H11198

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey MULTIBEAM

Field No. D

Registry No. H11198

LOCALITY

State New Jersey

General Locality North Atlantic Ocean

Locality Brigantine Inlet to Great Egg Harbor Inlet

2003

CHIEF OF PARTY
REBECCA T. QUINTAL
Science Applications International Corporation

LIBRARY & ARCHIVES

DATE

NOAA FORM 77-28 (11-72) U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTRY NO.

H11198

HYDROGRAPHIC TITLE SHEET

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

FIELD NO.

D

State New Jersey

General locality Atlantic Ocean

Locality Brigantine Inlet to Great Egg Harbor Inlet

Scale 1:20,000 Date of survey 21 May 2003 – 3 December 2003

Instructions Dated 24 January 2003 & 24 July 2003 Project No. OPR-C303-KR-03

Vessel *R/V OceanExplorer* US905425

Chief of Party *REBECCA T. QUINTAL*

Surveyed by *Rebecca Quintal, Gary R. Davis, Paul Donaldson, Walter Simmons, Pam Clark, Karen Hart, Jason Infantino, Chuck Key, Sheila Kosbab, Steve Lemke, Elizabeth Lobecker, Gary Parker and Deb Smith*

Soundings taken by (**echo sounder**), hand lead, pole MULTIBEAM RESON SEABAT 8101

Graphic record scaled by

Graphic record checked by

Protracted by Automated plot by HP1055CM

Verification by ***Atlantic Hydrographic Branch Personnel***

Soundings in fathoms, (**feet,**) meters at MLW, (**MLLW**)

REMARKS: **Contract** DG133C-03-CQ-0014
Contractor: Science Applications International Corp., 221 Third Street; Newport, RI 02840
Times: All times are recorded in UTC.
Purpose: To provide NOAA with modern, accurate hydrographic survey data with which to update the nautical charts of the assigned area.
Bold, Red, Italic notes in Descriptive Report were made during office processing.

NOAA FORM 77-28 SUPERSEDES FORM C&GS-537. ☆ U.S. GOVERNMENT PRINTING OFFICE: 1976—665-661/1222 REGION NO. 6

Science Applications International Corporation (SAIC) warrants only that the survey data acquired by SAIC and delivered to NOAA under Contract DG133C-03-CQ-0014 reflects the state of the sea floor in existence on the day and at the time the survey was conducted.

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***Appended to this report.**

****Data filed with original field records.**

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Descriptive Report to Accompany
Hydrographic Survey H11198
Scale 1:20,000, Surveyed 2003
R/V OceanExplorer
Science Applications International Corporation (SAIC)
Rebecca T. Quintal, Hydrographer

PROJECT
Project Number: OPR-C303-KR-03
Dates of Instructions: 24 January 2003 **Original:** OPR-C303-KR-03
Task Order #: T0001
Dates of Supplemental Instructions: 22 July 2003, 24 July 2003 and 16 March 2004
Sheet Letter: D
Registry Number: H11198
Purpose: To provide NOAA with modern, accurate hydrographic survey data with which to update the nautical charts of the assigned area.

A. AREA SURVEYED

Description:

The area surveyed was a section of the Atlantic Ocean extending from Brigantine Inlet to Great Egg Harbor Inlet. The area was surveyed with a multibeam sonar and a towed side scan sonar. The depth range encountered in this area was from 15 to 72 feet.

The survey area is defined by the following (NAD83) vertices:

Latitude	Longitude
39° 25' 20.28"W	074° 17' 59.78"W
39° 23' 22.62"W	074° 14' 45.37"W
Incorporating the search radii of AWOIS 11203, 1327, 1318, 1309 and 2483	
39° 13' 12.28"W	074° 25' 11.26"W
39° 16' 53.98"W	074° 31' 17.09"W
Thence, following the 8-meter curve to the point of beginning, incorporating the search radius of AWOIS 11206 to the 4-meter curve.	

The specified area accommodated all fourteen full investigation AWOIS items assigned.

Table A-1. Dates of Multibeam Data Acquisition in Calendar/Julian Days

Calendar Date	Julian Day
21 May 2003	141
27 May 2003	147
28 May 2003	148
29 May 2003	149
30 May 2003	150
31 May 2003	151
2 June 2003	153
3 June 2003	154
5 June 2003	156
8 June 2003	159
9 June 2003	160
11 June 2003	162
12 June 2003	163
15 June 2003	166
19 June 2003	170
20 June 2003	171
21 June 2003	172
22 June 2003	173
23 June 2003	174
24 June 2003	175
1 July 2003	182
23 July 2003	204
1 August 2003	213
2 August 2003	214
3 August 2003	215
4 August 2003	216
5 August 2003	217
15 August 2003	227
23 August 2003	235
24 August 2003	236
25 August 2003	237
26 August 2003	238
27 August 2003	239
28 August 2003	240
29 August 2003	241
30 August 2003	242
31 August 2003	243

Calendar date	Julian Day
1 September 2003	244
2 September 2003	245
7 September 2003	250
14 September 2003	257
15 September 2003	258
20 September 2003	263
21 September 2003	264
22 September 2003	265
24 September 2003	267
25 September 2003	268
26 September 2003	269
27 September 2003	270
29 September 2003	272
30 September 2003	273
1 October 2003	274
2 October 2003	275
3 October 2003	276
5 October 2003	278
6 October 2003	279
7 October 2003	280
8 October 2003	281
9 October 2003	282
13 October 2003	286
14 October 2003	287
17 October 2003	290
18 October 2003	291
19 October 2003	292
20 October 2003	293
22 October 2003	295
23 October 2003	296
24 October 2003	297
25 October 2003	298
5 November 2003	309
23 November 2003	327
24 November 2003	328
3 December 2003	337

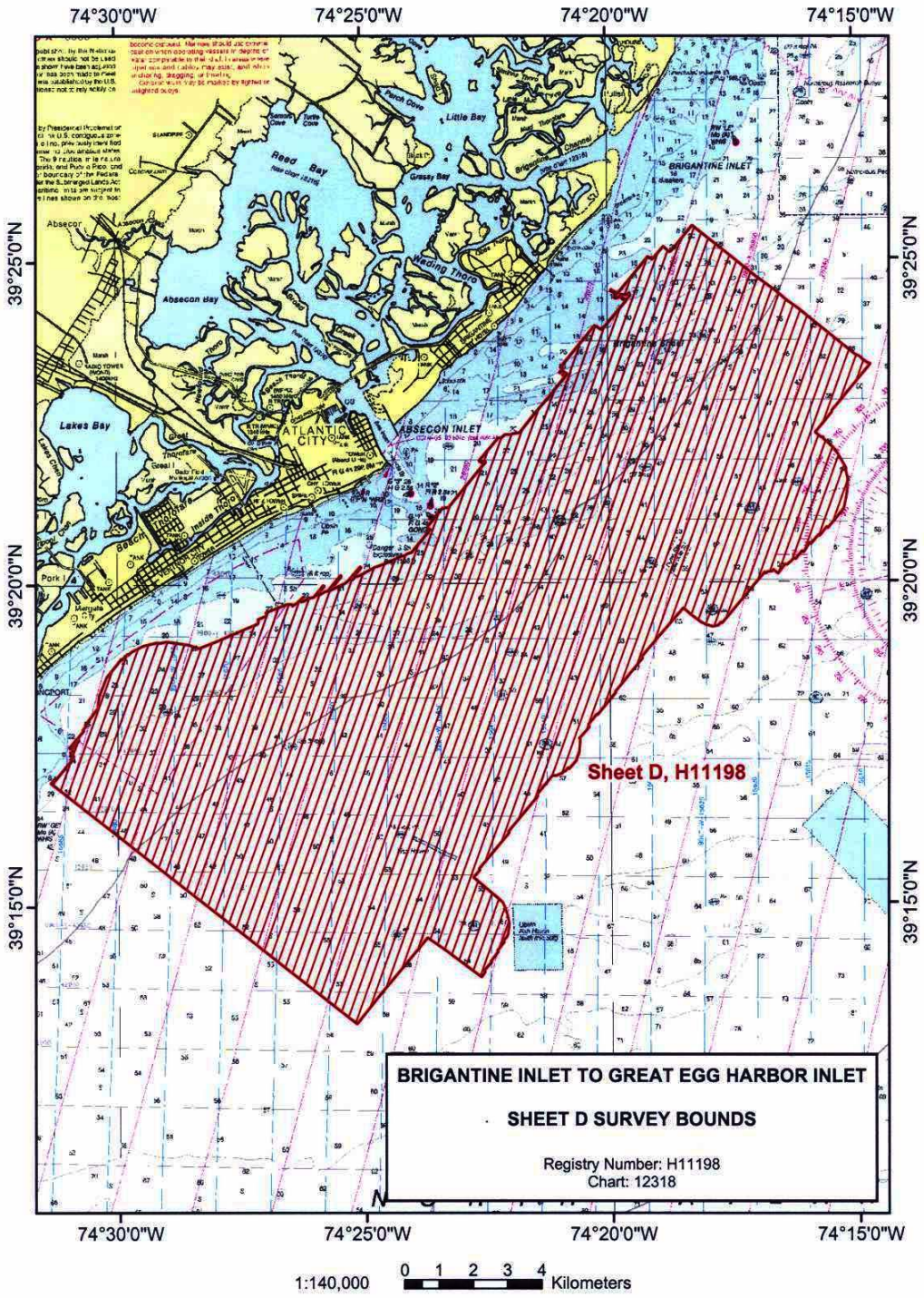

Figure A-1. H11198 Survey Bounds

B. DATA ACQUISITION AND PROCESSING *See also the evaluation report.*

B.1 EQUIPMENT

A detailed description of the systems used to acquire and process these data has been included in the separate Data Acquisition and Processing Report* for OPR-C303-KR-03 delivered 31 March 2004. There were no variations from the configuration described therein. The information below summarizes the larger report.

Data filed at the Atlantic Hydrographic Branch.

Table B-1. Major Systems by Manufacturer and Model Number

	Manufacturer / Model Number	Subsystem
Multibeam Sonar	RESON SeaBat 8101	Transducer 8101 Processor
Side Scan Sonar	Klein 2000 Towfish	K-Wing Depressor, Transceiver/Processing Unit (TPU)
Vessel Attitude System	TSS POS/MV Inertial Navigation System	
Positioning System	TSS POS/MV	
	Trimble 7400 GPS Receiver	
	Trimble Probeacon Differential Beacon Receiver	
	Leica MX41R Differential Beacon Receiver	
Sound Velocity System	Brooke Ocean Technology Ltd., Moving Vessel Profiler-30	Applied Microsystems Ltd. Smart SV and Pressure Sensor
	Sea-Bird Electronics, Inc. CTD Profiler	

Survey Vessel

The *R/V OceanExplorer* was the platform for multibeam sonar, side scan sonar and sound velocity data collection. The main cabin of the vessel was used as the data collection center. Data were shipped to the Data Processing Center in the SAIC Newport, RI office for data processing. The POS/MV IMU was mounted on the vessel, centerline just forward and above the RESON 8101 transducer, below the main deck. The multibeam sounder transducer was mounted on the keel. Table B-2 is a list of vessel characteristics for the *R/V OceanExplorer*.

Table B-2. Survey Vessel Characteristics

Vessel Name	LOA	Beam	Draft	Max Speed	Gross Tonnage	Power (Hp)	Registration Number
R/V OceanExplorer	60’	16’4”	6’	17 kn	56	1100	US905425

Major Systems

SAIC used their Integrated Survey System (**ISS2000**) software on a windows 2000 platform to acquire these survey data. Survey planning and data analysis was conducted using SAIC's **SABER** software on Linux platforms. Side scan data were collected and reviewed on a WindowsNT platform using Triton-Elics' **ISIS** software, while coverage mosaics were produced using **SABER** on a Linux platform.

B.2 QUALITY CONTROL

There were 147 linear nautical miles of cross lines surveyed and 3103 linear nautical miles of main scheme lines surveyed resulting in 5 percent coverage by cross lines. The cross lines were oriented at 127°/307° and were spaced approximately 800 meters apart, while the main scheme lines ~~line~~ were oriented at 40°/220° and were spaced 40 meters apart. The range scale was set to 50 meters for the side scan acquisition, while the swath width for the multibeam varied with depth. The following histograms represent the distribution of selected soundings by beam number. Figure B-1 illustrates the number of selected soundings versus beam number while Figure B-2 illustrates the percentage of selected soundings versus beam number.

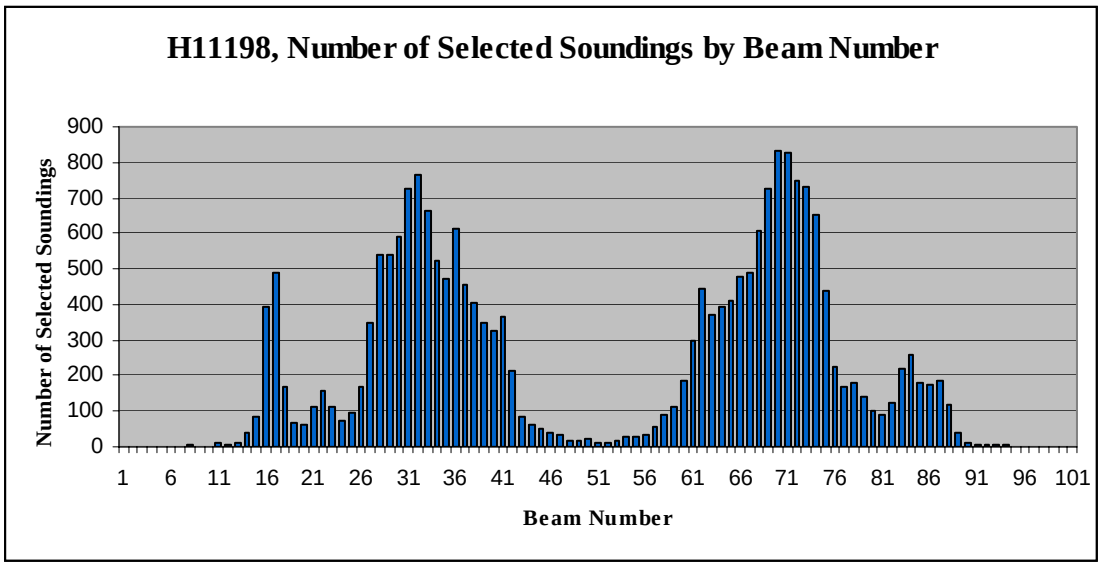

Figure B-1. Histogram of Selected Soundings by Beam Number, H11198

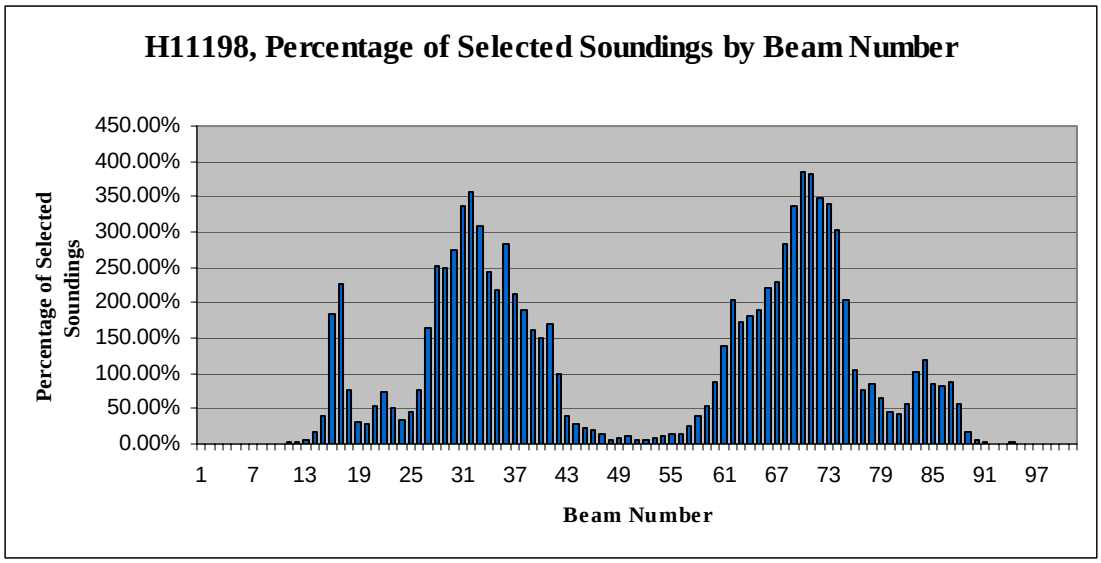

Figure B-2. Histogram of Percentage of Selected Soundings by Beam Number, H11198

Comparisons of all crossing data in H11198 show that 95.74% of comparisons are within 20 centimeters, 99.99% of comparisons are within 50 centimeters. The comparisons larger than 30 centimeters are accounted for by the normal small DGPS position scatter in areas of slopes, wrecks or obstructions, and sand waves. Table B-3 shows the comparisons using all crossings in H11198.

Table B-3. Junction Analysis: All Main Scheme vs. Cross Lines Near Nadir, H11198

Depth Difference Range		All		Positive		Negative		Zero
		Count	Percent	Count	Percent	Count	Percent	Count
0cm to	5cm	42697	47.99	16919	54.88	21599	40.02	4179
5cm to	10cm	25708	76.88	9196	84.71	16512	70.61	
10cm to	15cm	10796	89.01	3003	94.46	7793	85.05	
15cm to	20cm	5987	95.74	1275	98.59	4712	93.78	
20cm to	25cm	2308	98.33	297	99.56	2011	97.51	
25cm to	30cm	1060	99.53	96	99.87	964	99.29	
30cm to	35cm	267	99.83	25	99.95	242	99.74	
35cm to	40cm	90	99.93	11	99.98	79	99.89	
40cm to	45cm	37	99.97	2	99.99	35	99.95	
45cm to	50cm	15	99.99	0	99.99	15	99.98	
50cm to	60cm	5	99.99	1	99.99	4	99.99	
60cm to	70cm	3	99.99	1	100.00	2	99.99	
70cm to	80cm	0	99.99	0	100.00	0	99.99	
80cm to	90cm	2	100.00	0	100.00	2	100.00	
90cm to	100cm	0	100.00	0	100.00	0	100.00	
100cm to	210cm	3	100.00	1	100.00	2	100.00	
	Totals	88978	100%	30827	34.65%	53972	60.66%	4179 4.70%

Details of 75 selected nadir or near-nadir crossings in different areas of H11198 are listed in the Separates* to this report. The comparisons, comprising more than 1% of the crossings in the survey, were randomly selected for spatial and temporal distribution over the entire survey area.

Table B-4 depicts the junction analysis using all comparisons in the common area between H11198 and H11197. These comparisons show 99.44% were within 25 centimeters and 99.88% were within 30 centimeters. The table illustrates that 100% of the comparisons are within 45 centimeters.

Table B-4. Junction Analysis: H11197 vs. H11198 (all comparisons)

Difference Range		All		Positive		Negative		Zero
		Count	Percent	Count	Percent	Count	Percent	Count
0cm to	5cm	18211	50.89	8293	46.61	8154	50.24	1764
5cm to	10cm	10545	80.36	5532	77.70	5013	81.13	
10cm to	15cm	4166	92.00	2327	90.78	1839	92.46	
15cm to	20cm	2048	97.72	1168	97.35	880	97.88	
20cm to	25cm	614	99.44	355	99.34	259	99.48	
25cm to	30cm	160	99.88	88	99.84	72	99.92	
30cm to	35cm	33	99.97	22	99.96	11	99.99	
35cm to	40cm	6	99.99	4	99.98	2	100.00	
40cm to	45cm	3	100.00	3	100.00	0	100.00	
	Totals	35786	100%	17792	49.72%	16230	45.35	1764
								4.93%

B.3 CORRECTIONS TO ECHO SOUNDINGS

Please refer to the Data Acquisition and Processing Report** for a description of all corrections applied to echo soundings. There were no deviations from the corrections described therein. ***Data filed at the Atlantic Hydrographic Branch.***

C. VERTICAL AND HORIZONTAL CONTROL *See also the evaluation report.*

NOAA tide station 8534720 Atlantic City, NJ was the source of verified water level heights for determining correctors to soundings. The primary means for analyzing the adequacy of zoning was observing zone boundary crossings in the navigated swath editor, SAIC's **Multi View Editor**. In addition the sun illuminated coverage plots were examined on screen for adequacy of zoning. Cross line comparisons were also used to analyze zoning for the influence of wind and weather. A detailed description of tide zoning analysis is included in the Vertical and Horizontal Control Report*. The analysis indicated that the NOAA zoning for this sheet was adequate and therefore the NOAA zoning parameters were used to develop the water level correctors for soundings on sheet H11198. The zoning parameters applied on sheet H11198 are presented in Table C-1.
Approved tides and zones where applied during field operations.
****Data filed with original field records.***

3923--390077Table C-1. Water Level Zoning Parameters Applied on Sheet H11197

Zone	Time Corrector (mins)	Range Ratio	Reference Station
SA17	0	1.00	8534720
SA19	+12	0.99	8534720
SA21	0	0.95	8534720

These survey data were collected in horizontal datum NAD-83, using the UTM-18 projection. The following equipment was used for positioning on the *R/V OceanExplorer*:

- TSS POS/MV, Serial Number 314
- Trimble 7400 DSi GPS Receiver, Serial Number 3815A22469

Differential correctors used were from the U.S. Coast Guard Stations at Moriches, NY, Sandy Hook, NJ and Driver, VA. Daily position confidence checks were established using a Trimble DGPS. A real-time monitor raised an alarm when the two DGPS positions differed by more than 10 meters horizontally. Positioning confidence checks were well within an inverse distance of 5 meters.

