

Summary. Coal River - West Coal Area.

Prospector Hudson and Pites gave fire cracks prospecting along the contact of the batholith between the Coal and West Coal River from late July until the first week of September. The area covered was from peak 6907 to Cass Lake. Limited mineral was in the area resulted from helicopter reconnaissance out of Quartz Lake in 1962. At that time a few miles of the contact were flown and one magnetite bearing shaw zone checked on the ground. A limited amount of helicopter reconnaissance was carried out early in August of this year.

The batholith contacts sedimentary rocks throughout the area prospected. Shale, slate, argillite and limestone are the dominant rock types. In the valley south of Cass Lake the schists are restricted to a belt two to five miles wide between the Cass batholith on the east and another granite body on the west side of the valley.

At least six mineral occurrences ^{were} reported. Going from Lockwood around the contact the first deposit ① is the magnetite shaw zone located the previous year. The magnetite mineralization makes up 10-25% of a primarily garnet shaw lying right on the intrusion contact for a width of 20 to 30 feet. Next to this zone is a one foot width of garnet-calcite shaw carrying ~~5~~ to 10% chalcopyrite. The mineralization is only exposed along strike for about 20 feet ~~before~~. No further evidence of mineralization was found in the ~~area~~ surrounding area.

Showing ② was found approximately 1000 feet east of the granite contact in an ~~outcrop~~ outcrop about 8' x 8' in size. Sphalerite and ~~hematite~~ hematite and lesser amounts of galena make up about 15% of the specimen which is a light grey chert. The mineralization appears to be related to an east-west cross fracture.

The third showing ~~was~~ is a small ~~is~~ ^{is} within the granite batholith. Galena and pyrite occur in fracture zone over more than 100 feet in a creek bottom. A picked specimen sent in for assay carried 3.5% Pb and 1.24 oz/tm Ag, with .005 oz/tm Au. The area immediately surrounding the mineralization is covered by overburden.

Unworked float was picked up in the span, 3 miles northeast of peak 6638. Galena

apbalsite and a trace of chalcocite make up about 5% of a quartz, calcite, epidote shaw. The sulphide mineralization was found to be located in place and the amount of float (only a small amount of best float was found, and)

Showings ⑤ is located on top of the ridge 6 miles west of peak 7050. Sulphide mineralization is in shaw and appears to be related to two faults trending one trending NE the other NW separated by a few hundred to 1 or 2 thousand feet. Apbalsite with very minor amounts of galena and magnetite make up to 25 or 30% of the rock in very irregular zones near more than a few feet wide.

Showings ⑥ is 5 miles south Caesar Lake on the west side of the valley. Galena, chalcocite and apbalsite mineralization occurs in shaw near the granite contact. Mineralized widths are seldom more than a few inches wide. The best mineralization was picked up in an old camp nearby and consists of 60% galena and 10% chalcocite. The showing has been studied by William Paulsen in August 1960. A few thousand feet to the NW along the contact quartz vein carrying small amounts of galena, pyrite, chalcocite and apbalsite were found. They occur in a 25' wide vein zone and may be up to 3 or 4 feet wide.

Conclusion and Recommendations.

Of all the areas prospected this season the area between the Coal and West Coal Rivers seem the most mineralized. In the opinion of the prospector more of the showing is worthy of further work but whether further prospecting may be justified. The antimony contact of ~~the~~ ^{any north of the main prospect} ~~is~~ ^{is} the east side along the main valley of the Coal ~~is~~ ^{is} east of the high country and for the most part ~~is~~ ^{is} covered by low swampy ground with little or no outcrop. Little is known of the geology east and south east of Caesar Lake but it is known that this area has been prospected before for any ^{possible} ~~obvious~~ mineral deposits but ~~has~~ ^{has not} been found. This is ^{probably} ~~perhaps~~ also true of the west side of the West Coal - Caesar Lake valley. The ^{west side} ~~area~~ is generally more rugged and mineral better exposed than ~~than~~ ^{than} than prospected to the south ~~is~~ ^{is} therefore prospecting is not as important a tool.

