

INVESTIGATIONS - KETCHIKAN MINING DISTRICT  
SUMMARY REPORT

and

Itinerary of J. C. Roehm, Associate Engineer to Commissioner of Mines, Territorial Department of Mines, Juneau, Alaska, May 25 to June 23. 193.

May 25-26. En route Juneau, Alaska to Ketchikan.

May 26. Visited Judy claim, formerly wildcat claim, located two miles north of Ketchikan, half a mile back from beach. This claim is staked along the vein where it crosses the contact of diorite and black slates. This is probably the richest portion of this vein. An unsuccessful attempt to operate a 3-ton Gibson mill was made last year. Owner, Jack McKay, claimed the gold did not amalgamate. Present operations consist of driving a drift along the vein from a crosscut tunnel 60 feet below surface croppings. The vein in the crosscut tunnel consists of two quartz veins 2 inches and 8 inches respectively. Reported to assay \$50 in gold from picked samples taken from both. KX-125-46

May 27. Addressed Chamber of Commerce, Ketchikan.

28. Addressed Alaska Pioneers " .

May 29. En route to Thorne Arm.

May 30. Visited property of Evis Mining Corp. This property is the most active of any property in the district. Twelve men were employed. A prospect tunnel with entrance near the beach was being driven on strike of fissure. The length to date was 890 feet. A raise at 640 feet from adit was nearly to surface, 108 feet above. This raise is to be used for ventilation. This tunnel is known as Evis Tunnel. It is the intent of the company to extend this tunnel on to the Googoo claim and thus under several surface showings. Five hundred feet of ore has already been encountered thus far, which is mineralized quartz 2 to 12 feet in width. One small pocket of high grade was encountered, occasionally a good value while average gold content was reported as low. Values in the raise increased from drift to fairly good values near surface, were reported. A tunnel 510 feet in length has been driven on the east end of the Googoo claim on the vein. One hundred and fifty feet of ore was found here with highest values in vicinity of fault that displaces the vein. KX-126-57

Neither tunnel is equipped with ventilation pipes. The raise is assumed to aid ventilation while at present smoke is blown out between shafts with compressed air. No serious injuries were reported by Henry Twiet in charge of operations. No complaints were heard, only upon questioning, it was stated that occasionally some smoke and gas remained when next shift went to work.

KX-120-120  
The Gold Banner Group was visited which adjoins the Evis property on the south. This group consists of ten claims including the old Gold Banner claim. It is now owned by D. W. Lyle & Co., Aberdeen, Washington. This property is inactive at time of visit. Last year 1,000' of tramway was built, 200' of tunnel was driven and approximately 200 tons of ore stoped on the Crystal Quartz claim. According to Mr. Bonner, in charge of property at the present time, this ore averaged, according to mill run \$3.50 per ton, new price.

A new vein was discovered on this property this year which is exposed over 200' and has a width from 20 to 30 inches. It is heavily mineralized in spots with galena, sphalerite, chalcopyrite and pyrite. An average picked piece containing this mineralization was reported as containing \$16 gold. This vein is on the Iron Sulphide claim on which a tunnel was driven 40' last year.

No definite plans of operation are as yet known for this year.

KX-120-120  
May 31. The old Sea Level property, a parallel fissure vein and adjoining the Evis property on the north. It is now staked as the B & M. Lode claims. Last year some assessment work was done which consisted of cleaning out an old tunnel and stripping. These two claims are in litigation as to ownership between Martin Bugge and Mahoney stakers of B & M. Lode and an Indian by the name of Hamlet. It was reported this case is to come up in the fall term of court at Ketchikan.

KX-120-120  
The Sea Breeze claim which adjoins the B & M. Lode claims and contains the eastward extension of the veins, is under option by C. R. Riel of Vancouver, B. C. Considerable trenching and sampling was done on this property last year. A claim owned by Wm. Marsha adjoining the Sea Breeze on the east shows a 15" vein in granite. Two rock cuts at discovery post was the extent of assessment work seen.

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June 1. En route to McLean Arm, Prince of Wales Island.

