H12055

NOAA FORM 76-35A
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

Type of Survey: Hydrographic Multibeam & 200% Sidescan

Project No. : OPR-K354-KR-09

Registry No. : H12055

LOCALITY

State: Louisiana

General Locality: Gulf of Mexico

Sublocality: 14 NM S of Entrance to Timbalier Bay

2010

CHIEFS OF PARTY
Scott Croft, John Baker

LIBRARY & ARCHIVES

DATE:

NOAA FORM 77-28 (11-72)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	REGISTRY No: H12055
	HYDROGRAPHIC TITLE SHEET	
		FIELD NUMBER: Sheet D

State: Louisiana

General Locality: Gulf of Mexico

Locality: 14 NM S of Entrance to Timbalier Bay

Scale: 1:10,000 Date of Survey: August 14, 2009 - August 31, 2009

Instructions Dated: June 2008 Project Number: OPR-K354-KR-09

Vessels: *M/V Andrew Charles*

Chiefs of Party: Scott Croft, John Baker

Surveyed by: C&C Technologies Personnel

Soundings taken by echosounder, hand lead line, or pole: Simrad EM3002 Multibeam Echosounder

Verification by: C&C Technologies Personnel ***Atlantic Hydrographic Branch (bold, red, italic font)***

Soundings in: Feet: X* Fathoms: _____ Meters: _____ at MLW: _____ MLLW: X

H-cell Compilation units: Feet at MLLW

Remarks: Multibeam Hydrographic Survey of Sheet D
Data collection in meters, referenced to MLLW, later converted into feet
200% side scan sonar coverage
UTC time was used exclusively
Grab samples were taken
Tidal Zones: CGM366, 717, 718, 731, 732, 733, 734, 735, 749, 750, 364, WGM416
Tidal Station: 8762075 (Port Fourchon, LA)

NOAA FORM 77-28 SUPERSEDES FORM C & GS - 537

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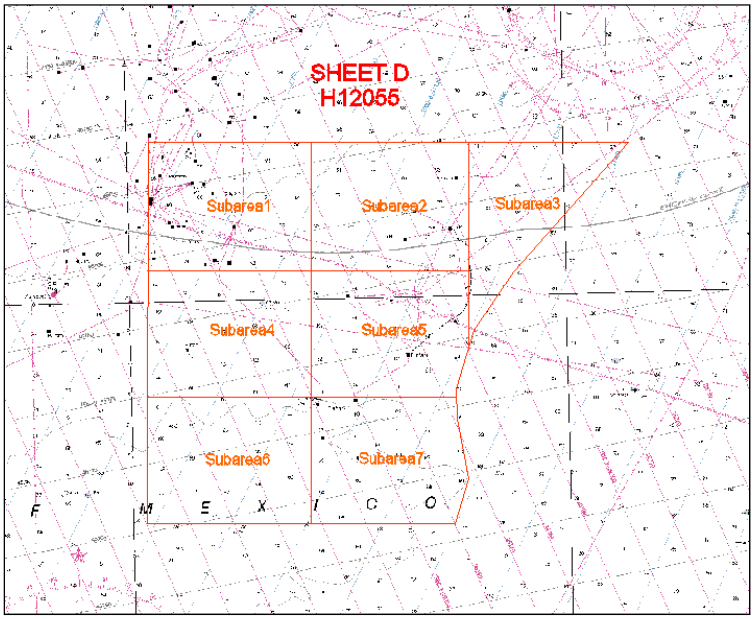
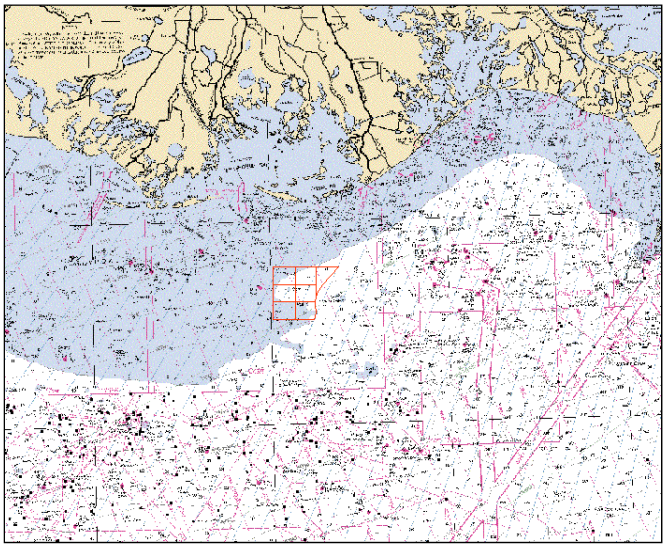
Archived with digital records

A. AREA SURVEYED

The survey area is located 14 NM S of Entrance to Timbalier Bay in the Gulf of Mexico. The following sketch shows the layout of Sheet D (H12055) of Project (OPR-K354-KR-09). Water depths in the survey area range from 57 feet to 70 feet Mean Lower Low Water (MLLW). ***Concur.***





	Andrew Charles	Total
LNM Side Scan + Multibeam	1254.80	1254.80
LNM Crosslines	67.40	67.40
LNM Investigations	8.03	8.03

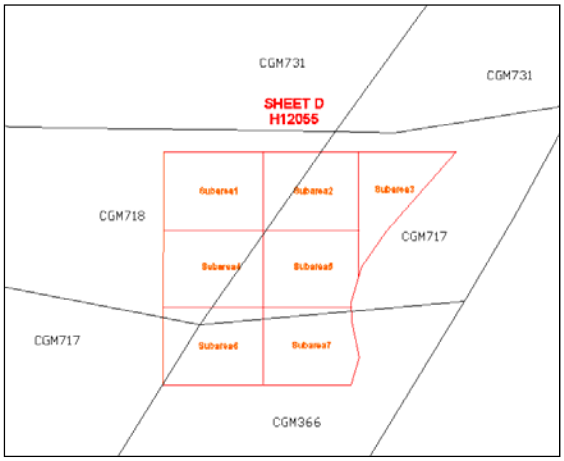
Number of bottom samples collected	45
Number of items investigated	11
Total square nautical miles	61.25

A.1 ACQUISITION DATES

Aug 14-21, 23-31 2009
Sept 2 2009

A.2 SURVEY SUBAREAS

The survey area was broken down into seven sub areas to allow for more efficient data processing and management. The sub areas were based on the predicted data set sizes prior to survey commencement. Tidal data from Port Fourchon, LA (8762075) was used as the source for corrections. Subarea 1 falls entirely within tide zone CGM718. Subarea 3 falls entirety within zone CGM717. CGM718 and CGM717 split Subareas 2, 4, and 5. CGM717 and CGM366 split subarea 7. And CGM717, CGM366, and CGM 718 split subarea 6. Below is an image showing the layout of the tide zoning for this project. ***Concur***



B. DATA ACQUISITION AND PROCESSING *See Also H-Cell Report.*

B.1 EQUIPMENT

System	Manufacturer	Model
Multibeam Echo Sounder	Simrad	EM3002
Side Scan Sonar	Edgetech	4200
Single Beam Echo Sounder	ODOM	Echotrac MK III
Motion Sensor	CODA	F180
Primary Positioning System	CNAV	2050
Secondary Positioning System	CNAV	2050
Tertiary Positioning System	CODA	F180
Sound Speed at Transducer	Endeco	YSI
Sound Velocity Profiler	Seabird	SBE19 Plus

See Data Acquisition and Processing Report* for a detailed description of the equipment used for hydrographic operations. ***Included with H-Cell deliverables.***

The *M/V Andrew Charles,* a 41.1-meter vessel, conducted survey operations for this project. The vessel is 10.3 meters wide with an approximate draft of 3.02 meters. A central reference point was established prior to the survey from which all relevant offsets were measured. Relevant offsets are presented in the following table.

METERS FROM CRP	Y(FORWARD)	X(STARBOARD)	Z(VERTICAL)
Primary CNAV	3.070	-0.376	-10.770
Secondary CNAV	3.070	0.275	-10.661
F180 Primary	3.070	-0.947	-10.752
F180 Secondary	3.070	1.053	-10.746
IMU	-0.248	1.038	-0.817
EM3002	1.326	1.835	4.008
Single Beam (Dual)	0.783	1.835	4.008
SSS Sheave	-26.022	-0.053	3.773

A detailed vessel description, vessel diagram, and patch test results are presented in the Data Acquisition and Processing Report*.

B.2 QUALITY CONTROL

In order to most efficiently carry out this survey, the survey lines were oriented roughly east west throughout the survey area. The side scan was operated with a range of 100 meters per channel, and line spacing was set to 90 meters. These parameters allowed us to effectively meet the criteria of 200 percent side scan coverage, using Technique 2, as set forth in Section 6.1 of the "Specifications and Deliverables" document. The angular sector on the multibeam was set so that the criterion of two times water depth, as well as all accuracy, resolution, and detection criteria as set forth in Sections 5.2 and 5.3 of the "Specifications and Deliverables" document, were met. ***Concur***

The internal consistency of the multibeam depth values is quantified in the cross line statistics that were performed at the end of each main line. Cross lines were run prior to the collection of main line data so that quality control statistics could be performed on the data after each line. Based on pre-plot calculations, the total cross line miles was 67 nm, while the total main line miles was 1255 nm. The cross lines comprised about 5% of the total data set as compared to the main scheme lines. Rerun line miles are not included in these totals. As can be seen in the sample statistics found in Separates V, the main lines and cross lines depth values showed very good agreement. Each main line was compared to all cross lines for which there was overlapping data. The graphs shown in Separates V are a random sample of the graphs that were produced. The graphs show the mean difference, RMS difference, and confidence interval for each beam. The results show that the multibeam data was repeatable with 90% of the soundings within about 8 to 14 centimeters across the swath. The seven BASE surfaces for Sheet D were created at a scale of 1:10000 with a resolution of 2 meters. Soundings between the base surfaces agree to within 1 foot in all areas, with no visible draft

or tidal errors between the survey junctions. No further corrections to soundings are necessary.

Multibeam quality control procedures are outlined in Section B.1 of the accompanying Data Acquisition and Processing Report*. ***Included with H-Cell deliverables.***

B.3 CORRECTIONS TO ECHO SOUNDINGS

No deviations from the Correction to Echo Soundings section in the Data Acquisition and Processing Report* occurred.

C. VERTICAL AND HORIZONTAL CONTROL *See Also H-Cell Report*

Tide and water level corrections were determined and applied in accordance with Attachment #7 of the Statement of Work*. Tidal zoning as set forth in the Statement of Work was applied. Data from Port Fourchon, LA (8762075) was used as the primary source of tides, while Grand Isle, LA (8761724) was used as a back up. Because there were no outages at the primary station during the survey, the secondary station was not used for any tidal corrections. The following table shows the tidal zone and correctors that were used for this sheet. Tidal data were processed using the 1983-01 epoch.

Tide Zone	Reference Station	Primary/ Secondary	Time Corrector	Range Ratio
CGM366	8762075	PRIM	-12	1.05
CGM366	8761724	SEC	-48	1.23
CGM717	8762075	PRIM	-12	1.05
CGM717	8761724	SEC	-48	1.23
CGM718	8762075	PRIM	-12	1.05
CGM718	8761724	SEC	-42	1.23
CGM731	8762075	PRIM	-12	1.05
CGM731	8761724	SEC	-42	1.23
CGM732	8762075	PRIM	-6	1.09
CGM732	8761724	SEC	-42	1.27
CGM733	8762075	PRIM	-6	1.17

CGM733	8761724	SEC	-36	1.37
CGM734	8762075	PRIM	-6	1.09
CGM734	8761724	SEC	-36	1.27
CGM735	8762075	PRIM	-6	1.05
CGM735	8761724	SEC	-42	1.23
CGM749	8762075	PRIM	0	1.13
CGM749	8761724	SEC	-36	1.32
CGM750	8762075	PRIM	0	1.09
CGM750	8761724	SEC	-36	1.27
WGM416	8762075	PRIM	-6	1.21
WGM416	8761724	SEC	-36	1.42
CGM364	8762075	PRIM	-6	1.09
CGM364	8761724	SEC	-36	1.27

The horizontal datum for the survey is the North American Datum of 1983 (NAD 83). The projection is Universal Transverse Mercator (UTM) Zone 15 North. The vertical datum for the soundings is Mean Lower Low Water (MLLW). ***Concur.***

D. RESULTS AND RECOMMENDATIONS **See also H-Cell Report*

Feature descriptions in this section were reviewed based on the largest scale chart covering the respective area. Any features that the contractor re-addressed on smaller scale charts have been stricken out (e.g., ~~example~~) by the AHB reviewer. This was done by AHB for the sake of clarity, so that each feature is only discussed once.

Refer to Appendix II – Survey Features Report for verified feature information and final feature disposition.

D.1 CHART COMPARISON

D.1.1 CHARTS AND NOTICES TO MARINERS

The following charts were used for comparison purposes.

Chart Number	Scale	Edition	Edition Date
11357	1:80,000	40	Jun 09
~~11340~~	~~1:458,596~~	~~74~~	~~Aug 09~~

The following table shows the last updated NM and LNM for each digital chart.

Chart Number	Corrected Through	
	NM	LNM
11357	Jun. 06/09	Jun. 02/09
~~11340~~	~~Aug 08/09~~	~~Jul 28/09~~

D.1.2 CHARTED FEATURES

Evidence of the following charted features was found during this survey.

Charted Feature	Charted Latitude	Charted Longitude	Contact Name
AWOIS 14495 Obstruction PA	28°52'21.720"N	90°28'31.080"W	227-142011P

This feature is found on chart 11357 and 11340. This is the same feature as AWOIS item ~~15795~~ ***14495***, and more information concerning this can be found in section D.1.6 of this report.

No evidence of the following charted features was found during this survey. It is recommended that these features be removed from the chart. All positions were taken from the chart, and are approximate. Concur with clarification. ***See Appendix II – DR AWOIS.***

Charted Feature	Chart Number	Latitude	Longitude
AWOIS 14494 Submerged Obstruction PA	11357	28°49'56.640"N	90°26'58.200"W
AWOIS 14493 Submerged Pipe PA	11357	28°47'59.539"N	90°25'36.632"W
AWOIS 14491 Pile PA	11357	28°53'03.840"N	90°28'33.960"W

~~Charted Feature~~	~~Chart Number~~	~~Latitude~~	~~Longitude~~
~~Submerged Obstruction PA~~	~~11340~~	~~28°49'59.462"N~~	~~90°26'56.129"W~~
~~Submerged Pipe PA~~	~~11340~~	~~28°48'08.520"N~~	~~90°25'33.205"W~~
~~Pile PA~~	~~11340~~	~~28°53'06.018"N~~	~~90°28'32.511"W~~

D.1.3 NOTICES TO MARINERS

The Notices to Mariners were reviewed from the last updated notice for each digital chart, to Aug 31/2009. During that time, there were four notices to mariners issued for the charted area within the survey bounds.

The four LNM are for additions of "Submarine Pipelines" on chart number 11357. These pipelines are buried, making it impossible to confirm with sidescan and multibeam. Below is a listing of these notices. ***Concur. *Retain as Charted.***

Notice	Date	Name	Latitude	Longitude
"LNM 50/09, 8th Dist"	12/16/2009	Submarine Pipeline PT 1 OF 2*	28°47'12.180"N	90°25'39.390"W
"LNM 32/09, 8th Dist"	8/17/2009	Submarine Pipeline PT 1 OF 2*	28°50'00.600"N	90°25'00.500"W
"LNM 32/09, 8th Dist"	8/17/2009	Submarine Pipeline PT 2 OF 2*	28°49'27.100"N	90°25'56.500"W
"LNM 50/09, 8th Dist"	12/16/2009	Submarine Pipeline PT 2 OF 2*	28°49'27.230"N	90°25'56.860"W

D.1.4 CHARTED SOUNDINGS

~~Chart 11340~~

~~In general, surveyed and charted soundings agree to within 2 feet. There is one charted 9 fathom sounding that is seven feet shoaler than the surrounding surveyed depths. This is shown in the image below.~~

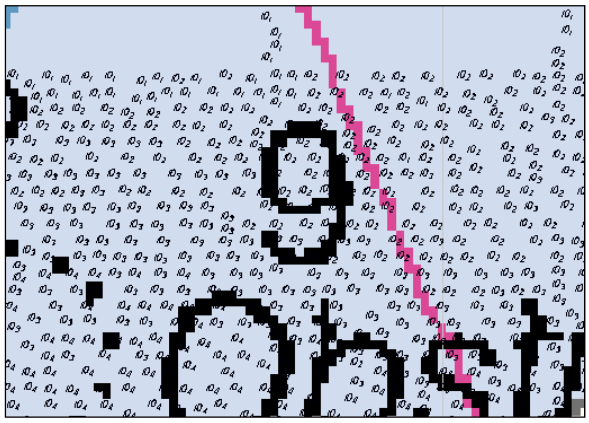


Chart 11357

In general, surveyed soundings are deeper than charted soundings. In the northern part of the survey area, this difference is up to 5 feet. In the southern part of the survey area, the surveyed soundings are only 1-2 feet deeper than charted. ***Concur.***

D.1.5 SHOALS AND HAZARDOUS FEATURES

No hazardous shoals were found during this survey. One hazardous feature was found, and it is discussed in section D.1.6 of this report. ***Concur.***

D.1.6 AWOIS ITEMS

Four AWOIS items were assigned for full investigation within the H12055 survey area. ***Concur.***

AWOIS ~~15791~~ ***14491***

Description: Pile

AWOIS Position: 28°53’04.00”N 90°28’34.00”W

Search Radius: 200 meters

Investigation Method: 200% Side Scan Sonar, Multibeam Echo sounder

Investigation Summary: This AWOIS item is described as a Pile, and is also found on charts 11346, and 11340 as a submerged Pile PA. No evidence of this item was found during the survey, and it is recommended that it be removed from the chart. ***Concur with clarification. See Appendix II – DR AWOIS.***

AWOIS ~~15793~~ ***14493***

Description: Pipe

AWOIS Position: 28°48'00.00"N 90°25'36.00"W

Search Radius: 200 meters

Investigation Method: 200% Side Scan Sonar, Multibeam Echo sounder

Investigation Summary: This AWOIS item is described as a Pipe, and is also found on charts 11346, and 11340 as a submerged Pipe PA. No evidence of this item was found during the survey, and it is recommended that it be removed from the chart. ***Concur. See Appendix II – DR AWOIS.***

AWOIS ~~15794~~ ***14494***

Description: Obstruction

AWOIS Position: 28°49'56.60"N 90°26'58.10"W

Search Radius: 200 meters

Investigation Method: 200% Side Scan Sonar, Multibeam Echo sounder

Investigation Summary: This AWOIS item is described as an Obstruction, and is also found on charts 11346, and 11340 as a submerged Obstruction PA. No evidence of this item was found during the survey, and it is recommended that it be removed from the chart. ***Concur. See Appendix II – DR AWOIS.***

AWOIS ~~15795~~ ***14495***

Description: Obstruction

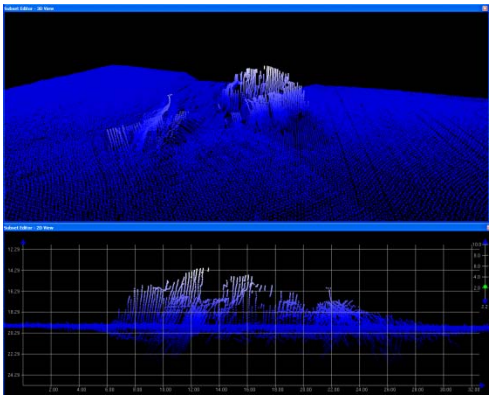
Charted Position: 28°52'21.8" N 90°28'31.1"W

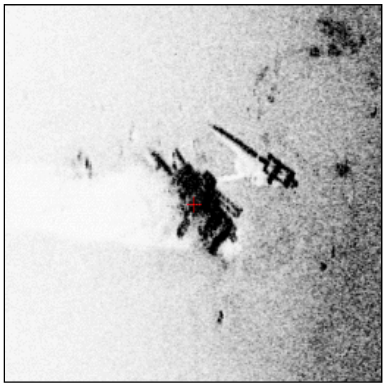
Search Radius: 200 meters

Investigation Method: 200% Side Scan Sonar, Multibeam Echo sounder

Position Determined By: Differential GPS

Investigation Summary: This AWOIS item is charted as an obstruction on charts 11357 and 11340. It was found during survey operations with a least depth of 46.171 ft at 28°52'23.199"N 90°28'32.152"W (NAD83). It is recommended that this feature remain on the chart as a 46 ft Submerged Obstruction at 28°52'23.199"N 90°28'32.152"W (NAD83). This AWOIS item has been marked as a designated sounding within the H12055 Caris project submitted in conjunction with this report. ***Concur. SeeAppendix II – DR AWOIS.***





D.1.7 INVESTIGATION ITEMS

Additional investigation work was performed for eleven significant sonar contacts. Two to Six additional multibeam and side scan lines were run over each of these targets. After review, only one of these contacts was determined to be significant. This target is discussed in section D.1.6 as AWOIS ~~15795~~ ***14495***.

D.1.8 DANGER TO NAVIGATION REPORTS

No Danger to Navigation Reports were issued. ***Concur.***

D.2 ADDITIONAL RESULTS

D.2.1 PRIOR SURVEYS

Comparison with prior surveys was not required under this Task Order. See Section D.1 for comparison to nautical charts.

D.2.2 AIDS TO NAVIGATION

No Aids to Navigation are charted within the survey area. ***Concur.***

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted. ***Concur. See Appendix II – DR Charted.***

Charted Position			
Latitude	Longitude	Structure Type	Structure Name
28°47'12.142"N	90°25'39.711"W	Platform	ST-81-A
28°47'56.861"N	90°24'52.325"W	Platform	ST-67-H
28°48'49.650"N	90°23'39.093"W	Platform	ST-67-B
28°50'01.525"N	90°25'00.187"W	Platform	ST-54-G
28°50'44.535"N	90°27'42.446"W	Platform	ST-53-C
28°50'44.958"N	90°28'15.246"W	Platform	ST-53 #6

28°50'48.152"N	90°28'02.702"W	Platform	ST-53 #4
28°50'53.283"N	90°29'26.461"W	Platform	ST-52-CB
28°51'10.632"N	90°23'40.322"W	Platform	ST-54-J
28°51'21.136"N	90°22'37.946"W	Platform	Exxon ST-55-E
28°51'29.195"N	90°27'34.064"W	Platform	OCS-6-04000 #1
28°51'30.520"N	90°28'43.401"W	Platform	ST-52 #17
28°51'31.131"N	90°28'51.112"W	Platform	ST-52-21
28°51'36.955"N	90°28'39.822"W	Platform	Well#16
28°52'09.639"N	90°28'02.915"W	Platform	ST-53-I
28°52'23.365"N	90°22'27.629"W	Platform	ST-48-A
28°52'32.673"N	90°29'15.228"W	Platform	ST #4
28°52'04.595"N	***90°29'26.786"W***	***Platform***	***-----***
28°52'23.732"N	***90°8'30.510"W***	***Platform***	***-----***

The structures in the following table were found very close to charted platforms. No platforms exist directly over the charted positions. The chart should be updated to reflect these new positions. ***Concur with clarification. See Appendix II – DR Charted.***

Surveyed Position			
Latitude	Longitude	Structure Type	Structure Name
28°51'44.338"N	90°23'26.098"W	Platform	ST-54-I
28°51'32.038"N	90°28'56.485"W	Platform	Well#20
28°52'56.781"N	90°29'08.796"W	Platform	ST-51-11

One charted structures at 28°52'01.697"N, 90°29'27.718"W is actually three connected structures. The positions of the three parts to this platform as found in the table below. ***Concur. See Appendix II – DR Charted and DR Uncharted.***

Surveyed Position			
Latitude	Longitude	Structure Type	Structure Name
28°52'01.413"N	90°29'26.900"W	Platform	ST-52
28°52'01.059"N	90°29'27.896"W	Platform	ST-52
28°51'59.477"N	90°29'29.675"W	Platform	ST 52

Structures found in the following locations are currently uncharted. ***Concur. See Appendix II – DR Uncharted.***

Surveyed Position			
Latitude	Longitude	Structure Type	Structure Name
28°52'27.319"N	90°28'37.656"W	Platform	ST 51 #4
28°52'54.202"N	90°28'27.426"W	Platform	ST-51-3
~~28°52'21.516"N~~	~~90°28'26.957"W~~	~~Platform~~	~~----~~
28°52'23.256"N	***90°28'27.022"W***	***Platform***	***---***

The following is a list of structures that are currently charted, but were no longer present at the time of the survey. ***Concur. See Appendix II – DR Charted.***

Charted Position	
Latitude	Longitude
28°47'52.326"N	90°25'44.440"W
28°49'00.876"N	90°28'41.465"W
28°51'35.167"N	90°29'03.418"W
28°52'49.029"N	90°28'24.973"W
28°52'21.986"N	***90°28'14.268"W***

D.2.4 OTHER PERTINENT INFORMATION

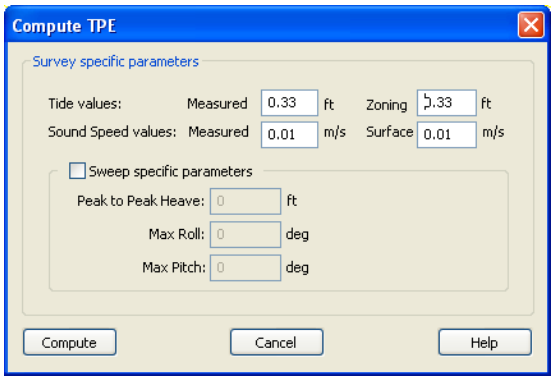
Draft corrections are verified on a daily basis, and entered into the multibeam collection software to be applied in real-time. Draft was entered directly into the single beam.

