

TERRITORY OF ALASKA

## DEPARTMENT OF MINES

JUNEAU, ALASKA

6 July 1951

## ITINERARY REPORT

TO: Leo H. Saarela, Commissioner of Mines, Juneau, Alaska

FROM: James A. Williams, Associate Mining Engineer, College, Alaska

SUBJECT: Itinerary Report of Leo H. Saarela and James A. Williams for the period 15 June to 27 June 1951 in the Juneau, Sitka, and Petersburg Precincts.

Transportation on this trip was by boat, owned by Louis J. Anderson, who accompanied Saarela and Williams. The purpose of the trip was to examine some prospects as requested by certain prospectors, and to gain first-hand information on other properties that might be of importance for future developments.

15 June: Enroute from Juneau to Swanson Harbor, where anchorage was found for the night.

16 June: The Silverton No. 1 Lode (also known as the McKecknie Prospect) was examined and mapped. This is a lead, zinc, copper, and silver deposit located on a rocky point in Howard Bay, which is on the east side of the southern tip of the peninsula between Icy and Chatham Straits, 135°05' W long. and 58°17' N lat. A separate report on this examination will be prepared by the writer. Five samples, LHS-1951-1 through 5, were taken. - KX-112-15

Enroute to Funter Bay in the evening. Made a preliminary reconnaissance of the Admiralty-Alaska property upon arrival.

17 June: The Admiralty-Alaska gold and nickel lodes were examined for radioactivity and fluorescent minerals in the main tunnel and in the upper adit which enters the Mertid Lode (the nickel lode). The results were negative except for a small amount of ankerite which fluoresced in the lower tunnel. The property is located at Funter Bay on the west side of Mansfield Peninsula, Admiralty Island, 134°53' W long., 58°14' N Lat. A memorandum on this examination will be written by Leo H. Saarela. KX-112-24+

Enroute to Hawk Inlet in the evening.

18 June: The Alaska-Empire gold lode property was inspected on the surface, but entrance could not be gained to the workings because of caved-in adits and water in the shaft. The mill is falling in, and although there is much good equipment on the property nothing is being done to protect it. The property is located about 1½ miles from the north side of Hawk Inlet, which enters from the west side of Admiralty Island. The coordinates are 134°45' W long, and 58°11' N lat. A memorandum on this inspection will be prepared by Leo H. Saarela. KX-112-32

Enroute to the Camel Gypsum property on Chichagof Island in the evening and made a preliminary reconnaissance. KX-114-10

19 June: Camel Gypsum property, a gypsum deposit north of Iyoukeen Cove, east side of Chichagof Island, 134°57' W long. and 57°55' N lat., was examined and mapped. No fluorescence or radio-activity was detected. An abstract and report on this property will be prepared separately by the writer. KX-114-10

The above property was located by W. E. Walker and Associates of Sitka in October 1950. They gave it the new name, Lucky Gypsum Group.

The old Pacific Coast Gypsum workings, a mile up Gypsum Creek, which empties into Iyoukeen Cove, were inspected, but entrance to underground workings could not be gained because of caving and flooding. There was a production of 500,000 tons of high grade gypsum in the early 1900's from this property, and apparently the flooding of the works by the Creek was the cause of the shutdown. The property is described in USGS Bulletin 824-E by B. D. Stewart. This deposit is approximately three miles from the Camel Gypsum and about the same distance from tide water in the other direction. It is quite likely that if one were to prospect the creeks and exposures in either direction, more gypsum of the same high grade could be found. The deposit is probably very extensive. The coordinates of the Pacific Coast Gypsum property are 135°00' W long. and 57°54' N lat. KX-114-10

Enroute to Angoon in the evening. KX-114-10

20 June: The Harkrader Coal property is located in Kanalku Bay, west side of Admiralty Island, 134°07' W long. and 57°30' N lat. Because of narrow channels, one must go in or out with the tide, and because of the tide, the Harkrader property was not reached until afternoon. The works are flooded and the surface buildings and equipment are practically non-existent. It is rather evident from the structures of the area and the underground map that the coal came from a small isolated basin, the rest of the bed having been eroded away. There is probably enough coal remaining to make a very limited operation profitable at the present price of coal in Juneau. A memorandum on this property will be written by Leo H. Saarela. KX-114-10

Enroute to the Harkrader property, a tunnel was noted about 25 feet above water level on the left limit of Davis Creek. Upon investigation it was found that the tunnel was driven about 100 feet in a northerly direction on a thin seam of impure, very dirty coal in a soft zone approximately six feet thick. There had been considerable movement in both hanging and footwall, and the dip was 65° east. The best coal was about four inches thick along the footwall.

Outcroppings of coal were found elsewhere in the vicinity, and in Lighter Creek, more old workings were observed.

Anchorage was found at Killisnoo that evening.

