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C. S. G. SURVEY,
COAST AND GEODETIC SURVEY
OCT 28 1910
No. 110

Diag. Cht. No. 8551-2

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Hydro Sheet No. *3186*

LOCALITY:

Johnstone Point

190

CHIEF OF PARTY:

Gilbert T. Rude

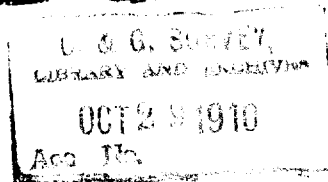
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DESCRIPTIVE REPORT

to accompany Hydrographic Sheet No. 3186

VICINITY JOHNSTONE POINT, HINCHINBROOK ID.



ALASKA

SEASON 1910.

Gilbert T. Rude,

Chief of Party.

INSTRUCTIONS:-

"Execute hydrography in the vicinity of Johnstone Point, Hinchinbrook Island, filling the gap between the previous surveys, from about 5 miles Southwest of Johnstone Point to about $2\frac{1}{2}$ miles East of it. It will not be necessary to extend the soundings beyond a depth of 100 fathoms. The special object is to prove the existence or non-existence of a reported shoal off the Point."

METHOD OF SURVEY.

"Description of Stations" was furnished for one station only, Johnstone Point, but the Stations Banner, Pillar, Hang and Curve were found. To locate hydrographic signals between Johnstone Point and Station Banner, a Plane Table was set at Johnstone Point, oriented on Goose Island with an azimuth line and a traverse run along the beach. From Johnstone Point Southwest to Signal Curve the intermediate signals were located by cuts from the bridge of Steamer, using three sextants and locating with Signals Johnstone Point, Pillar, Hang and Curve.

The sounding lines were run parallel to the coast line except the inshore lines from Johnstone Point to Signal Curve. The one hundred fathom curve was developed between these two points, but it was not possible to develop that curve to the Northward and Eastward of Johnstone Point as there is less than one hundred fathoms in the entrance to Cordova Bay.

DANGERS REPORTED ON CHART.

No shoal water was found in the vicinity of Johnstone Point except close inshore between signals "Tan" and "Lit" and along the shore between signals "Bee" and "Banner". In both these places there is a gradual slope from the shore and not a defined shoal.

Tide rips occur off signal "Tan", extending about one-half mile off shore. They have the appearance of a shoal and probably caused the report of shoals off Johnstone Point.

A line of kelp about fifty meters wide extends along the shore off signal "Bon" and between signals "Bee" and "Ped". There is also kelp North of signal "Tri". The positions of kelp and tide rips are shown on the boat sheet and the smooth sheet.

ANCHORAGES.

There are no good anchorages within the limits of the sheet. Anchorage for the Taku was sought in Shelter Bay but the entrance was too shallow and the current too swift. Temporary anchorage, with shelter from Easterly and Southeast-erly winds, may be had in the bight at the entrance to Shelter Bay. The anchorage is about midway between the two points at the entrance and about a half mile off shore in about five to ten fathoms, sand and mud. The bottom slopes gradually from the shore in the bight, and shoal water extends about a quarter mile off the shore.

The anchorage off the sand beach between signals "Tan" and "Lit" is mentioned in the "Alaska Coast Pilot Notes".

Good anchorage for small craft can be found in Big Octopus Bay in three fathoms, sticky bottom. Care should be exercised in entering to avoid two rocks in the entrance, the one on the West side of the channel bare at about half tide, the Easterly bare at extreme low water. The former is at the end of a sand spit making

out from the shore and should be given a berth of about forty yards. After passing inside clear of this rock, haul over for hollow in Southwest side of Bay and anchor on West side about 250 or 300 yards off shore and about half way between sand spit at entrance and the South shore of Bay.

GENERAL DESCRIPTION OF COAST LINE.

A chain of mountains, ranging from 1200 to 3000 feet, extends in about an E x N (true) direction from the South end of the work. Johnstone Point and vicinity is low, (about 50 feet) the low land, with a few inconspicuous foot hills, extending back from three to four miles to the base of the mountains. The lowland is sparsely wooded and the mountains are wooded to an elevation of about 1200 feet, above this they have the appearance of black rock.

