ENVIRONMENTAL ASSESSMENT

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BRONSON SLOPE

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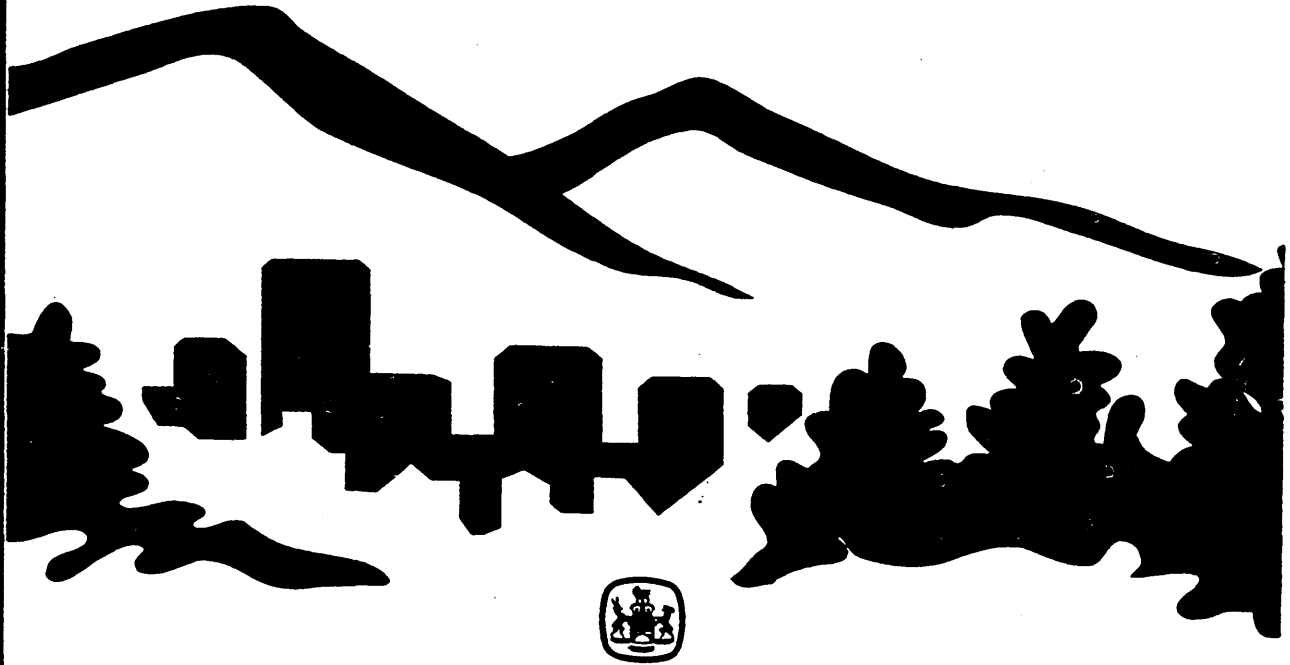
BRONSON SLOPE MINE COPPER/GOLD PROJECT

International Skyline Gold Corporation

DRAFT PROJECT REPORT SPECIFICATIONS

Prepared by the Bronson Slope Project Committee under the Environmental Assessment Act, SBC 1994

April 15, 1996



Province of British Columbia
Environmental Assessment Office

1.4 Scope of the Project

The reviewable project consists of the following on-site facilities:

- an open cut bench mine
- a 12,000 tonne per day mill facility;
- associated camp facilities;
- a pit access road;
- tailings facilities;

and the following off-site facilities:

- access via an extension of the Iskut Valley Road. (The EA Office is presently determining whether to include the construction of this road extension as part of the reviewable project and a decision is expected shortly. Regardless of the decision, the impacts of the use of the road to access the mine are included in the review.)

- power supply from either
  a) a maximum 20 MW run of the river hydroelectric power plant on the Iskut River with associated transmission facilities, or
  b) a transmission line extension from Meziadin Junction to the mine site.

- air access via:
  a) Terrace or
  b) Smithers and/or
  c) Dease Lake

- shipping from the Port of Stewart with existing dock facilities and storage facilities

- impacts on existing infrastructure and/or infrastructure improvements related to the transportation of ore from the mine-site to the Cassiar-Stewart Highway to Stewart.

