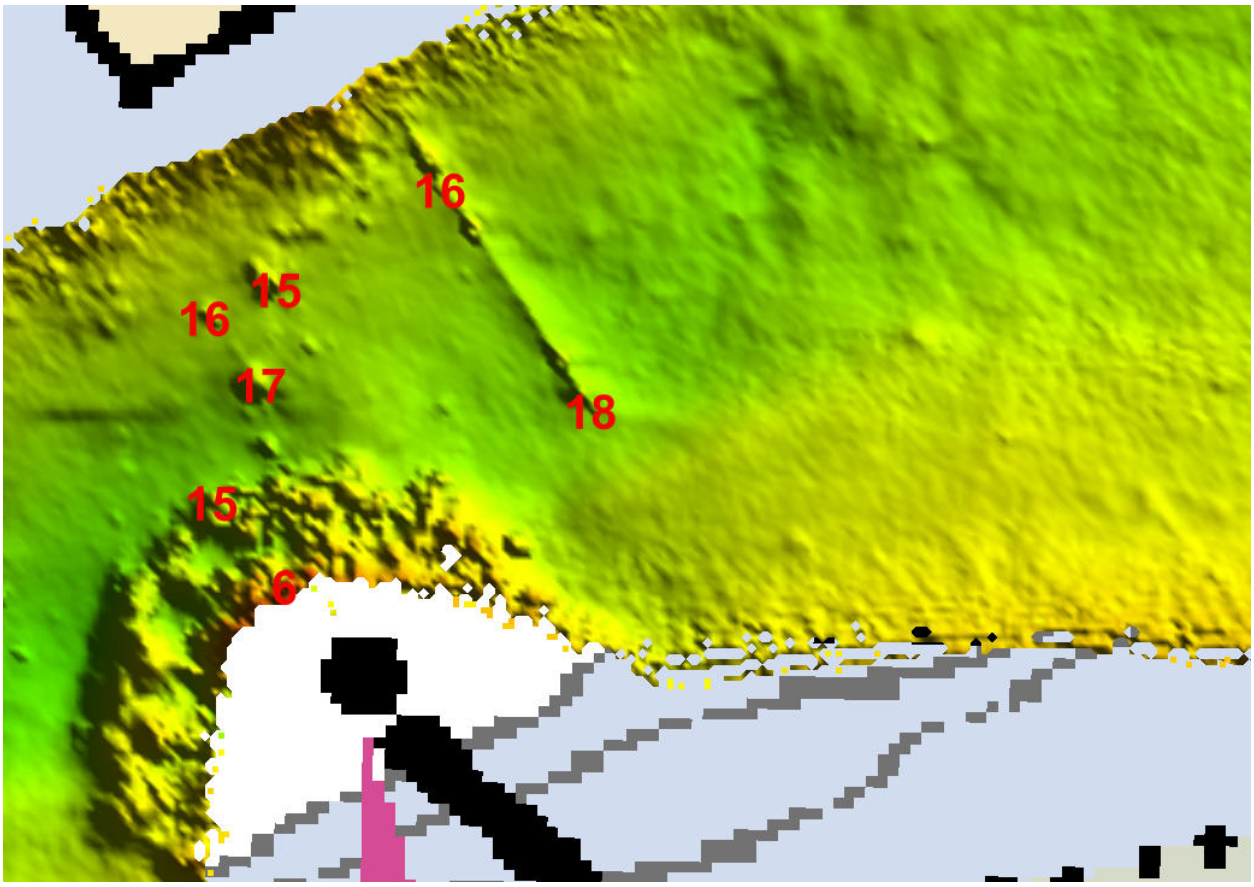


Figure 1.33.1

1.34) Danger 27

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 48.4" N, 124° 03' 04.1" W
Least Depth:	1.80 m (= 5.91 ft = 0.984 fm = 0 fm 5.91 ft)
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Danger 11
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

surveyed high point on breakwater

Hydrographer Recommendations

chart surveyed sounding

Cartographically-Rounded Depth (Affected Charts):

6ft (18581_1)

1fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

1.8m (501_1, 50_1)

S-57 Data

Geo object 1:	Underwater rock / awash rock (UWTROC)
Attributes:	QUASOU - 1:depth known
	RECDAT - 20090514
	TECSOU - 3:found by multi-beam
	VALSOU - 1.800 m
	WATLEV - 3:always under water/submerged

PHB Office notes: DTON #27, UWTROC. DTON not applied to chart by MCD. DTON not compiled to HCell. (Falls inside rocky seabed area at end of breakwater.)

Feature Images

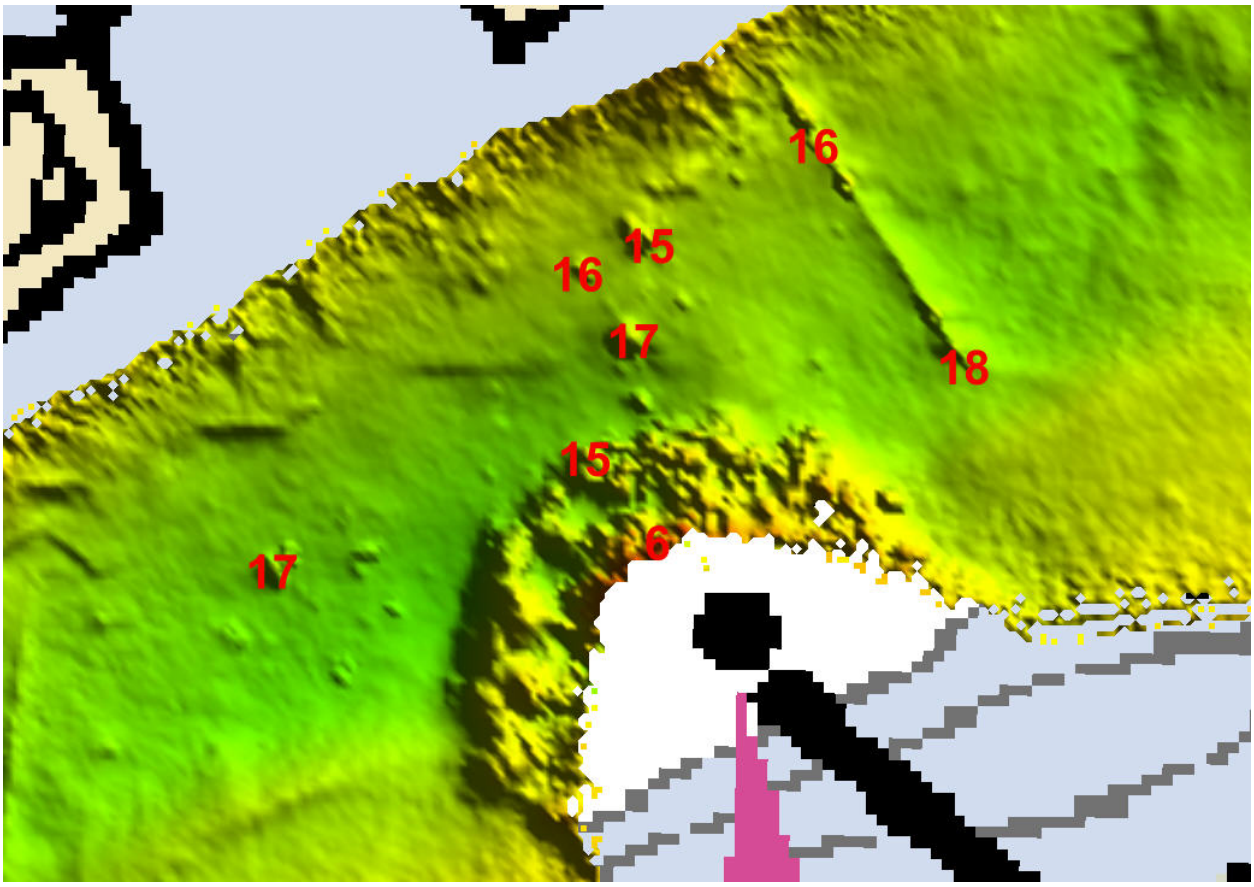


Figure 1.34.1

1.35) Seabed 1

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 42.2" N, 124° 04' 58.7" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Seabed 1
Charts Affected:	18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

rock charted at latitude 44.61046489N, longitude 124.08323834W is gone as is 14-foot charted sounding at latitude 44.61066807N, longitude 124.08374800W. Rocky seabed area has changed.

Hydrographer Recommendations

Delete charted rock and 14-foot depth; chart rocky seabed line delineating extent of jetty.

S-57 Data

Geo object 1: Seabed area (SBDARE)

Attributes: INFORM - offshore end of jetty

NATQUA - 10:hard

NATSUR - 9:rock

RECDAT - 20090514

SORDAT - 20080929

SORIND - us,us,survy,NRT3

WATLEV - 1:partly submerged at high water

PHB Office notes: DTON "Seabed 1", SBDARE at end of breakwater. DTON not applied to chart by MCD. DTON modified in extent and compiled to HCell as a rocky seabed area object.

