

A BRIEF REPORT ON THE MC 1-8 AND CM 1-7  
CLAIMS, KENO HILL AREA, YUKON TERRITORY

INTRODUCTION

The MC 1-8 and the CM 1-7 claims are owned by Howard Tracy, proprietor of the Carmacks Hotel. At his request these claims were examined by R.A. Dickinson, geologist, Cyprus Exploration Corporation, Ltd. on Sunday, July 16, 1972. This report is a brief summary of the findings.

LOCATION

The MC and CM groups are located in the Keno Hill Area on Sheet 105-M/14, Yukon Territory. The two groups are adjacent and lie 2 miles southeast of Gambler Lake, between Faro Gulch on the west and McKay Gulch on the east. They lie on a 20° north facing slope which is covered lightly by spruce and buckbrush. A cat trail leads to the claims from a 2 x 2 dirt road which ends near the headwaters of Gambler Creek. Walking time is approximately one hour. A quartz-galena-silver-siderite vein showing has been exposed by trenching on claim MC 4.

GEOLOGY

The property is wholly underlain by a greyish black quartz-muscovite schist which is thought to belong to the Nasina series of possible Precambrian Age. The strata strikes easterly and dips moderately (20-30°) south into the hill.

The schist has been intruded by a series of parallel felsic, granophyre to quartz-feldspar porphyry dykes that closely resemble those presently being examined by the author in the Mount Nansen area. The dykes may be of Tertiary Age. At least three dykes that are conformable with the strike and dip of the metamorphosed strata, cross the property. The dykes are more resistant to weathering than the schists and consequently form craggy bands across the mountainside and are easily recognizable. The dykes are parallel and are approximately 1/2 mile apart. True width of each dyke is probably not more than 200 feet.

A quartz-galena-silver?-siderite-pyrite vein system has been exposed, by trenching across the most northern dyke. In the trench there are six veins, on the average 5 feet apart, that trend N20E and dip steeply west. One vein is one foot wide while the others measure 2-4 inches. The vein material has been deposited in a series of parallel fault fissures. The southern contact of the dyke with schist has been uncovered while the northern contact remains unexposed.

## GEOLOGY cont'd

This contact dips 25° southerly. Although the fault system cuts both rock types, the veins pinch out on entering the schist.

The veins are predominantly quartz and siderite gangue with large interspersed blebs of galena and pyrite. Near surface the vein has decomposed into a limonite and manganese stained, crumbly material. According to Mr. Tracy, the galena carries silver values of up to 500 ozs. per ton. Assay reports were not available. The granophyre dyke wall rock is flecked with sericite near the veins.

Approximately 2,000 feet south (uphill) where another granophyre dyke crosses the property, quartz float carrying minor sphalerite was located, is a position on strike with the above described veins. In addition, un-mineralized quartz veins trending with the schist were noted.

## CONCLUSIONS

The geological history of the property can probably be summarized as follows:-

1. Metamorphism of pelitic mudstones, possibly in Precambrian time
2. Intrusion of granophyre, quartz-feldspar porphyry dykes along parallel planes of weakness (i.e. schistosity of schist)
3. Possible contemporaneous, non-mineralized quartz veining, like the dykes, conforming with strata.
4. Faulting of all rock types, predominantly normal faults trending N20E and dipping steeply west. Faulting may be due to dyke intrusion.
5. Late stage mineralizing fluids filling fractures, where open. Competent dyke rock, excellent environment while fault fissures through soft schist were dammed with gouge.
6. Accompanying quartz-sericite-pyrite alteration of wall rock.

## RECOMMENDATIONS

The MC and CM claims do not appear to warrant further investigation by Cyprus Exploration Corporation, Ltd. at present. Although persistent wider, Ag-rich veins

are known to cut through both schist and more competent dyke rock in the area (i.e. Keno Hill Mines Ltd.), the veins presently exposed pinch out when passing from dyke rock into schist because of gouge filled fault fissures in the schist. In addition, the width of the veins and wide spacing does not permit economic underground development. Even a high grading proposition is severely hampered by the attitude of the dyke. It is likely that other veins of the same nature will be found on the property. However, the location of a persistent, wide mineralized vein is necessary for economic underground development. To date, although the claims have been prospected, no rock float suggesting such a vein has been located.

