

4375

Diag. Cht. No. 8860-1 & 8802

4375

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

State: S.W. Alaska

21-5613

DESCRIPTIVE REPORT.

Hydrog. 4375 Sheet No.

LOCALITY:

Alaska Pen.

Northern Part of Cold Bay

1924

CHIEF OF PARTY:

R.R. Lukens

DESCRIPTIVE REPORT.

Hydrographic Sheet, Field No. "B"

COLD BAY - - - - S.W. Alaska.

Str. PIONEER R.R. Lukens, Comdg.

1924.

LIMITS This sheet embraces the head of COLD BAY, the lower part of the bay being shown on No. 4314. It is on the scale of 1:20,000

CONTROL The triangulation was done in 1923, and is on the Unalaska datum. The topography was done in 1924.

TIDAL DATA During the survey, a portable tide gauge was located at Lenard Harbor, and all soundings are reduced from that station.

GENERAL DESCRIPTION Two deep valleys extend up the bay, separated by a middle ground with depths of 8 to 15 fathoms. These valleys merge into the gently sloping bottom which forms the head of the bay. No dangers were found and the entire head of the bay is suitable for anchorage for large vessels. The country around the head of the bay consists of rolling tundra land with some sand dunes near the shore line.

HINZAROFF'S LAGOON is the large lagoon at the head of Cold Bay. It is mostly mud flats and is separated from the bay by a series of shifting sand islands and mud flats. There is a poorly defined channel entering the lagoon, but it is practically bare at low water. Launches can enter at about half tide, and with local knowledge can ascend nearly to Δ Lagoon

DANGERS The entire area covered by the sheet is remarkably free from dangers. Along the north shore there are boulders close inshore, but they usually lie at about the low water line, and are dangerous for small craft hugging the coast

BOTTOM Throughout the deeper parts of the bay, the bottom is generally soft mud, but approaching the shore, hard bottom is usually encountered a short distance inside the 10 fathom curve. This is a hard sand bottom.

ANCHORAGES Any part of the upper bay, where the depth is suitable, is available for anchorage. During a southeaster however, a heavy choppy sea would make it uncomfortable for any but large vessels. Smaller craft can anchor in the bight near signal "CCW" and obtain good protection from S.E. storms. The bottom here is sticky mud and has excellent holding qualities.

CURRENTS Only very weak tidal currents were experienced in the upper part of Cold Bay

WEATHER CONDITIONS are very bad, for the winds sweep in and out of the bay with great force and regularity. During the summer months, the prevailing wind is S.E., while towards Fall, the N.W. winds begin to predominate. Calm days are very rare. Most of the calms seemed to occur at night last season, the wind often coming up and going down with the sun. The weather in this bay is entirely local.

DISCREPANCIES About 1 mile East (2) from signal "NIP" the launch obtained a sounding of 5 4/8 fathoms near an 8 fathom sounding by the ship. I was on the launch myself at the time and observed the lead line at this sounding and can vouch for its correctness. It is also believed that the ship sounding is correct. I think the difference is due to irregularities in the bottom, of which there is some indication at this vicinity.

METHODS The inshore work was done by the two motor sailers in charge of the Commanding Officer and Lt. Reading, while the deeper area was done by the ship. In depths over 20 fathoms, the Rude type tubes were used, while in lesser depths the PIONEER trolley rig and hand lead was used.

NEW NAMES KINZAROFF'S LAGOON is the local name for the big lagoon at the head of the bay. DELTA POINT is the name suggested for the long low point on which hydro. signal "SPIT" is located. This name is descriptive, and the point forms part of the delta of a lagoon and stream entering the bay here

Respectfully submitted,

A. R. Lukens,
A. R. Lukens,
Chief of Party.

S T A T I S T I C S

S H E E T "B" - NORTH END OF COLD BAY

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1924		Letter	Volume	Positions	Soundings	Statute Miles	Vessels	Color
Date								
June	13	A	1	66	175	27.5	Ship	RED
	18	B	1	109	400	30.0	"	"
	26	C	1	93	457	30.1	"	"
	26	C	2	48	296	15.3	"	"
July	2	D	2	20	47	8.0	"	"
June	25	a	1	41	59	4.1	M.S.#1	BLUE
	26	b	1	74	157	9.0	do	"
	27	c	1	132	322	19.6	"	"
July	1	d	1	100	219	12.3	"	"
	1	d	2	44	160	7.4	"	"
June	27	a	1	141	1015	28.0	M.S.#2	GREEN
July	1	b	1	80	553	11.1	do	"
	1	b	2	70	439	9.4	"	"
	2	c	2	93	592	17.8	"	"
T O T A L				1111	4891	229.6		

NOTE: Auto tide gauge at Lenard Harbor
and King Cove.

January 19, 1925.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in

6 volumes of sounding records for Cold Bay, Alaska

HYDROGRAPHIC SHEET 4375

Locality: North end Cold Bay, S. W. Alaska

Chief of Party: R. R. Lukens in 1924

Plane of reference is mean of lower low waters,

4.8 ft. on tide staff at Lizard Harbor, Cold Bay, Alaska.

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 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: Reducers are not entered in strict accordance with Sec. 311 of General Instructions for Field Work in that they are entered in integral feet instead of feet and tenths but they are here approved in consultation with Lt. Comdr. Hardy, Chief of Section, Field Work, as open area soundings so classed by the field party in charge.

Y. B. de
Chief, Division of Tides and Currents.



FIELD RECORDS SECTION

REPORT ON HYDROGRAPHIC SHEET NO. 4375

The smooth sheet is clean and well protracted.

The sounding records are complete except those done by Motor Sailer boat # 1 in which the courses were omitted.

The time intervals were carefully adhered to in the plotting of the soundings although a good many soundings were omitted.

5 ft. was not plotted ^{as} ~~on~~ the next whole sounding.

The drafting conforms to the general instruction for field work.

H. W. Edmonstone

Cartographer, Field Records
Section.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON February 25, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet 4375

Northern Part of Cold Bay, Alaska Peninsula

Surveyed in 1923 and 1924

Instructions dated February 8, 1924

Chief of Party, R. R. Lukens

Surveyed by R. R. Lukens and O. S. Reading.

Protracted by C. L. Nyman.

Soundings plotted by D. W. Taylor.

Verified and inked by H. R. Edmonston.

1. The records conform to the requirements of the General Instructions except that courses were omitted for Motor Sailer No. 1.
2. The plan and character of development conform to the requirements of the General Instructions, except that additional development would have been desirable on the 8 fathom shoal on the lower edge of the sheet.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are adequate and the information is sufficient for drawing the usual depth curves.
5. The field plotting was completed to the extent prescribed in the General Instructions. Although there was ample space for plotting all the soundings only about one-half of them were plotted inside of the 8 fathom curve.
6. The character of the junction with the adjacent work cannot be stated as the latter has not been completed.
7. Two days' work with tubes was done in 1923 in the area covered by this sheet. As the work complied with all requirements, and the crossings with the 1924 work are excellent, it has been plotted on this sheet.
8. No further work is needed within the area covered by this sheet, except that additional leadline surveying should be done on the 8 fathom shoal at the bottom of the sheet when opportunity offers.

9. The character and scope of the surveying ~~are~~ excellent and the field drafting is good. ✓

10. Reviewed by E. P. Ellis, February, 1925.

Approved -
T. G.
J. H. H.

Somewhat deficient in
bottom characteristics - T. G.
J. H. H.