Please refer to the Vertical and Horizontal Control Report OPR-C303-KR-03* for detailed descriptions of the procedures and systems used to attain hydrographic positioning. There were no variations from the procedures described therein.
Data filed with original field records.

D. RESULTS AND RECOMMENDATIONS *See also the evaluation report.*

D.1 CHART COMPARISON

H11198 was compared to:

- Chart 13003, 47th Edition, 1 June 2003, at scale 1:1,200,000; Corrected through 28 February 2004 from Notice to Mariners and the NOAA Critical Corrections; Corrected through LNM 2 March 2004.
- Chart 12300, 43rd Edition, 1 March 2003, at scale 1:400,000; Corrected through 28 February 2004 from Notice to Mariners and the NOAA Critical Corrections; Corrected through LNM 2 March 2004.
- Chart 12318, 41st Edition, 1 December 2002, at scales 1:80,000 & 1:20,000; Corrected through 28 February 2004 from Notice to Mariners and the NOAA Critical Corrections; Corrected through LNM 2 March 2004.
- Chart 12316, 29th Edition, 1 November 2003, at scale 1:40,000 & 1:20,000; Corrected through LNM 2 March 2004.

Recommend reconstruction of the common areas of all charts using data from this survey. ***Concur.***

The following discrepancies were noted during chart comparisons:

Chart 12300 (See Chartlet 1 in Separates)*

The charted 3 fathom depth curve from approximately 39° 25' 00"N 074° 18' 00"W, NAD83 to approximately 39° 23' 00"N 074° 21' 00"W, NAD83 should be moved shoreward. ***Concur. Chart area as shown on present survey.***

The charted 6 fathom depth curve from approximately 39° 25' 00"N 074° 17' 00"W, NAD83 to approximately 39° 17' 00"N 074° 31' 00"W, NAD83 should be moved to the ~~southwest~~ ***southeast***. ***Concur. Chart area as shown on present survey.***

A uncharted wreck with a least depth of ~~6¾~~ ***6½*** fathoms MLLW was located at approximately in 39° 24' 24.38"N 074° 17' 10.55"W, NAD83 is not charted. Recommend charting a sounding of ~~6¾~~ ***6½*** fathoms MLLW and Wk in 39° 24' 24.38"N 074° 17' 10.55"W, NAD83. For reference, this is feature #19.* ***Concur. Chart 6½ Wk. See also Page 13 and Table D.1 on page 22 of this report.***

Recommend replacing charted 5¾ fathoms MLLW sounding **on a Wk** in 39º 23' 48.78"N 074º 18' 04.13"W, NAD83 with a 6 fathoms sounding MLLW **on a Wk**. See AWOIS #1344, 1345, 1346, 1347, 1348, and 1349. ***Concur. Chart 6 Wk. See also page 13 of this report.***

The charted 6-fathom enclosed depth curve in 39° 23' 00.97"N 074° 16' 40.29"W, NAD83 should be moved to the southwest. ***Concur. Chart area as shown on present survey.***

A 10-fathom depth curve should be added in approximately 39° 23' 33.05"N 074° 15' 13.92"W, NAD83. ***Concur. Chart area as shown on present survey.***

The 10-fathom depth curve in approximately 39° 21' 00.80"N 074° 16' 02.12"W, NAD83 should be extended to the southwest. ***Concur. Chart area as shown on present survey.***

A 10-fathom depth curve should be added in approximately 39° 22' 16.45"N 074° 16' 55.08"W, NAD83. ***Concur. Chart area as shown on present survey.***

Recommend removal of the charted dangerous wreck, Mast ~~PA~~, and danger curve in 39º 21' ~~34.9~~ ***30.42***"N 074º 16' ~~03.5~~ ***12.51***"W, NAD83 and plotting the 7 fathoms sounding and symbol Obstn in 39° 21' 38.51"N 074° 16' 38.17"W, NAD83. See AWOIS #11203. ***Concur. Delete dangerous Wk, depth unknown, Mast. Chart 7 Obstn. See also page 13 of this report.***

****Data filed with original field records.***

Recommend replacing charted 7~~½~~¼ fathoms sounding ***on a Wk*** in 39º 21’ ~~16.8~~ **12.42**”N 074º 17’ ~~19.6~~**07.51**”W, NAD83 with a 7¾ fathoms sounding ***on a Wk*** in 39º 21’ 08.72”N 074º 17’ 08.27”W, NAD83. See AWOIS #1327. ***Concur. Revise to 7¾ Wk. See also page 13 of this report.***

Several 10-fathom depth curves should be added in approximately 39° 20' 32.89"N 074° 17' 34.51"W, NAD83. ***Concur. Chart area as shown on present survey.***

Recommend replacing the charted dangerous wreck (4½ fathoms rep) in 39º 21’ ~~52.0~~ ***45.42***”N 074º 19’ ~~07.4~~ ***15.52***”W, NAD83 with a 5½ fathoms sounding and Wk in 39º 21’ 42.17”N 074º 19’ 12.60”W, NAD83. . See AWOIS #11205. ***Concur. Revise dangerous Wk (4½ fms rep) to 5½ Wk. See also page 14 of this report.***

The charted 3¾ fathoms sounding in 39° 22' 40.97"N 074° 20' 24.71"W, NAD83 is in depths of 4 - 6¼ fathoms MLLW. ***Concur. Chart soundings from present survey.***

The charted 1¼ fathom sounding in 39° 23' 05.45"N 074° 21' 02.63"W, NAD83 is in depths of 3¼ - 4½ fathoms MLLW. ***Do not concur. Hydrographic coverage is not considered adequate for removal of the charted 1¼ sounding. Retain as charted.***

Recommend replacing the charted sounding ***on a Wk*** cleared to 3½ fathoms in 39° 20' ~~58.6~~ ***54.42***"N 074° 20' ~~58.9~~ ***58.52***"W, NAD83 with a 3½ fathoms sounding ***on a Wk in 39°20’56.96”N, 074°20’57.83”W***. See AWOIS #11189. ***Concur. Revise to 3½ Wk as shown on present survey. See also page 14 of this report and D.1.6 of the evaluation report.***

Several 10-fathom depth curves should be added in approximately 39° 20' 22.60"N 074° 19' 28.16"W, NAD83. ***Concur. Chart area as shown on present survey.***

Recommend replacing the charted sounding ***on a Wk*** cleared to 7 fathoms in 39° 20' ~~22.5~~ ***18.42***"N 074° 19' ~~16.3~~ ***10.51***"W, NAD83 with a 8½ fathoms MLLW sounding ***on a Wk*** in ~~39º 19’ 50.8”N 074º 18’ 01.3”W~~ ***39°20’21.11”N, 074°19’06.33”W***, NAD83. ~~with a 9 fathom sounding.~~ See AWOIS #1322. ***Concur. Revise to 8½ Wk. See also page 14 of this report.***

Recommend replacing the charted sounding ***on a Wk*** cleared to 8¼ fathoms in ~~39° 20' 58.6"N 074° 20' 58.9"W~~ ***39°19’36.42”N, 074°17’55.51”W***, NAD83 with a 9 fathoms MLLW sounding ***on a Wk*** in 39º 19’ 31.81”N 074º 17’ 56.37”W, NAD83. See AWOIS #1318. ***Concur. Revise to 9 Wk. See also page 14 of this report.***

Two 10-fathom depth curves should be added in approximately 39° 19' 42.25"N 074° 17' 40.07"W, NAD83. ***Concur. Chart area as shown on present survey.***

A 10-fathom depth curve should be added in approximately 39° 19' 18.33"N 074° 18' 56.34"W, NAD83. ***Concur. Chart area as shown on present survey.***

The charted 3¼ fathoms sounding in 39° 17' 57.33"N 074° 27' 38.22"W, NAD83 is in depths of 3½ - 5¾ fathoms MLLW. ***Do not concur. A (6¼ fms rep) depth on a dangerous Wk is charted in the position giving by the hydrographer. Chart area as shown on present survey.***

The charted 3½ fathoms sounding in 39° 19' 18.99"N 074° 22' 42.64"W, NAD83 is in depths of 4 - 7 fathoms MLLW. ***Concur. Chart soundings from present survey.***

Recommend removal of the charted dangerous wreck in 39º 18' ~~58.8~~ ***55.72***"N ~~074º 22' 12.3~~ ***074°21'59.83***"W, NAD83, and recommend charting a ~~5½~~***7½*** fathoms MLLW sounding and symbol Wk in 39º 18' 58.88"N 074º 22' 02.18"W, NAD83. See AWOIS #11207. ***Concur. Revise to 7½ Wk. See also page 15 of this report.***

Recommend replacing the 5 fathom Wk in 39° 18' 17.96"N 074° 22' 07.80"W, NAD83 with a sounding of ~~5¼~~ ***5*** MLLW ~~sounding~~ and Wk in 39° 18' 15.89***90***"N 074° 22' ~~11.01~~ ***10.94***"W, NAD83. ***Concur. Chart 5 Wk. See also the associated Danger to Navigation Report appended to this report.***

The charted 9-fathom sounding in 39° 18' 26.50"N 074° 21' 23.23"W, NAD83 is in depths of ~~7~~ ***6*** - 8 fathoms MLLW. ***Do not concur. See D.1.2. of the evaluation report.***

The charted 10 fathoms sounding in 39° 18' 31.28"N 074° 19' 47.15"W, NAD83 is in depths of 7½ - 8 fathoms MLLW. ***Do not concur. See D.1.3. of the evaluation report.***

Recommend replacing the charted sounding ***on a Wk*** cleared to 6½ fathoms in 39° 17' ~~47.0~~ ***32.41***"N 074° 21' ~~17.0~~ ***19.52***"W, NAD83 with a 6½ fathom sounding ***on a Wk*** in 39º 17' 28.46"N 074º 21' 24.27"W, NAD83. See AWOIS #1309. ***Concur. Delete Wk cleared to 6½. Chart 6½ Wreckage. See also page 15 of this report.***

A charted dangerous wreck ***(6¼ fms rep)*** in 39º 17' ~~28.78~~ ***30.41***"N 074º 26' ~~29.71~~ ***28.53***"W, NAD83, was located. Recommend charting a ~~39~~ ***6½*** Wk in 39º 17' 50.26"N 074º 25' 10.56"W, NAD83. See AWOIS #1310. ***Concur. Delete dangerous Wk (6¼ fms rep). Chart 6½ Wk. See also page 15 of this report.***

An uncharted wreck with a least depth of 4 fathoms MLLW in 39° 19' 39.59"N 074° 25' 05.89"W, NAD83 was located. This wreck was reported in Danger to Navigation Report #1********(see AppendixV. SUPPLEMENTAL SURVEY RECORDS & CORRESPONDENCE)******* with a depth of 24 feet ***(4 fathoms)*** based on predicted tides. The depth should be corrected to 23 feet ***(3¾ fathoms)*** based on verified tides. For reference, this is feature #1.******* ***Concur. Chart 3¾ Wk. See also page 14 of this report.***

****Data filed with original field records.***
*****Appended to this report.***

A uncharted wreck with a least depth of ~~4½~~ ***4¼*** fathoms MLLW in 39° 19' 13.25"N 074° 27' 06.09"W, NAD83 was located. Recommend charting a sounding of ~~4½~~ ***4¼*** fathoms MLLW and Wk in 39° 19' 13.25"N 074° 27' 06.09"W, NAD83. For reference, this is feature #47.* ***Concur. Chart 4¼ Wk. See also page 15 of this report.***

An uncharted wreck with a least depth of ~~4~~ ***3¾*** fathoms MLLW in 39° 19' 04.61"N 074° 27' 59.75"W, NAD83 was located. Recommend charting a sounding of ~~4~~ ***3¾*** fathoms MLLW and Wk in 39° 19' 04.61"N 074° 27' 59.75"W, NAD83For reference, this is feature #33.* ***Concur. Chart 3¾ Wk. See also page 15 of this report.***

The charted 3½ fathoms sounding in 39° 19' 22.28"N 074° 25' 15.05"W, NAD83 is in depths of 4 - 6¼ fathoms MLLW. ***Concur. Chart soundings from present survey.***

Recommend removal of the charted dangerous wreck PA and danger curve in 39° 18' ~~07.5~~ ***00.48***"N ~~074° 29' 01.4"W~~ ***074°28'58.55"W***, NAD83. See AWOIS #11206. ***Concur. Delete dangerous Wk, depth unknown, PA. See also page 15 of this report.***

The charted dangerous wreck 2½ fathom PA, danger curve and blue tint in 39º 16' ~~06.48~~ ***03.62***"N 074º 24' ~~16.23~~ ***18.83***"W, NAD83, was located. Recommend charting an ~~8½~~ ***8¼*** fathoms MLLW Wk in 39º 15' 56.33"N 074º 24' 48.35"W, NAD83. See AWOIS #1307. ***Concur. See also page 15 of this report.***

Recommend replacing charted 6¾ fathoms ***cleared*** sounding ***on a Wk*** in 39º 14' ~~52.6~~ ***42.41***"N 074º 22' ~~57.6~~ ***48.52***"W, NAD83 with an 8¾ fathoms MLLW sounding ***on a Wk*** in 39º 14' 41.08"N 074º 22' 49.67"W, NAD83. See AWOIS #2483. ***Concur. Revise to 8¾ Wk. See also page 16 of this report.***

Chart 12318 (See Chartlet 2 in Separates)*

The charted 18 feet MLLW depth curve from approximately 39° 25' 21.33"N 074° 19' 11.39"W, NAD83 to approximately 39° 22' 47.04"N 074° 21' 19.15"W, NAD83 should be moved shoreward and the soundings updated based on this survey. The section of the 18 feet depth curve in approximately 39° 25' 06.73"N 074° 18' 57.04"W, NAD83 should be moved to the north east. ***Concur. Chart as shown on present survey.***

Several 30 feet MLLW depth curves should be added in approximately 39° 25' 26.70"N 074° 18' 28.55"W, NAD83. ***Concur. Chart as shown on present survey.***

The charted depth of 17 feet MLLW in 39° 24' 34.47"N 074° 18' 53.73"W, NAD83 is in depths of 25 - 27 feet MLLW. Recommend removal of the 18 feet depth curve and blue tint. ***Concur. Chart soundings and depth curves as shown on present survey.***

****Data filed with original field records.***

The charted depths of 13, 15 and 17 feet MLLW centered in approximately 39° 24' 27.05"N 074° 19' 50.06"W, NAD83 is in depths of 18 - 25 feet MLLW. Recommend moving the 18 feet depth curve and blue tint shoreward. ***Concur. Chart soundings as shown on present survey.***

The charted depth of 17 feet MLLW in 39° 23' 35.20"N 074° 18' 47.80"W, NAD83 is in depths of 23 - 24 feet MLLW. Recommend removal of the 18 feet depth curve and blue tint. ***Concur. Chart soundings and depth curves as shown on present survey.***

A uncharted wreck with a least depth of 40 feet MLLW was located in 39° 24' 24.38"N 074° 17' 10.55"W, NAD83 is not charted. Recommend charting a sounding of 40 feet MLLW and Wk in 39° 24' 24.38"N 074° 17' 10.55"W, NAD83. For reference, this is feature #19.***** ***Concur. Chart 40 Wk. See also Table D-1 on page 22 of this report.***

The depth of the charted wreck in 39º 23' 48.78"N 074º 18' 04.13"W, NAD83 is based on predicted tides. Recommend replacing the charted 35 sounding with a 36 feet MLLW sounding based on verified observed tides. See AWOIS #1344, 1345, 1346, 1347, 1348, and 1349. ***Concur. Chart 36 Wk. See also page 20 of this report.***

Three 60 feet MLLW depth curves should be added in approximately 39° 23' 35.02"N 074° 15' 14.50"W, NAD83. ***Concur. Chart depth curves as shown on present survey.***

A 60 feet MLLW depth curve should be added in approximately 39° 22' 14.24"N 074° 17' 00.12"W, NAD83. ***Concur. Chart depth curves as shown on present survey.***

Recommend removal of the charted dangerous wreck, MAST, danger curve and blue tint in ~~39º 22' 19.63~~ ***39°21'30.42***"N 074º 16' ~~54.52~~***12.51***"W, NAD83 and plotting the 42 feet MLLW sounding and symbol Obstn in 39° 21' 38.51"N 074° 16' 38.17"W, NAD83. See AWOIS #11203. ***Concur. Delete dangerous Wk, depth unknown, Mast. Chart 42 Obstn. See also page 21 of this report.***

A Wk cleared to 44 feet MLLW, in 39º 21' ~~10.12~~***12.42***"N 074º 17' ~~06.64~~***07.51***"W, NAD83, was located. Recommend charting a 47 feet MLLW and Wk in 39º 21' 08.72"N 074º 17' 08.27"W, NAD83. See AWOIS #1327. ***Concur. Revise to 47 Wk. See also page 20 of this report.***

Two 60 feet depth curves should be added in approximately 39° 20' 34.29"N 074° 17' 31.67"W, NAD83. ***Concur. Chart depth curves as shown on present survey.***

Two 60 feet depth curves should be added in approximately 39° 19' 35.18"N 074° 17' 50.63"W, NAD83. ***Concur. Chart depth curves as shown on present survey.***

****Data filed with original field records.***

Recommend replacing the charted sounding ***on a Wk*** cleared to 49 feet in ~~39° 20' 58.6~~ ***39°19'36.42***"N ~~074° 20' 58.9~~ ***074°17'55.51***"W, NAD83 with a 55 feet MLLW sounding and Wk symbol in 39º 19' 31.81"N 074º 17' 56.37"W, NAD83. See AWOIS #1318. ***Concur. Revise Wk cleared to 49 feet to a 55 Wk. See also page 19 of this report.***

Recommend replacing the charted sounding ***on a Wk*** cleared to 42 feet in 39° 20' ~~22.5~~***18.42***"N 074° 19' ~~16.3~~***10.51***"W, NAD83 with a 51 feet sounding ***on a Wk*** in 39° 20' 21.11""N 074° 19' 06.33"W, NAD83. See AWOIS #1322. ***Concur. Revise to 51 Wk. See also page 19 of this report.***

Several 60 feet depth curves should be added in approximately 39° 20' 23.47"N 074° 19' 27.21"W, NAD83. ***Do not concur. The three 61 foot soundings at this location are not considered significant. Chart soundings and depth cures as shown on present survey.***

Recommend replacing the charted dangerous wreck (27 ft rep) in 39º 21' ~~52.0~~***45.42***"N 074º 19' ~~07.4~~***15.52***"W, NAD83 with a 34 Wk in 39º 21' 42.17"N 074º 19' 12.60"W, NAD83. See AWOIS #11205. ***Concur. Revise dangerous Wk (27 ft rep) to a 34 Wk. See also page 21 of this report.***

The charted depth of 29 feet MLLW in 39° 21' 15.01"N 074° 20' 01.71"W, NAD83 is in depths of 34 - 39 feet MLLW. Recommend removal of the 30 feet depth curve and blue tint. ***Concur. Chart soundings and depth curves as shown on present survey.***

Recommend replacing the charted sounding cleared to 21 feet in 39° 20' ~~58.6~~***54.42***"N 074° 20' 58.~~9~~***53***"W, NAD83 with a 22 Wk in 39º 20' 56.96"N 074º 20' 57.83"W, NAD83. See AWOIS #11189. ***Concur. Revise to 22 Wk. See also page 20 of this report and D.1.6 of the Evaluation Report.***

The charted depth of 20 feet MLLW in 39° 21' 01.52"N 074° 22' 42.43"W, NAD83 is in depths of 25 - 28 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 19 feet MLLW in 39° 20' 51.09"N 074° 23' 02.67"W, NAD83 is in depths of 23 - 27 feet MLLW. ***Concur. Chart soundings from present survey.***

The 18 feet depth curves should be in approximately 39° 20' 41.88"N 074° 23' 36.32"W, NAD83 should be moved shoreward. ***Concur. Chart depth curves as shown on present survey.***

The Dangerous wreck with a least depth of 24 feet MLLW in 39° 19' 39.59"N 074° 25' 05.89"W, NAD83 is correctly charted based on the Danger to Navigation Report #1*** (see Appendix V. SUPPLEMENTAL SURVEY RECORDS & CORRESPONDENCE)* which reported a depth of 24 feet based on predicted tides. The depth should be corrected to 23 feet based on verified tides. ***Concur. Revise charted 24 Wk to 23 Wk.*** For reference, this is feature #1.*

Data filed with original field records.