Feature Images

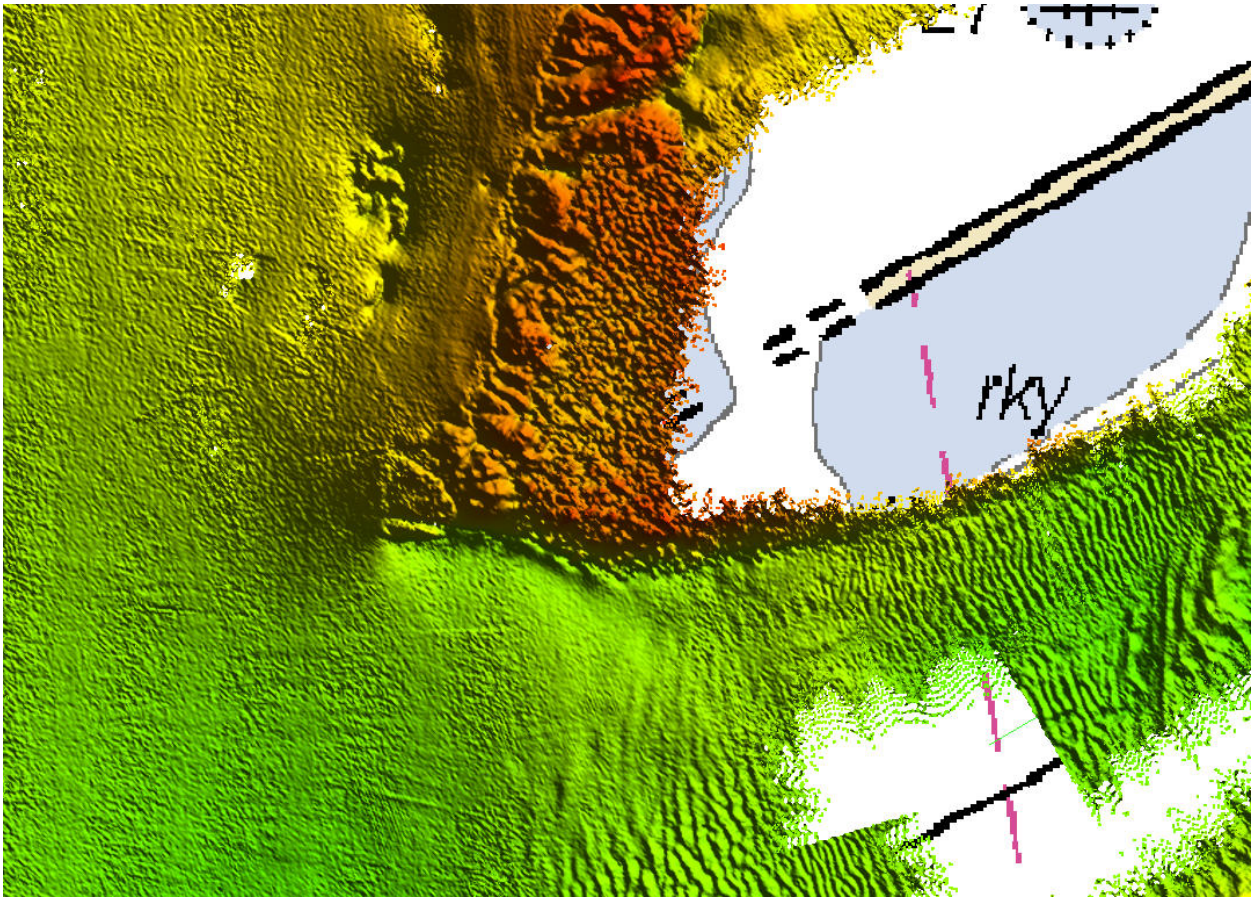


Figure 1.35.1

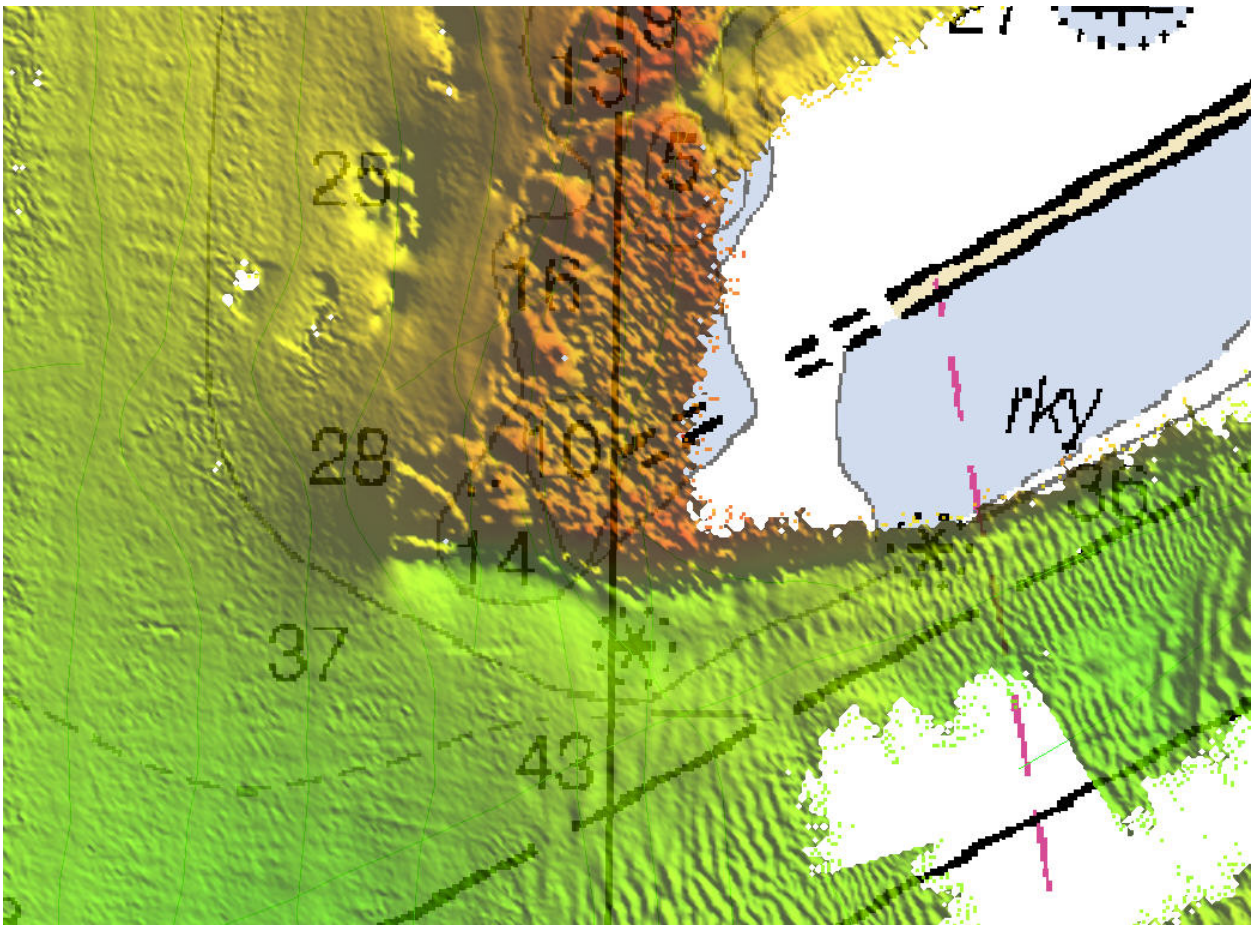


Figure 1.35.2

1.36) Seabed 3

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 47.3" N, 124° 03' 04.3" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Seabed 3
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

limits of underwater portion of breakwater

Hydrographer Recommendations

Chart as depicted

S-57 Data

Geo object 1:	Seabed area (SBDARE)
Attributes:	INFORM - limits of underwater portion of breakwater
	NATQUA - 10:hard
	NATSUR - 9:rock
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	WATLEV - 1:partly submerged at high water

PHB Office notes: DTON "Seabed 3", SBDARE at end of breakwater. DTON not applied to chart by MCD. DTON modified in extent and compiled to HCell as a rocky seabed area object.

Feature Images

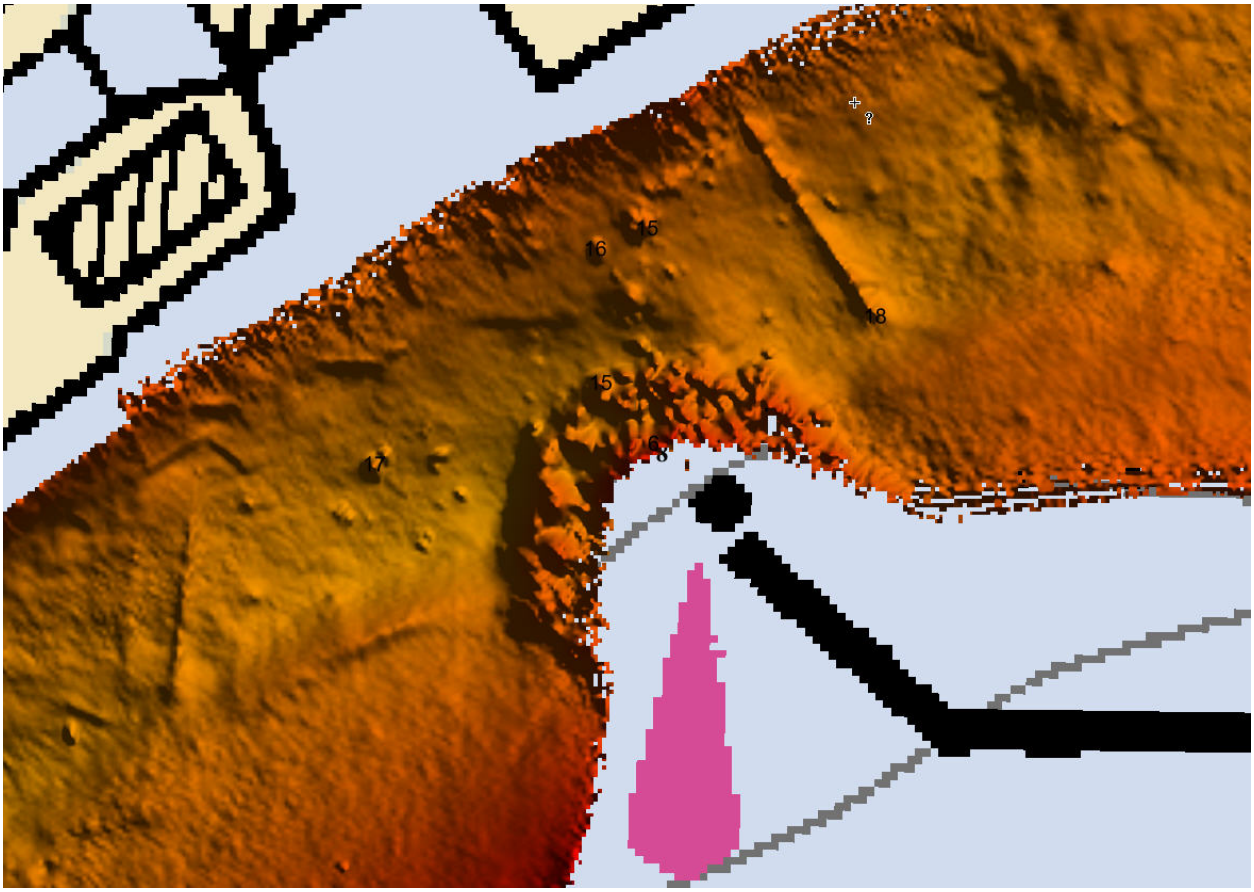


Figure 1.36.1

1.37) Outfall 3

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 44.7" N, 124° 03' 14.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Other 1
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

submerged outfall pipe

Hydrographer Recommendations

chart as depicted

S-57 Data

Geo object 1:	Pipeline, submarine/on land (PIPSOL)
Attributes:	CATPIP - 2:outfall pipe
	PRODCT - 3:water
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3

PHB Office notes: DTON "Outfall 3", PIPSOL. DTON not applied to chart by MCD. DTON not compiled to HCell, but included as a $LINES object for reference. See also DTON #32.

Feature Images

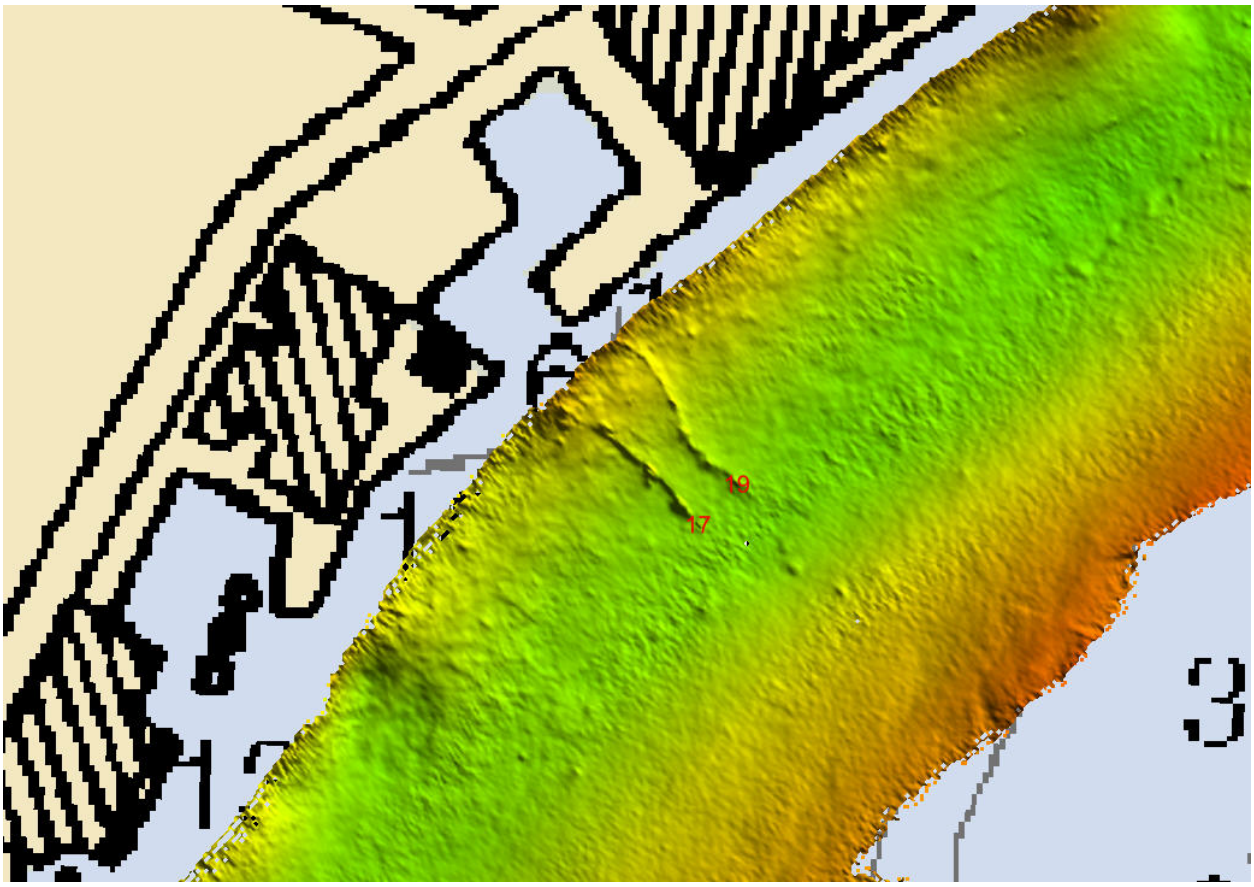


Figure 1.37.1

1.38) Outfall 4

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 45.1" N, 124° 03' 13.6" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Other 2
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

submerged outfall pipe

Hydrographer Recommendations

chart as depicted

S-57 Data

Geo object 1:	Pipeline, submarine/on land (PIPSOL)
Attributes:	CATPIP - 2:outfall pipe
	PRODCT - 3:water
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3

PHB Office notes: DTON "Outfall 4", PIPSOL. DTON not applied to chart by MCD. DTON not compiled to HCell, but included as a $LINES object for reference. See also DTON #34.

Feature Images

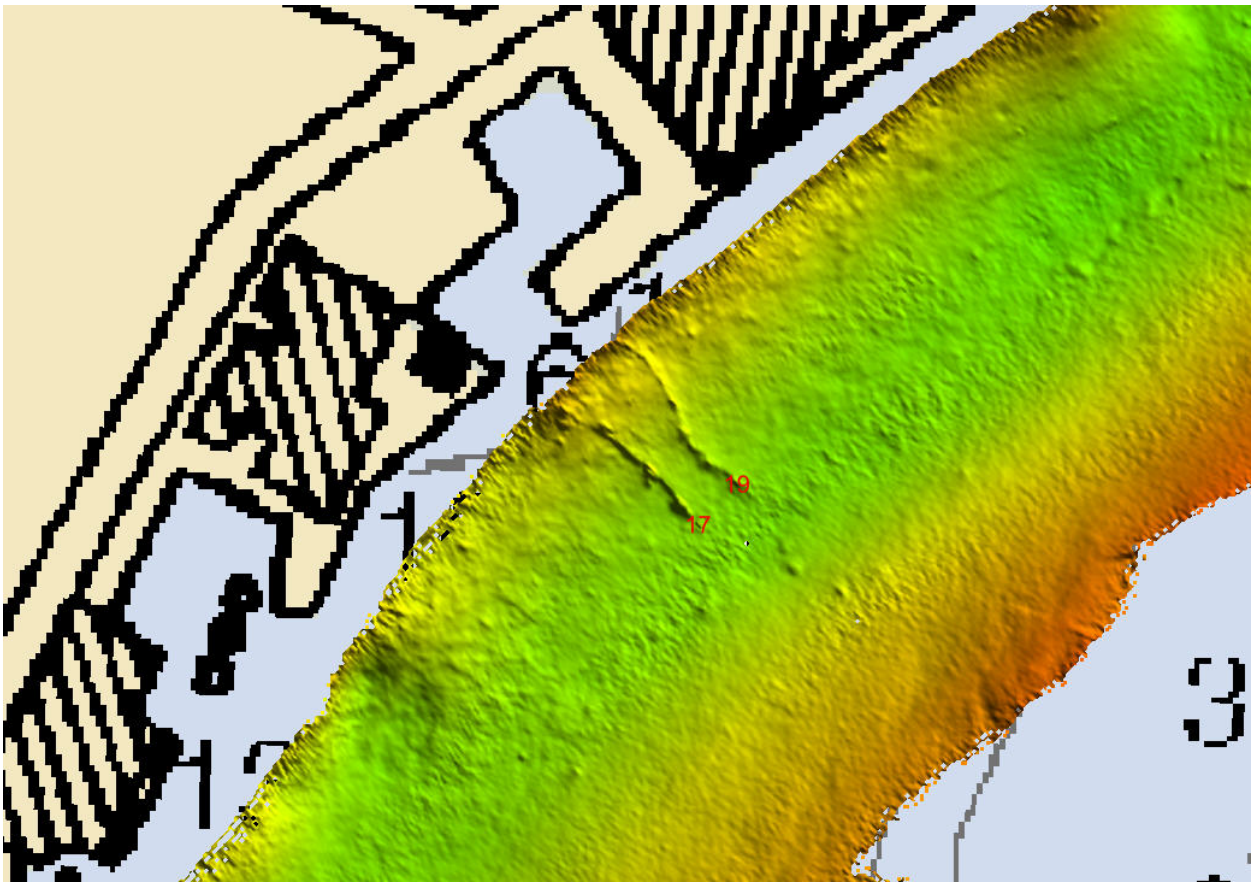


Figure 1.38.1

1.39) Outfall 5

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 49.9" N, 124° 03' 03.8" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Other 3
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

submerged outfall pipe

Hydrographer Recommendations

chart as depicted

S-57 Data

Geo object 1:	Pipeline, submarine/on land (PIPSOL)
Attributes:	CATPIP - 2:outfall pipe
	PRODCT - 3:water
	RECDAT - 20090514
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3

PHB Office notes: DTON "Outfall 5", PIPSOL. DTON not applied to chart by MCD. DTON not compiled to HCell, but included as a $LINES object for reference. See also DTON #29.

