

83  
S.H.A.  
3685

# 3685

C. & G. SURVEY  
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Chart No. 8102-Z

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

*J. H. Tuttleman*  
Superintendent.

State: *Alaska*

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DESCRIPTIVE REPORT.

*Hyd.*  
Sheet No. **3685**

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LOCALITY:

*Nichols Passage*  
*Port Chuteau and*  
*Approaches*

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1914

CHIEF OF PARTY:

*J. A. Daniels*

11-4045

# 3685

WIRE DRAG SURVEY

3685.

Port Chester,

S. E. ALASKA.

Metlakatla Harbor and Approaches

Oct. 6-9,

1914.

Scale  $\frac{1}{10,000}$ .

John A. Daniels, Aid.-Chief of Party.

Officers:

R. V. Miller, Aid, In charge of Launch Arnold, observing  $\text{LR}$  and plotting, in charge of triangulation.  
Thos. Jamieson, Mate, Observing  $\text{LR}$  and plotting on G. L. CHEHALIS.  
L. C. Dyke, D. O. In charge of E. L. VIKING.  
W. H. Kearns, D. O. Observing  $\text{L}^t$  on G. L.  
G. C. Jones, D. O. Observing  $\text{L}^t$  and assisting in triangulation.  
Lindley Davis, Mate, Assistant observer and coxswain CHEHALIS.

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J. A. Talbot, Jr. }  
J. C. Johnson, } Recorders.

DESCRIPTIVE REPORT  
Hydrographic Sheet #4 <sup>3685</sup>

The examination on this sheet includes all that area in Port Chester south of Hub Rock and its approaches including that part of Nichols Passage lying east of Warburton Island and Kelp Rocks and extending from a line 1200m. south of Cedar Pt. to a line 600m. south of Driest Pt.

The work was plotted on a  $\frac{1}{10,000}$  scale and all data for signals was secured from the party of C. G. Quillian, Asst. commanding the STR. MCARTHUR.

The principle shoals discovered are as follows:

The reef off Scrub Island extends much farther than is shown on the chart, a sounding of  $36\frac{1}{2}'$  being secured 730m.  $342^{\circ}$  true from the Metlakatla dock. The sounding is 80m. outside the 10fm. curve.

The  $14'$  shoal off Kelp Rocks <sup>discovered</sup> during the <sup>1914</sup> season by the party of the STR. MCARTHUR was developed. The reported  $14\frac{1}{2}'$  depth upon this rock was reduced to  $10\frac{1}{2}'$ , this sounding being secured 760m.  $35^{\circ}$  true from the charted position of buoy M2. The drag was passed over the rock at a depth to verify this sounding.

No other dangers were discovered in this locality.

## LIST OF PLANE TABLE POSITIONS

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Port Chester

Hydrographic Sheet #4

Wire Drag Party, 1914

John A. Daniels, Chief of Party.

OBJECT	LAT.	D.M. (meters)	LONG.	D.M. (meters)
Crow	55 08	685	131 35	267
Dead Stump on Rock North of Channel		(1170)		(796)
Boat	55 07	873	131 33	796
West Gable Boathouse at Metlakatla.		(982)		(271)

STATISTICS

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Port Chester, S. E. Alaska.

Hydrographic Sheet #4

Wire Drag Party, 1914.

John A. Daniels, Chief of Party.

Date 1914	Day	Miles of drag line	Angles	Soundings
Oct. 6	A	3.00	138	
" 7	B	7.75	300	
" 8	C	4.00	270	2
" 9	D	<u>4.75</u>	<u>294</u>	<u>4</u>
		19.50	1,002	6

VEC  
Feb. 5, 1915  
L. P. S.

HYDROGRAPHIC SHEET 3685.

Port Chester and approaches, Nichols Passage, Alaska,  
by Asst. J. A. Daniels in 1914.

TIDES.

	Port Chester ft.
Mean lower low water, or plane of reference on staff	6.3
Lowest tide observed " "	2.4
Highest " " " "	24.3
Mean range of tide	12.7

EXAMINATION OF HYDROGRAPHIC SHEETS  
*Sections* by the  
DIVISIONS OF FIELD WORK AND FIELD RECORDS.

Sheet No. 3685- W. D

1. + Are numbers of hydrographic sheets adjoining limits of work shown? ..... *No.*
2. Are transferred soundings of adjacent hydrographic sheets made to show that ground has been covered? .....
3. + Is sheet of proper size? ..... *yes*
4. + Is sheet well laid out, no additions required? ..... *yes*
5. Are limits of hydrography regular? .....
6. + Are positions of signals accentuated by light dot of black ink to assist plotting? ..... *No*
7. + Are tidal stations plotted on sheet? ..... *No. but is stated*
8. Is area of work completely covered? .....
9. Are critical soundings and dangers shown distinctly? .....
10. + Is the control good? ..... *yes*
11. + Are positions of signals clearly shown? ..... *yes*
12. Are soundings well distributed? .....
13. Are shoals carefully and sufficiently developed? .....
14. Do soundings cross satisfactorily? .....