1.3 Requirement to Apply for a Project Approval Certificate under the EA Act

In accordance with section 20 (1) of the Reviewable Projects Regulation under the *Environmental Assessment Act*, (the "EA Act")the Bronson Slope mine proposal is a reviewable project because:

a) the facility is a mineral mine; and
b) the facility has, or when the construction phase is completed will have, a production capacity of 25,000 tonnes or more of mineral ore per year.

Section 5 of the EA Act states that no person shall proceed to undertake a reviewable project unless the person first obtains a project approval certificate

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

MEMORANDUM

Smithers — Telephone: (604) 847-7383 Fax: (604) 847-7603

February 8 (revised Feb 19), 1996

TO: **Ted Hall, Regional Manager**

RE: **Bronson Slope Application for a Project Approval Certificate**

FROM: **Paul Wojdak, Regional Geologist** (File W:\PWojdak\Br_Slope.doc)

I have four areas of concern derived from review of the Bronson Slope application: adequate resource estimation, complete resource definition, geotechnical and access to the Snip mine site.

1. Adequate Resource Definition

The proponent states there is an "inferred and indicated resource of ....90.2 million metric tonnes containing an average of 0.749 grams gold per tonne, 4.2 grams silver per tonne, 0.16% copper and 0.01% molybdenum. And further, "a probable reserve of 56.7 million metric tonnes containing an average of 0.545 grams gold per metric tonne, 2.4 grams silver per metric tonne, 0.18% copper and 0.01% molybdenum" (Page 2-4).

- The drill hole data base is extremely small to confidently estimate a mineral resource. The application states there are 47 holes, totalling 7126 metres of drilling but just 35 holes are shown on Figure 2-1. By my experience and professional judgement at least 20,000-30,000 metres of drilling is required to define a "Probable" ore reserve on a 100 million tonne porphyry deposit in which gold is the primary economic commodity. The present drill density is sufficient for only a "Possible" ore reserve.

- Drill sections across the Red Bluff stock are spaced 50-100 metres apart with only 1-3 holes per section (Figure 2-1). Section spacing should be no greater than 50 metres, and possibly less if grade correlation between sections is poor, with at least 3-4 holes per section.

- The stock is elongated northwesterly and it is likely the quartz-magnetite-chalcopyrite stockwork is oriented parallel to it. If so, drill holes should be drilled across the stock to test mineralization properly. Many holes are drilled parallel to the Red Bluff stock (eg. 949, 957, 964) and may not provide good information. The possiblity of preferred vein orientation should be addressed.

- The Red Bluff cliff face should be channel sampled on several drill sections to supplement the drill hole database and to compare surface and drill hole assays.

  Requirements for the Project Report:

  Sufficient drilling should be carried out to estimate ore reserves. The proponent should provide verification of Bronson Slope ore reserves by an independant consultant that has a well established record of acceptability in the mining industry.

2. Complete Resource Definition

Drilling of the Bronson Slope gold-copper mineral deposit has been carried out up to the proponent's claim boundary. The extent of mineralization to the south, east and west on Cominco's mineral claims has not been determined. An optimum mine plan and best utilization of the resource cannot be done without drilling off all of the deposit. For example, if the mine access road is truncated by the open-pit then part of the gold-copper resource could be alienated from exploitation.

Requirements for the Project Report

The proponent should complete exploration of the deposit, especially to the south, and provide sufficient sections to show that the extent of mineralization is delineated by drilling. This will require an agreement with Cominco Ltd., owner of the adjoining mineral claims (see Access to Snip Mine Site).

3. Geotechnical

There are two areas of concern:

- The proponent refers to the natural 53° slope of Red Bluff in justifying the proposed 55° ultimate slope highwall. The south pit wall will consist of variably hornfelsed sedimentary rocks rather than the Red Bluff porphyry, an intrusive rock. Hornfels is commonly a tough competent rock but may have quite a different fracture and joint pattern from the Red Bluff stock, and therefore a different slope stability. Snowslides can be expected and could contribute to rock instability.

- Competency of wallrock in the proposed ore pass is critically important. If the wall sloughs, or if oversize muck enters the ore pass, it may become blocked. Snow and water mixed with the muck may freeze in the ore pass compounding the problem. This would shut down mining because there is no alternative means of transporting rock (the pit access road not being designed as a haul road).

Requirements for the Project Report

Detailed geotechnical work must be done to design pit walls and demonstrate the feasibility of the proposed in-pit ore/waste pass. A pilot hole should be drilled for the ore pass. Rock quality surveys should be designed and supervised by an independent, experienced geotechnical engineer who should report on feasibility of the ore/waste pass.

