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Diag. Cht. No. 8152-1

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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Sheet No. **3547**

LOCALITY:

*San Alberto Bay*

1913

CHIEF OF PARTY:

*R. B. Erickson*

11-4645

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Hydrographic Sheet No. ~~8~~ 3547

San Alberto Bay, S. E. Alaska.

Season April to October

1913.

Steamer GEDNEY

Scale 1:10000

R.E. Derickson, Asst., Comdg.

Thomas Jamieson, Mate,

Chief of Party

Percy R.E. Bettison, Asst.

Hydrographers.

*Protracted by field party  
Soundings plotted & reduced by R.L. Johnston,  
Verified by Geo. Flower*

H. 3547.

This sheet shows the soundings taken along the steamer track from Cape Flores to the vicinity of San Juan Bautista Island to obtain the general depths. It is sufficient to meet the needs of navigation, but it is not a complete survey. The work has subsequently been extended to cover the shores and side channels.

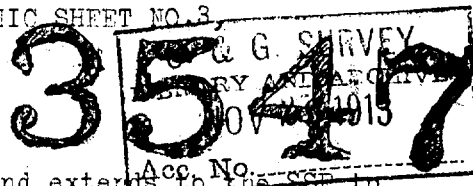
Sheet examined in Div.  
of Hyd'y & Top'y.

H. 3547.

Large area survey on west coast Prince of Wales Island. The work is sufficient for the needs of navigation. Altho a full survey of the shoal waters adjacent to the coast line and sufficient soundings to reasonably connect all depth curves should be done when the area is of sufficient importance to be covered by the wire drag.

Sheet examined in Div.  
of Hyd'y & Top'y.

SAN ALBERTO BAY, S.E. ALASKA.



This sheet connects with sheet #1 at its SE end and extends to the SSE to a line drawn from a point on San Juan Bautista Id, 1 mile SE of Pt. Agueda to the Coronados Ids. No work was done to the westward of a line joining Fern Point and Agueda Pt. or to the eastward of a line connecting Point Ildefonso, the Witnesses, Alberto Id and Clam Id. The regular steamer channel as described on pp 93 of Sect 1, of the Alaska Coast Pilot under Bucarali Bay, was the portion to which the greater part of the work was devoted.

SURVEY METHODS Two separate sounding parties were engaged on this work in the launches COSMOS and Launch #117. The regular development being carried on by the former and the investigations of shoal spots and suspicious soundings by the latter. All the work in Klawak Inlet was done by the party in Launch #117. A great deal of pipe drag work was performed on this sheet, all suspicious spots being gone over and the shoalwater area between Balandra Id and Agueda Pt. being thoroly investigated. The drag used is described in D.R. accompanying Sheet #1.

All signals used on this sheet with the following exceptions, were located by triangulation or Plane Table:

"HOUSE" is the NE'most shack in the deserted village of Fish Egg and depends on Sextant Angles.

SAILING DIRECTIONS All vessels navigating in this vicinity follow the track as laid down in the sailing directions page 93 and pass to the west of Balandra Shoal. A deep, clear, and straight channel could be utilized by passing E of Balandra shoal but would necessitate the marking of Balandra Shoal and a 2 fm spot which lies 5/8 mile W of the western Ballena Id.

DANGERS. In addition to the dangers mentioned in the sailing directions page 93 the above mentioned 2 fm spot was discovered 5/8 mile W. of the western Ballena Id. Also a rocky patch covered by  $4\frac{1}{2}$  (?) fms lying  $\frac{3}{4}$  mile SxE from the Eastern Ballena. This patch is in the track of vessels bound from Cape Flores to Craig. BALANDRA SHOAL has two shoal areas covered by 4 feet, lying  $\frac{1}{4}$  mile apart NE and SW from each other with 10 and 12 fms between the two. It was not marked by kepp during the past summer.

FERN REEF shows two rocky heads at L.W.spring; separated  $\frac{1}{4}$  mile from each other in a N and S direction and having deep water between the two. A rocky patch covered by 3 fms and having some kelp on it lies to the eastward  $\frac{1}{8}$  mile and is probably connected with the southern portion of the reef.

FERN SHOAL mentioned in the Sailing Directions page 93 as lying  $\frac{3}{8}$  mile E $\frac{1}{4}$ S from Fern Reef and covered by 3 fms was not found.

The main entrance to Klawak Inlet lies between Fish Egg Id and the Reefs to the N.W. This channel is both difficult and dangerous for vessels drawing more than 20 ft. A spindle erected by the Supt of the Klawak Cannery marks the southernmost of the bare rocks, covered at high water, which form Klawak Reef. A 4 (?) fathom spot lies 200 yards SE'ward of this spindle and is hard to avoid when entering. Another rocky patch covered by 4 (?) fathoms lies over  $\frac{1}{4}$  mile WxN from the same spindle.

On the Fish Egg side of the channel a rock lies which bares at L.W. 150 yards off the N. extremity of Fish Egg Id.

