

3812<sup>A</sup>

U. & G. SURVEY  
L. & A.  
FEB 20 1917  
Acc. No.

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

State: .....

11-5613

DESCRIPTIVE REPORT.

*Hyd.* Sheet No. *3812<sup>a</sup>*

LOCALITY:

191

CHIEF OF PARTY:

3812<sup>A</sup>

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3812<sup>a</sup>

State . . . Alaska, S.E. . . . . .

General locality . East end Sumner Strait . . . . .

Locality . ~~Between Eye Opener and Shingle Island~~ to Pt. Colpoys.

Chief of party . . . L.O. Colbert . . . . .

Surveyed by . . . . L.O. Colbert . . . . .

Date of survey . . . April 26 -- Sept 13, 1916 . . . . .

Scale . . . . . 1/20,000 . . . . .

Soundings in . . . . Feet. . . . . .

Plane of reference Mean lower low water . . . . .

Protracted by . . A.J. . . . . Soundings in pencil by A.J. . . . .

Inked by . . . . A.J. . . . . Verified by Drag-work by R.L. Johnston  
*Soundings by A.L. Shalowitz*

Records accompanying sheet (check those forwarded):

/ Des. report, \_\_\_\_\_ Tide books, \_\_\_\_\_ Marigrams, 1 Boat sheets,  
1 Sounding books, 2 Wire-drag books, \_\_\_\_\_ Photographs.

Data from other sources affecting sheet . . . . .

Remarks:

DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY.

E. Lester Jones, Superintendent.

DESCRIPTIVE REPORT

to accompany

WIRE DRAG SHEET No. 3872<sup>a</sup>

of

SUMNER STRAIT? SOUTHEAST ALASKA.

by

WIRE DRAG PARTY No. 4.

1916

L.O. Colbert, Chief of Party.

Scale. 1 : 20,000.

DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY.

E. Lester Jones, Superintendent.

Descriptive Report of Wire Drag Sheet No. 3.

of

SUMNER STRAIT, SOUTHEAST ALASKA.

by

Wire drag Party No. 4.

1916

Limits of the sheet:-

The area covered on this sheet in 1916 is that which was left unfinished in 1915. It overlaps the outer limits of the 1915 work, and practically cleans up the unfinished area in this region.

There are two separate drag areas on this sheet. First the area between the northern limits of 1915 work and the shoreline of Kupreanof Island. It starts with a dragged area about two miles wide just a little east and north of the Eye Opener and runs west with a width of two and a half miles to one half a mile wide, to a line running north and south from the west point at the entrance to Totem Bay.

The second area begins just north of Point Colpoys with a width of about one and a half miles and runs west (due) for three and one-half miles.

The scale of the sheet is 1 : 20,000.

Depth Dragged:-

In most cases forty or more feet were dragged. It was necessary on several occasions, however, to make a shoaler hook-up in order to clear shoals where the drag on previous dates had gone aground.

The shoalest depth dragged was a small area just south of the Eye Opener, where the drag carried no less than 27 feet.



Distance off Shore:-

In the case of the second area of this sheet as mentioned above, it was not necessary to go closer than one-fourth of a mile from the beach, as Wire Drag Sheet No. 4. covers the area between the southern limits of this sheet and the shore.

The first area is at most points at least a mile off shore. Since the northern limits of this area is off the shore of Mupreanof Island, which is bordered by shoals, islands and reefs, it was not thought practical to drag any closer in shore.

Currents:-

Observations were taken for the direction of the set and drift of the current just east of this sheet on Wire Drag Sheet No. 4, 1916, mentioning of which will be found in the descriptive report for that sheet.

No observations were taken on this area during 1916.

Adjoining Sheets:-

Since this sheet was made for the completion of unfinished areas on a sheet of the same locality in 1915, it joins up with that sheet on the west side.

On the east side it is overlapped by Wire Drag Sheet No. 4. 1916.

