

6248

WIRE DRAG

U.S. COAST & GEODETIC SURVEY
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MAR 2 1938

Acc. No. _____

WIRE DRAG

6248

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

WIRE DRAG
~~XXXXXXXXXXXX~~
~~Hydrographic~~ } Sheet No. 4

State California

LOCALITY

Northern California Coast

Bay View Gualala Point

1937

CHIEF OF PARTY

F. H. Hardy

26

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
MAR 2 1938
REG. NO.
Acc. No. _____

WIRE DRAG
~~HYDROGRAPHIC~~ TITLE SHEET

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. 4

REGISTER NO. H-6248 W.D.

State California

General locality Northern California Coast

Locality Del Mar Gualala Point

Scale 1:10,000 Date of survey Nov. 2 & 30, Dec. 1 and 2, 1937

Vessel GUIDE

Chief of Party F. H. Hardy

Surveyed by Charles Shaw

Protracted by R. C. Bolstad

Soundings penciled by R. C. Bolstad

Soundings in fathoms ~~feet~~ Drag Depths in Feet

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by R. C. Bolstad

Inked by R. C. Bolstad

Verified by _____

Instructions dated May 2, 1935, Project No. HT-206
March 6, 1937 & 3rd para. Director's 19
letter 22/MEK 1995 GU 4, dated July 29, 1937.

Remarks: Dual Control-Visual fixes using Chartered Launches FLORENCE,
(Guide Launch), VIRGINIA I (end launch) & No. 28 A 889 (tender).

DESCRIPTIVE REPORT
to accompany
WIRE DRAG SHEET FIELD NO. 4
Project No. HT-206
DEL MAR
Coast of California
U.S.C. & G.S.S. GUIDE
1937

INSTRUCTIONS:

Instructions for Project No. HT-206 were dated May 2, 1935. Supplemental Instructions for this work were dated March 6, 1937, and July 29, 1937, in the third paragraph of letter from the Director, Ref. No. 22/MEK, 1995 GU 4.

WORKING CONDITIONS:

The drag work around⁽¹⁾ Del Mar Landing was considered of primary importance and was completed at the earliest opportunity that weather conditions permitted. It should be understood that the nearest safe anchorage for the wire drag launches was at Drakes Bay some 65 nautical miles distant. On the runs to and from Del Mar⁽¹⁾ Landing it was necessary to tow the tender from and to Bodega Head so that dragging could start at once upon arrival and continue through the few remaining daylight hours as long as possible.

On the first day of this dragging season just north of San Francisco that weather seemed suitable for work off Del Mar⁽¹⁾ that is on November 2nd, the radio weather reports, sea, wind and barometer conditions were all favorable that morning and it was expected after dragging to spend the night at anchor at Fish Rocks, yet by mid-afternoon conditions had become distinctly unfavorable.

The launches had anchored for the night on November 1st under Bodega Head in Bodega Bay, and at 6 the next morning made a dash up the coast under good conditions towing the tender. Arrival on the working grounds was about 11 and the drag was set out immediately. By early afternoon the northwest wind and sea had picked up sharply so that it was necessary to quit dragging at 3:00 p.m. and hasten back supposedly to Bodega Bay shelter. We reached the Head after dark by 8:00 o'clock. Going with the northwest wind and sea was not bad until the buoy off Bodega Head was reached, but on making the turn from the buoy to clear the Head it was not but a few minutes before the guide launch found itself suddenly in troubled dangerous water from the heavy northwest swell producing bad rollers over the comparatively deep water between the buoy and Bodega Head. Changing course and getting out of this as soon as possible the end launch, which was astern a mile, was contacted by radio phone and warned. The end launch requested

(1) Landing (Name) to be deleted from chart GHE 3/21/38

approval of attempting to cross the Bodega Bay shoal at the deepest part if sea conditions were here satisfactory. However, upon reaching this area it quickly withdrew from this attempt as conditions were at least equally dangerous there.

The entrance to Tomales Bay is impossible in strong northwest weather. Hence the safe maneuver was to head for Drakes Bay rather than attempt further possible trouble in Bodega Bay under unfavorable conditions, and the three launches arrived there at almost midnight after a very rough time doubling Point Reyes.

The remaining two trips to Del Mar area were made satisfactorily with one night spent at anchor off the Gualala River.

