

SUMMARY REPORT OF INVESTIGATIONS IN THE PETERSEBURG
AND JUNEAU MINING DISTRICTS AND ITINERARY OF J. C.
ROEHM, ASSOCIATE ENGINEER TO COMMISSIONER OF MINES,
TERRITORIAL DEPARTMENT OF MINES, JUNEAU, ALASKA
MAY 12 TO JUNE 30, INCLUSIVE

NOTED

JUL 21 1937

B. D. STEWART
Commissioner of Mines

May 12-13 - en route to Kuiu Island.

May 14-15 - investigation of new discoveries made by J. C. B. Hawkes and associates of this year.

X-116-7

A group of 32 lode claims were partly staked which upon completion will form a rectangular block 3,000 feet in width and 16 times 600' in length. This group extends along the east shore of the most northerly peninsula of Kuiu Island between Keku Strait and Saginaw Bay. The group lies directly southwest and opposite the Keku Islands and 5 miles southeast of Point Cornwallis, the most northerly point of land of Kuiu Island.

The locators of this group are I. M. Hofstad, Lewis Dyrdaahl, Helen Hawkes, Hilda Dyrdaahl and A. C. Hofstad.

The formations covered by this group of claims consist of andesitic lavas overlain by limestone of lower Permian age, green agglomerates and greenish basaltic lavas. These lay as bedded formations in a small synclinal structure which is a part of the Kuiu anticlinorium. The general strike of the formations is 30 to 40° west with flat dips to the northeast. Folding with a developed schistosity is evident in the steep ravines at the heads of the small creeks.

A strata of limestone parallels the beach line and is situated approximately 600 feet back from the beach at an elevation of 100'. This strata strikes N. 45° W. and dips 31° NE. It is overlain with a greenstone calcareous conglomerate and underlain with an andesitic lava.

The discovery of a silver-bearing galena and supposedly cobalt and nickel mineral associates was made alongside a small creek 600 feet from the beach on the No. 9 claim of the Keku group in the limestone. The limestone outcrops along the south bank of the creek and crosses with an exposure of 150 to 200 feet. Galena is found disseminated through the limestone in small minute fractures and as a partial replacement. The greatest amount is near the upper contact with the greenstone conglomerate in the first 3 feet of limestone, gradually becoming less toward the footwall or bottom. Associated with the galena is silver, pyrite and possibly other metallics. To date only returns of gold, silver and lead have been received which varied from trace of gold to .07 oz. per ton; 9.2 oz. silver to 0.6 oz.; lead 6.3% to less than 1%. Returns of cobalt, nickel and manganese were not received. Whether or not these metals exist can only be determined by assay or analysis, as they are not apparent to the eye.

A small sketch was made of this showing.

Port Alex. 116

May 16 - return to Juneau aboard MS. Dart.

May 17 - office

May 18 - trip to Auke Bay and investigation of Berg and Spaulding properties. Snow encountered on Spaulding property. KX-112-49

May 19 - office

May 20 - trip to Auke Bay and investigated lower Berg property with John Berg.

May 21 - trip to Olsen's, Mile 26, Glacier Highway, regarding information concerning Peterson property.

May 22 - office

May 23 - Sunday at home

May 24-25 - sampled Yellowstone tunnel on Berg property. This was formerly the Dull & Stephens prospect and a short report is given in U. S. G. S. Bull. 502, "The Eagle River Region" by Adolph Knopf, page 58. The Yellowstone tunnel has a length of 110' driven across the contact of clay slates and brecciated augite melaphyre. Two short cross-cuts from tunnel on the contact lead in opposite directions following the hanging wall of the augite melaphyre. Both cross-cuts, and from the contact through the brecciated portion of melaphyre and slates to the tunnel portal was channel sampled at 10 foot intervals. This brecciated zone is cemented with quartz that contains sparsely distributed arsenopyrite and fine pyrite. The gold appears to be associated with arsenopyrite. A plane table sketch was made of this tunnel and immediate surface showings. KX-112-53