4. Access to Snip Mine Site

Currently, Cominco is a vital stakeholder at Bronson Slope because of their operation of the Snip gold mine. Bronson Slope mine development is predicated on obtaining use of the Snip mill / camp site from Cominco Limited for transport of material and equipment, and all mine site infrastructure. However:

- Snip mine may not close in 1998 (as currently scheduled). Recent exploration has been promising and there is a fair prospect that the life of this highly successful mine will be extended.

- Cominco has maintained a high level of exploration on their claims and, whether they are successful or not, have the right to continue exploration.

- Cominco may wish to maintain the mill as a custom milling operation. There are many gold deposits in the Iskut area. Further, Prime Resources (40% owner of the Snip operation) is discovering new reserves at its nearby Eskay Creek mine which might be milled at Snip.

- Cominco might propose an open pit mining operation on the Red Bluff porphyry, on their own claims.

Requirements for the Project Report

The proponent must reach an agreement with Cominco Ltd. This could be an outright purchase or a Joint Venture etc. MEMPR cannot approve development by International Skyline Gold Corporation on mineral claims they do not own nor have an agreement to enter.

Paul Wojdak, M.Sc., P.Geo.
Regional Geologist, Northwest Region

INTERNATIONAL SKYLINE GOLD CORPORATION

Suite 910, Cathedral Place, 925 West Georgia St.
Vancouver, British Columbia
V6C 3L2

BRONSON SLOPE MINE
APPROVAL CERTIFICATE APPLICATION

REPORT & FIGURES

Prepared by International Skyline Gold Corporation
with assistance from Norecol, Dames & Moore, Inc.,
and Azimuth Management Consulting

The Bronson Slope Project Application includes both this Approval Certificate Application and the accompanying Iskut Canyon Hydroelectric Plant Document

NOVEMBER 1995

EXECUTIVE SUMMARY

International Skyline Gold Corporation is proposing to develop its 100% owned Bronson Slope gold, copper, silver, molybdenum deposit located in the Iskut River region of northwestern British Columbia.

The deposit is a low grade porphyry type deposit comprising an inferred resource of 90.2 million metric tonnes containing 0.749 grams gold/mt, 0.159% copper, 4.17 grams silver/mt and 0.005% molybdenum. The gross contained metal value of the deposit equals $17.34/mt or a total of $CDN 1.6 billion. Using metallurgical test results on the ore, current smelter contracts and standard shipping and handling rates, a net smelter return value is calculated to be $13.12/mt or a total of $1.2 billion.

The unique geometry of the deposit will allow it to be mined using low cost open cut mining methods and movement of ore to the valley bottom by gravity. Metallurgical testing has demonstrated excellent metal recoveries by conventional flotation methods. Total minesite costs are conservatively forecast at $6.92/mt of ore.

Mining of 12,000 metric tonnes per day of ore will produce 120 metric tonnes per day of concentrate. The concentrate will be sold offshore, likely to Japanese smelters, and can only be transported economically to tide water by road.

The economic benefits of the operation to the people of British Columbia through employment and tax revenue will be considerable. Total capital costs are expected to be between $130 million and $150 million. The mine life is projected to be in excess of 15 years. One need only to look to stable mining communities such as Ashcroft, Fraser Lake, Kimberley, Logan Lake, McLeese Lake and Port Hardy to appreciate the social benefits made available by large mining operations.

The principal land use in the area is mining. The Cominco Snip mine is approximately 1 km to the north. The presently closed Johnny Mountain gold mine is approximately 4.06 km to the southeast. The Homestake Eskay Creek Mine is approximately 35 km to the southeast.

The development of the Bronson Slope Gold, Copper Porphyry may have a significant positive impact on the reclamation of previous mining activities in the Iskut Region of British Columbia. The large-scale milling facility will provide an economic solution to cleaning up existing tailings and waste rock from previous operations.

present in the Project area or immediate vicinity while grizzly bears are common. Within this guiding territory, grizzly bears and mountain goats are the key potential source of income to the guiding operation.

1.3.5 Trapping

The Project area lies within Registered Trapline 0621T002 held by Nancy and David Watson. Their camp is along the lower Craig River and their trails and traplines run throughout the Project area. The Project area is good furbearer habitat, with marten, mink, wolverine, river otter and beaver available. The best trapping areas are along the Sky Creek-Monsoon Creek drainages, around small wetlands and ponds and the Triangle Lake area. This trapline has a good potential and success is expected to continue and improve with further development of trails into new trapping areas. The presently active trapping area represents only a small portion of the approximately 1200 km^2 trapline area.

