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Diag. Cht. No. 8502-182

Form 504 DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
State: Alaska
DESCRIPTIVE REPORT.
Hydrographicheet No. 4295
LOCALITY:
S.W. Alaska, Shelikof Strait
Mialagvik ( Wide ) Bay,
Wide Bay - Western Part
Shalikof Strait.
S.W. Alaska.
19 <b>2</b> 3
CHIEF OF PARTY:
H.A. Seron, H. &C. Three

# DESCRIPTIVE REPORT

( To accompany Hydrographic Sheet No. 4 , Kialagvik (Widel Bay, Shelikof Strait, S.W. Alaska. )

#### 1. Limits & Connections.

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The work on this sheet was executed under instructions to the Commanding Officer of the U.S.S. DISCOVERER, dated February 21,1923, on scale 1:20,000 and covers the area between the S.W. end of Wide Bay and where the work commences on sheet No. 3 , i.e. from a line NW and SE from Channel Rock.

# 2. General Description of Coast.

See descriptive reports accompanying Hydrographic Sheet No. 3 , and Topographic Sheet No. 6 , of Kialagvik (Wide) Bay.

#### 3. Outlying Dangers.

As this sheet covers only the inside hydrography of Kialagvik (Wide) Bay to the S.W. of Channel Rock, little can be said concerning offshore dangers to navigation except as observed from a distance. For a mile off shore from the general trend of the islands, there are rocks which cause breakers at all stages of the tide.

#### 4. Currents.

The only noticeable currents occur between the islands and are mainly tidal. The slight current that exists in the Bay is also tidal, but as it isn't very appreciable, no observations for same were taken.

#### 5. Anchorages.

In calm weather a good anchorage is available in most and part of the Bay covered by this sheet, as the bottom is predominatingly mud. For SE storms protection is afforded behind Titeliff Island and to the westward of same just north of the mainland.

In westerly storms, the wind sweeps down along the mountains and has a very marked effect on the Bay, so that it offers practically no protection against these storms to small vessels.

# 6. Survey Methods.

Nine triangulation stations and thirteen stations, which were located by the topographic party, were used in obtaining the sextant fixes, and afforded excellent control.

# 6. Survey Methods, cont.

The work was executed by the YUKON and Motor Sailer No. 8613. Handlead soundings were taken up to 15 fms., using a 12# lead. For greater depths the YUKON used a Cosmos hand sounding machine with a 20# lead, while the Motor Sailer used a Ballauf hand sounding machine with a 12# lead. The vessels were stopped for all machine soundings, and the motor sailer also stopped for handlead soundings above 10 fms. All the other soundings were taken while underway. The leadline used was Samson's #8 Mahogany Phosphor\* Bronze wire center tiller rope, which gave excellent results.

The sounding lines were spaced 300 meters apart and were run normal to the shore, i.e. in a NW and SE direction.

#### 7. Channels into Kialagvik (%1de) Bay.

In addition to the recommended entrance into the Bay, as stated in the report accompanying Hydrographic Sheet No.,  $\beta$ , there are also probable entrances between the islands shown on this sheet.

Lines were run on both sides of Terrace Island and also N.E. of Hartman Island, which showed probable channels.

Respectfully submitted,

) M. Sucok.

Jr. H.&G. Eng.

Approved and forwarded:

H.A. Seran, H.&G.Eng.

STATISTICS SHEET NO. 4

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The protracting was excellent and time intervals were observed in plotting. The pencilled sounting shoved have been much smaller. The sheet was clean and none of the fill deafting required revision in the office, week the changes in the low water line as determined by soundings.

The notes were sufficient and well kept.

A 10 fathom sounding at 40 Eday (Jukon) was subsequently disproved, and sugar water is shown in this vicinity.

The reduced soundings were given in feet, instead of fathoms and feet as per curallar tho 21, 1921, last paragraph. This necessitates additional work on the part of the tide division.

Trafteman, Section of Field hins

Hov. 19,1423.

AND REFER TO NO. 4-DRM

#### DEPARTMENT OF COMMERCE

#### U. S. COAST AND GEODETIC SURVEY

WASHINGTON

November 26, 1923.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4295

Wide Bay, Alaska

Surveyed in 1923

Instructions dated February 21, 1923

Chief of Party, H. A. Seran.

Surveyed by M. O. Witherbee, H. W. Hemple, F. E. Joekel, J. M. Smook and J. F. Downey, Jr. Protracted by J. A. Bond.

Soundings plotted by J. M. Smook.

Verified and inked by F. M. Albert.

- 1. The records conform to the requirements of the General Instructions. The soundings were reduced in feet, and it was necessary to change them to fathoms before plotting the sheet.
- 2. The plan and character of development fulfill the requirements of the General Instructions and satisfy the specific instructions.
- 3. The sounding line crossings are adequate.
- 4. The field drafting was completed to the extent prescribed in the General Instructions and none of it had to be done over by the office draftsman.
- 5. The junction with the adjoining sheet is satisfactory.
- 6. The character of the surveying and field drafting is excellent.
- 7. Reviewed by E. P. Ellis, November, 1923.

#### COPY TO FIELD RECORDS

Hov. 9, 1925.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in

B volumes of sounding records for

HYDROGRAPHIC SHEET

Localidy: Wide May, Sheliker Straits, S. W. Alaska

Chief of Party: E. A. Seren, in 1925

Plane of reference is mean lever low water, reading

1.8 ft. on tide staff at wide hay

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.
- 1D. 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. Reductions entered in feet instead of fathome and feet Par. 311, General Instructions, 1980, regarding entering of tide reducers not observed.

Chief, Division of Tides and Currents.

# DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

# 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. 4295

State Alaska. Shelikof Strait
General locality : <del>Kialasvik ( Wide ) - Bay</del>
Locality . Shelikef Strait, S.W. Alaska.
Chief of party . H.A. Seran
Surveyed by M.O. Witherbee, H.W. Hemple, J.M. Smook, J.F. Downey, Jr.
Date of survey . August & September 1923.
Scale 1: 20,000
Soundings in Fathoms.
Plane of reference . M. L. L. W
Protracted by J.A. Bond . Soundings in pencil by J.M. Smook
Inked by .F.M.Albert Verified by .F.M.Albert
Records accompanying sheet (check those forwarded):
Des. report,X. Tide books, Marigrams, Boat shoets,
Sounding books, Wire-drag books, Photographs.
Data from other sources affecting sheet

Remarks: