

5070

Diag. Cht. No. 6102-1

5070

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, Director

State: Washington

DESCRIPTIVE REPORT

Topographic } Sheet No. 5070
Hydrographic } Field # 24

LOCALITY

Between Cape Johnson & Ozette Island

~~Washington Coast~~

Pacific Coast

1930

CHIEF OF PARTY

K. T. Adams

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5070

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. 24

REGISTER NO. 5070

State Washington

General locality Olympic Peninsula Pacific Coast

Locality Between Cape Johnson ^{to} and Ozette I.

Scale 1:20,000 Date of survey Sept. 8 - Oct. 10, 1930

Vessel U.S.C. & G.S.S. GUIDE

Chief of Party K. T. Adms

Surveyed by J. C. Mathisson

Protracted by E. H. Sheridan

Soundings penciled by E. H. Sheridan

Soundings in fathoms feet

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated April 16, 1930, 19

Remarks:

DESCRIPTIVE REPORT
to accompany
Sheet No. 24

Washington Coast
1930 -

AUTHORITY: The authority for this survey is contained in the
DIRECTOR'S Instructions dated April 16, 1930.

LIMITS: The sheet comprises inshore hydrography from Cape
Johnson to Ozette Island and offshore to a junction with the ship
hydrography.

SURVEY METHODS: No deviation was made from the usual launch hydrogra-
phy methods. A 65 foot, hired launch with a draft of 6 feet was
used for all of the work. Sunken rocks, rocks awash and dangers
were located either by sextant cuts from detached positions or from
fixes along sounding lines.

Compass courses were used to run sounding lines and
these courses were recorded in the sounding volumes.

The sounding lines were carried as far inshore as
practical. In some places it seems that lines could have been
run closer inshore, but due to the many rocks and the almost const-
ant swell, it seemed too great a danger.

DISCREPANCIES: Two sunken rocks just north of White Rock were
located by the topographic party after the hydrography was com-
pleted. These rocks were not seen by the hydrographic party and
no indication is shown by the soundings in this area that they
exist.
*9 ft of tide when sounding lines were run and rock breaks only
at low water, which may account for hydrographic party not seeing it.*

DANGERS: The middle rock, Latitude $47^{\circ} - 58' + 1613$ m, Longitude
 $124^{\circ} - 42' + 445$ m, of a reef, lying in a south-east and north-west
direction, is bare 7 feet at M.L.L.W. The reef is large in area
and is dangerous to fishing boats and tenders using the channel to
the east of Jagged Island.

At Latitude 48°-03' 1388 m, Longitude 124°-43' 220 m a least depth of 11-fathoms one foot was recorded. Less water might exist at this point.

CHANNELS: Small fishing boats and fish tenders, going to and from the Quillayute River use the channel between Jagged Island and the main land. There is good water here if Jagged Island is carried close. After passing Carroll Island then boats go off-shore from Hand Rock.

ANCHORAGES: During the summer months, and in good weather, fishing boats anchor to south-east of Ozette Island in from three to four fathoms. The bottom is hard here and swinging space is limited.

COMPARISON WITH PREVIOUS SURVEYS: The original survey was made in 1891 in this locality. It is difficult to get a true comparison, because of the poor control and the lack of development on the original survey. As a general rule, the relative positions of off-lying rocks were checked. Few additional rocks were found.

Only two rocks were found at Latitude 47°-58.3', Longitude 124°- 41.5'. The bottom is very uneven here and the other rocks might exist. This area should be charted as foul ground.

The sunken rocks and rocks awash to the south-east of Jagged Island were not verified by the party.

REMARKS: Between Triangulation Sand and the reef off the point, the area is foul. In this area and the area north to the vicinity of White Rock, many sunken rocks and rocks awash exist.

The area between Ozette Island and north east to the mainland is very foul.

From Latitude 48°- 04.0' to Latitude 48°- 05.5' the area is foul inshore of the sounding lines.

GEOGRAPHIC NAMES: See descriptive report for Topographic Sheet, Register No. 4450 (season 1929 and 1930)

Respectfully submitted,

John C. Mathisson

John C. Mathisson,
Jr. H & G Engineer,
Steamer GUIDE.