1.4 Project Key Data

The Company

International Skyline Gold Corporation
Suite 910, Cathedral Place
925 West Georgia Street
Vancouver, British Columbia
V6C 3L2

Contact

Mr. Clifford A. Grandison
President and Chief Executive Officer
Telephone: (604) 683-6865
Fax: (604) 683-7449

Project Location

The deposit is located in the Liard Mining District at 56° 39' 54" N. Latitude, 131° 05' 15" W. Longitude on N. T. S. map sheet 104 B 11E. It is 110 air km northwest of Stewart, B. C.

Economic Benefits

The economic benefits of the operation to the people of British Columbia through employment and tax revenue will be considerable. Total capital costs are expected to be between $130 million and $150 million. The mine life is projected to be in

excess of 15 years. One need only to look to stable mining communities such as Ashcroft, Fraser Lake, Kimberley, Logan Lake, McLeese Lake and Port Hardy to appreciate the social benefits made available by large mining operations.

Present and Planned Access

The property is only accessible by air and is serviced by two nearby airstrips, Bronson Creek and Johnny Mountain. The airstrips are 240 air kilometers from Terrace, B.C. and 82 air kilometers from Wrangell, Alaska. As well, Cominco uses a hovercraft on the Iskut and Stikine to supply the Snip mine from Wrangell, Alaska.

The development of the Bronson Slope gold, copper porphyry will be dependent on road access to the site. A 30.5 kilometer extension of the existing Eskay Creek road is the most logical route.

Ore Reserves

Inferred resource: 90.2 million metric tonnes containing 0.749 grams gold/mt, 0.159% copper, 4.17 grams silver/mt and 0.005% molybdenum. This resource is still open at depth and to the east.

Gross Value

The gross contained metal value of the deposit equals $17.34/mt or a total of $CDN 1. 6 billion. Using metallurgical test results on the ore, current smelter contracts and standard shipping and handling rates, a net smelter return value is calculated to be $13.12/mt or a total of $1.2 billion.

Mine

The unique geometry of the deposit will allow it to be mined using low cost open cut mining methods and movement of ore to the valley bottom by gravity. Metallurgical testing has demonstrated excellent metal recoveries by conventional flotation methods.

Mill

Mining of 12,000 metric tonnes per day of ore will produce 120 metric tonnes per day of concentrate. The concentrate will be sold offshore, likely to Japanese smelters, and can only be transported economically to tide water by road.

Tailings Discharge

Water from flotation tailings supernatant water will be discharged to Sky Creek when creek water volume is large enough to make the effluent non-toxic to aquatic life;

The lower sequence is intruded by the Red Bluff porphyry stock, a hydrothermally altered, potassium feldspar megacrystic, plagioclase porphyritic intrusion of probable granodioritic composition. The stock is approximately 2.0 kilometres long, up to 0.3 kilometres wide and trends southeast along the southwest side of the Bronson Creek valley. Contacts of the stock with country rocks are not well defined, but where observed in drill core or underground workings are either faulted or intrusive. The southwest and northeast contacts appear to be southwesterly dipping.

