

H13048

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

DESCRIPTIVE REPORT

Type of Survey: Navigable Area

Registry Number: H13048

LOCALITY

State(s): Texas

General Locality: Between Galveston Bay Entrance and Sabine Bank
Channels, Texas and Louisiana

Sub-locality: Between Galveston Bay Entrance and Sabine Bank
Channel

2018

CHIEF OF PARTY
Christiaan van Westendorp, CAPT/NOAA

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

H13048

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

State(s): **Texas**

General Locality: **Between Galveston Bay Entrance and Sabine Bank Channels,**

Sub-Locality: **Between Galveston Bay Entrance and Sabine Bank Channel**

Scale: **40000**

Dates of Survey: **06/09/2018 to 08/07/2018**

Instructions Dated: **03/08/2018**

Project Number: **OPR-K371-TJ-18**

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

Chief of Party: **Christiaan van Westendorp, CAPT/NOAA**

Soundings by: **Multibeam Echo Sounder**

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

Verification by: **Atlantic Hydrographic Branch**

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

Remarks:

None

None

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

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Descriptive Report to Accompany Survey H13048

Project: OPR-K371-TJ-18

Locality: Between Galveston Bay Entrance and Sabine Bank Channels, Texas and Louisiana

Sublocality: Between Galveston Bay Entrance and Sabine Bank Channel

Scale: 1:40000

June 2018 - August 2018

NOAA Ship *Thomas Jefferson*

Chief of Party: Christiaan van Westendorp, CAPT/NOAA

A. Area Surveyed

Survey H13048 extended from 49 NM to 77 NM southeast of the entrance to Galveston Bay, TX between the traffic safety fairways that lead into Galveston Bay, TX and Sabine Pass, LA (Table 1 and Figure 1).

A.1 Survey Limits

Data were acquired within the following survey limits:

Northwest Limit	Southeast Limit
28° 58' 15.74" N 93° 53' 8.7" W	28° 47' 10.82" N 93° 24' 26.19" W

Table 1: Survey Limits

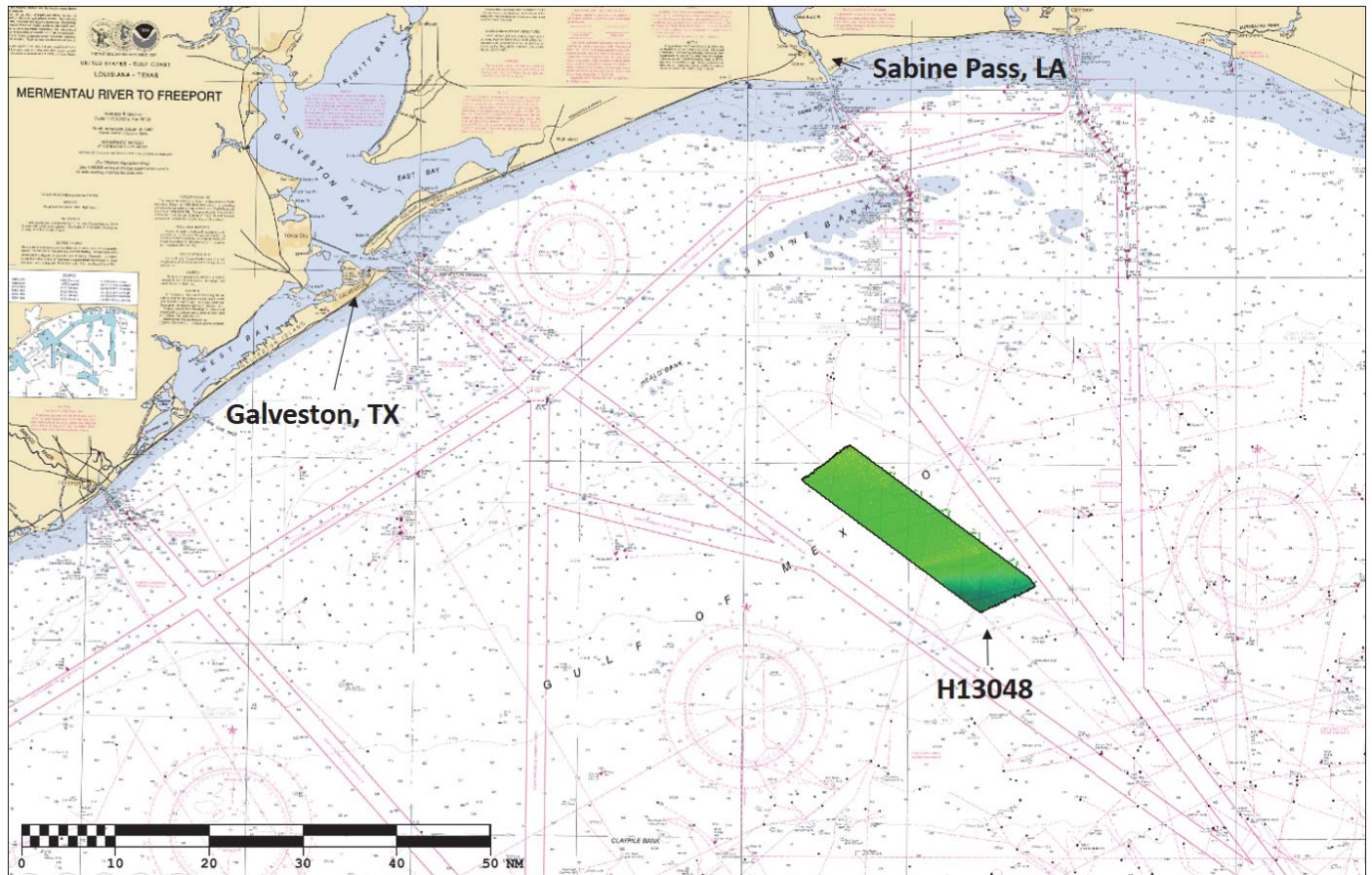


Figure 1: Overview of area surveyed

Sheet limits for H13048 were extended north-east of original sheet limits (Figure 2).

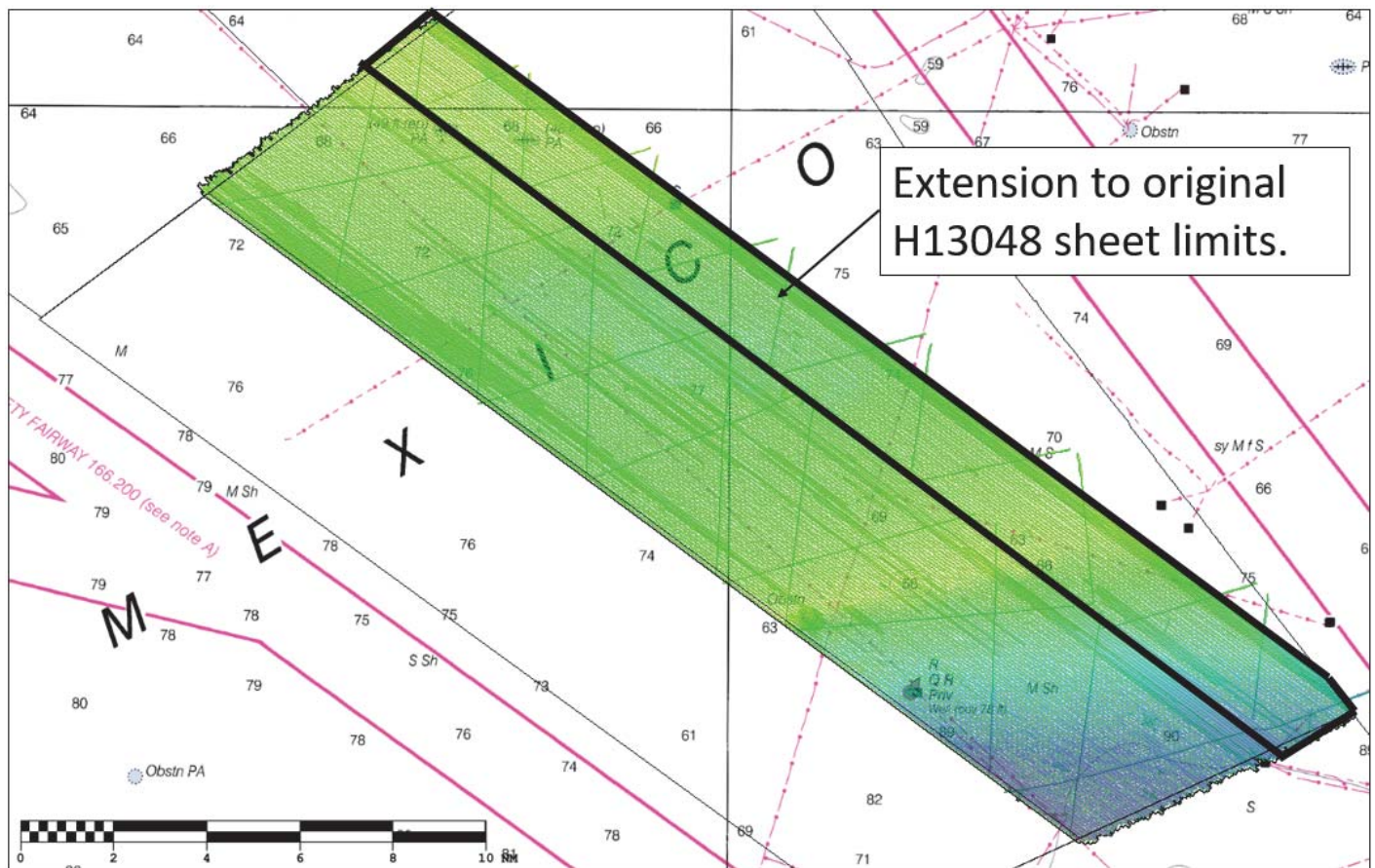


Figure 2: Overview of extended survey area

A.2 Survey Purpose

The purpose of survey project OPR-K371-TJ-18 is to provide contemporary surveys to update National Ocean Service nautical charts and products in an area critical to the nation's economy. In 2015, the Port of Houston supported \$137 Billion in trade, ranked first in the nation for foreign tonnage. was the nation's largest importer/exporter of petroleum products and supported 509,000 jobs directly or indirectly.* This survey project covers approximately 1100 square nautical miles between the Galveston Bay and Sabine Bank Channels in an area which has not been surveyed since 1963. The current chart coverage shows numerous reported wrecks and obstructions with their positions reported to be approximate; these pose a risk to surface navigation. This survey will identify changes to the bathymetry and resolve position uncertainty in known hazards.

A.3 Survey Quality

The entire survey is adequate to supersede previous data.

A.4 Survey Coverage

The following table lists the coverage requirements for this survey as assigned in the project instructions

(Table 2):

Water Depth	Coverage Required
All waters in survey area	Complete Coverage (refer to HSSD Section 5.2.2.3)

Table 2: Survey Coverage

Survey coverage was in accordance with the requirements listed above and in the HSSD

(Figure 3 and 4).

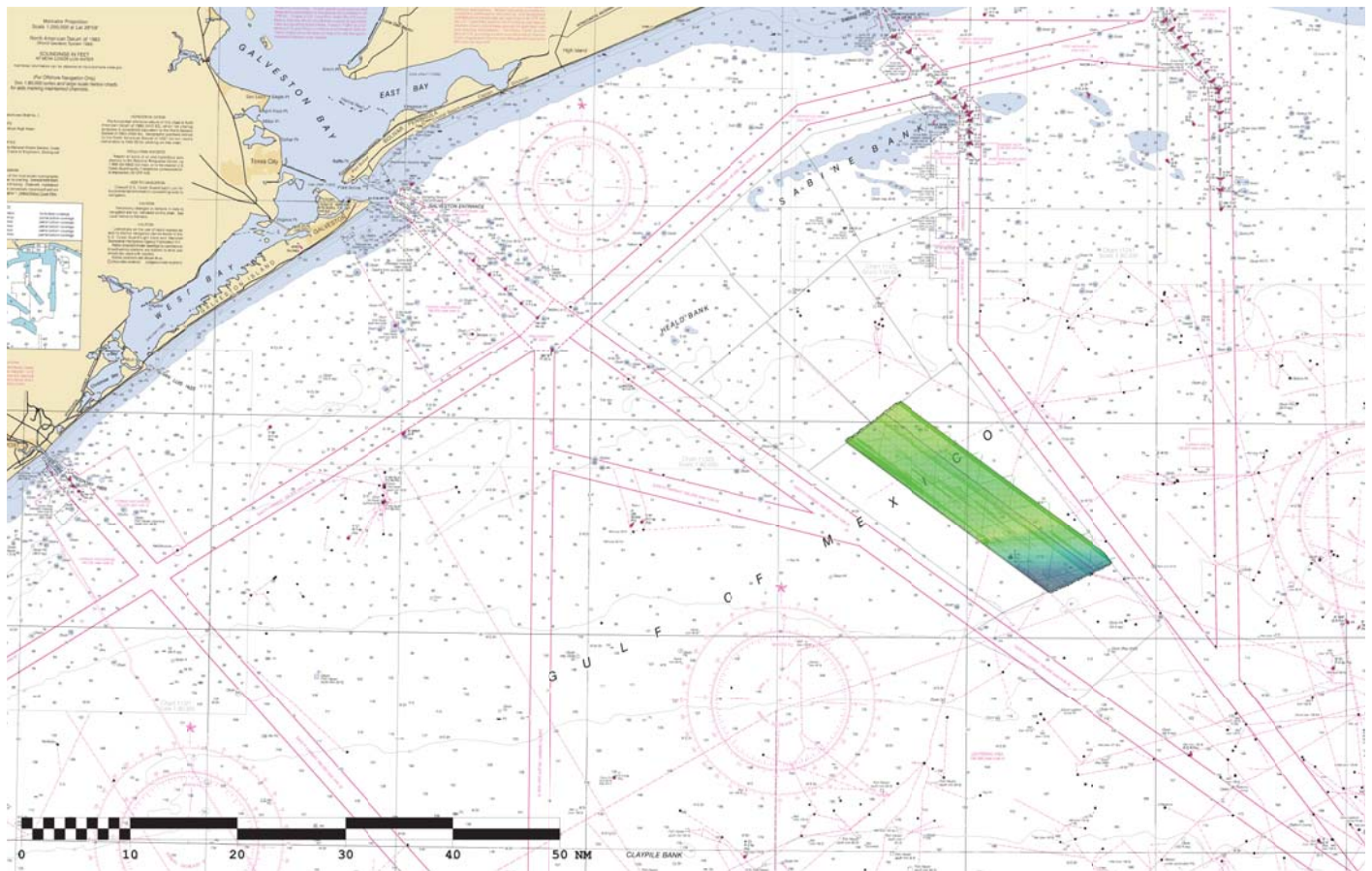


Figure 3: Survey coverage within project limits for project OPR-K371-TJ-18

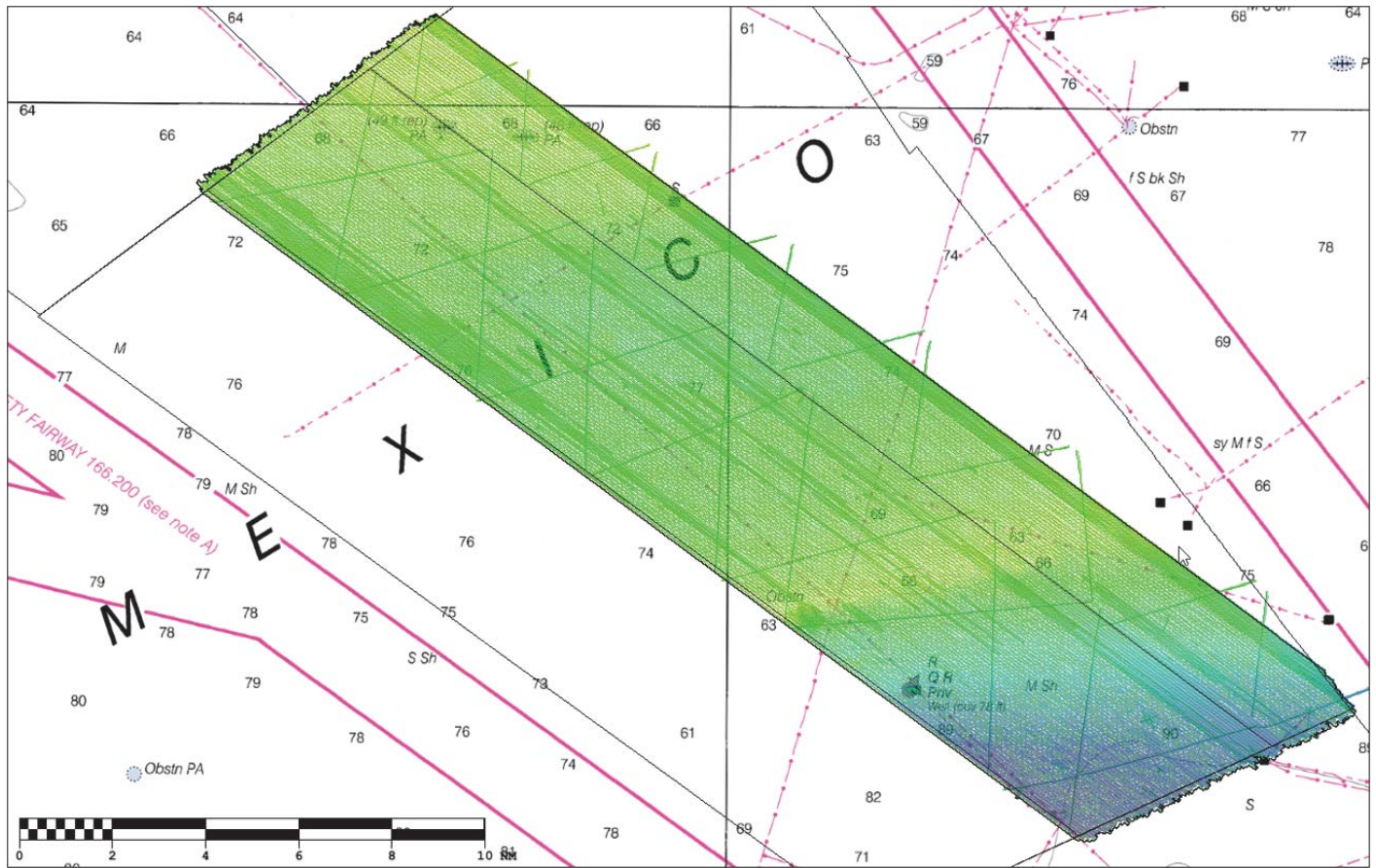


Figure 4: Survey coverage for H13048

A.6 Survey Statistics

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

(Table 3):

