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1899

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Diag. Cht. Nos. 9302 & 9380

U. S. COAST AND GEODETIC SURVEY.

*Henry S. Pritchett*, Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

*Hydrographic Sheet No. 2416*

LOCALITY:

*Topography & Hydrography  
Entrance to Port Safety*

1899.

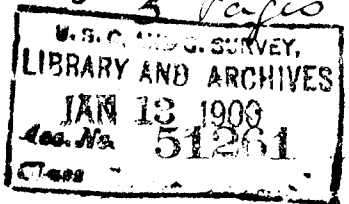
CHIEF OF PARTY:

*J. L. Pratt*

2416

*Descriptive Report of  
Port Safety Alaska  
5 Pages*

U. S. Coast and Geodetic Survey,  
Henry S. Pritchett, Superintendent.



Topography and Hydrography

of *Entrance to*

PORT SAFETY,

ALASKA

1899.

Scale 1/1000

Surveyed by the party under charge of

J. F. Pratt, Assistant.

Astronomical determinations by

F. A. Young, Assistant

and

W. A. O'Malley, 1st. Watch Officer.

Topography by J. F. Pratt, Assistant

Hydrography by F. A. Young, Assistant.

Statute Miles

Nautical Miles

Kilometers

*\* To accompany Hydrographic  
Sheet as per above table*

Statistics of Hydrography, Port Safety, Alaska.

Date	Letter	Number of				Vessel
		Vol.	Angles & Positions	Soundings	Miles, Statute	
1899	Green					
Sept. 9	a	1	142	390	10	"Patterson"
Sept.10	b	1	189	723	28	"

## Geographical Position of Front Beacon.

Latitude

64° 28' 30"

Longitude West from Greenwich

164° 46' -00"      10<sup>h</sup> 59<sup>m</sup> 04<sup>s</sup>

### Beacons.

The two Pyramidal Whitewashed Beacons on range mark the bar crossing.

### Soundings.

Soundings are expressed in feet and give the depth of the lowest low water observed.

The 6 foot curve is indicated thus .....

### Tides.

The tides in this locality are diurnal, i.e., only one high and one low water occur each day. They are largely influenced by winds. Prevailing northerly weather greatly retards and diminishes them, while prevailing southerly weather has the opposite effect.

The mean rise and fall is about 4 feet.

The predicted time and height of tides can be obtained from the TIDE TABLES published annually by the United States Coast and Geodetic Survey.

Distance of Front Beacon from Cape Nome Promontory ..... 6.6 nautical miles.

### Description of Port Safety.

The entrance to Port Safety is through a short narrow channel, cutting through the narrow strip of land separating this large lagoon from the Bering Sea, and is some twenty nautical miles from Nome City and about seven from the Promontory of Cape Nome, in a general E. N. E. direction.

The entrance, though straight, is narrow, being only about 175 meters in the narrowest part. It is clearly marked on the outside by lines of breakers on either side, even in moderate weather, and with a light ocean swell the bar breaks irregularly across the shoalest parts.

The shore line on either side of the entrance is low and sandy, but on the right the high water line is at the foot of a low sandy bluff, some twelve feet high. On either side there is a smooth sandy and gravelly beach, which in the entrance proper is bold on the left hand, and gently sloping on the right.

Inside of the entrance proper the channel is narrow and broken in direction; one branch turns sharply to the left through the narrow straight opening into the western end of the Lagoon towards Cape Nome, while the channel into the broader part of the Lagoon leads off to the north. The Lagoon is about two miles wide at this point and its greatest extent is in a northeasterly direction, where the Solomon River empties into it.

So far as developed in this direction, the water is found to be

shallow, not exceeding 4 1/2 feet in depth and with no clearly defined channel.

There are two other outlets into the Sea near the eastern end of this lagoon, which are said to be too shallow for any but small row-boats to enter.

The best anchoring ground is at the junction of the several channels, just to the north of the Front Beacon, where 17 1/2 feet can be obtained at low water.

The Tides at this point are diurnal, with a range of about four feet; but are greatly affected by prevailing winds.

For vessels with a draft of from 18 to 20 feet, a safe depth for anchoring may be found from a mile to a mile and one-half from the breakers, on the range of the Beacons; and a little to the west of this range an anchorage can be made a trifle closer in.



Assistant, Chief of Party.