

4270

Diag. Cht. No. 8152-1 & 8201-3



Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

APR 19 1903

State: Alaska

11-5013

DESCRIPTIVE REPORT.

Hyd. Sheet No. 4270

LOCALITY:

W. Coast of Prince of Wales I.

El Capitan Passage

1902

CHIEF OF PARTY:

H. B. Campbell

4270

DESCRIPTIVE REPORT

U.S.C.&G.SURVEY

to accompany

Hydrographic Sheet of El Capitan Pass,
West Coast of Prince of Wales Island.

APR 20 1923 1 31 PM

DONE BY PARTY ON THE LAUNCH WILDCAT.

SEATTLE FIELD STATION

Telegraphic Instructions dated September 29, 1922.

This sheet is on a scale of 1 - 10,000 and includes that part of El Capitan passage to the south of the small island on which Triangulation Station "Grass" is located, as far as Triangulation Station "Lor".

Three different launches were used, Steam Launch No. 47, the motor sailor from the Steamer SURVEYOR and Gas Launch No. 4.

The spacing of the sounding lines was varied according to depth from less than one hundred meters to one hundred and fifty meters.

The center of the channel was found to be clear. There are a number of shoals and rocks located along the shoreline. The rocks on the sheet, except for a few on or near the low water line, were located by the topographer. It is not believed necessary to describe these here. Those located by the hydrographer are inked on the boatsheet and as noted above are all practically on the low water line.

The shoals which were found were developed and all of them have enough shoal soundings on them to prevent their being overlooked on the smooth sheet.

DEVIL FISH BAY This bay was carefully developed. No dangers were found except the rock on which Signal "Chan" is located, lying between the outer and inner Bays. This rock is just covered at high water. A number of channel lines were run around this rock but as the soundings have not been reduced it can not be said what the depths are. The current flows with a velocity of several knots through this channel. It is estimated that the velocity at the rock on ordinary tides is at least two to three knots. This channel should be avoided by boats until it has been seen at low water.

SAILING DIRECTIONS No sailing lines were run. From the southern limit of the work on the sheet to the north as far as Signal "Fish" a mid channel course is considered best. North of Signal "Fish" to the limit of the sheet, the west and south shore should be favored.

ANCHORAGES There is a good anchorage in the outer part of Devilfish Bay, in from ten to twelve fathoms of water, mud bottom, just southeast of Signal "Step".

The heads of the small bights or bays are, in general, suitable anchorage for small boats. Those used by the WILDCAT and found satisfactory were; the outer part of Devilfish Bay, just off the tide staff one mile south of Devilfish Bay, and in the outer part of the bight in which Signal "Dog" is located fourteen hundred meters east of Triangulation Station "Grass". Mud bottom was found in these three places.

FRESH WATER Good water may be had at many of the streams. The most convenient place found for watering a small launch at high water was at the stream two hundred and sixty meters north of Triangulation Station "Lor".

ROCK ON CHART The chart of this locality shows a sunken rock off the point nine hundred meters southeast of Triangulation Station "Grass". That symbol undoubtedly refers to the small island just off this point as no indication was found of a shoal in that locality.

TIDES AND CURRENTS A tide staff was established in the bight one mile south of Devilfish Bay and was read while sounding was being done. An automatic tide gauge was operated at Shakan. Simultaneous observations were made on these staffs, and other staffs located in Dry Pass by the party from the SURVEYOR.

Current observations were made in Dry Pass by a party from the SURVEYOR and the time of slack water can best be determined from them. The currents in the channel developed on this sheet are not excessive, except in Devil Fish Bay at Signal "Chan" as previously noted.

Respectfully Submitted
H B Campbell
H S Engineer.

To the Director

U.S.Coast & Geodetic Survey

Washington, D.C.

HYDROGRAPHIC STATISTICS

EL CAPITAN PASSAGE, ALASKA.

1922.

Date, 1922.	Letter	Volume	Positions	Soundings	Miles statute	Vessels.
October 26	A	1	58	45	3.0	Steam launch #47
" 31	B	1	93	174	9.25	" "
November 1	C	1	49	100	4.5	" "
" 2	D	1	40	72	3.0	" "
" 3	E	1	95	166	8.0	" "
" 4	F	1	53	108	5.0	" "
" 7	G	2	60	141	8.6	" "
" 8	H	2	95	184	10.4	" "
" 10	J	2	19	28	1.5	" "
" 14	A	2	82	136	8.2	Surveyor's #4 lch
" 15	B	2	60	95	6.5	" "
" 16	C	2	12	19	1.1	" "
" 17	A	3	26	42	1.5	Motor Sailor
" 20	B	3	97	181	6.0	" "
" 21	C	3	68	153	6.0	" "
" 22	D	3	104	217	8.7	" "
" 23	E	3	104	192	5.7	" "
" 24	F	4	147	280	7.6	" "
Total			1262	2353	104.55	

Hyd Sheet No 4270

There is little to add to what is stated in the descriptive report.

As the bottom is broken and rocky no attempt was made to shift any soundings.

A few positions were rejected because they plotted within the limits of the shoreline.

R L Johnston

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON March 22, 1924.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4270

El Capitan Passage, Alaska

Instructions dated February 25, 1922.

Chief of Party, H. B. Campbell.

Surveyed by H. B. Campbell.

Protracted and soundings plotted by J. D. Torrey.

Verified and inked by R. L. Johnston.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. The plotting usually done by the field party was done in the office.
7. The junctions with adjacent sheets are satisfactory.
8. No further leadline surveying is required within the area of this sheet. There are several spots however which indicate possible dangers, and which can only be accurately surveyed with the wire drag.
9. The character and scope of the surveying are excellent.
10. Reviewed by E.P. Ellis, March, 1924.

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. **4270**

State **Alaska**

General locality . . **W. Coast, Prince of Wales, Island,**

Locality **El Capitan Passage.**

Chief of party . . . **H. B. Campbell**

Surveyed by **H. B. Campbell**

Date of survey . . . **October 26 to November 24, 1922.**

Scale **1 - 10,000**

Soundings in . . . **fathoms.**

Plane of reference **Mean Lower Low Water**

Protracted by **J. D. T.** . . Soundings in pencil by **J. D. 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 **Tidal data Shakan, .**
current observations at Dry Pass. Topographic Sheet. Triangulation done by U.S.S. SURVEYOR.

Remarks: **Smooth sheet not laid out .**