5. Coal - West Coal Rivers, Caesar Lakes Area.
Summary of Prospecting.

Prospectors Hurdere and Pitco spent 5 weeks ~~spent~~ prospecting along the contact of the batholith between the Coal and West Coal Rivers from late July until the first week in September. The area covered was from peak 6907 to Caesar Lakes. Initial interest in the area resulted from helicopter reconnaissance out of Quartz Lake in 1962. At that time a few miles of the contact were flown and one magnetite bearing skarn zone checked on the ground. A brief helicopter reconnaissance was carried out early in August of this year.

The batholith contacts sedimentary rocks throughout the area prospected. Shale, slate, chert, argillite and limestone striking north to northeasterly are the dominant rock types. In the valley south of Caesar Lakes the sediments are restricted to a belt 2 to 5 miles wide between the large batholith on the east and another granitic body on the west side of the valley.

Six noteworthy mineral occurrences were reported. Travelling clockwise around the contact the first deposit ① is the magnetite - skarn zone located the previous year. Magnetite makes up 10-25% of a principally garnet rock lying against the intrusive contact in a steeply dipping body 20 to 30 feet wide. Next to this zone is a one foot width of garnet - calcite skarn carrying 5-10% chalcopirite. The mineralization is only exposed along strike for 20 feet. No further evidence of significant mineralization was found at this locality.

Showing ② was found approximately 1000 feet east of the granite contact in a small outcrop about 8 feet by 8 feet. Sphalerite and lesser amounts of galena make up about 15% of the specimen which is light grey chert. The mineralization appears to be related to an east-west cross fracture.

The third showing is a mile inside the granite batholith. Galena and pyrite occur in fracture zone spaced over more than 100 feet along a creek bottom. A picked specimen sent in for assay carried 3.5% Pb, 1.24 oz/ton Ag and .005 oz/ton Au. The area immediately surrounding the mineralized zones is covered by overburden.

Mineralized float was picked up in the pass 3 miles northeast of peak 6638, ^{locality ④} V. Galena, sphalerite, and a trace of chalcopirite make up about 5% of a quartz - calcite - epidote skarn. Only a small amount of such float was found and no sulphide mineralization was located in place.

Showing ⑤ is on top of the ridge 6 miles west of peak 7060. Sulphide mineralization is in skarn and appears to be related to 2 faults one trending northeast, the other

northwest, separated by a few hundred feet or more. Sphalerite with very minor amounts of galena and magnetite make up to 25 or 30% of the rock in very irregular zones never more than a few feet across and discontinuous along strike.

Showing ⑥ is 5 miles south of Caesar Lakes on the west side of the valley. Galena, chalcopryite, sphalerite and pyrrhotite occur in skarn near the granite contact. Mineralized widths seldom exceed more than a few inches. These showings had been staked by William Paulock in August 1960. A few thousand feet to the northwest along the granite contact quartz veins carrying small amounts of galena, chalcopryite, sphalerite and pyrite were found. They occur in a 25' wide rust zone and individual veins are up to 3 or 4 feet wide.

Results from the limited amount of silt ^{sampling} ~~sample~~ that was done indicate a background of 80 to 150 ppm zinc and 10 ppm or less copper. Higher values probably reflect the numerous, small replacement type deposits that are described above. The highest value of 370 ppm zinc is from the drainage ^a mile or so below showing 5.

Conclusions and Recommendations

Of all the areas prospected this season the section between the Coal and West Coal Rivers seems the most mineralized. In the opinion of the prospectors more of the showings are worthy of further work although the area as a whole may be worth more prospecting, particularly if some geologic information could be obtained from the G.S.C. or companies that have worked in the area. The intrusive contact along the main valley of the Coal and north of the area prospected lies east of the mountains and for the most part is covered by low swampy ground with little or no outcrop. Little is known of the geology east and southeast of Caesar Lakes but this area has been prospected before so any obvious mineral deposits have probably been found. This is also true of the west side of the West Coal - Caesar Lakes valley. The whole region is generally more rugged and much better exposed than those prospected to the south. It is therefore possible to put heavier emphasis on conventional prospecting rather than geochemistry. ~~The results from silt samples taken this season are not yet available~~