LIMITS OF WORK:

The dragging on this sheet is from about 2 1/4 miles southeast to 3 1/2 miles northwest of Del Mar Landing.⁽¹⁾ Or from the vicinity of Latitude 38° 43' N and Longitude 123° 29' W to the vicinity of Latitude 38° 46' N and Longitude 123° 34' W. The dragged area covered extends from the 30 to 40 fathom curve about 2 miles offshore, to within 1/4 to 1/2 mile from the shore. The in-shore limit was slightly outside the generalized foul area line but as close as practicable bearing in mind the attendant dangers in drag launch operations due to swell, offlying rocks awash, kelp, etc.

No wire drag sheets join this work.

PURPOSE OF WORK:

The immediate purpose of this dragging was to prove or disprove a charted sunken "PD" rock off Del Mar Landing⁽¹⁾ about 3/4 mile as shown on Chart 5502. See chart letter No. 423 of 1932.

An effective drag depth of 82 feet was carried over this spot and the dragging extended inshore 1/2 mile and offshore 3/4 mile from the charted location and also 3 miles north and 2 miles south of the reported position.

It has been recommended by this party that this "PD" be expunged from the chart.

LOCAL INFORMATION:

Masters of several steam schooners navigating along these waters report no evidence of this "PD" rock, and it is their opinion the "SOMOA" was close inshore when she struck.

CHARACTER OF WORK:

The scale of the projection is 1:10,000. Dual control by sextant angle fixes was used with usual position interval of 5 minutes except when it seemed advisable to have closer control when 2 1/2 minute intervals were used.

(1) Del Mar to be deleted from chart. 3/21/38 G.H.E.

Drag tests were made as often as appeared necessary and at least once a day and usually after every hook-up unless prevented by unavoidable circumstances. Drag speed was maintained as far as practicable at not over 1 1/2 miles per hour to minimize or eliminate lift. Effective drag depths ranged from 15 to 90 feet. ✓

DATUM AND CONTROL:

This sheet is on the adjusted North American 1927 datum. Triangulation stations were located in 1878 and 1930. Topographic stations are from T-4507 and from 1937 topographic field sheet "L" - Ship GUIDE. C.S. 6248 ✓

All shoreline, offlying rocks, etc. were transferred from photostats of sheets T-4506 and T-4507 and none of the topographic features such as offlying rocks, etc. were located by the 1937 field party. ✓

DATES OF SURVEYS:

Wire drag work on this sheet was done on November 2nd, 30th and December 1st, 2nd, 1937. All work was done by the chartered launches. ✓

TIDAL REDUCERS:

Tidal reducers for this sheet were taken from the records of the standard automatic tide gage at San Francisco maintained by the San Francisco Field Station. See attached Tidal Data Sheet for further information. ✓

JUNCTIONS AND OVERLAPS:

As no wire drag work has been previously done here there are no junctions with other sheets. The overlaps of the adjacent and adjoining lines are good, conforming to first class wire drag practice. ✓

There are no splits. ✓

GROUNDINGS:

At Position 1 a, 49 feet, rocky, near Buoy No. 2, it was realized additionally that the drag was aground also some what toward Buoy No. 1 from this spot but with very rough storm weather fast making up from the northwest at this time the guide launch towline parted in trying slowly to maintain the "V" in the drag. With a safe anchorage 8 hours away, which would be about midnight, it was felt no further time should be lost in making shelter and no further work of investigating was done by the tender on this day. However, at positions 1 c and 2 c, both 38 feet, rocky, the additional shoal was found and was covered with an effective depth of 37 feet. ✓

The soundings in a cluster at positions 2 b, 3 b and 4 b, rocky, least depth 29 feet, were covered by an effective depth of 16 feet in clearing ✓

Position 5 b, rocky, 21 feet, only 50 yards inshore from this cluster. ✓

Pos.No. & Day Letter	Longitude & Latitude	Grounded Eff. Depth	Least Sdg. Depth	Cleared Eff. Depth	Depth Plotted	Remarks
	o ' "	Feet	Fms.	Feet	Fms.	
1 a	38 44.63 N 123 31.66 W	62	8 1/4	37 42	8 1/4	Inshore limit dragged area. ✓
3 b	38 45.71 123 32.48	38	6	16	6	-ditto- Pos. 2b is 6 4/6 fms. between pos. 3 & 4b. This pos. in general vicinity of 5b. ✓
4 b	38 45.70 123 32.47	38	4 5/6	16	4 5/6	Inshore limit dragged area. This pos. in general vicinity of 5b. ✓
5 b	38 45.73 123 32.45	23	3 1/2	16	3 1/2	Inshore limit dragged area. ✓
2 c	38 44.67 123 31.65	42	6 2/6	37	6 2/6	-ditto- Pos. 1c in practically same location with 6 2/6 fms. ✓

