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OCT 30 1913  
Acc. No. \_\_\_\_\_

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

\_\_\_\_\_  
Superintendent.

State: *SE Alaska*

DESCRIPTIVE REPORT.

*Top* Sheet No. *241.1*

LOCALITY:

*Hixon Entrance*

*1913*

CHIEF OF PARTY:

*P. B. Merickson*

11-4645

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Topographic Sheet 'A'

Vicinity of Cape Muzon, S.E. Alaska.

Season April to October

1913.

Scale 1:2000

U.S.S. GEDNEY.

R.B. Derickson, Asst., Comdg. John W. Maupin, Assistant,

Chief of Party

Topographer.

Filed with T-3908


DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET NO. A AND  
HYDROGRAPHIC SHEET NO. A VICINITY OF CAPE MUZON, S.E. ALASKA.

SURVEY METHODS. This work depends entirely on plane table triangulation. There being only one triangulation station ( $\triangle$  CAPE) on the topographic sheet. The azimuth was laid off from this in the direction toward  $\triangle$  "Y" and this line was used as the initial orientation. The graphic triangulation was carefully performed and checked by cuts, rod readings, and resections. Owing to the large scale on which the work is done, i.e. 1:2000 a large number of rod readings were taken and contour of the shoreline was further checked from notes made by the hydrographic party. The elevations of the principal islands, were obtained by use of the Y Level. For the reduction of soundings, a tide staff was erected back of the islands near  $\triangle$  CAPE, and this was connected with the automatic gauge at Cruz Bay by consecutive readings for a period of 59 hours.

GENERAL DESCRIPTION. The shoreline is very irregular and there are several off lying islands and shoals, where the seas break heavily during a S.E. or S.W. gale. The coast is bold and rises abruptly a short distance back from the shore. The islands and also the projections along the shore are almost destitute of vegetation. Along the mainland the tree line is quite regular and a short distance back from the water. The entire area is densely wooded with spruce, cedar, and other varieties of the pine family.

OUTLYING DANGERS, ISLANDS, ETC. Near the center of the area surveyed is a group of islands (three in number) the outer one of which constitutes the southermost point of Cape Muzon. There are several shoals within the area surveyed, but they are clearly shown on the chart. The islands and

treeless areas along the shore are composed of igneous rocks which are very rough and jagged. There are many crevices and ravines, some of which cut all the way through the islands at high water.

PASSES, CURRENTS, ETC. The channel between the southernmost and the middle of the three islands, nearly goes dry at low water and it is possible for a man to jump across at its narrowest point. The pass between the middle island and the northernmost of the group, is considerably wider. This pass is almost choked with kelp. At low water, the northernmost of the three islands is joined to the mainland by a spit of boulders. Although no observations were taken, a current of several knots was encountered while working in the small boats, during both ebb and flood tide. Kelp abounds wherever it can get a foothold to withstand the seas and currents. Moderate tide rips were encountered off  CAPE.

GENERAL REMARKS The area covered by this survey is very small and the topographic and hydrographic features are all shown on the sheets. It is therefore considered unnecessary to go into further detail. The weather, and other characteristics, correspond of course to those conditions which prevail in general over this section of S.E. Alaska.

Respectfully submitted,

*John W. Maynard*  
Assistant, C. & G. Survey,

Topographer.

Respectfully approved and forwarded,

*R. B. Anderson*  
Asst., Comdg.