Feature Images

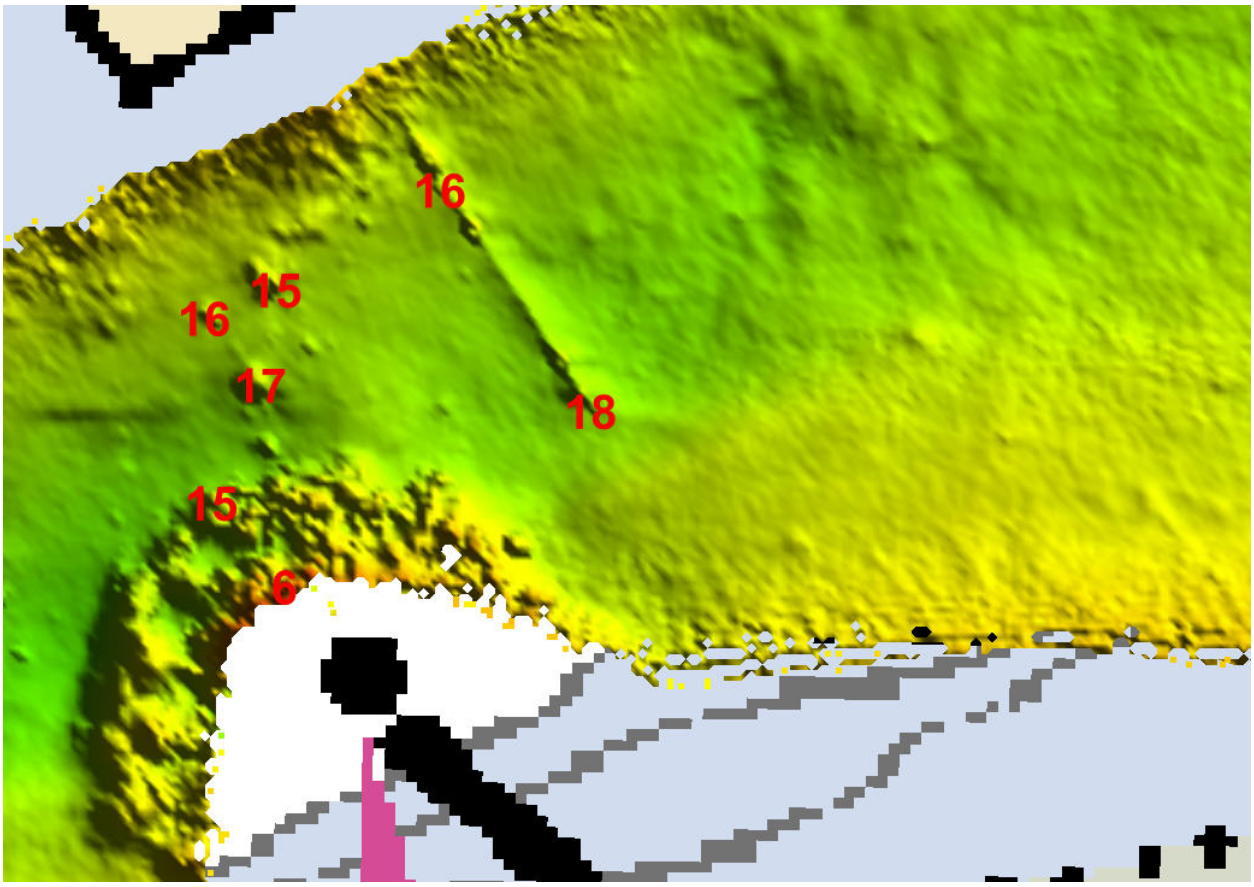


Figure 1.39.1

1.40) Outfall 1

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 38.3" N, 124° 03' 19.3" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Other 4
Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

submerged outfall

Hydrographer Recommendations

chart as depicted

S-57 Data

Geo object 1:	Pipeline, submarine/on land (PIPSOL)
Attributes:	CATPIP - 2:outfall pipe
	PRODCT - 3:water
	RECDAT - 200*0514
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3

PHB Office notes: DTON "Outfall 1", PIPSOL. DTON not applied to chart by MCD. DTON not compiled to HCell, but included as a $LINES object for reference. See also DTON #31.

Feature Images

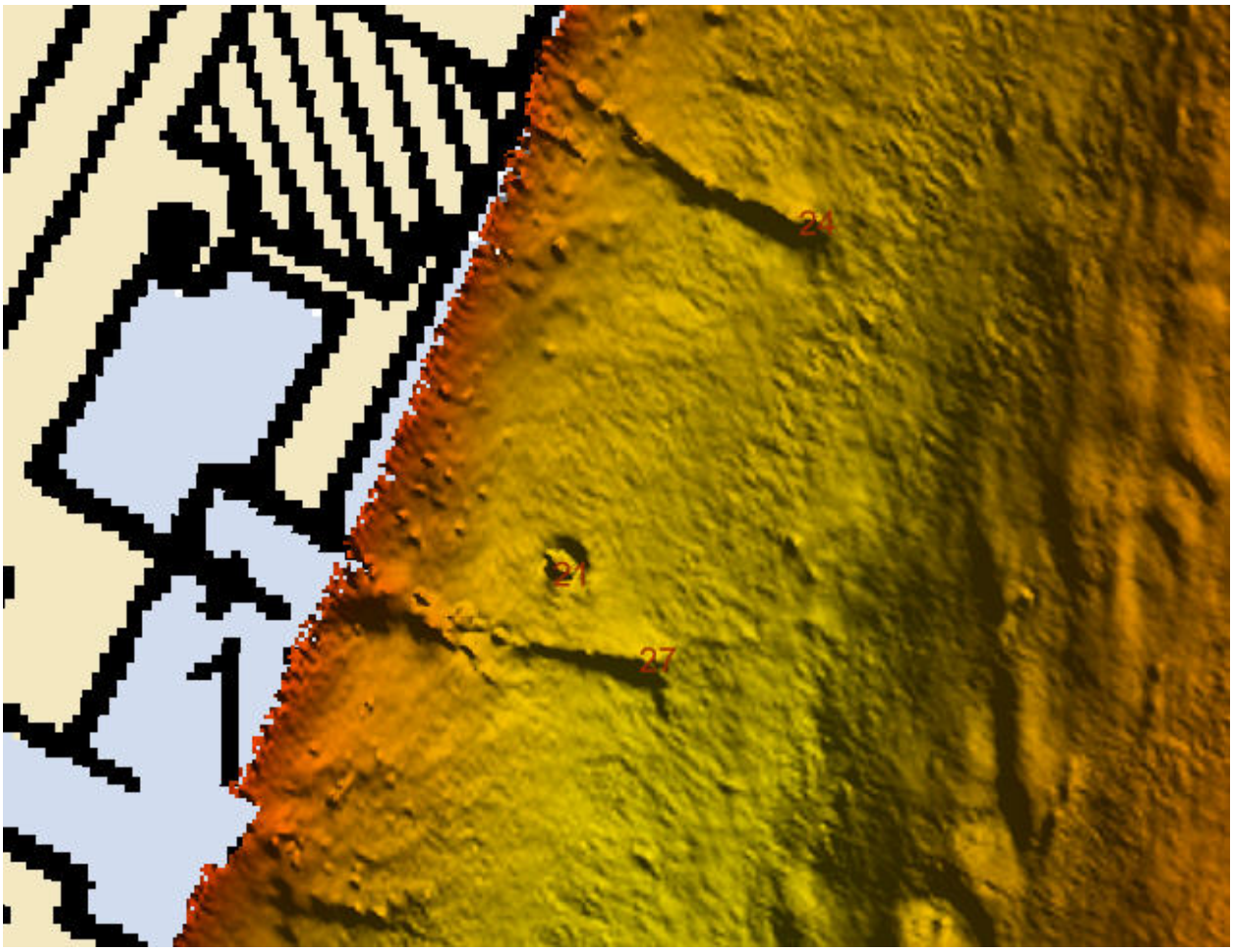


Figure 1.40.1

1.41) Outfall 2

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 37' 36.4" N, 124° 03' 20.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC Lines and Points
GP No.:	Other 5

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

submerged outfall pipe

Hydrographer Recommendations

chart as depicted

S-57 Data

Geo object 1: Pipeline, submarine/on land (PIPSOL)

Attributes:

CATPIP - 2:outfall pipe

PRODCT - 3:water

RECDAT - 20090514

SORDAT - 20080929

SORIND - us,us,survy,NRT3

PHB Office notes: DTON "Outfall 2", PIPSOL. DTON not applied to chart by MCD. DTON not compiled to HCell, but included as a $LINES object for reference. See also DTON #26.

Feature Images

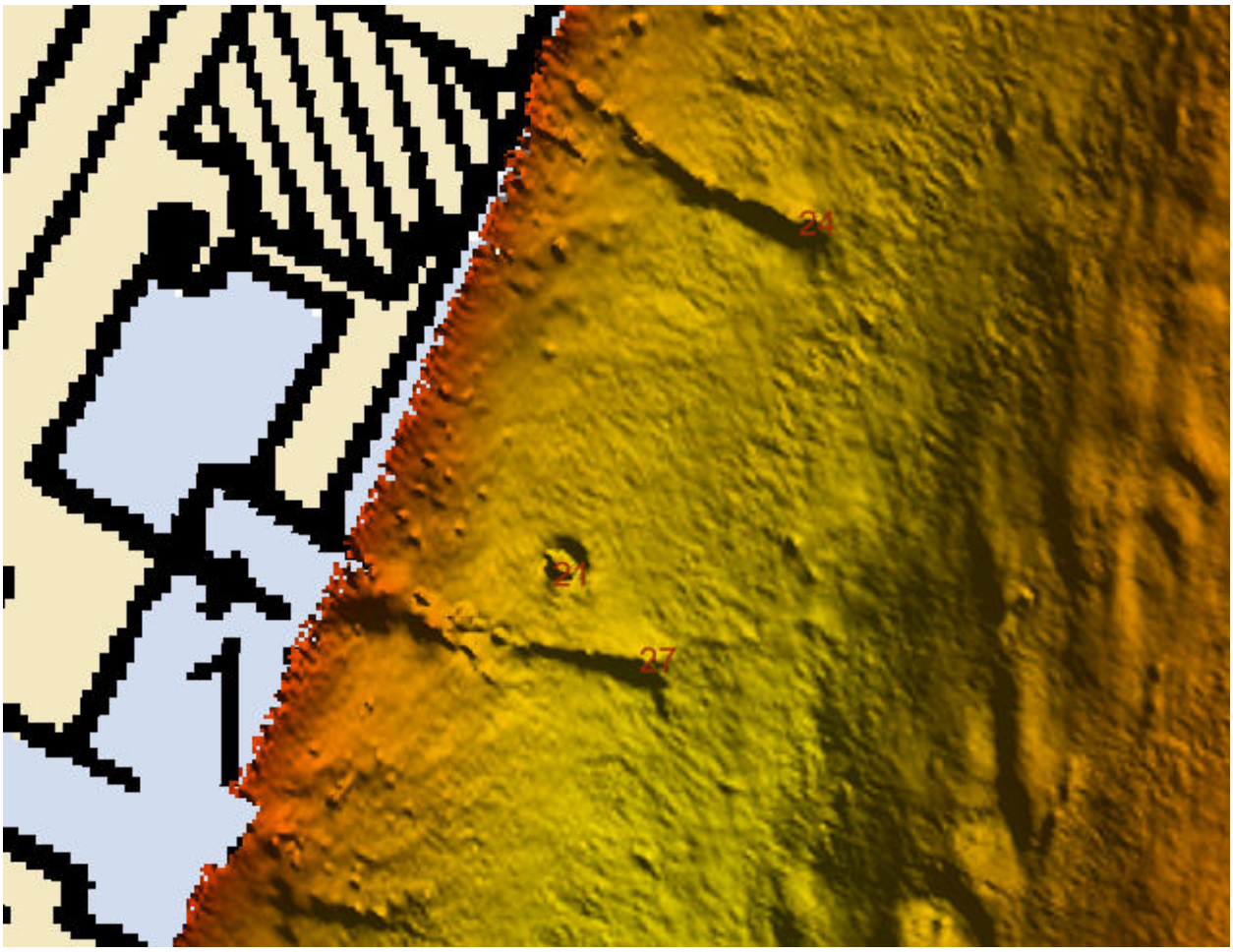


Figure 1.41.1

1.42) Seabed 2

DANGER TO NAVIGATION

Survey Summary

Survey Position:	44° 36' 29.9" N, 124° 04' 51.7" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	[None]
GP Dataset:	ChartGPs - ENC seabed line
GP No.:	Seabed 1

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Rocky seabed inside South Jetty and around offshore end. Breakers over rocky area.

Hydrographer Recommendations

Chart rocky seabed as depicted

S-57 Data

Geo object 1:	Seabed area (SBDARE)
Attributes:	INFORM - rocky area around end South Jetty
	NATQUA - 10:hard
	NATSUR - 9:rock
	RECDAT - 20090514
	WATLEV - 1:partly submerged at high water

PHB Office notes: DTON "Seabed 2", SBDARE at end of breakwater. DTON not applied to chart by MCD. DTON modified in extent and compiled to HCell as a rocky seabed area object.

