

4499

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Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
State: <u>SW Alaska</u>	
11-5013	
DESCRIPTIVE REPORT.	
Hyd	Sheet No. <u>B 4499</u>
LOCALITY:	
<u>Alaska Pen</u>	
<u>Ikaton Bay + Pen.</u>	
1925	
CHIEF OF PARTY:	
<u>R.F. Luce</u>	

MAR 31 1926

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4499

Locality: S. W. Alaska

Chief of Party: R. F. Luce in 1925

Plane of reference is
4.3 ft. on tide staff at Ikatan

For reduction of soundings, condition of records satisfactory
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A. M. or P. M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.



Chief, Division of Tides and Currents.

DESCRIPTIVE REPORT TO ACCOMPANY SHEET "B"
HYDROGRAPHY OF IKATAN BAY AND PENINSULA, S.W. ALASKA.

Date of Instructions: March 20th 1925.

LOCALITY AND LIMITS OF WORK

This sheet represents the ship and launch hydrography of Ikatan Bay and the easterly shore of Ikatan Peninsula as far south and west as Cape Pankof Light. It extends from Latitude 54°39' to 51' North and from Longitude 163°01' to 22' West.

GENERAL DESCRIPTION

The western shore of Ikatan Bay from the northern limit of the work to Ikatan Cannery is a low grass-covered slope with an occasional stretch of low rocky cliffs. From Ikatan Cannery to the southern limit of the work the shore line is very rugged except for short stretches at the head of East Anchor Cove and of other small bights. The general character of the shore line of the northern shore of Ikatan Bay and of Sankin Island is high cliffs with an almost sheer drop to the water's edge.

CURRENTS

There is no evidence of currents in this area other than tidal, but these are very marked. With the high velocity of the currents through Isanotski Strait it is to be expected that the effect of these currents would be felt far into the Bay. This is particularly true when the tide is ebbing. The currents at flood tide are not so marked. When the tide is ebbing, however, the current flows south and then follows the northerly shore of Ikatan Peninsula as far east as the point on which signal NAT is located. This southerly and easterly current often produces tide rips that are noticeable even three or four miles from the entrance to the Strait. There is, however, but little evidence of current beyond the line drawn from signal NAT to Sankin Island. In general the current near, and to the south and west of, Sankin Island flows westward. This, of course, is to be expected when the current is flooding into the pass; but when that time there exists a general flow toward the Pass throughout the Bay, but even when the tide is ebbing and the water is rushing south through the Strait, there is a slight westerly current in the northern part of the Bay.

LANDMARKS

Cape Pankof is a very prominent headland and has an elevation of nearly 1200 feet. Cape Pankof Light is placed on a prominent part of the cape and is called LITE on this sheet. For vessels approaching Ikatan Bay from the eastward Sankin Island and Ikatan Point serve as excellent landmarks. The latter is a headland about 450 feet high with cliffs rising abruptly from the water's edge. Other landmarks have been listed in the topographic sheet descriptive report.

Date 1925	Letter	Volume	Positions	Soundings	Miles Statute	Vessels
June 6	a	1	22	50	3 $\frac{1}{2}$	S.L. 1925
" 9	b	1	88	285	14	" "
" 10	A	6	88	230	31.4	Hship
" 10	c	1	84	124	12	S.L. 1915
" 11	B	6	78	194	23	Ship
" 12	d	1	147	240	25	S.L. & 1915
" 12	C	7	110	238	24.5	Ship
" 13	e	2	8	11	$\frac{1}{2}$	S.L. 1915
" 15	f	2	106	186	17	" "
" 16	g	2	75	145	13	" "
" 17	h	2	96	155	13	" "
" 18	J	3	210	280	29 $\frac{1}{4}$	" "
" 19	k	3-4	222	298	31 $\frac{3}{4}$	" "
" 20	m	4	82	120	13	" "
" 23	n	4	133	266	21 $\frac{1}{2}$	" "
" 24	p	4-5	111	216	14 $\frac{1}{2}$	" "
" 25	q	5	123	193	15	" "
			1783	3231	301.90	

An automatic tide guage at Ikatan was used for this work.
 Plane of Reference, Reading on Guage = 3.9 feet
 Lowest tide observed, " " " 3.8 "
 Highest " " " " 12.1 "

E. P.

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON May 19, 1927.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4499

Ikatan Bay, Alaska Peninsula

Surveyed in 1925

Instructions dated March 20, 1925 (PIONEER)

Chief of Party, R. F. Luce.