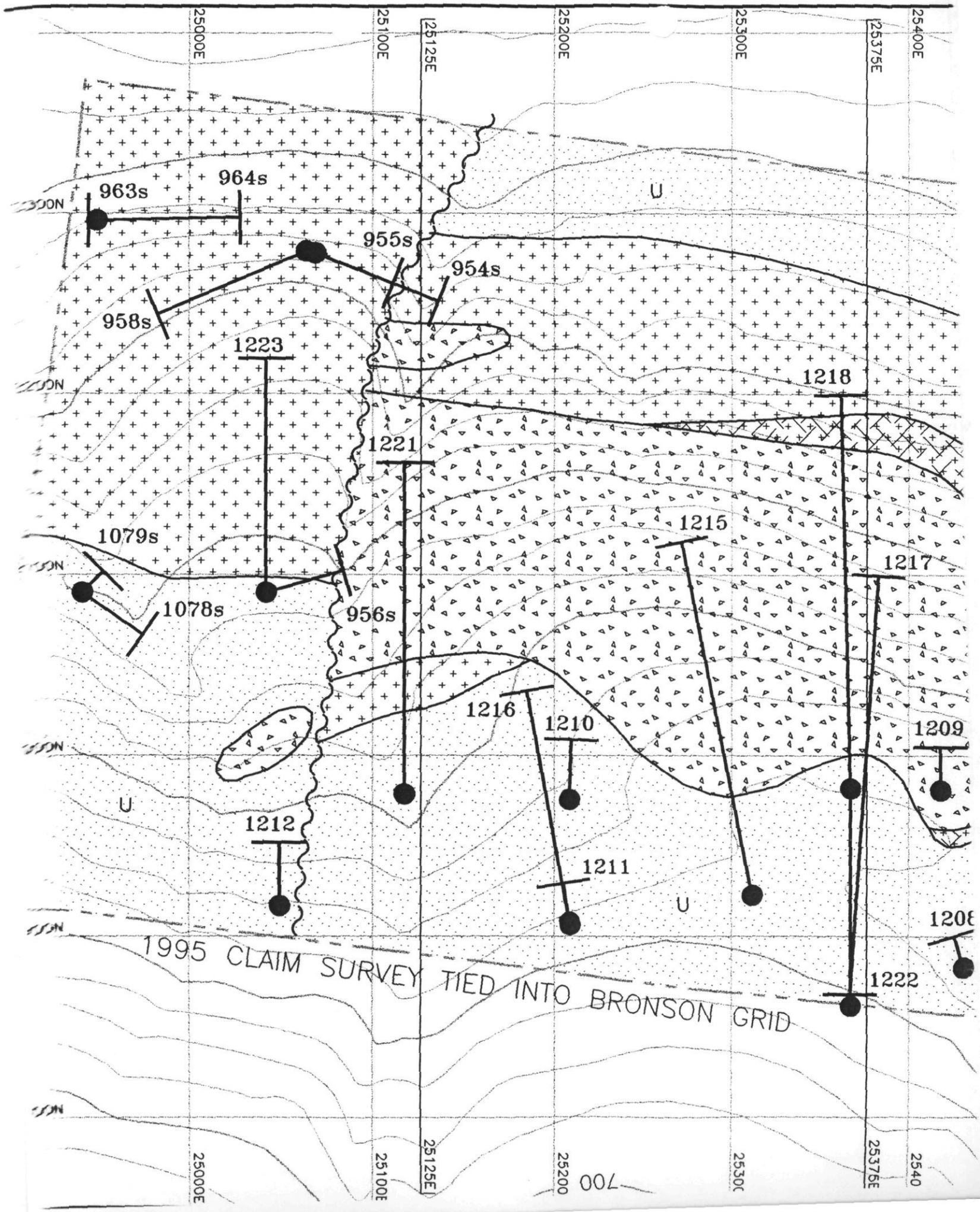
2.2.2 Geology of the Bronson Slope Deposit

The Bronson Slope porphyry gold, copper, silver, molybdenum deposit occurs on the southwest flank of the Red Bluff stock in hydrothermally altered country rocks and to a lesser extent in altered intrusive rocks.

The country rocks in the deposit comprise dark coloured, intermediate to mafic mudstones and siltstones with lesser amounts of light coloured wackes as interbeds. The sedimentary rocks are variably hydrothermally altered as a function of proximity to the intrusive porphyry. The alteration sequence in order of increasing distance from the intrusive is: (i) potassium feldspar alteration with subordinate chlorite, sericite and biotite, (ii) chlorite biotite hornfels with subordinate calcite and (iii) biotite carbonate alteration (occasionally schistose) with subordinate chlorite and sericite. There is field mapping evidence of a quartz, sericite, pyrite phyllic zone followed by a calcite, epidote, biotite, chlorite propylitic zone adjacent to those previously mentioned but these zones have not been encountered in the present drill pattern.

The intrusive rocks in the deposit comprise the Red Bluff porphyry stock variably but extensively altered by the overprint of quartz, magnetite mineralization. The quartz, magnetite was emplaced by multiple phases of veining which exhibit a wide range of depositional textures including: (i) simple widely spaced quartz, magnetite stringers ranging from several millimetres to several centimetres thick, (ii) several sets of crosscutting quartz, magnetite stringers of similar size, (iii) a stockwork of multiple sets of crosscutting quartz, magnetite stringers of sufficiently dense spacing to comprise greater than 50% of the whole rock mass, (iv) complete replacement of the original rock by quartz (90%) and magnetite (10%) and (v) a stockwork of quartz magnetite stringers cutting quartz, magnetite replacement to form a quartz, magnetite breccia. The quartz, magnetite mineralization has also occurred in the sedimentary rocks in the deposit.