May 26 - sampled and mapped tunnels No. 2 & 3 of Berg property or Gold King group. These tunnels were driven by the Treadwell Mining Company in 1917, in fractured augite melaphyre on the footwall of the dike that extends northwest of the Dull & Stephens prospect. These tunnels are located one and a half miles via Spaulding trail that begins at Mile 13 of the Glacier Highway at an elevation of 620'. They face opposite each other on the bank of a small creek. No. 2 tunnel on the south side has a length of 120' with a 79' crosscut to the east. The tunnel and crosscut are wholly within the augite melaphyre and the crosscut follows a cross vein that outcrops on the surface a few feet above. In the crosscut the vein carries 4" to 18" of quartz and is exposed the length of the crosscut. On the surface this vein contains 2 to 3 feet of quartz. The mineralization is sparse and consists of arsenopyrite and pyrite. This vein was sampled at 10 foot intervals. KX-112-53

The surface exposure was not in condition to sample.

No. 3 tunnel, opposite No. 2, has a length of 182' and an 80' crosscut to SW. and a 35' crosscut to E. The tunnel cuts from augite melaphyre at the portal across the footwall contact into graywacke and ends in slate following a quartz vein for a distance of 80 feet on its northern extremity. The two crosscuts follow a cross vein from the melaphyre into the graywacke and slate to the west. Several cross stringers occur in the fractured melaphyre and some have a width as great as 12 inches. The contact vein varies from 18" to 4' and the cross vein varies from a few inches to 18 inches. This cross vein on the surface has a width from 2 to 4 feet of quartz. These veins were sampled at 10' intervals.

Plane table sketches were made of these tunnels and surface cuts north to the end of the property or No. 4 tunnel, approximately 800' north. This tunnel is on the furthest north claim of the Berg property and also on the furthest south claim of the Auke group owned by Spaulding and associates.

May 27-28. No. 4 tunnel is a crosscut tunnel with a length of 110 feet and a crosscut following the augite melaphyre contact for a distance of 34 feet. Several gash veins and veinlets occur both in the melaphyre and slate and a 12 to 18" quartz vein follows the contact in the crosscut. This tunnel was sampled at 10' intervals.

Arthur Thane assisted in sampling and mapping this property, dates May 24 to 28, inclusive, or 5 days. A wage of six dollars per day was given.

May 29-31 - revisit to Spaulding property, Treasury Hill. Started mapping. Several cuts filled with snow and was unable to sample. Assessment work started and directed it to cleaning out old cuts at the best showings. Gold Knob showings were partly filled. A return trip is necessary to complete maps and sampling.

June 2-4 - visited the Peterson property located 4 miles east of Mile 26, Glacier Highway. This property of six claims lies in a northwest-southeast direction paralleling the general structure of the formations. While this property has had a varied history since its discovery in 1897, and since which time small amounts of ore have been milled, most of the development work has been done without definite knowledge of the type or structure of the orebody. U. S. G. S. Bull. 502, "The Eagle River Region" by Adolph Knopf, page 53, gives the geology of this property and a short account of the workings. Very little has been done since.

The major showing on this property is located on the Prairie claim and consists of an apex of small anticlinal fold in slate between a diorite dike and a dike of augite melaphyre. Both the crest and limbs of the fold contain a compound vein or in geological terms a small saddle reef. This gives the appearance of a very flat vein and has no doubt been one of the major obstacles that has held back the development of this property. Considerable of the apex of this orebody has been mined for ore by Peterson. The fold appears to be plunging southeast at a very low angle and strikes with the general structure of the area. Detail mapping and a study of structure in this area would no doubt reveal some interesting possibilities on this property and surrounding region.

With the incline shaft filled with water, and several of the old workings caved, some information was not obtainable. However, two plane table sketches were made, several samples were taken, all of which will make for an interesting report. Twenty-three samples were taken.

June 5-9 - office.

