# 633 PARTI

PROSPECTING REPORT COVERING

THE GRASSLAND AND AXEDENTAL MINERAL CLAIMS

OF

QUINTANA MINERALS CORPORATION

MICOLA MINING DIVISION, B.C.

MINERAL RESOURCES BRANCH

ASSESSMENT REPORT

NO.\_\_\_\_\_

bу

CHARLES KOWAIL
Geologist

# / MAP - PROSPECTING MAP

### INTRODUCTION

The Grassland and Axedental claim groups (19 units) are located in the Nicola Mining Division near the headwaters of the Quilchena River, and adjoin the Quilchena Indian Reserve along its southern border.

The Property can be reached by travelling 9 miles southeast along Highway #5 from the town of Merritt, then eastwards along a good dirt road past Lundbom Lake campground for 5 or 6 miles to the junction with the main north-south road on the Quilchena Reserve. Proceed south on the Quilchena road for about 4 miles to the southern boundary of the Reserve, which is marked by a fence line and is also the north boundary of the Quintana claims. Travel time from Merritt is about one and a half hours by jeep. (See location map #1).

### GEOGRAPHY

The claims are situated on a broad, gently rolling plain between 3000 and 3500 feet in elevation, bordered on the east by the Quilchena River Valley and on the west by a scarp-like north-south trending series of hills which rise abruptly for 500 feet or more above the western part of the property.

Vegetation is largely grasses and wild flowers and the area is being used for grazing cattle. No permanent water exists except for the muddy lake on the southeastern part of the Grassland claim. The Quilchena River is a clear, permanent stream about 100 feet in width and carries an abundant water supply of good quality. Several draws on the property appear to carry water only during spring snow melt and after heavy rainfall. The area surrounding the lake, as well as some of the deeper draws, support stands of aspens up to 50 feet in height and a few scattered ponderosa pines are also present.

The climate is quite arid and appears to be somewhat drier than nearby area such as Aspen Grove or Merritt. Small cacti are locally abundant. Hot dry summers with scattered thunderstorms alternate with cold dry winters. It is doubtful if snow depth reaches more than 2 ft. most winters.

## PROSPECTING RESULTS:

Regional geology, as shown on G.S.C. Map #886A (Nicola), shows the claims to lie along the projected west contact of a north-south trending quartz monzonite intrusion and the older Nicola Volcanics to the west. Tertiary age cold water sediments lie to the north and are locally overlain by Miocene Valley basalts.

A series of prospecting traverses (see map #2) were run across the property at 500 to 1000 ft. intervals to search for outcrops or locally derived float. Outcrops adjoining the property were visited to help interpret geological formations and structures.

The quartz monzonite intrusive, which is very poorly exposed, outcrops only on the east side of the Quilchena River, where it is exposed in a series of steep bluffs which are locally dissected by gullies at lower elevations. These exposures are overlain by many terraces of transported stream alluvium which can be seen as distinct benches from a distance. This intrusive has been staked by Canadian Occidental Minerals and has been the site of diamond drilling and percussion drilling programs in the search for porphyry copper mineralization by this company. See map #2.

Results of the prospecting traverse across the Quintana property disclosed only one outcrop of Nicola Volcanics with the remainder of the property being covered by extensive overburden.

Several pieces of float mineralized with chalcopyrite and malachite were found near PDH #98, about 1500 feet southeast of the lake, and also in the gully near silt sample 76 JQ107. Nicola Volcanic fragments consisting of greenish andesite which contained scattered blebs of chalcopyrite and pyrite, were found at both localities. A light coloured intrusive rock composed of tan-pink feldspar and quartz was also found at both localities and was seen to contain small quantities of chalcopyrite and malachite on fractures. In all cases, the mineralized fragments were of small size and their origin is obscure, and they must be diligently searched for as they are not abundant. A close search revealed a total of 5 mineralized pieces of float from both localities.

Valley basalt boulders were found to be particularly abundant along the border of Grassland and Axedental claims where the topography steepens somewhat as it falls away to the Quilchena River. Some of the boulders are as much as 20 or 30 feet in diameter and contain open, unfilled vugs, some of very large size. A few solid appearing basalt boulders were found which were almost completely hollow and large enough for a person to crawl into and seek shelter, if needed. These boulders were relatively as hollow as an egg shell and up to 15 feet in diameter.

The Nicola outcrop found was along the north border of the property on the western upland. It consisted of andesite showing prophylitic alteration of epidote and calcite stringers with traces of pyrite.

A series of northerly trending lineaments, as shown on map #2, could indicate a graben-like structure along the western contact of the quartz monzonite intrusive. Drill targets could be delineated by geophysics such as a magnetic survey. An I-P survey would not be useful if Valley basalt underlies much of the property, as dry porous rock would not allow electric currents to penetrate to depth. A Geochemical program would be of little use because of the deep transported overburden over most of the property.

# CONCLUSIONS

Heavy overburden was found to cover the property, and the next stage of exploration would involve intelligent use of geophysics together with regional geological interpretations, to outline a possible porphyry copper target which would then be tested by a drilling program, if management decides the risks are within desirable limits.

A statement of costs amounting to

Respectfully submitted

HARLES KOWALL

Geologist

Statement of costs of prospecting the Grassland and Axedental claims

Propecting 1 man @ \$100.00/day	4 days	\$400.00
4 Wheel drive vehicle rental & gas @ \$40.00/day	4 days	\$160.00
Travel & Mobilization \$100.00/day	2 days	\$100.00
4 Wheel drive vehicle	2 days	\$80.00
Report & Map Preparation l day		\$100.00
Cost of typing, duplication report and maps	rts	\$100.00
		\$1,040.00

May 18, 19, 21, 22, 23, 27, 30