COMPARISON WITH PREVIOUS SURVEYS AND CHARTS:

There are no soundings on H-4986, 4987 and 5094 nor on Chart 5502 shoaler than the dragged depths shown on this sheet. ✓

PERSONNEL AND LAUNCHES:

Lieutenant-Commander Charles Shaw was in charge of this work and in charge of the guide launch. Lieutenant W. H. Bainbridge and Lieutenant (j.g.) Walter J. Chovan were in charge of the end launch on different days. ✓

Chartered Launch FLORENCE was used as guide launch and VIRGINIA I as end launch. Chartered Launch No. 28 A 889 was used as tender. ✓

Respectfully submitted,

Charles Shaw
Charles Shaw,
H. & G. Engineer,
C. & G. Survey.

Approved, forwarded:

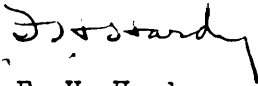
F. H. Hardy
F. H. Hardy,
Chief of Party, C. & G. S.,
Commanding Ship GUIDE.

STATEMENT
to accompany
WIRE DRAG SHEET FIELD NO. 4
1937

The plotting and protracting of buoy positions was done by
Lieutenant (j.g.) R. C. Bolstad.

The drag areas were subdivided and inked by Lieutenant (j.g.)
R. C. Bolstad.

The completed smooth sheet has been inspected and is approved.


F. H. Hardy,
Chief of Party, C. & G. S.,
Commanding Ship GUIDE.

STATISTICS
to accompany
WIRE DRAG SHEET FIELD NO. 4
1937

Date 1937	Day Letter	Volume	Statute Miles	Positions	Drag Length Feet	Tender Soundings	Positions
Nov. 2	A	1	3.6	61	10,000	1	1
30	B	1	4.4	95	10,000	5	5
Dec. 1	C	1	3.0	63	10,000	2	2
2	D	1	0.9	25	4,200	-	-
TOTALS			11.9	244		8	8

TOTAL AREA 8 SQUARE STATUTE MILES.

LIST OF SIGNALS
for
WIRE DRAG SHEET FIELD NO. 4
1937

TRIANGULATION

<u>Hydrographic Name</u>	<u>Location</u>
FRICK	Frick Ranch Barn, South Cupola, 1930
CHIM	Bourne's Landing, House Chimney, 1930
SAND	Sandstone, 1878
KNIPP	Knipp, 1878

TOPOGRAPHIC

	<u>Sheet</u>
HED	T-4507, 1929
JAN	"
BARN	C.S. 6248
BIL	L-1037
ALE	"
RIV	"
DOG	"
CAL	"

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6248** W. D.

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	...252
Number of positions checked	...11
Number of positions revised	...0
Number of soundings recorded	...8
Number of soundings revised	...0
Number of signals erroneously plotted or transferred	...0

Date: *April 8, 1938*

Verification by *J. A. McCormick*

Time: *8 hrs.*

Review by *J. A. McCormick*

Time: *5 hrs.*

HYDROGRAPHIC SURVEY NO. H-6248 W.D.

Smooth Sheet Yes

Boat Sheet Yes (Two)

Control Sheet One

Records; Sounding One Vols., Wire Drag Two Vols., Bomb --- Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Vol.#1 W.D.

Landmarks for Charts (Form 567) None

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

Special Chart for Lighthouse Service None
(Circular Nov.30, 1933)

Hydrography: Total Days 4; Last Date Dec. 2, 1937

Remarks _____

Remarks

Decisions

1	Called "Bournes Landing" T-4506 (pg. 2)	Landing destroyed see D.R.
2		
3	* Not necessary to be inked on this sheet.	USGB decision
4		" "
5		
6		No longer in use see USCP pg. 133.
7		
8	a sunken rock Lat 38°-46.68; Long. 123-33.52	
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. H-6248 W.D.