	HULL ID	<i>S222</i>	<i>Total</i>
LNM	SBES Mainscheme	0	0
	MBES Mainscheme	449	449
	Lidar Mainscheme	0	0
	SSS Mainscheme	0	0
	SBES/SSS Mainscheme	0	0
	MBES/SSS Mainscheme	237769	237769
	SBES/MBES Crosslines	113.865	113.865
	Lidar Crosslines	0	0
Number of Bottom Samples			11
Number Maritime Boundary Points Investigated			0
Number of DPs			0
Number of Items Investigated by Dive Ops			0
Total SNM			148.3

Table 3: Hydrographic Survey Statistics

The following table lists the specific dates of data acquisition for this survey (Table 4):

Survey Dates	Day of the Year
06/09/2018	160
06/10/2018	161

Survey Dates	Day of the Year
06/11/2018	162
06/12/2018	163
06/13/2018	164
06/14/2018	165
06/15/2018	166
06/16/2018	167
06/17/2018	168
06/28/2018	179
06/29/2018	180
06/30/2018	181
07/03/2018	184
07/04/2018	185
07/06/2018	187
07/10/2018	191
07/23/2018	204
08/02/2018	214
08/03/2018	215
08/04/2018	216
08/05/2018	217
08/06/2018	218
08/07/2018	219

Table 4: Dates of Hydrography

B. Data Acquisition and Processing

B.1 Equipment and Vessels

Refer to the Data Acquisition and Processing Report (DAPR) for a complete description of data acquisition and processing systems, survey vessels, quality control procedures and data processing methods.

B.1.1 Vessels

The following vessels were used for data acquisition during this survey (Table 5):

Hull ID	<i>S222</i>
LOA	208 feet
Draft	15 feet

Table 5: Vessels Used

Refer to DAPR for OPR-K371-TJ-18 for a complete description of equipment used.

B.1.2 Equipment

The following major systems were used for data acquisition during this survey (Table 6):

Manufacturer	Model	Type
Kongsberg Maritime	EM 2040	MBES
Kongsberg Maritime	EM 710	MBES
Klein Marine Systems	System 5500 V2	SSS
Applanix	POS MV 320 v5	Navigation and Attitude System
AML Oceanographic	MVP100	Sound Speed Profiling System
AML Oceanographic	Micro-CTD	Conductivity, Temperature, and Depth Sensor
AML Oceanographic	MVP-X CTD	Conductivity, Temperature, and Depth Sensor
Sea-Bird Scientific	SBE 19plus	Conductivity, Temperature, and Depth Sensor
Valeport	Thru-Hull SVS	Sound Speed System

Table 6: Major Systems Used

Vessel configurations, equipment operations, and data acquisition and processing were consistent with specifications described in the DAPR.

B.2 Quality Control

B.2.1 Crosslines

MBES crossline mileage equaled 4% of MBES mainscheme mileage. The mean difference of values of overlapping data from H13048 mainscheme MBES data and H13048 crossline MBES data was 0.0 m with a standard deviation of 0.1 m (Figure 5).

Project	OPR-K371-TJ-18		
Sheet	H13048		
Surface	H13048_ms_less_xl_20180818_01		

Count	9,146,015	Mean	0.0 m
Min	-0.6 m	Std Dev	0.1 m
Max	1.0 m		

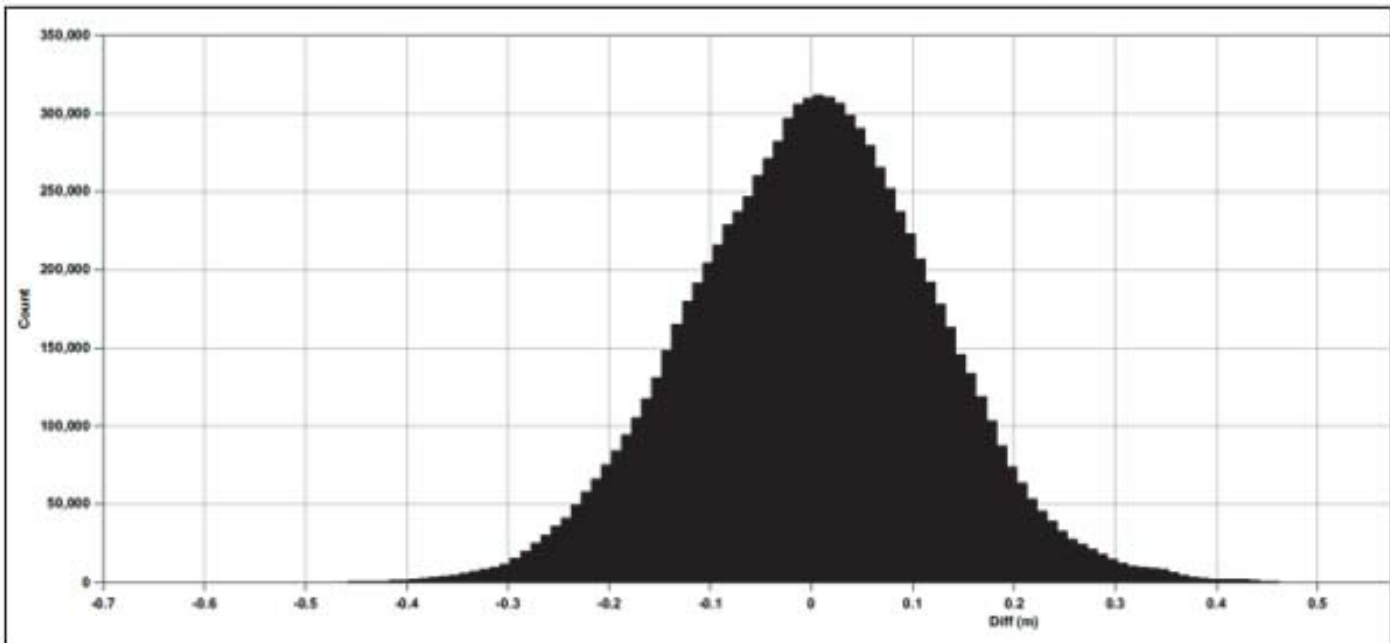


Figure 5: H13048 MBES crossline comparison statistics

B.2.2 Uncertainty

The following survey specific parameters were used for this survey (Table 7 and 8):

Method	Measured	Zoning
ERS via VDATUM	0.08 meters	0.13 meters

Table 7: Survey Specific Tide TPU Values.

Hull ID	Measured - CTD	Measured - MVP	Surface
S222	4.0 meters/second	2.0 meters/second	0.2 meters/second

Table 8: Survey Specific Sound Speed TPU Values.

Statistical analysis of the uncertainty layer for the MBES CUBE surface shows that specifications related to MBES uncertainty were met (Figure 6).

Uncertainty Standards

Grid source: H13048_MB_1m_MLLW

99.5+% pass (237,458,815 of 237,461,662 nodes), min=0.43, mode=0.56, max=2.46

Percentiles: 2.5%=0.52, Q1=0.55, median=0.56, Q3=0.57, 97.5%=0.61

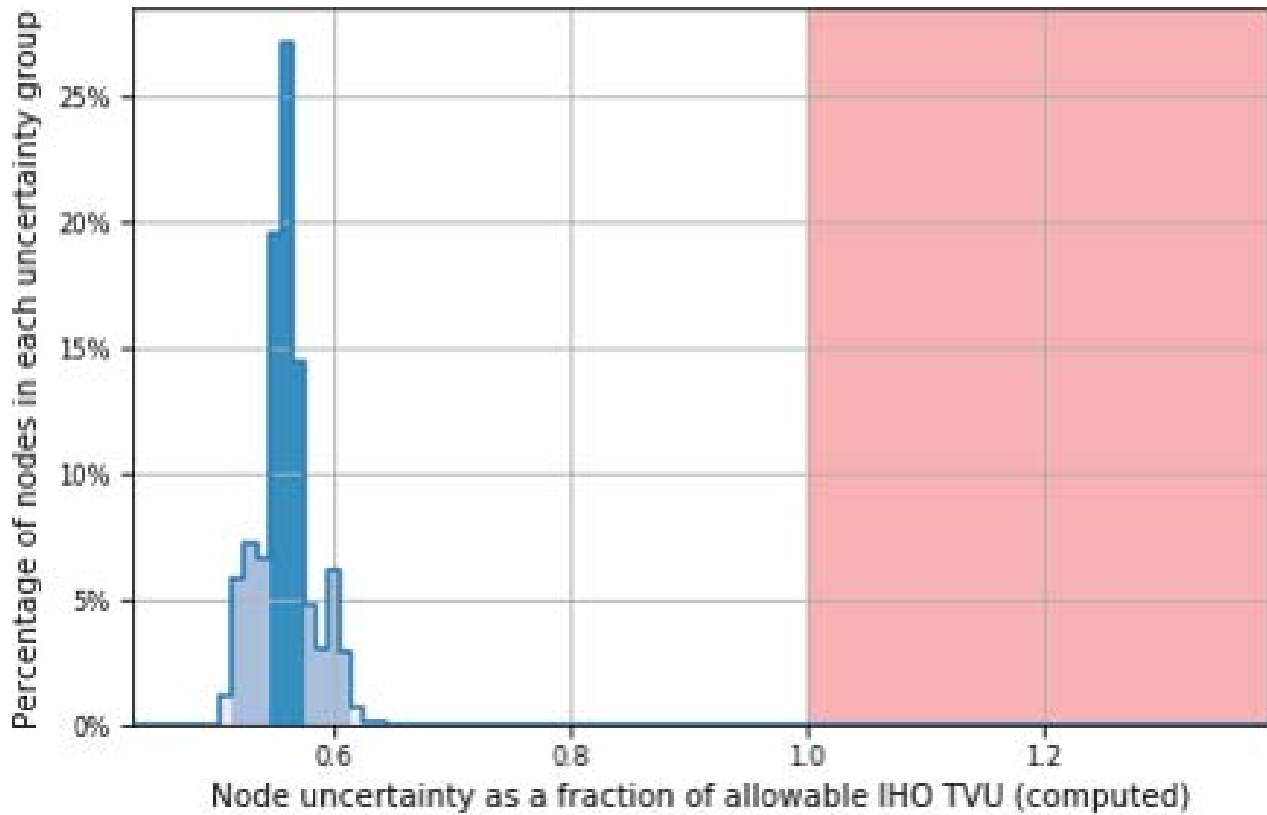


Figure 6: H13048 MBES surface uncertainty statistics

B.2.3 Junctions

H13048 junctioned with three surveys from project OPR-K371-TJ-18 (Figure 7).

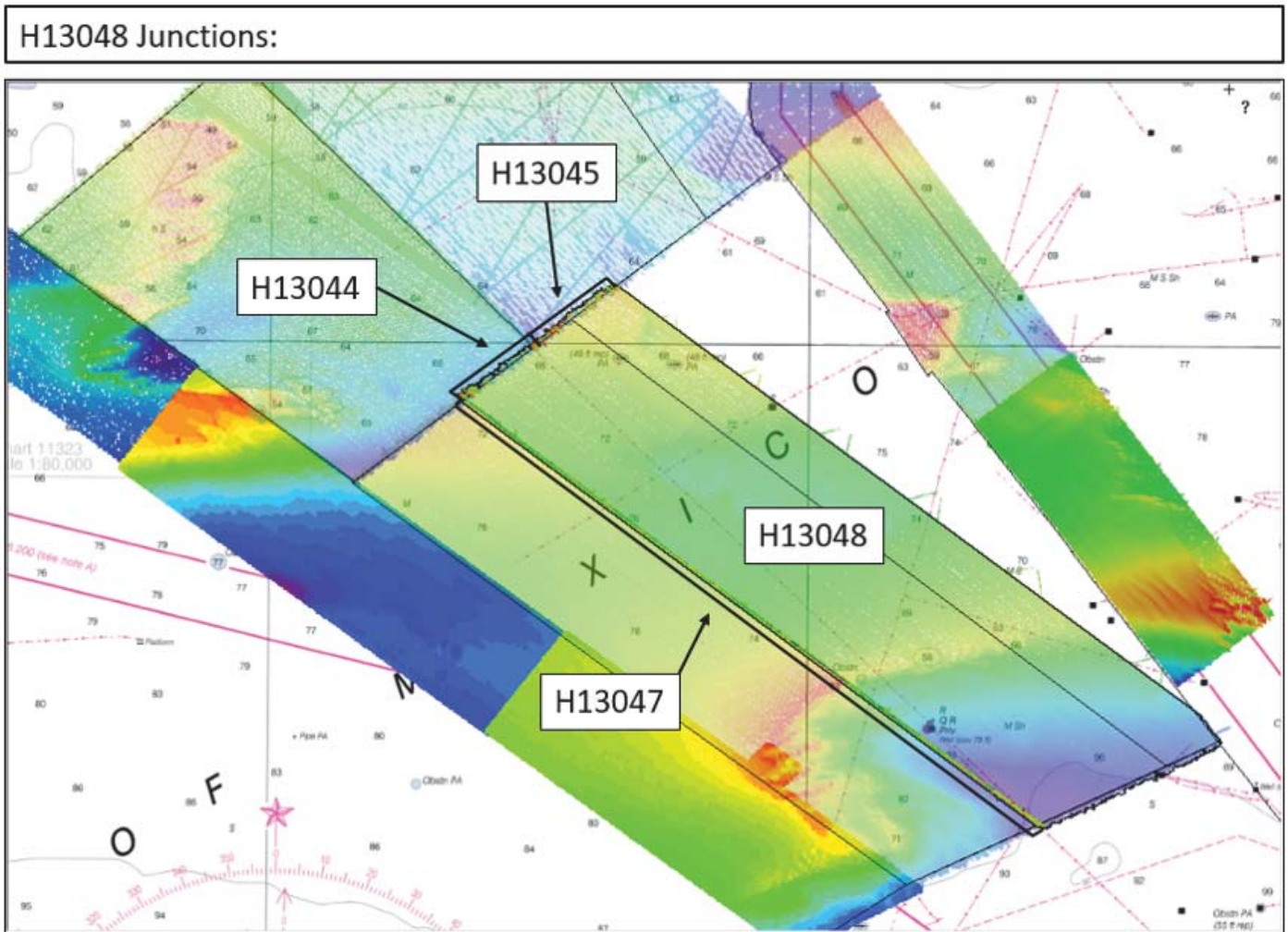


Figure 7: H13048 survey junctions

The following junctions were made with this survey:

Registry Number	Scale	Year	Field Unit	Relative Location
H13044	1:40000	2018	NOAA Ship THOMAS JEFFERSON	NW
H13045	1:40000	2018	NOAA Ship THOMAS JEFFERSON	N
H13047	1:40000	2018	NOAA Ship THOMAS JEFFERSON	W

Table 9: Junctioning Surveys

H13044

The mean difference of values of overlapping data from sheets H13048 and H13044 was 0.0 m with a standard deviation of 0.1 m (Figure 8).

Project	OPR-K371-TJ-18		
Sheet	H13048		
Surface	H13048_less_H13044		

Count	503,213	Mean	0.0 m
Min	-0.4 m	Std Dev	0.1 m
Max	0.6 m		

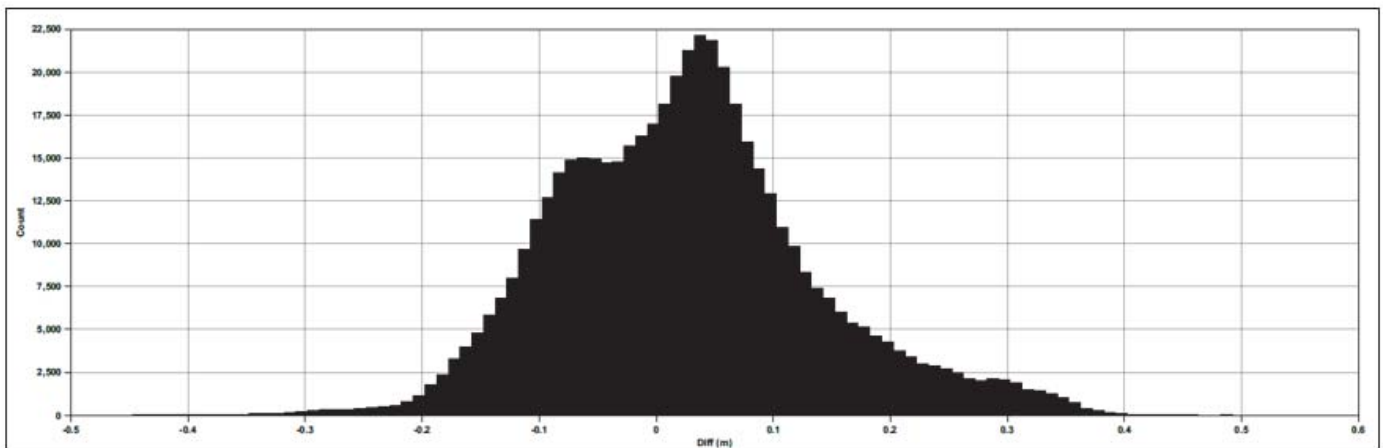


Figure 8: H13044 Junctions Analysis

H13045

The mean difference of values of overlapping data from sheets H13048 and H13045 was 0.0 m with a standard deviation of 0.1 m (Figure 9).