****Appended to this report.***

Recommend removal of the charted dangerous wreck in 39º 18’ ~~58.8~~ ***55.72***”N ~~074º 22’ 12.3~~ ***074°21’59.83***”W, NAD83. Recommend charting a 46 feet MLLW sounding and Wk in 39º 18’ 58.88”N 074º 22’ 02.18”W, NAD83. See AWOIS #11207. ***Concur. Revise to 46 Wk. See also page 21 of this report.***

Recommend replacing the charted sounding ***on a Wk*** cleared to 39 feet in approximately 39° 17' ~~47.0~~***32.41***"N 074° 21' ~~17.0~~***19.52***"W, NAD83 with a 41 feet MLLW sounding and Wk in 39º 17’ 28.46”N 074º 21’ 24.27”W, NAD83. See AWOIS #1309. ***Concur. Delete Wk cleared to 39 feet. Chart 41 Wreckage. See also page 19 of this report.***

The charted sewer pipe in approximately ~~39° 13’ 26.84~~***39°19’36.62***”N ~~074° 36’ 36.31~~ ***074°26’46.04***”W (NAD83) ~~This outfall~~ was reported in Danger to Navigation Report #5*** dated 21 May 2003 based on predicted tides. Recommend relocation and realignment of the charted sewer outfall. See AWOIS #11190 Charted Sewer Outfall. ***Concur. Chart outfall and associated soundings as shown on present survey. See also page 20 of this report.***

A wreck in 26 feet MLLW in 39° 19' 13.25"N 074° 27' 06.09"W, NAD83 is not charted. Recommend charting a sounding of 26 feet MLLW and Wk in 39° 19' 13.25"N 074° 27' 06.09"W, NAD83. For reference, this is feature #47.*** ***Concur. Chart 26 Wk. See also Table D.1 on page 22 of this report.***

A wreck in 23 feet MLLW in 39° 19' 04.61"N 074° 27' 59.75"W, NAD83 (Feature 33)*** is not charted. Recommend charting a sounding of 23 feet MLLW and Wk in 39° 19' 04.61"N 074° 27' 59.75"W, NAD83. For reference, this is feature #33.*** ***Concur. Chart 23 Wk. See also Table D-1 on page 22 of this report.***

The charted depth of 23 feet MLLW in 39° 18’ 22.02”N 074° 29’ 15.06”W, NAD83 is in depths of 27 - 28 feet MLLW. ***Concur. Chart soundings from present survey.***

Recommend removal of the charted dangerous wreck PA and danger curve in 39° 18' ~~07.5~~***00.48***"N ~~074° 29' 01.4~~ ***074°28’58.55***"W, NAD83. See AWOIS #11206. ***Concur. Delete dangerous Wk, depth unknown, PA. See also page 21 of this report.***

The charted dangerous wreck in 39° 17’ 30.~~64~~***41***”N 074° 26’ 28.~~66~~***53***”W, NAD83 was located is about 2000 meters northeast in 39º 17’ 50.26”N 074º 25’ 10.56”W, NAD83. See AWOIS #1310 ***Concur. Delete dangerous Wk (38 ft rep). Chart 39 Wk. See also page 19 of this report.***

The charted dangerous wreck (15 ft rep) PA, danger curve and blue tint in 39º 16’ ~~06.48~~ ***03.62***”N 074º 24’ ~~16.23~~***18.83***”W, NAD83, was located. Recommend charting a 51 feet MLLW sounding and Wk in 39º 15’ 56.33”N 074º 24’ 48.35”W, NAD83. See AWOIS #1307. ***Concur. Delete dangerous Wk (15 ft rep) PA. Chart 51 Wk. See also page 19 of this report.***

****Data filed with original field records.***

Recommend replacing charted cleared to 41 feet wreck in 39º 14’ ~~52.6~~***42.41***”N 074º 22’ ~~57.6~~***48.52***”W, NAD83 with a 53 feet MLLW sounding and Wk in 39º 14’ 41.08”N 074º 22’ 49.67”W, NAD83. See AWOIS #2483. ***Concur. Revise Wk cleared to 41 feet to a 53 Wk. See also page 20 of this report***

Chart 12316 (See Chartlet 3 in Separates)*

The charted depth of 17 feet MLLW in 39° 24’ 27.72”N 074° 19’ 25.32”W, NAD83 is in depths of 22 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 15 feet MLLW in 39° 24’ 28.16”N 074° 19’ 51.32”W, NAD83 is in depths of 23 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 15 feet MLLW in 39° 23’ 20.90”N 074° 20’ 54.18”W, NAD83 is in depths of 25 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 16 feet MLLW in 39° 23’ 33.55”N 074° 20’ 33.64”W, NAD83 is in depths of 22 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 16 feet MLLW in 39° 23’ 23.23”N 074° 20’ 34.80”W, NAD83 is in depths of 25 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 17 feet MLLW in 39° 23’ 34.85”N 074° 20’ 09.04”W, NAD83 is in depths of 24 feet MLLW. ***Concur. Chart soundings from present survey.***

The 18 foot depth curve running east northeast from approximately 39° 23’ 27.44”N 074° 21’ 06.38”W, NAD83 to approximately 39° 23’ 36.09”N 074° 20’ 03.66”W then back to the west southwest to approximately 39° 23’ 14.51”N 074° 21’ 03.40” should be redrawn based on the results of this survey, which show no depths less than 18 feet MLLW in this area. ***Concur. Chart depth curves as shown on present survey.***

The charted depth of 21 feet MLLW in 39° 23’ 22.91”N 074° 20’ 07.59”W, NAD83 is in depths of 27 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 17 feet MLLW in 39° 23’ 09.69”N 074° 20’ 26.96”W, NAD83 is in depths of 27 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 12 feet MLLW in 39° 23’ 02.74”N 074° 20’ 50.02”W, NAD83 is in depths of 18 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 10 feet MLLW in 39° 22’ 58.64”N 074° 21’ ~~21.31~~***03.00***”W, NAD83 is in depths of 16 feet MLLW. ***Concur. Chart soundings from present survey.***

The 12 and 18-foot depth curves around the 17, 12, and 10 feet soundings listed above should be redrawn based on the results of this survey. ***Concur. Chart depth curves as shown on the present survey.***
****Data filed with original field records.***

The charted depth of 23 feet MLLW in 39° 22’ 57.04”N 074° 20’ 18.39”W, NAD83 is in depths of ~~28~~ ***27*** feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 23 feet MLLW in 39° 22’ 36.93”N 074° 20’ 43.85”W, NAD83 is in depths of 30 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 20 feet MLLW in 39° 22’ 44.59”N 074° 21’ 05.01”W, NAD83 is in depths of 24 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 19 feet MLLW in 39° 21’ 53.54”N 074° 22’ 08.54”W, NAD83 is in depths of 25 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 19 feet MLLW in 39° 21’ 56.78”N 074° 21’ 53.79”W, NAD83 is in depths of ~~27~~ ***25-28*** feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 19 feet MLLW in 39° 21’ 59.16”N 074° 21’ 40.37”W, NAD83 is in depths of 31 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 10 feet MLLW in 39° 22’ 58.64”N 074° 21’ ~~21.31~~***03.00***”W, NAD83 is in depths of 16 feet MLLW. ***Concur. Chart soundings from present survey.***

The 30-foot depth curve that stops at the edge of the chart in approximately 39° 21’ 10.94”N 074° 21’ 40.57”W, NAD83 should be redrawn to extend to approximately 39° 22’ 57.87”N 074° 20’ 04.91”W, NAD83 based on the results of this survey. ***Concur. Chart depth curves as shown on the present survey.***

The charted depth of 25 feet MLLW in 39° 20’ 55.19”N 074° 22’ 23.05”W, NAD83 is in depths of 31 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 20 feet MLLW in 39° 21’ 00.19”N 074° 22’ 42.07”W, NAD83 is in depths of 27 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 19 feet MLLW in 39° 20’ 54.63”N 074° 22’ 53.84”W, NAD83 is in depths of ~~28~~ ***27*** feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 19 feet MLLW in 39° 20’ 44.20”N 074° 23’ 22.86”W, NAD83 is in depths of 23 feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 17 feet MLLW in 39° 20’ 40.54”N 074° 23’ 39.60”W, NAD83 is in depths of ~~22~~ ***21*** feet MLLW. The 18-foot depth curve around this sounding should be redrawn based on the on the results of this survey which shows no depth less than 18 feet in this area. ***Concur. Chart soundings and depth curves as shown on the present survey.***

The two charted depths of 28 feet MLLW in 39° 20’ 25.32”N 074° 22’ 49.94”W, NAD83 and 39° 20’ 23.20”N 074° 23’ 00.94”W, NAD83 are in depths of 34 feet MLLW. Recommend removal of the 30-foot depth curve around these soundings based on the results of this survey, which shows no depths less than 30 feet in this area. ***Concur. Chart soundings and depth curves as shown on the present survey.***

The Dangerous wreck with a least depth of 24 feet MLLW in 39° 19’ 39.59”N 074° 25’ 05.89”W, NAD83 is correctly charted based on the Danger to Navigation Report #1** (see Appendix V. SUPPLEMENTAL SURVEY RECORDS & CORRESPONDENCE)* which reported a depth of 24 feet based on predicted tides. The depth should be corrected to 23 feet based on verified tides. For reference, this is feature #1.* ***Concur. Revise 24 Wk to 23 Wk. See also the associated Danger to Navigation Report appended to this report.***

The charted depth of 21 feet MLLW in 39° 19’ 19.59”N 074° 25’ 56.11”W, NAD83 is in depths of ~~28~~ ***30*** feet MLLW. ***Concur. Chart soundings from present survey.***

The charted depth of 21 feet MLLW in 39° 19’ 15.23”N 074° 25’ 08.83”W, NAD83 is in depths of ~~27~~ ***29*** feet MLLW. ***Concur. Chart soundings from present survey.***

The charted sewer pipe in approximately ~~39° 13’ 26.84~~***39°19’36.62***”N ~~074° 36’ 36.31~~ ***074°26’46.04***”W NAD83 ~~This outfall~~ was reported in Danger to Navigation Report #5** dated 21 May 2003 based on predicted tides. Recommend relocation and realignment of the charted sewer outfall. See AWOIS #11190 Charted Sewer Outfall. ***Concur. Chart outfall as shown on present survey. See also page 20 of this report.***

A wreck in 26 feet MLLW in 39° 19' 13.25"N 074° 27' 06.09"W, NAD83 is not charted. Recommend charting a sounding of 26 feet MLLW and Wk in 39° 19' 13.25"N 074° 27' 06.09"W, NAD83. For reference, this is feature #47.* ***Concur. Chart 26 Wk. See also Table D-1 on page 22 of this report.***

A wreck in 23 feet MLLW in 39° 19' 04.61"N 074° 27' 59.75"W, NAD83 is not charted. Recommend charting a sounding of 23 feet MLLW and Wk in 39° 19' 04.61"N 074° 27' 59.75"W, NAD83. For reference, this is feature #33.* ***Concur. Chart 23 Wk. See also Table D-1 on page 22 of this report.***

The charted dangerous wreck in 39° 18’ 00.~~33~~***48***”N 074° 28’ ~~57.37~~***58.55*** ”W, NAD83 was not located during the survey. See AWOIS #11206. ***Concur. Delete dangerous Wk, depth unknown, PA. See also page 21 of this report.***

The charted dangerous wreck in 39° 17’ 30.~~64~~***41***”N 074° 26’ 28.~~66~~***53***”W, NAD83 was located is about 2000 meters northeast in 39º 17’ 50.26”N 074º 25’ 10.56”W, NAD83. See AWOIS #1310. ***Concur. See also page 19 of this report.***

****Data filed with original field records.***
*****Attached to this report.***

Chart 13003

There were no soundings or features charted on this nautical chart in the H11198 survey area.

AWOIS Items, Wrecks and Obstructions

AWOIS Items:

AWOIS #1307 (Chartlets 1 & 2)*
Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. Recommend removal of the charted dangerous wreck (15 ft rep) PA, danger curve and blue tint in 39º 16' ~~06.48~~ ***03.62***"N 074º 24' ~~16.23~~ ***18.83***"W, NAD83, and recommend charting a 51 Wk in 39º 15' 56.33"N 074º 24' 48.35"W, NAD83. For reference, this is feature #3.****Concur. Delete dangerous Wk (15 ft rep) PA. Chart 51 Wk.***

AWOIS #1309 (Chartlets 1 & 2)*
Full search of the 1000-meter radius with 200% side scan and resulting multibeam sonar coverage. A widely scattered wreck was located, the main body is feature #56 covered 44 feet, other portions are feature #57 covered 41 feet and feature #54 covered 42 feet. Recommend removal of the charted Wk cleared to 39 feet, danger curve and blue tint in 39º 17' ~~30.65~~ ***32.41***"N 074º 21' 19.52"W, NAD83, and recommend charting a 41 Wks in 39º 17' 28.46"N 074º 21' 24.27"W, NAD83. For reference, this is feature #57*** (see features #54, #55 and #56 also).*** ***Concur. Delete Wk cleared to 39 feet. Chart 41 Wreckage.***

AWOIS #1310 (See Chartlets 1, 2 & 3)*
Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. A 39 Wk, is about 2000 meters northeast. Recommend removal of the charted dangerous wreck (38 ft rep), danger curve and blue tint in 39º 17' ~~28.78~~***30.41***"N 074º 26' ~~29.71~~***28.53***"W, NAD83, and recommend charting a 39 Wk in 39º 17' 50.26"N 074º 25' 10.56"W, NAD83. For reference, this is feature #20.*** ***Concur. Delete dangerous Wk (38 ft rep). Chart 39 Wk.***

AWOIS #1318 (Chartlets 1 & 2)*
Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. Recommend removal of the charted Wk cleared to 49 feet, danger curve and blue tint in 39º 19' ~~35.43~~ ***36.42***"N 074º 17' ~~56.31~~ ***55.51***"W, NAD83, and recommend charting a 55 Wk in 39º 19' 31.81"N 074º 17' 56.37"W, NAD83. For reference, this is feature #4.* ***Concur. Revise to 55 Wk.***

AWOIS #1322 (Chartlets 1 & 2)*
Full search of the 1000-meter radius with 200% side scan and resulting multibeam sonar coverage. Recommend removal of the charted Wk cleared to 42 feet, danger curve and blue tint in 39º 20' ~~19.23~~ ***18.42***"N 074º 19' ~~09.64~~ ***10.51***"W, NAD83, and recommend charting a 51 Wk in 39º 20' 21.11"N 074º 19' 06.33"W, NAD83. For reference, this is feature #11.* ***Concur. Revise to 51 Wk.***
****Data filed with original field records.***

AWOIS #1327 (Chartlets 1 & 2)*
Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. Recommend removal of the charted Wk cleared to 44 feet, danger curve and blue tint in 39º 21' ~~10.12~~**12.42**"N 074º 17' ~~06.64~~**07.51**"W, NAD83, and recommend charting a 47 Wk in 39º 21' 08.72"N 074º 17' 08.27"W, NAD83. For reference, this is feature #10.* ***Concur. Revise to 47 Wk.***

AWOIS #1344, 1345, 1346, 1347, 1348, and 1349 (Chartlets 1 & 2)*
Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. Charted 35 Wk in 39º 23' 48.78"N 074º 18' 04.13"W, NAD83, is from Danger to Navigation Report #3 dated 22 May 2003** based on predicted tides. Recommend replace the charted 35 sounding with a 36 feet MLLW sounding based on verified observed tides. For reference, this is feature #2.* ***Concur. Chart 36 Wk.***

AWOIS #2483 (Chartlets 1 & 2)*
Full search of the 1000-meter radius with 200% side scan and resulting multibeam sonar coverage. Recommend removal of the charted Wk cleared to 41 feet, danger curve and blue tint in 39º 14' ~~41.82~~ ***42.41***"N 074º 22' ~~46.82~~ ***48.52***"W, NAD83, and recommend charting a 53 Wk in 39º 14' 41.08"N 074º 22' 49.67"W, NAD83. For reference, this is feature #27.* ***Concur. Revise to 53 Wk.***

AWOIS 11189 (Chartlets 1 & 2)*
Full search of the 500-meter radius with 200% side scan and resulting multibeam sonar coverage. Recommend removal of the charted Wk cleared to 21 feet, danger curve and blue tint in 39º 20' ~~58.56~~ ***54.42***"N 074º 20' ~~59.52~~ ***58.52***"W, NAD83, and recommend charting a 22 Wk in 39º 20' 56.96"N 074º 20' 57.83"W, NAD83. For reference, this is feature #51.* ***Concur. Revise to 22 Wk. See also D.1.6 of the evaluation report.***

AWOIS #11190 Charted Sewer Outfall (See Chartlets 2 & 3)*
Full search of the sewer outfall area from more than 200 meters off shore of the feature to shoreward of the burial point of the pipe with 200% side scan and resulting multibeam sonar coverage. This outfall was reported in Danger to Navigation Report #~~5~~ **2**** dated 21 May 2003 based on predicted tides. Recommend relocation and realignment of the charted sewer outfall with offshore ends of the Y-legs in 39º 19' 38.~~15~~***31***"N 074º 26' 33.~~37~~ ***54***"W, NAD83, feature #43*, 21 feet; and in 39º 19' 34.21"N 074º 26' 41.94"W, NAD83, feature #44*, 20 feet. Chart the junction of the outfall Y-legs with the main pipe outfall in 39º 19' 39.93"N 074º 26' 40.~~58~~ ***04***"W, NAD83, feature #46*, 20 feet. The outfall stands proud of the bottom from the offshore ends of the Y-legs to the burial point at the 17 feet sounding in 39º 19' 44.95"N 074º 26' 44.69"W, NAD83. Recommend charting this 17 sounding and charting a 20 sounding at the offshore ends of the Y-legs. ***Concur. Chart outfall and associated soundings as shown on present survey. See the associated Danger to Navigation Report appended to this report.***

****Data filed with original field records.***
*****Attached to this report.***

AWOIS #11203 (Chartlets 1 & 2)*
Full search of the 1500-meter radius with 200% side scan and resulting multibeam sonar coverage. One feature (feature #7)*was located inside the search radius in approximately 39° 21' 38.51"N 074° 16' 38.17"W, NAD83. Recommend removal of the charted dangerous wreck, MAST, danger curve and blue tint in ~~39º 22' 19.63~~ ***39°21'30.42***"N 074º 16' ~~54.52~~ ***12.51***"W, NAD83 and plotting the 42 feet sounding and symbol Obstn in 39° 21' 38.51"N 074° 16' 38.17"W, NAD83. ***Concur. Delete dangerous Wk, depth unknown, Mast. Chart 42 Obstn.***

AWOIS #11204 (Chartlets 1 & 2)*
Full search of the dump site and more than 200 meters outside its bounds with 200% side scan and resulting multibeam sonar coverage. Depths within the dump site are 51 to 60 feet. The charted boundary of this site does not match the listed corner coordinates. Recommend charting the depths from this survey. ***Concur with clarification – Defer to MCD for charting recommendation.***

AWOIS #11205 (Chartlets 1 & 2)*
Full search of the 1000-meter radius with 200% side scan and resulting multibeam sonar coverage. Recommend removal of the charted dangerous wreck (27 ft rep), danger curve and blue tint in 39º 21' ~~47.33~~***45.42***"N 074º 19' ~~14.52~~***15.52***"W, NAD83, and recommend charting a 34 Wk in 39º 21' 42.17"N 074º 19' 12.60"W, NAD83. For reference, this is feature #24.* ***Concur. Revise to 34 Wk.***

AWOIS #11206 (See Chartlets 1, 2 & 3)*
Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. No wreck was located. Recommend removal of the charted dangerous wreck PA, danger curve and blue tint in ~~39º 18' 01.84"N 074º 28' 59.64"W~~, ***39°18'00.48"N, 074°28'58.55"W*** NAD83. ***Concur.***

AWOIS #11207 (Chartlets 1 & 2)*
Full search of the 2000-meter radius with 200% side scan and resulting multibeam sonar coverage. Recommend removal of the charted dangerous wreck PA, danger curve and blue tint in 39º 18' 55.~~85~~***72*** "N 074º 21' 59.~~37~~***83***"W, NAD83, and recommend charting a ~~34~~ ***46*** Wk in 39º 18' 58.88"N 074º 22' 02.18"W, NAD83. For reference, this is feature #52.* ***Concur. Revise to 46 Wk.***

AWOIS #11210 (Chartlets 1 & 2)*
Full search of the fish haven and more than 100 meters beyond its bounds with 200% side scan and resulting multibeam sonar coverage. No features were located. Recommend charting the depths from this survey. ***Do not concur. Retain as charted.***

Data filed with original field records.

Uncharted Wrecks and Obstructions

Table D-1 lists uncharted wrecks and obstructions located in H11198 that are recommended for charting.

