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U. & G. SURVEY  
L. & A.  
-JAN 30-1917-  
Ass. No.

3635

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

State: \_\_\_\_\_  
11-5613

DESCRIPTIVE REPORT.

*Top.* Sheet No. 3635.

LOCALITY:

\_\_\_\_\_  
191  
\_\_\_\_\_  
CHIEF OF PARTY:

3635

Coast and Geodetic Survey,  
E. Lester Jones, Superintendent,  
A Descriptive Report to Accompany Topographic Sheet "#4"  
Port Bazan - Waterfall Bay,  
West Coast of Prince of Wales Island,  
S. E. Alaska.

August - September 1916

By Party on Steamer "EXPLORER"

F. H. Hardy, Assistant,  
Chief of Party.

Limits:-

This sheet covers that part of the shore line of the western coast of Dall Island, included between Port Bazan and Cape Augustine. The scale is 1:20000.

General Character of the country:-

This country as it appears on approaching it is very rough and rugged. The mountain tops, the highest of which is slightly over twenty-six hundred feet, are very definite and show up exceptionally well from the outside. During the summer months, these peaks are entirely free from snow. Throughout the island are found numerous ravines and slides, the latter being for the most part wooded ~~over~~. These two factors, combined with a generous amount of undergrowth, make mountain climbing a hard proposition. As the trails, there are none except for a few belonging to the wild animals that abide there. Of these it may be said that deer are, by far, the most plentiful but there are also a few representatives of the bear and wolf families.

The mountains including the peaks, are generally covered with trees, extending down to the high water line or, as in some cases, to within a few feet of it. There are a few bare peaks and occasionally a small patch of grass is seen, usually on a ridge. The trees on the Island consist of spruce, hemlock and cedar, the latter making up about one half of the whole supply. Then, too, there are a few specimens of the yellow cedar. The size of the trees varies and it would seem that they are smaller near the coast and assume larger proportions further in-land.

Descriptive Report to Accompany Topographic Sheet "#4"

General Character of the Coast:-

The shore line of the outside coast consists of principally of rocky cliffs, varying in height from a very few feet to perhaps forty or fifty. This part of the shore-line is completely exposed to the westerly swell and wind and, except during fine weather, landings, if able to be made at all, are made with great difficulty. In the bays, the shore-line is for the most part rocky but there are no high cliffs similar to those found outside. On the south shore of Gold Harbor, there is small bight about half way between the entrance and head of the bay and here is found a small sand beach. At the head of Goose Neck, too, some sand can be seen on the beach but, aside from these two places, the shore-line is composed entirely of rocky formations.

There are only a few off-lying rocks or islands along the coast except for the small bay just south of Goose Neck and here they are quite numerous. On these vegetation is scarcely noticeable, the islands for the most part being composed of solid rock.

There are several indications of marble around this part of the Island, there being deposits both near the triangulation station "Marble" and at the head of Waterfall Bay. Near the latter place a marble claim has been staked out. It is impossible to say of what quality this marble is or to what extent it is found but the fact, that for several years assessments have been paid upon this claim, would show that there is evidently some value attached to it.

Dangers:-

Of the dangers along this coast, perhaps the most prominent one is the breaker in the entrance of Gooseneck Harbor. It is located about one hundred and seventy five meters from the small island lying just off the southern shore of the bay and bears about W.  $\frac{1}{2}$  N. (true) from that island. This breaker being surrounded with kelp when the survey was made, could be seen easily. It breaks only over a very small area and bares at low water springs. When entering the bay the breaker should always be left on the starboard hand.

The head of Gooseneck, beginning with the signals Shak and Bak, is very foul. Shoal water extends over this entire area with rocks frequently occurring. Did not even take the launch into this part of the bay but used the skiff entirely.

Along the entire coast of this stretch of the country, kelp is of common occurrence as shown on the sheet. The largest bed occurs in the entrance of Gold Harbor, extending from the north shore perhaps five hundred meters out into the bay. This area is very foul, there being found here several rocks which bare at certain stages of the tide. Here too, the skiff was used entirely.

