

4628 WIRE DRAG

WIRE DRAG

4628
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Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: S. E. ALASKA
11-5013

DESCRIPTIVE REPORT.
Field Letter P.
Wire Drag Sheet No. 4628

LOCALITY:
CHATHAM STRAITS
Cape Ommaney to Port Alexander

1926

CHIEF OF PARTY:
F. B. T. Siems

DESCRIPTIVE REPORT

to accompany Wire Drag Sheet "P"
of
CAPE OMMANEY and Port Alexander.

EXTENT:

This sheet comprises the wire drag work from Cape Ommaney to Port Alexander. A short drag was taken through the passage between Wooden Island and the mainland, covering the nine fathom shoal to a depth of 51 feet. Additional work was also accomplished off Port Alexander in connection with work done in that locality during the previous year.

Methods:

The usual wire drag equipment and practise were used as described in previous reports. In the absence of drag tests an arbitrary correction of one foot was applied. The two boat control was used throughout.

Plotting and Records:

Position 11 A- Line does not end as N was aground and E. L. swung around ending at position 17 A (End Launch position)

The excessive lift on C day was due to abnormal speed against strong current.

Position 21 D- F buoy caught in kelp possibly aground, but line does not end on position 28 D (G.L.) as it first appears. E. L. cut loose from drag leaving F aground and took end of drag from G. L. without taking strain off drag. Guide Launch then cleared inshore Buoy F, picked up towline, reversed, and then resumed line without causing split. The inshore current was in a northerly direction while the offshore current was in a southerly direction and stronger than the former, this caused the drag to be under strain while keeping the offshore end of the drag in position while clearing the inshore end of the drag.

RESULTS OF SURVEY

The channel between Wooden Island and the mainland was proven to a depth of 51 feet.

A 37 ft shoal in a general depth of 9 to 10 fathoms was found off Port Alexander, this shoal was covered by a drag of 36 feet?

List of Grounds

- No. 1- Pos. 11A, grounded 440 meters E from signal ALEX, effective depth of drag 82 feet, not passed over with a shoaler drag no sounding taken, as it was comparatively close to shore.
- No. 2- Pos 28 C, grounded 40 meters N from signal NED (Wooded Island) No soundings taken. Effective depth of Drag 44 feet.

Lists of Grounds, cont.*

- No. 3.- Position 21 D, grounded 250 meters from signal Lite - S. E.
Probably upright fould in Kelp, effective depth 34 feet.
- No. 4.- Position 34 D, grounded 205 meters W.S.W. from ALEX. Effective
depth 45 feet, least water 37 feet, later passed over with an
an effective depth of 36 feet.
- No. 5.- Position 6 E, grounded 100 meters E from ALEX on known shoal
effective depth 39 feet.
- No. 6.- Position 7 E, grounded on same shoal as position 34D. Effective
depth 39 feet.
- No. 7.- Position 9 E, grounded 205 meters N.W. from ALEX on known shoal,
effective depth of drag 39 feet.
- No. 8.- Position 19E, grounded 60 meters S from ALEX on known shoal,
effective depth of drag 36 feet.
- No. 9.- Position 21E, grounded on known shoal, effective depth of
drag 36 feet.

Prepared by G. R. Shelton, Aid.

Approved:



F.B.T. Siems, Chief of Party.

| Statistics for Sheet "P" | | | | | |
|--------------------------|-----|-----------|------|-----------------|-----------|
| Date | day | Positions | | Miles (statute) | soundings |
| | | G.L | E.L. | | |
| 1926 | | | | | |
| Jul 9 | A | 11 | 17 | 1.0 | 1 |
| 10 | B | 49 | 61 | 9.2 | |
| Sep 16 | C | 29 | 47 | 2.5 | |
| 17 | D | 55 | 47 | 2.5 | |
| 22 | E | 30 | 17 | 1.0 | |
| T O T A L | | 174-189 | | 17.2 | 1 |

Section of Field Records
Report on Hydrographic Sheet (Wire Drag) No. 4628
Cape Ammaney to Port Alexander, S. E. Alaska
Surveyed in 1926
Instructions dated March 9, 1926

Chief of Party - F. B. J. Swins
Surveyed by - G. R. Shelton
Plotted and subdivision of areas by - G. R. S.
Soundings verified and inked by - R. L. Johnston
Drag work verified by - J. T. Jarman

1. The records conform to the requirements of the General Instructions.
2. The smooth sheet was completed to the extent prescribed in the General Instructions. Generally speaking the plotting was accurately done and with one exception the overlaps are generous.
3. The specific instructions were adhered to by the field party.

4. No further drag work is necessary in this area.

Remarks:

The drag strip beginning at pros. 19, 21 day was revised by the office draftsman so that the light of the drag is to the north. When so plotted the position of the light agrees with the notes at the bottom of page 45 of the guide launch record (Vol. 2) and is on the side of safety.