June 10 - The Josie and Karen claims located one and a quarter miles northwest of Douglas were visited with Mr. Paykull. These two claims are the restaking of Jumbo and Jumbo No. 1 claims of the Douglas Mining Company. These claims are staked upon the andesitic greenstone that extends in a northwest-southeast direction and above the old Treadwell ditch. They further include the large slide and the old tunnel of the Douglas Mining Company. The tunnel which cross-cuts this band of greenstone contains small quartz stringers and veinlets. The walls of the greenstone are clay slates. This is the same band of greenstone as on the Manning property to the south. Low gold values were reported in this tunnel and the owners Paykull and Kilburn want an average assay. The entire tunnel was sampled and one sketch made.

Visited further discoveries on the Black Bear group, or Manning property, adjoining the Josie and Karen claims on the southeast. These discoveries amount to uncovering further this greenstone in which free gold is supposedly seen. One channel sample was taken and also a sample of float found.

June 11-13 - Returned to Treasury Hill and Gold Knob prospects. These prospects were located as the Auks group of six claims by Vic Spaulding in 1935. This property extends from the No. 4 tunnel of the Berg property northwest six claim lengths. A return to this property was necessary to obtain further samples from cleaned cuts.

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Tunnel
The geology of these prospects is given in Bull. 502, "Eagle River Region" by Adolph Knopf, pp. 55-58. The Golden Knob prospect is a flat quartz vein exposed over 200' in a long trench. This vein has an apparent width of 4 feet, however, there has not been sufficient work done to determine the structure of the orebody. Free gold shows in several places. The vein is in schisted augite melaphyre. Other showings of quartz are shown in old trenches in the immediate vicinity and some show free gold. A 700 foot tunnel driven below these surface showings was entirely in slate except 60 feet of diorite porphyry at the portal. This tunnel contains nothing of apparent value, having fallen short of the major showings. A sketch was made of this tunnel and surface showings. Four channel samples of the vein were taken.

Treasury Hill prospect is an apparent fractured dike of grayish green color and unidentified nature which contains numerous quartz veins cutting transversely to the strike of the dike. They range in width from a few inches to several feet and are exposed a distance of 1200' along the northwest course of the dike. Numerous trenches and rock cuts and two short tunnels represent the extent of workings. These were mapped and seven channel samples were taken from cleaned cuts.

June 15-17 - Visited the Smith and Ashby-Tarro properties at the head of Montana and Windfall basins.

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The Smith property at the head of Montana is known as the Patton claim which contains a small banded cross-vein in altered schist. Attempts to operate a small Gibson mill were apparently unsuccessful two years ago. Some stoping and further development was done in the old workings. A description of the vein is given in Bull. 502, p. 55. A sketch was made of this tunnel. KX-112-50

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The Ashby-Tarro property is re-staking of the Smith-Heid property, described in the above bulletin. Several claims are included in this property at the head of Windfall Creek. The interests of these claims are in dispute between Tony Tarro and the Ashbys, father and son. However, the old showings of interest are confined to the Tunnel No. 1 claim, staked by Tony Tarro. Mr. F. A. Boyle is interested with Tarro in these claims. Tarro takes the Ashbys in as apparent partners and several claims are staked. The Ashbys are engaged in sluicing the tops of the orebodies and recovering some gold on the tunnel No. 1 claim. This consists of cutting large trenches which is to be recorded as assessment work and without the aid of Tarro, whose help is apparently not wanted. KX-112-49

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It was my advice to Mr. Boyle to finance Tarro to the extent of doing sufficient assessment to hold the four original claims. Also directed the work to drifting on the contact of the slate and graywacke-schists with the altered greenstone schist on which the ore-bodies apparently lie. Sketches were made of the tunnel and surface showings, which judging from the amount of free gold seen in the panning and the quartz of the outcrops, this property has some merit and warrants further development. Nine channel samples were taken.

The trail up Montana Creek to Windfall is washed out in eight places which in four places necessitate either wading or climbing over steep bluffs. Periods of high water do not permit wading. The road is extended two miles, the first mile is filled and graveled to across Montana Creek and the remaining mile is caterpillar road. Apparently no work is being done this summer.

