

ANNUAL REPORT OF PROSPECTORS AIRWAYSYUKON TERRITORYDURING 1958PART I -- PROSPECTINGSUMMARY:

Three two-man, prospecting teams were placed in the field in June. Four areas were prospected in detail and a fifth area was examined during one ten-day traverse. All teams used dogs for ground transportation. The Graham team was supplied by helicopter from Dawson; the other teams were serviced and visited using fixed-wing aircraft.

OGILVIE RANGE:

Graham prospected the Ogilvie Range between the head of Twelve Mile Creek and the head of Fifteen Mile River, sixty air-miles from Dawson, Y.T. A map showing routes travelled and rocks and minerals encountered is attached. This team found iron formation between the heads of the east and west forks of the Fifteen Mile River. Samples taken from one of the largest showings assayed 20% Fe. The hematite-bearing quartzites are interbedded with shales and slates and are estimated to be uneconomic. Chalcopyrite, in quartzites, was found on a tributary of the west fork of the Fifteen Mile River. The size and grade is too low to be economic. A float sample of galena and some one-inch veins, in place, were found in the divide between Fifteen Mile River and Little Sheep Creek, a south tributary of Tatonduk River. A deposit of magnesite was found on the west side of the West Fork of Fifteen Mile River.

The copper occurrences found were examined by the undersigned and the team was lifted from the area in the first week of September.

MacMILLAN RIVER:

DeBlois prospected the north side of the North MacMillan River around Mt. Armstrong and east and west of the North Fork of Husky Dog Creek. This team also prospected the head of Clearwater Creek between the North and South MacMillan Rivers, and made a traverse from a small lake nested on the west side of Mt. Selous, south-east to the South MacMillan River.

Routes traversed are shown on the Yukon topographical map enclosed.

This team found a pyrrhotite-chalcopyrite zone, in an altered sediment estimated by the prospector to be up to 500 feet width. The location is on the south side of the 6,688 ft. elevation peak east of Barr Creek, north of the North MacMillan River. The find was made in September; the location is above the 5,000 ft. elevation and an early snow-cover prevented an examination of the exposure. Some 60 lbs. of samples, taken as grabs from four locations, were assayed. They averaged 0.46% copper; traces of gold and silver. The best sample assayed 0.53% copper. Claims were not staked on this showing; the exposures will be examined, sampled, and if warranted, staked, during 1959. The location of this find of mineral is near a talus slope where Finn Campbell picked up a piece of float, of similar material, when he made a traverse through the area in 1955 for this company. An assay of his sample gave 1.1% copper.

On the west side of the head of Clearwater Creek, a north trending zone of quartzites and slates was traversed in three places by DeBlois. The zone is 200 to 500 ft. width, is extensively stained with iron oxides, and was seen from the air, at intervals over a distance of 10 miles. Detailed prospecting found one showing of bornite in pyrite-infested quartzite. The width was 18 inches and the showing is exposed for a length of ten feet as a lense. The bornite is secondary. The find is not interesting. Claims were staked on this showing, but after examination, were allowed to lapse without recording.

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The traverse along the south side of Mt. Selous and the prospecting on the north and west forks of Russell Creek did not result in any mineral finds.

This team was lifted out of the area the 10th of September when snow-cover prevented any further prospecting.

TOOBALLY LAKES - BEAVER RIVER:

Willison prospected in the vicinity of Toobally Lakes for one month. The east shore of the lakes and an area west of the North Lake as far as the divide east of Rock River, and around the head of Beaver River was prospected. Nothing of interest was seen. The rocks are generally metamorphosed sediments and volcanics.

FLAT RIVER:

This team prospected the watershed draining into Flat River on the Y.T. - N.W.T. boundary in the vicinity of Seaplane Lake. The contact of the granite on Dome Mtn. was prospected. The area south-west of Flat River between Seaplane Lake and Pass Creek was prospected to the cirques at the head of each tributary stream; pyrrhotite, in a skarn zone, associated with limestone and near a granite contact was found in this area, and testing of hand specimens with dimethyl showed traces of nickel. The mineral was not identifiable. The prospector reported secondary zinc mineralization but did not find any sulphides.

TUSTLES LAKE:

This team prospected the granite contacts in the area north-east of Tustles Lake, at the head of Frances Lake. The contacts between the sediments and granites were examined north-west and south-east of Tustles Lake without finding any evidence of mineralization. Some molybdenum in the talus at the head of Thomas River, north-west of Tustles Lake was found; the mineral was not seen in place.

This team was lifted out of the area to Watson Lake August 25th. Routes traversed are shown on the enclosed map.