Table D-1. Uncharted Wrecks and Obstructions

Feature Number	Feature Position (NAD83)		Least Depth (Feet)	Category
	Latitude (N)	Longitude (W)		
8	39° 18' 42.23"	074° 19' 47.14"	46.39	OBSTR Plot sounding and symbol "Obstn" *
12	39° 18' 18.56"	074° 22' 34.37"	31.66	OBSTR Plot sounding and symbol "Obstn" *
14	39° 22' 16.33"	074° 17' 08.41"	57.28	OBSTR Plot sounding and symbol "Obstn" *
19	39° 24' 24.38"	074° 17' 10.55"	40.42	WRECK Plot sounding and symbol "Wk" *
22	39° 20' 48.80"	074° 21' 55.55"	32.58	OBSTR Plot sounding and symbol "Obstn" *
23	39° 15' 08.23"	074° 26' 43.60"	50.56	OBSTR Plot sounding and symbol "Obstn" *
33	39° 19' 04.61"	074° 27' 59.75"	23.13	WRECK Plot sounding and symbol "Wk" *
34	39° 17' 32.86"	074° 29' 09.48"	32.61	OBSTR Plot Sounding and symbol "Obstn" *
35	39° 17' 03.49"	074° 30' 03.16"	36.02	OBSTR Plot Sounding and symbol "Obstn" *
37	39° 23' 26.04"	074° 20' 24.00"	23.69	OBSTR Plot Sounding and symbol "Obstn" *
47	39° 19' 13.25"	074° 27' 06.09"	26.31	WRECK Plot sounding and symbol "Wk" *
53	39° 17' 57.58"	074° 21' 13.33"	49.70	OBSTR Plot Sounding and symbol "Obstn" *

**** Concur. Chart as shown on present survey.***

Bottom Composition

There were 25 bottom samples taken to verify the bottom types charted for H11198. Table D-2 compares information for each sample collected to the charted bottom type. It is recommended that the bottom type charted be updated where necessary based on the information collected during the latest survey.

Table D-2. H11198 Bottom Sample Characteristics*

Bottom Sample Position (NAD83)		Depth of Bottom Sample (ft)	Observed Bottom Type	Charted Bottom Type	Chart 12300	Chart 12316	Chart 12318	Chart 13003
Latitude (N)	Longitude (W)							
39° 19' 06.20"	074° 22' 27.58"	37.04	S	S			X	
39° 19' 39.56"	074° 23' 41.02"	43.73	Silt, Cy	S		X	X	
39° 19' 19.57"	074° 26' 46.09"	27.76	S	S			X	
39° 19' 55.30"	074° 26' 28.40"	N/A	fne S	S, Sh		X	X	
39° 20' 33.50"	074° 24' 11.57"	N/A	fne S	S, Sh		X	X	
39° 18' 37.96"	074° 23' 59.56"	39.86	S	S			X	
39° 18' 25.14"	074° 26' 04.66"	36.65	S	S		X	X	
39° 17' 46.47"	074° 28' 22.71"	36.58	S	S			X	
39° 18' 15.13"	074° 30' 14.33"	24.7	S	S			X	

39° 16' 51.38"	074° 29' 33.41"	41.77	S	S		X	X	
39° 16' 11.21"	074° 28' 50.83"	47.08	S	S		X	X	
39° 16' 30.23"	074° 26' 52.18"	47.8	S	S			X	
39° 16' 01.29"	074° 25' 40.07"	50.69	S	S			X	
39° 14' 34.09"	074° 26' 55.06"	53.81	S	S			X	
39° 20' 10.29"	074° 21' 17.82"	45.96	S	S			X	
39° 20' 17.34"	074° 20' 18.87"	54.53	S	S			X	
39° 20' 45.86"	074° 19' 35.96"	42.95	S	S			X	
39° 21' 32.18"	074° 21' 23.54"	26.61	S	h		X	X	
39° 19' 47.53"	074° 17' 10.67"	N/A	fne S	S			X	
39° 21' 18.30"	074° 17' 47.27"	50.95	S, Sh	S			X	
39° 21' 35.99"	074° 15' 07.06"	N/A	S	S			X	
39° 24' 02.43"	074° 15' 29.82"	N/A	S	S			X	
39° 23' 20.55"	074° 17' 28.52"	38.55	fne S	S			X	
39° 23' 54.24"	074° 19' 14.11"	30.35	fne S	h S		X	X	
39° 22' 21.81"	074° 19' 05.53"	43.01	S	S			X	

Note: Bottom Sample Depths noted as N/A were taken where no multibeam data is available.

Concur. Chart bottom characteristics as shown on present survey.

D.2 ADDITIONAL RESULTS

Shoreline verification was not required for this survey. Comparison with prior surveys was not required under this contract. See Section D.1 Chart Comparison for comparison to the nautical charts.

Aids to Navigation

There were no navigational aids within the survey area of H11198. ***Concur.***

E. APPROVAL SHEET

31 March 2004

LETTER OF APPROVAL

REGISTRY NUMBER H11198

This report and the accompanying smooth sheet and digital data are respectfully submitted.

Field operations contributing to the accomplishment of survey H11198 were conducted under my direct supervision with frequent personal checks of progress and adequacy. This report and smooth sheet have been closely reviewed and are considered complete and adequate as per the Statement of Work.

Reports concurrently submitted to NOAA for this project include:

Report	Submission Date
Data Acquisition and Processing Report	03/31/04
Descriptive Report for Sheet C, H11197	03/31/04

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Rebecca T. Quintal

Rebecca T. Quintal
Hydrographer
Science Applications International Corp.
Wednesday, 31 March 2004

NOAA FORM 61-29
(12-71)

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

REFERENCE NO.
N/CS33-08-05

LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY (Check)

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CHIEF, DATA AQUISITION AND CONTROL, N/CS3x1
NOAA / NATIONAL OCEAN SERVICE
STATION 6704, SSMC3
1315 EAST-WEST HIGHWAY
SILVER SPRING, MARYLAND 20910-3282

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H11198

NEW JERSEY, NORTH ATLANTIC OCEAN, BRIGANTINE INLET TO GREAT EGG HARBOR

ONE TUBE CONTAINING THE FOLLOWING:

1 H-DRAWING ON MYLAR FOR CHART 12316
1 H-DRAWING ON MYLAR FOR CHART 12318
1 SMOOTH SHEET DRAWING ON MYLAR FOR SURVEY H11198
2 RECORD OF APPLICATION TO CHART FORMS (NOAA FORM #75-96) FOR SURVEY H11198

FROM: (Signature)
Richard B Burris

RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

NOAA \ NATIONAL OCEAN SERVICE
ATLANTIC HYDROGRAPHIC BRANCH N/CS33
439 WEST YORK STREET
NORFOLK, VA. 23510-1114

NOAA FORM 61-29 SUPERCEDES FORM C AND GS 413 WHICH MAY BE USED.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988 - 554-006-61309

Appendix I. DANGER TO NAVIGATION REPORTS

Danger to Navigation Report

Hydrographic Survey Registry Number: H11198

State: New Jersey

Locality: Atlantic Ocean

Sub-Locality: Brigantine Inlet to Great Egg Harbor Inlet

Project Number: OPR-C303-KR-03

Depths are reduced to Mean Lower Low Water using ***predicted*** tides based on preliminary zoning. Positions are based on NAD-83. There were four passes over this object on three days showing it coming up to 24 feet MLLW. Position was obtained using DGPS from a US Coast Guard Station.

Charts affected:
12300 1:400,000 42nd Edition February 2001
12316 Little Egg Harbor to Cape May 1:40,000 29th Edition November 2002
12318 Little Egg Inlet to Hereford Inlet 1:80,000 41st Edition December 2002
13003 1:1,200,000 46th Edition January 2003

The following item was found during hydrographic survey operations:

FEATURE	DEPTH (FT)	LATITUDE(N)	LONGITUDE(W)
1. Wreck	24	39° 19.65994’	074° 25.09815’

See also pages 11, 14, and 18 of the Descriptive Report.

