

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey

Field No.

Registry No.

LOCALITY

State

General Locality

Sublocality

CHIEF OF PARTY

LIBRARY & ARCHIVES

DATE

HYDROGRAPHIC TITLE SHEET

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

FIELD No.

State _____

General Locality _____

Sub-Locality _____

Scale _____ **Date of Survey** _____

Instructions dated _____ **Project No.** _____

Vessel _____

Chief of party _____

Surveyed by _____

Soundings by echo sounder, hand lead, pole _____

Graphic record scaled by _____

Graphic record checked by _____ **Automated Plot** _____

Verification by _____

Soundings in fathoms feet at MLW MLLW _____

REMARKS: _____

DESCRIPTIVE REPORT

A. AREA SURVEYED

This survey was conducted in accordance with Hydrographic Survey Letter Instructions* for Survey F00507, Los Angeles and Long Beach Harbors. The original instructions are dated August 5, 2005. Data acquisition was conducted from Aug 17, 2005- Sept 21, 2006.

See Figure 1-3 on the following pages for images of survey limits and data coverage.

** Filed with original field records.*

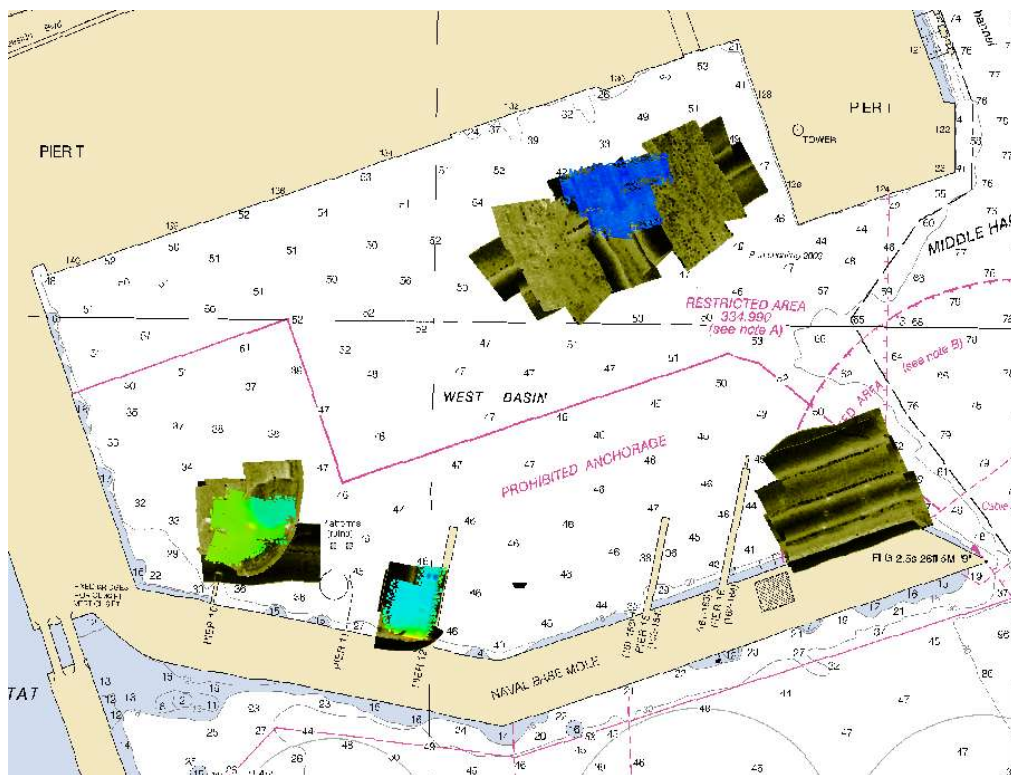


Figure 1: Long Beach Harbor Data Coverage.

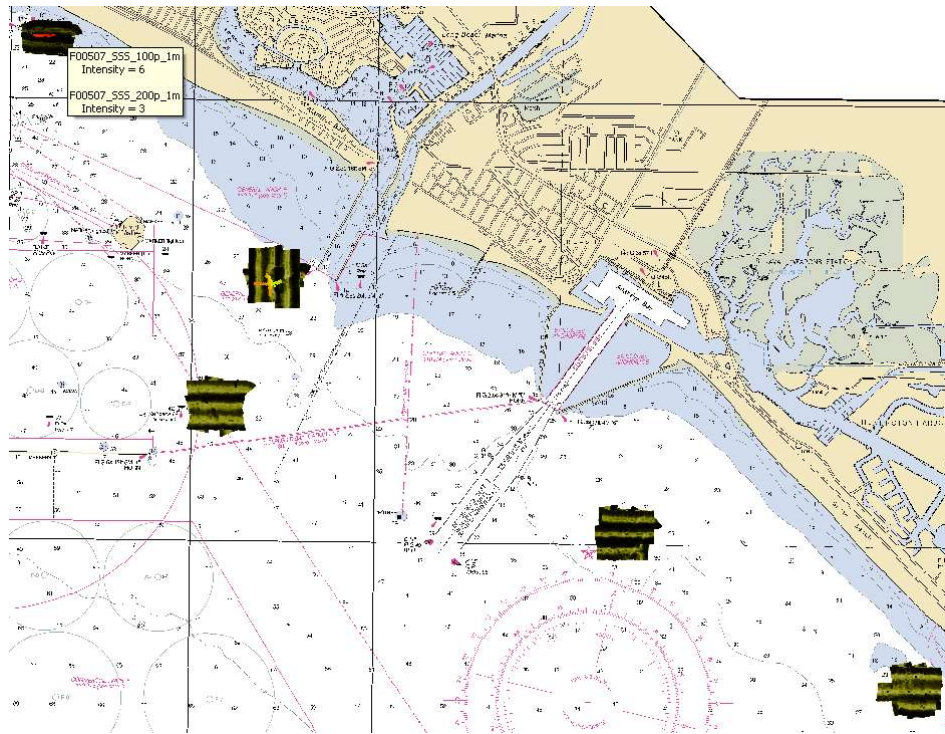


Figure 2: Long Beach to Huntington Beach Survey Data Coverage.

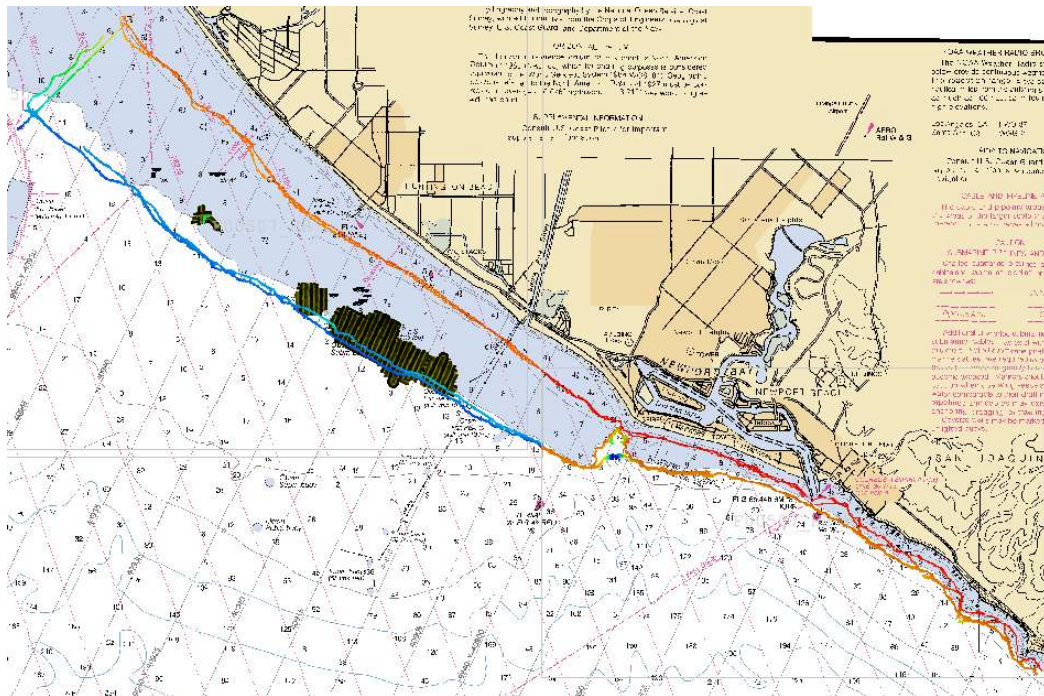


Figure 3: Huntington Beach to Newport Beach Data Coverage. Note: Image includes bathymetry data from Sheets H11485 and H11486, and SSS coverage of AWOIS items.

B. DATA ACQUISITION AND PROCESSING

B.1 EQUIPMENT

Data were acquired by NOAA Survey boat S3003, which is a 10-meter hydrographic survey vessel with an average transducer draft of 1.1 meters

NOAA Survey boat S3003 acquired soundings, imagery, and sound velocity profiles. Soundings were acquired by SIMRAD EM3000 multibeam echosounder. Imagery was acquired by KLEIN 3000 side scan sonar. Water column sound velocity data was acquired with a Sea-Bird SBE 19+ CTD.

NOAA Survey boat S3003 positioning and attitude data were determined with a TSS POS/MV 320 Version 3 GPS-aided inertial navigation system.

Refer to the Data Acquisition and Processing Report (DAPR*) for detailed equipment and vessel configuration information. *Concur.*

B.2 QUALITY CONTROL

B.2.1 Side Scan Sonar Quality Control

Daily confidence checks were made by observing the outer ranges of the side scan sonar images. A good check consisted of distinguishing contacts or sand waves across the entire range of the side scan trace.

Throughout the survey, the outer range of the right side scan transducer appeared very faint. The cause of this is not known. Significant objects or objects with strong acoustic reflectivity were readily discernable. Refer to this project's DAPR* for detailed discussion of SSS data acquisition and processing. *Concur.*

**Filed with original field records.*

B.2.2 Shallow Water Multibeam Quality Control

A patch test was conducted on July 14th, 2005 (DN 143) and applied to all multibeam echosounder data. This patch test was later found to contain errors. A patch test was conducted on March 23-24, 2006 (DN 082 and 083) by NRT6, PHB and HSTP personnel. The results of the March 2006 patch test were applied to the vessel configuration files 'NRT6_S3003_EM3000' and 'NRT6_S3003_EM3000_NAD83' and all data for the survey was remerged. *Concur.*

Two CARIS HVF files were used in this project: NRT6_S3003_EM3000, and NRT6_S3003_EM3000_NAD83. One day (DN 2005-229) of SWMB data was acquired and processed using the first HVF. The other two days of SWMB data for this sheet were processed using the NRT6_S3003_EM3000_NAD83 HVF. This HVF corrected the Ellipsoid parameter from WGS84 to NAD83. The difference between the datums is negligible, so it wasn't deemed necessary to reprocess using the corrected HVF. *Concur.*

Refer to this project's DAPR* for detailed discussion of SWMB system calibrations, data acquisition, and data processing.

B.2.3 BASE Surfaces

Four CARIS HIPS BASE (*Bathymetry Associated with Statistical Error*) surfaces, which incorporate each sounding's total propagated error (TPE), were created. Each finalized BASE surface contains seven layers: depth, uncertainty (using the "greater of the two" option), density, mean, standard deviation, shoal and deep. Refer to this project's DAPR for detailed discussion of BASE Surface generation and processing. *Concur.*

** Filed with original field records.*

The following Fieldsheets were generated as part of this survey:

Table 1: Fieldsheets and BASE Surfaces

<u>Fieldsheet</u>	<u># BASE Surfaces</u>	<u>Resolution</u>	<u>Purpose</u>
F00507	2	1m	Coverage & Finalized
F00507_BAG_A	2	1m	BAG Generation
F00507_BAG_B	2	1m	BAG Generation
F00507_BAG_C	2	1m	BAG Generation

Three BAG (Bathymetric Attributed Grid) surfaces were created. They are F00507_BAG_A, F00507_BAG_B, and F00507_BAG_C.

The latter three fieldsheets in the above table are smaller fieldsheets used to create the BAG exports. CARIS could not support a BAG file the size of the original fieldsheet.

Concur.

B.2.4 Crosslines

NOAA S3003 conducted the required amount of crosslines, totaling 10% of the total lineal nautical miles surveyed. Crossline-to-mainscheme data comparison was performed by visually inspecting the BASE Surface for data artifacts and large standard deviation areas. The crossline-to-mainscheme comparison was found to be satisfactory. *Concur.*

B.3 CORRECTIONS TO ECHO SOUNDING

All methods or instruments used were as described in the project DAPR*. A table of all sound velocity casts is located in Separate II*.

** Filed with original field records.*

C. VERTICAL AND HORIZONTAL CONTROL

C.1 VERTICAL CONTROL

The tidal datum for this project is Mean Lower Low Water (MLLW). The operating National Water Level Observation Network (NWLON) station at Los Angeles, CA (941-0660) was the sole water level station for this project. See Figure 2 for station location and tide zone boundaries. The tide zoning file “L418NRT62005CORP” was applied during processing. *Concur.*

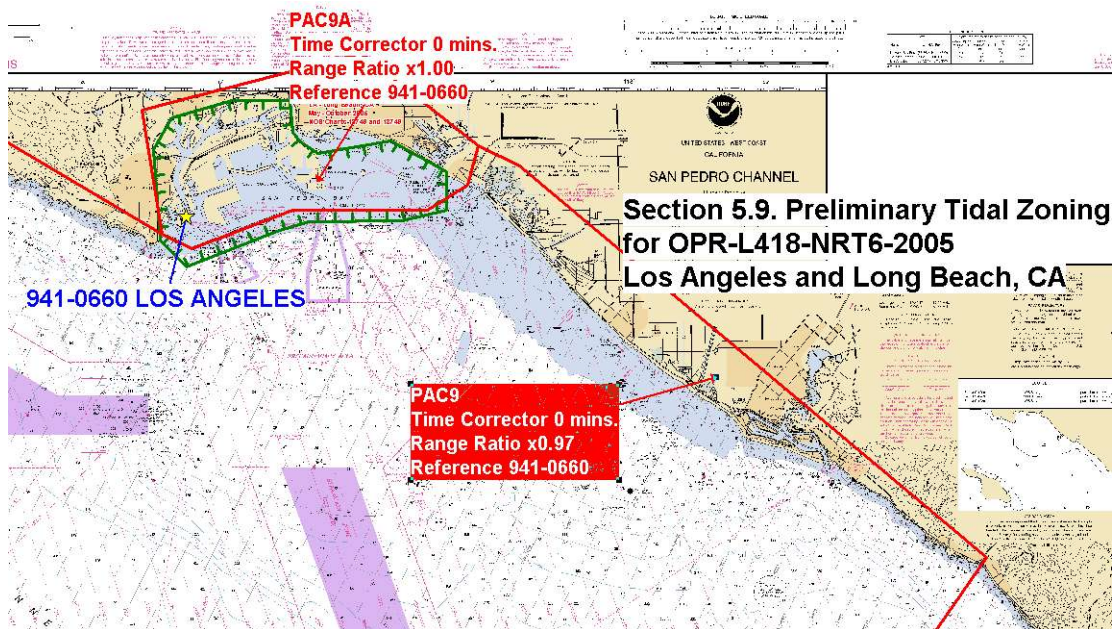


Figure 2: Preliminary Tide Zoning

The preliminary zones and correctors used for this survey are as follows:

Table 2: Preliminary Tide Zones & Correctors

<u>Zone Name</u>	<u>Time Correctors (mins)</u>	<u>Range Ratio</u>	<u>Predicted Reference</u>
PAC9	0	X0.97	941-0660
PAC9A	0	x1.00	941-0660

A Request for Approved Tides letter was sent to N/OPS1 on January 4th, 2007 and is

included in Appendix IV Tides & Water Levels. Observed water levels from the N/OPS1 CO-OPS website were downloaded and applied to all sounding data with preliminary tide zoning. Refer to the 2005 DAPR* for a summary of the methods used to determine, evaluate, and apply tide corrections to sounding data. ***Concur with clarification. Preliminary zoning was accepted as final zoning.***

C.2 HORIZONTAL CONTROL

The horizontal datum used for this survey is the North American Datum of 1983 (NAD 83), projected using UTM zone 11.

