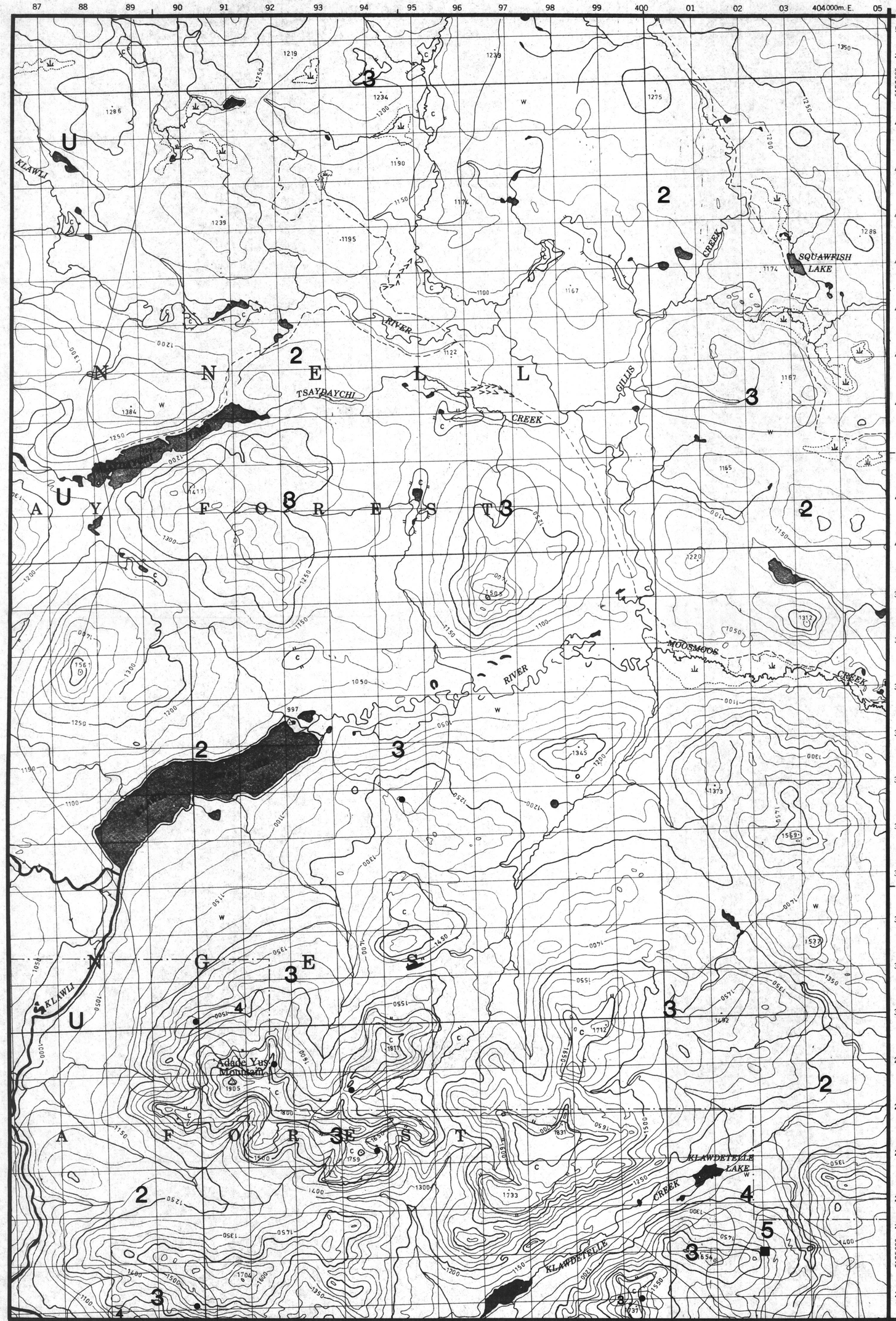


BC Ministry of Energy, Mines and Petroleum Resources

Geological Survey Branch

MINERAL POTENTIAL MAP 1992-7

METALLIC MINERAL POTENTIAL OF THE KLAWLI LAKE MAP AREA

NTS 93N/7E

BY K. BELLEFONTAINE AND J. NELSON

Scale 1:50 000

0 1 2 3 4 5

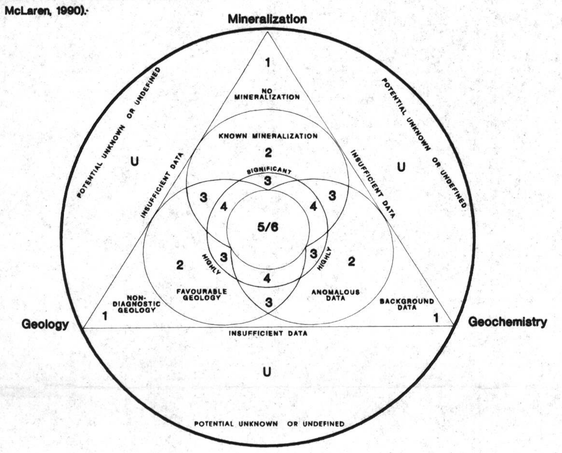
kilometres

INTRODUCTION

The Klawli Lake map area is underlain by rocks of the Takla Group which are intruded by numerous alkaline intrusions. The region has a high potential for alkaline porphyry copper-gold deposits the most significant of which is the Chuchi copper-gold alkaline porphyry prospect. Small prospects of hydrothermal flow top hosted mineralization, skarns and polymetallic veins also occur in the area.

CLASSIFICATION OF MINERAL POTENTIAL

(Modified from McLaren, 1990).



QUALITATIVE DESCRIPTIONS OF METALLIC MINERAL POTENTIAL CLASSIFICATIONS

Class	Mineral Potential	Description
6	Extremely High	Known deposits (developed prospects) with significant identified resources in the ground. Very favourable supporting data from all applicable areas; very high degree of confidence in designation. Continued exploration highly probable; potential for mine developement is high.
5	Very High	Known prospects, developed prospects, past producing mines (with undefined resources in the ground) in highly favourable geological environment. Very good supporting data from all three criteria, high degree of confidence in designation. Future exploration expected.
4	High	Known or indicated resources in highly favourable geological environment. Very good supporting geological and geochemical data. Resources or deposits not necessarily identified; however, positive indications that deposit forming processes were active in the area. Moderate to high degree of confidence in designation. Future exploration expected.
3	Moderate	Favourable geological environment for resource occurrence. Very favourable geological data from one or more criteria; but significant occurrences lacking. Moderate degree of confidence in designation. Future exploration likely, particularly if near an area of higher designation. Good potential for upgrading classification.
