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Treasury Department,  
U. S. COAST AND GEODETIC SURVEY.

*O. H. Litzmann.*

Superintendent.

State: *Alaska*

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## DESCRIPTIVE REPORT.

*Hyd. C.*

Sheet No. *2664*

LOCALITY:

*Prince of Wales Id. -*

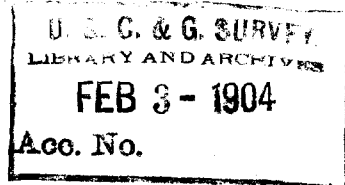
*Entrance to Davidson*

*Inlet.*

1903

CHIEF OF PARTY:

*C. F. Dickens, Coast*



DESCRIPTIVE REPORT.

HYDROGRAPHY

of

ENTRANCE to DAVIDSON INLET,  
PRINCE of WALES ISLAND,  
SOUTH EASTERN ALASKA.

Scale 20,000.

Steamer "Gedney",  
E.F. Dickins, Assistant C. & G. Survey  
Commanding.

September 24th to 30th 1903.

Descriptive Report, Hydrography, (1)

The area covered by this sheet includes Warren Channel, Iphigenia Bay and the Entrance to Davidson Inlet. The survey is not complete but is more in the nature of a reconnaissance, the sounding lines being run far apart so as to give only a general idea of the character of the bottom and the dangers were not thoroughly developed, Our season was so short that we had not time to make a detailed survey and our main object was to locate the position of the Salmon Saltery at Holbrook and obtain what data we could that would enable us to get out blue prints to serve as a guide to vessels desiring to reach that place.

The general character of the bottom is very irregular and rocky, the water is generally deep but shoals abruptly in many places from 100 to 30 or 40 fathoms.

The soundings were generally taken about a quarter of a mile apart in water which did not exceed 30 or 40 fathoms, but in greater depths they were taken with less frequency, a position was generally determined with each sounding, Where the water was noticed to shoal the lines were run closer together and the soundings taken much oftener but we had no time to make a thorough investigation.

The Plane of Reference used in the reduction of soundings is the mean of 18 Lower Low Waters as obtained from actual observations on a tide staff at Port Alice.

The tidal currents seemed very slight and were scarcely noticeable except in Warren Channel where it runs from about 2 to 3 knots per hour as a maximum rate.

The main entrance to Davidson Inlet is about 2 miles in width and is apparently free from dangers, except Whale Rock, which bares about half tide and lies about half a mile South, by compass, from

Descriptive Report, Hydrography, (2)

Whale Head and a reef lying about half a mile S.E.  $1/2$  E. magnetic, from Whale Head and on which there is a heavy break even with a moderate swell, the least water we found on this reef was 3- $1/2$  fathoms but I do not consider it thoroughly developed. By keeping in mid channel all dangers will be avoided.

Port Alice, on the South side of Davidson Inlet, about a mile inside the entrance, is an arm or bay about 2 miles long, by about a mile wide at its mouth and about a quarter of a mile in width at its head. About a half mile inside the entrance, near the center of the arm, there are two reefs or ledges which bare at low water and along the Northeast shore the ground seem rocky and foul and should be avoided. In entering this arm give Surf Point a berth of about half a mile and when within the arm favor the South shore to within about half a mile of its head where a good anchorage will be found in from 10 to 15 fathoms, soft bottom, This anchorage is safe in any weather, the reefs at the entrance prevent any swell from entering, the holding ground is good and the surrounding hills give protection from all winds. Several small streams enter near the head of this arm enabling vessels to obtain fresh water without much difficulty.

Cone Bay, on the South side of Iphigenia Bay, has not been carefully examined but appears to be rocky. It is open to the Westward and on account of the heavy swell which is generally rolling in would make a very poor anchorage in any weather.

Gull Island, also on the South side of Iphigenia Bay and about four miles South of Cone Bay, is a bare rocky islet and shows white on account of the bird lime which covers it, About 1- $1/4$  miles to the North and Northwest of Gull Island there is quite an extensive reef which has not been developed as yet.



Descriptive Report, Hydrography, (3)

The Northern side of the Entrance to Davidson Inlet is formed by a chain of small islands through which there are two passes, available for small boats only, these passages have not been examined as yet, but appear rocky and foul and the sea seems to break all across their entrance with a heavy swell. The largest and most Southerly of these islands is about 490 feet in elevation and on its South side is very precipitous, with cliffs rising from the waters edge to a height of from 50 to 300 feet, these cliffs make this point very easily distinguished and a good land-mark for entering the Inlet.

Off the islands on the North and East side of Iphigenia Bay there are numerous outlying sunken rocks and reefs which have not been investigated as yet.

The shore line is very rough and rocky with ledges running out some distance beyond the high water mark and in most places there is considerable kelp growing close in along shore.

Halibut Harbor, on the South side of Koscuisco Island, is a very good anchorage for small vessels and is well protected in Northerly weather, It is frequently used by the halibut fishing schooners, but owing to the numerous rocks and reefs outside its entrance I do not recommend it until it can be thoroughly examined.