The deposition of gold, copper, silver and molybdenum has accompanied late quartz, pyrite veining that has cut the sedimentary rocks, the intrusive rocks and the quartz, magnetite mineralization. The ore minerals have deposited as discrete grains in and along boundaries of quartz stringers, as discrete grains disseminated throughout altered mafic sedimentary rocks and as thin films coating closely spaced late hairline fractures.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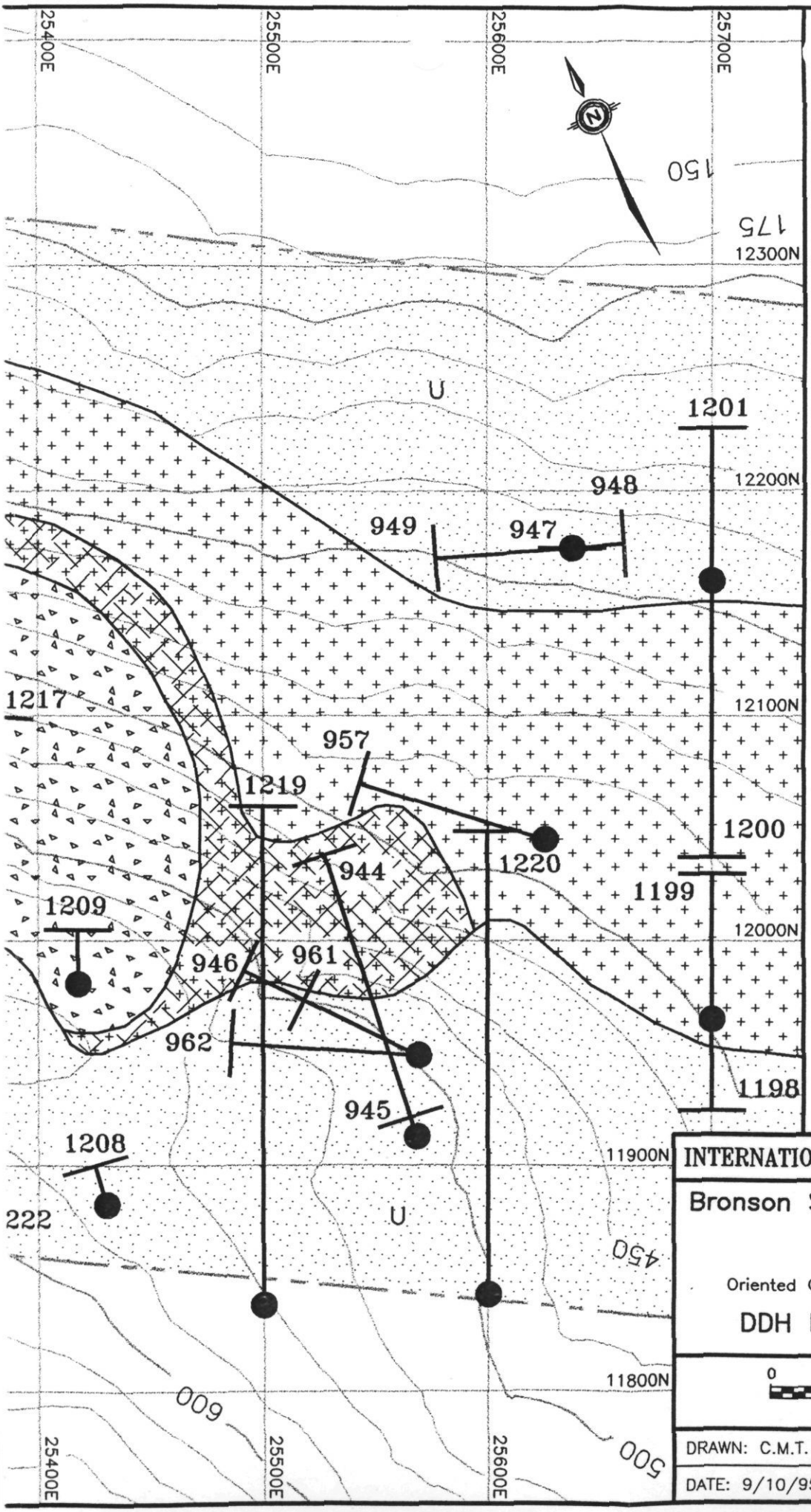


LEGEND

LITHOLOGY

- Quartz Magnetite Replacement &/or Breccia
- Quartz Magnetite Stockwork after Previous Rock Types
- Red Bluff Porphyry intrusive
- Sedimentary Rocks
  - U – undifferentiated
  - A – Biotite carbonate alteration
  - B – Biotite chlorite hornfels
  - C – Potassium feldspar alteration.