Feature Images

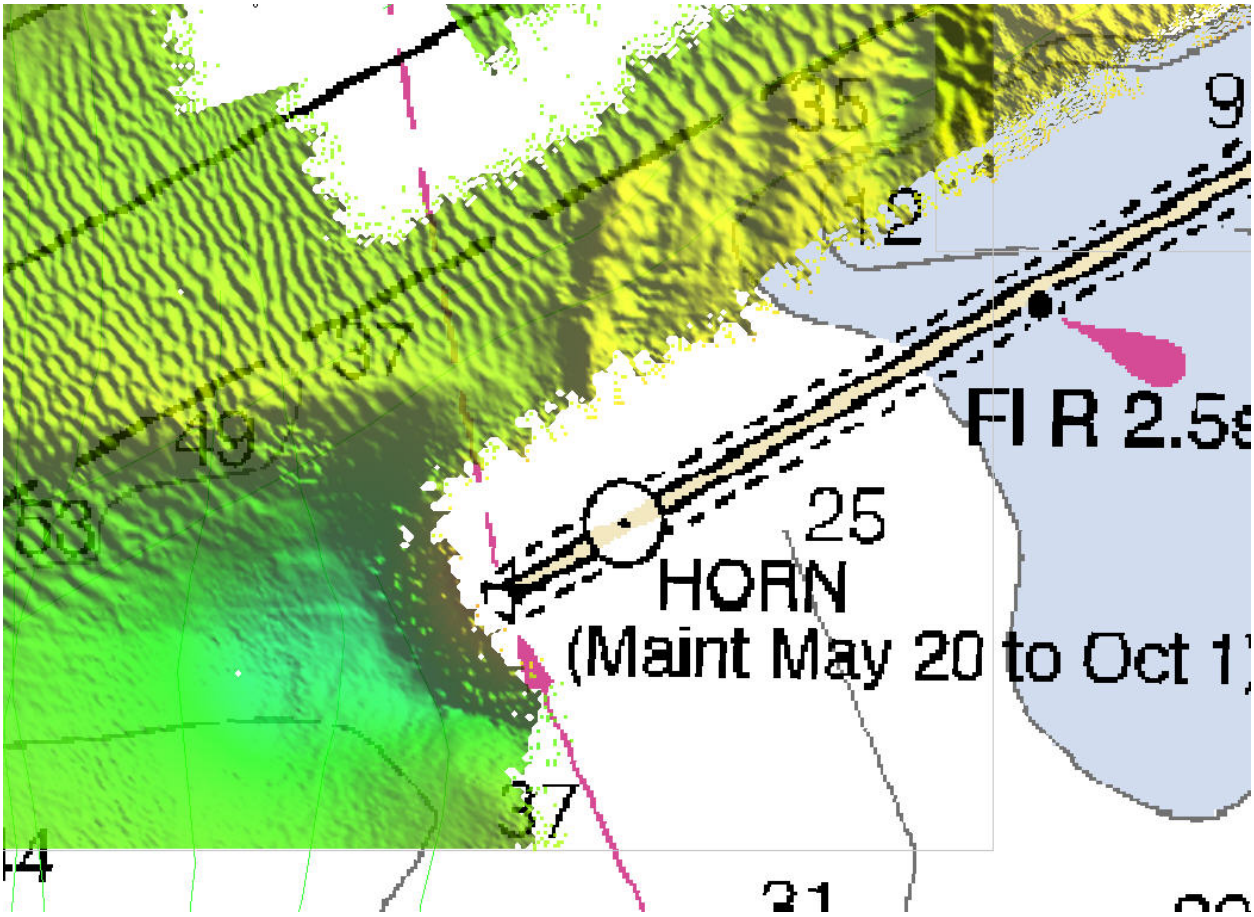


Figure 1.42.1

Remarks made in red were added during PHB office processing.

H11989 AWOIS Report

Registry Number: H11989

State: Oregon

Locality: Newport

Sub-locality: Approaches to Yaquina Bay to McCaffery Slough

Project Number: OPR-M916-NRT3-08

Survey Date: 09/18/2008

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
18581	18th	10/01/2008	1:10,000 (18581_1)	USCG LNM: 06/24/2008 (04/14/2009) CHS NTM: None (03/27/2009) NGA NTM: None (04/25/2009)
18561	12th	11/01/2003	1:50,000 (18561_1)	[L]NTM: ?
18520	26th	10/01/2005	1:185,238 (18520_1)	[L]NTM: ?
18580	22nd	12/01/2005	1:191,730 (18580_1)	[L]NTM: ?
18003	20th	11/01/2006	1:736,560 (18003_1)	[L]NTM: ?
18007	33rd	02/01/2009	1:1,200,000 (18007_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	AWOIS	4.06 m	44° 37' 18.6" N	124° 04' 50.8" W	---	53708(See 1.11&12)
1.2	AWOIS	[no data]	[no data]	[no data]	---	53709
1.3	AWOIS	[no data]	[no data]	[no data]	---	53710
1.4	AWOIS	[no data]	[no data]	[no data]	---	50589
1.5	AWOIS	[no data]	[no data]	[no data]	---	50590
1.6	AWOIS	[no data]	[no data]	[no data]	---	50591
1.7	AWOIS	[no data]	[no data]	[no data]	---	50592

Generated by Pydro v9.10 (r2732) on Fri Jan 01 01:22:45 2010 [UTC]

1.8	AWOIS	[no data]	[no data]	[no data]	---	50593
1.9	AWOIS	[no data]	[no data]	[no data]	---	50594
1.10	AWOIS	[no data]	[no data]	[no data]	---	50604
1.11	AWOIS	[no data]	[no data]	[no data]	---	50291 (See 1.1)
1.12	AWOIS	[no data]	[no data]	[no data]	---	50131 (See 1.1)
1.13	AWOIS	[no data]	[no data]	[no data]	---	53711

1,1, 1,11 & 1.12 are duplicates of the same feature--the wreck of the cargo ship John Aspin.

1 - Tree

1.1) AWOIS #53708 - UNKNOWN

Primary Survey Feature is Profile/Beam - 2414/90 from config / s1212_simrad / 2008-262 / 092a1944

Search Position: 44° 37' 18.5" N, 124° 04' 51.0" W

Historical Depth: [None]

Search Radius: 200

Search Technique: S2, MB, SB

Technique Notes: [None]

History Notes:

Unknown Source-- A Visible wreck add to chart.■ L841/1991-- USPS; Wreck is no longer visible, even at low low water. Revised to submerged at 44/37/18.5 - 124-04-51.0. (entered CEH 7/2008)

Survey Summary

Survey Position: 44° 37' 18.6" N, 124° 04' 50.8" W

Least Depth: 4.06 m (= 13.33 ft = 2.222 fm = 2 fm 1.33 ft)

TPU (±1.96σ): **THU (TPEh)** ±1.409 m ; **TVU (TPEv)** ±0.188 m

Timestamp: 2008-262.19:49:43.536 (09/18/2008)

Survey Line: config / s1212_simrad / 2008-262 / 092a1944

Profile/Beam: 2414/90

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Remnants of charted wreck were located with a least depth of 13.3 feet

Feature Correlation

Address	Feature	Range	Azimuth	Status
config/s1212_simrad/2008-262/092a1944	2414/90	0.00	000.0	Primary
AWOIS	AWOIS # 53708	5.32	063.9	Secondary

PHB Office notes: AWOIS 53708, 50131 and 50291 are duplicates for the wreck of the cargo ship John Aspin. Recommend deleting duplicates 50131 and 50291; Remove "PA" from chart. Chart new wreck symbol per survey H11989.

Hydrographer Recommendations

Retain charted symbol; delete text "PA"

Cartographically-Rounded Depth (Affected Charts):

13ft (18581_1)

2 ¼fm (18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 530_1)

4.1m (501_1, 50_1)

S-57 Data

Geo object 1:	Wreck (WRECKS)
Attributes:	CATWRK - 3:distributed remains of wreck
	PICREP - Item_2414_90.jpg
	QUASOU - 1:depth known
	SORDAT - 20080929
	SORIND - us,us,survy,NRT3
	TECSOU - 3:found by multi-beam
	VALSOU - 4.064 m
	VERDAT - 16:Mean high water
	WATLEV - 3:always under water/submerged

Feature Images

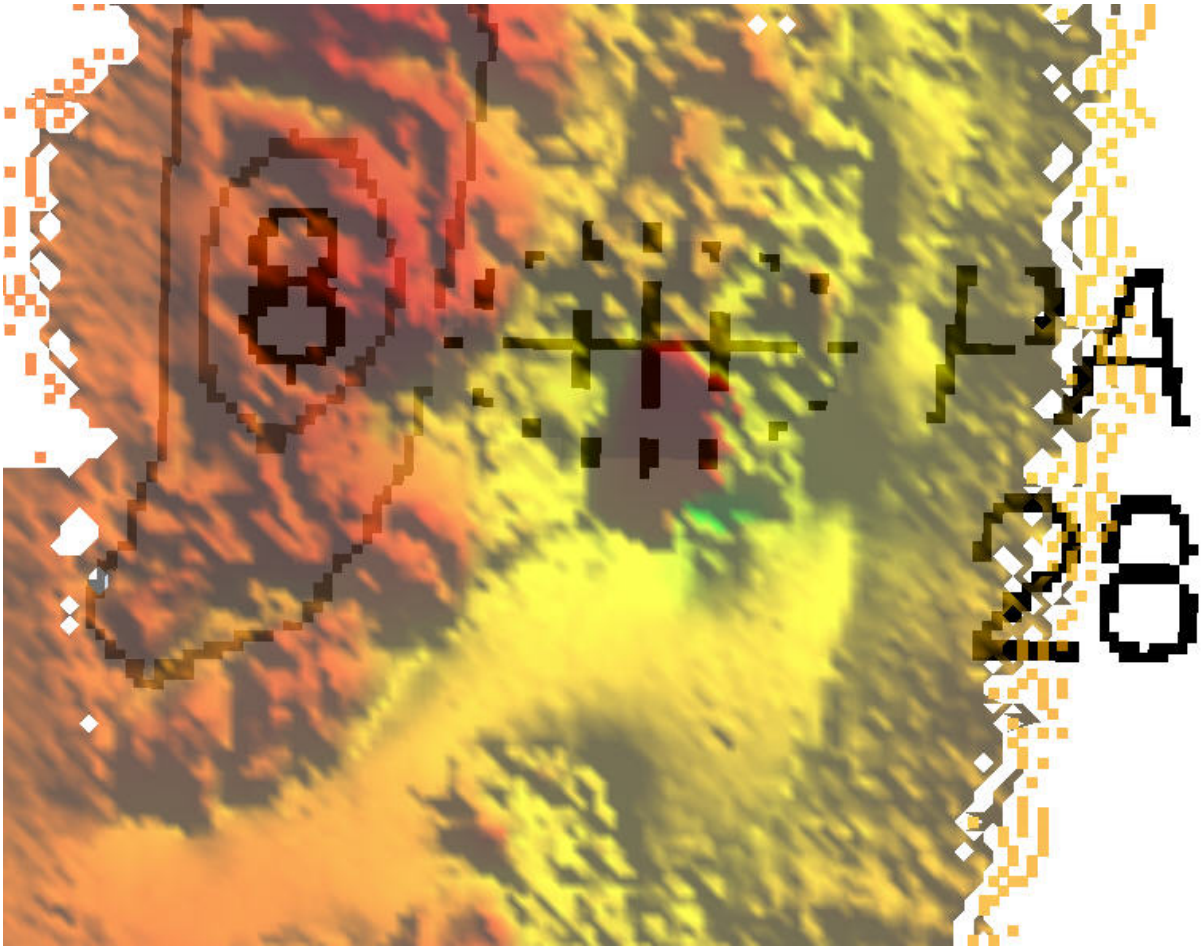


Figure 1.1.1

1.2) AWOIS #53709 - UNKNOWN

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 36' 43.8" N, 124° 04' 53.2" W

Historical Depth: [None]

Search Radius: 200

Search Technique: S2, ES, MB

Technique Notes: [None]

History Notes:

L561/1984-- Added submerged wreck PA at 44/36/43.8 - 124/04/53.2. (entered CEH 7/2008)

Survey Summary

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

This wreck was not investigated because of breakers over the wreck area; however, it appears that some obstruction exists in the vicinity.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 53709	0.00	000.0	Primary

Hydrographer Recommendations

Retain wreck as charted

S-57 Data

[None]

PHB Office notes: Not investigated during survey H11989. Retain as charted.

1.3) AWOIS #53710 - R/V MARGARET ANNE

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 35' 05.8" N, 124° 01' 18.4" W

Historical Depth: [None]

Search Radius: 50

Search Technique: VS, S2, ES

Technique Notes: [None]

History Notes:

L1657/2002-- ACOE; Visible Wreck was located by ACOE at 44/35/05.8 - 124/01/18.4. (entered CEH 7/2008)

Survey Summary

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

The charted wreck was not visible over the course of this survey; however it was

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 53710	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

[None]

PHB Office notes: Not investigated during survey H11989. Retain wreck as charted.

1.4) AWOIS #50589 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 37' 33.4" N, 124° 02' 52.7" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	##
Technique Notes:	[None]

History Notes:

50589■HISTORY■CL658/83--NOAA SHIP MCARTHUR, OPR-M-804-AR-82; PIER REVISED TO SUBMERGED RUINS■ LOCATED BY SEXTANT CONTROL AT 1:10,000 IN LAT.44-37-34.0N, LONG.124-02-48.5W.■BP-120139(NOS)--INFO. SAME AS ABOVE. ■■SURVEY REQUIREMENTS■NOT DETERMINED ■ NOT ASSIGNED

Survey Summary

Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

[None]

Hydrographer Recommendations

[None]

S-57 Data

[None]

PHB Office notes: Ruins not found with SWMB or SSS. Delete submerged ruins.

1.5) AWOIS #50590 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position:	44° 37' 33.6" N, 124° 02' 51.7" W
Historical Depth:	[None]
Search Radius:	0
Search Technique:	##
Technique Notes:	[None]

History Notes:

50590■HISTORY■CL658/83--NOAA SHIP MCARTHUR, OPR-M-804-AR-82; DOLPHIN REVISED TO SUBMERGED ■ LOCATED BY SEXTANT CONTROL AT 1:10,000 IN LAT.44-37-34.3, LONG.124-02-47.5W. ■BP-120139(NOS)--INFO. SAME AS ABOVE. ■■SURVEY REQUIREMENTS■NOT DETERMINED ■ NOT ASSIGNED

Survey Summary

Charts Affected:	18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

[None]

Hydrographer Recommendations

[None]

S-57 Data

[None]

PHB Office notes: Submerged dolphin disproved. Delete submerged dolphin.