Name on Survey	<div style="display: flex; justify-content: space-between; font-size: small;"> On Chart No. 5502 On previous survey No. T-16352, 16372 On U. S. quadrangle Maps From local information On local Maps P. O. Guide or Map Rand McNally Atlas U. S. Light List </div>										
	A	B	C	D	E	F	G	H	K	USCP	
Bournes Landing	✓	Bourn's Lndg.							✓		1
<u>Robinson Reef</u>	✓	✓							✓		2
* <u>Gualala</u>	✓	walalla									3
<u>Gualala River</u>	✓	walalla R									4
<u>Gualala Point</u>	✓	walalla pt							Gualala pt. I.		5
DeX Mark Landing	✓	T-4506							✓		6
<u>Bourn Rock</u>		✓									7
<u>Jeff Davis Rock</u>		✓									8
<u>Robinson Point</u>		✓									9
<u>walalla</u> ^{see above} Landing		✓									10
<u>walalla</u> ^{see above} (village)		✓									11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
Names underlined in red approved by <u>GLE</u> on 3/2/38											25
											26
											27

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H-6248 W.D.
~~No. 7~~

{ received Mar. 7, 1938
 registered Mar. 9, 1938
 verified
 reviewed
 approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------



200

TIDE NOTE FOR HYDROGRAPHIC SHEET

March 15, 1938.

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. E. P. Ellis

Plane of reference

~~Tide Reducers~~ are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 6248 W. D.

Locality Del Mar, Northern California Coast.

Chief of Party: F. H. Hardy in 1937

Plane of reference is mean lower low water reading
5.55 ft. on tide staff at Presidio (Golden Gate) Not on H-6248 GHE
10.3 ft. below B.M. 165

Time of tide used is 40 minutes earlier than San Francisco with the range the same.

Height of mean high water above plane of reference is 5.1 feet.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

Veriper's Report on H-6248 (1937) W. D.

No comments other than those contained
in the review are considered necessary.

April 8, 1938.

J. A. Mc Cormick.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6248 (1937) W. D. FIELD NO. 4

Gualala Point, Northern California Coast, California
Surveyed in Nov.-Dec. 1937, Scale 1:10,000
Instructions dated May 2, 1935 and March 6, 1937 (GUIDE)
and Director's letter of July 29, 1937

Wire Drag
Hand Lead Soundings.

Dual control on shore signals.

Chief of Party - F. H. Hardy.
Surveyed by - Charles Shaw.
Protracted by - R. C. Bolstad.
Subdivision of wire dragged areas by - R. C. Bolstad.
Inked by - R. C. Bolstad.
Verified by - J. A. McCormick.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual and of S. P. 118.

The Descriptive Report is complete and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The survey satisfies the general instructions for the project. The investigation of the "P. D." rock called for in the Director's letter of July 29, 1937 was satisfactorily accomplished (see par. 6a, this review).

3. Shoreline and Signals.

- a. Shoreline originates with T-4506 (1929) and T-4507 (1929).
- b. Topographic signals originate with T-4507 (1929) and control sheet C. S. 6248 (1937).

4. Junctions with Wire Drag Surveys.

There are no wire drag surveys adjoining this survey.

5. Comparison with Latest Hydrographic Surveys.

H-4987 (1929), 1:40,000; H-5094 (1930), 1:10,000.

The present survey covers portions of the above hydrographic surveys. The effective drag depths do not conflict with the depths shown.

6. Comparison with Chart 5502 (New Print dated Oct. 12, 1937).a. Hydrography.

The sunken rock, P. D., charted in latitude $38^{\circ} 43.9'$, longitude $123^{\circ} 31.3'$ originates with Chart Letter 423 of 1932 which reports the striking of the S. S. Samoa on an uncharted rock $1/4$ mile south of Del Marr Landing and $3/4$ mile offshore. The vessel was drawing 15 feet aft when she struck. No soundings or bearings were taken but the weather was clear and the master was positive in his statements as to the ship's position. The reported position falls in 23 fathoms on H-5094 (1930) and was cleared with an effective depth of 82 feet on the present survey (see Descriptive Report, page 2). The surrounding area from $1/2$ mile inshore to $3/4$ mile offshore and parallel to the shore for two to three miles on either side was dragged with effective depths of 37 to 90 feet. There is no doubt as to the nature of the obstacle encountered because a large piece of rock was removed from the hull when the vessel was in dry dock. The reported position is undoubtedly erroneous, however, and the sunken rock, "P. D.", should be removed from the chart. There are no other conflicts between the effective drag depths and the charted information.

b. Aids to Navigation.

There are no navigational aids within the area of the present survey.

7. Field Plotting.

The field plotting was, in general, excellent. A difference in length of the two uprights in an inclined section exceeding $2-1/2$ per cent of the length of the section was not taken into account in the subdivision of the D day drag strips (S. P. 118, page 37, par. 2). The necessary changes were made in the office.

