



3935

D. & G. SURVEY  
L. & A.  
MAR 20 1917  
Acc. No.

Diag. Cht. No. 8102-R & 8201-R

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

State: *Alaska*  
11-5613

DESCRIPTIVE REPORT.

*Hydrographic Sheet No. 3935*

LOCALITY:  
*Ernest Sound*  
*S.E. Alaska*

191*6*

CHIEF OF PARTY:  
*John A. Daniels*

3935

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. 3935

State . S.E. Alaska . . . . .

General locality . Vicinity of Clarence Strait . . . . .

Locality . . . . Ernest Sound . . . . .

Chief of party . John A. Daniels, Assistant . . . . .

Surveyed by . John A. Daniels, H.R. Bartlett . . . . .

Date of survey . . June 21 to Sept. 29, 1916 . . . . .

Scale . . . . 1-20000 . . . . .

Soundings in . . . . Feet . . . . .

Plane of reference . Mean Lower Low Water . . . . .

Protracted by R.C.B., V.A.E. Soundings in pencil by . . . . .

Inked by C.A.F. VE . . . . . Verified by . . N.P.B. . . . . .

Records accompanying sheet (check those forwarded):

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

Sounding books, 3 Wire-drag books,  Photographs.

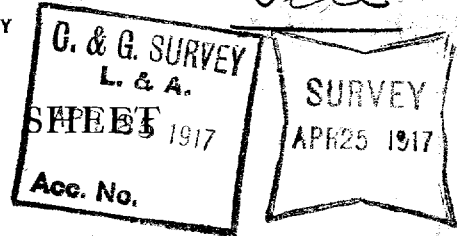
Data from other sources affecting sheet . . . . .

Remarks:

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

*File*

HYDROGRAPHIC TITLE SHEET



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U. S. Coast and Geodetic Survey.

Register No. 3935

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General locality . **Vicinity of Clarence Strait** . . . . .

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Chief of party . **John A. Daniels, Assistant** . . . . .

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Plane of reference . . **Mean Lower Low Water** . . . . .

Retracted by **B.C.B., V.A.E.** Soundings in pencil by . . . . .

Inked by **C.A.E., W.A.E.** . . . . . Verified by . . . **H.P.B.** . . . . .

Forwards accompanying sheet (check those forwarded):

Best report,  Tide books,  Marigrams,  Boat sheets,

Sounding books,  Wire-drag books,  Photographs.

Data from other sources affecting sheet . . . . .

Remarks:

DESCRIPTIVE REPORT

To accompany

HYDROGRAPHIC SHEET (#1) 3935

GENERAL LOCALITY

S. E. ALASKA

Sub Locality

Ernest Sound

From

Clarence Strait to Eaton Point

Surveyed under Instructions of the Superintendent Dated

Feb. 26, 1916

Wire Drag Party No. 3

Season of 1916

John A. Daniels Assistant, Coast and Geodetic Survey

Chief Of Party

The area included by Wire Drag work on this sheet extends roughly from a line - Lemesurier Point to Onslow Point - in Ernest Sound, to about one mile north of Eaton Point, including Union Bay.

On the northern side the drag was not taken much inside of the Muffin Islands, but was taken close to all headlands and Islands bordering the main channel.

The greater part of the signals used on this sheet were located by the U. S. Str. Patterson in 1916, exceptions are "Mis", located by this party in 1915 and "Lem" located by this party with plane table in 1916.

Depth of fifty feet or more was verified where possible.

Ernest Sound was found to be fairly clear water. The dangers located are as follows ---

Eighteen foot rock in the open water of entrance to Union Bay. This rock is located about  $2\frac{1}{8}$  miles NNE (true) of Lemesurier Point in the path of steamers entering Union Bay. This was reported by letter to the Superintendent dated, June 17, 1916. ✓

Six foot rock on southerly side of entrance to Vixen Inlet. This was least water on a shoal of considerable extent. The drag was not taken over this rock. ✓

Shoal with least water of 23 feet about  $\frac{1}{8}$  mile east of Muffin Ids. ✓

McHenry Ledge was found to have but two feet at M. L. L. W. ✓

Rock- bare one foot at M. L. L. W. , at Entrance to Vixen Inlet. ✓

The last four were reported to Superintendent in letter dated July 8, 1916.

Two rocks- bare at M. L. L. W. , in Vixen Inlet, reported in advance noti  
Notice to Mariners from Seattle Sub-office dated, November 6, 1916. One  
of these rocks does not appear on this sheet as it is inside of Sunshine  
Island and is located by tangents to shoreline. *not plotted G.B.*

The long drag was used in the open water and the short drag to develop  
shoals. The tides were not strong in Ernest Sound.

In all cases unless specially noted in the records, one foot was de-  
ducted for lift when the hook up was less than sixty feet and two feet was  
deducted when the hook up was sixty feet or over.