1.6) AWOIS #50591 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 37' 33.5" N, 124° 02' 53.4" W

Historical Depth: [None]

Search Radius: 0

Search Technique: ##

Technique Notes: [None]

History Notes:

50591■HISTORY■CL658/83--NOAA SHIP MCARTHUR, OPR-M-804-AR-82; DOLPHIN REVISED TO SUBMERGED ■ LOCATED BY SEXTANT CONTROL AT 1:10,000 IN LAT.44-37-34.2N, LONG.124-02-49.0W.■BP-120139(NOS)--INFO. SAME AS ABOVE ■■SURVEY REQUIREMENTS■NOT DETERMINED ■ NOT ASSIGNED

Survey Summary

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Submerged ruins disproved with SSS and SWMB

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 50591	0.00	000.0	Primary

Hydrographer Recommendations

Delete ruins and two seaward dols - see Shoreline Updates

S-57 Data

[None]

PHB Office notes: Submerged dolphin disproved. Delete submerged dolphin.

1.7) AWOIS #50592 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 37' 30.4" N, 124° 02' 39.4" W

Historical Depth: [None]

Search Radius: 0

Search Technique: ##

Technique Notes: [None]

History Notes:

50592■HISTORY■CL658/83--NOAA SHIP MCARTHUR; OPR-M-804-AR-82; UNKNOWN OBSTRUCTION DETECTED ON■ AN OBLIQUE AERIAL PHOTOGRAPH LOCATED IN APPROX. POS. LAT.44-37-31N, ■ LONG.124-02-35W. ■BP-120139(NOS)--INFO. SAME AS ABOVE. ■■SURVEY REQUIREMENTS■NOT DETERMINED ■ NOT ASSIGNED

Survey Summary

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Feature not disproved; probably research site

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 50592	0.00	000.0	Primary

Hydrographer Recommendations

retain as charted

S-57 Data

[None]

PHB Office notes: Not investigated during survey H11989. Retain OBSTRN as charted.

1.8) AWOIS #50593 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 37' 51.4" N, 124° 03' 00.4" W

Historical Depth: [None]

Search Radius: 0

Search Technique: ##

Technique Notes: [None]

History Notes:

50593■HISTORY■CL658/83--NOAA SHIP MCARTHUR; OPR-M-804-AR-82; PIER REVISED TO SUBMERGED RUINS■ LOCATED BY SEXTANT CONTROL AT 1:10,000 IN LAT.44-37-52N, LONG.124-02-56W. ■BP-120139(NOS)--INFO. SAME AS ABOVE. ■■SURVEY REQUIREMENTS■NOT DETERMINED ■ NOT ASSIGNED

Survey Summary

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Shoreline has been revised; see shoreline updates

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 50593	0.00	000.0	Primary

Hydrographer Recommendations

Delete ruins; chart pier as depicted

S-57 Data

[None]

PHB Office notes: Delete pier ruins and chart new pier as depicted in HCell H11989.

Feature Images

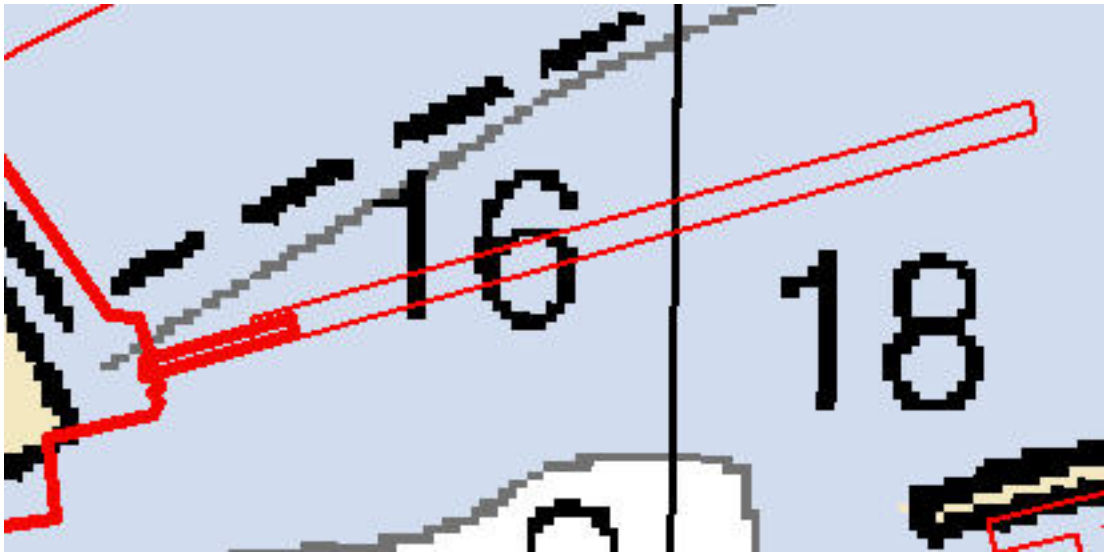


Figure 1.8.1

1.9) AWOIS #50595 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 35' 34.4" N, 124° 00' 51.4" W

Historical Depth: [None]

Search Radius: 0

Search Technique: ##

Technique Notes: [None]

History Notes:

50595■HISTORY■CL658/83--NOAA SHIP MCARTHUR; OPR-M-804-AR-82; SEVERAL PILES DETECTED IN ■ AERIAL PHOTOGRAPH IN THE VICINITY OF LAT.44-35-35N, LONG.124-00-47W AT ■ LA PAZ YACHT HARBOR. ■BP-120139(NOS)--INFO. SAME AS ABOVE. ■■SURVEY REQUIREMENTS■NOT DETERMINED ■ NOT ASSIGNED

Survey Summary

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

not investigated

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 50595	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

[None]

PHB Office notes: Not investigated during survey H11989.

1.10) AWOIS #50604 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 36' 33.9" N, 124° 00' 43.6" W

Historical Depth: [None]

Search Radius: 0

Search Technique: ##

Technique Notes: [None]

History Notes:

50604■HISTORY■CL658/83--NOAA SHIP MCCARTHUR; OPR-M-804-AR-82; SEVERAL PILES DETECHED IN ■ AERIAL PHOTOGRAPH LOCATED IN THE VICINITY OF LAT. 44-36-34.8N, ■ LONG-124-00-39.4W OFF OF COQUILE POINT. ■BP120139(N0S)--INFO. SAME AS ABOVE. ■■SURVEY REQUIREMENTS■NOT DETERMINED ■ NOT ASSIGNED

Survey Summary

Charts Affected: 18581_1, 18561_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

not investigated

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 50604	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

[None]

PHB Office notes: Not investigated during survey H11989. Retain dolphin as charted.

1.11) AWOIS #50291 - SS JOSEPH ASPDIN

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 37' 17.4" N, 124° 04' 52.4" W

Historical Depth: [None]

Search Radius: 0

Search Technique: ##

Technique Notes: [None]

History Notes:

SURVEY REQUIREMENTS■INFORMATION

Survey Summary

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Original Report? AWOIS 53708 is Duplicate?

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 50291	0.00	000.0	Primary

Hydrographer Recommendations

See Report for AWOIS 53708

S-57 Data

[None]

PHB Office notes: AWOIS 53708, 50131 and 50291 are duplicates for the wreck of the cargo ship John Aspin. Recommend deleting duplicates 50131 and 50291; Remove "PA" from chart. Chart new wreck symbol per survey H11989.

1.12) AWOIS #50131 - JOHN ASPIN

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 37' 19.4" N, 124° 04' 51.4" W

Historical Depth: [None]

Search Radius: 0

Search Technique: ##

Technique Notes: [None]

History Notes:

50131■HISTORY■NM DATED 7/25/53 ■■DESCRIPTION■ 24 NO.1197; BARGE; SUNK 1952; POSITION ACCURACY WITHIN 1 MILE; REPORTED ■ STRANDED (SOURCE UNK) ■■SURVEY REQUIREMENTS■NOT DETERMINED

Survey Summary

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

Same as AWOIS 53708 and 50291

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 50131	0.00	000.0	Primary

Hydrographer Recommendations

See 53708; Delete duplicate Items

S-57 Data

[None]

PHB Office notes: AWOIS 53708, 50131 and 50291 are duplicates for the wreck of the cargo ship John Aspin. Recommend deleting duplicates 50131 and 50291; Remove "PA" from chart. Chart new wreck symbol per survey H11989.

1.13) AWOIS #53711 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 44° 37' 05.0" N, 124° 03' 39.3" W

Historical Depth: [None]

Search Radius: 75

Search Technique: S2, ES, MB

Technique Notes: [None]

History Notes:

Unknown Source added visible Pile to chart.■ L1560/1976-- USPS; Revised pile to subm pile at 44/37/05.0 - 124-03-39.3. (entered CEH 7/2008)

Survey Summary

Charts Affected: 18581_1, 18561_1, 18520_1, 18580_1, 18003_1, 18007_1, 501_1, 530_1, 50_1

Remarks:

not seen on SSS or in SWMB Data

Feature Correlation

Address	Feature	Range	Azimuth	Status
AWOIS	AWOIS # 53711	0.00	000.0	Primary

Hydrographer Recommendations

Delete charged subm pile

S-57 Data

[None]

PHB Office notes: Submerged pile disproved. Remvoe submerged pile symbol and notation.

CORRESPONDENCE

From: "kathryn simmons" <kathryn.simmons@noaa.gov>
To: "Craig, John H NWP" <John.H.Craig@usace.army.mil>
Cc: "David Neander" <Dave.Neander@noaa.gov>; "Philip Sparr" <Philip.Sparr@noaa.gov>; "Kurt Mueller" <Kurt.Mueller@noaa.gov>
Subject: Newport Survey
Date: Thursday, December 11, 2008 11:11 AM

John,

During the course of our survey in Newport, OR, we found a few features in the entrance channel that rise above the controlling depth. FYI I'm attaching graphics which depict our findings:

Side Scan Imagery - shows the four objects located with side scan sonar
Obs_in_channel_4 - shows the multibeam data on the row of three features
NewportObstructions - shows the soundings over the features
ObstructionUnderBridge - shows the multibeam data over what appears to be a pile or log (not sure what's keeping it from falling all the way over).

Also attached is a text file showing coordinates for these features.

Finally, the shoal soundings in the NewportChannelShoaling graphic are not obstructions but indicate shifting sediments encroaching into the channel.

This survey was completed in September 2008; if dredging has occurred since then and post-dredge hydrography is available, could you please let me know.

Thanks. Kathryn 206-669-6536

Attached text file:

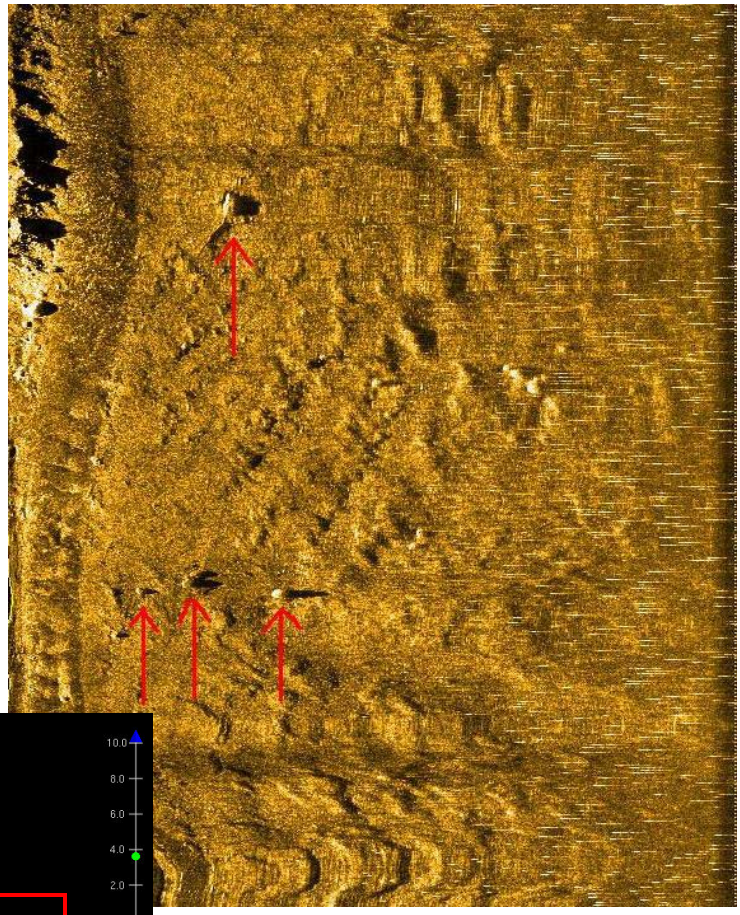
The following are the positions of high points on obstructions found in Yaquina Bay entrance channel having least depths less than controlling depth of 34 feet.