Horizontal position was determined using the Global Positioning System (GPS) corrected by U.S. Coast Guard differential GPS (DGPS) beacon station at Point Loma, CA (302 kHz). No horizontal control stations were established for this survey.

Horizontal dilution of precision (HDOP) was monitored daily. The observed HDOP values did not exceed 4.00. ***Concur.***

D. RESULTS AND RECOMMENDATIONS *See Evaluation Report*

D.1 CHART COMPARISON

Data accuracy standards and bottom coverage requirements have been met and survey data for survey F00507 are adequate to supersede charted data in their common areas.

Do not concur. See Evaluation Report.

There are four raster charts and two ENC's affected by this survey: ***Do not concur. There are three raster charts and three ENC's affected by this survey.***

Table 3: Affected Charts

<u>Chart Number</u>	<u>Edition</u>	<u>Edition Date</u>
18746	36 th	3/1/2005
18749	39 th	12/1/2004
18751	43 rd	12/1/2004
18754	17th	7/1/2003

<u>ENC Cell</u>	<u>Last Updated</u>	<u>Corresponding Chart</u>	<u>Version</u>	<u>Ed.</u>
US5CA61M	June 10, 2005	18749	2	1
US5CA62M	July 29, 2005	18751	2	2
<i>US4CA60M</i>	<i>Dec. 11, 2007</i>	<i>18746</i>	<i>1</i>	<i>5</i>

Soundings in the vicinity of the charted Belmont Pier suggest that the 18-foot contour has migrated seaward, with depths of 18 feet surveyed up to 75 meters seaward of the charted 18-foot depth curve. The hydrographer recommends further echosounder investigation of this area to determine the extent of shoaling. *Concur.*

D.1.1 General Agreement with Charted Soundings

Soundings in the Long Beach West Basin will be discussed below. Elsewhere, present survey soundings agree within 2 feet of charted depths. *Concur.*

D.1.2 Dangers to Navigation (Dton's)

Seven DTONS were identified by the field party. Information pertaining to these dangers to navigation is discussed in Appendix I. *Concur with clarification.. Six of the seven submitted Dtons were later retracted due to removal of the features in question.*

D.1.3 AWOIS Items

~~Twenty-two~~ *Twenty-one* AWOIS items were identified as critical to surface navigation and assigned to survey F00507. All ~~22~~ *21* items were investigated with 200% side scan sonar and contacts were developed with multibeam sonar surveys. Investigation methods, results and charting recommendations have been entered into the Pydro PSS "F00507". Information pertaining to these AWOIS items is contained in Appendix II* of this report. *Concur.*

D.1.4 Significant Uncharted Features

Three significant uncharted features were observed by the field party. These features are discussed in Appendix II* of this report. *Do not concur. Only one uncharted feature is included in Appendix II* of this report.*

** Filed with original field reports.*

D.1.5 Non-AWOIS Charted Features & Notes

Two non-AWOIS charted features were investigated during survey F00507. These features are addressed in Appendix II* of this report. *Do not concur. Only one additional non-AWOIS charted feature is included in Appendix II.*

D.2 ADDITIONAL RESULTS

D.2.1 Prior Surveys

This survey overlaps seventeen prior NOAA surveys:

Table 4: Prior NOAA surveys

<u>Registry Number</u>	<u>Scale</u>	<u>Year Surveyed</u>
F00484	10000	2001
H10998	10000	2000
H10331	10000	1990
H09670	5000	1978
H09671	5000	1977
H09672	5000	1977
H09672A	5000	1977
H09673	5000	1977
H09674	5000	1977
H09592	5000	1976
H09493	10000	1975
H09492	10000	1975
H09494	20000	1975
H09487	10000	1975
H09580	10000	1975
H09469	10000	1974
H09470	5000	1974

Long Beach West Basin

Correspondence with the Long Beach harbor master's office describes recent dredging in the north of Long Beach West Basin. After dredging, the West Basin has a controlled depth of 50 feet at MLLW. Documentation regarding this dredging was obtained from the harbor masters office and is included in Appendix V*. Sounding comparisons between the present survey and the chart were not performed in the West Basin due to these dredging operations. *Concur with clarification. Only a portion of the West Basin was dredged, see Appendix V for more information.*

** Filed with original field reports.*

The ruins of two demolished piers, West Basin Pier 1 and Pier 2, were observed in the side scan sonar data. These ruins were submitted as a Danger to Navigation on July 12th, 2006, to alert mariners to the presence of numerous small submerged piles in the area. These ruins are further described in Appendix I. Per a telephone call with the Port of Long Beach lead hydrographer Pete Jensen, the harbormaster's office has removed these piles and several others found in the vicinity. According to Jensen, all piles critical to navigation in the area have been razed below controlling depth or removed, and correspondence between the Port and MCD resulted in the DTON's being retracted. The hydrographer recommends obtaining original documentation from the Port of Long Beach describing further dredging and object removal during office evaluation. *Concur.*

This survey is adequate to update charted features in common areas. This survey is adequate to update charted depths in common areas outside of Long Beach West Basin. *See Evaluation Report.*

D.2.2 Aids to Navigation and Other Detached Positions

No fixed or floating aids to navigation were positioned during this project. *Concur.*

D.2.3 Bridges and Overhead Cables

There are no bridges or overhead cables in the survey area. *Concur.*

D.2.4 Ferry Routes

There are no ferry routes in the survey area. *Concur.*

D.2.5 Submarine Cables and Pipelines

No submarine cables or pipelines were located in the survey area. *Concur.*

E. APPROVAL SHEET

OPR-L418-NRT6-05
Los Angeles and Long Beach, California

Survey Registry No. F00507

Field operations for this basic hydrographic survey were conducted under my daily supervision with frequent checks of progress and adequacy. All bathymetry models, this Descriptive Report, and all accompanying records and data are approved.

This survey is adequate to supersede all prior surveys in common areas and for application to the relevant NOS nautical charts.

Also submitted in association with this descriptive report has been a series of reports and data:

- SEPARATES TO ACCOMPANY PROJECT OPR-L418-NRT6-05
- OPR-L418-NRT6-05 HORIZONTAL AND VERTICAL CONTROL REPORT (*March 2006*)
- DECEMBER 2005 DATA ACQUISITION AND PROCESSING REPORT (*July 2006*)

Respectfully Submitted:

Approved and Forwarded:

Eric Moore, NOAA
Physical Science Technician

APPENDIX I

DANGERS TO NAVIGATION REPORT

F00507 - Dangers to Navigation

Registry Number: F00507
State: California
Locality: Los Angeles and Long Beach Harbour
Sub-locality: San Pedro Bay
Project Number: OPR-L418-NRT6-05
Survey Dates: 08/17/2005 - 07/12/2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
18751	45th	11/01/2007	1:12,000 (18751_1)	USCG LNM: 05/13/2008 (05/13/2008) NGA NTM: 06/22/1996 (05/24/2008)
18749	41st	08/01/2007	1:20,000 (18749_1)	USCG LNM: 03/25/2008 (03/25/2008) NGA NTM: 06/22/1996 (04/05/2008)
18746	37th	08/01/2007	1:80,000 (18746_1)	USCG LNM: 05/13/2008 (05/13/2008) NGA NTM: 05/21/2005 (05/24/2008)
18740	41st	04/01/2005	1:234,270 (18740_1)	[L]NTM: ?
18022	35th	08/01/2005	1:868,003 (18022_1)	[L]NTM: ?
18020	37th	09/01/2003	1:1,444,000 (18020_1)	[L]NTM: ?
501	12th	11/01/2002	1:3,500,000 (501_1)	[L]NTM: ?
530	31st	06/01/2005	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

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

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS #52885/DTON #1 - 250/13	Stationary structure, floating or fixed	11.19 m	33° 45' 09.5" N	118° 13' 41.6" W	52885
1.2	AWOIS #50963/DTON #3 - 349/123	Obstruction	7.31 m	33° 44' 42.5" N	118° 14' 18.6" W	50963
1.3	DTON #4 - 0005	Stationary structure, floating or fixed	[None]	33° 45' 09.8" N	118° 13' 41.9" W	---
1.4	DTON #7 - 0006	Stationary structure, floating or fixed	[None]	33° 45' 10.3" N	118° 13' 42.1" W	---
1.5	AWOIS #52888/DTON #5 - 0003	Stationary structure, floating or fixed	[None]	33° 45' 06.2" N	118° 13' 48.6" W	52888
1.6	DTON #6 - 0015	Stationary structure, floating or fixed	[None]	33° 45' 11.1" N	118° 13' 40.9" W	---

1 - DR_DToN

1.1) AWOIS #52885/DTON #1 - 250/13**DANGER TO NAVIGATION****Primary Feature for AWOIS Item #52885**

Search Position: 33° 45' 08.2" N, 118° 13' 41.2" W
Historical Depth: [None]
Search Radius: 75
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 45' 09.5" N, 118° 13' 41.6" W
Least Depth: 11.19 m (= 36.71 ft = 6.118 fm = 6 fm 0.71 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 7.882 m ; **TVU (TPEv)** ± 0.233 m
Timestamp: 2005-229.21:17:12.030 (08/17/2005)
Survey Line: f00507 / nrt6_s3003_em3000 / 2005-229 / 012_2116
Profile/Beam: 250/13
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a submerged dolphin (AWOIS #52885) imaged with KLEIN 3000 side scan sonar. Soundings were acquired with SIMRAD EM3000 MBES and corrected to MLLW using observed water levels with preliminary tide zoning.

This feature was submitted as Danger to Navigation 'OPR-L418-NRT6-05_DTON 1' on August 18th, 2005. Subsequent correspondence with the hydrographer of the Port of Long Beach revealed that this pile has been removed and DTON was retracted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_em3000/2005-229/012_2116	250/13	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 52885	42.06	345.0	Secondary

Hydrographer Recommendations

Per correspondence with the harbormaster, this item has been removed. DT0N has been retracted. Delete charted dolphins. See DR for additional information and supporting documentation.

Cartographically-Rounded Depth (Affected Charts):

36ft (18751_1, 18749_1)

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

11.2m (501_1, 50_1)

S-57 Data

[None]

Office Notes

Concur with clarification. Remove charted dols based on dredging, see Appendix 5 for more information.

1.2) AWOIS #50963/DTON #3 - 349/123**DANGER TO NAVIGATION****Primary Feature for AWOIS Item #50963**

Search Position: 33° 44' 42.4" N, 118° 14' 18.7" W
Historical Depth: 0.79 m
Search Radius: 100
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 44' 42.5" N, 118° 14' 18.6" W
Least Depth: 7.31 m (= 23.99 ft = 3.999 fm = 3 fm 5.99 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 7.888 m ; **TVU (TPEv)** ± 0.238 m
Timestamp: 2005-229.21:42:39.190 (08/17/2005)
Survey Line: f00507 / nrt6_s3003_em3000 / 2005-229 / 027_2141
Profile/Beam: 349/123
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a cluster of three large and numerous small obstructions on a small rise in the water bottom. This obstruction was imaged with KLEIN 3000 SSS. Soundings were acquired by SIMRAD EM3000 MBES and corrected to MLLW using observed tides and preliminary tide zoning.

This feature was submitted as Danger to Navigation 'F00507 DTON #3' on July 5, 2006.

Corresponds to AWOIS #50963

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_em3000/2005-229/027_2141	349/123	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 50963	3.41	008.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-285/sonar_data051012120200	0003	13.86	298.8	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous obstruction, least depth 7.31 m (24 feet) at the present survey position.

Cartographically-Rounded Depth (Affected Charts):

24ft (18751_1, 18749_1)

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

7.3m (501_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 1:depth known
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 7.313 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. This item was previously charted as a 26ft OBSTN (AWOIS #50963) It was revised as a DtoN to a 24ft OBSTN.

The 24Ft OBSTN is already charted correctly on the continual update raster chart as of 06/18/2008.

[Image file H:/OPR-L418-NRT6-05/F00507/PSS/PSS Images/awois50963_2.jpg does not exist.]

[Image file H:/OPR-L418-NRT6-05/F00507/PSS/PSS Images/awois50963_1.jpg does not exist.]

1.3) DT0N #4 - 0005**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 33° 45' 09.8" N, 118° 13' 41.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-193.06:56:29 (07/12/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss100 / 2005-229 / sonar_data050817125000
Contact/Point: 0005/1
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a pile at the southwesternmost end of the demolished Pier 1, Port of Long Beach. This pile is one of a group of ruins at what would have been the termination of Pier 2 prior to its demolition. Imagery was acquired with KLEIN 3000 side scan sonar.

This feature was submitted as a Danger to Navigation on July 12, 2006, DT0N #4.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817125000	0005	0.00	000.0	Primary

Hydrographer Recommendations

Per correspondence with the harbor master, this item has been removed. DT0N has been retracted. No chart action is needed. See DR for additional information and supporting documentation.

S-57 Data

[None]

Office Notes

Concur with clarification. Remove charted dols based on dredging, see Appendix 5 for more information

1.4) DT0N #7 - 0006**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 33° 45' 10.3" N, 118° 13' 42.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-193.06:56:48 (07/12/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss100 / 2005-229 / sonar_data050817125000
Contact/Point: 0006/1
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a pile from the demolished Pier 1, Port of Long Beach, West Basin. This pile is one of a group of ruins at what would have been the termination of Pier 1 prior to its demolition. Imagery was acquired with KLEIN 3000 side scan sonar. There is no bathymetry for this position.

Submitted as DT0N#7

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817125000	0006	0.00	000.0	Primary

Hydrographer Recommendations

Per correspondence with the harbormaster, this item has been removed. See DR for additional information and supporting documentation.

S-57 Data

[None]

Office Notes

Concur with clarification. Remove charted dols based on dredging, see Appendix 5 for more information

1.5) AWOIS #52888/DTON #5 - 0003**DANGER TO NAVIGATION****Primary Feature for AWOIS Item #52888**

Search Position: 33° 45' 06.3" N, 118° 13' 47.1" W
Historical Depth: [None]
Search Radius: 75
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 45' 06.2" N, 118° 13' 48.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-193.07:17:55 (07/12/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss200 / 2005-229 / sonar_data050817131100
Contact/Point: 0003/1
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a pile at the southwesternmost end of the demolished Pier 2, Port of Long Beach. This pile is one of a group of ruins at what would have been the termination of Pier 2 prior to its demolition. Imagery was acquired with KLEIN 3000 side scan sonar. There is no bathymetry for this position.

This feature was submitted as a Danger to Navigation on July 12, 2006, DTON #5.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0003	0.00	000.0	Primary
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0014	6.73	255.4	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0007	17.24	158.3	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0005	23.99	252.3	Secondary (grouped)

f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0005	27.53	263.8	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0006	33.27	265.2	Secondary
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0004	36.29	251.2	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0008	37.01	161.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0006	38.13	241.6	Secondary (grouped)
LA AWOIS_Assigned	AWOIS # 52888	38.45	264.5	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0002	40.65	239.0	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0003	42.92	232.3	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0004	46.82	218.1	Secondary
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0009	50.43	211.7	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0010	53.48	208.6	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0011	57.19	204.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0012	60.16	202.2	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0013	62.80	199.4	Secondary (grouped)

Hydrographer Recommendations

Per correspondence with the harbormaster, this item has been removed. DTON has been retracted. No chart action is needed. See DR for additional information and supporting documentation.

S-57 Data

[None]

Office Notes

Concur with clarification. Remove charted dols based on dredging, see Appendix 5 for more information

1.6) DT0N #6 - 0015**DANGER TO NAVIGATION****Survey Summary**

Survey Position: 33° 45' 11.1" N, 118° 13' 40.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-193.07:29:05 (07/12/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss200 / 2005-229 / sonar_data050817131100
Contact/Point: 0015/1
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a pile at the southeasternmost end of the demolished Pier 1, Port of Long Beach. This pile is one of a group of ruins at what would have been the termination of Pier 1 prior to its demolition. Imagery was acquired with KLEIN 3000 side scan sonar. There is no bathymetry for this position.

This feature was submitted as a Danger to Navigation on July 12, 2006, as DT0N #6 for survey F00507. DT0N has since been retracted per communications with the Port of Long Beach chief surveyor.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0015	0.00	000.0	Primary

Hydrographer Recommendations

Per correspondence with the harbormaster, this item has been removed. DT0N has been retracted. No chart action is needed. See DR for additional information and supporting documentation.