Seven separate BASE surfaces were created for this project, one for each subarea. All seven BASE surfaces were created at 2-meter resolution. ***Concur.***

All of the side scan data collected for this project has been layback corrected. Data should be imported into Caris using fish position and zero layback correction.

S57 feature files for oil and gas infrastructure, bottom samples, and obstructions have been submitted in a Caris Notebook project.

All TPE values were calculated using the following settings.



LETTER OF APPROVAL

REGISTRY NUMBER H12055

This report and the accompanying smooth sheet are respectfully submitted.

Field operations contributing to the accomplishment of the survey H12055 were conducted under my direct supervision with frequent personal checks of progress and adequacy. This report and CARIS project have been closely reviewed and are considered complete and adequate as per the Statement of Work.

This report is accompanied by the Data Acquisition and Processing Report for project OPR-K354-KR-09.

John Baker
Chief of Party
C&C Technologies
April 2010

APPENDIX I

DANGER TO NAVIGATION REPORTS

No Danger to Navigation Reports were issued.

Survey Feature Report

Registry Number: H12055
State: Louisiana
Locality: Gulf of Mexico
Sub-locality: 14 NM S of Entrance to Timbalier Bay
Project Number: OPR-K354-KR-09
Survey Dates: 01/01/1981 - 07/21/2011

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
11357	41st	05/01/2011	1:80,000 (11357_1)	USCG LNM: 5/10/2011 (5/17/2011) NGA NTM: 10/16/2010 (5/28/2011)
11340	73rd	08/01/2008	1:458,596 (11340_1)	[L]NTM: ?
1116A	73rd	08/01/2008	1:458,596 (1116A_1)	[L]NTM: ?
411	52nd	09/01/2007	1:2,160,000 (411_1)	[L]NTM: ?

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

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS 14491 - Charted Pile PA	Pile	[None]	28° 53' 04.0" N	090° 28' 34.0" W	---
1.2	AWOIS 14494 - Obstn PA	Obstruction	[None]	28° 49' 56.6" N	090° 26' 58.1" W	---
1.3	AWOIS 14493 - Charted Submerged pipe PA	Obstruction	[None]	28° 47' 59.4" N	090° 25' 36.8" W	---
1.4	AWOIS 14495 Charted Obstn PA	Obstruction	14.07 m	28° 52' 23.2" N	090° 28' 32.2" W	---
2.1	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 59.5" N	090° 29' 29.7" W	---
2.2	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 50' 53.3" N	090° 29' 26.5" W	---
2.3	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 52' 32.7" N	090° 29' 15.2" W	---
2.4	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 52' 56.8" N	090° 29' 08.8" W	---
2.5	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 32.0" N	090° 28' 56.5" W	---
2.6	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 31.1" N	090° 28' 51.1" W	---
2.7	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 30.5" N	090° 28' 43.4" W	---
2.8	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 37.0" N	090° 28' 39.8" W	---
2.9	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 52' 54.2" N	090° 28' 27.4" W	---

2.10	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 50' 45.0" N	090° 28' 15.2" W	---
2.11	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 52' 09.6" N	090° 28' 02.9" W	---
2.12	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 50' 48.2" N	090° 28' 02.7" W	---
2.13	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 50' 44.5" N	090° 27' 42.4" W	---
2.14	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 29.2" N	090° 27' 34.1" W	---
2.15	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 47' 12.1" N	090° 25' 39.7" W	---
2.16	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 50' 01.5" N	090° 25' 00.2" W	---
2.17	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 47' 56.9" N	090° 24' 52.3" W	---
2.18	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 10.6" N	090° 23' 40.3" W	---
2.19	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 48' 49.7" N	090° 23' 39.1" W	---
2.20	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 44.3" N	090° 23' 26.1" W	---
2.21	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 51' 21.1" N	090° 22' 37.9" W	---
2.22	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 52' 23.4" N	090° 22' 27.6" W	---
2.23	Charted Platform -Delete charted platform.	Platform (oil or gas)	[None]	28° 51' 35.7" N	090° 29' 03.3" W	---
2.24	Charted Platform -Delete charted platform.	Platform (oil or gas)	[None]	28° 49' 00.8" N	090° 28' 42.0" W	---
2.25	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 52' 23.3" N	090° 28' 27.0" W	---
2.26	Charted Platform -Delete charted platform.	Platform (oil or gas)	[None]	28° 52' 49.6" N	090° 28' 25.2" W	---
2.27	Charted Platform -Delete charted platform.	Platform (oil or gas)	[None]	28° 47' 53.1" N	090° 25' 45.1" W	---
2.28	Exposed Section of Pipeline	Pipe	18.56 m	28° 52' 19.2" N	090° 28' 52.9" W	---
2.29	Charted Platform - Updated Position	Platform (oil or gas)	[None]	28° 52' 04.7" N	090° 29' 28.0" W	---
2.30	Charted Platform - Delete Charted Platform	Platform (oil or gas)	[None]	28° 52' 22.0" N	090° 28' 14.3" W	---
3.1	Uncharted Platform - Do Not Chart	Platform (oil or gas)	[None]	28° 52' 01.1" N	090° 29' 27.9" W	---
3.2	Uncharted Platform	Platform (oil or gas)	[None]	28° 52' 01.4" N	090° 29' 26.9" W	---
3.3	Uncharted Platform	Platform (oil or gas)	[None]	28° 52' 27.3" N	090° 28' 37.7" W	---
3.4	Uncharted 60 ft Obstrn	Obstruction	18.41 m	28° 53' 00.5" N	090° 28' 43.1" W	---
3.5	Uncharted 60ft Obstrn	Obstruction	18.50 m	28° 52' 39.3" N	090° 28' 41.9" W	---

1 - AWOIS

1.1) AWOIS 14491 - Charted Pile PA

Survey Summary

Survey Position: 28° 53' 04.0" N, 090° 28' 34.0" W

Least Depth: [None]

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

Timestamp: 2003-042.00:00:00.000 (02/11/2003)

GP Dataset: AHB_H12055 / SAR Final Products / Features / H12055_AWOIS.000

GP No.: 0226000057EE0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

AWOIS 14491

Description: Pile

AWOIS Position: 28°53’04.00”N 90°28’34.00”W

Search Radius: 200 meters

Investigation Method: 200% Side Scan Sonar, Multibeam Echo sounder

Investigation Summary: This AWOIS item is described as a Pile, and is also found on charts 11346, and 11340 as a submerged Pile PA. No evidence of this item was found during the survey, and it is recommended that it be removed from the chart.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AHB_H12055/SAR Final Products/Features/H12055_AWOIS.000	0226000057EE0001	0.00	000.0	Primary
ChartGPs - Digitized	1	-1.00	000.0	Secondary (grouped)

Hydrographer Recommendations

No evidence of this item was found during the survey, and it is recommended that it be removed from the chart. Listed on the raster chart as a Subm Pile PA, but listed on the ENC as a PILPNT - Unlighted Piling.

S-57 Data

Geo object 1: Cartographic symbol ($CSYMB)

Attributes: NINFOM - delete PILPNT

Geo object 2: Pile (PILPNT)

Attributes: INFORM - Unlighted Piling - AWOIS 15791
SORDAT - 20030211
SORIND - US,US,reprt,8thCGD,LNM 06/03

Office Notes

Concur with clarification. Delete charted Pile "PA".

1.2) AWOIS 14494 - Obstn PA

Survey Summary

Survey Position:	28° 49' 56.6" N, 090° 26' 58.1" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2006-010.00:00:00.000 (01/10/2006)
GP Dataset:	AHB_H12055 / SAR Final Products / Features / H12055_AWOIS.000
GP No.:	0226000057F10001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

AWOIS 14494

Description: Obstruction

AWOIS Position: 28°49’56.60”N 90°26’58.10”W

Search Radius: 200 meters

Investigation Method: 200% Side Scan Sonar, Multibeam Echo sounder

Investigation Summary: This AWOIS item is described as an Obstruction, and is also found on charts 11346, and 11340 as a submerged Obstruction PA. No evidence of this item was found during the survey, and it is recommended that it be removed from the chart.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AHB_H12055/SAR Final Products/Features/H12055_AWOIS.000	0226000057F10001	0.00	000.0	Primary

Hydrographer Recommendations

No evidence of this item was found during the survey, and it is recommended that it be removed from the chart.

S-57 Data

Geo object 1:	Cartographic symbol ($CSYMB)
Attributes:	NINFOM - delete OBSTRN
Geo object 2:	Obstruction (OBSTRN)
Attributes:	INFORM - 8thCGD 005-06 - AWOIS 15794

SORDAT - 20060110

SORIND - US,US,reprt,8thCGD,LNM 2/06

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Delete charted dangerous obstruction "PA", least depth unknown.

1.3) AWOIS 14493 - Charted Submerged pipe PA

Survey Summary

Survey Position: 28° 47' 59.4" N, 090° 25' 36.8" W

Least Depth: [None]

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

Timestamp: 2003-182.00:00:00.000 (07/01/2003)

GP Dataset: AHB_H12055 / SAR Final Products / Features / H12055_AWOIS.000

GP No.: 0226000057EF0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

AWOIS 14493

Description: Pipe

AWOIS Position: 28°48’00.00”N 90°25’36.00”W

Search Radius: 200 meters

Investigation Method: 200% Side Scan Sonar, Multibeam Echo sounder

Investigation Summary: This AWOIS item is described as a Pipe, and is also found on charts 11346, and 11340 as a submerged Pipe PA. No evidence of this item was found during the survey, and it is recommended that it be removed from the chart.

Feature Correlation

Address	Feature	Range	Azimuth	Status
AHB_H12055/SAR Final Products/Features/H12055_AWOIS.000	0226000057EF0001	0.00	000.0	Primary

Hydrographer Recommendations

No evidence of this item was found during the survey, and it is recommended that it be removed from the chart.

S-57 Data

Geo object 1: Cartographic symbol ($CSYMB)

Attributes: NINFOM - delete OBSTRN

Geo object 2: Obstruction (OBSTRN)

Attributes: CATOBS - 1:snag / stump

INFORM - Pipe - AWOIS 15793

QUASOU - 2:depth unknown

SORDAT - 20030700

SORIND - US,US,graph,Chart 11357

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Delete charted dangerous obstruction "Subm pipe PA", least depth unknown.

1.4) AWOIS 14495 Charted Obstn PA

Survey Summary

Survey Position:	28° 52' 23.2" N, 090° 28' 32.2" W
Least Depth:	14.07 m (= 46.17 ft = 7.695 fm = 7 fm 4.17 ft)
TPU (±1.96σ):	**THU (TPEh)** ±3.922 m ; **TVU (TPEv)** ±0.321 m
Timestamp:	2009-233.00:58:30.988 (08/21/2009)
Survey Line:	h12055_sub1 / andrew_charles / 2009-233 / 2d-1
Profile/Beam:	1160/254
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

AWOIS 14495

Description: Obstruction

Charted Position: 28°52’21.8” N 90°28’31.1”W

Search Radius: 200 meters

Investigation Method: 200% Side Scan Sonar, Multibeam Echo sounder

Position Determined By: Differential GPS

Investigation Summary: This AWOIS item is charted as an obstruction on charts 11357 and 11340. It was found during survey operations with a least depth of 46.171 ft at 28°52'23.199"N 90°28'32.152"W (NAD83). It is recommended that this feature remain on the chart as a 46 ft Submerged Obstruction at 28°52'23.199"N 90°28'32.152"W (NAD83). This AWOIS item has been marked as a designated sounding within the H12055 Caris project submitted in conjunction with this report.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h12055_sub1/andrew_charles/2009-233/2d-1	1160/254	0.00	000.0	Primary
R/SAR AHB HOB Files/Field S-57 Feature Files/H12055_obstructions.000	1C1C000003170001	0.00	000.0	Secondary (group

Hydrographer Recommendations

Delete charted Obstn PA and chart an Obstn with a depth of 46 ft. at the surveyed position.

Cartographically-Rounded Depth (Affected Charts):

46ft (11357_1)

7 ¾fm (1116A_1, 11340_1, 411_1)

S-57 Data

[None]

Office Notes

Concur with clarification. Feature was not completely ensonified during multibeam development, therefore the shoal depth of 46 feet could not be confirmed as the shoalest point or least depth on the obstruction. Delete charted dangerous obstruction "PA", least depth unknown. Chart dangerous obstruction, depth known 46 ft at the survey position.

Feature Images

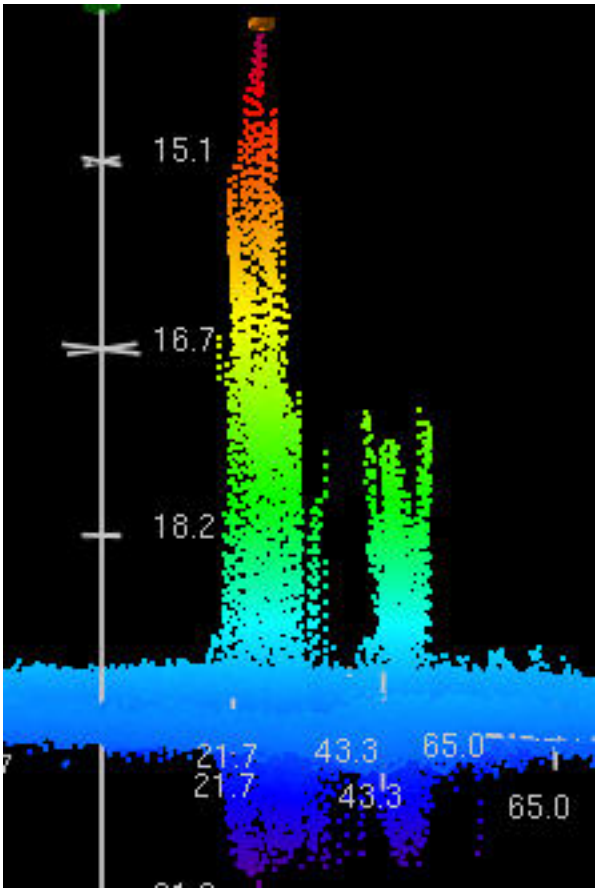


Figure 1.4.1

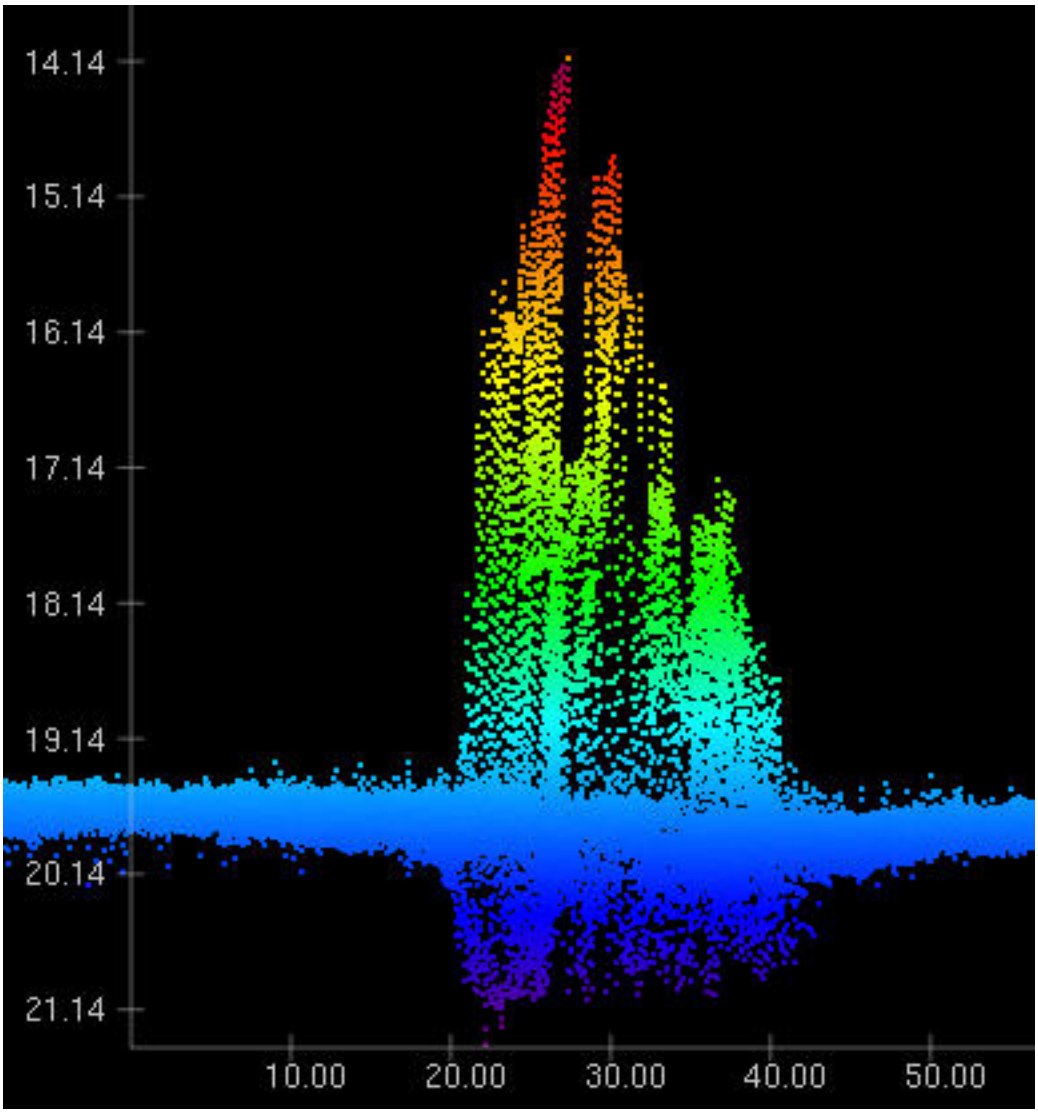

14.14
15.14
16.14
17.14
18.14
19.14
20.14
21.14
10.00
20.00
30.00
40.00
50.00

Figure 1.4.2

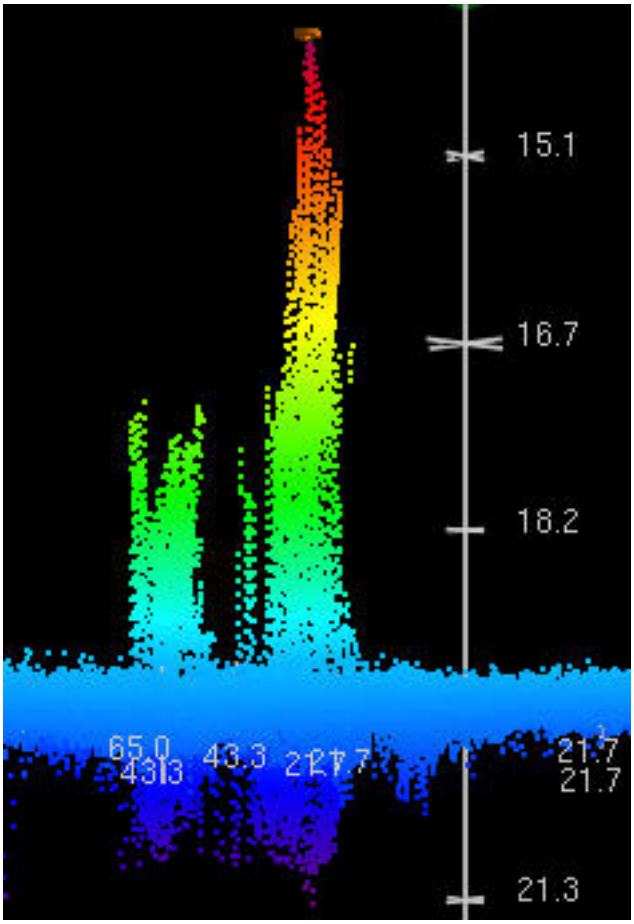


Figure 1.4.3

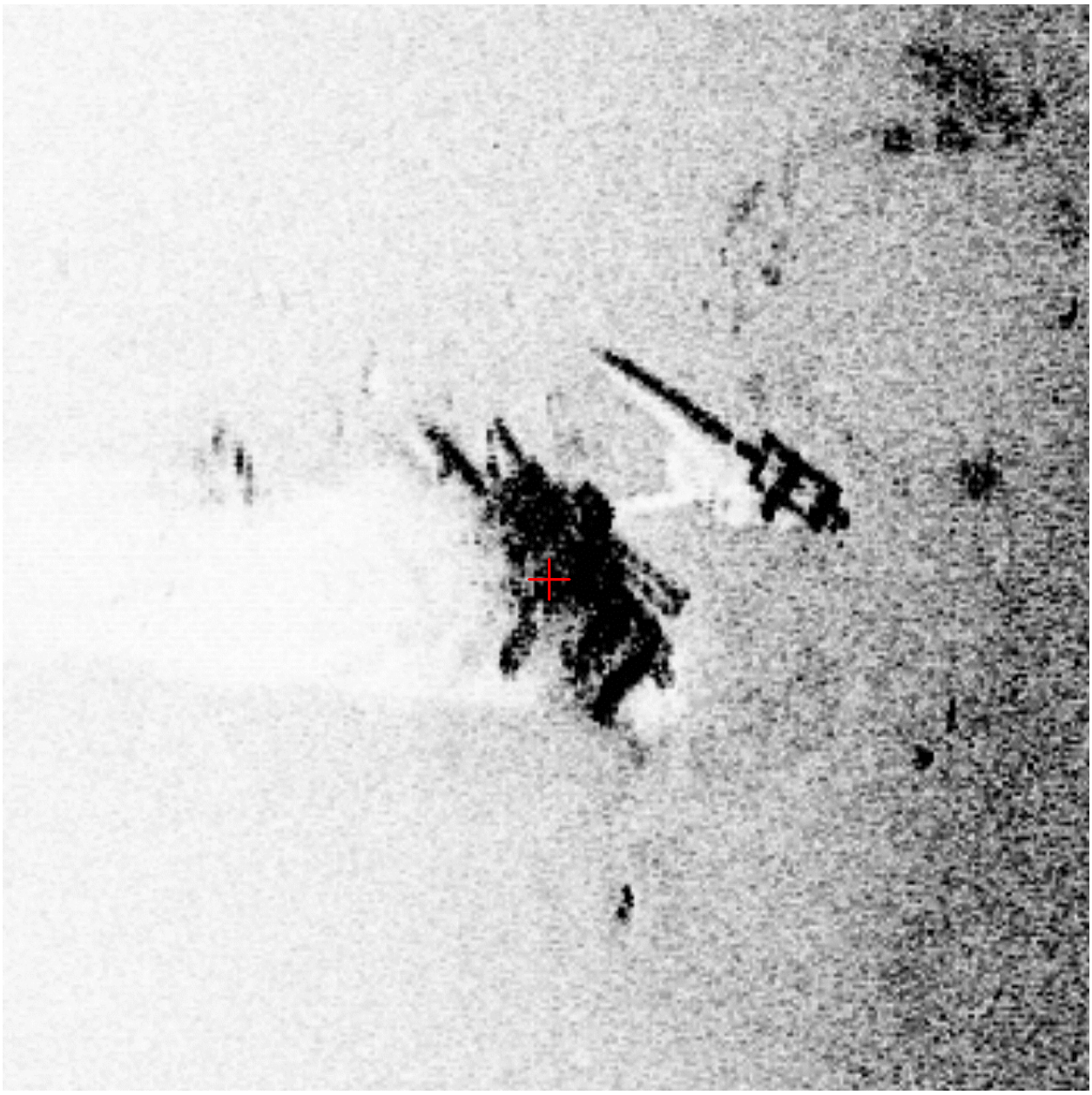


Figure 1.4.4

2 - Charted

2.1) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 51' 59.5" N, 090° 29' 29.7" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003200001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

Two charted structures at 28°52'01.697"N, 90°29'27.718"W are actually three connected structures. The positions of the three parts to this platform as found in the table below.