During progress of the above strip, the 7 buoy either grounded or caught in kelp at 1:20 P.M. and the Guide Launch continued until 1:40 P.M. At 1:40 the launches changed ends and the field party contended that tension was maintained between the guide launch and the ground while the end launch was picking up the guide launch tow line. This assumption, although logical is not certain and in order to be on the side of safety the line was broken. [After accepting the above assumption, the field party erroneously plotted the strip because

the inshore limit of the strip was extended from the second ground (34 feet at 1:20 P.M.) to Guide Launch pos. 30 (time 2:24) and no account was taken of the Guide Launch's movements in clearing the drag from the above mentioned ground. Guide Launch pos. 29 was not shown in the field plotting. In view of the discrepancies just mentioned, it would appear that the field party was not certain as to just what did happen in the above case.] Before changing the above, the office draftsman conferred with wire drag authorities and it was decided that the step would be on the side of safety.

The new line begins at G.L. pos. 29 (time 2:25) The light was in the shape of an S with the inshore half to the south and the other half slightly to the north. It was considered safe to assume that the strip begins as a straight line since the drag had to cover the area in order to reach its northerly position. This assumption seems contradictory to the one made earlier but in view of the fact that in the beginning, the strip was not intended to be broken and that some tension was maintained on the drag, it is reasonably safe.

In plotting the above assumptions, there occurs a small area (checked on the accompanying tracing) which was not covered by the 54 foot drag strip. This area was in all probability covered during the manipulation of the drag but due to the safety assumptions above was not shown as such. It was later covered by a strip dragged to 36 feet but the overlap with an 83 foot strip which ends in the same vicinity is not sufficient. Here again, the overlap was probably covered by a ^{54 foot drag} but was shown as above in order to be on the safe side. The above mentioned area is in Lat $52^{\circ} 14' 26.6''$ N and Long. $134^{\circ} 38' 44''$ W.

The areas as subdivided on the strip beginning at 19 D are approximate in order to be on the safe side. On this strip the drag was manipulated back and forth and the paths of No. 1 and No. 2 buoys is represented approximately by the dotted black and solid black lines respectively. If the above is true the

shaded area on the tracing would have a negative drag depth of 44 feet (that is the drag backed over this area to a depth of 44 feet) and the cross hatched area a drag depth of 54 feet. These areas were shown on the sheet as dragged to depths of 34 and 45 feet respectively which is on the side of safety.

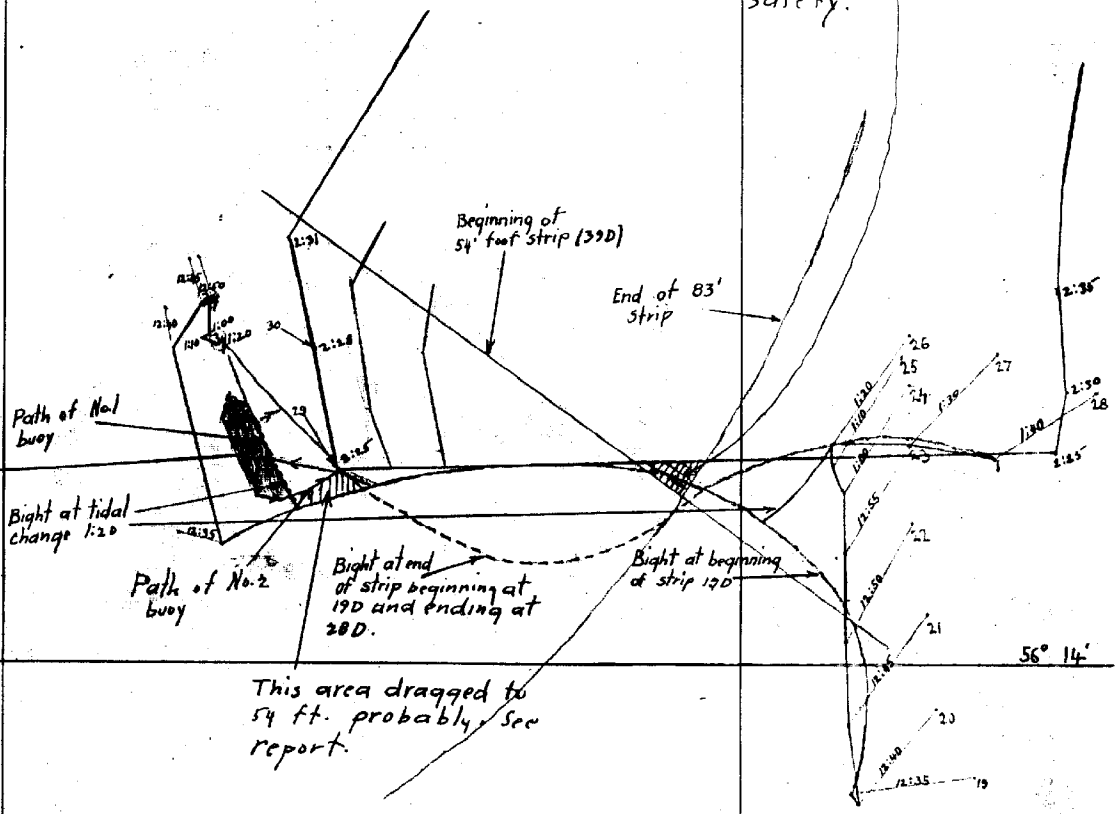
A tracing of the above strip with appropriate notes accompanies this report.