S-57 Data

[None]

Office Notes

Concur with clarification. Remove charted dols based on dredging, see Appendix 5 for more information

F00507_DTON2

Registry Number: F00507
State: CA
Locality: San Pedro Bay
Sub-locality: San Pedro Bay Middle Breakwater
Project Number: OPR-L418-NRT6-05
Survey Date: 12/15/2005

Charts Affected

Number	Version	Date	Scale
18751	43rd Ed.	12/01/2004	1:12000
18749	39th Ed.	12/01/2004	1:20000
18746	35th Ed.	11/01/2003	1:80000
18740	40th Ed.	08/01/2003	1:234270
18022	34th Ed.	11/01/2003	1:868003
18020	37th Ed.	09/01/2003	1:1444000
501	12th Ed.	11/01/2002	1:3500000
530	30th Ed.	03/23/2002	1:4860700
50	6th Ed.	06/01/2003	1:10000000

Features

No.	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	Obstruction	12.73 m	033° 43' 13.419" N	118° 13' 22.558" W	---
1.2	Obstruction	12.53 m	033° 43' 13.687" N	118° 13' 19.286" W	---

1 - Danger To Navigation

1.1) Obstr

DANGER TO NAVIGATION

Survey Summary

Survey Position: 033° 43' 13.419" N, 118° 13' 22.558" W
Least Depth: 12.73 m
Timestamp: 2005-349.19:39:30.813 (12/15/2005)
Survey Line: anchor / nrt6_s3003_em3000 / 2005-349 / newliner
Profile/Beam: 78/40
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

Debris pile located by multibeam while investigating another reported obstruction of a pile of I-beams. Most likely also a pile of I-beams.

Feature Correlation

Address	Feature	Range	Azimuth	Status
anchor/nrt6_s3003_em3000/2005-349/newliner	78/40	0.00	000.0	Primary

Hydrographer Recommendations

Chart as obstruction with 42 ft. sounding.

Cartographically-Rounded Depth (Affected Charts):

42ft (18751_1, 18749_1)

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

12.7m (501_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: INFORM - Debris pile
 NATCON - 7:metal
 OBJNAM - Obstruction
 QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 12.728 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Feature Images

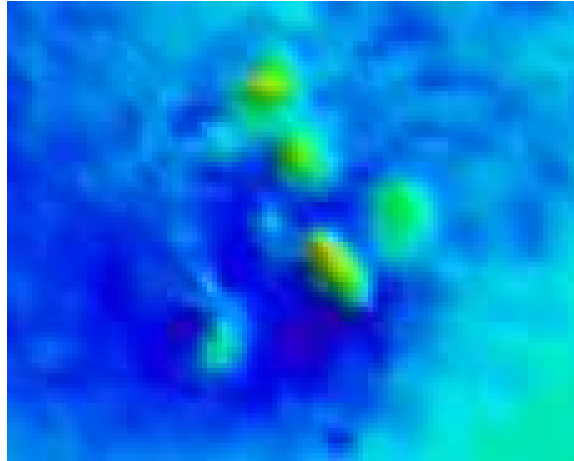


Figure 1.1.1

1.2) Obstr

DANGER TO NAVIGATION

Survey Summary

Survey Position: 033° 43' 13.687" N, 118° 13' 19.286" W
Least Depth: 12.53 m
Timestamp: 2005-349.19:40:11.299 (12/15/2005)
Survey Line: anchor / nrt6_s3003_em3000 / 2005-349 / newliner
Profile/Beam: 418/109
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

Obstruction located with multibeam after divers found the what they reported as being a pile of 10-12 inch I-beams protruding approximately 4 ft. from the bottom.

Feature Correlation

Address	Feature	Range	Azimuth	Status
anchor/nrt6_s3003_em3000/2005-349/newliner	418/109	0.00	000.0	Primary

Hydrographer Recommendations

Chart as obstruction with 41 ft. sounding.

Cartographically-Rounded Depth (Affected Charts):

41ft (18751_1, 18749_1)

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

12.5m (501_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: INFORM - Debris pile identified by divers as a pile of 10-12 inch metal I-beams
 NATCON - 7:metal
 OBJNAM - Obstruction
 QUASOU - 6:least depth known

TECSOU - 3:found by multi-beam

VALSOU - 12.534 m

VERDAT - 12:Mean lower low water

WATLEV - 3:always under water/submerged

Feature Images

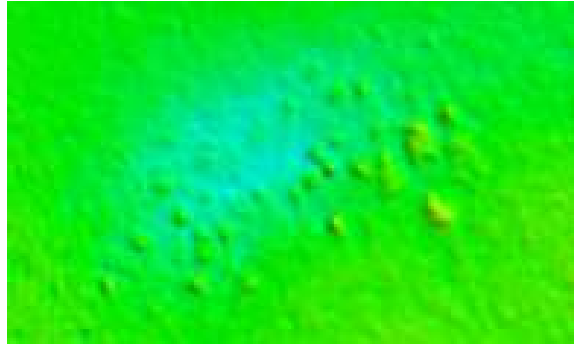


Figure 1.2.1

APPENDIX II
SURVEY FEATURES REPORT

F00507 - AWOIS Items

Registry Number: F00507
State: California
Locality: Los Angeles and Long Beach Harbour
Sub-locality: San Pedro Bay
Project Number: OPR-L418-NRT6-05
Survey Dates: 08/17/2005 - 07/12/2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
18751	45th	11/01/2007	1:12,000 (18751_1)	USCG LNM: 05/13/2008 (05/13/2008) NGA NTM: 06/22/1996 (05/24/2008)
18749	41st	08/01/2007	1:20,000 (18749_1)	USCG LNM: 03/25/2008 (03/25/2008) NGA NTM: 06/22/1996 (04/05/2008)
18746	37th	08/01/2007	1:80,000 (18746_1)	USCG LNM: 05/13/2008 (05/13/2008) NGA NTM: 05/21/2005 (05/24/2008)
18740	41st	04/01/2005	1:234,270 (18740_1)	[L]NTM: ?
18022	35th	08/01/2005	1:868,003 (18022_1)	[L]NTM: ?
18020	37th	09/01/2003	1:1,444,000 (18020_1)	[L]NTM: ?
501	12th	11/01/2002	1:3,500,000 (501_1)	[L]NTM: ?
530	31st	06/01/2005	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

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

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	AWOIS # 50947 - 579/64	Obstruction	12.82 m	33° 44' 35.5" N	118° 14' 00.5" W	50947
1.2	AWOIS #53259 - 652/123	Wreck	5.99 m	33° 44' 09.7" N	118° 07' 35.5" W	53259
1.3	AWOIS #53256 - 1070/41	Pile	5.70 m	33° 45' 17.0" N	118° 08' 49.6" W	53256
1.4	AWOIS #53262 - 306/49	Wreck	15.02 m	33° 39' 07.1" N	118° 02' 51.2" W	53262
1.5	AWOIS #50948 - 0002	Obstruction	[None]	33° 44' 44.1" N	118° 13' 15.5" W	50948
1.6	AWOIS #53271 - 0003	Obstruction	[None]	33° 37' 25.6" N	118° 00' 04.1" W	53271
1.7	AWOIS #51791 - 0001	Wreck	[None]	33° 37' 30.3" N	117° 59' 53.3" W	51791

1.8	AWOIS #53267/53272 - 0001	Obstruction	[None]	33° 37' 17.1" N	117° 59' 54.0" W	53267
1.9	AWOIS #53274 - 0004	Obstruction	[None]	33° 36' 55.4" N	117° 58' 53.3" W	53274
1.10	AWOIS #53273 - 0006	Obstruction	[None]	33° 37' 07.2" N	117° 59' 19.5" W	53273
1.11	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---
1.12	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---
1.13	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---
1.14	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---
1.15	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---
1.16	OBSTRUCTION	AWOIS	[no data]	[no data]	[no data]	---
1.17	---	AWOIS	[no data]	[no data]	[no data]	---
1.18	AWOIS #53257 - 0001	SSS	[None]	33° 43' 37.1" N	118° 07' 52.4" W	53257
1.19	AWOIS #52885/DTON #1 - 250/13	Stationary structure, floating or fixed	11.19 m	33° 45' 09.5" N	118° 13' 41.6" W	52885
1.20	AWOIS #50963/DTON #3 - 349/123	Obstruction	7.31 m	33° 44' 42.5" N	118° 14' 18.6" W	50963
1.21	AWOIS #52888/DTON #5 - 0003	Stationary structure, floating or fixed	[None]	33° 45' 06.2" N	118° 13' 48.6" W	52888

1 - DR_AWOIS

1.1) AWOIS # 50947 - 579/64

Primary Feature for AWOIS Item #50947

Search Position: 33° 44' 34.1" N, 118° 14' 00.3" W
Historical Depth: [None]
Search Radius: 100
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Survey Position: 33° 44' 35.5" N, 118° 14' 00.5" W
Least Depth: 12.82 m (= 42.07 ft = 7.011 fm = 7 fm 0.07 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 7.869 m ; **TVU (TPEv)** ± 0.228 m
Timestamp: 2005-229.21:51:52.335 (08/17/2005)
Survey Line: f00507 / nrt6_s3003_em3000 / 2005-229 / 013_2150
Profile/Beam: 579/64
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a scattered pile of loose debris imaged by KLEIN 3000 side scan sonar. Soundings were acquired by SIMRAD EM3000 MBES and corrected to MLLW using observed water levels and preliminary tide zoning. Aside from this isolated pile of debris, the charted pier ruins were not evident in either the side scan sonar imagery or the digital terrain model.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_em3000/2005-229/013_2150	579/64	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 50947	43.62	351.0	Secondary

Hydrographer Recommendations

Delete charted pier ruins at 33°44'34.060" N, 118°14'00.250" W. Chart a dangerous obstruction, least depth 12.8 m (42 feet) at the present surveyed position.

Cartographically-Rounded Depth (Affected Charts):

42ft (18751_1, 18749_1)

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

12.8m (501_1, 50_1)

S-57 Data

[None]

Office Notes

Concur. Remove charted pier ruins. Chart 42Ft Obstn.

1.2) AWOIS #53259 - 652/123

Primary Feature for AWOIS Item #53259

Search Position: 33° 44' 12.1" N, 118° 07' 33.2" W
Historical Depth: [None]
Search Radius: 200
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 44' 09.7" N, 118° 07' 35.5" W
Least Depth: 5.99 m (= 19.65 ft = 3.275 fm = 3 fm 1.65 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 7.892 m ; **TVU (TPEv)** ± 0.233 m
Timestamp: 2005-307.22:46:33.324 (11/03/2005)
Survey Line: f00507 / nrt6_s3003_em3000_nad83 / 2005-307 / 012_2245
Profile/Beam: 652/123
Charts Affected: 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a charted wreck (AWOIS #53259). Imagery was acquired with KLEIN 3000 side scan sonar. Soundings were acquired by SIMRAD EM3000 MBES and corrected to MLLW using observed water levels with preliminary tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_em3000_nad83/2005-307/012_2245	652/123	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 53259	93.99	217.6	Secondary

Hydrographer Recommendations

Delete the charted dangerous wreck, depth unknown at 33°44'12.060" N, 118°07'33.230" W. Chart a dangerous wreck, least depth 6 m (19.7 feet) at the present survey position.

Cartographically-Rounded Depth (Affected Charts):

19ft (18749_1)

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

6.0m (501_1, 50_1)

S-57 Data

[None]

Office Notes

Concur. Remove charted Wk. Chart 25Ft Wk in surveyed position.

1.3) AWOIS #53256 - 1070/41

Primary Feature for AWOIS Item #53256

Search Position: 33° 45' 17.1" N, 118° 08' 48.2" W
Historical Depth: [None]
Search Radius: 150
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 45' 17.0" N, 118° 08' 49.6" W
Least Depth: 5.70 m (= 18.69 ft = 3.115 fm = 3 fm 0.69 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 7.866 m ; **TVU (TPEv)** ± 0.227 m
Timestamp: 2005-307.22:32:22.180 (11/03/2005)
Survey Line: f00507 / nrt6_s3003_em3000_nad83 / 2005-307 / 014_2231
Profile/Beam: 1070/41
Charts Affected: 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a charted pile (AWOIS #53256). This pile was located with SIMRAD EM3000 MBES and KLEIN 3000 SSS. Soundings were corrected to MLLW using observed water levels and preliminary tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_em3000_nad83/2005-307/014_2231	1070/41	0.00	000.0	Primary
f00507/nrt6_s3003_klein3000_sss200/2005-285/sonar_data051012124600	0001	4.43	087.1	Secondary
LA AWOIS_Assigned	AWOIS # 53256	34.26	269.1	Secondary (grouped)

Hydrographer Recommendations

Delete charted Pile Rep PA. Chart a dangerous submerged pile, least depth 5.7m (18.7 feet) at the present survey position.

Cartographically-Rounded Depth (Affected Charts):

18ft (18749_1)

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

5.7m (501_1, 50_1)

S-57 Data

[None]

Office Notes

Concur. Delete charted Pile Rep. PA. Chart Pile in current surveyed position.

1.4) AWOIS #53262 - 306/49

Primary Feature for AWOIS Item #53262

Search Position: 33° 39' 06.8" N, 118° 02' 52.9" W
Historical Depth: [None]
Search Radius: 250
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Survey Position: 33° 39' 07.1" N, 118° 02' 51.2" W
Least Depth: 15.02 m (= 49.26 ft = 8.210 fm = 8 fm 1.26 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 7.871 m ; **TVU (TPEv)** ± 0.228 m
Timestamp: 2005-312.20:17:57.107 (11/08/2005)
Survey Line: f00507 / nrt6_s3003_em3000_nad83 / 2005-312 / 076_2016
Profile/Beam: 306/49
Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a charted wreck (AWOIS #53262) imaged by KLEIN 3000 side scan sonar. Soundings were acquired by SIMRAD EM3000 MBES and corrected to MLLW using observed water levels with preliminary tide zoning.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_em3000_nad83/2005-312/076_2016	306/49	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 53262	44.32	075.2	Secondary

Hydrographer Recommendations

Delete the charted dangerous wreck, depth unknown at 33°39'06.770" N, 118°02'52.920" W. Chart a dangerous sunken wreck, least depth 15 m (49.2 feet) as per current survey findings.

Cartographically-Rounded Depth (Affected Charts):

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

15.0m (501_1, 50_1)

S-57 Data

Geo object 1: Wreck (WRECKS)

Attributes: CATWRK - 2:dangerous wreck

TECSOU - 1,2:found by echo-sounder,found by side scan sonar

VALSOU - 15.015 m

WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. Update charted subm. Wk with LD 49Ft.

1.5) AWOIS #50948 - 0002**Primary Feature for AWOIS Item #50948**

Search Position: 33° 44' 45.1" N, 118° 13' 18.2" W
Historical Depth: 8.84 m
Search Radius: 150
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 44' 44.1" N, 118° 13' 15.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2005-238.09:20:32 (08/26/2005)
Survey Line: f00507 / nrt6_s3003_klein3000_sss100 / 2005-237 / sonar_data050825142100
Contact/Point: 0002/1
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is one of a series of charted ruins. Imagery was acquired with KLEIN 3000 side scan sonar. There is no bathymetry for these ruins.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss100/2005-237/sonar_data050825142100	0002	0.00	000.0	Primary
f00507/nrt6_s3003_klein3000_sss200/2005-237/sonar_data050825143200	0005	5.71	114.5	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-237/sonar_data050825142100	0007	12.83	356.1	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-237/sonar_data050825142400	0004	36.69	185.5	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-237/sonar_data050825143200	0006	37.30	186.5	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-285/sonar_data051012113600	0003	44.16	198.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-237/sonar_data050825143600	0004	46.36	195.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-237/sonar_data050825143200	0007	73.31	187.5	Secondary (grouped)

f00507/nrt6_s3003_klein3000_sss200/2005-237/sonar_data050825143600	0001	75.87	192.3	Secondary (grouped)
LA AWOIS_Assigned	AWOIS # 50948	76.60	112.3	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-285/sonar_data051012113600	0002	90.60	091.8	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-237/sonar_data050825143200	0004	94.24	112.3	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-237/sonar_data050825143200	0001	97.54	088.4	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-237/sonar_data050825143600	0002	99.06	113.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-237/sonar_data050825142100	0005	99.56	089.5	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-237/sonar_data050825142400	0003	99.81	113.6	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-237/sonar_data050825142400	0001	100.26	093.1	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-237/sonar_data050825142100	0006	109.99	070.6	Secondary (grouped)

Hydrographer Recommendations

Retain as charted.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.6) AWOIS #53271 - 0003

Primary Feature for AWOIS Item #53271

Search Position: 33° 37' 25.4" N, 118° 00' 04.6" W
Historical Depth: [None]
Search Radius: 300
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 37' 25.6" N, 118° 00' 04.1" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2005-347.04:28:56 (12/13/2005)
Survey Line: f00507 / nrt6_s3003_klein3000_sss100 / 2005-320 / sonar_data051116132700
Contact/Point: 0003/1
Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a large pile of debris forming a charted fish haven (AWOIS #53271). Imagery of this fish haven was acquired with KLEIN 3000 side scan sonar. There is no bathymetry for this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss100/2005-320/sonar_data051116132700	0003	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 53271	15.15	060.8	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-320/sonar_data051116132700	0001	45.63	047.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0012	49.21	045.7	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0013	54.14	302.7	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0011	66.32	100.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-320/sonar_data051116132700	0004	78.40	137.3	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222120000	0002	81.04	142.0	Secondary (grouped)

f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222120000	0004	107.15	126.7	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0010	114.09	124.8	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222120000	0003	123.23	138.7	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222120000	0001	136.11	129.8	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-320/sonar_data051116131800	0002	145.41	127.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0009	146.18	128.0	Secondary (grouped)

Hydrographer Recommendations

Chart obstructions, least depth unknown, at the present survey positions.