Surveyed Position

Latitude Longitude Structure Type Structure Name

28°52'01.413"N 90°29'26.900"W Platform ST-52

28°52'01.059"N 90°29'27.896"W Platform ST-52

28°51'59.477"N 90°29'29.675"W Platform ST 52

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003200001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform
OBJNAM - ST 52
SORDAT - 20090831
SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

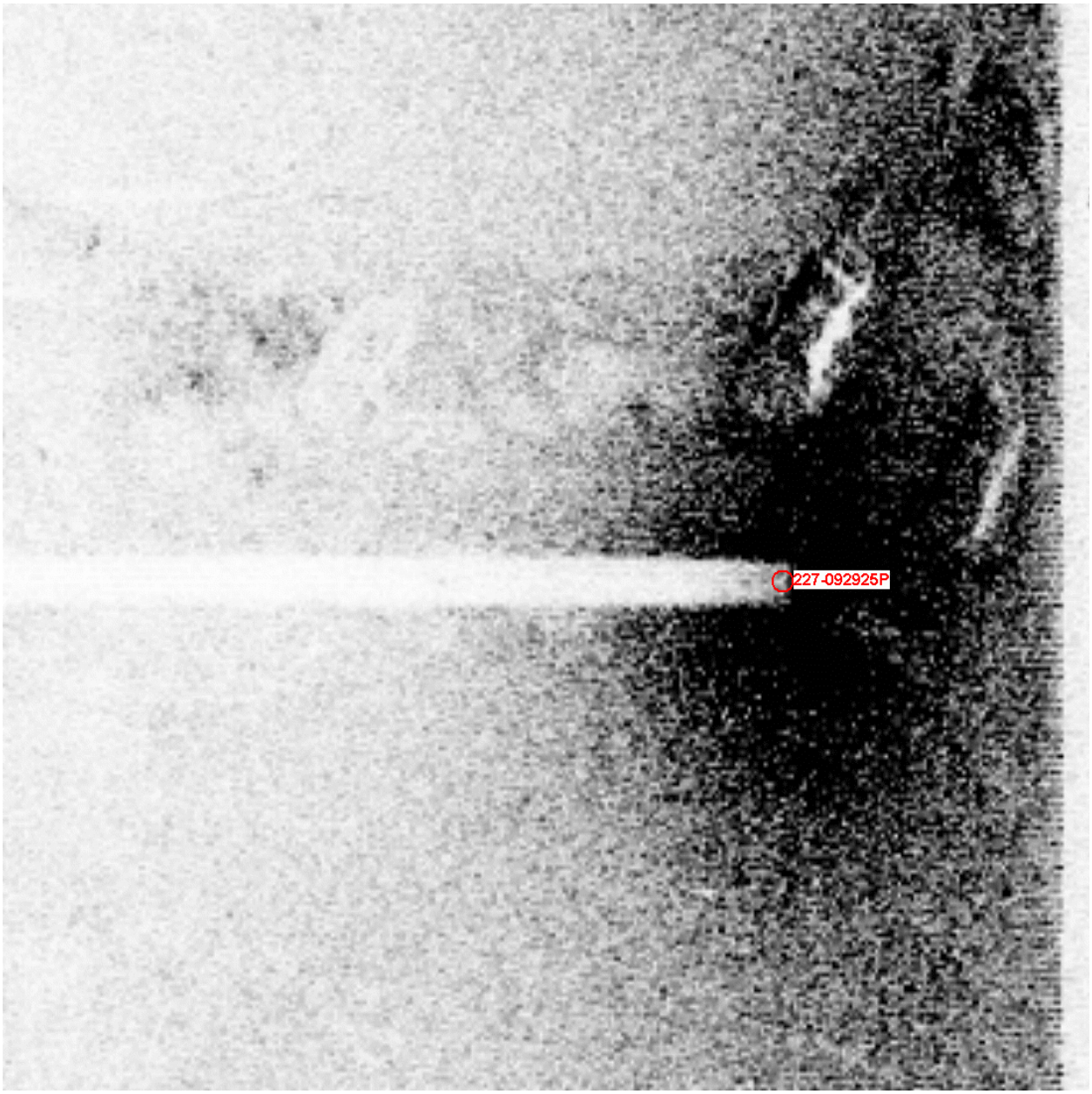


Figure 2.1.1

2.2) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 50' 53.3" N, 090° 29' 26.5" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C0000032F0001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°50'53.283"N 90°29'26.461"W Platform ST-52-CB

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000032F0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - ST-52-CB
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

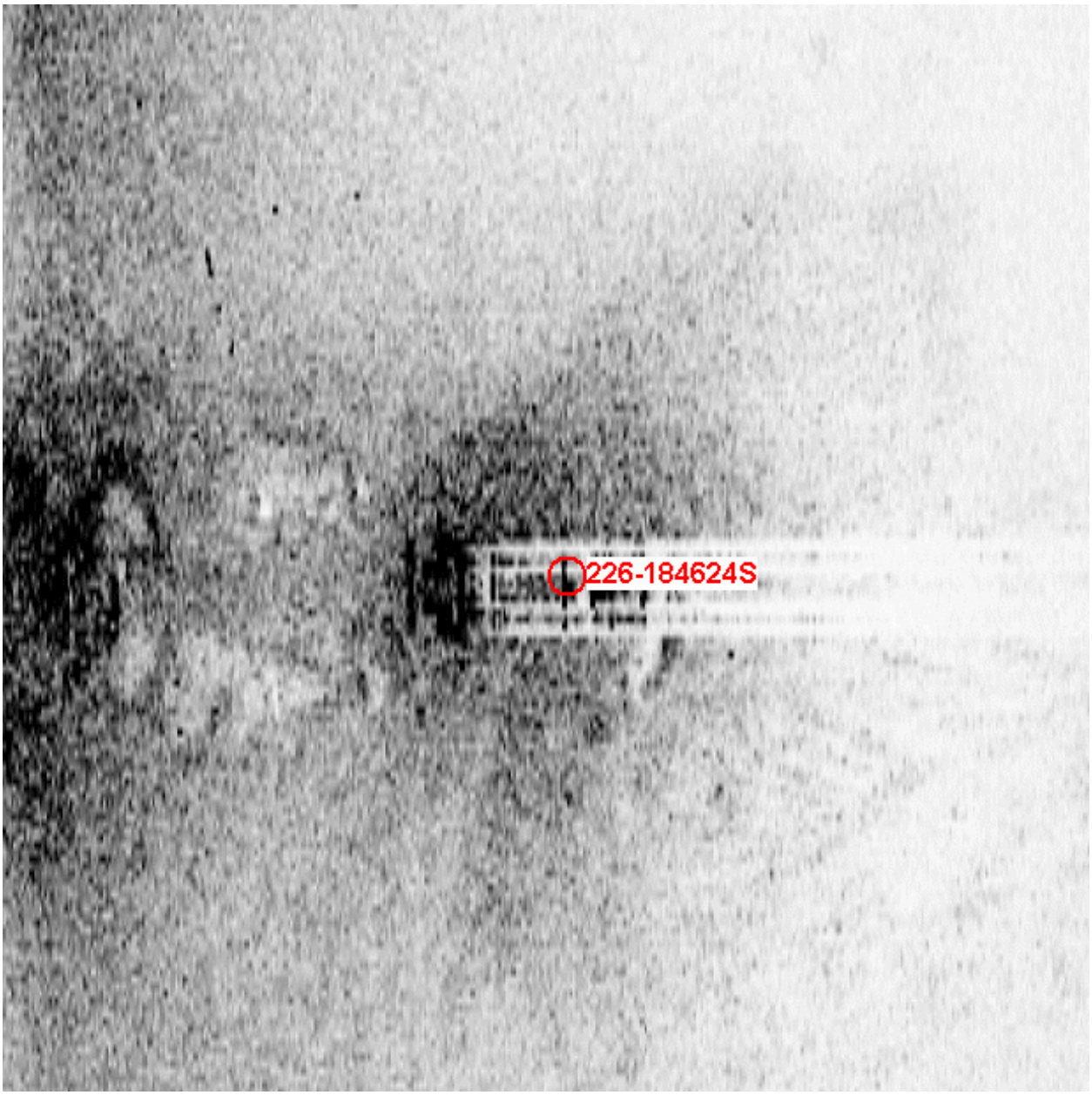


Figure 2.2.1

2.3) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 52' 32.7" N, 090° 29' 15.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003240001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°52'32.673"N 90°29'15.228"W Platform ST #4

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003240001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - ST #4
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

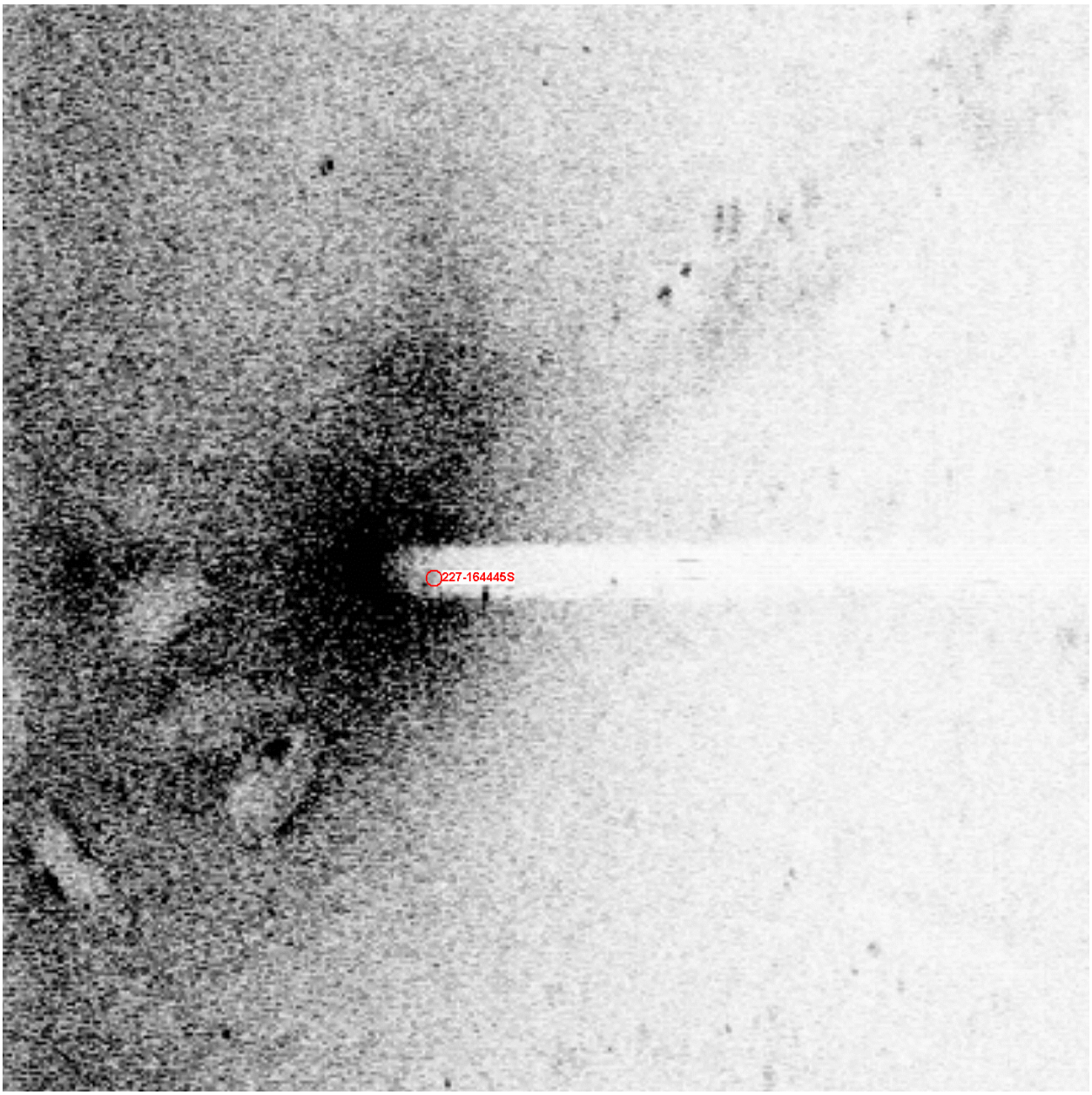


Figure 2.3.1

2.4) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 52' 56.8" N, 090° 29' 08.8" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003180001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The structures in the following table were found very close to charted platforms. No platforms exist directly over the charted positions. The chart should be updated to reflect these new positions.

28°52'56.781"N 90°29'08.796"W Platform ST-51-11

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003180001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - ST-51-11
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

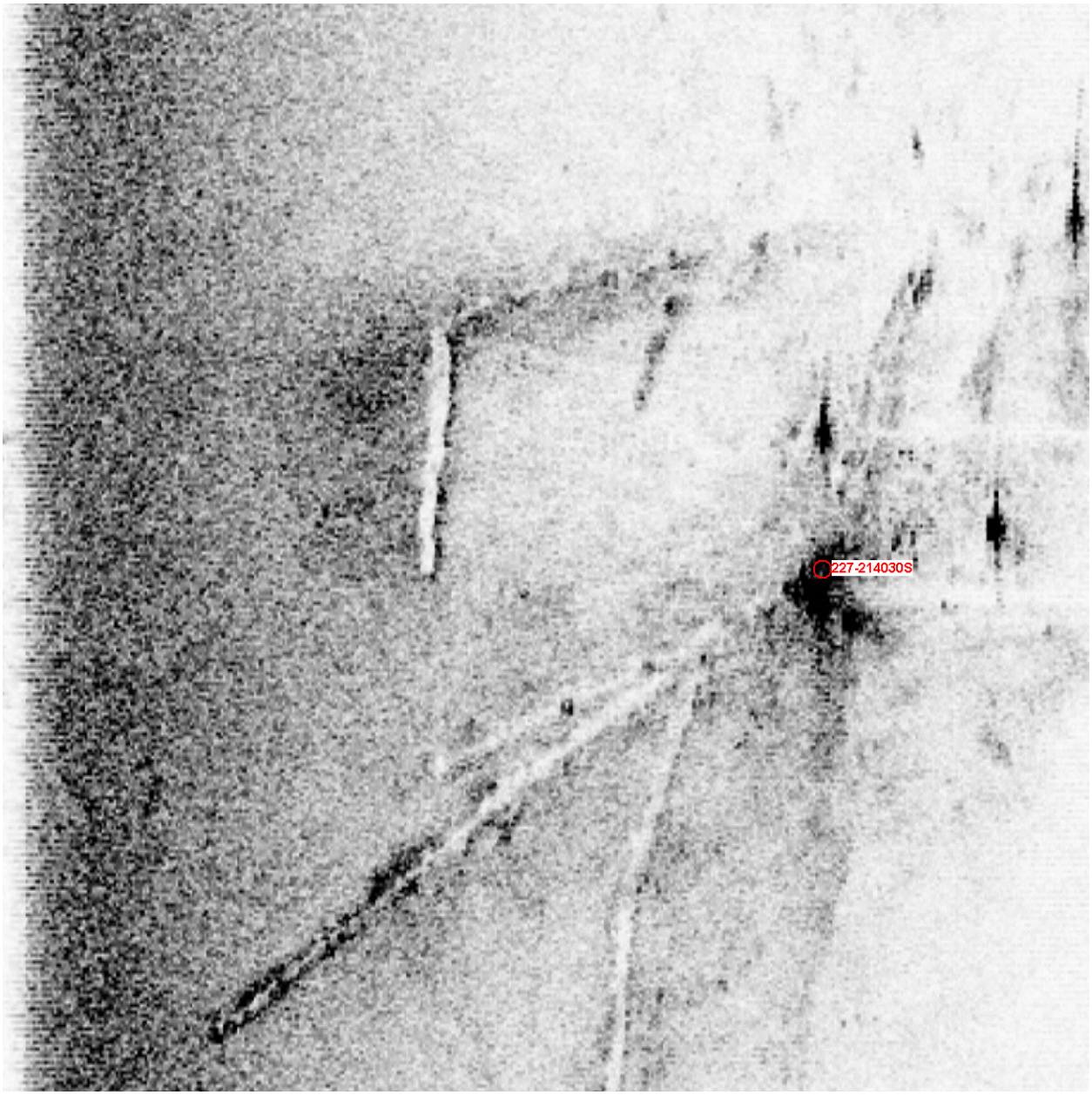


Figure 2.4.1

2.5) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 51' 32.0" N, 090° 28' 56.5" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000031E0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The structures in the following table were found very close to charted platforms. No platforms exist directly over the charted positions. The chart should be updated to reflect these new positions.

28°51'32.038"N 90°28'56.485"W Platform Well#20

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000031E0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - Well#20

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

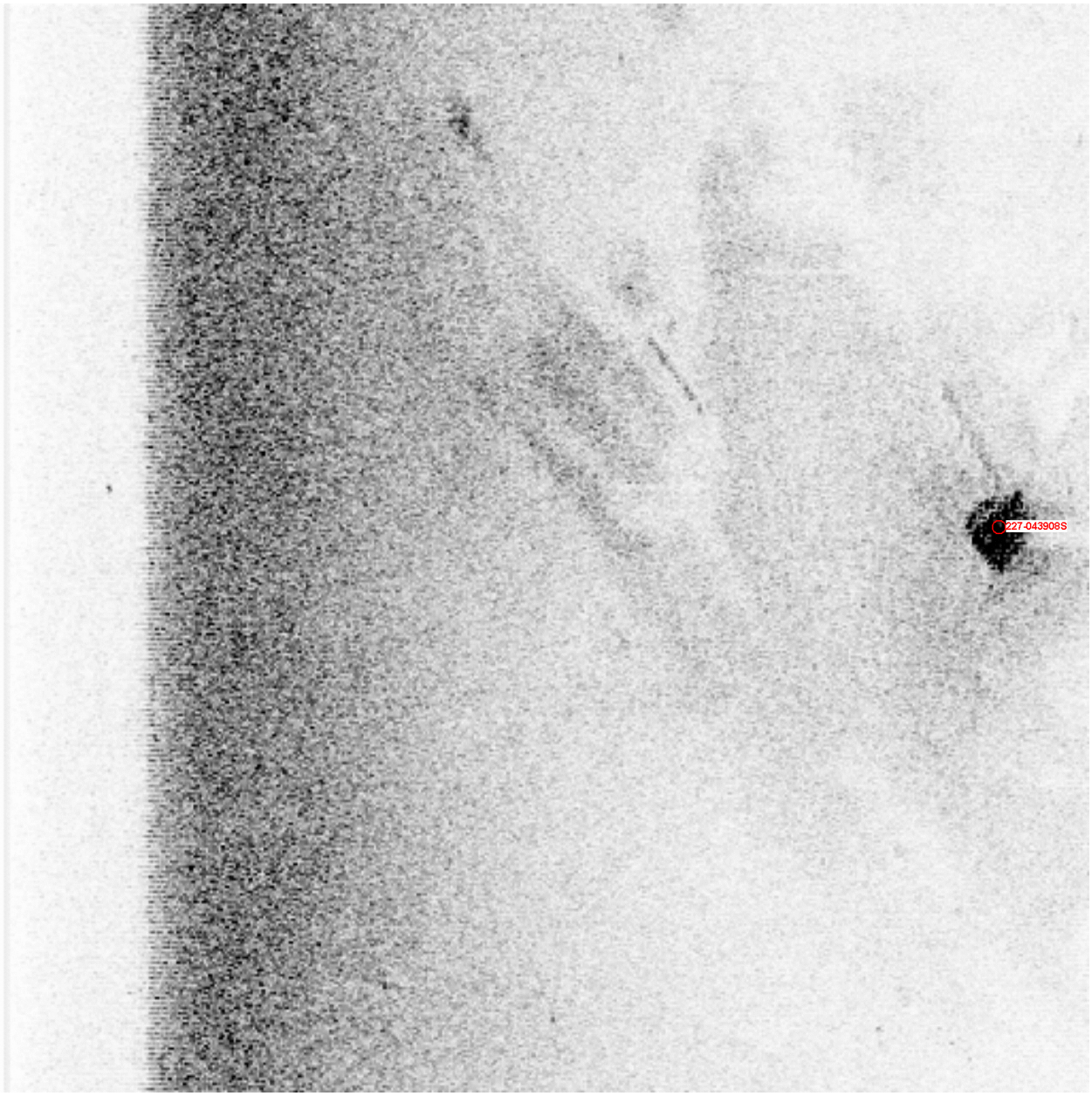


Figure 2.5.1

2.6) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 51' 31.1" N, 090° 28' 51.1" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C000003300001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°51'31.131"N 90°28'51.112"W Platform ST-52-21

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003300001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-52-21

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

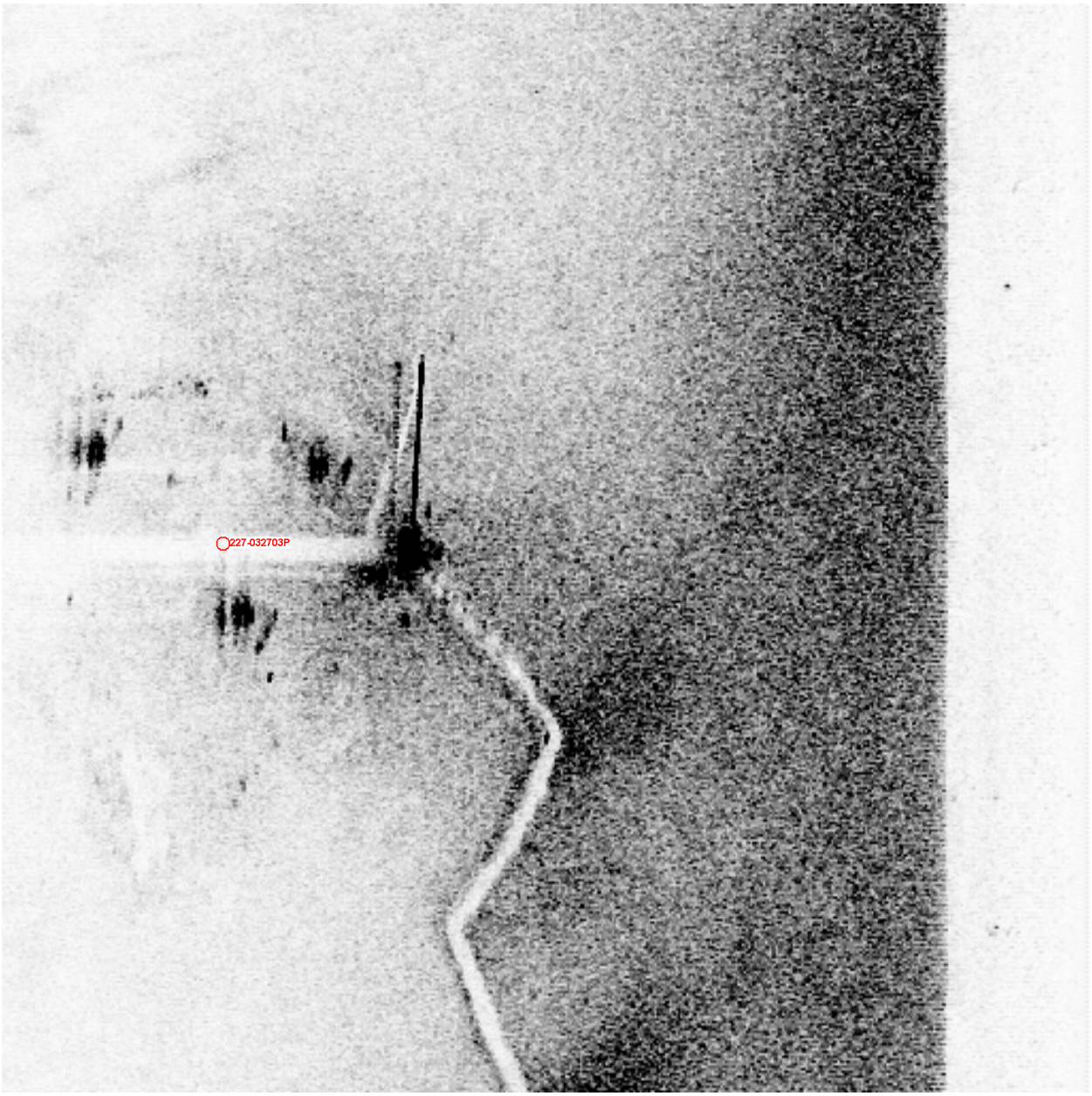


Figure 2.6.1

2.7) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 51' 30.5" N, 090° 28' 43.4" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000031D0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°51'30.520"N 90°28'43.401"W Platform ST-52 #17

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000031D0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-52 #17