KX-121-40  
June 2. Examined Apex group, located nearly head of McLean Arm on south side, one mile from tidewater. This is an old copper gold property on which continuous assessment has been done for several years. Nearly 900' of tunnel has been driven by hand on a fissure vein in a granitic rock. This vein is exposed nearly 2,000' and varies in width from few inches to 3 feet. Ore contains chalcopyrite, bornite in quartz with low gold values.

K2-121-53

June 3. Examined the Nelson & Tift property, located one-half mile from entrance on North Beach of McLean Arm. This is a new discovery of last fall by the above fisherman. This discovery consists of a surface showing on tidewater of massive bunches of sulphides, mainly marcasite and pyrite, in a fissure in the granitic country rock. This fissure which is 25' to 30' wide is filled with limestone, a remnant of pre-existing overlying limestone. This fissure has a strike N. 76° W., nearly parallel with McLean Arm, and dips 82° to the north. After the deposition of the limestone, the country rock was intruded with a series of parallel diorite and diorite porphyry dikes. These strike nearly north and south at nearly right angles to the limestone filled fissure. The occurrence of this ore is on a contact intersection of one of these diorite dikes and the fissure. This sulphide ore occurs both in the dike and most extensively as a replacement in the limestone with some quartz. The extent of this deposit could not be determined, as sufficient work had not been done. However, by advising the owners to put in some trenches at the time of leaving this deposit was exposed a length of 150 feet with a width 8' to 15'. Since this property had not been sampled other than a ton shipment of ore to the smelter, I took seven samples, Nos. 8 to 14, inclusive, from the trenches and rock cut. Each sample was halved and one half given to owners for immediate assay.

The owners are mining this deposit according to instructions given them and shipping ore direct to smelter. It is their aim to ship as much ore as possible in order to finance developments. Sacked ore to the amount of 2,156 pounds was shipped to Tacoma Smelter December 20, 1935. The Smelter assay returned .785 oz. gold per ton. A 50-ton shipment was made June 1 and a copy of the returns was promised to be mailed to the office of the Department of Mines, Juneau. At the time visit another 50-ton shipment was in preparation by mining on the surface a few feet above high tide mark and wheeled onto a scow. A small Sullivan compressor furnished air for one jack-hammer. Prior to visit considerable ore was blasted into the sea.

There are good possibilities along this fissure of finding more of these deposits near intersection of other parallel dikes which were seen along shore line. This deposit may prove to be of considerable more length, if opened up and prospected. The important feature is the fact that the mineralization in this area is gold-bearing and related to the diorite dikes. The sulphide deposits mentioned in U. S. G. S. reports of Mallard Bay, Nichols Bay and in the vicinity of Cape Chacon should be located and samples taken to prove gold contents.

June 4. En route to Ketchikan.

June 5. Made arrangements for trip to Helm Bay.

June 6. Examined old Rainy Day prospect, located 2 miles from entrance of Helm Bay on west side. Owner E. W. Steers plans to operate small mill this year. KX-120 22

*KX-120*  
Visited Lone Jack claim, 3 miles from head of bay and 2,100 feet back from beach. Only assessment has been done recently on this claim. Visited Annie claim which adjoins the Lone Jack on the west. Assessment work consists of stripping and an attempt to open up this vein at a lower elevation. KX-120-1

June 7. Visited Beat Lode, owned by A. H. Stensland, a group of six claims located one-half mile from beach at the head of Helm Bay. Assessment work consisted of cutting a right-of-way for a road to showings. Since this work is being done by members of a family of poor means, their work was redirected to stripping along a fairly promising fissure vein. KX-119-162

Visited old Portland group to the south and adjoining Beat Lode, owned by B. R. Lide of Ketchikan. Assessment work had been done, which consisted of sluicing off the overburden over surface croppings with a gas driven pump. KX-119-124

Visited Free Gold group, located on south adjoining Portland group and next to the Gold Standard. This group was originally the Gold Coin group and recently the Helm Bay Mining Company, now owned by Martin Bugge and H. W. Rogers. 500' of cross-cut tunnel was driven and 900' of drifting by above company two years ago. Seven feet of \$14 ore was cut in the crosscut and some high values were found in drifting. KX-119-123  
KX-120-89