Report respectfully submitted by
J. J. Jarman.

134° 38'

56° 14'

This area dragged to 44' ft. probably due to drag backing up. Shows on sheet dragged to 34 ft. see report.



Probably covered by 54 ft. drag but shown at 36 for safety.

This area dragged to 54 ft. probably. See report.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4628 W.D

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet . . 343
Number of positions checked . 200
Number of positions revised . . 17
Number of soundings recorded . . 1
Number of soundings revised . . 0
Number of signals erroneously
plotted or transferred 0

Date: - - May 1, 1930 - - - - -

Cartographer: - - J. J. Jarman - - - - -

SECTION OF FIELD RECORDS

Review of Wire Drag Survey, H. 4628.

Cape Ommaney to Port Alexander, Chatham Strait, S. E. Alaska.

Surveyed in 1926

Instructions dated May 10, 1926. (Explorer)

Chief of party - F. B. T. S iems.

Surveyed by - G. R. Shelton.

Drag work plotted by - G. R. S.

Subdivision of areas by - G. R. S.

Soundings and groundings plotted by - G. R. S.

Soundings and groundings verified and inked by - R. L. Johnston.

Drag work verified by - J. T. Jarman.

Area and Depth tracing by - J. T. J.

1. The records conform to the requirements except that no bottom characteristics were entered for the soundings obtained.
2. The plan and extent of the survey satisfy the specific instructions except that drag depths, under fifty feet, are not always within three feet of the bottom.
3. The Area and Depth tracing, which was prepared in the office, has been verified and may be considered correct.
4. The junction with the wire drag survey, H. 4514 is satisfactory.
5. Comparison with charts.

None of the soundings, shown on Chart 8253, have been disproved by the drag. The 9 fathom spot, about 200 meters northwest of the north end of Woodin I., was cleared with an effective depth of 51 feet.

On Chart 8261, no soundings have been disproved by the drag, but it is noted that a $3\frac{1}{2}$ fathom sounding shown on Chart 8261 in Lat. $56^{\circ}14'.63$, Long. $134^{\circ}38'.43$ was apparently passed by a narrow drag strip with an effective depth of 39 feet. The drag strip ends after having passed the sounding and as the shape of the bight of the drag is uncertain the sounding is not discredited. An investigation of the $3\frac{1}{2}$ fathom sounding showed that this sounding as well as the $2\frac{1}{2}$ fathom sounding, 40 meters east of it, were incorrectly plotted on H. 4392a. They have been shifted to their correct position on H. 4392a and should also be changed on Chart 8261. The results of this survey, H. 4628, have not been applied to Chart 8261. The soundings and groundings should be charted and the tinted area extended to conform to the limits of the drag work on H. 4628.

6. The groundings of the end buoy, effective depth 34 feet, off the entrance to Port Alexander from 200 to 250 meters S.E. of signal Lite, are very doubtful. The note in the end launch record (pos. 21d) reads "Big buoy not moving but not lying flat, possibly caught in kelp" and there is a statement in the descriptive report that "Probably upright fouled in kelp." These depths fall just outside the ten fathom curve and an effort should have been made to obtain soundings. In the absence of any soundings it is necessary to carry these depths on the chart in the interests of

H. 4628-2.

safety until disproved. When the commercial importance of Port Alexander should require deeper draft ships, it would be desirable to determine whether these depths exist.

7. With the exception of the points noted, this survey is considered satisfactory.

8. No additional dragging is required but a further investigation of the area, described in par. 6, is recommended when a convenient opportunity arises.

9. Reviewed by - R. L. Johnston.

L. O. Colbert.

Examined and approved:

L. O. Colbert,
Chief, Section of Field Records.

Chief, Division of Charts.

Chief, Section of Field Work.

Chief, Division of H. & T.

T. J. H.

June 7, 1927.

(11)

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 4628

Locality: S. E. ALASKA, CAPE ORMANBY -- PORT ALEXANDER

Chief of Party: F. S. S. Sims, 1926.

Plane of reference is M L L W

5.1 ft. on tide staff at Port Alexander.

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. W. ...

Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A.
APR 14 1927
Acc. No.

REG. NO.
4628

~~WIRE DRAG~~
HYDROGRAPHIC TITLE SHEET

~~WIRE DRAG~~

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

Field No. Letter P

REGISTER NO. ⁴⁶²⁸
4628

State S. E. ALASKA

General locality CHATHAM STRAIT

Locality Cape OMLANNEY to Port Alexander

Scale 1/10,000 Date of survey July⁵ to Sept²², 1926

Vessel EXPLORER

Chief of Party F. B. T. Siems

Surveyed by G. R. Shelton

Protracted by G. R. Shelton

Soundings penciled by _____

Soundings in ~~fathoms~~ feet

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by G. R. S.

Inked by _____

Verified by _____

Instructions dated March 9, 1926., 192

Remarks: _____