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

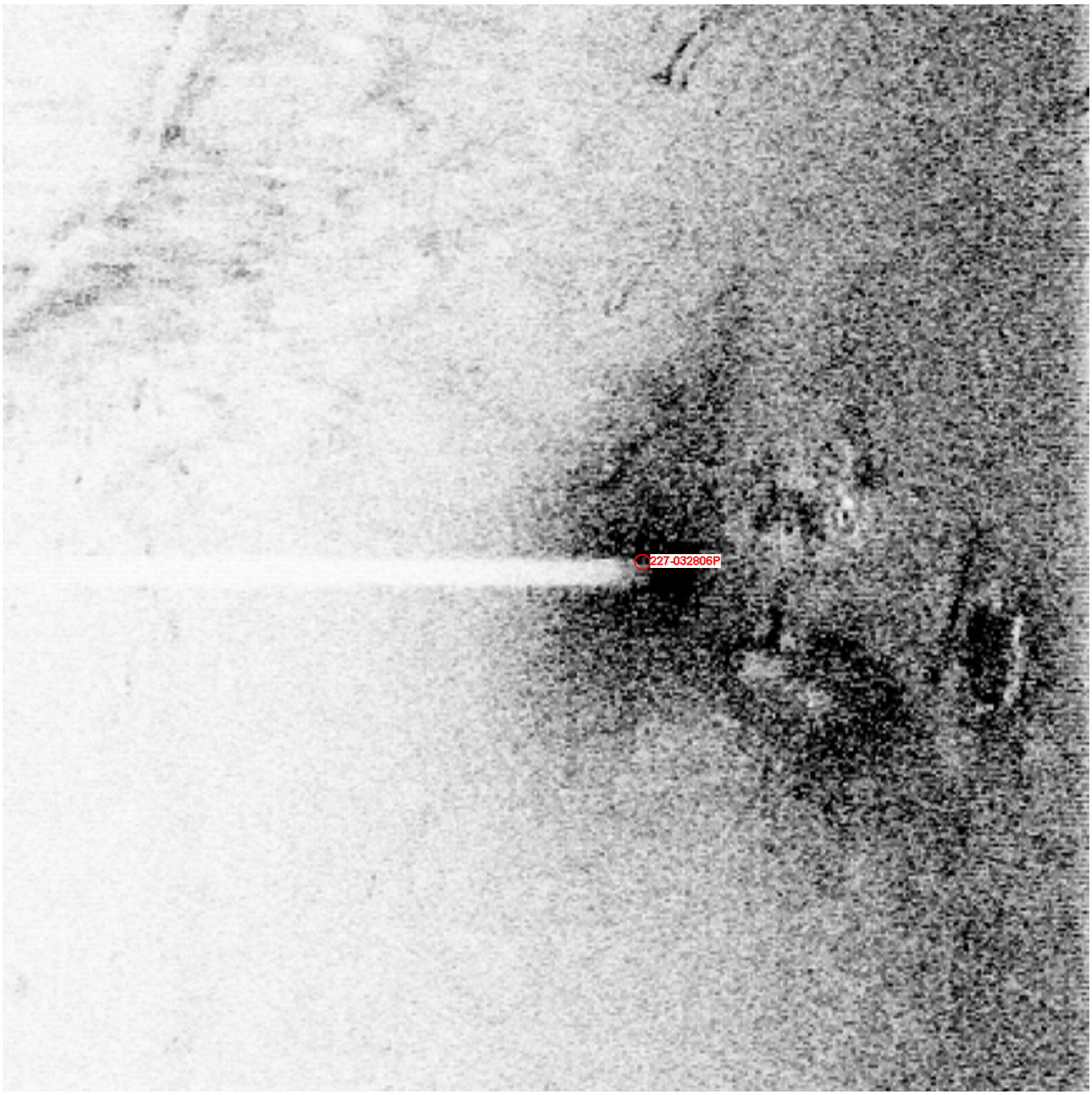


Figure 2.7.1

2.8) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 51' 37.0" N, 090° 28' 39.8" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C000003230001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°51'36.955"N 90°28'39.822"W Platform Well#16

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003230001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - Well#16

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

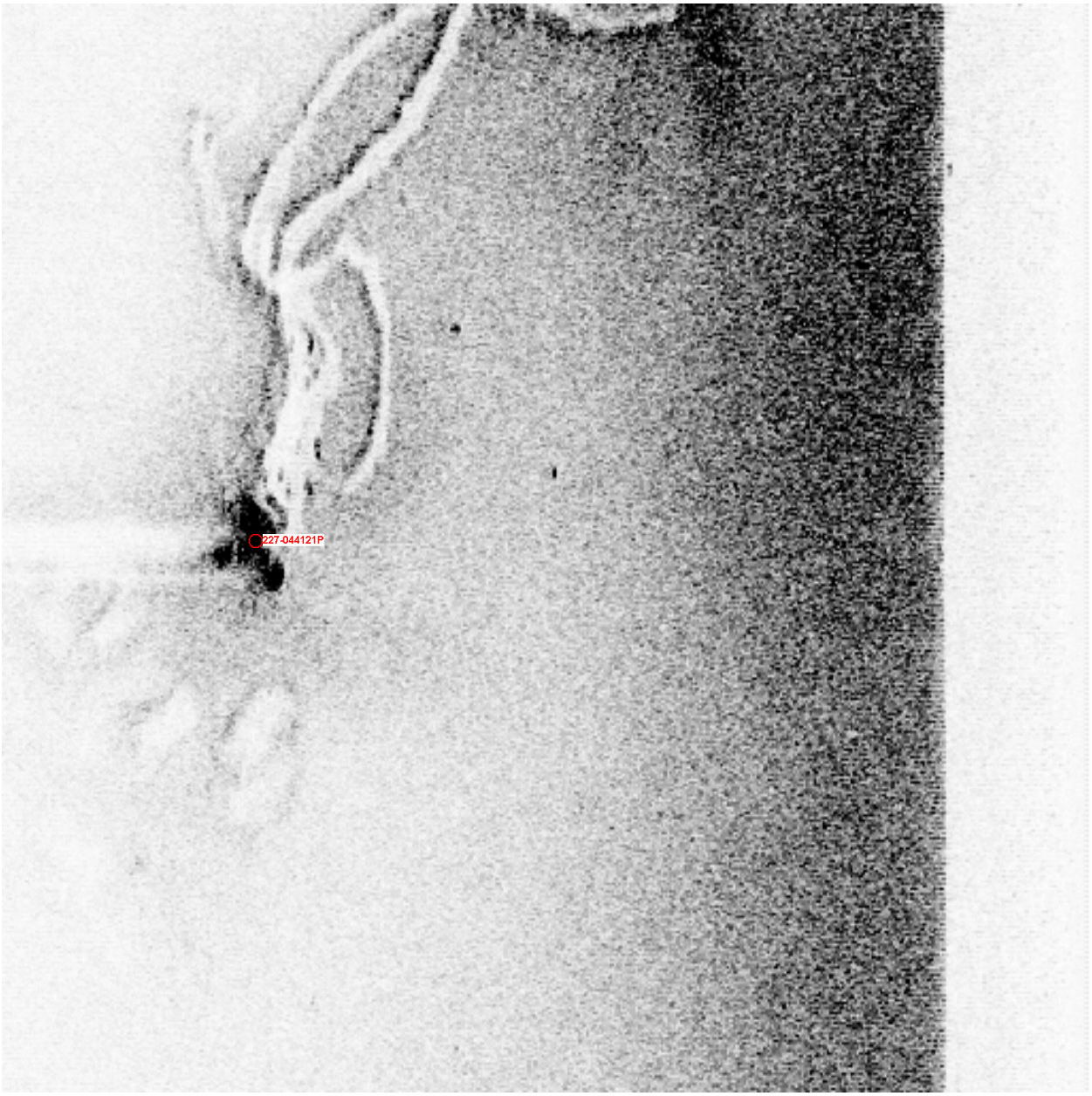


Figure 2.8.1

2.9) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 52' 54.2" N, 090° 28' 27.4" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000032D0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

Structures found in the following locations are currently uncharted.

28°52'54.202"N 90°28'27.426"W Platform ST-51-3

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000032D0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-51-3

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

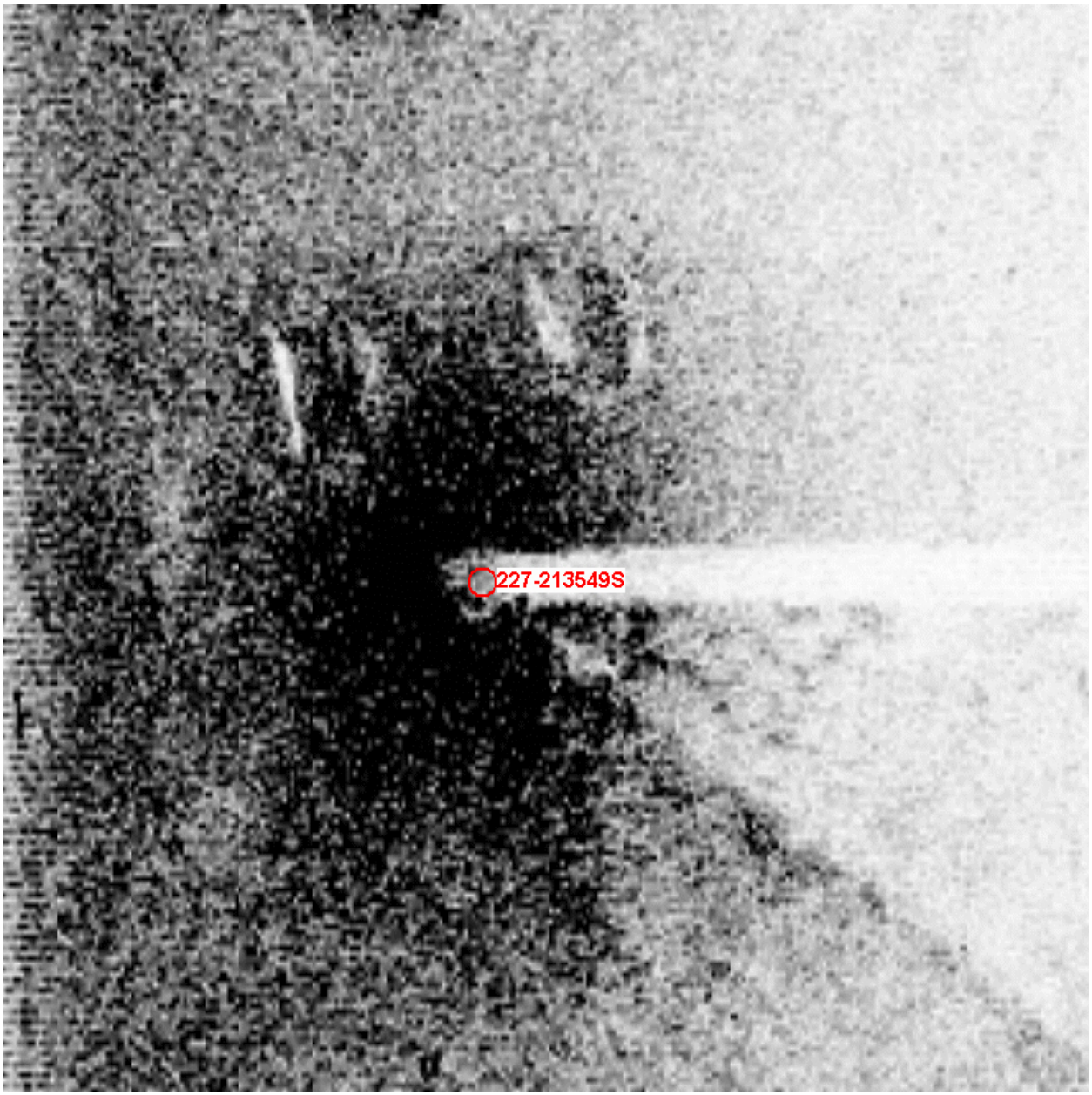


Figure 2.9.1

2.10) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 50' 45.0" N, 090° 28' 15.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003280001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°50'44.958"N 90°28'15.246"W Platform ST-53 #6

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003280001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - ST-53 #6
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

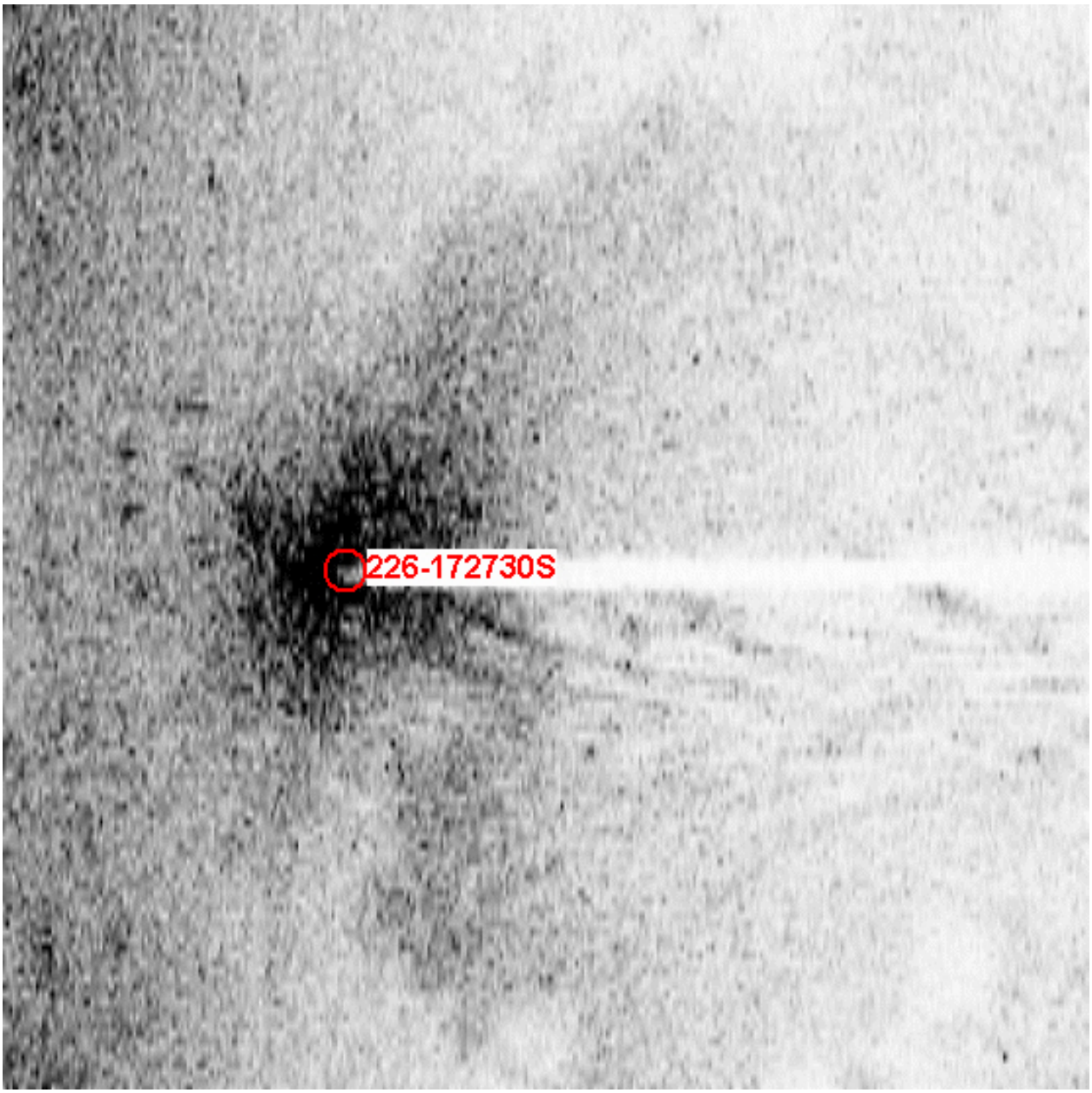


Figure 2.10.1

2.11) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 52' 09.6" N, 090° 28' 02.9" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000032A0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°52'09.639"N 90°28'02.915"W Platform ST-53-I

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000032A0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-53-I

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

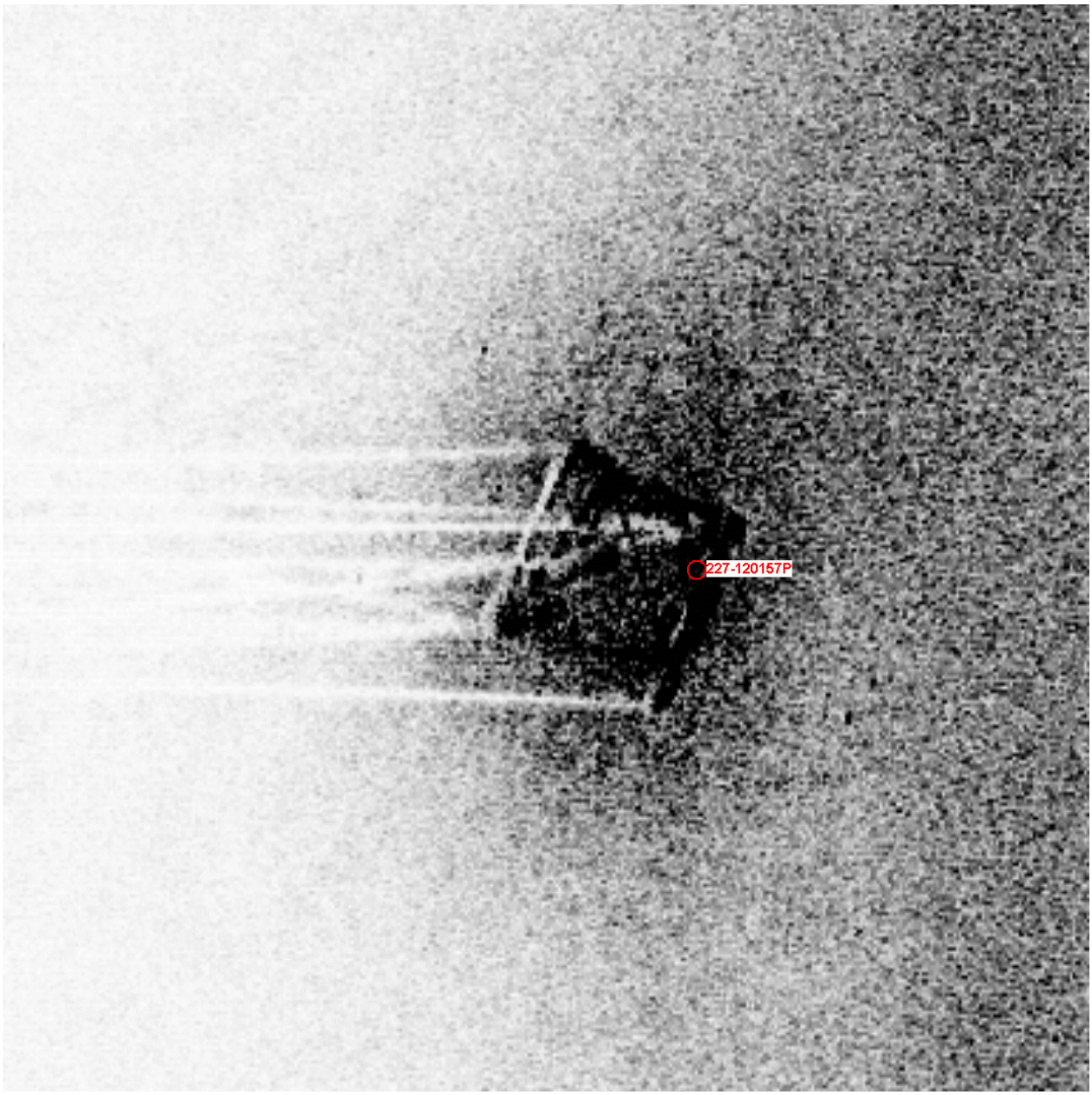


Figure 2.11.1

2.12) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 50' 48.2" N, 090° 28' 02.7" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003220001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°50'48.152"N 90°28'02.702"W Platform ST-53 #4

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003220001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - ST-53 #4
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

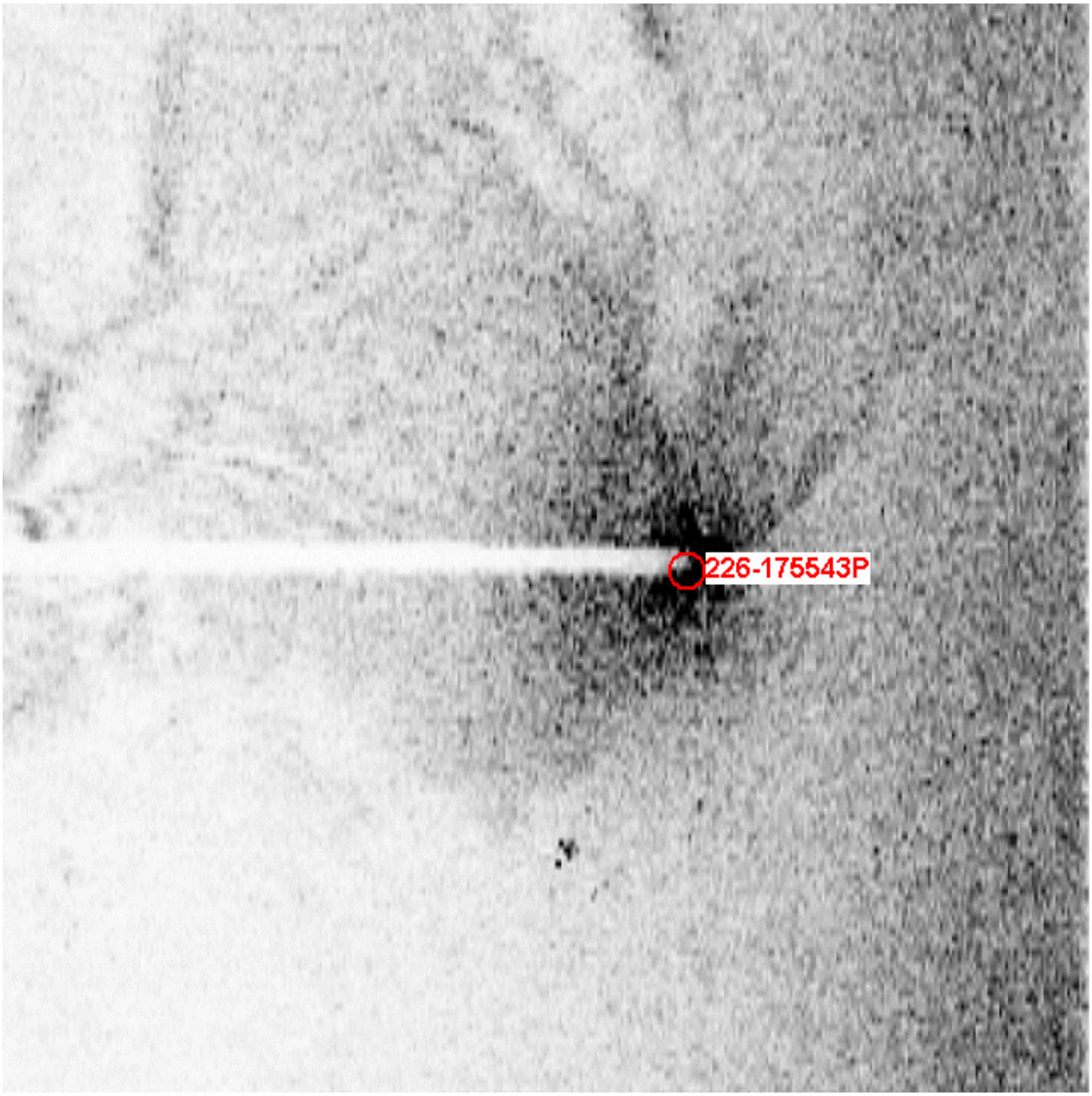


Figure 2.12.1

2.13) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 50' 44.5" N, 090° 27' 42.4" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000031C0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°50'44.535"N 90°27'42.446"W Platform ST-53-C

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000031C0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-53-C

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

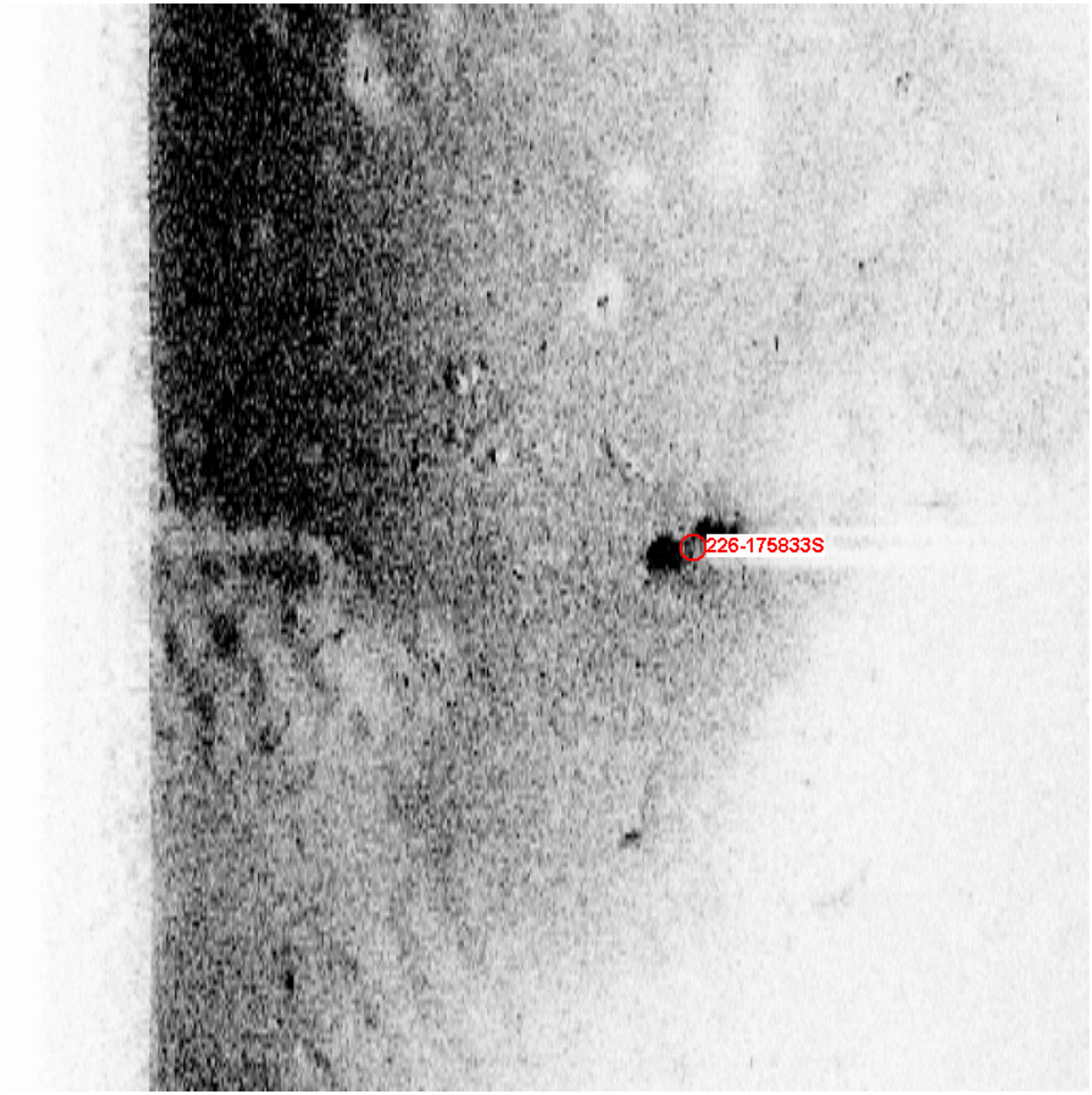


Figure 2.13.1

2.14) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 51' 29.2" N, 090° 27' 34.1" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C000003290001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°51'29.195"N 90°27'34.064"W Platform OCS-6-04000 #1