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RECOMMENDATIONS:

The season's work in the Ogilvie Range was unsuccessful in locating mineral of economic importance. The prospecting was sufficiently thorough that further work is not recommended in this area. The hematite occurrences are wide-spread and uniformly small and low grade. There is copper float, generally chalcopyrite, scattered throughout the area, especially at the head of the West Fork of Fifteen Mile River, but where concentrations of one percent copper were examined, they were found to be veins five feet or less in width and lacking continuity. Where chalcopyrite is disseminated in sediments, invariably the grade was from trace to one-half of one percent.

The prospecting in the area of the forks of the MacMillan River was planned as an expansion of the areal programme of prospecting the tributary to Vangorda Mine. An examination of the pyrrhotite-chalcopyrite find, east of Barr Creek, is recommended because of the size reported by the prospector. Grab samples, taken from the showing, were examined before assaying. The rock is uniformly hard. There is no secondary copper mineralization on the samples. It is probably an altered sediment. All samples showed some chalcopyrite; in fact, all pieces of rock in the four grab samples showed some chalcopyrite. The average assay of 0.46% and the best assay of 0.92% copper are lower than the estimated content made by visual examination of the samples submitted.

The prospector did not submit a written report; however, his verbal description indicates his samples are a mixture of float and rock in place. It is estimate the samples are not representative and a re-check of the area is warranted.

Further work in the area between the forks of the MacMillan River is not recommended. In addition to the fact the iron-stained zone is barren of mineral, the Canadian Geological survey party, which mapped the southern part of this area did not see any concentrations of interesting mineralization.

Willison's work in the Seaplane - Pass Creek area was thorough and complete. Further detailed work on the pyrrhotite in limestone on the contact of the granite south-east of Flat River would require helicopter support.

Further work is not recommended for the Toobally Lakes - Beaver River area. Outcrops of intrusives are far from abundant and the quartzites seen were barren of mineralization and lacked structural deformation.

Work in the Tustles Lake area was not completed in sufficient detail to evaluate the area.

Maps enclosed with this Report:

Yukon topographical map - 20-mile scale
Dawson topographical map - 4-mile scale

March 22, 1959

Roderick Macrae
Roderick Macrae

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PART II - PRELIMINARY DEVELOPMENT:

SUMMARY:

Short packsack diamond drill holes were drilled on Blair No. 5 and Bell No. 3, two of a group of fourteen mineral claims on Quill Creek, owned by the company. 915 feet of drilling was completed in 16 holes. The drill programme tested an E.M. anomaly found in a 1955 survey, and failed to intersect sulphide mineralization. Two holes were drilled to intersect the line of conductors on Line 3200 E; four holes were drilled on Line 3600 E, and three on Line 4000 E. Core-recovery was better than 90% in all but two short holes, which were abandoned at 10 ft. and 24 ft. The holes intersected uniform-textured grey to green andesite with sparse $\frac{1}{4}$ inch pyrite stringers and some minor disseminated pyrrhotite.

One Line 3750 E, a series of seven short holes were drilled in a dry creek bed across the strike between conductors recorded on Line 3600 E and Line 4000 E. Minor sulphide mineralization was intersected. Calcite-filled stringers, up to two inches width, were intersected in three of the drill-holes.

An E.M. profile was run on Line 3200 E and 3600 E and on Line Zero over the discovery find. On the first two lines, all readings were off scale and profiles were uniformly flat. Readings over the discovery showing on line Zero were off scale.

CONCLUSIONS:

The drilling programme completed, indicated there is not a sulphide zone in the area of the E.M. conductors, found in 1955, to the depth tested in drilling. The 1958 survey, with the Crone E.M. failed to confirm or deny the earlier survey due to failure of the instrument to operate on 35 degree slopes.

Drilling and trenching done in connection with the season's work was filed as assessment work on a fourteen-claim block, and in the event that a decision is made to apply for lease on this group, a survey, only, is required to complete assessment requirements.

PART III - PROPERTY EXAMINATIONS:

SUMMARY:

Seven mineral prospects were examined, one held by staking by the company, the others owned by independent prospectors. With the exception of the Tango, a patented mineral claim on Keno Hill, all six have had recent preliminary development work. On the Duff Group at Elsa, Mayo Mining Division, shaft sinking was in progress at the time of the examination.

The locations of the prospects are marked on the topographic map of the Yukon which is enclosed.

32 Claim Group, Grizzly-Jim-Joe-Lucky: 138-16; 64-46.

This is a chalcopryrite vein, exposed on the north-east side of a tributary of Fifteen Mile River, approximately 60 miles north of Dawson, Y.T. There are two parallel veins and one other exposure, all smaller in dimension than the main showing. Trenching exposes the main vein for ten feet on one side of the creek. The extension is covered with overburden on the south-west side of the small tributary to the Fifteen Mile River. Two samples across six feet of vein assayed less than 0.5% copper, trace gold and silver. The host rock is slates and sediments. Prospecting around the showing did not result in further exposures. Strike of the main vein is approximately 270 degrees, dip vertical. The prospect is not worth further consideration.

