

3971

C. & G. SURVEY
L. & A.
OCT 2 1917
Acc. No.

Diag. Chart No. 6450-1



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

State: *Washington*

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. **3971**

LOCALITY:

Puget Sound.

Agate Passage x

Port Madison.

1917

CHIEF OF PARTY:

J. A. Daniell

3971

110

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. ~~3971~~ **3971**

State . . . Washington

General locality . . . Puget Sound

Locality . . . Port Madison and Agate Passage

Chief of party . . . John A. Daniels

Surveyed by . . . W. S. P. Keyes

Date of survey . . . January 25 - February 9, 1917.

Scale 1 : 5000

Soundings in . . . Feet

Plane of reference . . . 2 feet below M. L. L. W.

Protracted by M. J. T. . . Soundings in pencil by M. J. T.

Inked by *R. L. J.* . . . Verified by *R. L. J.*

Records accompanying sheet (check those forwarded):

Des. report, Tide books, Marigrams, Boat sheets,

Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks:

DESCRIPTIVE REPORT

Hydrographic Sheet Number (~~4~~ (Temporary)) 3971

Surveyed Under Instructions from The Superintendent
dated

November 12, 1917

John A. Daniels, Assistant, Chief of Party.

The area sounded and represented upon this sheet included the small inlet situated upon the southern side of Port Madison Bay, Puget Sound, from its head to a point $1/3$ mile northward from the dock at Port Madison village. It also includes Agate Passage from its northern extremity to a point $1/2$ mile southward from its narrowest part. The scale of the sheet is 1 : 5000.

In the small inlet at Port Madison village, the development consists of 50 meter lines run perpendicular to the axis of the channel. The sounding was done at a high stage of the tide which permitted a determination of the low water line thruout. Tides were observed upon a staff attached to the village dock during the time sounding was done and later continuous hourly readings for 48 hours were taken in order to secure good comparisons with the automatic gauges at Morford and Seattle. The depths in the inlet were found to check charted depths closely except at the narrowest part of the entrance where a depth of 9 feet prevailed instead of 13 feet as charted. This shoaling is probably due to the accumulation of sawdust from the old mill which formerly stood just inside the narrows.

Agate Passage was developed by a series of 50 meter lines perpendicular to the channel and three lines in the direction of the channel. This development was not called for by the instructions, but was done on account of local reports by ship masters navigating the passage to the effect that the present chart is incorrect. The result closely checks the charted depths.

TABLE OF STATISTICS

| Day | Date | Vol. | Soundings | Angles | Miles |
|-----|---------|-------|-----------|--------|-------|
| A | Jan. 25 | 1 | 532 | 371 | 17.3 |
| B | Feb. 8 | 1 | 239 | 156 | 6.6 |
| C | " 9 | 1 & 2 | 395 | 211 | 7.0 |
| | | | 1166 | 738 | 30.9 |

Respectfully Submitted,

John A. Daniels
Assistant, Chief of Party.

J. S. J.

ADDRESS
U. S. COAST AND GEODETIC SURVEY
WASHINGTON, D. C.

REFER TO No. 5-VEC

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

January 9, 1918.

Hydrography & Topography (HT):

HCS FIELD RECORDS (H) *20*

Division of Charts (HT):

LIBRARY

Place with descriptive report
of hydrographic sheet No. 3971

Tidal reductions are approved* in
2 volumes of sounding records for

H.T.
Drawing Section.

HYDROGRAPHIC SHEET 3971

Port Madison, Puget Sound, Wash.
J.A. Daniels in 1917.

Plane of reference is
Mean lower low water, * reading

6.0 ft. on tide staff at Port Madison
7.5 " " " " " Morford

*Caution:- Soundings were reduced
in the field to the old plane of 2
feet below mean lower low water, and
should be increased by 2 feet to
reduce to the new plane of mean
lower low water.



L. P. Shidy

Acting Chief, Section of
Tides and Currents.

Hyd. Sheet No. 3971

This work consists of a development of Agate Passage and the small inlet on the southern side of Port Madison.

The work in Agate Passage agrees closely with the old survey, but it should not be applied to the chart until the wire drag sheet (Hyd. 3970) is plotted and the soundings taken on the shoals found by the drag are added to this sheet. These soundings could not be plotted at this time as the records had not passed through the Tidal Div.

In drawing the curves, allowance was made for the soundings from the drag sheet.

The work in the inlet on the southern side of Port Madison checks perfectly with the old survey, with the exception of a nine foot spot in the channel (between \odot Flo and \odot Egg) where the old work shows thirteen feet. Asst. Daniels thinks that this shoaling is caused by a sawdust deposit from a saw mill, situated just inside of it.

R. L. Johnston