

4498

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

State: SW. Alaska

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. 4498

LOCALITY:

Alaska Pen.

Morzhovoi Bay to Ikatan Bay

1925

CHIEF OF PARTY:

R.F. Luce

8677
4498

DESCRIPTIVE REPORT TO ACCOMPANY SHEET "C" -
HYDROGRAPHY FROM FALSE PASS TO MORZHVOI BAY, S.W. ALASKA

INSTRUCTIONS

This work was called for in the Director's instructions dated March 20, 1925.

GENERAL DESCRIPTION

This sheet covers the area from triangulation station SLIDE to triangulation station DRY, and the hydrography is all launch work between the shore and the northerly limit of the ship hydrography done by the PIONEER in 1924.

In general the coast line here is rugged although there are a few stretches of short ^{stretches} beach. Beginning at SLIDE the beach is rugged and boulder strewn and is backed by a sharp steep ridge of uniform height averaging a thousand feet. The face of the slope near the beach is broken by numerous cliffs and rock slides and is practically without vegetation. Between signals LID and PAY the bluff behind the beach is very steep and rugged, consisting of uneven rock cliffs nearly three hundred feet high. A fine sand beach begins a short distance west of the stream near signal POL and extends nearly to signal CON. A short distance west of CON the shore line again becomes rugged and in several places between CON and LO the beach is impassible on account of the sheer rock cliffs extending directly into the water. The beach in this stretch is for the most part huge blocks of rock broken from the ~~overhanging~~ cliffs overhead. Another fine sand beach runs across the valley near the signal MA, but beyond the stream flowing from the fresh water pond in this valley the mountain slopes again extend sharply down to the beach, and the beach itself consists of blocks of rock broken from the cliffs that usually terminate these slopes.

LANDMARKS

A very distinctive landmark in this area is the cliff near the beach at a point about a quarter of a mile northeast of SLIDE. This five hundred foot rock cliff is nearly vertical and has a fluted appearance very much like a series of organ pipes. The topographic sheet for this area shows this landmark clearly. While none of the other landmarks are so well defined as this one, yet the navigator will be easily able to identify many other peaks and headlands with the aid of the form lines on the topographic sheet for this area.

INSHORE DANGERS

There are a number of rocks quite close to the beach that are shown on the hydrographic and topographic sheets. From ~~WEST~~ as far east as CON rocks of large size bare at low water. All these dangers are within 150 meters of the shore, however, and in most cases are well marked by kelp, so they can not be regarded as a menace to navigation of vessels of any tonnage.

ANCHORAGES

There are no permanent anchorages in this area, but in northerly weather vessels can find temporary anchorage at practically any point along this coast about $\frac{3}{4}$ of a mile from the beach.

SURVEY METHODS

The usual method of launch hydrography was followed in developing this area. Lines were spaced approximately 300 meters apart. A sounding machine using stranded wire and a 15 pound lead was employed in depths greater than about 12 fathoms; the shoaler depths being hand leaded.

Sheet Inspected by Crdg. Officer May 28, 1925.
R. L. Rice

Statistics Sheet No. 0

Date 1925	Letter	Volume	Positions	Soundings	Miles Statute	Vessels
May 26	a	1	49	121	11	S.L. 8171
" 27	b	1	60	150	13.6	" "
" 27	a	2	73	144	14	S.L. 9843
" 28	b	2	43	94	8	" "
			225	509	46.60	

An automatic tide guage at Ikatan was used for this work.
 Soundings are in fathoms.
 Plane of reference is M.L.L.W.
 Plane of reference, reading on guage=
 Lowest tide observed " " " =
 Highest tide observed " " " =

MAR 15 1926
N.Y.P.

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4498

Locality: S. W. Alaska

Chief of Party: R. F. Luce in 1925

Plane of reference is M L L W
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.

Report on Hyd. 4498.

The records could have been improved in recording depths with the sounding machine in the vicinity of 10 fathoms if the readings near that depth were made in fathoms and feet, and not in even fathoms.

It appears that no attempt was made in the cases interested to read the machine soundings beyond the ^{even} fathom marks. The resulting 10 fathom curve presents somewhat unnatural undulations which undoubtedly are influenced to some degree by this deficiency.