Duff Group: 135-25; 56-30.

This is a twenty-claim group located on the south side of the South McQuestron River adjacent to the road from Elsa to Keno City. Owner is Alex Smith of Mayo. Shaft sinking was in progress at the time the examination was made; the shaft depth was thirty-eight feet. Mineralization exposed was sphalerite, with minor galena. The showing is a fracture or fault vein striking 335 degrees, dipping steeply east, on or near the contact with a green-stone lense. Best width exposed was sixteen inches of mixed oxides and sulphides of zinc and some siderite.

There are three other exposures of limonitic fracture filling material that outcrop within a claim length, that cannot be correlated on surface with the main showing. The area of the exposures is covered with Yukon schists. A reconnaissance E.M. survey was made over the area of the main showing which failed to indicate the vein where exposed, due, possibly to the masking effect of the schists and graphitic horizons in the surface material. The showing is worth further examination when the shaft has been deepened.

Tango Mineral Claim: 135-15; 63-51.

This is a single full sized mineral claim held by lease by Emil Forrest of Whitehorse. It is located in the vicinity of the Comstock-Porcupine vein structure on the south-side of Keno Hill. A survey with the E.M. unit was conducted to attempt to locate a north-east vein structure similar to the Number Nine which is associated with the Porcupine vein, and was currently under development with two adits by United Keno Hill Mines during the season.

The survey failed to indicate any structure of interest. Test lines were run both east west and north south over the claim and in the vicinity of the greenstone-quartzite outcrop on the west side of the claim. Further work is not recommended.

In connection with the attempts to trace a typical Keno Hill structure on the Tango, an evaluation was made of an eighteen-claim block that adjoins the Tango M.C. in Hope Gulch. A study of the structure indicated that the Comstock Keno property would have to be included in the group because of its location covering the known mineralized part of the Porcupine vein system. The inability of the Wedge E.M. unit to identify known vein structures in the area on Keno Hill meant that any prospecting of this group would involve expensive surface stripping methods and the proposition concerning this possible option was dropped.

North Star Group - Elsa: 135-45; 63-51.

Further work was done in 1958 consisting of another shallow shaft on the Alberta #2 mineral claim by John Strebchuk. The mineralization exposed is thin veins of sphalerite in thin-bedded quartzites. On the original showing which has a thirty foot shaft sunk in 1957, one additional round was taken by the owner; the mineralization is similar to the exposure originally developed and is not of interest.

Bornite Creek: 137-34; 60-28.

This is a bornite-chalcopyrite prospect on Bornite Creek, a tributary of Kathleen Lake in the St. Elias Range. There are three exposures of bornite with minor chalcopyrite in a steep talus slide. Each is a lense, the best exposure being thoroughly exposed by erosion and some stripping. An attempt to connect the exposures by tracing structure with the portable E.M. failed to secure satisfactory readings. One exposure made by the undersigned by stripping was sampled over a width of six feet. Further work is required to uncover the exposures reported by government geologists, who made the original find, before the prospect can be assessed. Owners are planning a winter work programme to expose the surface outcrops along strike.

Kathleen River Asbestos: 137-18; 60-43.

This claim group is located west of Kathleen River, five miles south of Kaines Junction. Showing consists of one ten ton boulder of serpentine bearing rock exposed on surface, and three exposures of 1/8 to 1/4 inch fibre asbestos exposed by stripping over a width of rock thirty-two feet. This find was originally optioned to Bell Asbestos Corporation in 1956. The fibre exposed in place is brittle and dusty. Further stripping has been planned by the owners who have available mechanical stripping equipment. The showing is worth further examination when more work has been completed by the owners.

Carbon Hill Antimony Prospect: 135-15; 60-11.

Twenty claims were staked for the company covering the Becker Cochrane antimony prospect and certain other showings on Antimony Creek, a tributary of the Wheaton River. The main showing was sampled and an E.M. survey was conducted to locate the extension of the shear zone west of the end of the existing tunnel. The exposure developed by the original owners, consisting of an 80 ft. tunnel driven on a five ft. shear zone, was systematically sampled. Sampling indicated a two ft. vein of 4 to 6% Sb in the shear zone, exposed for seventy ft. The survey did not indicate any continuity on surface of the shear zone beyond the face of the tunnel. Silver content of all samples taken was less than one ounce; gold content, nil. This prospect is not worth further consideration; the claims should be permitted to lapse.

(Of the seven prospects examined in the Yukon this year, the Duff group, owned by Alex Smith of Mayo and the Bornite Creek group, owned by Herman Honing of Whitehorse, are worth further examinations, when more prospecting has been completed. Locations of these properties are marked on the enclosed Yukon Topographical Map.)