June 21-28 - At the request of Mr. Pond and Mr. Harrison for a map of the showings and representative samples of the California-Gold Standard group, a trip was made to Berners Bay. It was intended to reach the Kensington and other properties on Berners Bay, however, stormy weather both delayed mapping and reaching the northwest side of Berners Bay. The Winter and Pond property was completed and the Hussie and Thompson property on Sawmill Creek was visited. KX-112-27

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A new discovery has been made on the Winter and Pond property, which is an apparent extension of the old veins across a ravine. The best showing of these consists of 6 to 20 inches of banded quartz in schisted augite melaphyre exposed along the side of a rock knob for 50 feet. This quartz is well mineralized with arsenopyrite and no doubt contains good values. Assessment work has been confined to this new discovery and to cleaning out the old workings as mentioned in Bull. 502, pp. 46-47. All showings were mapped and seven channel samples were taken.

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The Bonanza lode group of six claims is a restaking of the old Tacoma group on the south side of Sawmill Creek, one and quarter miles from tidewater. A short description of the showings of this group is given in Bull. 642, "Mineral Resources of Alaska, 1915" p. 78. Only a small amount of work has been done on this property since the above report has been made. This has consisted of a cut along the south bank of a small stream across several feet of augite melaphyre and across the contact into slates. Several small veins cut nearly at right angles to the strike of the melaphyre dike. These show a pyrite mineralization only. A strong stringer zone shows along the contact in the slates. The showings on this group show close contact to some intrusive and some carry a good character of ore with a different mineralization than the Winter and Pond property to the south. I recommended much more prospecting along the contacts as this section has many interesting features. Three tunnels and some of the open cuts were sampled. KX-112-22

A trip was made to examine a mineralized schist showing two and a half miles south of the head of Echo Cove. This mineralized zone is 30 feet wide and contained only pale pyrite along the seams.

June 29-30 - Tried to plan a trip into Carlson Creek. Was unable to contact any one who knew the trail as some of the owners were on the ground doing assessment work and not expected out until July 3.

Considerable rain in the last two weeks has hindered plane table work considerably. Of the eleven properties examined, nine were examined and sampled extensively. A total of 118 samples were taken and 15 plane table plates were made.

July 2 - On this date at 5 a.m. an explosive accident occurred on No. 3 level, No. 6 Cone of the Alaska Juneau Mine. Only one man was injured and apparently not seriously as he only reported at the Hospital for one bandage. Two others escaped with only a shaking up. This explosion was not reported and not known until July 3 at which time Mr. Humphrey contacted one of the adjoining bulldozers, to whom I am indebted for this information.

Juneau 112
"A bulldozer, Byron Porter, lit a shot in his chamber of four sticks of 40% DuPont Extra dynamite and went into the next chamber where the other bulldozer was. He went there to go to a light as his own lamp fell down the chute when he lit the shot. (Another case where electric cap lamps are safer) When the shot went off there was an immediate explosion of about 100 sticks of the same explosive on the powder bench in the drift off the bulldoze chamber. Porter and the other bulldozer, Geo. Hauk, were knocked down, but were little injured except for small particles and splinters hitting them. The expansion in the chamber of the pressure of the explosion probably saved them as they were only about 35 feet from the bench. Another man, Hans Johanson, was about 85 feet down the drift from the bench and was severely bruised, shaken, and cut on the head when he was thrown against a valve on the air line on the floor. A 4-inch air line was broken and the water pipe alongside it.

The powder bench was a plank bench where the explosives were kept for blasting in the chamber and the charges made up. The primers were in a compartment (No. 6 DuPont blasting caps on 2-foot lengths of fuse), although one or two might have been in the open or exposed to flying fragments from the blast. This chamber was so located that rocks from blasting would be able to hit the bench. The bench was old and old powder boxes were around it. There was then a possibility that explosive material from making up charges over a long period had been left on the planks. It was stated that the explosion at the bench occurred almost at the same time the other blast went off."

