

3943

See Topo. 2746a

Diag. Cht. No. 8201-2

Also see Topographic Dec. Report 2746a

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

E. Lester Jones
Superintendent.

State: ~~ALASKA~~

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 3943

LOCALITY:

Whale Passage

1906

CHIEF OF PARTY:

C. G. Sullivan

3943

See Topo 2746a

Whale Passage (1)

METHOD

The work was executed in accordance with the Superintendent's instructions dated February, 1916

Gasoline Launch No. 38 was used with a Cosmos Hand Sounding Machine. The hand lead was used in depths up to 10 fathoms.

The shore line was approached as close as possible without endangering the launch.

The work was controlled almost entirely by signals located by plane table.

Soundings on this sheet are in fathoms. The plane of reference is Mean Lower Low Water. The height of the tide was obtained from the automatic tide gauge at Lake Bay, Prince of Wales Island. The plane of reference on the tide staff to which the soundings of the marigram were reduced was 3.0 feet.

INSHORE ROCKS AND DANGERS

The entrance to Whale Passage between Stevens and Thorne Islands is deep and clear and no obstructions were found in the center of the channel. The passage at the south end is very narrow and foul; strong dangerous tide rips and whirls will be met with at any time except at slack water. The waters are not recommended and at the present are only used by persons with local knowledge. All obstructions shown on the sheet were located by topography except where stated otherwise. Signal TGV marks the middle of a fish trap.

The area west of a small wooded islet on which signal FUN is located is difficult to navigate and is only used by cannery tenders and by small fishing boats.

Strangers should not enter without charts, as regular sailing directions can not be given. The best time to navigate these waters is at low tide or nearly so, as all rocks and obstructions are bare at that time.

ROCKS AND DANGERS

A group of ROCKS bare about 6 feet at M.L.L.W. covered with thick kelp during the summer, lies about 390 meters, 217° true from signal LOG.

A ROCK bare at M.L.L.W. covered with thick kelp during the month of August, lies 450 meters, 280° true from signal HIG.

A ROCK bare at M.L.L.W. covered with thick kelp during the month of August lies 260 meters, 149° true from signal FUN.

A GROUP OF ROCKS which bare at M.L.L.W. (about 150 meters long in a NNW and SSE direction, and 50 meters wide) lies 870 meters, 151° true from signal FUN. This area is covered with kelp during the month of June.

A ROCK bare at M.L.L.W. covered with kelp during the month of June, lies 320 meters, 128° true from signal LEE.

A ROCK bare at M.L.L.W. covered with thick kelp during the month of August, lies 170 meters, 113° from signal AT. The area inside of it is foul.

A ROCK bare 1 foot at M.L.L.W. covered with thick kelp during the month of August lies 560 meters, 89° true from signal DRY.

A ROCK bare at M.L.L.W., covered with thick kelp during the month of August, lies 390 meters, 80° true from signal DRY.

A ROCK bare at M.L.L.W., covered with thick kelp during the summer, lies 520 meters, $38^{\circ} 30'$ from signal DRY.

A ROCK which bares at M.L.L.W., lies about 170 meters, 150° true from signal DRY. This rock marks the extreme end of a foul area, south of a sparsely wooded islet. This islet was surrounded by thick kelp during the month of June.

A ROCKY PATCH bare at M.L.L.W., lies 140 meters, 45° true from signal MADE.

A ROCKY PATCH bare at M.L.L.W., lies about 140 meters, 338° true from signal ODD.

A ROCK bare at M.L.L.W., covered with thick kelp during the month of August, lies about 340 meters, 184° true from signal DEW.

A ROCK which bares at M.L.L.W. lies about 240 meters, 247° true from signal HAT. The area from this rock to signals HAT and ZO is foul and is marked by thick kelp during the month of June.

A ROCKY SHOAL with 3 feet over it at M.L.L.W., marked by thick kelp during the month of August lies 170 meters, 49° true from signal TAB.

THE AREA between signals ODD and PAIN is foul and is marked with kelp during the summer. All shown on this sheet were located by the topographer and most of them bare at M.L.L.W.

THE AREA between signals PAIN, JIB and HIRE and the island west of Prince of Wales Island is very foul, thickly covered by rocks which bare at M.L.L.W. Several rocks have been located by topographer while four others were determined by the sounding party. These rocks were not marked by kelp, and were absolutely bare of any marine growth. This foul area is known by cannery people as LITTLE ROCKY BAY.