SYMBOLS

- Drill Hole Trace
- Fault
- Claim Boundary

INTERNATIONAL SKYLINE GOLD CORPORATION

Bronson Slope Gold, Copper Porphyry

PLAN VIEW

Oriented Grid North (25° 12' 22" True 1983)

DDH LOCATIONS and GEOLOGY

0 50 100 150 m.

SCALE 1:2500

DRAWN: C.M.T. / D.Y.	Filename: Fig2-1.dwg	Figure 2-1
DATE: 9/10/95	NTS: 104B/11	

2.2.3 Ore Mineralogy

The ore minerals in the deposit are as follows; (i) copper: chalcopyrite with minor covellite, chalcocite, malachite, native copper and cuprite, (ii) silver: tetrahedrite, (iii) molybdenum: molybdenite and (iv) gold: not seen but demonstrates a correlation with copper and likely occurs microscopically on chalcopyrite grain boundaries. The gangue minerals in the deposit are quartz, pyrite, dolomite and calcite with minor chlorite, biotite and sericite. The magnetite content of the deposit is approximately 10% and represents a recoverable and potentially profitable component of the deposit if transportation costs from the site to tidewater can be minimized.

2.2.4 Host Mineralogy

The mineralogy of the host rock and of the waste rock comprises predominantly feldspar, quartz, chlorite, dolomite, pyrite, calcite, biotite, sericite and minor clay minerals.

2.3 Reserves and Mine Life

2.3.1 Reserves

The reserve estimate for the Bronson Slope deposit is based on information from 47 diamond drill holes comprising 7,126 metres of drilling. These holes were drilled during exploration projects in 1965, 1988, 1993, 1994 and 1995. The 1988 program gave preliminary indications of the gold potential of the deposit but it was not until the 1993 drilling that the size potential was discovered. The high grade core of the deposit was outlined in 1994.

Reserves have been calculated using the bench polygonal weighting method. The steps used to calculate reserves in this fashion are as follows: (i) the deposit is divided into a series of horizontal slices approximating mining benches in an open pit mine; in the case of the Bronson Slope deposit the bench thickness is 10 metres, (ii) for each drill hole on each bench, a composite metal assay value is assigned by finding the weighted arithmetic mean of the assay intervals that fall within the 10 metre elevation slice, (iii) the composite metal assay value for each drill hole on each bench is assigned to a polygonal area surrounding the drill hole; the shape of the polygon being determined by perpendicular bisector lines between drill holes, (iv) the volume and weight of mineralised rock associated with each polygon is calculated by multiplying the area of each polygon by the bench thickness and the specific gravity of the rock (S. G. = 2.65), (v) the total tonnages of the polygonal blocks falling within the various metal grade categories are compiled and (vi) the weighted arithmetic means of the metal grades for the total tonnages in each metal grade category are calculated.

