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

State: \_\_\_\_\_

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. 3785

LOCALITY:

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191

CHIEF OF PARTY:

C60

3785



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C. & G. SURVEY,  
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Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: *Alaska*

11-5613

DESCRIPTIVE REPORT.

Hydrographic Sheet No. *3785*

LOCALITY:  
*Annette Bay*  
*S. E. Alaska*

1915

CHIEF OF PARTY:  
*C. G. Quilley*

3785

3785

DESCRIPTIVE REPORT

TO ACCOMPANY HYDROGRAPHIC SHEET

3785

OF

ANNETTE BAY, ANNETTE ISLAND,

SOUTHEASTERN ALASKA.

Under Instructions from the Superintendent  
dated March 24, and April 30, 1915.

Season 1915

Party of Steamer McARTHUR

C. G. Quillian, Assistant, C. & G. Survey,

Commanding.

HYDROGRAPHY BY LAUNCH "DELTA:"

R. C. Briggs, Aid,  
in charge.

W. K. Doolittle, Aid.

F. R. Webb, Ass't. Surgeon.

DESCRIPTIVE REPORT

*Hydrographic*  
TO ACCOMPANY ~~TOPOGRAPHY~~ SHEET No. 3785

OF

ANNETTE BAY, ANNETTE ISLAND,  
S.E. ALASKA.

Party of U S S McARTHUR,

C. G. Quillian, Assistant, C. & G. Survey,  
Commanding.

TOPOGRAPHY BY

W. D. Sutcliffe, Aid, C. & G. Survey,

October, 1915.

Scale 1/10,000.

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET OF  
ANNETTE BAY, ANNETTE ISLAND, ALASKA. 3785.

This work was done on a scale of 1/10,000 and includes Annette Bay only.

- GENERAL DESCRIPTION -

Annette Bay is an inlet in the northeast end of Annette Island, extending 3-1/2 miles in a southerly direction. Race Point, the extreme north point of Annette Island, marks the northeast side of the entrance to the bay. Walden Point marks the northwest side of the entrance which is one mile wide. It gradually narrows to a width of less than 150 meters at a distance of one mile from the end, and the last half mile is about 80 meters wide and bares at low tide. Both sides of the bay are very heavily wooded, but the peninsula of which Race Point is the end, lies a maximum elevation of about 200 feet to tree tops, while Walden Point rises rapidly inland to Anvil Mountain, 2157 feet high.

- DETAILED DESCRIPTION -

Annette Bay furnishes good protection from southwest or southeast blows and good anchorage for launches, in the lower end. For ships the size of the McARTHUR the anchorage is only fair and could not be recommended at all for larger ones. This is due to the great depth in the wider part. It is necessary to proceed two miles down the bay from the entrance to find an anchorage at twenty fathoms and here the width is only about 450 meters. From this point on it shallows rather rapidly, but also becomes very narrow. The bottom is sand and gravel over the whole bay.

There are several waterfalls along the southwest shore, giving indication of one or more lakes in the vicinity of Anvil Mountain. A small stream flows into the head of the bay.

DESCRIPTIVE REPORT, HYDROGRAPHIC SHEET, ANNETTE BAY, 1915.

The greatest depth found was 116 fathoms, a little to the east of the center of the entrance. The greatest depths from here on run very consistently down the middle of the bay. The southwest shore is steep to near the entrance and for the full length of the bay is steeper than the opposite shore.

There are no rocks in the bay and only two shoals to be noticed. One of the latter is off Race Point, which is to be expected on account of the nature of the topography. A distance of 450 meters from the high water line of Race Point clears everything well. The other shoal is an unimportant one off the small peninsula 1-1/2 miles down the bay on the northeast side. A 3 fathom spot is found about 200 meters northwest (True) of this point, but outside of this the water deepens rapidly.

With the exception of some tidal eddies west of Race Point, that interfered somewhat with running straight lines in that vicinity, no unusual currents were observed. The tide appeared to set fair with the channel and with only normal rapidity.

Specific ranges for entering the bay are unnecessary as the entrance is a mile wide, deep and clear. The only point requiring special attention is the shoal extending 350 meters off Race Point and already mentioned.

- SURVEY METHODS -

The hydrography of Annette Bay was done from the Launch DELTA, with the exception of a few hand soundings at the head of the bay by a dinghy party in charge of W. D. Sutcliffe, Aid. Most of the sounding was done with a Cosmos sounding machine operated by belt drive from a small three cylinder Ingersoll-Rand steam engine. A dial on Ballauf Registering Sheave No. 6 gave the depths. At the end of the season this was checked up with a steel tape and fifty fathoms of wire according to the dial, was found to actually measure 299.5 feet, an error of less than two tenths of one percent.

A hand lead was used for the shoal work at the head of the bay, around Race Point, and one or two other places when close to shore. The leadline was checked up before starting work each morning and after finishing each evening.