Warren Cove, on the East side of Warren Island, is a semi-circular cove about three fourths of a mile in extent and is an excellent summer anchorage, in about 6 fathoms of water with good holding ground, the entrance is free of all dangers, by keeping in mid-channel but the cove is open to the Southward and Eastward and quite a heavy swell rolls in during Southerly weather, We were obliged to clear out in a hurry during a South-Easter and seek

Descriptive Report, Hydrography, (4)

shelter in Port Alice.

The country round the Inlet is heavily timbered with cedar, fir and spruce with a dense under-brush. Some fine marble has been discovered on the shores and islands of the Inlet but none of the quarries have been developed as yet.

There are no inhabitants in the vicinity except at Holbrook, which is situated at the head of the North-west arm of the Inlet about 14 miles from the entrance and where there is a salmon saltery, a small saw-mill and a few houses for the employees.

Steamers enter the Inlet occasionally during the summer months to bring supplies to and take away the salted salmon from Holbrook, other-wise there is no commerce at present.

To enter Davidson Inlet from Sumner Strait keep a mid-channel course through Warren Channel, into Iphigenia Bay, until Black Rock is abeam, about a mile distant on the port hand, then steer for Cone Peak, or E. by S.  $1/2$  S. magnetic, until the S.E. tangent of Whale Head bears N.  $1/2$  W. magnetic, then change course and keep in mid-channel through the Entrance and if bound for Holbrook head for Nipple Peak or N.  $1/2$  E. magnetic, up the Inlet passing the Bear Islands, 11 miles from the Entrance then favoring the Eastern shore of Holbrook arm until abreast of the Saltery where a good anchorage will be found.

*E. J. Dickins*  
*Assistant C. & G. Surveyor*  
*Chief of Party.*

Department of Commerce and Labor

Hyd Sheet No. 2664.

Position numbers should have been  
laid farther away and the soundings  
lotted upon the positions.

Several corrections were made in the  
survey.

The records were kept in a satisfactory  
manner.

A. L. Simmons

May 28 1906



DEPARTMENT OF COMMERCE AND LABOR  
 COAST AND GEODETIC SURVEY  
 U. S. TIDESMAN, SUPERINTENDENT.

**PRINCE OF WALES ISLAND**  
**ENTRANCE TO DAVIDSON INLET**  
 ALASKA

Surveyed by R. F. Healy, Assistant, Chief of Party  
 September, 1896-1898  
 Scale 50,000

Notes  
 The numbers on soundings are in fathoms unless otherwise stated.  
 The numbers in circles are in feet.  
 The numbers in squares are in meters.  
 The numbers in triangles are in yards.  
 The numbers in diamonds are in rods.  
 The numbers in stars are in miles.  
 The numbers in crosses are in kilometers.  
 The numbers in pluses are in centimeters.  
 The numbers in asterisks are in inches.  
 The numbers in dots are in millimeters.  
 The numbers in dashes are in micrometers.

Table No. 1, 1896-1898, Soundings, Levels, and Tides

Station	Soundings	Levels	Tides
1	10	10	10
2	15	15	15
3	20	20	20
4	25	25	25
5	30	30	30
6	35	35	35
7	40	40	40
8	45	45	45
9	50	50	50
10	55	55	55
11	60	60	60
12	65	65	65
13	70	70	70
14	75	75	75
15	80	80	80
16	85	85	85
17	90	90	90
18	95	95	95
19	100	100	100
20	105	105	105
21	110	110	110
22	115	115	115
23	120	120	120
24	125	125	125
25	130	130	130
26	135	135	135
27	140	140	140
28	145	145	145
29	150	150	150
30	155	155	155
31	160	160	160
32	165	165	165
33	170	170	170
34	175	175	175
35	180	180	180
36	185	185	185
37	190	190	190
38	195	195	195
39	200	200	200
40	205	205	205
41	210	210	210
42	215	215	215
43	220	220	220
44	225	225	225
45	230	230	230
46	235	235	235
47	240	240	240
48	245	245	245
49	250	250	250
50	255	255	255
51	260	260	260
52	265	265	265
53	270	270	270
54	275	275	275
55	280	280	280
56	285	285	285
57	290	290	290
58	295	295	295
59	300	300	300
60	305	305	305
61	310	310	310
62	315	315	315
63	320	320	320
64	325	325	325
65	330	330	330
66	335	335	335
67	340	340	340
68	345	345	345
69	350	350	350
70	355	355	355
71	360	360	360
72	365	365	365
73	370	370	370
74	375	375	375
75	380	380	380
76	385	385	385
77	390	390	390
78	395	395	395
79	400	400	400
80	405	405	405
81	410	410	410
82	415	415	415
83	420	420	420
84	425	425	425
85	430	430	430
86	435	435	435
87	440	440	440
88	445	445	445
89	450	450	450
90	455	455	455
91	460	460	460
92	465	465	465
93	470	470	470
94	475	475	475
95	480	480	480
96	485	485	485
97	490	490	490
98	495	495	495
99	500	500	500
100	505	505	505

Register No. 2964

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O. H. Tittmann

SUPERINTENDENT.

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LOCALITY,

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OBJECT,

Hydrographic sheet no. 2664

CHIEF OF PARTY,

E. J. Dickins

YEAR,

1904

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