

1995 EXPLORATION REPORT

on the

RED - CHRIS PROPERTY

Todagin Plateau Area
Liard Mining Division
British Columbia, Canada

Latitude: 57° 42' North Longitude: 129° 47' West
N.T.S. 104 H / 12 W

- Prepared For -

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GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORTS

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GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

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SUMMARY

American Bullion Minerals Ltd. controls and operates the Red-Chris porphyry copper-gold property which is comprised of 156 two-post, fractional and modified grid mineral claims, totalling 452 units, that are located in the Liard Mining Division of northwestern British Columbia, Canada. The property is situated between Ealue and Kluea Lakes, approximately 20 kilometres southeast of the village of Iskut or 80 kilometres south of Dease Lake, at geographic coordinates 57° 42' North latitude by 129° 47' West longitude (N.T.S. map-sheet 104H/12W).

In 1994, American Bullion Minerals Ltd. negotiated option agreements with Falconbridge Limited, Norcen Energy Resources Limited and Teck Corporation to acquire an eighty percent interest in the property with Teck Corporation retaining ten percent participating and ten percent carried net profit interests. The terms of the agreement include provisions by which Teck Corporation may increase its interest in the property to fifty-five percent at which time American Bullion Minerals Ltd. would retain a forty-five percent carried and non-assessable interest.

The property is situated regionally on the eastern Todagin upland plateau; a subdivision of the Klastline Plateau that lies along the northern margin of the Skeena Mountains. It is readily accessible with helicopter support from several landing sites along Highway 37 (Stewart-Cassiar Highway) which is approximately 12 kilometres west of the central claim holdings. There is also a rough tote road to the property that leads southwardly from the Coyote Creek-Ealue Lake road, approximately 8 kilometres east of Highway 37.

The first recorded exploration of the Todagin Plateau was undertaken by Conwest Exploration Limited in 1956 (B.C.M.M.A.P., 1956). Later, Great Plains Development Company of Canada (1969-74) and Silver Standard Mines Ltd. (1970-74) staked and explored their own Chris-Money and Red-Sus claim holdings respectively. In 1974, Ecstall Mining Limited (later Texasgulf Inc.) negotiated joint venture agreements with these two companies and amalgamated their respective claim holdings. Following the discovery of low-grade copper mineralization, drilling programs were conducted by Texasgulf Inc. in 1974, 1975, 1976, 1978 and 1980. The results of this work indicated two coalescing, east-northeasterly trending zones of porphyry-style copper-gold mineralization hosted by the 'Red' stock, a weakly- to intensely-altered feldspar hornblende porphyry intrusion. Later, as a result of a series of corporate reorganizations and takeovers, the ownership of the property passed to Norcen Energy Resources Limited (20%), Falconbridge Limited (60%) and Teck Corporation (20%).

In 1994 American Bullion Minerals undertook a comprehensive geological, geochemical and geophysical surveying and diamond drilling program (21,417 metres or 70,266 feet of HQ- and/or NQ-core drilling) to evaluate the known Red-Chris copper-gold deposit and the exploration potential of the property. This work discovered continuous copper-gold mineralization within the Red-Chris deposit over vertical distances of 400 metres and expanded the lateral dimensions of the deposit in a north-south direction. Field work also identified two very large exploration targets within 2 kilometres west of the deposit. The 600-metre long by 600-metre wide 'Far West' Zone and the 700-metre long by 400-metre wide 'Gully' Zone, comprising an area known as the 'Yellow Chris', were identified by strong chargeability highs, resistivity lows and coincident anomalous copper and gold soil geochemistry.

A 1994 geostatistical resource inventory of the Red-Chris deposit indicated combined "drill proven" and "drill probable" resources of approximately 181 million tonnes grading 0.40 percent copper and 0.31 grams per tonne gold with additional "drill possible" resources of 139 million tonnes grading 0.35 percent copper and 0.28 grams per tonne gold using a 0.20 percent copper cut-off grade (Giroux, 1995). These resources were calculated using ordinary kriging methodology, and occur vertically as mineralized blocks between a surface elevation of 1,530 metres to 1,050 metres A.M.S.L. (Giroux, 1995). Since the economic viability of these resources has not yet been demonstrated, the term 'resources' is the equivalent of 'mineralization' (as per National Policy No. 2-A). Continued detailed exploration of the Red-

Chris deposit and the two large exploration targets was recommended for 1995 to expand the mineral inventory of the property and complete a prefeasibility study at an estimated cost of CAN \$4.16 million.