Project	OPR-K371-TJ-18
Sheet	H13048
Surface	H13048_less_H13045

Count		Mean	0.0 m
Min	-0.6 m	Std Dev	0.1 m
Max	1.0 m		

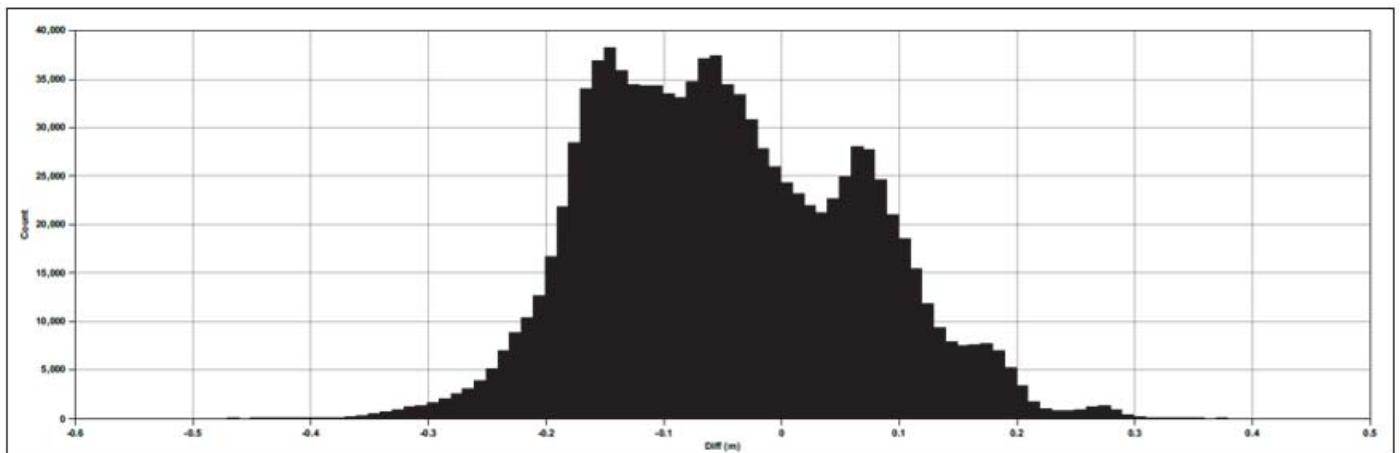


Figure 9: H13045 Junctions Analysis

H13047

The mean difference of values of overlapping data from sheets H13048 and H13047 was 0.0 m with a standard deviation of 0.1 m (Figure 10).

Project	OPR-K371-TJ-18		
Sheet	H13048		
Surface	H13048_less_H13047		

Count	5,099,6333	Mean	0.0 m
Min	-1.0	Std Dev	0.1 m
Max	0.7		

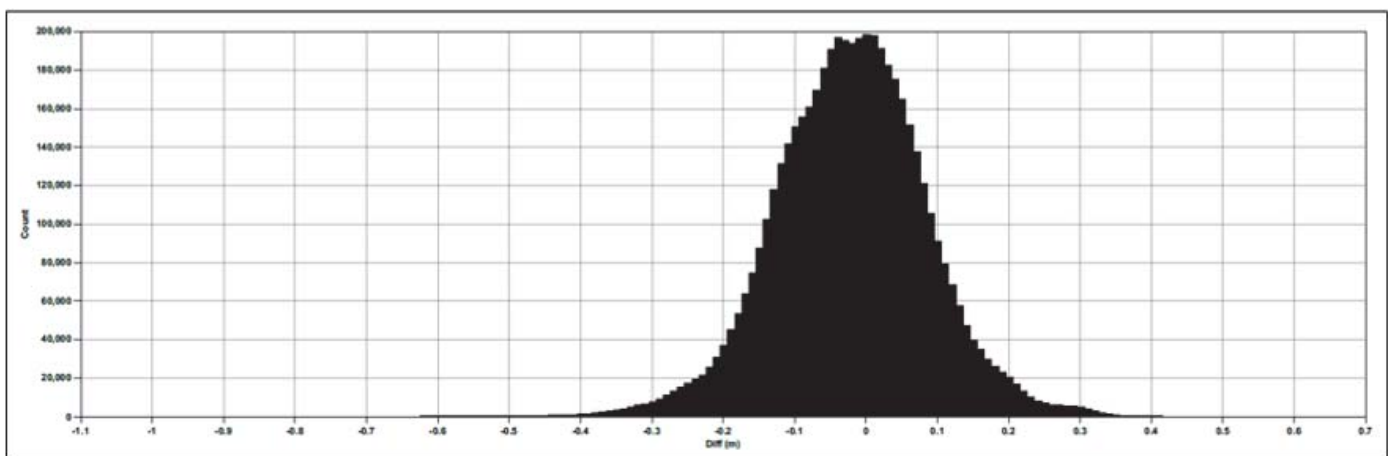


Figure 10: H13047 Junctions Analysis

B.2.4 Sonar QC Checks

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

B.2.5 Equipment Effectiveness

Data artifact sometimes present in MBES data:

MBES data on S222 can sometimes exhibit an artifact under certain environmental conditions. A discussion of the probably causes and impact of the data artifact on overall data quality is outlined in the DAPR. MBES data quality is monitored in real-time and in post processing. All MBES data collected on H13048 was deemed to be acceptable to meet survey specifications.

B.2.6 Factors Affecting Soundings

Refraction induced data artifacts sometimes present in SSS imagery

Data artifacts sometimes present in SSS imagery indicated the presence of a significant and/or variable sound speed gradient in the water column during certain periods of survey. Additional SSS 'split lines' were acquired over all areas where sound speed refraction artifacts significantly degraded image quality (Figures 11 and 12 below).

Project	OPR-K371-TJ-18
Sheet	H13048
Image	SSS 'split lines'
Description:	SSS 'split lines' were acquired over areas significantly impacted by refraction imagery artifacts; the highlighted lines above show where SSS 'splits lines' were acquired.

Figure 11: SSS 'split lines'

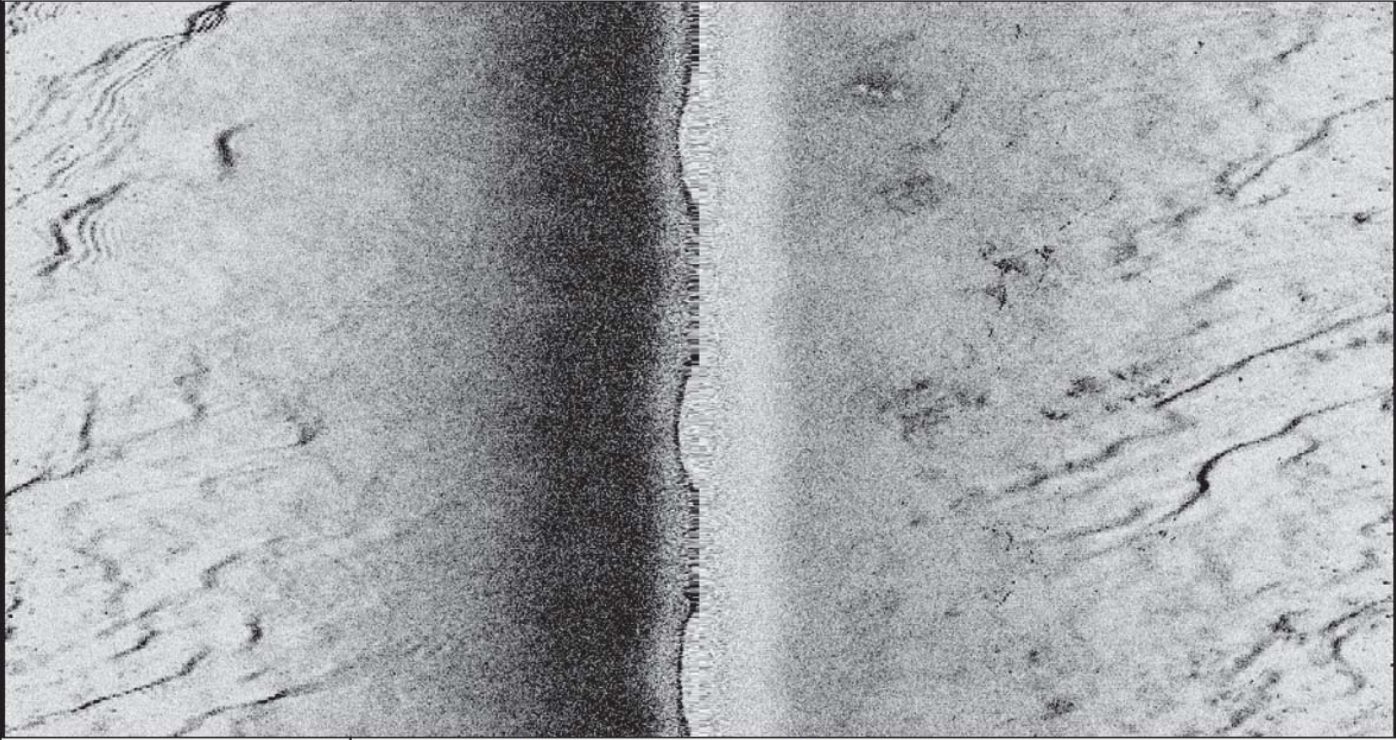
Project	OPR-K371-TJ-18
Sheet	H13048
	
Image	Example of refraction data artifact in SSS imagery
Description:	The dark waves show areas where imagery data is unreliable for contact selection purposes; SSS lines were re-acquired in such cases.

Figure 12: SSS imagery data artifact example

B.2.7 Sound Speed Methods

Sound Speed Cast Frequency: CTD/MVP casts were taken in accordance with the procedures outlined in the DAPR.

MVP cast frequency was frequently reduced due to the risk of entangling the MVP gear with the towed SSS gear during periods of significant cross currents; cast distribution is somewhat uneven and several casts were conducted outside of MBES coverage as a result; however, cast frequency and distribution complied with HSSD requirements. Environmental conditions for casts taken outside of the prescribed survey limits represented the environmental conditions present within the survey area in all cases (Figure 13).

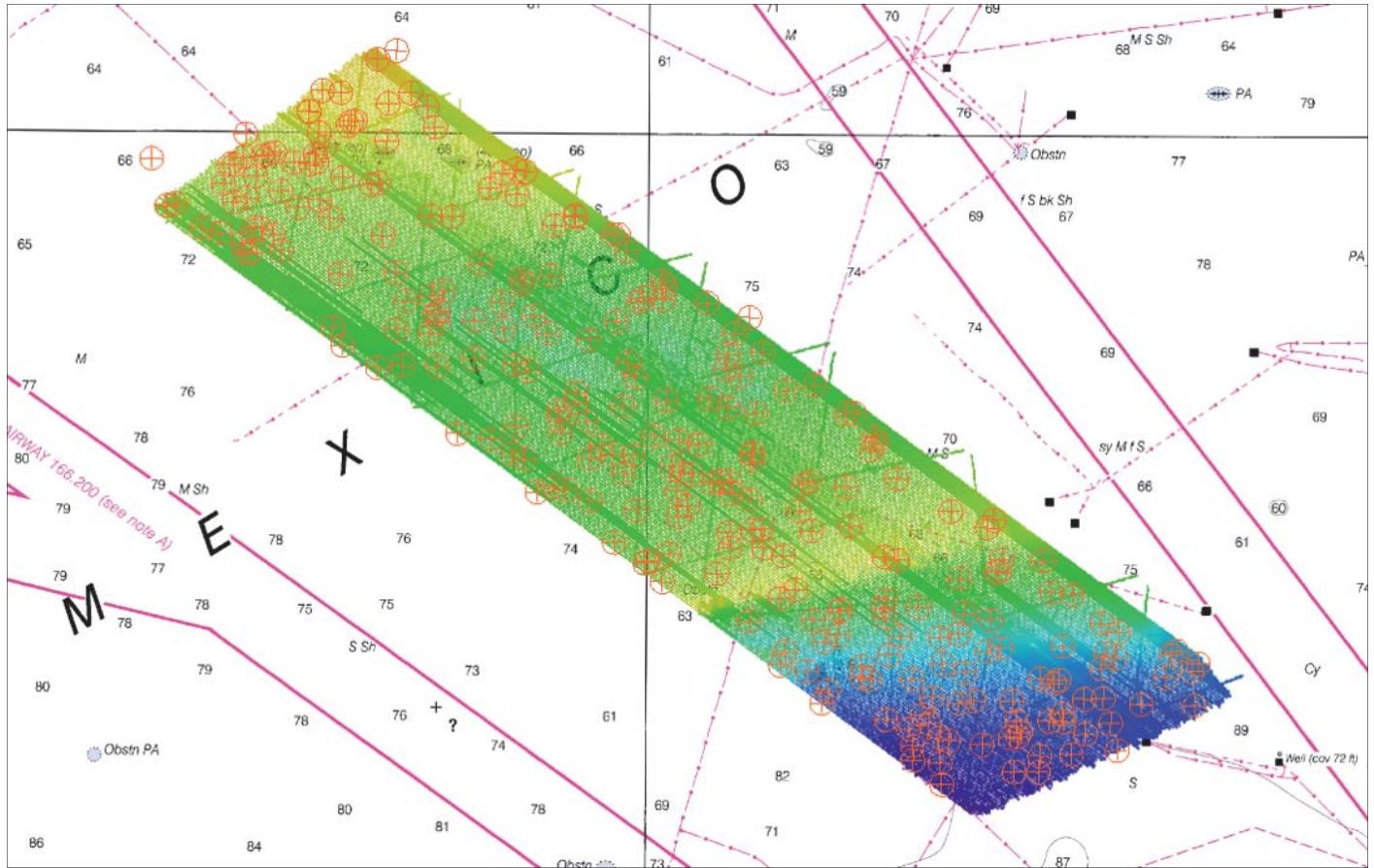


Figure 13: Geographic distribution of sound speed casts

B.2.8 Coverage Equipment and Methods

Concurrent MBES bathymetric and 100% SSS sonar coverage was used to obtain Complete Coverage (Option B. as described in section 5.2.2 of HSSD 2018) for the majority of the survey. 100% bathymetric bottom coverage using MBES (Option A. as described in section 5.2.2 of HSSD 2018) was used to obtain Complete Coverage during the final days of operations on the project.

Three holidays in 100% SSS coverage exist within the extents of the main SSS mosaic; however, all instances of holidays in SSS coverage were addressed via 100% complete coverage MBES coverage. No holidays exist within the the survey limits in combined complete coverage MBES and SSS coverage.

B.2.9 Data Density Analysis

An analysis of data density for the MBES surface shows that the final MBES surface meets HSSD specifications (Figure 14).