JCM/s

Forwarded, approved:

K. T. Adams

K. T. Adams,
Commanding Officer,
Steamer GUIDE.

STATISTICS

DAY	BOAT	NO. POS.	NO SND 'GS.	STAT. MI.	VOL.
a	SEAKIST	65	243	16.0	I
b	"	64	234	16.3	I
c	"	38	134	8.8	I
d	"	101	377	24.4	I
e	"	49	180	12.8	I
f	"	19	53	4.0	I
g	"	95	316	16.0	I & II
h	"	58	180	15.9	II
j	"	56	192	11.6	II
k	"	55	197	14.9	II
l	"	120	434	24.3	II
TOTAL		720	2540	164.1	

VERIFICATION REPORT
to accompany

Hydrographic Sheet No. 24
Washington Coast

This is to certify that I have examined the completed smooth sheet and records and hereby approve same. ✓

Less than the usual amount of supervision was had over the field work, it being done by a detached party, contact with which was seldom made on the working ground. However, each time in port the boat sheet was examined and discussed with the officer in actual charge of the work. ✓

K. T. Adams

K. T. Adams,
Chief of Party,
Steamer GUIDE.

KTA/s

Section of Field Records
Report on H-5070
Cape Johnson to Ogette Island, Wash.
Surveyed in 1930
Instructions dated Apr. 16, 1930 (Guide)

Chief of Party - K. J. Adams
Surveyed by - J. C. Mathiason
Abstracted by - E. H. Sheldon
Soundings plotted by - E. H. S.
Verified & inked by - H. W. Murray & J. H. Strueter

1. The records conform to the requirements of the Hydrographic Manual except that no letters were entered at the beginning of a, b, e, g, h, j & l days.
2. The plan & character of development fulfill the requirements of the Hydrographic Manual.
3. The plan and extent of development satisfy the specific instructions.
4. There are no sounding line crossings on this sheet.
5. The hydrography is not sufficient to completely draw any of the depth curves.

6. The field plotting was completed to the extent prescribed in the Hydrographic Manual except that:-
- (a) Position numbers should have been attached to ends of lines.
 - (b) Corrected position numbers should have been erased and corrected instead of writing over the old ones.
 - (c) The shore line & adjacent features were not carefully & neatly transferred and several changes had to be made. More attention might have been given to the balancing of the two projections.
7. The junction on the south with H-5069 and on the west with H-5110 and H-5111 is satisfactory. No junction was made on the north as that area has not as yet been surveyed.
8. No investigation seems to have been made by the field party of the shoal indications with a least depth of 8 $\frac{1}{2}$ fms in lat. $48^{\circ}04.7'$, long $124^{\circ}44.1'$. This will probably be taken up next season.

9. A few comparisons were made with old surveys H-1845 & 2096 and fair agreement was found. However, a shoal indication of 5 $\frac{3}{4}$ fm on H-2096 in lat. 48° 06'.2, long. 124° 42'.8 falls near a 7 $\frac{1}{4}$ fm sounding on this sheet which is surrounded by a group of 9 $\frac{1}{4}$ fm soundings. This may or may not be an indication.

No information was found relative to the 11 fm shoal in lat 48° 03'.8, long 124° 43'.2

10. Further surveying will be necessary to develop the flank areas which are foul & infested with rocks.

12. Remarks:-

Soundings to the west of long 124° 43' were inked & verified by H.W. Murray, those to the east by J. H. Struter. All rock cuts from post 1a to 4 l now checked by J. H. S., from 4 l to 120 l by H.W.M. All overlap, comparisons and pencil notes are by H.W.M.

13. Respectfully submitted -

Sept. 9, 1931
Harold W. Murray

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5070

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

Number of positions on sheet	<u>720</u>
Number of positions checked	<u>218.</u>
Number of positions revised	<u>5.</u>
Number of soundings recorded	<u>2540</u>
Number of soundings revised	<u>33</u>
Number of signals erroneously plotted or transferred	<u>✓</u>

Date: Sept. 9, 1931
Cartographer: Harold W. Murray

May 7, 1931

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 5070

Locality Cape Jomson to Ogette Island, Washington Coast

Chief of Party: K. T. Adams, in 1930

Plane of reference is mean lower low water

3.8 ft. on tide staff at La Push

17.2 ft. below B. M. 4

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 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.



Acting Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE

AND REFER TO No. 80-DRM

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5070

Cape Johnson to Ozette Island, Coast of Washington

Surveyed in 1930

Hand lead soundings

Instructions dated April 16, 1930 (GUIDE)

Chief of Party, K. T. Adams

Surveyed by J. C. Mathisson

Protracted and soundings plotted by E. H. Sheridan

Verified and inked by H. W. Murray, G. H. Streeter

1. The records conform to the requirements.
2. The plan, character and extent of the survey satisfy the general and specific instructions except that 100 meter spacing was called for off of capes. This was not maintained off Cape Johnson.
3. No cross lines were run. Adjacent lines agree fairly well.
4. The information is not sufficient for completely drawing the usual depth curves. The greater part of the ten fathom curve can be drawn but the shoaler curves can only be indicated in a few places.
5. There is no junction on the north as H. 5109 is incomplete and does not join this work at present.

The offshore junctions with H. 5110 and 5111 are satisfactory and the junction on the south with H. 5069 is also satisfactory.