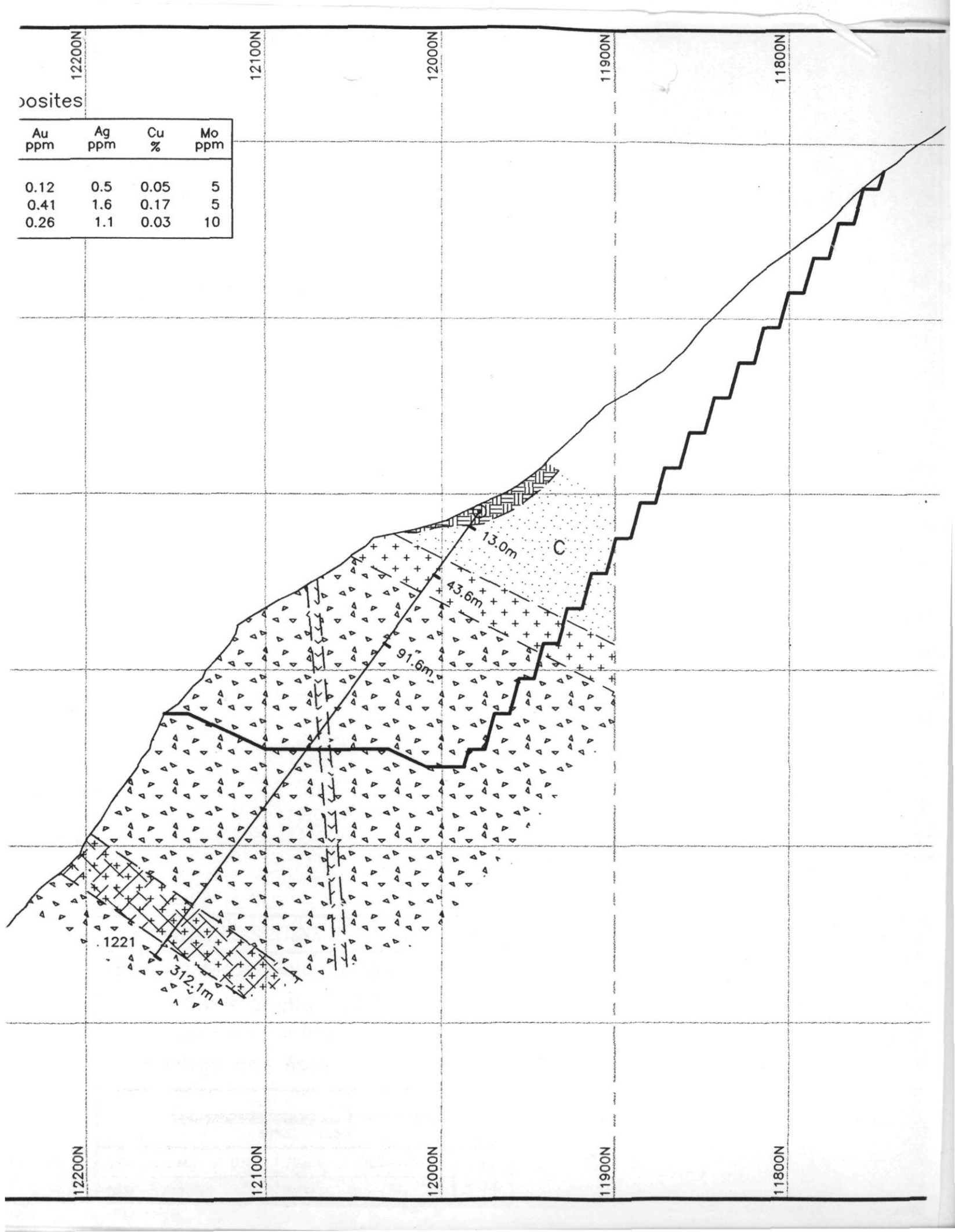
The metal prices used to define the metal grade categories are: (i) gold at US $12.06 per gram or US $375 per troy ounce, (ii) silver at US$ 0.16 per gram or US $5.06 per troy ounce and (iii) copper at US $2,072.34 per metric tonne or US $0.94 per pound. Molybdenum values were not included in the determination of metal grade categories. The Canadian dollar value used is equivalent to US $0.75.

In the case of the Bronson Slope deposit, the total inferred and indicated resource of mineralised rock containing greater than Cdn. $10.00 per metric tonne worth of metal (Gross Contained Metal Value) is 90.2 million metric tonnes containing an average of 0.749 grams gold per metric tonne, 4.2 grams silver per metric tonne, 0.16 % copper and 0.01 % molybdenum. The value of metals contained in this resource is Cdn. $1.56 billion or an average of Cdn. $17.34 per metric tonne.

Within this larger deposit, the company has designed an open cut that would initially mine the lower cost material. This open cut contains a probable reserve of 56.7 million metric tonnes containing an average of 0.545 grams gold per metric tonne, 2.4 grams silver per metric tonne, 0.18 % copper and 0.01 % molybdenum including all mineralised rock containing greater than Cdn. $5.00 per metric tonne worth of metal. The value of metals contained in this reserve is Cdn. $813.6 million or an average of Cdn. $14.34 per metric tonne. In order to mine this reserve of mineralised rock, the company will have to mine a total of 16.3 million metric tonnes of waste rock. The ratio of waste rock to ore is 0.29:1. This proposed open cut mine plan is the subject of this Application for Environmental Review.

2.3.2 Mine Life

The company is proposing to construct a concentrator nominally capable of processing 12,000 metric tonnes per day of ore. Assuming a plant availability of 345 days per year, the mine plan should be completed in 13.7 years.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