In the summer months the prevailing winds along this coast are westerly, switching to south-east very suddenly and quite frequently

Descriptive Report to Accompany Topographic Sheet "#4"

However, in the winter months, the south winds are common. Fog, throughout the summer, is of frequent occurrence.

Land marks:-

There are, on this sheet two land marks that stand out very prominently, namely, the slide at Gold Harbor and the two bare mountain peaks between the heads of Gold Harbor and Waterfall Bay.

The slide at Gold Harbor is located on the north shore of the bay, just a short distance from the entrance. The slide is absolutely bare and shows up very prominently when approaching it from the southerly direction. It can probably be seen for fifteen miles. The slide is about three hundred meters inshore, perhaps one hundred meters wide and approximately three hundred meters in length. The elevation of the top of the slide is one thousand five hundred and sixty feet.

The two mountain peaks, referred to as "Twin" Peaks, are about midway between the heads of Waterfall Bay and Gold Harbor. They are nearly five hundred meters apart and are both devoid of all vegetation. The more western one is the higher, its elevation being two thousand, six hundred and twenty two feet, while the other has one of two thousand six hundred and three. Both peaks are very sharply defined and can be seen from all directions at sea for miles. The formation of these peaks consist of solid rock and this appears to extend down to about the seventeen hundred foot contour, where the country becomes densely wooded. These two peaks are the highest ones along the coast between Cape Muzon and Augustine.

At the head of Gooseneck Harbor a wooden building is located belonging to Mr. Roy Thompson of Ketchikan. The building is used as a saltery during the fishing season. There is also a landing in connection with the building and launches drawing perhaps six feet can safely get along side. Pipe lines bring water from a near by stream to the saltery, affording it an excellent place for small craft to take water.

While doing the topographic work in Gooseneck, the saltery was used as a camp, making it very comfortable for all concerned and doing away with the necessity of pitching tents.

In Waterfall Bay, at the extreme head, is a good sized shack owned by those interested in the marble claim spoken of previously in this report. While doing work in this vicinity, the shack was used as a cook house, there being a small stream of water near by. In this bay, the prominent waterfall shown on the sheet on the north side of the bay, not far from the entrance, is a very good place to water up.

Methods used:-

On this sheet the control was excellent. The signals were determined by intersections and were so numerous that little traversing was necessary.

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In Gooseneck azimuths to a great number of the stations were taken from signals "To" and "Sate" which had previously been determined from by intersections from triangulation stations "Goose" and "Neck" and of course checked by rod readings.

In Gold Harbor, the station "Rut" was determined by intersections from triangulation signals "Marble" and "Gold," checked by rod readings and from this station, azimuths were taken to practically all the signals in the bay, even to those at the extreme head.

At Waterfall the triangulation signals could not be seen much further than the large wooded island but, the control was good, due to the closeness of the stations.

Gooseneck Harbor was worked during rainy weather but the remaining work of the sheet was done during favorable weather conditions. The two mountain peaks at the head of Gooseneck were marked indefinite because very poor intersections were obtained, the angles being extremely acute. The one hundred foot contour was used throughout the sheet.

Respectfully Submitted,

*W. H. Clark,*

Aid, Coast & Geodetic Survey,

Approved and Forwarded,

*J. H. Stady*

Assistant, C. & G. Survey,  
Commanding Strmr. "EXPLORER"

## STATIONS OF HYDROGRAPHIC SHEET No. 4

West Coast Dall Island,  
S. E. Alaska.