The plotting on this sheet was done by R. C. Briggs, Aid, C. A. Egner,  
Aid and V. E. Endersby, D.O. The greater part of the inking was done by  
Mr. Endersby. The depth curves are entered for every foot change in depth  
for the first part of the work but for the latter part only every five feet  
above fifty feet.

U' day of sheet 2793 was plotted on this sheet to take advantage of  
the 1:20000 scale projection.

The shoreline at Lemesurier Point was transferred from Topographic  
Sheet A of this party (1916), but the remainder was taken from charts.

Respectfully submitted

*H. Bal Bartlett*  
Assistant, Coast & Geodetic Survey.

Approved

*John A. Daniels*  
Assistant, Coast & Geodetic Survey,  
Chief of Party.

STATISTICS TO ACCOMPANY HYDROGRAPHIC SHEET FOR ERNEST SOUND

Date	Day Letter	Vol. No.	Linear Miles	Angles	Sdg. Vol.	Sdgs.	Angles	
June	21	A	1	3.3	184	1	3	6
	22	B	1	5.0	199	1	2	4
	24	C	1	5.8	260	1	1	2
	26	D	1	3.7	219	-	-	-
	27	E	1	4.8	223	1	30	45
	28	F	1	5.2	247	-	-	-
	29	G	1	3.0	183	-	-	-
	30	H	2	4.5	198	1	8	6
July	1	J	2	3.3	197	1	5	10
Sept	23	K	2	5.9	255	-	-	-
	25	L	2	4.6	106	-	-	-
	26	M	2	5.9	182	1	1	4
	27	N	2	6.3	295	-	-	-
	29	O	2&3	4.6	205	1	4	9

SUB PARTY

	<del>25</del>	L	3	1.0	20	-	-	-
	26	M	3	3.2	176	-	-	-
	27	N	3	4.0	218	-	-	-
Total		14	3	74.1	3367	1	54	86

J.S.S. 1109

ADDRESS  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON, D. C.

REFER TO NO. 5-VEC

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

October 15, 1917.

Division of Hydrography and Topography: *W*

Division of Charts:

LIBRARY

Tidal reductions are approved in  
4 volumes of Sounding records for

Place with descriptive report  
of hydrographic sheet No. 3935

HYDROGRAPHIC SHEET 3935

*G.L.P.*

Drawing Section.

Ernest Sound, Alaska  
J.A.Daniels in 1916

Plane of reference is  
Mean lower low water, reading

2.9 ft. on tide staff at Lake Bay.

*L. P. Shidy*

Acting Chief, Section of  
Tides and Currents.



Verification Report of Wgd. 3935

The plotting was highly satisfactory as no errors of the same were found. The tide revision which changed the tide reducers affected the effective depths as plotted in a great many cases. As it was considered  $\$$  large an amount for the value involved these depths were not changed or corrected on the smooth sheet. The final tracing shows the corrected work.

All the shoals appear fully developed. The rock about 1/4 mi. Sx E of S Pass is not mentioned in the descriptive report. It was plotted as recorded. On the shoal - 5 ft. least depth - at entrance to Vicer Inlet a sounding of 21 ft. is also obtained. Where the latter sounding plot was subsequently swept by the drag set at 47 ft. Evidently the 21 ft. is misplaced due to wrong angles; there is no note to this effect in the records.

As the drag length was unusually large or most of this work the depth curves, <sup>or the line of buoys</sup> were not always a smooth curve. Thus the plotting of the curves had to be accepted as laid down by the field party.

Respectfully submitted

Alon Baur

Draftsman.

Hy

ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO.

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

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 3935

Surveyed in 1916.

Chief of Party: J. A. Daniels

Surveyed by: J. A. Daniels and H. R. Bartlett.  
Instructions dated Feb. 26, 1916.

Protracted and inked by: R. C. Briggs, V. A. Egner.

Verified and Area and Depth Sheet by: A. Baer

1. The depth and extent of dragging satisfy the specific instructions except that an adequate junction was not effected with sheet 3913.
2. The least water was found on all shoals discovered.
3. The overlaps are sufficient.
4. There are no splits on this sheet. However, additional work should be done at the northern limit of this sheet in the vicinity of Watkins Pt. in order to effect a proper junction with the adjoining sheet. The drag should also be carried closer to the small island about 3 miles north of Vixen Pt. The area covered by this sheet cannot, therefore, be considered as completed. See note below.
5. The 21 foot spot shown on the smooth sheet, as dragged over by a 48 foot drag is probably O. K. and the bight of the drag is probably in error, and should have been swung around a little to include the 21 foot sounding.

Reviewed by A. L. Shalowitz, October, 1922.

*Note:*

*Subsequent to reworking this sheet it was found that a small triangular split about 150 meters in extent was only partly covered by H-3793.*

*E.P.G.*