

4529

4529

Form 501 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
State: SE Alaska
11-5613
DESCRIPTIVE REPORT.
Hyd. Sheet No. 4529
LOCALITY:
Chichagof I. + Yakobi I. - W. Coast
C. Edward to Cross. Sd. - Offshore
1925
CHIEF OF PARTY:
A.M. Sobieralski

WWS
May 22, 1926.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4529

Locality: S.E. Alaska

Chief of Party: A. M. Sobieralski in 1925

Plane of reference is MLLW
9.8 ft. on tide staff at Sitka

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.

G. Wade
Chief, Division of Tides and Currents.

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO 100

West Coast Chichagof

and

Yakobi Islands

Off Shore Ship Work

May-September 1925

Scale 1:100,000

Instructions dated Feb.4, 1925

A. M. Sobieralski - Chief of Party.

-----oOo-----

DESCRIPTIVE REPORT

to accompany

Hydrographic Sheet No 100

Off Shore, West Coast
Chichagof and Yakobi Islands.
Scale 1:100,000

-----ooOoo-----

All work on this sheet was done by the U. S. C. & G. S. Steamer SURVEYOR, in accordance with instructions dated February 4, 1925.

All soundings were taken up and down with piano wire. The registering sheave was tested by passing 100 fathoms of measured sounding wire over it and noting the reading on the register.

As most of the hydrography on this sheet extends only to the 50 fathom curve, there are no dangers, except the 2-4/6 fathom spot in Latitude 57-45.3 and Longitude 136-21.7 which is shown and developed on a launch hydrographic Sheet. 57°44.3

A few soundings were taken well outside of the 1000 fathom curve when running to Sitka.

Where the soundings on this sheet overlap the soundings on Hydrographic Sheet No. 4004, very close agreement was almost invariably obtained.

The formation of the bottom off Cross Sound shows the usual characteristics of a submerged glacial valley,--the piedmont bulb and terminal and lateral morains, showing that at one time a glacier filled what is now Cross Sound. Bottom specimens along the 100 fathom curve northward of Latitude 57-50 consist frequently of stones 1/2" or more in diameter, with distinctly angular faces, showing that they were formed and deposited by glaciers rather than by streams.

The positions of practically all the signals had been determined by triangulation, but a few were located by sextant angles or plane table.

* Signal Last was located by sextant cuts and later a position was computed from several very weak triangles. The position determined by sextant angles was used in plotting the smooth sheet.

The positions of a few signals near the southern end of the sheet were taken from topographic sheets.

All soundings on this sheet are plotted in fathoms.

The plane of reference for reduction of soundings is M L L W corresponding to a reading of 9.8 feet on the tide staff at Sitka.

Lowest tide observed: Reading on guage 6.9 Aug. 5, 1925.
Highest tide observed: Reading on guage 21.5 June 8, 1925.

Respectfully submitted,

A. M. Sobieralski
H.&.G. Eng'r C.&.G. Survey.
Chief of Party.

~~Upon recommendation of Mr. Godsey the computed location of Δ Last was used in completing the sheet.~~

~~E. P. Kelly~~

~~July 21, 1926~~

Further examination indicates that the position of Last shown by the blue circle (photod by the hyd. party) is the better location. Approved by G.S.S.

E. P. Kelly

July 23, 1926

HYDROGRAPHY
Sheet No. 100

DATE	LETTER	VOL	STA.MI.	POS.	SOUNDINGS	AREA	TO & FROM WORK
May 22, 1925	A	1	8.5	21	21		23.0
June 5, 1925	B	1	35.0	15	15		11.0
" 6 "	C	1	99.5	41	41		6.0
" 7 "	D	1	107.0	66	66		6.0
" 8 "	E	1	17.0	30	30		59.0
" 10 "	F	1	13.0	36	36		34.0
" 11 "	G	1	52.0	74	74		32.0
" 26 "	H	1	8.5	8	8		4.0
July 2 "	J	2	28.5	84	84		43.0
" 7 "	K	2	4.0	18	18		47.
" 14 "	L	2	13.0	34	34		25
" 15 "	M	2	75.0	175	175		18
" 16 "	N	2	16.0	21	21		2
" 18 "	P	2-3	22.5	115	115		32
" 20 "	Q	2-3	24.0	116	116		43
Aug. 4 "	R	3	16.0	25	25		53
" 6 "	S	3	28.0	49	49		68
" 7 "	T	3	28.5	72	72		32
" 11 "	U	3	32.0	99	99		20
" 12 "	V	3	43.0	64	64		13
" 13 "	W	4	18.0	33	33		37.0
" 21 "	X	4	47.5	87	87		39.0
" 22 "	Y	4	97.0	130	130		15.0
" 23 "	Z	4	93.0	116	116		2.0
" 24 "	AA	5	58.5	32	32		0.0
Sept 10 "	BB	5	55.1	130	130		35.0
" 11 "	CC	5	52.5	58	58		17.0
" 17 "	DD	5	48.5	68	68		44.0
" 18 "	EE	5-6	40.5	125	125		30.0
" 19 "	FF	6	8.5	23	23		30.0
" 23 "	GG	6	35.5	109	109		41.0
" 24 "	HH	6	57.0	135	135		37.0
" 25 "	JJ	6-7	72.0	142	142		5.0
" 26 "	KK	7	81.0	120	120		6.0
" 27 "	LL	7	76.3	103	103		9.0
" 28 "	MM	7-8	85.0	134	134		6.0
" 29 "	NN	8	35.0	86	86		34.0