A ROCK bare 2 feet at M.L.L.W. lies 250 meters, 202° true of signal DIME.

A ROCK bare 5 feet at M.L.L.W. lies 840 meters, 180° true of signal DIME.

A ROCK bare 4 feet at M.L.L.W. lies 340 meters, 194° true of signal DIME.

A ROCK bare 3 feet at M.L.L.W. lies 630 meters, 201° true of signal DIME.

The area north of signal POT is clear, the bottom is uniform and mostly sticky. All rocks and dangers are near the shore line and are plainly visible at any time.

The west shore of Thorne Island north of signal MOB is more or less foul. The area between signals KILN and SIX bares at M.L.L.W. The area between signals RISE, MILL, CITY, and HARD is foul.

The area north of signal Hard is foul; several rocks in it were located by the plane table. The whole area was marked by thick kelp during the month of August and as the hydrography was executed during high water, nothing unusual was observed which would warrant closer development. Several days

after the hydrography was completed, and the party shifted to another locality cannery people informed me that this area was extremely foul and difficulties were experienced in finding a passage at low water.

A ROCK bare ^{7 feet} at M.L.L.W. lies 230 meters 138° true from signal HELP.

A ROCKY SHOAL marked by thick kelp during the month of August with a least depth found of 16 feet at M.L.L.W. lies 270 meters, 333° from signal FELL.

A bay situated at the northwest end of Whale Passage is clear, the depths are uniform gradually shoaling near the shores. This bay is used to a great extent by fishing boats during the salmon season and offers a good anchorage in 5 and 7 fathoms, sticky bottom. The northwest shores are rocky and bare at M.L.L.W.

The area between signals YELL and JIM is foul and should not be approached within 200 meters. Several rocks were located by the topographer.

The narrow inlet lying directly north of signal JIM is apparently clear and its shores may be closely approached. A good anchorage for small boats may be found at the head of the inlet in 2 to 3 fathoms of water. A small stream empties at the head of the inlet.

The water at the north entrance of Whale Passage is clear and deep north of a small wooded islet on which signal HIT is located. The area between signals FAR and HIT is recommended in entering and a midchannel course should be steered. The water south of signal HIT is more or less foul and is marked by thick kelp during the summer. Deep water was found in the midchannel as far as the south end of the island on which signal GILD is located. The west shore of Thorne Island may be approached within 50 meters. The area between signals LIME, GRUM and KNOT is foul, several obstructions here being located by the topographer.

CURRENTS

Strong currents with a maximum velocity of 3 knots were encountered in Whale Passage. In the southern part of Whale Passage the flood current runs in a west and northwesterly direction, having a velocity from 0 to 3 knots, and meets about $\frac{1}{2}$ mile north of signal POT the flood current which runs in a southerly direction through the northern part of Whale Passage. The estimated velocity of the current through Indian Creek (west shore of Stevens Island) is about 6 knots.

WATER SUPPLY

There are several streams in this locality where boats may obtain water. A small stream empties in a small bight south of signal LUNA and a much larger one south of signal YES. This is in the south west corner of the passage. An unlimited water supply may be had in the North West Bay of Whale Passage. A large stream empties at the head of the bay behind an island and there are several more streams in the same locality.

(4)

ANCHORAGES

As this body of water is land locked, boats navigating there should have no difficulty in finding a suitable anchorage in any weather, During a severe southeast blow in Clarence Strait, little or no wind was experienced in Whale Passage. The best anchorage, however, is found in a bay at the northwest end, and the holding ground is very good.

Respect fully submitted

H. Kiddick

Master H. G. Survey

STATISTICS SHEET NO.

Date, 1916	Letter	Vol- ume	Posi- tions	Sound- ings	Miles Statute	Boat used
Aug 25	a	1	107	393	14.2	Launch 38
28	b	1	7	27	1.1	do
29	c	1	129	565	24.4	do
30	d	1 & 2	100	397	16.1	do
31	e	2	117	512	19.4	do
			460	1894	84.2	

N O T E

Soundings on this sheet are in fathoms, the plane of reference being Mean Lower Low Water. The automatic tide gauge used was located at Lake Bay, Prince of Wales Island, Latitude, 56° 01' N Longitude 132° 55' W.