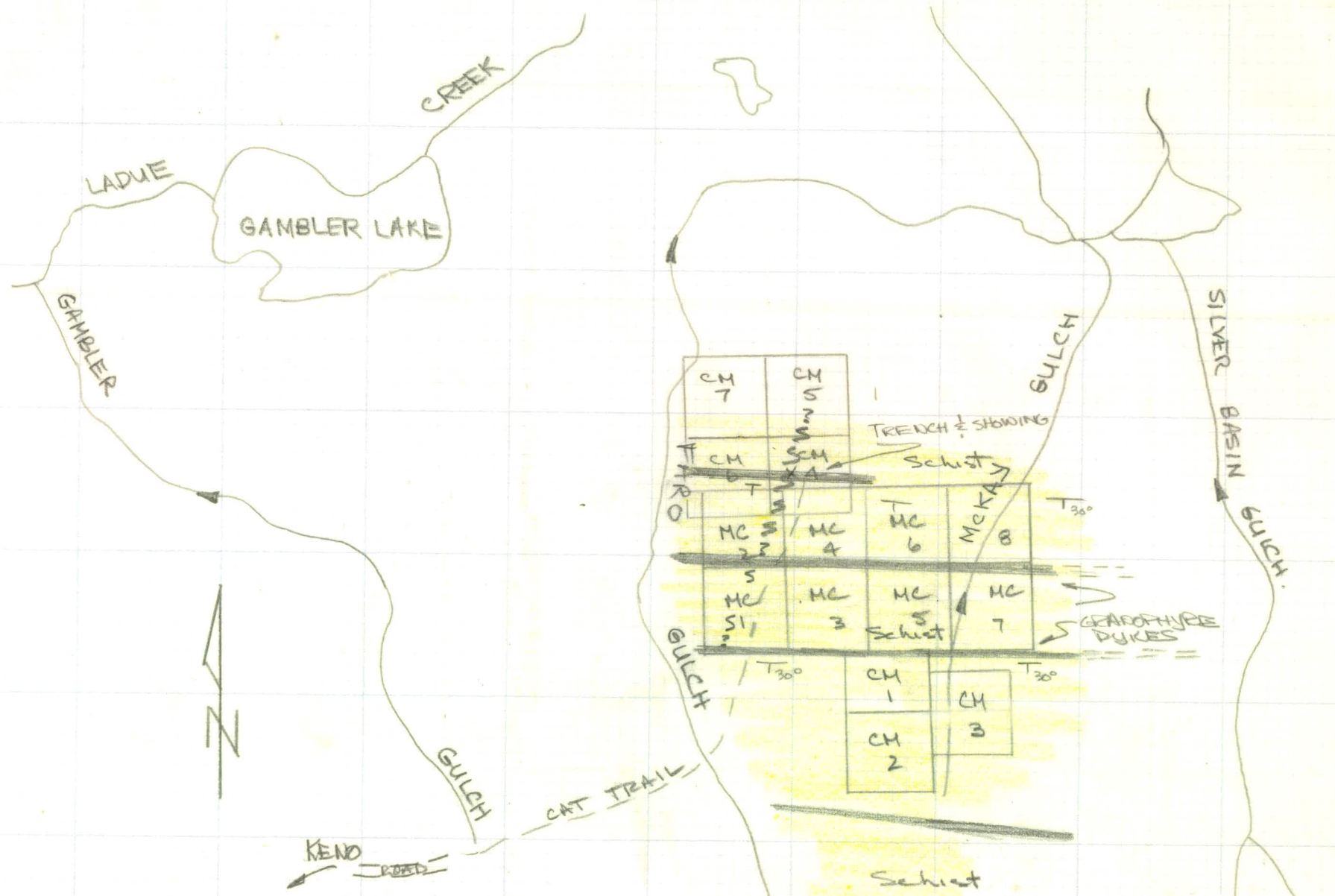
Mr. Tracy felt he could high grade the showing and the following recommendations were made to aid in locating further veins:-

1. Intensive prospecting along dyke trends where high grade zones are most likely to be found. Note sericite alteration and limonite-manganite staining
2. Pb-Ag soil geochem at 25-50' intervals along dyke trends and slightly downslope.
3. Air photo fracture analysis with special attention to N20E trends and possible offsets. This author agreed to have a look at the photos while working in the Carmacks area if at all possible.