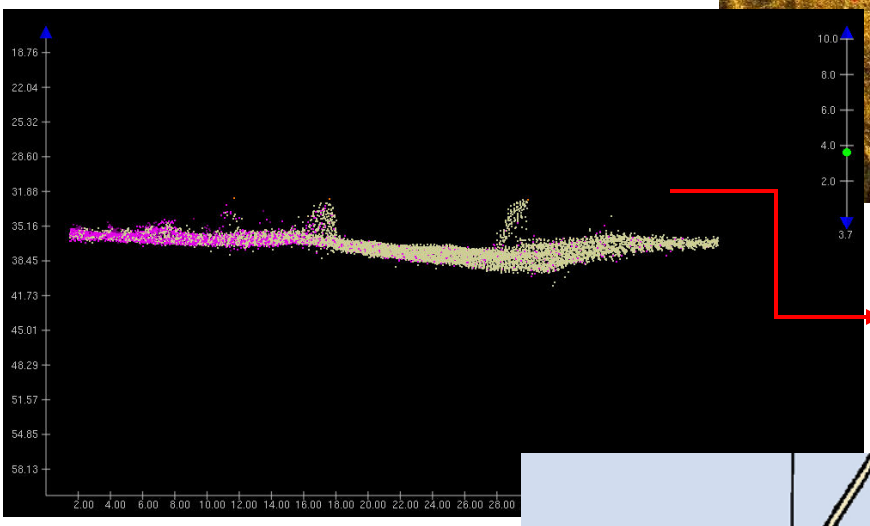
44.61669940, -124.06542500
44.61682798, -124.06540649
44.61685817, -124.06548023
44.61738695, -124.06464457

Position of high point of obstruction found under the bridge:
44.62309556, -124.05754298

Attached graphics:

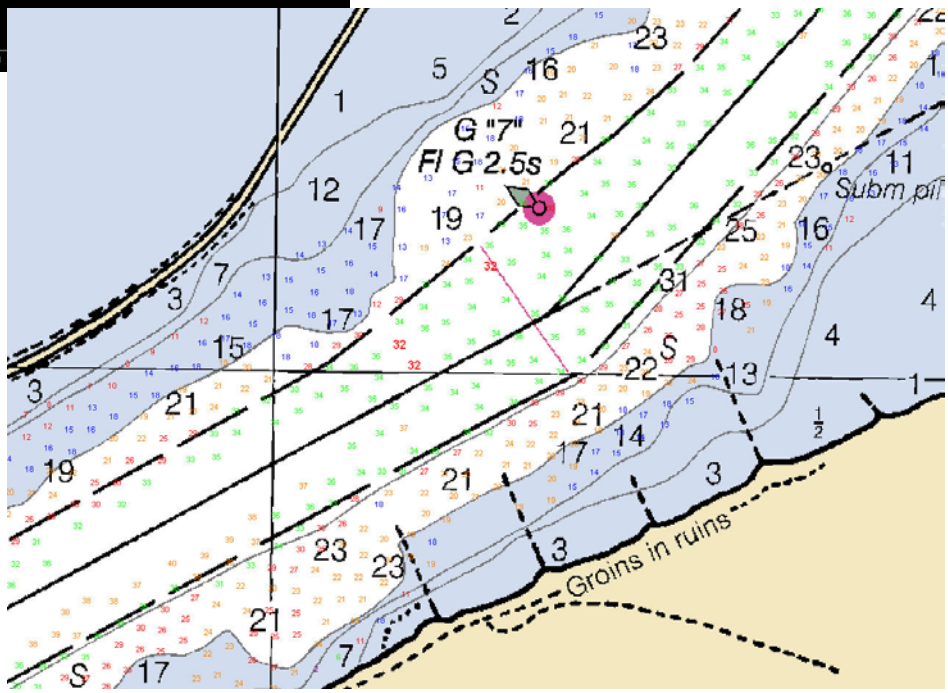
Side Scan Imagery - shows the four objects located with side scan sonar

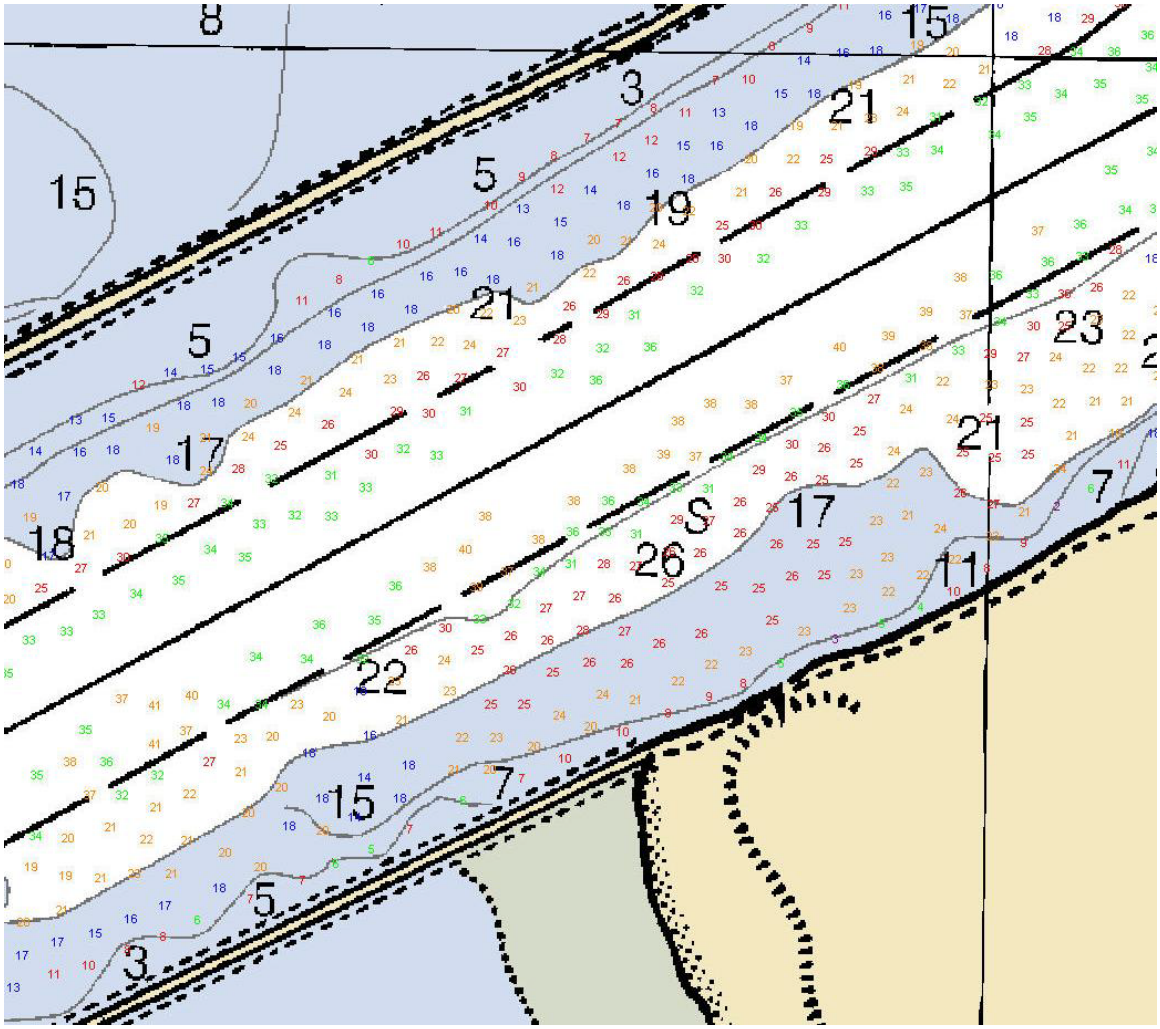




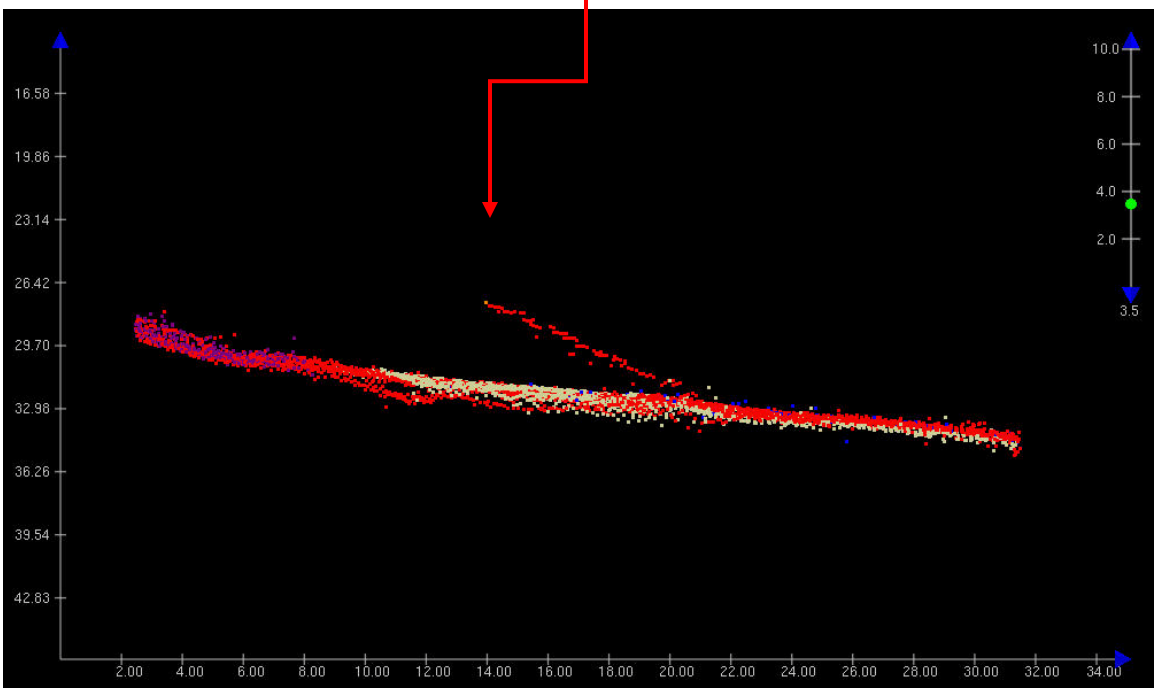
Obs_in_channel_4 - shows the multibeam data on the row of three features

NewportObstructions - shows the soundings over the features





ObstructionUnderBridge - shows the multibeam data over what appears to be a pile or log (not sure what's keeping it from falling all the way over).



CORRESPONDENCE

Subject: Yacquina Bay Approaches
Date: Thu, 12 Aug 2010 12:45:19 -0700
From: Gary Nelson <gary.nelson@noaa.gov>
To: Norton, Jarod K NWP <Jarod.K.Norton@usace.army.mil>, Daniel.R.Proudfit@usace.army.mil
CC: Karen.L.Garmire@usace.army.mil

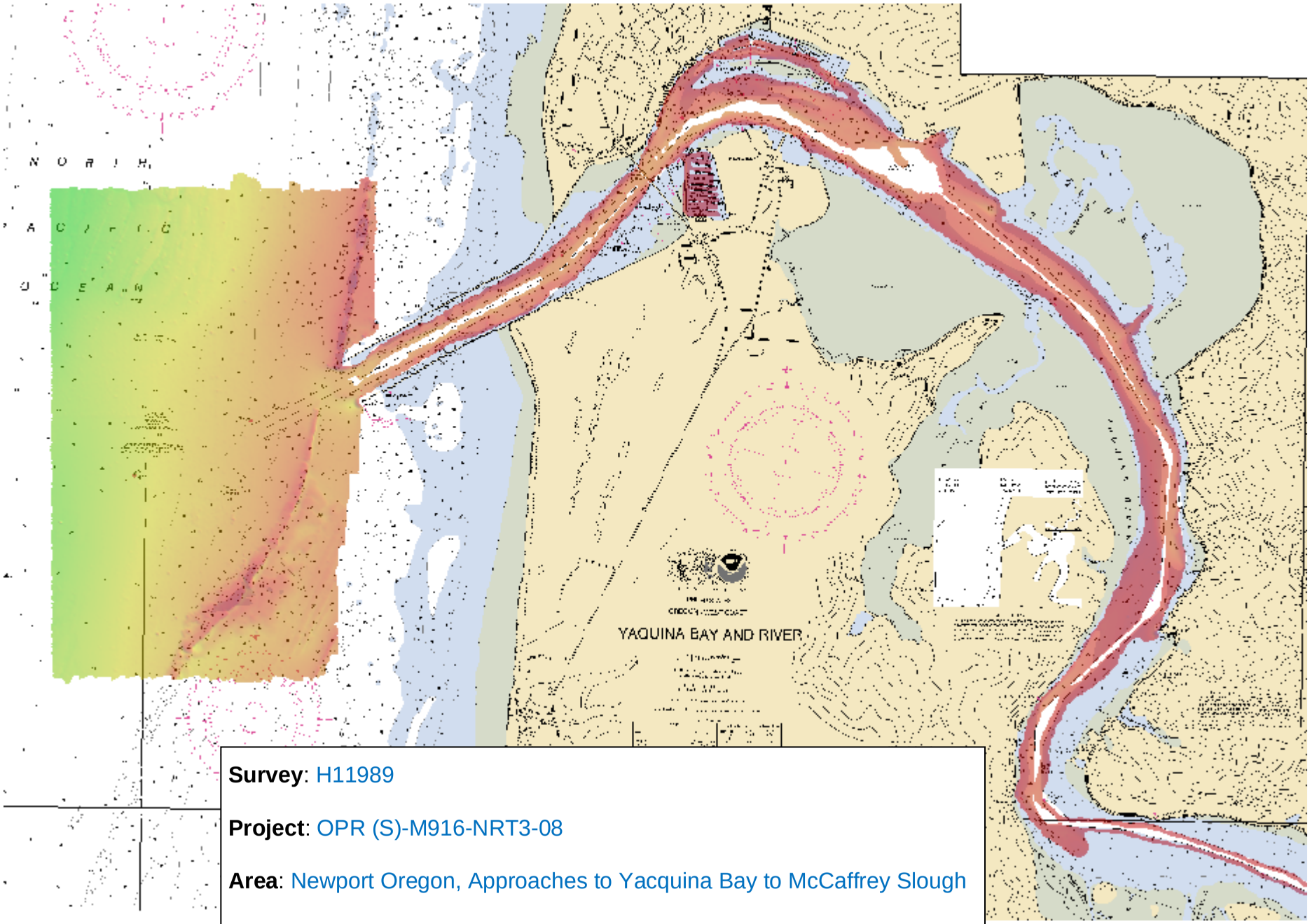
Jarod/Dan,

As Karen mentioned we found some shoal soundings in the maintained area of the approaches to Yacquina Bay. All of the soundings are along the edge of the maintained areas. I have attached a document with the areas in question. It sounds likely it has been dredged since our survey was conducted. Let me know if you have any questions.