S-57 Data

[None]

Office Notes

Do not concur. Retain as charted.

1.7) AWOIS #51791 - 0001

Primary Feature for AWOIS Item #51791

Search Position: 33° 37' 30.7" N, 117° 59' 53.5" W
Historical Depth: [None]
Search Radius: 75
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Survey Position: 33° 37' 30.3" N, 117° 59' 53.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2005-327.03:59:10 (11/23/2005)
Survey Line: f00507 / nrt6_s3003_klein3000_sss100 / 2005-320 / sonar_data051116134700
Contact/Point: 0001/1
Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a charted wreck. Imagery was acquired by KLEIN 3000 side scan sonar. There is no bathymetry for this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss100/2005-320/sonar_data051116134700	0001	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 51791	13.94	159.6	Secondary

Hydrographer Recommendations

Chart a dangerous wreck, least depth unknown, at the present survey position.

S-57 Data

[None]

Office Notes

Do not concur. Retain as charted

1.8) AWOIS #53267/53272 - 0001

Primary Feature for AWOIS Item #53267

Search Position: 33° 37' 17.8" N, 117° 59' 55.5" W
Historical Depth: [None]
Search Radius: 200
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Survey Position: 33° 37' 17.1" N, 117° 59' 54.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-054.07:37:12 (02/23/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss200 / 2006-053 / sonar_data060222111600
Contact/Point: 0001/1
Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a cluster of debris piles forming a charted fish haven (AWOIS #53272). Imagery was acquired with KLEIN 3000 side scan sonar. There is no bathymetry for this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222111600	0001	0.00	000.0	Primary
f00507/nrt6_s3003_klein3000_sss100/2005-320/sonar_data051116135600	0002	2.49	221.0	Secondary (grouped)
LA AWOIS_Assigned	AWOIS # 53267	42.76	118.7	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0007	52.84	152.0	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss100/2005-320/sonar_data051116135600	0003	75.99	336.2	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0008	121.16	143.7	Secondary (grouped)
LA AWOIS_Assigned	AWOIS # 53272	164.48	188.2	Secondary (grouped)

Hydrographer Recommendations

Delete charted obstruction (fish haven) located at 33°37'22.400" N, 117°59'53.120" W. Chart a dangerous obstruction (Fish haven) at the present surveyed position.

S-57 Data

[None]

Office Notes

Do not concur. Retain as charted.

1.9) AWOIS #53274 - 0004

Primary Feature for AWOIS Item #53274

Search Position: 33° 37' 00.7" N, 117° 58' 56.2" W
Historical Depth: [None]
Search Radius: 300
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Survey Position: 33° 36' 55.4" N, 117° 58' 53.3" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-054.07:41:37 (02/23/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss200 / 2006-053 / sonar_data060222113800
Contact/Point: 0004/1
Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a large debris pile forming a fish haven (AWOIS #53274). Imagery of this fish haven was acquired with KLEIN 3000 side scan sonar. There is no bathymetry data for this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0004	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 53274	179.57	155.5	Secondary

Hydrographer Recommendations

Delete the charted fish haven at 33°37'00.700" N, 117°58'56.210" W. Chart a fish haven, least depth unknown, at the present surveyed position.

S-57 Data

[None]

Office Notes

Do not concur. Retain as charted.

1.10) AWOIS #53273 - 0006

Primary Feature for AWOIS Item #53273

Search Position: 33° 37' 09.4" N, 117° 59' 32.1" W
Historical Depth: [None]
Search Radius: 0
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Survey Position: 33° 37' 07.2" N, 117° 59' 19.5" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-054.07:43:51 (02/23/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss200 / 2006-053 / sonar_data060222113800
Contact/Point: 0006/1
Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a group of debris piles forming a charted fish haven (AWOIS #53273). Imagery over this debris pile was acquired with KLEIN 3000 side scan sonar. There is no bathymetry for this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0006	0.00	000.0	Primary
f00507/nrt6_s3003_klein3000_sss100/2006-053/sonar_data060222135900	0002	4.50	276.7	Secondary
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222113800	0005	112.22	333.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222120000	0005	153.76	148.6	Secondary (grouped)
LA AWOIS_Assigned	AWOIS # 53273	327.84	101.9	Secondary (grouped)

Hydrographer Recommendations

Delete the charted fish haven at 33°37'09.440" N, 117°59'32.060" W. Chart Obstrns, Fish Havens at the present surveyed positions.

S-57 Data

[None]

Office Notes

Do not concur. Retain as charted.

1.11) AWOIS #52876 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 33° 45' 16.9" N, 118° 16' 51.6" W
Historical Depth: [None]
Search Radius: 75
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

Awois item #52876 investigated with 200% SSS and 200% MB (Survey H11471). Dols not located.

Feature Correlation

Address	Feature	Range	Azimuth	Status
LA AWOIS_Assigned	AWOIS # 52876	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted Submerged Dolphins. Chart new bathymetry as per current survey findings (survey H11471).

S-57 Data

[None]

Office Notes

Do not concur. No MBES,SBES, or SSS was submitted for this position. Retain as charted.

1.12) AWOIS #52884 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 33° 45' 12.4" N, 118° 13' 34.3" W
Historical Depth: [None]
Search Radius: 75
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

A 200% side scan sonar search for AWOIS #52884 was conducted. No features were found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
LA AWOIS_Assigned	AWOIS # 52884	0.00	000.0	Primary

Hydrographer Recommendations

AWOIS #52884 is disproved. Delete charted dolphins.

S-57 Data

[None]

Office Notes

Concur with clarification. Charted dols were removed during dredging. See Appendix V for further information.

1.13) AWOIS #53261 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 33° 42' 21.0" N, 118° 04' 02.0" W
Historical Depth: [None]
Search Radius: 200
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Charts Affected: 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

A 200% SSS survey was conducted on AWOIS #53261, a charted obstruction PA. No contacts were found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
LA AWOIS_Assigned	AWOIS # 53261	0.00	000.0	Primary

Hydrographer Recommendations

Remove charted obstruction from chart.

S-57 Data

[None]

Office Notes

Concur. Remove charted Obstn PA.

1.14) AWOIS #53266 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 33° 43' 03.1" N, 118° 05' 38.0" W
Historical Depth: [None]
Search Radius: 200
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:
 [unknown]

Survey Summary

Charts Affected: 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

A 200% SSS survey was conducted on AWOIS #53266. No contacts were found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
LA AWOIS_Assigned	AWOIS # 53266	0.00	000.0	Primary

Hydrographer Recommendations

Delete charted dolphin.

S-57 Data

[None]

Office Notes

Concur. Remove charted Dol PA.

1.15) AWOIS #53268 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 33° 38' 00.7" N, 118° 01' 03.2" W
Historical Depth: [None]
Search Radius: 350
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

A 200% side scan sonar search was performed for AWOIS #53268. No contacts were found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
LA AWOIS_Assigned	AWOIS # 53268	0.00	000.0	Primary

Hydrographer Recommendations

AWOIS #53268 is disproved. Delete charted obstruction at 33°38'00.720" N, 118°01'03.220" W.

S-57 Data

[None]

Office Notes

Concur. Remove charted Obstn.

1.16) AWOIS #53269 - OBSTRUCTION

No Primary Survey Feature for this AWOIS Item

Search Position: 33° 37' 39.0" N, 118° 00' 26.2" W
Historical Depth: [None]
Search Radius: 350
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

A 200% side scan sonar search for AWOIS #53269 was conducted. No contacts were found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
LA AWOIS_Assigned	AWOIS # 53269	0.00	000.0	Primary

Hydrographer Recommendations

AWOIS #53269 is disproved. Delete the charted obstruction located at 33°37'39.000" N, 118°00'26.240".

S-57 Data

[None]

Office Notes

Concur. Remove charted Obstn.

1.17) AWOIS #53270 -

No Primary Survey Feature for this AWOIS Item

Search Position: 33° 37' 38.0" N, 117° 59' 53.7" W
Historical Depth: [None]
Search Radius: 350
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

A 200% side scan sonar search for AWOIS #53270 was conducted by the field party. No contacts were found.

Feature Correlation

Address	Feature	Range	Azimuth	Status
LA AWOIS_Assigned	AWOIS # 53270	0.00	000.0	Primary

Hydrographer Recommendations

AWOIS #53270 is disproved. Delete the charted obstruction at 33°37'38.000" N, 117°59'53.710" W.

S-57 Data

[None]

Office Notes

Concur. Remove charted Obstn.

1.18) AWOIS #53257 - 0001

Primary Feature for AWOIS Item #53257

Search Position: 33° 43' 37.2" N, 118° 07' 52.0" W
Historical Depth: [None]
Search Radius: 200
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 43' 37.1" N, 118° 07' 52.4" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-184.05:32:59 (07/03/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss200 / 2005-285 / sonar_data051012135300
Contact/Point: 0001/1
Charts Affected: 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a charted obstruction. A 200% SSS survey was conducted on AWOIS #53257. Two contacts were found. No bathymetry was collected.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss200/2005-285/sonar_data051012135300	0001	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 53257	8.31	258.9	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-285/sonar_data051012141300	0001	9.19	303.0	Secondary

Hydrographer Recommendations

Retain as charted.

S-57 Data

[None]

Office Notes

Concur. Retain as charted.

1.19) AWOIS #52885/DTON #1 - 250/13

DANGER TO NAVIGATION

Primary Feature for AWOIS Item #52885

Search Position: 33° 45' 08.2" N, 118° 13' 41.2" W
Historical Depth: [None]
Search Radius: 75
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 45' 09.5" N, 118° 13' 41.6" W
Least Depth: 11.19 m (= 36.71 ft = 6.118 fm = 6 fm 0.71 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 7.882 m ; **TVU (TPEv)** ± 0.233 m
Timestamp: 2005-229.21:17:12.030 (08/17/2005)
Survey Line: f00507 / nrt6_s3003_em3000 / 2005-229 / 012_2116
Profile/Beam: 250/13
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a submerged dolphin (AWOIS #52885) imaged with KLEIN 3000 side scan sonar. Soundings were acquired with SIMRAD EM3000 MBES and corrected to MLLW using observed water levels with preliminary tide zoning.

This feature was submitted as Danger to Navigation 'OPR-L418-NRT6-05_DTON 1' on August 18th, 2005. Subsequent correspondence with the hydrographer of the Port of Long Beach revealed that this pile has been removed and DTON was retracted.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_em3000/2005-229/012_2116	250/13	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 52885	42.06	345.0	Secondary

Hydrographer Recommendations

Per correspondence with the harbormaster, this item has been removed. DTON has been retracted. Delete charted dolphins. See DR for additional information and supporting documentation.

Cartographically-Rounded Depth (Affected Charts):

36ft (18751_1, 18749_1)

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

11.2m (501_1, 50_1)

S-57 Data

[None]

Office Notes

Concur with clarification. Remove charted dols based on dredging, see Appendix 5 for more information.

1.20) AWOIS #50963/DTON #3 - 349/123

DANGER TO NAVIGATION

Primary Feature for AWOIS Item #50963

Search Position: 33° 44' 42.4" N, 118° 14' 18.7" W
Historical Depth: 0.79 m
Search Radius: 100
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 44' 42.5" N, 118° 14' 18.6" W
Least Depth: 7.31 m (= 23.99 ft = 3.999 fm = 3 fm 5.99 ft)
TPU ($\pm 1.96\sigma$): **THU (TPEh)** ± 7.888 m ; **TVU (TPEv)** ± 0.238 m
Timestamp: 2005-229.21:42:39.190 (08/17/2005)
Survey Line: f00507 / nrt6_s3003_em3000 / 2005-229 / 027_2141
Profile/Beam: 349/123
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a cluster of three large and numerous small obstructions on a small rise in the water bottom. This obstruction was imaged with KLEIN 3000 SSS. Soundings were acquired by SIMRAD EM3000 MBES and corrected to MLLW using observed tides and preliminary tide zoning.

This feature was submitted as Danger to Navigation 'F00507 DTON #3' on July 5, 2006.

Corresponds to AWOIS #50963

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_em3000/2005-229/027_2141	349/123	0.00	000.0	Primary
LA AWOIS_Assigned	AWOIS # 50963	3.41	008.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-285/sonar_data051012120200	0003	13.86	298.8	Secondary (grouped)

Hydrographer Recommendations

Chart a dangerous obstruction, least depth 7.31 m (24 feet) at the present survey position.

Cartographically-Rounded Depth (Affected Charts):

24ft (18751_1, 18749_1)

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

7.3m (501_1, 50_1)

S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: QUASOU - 1:depth known
TECSOU - 2,3:found by side scan sonar,found by multi-beam
VALSOU - 7.313 m
VERDAT - 12:Mean lower low water
WATLEV - 3:always under water/submerged

Office Notes

Concur with clarification. This item was previously charted as a 26ft OBSTN (AWOIS #50963) It was revised as a DtoN to a 24ft OBSTN.

The 24Ft OBSTN is already charted correctly on the continual update raster chart as of 06/18/2008.

[Image file H:/OPR-L418-NRT6-05/F00507/PSS/PSS Images/awois50963_2.jpg does not exist.]

[Image file H:/OPR-L418-NRT6-05/F00507/PSS/PSS Images/awois50963_1.jpg does not exist.]

1.21) AWOIS #52888/DTON #5 - 0003

DANGER TO NAVIGATION

Primary Feature for AWOIS Item #52888

Search Position: 33° 45' 06.3" N, 118° 13' 47.1" W
Historical Depth: [None]
Search Radius: 75
Search Technique: [unknown]
Technique Notes: [unknown]

History Notes:

[unknown]

Survey Summary

Survey Position: 33° 45' 06.2" N, 118° 13' 48.6" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): **THU (TPEh)** [None] ; **TVU (TPEv)** [None]
Timestamp: 2006-193.07:17:55 (07/12/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss200 / 2005-229 / sonar_data050817131100
Contact/Point: 0003/1
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a pile at the southwesternmost end of the demolished Pier 2, Port of Long Beach. This pile is one of a group of ruins at what would have been the termination of Pier 2 prior to its demolition. Imagery was acquired with KLEIN 3000 side scan sonar. There is no bathymetry for this position.