Visited the old Gold Standard property. This property is now under option to the Gold Helm Mining Company, a new company organized in the State of Washington. A Mr. Tillie was said to have been organizer. The terms of the option were a total sum of \$100,000, to be paid at the rate of \$1,000 a month for 10 months, and then \$500 a month until paid. Ten men were engaged in building a new bunk house, old one previously destroyed by fire, and in opening up the old shaft and workings for examination. It was reported that Dean Roberts of the University of Washington is to do consulting work on this property this summer. Prior to this option, this property was under lease during which 1,800' of aerial tram was built. Ore was mined from the glory hole near the beach. \$50,000 in gold was reported to have been recovered during the last four years. Further reported the ore averaged \$3 a ton. KX-120-88

June 8. En route to Union Bay.

June 9. Visited the Peterson-Wilson-Arwiak property, located on the north slope of Bear Lake which is 7 miles via trail from head of Union Bay, south following Bear Creek. This prospect was found five years ago and staked two years ago. It is a new discovery. Three definite parallel stringer zones were discovered. The lowest on the Monte Carlo claim, elevation 1,260', consists of twenty quartz stringers across a width of 30 feet. These stringers vary in width from 1 inch to 12 inches. The two other zones are parallel and at higher elevations. These stringers are quartz filled fault fractures which cut a greenstone formation which lies between slate formations 2,000 feet apart. The quartz stringers extend across the entire width of the greenstone formation and end at the contact of the slates, while the faults continue on through the slates. These stringers contain gold, pyrite, arsenopyrite and contain considerable calcite. Assays were reported from \$3 to \$400 a ton.

A new 8-ton Gibson mill is on the property. The owners intend to build an aerial tramway of 1,200 feet. The mining is to be done by hand and the mill is to be run by water power.

June 10. En route from Bear Lake to Hollis, Prince of Wales Island.

June 11. Visited Kassan Gold & Humbolt properties, located 3/4 mile from tidewater up Harris Creek. These properties are under option to W. Dawson. On a surface outcropping 300 feet above the old Humbolt tunnel, 150' of tunnel has been driven, two short raises and some stoping. Two small blocks of ore, evidently faulted blocks, have been mined. From these two approximately \$5,000 in gold has been washed, concentrated and shipped. Two small ore dumps approximately 350 tons are to be milled. This ore was reported to average \$25 a ton in gold.

June 12. Visited Hope property, formerly old Puyallup, and now owned by E. W. Brown & B. Brant. Brown was taking in a small Ingersoll-Rand compressor and supplies at time of visit. He intends to operate the 5-stamp mill which is on the property. Last year a small amount of gold was taken out by a newly constructed arrastre built by B. Brant. This means proved unsuccessful.

A wagon road is to be proposed by members of the Ketchikan Chamber of Commerce from Hollis into the Lucky Nell and Pioneer properties owned by G. Gervis. This road, which would be 8 miles in length, would follow the Maybeso River valley. The purpose of this road is to encourage the development of

these properties and to encourage prospecting in the mineralized belt that extends northwest from Hollis. In flying over this area from Craig, to Ketchikan the area looks to be fairly intensively mineralized. Made suggestion to one member to propose the route of this road on the west bank of Maybess Creek and by such route would pass both the active Hope property and the Cracker-Jack property. It was reported that T. McWickum expects to sink three test-pit shafts and to have a small party of Washington University students doing geological work for a period this summer on the Cracker-Jack. K2-114-72

June 13. Left Ketchikan for Craig aboard tugboat "Chief".

June 14. Arrive Craig midnight.

June 15. Left Craig for Hunter Bay, arrive 10 p.m.

June 16. Examined McKwan property at the head of Hunter Bay. K2-114-41

The old Goodhope copper property one-half mile East of head of bay is a contact metamorphic deposit which has not had any recent work done on it for what appeared several years. The tunnel was caved and trenches were partly filled. The ore is a magnetite chalcopyrite ore, reported to contain a low gold value. The copper content was reported as 7 per cent copper. Due to the filled workings, no samples could be taken.