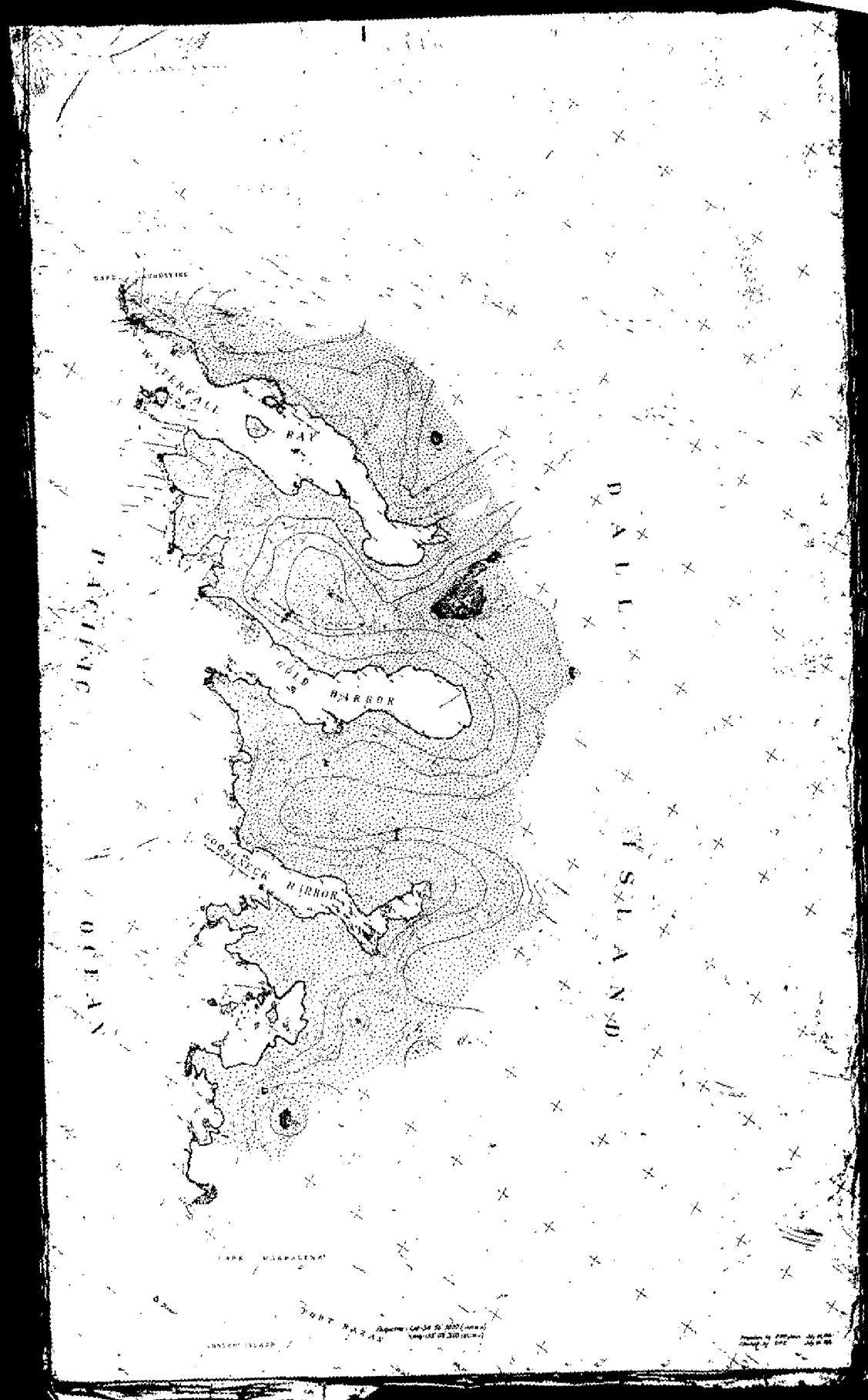
Party on Steamer "EXPLORER"  
Season 1916