Data Density

Grid source: H13048_MB_1m_MLLW

99.5+% pass (236,493,869 of 237,461,662 nodes), min=1.0, mode=91, max=2943.0

Percentiles: 2.5%=37, Q1=64, median=86, Q3=101, 97.5%=149

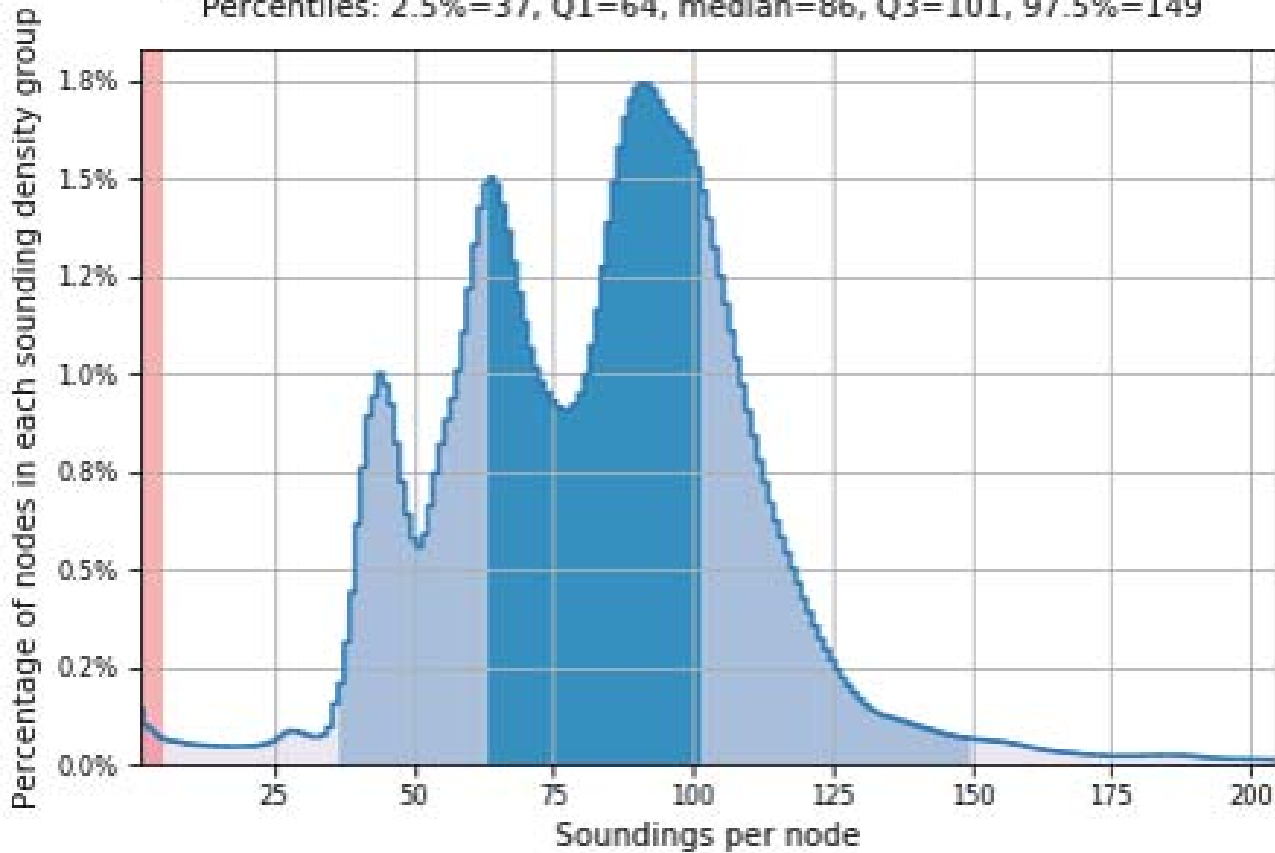


Figure 14: H13048 MBES density statistics

B.3 Echo Sounding Corrections

B.3.1 Corrections to Echo Soundings

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

B.3.2 Calibrations

All sounding systems were calibrated as detailed in the DAPR.

B.4 Backscatter

All equipment and survey methods were used as detailed in the DAPR (Figure 15).

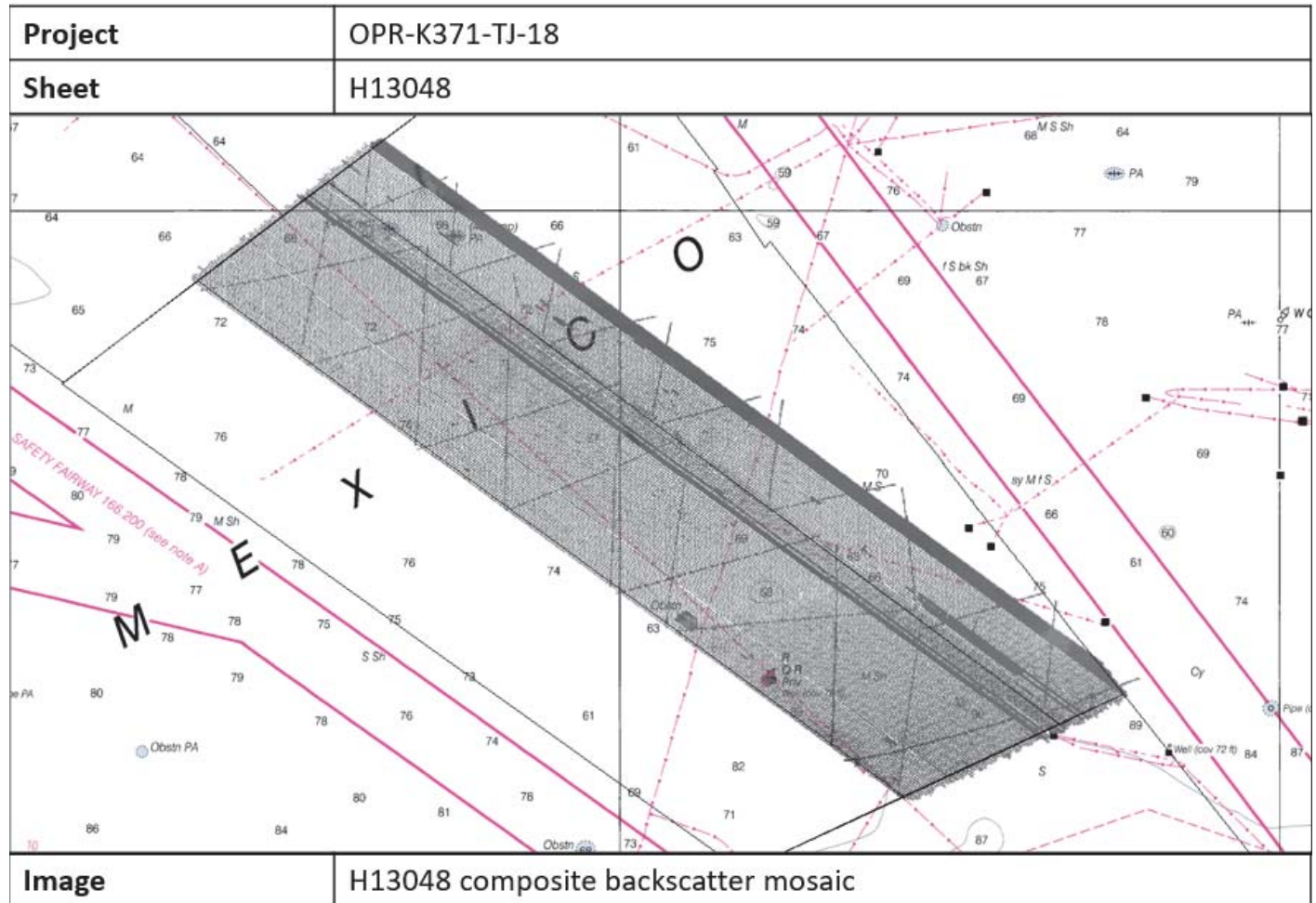


Figure 15: Composite backscatter mosaic for H13048

B.5 Data Processing

B.5.1 Primary Data Processing Software

The following Feature Object Catalog was used: NOAA Profile V_5_8.

NOAA extended attribute files and profiles settings were used as described in the DAPR.

B.5.2 Surfaces

The following surfaces and/or BAGs were submitted to the Processing Branch (Table 10):

Surface Name	Surface Type	Resolution	Depth Range	Surface Parameter	Purpose
H13048_MB_1m_MLLW_final.csar	CARIS Raster Surface (CUBE)	1 meters	14.6 meters - 30.7 meters	NOAA_1m	Complete MBES
H13048_MB_1m_MLLW.csar	CARIS Raster Surface (CUBE)	1 meters	14.6 meters - 30.7 meters	NOAA_1m	Complete MBES
H13048_SSSAB_1m_455kHz_1of1.tiff	SSS Mosaic	1 meters	14.6 meters - 30.7 meters	N/A	100% SSS
H13048_MBAB_1m_S222_300kHz_1of2.tif	MB Backscatter Mosaic	1 meters	14.6 meters - 30.7 meters	N/A	MBES Backscatter
H13048_MBAB_1m_S222_70kHz_2of2.tif	MB Backscatter Mosaic	1 meters	14.6 meters - 30.7 meters	N/A	MBES Backscatter

Table 10: Submitted Surfaces

Complete coverage requirements were met by either 100% SSS and concurrent MBES or complete coverage MBES per Section 5.2.2.3 of the HSSD 2018. Density requirements were met for H13048 and all MBES data was gridded at a 1m resolution; see Project Correspondence for single grid resolution waiver. SSS data was mosaiced at a 1m resolution.

C. Vertical and Horizontal Control

No Horizontal Vertical Control Report (HVCR) accompanies this survey.

C.1 Vertical Control

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

ERS Methods Used:

ERS via VDATUM

Ellipsoid to Chart Datum Separation File:

OPR-K371-TJ-17_WGS84-MLLW_Geoid12B.csar

All soundings were reduced to MLLW using VDATUM techniques as outlined in the DAPR.

C.2 Horizontal Control

The horizontal datum for this project is World Geodetic System (WGS) 1984. The projection used for this project is Projected UTM 15N.*

The Fugro Marinestar commercial real-time satellite based corrector service was used to meet ERS specifications for GNSS positioning.

**The horizontal datum and projection was revised to NAD83 UTM 15N during the survey verification to meet the product specifications for HSD and NCEI.*

D. Results and Recommendations

D.1 Chart Comparison

Chart comparisons for all ENC's listed below were conducted as described in the DAPR.**D.1.1**

Electronic Navigational Charts

The following are the largest scale ENC's, which cover the survey area (Table 11):

ENC	Scale	Edition	Update Application Date	Issue Date	Preliminary?
US3GC02M	1:250000	33	07/11/2018	10/03/2018	NO

Table 11: Largest Scale ENC's

US3GC02M

US3GC02M is the largest scale chart covering the H13048 survey area. Two significant discrepancies between charted sounding values and observed depths were observed: (1) an obstruction in the north-eastern portion of the sheet charted at 14.6 m with an observed least depth of 15.1 m (Figure 16); and (2) a charted

17.6 m sounding in an area characterized by an observed least depth of 19.9 m. All other soundings generally agreed with observed data (Figure 17).

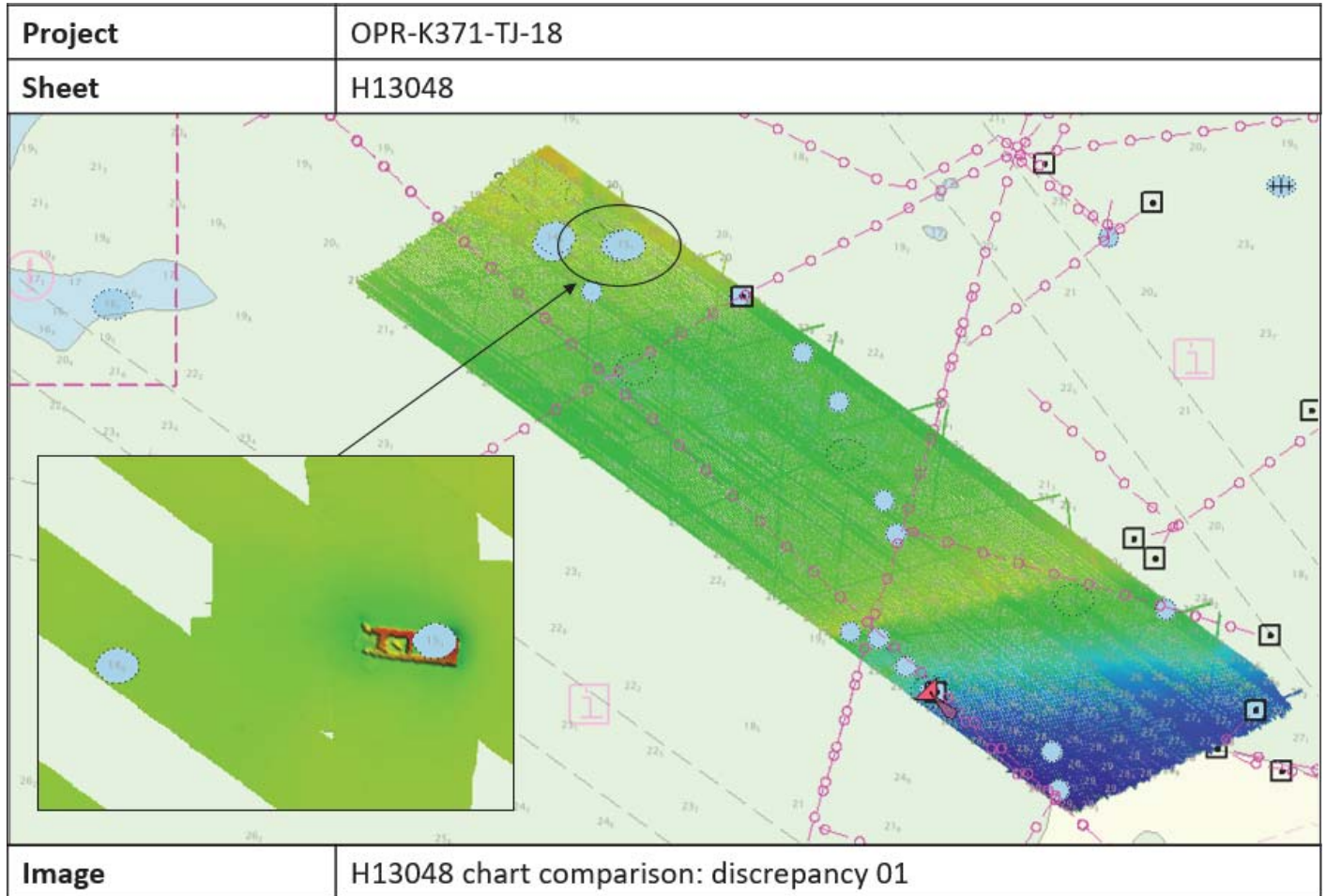


Figure 16: The least depth of a charted 14.6 m obstruction was observed to be 15.1m; the obstruction was mischarted by 208m.

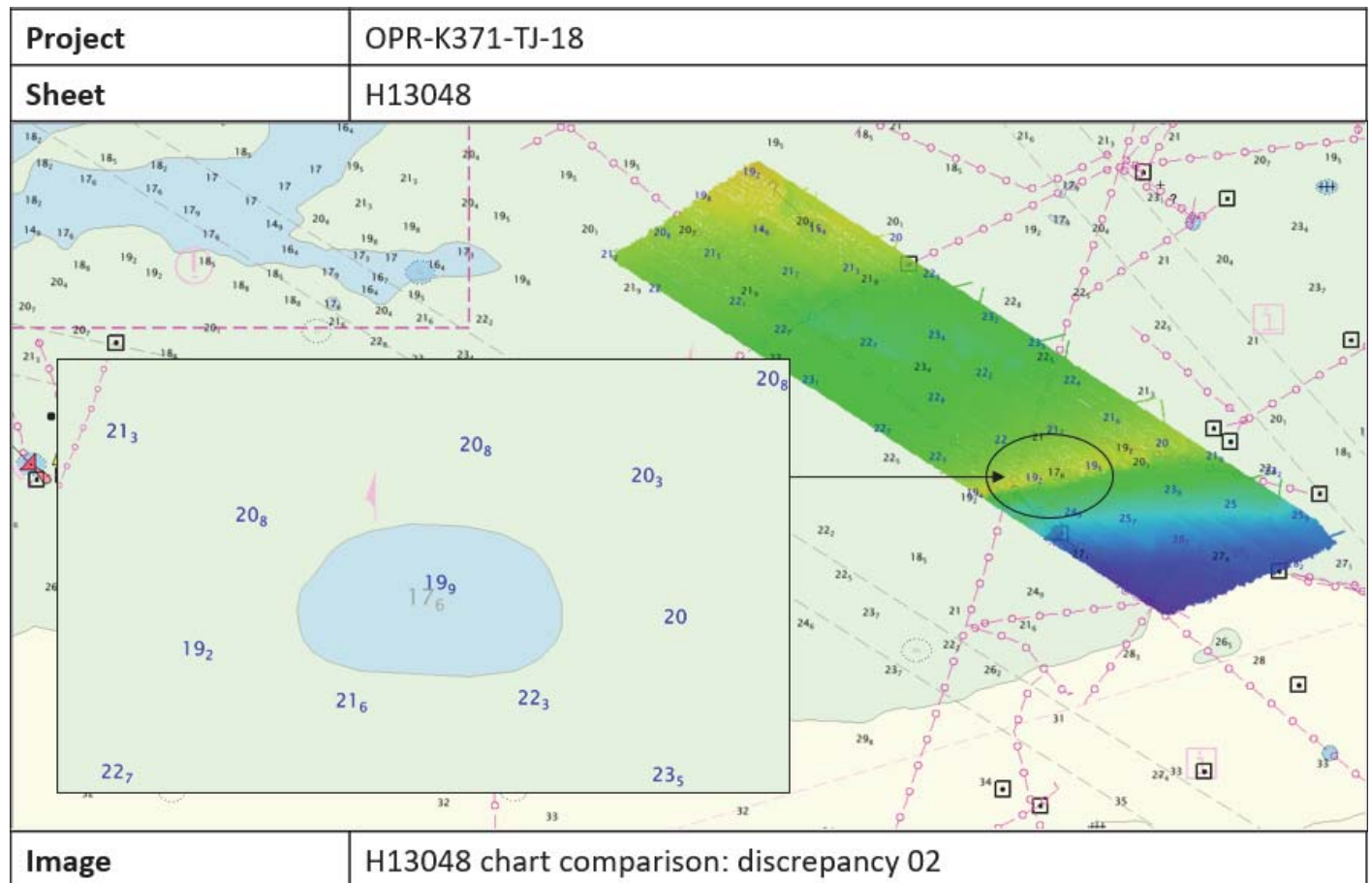


Figure 17: A charted 17.6 m shoal sounding was unobserved in the data.