This feature was submitted as a Danger to Navigation on July 12, 2006, DTON #5.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0003	0.00	000.0	Primary
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0014	6.73	255.4	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0007	17.24	158.3	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0005	23.99	252.3	Secondary (grouped)

f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0005	27.53	263.8	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0006	33.27	265.2	Secondary
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0004	36.29	251.2	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0008	37.01	161.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0006	38.13	241.6	Secondary (grouped)
LA AWOIS_Assigned	AWOIS # 52888	38.45	264.5	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0002	40.65	239.0	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0003	42.92	232.3	Secondary
f00507/nrt6_s3003_klein3000_sss100/2005-229/sonar_data050817130400	0004	46.82	218.1	Secondary
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0009	50.43	211.7	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0010	53.48	208.6	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0011	57.19	204.9	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0012	60.16	202.2	Secondary (grouped)
f00507/nrt6_s3003_klein3000_sss200/2005-229/sonar_data050817131100	0013	62.80	199.4	Secondary (grouped)

Hydrographer Recommendations

Per correspondence with the harbormaster, this item has been removed. DTON has been retracted. No chart action is needed. See DR for additional information and supporting documentation.

S-57 Data

[None]

Office Notes

Concur with clarification. Remove charted dols based on dredging, see Appendix 5 for more information

F00507 - Charted Items

Registry Number: F00507
State: California
Locality: Los Angeles and Long Beach Harbour
Sub-locality: San Pedro Bay
Project Number: OPR-L418-NRT6-05
Survey Date: 06/30/2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
18746	37th	08/01/2007	1:80,000 (18746_1)	USCG LNM: 05/13/2008 (05/13/2008) NGA NTM: 05/21/2005 (05/24/2008)
18740	41st	04/01/2005	1:234,270 (18740_1)	[L]NTM: ?
18022	35th	08/01/2005	1:868,003 (18022_1)	[L]NTM: ?
18020	37th	09/01/2003	1:1,444,000 (18020_1)	[L]NTM: ?
501	12th	11/01/2002	1:3,500,000 (501_1)	[L]NTM: ?
530	31st	06/01/2005	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

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

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	0004	Obstruction	[None]	33° 37' 31.0" N	118° 00' 26.9" W	---

1 - DR_Charted

1.1) 0004**Survey Summary**

Survey Position: 33° 37' 31.0" N, 118° 00' 26.9" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-181.10:01:35 (06/30/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss200 / 2006-053 / sonar_data060222111600
Contact/Point: 0004/1
Charts Affected: 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a charted submerged buoy block. The buoy block is imaged with KLEIN 3000 side scan sonar. There is no bathymetry for this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss200/2006-053/sonar_data060222111600	0004	0.00	000.0	Primary
ChartGPs - Digitized	1	96.22	300.2	Secondary (grouped)

Hydrographer Recommendations

Delete "Obstn Subm buoy" at 33°37'29.448" N, 118°00'23.660" W. Chart an obstruction, least depth unknown, at the present surveyed position.

S-57 Data

[None]

Office Notes

Do not concur. Retain as charted.

F00507 - Uncharted Items

Registry Number: F00507
State: California
Locality: Los Angeles and Long Beach Harbour
Sub-locality: San Pedro Bay
Project Number: OPR-L418-NRT6-05
Survey Date: 06/30/2006

Charts Affected

Number	Edition	Date	Scale (RNC)	RNC Correction(s)*
18751	45th	11/01/2007	1:12,000 (18751_1)	USCG LNM: 05/13/2008 (05/13/2008) NGA NTM: 06/22/1996 (05/24/2008)
18749	41st	08/01/2007	1:20,000 (18749_1)	USCG LNM: 03/25/2008 (03/25/2008) NGA NTM: 06/22/1996 (04/05/2008)
18746	37th	08/01/2007	1:80,000 (18746_1)	USCG LNM: 05/13/2008 (05/13/2008) NGA NTM: 05/21/2005 (05/24/2008)
18740	41st	04/01/2005	1:234,270 (18740_1)	[L]NTM: ?
18022	35th	08/01/2005	1:868,003 (18022_1)	[L]NTM: ?
18020	37th	09/01/2003	1:1,444,000 (18020_1)	[L]NTM: ?
501	12th	11/01/2002	1:3,500,000 (501_1)	[L]NTM: ?
530	31st	06/01/2005	1:4,860,700 (530_1)	[L]NTM: ?
50	6th	06/01/2003	1:10,000,000 (50_1)	[L]NTM: ?

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

Features

No.	Name	Feature Type	Survey Depth	Survey Latitude	Survey Longitude	AWOIS Item
1.1	0005	Obstruction	[None]	33° 44' 45.2" N	118° 13' 24.0" W	---

1 - DR_UnCharted

1.1) 0005**Survey Summary**

Survey Position: 33° 44' 45.2" N, 118° 13' 24.0" W
Least Depth: [None]
TPU ($\pm 1.96\sigma$): THU (TPEh) [None] ; TVU (TPEv) [None]
Timestamp: 2006-181.09:27:14 (06/30/2006)
Survey Line: f00507 / nrt6_s3003_klein3000_sss100 / 2005-237 / sonar_data050825142400
Contact/Point: 0005/1
Charts Affected: 18751_1, 18749_1, 18746_1, 18740_1, 18022_1, 18020_1, 501_1, 530_1, 50_1

Remarks:

The feature is a large cluster of rocks or debris. Imagery was acquired by KLEIN 3000 side scan sonar. There is no bathymetry data for this position.

Feature Correlation

Address	Feature	Range	Azimuth	Status
f00507/nrt6_s3003_klein3000_sss100/2005-237/sonar_data050825142400	0005	0.00	000.0	Primary

Hydrographer Recommendations

Chart a dangerous obstruction, least depth unknown, at the present survey position.

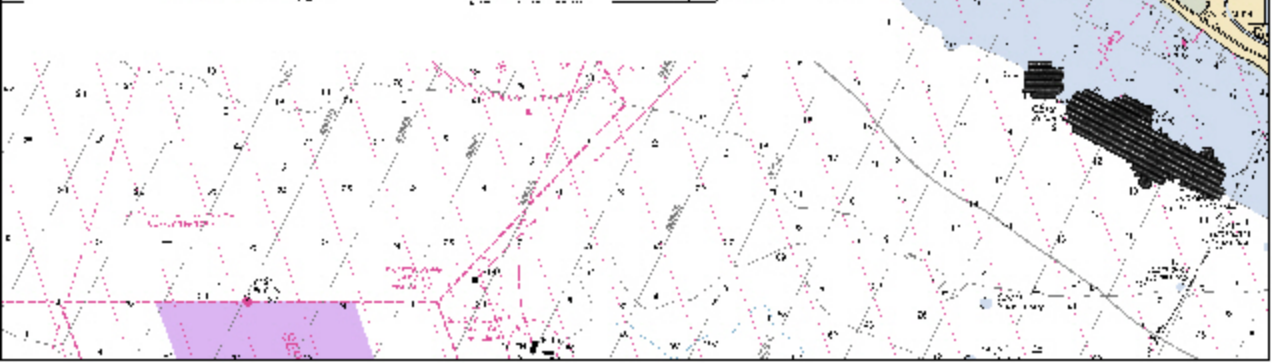
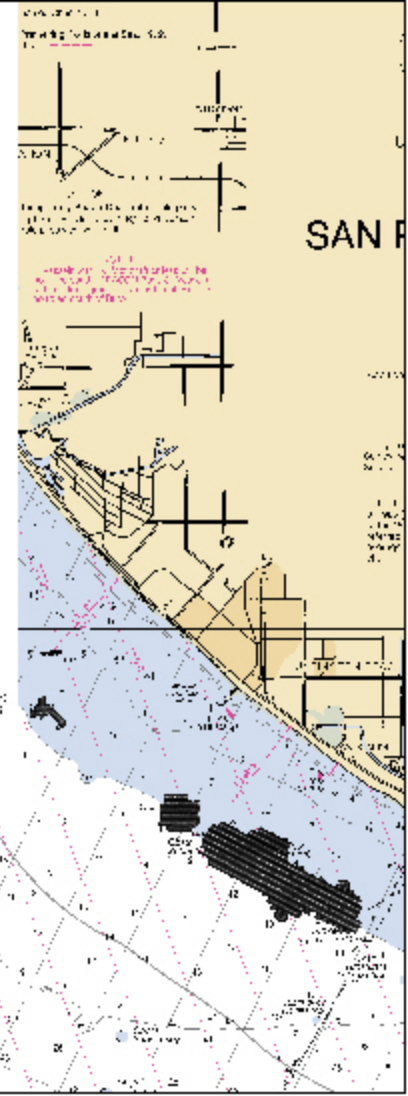
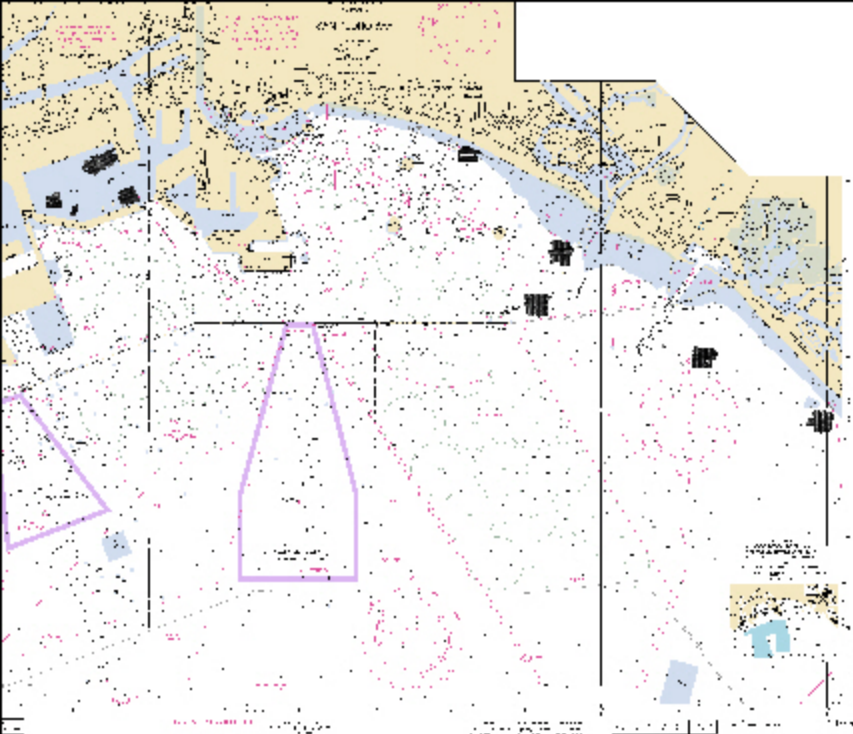
S-57 Data

Geo object 1: Obstruction (OBSTRN)
Attributes: WATLEV - 3:always under water/submerged

Office Notes

Concur. Chart Dangerous OBSTN, LD unknown.

APPENDIX III
FINAL PROGRESS SKETCH AND SURVEY



APPENDIX IV
TIDES AND WATER LEVELS



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



Final Tidal Zoning
for OPR-L418-NRT6-2005, F00507 Rev
San Pedro Bay, Los Angeles and Long Beach Harbor, CA
Preliminary Zoning Accepted as Final Zoning

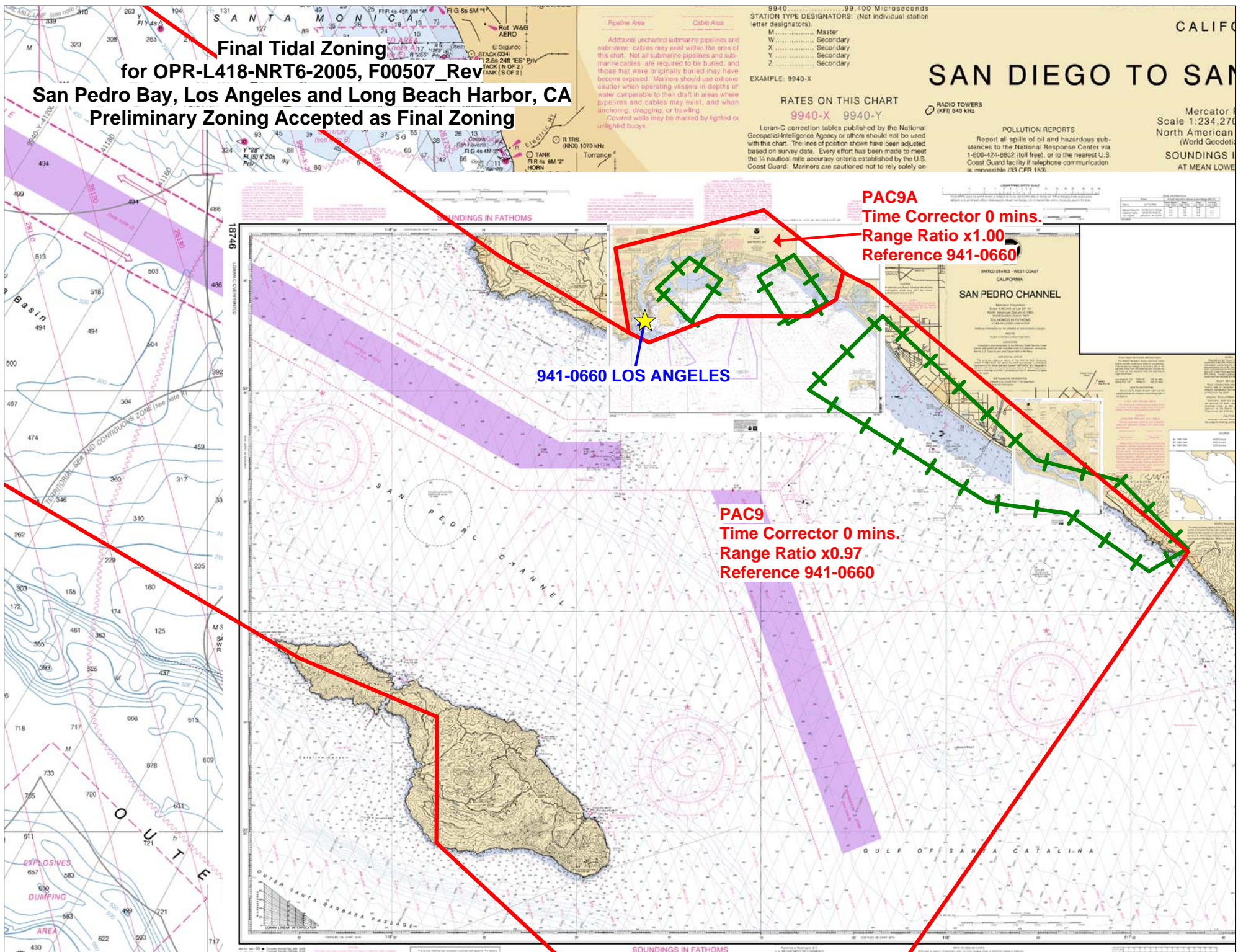
Pipeline Area
 Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

9940.....99,400 Microseconds
 STATION TYPE DESIGNATORS: (Not individual station letter designators).
 M.....Master
 W.....Secondary
 X.....Secondary
 Y.....Secondary
 Z.....Secondary
 EXAMPLE: 9940-X

RATES ON THIS CHART
 9940-X 9940-Y

SAN DIEGO TO SAN

Mercator Projection
 Scale 1:234,270
 North American
 (World Geodetic System 1983)
 SOUNDINGS IN FATHOMS
 AT MEAN LOWE



PAC9A
 Time Corrector 0 mins.
 Range Ratio x1.00
 Reference 941-0660

941-0660 LOS ANGELES

PAC9
 Time Corrector 0 mins.
 Range Ratio x0.97
 Reference 941-0660

UNITED STATES - WEST COAST
 CALIFORNIA
SAN PEDRO CHANNEL

SOUNDINGS IN FATHOMS

APPENDIX V
SUPPLEMENTAL SURVEY AND
CORRESPONDENCE

Sheet 1 of 1
Scale 1" = 160'

PROJECT MANAGER: DRAGON MALONOVICH
ENGR. OF RECORD:
RES. NO.
SERV. OF RECORD:
RES. NO.