DESCRIPTIVE REPORT, HYDROGRAPHIC SHEET, ANNETTE BAY, 1915.

The projection for the plane table sheet was made before the topography was started, and the shore line that had been previously done transferred (shown dotted) from a photograph of the original sheet. The hydrographic work was then plotted on the completed topographic sheet.

Respectfully submitted,

Reroc C. Briggs,

Aid, C. & G. Survey.

RCB/MDG.

*Hydrog.*  
DESCRIPTIVE REPORT, TOPOG. SHEET No. 3785, ANNETTE BAY, 1915.

This sheet shows on a 1/10,000 scale the southern half of Annette Bay and joins Topographic Sheet No. 3114.

Annette Bay is a long narrow indentation in the north side of Annette Island, extending about 3-1/2 miles into the island. It is nearly one mile wide at the entrance and narrows to 80 meters at the head. It affords anchorage in deep water for ships about the size of the McARTHUR, the water gradually shoaling from over a hundred fathoms at the entrance to the head of the bay which goes dry at low water. There are no rocks or shoals except off Race Point, the point on the east of the entrance.

The shores are steep and rocky, except at the head, and are quite straight and regular, the western shore being steeper than the eastern.

The head of the bay for nearly half a mile goes bare at low water, the bottom being rocks and gravel. The shores are heavily wooded with fir trees, the trees coming right down to the waters edge, except at the head of the bay there is a fringe of grass between the trees and the water. A number of small streams flow into the bay.

The control of this survey were the Triangulation Stations "NEAR," "OUT," "WORK," "ANN," and "NET" of 1914. Sufficient signals were built in the bay for hydrography and these signals were located by plane table triangulation, starting with these old stations. Then starting at "PECK," the end of the shoreline on Sheet No. 3114, a traverse was run down the east shore, the west shore being rodded in at the same time. For contours and heights of hills around the bay see Sheets No. 3114 and the 1/20,000 sheet, vicinity of Bold Island.

This sheet was also used as a smooth hydrographic sheet and the sounding lines were plotted on it.

Respectfully submitted,

*W. D. Sutchiff*

Aid, C. & G. Survey.

WDS/MDG.



PLANE TABLE POSITIONS

TO ACCOMPANY TOPOGRAPHIC SHEET No. \_\_\_

ANNETTE BAY, ANNETTE ISLAND, ALASKA.

STATION	LAT. ° ' "	D.M. METERS	LONG. ° ' "	D.P. METERS	HEIGHT IN		REMARKS
					FT. ABOVE	H. W.	
Carp	55 - 16	1545 310	131 - 34	33 1026	-1	W.W. C. B.	
Din	55 - 16	1277 578	131 - 33	807 252	3	Braced pole signal.	
Sar	55 - 16	710 1145	131 - 33	184 875	2	Braced pole signal.	
Flag	55 - 16	640 1215	131 - 35	219 840	1	W.W.+Flag on tree.	
Log	55 - 16	495 1360	131 - 34	775 284	1	W.W.+Flag on dead tree.	
Same	55 - 16	172 1683	131 - 33	883 176	6	Black & white signal cloth around tree.	
Bark	55 - 15	1754 101	131 - 33	335 724	10	Black & white signal cloth around tree.	
Sil	55 - 16	46 1809	131 - 32	989 70	0	Braced pole. C.B.	
Peck	55 - 15	1528 327	131 - 32	665 394	1	Braced pole. C.B.	
Sure	55 - 15	1090 765	131 - 32	978 82	1	Braced pole.	
Thru	55 - 15	1129 726	131 - 32	312 748	-1	Braced pole. C.B.	
Bent	55 - 15	669 1186	131 - 32	195 865	0	Flag on tree.	
Bel	55 - 15	515 1340	131 - 31	978 82	0	Braced pole. C.B.	

PLANE TABLE POSITIONS  
 TO ACCOMPANY TOPOGRAPHIC SHEET No. \_\_\_\_\_  
 ANNETTE BAY, ANNETTE ISLAND, ALASKA.

STATION	LAT. O ' "	D.M. METERS	LONG O ' "	D.P. METERS	HEIGHT IN		REMARKS.
					FT. ABOVE	H. W.	
How	55 - 15	498 1357	131 - 31	709 351	0	Braced pole.	C.B.
Dead	55 - 15	342 15123	131 - 31	685 375	0	Braced pole.	
Bay	55 - 15	189 1666	131 - 31	274 786	0	Braced pole.	
Nuf	55 - 15	88 1767	131 - 31	223 837	-5	Braced pole.	C.B.
End	55 - 14	1455 400	131 - 30	538 522	0	Braced pole.	

LIBRARY

Place with descriptive report  
of hydrographic sheet No. 3785

*G. P. F.*  
Drawing Section.

*Hyd. Sheet No. 3785*

*There are no unusual features on this work.*

*P. L. Johnston*

*Soundings shown in fathoms.*