The Red-Chris mineralization is a bulk tonnage copper-gold deposit with hybrid alkalic and calc-alkalic porphyry copper characteristics. It is dominantly hosted by the 'Red' stock, an earliest Early Jurassic hypabyssal plagioclase-hornblende porphyry intrusion, that is probably comagmatic with some of the surrounding alkaline Upper Triassic volcanic rocks. The emplacement of the stock and its subsequent pervasive alteration, sulphide mineralization and late-stage dykes were controlled by reactivated, east-northeasterly to easterly faulting. Similar faulting along the southern margins of the Red stock has downdropped clastic sedimentary rocks of the Middle Jurassic Bowser Lake Group in unconformable contact with the stock and surrounding Upper Triassic strata. Several north-northwesterly normal and strike-slip faults occur along the length of the Red stock, and they appear to have been responsible for local displacements of the copper-gold mineralization and the associated quartz vein stockwork zones.

The Red stock is comprised of two major units of plutonic rocks that are cut by one pre-mineral and several post-mineral dykes. The 'Main Phase' unit is a medium-grained, weakly- to intensely-altered plagioclase-hornblende porphyry of monzodioritic to quartz dioritic composition. It hosts most of the known copper-gold mineralization and constitutes approximately 80 to 90 percent of the stock. The 'Late Phase' unit is similar in composition, notably fresh to very weakly altered, usually barren of copper-gold mineralization, and locally represents approximately 10 to 18 percent of the stock. The pre- and post-mineral dykes vary slightly in composition, and constitute the minor remaining volume of the stock.

Two stages of hydrothermal alteration have affected the plutonic and country rocks: an earlier stage of orthoclase-albite-biotite, albite-chlorite-calcite and ankerite-sericite-quartz alteration, and later stage of quartz-ankerite-kaolinite-sericite, quartz-sericite-ankerite-kaolinite and pervasive quartz-sericite-pyrite alteration. Irregular early and late, barren to very weakly mineralized gypsum vein stockwork and carbonate veining appear to be unrelated to the main hydrothermal copper-gold mineralizing event(s).

Chalcopyrite and lesser bornite occur as disseminations and fracture fillings associated with well developed quartz-sulphide vein stockwork zones which are spatially-related to east-northeasterly to easterly, subvertical faulting along the central axis of the Red stock. Pyrite and covellite also occur within the mineralized vein stockwork zones; however, pyrite is most abundant in a halo peripheral to the higher grade copper mineralization. Microscopic gold grains are intimately associated with the copper sulphides. Copper versus gold grade ratios (% copper versus g.p.T. gold) of the mineralization change laterally in a westward direction from 1:0.8 to 1:4. This westward transition of copper-gold ratios is coincident with increased pyritization, decreased copper mineralization and a dominance of a phyllic alteration facies.

The 1995 two-stage exploration program was conducted by American Bullion Minerals Ltd. from April 27th to November 12th. The results of the first stage of exploration work, including 21,336 m (70,000 ft.) of diamond drilling, were reviewed in August 1995 and a second stage of additional diamond drilling (15,000 m) was recommended and carried out from September to November 1995. The combined exploration program comprised: HQ- and NQ-size diamond drilling (112 holes totalling 36,770.46 m or 120,630 ft.) of the Red Chris (Main and East Zones) and Yellow Chris areas (Gully and Far West Zones); geological mapping of the East and West Gully drainages at a scale of 1:2,000; linecutting and soil geochemical sampling over a 4- by 1-kilometre area west of the 1994 survey control grid area; BQTK-core geotechnical diamond drilling (3 holes totalling 59.44 m or 195 ft.); continued baseline environmental studies; metallurgical and mining engineering studies; and documentation of the program for a prefeasibility report on the project. Expenditures for this work total CAN \$5.9 million.

