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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. Pittman
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Hydrographic Sheet No. **3684**

LOCALITY:

Kuskokwim R.
Upper Part

1914

CHIEF OF PARTY:

R. R. Lubbock

11-4845

3684

DESCRIPTIVE REPORT

RECONNAISSANCE SURVEY OF THE KUSKOKWIM RIVER

WEST POINT TO BETHEL

Field Sheet D

Plotted and adjusted by Mr. E.E. Smith, Assistant.

This survey was made in August, 1914, during a run made by the Str. YUKON, from West Point to Bethel, with a native pilot in charge.

Courses and logged distances were plotted, bearings were taken to tangents etc. for sketching purposes, and then the whole frame work adjusted to fit between the positions of Δ Moses, and the astronomical position of Bethel. This position was obtained by theodolite observations on Polaris for latitude and sextant time sights on the Sun for longitude.

Especially pains were taken to sketch the mud flats and shore line relative to the track of the vessel, and while the sketch has little value as a survey, it should be of value to strangers entering the river, for even with a pilot onboard, a master likes to have some idea of what is ahead of him.

Starting at West Point the ~~shrubbery~~ gradually gets heavier and thicker until near Bethel there are a few scattered spruce trees. Bethel may be said to be at the timber line. The banks of the river are low and flat, the only highlands being those shown near the Napatuk and Johnsonville.

The channels and topography not seen from the main ship channel, were sketched from descriptions furnished by prospectors and residents of Bethel, who often use the back sloughs as boat passages.

The names of the villages and creeks are the local ones spelled phonetically, and are believed to be nearly correct. There seems to be a great confusion

of names in this vicinity as is evidenced by the nomenclature of the various maps of this region.

The soundings are plotted in fathoms without tidal reduction. The trip was started at low water, therefore the first section would have very little reduction, and the upper part of the river is not greatly influenced by the tides.

A critical depth of 13 feet was found about 4 miles South of Bethel. In making this cross over the same depth was found on both trips at nearly high tide. This ^{bar} seems to be the only seriously shoal that has to be crossed to reach Bethel. This depth is dependent on the stage of the river, rather than the tide, and the river is at a low stage in the latter part of August.

Mining The country contiguous to Bethel contains vast areas of mineralized ground which in general is low grade and can be worked profitably only on a large scale. Owing to the uncertainty and high cost of transportation, very little capital can be obtained for investment in this region, and its development has therefore been materially held back. It is the ^{opinion} of the writer that in the years to come, there will be a business in the Kuskokwim, comparable to that of the YUKON.

The Survey of the river is already having a good effect, for at the present time a company in Seattle has been formed to build and operate a good freight and passenger vessel to the Kuskokwim river.

A. P. Luken.

VEC
Jan.19,1915

HYDROGRAPHIC SHEET 3684.

Reconnaissance Line, West Point to Bethel, Kuskokwim
River, Alaska, by Asst. R.R.Lukens in 1914.

TIDES.

	Apokok ft.
Mean lower low water, or plane of reference on staff	2.7
Lowest tide observed " "	1.1
Highest " " " "	18.0
Mean range of tide	9.4

Allowance was made for difference in tide at gage and at
place of sounding..