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003290001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - OCS-6-04000 #1

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

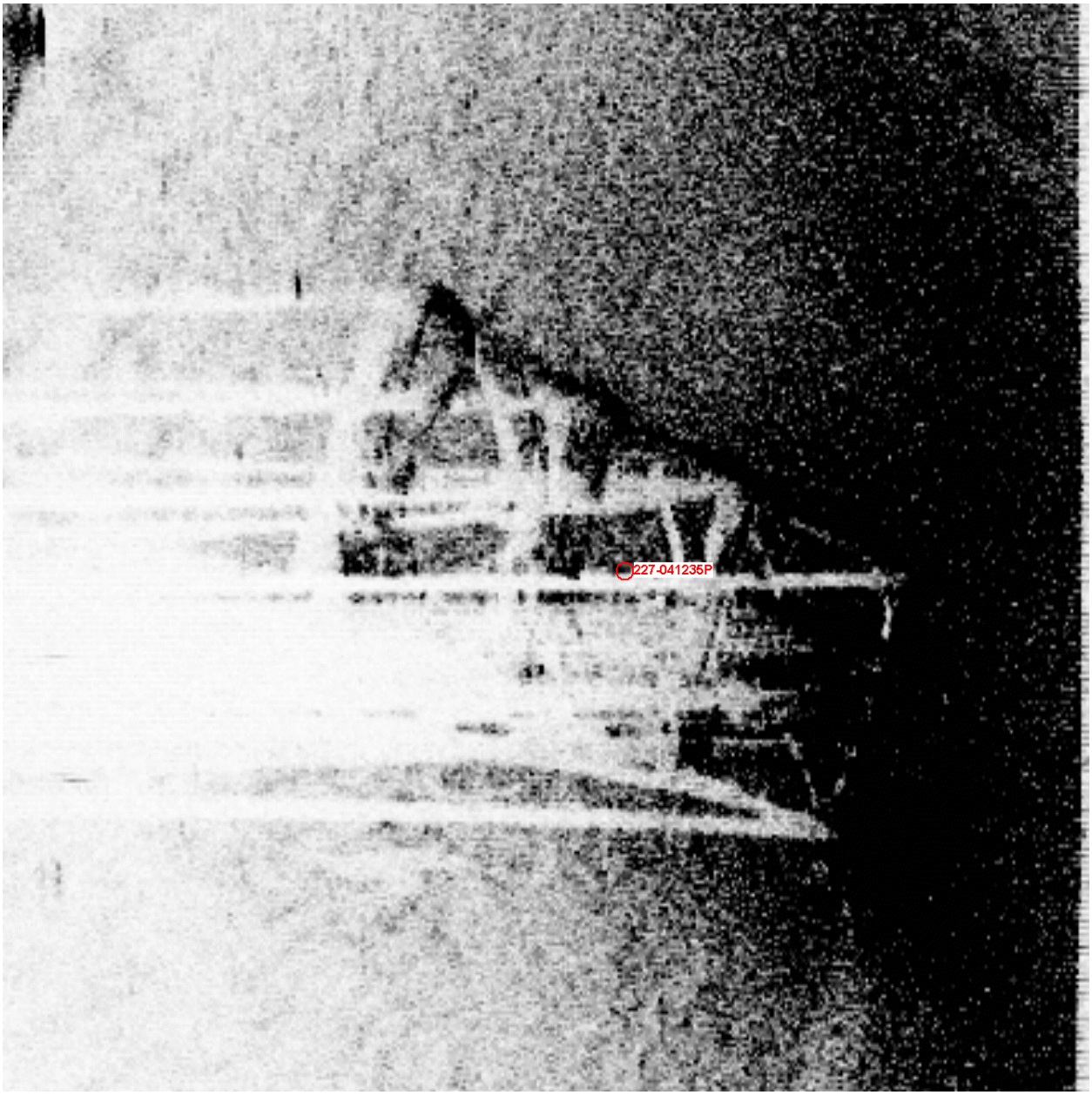


Figure 2.14.1

2.15) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 47' 12.1" N, 090° 25' 39.7" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C000003190001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°47'12.142"N 90°25'39.711"W Platform ST-81-A

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003190001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-81-A

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

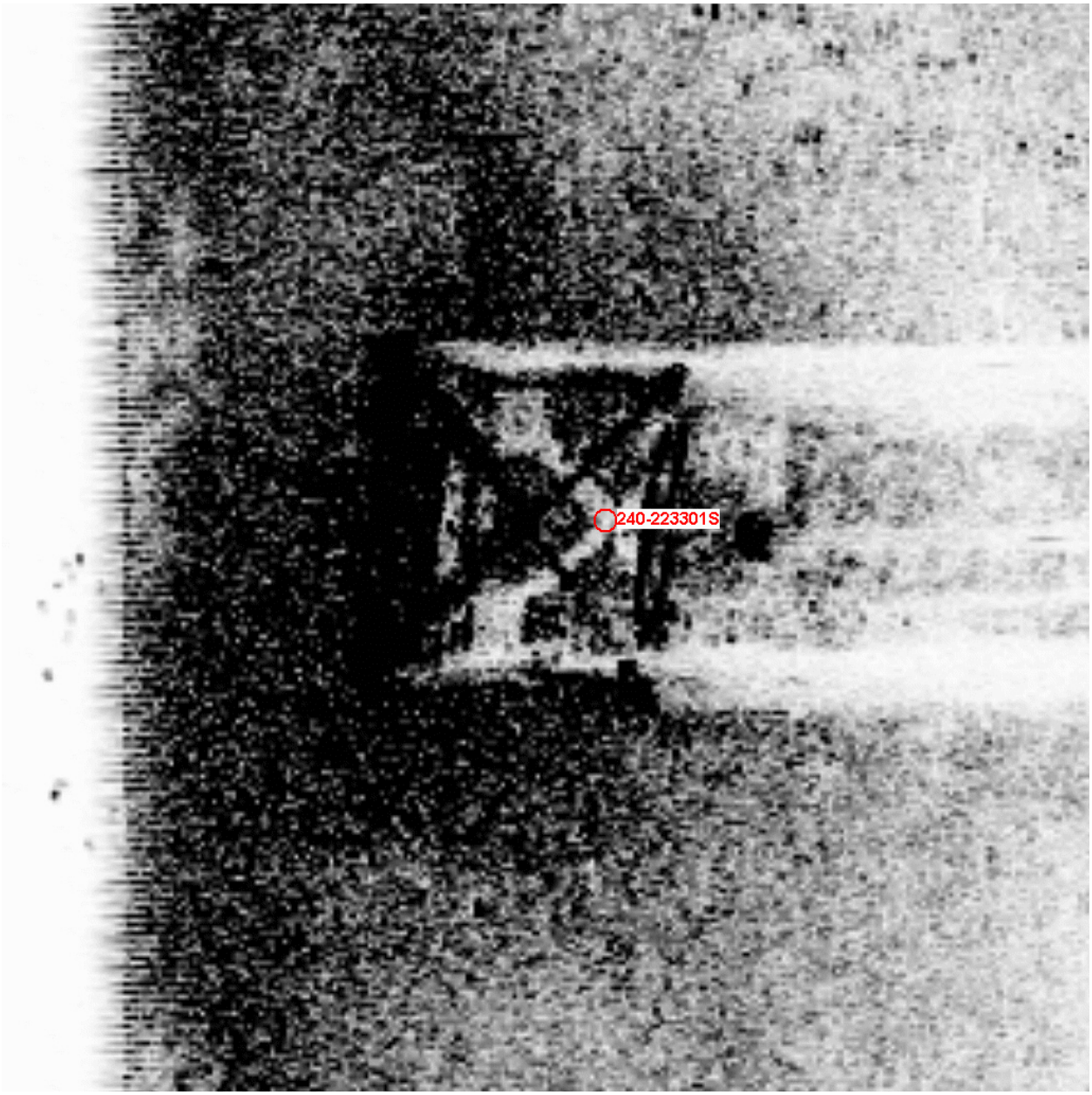


Figure 2.15.1

2.16) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 50' 01.5" N, 090° 25' 00.2" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003270001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°50'01.525"N 90°25'00.187"W Platform ST-54-G

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003270001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - ST-54-G
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

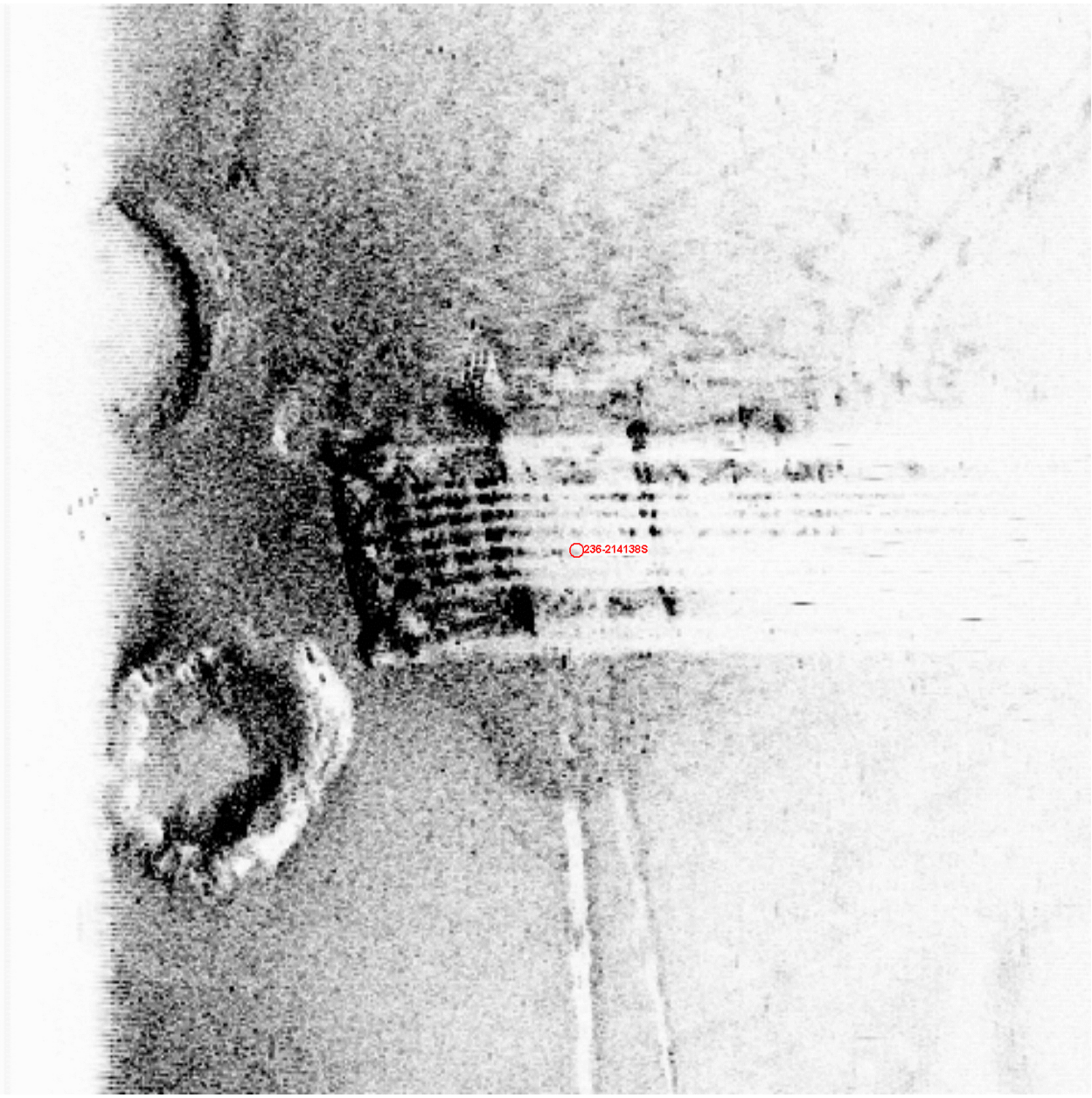


Figure 2.16.1

2.17) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 47' 56.9" N, 090° 24' 52.3" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000031F0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°47'56.861"N 90°24'52.325"W Platform ST-67-H

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000031F0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-67-H

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

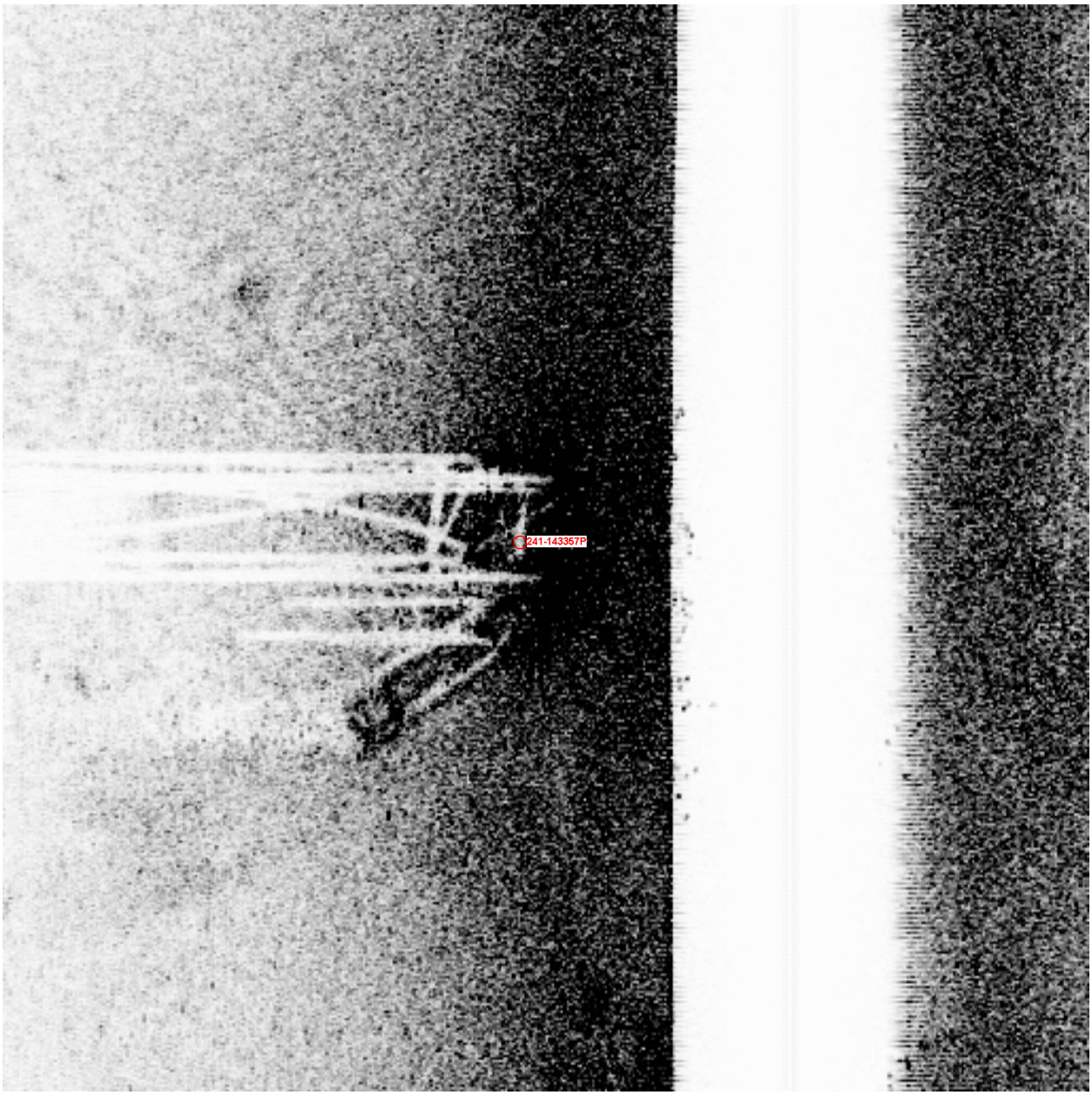


Figure 2.17.1

2.18) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 51' 10.6" N, 090° 23' 40.3" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003210001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°51'10.632"N 90°23'40.322"W Platform ST-54-J

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003210001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - ST-54-J
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

Figure 2.18.1

2.19) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 48' 49.7" N, 090° 23' 39.1" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000032C0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°48'49.650"N 90°23'39.093"W Platform ST-67-B

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000032C0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-67-B

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

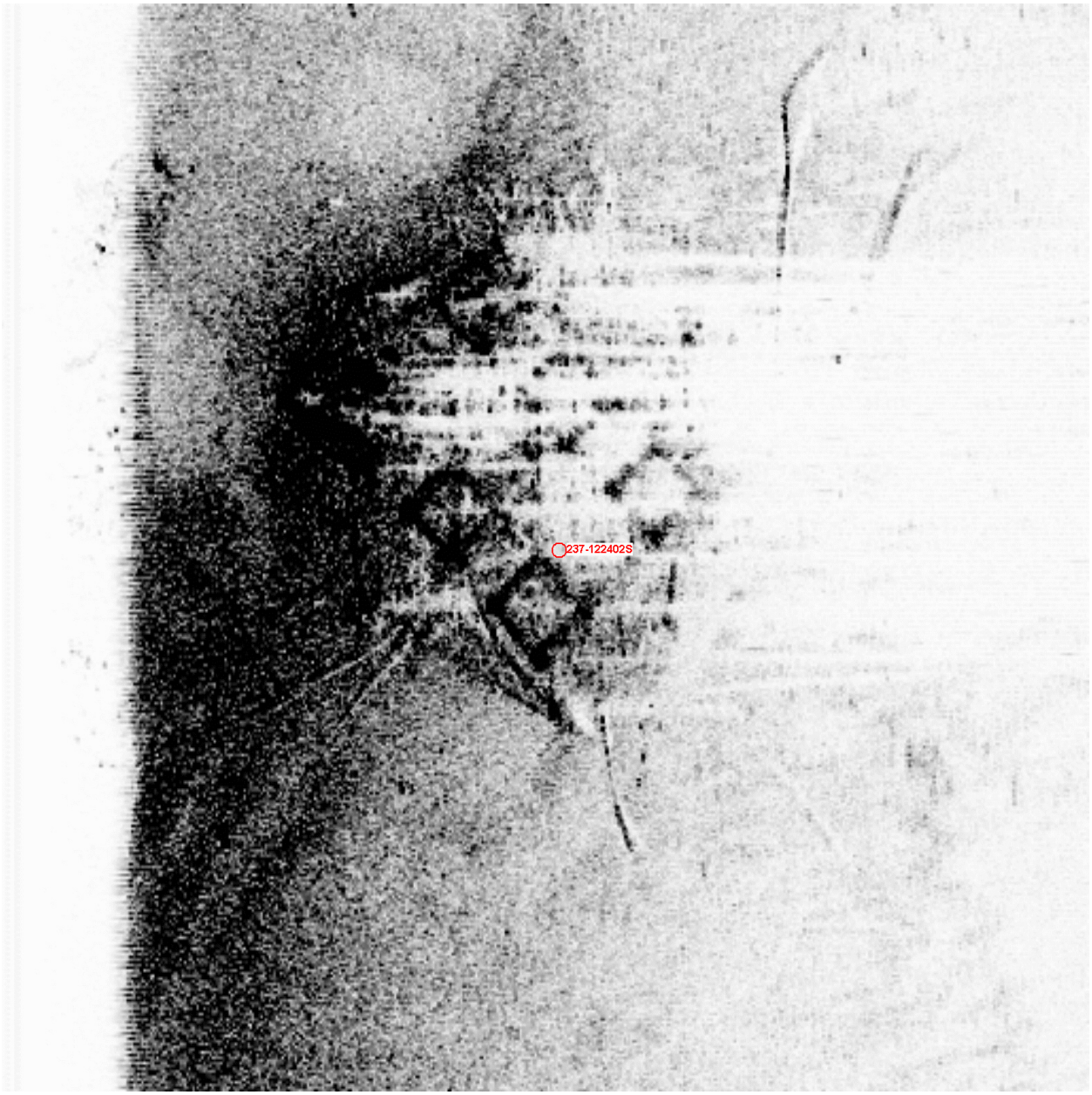


Figure 2.19.1

2.20) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 51' 44.3" N, 090° 23' 26.1" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003250001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The structures in the following table were found very close to charted platforms. No platforms exist directly over the charted positions. The chart should be updated to reflect these new positions.

28°51'44.338"N 90°23'26.098"W Platform ST-54-I

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003250001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - ST-54-I
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

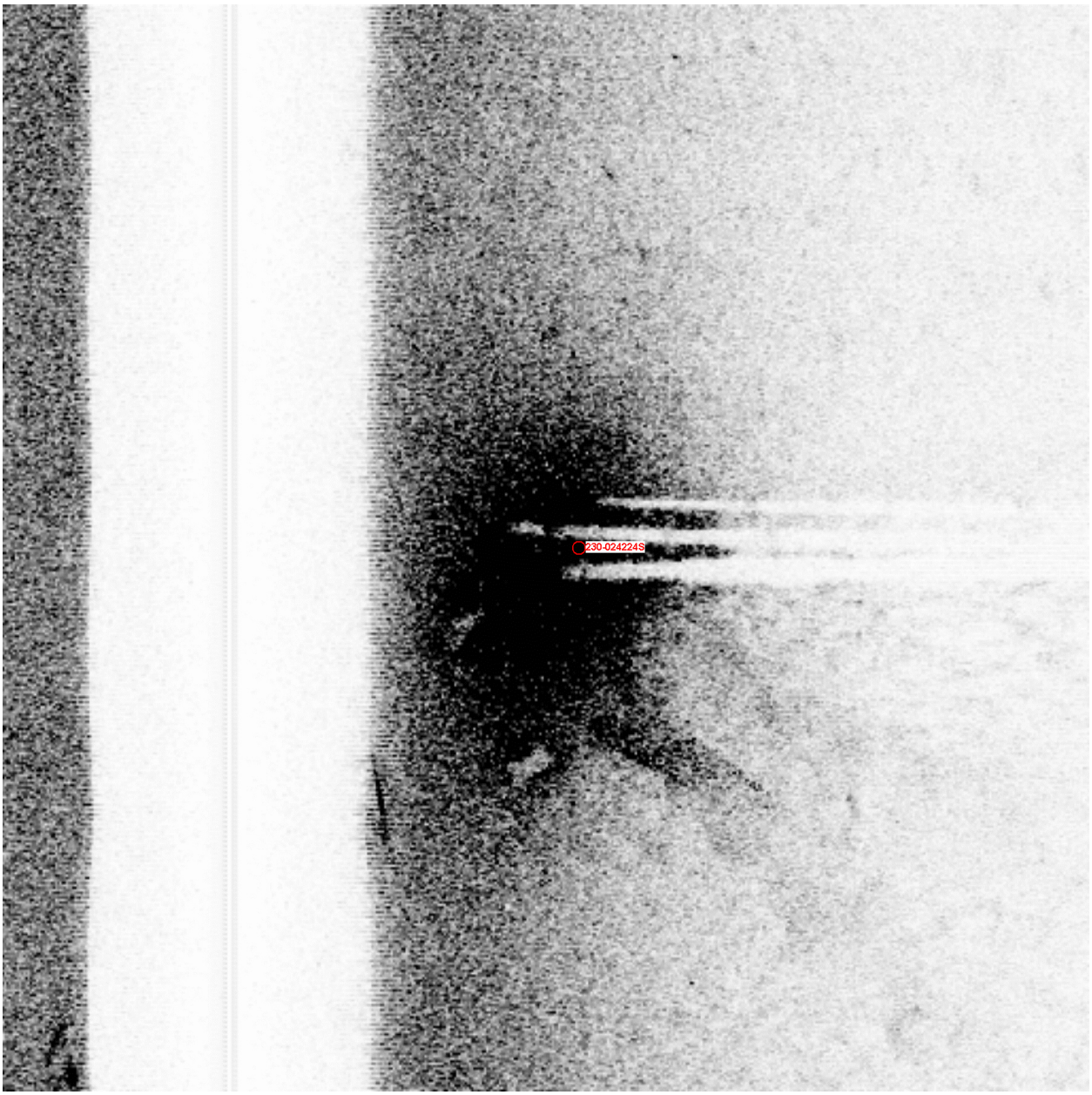


Figure 2.20.1

2.21) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 51' 21.1" N, 090° 22' 37.9" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C0000031B0001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°51'21.136"N 90°22'37.946"W Platform Exxon ST-55-E