A showing of massive sulphide stringers across 5 feet was found 300' from the beach at the head of the bay. The mineralization was pyrite with a small amount of arsenopyrite in a greenstone formation. One channel sample, No. 15, was taken for gold and silver assay.

Along a small creek that runs to the north at the head of the bay are two rock cuts along a fault zone which contains calcite and some iron pyrite mineralization. No. 16 sample was taken across 18 inches of the best showing to be assayed for gold and silver. A few gold colors were panned in the creek. The widest calcite vein with a little quartz was 2 inches.

Located one-quarter mile east of the old Indian village of Klinkwan at the entrance to Hunter Bay is a copper prospect staked by McKwan. This showing consists of a fault intersection in greenstone with some of the faults containing calcite. Scattered in the calcite are small bunches of bornite and chalcopyrite. The widest calcite stringer was nearly three inches. This prospect did not look worth while to sample.

The owner was not at the property nor was any word received as to when he was to appear. It is possible that some of the showings were missed. However, the greater portion of showings were seen and considered as not of economic importance, with the exception possibly of the Goodhope Copper property.

June 17. Located at the south head of San Antonio Bay, Baker Island, a 3-foot fissure vein outcrops on the beach. This vein outcrops over 4,000' and has a width from 2 to 3 feet. This vein is in slate for half its length and the other half is in granite. The most intense mineralization is over a distance of two to three hundred feet each direction from the contact. The mineralization consists of pyrite, sphalerite, galena and small amounts of chalcopyrite and bornite. The gangue minerals are quartz and a little calcite. On the footwall a bluish gouge is very persistent which has a width from 2 to 3 inches. A small granitic dike that parallels the vein on the hanging wall was seen in several places. This vein was discovered by Elmer Perkins in 1918 and located as the Blue Streak. Considerable work was done following, which consisted of a tunnel 77' long and numerous cuts. According to E. W. Steers, the vein was channel sampled in the tunnel and all cuts and the average gold value was \$3 per ton and 4 oz. of silver. This vein has been restaked, the last staking being August 18, 1930. However, no work has been done for several years.

Sample No. 17 was taken across 32" at a point 150' from contact in the slate. Since this vein appears to be open, fairly complete notes were taken.

June 18. Visited property of San Antonio Metals Company located on the south side of the entrance of San Antonio Bay, Baker Island. This property consisted of a group of 26 claims and optioned to the above company by J. G. Calvin of Wrangell, present owner with associates.

There were two showings of different character and type on this group. A gold molybdenite showing on the beach and a small blanket vein containing high grade zinc, one mile west via trail from the beach. The zinc showing is in the slate formation and the gold-molybdenite showing in the granite.

This latter showing consists of several hundred quartz stringers varying in width from less than an inch to 3 feet across a distance of 600'. These stringers are interlaced somewhat, but generally parallel and across some distances of 100 feet very close together. One distance of 250 feet across the most concentrated area 120 quartz stringers were counted over 1 inch in width. These stringers occur in a zone of siliceous granite

which extends for several hundred feet in length and nearly 1,000 feet wide. This zone is parallel to the granite contact with sediments and approximately 1,000 feet from the contact.

There are two later fault zones which intersect this zone on a point on the beach line. Within this area of intersection the development work of the late company was confined. It consisted of four diamond drill holes, trenching and stripping. The mineralization which is widely disseminated and is most concentrated within this zone of intersection in both the country rock and quartz veins.

It was reported that average gold values of \$3.20 were obtained from the drill holes. Molybdenite occurs sparsely scattered in the quartz and mineralized country rock. It is associated with pyrite and mostly along minute fractures. The entire mineralized zone is very spotty and irregular, there appears to be no consistent widths that would give an average sample value of the deposit. No samples were taken. Fairly extensive notes were taken. Assessment work is being done this year on only ten claims for owners.

June 19. En route to Craig.

June 20. En route from Craig to Ketchikan via plane.

June 22. En route from Ketchikan to Juneau.