

# 4921

Diag. Ch. No. 3702-2

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
R. S. Patton, Director	
U. S. COAST AND GEODETIC SURVEY OCT 26 1929 Acc. No.	
State: California	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 9 4921
WIRE DRAG	
LOCALITY	
CRESCENT CITY Harbor	
CALIFORNIA	
1929	
CHIEF OF PARTY	
A. P. Ratti, H. & G. E.	

GOVERNMENT PRINTING OFFICE

# 4921

DESCRIPTIVE REPORT TO ACCOMPANY SHEET #9 (FIELD)

WIRE DRAG SURVEY OF PORTION OF CRESCENT CITY HARBOR, CALIFORNIA

DATE OF INSTRUCTIONS.

This survey was made in accordance with the Director's supplemental instructions dated July 24, 1929.

SURVEY METHODS.

This survey was accomplished in accordance with Special Publication No. 118. The light wire drag was used throughout the survey and the method of control was "Dual Control".

CONTROL.

Control for this survey was furnished by triangulation stations South Steeple Catholic Church, 1925 (Cath.); Crescent City Light House, 1913 (Light); Whaler's Island, 1859 (Whale); Steamboat Rock, 1859 (Steam); Round Rock, 1859 (Round); and Mussel Rock, 1925 (Mus). Also controlled by topographic stations located by F. G. Engle, 1928 as follows: LAUF, DOC, BOOM, and SPAR (Spar Buoy directly south of Fauntleroy Rock).

COMPARISON WITH PREVIOUS SURVEYS.

Supplemental soundings were taken north and close to Whaler's Island; these are shown on the smooth sheet covered by this report. The soundings are plotted in feet above the plane of reference MLLW which corresponds to 2.8' on the tide staff at Crescent City. These soundings were plotted on section "A" of this smooth sheet. The rocks close to and off BOOM were also verified; these are the same as shown on T 4402.

REMARKS.

To simplify and clarify the plotting of the wire drag lines this sheet was divided into three sections, section 1 containing the wire drag lines of "A" day, section 2 the drag lines of "B" day, and section 3 the lines and soundings of "C" day.

Two points were located on the jetty at section 10+00 ft. and 26+00 ft. by sextant fixes and are shown plotted on the smooth sheet section "A". These two points were located in order that the

Report on Wire Drag Survey, Crescent City, Calif.

(continued)

hydrographic data furnished by the Standard Oil Co. of California may be tied in to this survey. A blue print of this survey accompanies this sheet.

The plane of reference used for this survey was MLLW 2.8', Crescent City California.

Respectfully submitted,

*Augustus P. Ratti*

Augustus P. Ratti,  
Chief of Party,  
U. S. Coast and Geodetic Survey.

STATISTICS WIRE DRAG SHEET NO. 9 (FIELD)

DATE	LETTER	VOLUME	DRAG LENGTH	ANGLES	MILES STATUTE	SOUNDINGS
1929						
Aug. 7	A	1	400	460	2.7	10
" 8	B	1	600	716	3.8	4
" 9	C	1	500	<u>218</u>	<u>1.3</u>	<u>2</u>
TOTALS				1394	7.8	16

IN REPLY ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY  
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO NO. 11-DRM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

December 6, 1929.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 4921

Crescent City Harbor, California

Surveyed in 1929

Instructions dated July 24, 1929 (A. P. Ratti)

Chief of Party, A. P. Ratti.

Surveyed by A. P. R.

Protracted and inked by G. M. Marchand.

Verified and area and depth sheet by R. L. Johnston.

1. The records conform to the requirements with the following exception. On "a" day, twelve positions were taken locating rocks. The time was recorded on only two of these positions, making the tide reducer uncertain for the remaining positions.

2. The methods and character of operations fulfill the requirements of the General Instructions.

3. The depth and extent of dragging satisfy the specific instructions with the following exceptions:

The drag strip from position 30 c to position 43 c has an effective depth of only 13 feet, while instructions call for an effective depth of at least 15 feet.

The work was not carried as close to the jetty as indicated on the tracing, which was furnished with the instructions.

The records do not show that any drag tests were made except on A day.

4. No important shoals were discovered within the drag limits. A least depth of 17 ft. was found at the point where the drag grounded at position 102 B, but H. 4865 shows 14 feet at this point.
5. No supplemental hydrography was done, except some positions locating rocks near Whaler's Island.

6. The overlaps are sufficient with the exception of one small point, indicated on the Area and Depth tracing.
7. No further dragging is required to comply with instructions for this work.
8. The field plotting was completed to the extent required, but some rocks and soundings on A day were inked, which should have been left in pencil.
9. The office draftsman did not have to do over any of the drafting done by the field party.

10. Remarks:

The fixes at position 1a and position 2a, which locate rocks awash north of Whalers Island, are very weak. The officer, who took these positions and who plotted the work, has a note in the record, "Plotted in most probable location." The positions were accepted as plotted.


