TERRITORY OF ALASKA OFFICE OF THE GOVERNOR JUNEAU

March 6, 1931

MEMORANDUM

For: Mr. B. D. Stewart

A determined effort to create a National Park embracing Chichagof Island seems to be under way. The proponents of this fantastic scheme seem to be wholly without information regarding the resources of this island. The only effective way to meet the proposal is to supply the several Departments and the President with a statement of the resources, both developed and potential, of the area involved.

Mr. Heintzleman is assembling data on the area, coast line, roads and trails, water power and timber resources. Will you please prepare a memorandum showing the mineral resources, including, if possible, the past mineral production of the area with reference to any Geological Survey reports that contain references to the island?

Governor

631.1 Sither 8193 1-12...\ Juneau, Alaska, March 23, 1931. BDS/S Honorable George A. Parks, Governor of Alaska, Juneau, Alaska. My dear Governor: In response to your request of March 6, 1931 there is inclosed herewith a memorandum on mineral resources of Chichagof Island. Very truly yours, B. D. STEWART, Incl. Supervising Mining Engineer.

MEMORANDUM ON THE MINERAL RESOURCES OF CHICHAGOF ISLAND

The known metallic mineral resources of Chichagof Island include deposits of gold-bearing quartz, nickeliferous ores, and ores of copper. The principal known non-metallic mineral is gypoum.

The total value of the mineral production of the Island to date amounts to a sum in excess of \$16,000,000, of which amount approximately \$2,500,000 represents the value of gypsum mined at Y Iyoukeen Cove on the east coast and the balance that of the output of gold from mines on the west coast.

The general geologic conditions under which the productive gold-bearing quartz deposits of Chichagof Island occur are in many essential respects strikingly similar to those found in the "Mother Lode" section of California. Favorable geologic conditions of similar type are known to exist in many sections of the interior of the Island, which, at the present time, are difficult of access on account of the rugged nature of the topography and the lack of trails and which have therefore been but slightly prospected. As prospecting proceeds in these sections, however, the discovery of additional gold mines is well within the probabilities, and prospecting operations should receive every possible encouragement.

The recorded production of gold has all been derived from the operation of three mines that are situated within the belt of rocks bordering the west coast of the Island that is rendered easily

accessible by water transportation. These three mines are well equipped and their development represents a capital expenditure of several million dollars. One of them is the Chichagoff Mine, which is one of the most famous high-grade gold mines on the Pacific Coast.

The gypsum deposits at Lyoukeen Cove provided for many years the raw material from which was manufactured most of the plaster $\mu^{1/2}$ products used on the Pacific Coast of the United States. Additional deposits of gypsum are now under development at Lyoukeen Cove.

Deposits of nickeliferous ores occur on the west coast about midway between the gold-mining camp of Chichagof and the north end of the Island, and also in the vicinity of Tenakee on the east the coast. These deposits have been only slightly explored and their extent has not been determined. The type of this ore is similar to that of the ores mined at Sudbury, Ontario, Canada and the deposits merit further development.

Ores of copper are known to occur near the head of Pinta

Generally speaking, it may be said that known geologic conditions on Chichagof Island are more favorable for the occurrence of valuable mineral deposits than on any other of the large islands of the Alexander Archipelago, with the possible exception of Prince of Wales Island, which is much larger.

A complete geologic survey of the Island has never been made, the investigations by the Geological Survey having been confined to the coastal strips. Descriptions of the results of such investigations as have been made by the Survey are to be found in the following published bulletins:

U. S. Geol. Survey Bull. No. 259, Mineral Resources of Alaska, 1905, pp. 55-58.

U. S. Geol. Survey Bull. No. 314, Mineral Resources of Alaska, 1907, pp. 59-61.

U. S. Cecl. Survey Bull. No. 347, Mineral Resources of Alaska, 1908, pp. 38-43.

U. S. Geol. Survey Bull. No. 504, The Sitka Mining District, Alaska, by Adolf Knopf.

U. S. Geol. Survey Bull. No. 692, Mineral Resources of Alaska, 1917, pp. 91-136; "Geology and Mineral Resources of the West Coast of Chichagof Island." by R. M. Overbeck (with map).

U. S. Geol. Survey Bull. No. 773, Mineral Resources of Alaska, 1923, pp. 107-109; "Investigations in Southeastern Alaska," by A. F. Buddington (with map).

U. S. Geol. Survey Bull. No. 800, pp. 371-373; "Geology and Mineral Deposits of Southeastern Alaska," by A. F. Buddington and Theodore Chapin (with maps).