Shoals:-

(1) A pinnacle rock with ten feet over it at mean lower low water, was found about South southeast (true) of Shingle Island. A series of shoals with thirty four to forty five feet, muddy bottom, extend about three-quarters of a mile to the east of this pinnacle.

The pinnacle rock is located on the following bearings;

Eye Opener Beacon,  $121^{\circ}$  (true), distant 7250 meters.

Shingle Island (south end),  $332^{\circ}$  (true), distant 2200 Meters.

Geographical Position as taken from the Wire Drag Smooth Sheet;

Latitude  $56^{\circ} - 25' - 09''$  North.

Longitude  $133^{\circ} - 22' - 32''$  West.

Within thirty meters of this pinnacle is found kelp.

Shoals:- Continued,

(2) A rocky shoal with a least depth of forty-five feet at mean lower low water, was located northwest (true) of the Eye Opener about one and one-eighth miles. This shoal is about one-third of a mile in diameter.

The shoalest sounding obtained is located by the following bearings;

Eye Opener  $140^{\circ}$  (true), - distant 3060 meters.

Shingle Island (south end)  $304^{\circ}$  (true), - distant 6300 meters.

Geographical Position as taken from the Wire Drag Smooth Sheet;

Latitude  $56^{\circ} - 24' - 18''$  North.

Longitude  $133^{\circ} - 18' - 29''$  West.

A greatest depth of forty-four feet was dragged over this shoal.

(3) A rocky shoal of about one-fourth mile in diameter was located about one and one-half miles South southeast (true) of Shingle Island. The drag went aground here on "G" day while drawing fifty one feet, and a sounding of forty <sup>four</sup> feet at mean lower low water was located. Later on "H" day the drag went aground about (250) meters east of this point while drawing thirty three feet. No soundings were taken at this time, though it can be said that the shoal has less than thirty three feet of water at mean lower low water. It is likely that this shoal is about one-fourth of a mile in diameter, however, this is only an estimate, judging from the bordering drag areas. No drag strip cleared this shoal where the drag went aground at "H" and so the dimensions and least depth of this shoal cannot be given.

The forty <sup>four</sup> foot sounding mentioned above is located ~~one~~ by the following bearings and distances;

Shingle Island (south end)  $32^{\circ}$  (true), - distant 3100 meters.

Eye Opener  $107^{\circ}$  (true), - distant 8900 meters.

Geographical Position as taken from the Wire Drag Smooth Sheet ;

Latitude  $56^{\circ} - 24' - 37''$  North

Longitude  $133^{\circ} - 24' - 40''$  West.

Shoals:- Continued,

(4) On position ( 8 "A" day ), one and one-tenths miles North northwest (true) of Eye Opener., the drag went aground, though no soundings are recorded. A depth of forty one feet was afterwards taken over this place. The boat sheet gives a sounding of forty feet, but no other record is given. No doubt there was an error of reducing, otherwise the forty one foot drag would not have cleared.

Tide Reducers:-

The drag depths and soundings of this sheet were reduced to mean lower low water by the tides as taken from the marigram at St. Johns Harbor.

Conclusion:

The work of this sheet cleared up the unfinished area left by the drag party in 1915, except for the groups of shoals south of Shingle Island. These lie some distance from the path of steamers, and for that reason time was not taken during the season to investigate them thoroughly. A tracing is attached to this report showing the unfinished region. The entire area joining this vicinity on the north requires a special hydrographic examination. This should be done before further drag work is done. At the same time a topographic revision of the entire shoreline of Kupreanof Island with the numerous off-lying islands and rocks.

STATISTICS OF SHEET No. 3.

Day	No. of Angles	No. Stat. Miles	No. Retained Sdgs.
A	156	4.8	
B	130	4.0	11
C	104	2.8	
D	67	3.6	
E	236	7.0	9
F	188	4.0	4
G	216	4.0	1
H	50	1.1	1
I	234	7.8	
	<u>1381</u>	<u>39.1</u>	<u>26</u>

16 Square (statute) miles

Approved

*L.O. Robert.*

*Joachim*  
Assistant, C. & G. Survey  
Compiler.