Detailed geological mapping of the East and West Gully drainages was undertaken at a scale of 1:2,000. The results of this work were utilized during the subsequent drilling of the Gully and Far West Zones and was instrumental in the discovery of the near-surface mineralization at each of these zones.

The 1994 survey control grid was extended westward to 44000 East with one-kilometre, north-south gridlines. Soil geochemical sampling was undertaken over the extended grid area and the analytical results from the soil samples were compared to those from past soil and basal till sampling programs. Only one sample site at 99800 North by 46300 East returned a statistically-anomalous value (greater than 100 ppm copper) of 187 ppm copper. Five other widely-distributed samples returned values greater than 65 ppm copper and only four soil samples returned gold-in-soil values greater than 25 ppb. There appears to be a general increase in copper-in-soil values from the northeastern corner of the extended soil sampling grid but no obvious multi-site copper-in-soil with gold-in-soil anomalies were discovered.

A review of past soil geochemical data revealed that there are several untested soil geochemical anomalies. Several anomalous copper-in-soil sample sites are situated adjacent to the South Boundary Fault which may be reflecting buried mineralization hosted by the Red stock or Stuhini Group volcanic rocks near the fault zone. There is also an open copper- and possibly gold-in-soil anomaly south of the Gully Zone that should be evaluated with additional geophysical and geochemical surveying and possible diamond drilling. Furthermore, old soil geochemical results in the vicinity of the Far West Zone indicate copper-gold mineralization south of drill holes 95-167 and 95-196, and the copper-molybdenum mineralization within the Sus North claim should be re-assessed.

The results of I.C.P. analyses on 20 percent of the drill core samples indicate that copper, gold and possibly silver are the only metals of economic interest, and a relatively 'clean' concentrate could be produced without any serious penalty contaminants. Check assaying of 'blind' duplicate samples and selected sample pulps indicates that the 1995 drill core sampling and analytical procedures were well controlled and that the assay and analytical data is both accurate and precise (Smee, 1996).

The 1995 baseline environmental monitoring program included recording local meteorology, hydrology (5 sites, including 2 automatic water level recorders), water quality (11 sites) and wildlife data, and preliminary vegetation and fisheries studies. Results of this work indicate that the general environmental conditions of the property are typical of the region. Preliminary waste characterization studies on the four main rock types suggest that the host Main Phase monzodiorite and post-mineral dykes will likely be acid generating. Distal volcanic rocks will likely be acid consuming; however, proximal volcanic and Bowser Lake Group rocks will require further test work to determine their overall acid generation potentials.

The 1995 diamond drilling program successfully traced a 400-metre western extension of the Red-Chris deposit and discovered significant copper-gold mineralization along the southern margins of the Red stock. Current drilling results indicate that there are two near-surface core zones within the Main and East Zones of the Red-Chris deposit that grade greater than 0.6 percent copper and 0.6 g.p.T. gold and are amenable for 'starter' open pit mining. These zones are separated and surrounded by a much larger, less well delineated zone of greater than 0.25 percent copper and 0.2 g.p.T. gold mineralization. The strike length of the Red-Chris deposit, comprising both the Main and East Zones, is now in the order of 1.7 kilometres with widths ranging from 250 to 700 metres or more. Furthermore, deep drilling within the East Zone intersected significant copper-gold mineralization at a depth of 750 metres beneath the surface with no evidence that the mineralization is diminishing.

Exploration drilling over a 2-kilometre strike length, west of the Red-Chris deposit, discovered significant near-surface copper-gold mineralization underlying both the Gully and Far West exploration targets in the Yellow Chris area. Two east-west trending, subvertical zones of significant copper-gold mineralization were discovered in the Gully Zone; centred at grid coordinates 99800 North by 49000 East and 99200 North by 49000 East. These zones have been tested by widely-spaced drilling over strike distances of 400 to 500 metres and widths from 200 to 300 metres, and remain open both laterally and vertically. Drill intercepts from within the Gully Zone typically grade more than 0.3 percent copper and 0.3 g.p.T. gold over lengths of 15 to more than 300 metres. There are also higher grade sections within this mineralized zone, such as the one intercepted by DDH 95-168, with grades of 1.486 percent copper and 3.266 g.p.T. gold over 18.29 metres.