2	Moderate	Moderately favourable environment for resource accumulation as indicated by one line of evidence (ie. favourable geology, mineralization or anomalous geochemistry with no other supporting data). Areas generally lack sufficient prospecting to identify resources. Moderate to low degree of confidence in designation. Future reconnaissance exploration to be expected. Good potential for upgrading classification.
1	Low	Current data indicates that the existence of resources is unlikely. Moderate to high degree of confidence in designation. Future exploration for deposit types considered is unlikely.
U	Unknown	Current data is either outdated or insufficiently detailed for a reasoned determination of mineral potential. High degree of confidence in designation. Future exploration could occur in parts of the area.

SYMBOLS

- Developed Prospect/Deposit (Major Resources)
- Prospect/Deposit (Minor Resources)
- Showing

ANOMALOUS THRESHOLDS

Zn	128 ppm	As	17 ppm
Cu	80 ppm	Sb	1 ppm
Pb	9 ppm	Au	9 ppb
Ag	0.5 ppm		

MINERAL DEPOSIT MODELS

Deposit Type	Commodities	Geological Indicators	Example
Alkaline Porphyries	Cu, Au	Crowded porphyritic alkaline intrusions; potassic and propylitic alteration; probable structural control.	Mt. Milligan (93N/1) 400 million tonnes 0.2% Cu, 0.48 g/t Au
Polymetallic Veins	Au, As, Sb, Pb, Zn	Quartz veins (+/-epithermal) near intrusions and faults.	Wit (93N/1) 20 million tonnes 7% Pb-Zn
Hydrothermal Flow Top	Cu, Ag	Amygdaloidal maroon flows; vug and fracture controlled mineralization.	Gertie Showing (93N/7)
Skarns	Cu, Au	Limey sediments in close proximity to alkaline intrusions; skarn alteration.	Dem Lake (93K/16)

DEFINITION OF ANOMALOUS THRESHOLDS (RGS)

Regional Geochemical Survey (RGS) data for mapsheet 93N includes Zn, Cu, Pb, Ag, As, and Sb. This data set was complimented by additional samples from mapsheet 93N/2 that were analysed for Au. Anomalous threshold values were established statisically by using the PROBPLOT program (Stanley, 1978). Anomalous thresholds are either a) the lower (2%) threshold for the first identifiably distinct population at or above the 95th percentile or b) the average of this threshold with the upper threshold for the next lower population; whichever option is most geologically reasonable.

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