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000031B0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1:	Offshore platform (OFSPLF)
Attributes:	CATOFP - 2:production platform
	OBJNAM - Exxon ST-55-E
	SORDAT - 20090831
	SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

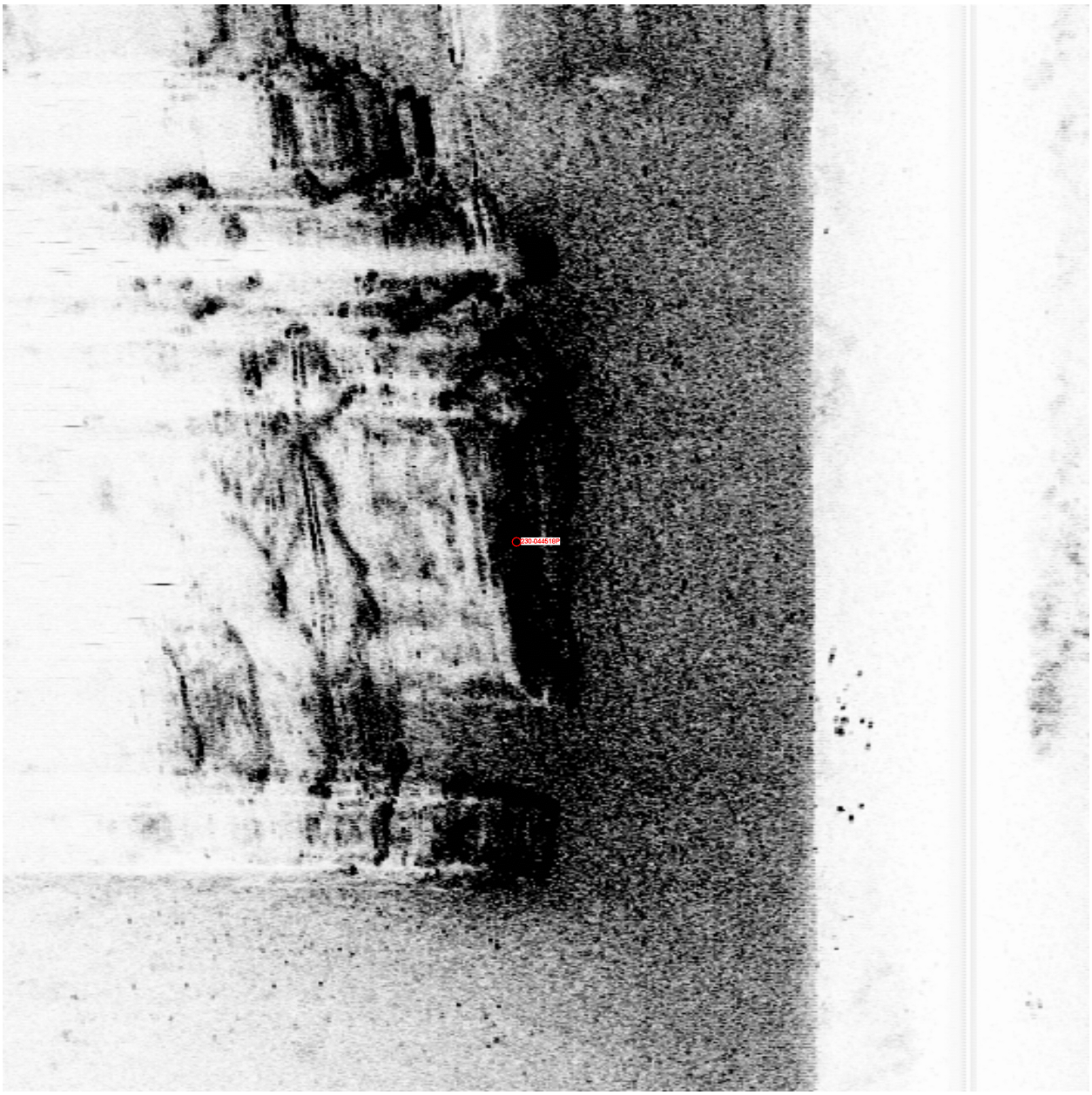


Figure 2.21.1

2.22) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 52' 23.4" N, 090° 22' 27.6" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000032E0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

The following charted structures were found as charted.

28°52'23.365"N 90°22'27.629"W Platform ST-48-A

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000032E0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-48-A

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

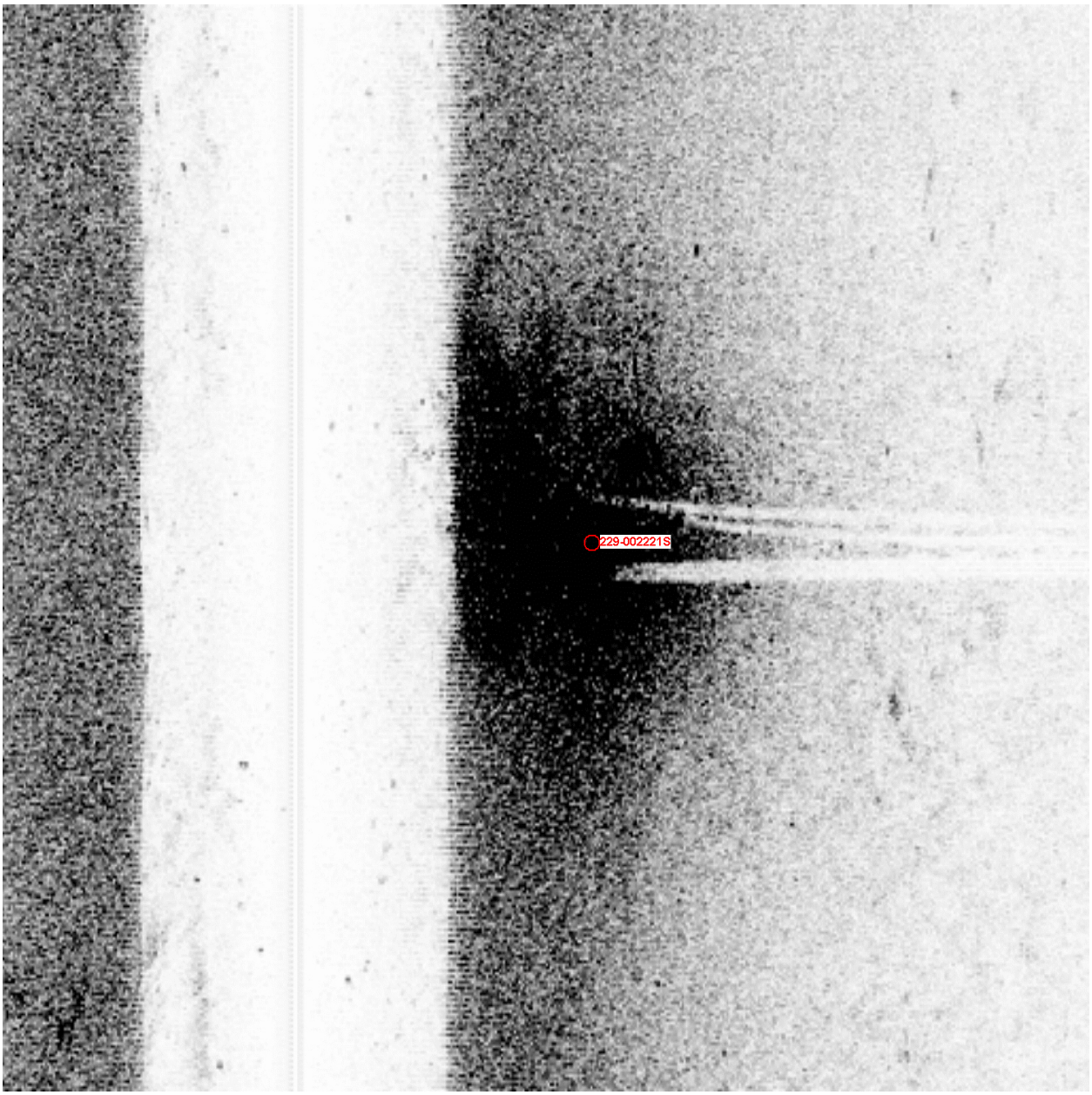


Figure 2.22.1

2.23) Charted Platform -Delete charted platform.

Survey Summary

Survey Position: 28° 51' 35.7" N, 090° 29' 03.3" W

Least Depth: [None]

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

Timestamp: 2003-182.00:00:00.000 (07/01/2003)

GP Dataset: AHB_H12055 / SAR Final Products / Features / New_and_Delete_Platforms.000

GP No.: 0226000057E30001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

The following is a list of structures that are currently charted, but were no longer present at the time of the survey.

Charted Position

Latitude Longitude

28°51'35.167"N 90°29'03.418"W

Feature Correlation

Address	Feature	Range	Azimuth	Status
AHB_H12055/SAR Final Products/Features/New_and_Delete_Platforms.000	0226000057E30001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform.

S-57 Data

Geo object 1: Cartographic symbol ($CSYMB)

Attributes: NINFOM - Delete charted platform.

Geo object 2: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

SORDAT - 20030700

SORIND - US,US,graph,Chart 11357

Office Notes

Concur.

2.24) Charted Platform -Delete charted platform.

Survey Summary

Survey Position: 28° 49' 00.8" N, 090° 28' 42.0" W

Least Depth: [None]

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

Timestamp: 1993-033.00:00:00.000 (02/02/1993)

GP Dataset: AHB_H12055 / SAR Final Products / Features / New_and_Delete_Platforms.000

GP No.: 0226000057E20001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

The following is a list of structures that are currently charted, but were no longer present at the time of the survey. Concur.

Charted Position

Latitude Longitude

28°49'00.876"N 90°28'41.465"W

Feature Correlation

Address	Feature	Range	Azimuth	Status
AHB_H12055/SAR Final Products/Features/New_and_Delete_Platforms.000	0226000057E20001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform.

S-57 Data

Geo object 1: Cartographic symbol ($CSYMB)

Attributes: NINFOM - Delete charted platform.

Geo object 2: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

CONRAD - 1:radar conspicuous

CONVIS - 1:visual conspicuous

OBJNAM - MURPHY-SS-117-7

SORDAT - 19930202

SORIND - US,US,reprt,8thCGD,LNM-05/93

Office Notes

Concur.

2.25) Charted Platform - Updated Position

Survey Summary

Survey Position: 28° 52' 23.3" N, 090° 28' 27.0" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: AHB_H12055 / SAR Final Products / Features / New_and_Delete_Platforms.000

GP No.: 0226000057E90001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
AHB_H12055/SAR Final Products/Features/New_and_Delete_Platforms.000	0226000057E90001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur.

Feature Images

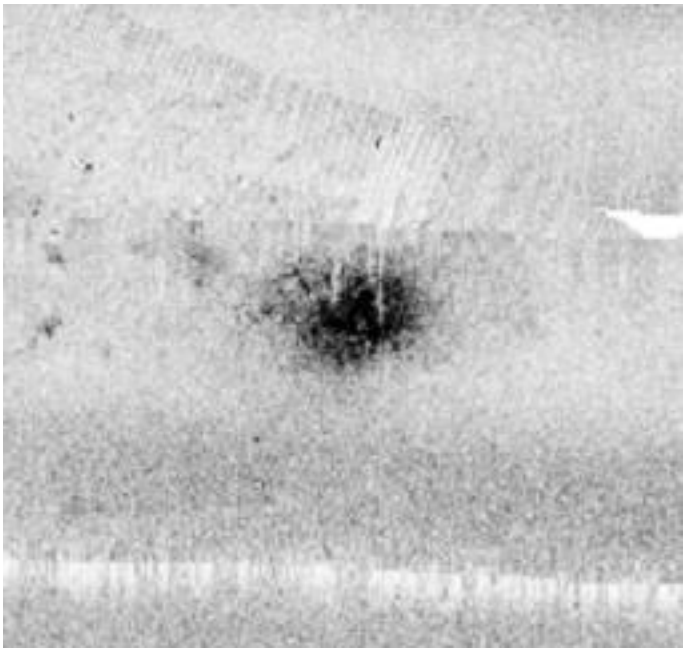


Figure 2.25.1

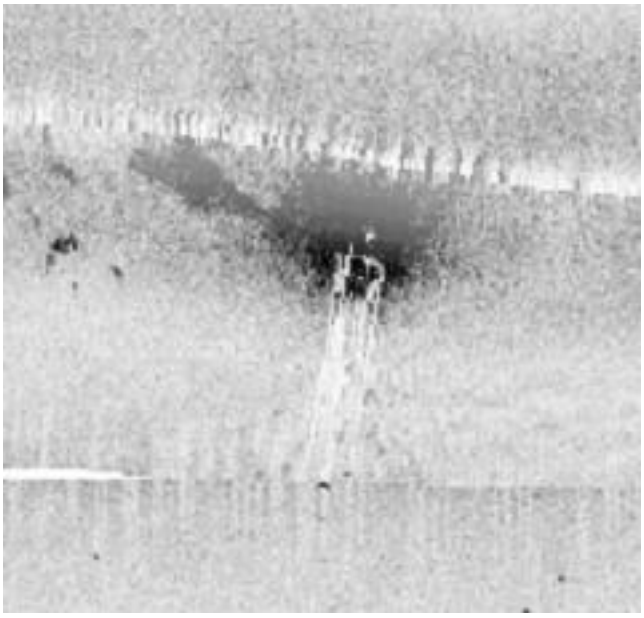


Figure 2.25.2

2.26) Charted Platform -Delete charted platform.

Survey Summary

Survey Position: 28° 52' 49.6" N, 090° 28' 25.2" W

Least Depth: [None]

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

Timestamp: 2003-182.00:00:00.000 (07/01/2003)

GP Dataset: AHB_H12055 / SAR Final Products / Features / New_and_Delete_Platforms.000

GP No.: 0226000057E40001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

The following is a list of structures that are currently charted, but were no longer present at the time of the survey. Concur.

Charted Position

Latitude Longitude

28°52'49.029"N 90°28'24.973"W

Feature Correlation

Address	Feature	Range	Azimuth	Status
AHB_H12055/SAR Final Products/Features/New_and_Delete_Platforms.000	0226000057E40001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform.

S-57 Data

Geo object 1: Cartographic symbol ($CSYMB)

Attributes: NINFOM - Delete charted platform.

Geo object 2: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

SORDAT - 20030700

SORIND - US,US,graph,Chart 11357

Office Notes

Concur.

2.27) Charted Platform -Delete charted platform.

Survey Summary

Survey Position: 28° 47' 53.1" N, 090° 25' 45.1" W

Least Depth: [None]

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

Timestamp: 1992-098.00:00:00.000 (04/07/1992)

GP Dataset: AHB_H12055 / SAR Final Products / Features / New_and_Delete_Platforms2.000

GP No.: 02260893AAB90F20

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

The following is a list of structures that are currently charted, but were no longer present at the time of the survey. Concur.

Charted Position

Latitude Longitude

28°47'52.326"N 90°25'44.440"W

Feature Correlation

Address	Feature	Range	Azimuth	Status
AHB_H12055/SAR Final Products/Features/New_and_Delete_Platforms2.000	02260893AAB90F20	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform.

S-57 Data

Geo object 1: Cartographic symbol ($CSYMB)

Attributes: NINFOM - Delete charted platform.

Geo object 2: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

CONRAD - 1:radar conspicuous

CONVIS - 1:visual conspicuous

OBJNAM - ARCO-ST-68-1

SORDAT - 19920407

SORIND - US,US,reprt,8thCGD,LNM 15/92

Office Notes

Concur.

2.28) Exposed Section of Pipeline

Survey Summary

Survey Position:	28° 52' 19.2" N, 090° 28' 52.9" W
Least Depth:	18.56 m (= 60.90 ft = 10.150 fm = 10 fm 0.90 ft)
TPU (±1.96σ):	**THU (TPEh)** ±3.921 m ; **TVU (TPEv)** ±0.318 m
Timestamp:	2009-233.00:36:31.003 (08/21/2009)
Survey Line:	h12055_sub1 / andrew_charles / 2009-233 / 1d-1
Profile/Beam:	1275/64
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

Charted pipeline has a section exposed above the seafloor

Feature Correlation

Address	Feature	Range	Azimuth	Status
h12055_sub1/andrew_charles/2009-233/1d-1	1275/64	0.00	000.0	Primary

Hydrographer Recommendations

As the exposed pipeline falls on a charted pipeline, no charting recommendation is necessary. Chart present survey soundings.

S-57 Data

[None]

Office Notes

Concur. No charting action required.

Feature Images

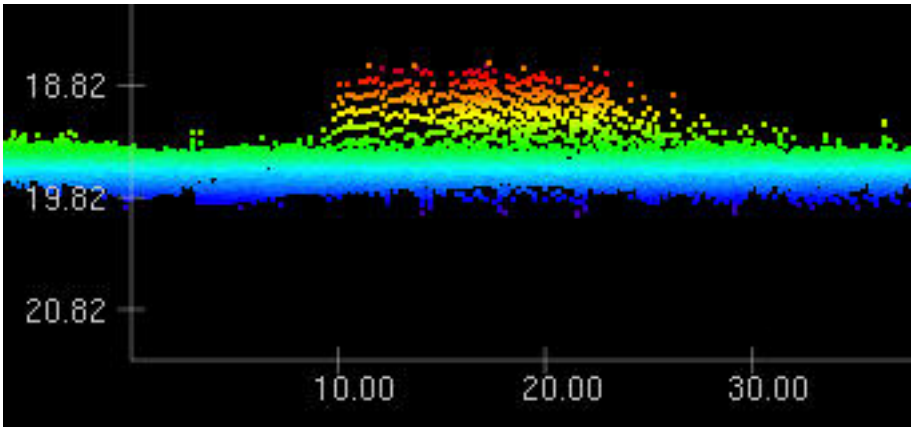


Figure 2.28.1

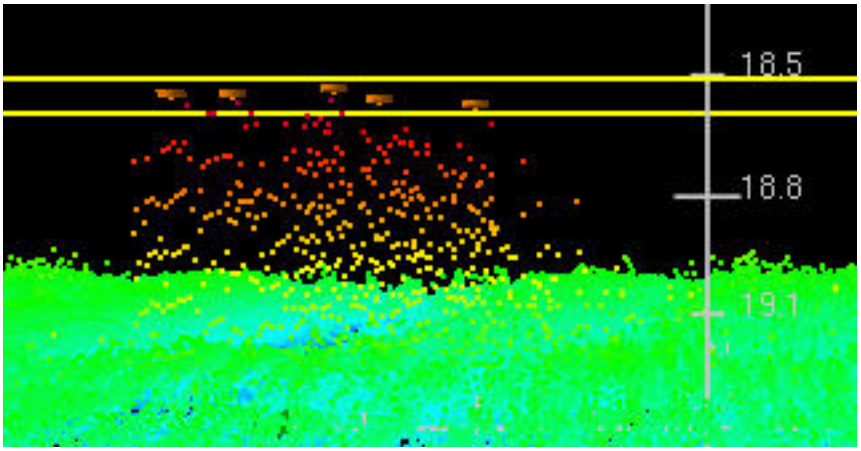


Figure 2.28.2

2.29) Charted Platform - Updated Position

Survey Summary

Survey Position:	28° 52' 04.7" N, 090° 29' 28.0" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	2011-202.08:10:29 (07/21/2011)
Survey Line:	h12055_sub1 / andrew_charles / 2009-sss / 4124-1.lbc
Contact/Point:	0001/1
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

Charted platform present in side scan, unaddressed by field personnel.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h12055_sub1/andrew_charles/2009-sss/4124-1.lbc	0001	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted platform and add platform in the surveyed position.

S-57 Data

[None]

Office Notes

Concur.

Feature Images

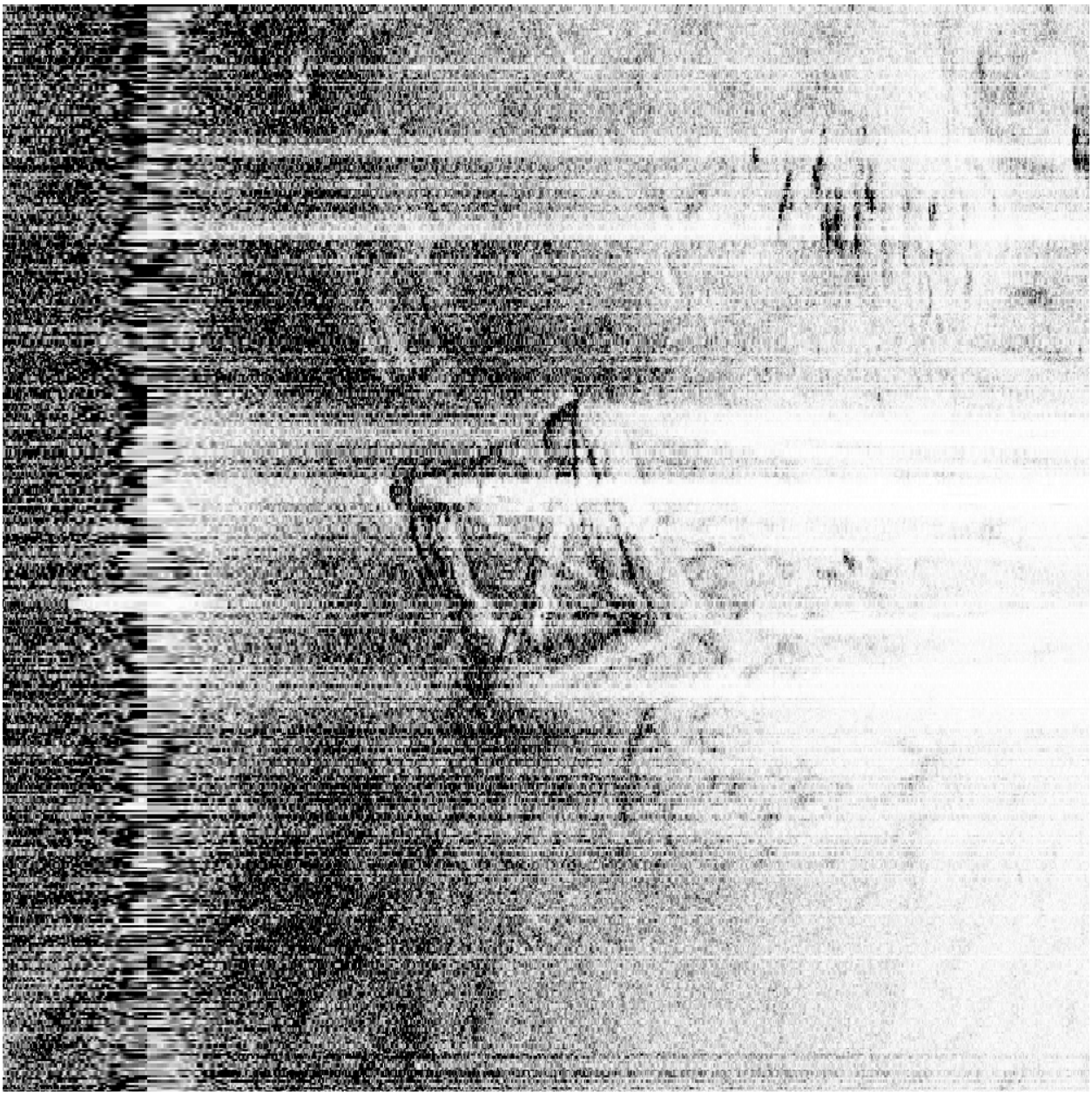


Figure 2.29.1

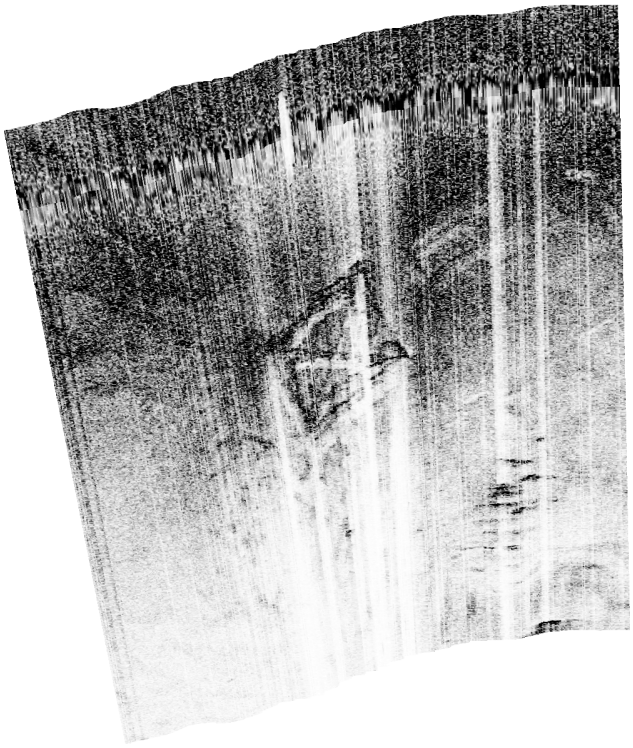


Figure 2.29.2

2.30) Charted Platform - Delete Charted Platform

Survey Summary

Survey Position: 28° 52' 22.0" N, 090° 28' 14.3" W

Least Depth: [None]

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

Timestamp: 2003-182.00:00:00.000 (07/01/2003)

GP Dataset: COMPILE / Working / HOB's / Platform to Delete.000

GP No.: 022600008E210001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

[None]

Feature Correlation

Address	Feature	Range	Azimuth	Status
COMPILE/Working/HOB's/Platform to Delete.000	022600008E210001	0.00	000.0	Primary

Hydrographer Recommendations

This OFSPLF was not reviewed by the field. Office processing determined this platform no longer exists. Recommend to delete OFSPLF.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

SORDAT - 20030700

SORIND - US,US,graph,Chart 11357

Office Notes

Concur. Delete charted platform.