Assistant, C. & G. Survey  
Chief of Party.



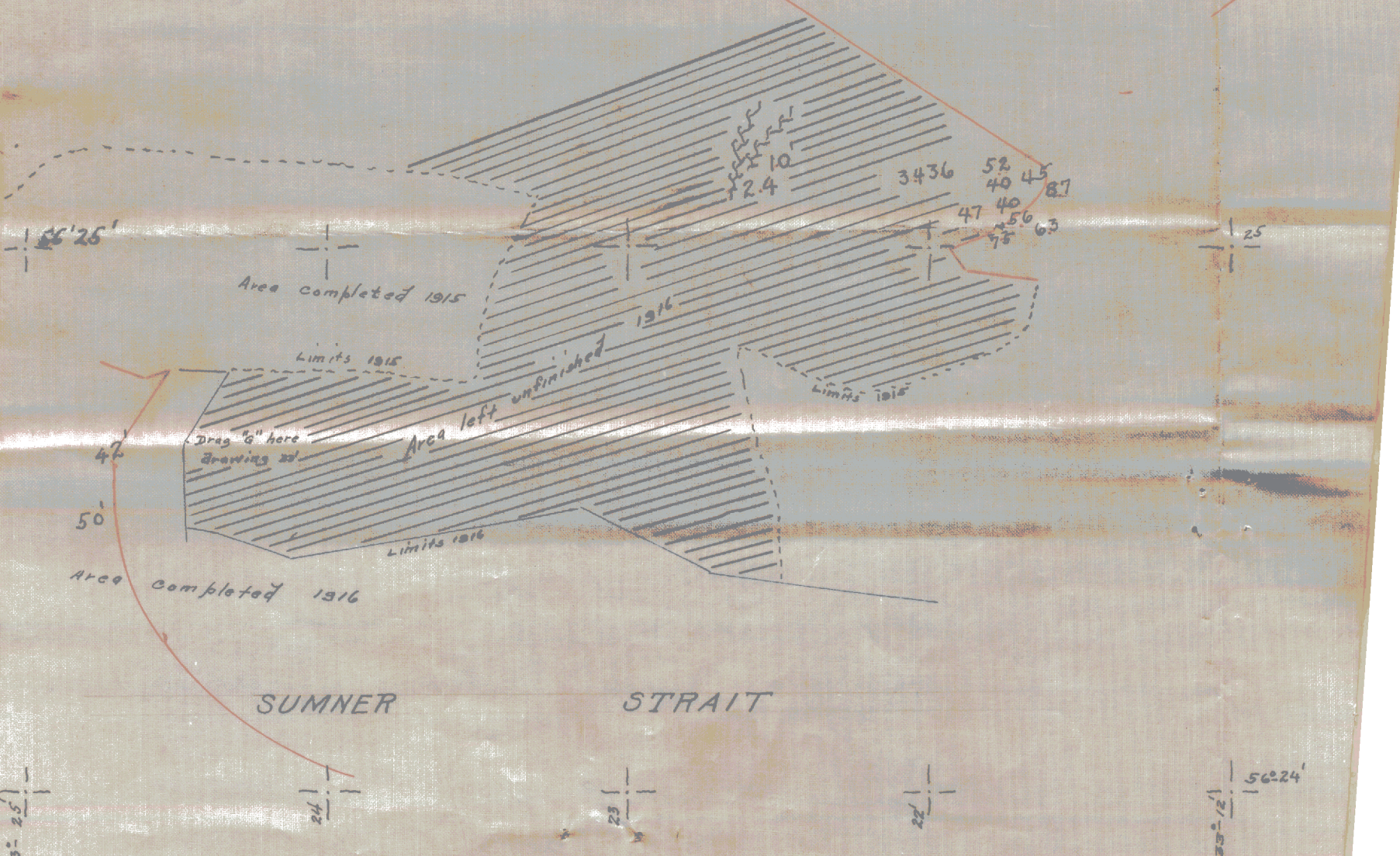
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# UNFINISHED AREA