D.1.2 Maritime Boundary Points

No Maritime Boundary Points were assigned for this survey.

D.1.3 Charted Features

21 features were assigned for investigation within the original survey limits for H13048; an additional 16 features were assigned for investigation within the extended area of H13048. All assigned features were addressed. Two assigned wrecks were designated as Position Approximate (PA) features; both of the PA wrecks were located (Figures 16 above and 18 below). An obstruction with an unknown depth was disproved in accordance with HSSD and assigned search radius criteria (Figure 19). Numerous wellhead obstructions were assigned and addressed in accordance with HSSD and assigned search radius criteria. Reference the Final Feature File for further information.

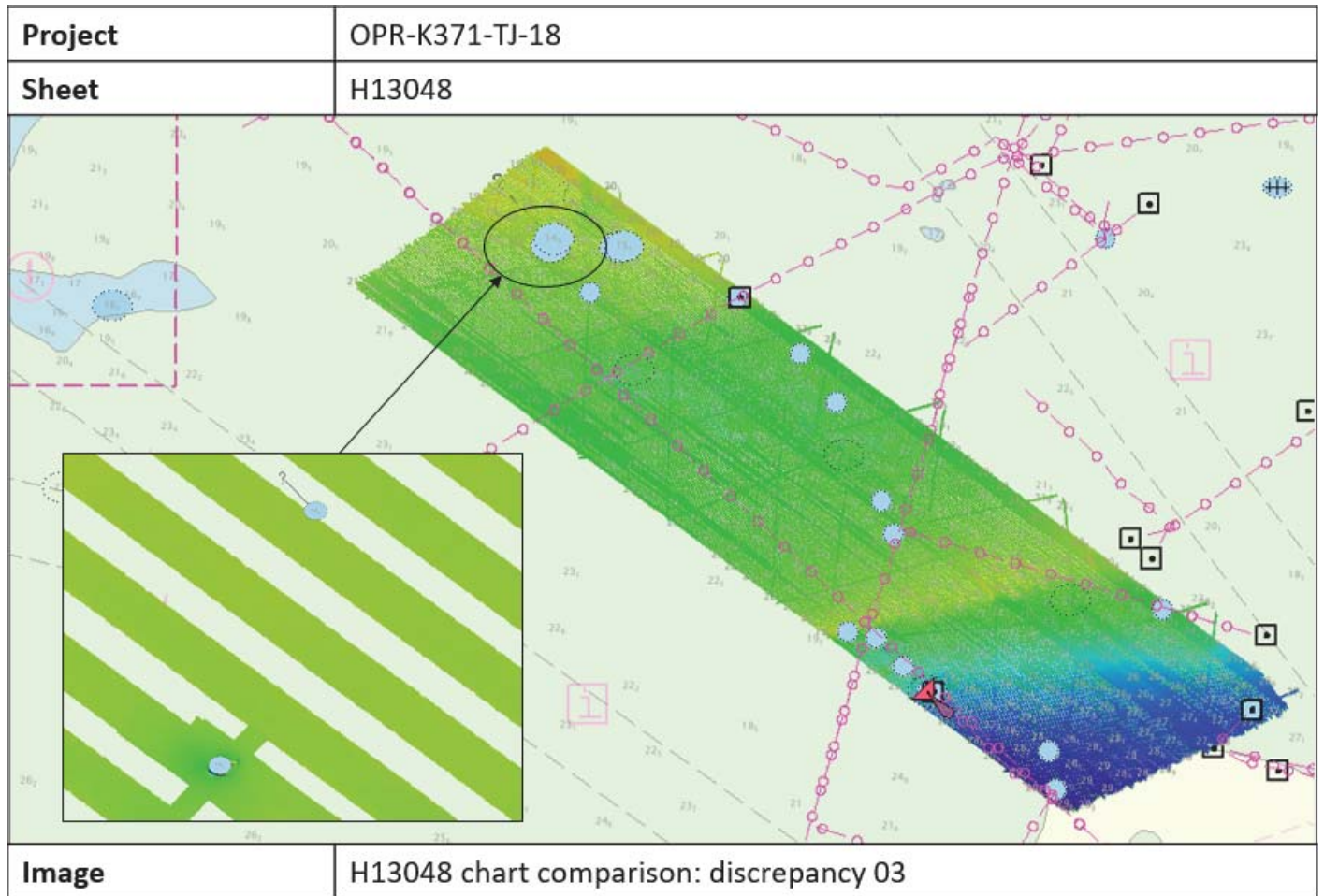


Figure 18: A Position Approximate obstruction was mischarted by 406m.

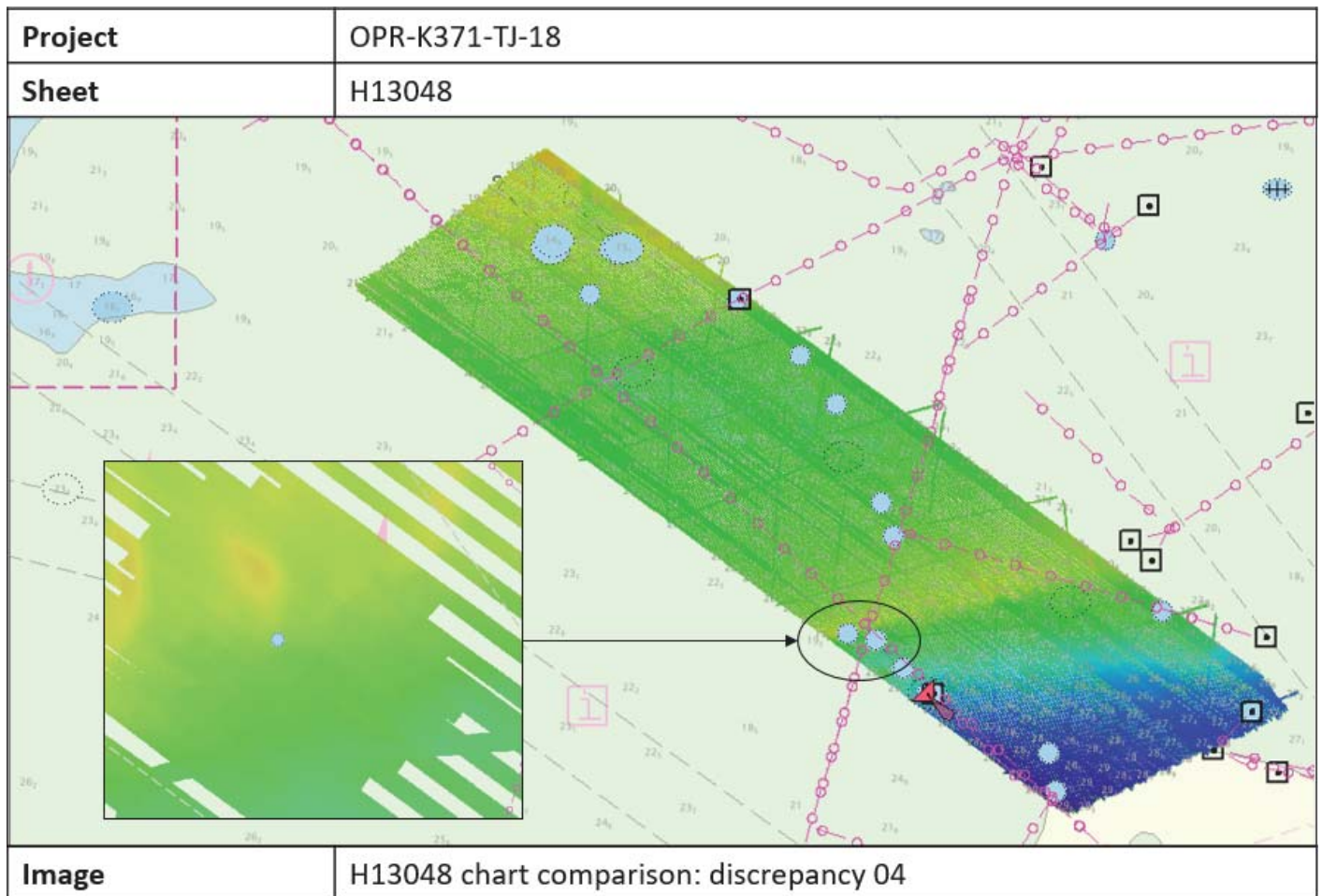


Figure 19: An obstruction with an unknown depth was disproved.

D.1.4 Uncharted Features

Three uncharted features were found within the survey area. One of the uncharted features was assigned for investigation as a wellhead obstruction (Figures 20, 21, and 22 below). Reference the Final Feature File for further information.

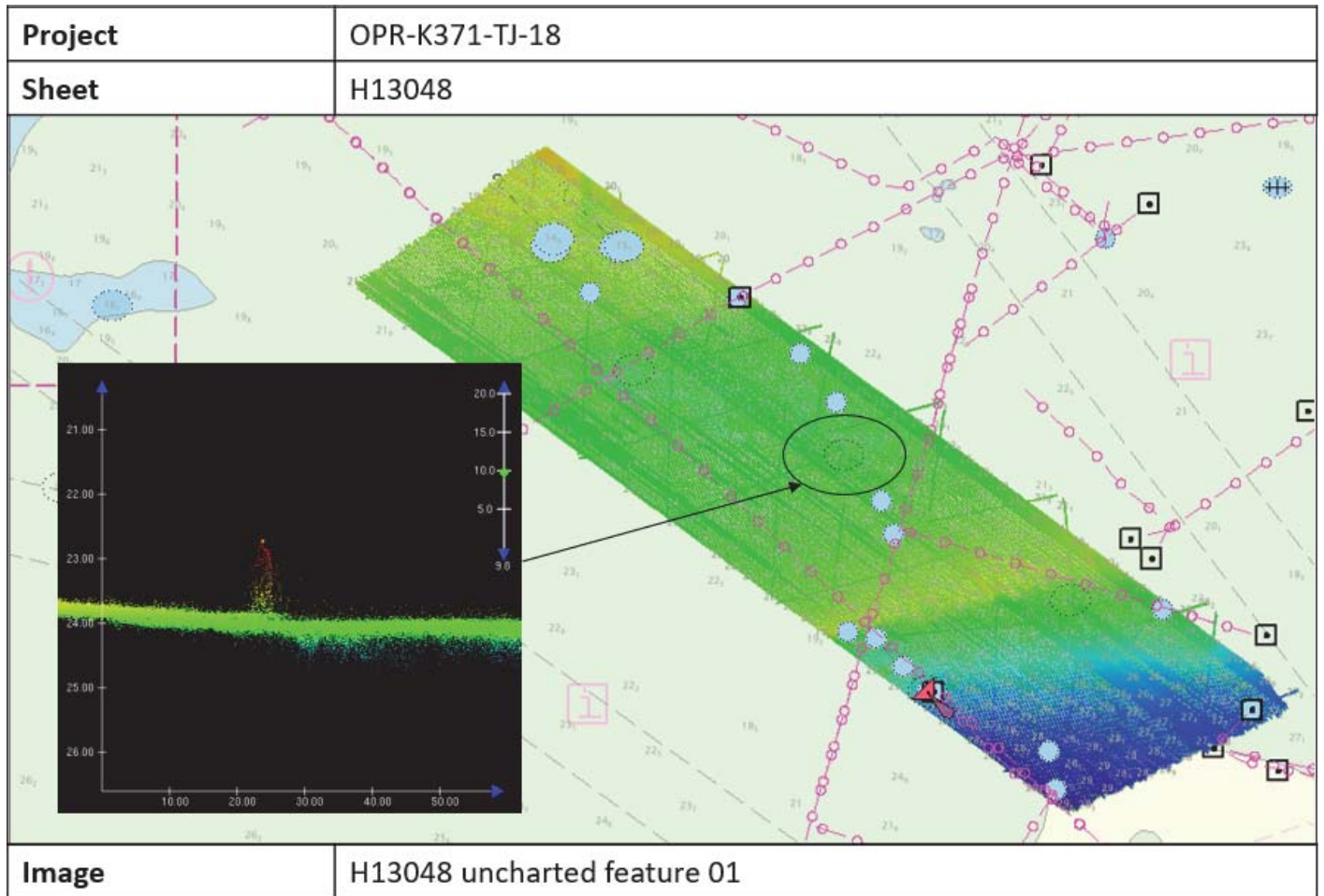


Figure 20: An uncharted obstruction with a height of approximately 1.3 m; least depth of 22.6 m; close to a charted 22.2 m sounding.

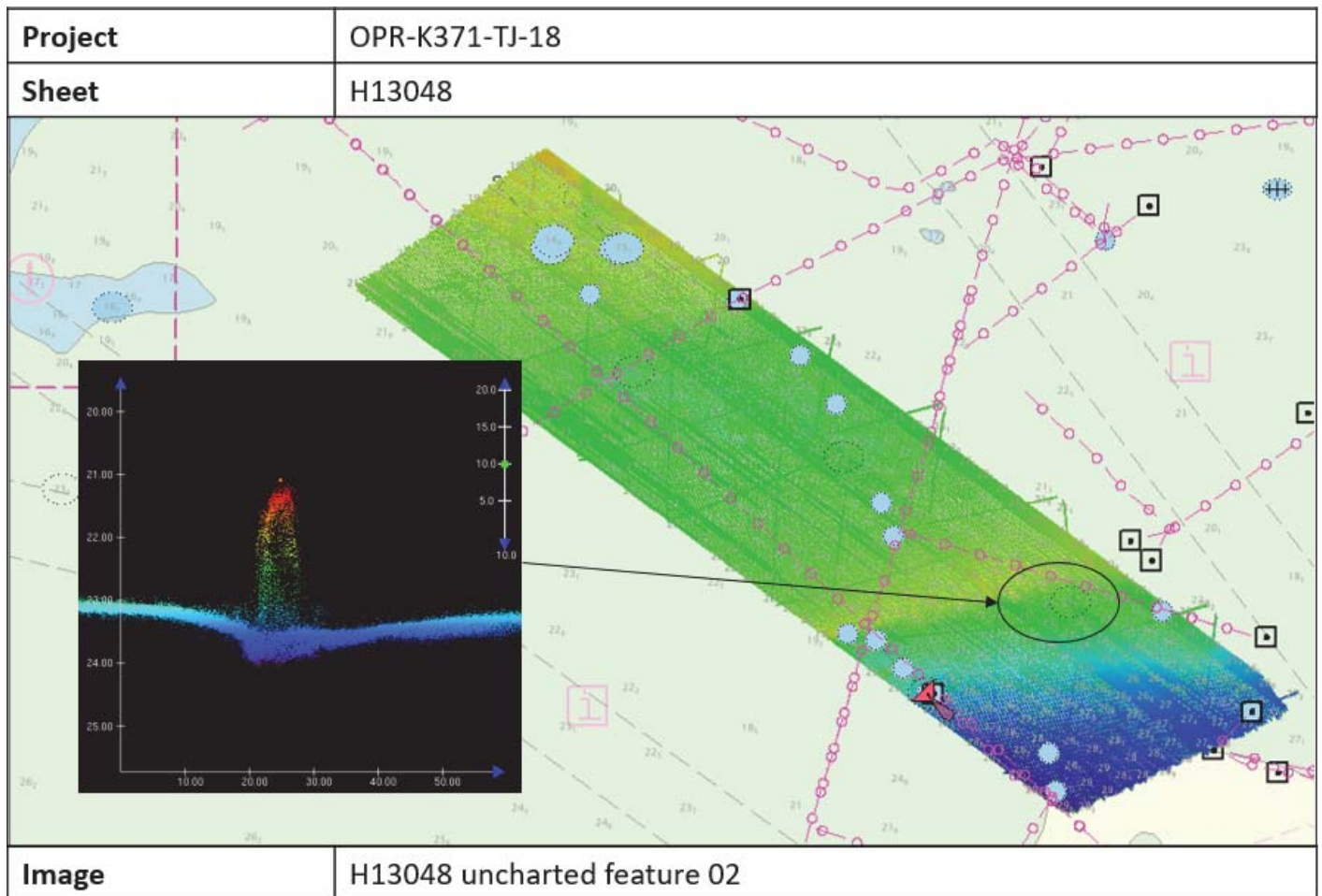


Figure 21: An uncharted obstruction with a height of approximately 2 m; least depth of 21.1 m; depth of surrounding waters approx. 23 m.