R. E. Gordon Davis

Nov. 1963

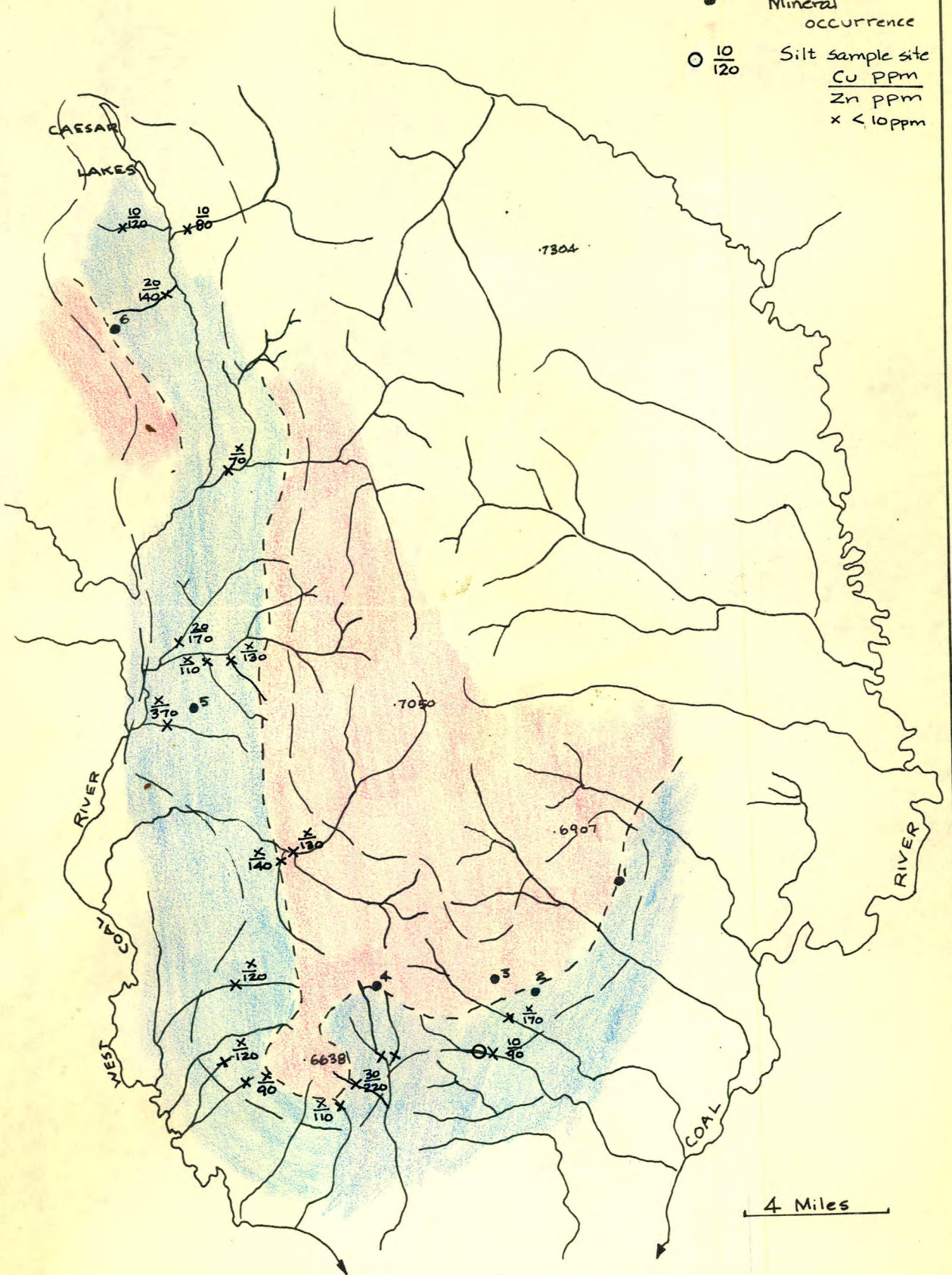
COAL - WEST COAL RIVERS - CAESAR

LAKES AREA - Prospecting

LEGEND

- Granite
- Sediments
- Boundary of area prospected
- Mineral occurrence
- Silt sample site

Cu	PPM
Zn	PPM
x	< 10ppm



4 Miles

G. Davis
Oct. 1963