

# 3710

C. & G. SURVEY,  
LIBRARY AND ARCHIVES  
FEB 24 1915  
Acc. No. \_\_\_\_\_

Diag. Cht. No. 8102-2

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

Superintendent.

State: *S.E. Alaska*

## DESCRIPTIVE REPORT.

Hydrographic Sheet No. 3710

LOCALITY:

*Port Chester  
Annette Id  
S.E. Alaska*

1914

CHIEF OF PARTY:

*C. G. Quillian*

11-4045

3710

1914  
original

Descriptive Report  
of  
Hydrographic Survey  
of  
Port Chester, Annette Id  
S.E. Alaska  
Str McArthur  
C. Y. Quillian  
Chief of Party  
1914

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

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

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SHEET OF PORT CHESTER.

---

PORT CHESTER was resurveyed by the party of the Steamer "McARTHUR," in 1914. The scale selected was 1-10,000. Points were taken from triangulation the previous year by Assistant Derickson, and other signals were located by plane table and by the triangulation up Nichols Passage. Sounding lines were spaced 100 to 200 meters apart, and soundings were spaced 50 to 100 meters apart. In depths over 30 fathoms the soundings were spaced about 100 meters.

Port Chester is an indentation in Annette Island, and is about two miles deep by two miles wide. It lies between Village Point and Driest Point, Village Point on the southern side and Driest Point on the northern side. In the center of the bay are numerous islands, some of which are wooded, and extensive rocky ledges. The greater part of these ledges bare. The shoreline is generally rocky. Trees grow close to the shore over the greater part of the harbor.

DRIEST POINT is 252 feet high at the northern end of the bay. It is heavily wooded. Eastward from Driest Point there are rocky ledges, which bare to a distance of 100 yards offshore, and here and there are rocks a slightly greater distance from shore.

HEMLOCK ISLAND lies in the northern part of the bay. It is wooded, and is about 250 feet high. A fringe of reefs extend about 200 yards off the eastern and southern shores.

TROUT CREEK empties into the northeastern part of the harbor, and drains Trout Lake. It bares across the mouth at low water. This stream is a red salmon stream and is fished extensively during the run of red salmon.

A small stream drains Melanson Lake and enters a half-mile southward of Trout Creek. It is not conspicuous.

In the southeastern part of the harbor is a conspicuous waterfall which drains Chester Lake. A considerable volume of water is present. In a distance of about one quarter of a mile this stream falls some 800 feet, and the greater part of which is visible from the water. The base of the falls is very conspicuous.

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SHEET OF PORT CHESTER.

PURPLE MOUNTAIN, which is a bare hill some 2,500 feet high, and the name is descriptive. Purple Mountain is just southeast of the bay.

LEADVILLE MOUNTAIN, just northward of Purple Mountain.

VILLAGE POINT is low and sandy, with a gravel beach on the eastern shore. This gravel is small size, and this beach is an excellent place on which a vessel might be beached for repairs or for cleaning bottom. The slope is gentle on the eastern side.

METLAKATLA is an Indian Mission village located on Village Point. The streets are laid out nearly north (Mag). There are a considerable number of houses, a number of which are two storys, and quite pretentious. The church has two square towers, and is conspicuous from Nichols Passage. The Town Hall is a peculiar 12 sided building, and has 12 gables, and a flag pole in center. There is a wharf on the eastern side of Village Point. A cannery building is on this wharf. There is now no pipeline on the wharf. The cannery was not operated last year. There is a saw mill 1/4 mile eastward of the cannery. There is no wharf at the saw mill, and lumber for vessels must be floated off. One-half mile eastward of the town is a boat house built by the Coast and Geodetic Survey for storing the launches of the Steamer "GEDNEY." At the north end of this building there is a high gable, painted white, and is conspicuous. At Metlakatla is a large store, and considerable variety of supplies are carried. There are several smaller stores. There is a blacksmith shop. Several boat builders are located here, and the Indians have a reputation for building excellent small boats. The natives are industrious beyond the average of their race.

~~Westward~~  
Eastward of Village Point are extensive reefs which bare to a distance of 1/4 mile offshore. At high water these reefs are covered, with the exception of one rock which is 1,500 meters, <sup>251</sup>~~200~~, True, from Village Point.

250°  
GULL ISLAND is a small rounded, wooded island; elevation to tops of trees, about one hundred and fifty feet. Off this island are numerous rocky reefs which bare at low water and are covered at the high tides. The western limit of this ledge is 750 meters, <sup>250</sup>~~200~~, True, from Gull Island. The southern limit of this reef is 400 meters southward of Gull Island. The eastern end of the reef is 1,050 meters, <sup>105</sup>~~100~~, True, from Gull Island.