A number of rocks (omitted on accompanying Topo. 4146) near signal "C" were shown on the two boat sheets for this sheet. These rocks were transferred to the smooth sheet from the boat sheets using either one to best advantage for the best information and drafting shown on them. Difficulty was experienced in the transference due to the uncertainty of detail, symbols, and writing in this congested area. In ~~these~~ ^{some} cases "rocks awash" has been written but in no case is it clear which of the rocks shown might be meant and the rock awash symbol was not in evidence which easily could have been used. It is very probable that the rocks appearing before the words "rocks awash" were the ones intended and have been interpreted and shown thus on smooth sheet. As this area is very foul and close inshore, further investigation in all probability would not be worth while.

Attention to the fact, might be called here that two signals which were used, "Ilib" and "Nak", were not shown on the accompanying Topo. 4146. These signals had to be transferred to the smooth sheet from the boat sheet, as this was the only available source containing this data.

The protracting and plotting of soundings
(over)

were found to be very good.

The sheet was legible, clean and free from features marking poor draftsmanship.

Respectfully submitted,
S. Pregari.

June 7, 1926.

Comparison of overlays

4301	4498		4301	4498	
17	18	1.	21	22	1.
21	21	0.0	16	19	3.
23	24.5	1.5	22	24.5	2.5
22	23.5	1.5	21	23	2.
24	24.5	.5	22	22.5	.5
23	25	2.	19	21	2
21	23.5	2.5	19	20	1
23	23.5	.5	18	19	1
22	22.5	.5	18	19	1
22	22.5	.5			14.0
20	20	0.0			32.5
13	16	3.			46.5
17	17	0.0			
22	23	1.1			
24	25.5	1.5			
19	21.5	2.5			
24	25	1.			
16	19	3.			
22	22.5	.5			
24	25	1.			
23	24	1.			
19	19.5	.5			
17	18	1.			
15	16.5	1.5			
16	18	2.			
20	21	1.			
16	16	0.0			
17	17	0.0			
21	22	1.			
24	24	0.0			
23	23.5	.5			
		32.5			

46.5
6
 40) 279.0
 6.97 ft.

E.P.S.
 Feb. 1927

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

AND REFER TO NO. 11-DEW

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

February 26, 1927.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4498

Morzhovoi Bay to Ikatan Bay, Alaska Peninsula.

Surveyed in 1925

Instructions dated March 20, 1925.

Chief of Party, R. F. Luce.

Surveyed by C. Shaw and W. Weidlich.

Protracted and soundings plotted by F. G. Johnson.

Verified and inked by G. Risegari.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions with the exception that the rocks in the vicinity of Δ Wet were not shown on the smooth sheet as required by Paragraph 54 of the specific instructions. It was necessary for the office cartographer to combine the rock details on the topographic and boat sheets.
4. There are no sounding line crossings, but a comparison of adjacent parallel sounding lines indicates satisfactory results.
5. The information is sufficient for drawing the usual depth curves.
5. The usual field plotting was done by the field party and it was well done.
7. The junctions with the surveys on the north and south are adequate, but the overlapping soundings from H. 4301 show that the depths on H. 4498 are uniformly deeper than those on H. 4301, the differences obtained by comparing 40 soundings averaging 7 feet. A special

examination of the tidal data of both surveys by the Division of Tides and Currents failed to disclose any defects in the tidal data; and a close study of the soundings along the overlapping portions of the sheets showed that the soundings (mostly wire) and their positions are fully up to standard. The differences are partly due, without doubt, to the fact that nearly all the soundings along the overlap are recorded in the nearest whole fathom.

8. An extension of the 10-fathom curve southeast of Ⓞ Mer indicates the possibility of shoaler water in this spot and additional development would be desirable. With this exception no additional sounding or wire drag work is needed in the area covered by the sheet.
9. The character and scope of the surveying are excellent and the field drafting is good.
10. Reviewed by E. P. Ellis, February, 1927.

Approved:

Chief, Section of Field Records (Charts)

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

4498

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. C4498

State ^{SW.} Alaska

General locality Alaska Peninsula

Locality ~~False Pass to Morzhovoi Bay to Ikatani Bay~~

Chief of party R.F. Luce

Surveyed by Charles Shaw and W. Weidlich

Date of survey May 1925

Scale 1 to 20,000

Soundings in Fathoms

Plane of reference M.L.L.W.

Protracted by E.G. Johnson. Soundings in pencil by E.G.J.

Inked by Verified by

Records accompanying sheet (check those forwarded):

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

Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks: No smooth sheet has been plotted; boat sheets only are being forwarded. *Smooth sheet rec'd. April 12, 1926 3013*

Recommend approval of sheet.
R.F. Luce
Comdr. U.S. Navy