Regards,

Gary
206 526-6835

(Attachment follows)



Survey: H11989

Project: OPR (S)-M916-NRT3-08

Area: Newport Oregon, Approaches to Yacquina Bay to McCaffrey Slough

Survey Scale: 1:10,000

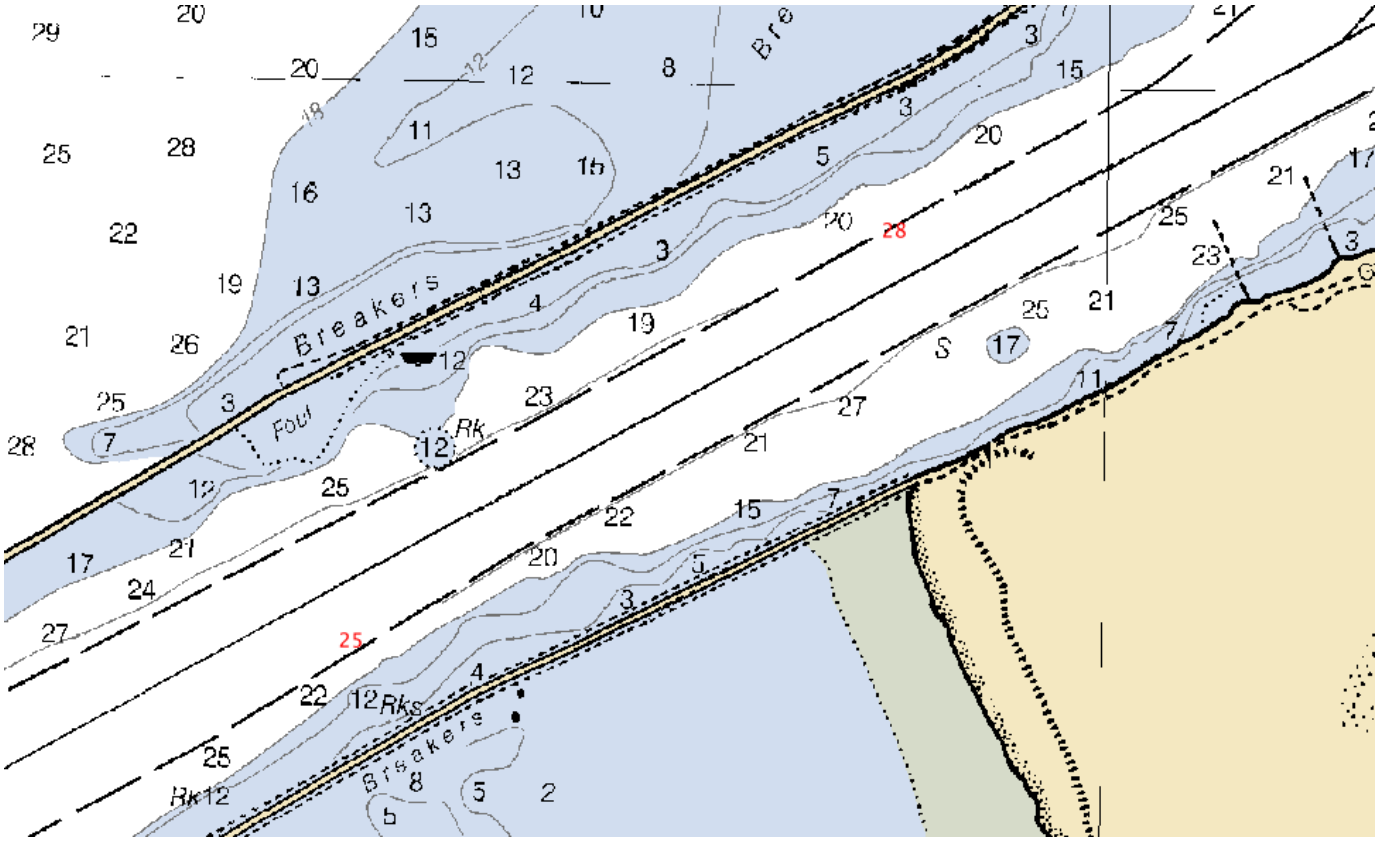
Start Date: 8/8/2008 **End Date**: 9/29/2008

Controlling Depths

Channel Entrance to First Turn

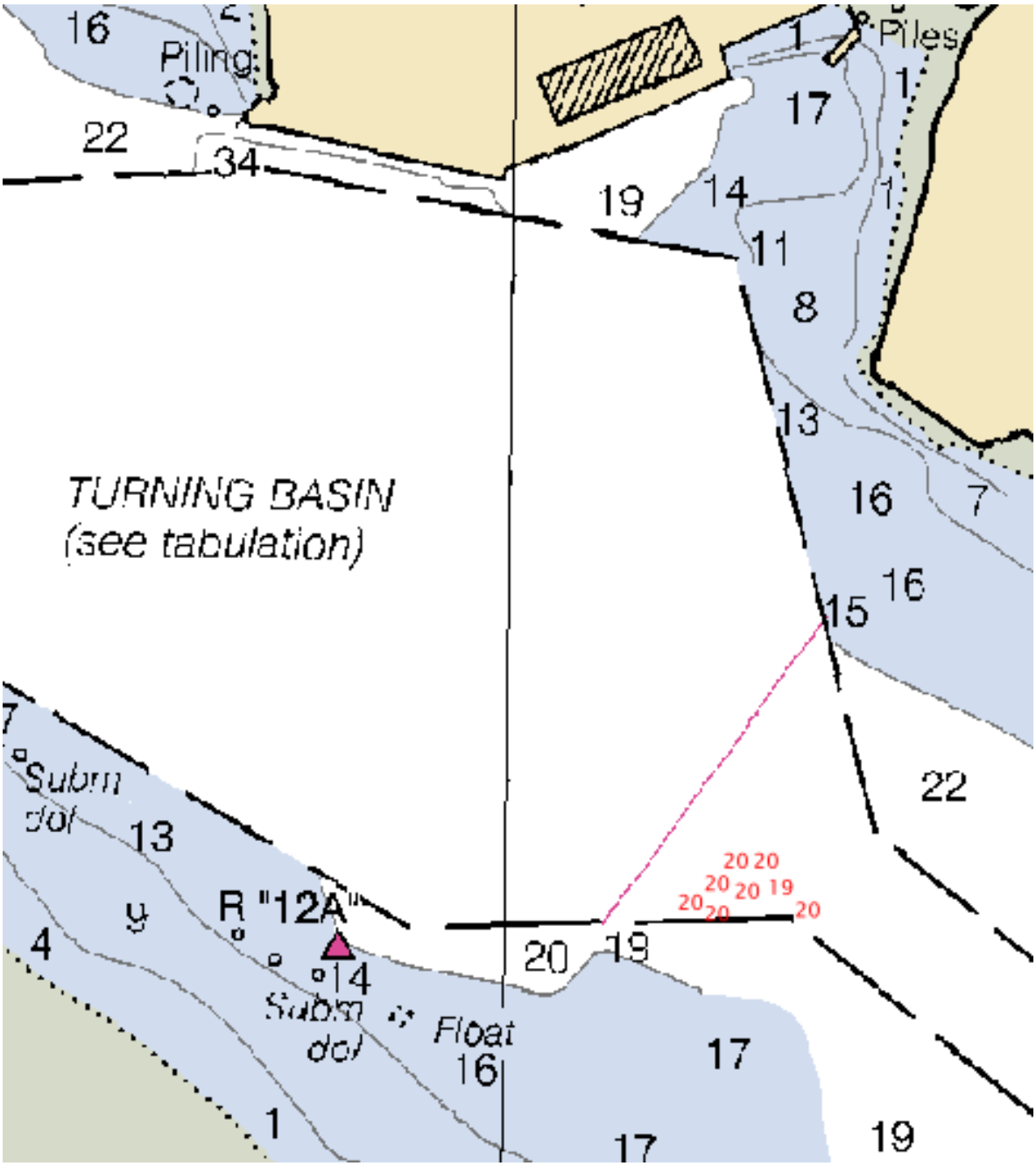
A 25 ft depth was found at 44°36.74'N Lat.,, 124°04.49'W Long., on the south side of the channel (right outside quarter)where the controlling depth is 27 feet.

A 28 ft depth was found at 44°36.93'N Lat., 124°04.14'W Long., on the north side of the channel (left outside quarter) where the controlling depth is 29 feet.



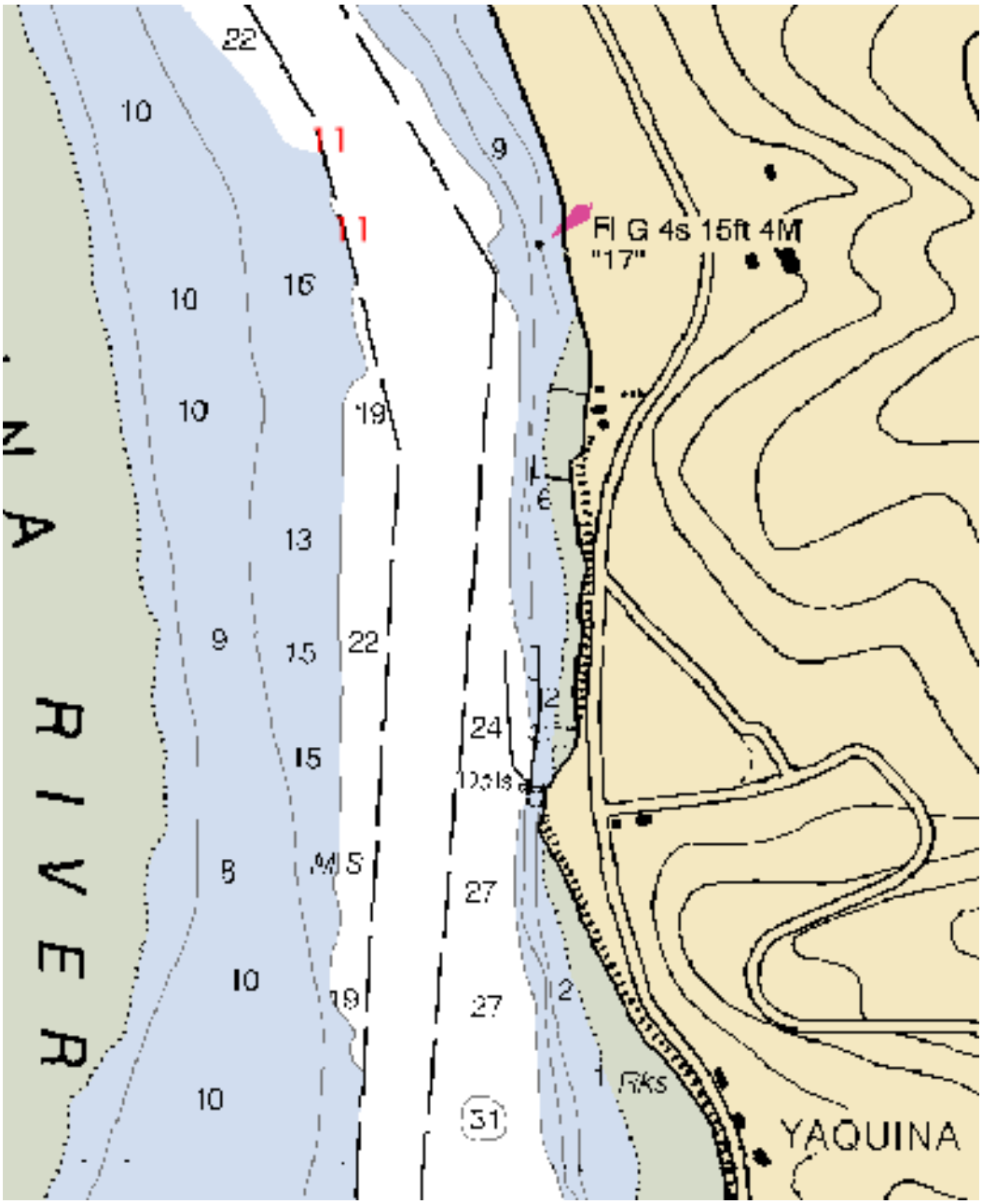
Turning Basin

One 19 and seven 20 foot depths were found in the vicinity of 44°37.24'N Lat., 124°01.80'W Long., on the south side of the turning basin (right outside quarter) where the controlling depth is 21 feet.



Turning Basin to Yaquina

Two 11 foot depths were found in the vicinity of 44°36.41'N Lat., 124°00.74'W Long., on the west side of the turning basin (right outside quarter) where the controlling depth is 13 feet.



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : February 2, 2009

HYDROGRAPHIC BRANCH: Pacific
HYDROGRAPHIC PROJECT: S-M916-NRT3-2008
HYDROGRAPHIC SHEET: H11989

LOCALITY: Approach to Yaquina Bay to McCaffery Slough
TIME PERIOD: August 8 - September 29, 2008

TIDE STATION USED: 943-5380 South Beach, OR
Lat. 44° 37.5'N Long. 124° 02.7' W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 2.330 meters

REMARKS: RECOMMENDED ZONING

Preliminary zoning is accepted as the final zoning for project S-M916-NRT3-2008, H11989, during the time period between August 8 - September 29, 2008.

Please use the zoning file "M916NRT32008CORP" submitted with the project instructions for S-M916-NRT3-2008. Zones PAC203, PAC28, PAC29 and PAD30 are the applicable zones for H11989.