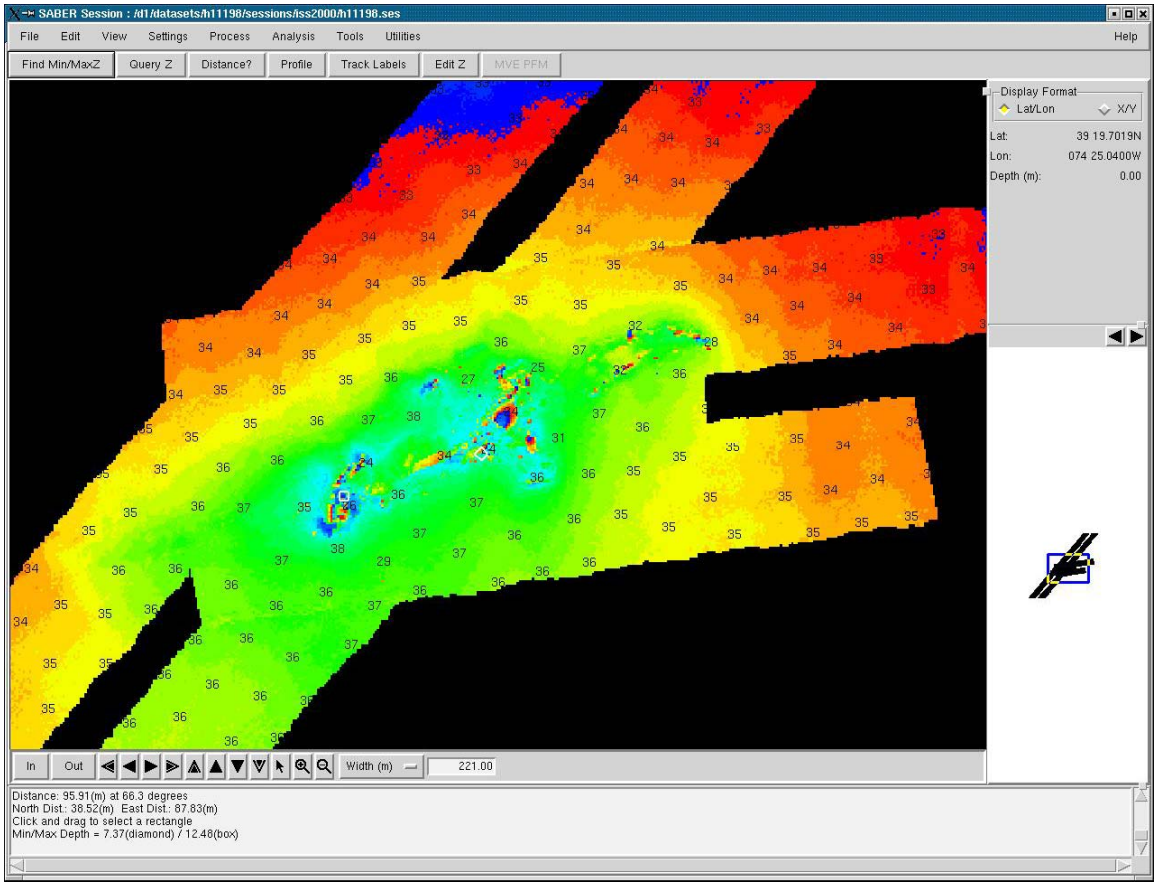

Figure App. I-1. Obstruction with Soundings

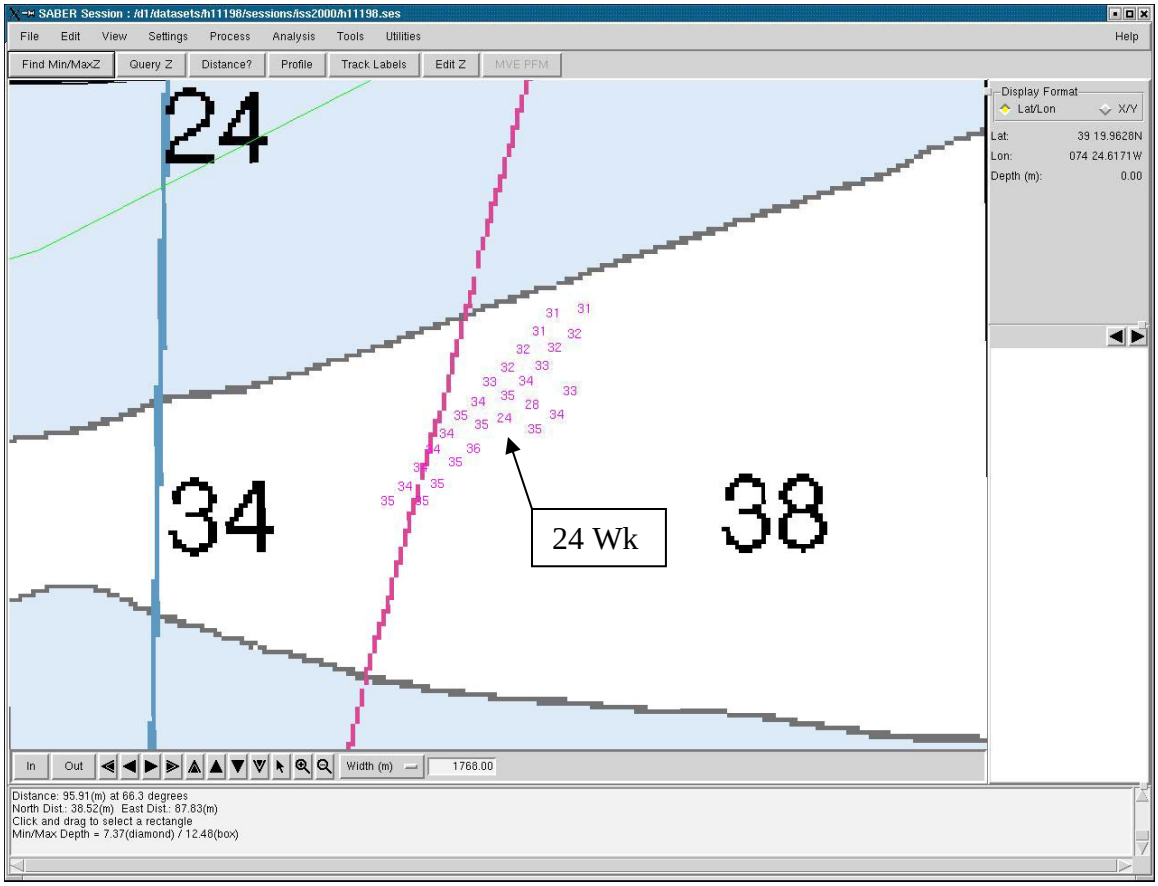

Figure App. I-2. Soundings Over Chart 12318

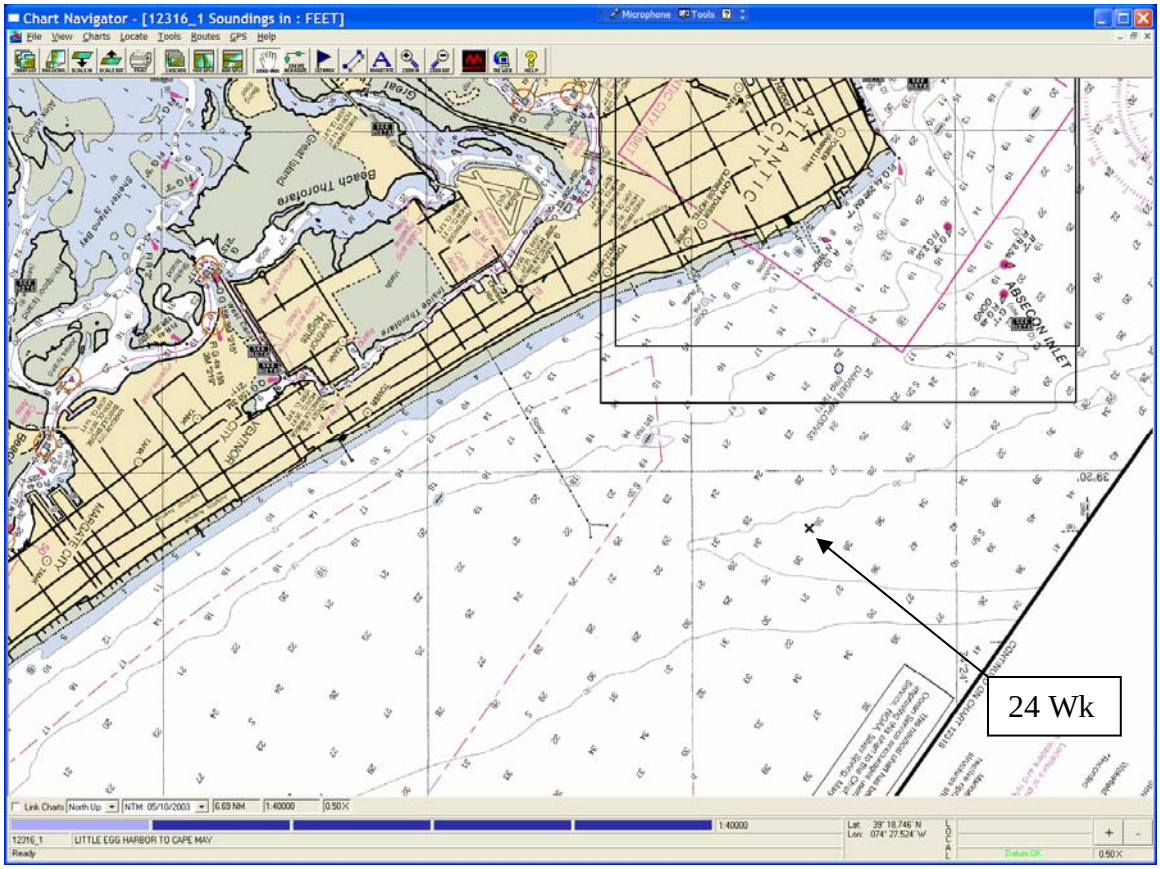

Figure App. I-3. Wreck on Chart 12316

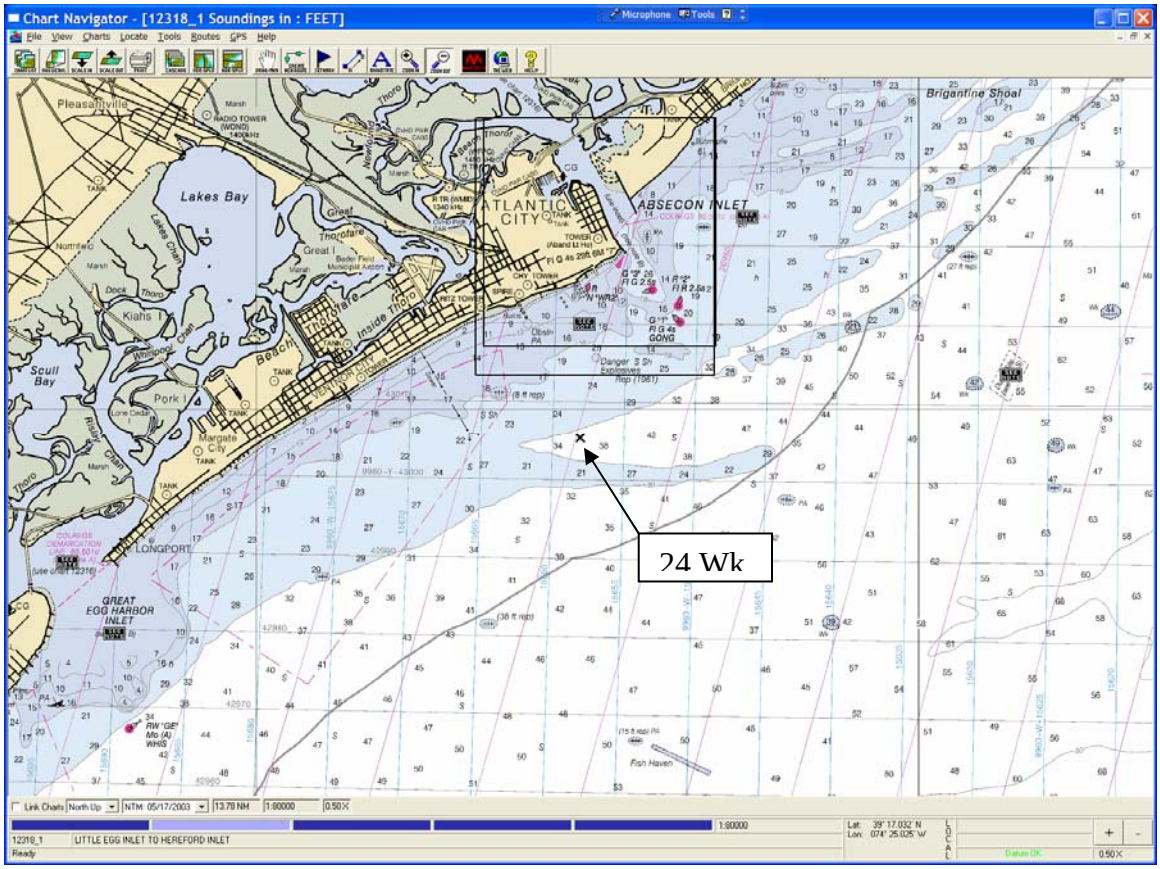

Figure App. I-4. Wreck on Chart 12318

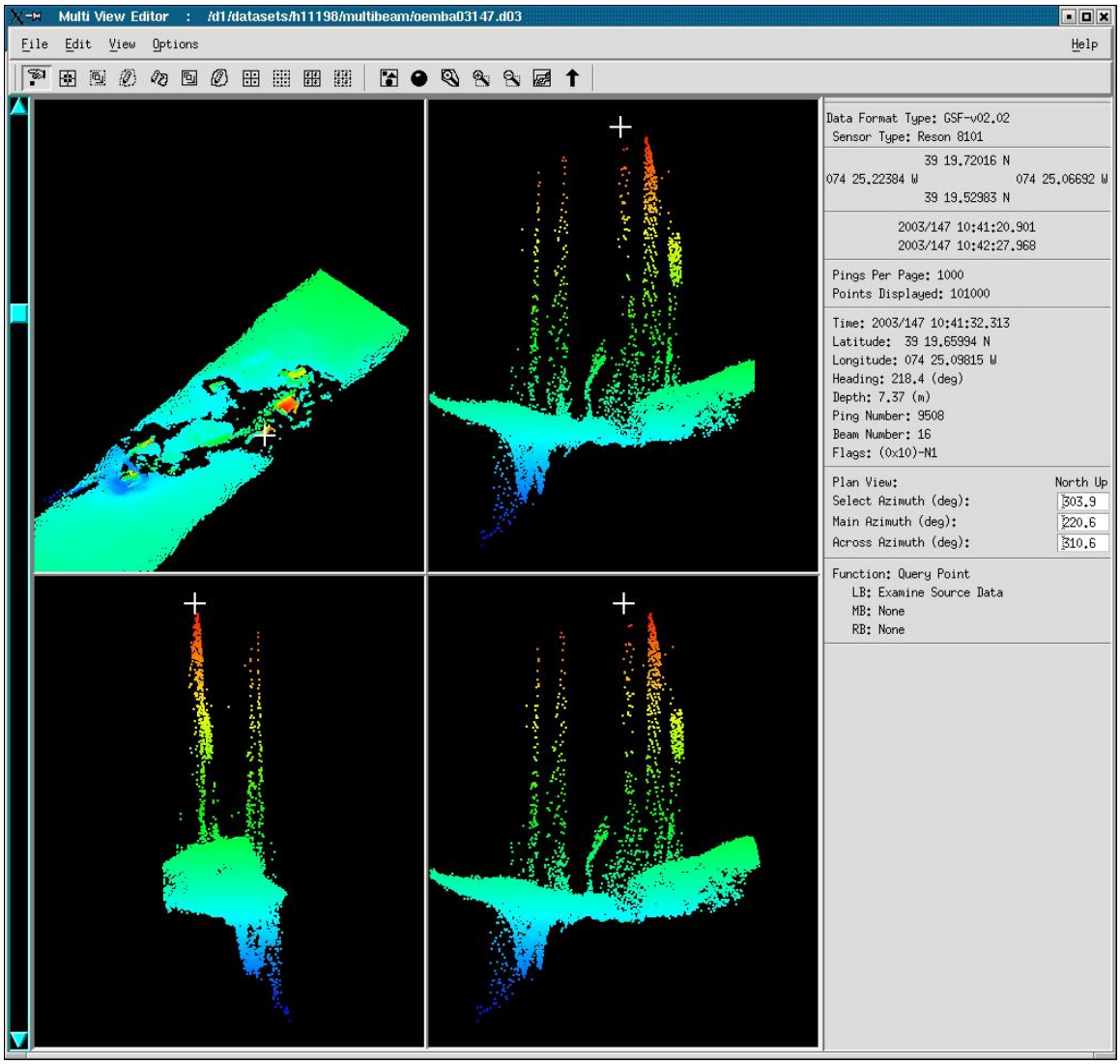

Figure App. I-5. Wreck in Multibeam

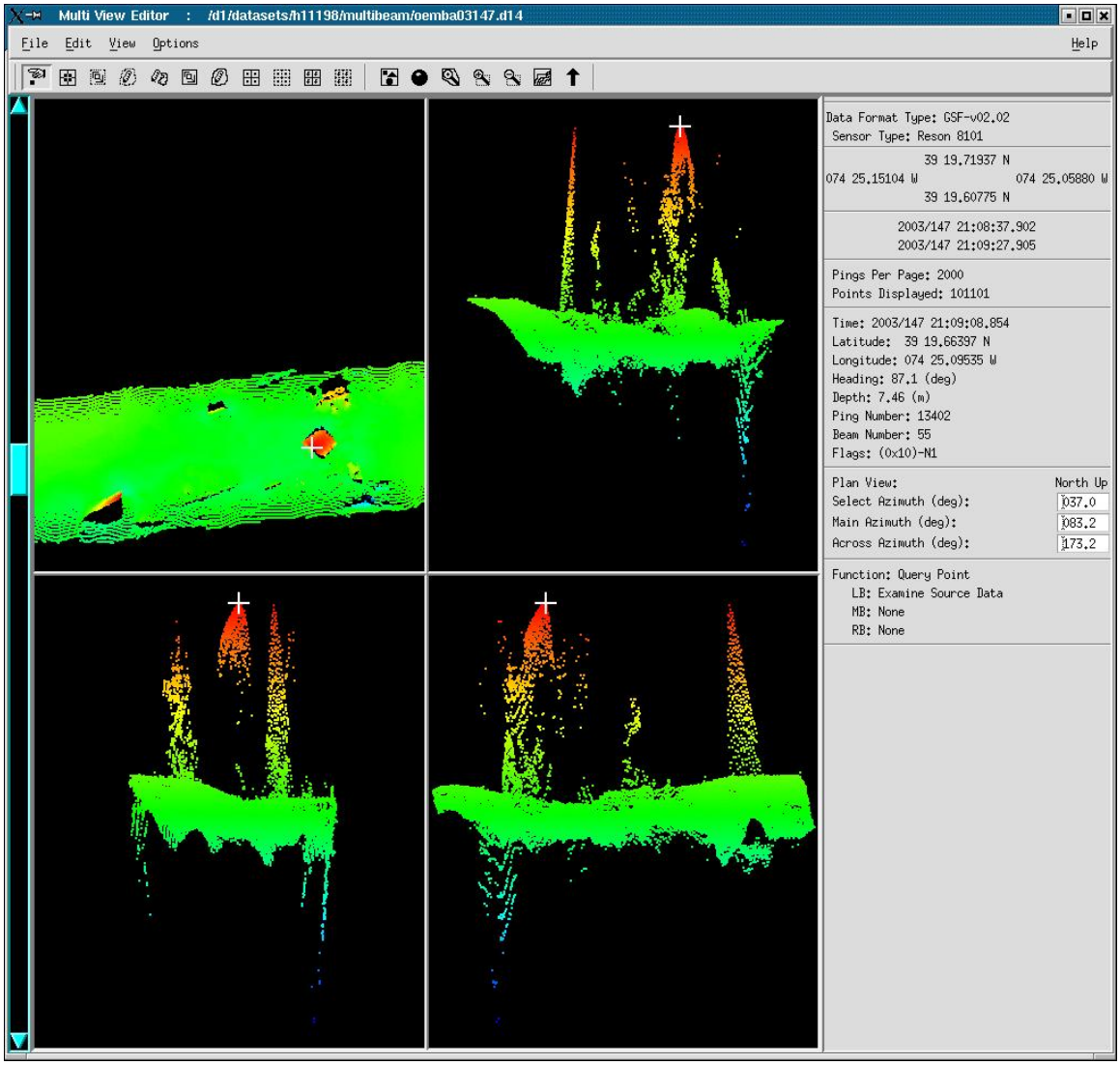

Figure App. I-6. Wreck in Multibeam

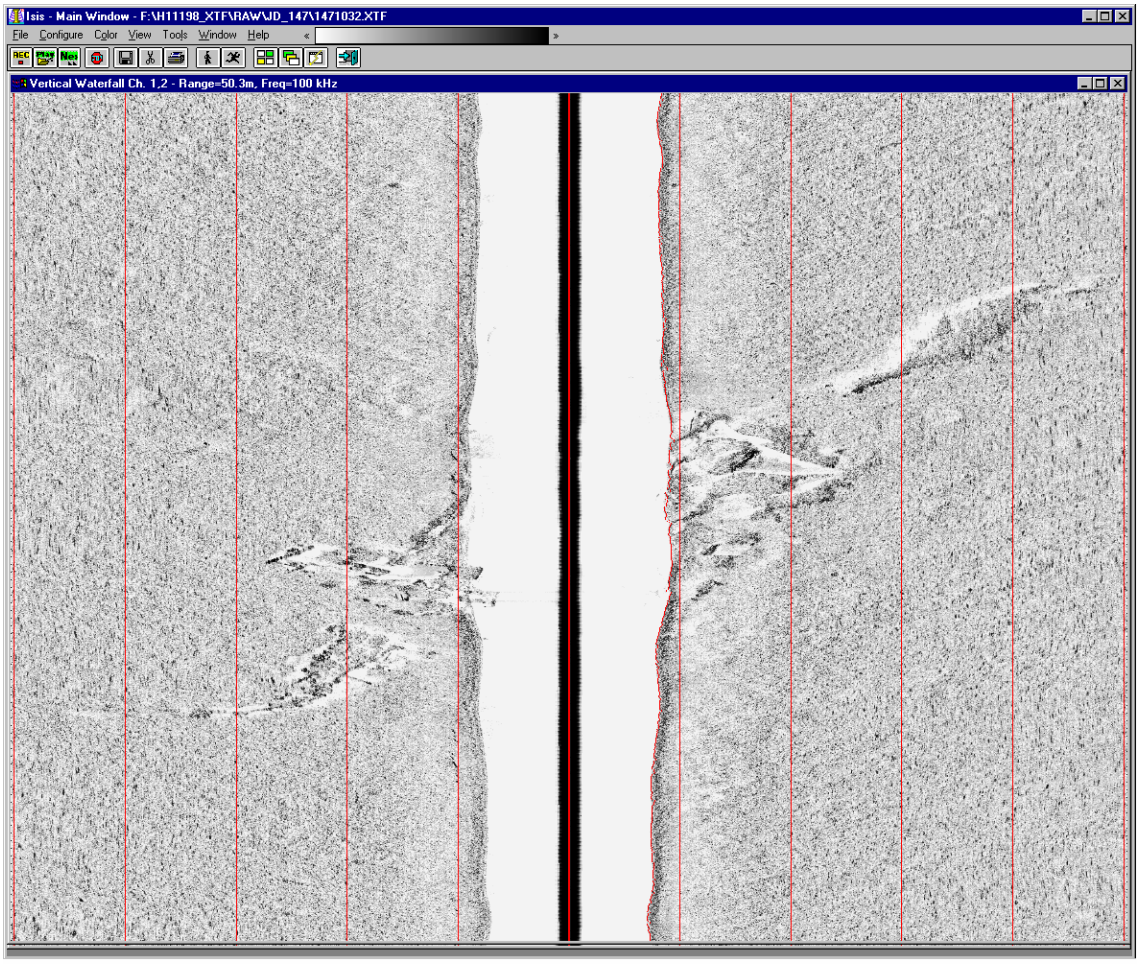

Figure App. I-7. Wreck Side Scan Image

Danger to Navigation Report

Hydrographic Survey Registry Number: H11198

State: New Jersey

Locality: Atlantic Ocean

Sublocality: Great Egg Harbor Inlet to Townsends Inlet

Project Number: OPR_C303-KR-03

Survey Date: May 22, 2003 and on going

Depths are reduced to Mean Lower Low Water using ***predicted*** tides based on preliminary zoning. Positions are based on NAD-83. Positions were obtained using DGPS from a US Coast Guard Station.

Charts affected:

- 12300_1 43rd Edition Mar. 2003 1:400,000 scale; Corrected through NM Mar. 1/03; Corrected through LNM Feb. 11/03
- 12318_1 41st Edition Dec. 2002 1:80,000 scale, Corrected through NM Dec. 7/02; Corrected through LNM Nov. 26/02

The following item was found during hydrographic survey operations:

FEATURE	DEPTH (FT)	LATITUDE (N)	LONGITUDE (W)
1. Wreck	35	39° 23.81334 N	074° 18.06911 W

See also pages 9, 13, and 20 of the Descriptive Report.

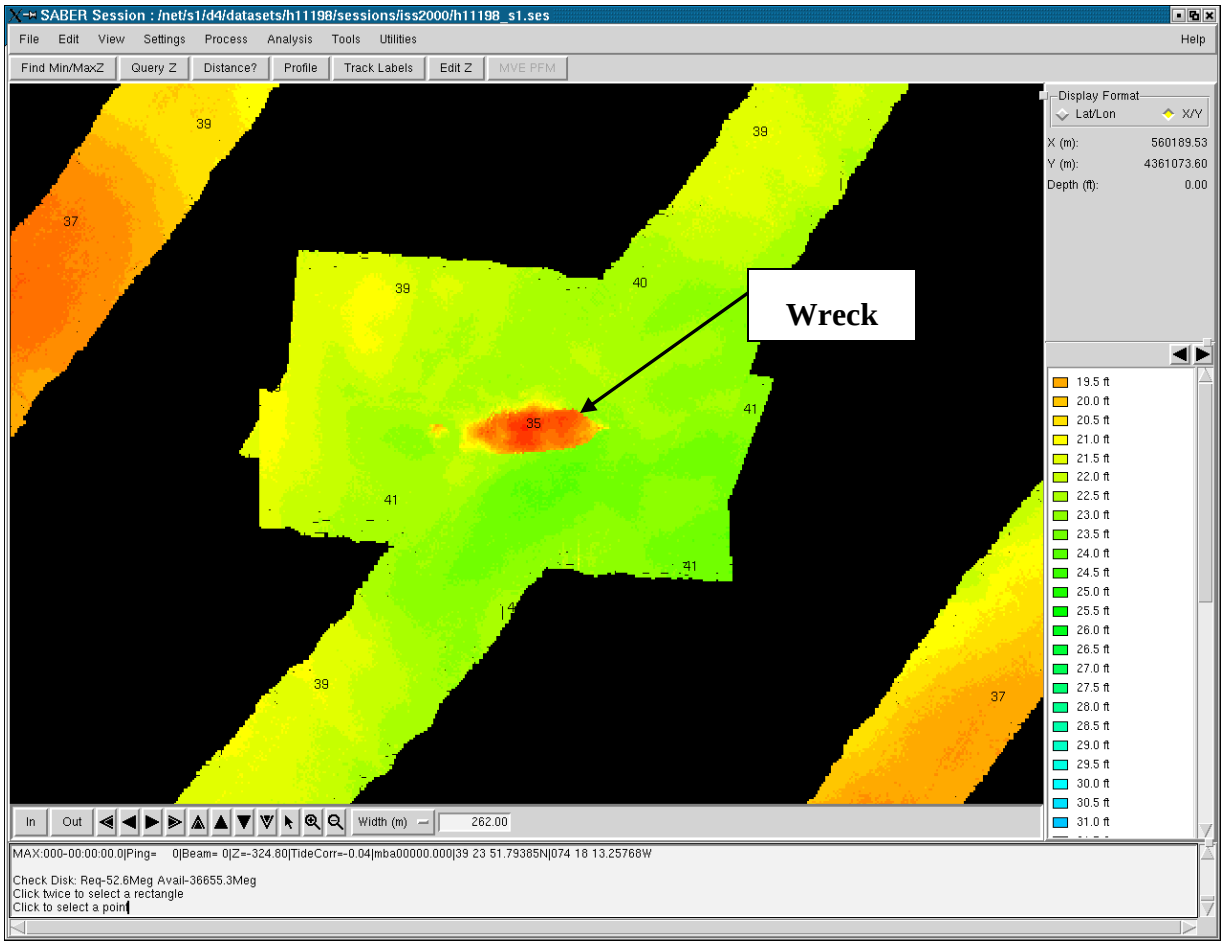

Figure App. I-8. Color Coded Depth Grid and Selected Soundings Showing Wreck, H11198

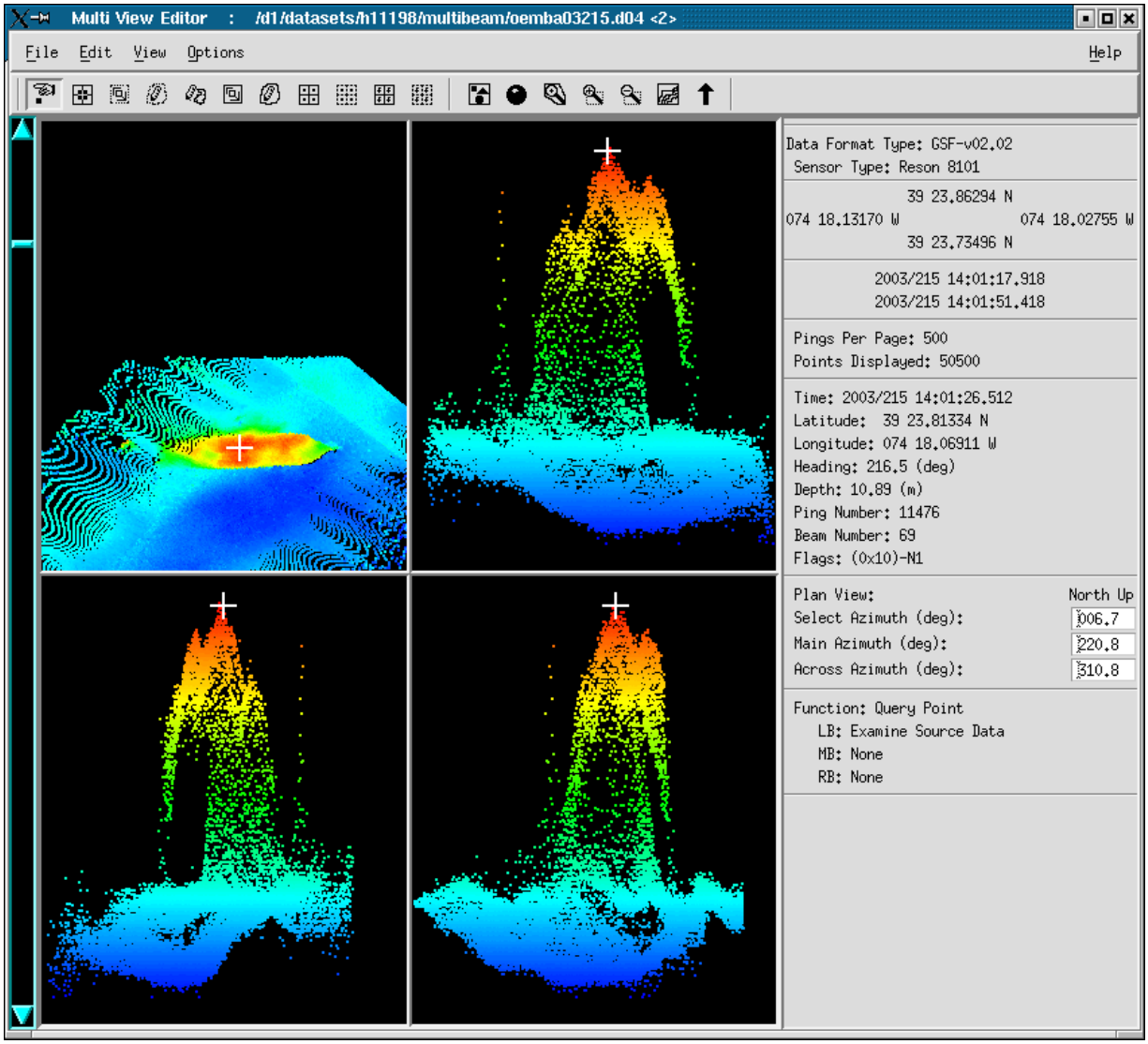

Figure App. I-9. Multibeam File Showing Wreck located 39° 23.81334 N / 074° 18.06911 W within H11198