6. Comparison with the surveys of 1888 and 1891, H. 1845 and H. 2096, shows fair agreement and no serious discrepancies. However, it is believed that the recent work as shown on H. 5070 should supersede the old surveys, with the exception of a $5 \frac{3}{4}$ fathom sounding shown on H. 2096 inlat. $48^{\circ}06'.2$, long. $124^{\circ}42'.85$. This sounding was checked from the old record

and seems to be confirmed by a 7 1/4 fathom sounding obtained on the new work.

On H. 2096 there are quite a number of rocks which are not shown on the new work. Most of these are located in the sounding records of H. 2096, but a few, such as the rock awash just south of Foot Rock and the rock awash and sunken rock about one-half mile west of signal Hump, are not mentioned in the sounding records although clearly shown on the sheet. These rocks have been added to H. 5070 in red.

The rocks shown on H. 2096 southeast of Jagged I. were not added to H. 5070 as the hydrographic party state they could not be verified.

A sunken rock shown on H. 2096 in lat. $48^{\circ}05'.5$, long. $124^{\circ}42'.4$ was found to have been incorrectly plotted from the records and should be removed from the chart. The correct plotting is shown in red on H. 2096.

A rock awash shown on H. 2096 in approximately lat. $48^{\circ}05'$, long. $124^{\circ}43'$ was added to H. 5070 because this rock is of considerable importance if existent and there is no development at this point on the new work. It was found, however, that the fix which locates this rock, pos. 32a (blue) in the records of H. 2096, is a rank revolver, and there is a possibility that it actually belongs about one-half mile southeast of the position shown.

On chart 6102, a large patch of sunken rocks is shown just northeast of Hand Rock. These were probably put on the chart from an indefinite note on H. 2096, and are disproven by the new hydrography. It is recommended that they be removed from the chart and changed to conform with H. 5070.

The rocks as shown on the topographic surveys of 1887, T. 1789 and T. 1788, generally agree approximately with those on H. 5070 except that many of the ~~xxxx~~ rocks which are shown as bare rocks on the old topographic sheets are shown as rocks awash on H. 5070.

A rock shown on T. 1789 in lat. $48^{\circ}04'.55$, long. $124^{\circ}42'.7$ was the only rock added to H. 5070 from these sheets.

7. The usual amount of field plotting was well done by the field party but rocks and other features outside of the shoreline were not neatly or accurately transferred.
8. While the ground is uniformly covered on this survey, very little development was done. The area in lat. $48^{\circ}06'.5$, long. $124^{\circ}44'.0$, and the channel east of Carroll Island might have been more closely developed. The work has not been carried very close inshore and the field party can not be blamed for not going further in with the type of boat used, but it is noted that on the survey of 1891 sounding lines were carried further in, using small boats. The rocks shown on H. 2096 should have been more closely examined.
9. The surveyor is of the opinion that less water may exist at the 11 fathom sounding in lat. $48^{\circ}03'.75$, long. $124^{\circ}43'.2$, but it is doubtful if any additional work is necessary in this area. Further investigation of the $8 \frac{3}{4}$ fathom fathometer sounding, in lat. $48^{\circ}04'.7$, long. $124^{\circ}44'.1$ has been recommended in the review of H. 5111. Some of the rocks from the old surveys need examination, especially the one in lat. $48^{\circ}05'$, long. $124^{\circ}43'$ and the rock awash and sunken rock just north of lat. $47^{\circ}58'$.
10. Reviewed by R. L. Johnston, September 30, 1931.

Notes by A. L. Shalowitz

1. Additional work - It is considered highly important that the area to the eastward of Carroll Island and particularly the rocky $8 \frac{3}{4}$ fathom spot, which area has every indication of containing lurking dangers, should be examined in detail within the 10 fathom curve, especially since it is a channel used for by fishing boats and tenders.
2. Information for compiler - It will be observed that near the outer limits of the sheet certain consistent discrepancies approximating one fathom exist between some of the lines or portions of lines and the lines adjacent. Two reasons might be advanced for these discrepancies; one being the difficulty of getting

accurate hand lead soundings in depths of 18 fathoms (it should be noticed that the fathometer soundings on the adjoining offshore sheets are usually shoaler); the other being the existence of a fairly strong **con-**stant southerly current in this locality (noted in Descriptive Report, H. 5068, which is in the **same** general locality as this sheet), so that lines run against it or in a northerly direction would generally be deeper. This is actually the case here.

Although it is reasonably certain that these soundings are in error by an average of one fathom it was not deemed advisable to omit them from the sheet, inasmuch as they possess some value in indicating that no shoals exist. The compiler, however, should not use them on the charts, but should be guided in the selection of his soundings more by the general configuration of the bottom, rather than by the actual soundings shown on the sheet.

3. Sheet inspected by A. L. Shalowitz, January 1932.

Approved:

K.T. Adams
Chief, Section of Field Records

J.S. Borden
Chief, Section of Field Work