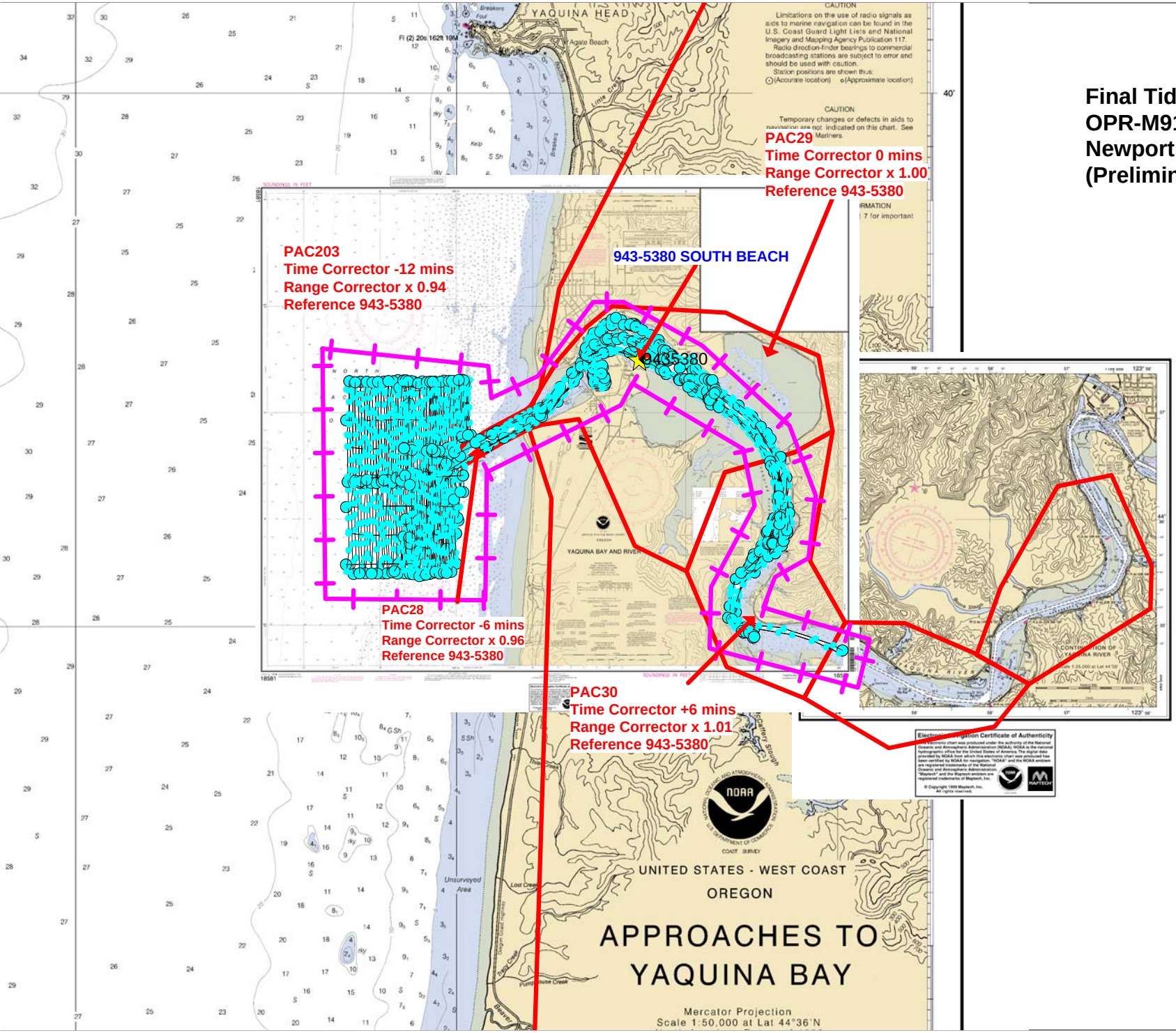
Refer to attachments for zoning information.

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).

Peter J. Stone

Digitally signed by Peter J. Stone
DN: cn=Peter J. Stone, o=Oceanographic Division, ou=NOAA/NOS/CO-OPS, email=peter.stone@noaa.gov, c=US
Date: 2009.02.05 12:42:59 -05'00'

CHIEF, OCEANOGRAPHIC DIVISION



Final Tidal Zoning for
OPR-M916-NRT3-2008, H11989
Newport, OR
(Preliminary as Final)

H11989 HCell Report

Cathleen Barry, Cartographer
Pacific Hydrographic Branch

1. Specifications, Standards and Guidance Used in HCell Compilation

HCell compilation of survey H11989 used:

Office of Coast Survey HCell Specifications: Draft, Version: 4.0, 17 March, 2010.
HCell Reference Guide: Version 2.0, 22 February, 2010.

2. Compilation Scale

Depths and features for HCell H11989 were compiled to the largest scale raster chart, 18581. H11989 falls entirely on the 1:10,000 scale chart 18581, with 25 meters of the eastern extent falling on the 1:25,000 *Continuation of Yaquina River* inset. However, no soundings or features were compiled to the inset.

Chart	Scale	Edition	Edition Date	NTM Date
18581	1:10,000	18th	10/01/2008	12/4/10
18581 (inset)	1:25,000	18th	10/01/2008	12/4/10

The corresponding ENCs for chart 18581, US3OR01M and US3OR02M, are of a scale unsuitable for chart comparison or use in HCell compilation.

3. Soundings

A survey-scale sounding (SOUNDG) feature object layer was built from the 2-meter Combined Surface in CARIS BASE Editor. A shoal-biased selection was made at 1:5,000 survey scale using a Radius Table file with values shown in the table, below.

Shoal Limit (m)	Deep Limit (m)	Radius (mm)
0	10	3
10	20	4
20	50	5
50	250	6

In CARIS BASE Editor soundings were manually selected from the high density sounding layer (SS) and imported into a new layer (CS) created to accommodate chart density depths. Manual selection was used to accomplish a density and distribution that closely represents the seafloor morphology.

4. Depth Contours

Depth contours at the intervals on the largest scale chart are included in the *_SS HCell for MCD raster charting division to use for guidance in creating chart contours. The metric and fathom equivalent contour values are shown in the table below.

Chart Contour Intervals in Feet as seen on Chart 18581	Metric equivalent to Chart Feet, Arithmetically Rounded	Meters with NOAA Rounding Applied	Feet with NOAA Rounding Applied	Feet with NOAA Rounding Removed for Display on Chart 18581 (as seen on H11989_SS)
0	0	0.2286	0.75	0
6	1.8288	2.0574	6.75	6
12	3.6576	3.8862	12.75	12
18	5.4864	5.715	18.75	18
30	9.144	9.3726	30.75	30
40	12.192	12.4206	40.75	40
50	15.24	15.4686	50.75	50
60	18.288	18.5166	60.75	60

With the exception of the zero contours included in the *_CS file, contours have not been deconflicted against shoreline features, soundings and hydrography, as all other features in the *_CS file and soundings in the *_SS have been. This may result in conflicts between the *_SS file contours and HCell features at or near the survey limits. Conflicts with M_QUAL and SBDARE objects, and with DEPCNT objects representing MLLW, should be expected. HCell features should be honored over *_SS.000 file contours in all cases where conflicts are found.

5. Meta Areas

The following Meta object areas are included in HCell H11989:

M_QUAL

The Meta area object was constructed on the basis of the limits of the hydrography using high resolution Finalized Surfaces.

6. Features

Features addressed by the field units are delivered to PHB where they are deconflicted against the hydrography and the largest scale chart. These features, as well as features to be retained from the chart and features digitized from the Base Surface, are included in the HCell. The geometry of these features may be modified to emulate chart scale per the HCell Reference Guide on compiling features to the chart scale HCell.

7. S-57 Objects and Attributes

The *_CS HCell contains the following Objects:

$CSYMB	Blue Notes (points) —Notes to the MCD chart Compiler
$LINES	Blue Notes (lines) —Notes to the MCD chart Compiler
BCNSPP	USCG special purpose beacons, support for new (uncharted) light
BRIDGE	Footbridges
BUISGL	Buildings
DEPCNT	Modified surveyed MLLW
HULKES	Hulkes—Permanently moored ships used for specified purposes.

LIGHTS	New (uncharted) USCG Lights attached to BCNSPP
MORFAC	Mooring/Warping facility
M_QUAL	Data quality Meta object
OBSTRN	Obstruction area objects
PILPNT	Piles
SBDARE	Bottom samples, reefs, intertidal areas, and rocky seabed areas
SLCONS	Shoreline Construction features
SOUNDG	Soundings at chart scale density
UWTROC	Rock features
WATTUR	Water turbulence—Breakers
WRECKS	Wrecks

The *_SS HCell contains the following Objects:

DEPCNT	Generalized contours at chart scale intervals (See table under section 4.)
SOUNDG	Soundings at the survey scale density (See table under section 3.)

8. Spatial Framework

8.1 Coordinate System

All spatial map and HCell 000 file deliverables are in an LLDG geographic coordinate system, with WGS84 horizontal, MHW vertical, and MLLW (1983-2001 NTDE) sounding datums.

8.2 Horizontal and Vertical Units

DUNI, HUNI and PUNI are used to define units for depth, height and horizontal position in the chart units HCell, as shown below.

Chart Unit Base Cell Units:

Depth Units (DUNI):	Feet
Height Units (HUNI):	Feet
Positional Units (PUNI):	Meters

During creation of the HCell in CARIS BASE Editor and CARIS S-57 Composer, all soundings and features are maintained in metric units with as high precision as possible. Depth units for soundings measured with sonar maintain millimeter precision. Depths on rocks above MLLW and heights on islets above MHW are typically measured with range finder, so precision is less. Units and precision are shown below.

BASE Editor and S-57 Composer Units:

Sounding Units:	Meters rounded to the nearest millimeter
Spot Height Units:	Meters rounded to the nearest decimeter

See the HCell Reference Guide for details of conversion from metric to charting units, and application of NOAA rounding.

9. Data Processing Notes

There were no significant deviations from the standards and protocols given in the HCell Specification and HCell Reference Guide.

All ATONs not included in the HCell should be retained as charted, except as noted in the table below showing ATONs requiring an update to position and/or attribution. It is recommended that positions and attributes of these ATONs be adjusted as indicated. The ATONS below are Blue Noted in the HCell.

Feature Acronym	Latitude in DMS	Longitude in DMS	Description	Recommendation	Images	Attributes
BCNISD **DAYMAR**	44°37'48.522"N	124°03'03.918"W	Warning Marker for Submerged Jetty	Update position/attributes	 	**BCNISD** BCNSHP: stake, pole, perch, post COLOUR: brown NATCON: metal **DAYMAR** COLOUR: white, orange TOPSHP: rhombus (diamond)
BCNSPP **LIGHTS** **TOPMAR**	44°37'44.240"N	124°02'59.004"W	Yaquina Bay Inner Range Front Light; LLN 9620	Update position/attributes		**BCNSPP** BCNSHP: beacon tower CATSPM: leading mark COLOUR: brown NATCON: metal **LIGHTS** CATLIT: leading light, {front/lower light} COLOUR: red **TOPMAR** COLOUR: red,black,red TOPSHP: rectangle,vertical
BCNSPP	44°37'44.611"N	124°02'33.979"W	Beacon tower, Leading mark Dredging range not in use	Dredging range no longer in use; Update position/attributes		**BCNSPP** BCNSHP: beacon tower CATSPM: leading mark COLOUR: brown NATCON: metal
BCNSPP	44°37'40.997"N	124°02'27.863"W	Former dredging range tower	Dredging range no longer in use; Update position/attributes		**BCNSPP** BCNSHP: beacon tower CATSPM: leading mark COLOUR: brown NATCON: metal

BCNLAT **LIGHTS**	44°37’33 .643”N	124°02’56. 498”W	Yaquina Bay Light 10; LLN 9650	Update attributes/position		**BCNLAT** BCNSHP: pile beacon CATLAM: starboard-hand lateral mark COLOUR: brown NATCON: metal **LIGHTS** CATLIT: leading light COLOUR: red OBJNAM: Yaquina Bay Light 10
BCNLAT **LIGHTS** **TOPMAR**	44°37’25 .612”N	124°02’23. 911”W	Yaquina Bay Light; LLN 9670	Charted position OK Update attributes		**BCNLAT** BCNSHP: pile beacon CATLAM: starboard-hand lateral mark COLOUR: brown NATCON: metal OBJNAM: Yaquina Bay Light 12 **LIGHTS** CATLIT: leading light COLOUR: red OBJNAM: Yaquina Bay Light 12 **TOPMAR** COLOUR: red,white TOPSHP: triangle, point up

10. QA/QC and ENC Validation Checks

H11989 was subjected to QA checks in S-57 Composer prior to exporting to the metric HCell (000) file. The millimeter precision metric S-57 HCell was converted to chart units and NOAA rounding applied. dKart Inspector was then used to further check the data set for conformity with the S-58 ver. 2 standard (formerly Appendix B.1 Annex C of the S-57 standard). All tests were run and warnings and errors investigated and corrected unless they are MCD approved as inherent to and acceptable for HCells.

11. Products

11.1 HSD, MCD and CGTP Deliverables

H11989_CS.000	Chart Units HCell, Soundings and features compiled to 1:10,000
H11989 _SS.000	Chart Units HCell, Soundings and Contours compiled to 1:5,000
H11989 _DR.pdf	Descriptive Report including end notes compiled during office processing and certification, the HCell Report, and supplemental items
H11989 _outline.gml	Survey outline
H11989 _outline.xsd	Survey outline

11.2 Software

CARIS HIPS Ver.7.0	Inspection of Combined BASE Surfaces
CARIS BASE Editor Ver. 3.0	Creation of soundings and bathy-derived features, creation of the depth area, meta area objects, and Blue Notes; Survey evaluation and verification; Initial HCell assembly.
CARIS S-57 Composer Ver. 2.1	Final compilation of the HCell, correct geometry and build topology, apply final attributes, export the HCell, and QA.
CARIS GIS 4.4a	Setting the sounding rounding variable for conversion of the metric HCell to NOAA charting units with NOAA rounding.
CARIS HOM Ver. 3.3	Perform conversion of the metric HCell to NOAA charting units with NOAA rounding.
HydroService AS, dKart Inspector Ver. 5.1, SP 1	Validation of the HCell 000 file.
Northport Systems, Inc., Fugawi View ENC Ver.1.0.0.3	Independent inspection of final HCells using a COTS viewer.

12. Contacts

Inquiries regarding this HCell content or construction should be directed to:

Cathleen Barry, Cartographer
Pacific Hydrographic Branch, Seattle, WA
206-526-6841 Cathleen.Barry@noaa.gov

APPROVAL SHEET
H11989

Initial Approvals:

The survey evaluation and verification has been conducted according to branch processing procedures and the HCell compiled per the latest OCS HCell Specifications.

Cathleen Barry
2011.02.17 15:14:30 -08'00'

The survey and associated records have been inspected with regard to survey coverage, delineation of the depth curves, development of critical depths, S-57 classification and attribution of soundings and features, cartographic characterization, and verification or disproval of charted data within the survey limits. The survey records and digital data comply with OCS requirements except where noted in the Descriptive Report and are adequate to supersede prior surveys and nautical charts in the common area.

Digitally signed by
Kurt Brown
Date: 2011.02.17
15:17:52 -08'00'

I have reviewed the HCell, accompanying data, and reports. This survey and accompanying digital data meet or exceed OCS requirements and standards for products in support of nautical charting except where noted in the Descriptive Report.

Digitally signed by Gary C.
Nelson
DN: cn=Gary C. Nelson, o=NOAA,
ou=Pacific Hydrographic Branch,
email=gary.nelson@noaa.gov,
c=US
Date: 2011.02.25 11:14:41 -08'00'

Christopher Hare
HQ Survey Review
2011.03.04 10:52:08
-05'00'