

803586

MEMORANDUM

NEWHAWK GOLD MINES LTD.

DATE: May 13, 1991

TO: File

FROM: Barry Way

RE: a) McQuillan Cu-Au Showing
b) Chibougamau Cu, Au, Ag Showing Sulphside

B. J. KIRKHAM

GEOLOGY:

Altered sediments are intruded by monzonitic plugs. No detailed mapping has occurred. 200 - 300 vertical metres of this potential porphyry system are exposed.

WORK COMPLETED:

Some time prior to 1980 someone chip sampled along 40 m with average Cu grade of 0.24% at the 800 m elevation. Gold assays were recorded up to 0.03 oz/t. Rock geochemical sampling traverses during 1974 defined a 1000 by 500 m copper anomaly above the Sulphurets Glacier. Weak, spotty Au anomalies are associated. Alldrick mapped three monzonitic plugs spatially associated with the copper anomaly and a creek traverse by Kirkham indicates mixed intrusive with highly altered sediments.

The Chibougamau Showing was discovered by Kirkham and named because of its ductile appearance and Cu-Au association. Only one sample (shown) exists to date although reportedly mass spectrometer work at the GSC has identified abundant Au in other specimens.

ADDITIONAL NOTE:

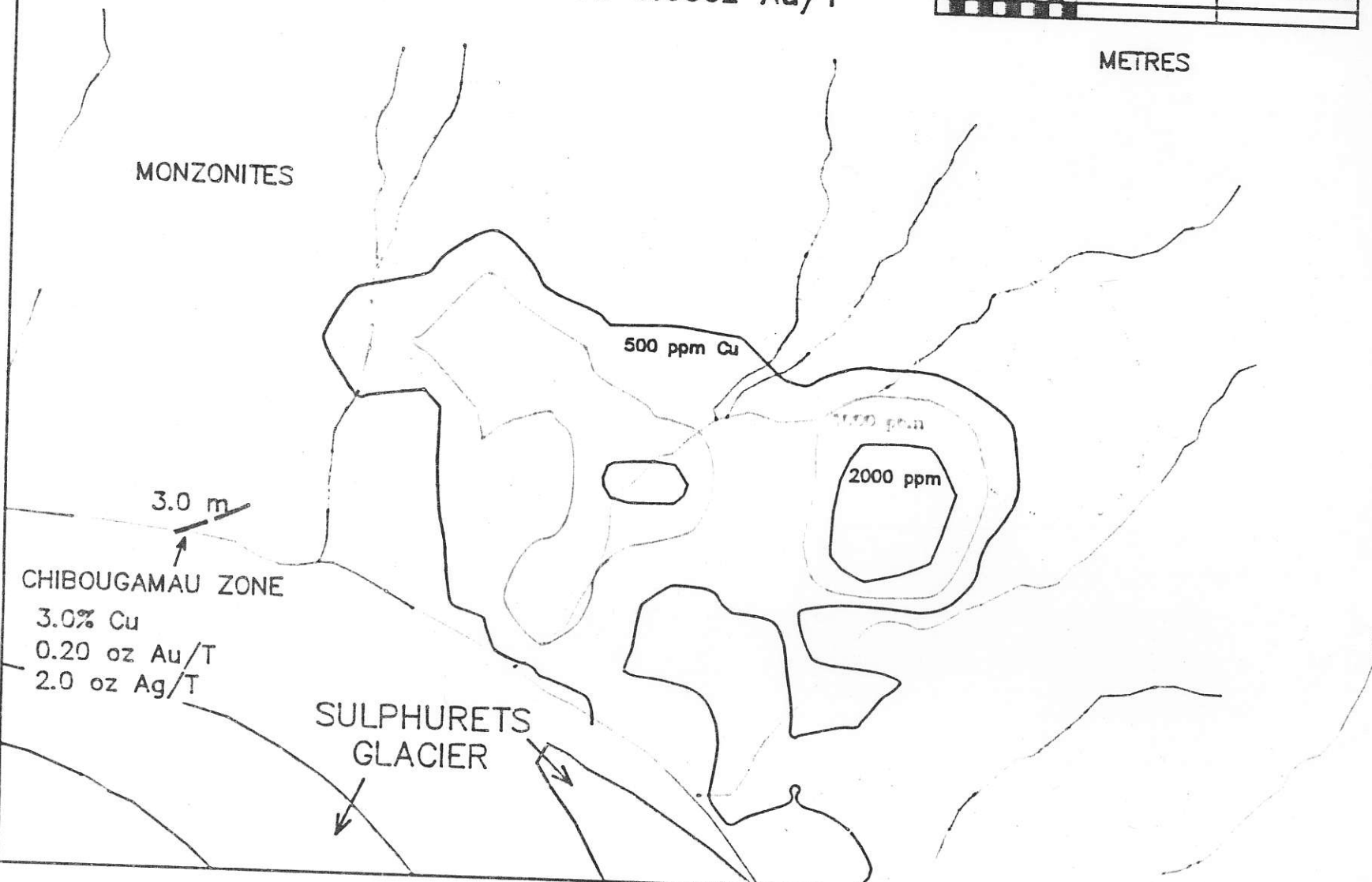
The occurrence is located in steep, dangerous slide and chute geography. Open pit potential is limited by the steep north bounding wall.

McQUILLAN SHOWING @800m ELEVATION
49m CHIP @ 0.24% Cu - UP TO 0.03oz Au/T



METRES

MONZONITES



vi) McQuillan

The McQuillan Zone is located on the north slope of Sulphurets Creek approximately 200 metres above ice level. Previous sampling in the area outlined an extensive zone of anomalous copper mineralization in which erratic gold values of up to 0.030 opt occur, with a hand trench averaging 0.24% Cu over 49 metres. Preliminary mapping and sampling have shown an intensively fractured feldspar porphyry intrusive to host variable, up to 10% pyrite, along with trace to 1% chalcopyrite and extensive malachite stain. The sulphides are found as disseminations within the host and along fracture faces. The host rock is typically silicified and chloritized. Copper mineralization (>0.25%) has been traced intermittently in outcrop over a 500 metre distance with the width of the zone being at least 100 metres as exposed in a creek cut in the eastern portion of the zone. The zone appears to pinch out to the east but is open in part to the west and south. To the north it is overlain by barren sediments. Gold values throughout are generally low, being <0.010 opt.

vii) Chib

The Chib Zone, located 100 metres above the north side of Sulphurets Glacier, was initially located by GSC geologists who in 1990 took a three metre chip sample that averaged 3.0% Cu, 0.200 opt Au and 2.0 opt Ag. Initial sampling and mapping has shown the zone to be composed of massive chalcopyrite/pyrite pods that are up to 0.40 metres wide. Grab samples of highly mineralized outcrop and float assayed up to 1.031 opt Au. The mineralization is conformable to bedding. Three hand sawn trenches totalling seven metres in length were cut, sampled and mapped. The best trench averaged 0.222 opt Au and 0.41% Cu over 3.5 metres, however, the results along strike on either side were significantly less.