

FILE COPY

N.T.S. 82-M

REPORT
ON
ADAMS RIVER PROSPECTING
PROGRESS SUMMARY
1961 SEASON
REVELSTOKE & KAMLOOPS

MINING DIVISION
E. D. Dodson
Geologist

ADAMS RIVER PROSPECTING

PROGRESS SUMMARY

1961 SEASON

Vancouver, B. C.
January 2, 1962

Earl D. Dodson
Geologist

ADAMS RIVER PROSPECTING

PROGRESS SUMMARY

1961 SEASON

INTRODUCTION

For the past two seasons prospecting has been carried out in the areas shown on the accompanying map. This work has indicated mineralization in several areas. At the close of the first season a prospect of considerable interest was discovered (Ruddock Creek). Work since that time has indicated several showings of lesser interest.

PROSPECTING METHODS

The favoured method of operation has employed a Hillier 12E helicopter and crew, a geologist, and two or three two-man teams of prospectors.

Areas are generally evaluated by aerial reconnaissance with the helicopter. As now practised this involves flying any well-exposed outcrop areas available on every drainage, tributary and cirque. In practice, of course, the coverage is less than perfect as the helicopter may be flown at distances of 50 to 500 feet from the mountain face, and the geologist actually sees a strip of varying width above and below the helicopter's path. The only areas now deliberately neglected are the interiors of large simple granitic intrusives. Areas assumed to be non-favourable (e.g. phyllite belts) are given a less intensive going over once their width and continuity have been established.

At intervals the geology is checked on the ground and float is checked for evidence of mineralization. Any areas showing gossan, veins or faulting are checked as a matter of course.

As a follow-up to the above, teams of prospectors are placed in suitable areas to check out favourable belts, providing ground travel is not too difficult. The prospecting team is left in the area for varying periods of at least a few days duration. The prospectors are not only expected to turn up any major mineralization but also serve to give further data as to the general favourability of the area.

EVALUATION OF THE METHOD

It can readily be seen that the above method is designed primarily to detect the readily visible ore-deposit. In addition it outlines areas of probable interest which can be further checked by ground parties.

The method is, however, not ideal for small, inconspicuous or concealed orebodies. Possibly the most significant of the above weaknesses is related to the inconspicuous deposit. Lead-zinc deposits in limestone constitute what would seem the best prospecting bet in the Selkirk section. Many of these deposits are low in iron, thus show little gossan and are difficult to differentiate from limestone or dolomite. Where buff-weathering dolomite is developed around a mineralized zone it may be possible to spot this alteration from the air. A ground check would then almost certainly indicate whether further work was needed.

AREAL GEOLOGY

As will be seen on the map the area worked to date involves portions of the Monashee, Selkirk and Rocky Mountains. The geology is less readily divisible. The Monashees and the northern Selkirks consist primarily of granulites and schists of sedimentary origin. A large part

of this area is rich in pegmatite. The remainder of the Selkirks and the front ranges of the Rockies consist primarily of Paleozoic and Proterozoic sediments metamorphosed to phyllite grade or higher. Granitic intrusives are apparently lacking in the Monashee portion although several masses are present in the Selkirks. The only intrusives of consequence in the Rocky Mountains are small nepheline syenite bodies near the Rocky Mountain Trench.

MINERAL DEPOSITS

Monashees - All mineralization of consequence seen to date consists of narrow, extremely elongate lead-zinc and/or copper deposits associated with limestone or limy quartzite. The Jordan River prospect, the Cotton Belt, and the Ruddock Creek prospect all qualify. In addition, the sub-economic Bay Lake copper zinc showing appears to be of similar type. A new find on Foster Creek, as yet unexamined, is understood to be of similar type.

Selkirks - Mineralization in the Selkirks is varied. Deposits of silver, lead, zinc, gold and copper are known. Unfortunately most of these deposits have been known for many years and are of little interest at this time. In two or perhaps three instances at least some time could profitably be spent in examinations if a favourable option were available.

A new find was made this year at the head of Downie Creek. This consists of widespread lead-zinc mineralization in dolomite (see AM Group). Its economic significance is problematical.

Rockies - Several new showings of copper, lead and zinc were discovered in the front ranges of the Rocky Mountains. None of these show particular promise although at least one is of considerable lineal extent. (see Harvey Ck.).

INDIVIDUAL SHOWINGS

Ruddock Creek

Work on the Ruddock Creek showings was under the direction of Hans R. Morris and will be the subject of a separate report by the above.

Extensions of the Ruddock Creek showings found as part of the prospecting program this year are the subject of a separate report.

Bay Lake

This showing, found during the 1960 season, is a sub-economic copper-zinc showing in limestone and quartzite. No further work done in 1961.

Foster Creek

Prospectors investigating a limestone belt near Foster Ck. at the close of the 1961 season discovered showings of chalcocite-bearing limestone. Unfortunately this occurrence was never seen as a heavy snow-fall and subsequent poor weather put an end to prospecting in this area. The prospectors, however, believe that it is a four foot wide vein on the footwall of a major lime band. Grab samples gave assays of approximately 2% copper. An examination will be made early in the 1962 season.

AM Group

The AM group of four mineral claims was staked to cover showings of lead-zinc mineralization discovered in August by aerial reconnaissance. Later investigation indicated a zone of disseminated and irregular galena-sphalerite-barite mineralization in and adjacent to a dolomite mass apparently developed within normal limestone.

Due to the irregular "nuggety" occurrence of the minerals estimation of grade is extremely difficult. It is thought, however, that exploration might develop zones near the top of the dolomite which would run in the order of 5% combined lead-zinc. Lead-silver ratios in picked specimens are approximately 1 oz. Ag to 5% Pb.

If possible, a few days will be spent during the 1962 season in ground sluicing some of the more promising areas in order to get a better estimate of the true tenor of the sulphides; and thus to provide a fair indication of the probable economic significance of the showings.

Harvey Creek

A schist belt crossing the heads of Molson and Harvey Creeks northeast of Boat Encampment is mineralized with chalcopyrite, pyrrhotite, pyrite and quartz throughout a distance of over two miles.

The band, 10 to 50 feet wide, contains much disseminated sulphide and locally considerable vein material but overall grade would seldom exceed .3% copper over any mineable width.

SUMMARY

In summary the prospects discovered during the 1961 field season (exclusive of extensions of Ruddock Creek showings) in two instances require at least some further work. These are the Foster Creek copper showing and the AM lead-zinc deposit.

Prospecting of the general area is by no means complete. Large areas as yet unworked by helicopter-supported parties remain, particularly, to the northwest and to the south.

Several small areas remain worthy of more intensive work. These

are shown on the accompanying map. It is possible that some time could be profitably spent in attempting to work out the gross structures particularly in the section between Revelstoke and Rudderock Creek. This becomes particularly worthwhile if one accepts the premise that the zinc deposits are developed in a single horizon or in closely related horizons.

At present a geological study of the entire region is in the process of compilation. It is hoped that this study will aid in delineating favourable belts both within and without the area already worked. An addendum to this report summarizing the results of the study will be submitted at a later date.



Vancouver, B. C.
January 3, 1962

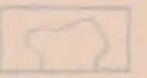
Earl D. Dodson
Geologist

Adams River Area
B.C.

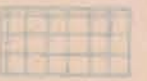
Scale



Reconnaissance - 1960-1961
(within outlines)



Areas requiring more detailed
work



Areas meriting reconnaissance
work



Showings discovered 1960-1961