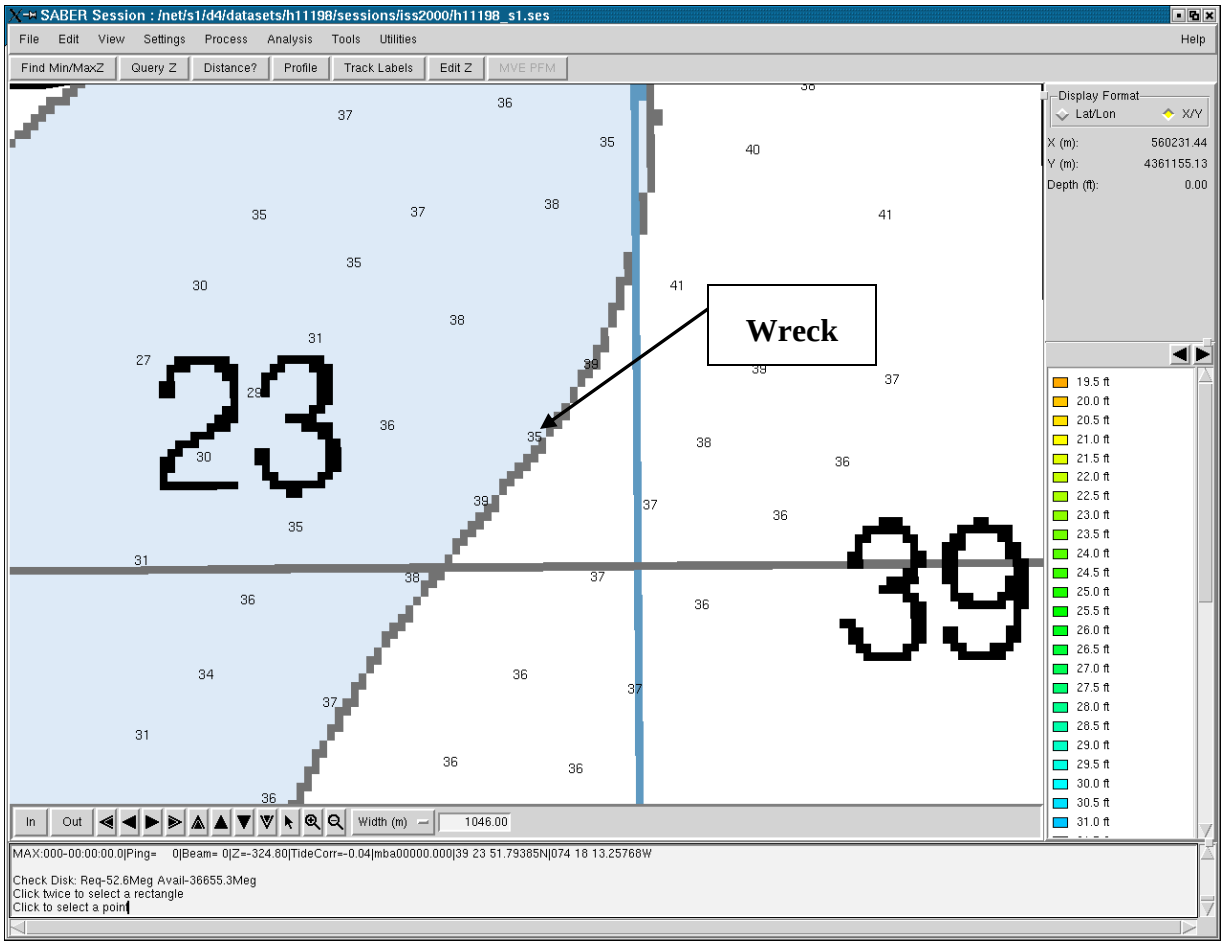

Figure App. I-10. Chart 12318 Showing Wreck and Selected Soundings within H11198

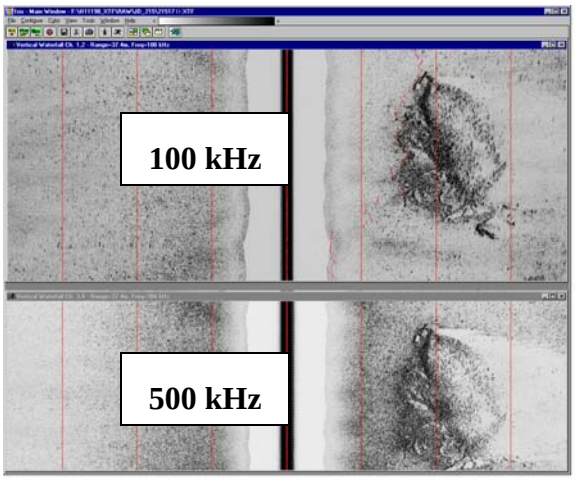

Figure App. I-11. 35m Range Scale Side Scan Image of Wreck Within H11198

Danger to Navigation Report

Hydrographic Survey Registry Number: H11198

State: New Jersey

Locality: Atlantic Ocean

Sublocality: Brigantine Inlet to Great Egg Harbor Inlet

Project Number: OPR_C303-KR-03

Survey Date: May 22, 2003 and on going

Depths are reduced to Mean Lower Low Water using ***predicted*** tides based on preliminary zoning. Positions are based on NAD-83. Positions were obtained using DGPS from a US Coast Guard Station.

Charts affected:

- 12300_1 43rd Edition Mar. 2003 1:400,000 scale; Corrected through NM Mar. 1/03; Corrected through LNM Aug/2003
- 12318_1 41st Edition Dec. 2002 1:80,000 scale, Corrected through NM Dec. 7/02; Corrected through LNM Aug/2003

The following item was found during hydrographic survey operations:

FEATURE	DEPTH (FT)	LATITUDE (N)	LONGITUDE (W)
1. Wreck	50	39° 14.53777 N,	074° 24.36445 W
2. Wreck	31	39° 18.26512 N,	074° 22.18239 W*

See also page 11 of the Descriptive Report.

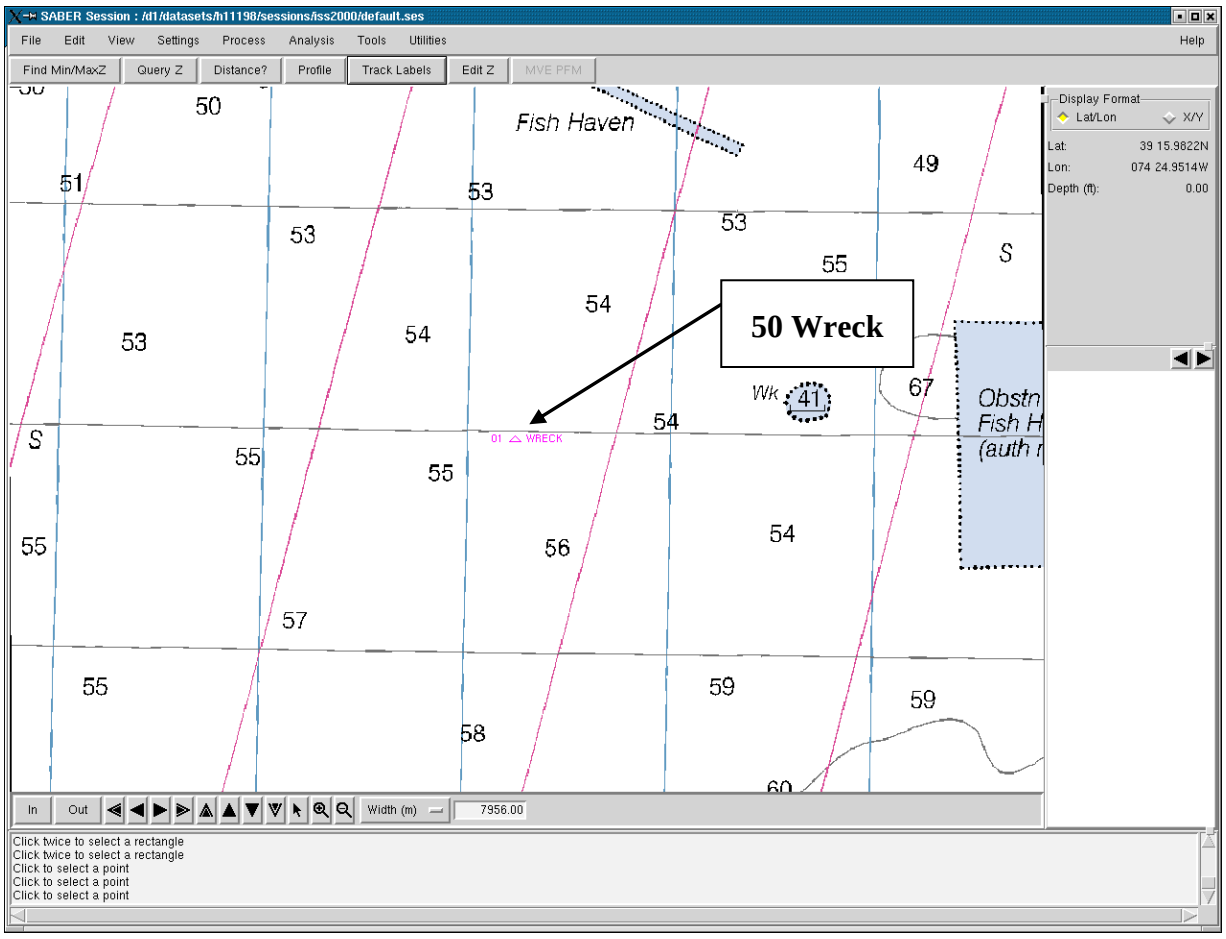

Figure App. I-12. Chart 12318 Showing 1. Wreck within H11198

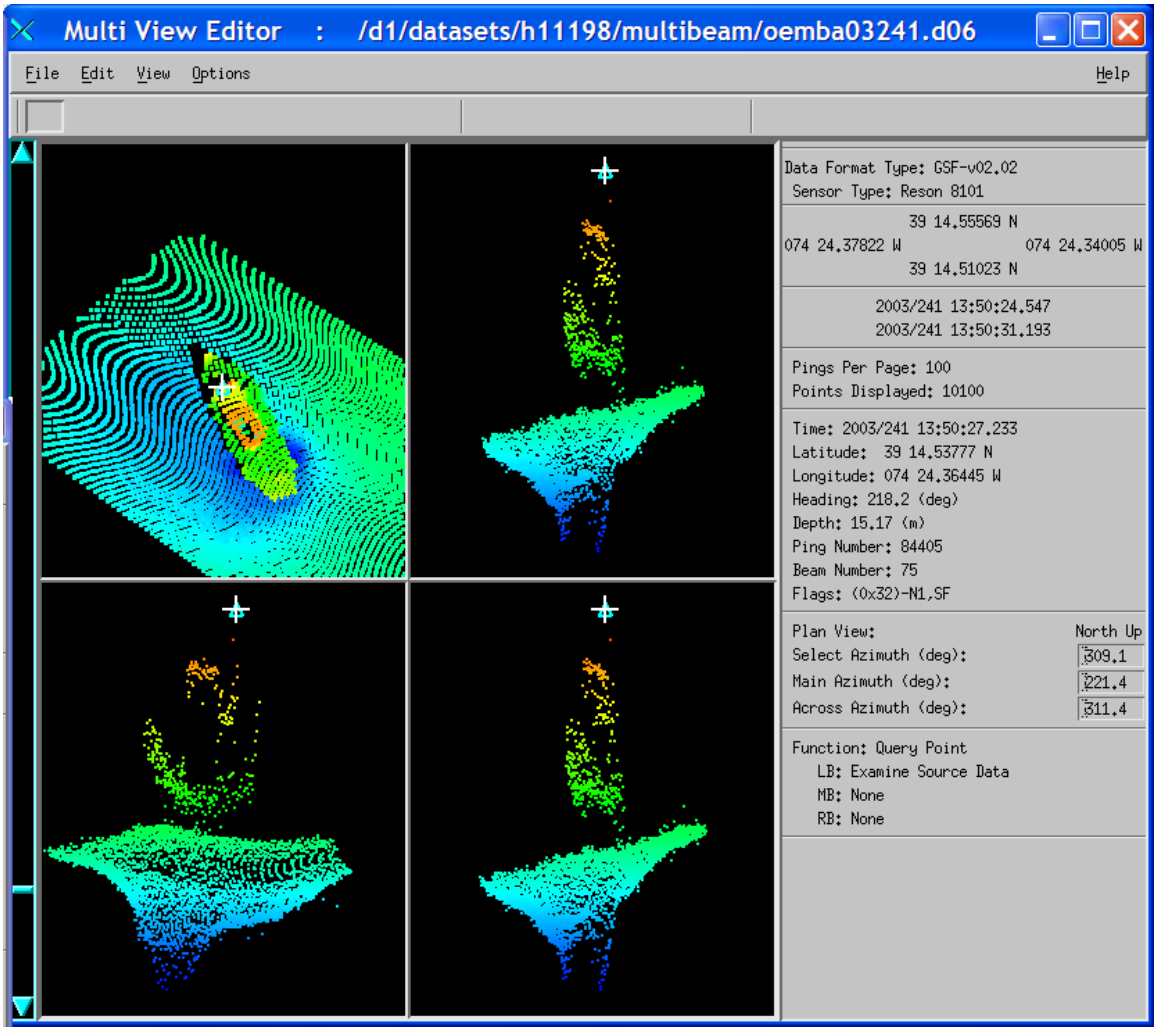

Figure App. I-13. Multibeam File Showing 1. Wreck located in 39° 14.53777 N, 074° 24.36445 W within H11198

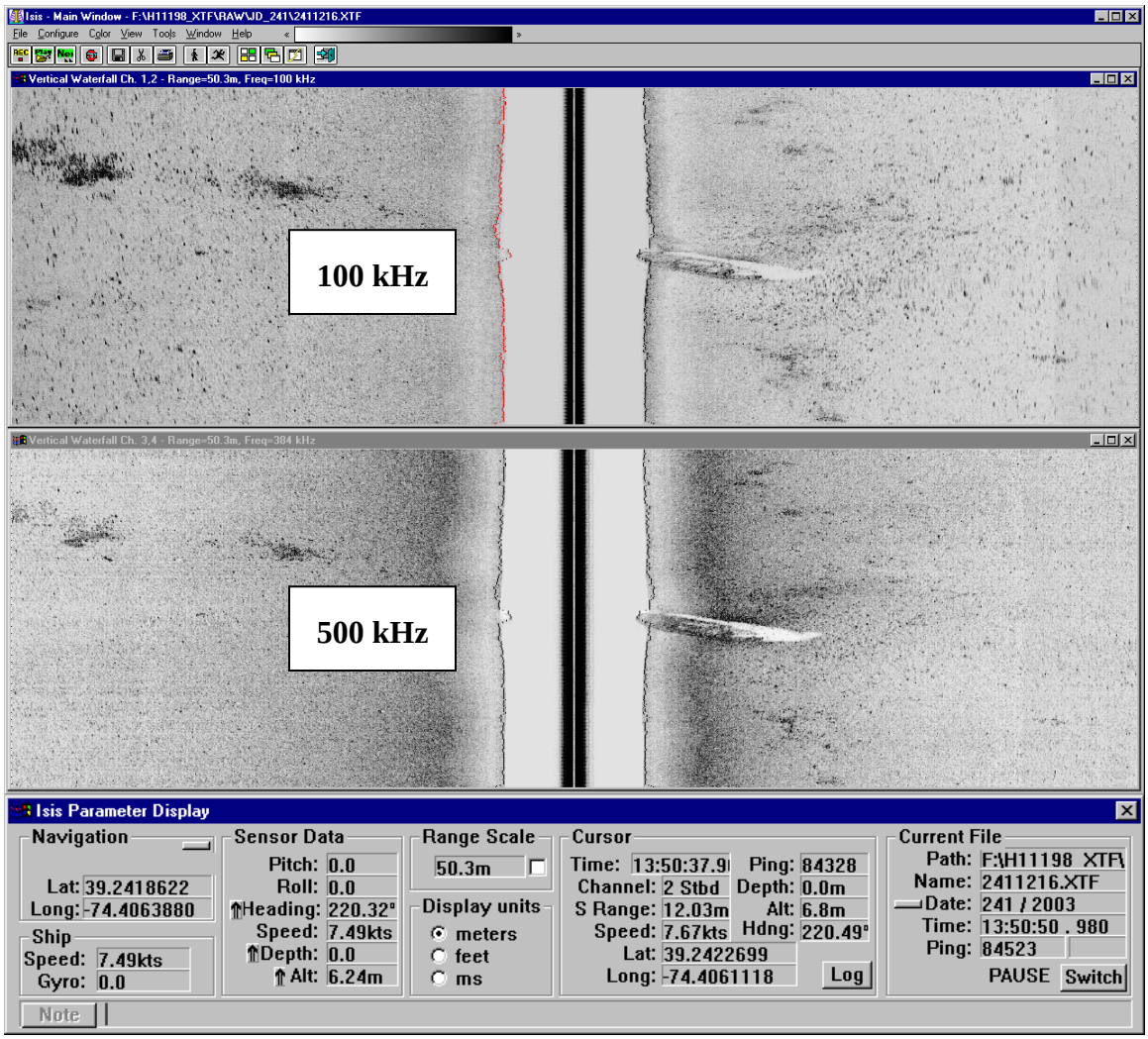

Figure App. I-14. Side Scan Image of 1. Wreck within H11198

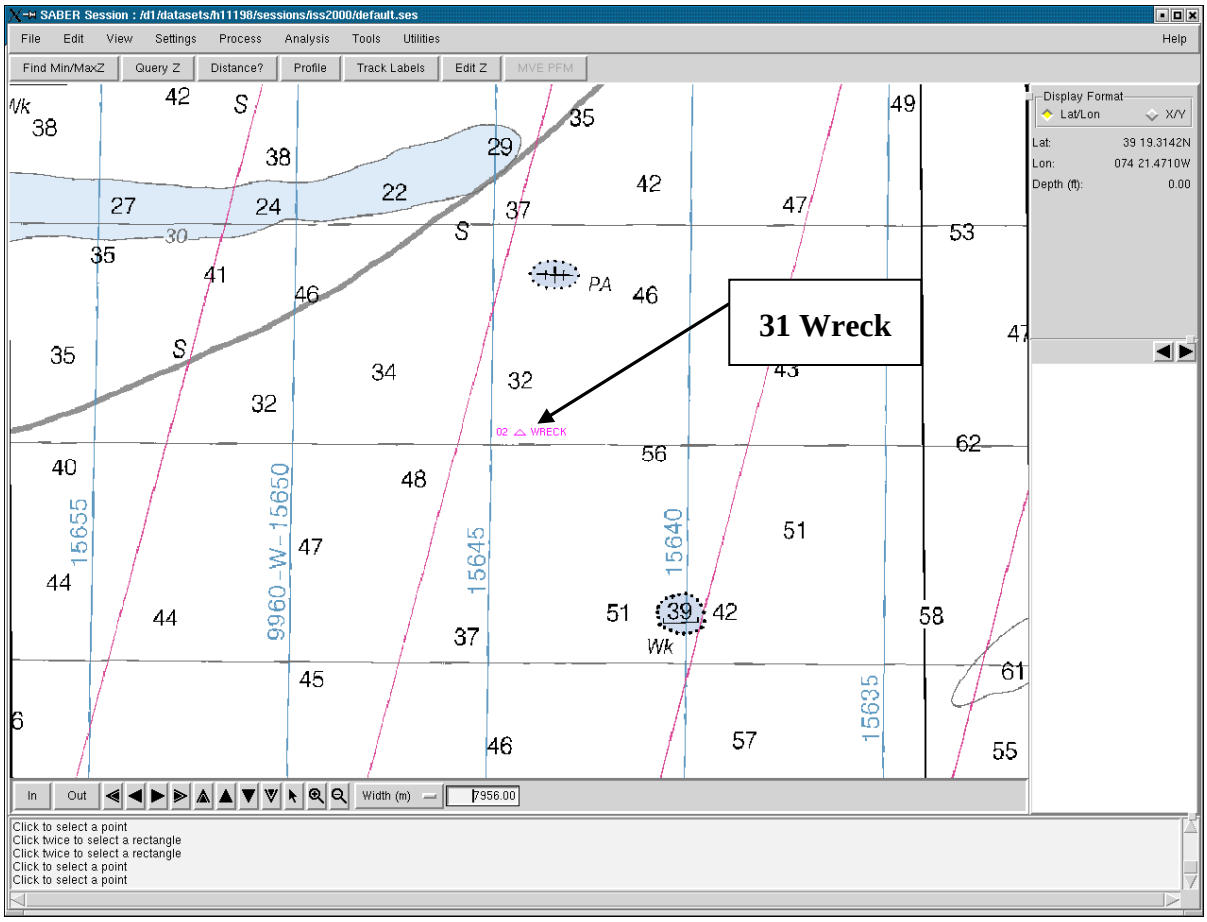

Figure App. I-15. Chart 12318 Showing 2. Wreck within H11198

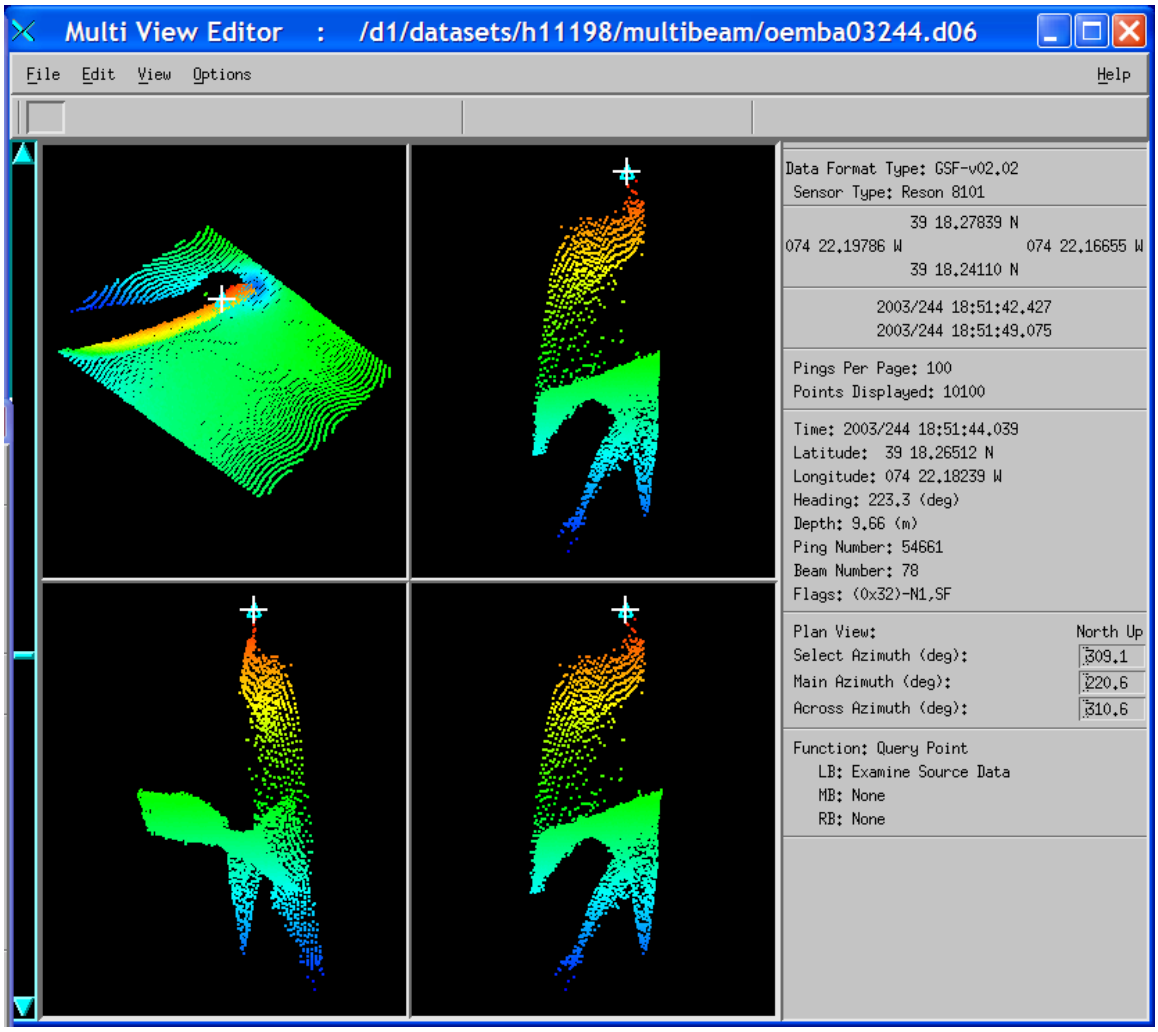

Figure App. I-16. Multibeam File Showing 2. Wreck located in 39° 18.26512 N, 074° 22.18239 W within H11198