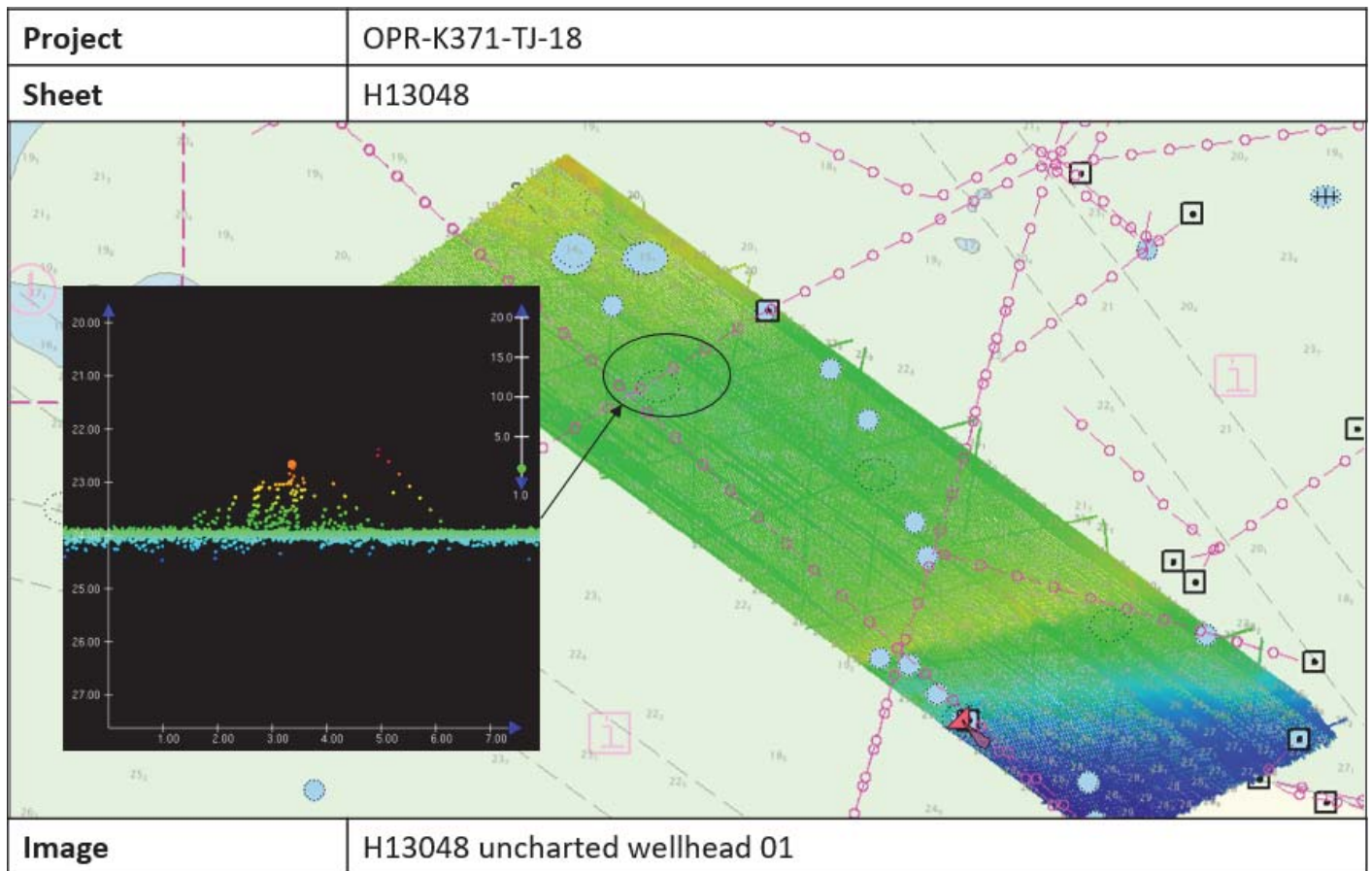


Figure 22: An uncharted obstruction with a height of approximately 1.4 m; least depth of 22.6 m; depth of surrounding waters approx. 23.9 m; wellhead obstruction assigned for investigation.

D.1.5 Shoal and Hazardous Features

One PA wreck and one uncharted pipeline were submitted as DTONs. Reference the H13048 Danger to Navigation Reports (included with this report as Supplemental Survey Records and Correspondence) and the Final Feature File for further information.

D.1.6 Channels

No channels exist for this survey. There are no designated anchorages, precautionary areas, safety fairways, traffic separation schemes, pilot boarding areas, or channel and range lines within the survey limits.

D.1.7 Bottom Samples

The number and distribution of bottom samples were adjusted from the original sample plan provided after an analysis of the SSS and MBES backscatter mosaics. Eleven bottom samples were collected by S-222 to

cover the distinct bottom types within the survey sheet limits (Figure 23). Reference the Final Feature File for further information.

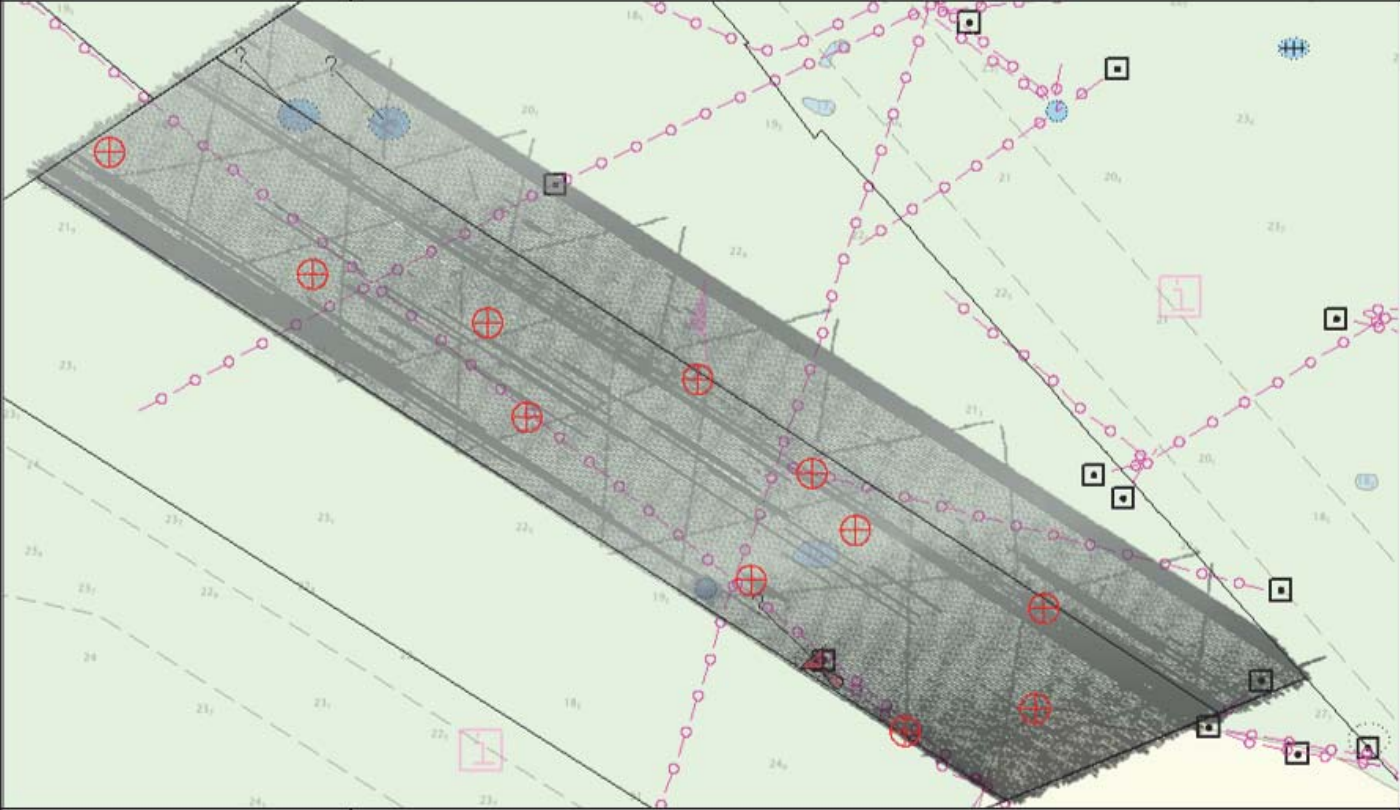
Project	OPR-K371-TJ-18
Sheet	H13048
Image	
Image	Bottom sample site distribution

Figure 23: Bottom sample site distribution

D.2 Additional Results

D.2.1 Shoreline

Shoreline was not assigned in the Hydrographic Survey Project Instructions or Statement of Work.

D.2.2 Prior Surveys

No prior survey comparisons exist for this survey.

D.2.3 Aids to Navigation

One charted buoy was unobserved and one uncharted buoy was observed. Reference the Final Feature File for further information.

D.2.4 Overhead Features

No overhead features exist for this survey.

D.2.5 Submarine Features

Numerous submarine pipelines exist within the survey area. One exposed pipeline was observed and reported to the Bureau of Safety and Environmental Enforcement (BSEE) in accordance with HSSD requirements (Figure 24). One uncharted pipeline was observed and submitted as a DTON; see (Figure 25). Reference the Final Feature File and Project Correspondence for further information.

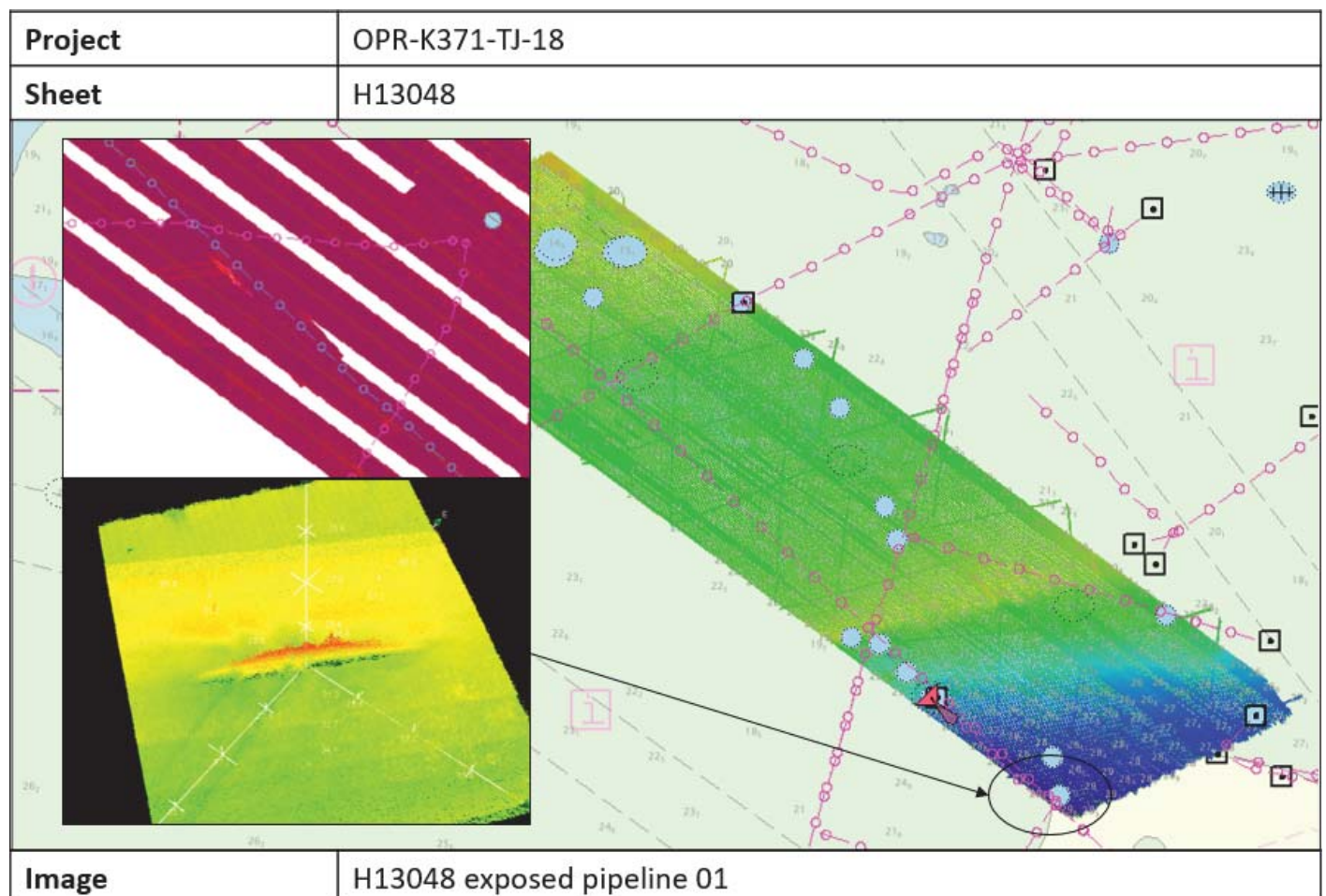


Figure 24: Exposed pipeline

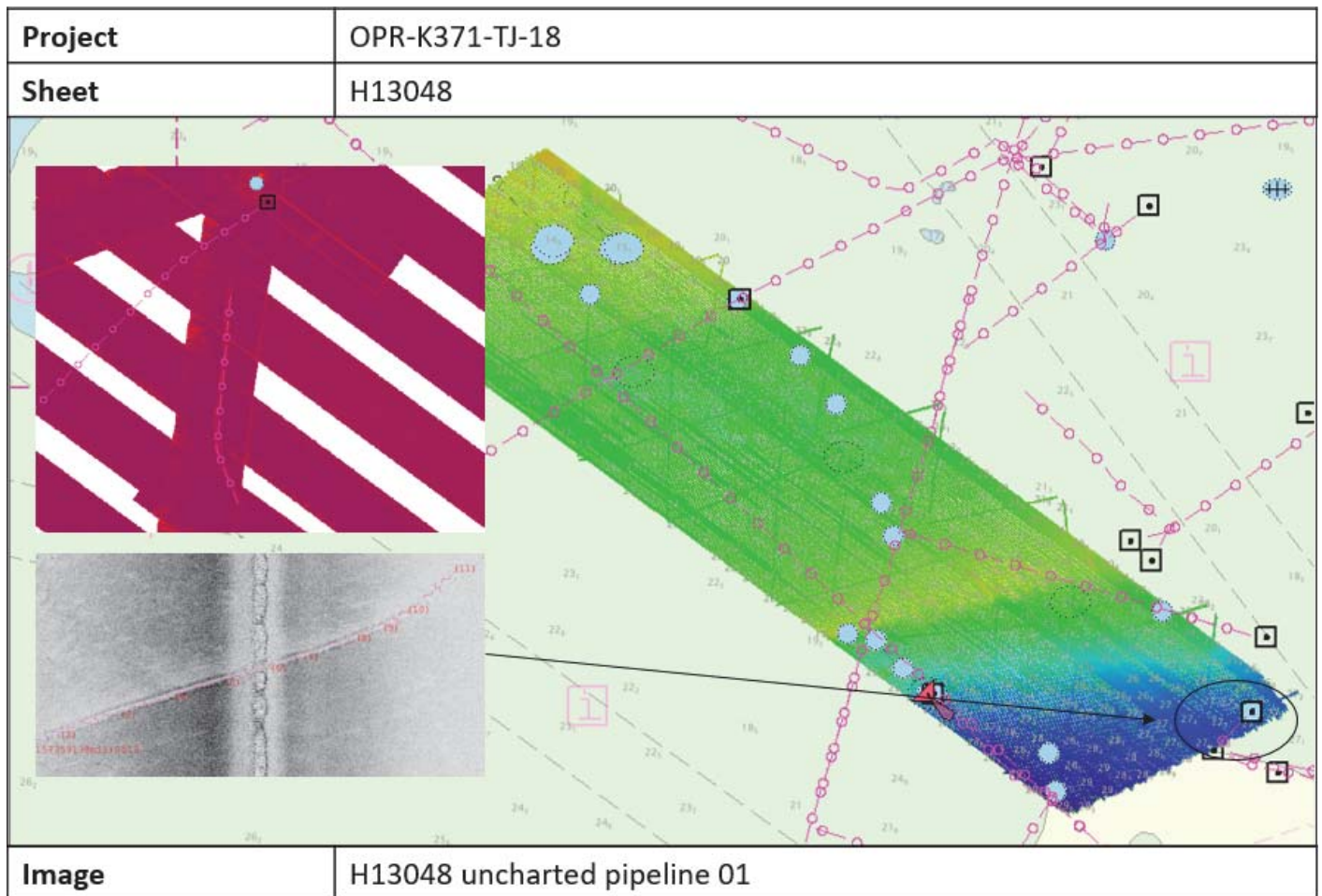


Figure 25: Uncharted pipeline

D.2.6 Platforms

A number of charted platforms and assigned wellheads were assigned and investigated. No platforms were observed within the survey limits and one of the assigned wellhead obstructions was observed in the data. Reference the Final Feature File for further information.

D.2.7 Ferry Routes and Terminals

No ferry routes or terminals exist for this survey.

D.2.8 Abnormal Seafloor and/or Environmental Conditions

No abnormal seafloor and/or environmental conditions exist for this survey.

D.2.9 Construction and Dredging

No present or planned construction or dredging are known to exist within the survey limits.

D.2.10 New Survey Recommendation

No new surveys or further investigations are recommended for this area.

D.2.11 Inset Recommendation



No new insets are recommended for this area.

E. Approval Sheet

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

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

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

Approver Name	Approver Title	Approval Date	Signature
Christiaan van Westendorp, CAPT/NOAA	Chief of Party	12/14/2018	 <small>VAN WESTENDORP.CHRISTIAAN.HENRY.1012828175 c=US, ou=U.S. Government, ou=DoD, ou=PKI, ou=NOAA, cn=VAN WESTENDORP.CHRISTIAAN.HENRY.1012828175 2018.12.14 13:50:48 -05'00'</small>
Charles J. Wisotzkey LT/NOAA	Field Operations Officer and Sheet Manager	12/14/2018	 <small>Digitally signed by WISOTZKEY.CHARLES.JUSTIN.130 0819660 Date: 2018.12.14 13:45:54 -05'00'</small>

F. Table of Acronyms

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

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

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



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

H13048 DTON report

2 messages

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov> Tue, Jul 17, 2018 at 7:34 PM
 To: Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>, Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, _NOS OCS HSD OPS <hsd.ops@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA CO Thomas Jefferson <co.thomas.jefferson@noaa.gov>, Clinton Marcus - NOAA Federal <clinton.r.marcus@noaa.gov>, OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>, Kevin Brown - NOAA Federal <kevin.w.brown@noaa.gov>


All,


Please see attached.