8. Results of Survey.a. Shoals discovered and clearance depths obtained.

- (1) The $6-2/6$ and $8-1/4$ fathom soundings in latitude $38^{\circ} 44.65'$, longitude $123^{\circ} 31.65'$ falling in 12 fathoms on H-5094 (1930). Cleared with an effective depth of 37 feet.
- (2) The $3-1/2$ and $4-5/6$ fathom soundings in latitude $38^{\circ} 45.72'$, longitude $123^{\circ} 32.46'$ falling in 9 to 11 fathoms on H-5094 (1930). Cleared with an effective depth of 16 feet.

b. Effective Depths.

The effective depths of the various drag strips are sufficient to insure safety to surface navigation to within 1/4 to 1/2 mile from the shore.

c. Splits and insufficient overlaps.

There are no splits within the dragged area and the overlaps are satisfactory.

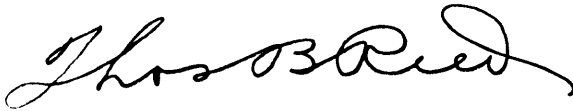
9. Additional Field Work Recommended.

The survey is complete and no additional field work is required.

10. Reviewed by - J. A. McCormick, April 8, 1938.

Inspected by A. L. Shalowitz.

Examined and approved:



T. B. Reed,
Chief, Field Records Section.

K.T. Adams
Chief, Division of Charts.



Fred. L. Peacock
Chief, Section of Field Work.

Chief, Division of H. & T.

C.S. 6248
CONTROL SHEET

U. S. COAST & GEODETIC
LIBRARY AND OFFICE

MAR 2 1938

Acc. No. _____

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic }
~~Hydrographic~~ } Sheet No. L-37

State California

LOCALITY

South of Point Arena

Del Mar Landing

1937

CHIEF OF PARTY

F. H. Hardy

U. S. GOVERNMENT PRINTING OFFICE

6248
CONTROL SHEET

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

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

Field Letter L-37

REGISTER NO.

State California

General locality South of Point Arena

Locality At and South of Del Mar Landing

Scale 1:10,000 Date of survey October, 19 37

Vessel GUIDE

Chief of Party F. H. Hardy

Surveyed by H. G. Conerly

Inked by H. G. Conerly

Heights in feet above.....to ground to tops of trees

Contour Approximate contour Form line interval.....feet

Instructions dated May 31, 19 34

Remarks: This sheet for graphic control only.

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET FIELD NO. L-1937

INSTRUCTIONS:

Dated May 31, 1934 and Director's letter dated July 29, 1937. ✓
Project HT-206.

CONTROL:

Triangulation stations are on 1927 datum. ✓

PURPOSE OF SURVEY:

The purpose of the survey was to furnish control for the wire ✓
drag work in this vicinity.

METHODS:

Standard methods of planetable topography were used throughout. Stations CAL and RED were located by rod readings from Station BOURNS LANDING 1879 and checked by a cut from Station ROBISON POINT 1878. DOG was located by a rod reading from ROBISON POINT 1878 and a cut from BOURNS LANDING 1879. BIL was located by cuts from BOURNS LANDING 1879 and ROBISON POINT 1878. For a check a set up was made at station ✓ and a check made on stations ROBISON POINT, BOURNS LANDING and Topographic Station RIV. Riv was located by cuts from triangulation stations BOURNS LANDING, ROBISON POINT and SANDSTONE. Station BARN was located by a cut from Station SANDSTONE, a traverse to the station from SANDSTONE and checked by resection on KNIPP 1878. ALE was located by a rod reading from Station SANDSTONE.

There is no magnetic meridian on the sheet but declinometer obser- ✓
vations were made on all of the triangulation stations during the time the work was being done.

GENERAL DESCRIPTION OF COAST:

Along the coast are low rolling hills with bluffs at the high water line from about 25 to 100 feet high. There are several rows of trees extending in a northeasterly-southwesterly direction. The north one is very near Signal RIV and the most southerly one is approximately 3/4 mile ✓ south of the limits of the sheet. These lines of trees are used for wind breaks and extend back to where the hills become steeper, approximately 3/4 mile from shore.

CHANGES SINCE LAST SURVEY:

Bourns Landing has been burned and wrecked and at present all the landing is gone except a very small upright boiler called CAL on the sheet. ✓

Bourns Landing, House Chimney 1930, is located on the largest and unpainted house nearby. There are a few outhouses and a small red tank left of the old landing *houses*. ✓

Respectfully submitted,

H. G. Conerly
H. G. Conerly,
Aid,
C. & G. Survey.

Approved, forwarded:

F. H. Hardy
F. H. Hardy,
Chief of Party, C. & G. S.,
Commanding Ship GUIDE.