21 June: Murder Cove was reached in the afternoon, where there is reported to have been a coal deposit at an elevation of 500 feet. The trail to the property could not be found. Murder Cove is on the southern tip of Admiralty Island at 134°33' W long. and 57°03' N lat. The trail to the deposit is reported to leave the water on the north side of a creek that empties into the cove to the north and far side of the cove from the Tye Cannery. The stream runs in an easterly direction. The deposit is described in USGS Bulletin 287 on pages 152 and 153. KX-114-116

22 June: Arrived at Halleck Harbor and examined the Keku Group (also known as Kulu Zinc-Lead) in the afternoon and evening. This property is on the north end of Kulu Island at 134°06' W long. and 56°54' N lat. Although considerable development work and drilling has been done, no mineralization sufficient for commercial interest was evident. Fluorescence was not found, but a high radioactivity count over a large area was encountered, probably due to thorium rather than uranium. The underground workings were mapped, and a report is being prepared on this property by the writer. Sample LHS-1951-10 was taken for careful radioactive assay. KX-114-117

23 June: Examined the beaches in front of the Keku Group and the Hungerford property, which is a mile or two to the southeast. Further radioactivity was found on the beach at the Keku Group, but it was diminished at the Hungerford property. KX-116-117

The Hungerford property was found to be simply a hot water deposit with much solution-deposited jasper and other silicious materials of various colors. A little very fine galena was found, and it was usually associated with the jasper. The area examined was on Hope Claim No. 1, and at the location where the Bureau of Mines had put down a diamond drill hole. The silicious materials were moderately radioactive, but the carbonates definitely not. KX-116-118

The night was spent anchored in Windham Bay where it was thought that Herman Kloss lived.

June 24: Learned that Herman Kloss lived at Sunset Cove, so left Windham Bay and arrived at Sunset Cove at noon. Kloss was not there, but finally arrived late in the afternoon, and the balance of the day was spent in going over the details of Kloss's properties with him.

25 June: Examined and mapped the K & D Lode workings owned by Herman Kloss and Jack Davis. It is a gold and antimony lode  $2\frac{1}{2}$  miles from the beach at Sunset Cove at an elevation of 360 feet. Sunset Cove is south of Windham Bay on the mainland at  $133^{\circ}32'$  W long. and  $57^{\circ}30'$  N Lat. The main vein is up to 25' thick and well mineralized, but with such a variety of minerals that the milling problem will be serious. An interesting feature of the lode is the native antimony which it contains. However, there is not enough antimony for a profitable antimony mine alone. A separate memorandum will be written on this property by the undersigned.

Left Sunset Cove in the evening and anchored at Point Coke that night.

26 June: Arrived at Snettisham in the afternoon. Investigated the Friday and Crystal mines for radioactivity and fluorescence. The results were negative. Snettisham is at  $133^{\circ}47'$  W long. and  $57^{\circ}59'$  N Lat. on the south side of Port Snettisham and about  $1\frac{1}{2}$  miles southwest of Sentinel Point.

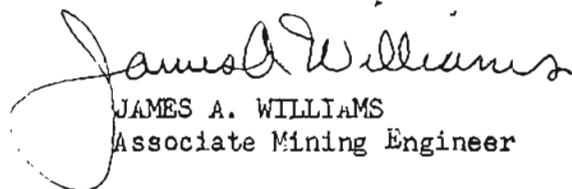
The Friday Mine is about  $\frac{1}{2}$  mile in from the beach and 350 feet in elevation at the lower tunnel. It is described in USGS Bulletin 287, page 47. The country rock here is a hornblendite, usually quite coarse-grained; containing a high percentage of magnetite, which is the usual case with hornblendite. This mine is apparently in part of the body of magnetic material which causes the magnetic anomalies of the area. The hornblendite is mineralized in the mine with some pyrite, but not enough gold for a profitable operation. The rock is very hard, and where it is fractured it is filled with aplite dikes. The fillings apparently came in so rapidly and cooled so quickly that the country rock that was caught in the cooling material was not assimilated, so that the dikes have many inclusions of unaltered hornblendite. In checking the main tunnel and other locations for magnetite, it was found that the strongest zones of magnetite were about a foot away from the walls on either side of the aplite fillings. The upper tunnel was found to be 400 feet long and the lower one, which had less magnetite than the other, was about 150 feet long. Sample LHS-1951-12 was taken of some typical country rock in the upper tunnel for a magnetite, nickel, and platinum assay.

The Crystal Mine at an elevation of 700 feet and perhaps a mile south of the Friday Mine is in a different country rock than the Friday. The rock here is an elongated dark flow with elongated light crystals of feldspar, which places it in the classification of a gneiss. The rock is well jointed in one direction, dipping about  $30^{\circ}$ , and the mineralization is in the filling of the joints. The principle mineral is quartz which carries the gold and pyrites. Many well formed crystals of pyrites, and of quartz also, are in the mine. The property is described in USGS Bulletin 287, pages 47 and 48. Sample LHS-1951-11 was taken of some concentrates found below the mill site.

27 June: Inspected site of Snettisham mill and a nearby caved-in tunnel, both at beach level, for magnetite. Also checked the beach from Snettisham nearly to Sentinel Point. Very little actual segregation of magnetite was found. Some of the best exposures were at the mill site where the rock had been excavated for footings. A stock work was found there where the hornblendite was mixed indiscriminately with aplite and quartz material. Magnetite was fairly strong here and segregated occasionally into small stringers or lenses up to an inch thick. There were also a few one-inch stringers of magnetite at a point on the beach, but these were not at the point where later the strongest magnetic anomalies were found with a dip needle. The former point is about 1500 feet northeast of the mill site, and the latter point is 3000 feet northeast of the mill site. The majority of the rocks on the beach were magnetic and varied from fine-grained to very coarse-grained hornblendite, with occasional bits of light igneous material showing up as float. A magnetic survey with a dip needle was made of the whole area a few days later on which there will be made a full report.

Returned to Juneau in the evening.

Respectfully submitted,

  
JAMES A. WILLIAMS  
Associate Mining Engineer