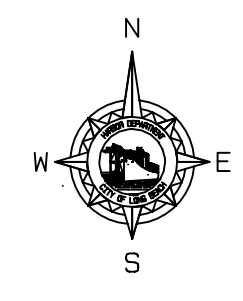
SPEC. NUMBER: H-0301
SHEET DATE: 8-14-2020-2023-2025
DESIGNED BY:
DATE:
DRAWN BY: CG
DATE:
CHECKED BY: PKJ
DATE:
APPROVED BY: PKJ
DATE:

1) VESSEL SEA EYE
2) EQUIPMENT, HORIZ. POSN./DTK
3) SOUNDINGS ARE MEASURED IN FEET AND TENTHS AND NEW YORK ADJUSTED MEAN TIME
4) THE HORIZONTAL POSITIONS ARE BASED ON POLB 15 05 40 7 (NAD 83) REFERENCED TO HPFB 3029
5) HORIZONTAL GRID 50' X 50'

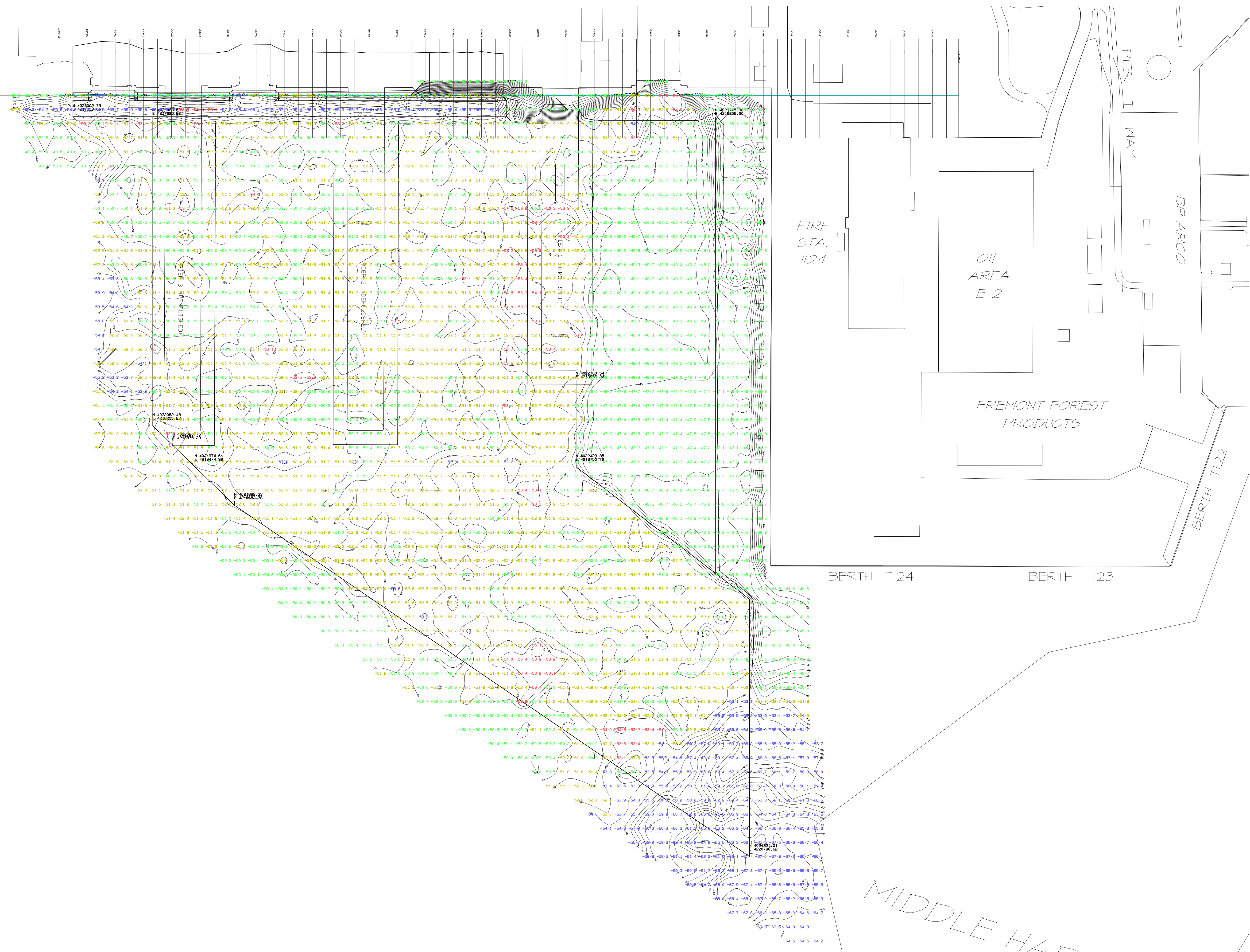
THE PORT OF LONG BEACH
925 HARBOR PLAZA, P.O. BOX 570
LONG BEACH, CALIFORNIA 90801
TEL. (562) 437-0041

Permittee Signature: _____
Date: _____
Permit Number: 20030041T-JLB

PIER T, WHARF EXTENSION
BATHYMETRY
AREA 3, HYDROGRAPHIC SOUNDING INDEX MAP



BERTH T134



WEST BASIN

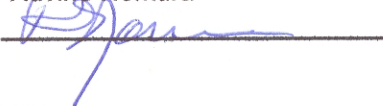
MIDDLE HARBOR

PORT OF LONG BEACH DIVER'S DAILY REPORT
 Contract HD-6923 Specification HD-S2284 BPHA05000083

Work Boat: Parker I Start Time: 0745 Stop Time: 1615 Reg. Hrs: ___ + O.T. = ___ Total Hrs.

Supervisor: Robert Chow Approved by:  Boat Operator: Ruvino Nomura

(1) Account # HB 5095	T132	Total Terminals International	Rate	Hrs	Costs
Bid Item #2	TWO DIVERS, TWO TENDERS DIVE TEAM		317.20	8	2,537.60
Bid Item #2	TWO DIVERS, TWO TENDERS DIVE TEAM		317.20	8	2,537.60
			TOTAL	\$	5,075.20

DPIC: Ruvino Nomura Diver(s): Ruvino Nomura, Scott Perkoski, Pat Daly, Matt Peterson
 DPIC:  Tender(s): Scott Perkoksi, Pat Daly, Matt Peterson, Ruvino Nomura

Work Description:

(1) Berth T132

- Divers began the day by attempting to take video footage of the pile stubs found yesterday along the east side of the old Long Beach Naval Shipyard Pier 3. However, the visibility was too poor to get any good pictures. The divers removed the down line and moved to the next location to begin surveying the remaining items in the south-east corner of the pier, Items No. 3-K through 3-E, and the items on the west side of the pier, Items No. 3-D through 3-A.
- Again, due to the depth, the divers had limited bottom time, so all four (4) divers went down on the survey.
- The print indicated there were seven (7) items to be found, but the divers found twelve (12) items between Items No. 3-K and 3-E. Refer to the following chart for details of these items, and for the five (5) stub piles found between the four (4) items marked 3-D and 3-A. Please note that as the 12 items were found so close together that the divers could not determine which was which on the print except for the first and last items (3-K and 3-E). This grouping of piles was probably one of the timber dolphins that were in each corner of the pier. The items listed below in *italics* are the items found yesterday, and the non-*italicized*, **bold** items are what was found today:

Pier 3 - East Side		
Station No. on Print	ID on Print	Description
11+70	3-Q	<i>Timber Pile, 12" above mudline</i>
11+55	3-P	<i>Timber Pile, 12" above mudline</i>
11+40	3-O	<i>Timber Pile, 12" above mudline</i>
11+25	3-N	<i>Timber Pile, 12" above mudline</i>
11+10	3-M	<i>Timber Pile, 36" above mudline</i>
11+00		<i>Timber Pile, not marked on chart, 16" above mudline</i>
10+95		<i>Timber Pile, not marked on chart, 24" above mudline</i>
10+90	3-L	Timber Pile, 36" above mudline

Continued on next sheet

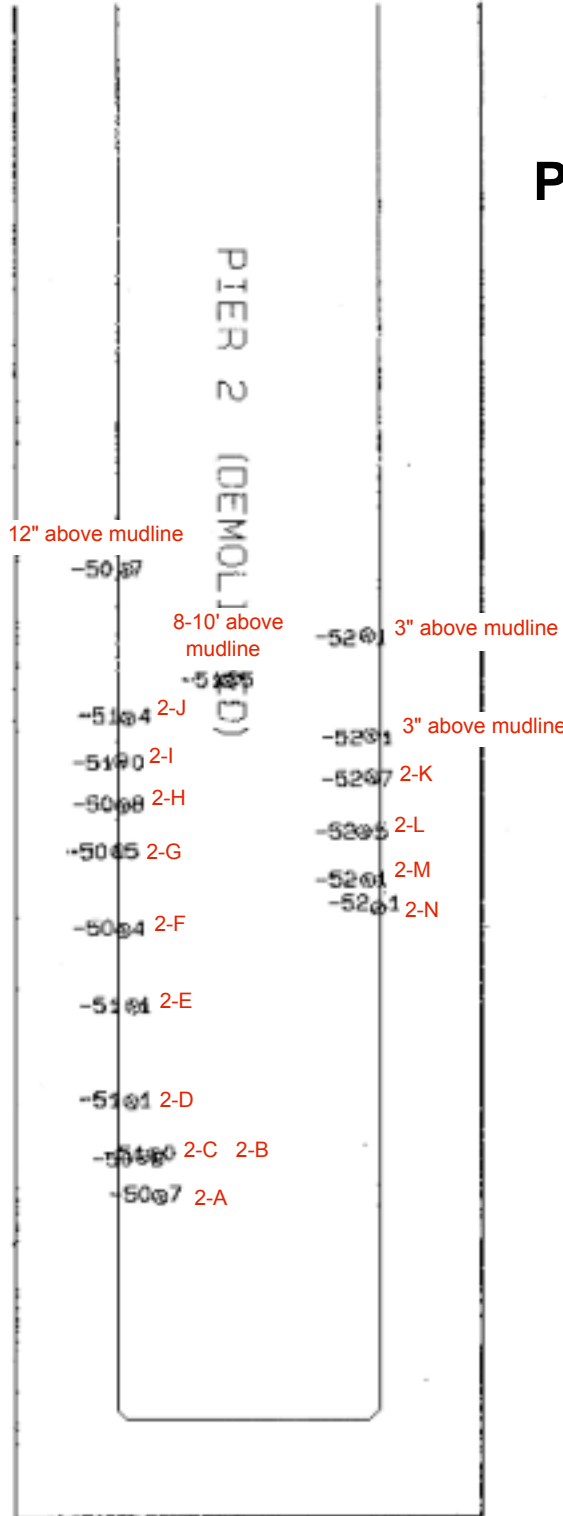
PORT OF LONG BEACH DIVER'S DAILY REPORT
Contract HD-6923 Specification HD-S2284 BPHA05000083

Pier 3 - East Side		
Station No. on Print	ID on Print	Description
10+35	3-K	Timber Piler, 18" above mudline
10+30	3-J	Timber Piler, 24" above mudline
10+05	3-I	Timber Piler, 24" above mudline
		Timber Piler, not on print, 24" above mudline
		Timber Piler, not on print, 36" above mudline
10' off pier	3-H	Timber Piler, 24" above mudline
		Timber Piler, not on print, 24" above mudline
20' off pier	3-G	Timber Piler, 36" above mudline
		Timber Piler, not on print, 24" above mudline
10' off pier	3-F	Timber Piler, 48" above mudline
		Timber Piler, not on print, 18" above mudline
10+05	3-E	Timber Piler, 24" above mudline

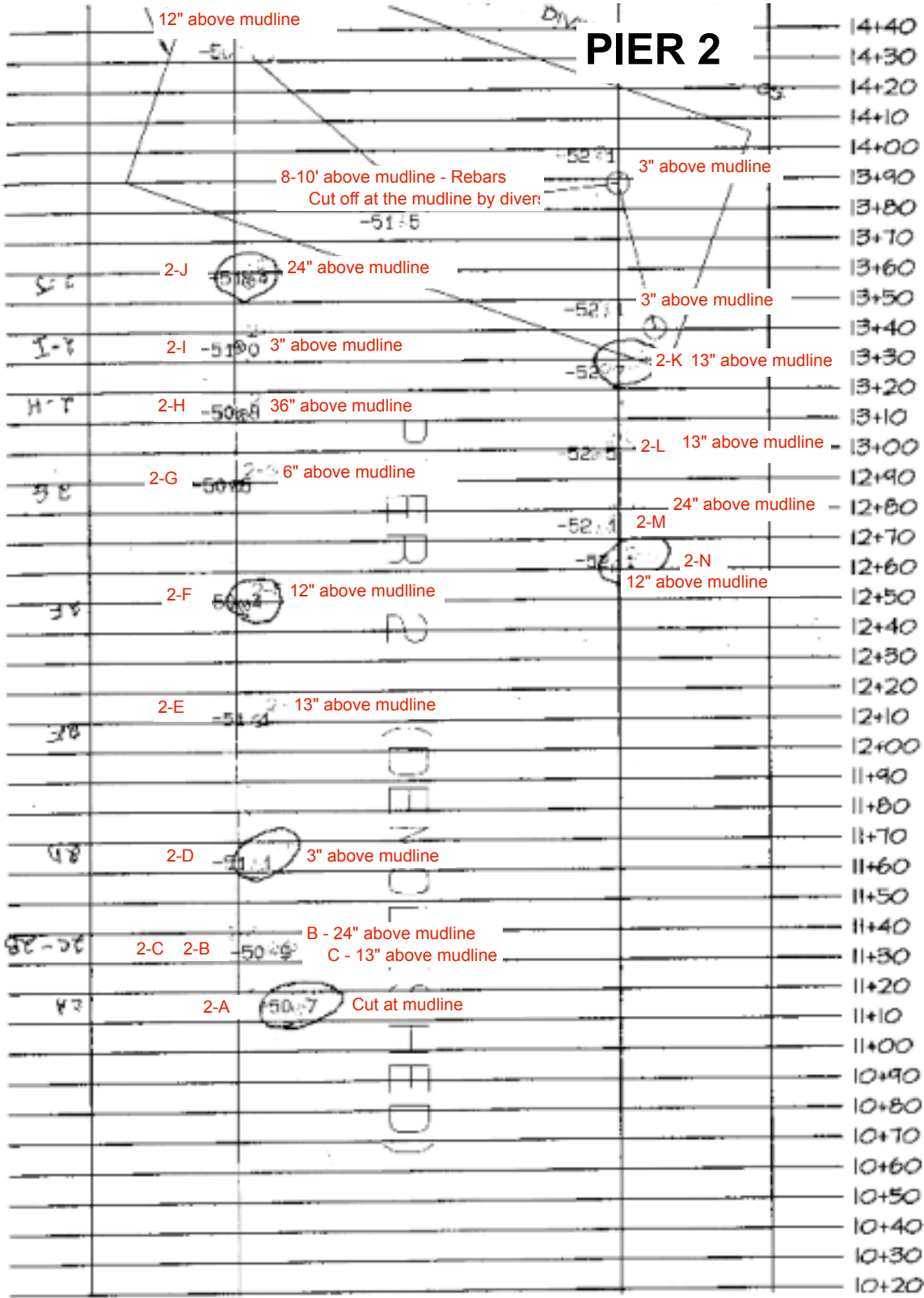
Pier 3 - West Side		
Station No. on Print	ID on Print	Description
11+30	3-A	Timber Piler, 18" above mudline
10+65	3-B	Timber Piler, 18" above mudline
10+10	3-C	Timber Piler, 36" above mudline
10+08		Timber Piler, not on print, 24" above mudline
10+05	3-D	Timber Piler, 12" above mudline

4. None of the timber pile stubs found on Piers 2 and 3 was five (5) feet or more above the mudline. The only item above five (5) feet was the pieces 1" rebar in the center of Pier 2, Station 13+78. However, those pieces were burned off by the divers. One other timber pile stub located approximately 10' off the end of Pier 3, east side (Item 3-F) was 48" above the mudline. All others ranged between 3" and 36".