The coast line from Shelter Bay Southward is bold. In the vicinity of signal "Sig" the shore is low and from signal "Pillar" to "Lit" the shore is composed of rocky cliffs about 30 to 50 feet high. A shingle beach extends from signal "Lit" to "Tan". The shoreline from signal "Tan" to and around Johnstone Point about 300 yards is again formed of cliffs about 30 to 50 feet high. A shingle beach extends from a point about half way between Johnstone Point and signal "Bee" to signal "Banner".

WATER

The Taku watered at a small fall about 300 yards S. W. of signal "Lit". It was taken aboard in small boats and pumped into the tanks.

NAMES

All names used are taken from the C. & G. S. Charts, except the two bays half way between Johnstone Point and Hawkins Id. Cut Off. The Westerly was called Little Octopus Bay and the Easterly Big Octopus Bay, from the large number of small arms forming them. The Tide Staff was established in Big Octopus Bay.

TIDE STAFF

One B. M. at Camp Denson was found but the small island mentioned in the description has been washed away and it was impossible to place a staff in that locality. A staff was erected in Big Octopus Bay and Datum Plane established with nine low waters.

TOPOGRAPHY.

A traverse was run from Johnstone Point to signal "Banner" and the shoreline shown in red on smooth hydrographic sheet. All prominent peaks were located by sextant cuts from the bridge of Steamer while running sounding lines and the contours sketched. These are shown on the smooth hydrographic sheet in broken red lines, and the cuts are recorded in the sounding record book.

The elevations are approximate and were estimated by comparison with Peak I, located by previous survey, and with each other.

Respectfully submitted,

Gilbert J. Rude,

Assistant, C. & G. Survey,

Chief of Party.

List of topographic ^{and} hydrographic Stations,
Johnstone Point, Alaska.

Name	φ	D.M	λ	D.M	Description
Bot	60 28	1740	146 33	390	Cannot be recovered
Bon	60 28	1684	146 34	216	Tripod on fallen dead tree on beach.
Red	60 28	1502	146 35	302	Top of large rock
Bee	60 28	1742	146 36	274	Cannot be recovered
Tan	60 28	1120	146 37	712	Outer face large rock
Lit	60 28	1720	146 38	246	Cannot be recovered
Rock	60 27	1164	146 39	120	Top of sharp rock.
Sig	60 26	1200	146 39	870	Cannot be recovered
Med	60 26	424	146 40	448	Cannot be recovered
Shel	60 25	1216	146 40	188	Cannot be recovered
Tri	60 24	1510	146 42	358	Cannot be recovered
Last	60 24	1090	146 42	604	Cannot be recovered

V.E.C.
Dec. 5, 1910

HYDROGRAPHIC SHEET 3186.

Johnstone Point, Prince William Sound, Alaska,
by Asst. G. T. Rude in 1910.

TIDES.

	Big Octopus Bay ft.
Mean lower low water, or plane of reference on staff	5.2
Lowest tide observed " "	2.8
Highest " " " "	16.6
Mean range of tide	9.4

Coast and Geodetic Survey
DEC 9 1910
TIDAL DIVISION

*Particulars plotted & marked by H.L.S.
Verified by R.L.J.*

All soundings shown in feet.

Hyd Sheet No 3186

Jan 4 1911

The depth of 84 feet about 1 mile northwest of Δ Pt. Johnstone is doubtful. The examination made on 7th day gives no indications of a shoal at this point. The sounding recorded was 13 fathoms which the records state should probably have been 83 fms or 218 ft reduced.

The records were well kept.

H. L. Linnans

Verified;

Jan. 9th, 1911

I think that it would be better to take out the 84 ft sounding and the one hundred and twenty foot curve around it and to show the 158 ft sounding, on line from pos. 6h to pos. 7h, which falls on the same spot, instead.

R. L. Johnston

This is recommended

G. F. A.