The southern entrance to Klawak Inter between Fish Egg Id and the town of Craig can only be used by large vessels safely from half tide to high water, as not more than 3(?) fathoms can be carried thru it at L.W. At present this channel is marked by a siggle pile on each side, placed in position by the Supt. of

the cannery at Craig. One of these piles is close to the end of the spit which extends NW from the Cannery and the other is on the SE edge of a reef, bare at half tide, which extends from the south end of Fish Egg Id.

Good shelter may be found in Klawak Inlet off the village of Craig.

The northern portion of Klawak Inlet was not examined owing to lack of time.

Alberto Reef is awash at  $\frac{1}{2}$  tide.

CURRENTS No currents of any strength were experienced while this work was in progress

All compass bearings are magnetic and approximate.

Distances are approximate.

Respectfully submitted,

Thomas Jamieson,

Mate, C. & G. Survey,

Hydrographer.

Respectfully approved and forwarded,



Asst., Comdg.

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NOV 18 1913  
Acc. No. \_\_\_\_\_See Descriptive Report of Hydrographic Sheet No. 1 for description  
of drag.

DRAG WORK ON HYDROGRAPHIC SHEET NO 3. DRAG DRAWING 5 fms., 4½ fms.

		<u>Aggles.</u>	
Sept. 11,	n	Hand Lead Soundings	1 - 39
"	12	o Drag drawing 5½ fms., 5 fms., 4½ fms., 6 fms. Hand lead soundings on shoals	1 - 188
"	13,	p Drag drawing 5 fms., 4 fms., 5½ fms., 6 fms., Hand lead and machine soundings while underway	1 - 94
"	15	q Drag drawing 6 fms., 5½ fms., 5 fms., Sounding with machine while underway Hand lead over shoals	5 - 141
"	16	r Drag drawing 6 fms. Machine sounding underway	1 - 44
"	17	s " " "	1 - 43
"	18	t Drag drawing 6 fms (5 fms for a few minutes) Machine sounding under way	1 - 101
"	19	u " " "	1 - 10
"	22	v " " "	1 - 40
"	26	w " " "	1 - 62
"	29	x " " "	1 - 51

MKQ  
Dec. 6, 1913.

HYDROGRAPHIC SHEET 3547

RECEIVED  
DEC 8 1914  
ASSISTANT IN CHARGE  
CHART CONSTRUCTION

San Alberta Bay, S. E. Alaska, by  
Asst. R. B. Derickson in 1913.

TIDES.

	Cruz Bay	Craig
Mean lower low water, or plane of reference on staff	ft. 11.2	ft. 10.6
Lowest tide observed " "	8.6	8.0
Highest " " " "	23.9	23.0
Mean range of tide	8.1	8.0



Hyd. Sheet No. 3547

Within the limits of the work, the ground is well covered and shoals developed, but as is usually the case with rocky bottom of this character, there are many suspicious spots, which could be further examined.

The 11 fathom spot, (1750 me. S.W. of  $\Delta$  Suspire) falling well outside the twenty fathom curve, is the most conspicuous of these.

The boatsheet shows a bare shoal, east of Ballandra Id. and 150 me. east of  $\odot$  Comp. This is probably out of position and should be in the large kelp patch, somewhat south of the position it was shown in. As the soundings show from 4 to 7 fath., at this point, it was not shown on the sheet.

The rock awash, 820 me. S. x S.W. from  $\Delta$  Cement, may be intended for the one, about 85 me. west of it, which is shown on the Top. sheet. As it was put on by the field party, it was allowed to remain, although no authority could be found for it in the sounding records.

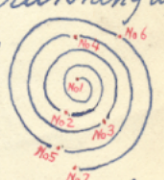
This work was done by two separate parties, the first using the "Cosmos", (green pos. numbers) and the second in Launch # 117 (red pos. numbers).

Work of first party. — Throughout the records of this work, the character of the bottom has never been recorded.

A large part of this work, had not been protracted. (from green  $\pi$  day to green  $\times$  day inc.) This consists of lines run with a twenty foot pipe drag, on which soundings were taken also. (over)

These lines were protracted and all lines and independent positions, on which soundings were taken, were shown on the smooth sheet and the soundings plotted on them. In order to distinguish the drag work, a tracing was made, showing only the drag lines.

Another tracing was made combining the work on this sheet with that on Hyd. 2326<sup>a</sup>, vicinity of Ballandra Shoal, and curves drawn from the combined soundings.

The work of second party - The launch party ran a number of lines, termed "spirals". Commencing at a point and running around it in a circle, gradually increasing the radius. diagram  
  
These lines are not accurate, for the reason that the only points, absolutely fixed, are the positions and the course of line between positions can only be guessed. Therefore intermediate soundings between positions, may not be correctly plotted.

The work done by this party, was protracted in the most careless manner. Whole lines were found incorrectly protracted and a large number of positions had to be reprotracted and corrected on all parts of the sheet. As it was impractical to reprotract all of the work, many positions may still be wrong. Therefore the reliability of the entire work is affected.

R. L. Johnston.

Apr. 25, 1914.

Soundings expressed in fathoms.

Protracted by field party & R. L. J.

Plotted by and inked by R. L. J.

Verified by Geo. T. Lamer

The above report is comprehensive. There remains only to state that it required several times the length of time to do the office work on this sheet, than is usually required for such a sheet. Attention of G. T. Lamer called to method. R. L. J.