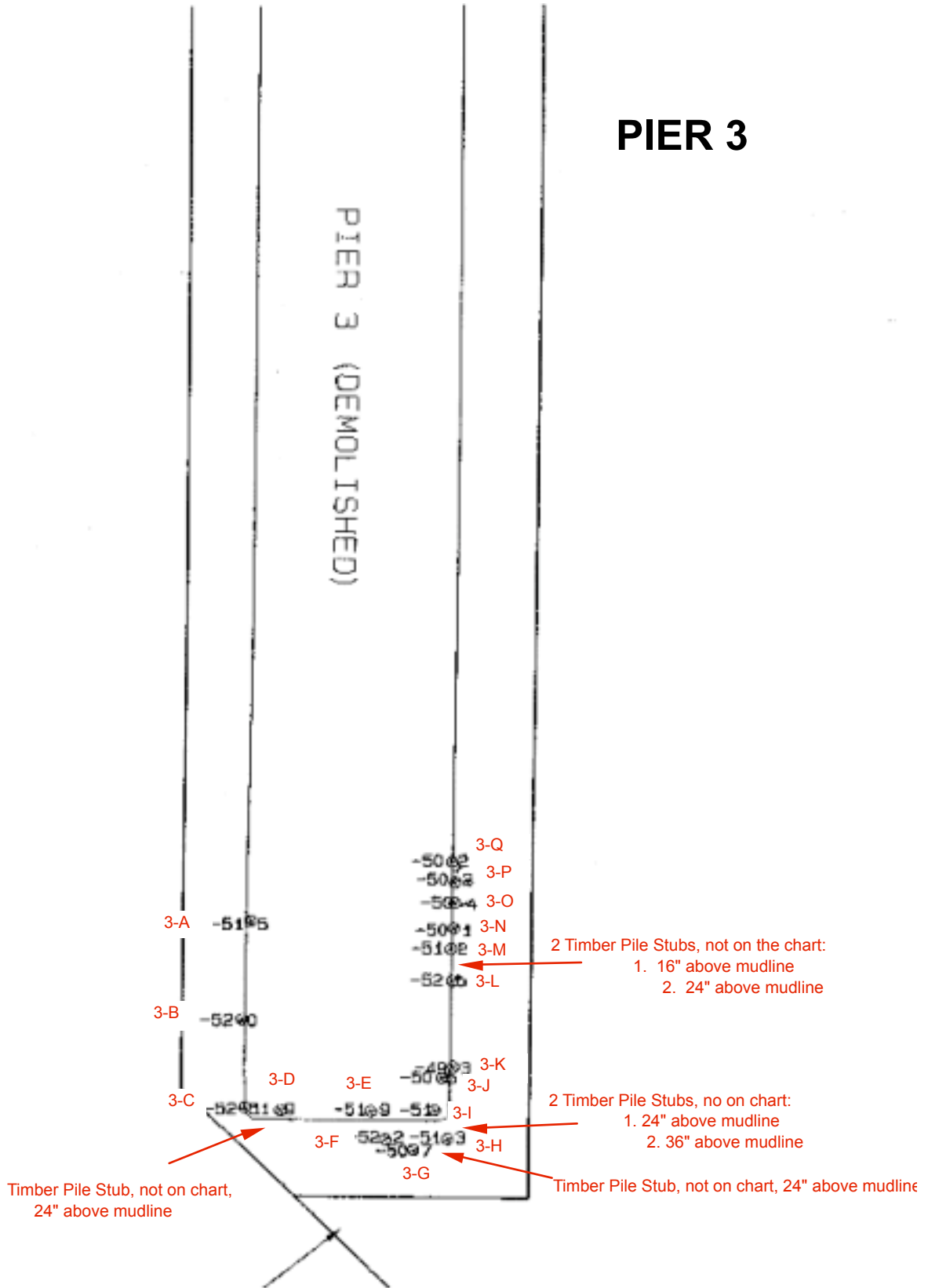
PIER 2



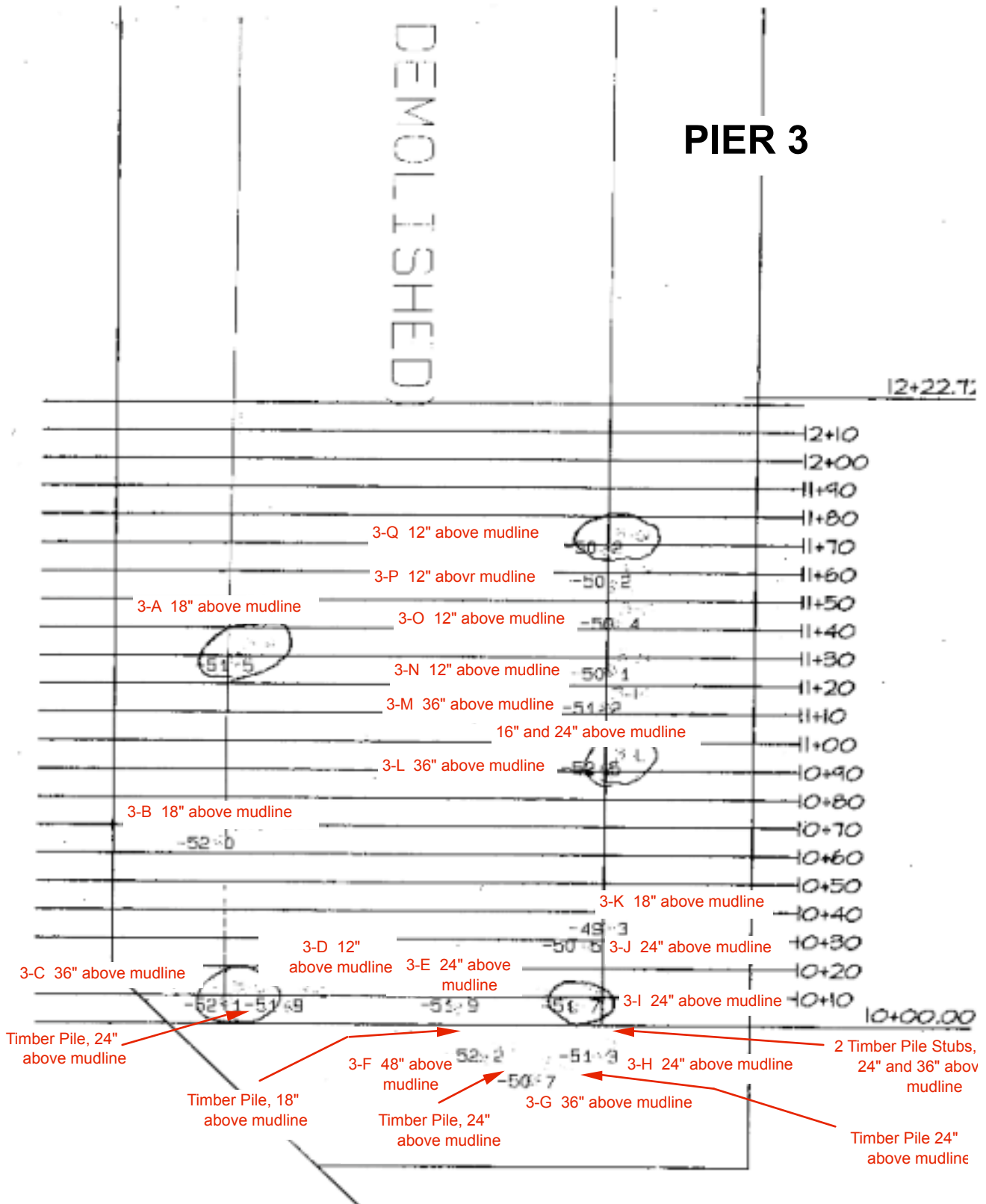
PORT OF LONG BEACH DIVER'S DAILY REPORT
 Contract HD-6923 Specification HD-S2284 BPHA05000083



PIER 3



PORT OF LONG BEACH DIVER'S DAILY REPORT
 Contract HD-6923 Specification HD-S2284 BPHA05000083



Parker Diving Service, Inc.
 P.O. Box 5272
 San Pedro, CA 90733
 24-hr Tel: (310) 833-4554

Report No. 060727
 Date: Thu. 27 July, 2006
 Sheet 6 of 7

**PORT OF LONG BEACH
CONTAINER INVENTORY LIST**

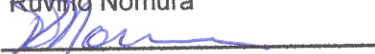
DESCRIPTION		AMOUNT						
1	T/O Anodes	5						
2	Silver Anodes	13						
3	Looped Together Anodes	8						
4	Magnetite Anodes	4						
5	Crates of Turnbuckles	9						
6	Grounding Plates	7						
7	Reference Cells	1						
8	Misc Angles & Plates							
9	Spool wire - Odd Sizes	4						
10	Steel Pipe Brackets	180						
11	55 gal. Plastic Drums	2						
12	Honda 4-Stroke Motor	1						
13	Aluminum A-Frames	2						
14	Misc PVC Fittings							
15	Misc Steel for Staples							
16	Bucket small chain links	1/2						
17	Channel Clips	21						
18	Bug Sprayer	1						
19	Aluminum Flag Holder	1						
20	Aluminum Brackets	2						
21	SikaTop 123+ (bag)	7						
22	Sika Armatec 110 (bag)	1						
23	Sika Armatec A&B(kit)	0						
24	SikaTop "A" (gal)	12						
25	Sikadur 330 - (3gal kit)	16						
26	SikaWrap Hex 230C	309'						
27	Ferrogard 903 - (gal)	5/8						
28	Fox FX700 (bags)	6						
29	4x4x5 Anode w/wire	34						
30	Euco Tremie Grout (50-lb)	42						
31	Aluminum Nails (Box)	16	<i>*Most are in 50-lb boxes</i>					
32	Aluminum Washers (Box)	13						
33	Round Fiber Form (7')	2						
34	Round Fiber Form (3.5')	2						
35	150-mil Pile Wraps	85						
36	120-lb Alum. Anodes (C72)	66						
37	Splash Zone Epoxy (2 Gal Kits)	4						
38	Anode Brackets for C72	190						
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								

PORT OF LONG BEACH DIVER'S DAILY REPORT
 Contract HD-6923 Specification HD-S2284 BPHA05000083

Work Boat: Parker I Start Time: 0745 Stop Time: 1615 Reg. Hrs: ___ + O.T. = ___ Total Hrs.

Supervisor: Robert Chow Approved by:  Boat Operator: Ruvino Nomura

(1) Account #	HB 5095	T132	Total Terminals International	Rate	Hrs	Costs
Bid Item #2	TWO DIVERS, TWO TENDERS DIVE TEAM			317.20	8	2,537.60
Bid Item #2	TWO DIVERS, TWO TENDERS DIVE TEAM			317.20	8	2,537.60
Bid Item #11	UNDERWATER VIDEO EQUIPMENT			FULL DAY		150.00
TOTAL						\$ 5,225.20

DPIC: Ruvino Nomura Diver(s): Ruvino Nomura, Scott Perkoski, Pat Daly, Matt Peterson
 DPIC:  Tender(s): Scott Perkoski, Pat Daly, Matt Peterson, Ruvino Nomura

Work Description:

(1) Berth T132

- Divers, using co-ordinates provided by the Port Surveyors, conducted inspection dives off the berth, at the demolition sight of the old Long Beach Naval Shipyard Pier 2 and Pier 3. The purpose of the dives were to document the items and determine the height off the mudline. Please note that due to the depth ranging from 54' to 58', more divers were utilized as bottom time was limited to 60 minutes per man.
- The divers were instructed to locate and identify any target which sticks up to five (5) feet above the mudline. Divers took video, but visibility was very poor. Still photos were taken but were not adequate.
- Divers began the survey at Pier 2. The divers completed all targets on the east side of the pier and began the west side. All targets were identified as timber pile stubs, ranging in height above the mudline from 3" to 3'. Refer to the following chart for details:

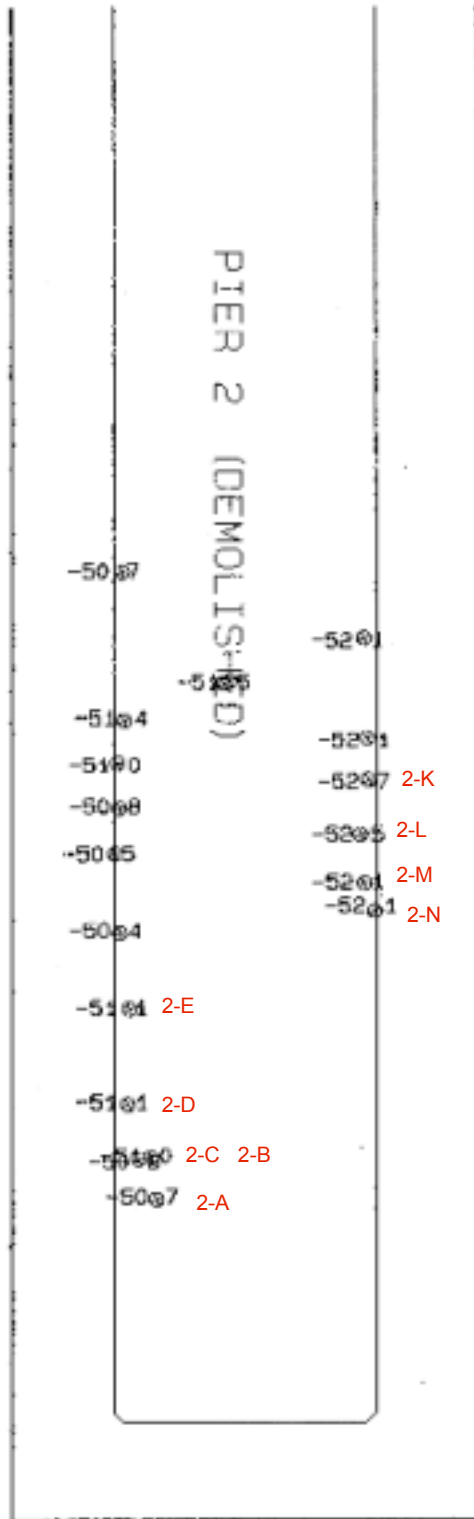
Pier 2 - East Side		
Station No. on Print	ID on Print	Description
12+60	2-N	Fender Pile, 12" above mudline
12+75	2-M	Fender Pile, 24" above mudline
13+00	2-L	Fender Pile, 13" above mudline
13+0		<i>Fender Pile cut at mudline, not shown on chart</i>
13+25	2-K	Fender Pile, 13" above mudline
13+50		<i>Fender Pile not given designation on chart, 3" above mudline</i>
14+00		<i>Fender Pile not given designation on chart, 3" above mudline</i>

Pier 2 - West Side		
Station No. on Print	ID on Print	Description
11+15	2-A	Fender Pile, cut at mudline
11+35	2-B	Fender Pile, 24" above mudline
11+35	2-C	Fender Pile, 13" above mudline
11+60	2-D	Fender Pile, 3" above mudline
12+10	2-E	Fender Pile, 13" above mudline

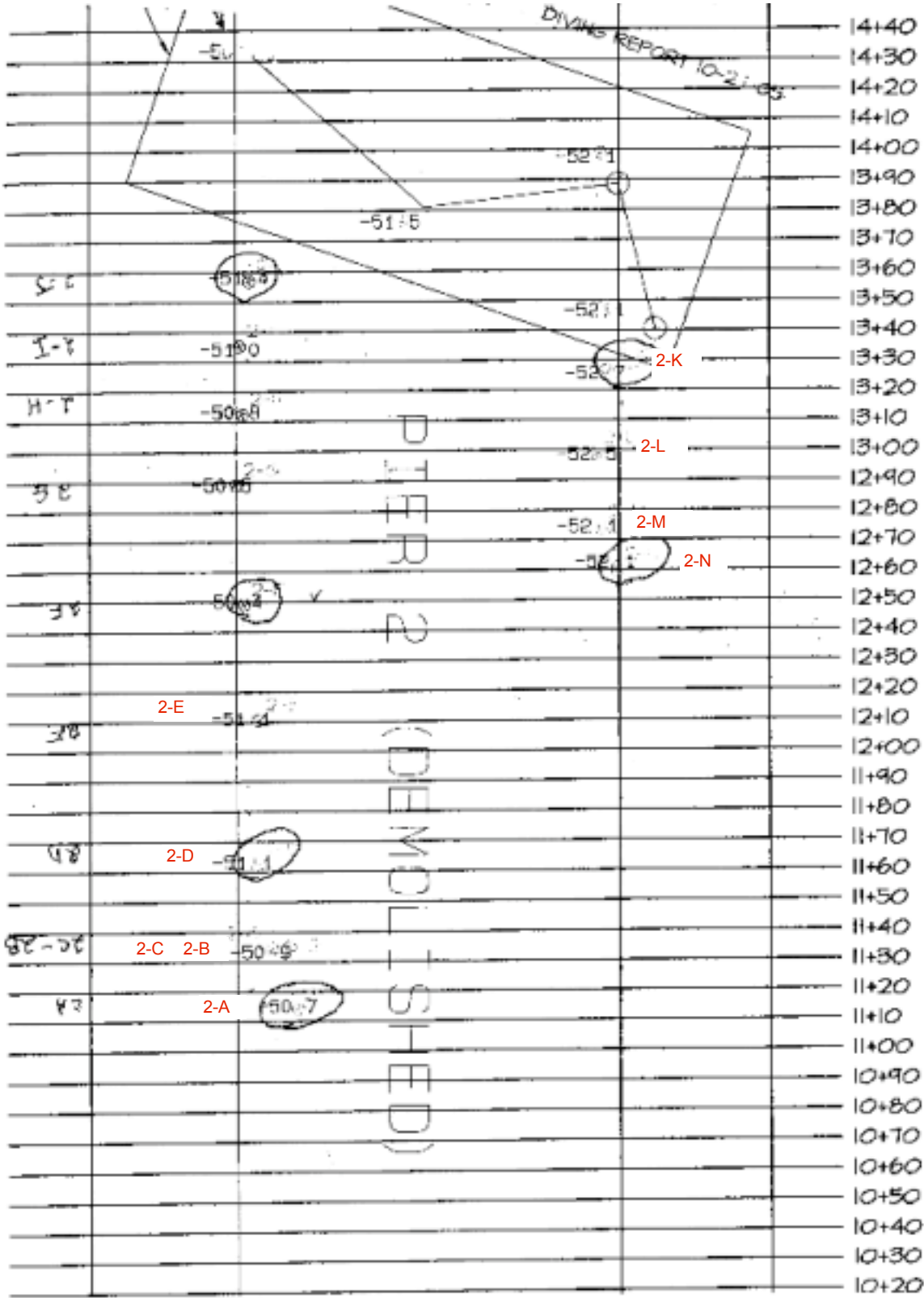
Parker Diving Service, Inc.
 P.O. Box 5272
 San Pedro, CA 90733
 24-hr Tel: (310) 833-4554