IN SUMNER ST. Near Shingle Id.  
as left by Wire Drag No. 4, 1915-1916  
to accompany Descriptive report  
Wire Drag Sheet No. 3, 1916 Scale 1:20,000


This in area of H-9218(1971)

Area completed 1916





Nov. 15, 1922.

Division of Hydrography and Topography: 

Division of Charts:

Tide reducers are approved in

1 volume of sounding records ~~for~~ and 2 vols. of wire-drag records for

HYDROGRAPHIC SHEET 3812<sup>a</sup>

Locality: Sumner Strait, S. E. Alaska

Chief of Party: L. O. Colbert in 1916

Plane of reference is mean lower low water

4.2 ft. on tide staff at St. John Harbor, Zarembo Island

For reduction of soundings

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 "Office" column.
- ✓ 8. Location of tide gauge not given at beginning of each 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 record could be improved.
13. Remarks.



Chief, Division of Tides and Currents.

Hyd. 3812<sup>a</sup>

This work, done during the season of 1916, covers most of the area left unfinished in 1915 (Hyd. 3812). One split occurs between the limits of Hyd. 3812 and Hyd. 3812<sup>a</sup>. It is in the vicinity of Long. 133°-21' between Lat. 56°-24' and Lat. 56°-25'. This probably would have been covered, but for the fact that the tow-line parted at pos. 17F."

Two small splits on Hyd. 3812 have been covered by this work.

At pos. 9H", the drag grounded with an effective depth of thirty three feet. No sounding was obtained and no other drag was passed over this point.

At pos. 8A", the drag grounded with an effective depth of fifty six feet. The boatsheet shows a sounding of forty feet, which is not in the records. In any case an effective depth of forty one feet was passed over the spot.

An area and depth sheet was prepared for this work, independent of the previous season's work. In order to get the combined results of both seasons work, the area and depth sheet for this sheet H. 3812<sup>a</sup> can be laid over that of Hyd. 3812.

The sheet has been well plotted.

R. L. Johnston

E. O. S.

ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY  
AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON July 2, 1924.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 3812<sup>a</sup>

Summer Strait, Alaska

Surveyed in 1916

Instructions dated February 26, 1916

Chief of Party, L. O. Colbert

Surveyed by L. O. Colbert

Portracted and inked by A. Joachims.

Verified and Area and Depth Sheet by R. L. Johnston.

1. There are no definite instructions as to depth and extent hence it is assumed that the depth and extent are sufficient. It is to be noted, however, that the deep water areas covered by this sheet and by that of 3812 have not been dragged to a depth sufficient for submarine navigation.
2. A clearance depth sufficient for **surface** navigation in the particular locality was obtained over all shoals discovered except as follows:
  - (a) The 10' spot southeast of Shingle I. This is so shoal that it is hardly necessary to drag any more over this spot.
  - (b) The group of shoal soundings just east of the above 10' spot are so close to it that additional work would seem unnecessary.
  - (c) At a point 1 1/2 miles 198° (true) from Shingle I. the drag grounded at an effective depth of 33 feet. (See Vol. 2 page 5 this sheet) No sounding was obtained here and the area was not subsequently dragged. 5 1/2 fathoms should be charted here for the present, and it should be dragged over when opportunity offers.
3. The overlaps are sufficient except as shown on the A. & D. Sheet.
4. The split in the work between this sheet and H. 3812 should be covered as well as the undragged area south of Shingle I. and particularly the spot mentioned in Paragraph 2 (c)
5. Reviewed by A. L. Shalowitz, June, 1924.

Chart 8/60 Extension App'd 2-19-70 HR