- 15. Is existence or non-existence of a reported shoal determined?  
.....
- 16. Is least sounding over bar probably determined by check soundings or diagonal sounding lines crossing same? .....
- 17.+ Are projection and plotting checked? *yes* .....
- 18. Is the scale of this sheet sufficient to show the necessary details in the navigable channels? .....
- 19. +Is the shoreline shown? *yes* .....
- 20.+ Is there an accompanying list of plane table or sextant positions of signals? *yes* .....
- 21. Has sufficient attention been given to the development of channel? .....
- 22. Are sufficient bottom characteristics shown? .....
- 23. Are sounding lines normal to coast? .....
- 24. Have suspicious soundings been investigated? .....
- 25. Are ranges or bearings given for important shoals? .....
- 26.. Are sailing directions given? .....



- 27. Is the general hydrography in the entire area properly developed? .....
- 28. Are shallow channels for motor boats sounded? .....
- 29. Is there a note as to coloration of water in or near mouths of rivers and bays? .....
- 30. Is there any information given as to obtaining fresh water? ..
- 31. Are there proper intervals between soundings? .....
- 32. Are projecting points of land and reefs determined by sufficient lines with soundings at close intervals run at right angle to direction of points? .....
- 33. Is there sufficient data to draw depth curves? .....
- 34. Are shoal areas remote from shore properly developed by independent system of buoy signals placed in the vicinity of shoal? .....
- 35. Are soundings obtained at docks in harbor? .....
- 36. \*Is there a full list of data effecting sheet given? *yes* .....
- 37. Are description of hydrographic signals and marking of same recorded? .....
- 38. Is there a list of land marks given? .....

- 39.+ Does descriptive report give date of instructions? *No* .....
- .....
- 40. Are small islets and rocks distinctly shown? .....
- 41. Is information relative to anchorage given? .....
- 42.+ Are survey methods explained sufficiently? *Yes* .....
- 43. Are geographical names given on sheet? .....
- 44. Are coast pilot notes given? .....
- 45. Is the unit of soundings given in title? .....
- 46. Are sufficient depth curves shown? .....
- 47. Are aids to navigation shown? .....
- 48. Are grass or kelp indications shown? .....
- 49. Are sailing courses shown on sheet? .....
- 50. Is descriptive note given as to visibility of shoals? .....
- .....
- 51. Are dangers fully described in descriptive report? .....
- .....
- 52. Is the character of reefs described on sheet? .....
- .....
- 53. Are beaches indicated where vessels in distress could be safely beached? .....
- 54. Are standard symbols used in drafting? .....
- 55. Is information relative to currents given? .....
- 56. Is there a statement as to certainty or probability of least depth over dangers given? .....
- 57. Is the existence of certain shoals doubtful? .....
- 58. Is a general description of coast given? .....

- 59. Is information relative to commercial importance given? .....  
.....
- 60. Does the descriptive report cover one or a moderate number of  
sheets? .....
- 61. Are descriptions of headlands given? .....
- 62. Is the nature of shoals whether coral rock or sand shown on  
sheet? .....
- 63.+ Is the position of the tide gauge well selected? Is the tidal  
data sufficient for the reduction of soundings over the area  
of the sheet? ..... *yes* .....
- 64.+ Have projection lines been numbered around all the edges? ...  
..... *yes* .....
- 65.+ Has the geographic position of one of the triangulation points  
on the sheet been inked near the bottom edge of the sheet?  
..... *yes* .....
- 66. Was the speed of the sounding boat such as to allow vertical  
readings of the leadline? .....
- 67. Were lines of soundings run along the axis of narrow channels?  
.....
- 68. Have rocks or shoals seen from the sounding boat in passing  
been definitely located? .....
- 69. Have charted shoals reefs, or rocks been investigated? .....
- 70.+ Have sounding records been kept in approved form? ..... *yes* .....

- 71. Are Wire drag surveys required? .....
- 72. Is the area between the soundings taken and the shore indicated or described as being covered by reefs, etc. as the case may be?  
.....

Other Remarks .....

.....

.....

The forgoing points marked by a cross (+) and the following additional points are to be considered for wire drag hydrographic sheets.

- 73. What additional areas, if any, in the locality covered by the sheet should be dragged? *Principal Entrance*  
*well covered* .....

- 74. Number of small areas inside limits of work missed by drag (few, moderate number, numerous) *none* .....

- 75. Are shoals discovered with drag clearly shown? *yes* .....

- 76. Were shoals later covered by drag set at suitable depth? *as much as practicable* .....

- 77. Are all areas missed by drag clearly shown? *none* .....

- 78. Are overlaps ample? *yes* .....

- 79. Do effective depths conform to instructions under which the work was done? .....

- 80. If work was done before present practice as regards effective depths was adopted, should the area be re-dragged to conform to the present practice? *Probably ample* .....

- 81. Are all shoals discovered shown on current issue of chart? *yes* .....

*J. H. Hawley*

Hyd. # 3685

The work on this sheet was plotted in the field, verified and traced in the office.

The area dragged was completely covered, the work well executed, and the records kept in good shape.

The dangers to navigation are described in the report of the Chief of the Party and Let. #356 of 1914 and Let. #37 of 1915.

J. B. Shkela

5/4-1915

6-6-60 - New Chart 8086 - M. Rogers - Completely applied