Report No. 060724
 Date: Mon. 24 July, 2006
 Sheet 1 of 4

PORT OF LONG BEACH DIVER'S DAILY REPORT
Contract HD-6923 Specification HD-S2284 BPHA05000083



PORT OF LONG BEACH DIVER'S DAILY REPORT
 Contract HD-6923 Specification HD-S2284 BPHA05000083



Parker Diving Service, Inc.
 P.O. Box 5272
 San Pedro, CA 90733
 24-hr Tel: (310) 833-4554

Report No. 060724
 Date: Mon. 24 July, 2006
 Sheet 3 of 4

**PORT OF LONG BEACH
CONTAINER INVENTORY LIST**

DESCRIPTION		AMOUNT						
1	T/O Anodes	5						
2	Silver Anodes	13						
3	Looped Together Anodes	8						
4	Magnetite Anodes	4						
5	Crates of Turnbuckles	9						
6	Grounding Plates	7						
7	Reference Cells	1						
8	Misc Angles & Plates							
9	Spool wire - Odd Sizes	4						
10	Steel Pipe Brackets	180						
11	55 gal. Plastic Drums	2						
12	Honda 4-Stroke Motor	1						
13	Aluminum A-Frames	2						
14	Misc PVC Fittings							
15	Misc Steel for Staples							
16	Bucket small chain links	1/2						
17	Channel Clips	21						
18	Bug Sprayer	1						
19	Aluminum Flag Holder	1						
20	Aluminum Brackets	2						
21	SikaTop 123+ (bag)	7						
22	Sika Armatec 110 (bag)	1						
23	Sika Armatec A&B(kit)	0						
24	SikaTop "A" (gal)	12						
25	Sikadur 330 - (3gal kit)	16						
26	SikaWrap Hex 230C	309'						
27	Ferrogard 903 - (gal)	5/8						
28	Fox FX700 (bags)	6						
29	4x4x5 Anode w/wire	34						
30	Euco Tremie Grout (50-lb)	42						
31	Aluminum Nails (Box)	16	<i>*Most are in 50-lb boxes</i>					
32	Aluminum Washers (Box)	13						
33	Round Fiber Form (7')	2						
34	Round Fiber Form (3.5')	2						
35	150-mil Pile Wraps	85						
36	120-lb Alum. Anodes (C72)	66						
37	Splash Zone Epoxy (2 Gal Kits)	4						
38	Anode Brackets for C72	190						
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								

PORT OF LONG BEACH DIVER'S DAILY REPORT

Contract HD-6923 Specification HD-S2284 BPHA05000083

Work Boat: PARKER-1 Start Time: 0745 Stop Time: 1615 Reg. Hrs: 8 + O.T. = 8 Total Hrs.

Supervisor: Robert Chow Approved by:  Boat Operator: Ruvino Nomura

(1) Account #	HB5095	T132	Total Terminals International	Rate	Hrs	Costs
Bid Item #2	TWO DIVERS, TWO TENDERS DIVE TEAM			317.20	4	1,268.80
TOTAL \$						1,268.80

DPIC: Ruvino Nomura Diver(s): Andy Cummings, Matt Peterson
 DPIC:  Tender(s): Ruvino Nomura, Pat Daly

(2) Account #	HB5270	B84-87	Shell Terminal	Rate	Hrs	Costs
Bid Item #2	TWO DIVERS, TWO TENDERS DIVE TEAM			317.20	4	1,268.80
Bid Item #7	CRANE			0.00	4	0.00
TOTAL \$						1,268.80

DPIC: Ruvino Nomura Diver(s): Andy Cummings, Matt Peterson
 DPIC:  Tender(s): Ruvino Nomura, Pat Daly

Work Description:

(1) Berth T132

- On October 21st, the divers made initial dive to verify that all the targeted objects on the chart below had been removed. At that time, Items #5,6 and 7 were not inspected due to time factor and ship movements. Today, the divers went back to the berth and completed the inspection, including the verification of the removal of Item #8, which had not been previously inspected as well.
- All objects were found missing, and the only thing the diver could find at the coordinates for Item #8 was a big hole left from the contractor's crane bucket. All targeted items listed below are now gone.

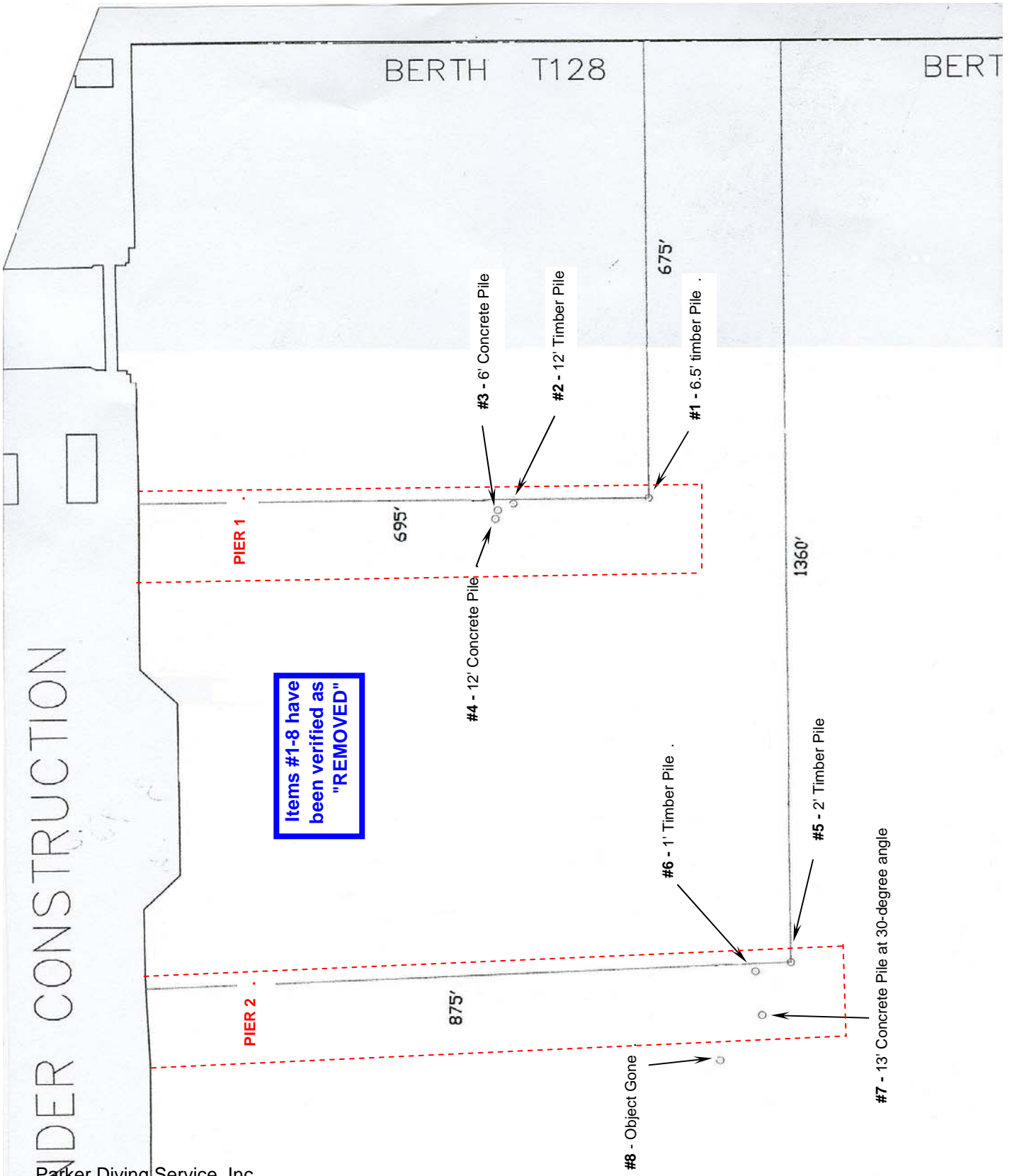
Coordinates		Description	Video
Lat	Long		ID#
118 13 34.12202	33 34 15.86370	Timber Pile sticking 6.5 feet above mud line	1
118 13 34.91340	33 45 17.55603	Timber Pile sticking 12 feet above mud line	2
118 13 35.10263	33 45 17.72443	Concrete Pile sticking 6 feet above mud line	3
118 13 35.25667	33 45 17.71465	Concrete Pile sticking 12 feet above mud line	4
118 13 41.07892	33 45 11.90286	Timber Pile sticking 2 foot above mud line	5
118 13 41.41007	33 45 12.30879	Timber Pile sticking 1 foot above mud line	6
118 13 42.09733	33 45 12.02250	Concrete Pile at 30-degree angle, 13 feet above mudline	7
118 13 43.05627	33 45 12.34979	Area clam-shelled by crane, nothing here now	8

(2) Berth B84-87 -

Divers removed sections of the old whaler near Station 2550. The existing bolts and nuts were too corroded and had to be burned off. New sections will be attached after marked and drilled.

Parker Diving Service, Inc.
 P.O. Box 5272
 San Pedro, CA 90733
 24-hr Tel: (310) 833-4554

Report No. 051027
 Date: Thu. 27 October, 2005
 Sheet 1 of 3



UNDER CONSTRUCTION

PORT OF LONG BEACH DIVER'S DAILY REPORT
Contract HD-6923 Specification HD-S2284 BPHA05000083



Photo No. 1
Burning off the old bolst from the whaler



Photo No. 2
Whaler at Station 2550



Photo No. 3
Using the Boat Crane, the old whaler section was removed.



Photo No. 4



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

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE : February 20, 2006

HYDROGRAPHIC BRANCH: Pacific
HYDROGRAPHIC PROJECT: OPR-L418-NRT6-2005
HYDROGRAPHIC SHEET: F00507_Rev

LOCALITY: San Pedro Bay, Los Angeles and Long Beach Harbor, CA

TIME PERIOD: August 17 - November 8, 2005
September 19 -21, 2006

TIDE STATION USED: 941-0660 Los Angeles, CA
Lat. 33° 43.2'N Long. 118° 16.3' W

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.448 meters

REMARKS: RECOMMENDED ZONING

Preliminary zoning is accepted as the final zoning for project OPR-L418-NRT6-2005, F00507_Rev, during the time period between August 17, 2005 - September 21, 2006.

Please use the zoning file "L418NRT62005CORP" submitted with the project instructions for OPR-L418-NRT6-2005. Zones PAC9 & PAC9A are the applicable zones for F00507_Rev.

Refer to attachments for zoning information.

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

For 

CHIEF, PRODUCT AND SERVICES DIVISION



**ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT to Accompany
Survey F00507 (2006)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

B. DATA ACQUISITION AND PROCESSING

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

HSTP PYDRO version 7.3 r2239
CARIS HIPS/SIPS version 6.1 SP1 HF 1-6
CARIS Bathymetry Manager version 2.1 HF 1-3
DKART INSPECTOR, version 5.0 Build 732 SP1
CARIS HOM version 3.3
CARIS S57 Composer version 1.0

B.2. QUALITY CONTROL

B.2.1. H-Cell

The AHB source depth grid for the survey's nautical chart update product was a 50cm surface from which the survey scale selected soundings were extracted. The selected sounding set is approximately 10 to 20 times the number of charted depths. The chart scale selected soundings are a subset of the survey scale selected soundings.

Depth curves were created from a 50cm product surface grid. The depth curves are forwarded to MCD for reference only. The curves were utilized during chart scale sounding selection and quality assurance efforts at AHB. The depth curves are incorporated into the S57 US500507_CS.000 deliverable.

The pre-compilation products or components (Stand Alone HOB files (SAHOB)) include depth curves (DEPCNT), sounding selections (SOUNDG), features (OBSTRN, WRECKS, PILPNT), Meta objects (M_COVR, M_QUAL, M_NSYS), and cartographic Blue Notes. The individual SAHOB files were inserted into one BASE Manager feature layer and exported to S57 format in order to create the H-Cell deliverable.

The completed H-Cell was exported as a Base Cell File (ENC.000) in S-57 format with all values in metric units. The metric equivalent ENC.000 file was then converted to NOAA chart units (ENC_CU.000) with all values measured in feet following NOAA sounding rounding rules.

Chart compilation was performed by Atlantic Hydrographic Branch personnel in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

The F00507 CARIS H-Cell final deliverables include the following products:

US500507_CS.000	1:12,000 Scale	F00507 H-Cell with Chart Scale Selected Soundings and Depth Curves
US500507_SS.000	1:10,000 Scale	F00507 Selected Soundings (Survey Scale)
US500507_BlueNtoes.000	1:12,000 Scale	F00507 Cartographic Notes

D. RESULTS AND RECOMMENDATIONS

D.1 CHART COMPARISON

18751 (45th Edition, Nov./07)
Corrected through NM 11/03/2007
Corrected through LNM 10/23/2007
Scale 1:12,000

18749 (41st Edition, Aug./07)
Corrected through NM 08/04/2007
Corrected through LNM 07/31/2007
Scale 1:20,000

18746 (37th Edition, Aug./07)
Corrected through NM 08/11/2007
Corrected through LNM 08/07/2007
Scale 1:80,000

ENC Comparison

US5CA62M
Los Angeles and Long Beach Harbors
Edition 11
Update Application Date 2007-11-16
Issue Date 2008-05-21
References: Chart 18751

US5CA61M
San Pedro Bay
Edition 10
Update Application Date 2008-03-21
Issue Date 2008-03-21
References: Chart 18749

US4CA60M
San Pedro Channel
Edition 6
Update Application Date 2007-12-11
Issue Date 2008-05-21
References: Chart 18746

D.1.1 Hydrography

The charted hydrography originates with prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in section “D” and Appendix 1&2 of the Descriptive Report. With the following exceptions:

1. The majority of the surveyed area was not covered by any form of bathymetry. In areas where no bathymetry was present the side scan record was used to add new features with unknown depth. No currently charted features were updated in these areas unless disproved.

D.3. MISCELLANEOUS

Chart compilation was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, 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.4. ADEQUACY OF SURVEY

The present survey is adequate to supersede the charted bathymetry within the M_COV area. Any features not specifically addressed either in the H-Cell BASE Cell File or the Blue Notes should be retained as charted. Refer to the Descriptive Report for further recommendations by the hydrographer.

APPROVAL SHEET
F00507

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, representation 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 Evaluation Report.

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

Sarah M. Eggleston
Physical Scientist
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.

Approved: _____

Shepard Smith
Lieutenant Commander, NOAA
Chief, Atlantic Hydrographic Branch