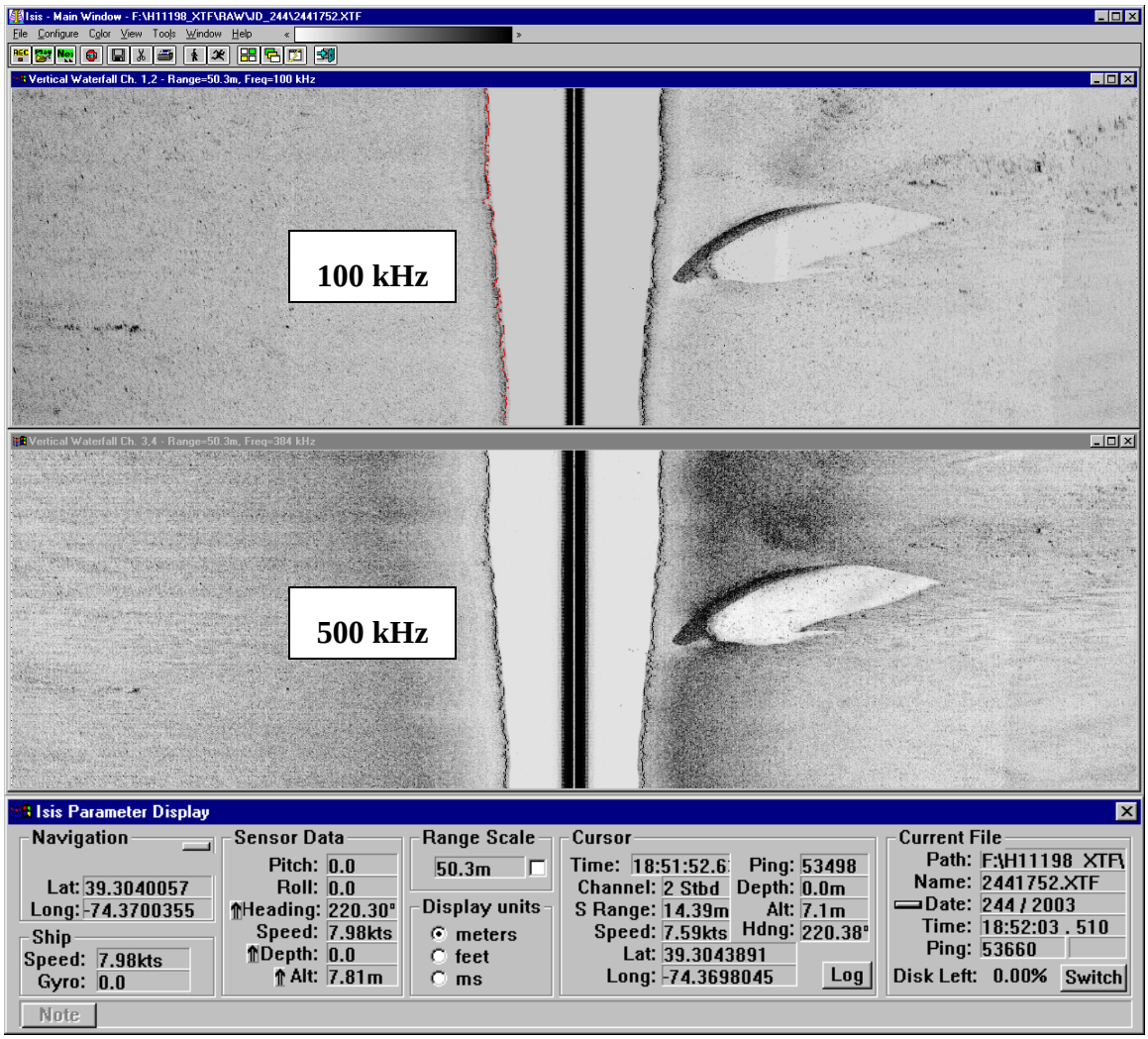

Figure App. I-17. Side Scan Image of 2. Wreck within H11198

REPORT OF DANGERS TO NAVIGATION

Hydrographic Survey Registry Number: H11198

Survey Title: State: New Jersey
Locality: Atlantic Ocean
Sublocality: Brigantine Inlet to Great Egg Harbor Inlet

Project Number: OPR_C303-KR-03

Survey Date: May 21, 2003 and on going

Features are reduced to Mean Lower Low Water using predicted tides and are positioned on
NAD 83.

Charts affected: 12318_1 Oct. 17, 2003 1:80,000 scale
12216_1 Oct. 17, 2003 1: 80,000 scale

DANGERS TO NAVIGATION

FEATURE	DEPTH (FT)	LATITUDE	LONGITUDE	REFERENCE
ELEVATED SEWER	20 feet	39 19 34.51N	074 26 41.97W	69
ELEVATED SEWER	20 feet	39 19 36.55N	074 26 41.23W	70
ELEVATED SEWER	21 feet	39 19 38.45N	074 26 34.05W	71
ELEVATED SEWER	20 feet	39 19 39.21N	074 26 38.00W	72
ELEVATED SEWER	20 feet	39 19 38.33N	074 26 40.82W	73
SEWER_BURIED	24 feet	39 19 44.37N	074 26 44.26W	84
SOUNDING	18 feet	39 19 44.95N	074 26 44.69W	

This is an update of a previously submitted Report of Danger to Navigation, and includes the result of additional multibeam sounder investigation.

The sewer is elevated in the water column seaward of Reference 84, and is buried from that point toward shore. The charted pipe is in the wrong position. The actual location is north and seaward of the charted position.

The SEWER is in charted 23 to 25 feet. This survey shows a depth of 18 feet over the buried portion of the pipe, and depths of 20 feet on the elevated seaward portion of the pipe.

See also pages 15, 18, and 20 of the Descriptive Report.

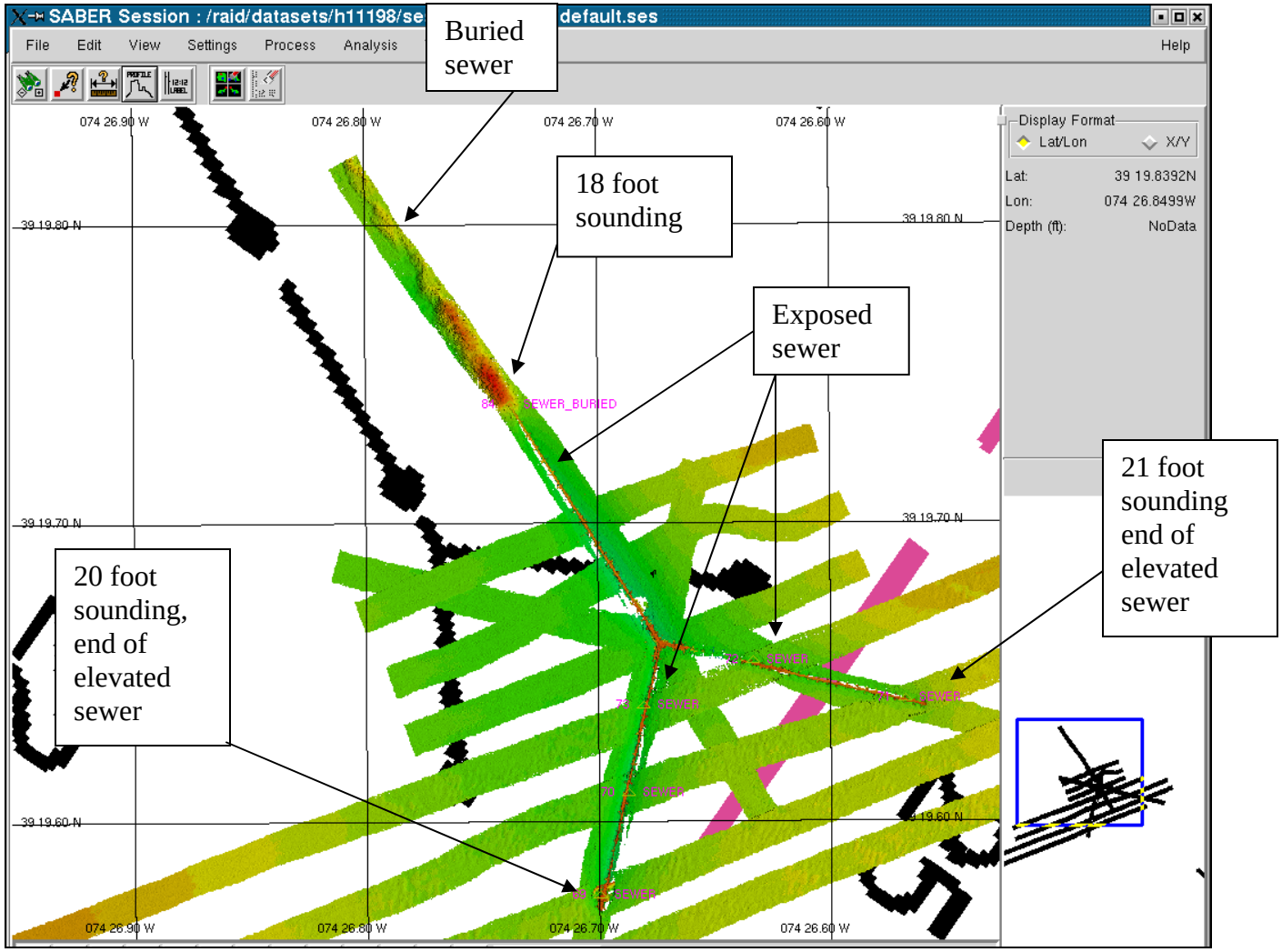

Figure App. I-18. Color Coded Depth Grid Showing Elevated Sewer, Buried Sewer, and 18 ft Sounding on Chart 12216

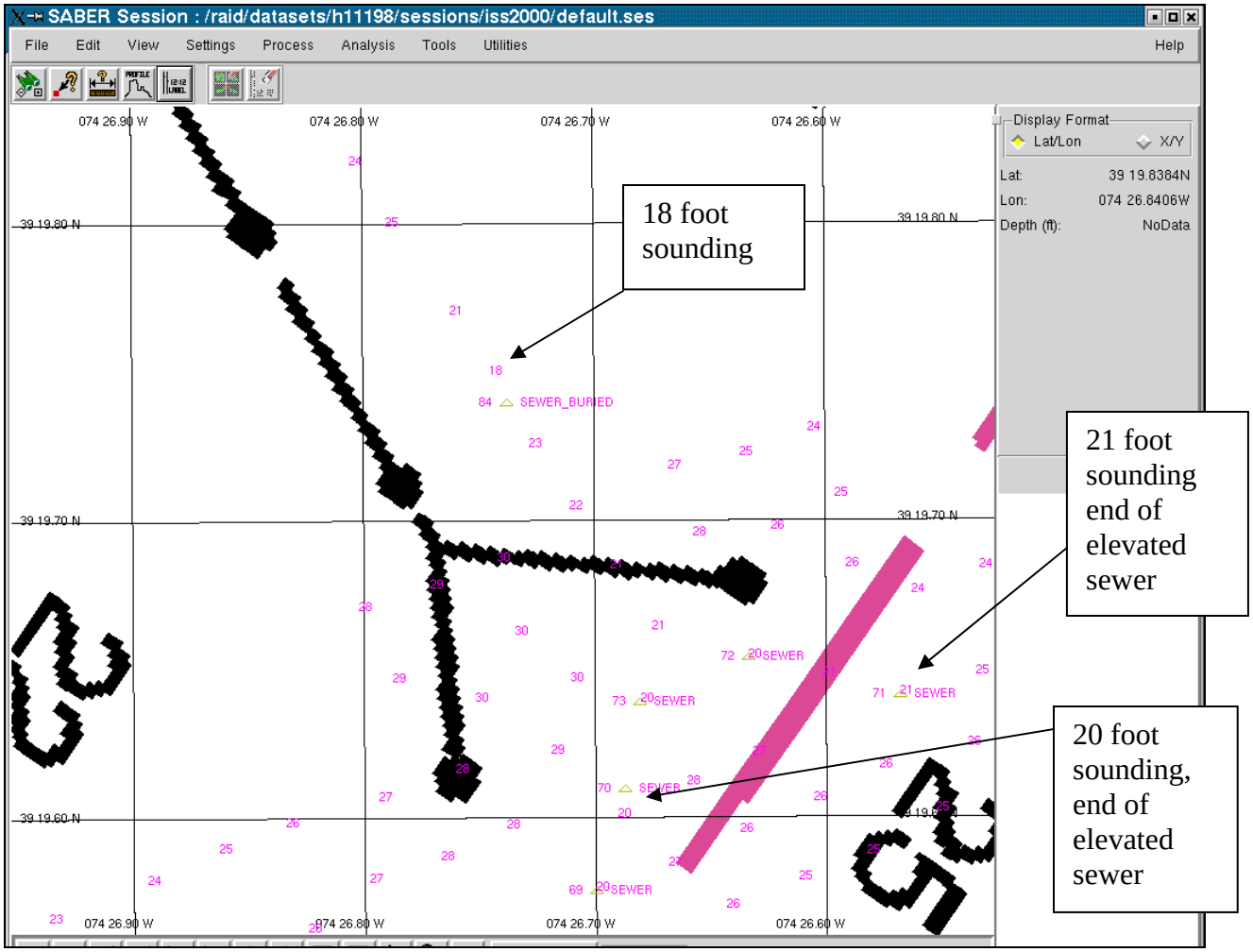

Figure App. I-19. Chart 12216 Showing Elevated Sewer, Buried Sewer, 18 ft Sounding, and Selected Soundings within H11198

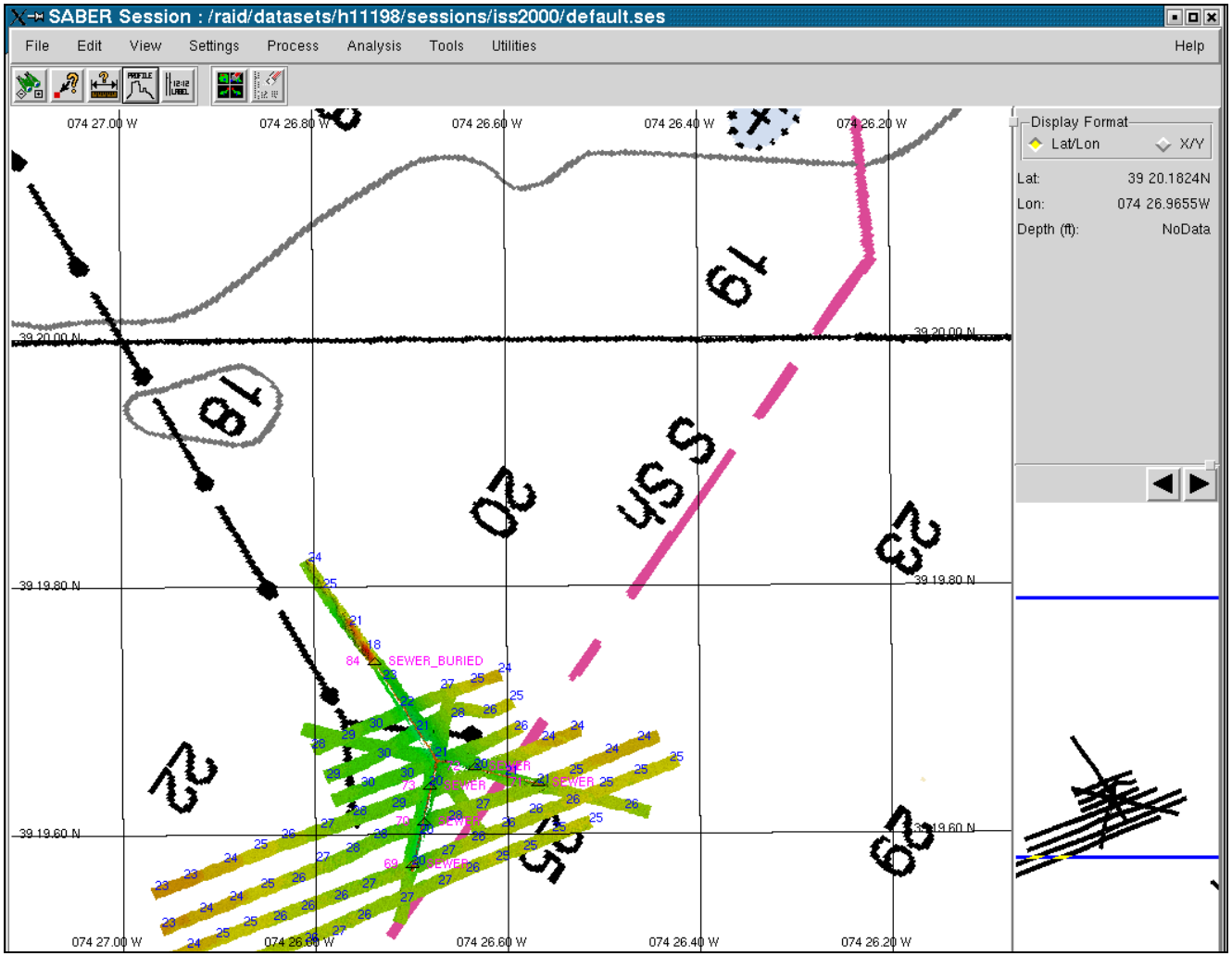

Figure App. I-20. Chart 12216 and Color Coded Depth Grid Showing Elevated Sewer, Buried Sewer, and Selected Soundings

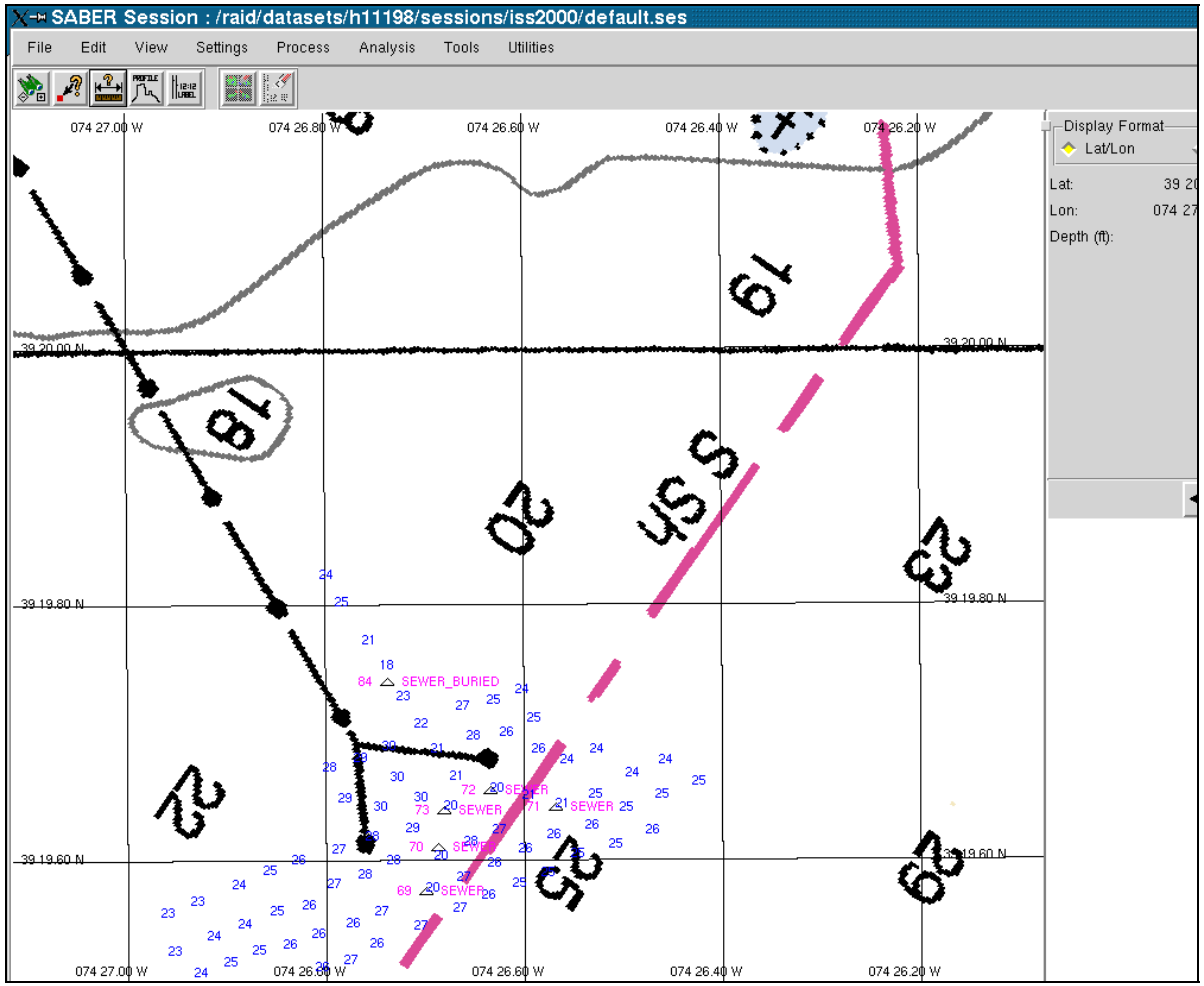

Figure App. I-21. Chart 12216 Showing Elevated Sewer, Buried Sewer, and Selected Soundings within H11198