In conclusion it should be said that Mr. H. Tracy also owns an asbestos property (samples examined showed good chrysotile cross fibre along 1 inch seams) and a pyrrhotite-pentlandite? (nickel) property. Both properties were recently staked.

Respectfully submitted,

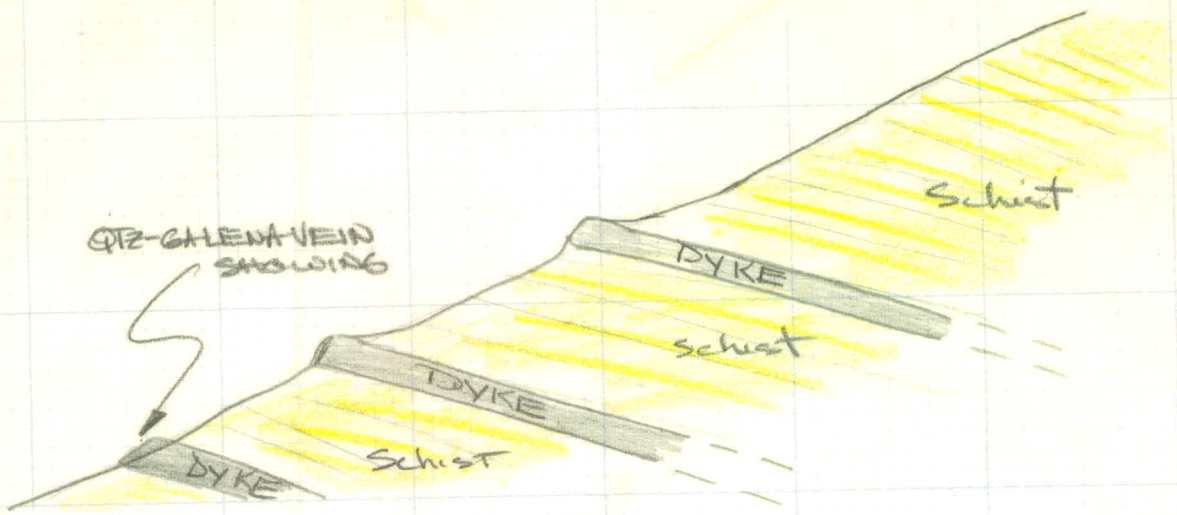
Robert A. Dickinson



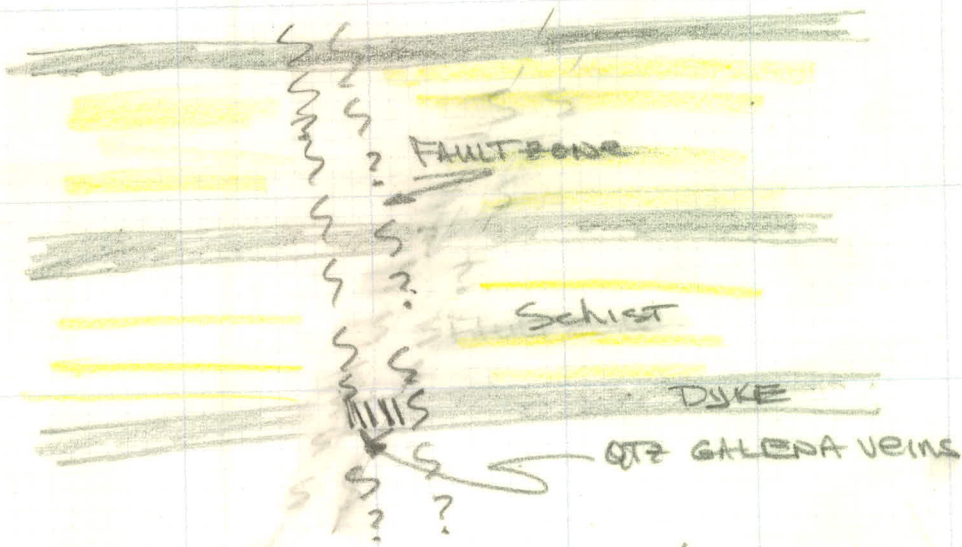
LOCATION MAP MC & CH GROUPS  
(DIAGRAMMATIC)

Scale 1" = 1/2 MILE

22/7/72



SCHEMATIC X-SECTION (FACING EAST)



SCHEMATIC X-SECTION (FACING SOUTH)