

# 3553

Diag. Cht. No. 8551-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. \_\_\_\_\_ Office No. H-3553

### LOCALITY

State ALASKA

General locality PRINCE WILLIAM SOUND

Locality SIMPSON & SHEEP BAYS

194 13

CHIEF OF PARTY

G. T. Rude

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DATE DECEMBER 10, 1913

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## DESCRIPTIVE REPORT,

to accompany *Hydrog Sheet No 3553.*

Simpson and Sheep Bays, Prince William Sound, Alaska.

Steamer Taku, Season 1913.

This sheet comprises the east arm of Simpson Bay and a part of Sheep Bay. The north arm of Simpson Bay was completed during the season of 1912. The survey of Sheep Bay was not completed owing to the receipt of instructions from the Superintendent, suspending this work and ordering a survey at the head of Passage Canal.

The sounding in Orca Bay outside the entrance to Sheep Bay was done to supplement previous work in that locality. It was done to fill in the time while the topographic party was engaged on the topography so as to furnish signals at the head of the bay for the sounding party. This work at the head of the bay was not reached for the reason given above.

Both the hydrography and topography was done on a scale of one to twenty-thousand. The Taku was used on all the sounding, with an improved Cosmos Sounding Machine.

The bottom of both bays, except that close inshore, is composed of blue glacial mud, furnishing good holding ground. Close along the shores the bottom is rocky.

Good anchorage in ten to twelve fathoms may be had at the head of Simpson Bay, north of two small islands located about two miles from the entrance.

The signals for the control of the survey were located by the triangulation party of Assistant Homer P. Ritter and an extension

of this triangulation by the party on the Taku this season. The signals in the east arm of Simpson Bay were located on the topographic survey of that arm which is controlled by the triangulation of Assistant Ritter's party and are shown on topographic sheet C, Steamer Taku, Season 1913.

The tidal data for the soundings in the east arm of Simpson Bay was obtained from the plain tide staff in the north arm of Simpson Bay, the datum plane of which was established by the party on the Taku in 1912. The data for the sounding in and off the entrance to Sheep Bay was obtained from a plain tide staff erected in Comfort Cove, Port Gravina, the datum plane of which was established this season by simultaneous readings with the staff at Camp April, Assistant Homer P. Ritter's work. The reason for the staff's being established in Port Gravina instead of in Sheep Bay was that the camping party was ashore in Port Gravina carrying the triangulation up that bay. The crew on the Taku was too small for two camping outfits. And too, at the time the staff was established the expectation was that the hydrography of Port Gravina would be done during the season of 1913.

During the progress of the sounding in and off the entrance to Sheep Bay a number of soundings were taken, showing shoaler water than the surrounding areas, indicating shoals in the vicinity. Owing to the fact that this work was suspended before completion, these areas were not developed this season and should be looked up next season. These areas are inclosed in penciled lines on the boat sheet.

The positions have been plotted on the fair sheet by the field party, but only a few soundings which have been plotted in pencil.

Respectfully,

*Gilbert J. Tude.*

assistant, C. & G. Survey.

VEC  
Feb. 13, 1914.

HYDROGRAPHIC SHEET 3553.

Simpson, Orca and Sheep Bays, Prince William Sound, Alaska,  
by Assistant G. T. Rude in 1913.

TIDES.

	Simpson Bay	Comfort Cove
	ft.	ft.
Mean lower low water, or plane of reference on staff	6.1	2.8
Lowest tide observed " "	2.4	2.0
Highest " " " "	18.9	16.4
Mean range of tide	9.5	9.6