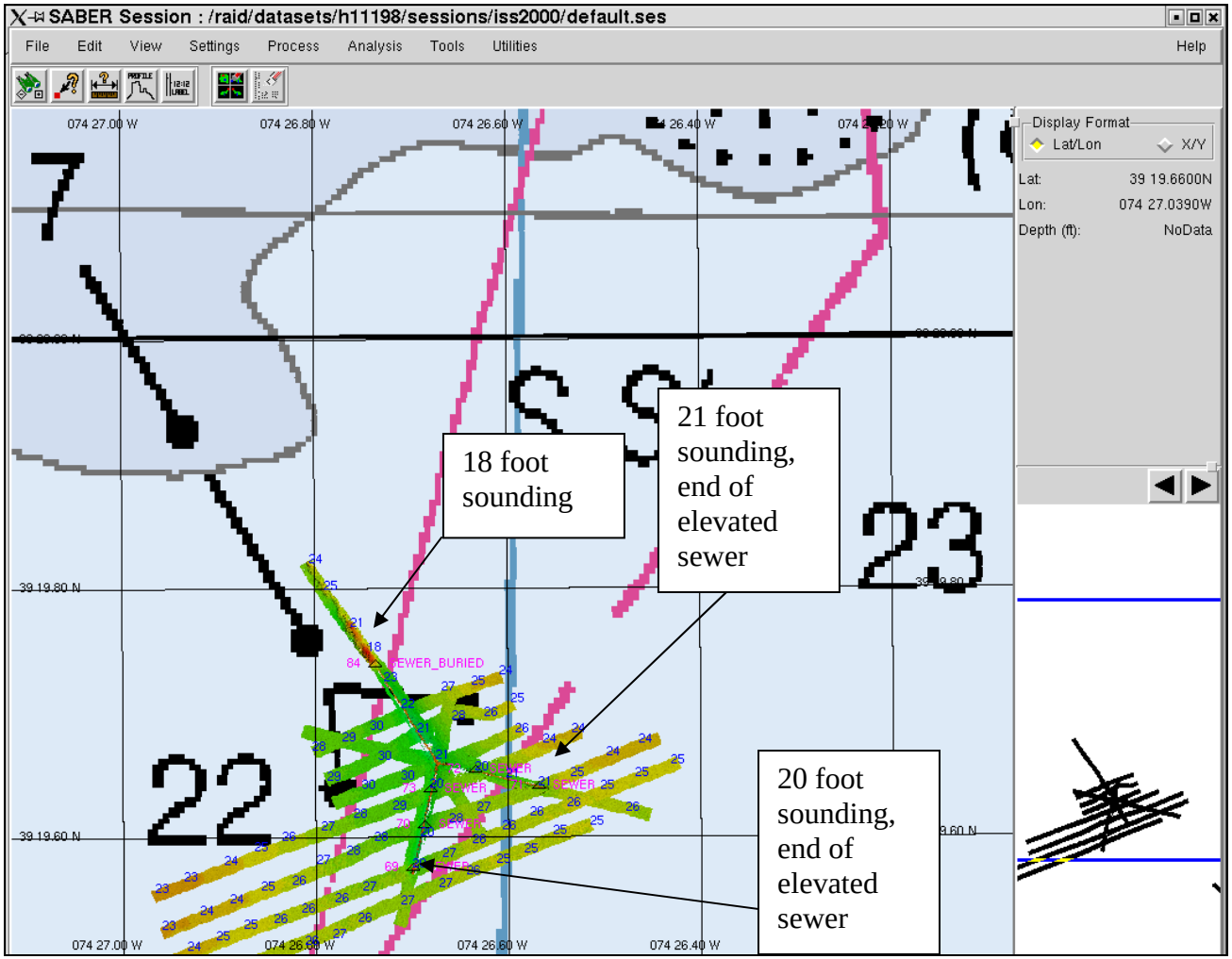

Figure App. I-22. Chart 12318 and Color Coded Depth Grid Showing Elevated Sewer, Buried Sewer, 18 ft Sounding, and Selected Soundings

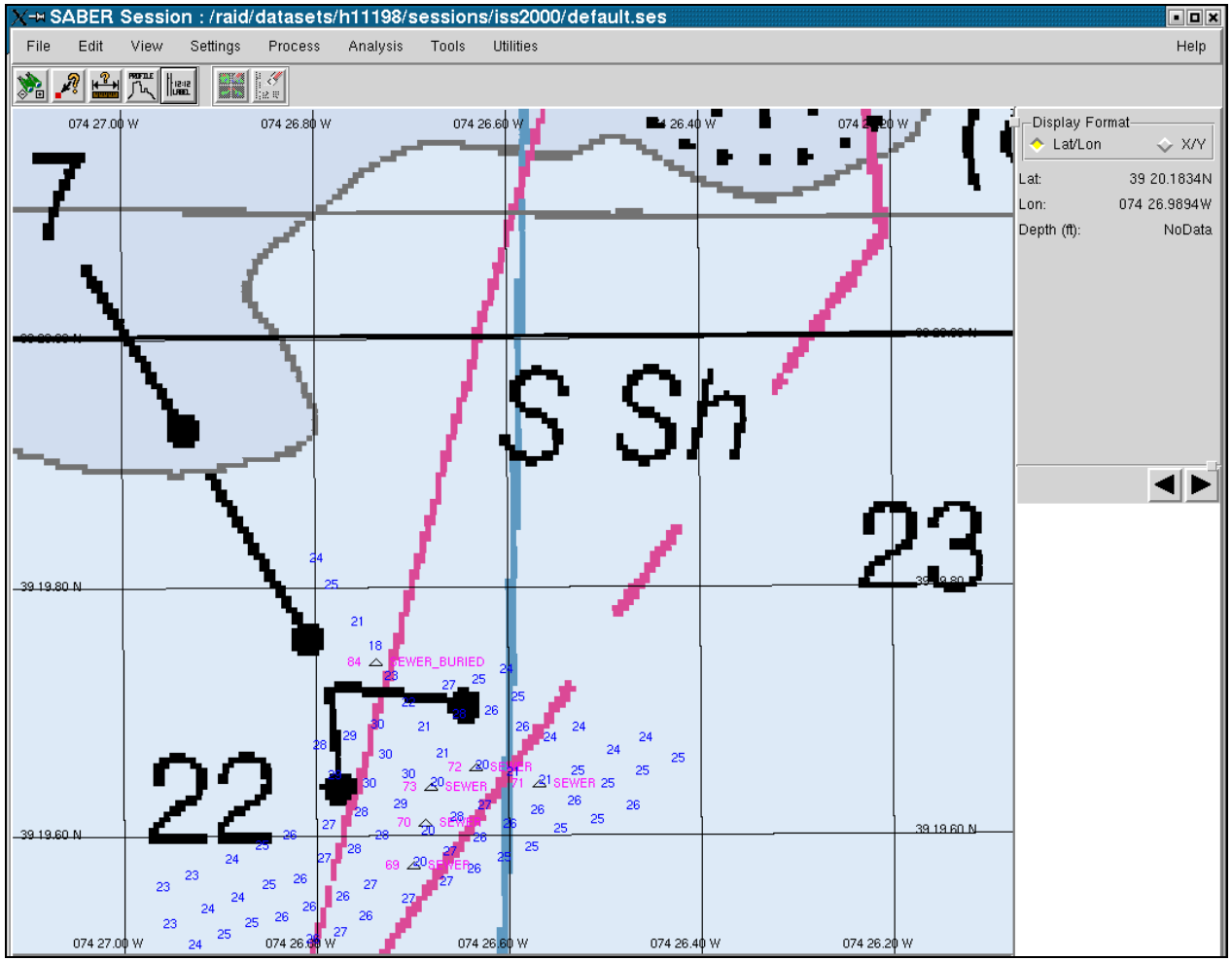

Figure App. I-23. Chart 12318 Showing Elevated Sewer, Buried Sewer, and Selected Soundings within H11198

ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT FOR H11198 (2003)

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report and required revisions on the contractor Preliminary Smooth Sheet (PSS). Sections in this report refer to the corresponding sections of the Descriptive Report.

B. DATA ACQUISITION AND PROCESSING

The following software was used to process and review data at Atlantic Hydrographic Branch:

AutoCAD, release 14
CARIS HIPS/SIPS version 5.3
MapInfo, version 6.5
Microstation J, version 07.01.04.16
I/RAS B, version 07.01.000.18

The Preliminary Smooth Sheet was plotted by the contractor. No revisions were made to the Preliminary Smooth Sheet during office processing.

C. VERTICAL AND HORIZONTAL CONTROL

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83). Office processing of this survey is based on these values.

D. RESULTS AND RECOMMENDATIONS

D.1 CHART COMPARISON

12316 30th Edition, Nov 01/03
Corrected through NM Nov 15/03
Corrected through LNM Nov 04/03

12318 42st Edition, May/04
Corrected through NM May 29/04
Correted through LNM May 18/04

13003 47th Edition, Jun 01/03
Corrected through NM Feb 28/04
Corrected through LNM Mar 02/04

12300 44rd Edition, Jul/04
Corrected through NM Jul 03/04
Corrected through LNM Jun 15/04

12200 47th Edition, Aug 01/02
Corrected through NM Feb 28/04
Corrected through LNM Mar 02/04

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in Section D of the Descriptive Report. Attention is directed to the following:

Chart 12300

1. The hydrographer recommends replacing a $5^{3/4}$-fm depth, in Latitude 39°23'48.78"N, Longitude 74°18'04.13"W, with a 6 fathom sounding. Office review determined that there are no charted soundings in the location given. The hydrographer located a wreck with a depth of 6 fathoms, in Latitude 39°23'48.78"N, Longitude 074°18'04.13"W. It is recommended this feature be charted as shown on the present survey. It is also recommended that this feature be charted appropriately on charts 12316 and 12318. See page 9 of the Descriptive Report. See also AWOIS Items #1344 through #1349 on page 18 of the Descriptive Report.

2. The hydrographer recommends replacing a 9-fm depth, in Latitude 39°18'26.50"N, Longitude 074°21'23.23"W, with soundings from the present survey. Office review determined that there are no charted soundings in the location given. It is recommended that the area be charted as shown on the present survey. See page 11 of the Descriptive Report.

3. The hydrographer recommends replacing a 10-fm depth, in Latitude 39°18'31.28"N, Longitude 074°19'47.15"W, with soundings from the present survey. Office review determined that there are no charted soundings in the location given. It is recommended that the area be charted as shown on the present survey. See page 11 of the Descriptive Report.

Chart 12316/12318

4. An obstruction with a depth of 24 feet, in Latitude 39°21'50.60"N, Longitude 074°22'17.10"W was located by the hydrographer but not addressed in the Descriptive Report. This feature is referenced as feature #30 in Separates II of the Descriptive Report. This feature is shown on the smooth sheet but should not charted due to shoaler depths in the immediate area.

5. A obstruction with a depth of 55 feet, in Latitude 39°21'49.80"N, Longitude 074°17'59.50"W, was located by the hydrographer but not addressed in the Descriptive Report.

This feature is referenced as feature #32 in Separates II of the Descriptive Report. This feature is shown on the smooth sheet but should not charted due to shoaler depths in the immediate area.

6. AWOIS#11189, a charted Wk cleared to 21 feet, in Latitude 39˚20'54.42"N, 074˚20'58.52"W was investigated by the hydrographer. The hydrographer located a 22 Wk in Latitude 39˚20'56.96"N, 074˚20'57.83"W. The 22 Wk is shown as a 22 ft sounding on the contractor's smooth sheet. It is recommended that a 22 Wk be charted in Latitude 39˚20'56.96"N, 074˚20'57.83"W.

Danger To Navigation

Data for four Danger to Navigation were submitted by the hydrographer to the Atlantic Hydrographic Branch (AHB). Danger to navigation reports were generated by AHB personnel and sent to the Marine Chart Division, N/CS3x1, Silver Spring, Maryland. Copies of these reports are appended to the Descriptive Report.

The present survey is adequate to supersede the charted hydrography in the common area, except as noted in this report.

JUNCTIONS

H11197 (2003) to the southwest
H11241 (2003-04) to the northeast

A standard junction was effected between surveys H11241(2003-04) and H11197 (2003) and the present survey. There are no contemporary surveys to the southeast or northwest of the present survey. Present survey depths are in harmony with the charted hydrography to the southeast and northwest.

Present survey depths are in harmony with the charted hydrography.

ADEQUACY OF SURVEY

The present survey is adequate to supersede the charted hydrography within the common area. No additional work is required.

MISCELLANEOUS

Chart compilation using the present survey data was done by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compiled data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

The following NOS charts were used for compilation of the present survey:

12316 30th Edition, Nov 01/03
Corrected through NM Nov 15/03
Corrected through LNM Nov 04/03
12318 42st Edition, May/04
Corrected through NM May 29/04
Correted through LNM May 18/04

H11198

Richard W. Blevins

Richard W. Blevins
Cartographer
Verification of Field Data
Evaluation and Analysis

REPORT OF DANGERS TO NAVIGATION

Hydrographic Survey Registry Number: H11198

Survey Title: State: New Jersey
Locality: Atlantic Ocean
Sub-locality: Brigantine Inlet to Great Egg Harbor Inlet

Project Number: OPR-C303-KR-03

Field Unit: Science Applications International Corporation (SAIC)
Survey Vessel *Ocean Explorer*

Survey Dates: On Going

Depths are reduced to Mean Lower Low Water using predicted tides and preliminary tidal zoning. Positions are referenced from USCG DGPS beacon and horizontal datum is North America Datum 83 (NAD83).

Charts affected:

12300 1:400,000 42nd Edition February 2001
12316 Little Egg Harbor to Cape May 1:40,000 29th Edition November 2002
12318 Little Egg Inlet to Hereford Inlet 1:80,000 41st Edition December 2002
13003 1:1,200,000 46th Edition January 2003

DANGERS TO NAVIGATION

	Feature	Depth (FT)	Latitude (N)	Longitude (W)
1.	Wreck	24	39° 19' 39.596"	074° 25' 05.889"

Questions concerning this report should be directed to the Chief, Atlantic Hydrographic Branch at (757) 441-6746.

See also pages 11,14, and 18 of the Descriptive Report.

REPORT OF DANGERS TO NAVIGATION

Hydrographic Survey Registry Number: H11198

Survey Title: State: New Jersey
Locality: Atlantic Ocean
Sub-locality: Brigantine Inlet to Great Egg Harbor Inlet

Project Number: OPR-C303-KR-03

Field Unit: Science Applications International Corporation (SAIC)
Survey Vessel *Ocean Explorer*

Survey Dates: May 22, 2003 and On Going

Depths are reduced to Mean Lower Low Water using predicted tides and preliminary tidal zoning. Positions are referenced from USCG DGPS beacon and horizontal datum is North America Datum 83 (NAD83).

Charts affected:

12318 1:80,000 41st Edition December 2002, Corrected through LNM November 26, 2002
Corrected through NM December 7, 2003
12300 1:400,000 43rd Edition March, 2003, Corrected through LNM February 11, 2003;
Corrected through NM March 1, 2003

DANGERS TO NAVIGATION

	Feature	Depth (FT)	Latitude (N)	Longitude (W)
1.	Wreck	35	39° 23' 48.800"	074° 18' 04.146"

Questions concerning this report should be directed to the Chief, Atlantic Hydrographic Branch at (757) 441-6746.

See also pages 9, 13 and 20 of the Descriptive Report.

REPORT OF DANGERS TO NAVIGATION

Hydrographic Survey Registry Number: H11198

Survey Title: State: New Jersey
Locality: Atlantic Ocean
Sub-locality: Brigantine Inlet to Great Egg Harbor Inlet

Project Number: OPR-C303-KR-03

Field Unit: Science Applications International Corporation (SAIC)
Survey Vessel *Ocean Explorer*

Survey Dates: May 22, 2003 and On Going

Depths are reduced to Mean Lower Low Water using predicted tides and preliminary tidal zoning. Positions are referenced from USCG DGPS beacon and horizontal datum is North America Datum 83 (NAD83).

Charts affected:

12318 1:80,000 41st Edition December 2002, Corrected through LNM November 26, 2002
Corrected through NM December 7, 2003
12300 1:400,000 43rd Edition March, 2003, Corrected through LNM February 11, 2003;
Corrected through NM March 1, 2003

DANGERS TO NAVIGATION

	Feature	Depth (FT)	Latitude (N)	Longitude (W)
1.	Wreck	50	39°14'32.266"	074°24'21.867"
2.	Wreck	31	39°18'15.907"	074°22'10.943"*

Questions concerning this report should be directed to the Chief, Atlantic Hydrographic Branch at (757) 441-6746.

See also page 11 of this report.

REPORT OF DANGERS TO NAVIGATION

Hydrographic Survey Registry Number: H11198

Survey Title: State: New Jersey
Locality: Atlantic Ocean
Sub-locality: Brigantine Inlet to Great Egg Harbor Inlet

Project Number: OPR-C303-KR-03

Field Unit: Science Applications International Corporation (SAIC)
Survey Vessel *Ocean Explorer*

Survey Dates: May 21, 2003 through December 3, 2003

Depths are reduced to Mean Lower Low Water using verified tides and preliminary tidal zoning. Positions are referenced from USCG DGPS beacon and horizontal datum is North America Datum 83 (NAD83).

Charts affected:

12316 1:40,000 30th Edition November, 2003, Corrected through LNM November 4, 2003
Corrected through NM November 15, 2003

12318 1:80,000 41st Edition December 2002, Corrected through LNM November 26, 2002
Corrected through NM December 7, 2002

DANGERS TO NAVIGATION

	Feature	Depth (FT)	Latitude (N)	Longitude (W)
1.	Submerged Sewer	17	39°19'44.95"	074°26'44.69"
2.	Submerged Sewer	21	39°19'42.21"	074°26'41.98"
3.	Submerged Sewer	20	39°19'39.93"	074°26'40.04"
4.	Submerged Sewer Outfall Least Depth	21 Eastern Offshore End	39°19'38.31"	074°26'33.54"
5.	Submerged Sewer Outfall Least Depth	20 Southern offshore End	39°19'34.21"	074°26'41.94"

Questions concerning this report should be directed to the Chief, Atlantic Hydrographic Branch at (757) 441-6746.

See also pages 15, 18, and 20 of the Descriptive Report.

APPROVAL SHEET
H11198

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. All revisions and additions made to the smooth sheet during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Richard W. Blevins Date: AUG. 3, 2004

Richard W. Blevins
Cartographer,
Atlantic Hydrographic Branch

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

Approved: P Schattgen Date: APRIL 27, 2005

P. Tod Schattgen
Lieutenant Commander, NOAA
Chief, Atlantic Hydrographic Branch

Jennifer Sherry

Digitally signed by Jennifer Sherry
DN: CN = Jennifer Sherry, C = US, O = HSD, OU = Operations Branch
Reason: AWOIS/SURF check
Location: Operations Branch, HSD
Date: 2005.05.03 09:27:25 -04'00'

NOAA FORM 75-96
(10-83)

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

MARINE CHART BRANCH

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H11198

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
12316	10/08/04	Richard Blevin	Full ~~Part Before~~ After Marine Center Approval Signed Via
			Drawing No.
12318	10/08/04	Richard Blevin	Full ~~Part Before~~ After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
			Drawing No.
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			Full Part Before After Marine Center Approval Signed Via
			Drawing No.

SUPERSEDES C&GS FORM 8352 WHICH MAY BE USED