--

LT Charles J. Wisotzkey, NOAA
NOAA Ship Thomas Jefferson (S-222)

3 attachments

 **H13048_DTON.xml**
5K

 **H13048_DTON.zip**
421K

 **H13048_DTON.pdf**
236K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov> Wed, Jul 18, 2018 at 3:25 PM
 To: Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>
 Cc: Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>, Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, AHB Chief - NOAA Service Account <ahb.chief@noaa.gov>, _NOS OCS HSD OPS <hsd.ops@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA CO Thomas Jefferson <co.thomas.jefferson@noaa.gov>, Clinton Marcus - NOAA Federal <clinton.r.marcus@noaa.gov>, Kevin Brown - NOAA Federal <kevin.w.brown@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>, Castle E Parker <Castle.E.Parker@noaa.gov>, Charles Porter - NOAA Federal <charles.porter@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>, Ken Forster <Ken.Forster@noaa.gov>, Kevin Jett - NOAA Federal <kevin.jett@noaa.gov>, Matt Kroll <Matt.Kroll@noaa.gov>, Michael Gaeta <Michael.Gaeta@noaa.gov>, Nautical Data Branch <OCS.NDB@noaa.gov>, NSD Coast Pilot <coast.pilot@noaa.gov>, PHB Chief <PHB.Chief@noaa.gov>, Tara Wallace <Tara.Wallace@noaa.gov>, Chris Libeau <Chris.Libeau@noaa.gov>

DD-29702 has been registered by the Nautical Data Branch and directed to Products Branch G for processing.

The Dton reported is one wreck located between Galveston Bay Entrance and Sabine Bank Channels in the Gulf of Mexico.

The following charts are affected:
11330 kapp 195

11340 kapp 49

The following ENC is affected:
US3GC02M

References:
H13048
OPR-K371-TJ-18

This information was discovered and submitted by the crew of the NOAA Ship *Thomas Jefferson*.

Nautical Data Branch/Marine Chart Division/
Office of Coast Survey/National Ocean Service/
Contact: ocs.ndb@noaa.gov



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H13048_DTON.zip
421K



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

H13048 DTON 02

4 messages

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov> Tue, Dec 11, 2018 at 10:24 AM

To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>

Cc: Briana Welton <Briana.Hillstrom@noaa.gov>, ahb.dton@noaa.gov, "CO. Thomas Jefferson - NOAA Service Account" <co.thomas.jefferson@noaa.gov>, "OPS.Thomas Jefferson - NOAA Service Account" <ops.thomas.jefferson@noaa.gov>, Christina Belton - NOAA Affiliate <christina.belton@noaa.gov>, Corey Allen - NOAA Federal <corey.allen@noaa.gov>, Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov>

Good Morning,

Please attached DTON report for one uncharted pipeline observed on sheet H13048.


Project: OPR-K371-TJ-18


Sheet: H13048


--

LT Charles J. Wisotzkey, NOAA
NOAA Ship Thomas Jefferson (S-222)

3 attachments

 **H13048_DTON_02.000**
3K

 **H13048_DTON_02.pdf**
1631K

 **H13048_DTON_02.zip**
2911K

CO Thomas Jefferson <co.thomas.jefferson@noaa.gov> Tue, Dec 11, 2018 at 12:19 PM

To: Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Charles,

For future DtoN submissions, I want the opportunity for review prior to submission to NDB. In this case, I'd have wanted a bit more detail in the remarks. No correction necessary at this point as it's already been submitted.

R/

CO

CAPT Chris van Westendorp, NOAA

Commanding Officer, NOAA Ship *Thomas Jefferson* (S-222)

co.thomas.jefferson@noaa.gov

Ship Cell1: (757)647-0187 Cell2: (757)418-0629

VolP: (541)867-8927/8928 Iridium: (808)434-2706

In-Port Norfolk: (757)441-6322/6323

[Quoted text hidden]

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>

Wed, Dec 12, 2018 at 3:54 PM

To: Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Cc: Briana Hillstrom - NOAA Federal <Briana.Hillstrom@noaa.gov>, _NOS OCS HSD AHB Danger to Navigation <ahb.dton@noaa.gov>, _NMAO MOA CO Thomas Jefferson <CO.Thomas.Jefferson@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <OPS.Thomas.Jefferson@noaa.gov>, Christina Belton - NOAA Federal <christina.belton@noaa.gov>, Corey Allen <Corey.Allen@noaa.gov>, Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov>, _NOS OCS PBA Branch <ocs.pba@noaa.gov>, _NOS OCS PBB Branch <ocs.pbb@noaa.gov>, _NOS OCS PBC Branch <ocs.pbc@noaa.gov>, _NOS OCS PBD Branch <ocs.pbd@noaa.gov>, _NOS OCS PBE Branch <ocs.pbe@noaa.gov>, _NOS OCS PBG Branch <ocs.pbg@noaa.gov>, Castle E Parker <Castle.E.Parker@noaa.gov>, Charles Porter - NOAA Federal <charles.porter@noaa.gov>, Chris Libeau <Chris.Libeau@noaa.gov>, James M Crocker <James.M.Crocker@noaa.gov>, Ken Forster <Ken.Forster@noaa.gov>, Kevin Jett - NOAA Federal <kevin.jett@noaa.gov>, Matt Kroll <Matt.Kroll@noaa.gov>, Michael Gaeta <Michael.Gaeta@noaa.gov>, NSD Coast Pilot <coast.pilot@noaa.gov>, PHB Chief <PHB.Chief@noaa.gov>, Tara Wallace <Tara.Wallace@noaa.gov>

DD-30211 has been registered by the Nautical Data Branch and directed to Products Branch G for processing.

The DtoN reported is one uncharted / exposed pipeline located between Galveston Bay Entrance and Sabine Bank Channels in the Gulf of Mexico.

The following charts have been assigned to the record:

11330 kapp 195

11340 kapp 49

The following ENC has been assigned to the record:

US3GC02M

References:

H13048

OPR-K371-TJ-18

This information was discovered and submitted by the crew of the NOAA Ship *Thomas Jefferson*.

Nautical Data Branch/[Marine Chart Division](#)/
Office of Coast Survey/[National Ocean Service](#)/


Contact: ocs.ndb@noaa.gov




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3 attachments

 **H13048_DTON_02.000**
3K

 **H13048_DTON_02.pdf**
1631K

 **H13048_DTON_02.zip**
2911K

OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>

Wed, Dec 12, 2018 at 4:21 PM

To: Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Good afternoon LT Wisotzkey,

NDB will attempt to obtain information to chart the full extent of this pipeline, but as it is located in the area under BSEE's jurisdiction, I'm wondering if you alerted BSEE about the fact that at least a portion of it is unburied, as per HSSD section 1.7?

Thanks,
Diane

Nautical Data Branch/[Marine Chart Division](#)/
Office of Coast Survey/[National Ocean Service](#)/
Contact: ocs.ndb@noaa.gov



[Quoted text hidden]



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

H13048 Survey Outline

1 message

Anthony Klemm - NOAA Federal <anthony.r.klemm@noaa.gov>

Thu, Aug 16, 2018 at 10:20 AM

To: _NOS OCS Survey Outlines <survey.outlines@noaa.gov>

Cc: Douglas Wood <douglas.wood@noaa.gov>, _OMAO MOA OPS Thomas Jefferson

<ops.thomas.jefferson@noaa.gov>, Charles Wisotzkey <charles.j.wisotzkey@noaa.gov>, Kevin Brown - NOAA Federal <kevin.w.brown@noaa.gov>

Good morning,

Attached is the H13048 survey outline in .000 S57 format. Please let us know if you have any questions.

Best regards,
Anthony

LT Anthony Klemm, NOAA
Field Operations Officer
NOAA Ship *Thomas Jefferson*
[439 W York Street](#)
[Norfolk, VA 23510](#)
[757-647-0187](#)

Learn about NOAA nautical charts - www.nauticalcharts.noaa.gov

 **H13048_SurveyOutline.000**
2235K



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

OPR-K371-TJ-17_WGS84-MLLW_Geoid12B SEP

2 messages

Jack Riley - NOAA Federal <jack.riley@noaa.gov>

Mon, Apr 9, 2018 at 1:08 PM

To: _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

Cc: _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, Douglas Wood - NOAA Affiliate <douglas.wood@noaa.gov>

Hello Chief Stone,

See attached for the WGS84 version of the K371 MLLW SEP (NAD83 version was delivered earlier via OPS/Doug).

Kind regards,

Jack

--

Jack L. Riley
NOAA Coast Survey
SSMC3 N/CS11 Rm 6601
240-847-8271



OPR-K371-TJ-17_WGS84-MLLW_Geoid12B.zip

1990K

Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>

Mon, Apr 9, 2018 at 6:37 PM

To: "OPS.Thomas Jefferson - NOAA Service Account" <ops.thomas.jefferson@noaa.gov>, "ChiefST.Thomas Jefferson - NOAA Service Account" <chiefst.thomas.jefferson@noaa.gov>

Hi *TJ* Ops,

thank you for having me last week and I hope that things went well today.

Attached is an updated SEP model (WGS84 - MLLW) from Jack for approaches to Houston.

Let me know if this looks good.

Thank you.

Doug

[Quoted text hidden]

--

Douglas Wood
Physical Scientist
Hydrographic Surveys Division
Office of Coast Survey
National Oceanic and Atmospheric Administration
1315 East West Highway
Silver Spring, MD 20910
240-533-0042



OPR-K371-TJ-17_WGS84-MLLW_Geoid12B.zip

1990K



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Exposed charted pipelines found in NOAA Survey H13048 in Western Gulf of Mexico

1 message

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Tue, Dec 11, 2018 at 8:27 AM

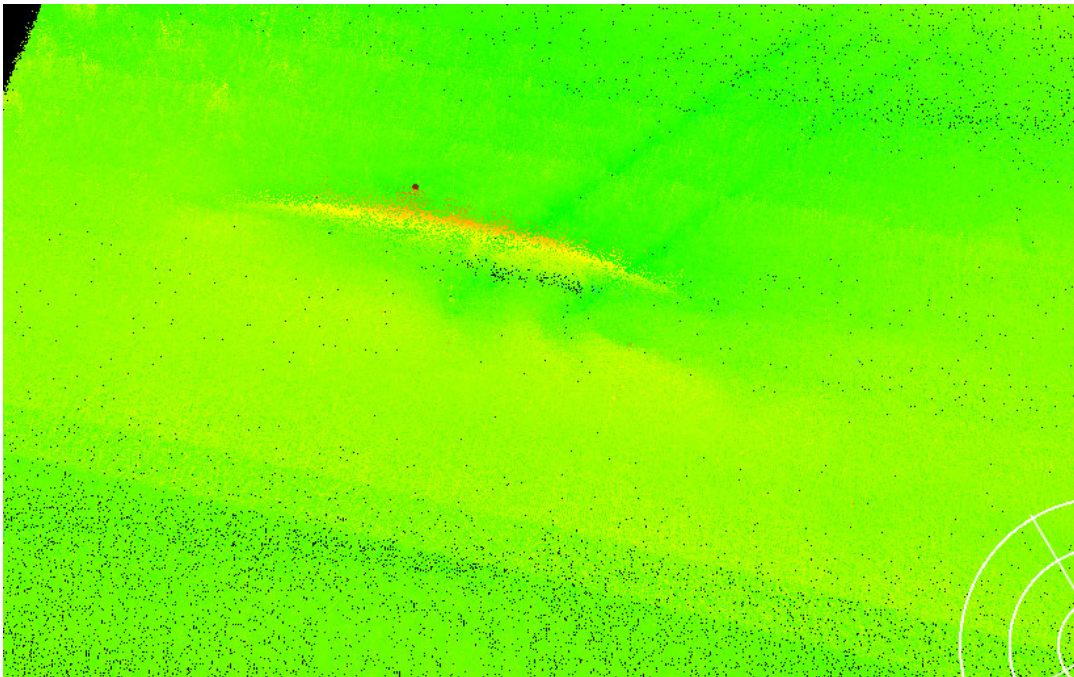
To: pipelines@bsee.gov

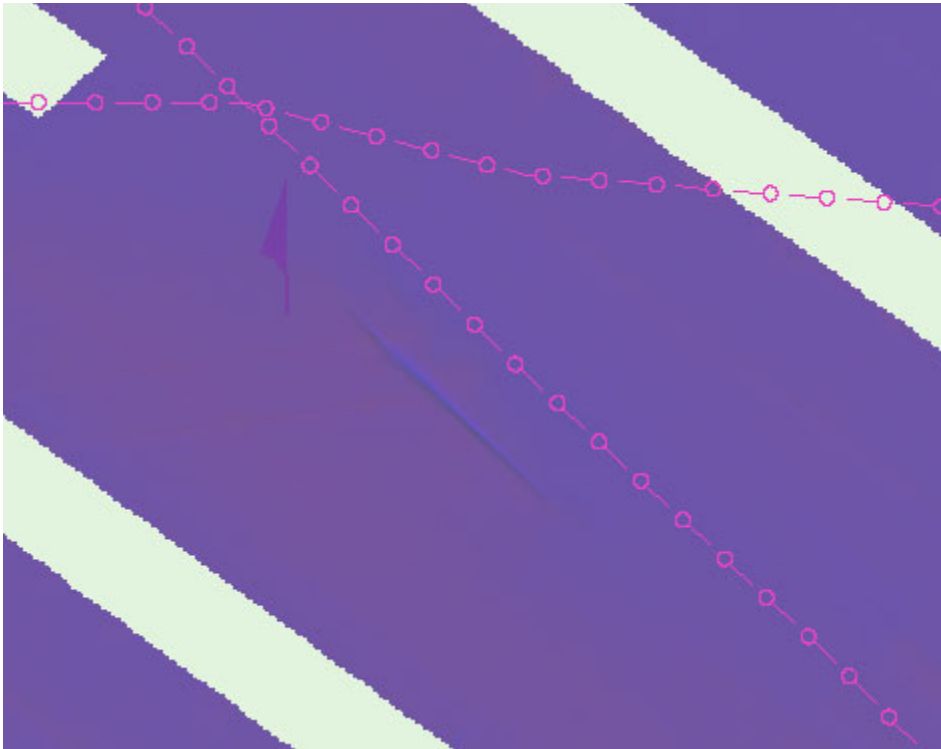
Cc: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, "OPS.Thomas Jefferson - NOAA Service Account" <ops.thomas.jefferson@noaa.gov>, Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov>

Good Morning,

NOAA Hydrographic Survey H13048 by the NOAA Ship *Thomas Jefferson* indicates there is one area of exposed pipeline at the following location(s):

- 28.7467 N, 093.53335 W; found 2018-07-05 at ~2322 UTC; positioned 25 m from charted pipeline (see attached images for reference)





VR,

--

LT Charles J. Wisotzkey, NOAA
NOAA Ship Thomas Jefferson (S-222)



Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov>

Coast pilot review

3 messages

Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov> Thu, Aug 16, 2018 at 5:44 PM
To: OCS NDB - NOAA Service Account <ocs.ndb@noaa.gov>, _NOS OCS NSD Coast Pilot <coast.pilot@noaa.gov>
Cc: _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, Anthony Klemm - NOAA Federal <anthony.r.klemm@noaa.gov>, Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>, Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>

To whom it may concern,


Attached is the Coast Pilot review for project OPR-K371-TJ-18.

V/r,

Josh

--

HSST Joshua Hiteshew, NOAA
NOAA ship Thomas Jefferson
439 W York St, Norfolk, VA 23510

 **OPR-K371-TJ-18_Coast_pilot review.pdf**
2099K

Richard Powell - NOAA Federal <richard.powell@noaa.gov> Thu, Aug 16, 2018 at 6:17 PM
To: Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov>

Josh,

Thanks for the report and noting that you were not able take any current velocity readings.

Sincerely,
Richard

Richard Hodge Powell
Cartographer / Marine Information
Nautical Publications Branch
240-533-0060

National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey

[Quoted text hidden]

Douglas Wood - NOAA Federal <douglas.wood@noaa.gov> Mon, Aug 20, 2018 at 9:20 PM
To: Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov>

Thanks Josh!

On Thu, Aug 16, 2018 at 1:44 PM, Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov> wrote:

[Quoted text hidden]

--

Douglas Wood
Physical Scientist
Hydrographic Surveys Division
Office of Coast Survey
National Oceanic and Atmospheric Administration
[1315 East West Highway](#)
[Silver Spring, MD 20910](#)
240-533-0042



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Environmental compliance letter for Approaches to Galveston

1 message

Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>

Tue, Mar 6, 2018 at 8:30 AM

To: "OPS.Thomas Jefferson - NOAA Service Account" <ops.thomas.jefferson@noaa.gov>, "ChiefST.Thomas Jefferson - NOAA Service Account" <chiefst.thomas.jefferson@noaa.gov>, CO Thomas Jefferson <co.thomas.jefferson@noaa.gov>

Hi TJ,

I just received the signed environmental review for OPR-K371.
Please take some time to review it.