SCRUB ISLANDS are two small rocky islands which are wooded. Ledges extend 200 yards off these islands.

Page 3.  
DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SHEET OF PORT CHESTER.

MURDO ISLAND is low and sandy. It is sometimes called Battleship Island. There is a large dead tree in the center of the island, and several bushes. Extensive ledges surround this island.

The locations of the outer rocks off Murdo Island are as follows:

A group of THREE ROCKS, which bare 10 feet, lie 1,500 meters, 295°, True, from Murdo Island.

260° to 270°  
A group of ROCKS, which bare 4 feet, lie 1,100 meters, 270°, True, from Murdo Island, and this ledge extends easterly for 900 yards, and the southern limit is about 500 yards south of Murdo Island.

Northward from the island a submerged ledge extends, and which terminates at Lively Rock and Fillmore Rock.

LIVELY ROCK has a depth of 1 fathom at low water, and lies 875 meters, 350°, True, from Murdo Island.

FILLMORE ROCK bares one foot at lowest tides, and lies 650 meters, 340°, True, from Murdo Island.

There is a spot with 2-1/2 fathoms, 400 yards south-east of Hemlock Island.

HUB ROCK is a small rocky ledge which is about six feet above highest tides.

A ROCKY LEDGE, with a least found depth of 5-1/2 fathoms, lies 1,100 meters, 30°, True, from Hub Rock.

A SMALL SHOAL, with a least found depth of six feet, lies 590 yards, 30°, True, from Hub Rock.

MARTIN ROCK, which is awash at low water, lies 325 yards, 325°, True, from Hub Rock.

A SHOAL, with a least found depth of 2-1/2 fathoms, is in the southeast corner of the bay.

At lowest tides, Hemlock Island is connected with Annette Island at the northeast corner.

The general character of the bottom is irregular, and in the main part of the harbor are numerous small narrow ledges, with depths of 14 to 20 fathoms, and immediately alongside are greater depths.

The part of the harbor southward of Hub Rock and Gull Island, was dragged by the wire drag party, by Aid J. A. Daniels, 1914, and no dangers discovered.

There are three entrances into Port Chester. Of these, the one southward of Gull Island has been dragged, and is recommended. In its use, the following DANGERS are to be avoided:

The extensive ledge southward of Gull Island. The western extremity of this ledge is marked by a H. S. Buoy.

The other dangers are the ledges off the main shore westward of Village Point.

a, TO ENTER, follow the sailing directions for Nichols Passage until Warburton Island is nearly in line with Dall Head, and Warburton Island bears 265°, True, then bring the

Page 4.  
DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SHEET OF PORT CHESTER.

light on Warburton Island directly astern bearing 265°, True; and pass in on a course of 85°, True, midway between the ledges off Gull Island and off Village Point. After passing Village Point, course may be altered to the southward to make the anchorage or to make the dock.

6 The northern entrance is used by small vessels. If so used, the pilot should exercise caution, proceeding as follows:

Round Driest Point a distance of not less than 1/4 mile, and steer for the southern tangent of Hemlock Island, bearing 123°, True. When Hemlock Island is about one-fourth of a mile distant and the greater part of Village of Metlakatla is open to the eastward of Murdo Island, change course and steer 169°, True, heading between the wharf and the saw mill. This course carries one midway between Scrub Islands and the eastern extremity of the ledge off Gull Island. When a good one-fourth mile past Scrub Islands, the course may be changed to the eastward to make the anchorage, or to turn to make the dock.

There is a passage between the ledges off Gull and Murdo Islands; but it should not be attempted by strangers. It may be used by small boats at low water.

ANCHORAGE. Port Chester has not a good anchoring ground. In general the depths are deep. There are several small spots, with depths of 14 to 18 fathoms on which anchorage may be made. However, these spots are rather difficult to locate.

The "McARTHUR" used the following anchorage:

*bearing 330 true*  
*bearing 274 true*  
Bring the tangent of Driest Point midway between the Scrub Islands; and the northern house on Village Point just open of the wharf. When exactly on this range, there is a small spot with a depth of 14 fathoms, muddy bottom. This is 490 yards from the C. & G. S. Boat house, and is a distance of 200 yards clear of all dangers.

It is advisable to give a large scope of chain, since the depths are very much in excess of the anchorage depth on all sides of this spot, and there are heavy williwaws with storms. The "McARTHUR" rode to not less than 60 fathoms at all times in Port Chester.

