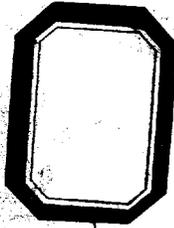


4761b W.D.



C. & G. SURVEY
L. & A
MAY 31 1928
Acc. No.

ORIGINAL

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State E. Alaska

11-5613

DESCRIPTIVE REPORT.

Wire Drag Sheet No. 4761b

LOCALITY:

VIEW COVE, TLEVAK STRAITS

1927

CHIEF OF PARTY:

H. A. Cotton

595 SV

4761b W.D.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

~~HYDROGRAPHIC~~ WIRE DRAG 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. 4761b

4761b

State S. F. Alaska

General locality . Flevak Straits

Locality View Cove

Chief of party . . H. A. Cotton

Surveyed by . . . H. A. Cotton

Date of survey . . May, June, July, L 1927

Scale 1 : 10,000

Soundings in . . . Feet

Plane of reference M. L. L. W.

Protracted by . A. N. S. . . Soundings in pencil by A. N. S. . .

Inked by A. N. S. . . Verified by

Records accompanying sheet (check those forwarded):

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

1 Sounding books, 4 Wire-drag books, _____ Photographs.

Data from other sources affecting sheet

Remarks: **Two volumes Wire-drag books are guide launch and two end launch records.**

DESCRIPTIVE REPORT

to accompany

Wire Drag Sheet No. _____ (Field No. 1)

View Cove and Approaches.

EXTENT: The drag work on this sheet covers View Cove and Approaches. The eastern and southern limits of the sheet reach well beyond the 100 fathom curve. North and west the work was carried over and beyond the shoaler ground opposite View Island and into the deep water leading to the head of the cove but this last reach of $2\frac{1}{2}$ miles to the head of the cove was not dragged. Practically the full width of View Cove was dragged, the limits being as close to shore as possible.

Besides the general area of View Cove and Approaches this drag work covers the following particulars:

(a) The work in View Cove was done in anticipation of development work by the Pacific Coast Cement Company, which company had selected a tentative dock site along the north shore of the Cove just outside the small cove opposite View Island. The area off this dock site was dragged as close to the proposed dock as possible.

(b) Just outside View Island along the south shore, there is a large bight which is the most promising anchorage area in this immediate vicinity. This area was included in the drag work.

(c) The width of the Cove is decidedly contracted opposite View Cove and the depths over this area are relatively shoal, decidedly shoaler than the general depths in View Cove, shoal enough to furnish anchorage depths but not shoal enough, as developed by the hydrography, to be critical. The drag work was extended up the Cove to beyond this relatively shoal area.

(d) A thousand meters off Reef Point there is a rock which covers at half tide. Between the rock and the point there is deep water and an attempt was made to drag this approach but was only partially successful on account of grounding (Position 20E). A strip about 200 meters wide was actually dragged through this approach but it is scarcely wide enough for navigational purposes. No further attempt was made to drag this area as it would have materially interfered with previous plans to shift headquarters to Keku Straits. This approach inside of Half Rock was not considered an essential

area to be dragged, not of sufficient importance to warrant altering the plans of the party as would have been necessary.

METHODS OF SURVEY: Three sixteenth inch bottom wire was used with wooden floats tested for buoyancy and single toelines (not bridled) but of sufficient length to prevent great lift.

The drag tests indicated lifts of from nothing to two feet; most of the time no lift was found and the maximum lift of two feet was found but on two occasions. The lift allowed in the records is the usual two feet.

On "E" day there was a fresh S.E. breeze and choppy sea but not sufficient to interfere with good dragging. Otherwise ideal weather conditions prevailed while this work was in progress. Accordingly it was unnecessary to make any allowance for swell. Little or no current was experienced during the work.

When dragging the channel opposite View Island, the guide launch end of the drag was kept south of the island while the end launch dragged close along the opposite shore till past the relatively shoal area and then wrapped the drag around the east end of View Island until it grounded when the drag position was determined by the position of the several groundings.

The two boat method of control was used throughout the work.

PLOTTING AND RECORDS: In addition to plotting the dragged strip, launch positions were plotted and the towline position indicated for all of the work. Placing the launch and towline position on the smooth sheet greatly facilitates a review of the completed work. It also is of material assistance in correctly placing the normal position of the drag, which position is considered to be that of the celluloid strip shaped to pass through the two launch positions and the two buoy positions.

All end launch positions were copied into the guide launch record. If simultaneous positions were not obtained, the end launch position most nearly coinciding with the guide launch position was copied opposite the guide launch position. The end launch position numbers were retained as originally recorded but simultaneous position of launches is

properly indicated by the short cross lines reaching in-drag from each position. Capital day letters indicate guide launch positions while end launch positions are simply numbered.

Grounds recorded are prominently indicated in the record by a red "G" with a red circle around the letter.

GROUNDS:

29A - 19B - 11C - These grounds were due to dragging too close inshore. When attempting to drag as close to shore as possible such occasional groundings are inevitable even with the lead going on the launch which was always done when in critical depths. These grounds were either in charted depths or so close to Half Rock that further investigating was not considered necessary.

40A - Drag grounded at 80 feet but later cleared with 48 feet.

27B - Drag grounded at 59 feet but pulled clear before soundings could be taken. Area later cleared with 48 feet.

14D- Position of bight which in this case defined the inshore limits of the dragged area.

32D - 35D - Grounded with 48 feet. Soundings of 45 feet and 31 feet found. Area not dragged later on account of position being close in to Half Rock.

10E - 20E - The towline of the end launch grounded at position 10E. A sounding of 29 feet was obtained at the ground while at the large buoy the depth was 50 feet. At position 20E, the bight of the drag grounded and a least depth sounding of 46 feet obtained.

As explained in the first part of this report, this area was not redragged.

RESULTS OF SURVEY: Under Limits there is a detailed description of the general features which were covered by this examination. The results of the work show that all these features were found deep and clear, no dangers to navigation being encountered.

In the case of the grounding at 27B the 59 foot depth at which the drag hung up and then came clear was considerably less than developed by the hydrography but later the area was cleared with 48 feet.

The 46 foot spot found inside Half Rock is considerably shoaler than the charted depths through this approach

but the approach can be considered safe for most vessels -
in fact as noted in the first part of this report a 200
meter strip was actually dragged through from deep water in
Tlevak Strait to deep water in View Cove.

Respectfully submitted,



Harold A. Cotton,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

STATISTICS FOR WIRE DRAG SHEET OF VIEW COVE, TLEVAK STRAITS, SOUTHEAST ALASKA.

DATE	Letter	No. of Positions	No. of Sdgs.	Miles of Drag	Vessel	
1927						
May	25	A	67	7.6	EXPLORER Scandinavia Tender #2	
			77	8.4		
May	26	B	59	8.2	EXPLORER Scandinavia Tender #2	
			71			
May	27	C	43	4.0	Scandinavia Tender #2 Motor Whaleboat	
			43			
June	3	D	36	4.5	Explorer Scandinavia Tender #2	
			66			
			11			5
July	20	E	20	2.3	Launch #67 Scandinavia Motor skiff	
			11			
			3			3
		----- 6	----- 867	----- 8	----- 35.0	

(11)

J.H.

Copy for Section of Field Records files.

June 19, 1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
volumes of sounding records for

HYDROGRAPHIC SHEET
4761b

Locality:

TINIAK STRAIT, S. E. ALASKA.

Chief of Party:

H. A. Cotton, 1927.

Plane of reference is

6.1 ft. on tide staff at **M L L W**
View Cove.

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.