3 - Uncharted

3.1) Uncharted Platform - Do Not Chart

Survey Summary

Survey Position:	28° 52' 01.1" N, 090° 29' 27.9" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C000003260001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

Two charted structures at 28°52'01.697"N, 90°29'27.718"W are actually three connected structures. The positions of the three parts to this platform as found in the table below.

Surveyed Position

Latitude Longitude Structure Type Structure Name

28°52'01.413"N 90°29'26.900"W Platform ST-52

28°52'01.059"N 90°29'27.896"W Platform ST-52

28°51'59.477"N 90°29'29.675"W Platform ST 52

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C000003260001	0.00	000.0	Primary

Hydrographer Recommendations

SAR Note - Concur. Chart a platform at the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST-52

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Do not Concur. Do not chart OFSPLF.

Compilation: This OFSPLF is not recommended to chart due to the density of platforms in close proximity at chart scale.

Feature Images

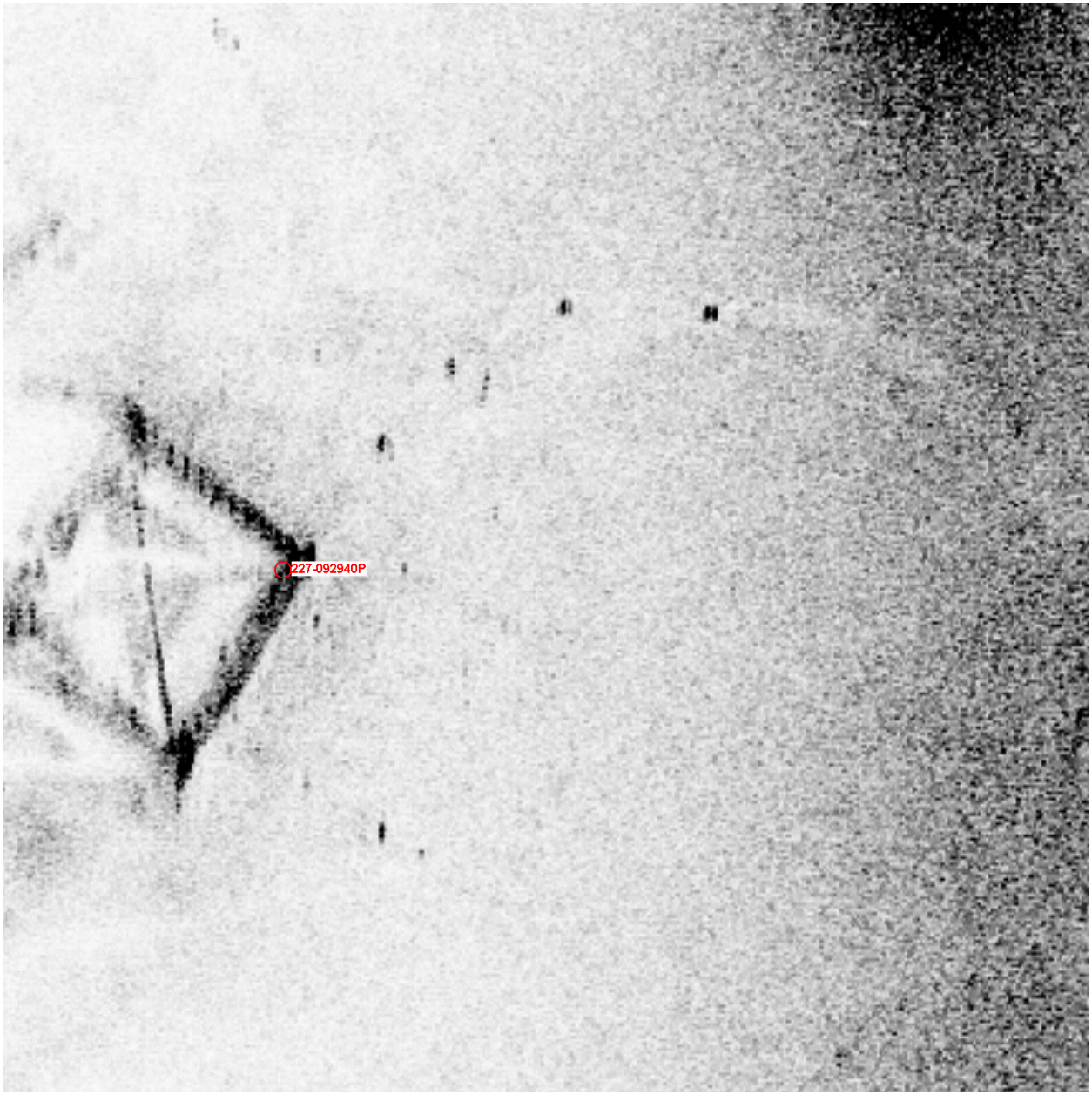


Figure 3.1.1

3.2) Uncharted Platform

Survey Summary

Survey Position:	28° 52' 01.4" N, 090° 29' 26.9" W
Least Depth:	[None]
TPU (±1.96σ):	**THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp:	1981-001.00:00:00.000 (01/01/1981)
GP Dataset:	SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000
GP No.:	1C1C0000032B0001
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

Two charted structures at 28°52'01.697"N, 90°29'27.718"W are actually three connected structures. The positions of the three parts to this platform as found in the table below.

Surveyed Position

Latitude Longitude Structure Type Structure Name

28°52'01.413"N 90°29'26.900"W Platform ST-52

28°52'01.059"N 90°29'27.896"W Platform ST-52

28°51'59.477"N 90°29'29.675"W Platform ST 52

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000032B0001	0.00	000.0	Primary

Hydrographer Recommendations

SAR Note - Concur. Chart a platform at the surveyed position.

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform
OBJNAM - ST-52
SORDAT - 20090831
SORIND - US,US,graph,H12055

Office Notes

Concur. Chart a platform at the surveyed position.

Feature Images

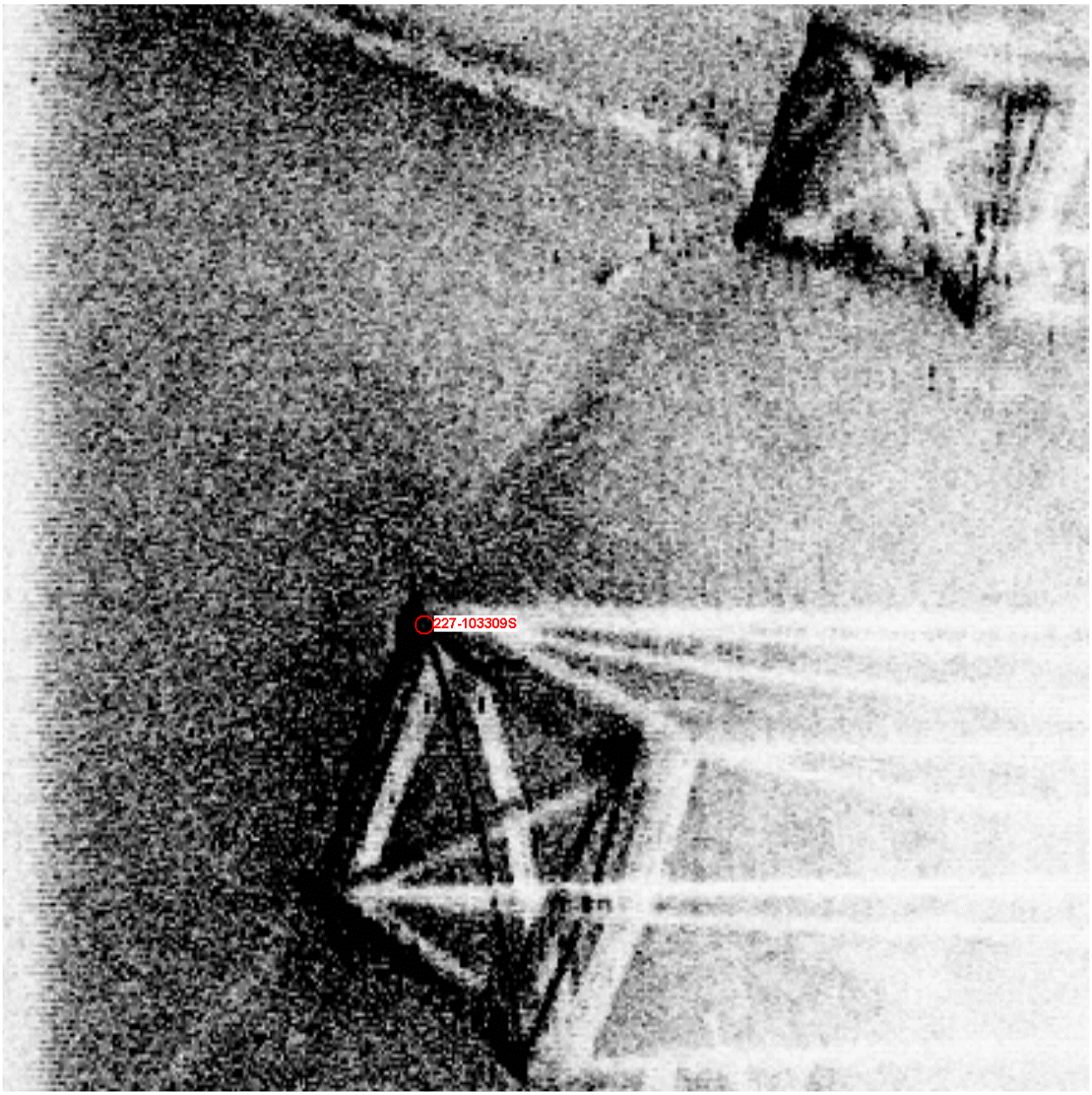


Figure 3.2.1

3.3) Uncharted Platform

Survey Summary

Survey Position: 28° 52' 27.3" N, 090° 28' 37.7" W

Least Depth: [None]

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

Timestamp: 1981-001.00:00:00.000 (01/01/1981)

GP Dataset: SAR / SAR AHB HOB Files / Field S-57 Feature Files / H12055_platforms.000

GP No.: 1C1C0000031A0001

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

DR States:

D.2.3 EXISTING INFRASTUCTURE

Structures found in the following locations are currently uncharted.

28°52'27.319"N 90°28'37.656"W Platform ST 51 #4

Feature Correlation

Address	Feature	Range	Azimuth	Status
SAR/SAR AHB HOB Files/Field S-57 Feature Files/H12055_platforms.000	1C1C0000031A0001	0.00	000.0	Primary

Hydrographer Recommendations

SAR Note - Concur. Chart a platform at the surveyed position

S-57 Data

Geo object 1: Offshore platform (OFSPLF)

Attributes: CATOFP - 2:production platform

OBJNAM - ST 51 #4

SORDAT - 20090831

SORIND - US,US,graph,H12055

Office Notes

Concur. Chart a platform at the surveyed position.

Feature Images

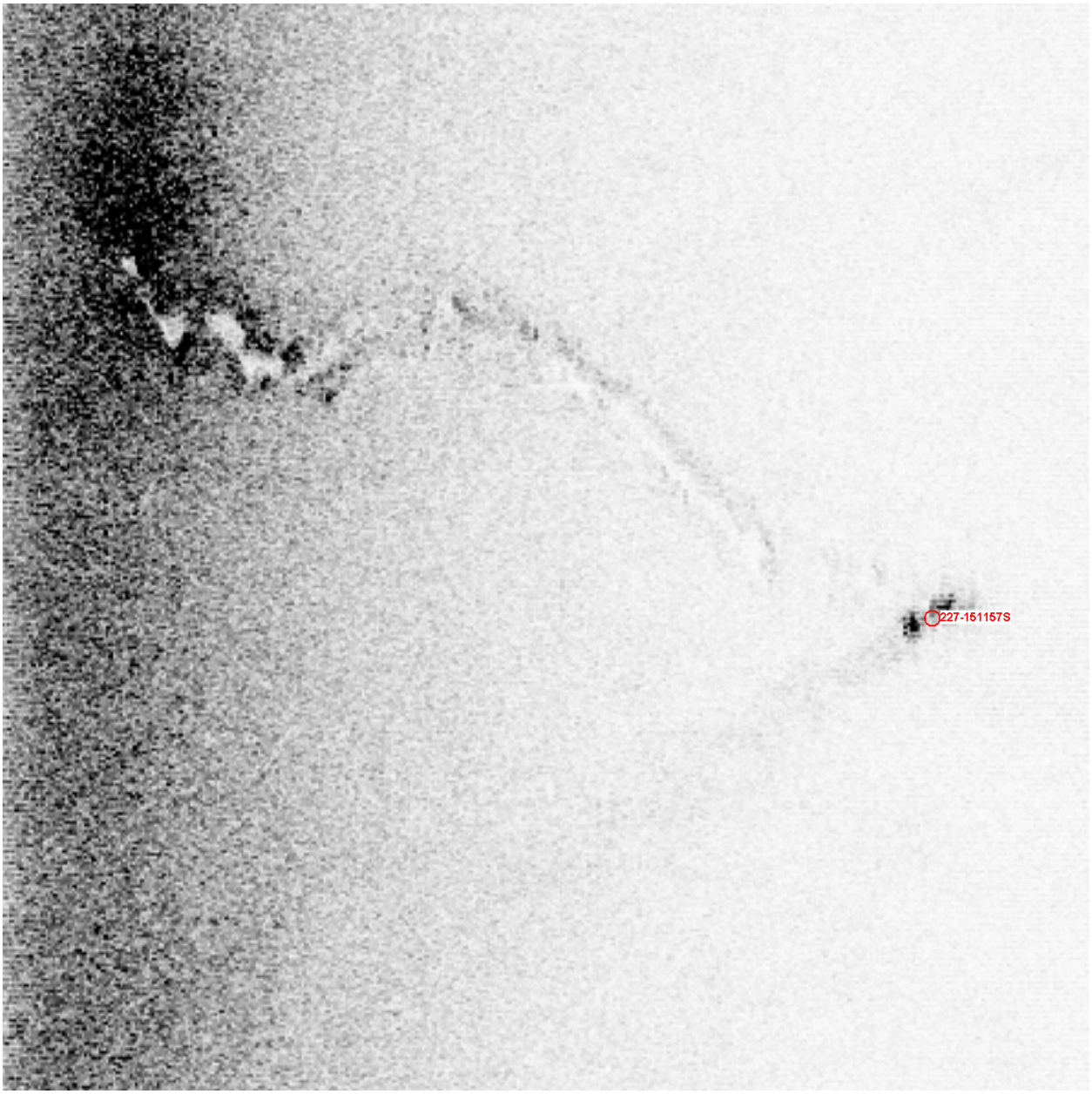


Figure 3.3.1

3.4) Uncharted 60 ft Obstrn

Survey Summary

Survey Position: 28° 53' 00.5" N, 090° 28' 43.1" W

Least Depth: 18.41 m (= 60.38 ft = 10.064 fm = 10 fm 0.38 ft)

TPU (±1.96σ): **THU (TPEh)** ±3.922 m ; **TVU (TPEv)** ±0.336 m

Timestamp: 2009-228.00:14:06.469 (08/16/2009)

Survey Line: h12055_sub1 / andrew_charles / 2009-227 / 4105-2

Profile/Beam: 17644/254

Charts Affected: 11357_1, 1116A_1, 11340_1, 411_1

Remarks:

Possible pile or Obstn

Feature Correlation

Address	Feature	Range	Azimuth	Status
h12055_sub1/andrew_charles/2009-227/4105-2	17644/254	0.00	000.0	Primary
h12055_sub1/andrew_charles/2009-228/4105-2	17639/249	1.53	275.3	Secondary
h12055_sub1/andrew_charles/2009-sss/4105-2.lbc	0001	3.90	067.7	Secondary
h12055_sub1/andrew_charles/2009-sss/4104-1.lbc	0001	19.32	009.0	Secondary
h12055_sub1/andrew_charles/2009-228/4105-2	17652/168	22.24	005.1	Secondary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1: Obstruction (OBSTRN)

Attributes: QUASOU - 6:least depth known

SORDAT - 20090831

SORIND - US,Us,graph,H12055

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

VALSOU - 18.405 m

Office Notes

Do not chart. Insignificant item with relative depths represented in close proximity.

Feature Images

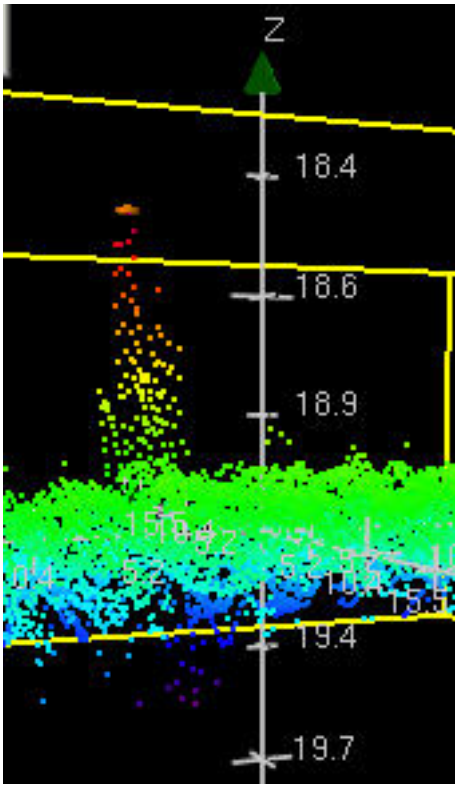


Figure 3.4.1

3.5) Uncharted 60ft Obstrn

Survey Summary

Survey Position:	28° 52' 39.3" N, 090° 28' 41.9" W
Least Depth:	18.50 m (= 60.70 ft = 10.116 fm = 10 fm 0.70 ft)
TPU (±1.96σ):	**THU (TPEh)** ±3.921 m ; **TVU (TPEv)** ±0.317 m
Timestamp:	2009-233.00:09:53.725 (08/21/2009)
Survey Line:	h12055_sub1 / andrew_charles / 2009-233 / 4d-1
Profile/Beam:	2508/181
Charts Affected:	11357_1, 1116A_1, 11340_1, 411_1

Remarks:

Possible obstrn on the seafloor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
h12055_sub1/andrew_charles/2009-233/4d-1	2508/181	0.00	000.0	Primary

Hydrographer Recommendations

[None]

S-57 Data

Geo object 1:	Obstruction (OBSTRN)
Attributes:	QUASOU - 6:least depth known
	TECSOU - 2,3:found by side scan sonar,found by multi-beam
	VALSOU - 18.501 m
	WATLEV - 3:always under water/submerged

Office Notes

Do not chart. Obstruction is insignificant. Chart as CS Sounding.

Feature Images

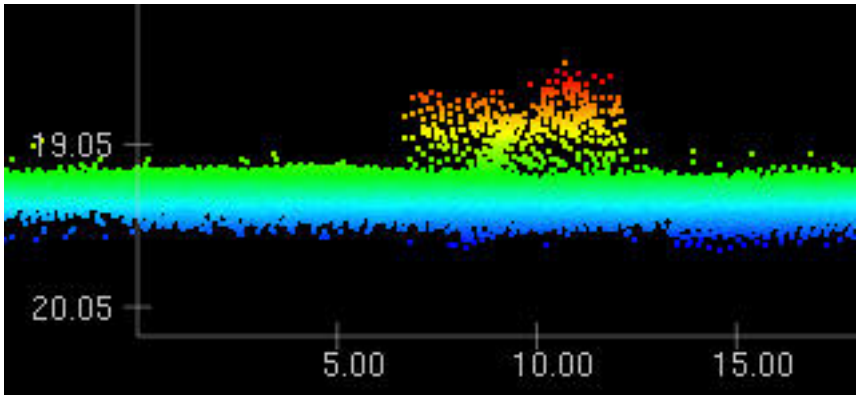


Figure 3.5.1

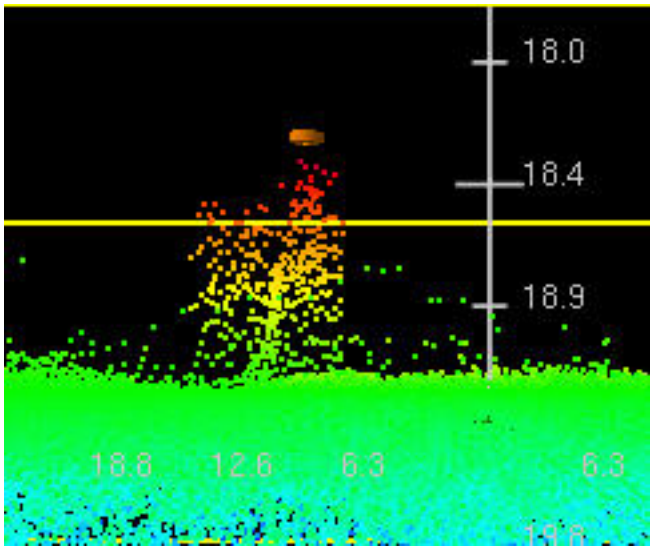
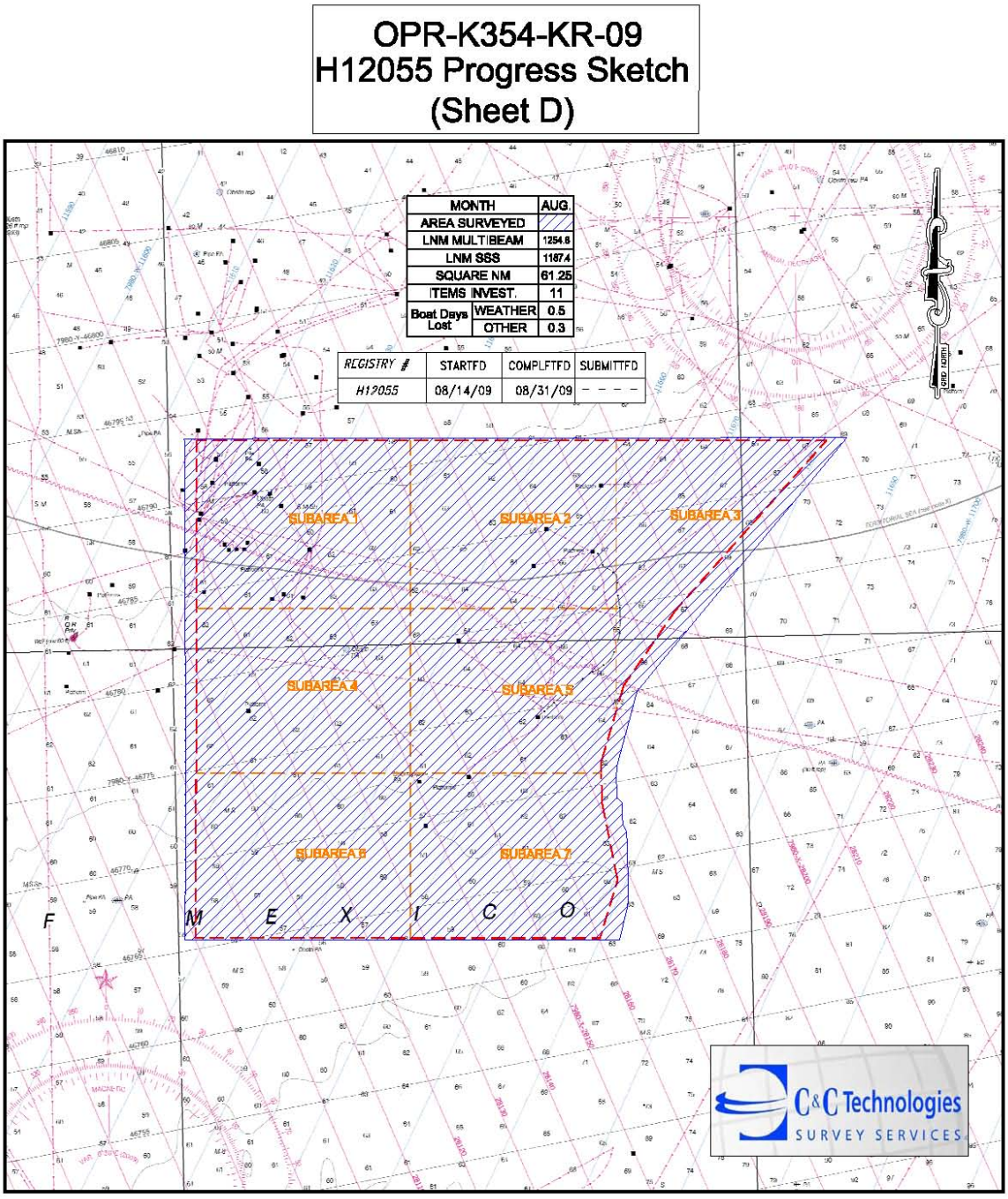


Figure 3.5.2

APPENDIX III

FINAL PROGRESS SKETCH AND SURVEY OUTLINE

A shapefile of the final survey outline for Sheet D (H12055) has been included in the DR folder inside the H12055_Report_Deliverables directory



APPENDIX IV

TIDES AND WATER LEVELS

The tidal data applied to all multibeam echo sounder data was downloaded from the following website:

http://tidesandcurrents.noaa.gov/data_menu.shtml?stn=8768094%20Calcasieu%20Pass,%20LA&type=Historic%20Tide%20Data

ABSTRACT OF TIMES OF HYDROGRAPHY

Project: OPR-K354-KR-09
Contractor Name: C & C Technologies, Inc.
Inclusive Dates: August 14th,2009 - September 2nd,2009
Registry No.: H12055 (Sheet D)
Date: April 2009
Sheet Letter: D
Field Work is Complete
Time (UTC)

Date	Julian Day	Start	End	Year
8/14/2009	226	1200	2400	2009
8/15/2009	227	0000	2400	2009
8/16/2009	228	0000	2400	2009
8/17/2009	229	0000	2400	2009
8/18/2009	230	0000	2400	2009
8/19/2009	231	0000	1110	2009
8/20/2009	232	0300	2400	2009
8/21/2009	233	0000	2400	2009
8/22/2009	234	0000	0306	2009
8/23/2009	235	0808	2400	2009
8/24/2009	236	0000	2400	2009
8/25/2009	237	0000	2400	2009
8/26/2009	238	0000	1044	2009
8/27/2009	239	0501	2400	2009
8/28/2009	240	0000	2400	2009
8/29/2009	241	0000	2400	2009
8/30/2009	242	0000	1654	2009
8/30/2009	242	2127	2400	2009
8/31/2009	243	0000	0934	2009
9/2/2009	245	0804	0838	2009

APPENDIX V

SUPPLEMENTAL SURVEY RECORDS AND CORRESPONDANCE

There are no supplemental survey records or correspondence accompanying this report.