Plane of Reference, reading on staff.....3.0 ft
 Lowest tide observed.....July 16, '16.....1.2 ft
 Highest Tide Observed..... do 22.5 ft

METHOD

The work was executed in accordance with the Superintendent's instructions dated February, 1916

Gasoline Launch No. 38 was used with a Cosmos Hand Sounding Machine. The hand lead was used in depths up to 10 fathoms.

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Respectfully Submitted

W. Weidlich

Master E. G. Swamy.

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N O T E

Soundings on this sheet are in fathoms, the plane of reference being Mean Lower Low Water. The automatic tide gauge used was located at Lake Bay, Prince of Wales Island, Latitude, 56° 01' N Longitude 132° 55' W.

Plane of Reference, reading on staff.....3.0 ft
 Lowest tide observed.....July 16, '16.....-1.2 ft
 Highest Tide Observed..... do 22.5 ft

DESCRIPTIVE REPORT

to accompany Sheet No.....

Coffman Cove

METHOD

The hydrography was executed under the direction of C.G. Quillian, Asst. Comm'g. Str. PATTERSON, who considered a closer development of value to mariners navigating in the vicinity.

Only a half day was allowed for hydrography and as the bottom is uniform in the center of the bay, no fuller development was considered necessary.

ROCKS AND DANGERS

A rocky shoal covering an area 150 x 150 meters with 1 foot of water at M.L.L.W. lies about 700 meters, 95° true from signal MOS. This area is thickly covered with kelp during the month of October. The foul area extends toward the shore. The whole area lying between signals MOS and CLO is marked by thick kelp.

The east shores of the island on which signal COFF is located is foul near the shore line; all dangers were marked by kelp during the month of October.

A REEF extending about 150 meters north true of signal MOS bares at M.L.L.W.

The western side of Coffman Cove is foul and thickly dotted with rocks which bare at low tide. All of these rocks were located by the topographer and no hydrography was done in this foul area.

A FLAT extends about 400 meters from the south shore of Coffman Cove.

SAILING DIRECTIONS

The approaches to Coffman Cove are clear and no trouble will be experienced by any vessel up to 150 feet in length in finding a safe anchorage in bad weather. This anchorage is practically landlocked and only open to NE wind.

Vessels wishing to enter Coffman Cove should steer a midchannel course of 206° 30' (S $\frac{1}{2}$ E mag) heading for a small grassy rock. An anchorage may be had almost anywhere on this line in 10 to 15 fathoms, sticky bottom.

Respectfully submitted

H. Killick. Mak. to G. Survey

STATISTICS SHEET NO.....

COFFMAN COVE

Date	Letter	Volume	Positions	Soundings	Miles Statute	Boat used
1916						
Oct. 5	a	1	80	314	10.1	Launch 47
TOTALS			<u>80</u>	<u>314</u>	<u>10.1</u>	

Soundings are in fathoms.
 Plane of Reference is Mean Lower Low Water.
 Tide Gauge located at Lake Bay, Prince of Wales Id. Lat. 56° 01' N
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The east shores of the island on which signal COFF is located is foul near the shore line; all dangers were marked by kelp during the month of October.

A REEF extending about 150 meters north true of signal MOS bares at M.L.L.W.

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H. Heidrich
Inst. Co. G. Survey

J.S.S.D.

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

October 1, 1917.

LIBRARY
Place with descriptive report
of hydrographic sheet No. 3943
Drawing Section.

✓ Chief, Division of Hydrography and Topography: *W*

Chief, Division of Charts.

Tidal reductions are approved in
3 volumes of Sounding records for

HYDROGRAPHIC SHEET 3943

Whale Passage and Coffman Cove,
Clarence Strait, Alaska
C.G. Quillian in 1916

Plane of reference is
Mean lower low water, reading

3.0 ft. on tide staff at Lake Bay
4.6 " " " " " Wrangell

L. P. Shridy
Acting Chief, Section of
Tides and Currents.

Draftsman's
Report - Hyd. 3943

The sheet was evenly but not closely covered, except the sub-sketch which was rather closely developed.

The records were in good condition.

The positions and soundings were well plotted by the field party,

EK Ellis,
Draftsman.