Surveyed by R. F. L., C. Shaw, W. Weidlich, A.J. Hoskinson.

Protracted by F. G. Johnson, P. L. Bernstein, F. R. Quinn.

Verified and inked by R. L. Johnston.

1. The records conform to the requirements of the General Instructions except that no graphs were submitted for the tube soundings. Furthermore, on C day, tube No. 137 was used throughout the day, although the comparative readings taken at the beginning of the day showed clearly that the tube was defective. It should have been withdrawn from use at once.
2. The plan and character of development satisfy the requirements of the General Instructions.
3. The plan and extent of the survey satisfy the specific instructions except that additional lines should have been run in the area about a mile northeast of the cannery to develop an irregularity in the 30 fathom depth curve. This area lies in approximately Lat. 54° 46-1/2', Long. 163° 16' to 163° 19'.
4. Wherever cross lines were run there is a good agreement. A comparison of adjacent lines indicates satisfactory results.
5. The usual depth curves could in general be completely drawn except some places close inshore where the kelp prevented further work.
6. The usual field plotting was completed by the field party and was well executed.
7. The junctions with the contemporary surveys, H. 4301, H. 4391, and H. 4498, are satisfactory.
8. No immediate additional work is necessary, but whenever work is again resumed in this vicinity, consideration should be given the following:

- (a) Additional soundings off Cape Pankof to better develop the 10 fathom curve.
 - (b) Additional soundings in East Anchor Cove in the vicinity of the 10 fathom sounding outside the main 10 fathom curve. The old survey, H. 2557 (surveyed in 1901) shows less water in this vicinity.
 - (c) Some additional soundings off Ikatan Pt. between the shore and the 10 fathom curve to insure that no dangers exist here.
 - (d) Additional lines as mentioned in paragraph 3 above.
9. The reef off \odot fest in East Anchor Cove is probably erroneously shown on the topographic sheet, since the sounding of $-1/6$ fathom definitely fixes the end of the reef.
10. Character and scope of surveying - very good.
Field drafting - excellent.
11. Reviewed by A. L. Shalowitz, May, 1927.

Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field Work (H. & T.)

Hyd. 4499

Part of the shoreline is very rugged with numerous rocky ledges, but away from the shore the ground appears even with few shoals.

The area has been evenly covered but no close developement was attempted and no cross lines run.

The records are satisfactory but the beginnings and endings of lines are not described.

The sheet has been very well protracted and the soundings were accurately spaced, but an "M" was plotted at every point at which a sounding was missed.

While it was not noted in the sounding record there was a great deal of kelp indicated on the boat sheet, close to the shoreline. This was added to the sheet.

R. L. Johnston

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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HYDROGRAPHIC TITLE SHEET

The finished Hydrographic 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. (B) 4499

State ^{SW.} Alaska

General locality . Alaska Peninsula

Locality . Ikatan Bay and Peninsula

Chief of party . R.F. Luce

Surveyed by R.F. Luce, Charles Shaw, W. Weidlich, and A.J. Hoskinson

Date of survey . June and July 1925

Scale . 1 : 20000

Records don't show - Str.

Soundings in . Fathoms

Plane of reference . M.L.L.W.

Protracted by F.G.J. + R.L.B. + F.B.Q. Soundings in pencil by C.A.B.

Inked by . R.L.U. . . . Verified by . R.L.C.

Records accompanying sheet (check those forwarded):

Des. report, Tide books, Marigrams, 2 Boat sheets,

7 Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks: Smooth sheet not yet plotted; boat sheets only are being forwarded.