TIDAL CURRENTS are very slight; no observations of over four-tenths of a mile was obtained.

WINDS. During southeasterly gales winds blow with a great violence in Port Chester, and williwaws of almost hurricane force sweep down from Purple Mountain. At such times, there is considerable chop in the harbor and it becomes dangerous for pulling boats.

*and Yellow Hill in background  
the Church and Steep*

Page 5.

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SHEET OF PORT CHESTER.

Hydrographic party was in charge of Aid R. L. Schoppe,  
Aid M. O. Nelson, left angle, Recorders, Dr. L. I. Condit,  
and M. D. Graves.

Work with Cosmos sounding machine on Launch "DELTA,"  
and Tanner sounding machine on whaleboat.

Respectfully submitted,

*C. G. Quillian*  
Chief of Party

**TABLE OF STATISTICS  
FOR  
HYDROGRAPHIC SHEET OF  
PORT CHESTER  
1914**

DATE	DAY	VOL.	MILES	SOUND- INGS	POS- ITIONS	HOURS	DISTANCE OF WORK		
							TO	FROM	
5/18	a	I	4.75	108	102	4:20			Whaleboat
19	b	I	6.0	176	169	7:40			"
20	c	I	10.0	205	209	7:00			"
21	d	I & II	8.75	208	206	6:25			"
22	e	II	8.25	182	190	7:59	1.75	2.25	"
23	f	II	6.00	131	102	4:04	1.6	1.5	"
6/3	g	II&III	10.0	239	165	7:07	2.5	1.8	"
4	h	III	10.5	330	178	8:22	1.5	1.0	"
5	j	III	10.25	272	154	6:54	1.0	1.0	"
6	k	III	5.75	151	84	4:19	0.5	2.0	"
7	l	III&IV	7.75	195	109	6:17	0.5	8.0	"
Total for Whaleboat			88.00	2193	1669	70:47	8.35	17.58	
6/9	a	V	18.0	278	200	7:57	0.75	1.75	DELTA
10	b	V	14.5	270	187	8:08	1.0	1.5	"
11	c	V & VI	13.24	192	147	6:23	1.75	14.0	"
8/1	d	VI	9.0	143	130	5:08	1.75	-	"
Total Delta			<del>54.84</del> 55.25	883	<del>674</del> 664	27:28	5.25	17:25	
Grand Total, this Sheet			<del>142.84</del> 143.25	3076	<del>2345</del> 2333	28:15	13.60	<del>29.85</del> 28.80	

L.H.Z. ✓

VEC  
Apr. 7, 1915  
L. S. S.

HYDROGRAPHIC SHEET 3710.

Port Chester, Nichols Passage, S.E. Alaska, by  
Asst. C. G. Quillian in 1914.

TIDES.

	Port Chester ft.
Mean lower low water, or plane of reference on staff	6.3
Lowest tide observed " "	2.1
Highest " " " "	25.8
Mean range of tide	12.7

This sheet was projected and protracted by field party on smooth paper. The soundings were plotted and inked in the office.

The locations of rocks and reefs on this sheet were taken from the hydrographic records except a few rocks found on the topographic sheet, and not covered in the hydrographic records, were located on this sheet from the topographic sheet. The rock 940 meters, 254° true, from  $\Delta$  tree, was taken from the topographic sheet. This rock may be the same as the rock 850 meters, 254° true from  $\Delta$  tree, which was located from the hydrographic records.

The extents of the various reefs were taken from both the topographic sheet and the hydrographic records.

The shoal spot of 2½ fathoms least depth, mentioned in the descriptive report as being in the southeast part of the bay could not be found in the records. It was not shown on the boat sheet and therefore could not be placed on this sheet.

The shoal spot of one fathom near O'Dug, shown on the boat sheet, could not be plotted as the positions at this point were on circle and had been rejected by the field party. The spot is close inshore.

This sheet was compared with hydrographic sheet number

1615b and found to conform except several shoal spots  
or rocks were developed on the new survey that were not  
developed on the old survey. at a point about 400 meters  
south of Hemlock Island a rock awash is shown on  
Hydrographic sheet number 1615b which rock was not  
found in the records of hydrographic sheet number 3710.  
A note to this effect was placed on this new sheet.

Lyman E. Bolinger.

Proj. & Prot. by Field Party.

Sdgs Plotted & Inked by L.E.B. 1915.

Sdgs. in Fathoms.

Verified by R.L.J.

Verified;

Oct 2, 1915.

R.L. Johnston