F. H. Hardy, Commanding.

*all stations marked described on Sound 574*

Stations	Lat	D M's	Long	D P's	Remarks
Ah	54 56	1300	133 09	568 ✓	
Al	54 56	380	133 07	750 <del>674</del> ✓	Marked
Am	54 55	915	133 02	430 ✓	
Ant	54 55	445	133 03	10 ✓	
As	54 56	1725	133 04	1055 ✓	
Bal	54 53	1455	132 59	940 ✓	
Bak	54 53	926	133 00	300 ✓	Marked
Ban	54 55	315	133 01	375 ✓	
Base	54 53	1125	132 59	1020 ✓	
Bay	54 56	1457	133 09	784 ✓	Triangulation
Be	54 56	1405	133 09	221 ✓	
Ben	54 56	1345	133 03	302 ✓	
Big	54 56	1605	133 06	535 ✓	
Bib	54 55	1282	133 01	828 ✓	Marked
Bill	54 50	636	133 00	939 ✓	Marked
Bob	54 53	90	133 01	945 ✓	
Bug	54 55	745	133 02	885 ✓	
Brik	54 56	1162	133 09	410 ✓	
Brod	54 56	575	133 06	245 ✓	
Bre	54 53	75	133 02	480 ✓	
Bub	54 52	1555-	133 02	650 ✓	
Buc	54 53	888	133 01	134 ✓	Marked
Bun	54 55	880	133 07	210 ✓	<i>marked</i>
Bur	54 51	235	133 01	880 ✓	<i>marked</i>
But	54 55	55	133 03	755 ✓	
By	54 56	565	133 07	185 ✓	
Cal	54 56	1400	133 03	495 ✓	
Can	54 56-	1229	133 04	25 ✓	Marked
Cape	54 56	1679	133 09	1017 ✓	Triangulation
Cot	54 56	1340	133 08	692 ✓	<i>marked</i>
Cen	54 56	1285	133 03	770 ✓	
Core	54 55	235	133 02	200 ✓	
Cro	54 56	695	133 03	350 ✓	
Dau	54 53	790	133 00	955 ✓	
Day	54 56	1815	133 06	435 ✓	
Def	54 53	635	133 00	380 ✓	
Den	54 53	700	133 01	90 ✓	
Do	54 56	1150	133 04	873 ✓	Marked
Don	54 56	700	133 08	365 ✓	
Dot	54 55	235	133 05	600 ✓	
Dub	54 52	645	133 02	310 ✓	
Dun	54 53	635	133 00	930 ✓	
Er	54 56	970	133 05	475 ✓	
Ex	54 56	1590	133 04	680 ✓	Marked

(continued)



CAPE GOOD HOPE

WATERFALL BAY

OLD HARBOR

GOOSE NECK HARBOR

CAPE MACPHERSON

PORT HAGAR

UNION ISLAND

Depth: 40-50-60 fathoms  
Length: 210 feet

Scale of 1 inch = 1 mile



West Coast Ball Island,  
S. E. Alaska.Party on Steamer "EXPLORER"  
Season 1916

F. H. Hardy, Commanding.

Stations	Lat	D M's	Long	D P's	Remarks	
Fal	54 56	1465	133 03	345 ✓		
For	54 55	145	133 05	135 ✓		
Foul	54 55	359	133 06	972 ✓	Triangulation ✓	
Fus	54 53	748	133 00	655 ✓	Marked ✓	
Gam	54 53	1355	133 00	255		
Gold	54 54	813	133 05	254	Triangulation	
Goose	54 52	1005	133 03	125	Triangulation	
Gum	54 56	495	133 03	680		
Ha	54 56	1460	133 02	985		
Hig	54 56	945	133 06	780		
High	54 55	1555	133 07	945	Marked	
Hut	54 53	1040	133 00	495		
In	54 54	1275	133 02	745		
It Isle	54-56	535	1570 133-06	133 06 05	853	Marked
Kat	54 56	1540	133 07	212		
Ke	54 53	325	133 00	405		
Kel	54 55	85	133 02	485		
Ko	54 53	450	133 00	772	Marked	
<del>Kat</del>	54 51	1535	133 02	170		
Lar Lem	54 52	580	133 01	490		
Let	54 56	465	133 00	1015		
Lip	54 55	550	133 02	1015		
Lit	54 57	90	133 06	1024		
Log	54 57	105	133 05	270		
Low	54 55	1395	133 07	735		
Mag	54 53	785	133 01	745		
May	54 53	490	133 00	675		
Met	54 54	1190	133 04	580		
Mis	54 56	1250	133 03	190		
My	54 53	1125	133 00	340		
Marble	54 54	1846	133 06	52 532	Triangulation	
Na	54 53	470	133 01	300		
Nab	54 55	1325	133 01	445		
Nar	54 56	1305	133 07	915	Marked	
Neck	54 53	590	133 03	338	Triangulation	
Net	54 53	685	133 01	950		
Nob Nip	54-54	570	174 133-05	133 03 00	290	Marked
On	54 56	595	133 06	580		
Pan	54 51	80	133 01	245		
Pat	54 54	12 75	133 03	20		
Pek Patch	54-52	590	134 133-02	133 07-90	1059	Triangulation
Pen	54 54	490	133 04	560		
Pil	54 55	730	133 06	400		
Pile	54 55	275	133 01	740		
Pit	54 52	475	133 02	995		
Point	54 56	890	133 05	580		