The descriptive report and the sounding record, both state that two stations were located on the jetty. One of these, Sta 26 + 00, plots about 100 meters beyond the end of the jetty as shown on the sheet. If the jetty has been extended, it should have been indicated on the sheet.


11. (a) Character and scope of drag operations: The drag work would rate well were it not for the fact that the records do not show that the drag was tested on B and C days.

(b) Field drafting: Excellent.

12. Reviewed by R. L. Johnston, November 26, 1929.

Approved:

  
Chief, Section of Field Records (Charts)

  
Chief, Section of Field Work (H. & T.)

Section of Field Records.

November 11, 1929.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in  
4 volumes of sounding records for

4921

HYDROGRAPHIC SHEET

Crescent City Harbor, California.

Locality:

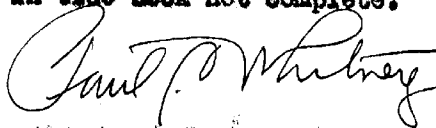
A. P. Ratti, in 1929

Chief of Party, mean lower low water, reading  
Plane of reference is Crescent City  
ft. on tide staff at  
ft. below B. M.

Humboldt Bay predictions used where observations were not available.

Condition of Records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Notes" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of soundings omitted.
13. Remarks Information called for in tide book not complete.



Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
FIELD STATION  
510 CUSTOMHOUSE  
SAN FRANCISCO, CALIF.

14  
DEC 21 8 51 AM '29

Dec. 16, 1929.

To: The Director,  
U.S. Coast and Geodetic Survey,  
Washington, D.C.

From: Lieut. A.P. Ratti,  
Box 2512, San Francisco, Calif.

Subject: Hydrographic Sheet No. 4921.

In answer to paragraph 6 of your letter of Dec. 12th  
10-RS I wish to state that the jetty was under the process  
of extension at the time of the survey. Station 26+00 was located  
at the end of the jetty. The jetty should be shown as extending  
to this point with a note stating that it is being extended further.

*Augustus P. Ratti*  
*C. of P. C. & G. S.*

*The jetty has been extended as indicated above*  
*E. P. Ratti*



10-RS

December 12, 1929.

To: Lieutenant A. P. Ratti,  
Coast and Geodetic Survey,  
Box 2512,  
San Francisco, California.

From: The Director,  
U. S. Coast and Geodetic Survey.

Subject: Hydrographic Sheet No. 4921.

Review of hydrographic sheet No. 4921 comprising wire drag work done by your party in Crescent City Harbor during the present season includes the following comments:

1. The records conform to the requirements with the following exception: On "a" day, twelve positions were taken locating rocks. The time was recorded on only two of these positions, making the tide reducer uncertain for the remaining positions.
2. The methods and character of operations fulfill the requirements of the General Instructions.
3. The depth and extent of dragging satisfy the specific instructions with the following exceptions:

The drag strip from position 30 c to position 45 c has an effective depth of only 13 feet, while instructions call for an effective depth of at least 15 feet.

The records do not show that any drag tests were made except on A day.

4. No important shoals were discovered within the drag limits. A least depth of 17 feet was found at the point where the drag grounded at position 102 B, but H. 4865 shows 14 feet at this point.
5. The fixes at position 1a and position 2a, which locate rocks awash north of Whalers Island, are very weak. The officer, who took these positions and who plotted the work, has a note in the record: "Plotted in most probable location". The positions were accepted as plotted.

6. The descriptive report and the sounding record both state that two stations were located on the jetty. One of these, Sta 26 + 00, plots about 100 meters beyond the end of the jetty as shown on the sheet. If the jetty has been extended, it should have been indicated on the sheet.
7. Character and scope of drag operations: The drag work would rate well were it not for the fact that the records do not show that the drag was tested on B and C days.
8. Field drafting: Excellent.

You will please submit as early as practicable the information necessary to chart the position of the outer end of the jetty which is shown on the sheet a considerable distance inside of a position which you state was taken on the jetty.

Director.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEYC. & G. SURVEY  
L. & A.  
OCT 28 1929  
Acc. No.

REG. NO. 4921

## HYDROGRAPHIC TITLE SHEET

Wire Drag  
**WIRE DRAG**

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. 9REGISTER NO. **4921**State CALIFORNIAGeneral locality NORTHERN COASTLocality CRESCENT CITY HARBORScale 1-5000 Date of survey Aug. 7 to 9 incl., 19 29.Vessel Project No. 34Chief of Party Augustus P. RattiSurveyed by Augustus P. RattiProtracted by George M. MarchandSoundings penciled by George M. MarchandSoundings in ~~fathoms~~ feetPlane of reference MLLW 2.8' Crescent City, CaliforniaSubdivision of wire dragged areas by A.P.R.Inked by A.P. RattiVerified by A.P. RattiInstructions dated July 24, 19 29.

Remarks: Sheet divided in three parts and each day of drag  
work was plotted separately.