AHB COMPILATION LOG

General Survey Information	
REGISTRY No.	H12055
PROJECT No.	OPR-K354-KR-09
FIELD UNIT	C AND C TECHNOLOGIES
DATE OF SURVEY	20090814 - 20090902
LARGEST SCALE CHART	***11357_1, edition 41, 20110501, 1:80,000***
ADDITIONAL CHARTS	***N/A***
SOUNDING UNITS	**FEET AT MLLW**
COMPILER	Dinah O. Morris

Source Grids	**File Name** H:\Compilation\H12055_K354_CC\AHB_H12055\SAR Final Products\GRIDS
	H12055_Sub1_2m_Final.csar **H12055_Sub2_2m_Final.csar** **H12055_sub3_2m_Final.csar** **H12055_sub4_2m_Final.csar** **H12055_Sub5_2m_Final.csar** **H12055_Sub6_Final.csar** **H12055_Sub7_2m_Final.csar** **H12055_Investigations_50cm_Final.csar**
Surfaces	**File Name** H:\Compilation\H12055_K354_CC\AHB_H12055\COMPILE\Working
Combined	**H12055_4m_Combined.csar**
Point Cloud	\Point Cloud**H12055_SS_Soudnings_PTCloud.csar** \Point Cloud**H12055_CS_Soundings_PTCloud.csar**
Interpolated TIN	\Interpolated TIN**H12055_12m_InterpTIN.csar**
Shifted Interpolated TIN	\Shifted Surface**H12055_12m_InterpTIN_Shifted.csar**
Final HOBs	**File Name** H:\Compilation\H12055_K354_CC\AHB_H12055\COMPILE\Final_Hobs
Survey Scale Soundings	**H12055_SS_Soundings.hob**
Chart Scale Soundings	**H12055_CS_Soundings.hob**
Contour Layer	**H12055_Contours.hob**
Feature Layer	**H12055_Features.hob**
Meta-Objects Layer	**H12055_MetaObjects.hob**
Blue Notes	**H12055_BlueNotes.hob**
ENC Retain Soundings	***N/A***

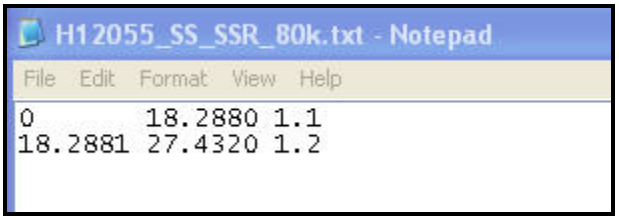
Meta-Objects Attribution	
Acronym	**Value**
M_COVR	
CATCOV	1 – coverage available
SORDAT	20090902
SORIND	US,US,graph,H12055
M_QUAL	
CATZOC	6 – zone of confidence U (data not assessed)
INFORM	*M / V Andrew Charles*
POSACC	10.0 m
SORDAT	20090902

SORIND	US,US,graph,H12055
SUREND	20090902
SURSTA	20090814
DEPARE	
DRVALV 1	45.0 ft
DRVALV2	72.0 ft
SORDAT	20090902
SORIND	US,US,graph,H12055
M_CSCL	
CSCALE	
SORDAT	20090902
SORIND	US,US,graph,H12055

SPECIFICATIONS:

I. COMBINED SURFACE:
- a. Number of SAR Final Grids: 8
- b. Resolution of Combined (m): 4 m

II. SURVEY SCALE SOUNDINGS (SS):
- a. Attribute Name: Depth
- b. Selection criteria: Radius, Shoal bias
- c. Radius value is: mm at map scale
  - i. Use single-defined radius: N/A
  - ii. And/Or use radius table file: H12055_SS_SSR_80k.txt



- d. Queried Depth of All Soundings
  - i. Minimum: 46.171 ft
  - ii. Maximum: 71.288 ft

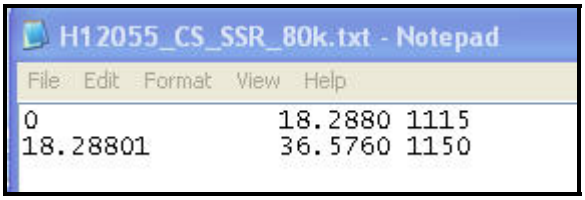
III. INTERPOLATED TIN SURFACE:
- a. Resolution (m): 12 m
- b. Interpolation method: Natural Neighbor
- c. Shift value: -0.75 ft

IV. CONTOURS:
- a. Attribute Name: Depth
- b. Use a Depth List: H12055_depth_contours.txt
- c. Output Options: Create contour lines
  - i. Line Object: DEPCNT
  - ii. Value Attribute: VALDCO

V. FEATURES:
- a. Number of Chart Features: 27
- b. Number of Non-Chart Features: 3

VI. CHART SURVEY SOUNDINGS (CS):

a. Number of ENC CS Soundings: 136
b. Attribute Name: Depth
c. Selection criteria: Radius, Shoal bias
d. Radius value is: Distance on the ground (m)
   i. Use single-defined radius: N /A
   ii. And/Or use radius table file: H12055_CS_SSR_80k.txt



e. Number Survey CS Soundings: 142

VII. NOTES:

ATLANTIC HYDROGRAPHIC BRANCH
H-CELL REPORT to ACCOMPANY
SURVEY H12055 (2009)

This H-Cell Report has been written to supplement and/or clarify the original Descriptive Report (DR) and pass critical compilation information to the cartographers in the Marine Chart Division. Sections in this report refer to the corresponding sections of the Descriptive Report.

B. DATA ACQUISITION AND PROCESSING

B.2 QUALITY CONTROL

The AHB source depth grid for the survey's nautical chart update product were one 0.5 m and seven 2m resolution BASE surfaces (*.CSAR), which were combined at 4m resolution. The survey scale soundings were created from the combined surface using a sounding spacing range (SSR) file (all SSR values included in the AHB Compilation Log section of this Descriptive Report). The survey scale soundings were imported into a "point cloud" grid. The chart scale soundings were derived directly from the survey scale soundings point cloud grid to preserve absolute continuity between the charted depths, the survey scale soundings, and the original source grid.

The chart scale soundings were selected using a sounding spacing range (SSR) file. The chart scale soundings are a subset of the survey scale soundings. The surface model was referenced when selecting the chart scale soundings, to ensure that the selected soundings portray the bathymetry within the common area.

A UTM projected TIN surface was created from the survey scale soundings point cloud grid, from which an interpolated surface of 12m resolution was generated. The interpolated TIN surface of 12m resolution was shifted by the NOAA sounding rounding value of -0.75 feet. The shifted interpolated TIN was used to generate depth contours in feet (60 feet). The depth contours are forwarded to MCD for reference only. The contours were utilized during chart scale sounding selection and quality assurance efforts at AHB. The depth contours are incorporated into the SS H-Cell product as per 2009 H-Cell Specifications.

The compilation products (Final *.HOB files) for this survey are detailed in the H12055 AHB Compilation Log contained within this document. The Final HOB files include depth areas (DEPARE), depth contours (DEPCNT), soundings (SOUNDG), meta-objects (M_COVR, M_QUAL), cartographic Blue Notes ($CSYMB), and features (OBSTRN, SBDARE and OFSPLF).

As dictated by Hydrographic Technical Directive 2008-8, the Final HOB files were combined into two separate H-Cell files in S-57 format. Both S-57 files were exported from CARIS S-57 Composer in feet. Quality assurance and topology checks were conducted using CARIS S-57 Composer and DKART Inspector validation tests.

The final H-Cell products are two S-57 files, in Lat/Long NAD-83. The contents of these two H-Cell deliverables are listed in the table below:

TABLE 1 - Contents of H-Cell Files

H12055_CS.000			Scale 1:80,000
Object Class Types	**Geographic**	**Cartographic**	**Meta**
S-57 Object Acronyms	DEPARE	$CSYMB	M_COVR
	OBSTRN		M_QUAL
	SBDARE		
	OFSPLF		
	SOUNDG		
H12055_SS.000			**Scale 1:10,000**
Object Class Types	**Geographic**		
S-57 Object Acronyms	DEPCNT		
	SOUNDG		

B.2.4 Junctions and Prior Surveys

Survey H12055 (2009) junctions with survey H12054 (2009) to the west, H12049 (2009) to the north and H12056 (2009) and H12057 to the south. The present survey soundings compare within two feet to the charted depths to the east.

B.4 DATA PROCESSING

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

CARIS Bathy DataBASE version 3.2/HF1
CARIS HIPS/SIPS version 7.0/SP2/HF8
CARIS S-57 Composer version 2.2
DKART Inspector version 5.1
HSTP Pydro version 11.7

C. HORIZONTAL AND VERTICAL CONTROL

The hydrographer makes adequate mention of horizontal and vertical control used for this survey in section C of the DR. The sounding datum for this survey is Mean Lower Low Water (MLLW), and the vertical datum is Mean High Water (MHW). Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD83), UTM projection zone 15 North.

D. RESULTS AND RECOMMENDATIONS

D.1 CHART COMPARISON

11357_1 (41st Edition, MAY/11)
Timbalier and Terrebonne Bays
Corrected through NM 07/09/2011
Corrected through LNM 07/26/2011
Scale 1:80,000

ENC COMPARISON

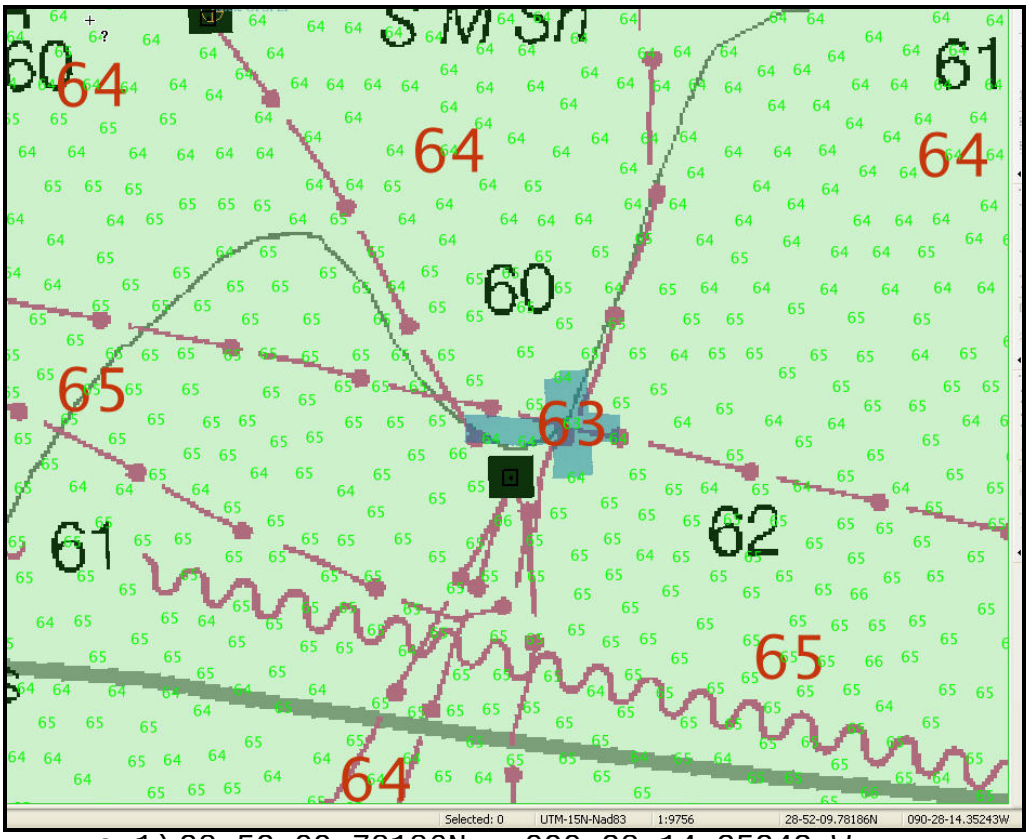
US4LA31M
Timbalier and Terrebonne Bays
Edition 23
Application Date 2010/11/09
Issue Date 2011/07/13
Chart 11357_1

US4LA29M
TIMBALIER BAY
Edition 13
Application Date 2011/04/08
Issue Date 2011/04/08

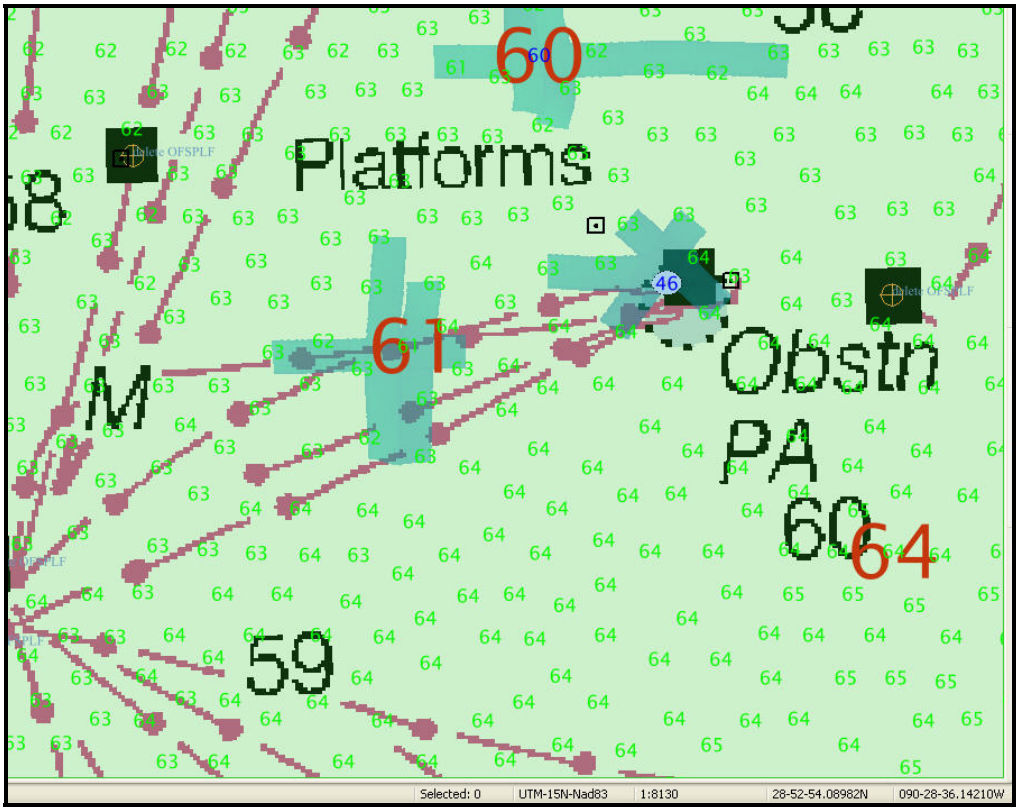
D.2 ADDITIONAL RESULTS

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section D and Appendix I and II of the DR. The hydrographer recommends that any charted features not specifically addressed either in the H-Cell files or the Blue Notes should be retained as charted. The following exceptions are noted:

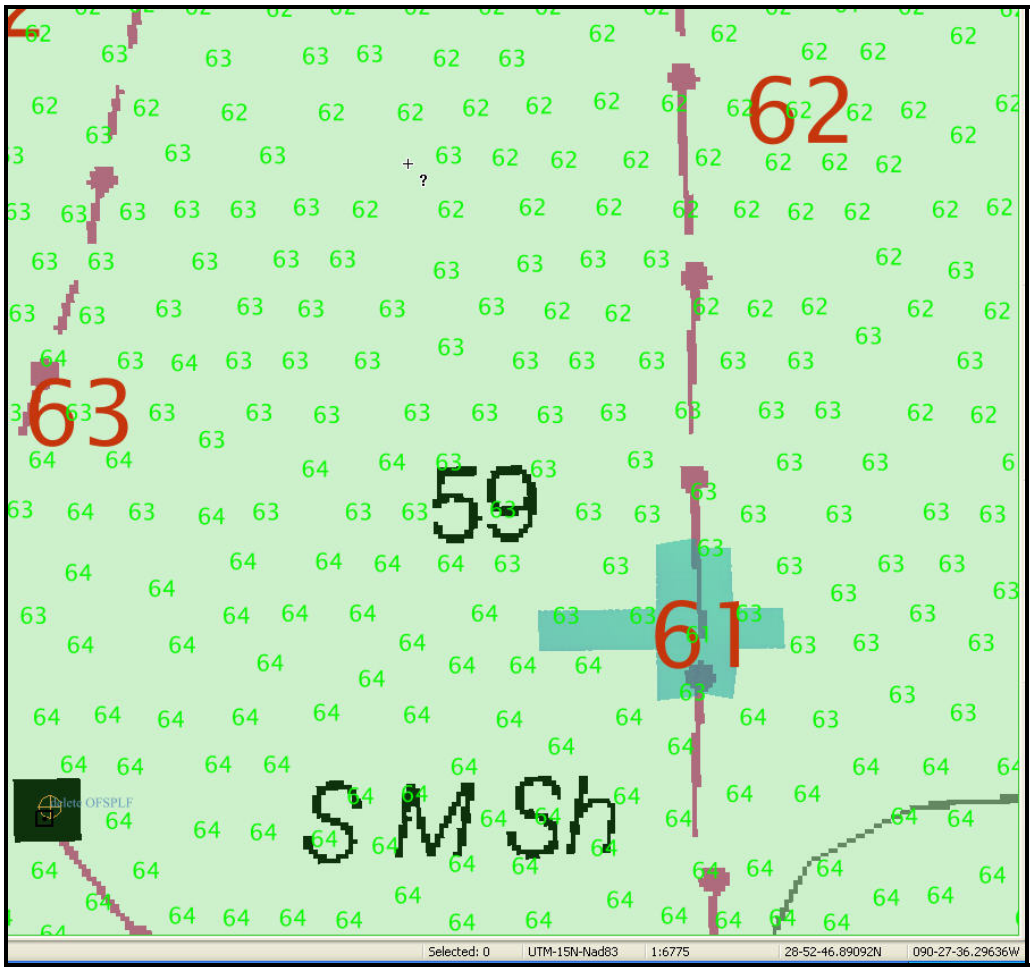
a. Final feature disposition for the following items are deferred to MCD. These are shoal features positioned on charted pipelines. Based on the proposed elevated pipeline policy provided by CAPT Baird, Chief of NOAA's Marine Chart Division, set on April 19, 2010 (See DR Appendix V), it is recommended that these features be charted with the least depth as a chart scale SOUNDG at survey position.



a.1) 28-52-09.78186N , 090-28-14.35243 W

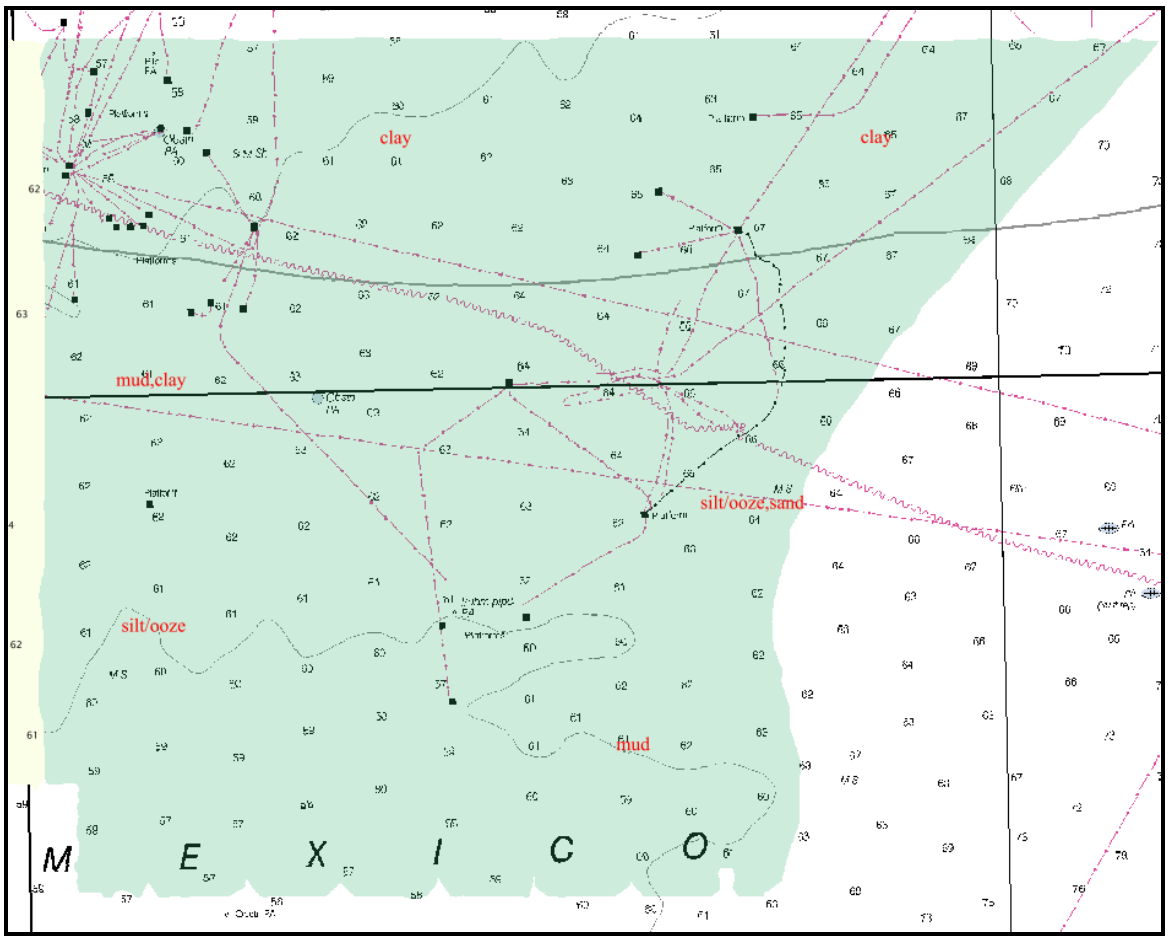


a.2) 28-52-54.08982N , 090-28-36.14210 W



a.3) 28-52-46.89092N , 090-27-36.29636W

b. The field unit collected a total of 45 bottom samples. All charted seabed characteristics were superseded by the survey findings. Six seabed characteristics were used for charting.



D.6 MISCELLANEOUS

Chart compilation was completed by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compilation data will be forwarded to the Marine Chart Division in Silver Spring, Maryland. See section D.1 of this report for a list of the Raster Charts and Electronic Navigation Charts (ENC) used for compiling the present survey.

D.7 ADEQUACY OF SURVEY

The present survey is adequate to supersede the charted bathymetry within the common area. Any features not specifically addressed either in the H-Cell files or the Blue Notes should be retained as charted. Refer to section D and Appendix I and II of the DR for further recommendations by the hydrographer.

APPROVAL SHEET
H12055

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth contours, disposition of critical depths, cartographic symbolization, and verification or disproval of charted data. All revisions and additions made to the H-Cell files during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with National Ocean Service and Office of Coast Survey requirements except where noted in the Descriptive Report and the H-Cell Report.

All final products have undergone a comprehensive review per the Hydrographic Surveys Division Office Processing Manual and are verified to be accurate and complete except where noted.

D. Olivia Morris 2011.08.31 10:30:52 -04'00'

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Dinah O. Morris
Hydrographic Survey Intern
Atlantic Hydrographic Branch

I have reviewed the H-Cell files, accompanying data, and reports. This survey and accompanying Marine Chart Division deliverables meet National Ocean Service requirements and standards for products in support of nautical charting except where noted.

Richard T. Brennan 2011.08.31 17:27:13 -04'00'

Approved: _____

CDR Richard T. Brennan, NOAA
Chief, Atlantic Hydrographic Branch