( continued )



West Coast Dall Island,  
S. E. Alaska.Party on Steamer "EXPLORER"  
Season 1916

F. H. Hardy, Commanding.

Stations	Lat	D M's	Long	D P's	Remarks
Pol	54 56	1485	133 04	370	
Pow	54 55	30	133 04	540	Marked
Puk	54 53	1535	133 00	10	
Ran	54 51	725	133 01	1025	
Rek <del>Rik</del>	54 56	660	133 08	160	
Ris	54 55	745	133 02	515	
Rock	54 56	1244	133 05	975	Marked
Run	54 56	800	133 04	55	Marked
Rut	54 54	1200	133 04	1040	Marked
Sam	54 56	578	133 06	840	
Sap	54 54	1035	133 04	715	
Sat	54 56	1255	133 06	572	
Sate	54 53	582	133 02	273	Marked
Sau	54 54	1400	133 03	835	
Say	54 53	650	133 02	615	
Shak	54 56	1545	133 02	915	
Sig	54 56	965	133 04	405	
Som	54 53	1010	133 01	285	
Spot	54 55	1348	133 04	119	Triangulation
Ter Stake 54-56	54 56	1652	133-03 133 03	1848 945	
Tin	54 53	1070	133 03	780	
Tip	54 51	677	132 59	949	Triangulation
To	54 53	63	133 02	312	Marked
Tol Tod 54-51	54 55	1500 70	133-01 133 04	580 105	
Top	54 54	1215	133 04	130	
Tooth	54 56	1115	133 04	750	
Tre	54 51	1680	133 01	865	
Tri	54 55	852	133 00	942	Marked
Tuk	54 55	1466	133 03	40	Marked
Up	54 53	1552	133 04	55	Marked
Was	54 50	1395	133 01	330	Marked
Water	54 56	194	133 08	719	Triangulation
White	54 56	1175	133 03	230	
Wy	54 53	430	133 00	250	
Yat	54 53	565	133 01	130	
Yes	54 53	280	133 01	520	
Yu	54 53	235	133 00	300	

L. C. W.

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DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic 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. (4) 3635

State . . . . . Alaska, South East. . . . .  
General locality . West Coast, Dall Island, . . . . .  
Locality . . . . . From Port Bazan North to Cape Augustine.  
Chief of party . . F. H. Hardy, Ass't. C. & G. Survey. . .  
Surveyed by H. B. Campbell, Ass't. and W. H. Clark, Aid. . .  
Date of survey . . August 1st. to September 11th, 1916. . . .  
Scale . . . . . 1 to 20,000 . . . . .  
Heights in feet above . . Mean High Water. . . . .  
Contour interval . 100 . feet.  
Inked by W. H. Clark. . Lettered by W. H. Clark, . . . . .  
Records accompanying sheet (check those forwarded): Photographs,  
Descriptive report, Horizontal angle books, Field computations,  
Data from other sources affecting sheet . . . . .

Remarks: List of D.M. and D.P. of Stations located for  
hydrographic use attached.