Report for Hyd. Sheet 4529.

The character and completeness of the records accompanying this sheet were found to be satisfactory.

The plotting of the soundings was found to be good, but the protracting in a large number of cases was found to be bad, particularly in the long shots, and grew worse as the lengths increased.

These inaccuracies indicated plainly that the field protractor was either out of adjustment or that its extension arms did not make a straight line from the plotted positions.

In a number of cases regarding the protracting, a difference between plotted and replotted positions of $\frac{1}{2}$ mile is not uncommon. The worst instance is pos. 120 KK which ^{shows} a difference of $1\frac{1}{2}$ miles.

The protracting nearer land was very good. This should indicate that the operation of the protracting was carefully done and understood and that the protractor used for these shorter distances was in adjustment. If, therefore, the same protractor was used for the long shots mentioned above it is evidently then, that the extension arms are at fault or whatever method was used for the prolongation of the lines.

The boat sheet accompanying this sheet was not submitted by F.P. Reference is made in the remarks column for pos. 131X, ^{at 1000} "see b.S. for position") and 26 NN_n (29 27 from ship sheet").

In the former case the plotted position by F.P. agrees well by time and course, and ^{with} other soundings in its proximity; in the latter, 29° 27', was ^{also} considered to be satisfactory.

The work ^{on sheet} was legible and presentable.

Respectfully Submitted,
G. Duggan.

Aug. 4, 1926

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

September 17, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4529

West Coasts of Chichagof and Yakobi Islands

Surveyed in 1925

Instructions dated February 4, 1925 (SURVEYOR)

Chief of Party, A. M. Sobierlaski.

Surveyed by Party of Steamer SURVEYOR.

Protracted and soundings plotted by P. R. Hathorne.

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.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the depth curves.
6. The usual field plotting was done by the field party. Practically all the protracting which required the use of an extension arm was found to be erroneous, in a number of instances amounting to one-half mile, and in one to $1\frac{1}{2}$ mile. The error was always in the same direction and was evidently due to a protractor out of adjustment or to a defective extension arm. The inshore positions were accurately protracted and the plotting of soundings was good.
7. The junction with H. 4528 is excellent. The junction with H 4524 and 4527 will be considered in the review of those sheets. There is a gap one mile wide between H. 4529 and H. 4002.

8. There are no indications of dangers on this sheet and all shoalings were sufficiently developed. No further surveying is required except in the deficient area between this sheet and H. 4002.
9. The character and scope of the surveying is excellent. The field drafting also is excellent except for the errors due to arc of a defective protractor.
10. Reviewed by E. P. Ellis, September, 1926.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4529

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

4A

Field No. ~~100,000~~

REGISTER NO. 4529

State S. E. Alaska
 General locality Chichagof I. and Yakobi I. ~ W. Coasts
~~West coast of Chichagof and Yakobi Islands~~
C. Edward to Cross Sound ~ Offshore
 Locality off shore ship hydrography
 Scale 1:100,000 Date of survey May 22 to Sept. 29, 1925
 Vessel SURVEYOR
 Chief of Party A. M. Sebieralski, H. & G. Eng'r.
 Surveyed by A. M. Sebieralski, H. & G. Eng'r.
 Protracted by P. R. Hatherne
 Soundings penciled by P. R. Hatherne
 Soundings in fathoms fathoms
 Plane of reference M.L.L.W.
 Subdivision of wire dragged areas by _____
 Inked by _____
 Verified by _____
 Instructions dated February 4, 1925
 Remarks: _____

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Sebieralski