Thank you

Doug

--

Douglas Wood
Physical Scientist
Hydrographic Surveys Division
Office of Coast Survey
National Oceanic and Atmospheric Administration
1315 East West Highway
Silver Spring, MD 20910
[240-533-0042](tel:240-533-0042)

 **Env Review - Houston-Galveston 2018.pdf**
3048K



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Expansion of H13045 or H13048 to fill extra work days

12 messages

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov> Sun, Jul 15, 2018 at 3:01 PM
To: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>
Cc: _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

Doug, Martha,

Hello from the TJ.

It looks like we'll finish H13047, H13044, H13048 (slightly expanded), and H13045 (expanded into H13046, email forthcoming) before we depart the Houston area for the season with a solid 4-5 full days of onsite work time to spare (assuming anticipated work schedule and no major unforeseen work-limiting events).

We would like to add to an open survey to fill the time. The two options are: (1) expand H13048 into H13049; or (2) expand H13045 into H13046.

H13046 will require launch work over the dump sites, so we may be limited by weather there.

I'd rather not open a survey, as we are pushing to have all surveys off before we begin work in Puerto Rico and staffing is tight.

Please let me know what you think when you get a chance.

- Charles

--

LT Charles J. Wisotzkey, NOAA
NOAA Ship Thomas Jefferson (S-222)

Martha Herzog - NOAA Federal <martha.herzog@noaa.gov> Mon, Jul 16, 2018 at 9:13 AM
To: Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>
Cc: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

I think we can work with one of those options. Do you mind providing a quick graphic of what you have covered so far? That may make a decision of where to go a little easier.

Thanks,
Martha

[Quoted text hidden]

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov> Mon, Jul 16, 2018 at 9:21 AM
To: Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>
Cc: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

To: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>
Cc: Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

Well, we've got some pictures of some dirty platforms sticking out of the hot sticky GOM.

Martha,

Attached is a screen grab of what we have accomplished as of the 14th. We should complete H13045 mainscheme on the 22nd. The blue extents are the expanded sheet limits, so we could keep the ship driving in long-straight lines.

The .tif is here:

<https://drive.google.com/open?id=1tTpEpbTzKMONvKKsIOfpSAHEo2RcEoq8>

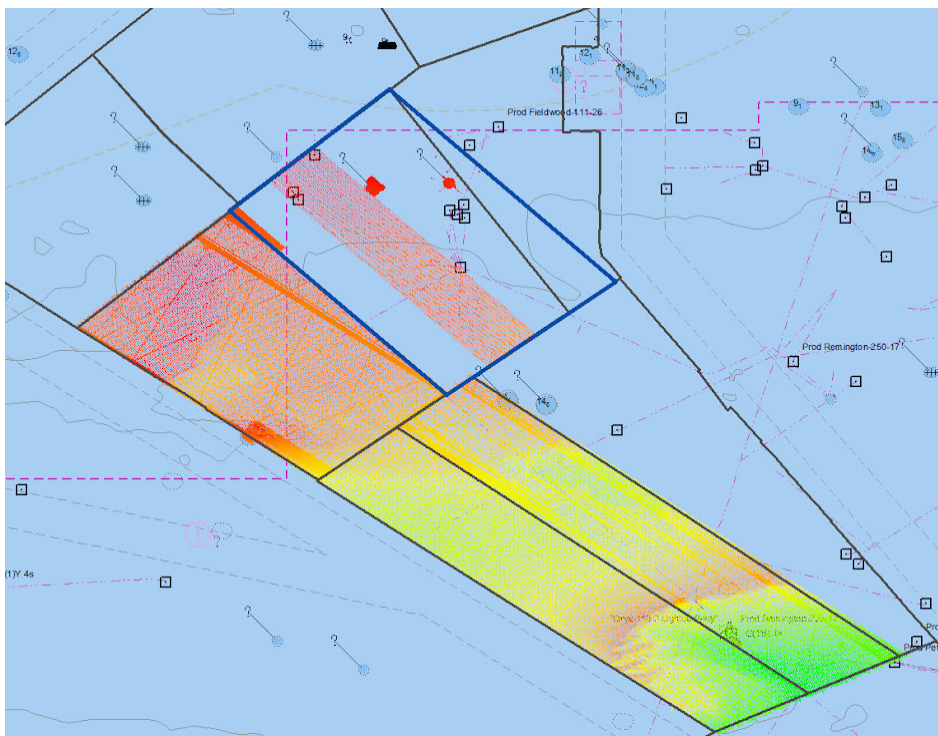
- Charles

[Quoted text hidden]

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Mon, Jul 16, 2018 at 2:57 PM

To: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>
Cc: Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>



[Quoted text hidden]

Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>

Mon, Jul 16, 2018 at 3:47 PM

To: Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>
Cc: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

I get the sense it is a little warm and humid and brown out there.

Your proposal for expanding H13045 looks reasonable. I assume the TJ's (and hopefully AHB's) network doesn't

have too much issue handling a data set of that size. I believe Doug returns from leave later this week and should be able to give you something more official for your records for the sheet expansion.

Martha

[Quoted text hidden]

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov> Mon, Jul 16, 2018 at 4:12 PM
To: Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>
Cc: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

Martha,

Thanks.

To clarify, we can be done with the blue polygon (the expanded H13045) by around the end of the leg. We'd like to expand H13045 even further or H13048 further by about four days of work.

[Quoted text hidden]

Martha Herzog - NOAA Federal <martha.herzog@noaa.gov> Mon, Jul 16, 2018 at 4:56 PM
To: Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>
Cc: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

My apologies for the misunderstanding of the expansion; I thought the blue poly was the total extent of the expansion.

This is my current understanding of the request:

H13045 will be finished on the ~22nd. Expand H13045 into H13046 for x days until ship work runs out (blue poly). Then expand H13048 for x days moving into H13049 until the end of the leg.

Or is the blue poly (possibly a previously agreed expansion) the full area completed on the 22nd?

[Quoted text hidden]

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov> Mon, Jul 16, 2018 at 5:10 PM
To: Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>
Cc: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

Sorry, this might clarify:

- We are on schedule to complete mains-scheme (minus bottom samples and feature investigations) on about the 22nd for the blue polygon (H13045 already expanded)
- We can probably finish up the blue polygon before we depart for our next inport or about a day after returning to the survey area (probably the later)
- Our inport is 26-30 July in Pascagoula, MS
- After returning to the working grounds we should have about five full working days left before we leave the project for the area
- We need to know what to focus on with the extra ~four days

- Our preference is to add to an existing open sheet to avoid the overhead associated with a small stand-alone survey

[Quoted text hidden]

Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>

Mon, Jul 16, 2018 at 5:19 PM

To: Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Cc: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>

After completing the H13045 expanded area, go ahead and then H13048 into H13049. What is your estimate of how far you'll get into H13049?

[Quoted text hidden]

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Mon, Jul 16, 2018 at 5:42 PM

To: _OMAO MOA CO Thomas Jefferson <co.thomas.jefferson@noaa.gov>

Sir,

The word from OPS: After completing the H13045 expanded area, go ahead and then H13048 into H13049.

[Quoted text hidden]



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Waiver request for HTD issued after commencement of data acquisition and processing

1 message

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov> Sun, Aug 5, 2018 at 8:09 PM
To: Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>
Cc: _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>

Doug,

Please see attached.

--

LT Charles J. Wisotzkey, NOAA
NOAA Ship Thomas Jefferson (S-222)

OPR-K371-TJ-18 HTD 2018-5 waiver request.pdf
163K



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 Office of Marine and Aviation Operations,
 Marine Operations Center – Atlantic, NOAA Ship *Thomas Jefferson*
 Norfolk, Virginia 23510

August 3, 2018

MEMORANDUM FOR: Doug Wood
 Project Manager, OPR-K371-TJ-18
 Hydrographic Surveys Division Operations Branch

FROM: Commander Chris van Westendorp, NOAA 
 Commanding Officer, NOAA Ship *Thomas Jefferson*

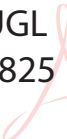
VAN
 WESTENDORP.CHRISTIAAN.HENRY.1012828175
 c=US, o=U.S. Government, ou=DoD, ou=PKI,
 ou=NOAA, cn=VAN
 WESTENDORP.CHRISTIAAN.HENRY.1012828175
 2018.08.03 09:43:38 -05'00'

SUBJECT: OPR-K371-TJ-18 waiver request re: HTD 2018-5

Thomas Jefferson requests a waiver of Hydrographic Technical Directive 2018-5: Feature Image File Naming Convention for all surveys in project OPR-K371-TJ-18.

Justification

Data acquisition and feature management, including all image naming, commenced on all project surveys at the time of issuance of the HTD.

Decision WOOD.DOUGL  Digitally signed by
 AS.ALAN.12825 WOOD.DOUGLAS.ALAN.12
 80698 82580698
 Date: 2018.08.10 09:04:15
 -04'00'

Waiver is: Granted Denied

cc: Chief, HSD OPS
 OPS, *Thomas Jefferson*
 HCST, *Thomas Jefferson*





James Miller - NOAA Federal <james.j.miller@noaa.gov>

Thomas Jefferson Marine Mammal Reports 30 Apr - 17 May 2018

Jacquelyn Putnam - NOAA Federal <jacquelyn.putnam@noaa.gov>

Thu, May 17, 2018 at 12:16 PM

To: _NOS OCS ECC <ocs.ecc@noaa.gov>, Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, _NMFS AFSC NMML POP INFORMATION <pop.information@noaa.gov>

Cc: Anthony Klemm - NOAA Federal <anthony.r.klemm@noaa.gov>, James Miller - NOAA Federal <james.j.miller@noaa.gov>

Good Afternoon,

Attached are marine mammal sighting reports from NOAAS *Thomas Jefferson*. These reports cover sightings during our first leg of Approaches to Galveston (30 April - 17 May).

Thank you in advance,

ENS Jacquelyn Putnam, NOAA

Junior Officer, NOAA Ship *Thomas Jefferson*










Ship Land Line: 757-441-6322

Ship Cell: 757-647-0187

Ship Iridium: 808-434-2706

Jacquelyn.Putnam@noaa.gov

9 attachments

-  Thomas Jefferson_20180430204001_MARINE_MAMMAL.txt
1K
-  Thomas Jefferson_20180501195840_MARINE_MAMMAL.txt
1K
-  Thomas Jefferson_20180503215717_MARINE_MAMMAL.txt
2K
-  Thomas Jefferson_20180507143116_MARINE_MAMMAL.txt
1K
-  Thomas Jefferson_20180508201956_MARINE_MAMMAL.txt
2K
-  Thomas Jefferson_20180512190725_MARINE_MAMMAL.txt
1K
-  Thomas Jefferson_20180512190735_MARINE_MAMMAL.txt
1K
-  Thomas Jefferson_20180514164218_MARINE_MAMMAL.txt
2K
-  Thomas Jefferson_20180514164231_MARINE_MAMMAL.txt
2K



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Office of Marine and Aviation Operations,
Marine Operation Center-Atlantic, NOAA Ship *Thomas Jefferson*
Norfolk, Virginia 23510

April 16, 2018

MEMORANDUM FOR: Jay Nunenkamp
Environmental Compliance Coordinator, NOAA Office of Coast
Survey

FROM: ENS Jacquelyn Putnam, NOAA
Junior Officer, NOAA Ship *Thomas Jefferson*

SUBJECT: Recipients of Marine Species Awareness Training

The following personnel of NOAA Ship *Thomas Jefferson* completed the required Marine Species Awareness Training (MSAT) on April 4, 2018:

- LCDR Meghan McGovern
- LT Anthony Klemm
- LT Charles Wisotzkey
- ENS Dale Gump
- ENS Sydney Catoire
- ENS Garrison Grant
- ENS Jacquelyn Putnam
- ENS Taylor Krabiell
- JUE Sharon Gilliam
- EU Andy Medina
- WP Michael Wilson
- ET Thomas Loftin
- ET Richard Conway
- CHST Allison Stone
- HST Kim Glomb
- HST Joshua Hiteshew
- HST Tracey McMillan
- HAST Kevin Brown
- CB Bernard Pouser
- BGL Robert Bayliss
- SS Francine Grains
- SS James Brzostek



- AB Patrick Osborn
- AB Tom Bascom
- AB Stephen Lovett
- GVA Joshua Thompson
- CC Ace Burke
- 2C Patrick Fennel
- 2C Nester Poblete



Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

OPR-K37-TJ-18 NCEI Sound Speed Data

1 message

Charles Wisotzkey - NOAA Federal <charles.j.wisotzkey@noaa.gov>

Wed, Aug 8, 2018 at 10:56 PM

To: NODC.submissions@noaa.gov


Cc: _OMAO MOA OPS Thomas Jefferson <ops.thomas.jefferson@noaa.gov>, _OMAO MOA ChiefST Thomas Jefferson <chiefst.thomas.jefferson@noaa.gov>, Douglas Wood - NOAA Federal <douglas.wood@noaa.gov>, Martha Herzog - NOAA Federal <martha.herzog@noaa.gov>, Jacquelyn Putnam - NOAA Federal <jacquelyn.putnam@noaa.gov>, Joshua Hiteshew - NOAA Federal <joshua.hiteshew@noaa.gov>, Sydney Catoire - NOAA Federal <sydney.catoire@noaa.gov>, Kevin Brown - NOAA Federal <kevin.w.brown@noaa.gov>, James Miller - NOAA Federal <james.j.miller@noaa.gov>, Julia Wallace - NOAA Affiliate <julia.wallace@noaa.gov>

All,

Please attached zip file containing sound speed data from project OPR-K37-TJ-18. The zip file contains all casts for sheets H13044, H13045, H13047, and H13048.

--

LT Charles J. Wisotzkey, NOAA
NOAA Ship Thomas Jefferson (S-222)


 **OPR-K37-TJ-18.zip**
4084K



UNITED STATES DEPARTMENT OF COMMERCE
 National Oceanic and Atmospheric Administration
 Office of Marine and Aviation Operations
 NOAA Ship *Thomas Jefferson* (S222)
 439 West York St, Norfolk, VA 23510

19 June 2018

MEMORANDUM FOR: Doug Wood
 Project Manager, OPR-K371-TJ-18
 Hydrographic Surveys Division Operations Branch

FROM: Commander Chris van Westendorp, NOAA 
 Commanding Officer, NOAA Ship *Thomas Jefferson*

SUBJECT: Waiver request – Submission of single resolution depth surface

VAN
 WESTENDORP.CHRISTIAAN.HENRY.1012828175
 c=US, o=U.S. Government, ou=DoD, ou=PKI,
 ou=NOAA, cn=VAN
 WESTENDORP.CHRISTIAAN.HENRY.1012828175
 2018.06.19 19:46:30 -0500

Thomas Jefferson requests a waiver of the HSSD 2018 Section 5.2.2.3: Complete coverage multibeam surface grid-resolution thresholds requirement. *Thomas Jefferson* requests approval to submit a single 1m resolution CUBE multibeam surface for surveys in Project OPR-K371-TJ-18, in spite of depths ranging both shallower and deeper than 20m.

Justification

The grid nodes with a depth greater than 20m in sheet H13047 have an average sounding density of 84 soundings per node, with 99.5% having greater than or equal to 5 soundings per node, which is sufficient to meet minimum required sounding density requirements at the 1m grid size.

Decision

PRIDGEN.KATHRYN. Digitally signed by
 GRABOWSKI.13925 PRIDGEN.KATHRYN.GRABOWSKI.1
 392550549
 50549 Date: 2018.06.20 09:06:12 -04'00'

Waiver is: Granted Denied

cc: Chief, HSD OPS
 OPS, *Thomas Jefferson*
 HCST, *Thomas Jefferson*





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Thank you, your report has been sent.

Thank you for your input! The information you have provided has been processed and is shown below. You should print it for your information and so that you can remember the specifics of this outage in case we have to call you to gather more information.

You may return to our [home page](#) or click on your browser's BACK button to return to the page from which you came.

Name: Castle Eugene Parker

Email Address: castle.e.parker@noaa.gov

Telephone number: 757-364-7472

Waterway/Area/State: Between Galveston Bay Entrance safety fairway and Sabine Bank Channel safety fairway., Texas

Your Vessel's Name: NOAA Ship Thomas Jefferson

Type of Vessel: NOAA Hydrographic Survey Vessel

DOC# / HIN / VIN / State #: S222

AID Name (from Light List): Oryx-110-3 Lighted Buoy

Light List Number (LLNR): LL #1055

Structure Discrepancy: None

Buoy Discrepancy: Missing

Lighted ATON Discrepancy: None

Other type of discrepancy:

Hazard No

Comments: NOAA hydrographic survey H13048 conducted from 06/09/2018 to 08/07/2018 did not observe the lighted buoy above the water surface nor was it observed within the survey data. Survey H13048 was complete coverage with 100% side scan sonar coverage and multibeam coverage at the documented Light List and charted location. The existence of Oryx-110-3 Lighted Buoy was considered as disproved. Recommend to update the Light List and IATONIS such that NOAA's Marine Chart Division can update the nautical chart. Castle Eugene Parker NOAA Office of Coast Survey Atlantic Hydrographic Branch Hydrographic Team Lead / Physical Scientist castle.e.parker@noaa.gov office (757) 364-7472

APPROVAL PAGE

H13048

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

The following products will be sent to NCEI for archive

- Descriptive Report
- Data Acquisition and Processing Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Processed survey data and records
- GeoPDF of survey products
- Collection of Backscatter mosaics

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

Approved: _____

Lieutenant Commander Ryan Wartick, NOAA
Chief, Atlantic Hydrographic Branch