The Far West Zone is a 600-metre by 600-metre coincident geochemical and geophysical exploration target centred at grid coordinates 99900 North by 48400 East. It was tested with widely-spaced drilling directed at the centre of a strong high chargeability-low resistivity geophysical anomaly. This drilling intersected pyrite-chalcocopyrite-gold mineralization hosted by two subvertical, easterly trending structures centred at 99800 North by 48500 East. Assay results indicate that the copper to gold grade ratios are in the order of 1:3 with copper grades typically ranging from 0.2 to 0.35 percent and gold values ranging from 0.6 to 0.75 g.p.T. Considerably more drilling will have to be conducted within this zone to delineate the mineralized sections and their trends.

Mr. G. H. Giroux, P. Eng., of Montgomery Consultants Ltd. updated the geological resources of the Red-Chris deposit and Yellow Chris mineralization using ordinary kriging geostatistical techniques for each block of a geologic block model that was constructed by the writer and mining engineers of Fluor Daniel Wright Ltd. Individual blocks measuring 20 metres long by 20 metres wide by 15 metres deep were constrained by drill hole density, geology and composite assay data, and classified as measured, indicated and inferred based on the distance from the block centroid to the nearest assay composite used for its estimate. The geologic resources were calculated for all blocks from a surface elevation of approximately $1,530 \pm 30$ m to an arbitrary elevation of 900 m A.M.S.L.. A mean specific gravity of 2.79 was used for the calculations. Giroux (1996) reported the in-situ geologic resources at various copper cut-off grades and Net Smelter Returns. The Net Smelter Return cut-off levels were calculated using a fixed formula (i.e. N.S.R. CAN \$ = $16.96 \times \% \text{ copper} + 10.18 \times \text{g.p.T gold}$) at unit prices of US \$1.00 per pound copper and US \$350.00 per ounce gold. Since the economic viability of the following geologic resources has not yet been demonstrated, the term 'resources' is the equivalent of 'mineralization (as per National Policy No. 2-A)'. The present geological resources within the property are reported by Giroux (1996) as follows:

| Cut-Off Grade Cu % | Measured | | | Indicated | | | Measured & Indicated | | | Inferred | | |
|--------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|----------------------|---------------|-----------------|------------------|---------------|-----------------|
| | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au |
| 0.20 | 87.10 | 0.394 | 0.309 | 696.30 | 0.347 | 0.294 | 783.40 | 0.352 | 0.296 | 478.20 | 0.333 | 0.288 |
| 0.25 | 69.40 | 0.437 | 0.339 | 533.80 | 0.384 | 0.326 | 603.20 | 0.390 | 0.327 | 389.80 | 0.357 | 0.311 |
| 0.30 | 53.20 | 0.486 | 0.378 | 387.50 | 0.426 | 0.362 | 440.70 | 0.433 | 0.364 | 279.10 | 0.390 | 0.344 |
| 0.35 | 39.20 | 0.545 | 0.418 | 266.50 | 0.472 | 0.401 | 305.70 | 0.481 | 0.403 | 186.20 | 0.423 | 0.384 |
| 0.40 | 29.80 | 0.599 | 0.456 | 177.50 | 0.521 | 0.440 | 207.30 | 0.532 | 0.442 | 109.00 | 0.459 | 0.404 |
| 0.45 | 22.90 | 0.652 | 0.501 | 113.70 | 0.577 | 0.483 | 136.60 | 0.589 | 0.486 | 58.10 | 0.494 | 0.401 |
| 0.50 | 18.40 | 0.696 | 0.540 | 77.30 | 0.626 | 0.529 | 95.70 | 0.639 | 0.531 | 21.90 | 0.537 | 0.461 |

The property has now been tested by 244 diamond and 44 percussion drill holes, or 74,782.52 metres of drilling, and the results from this work indicate that the Red-Chris deposit is still open both laterally and vertically, and the Far West and Gully Zones may host substantial copper-gold mineralization amenable to open pit mining.

Continued detailed exploration of the Red-Chris deposit and the Yellow Chris area is justified. This work should focus on defining the near-surface inferred geologic resources of the Red-Chris deposit with the best probability of enhancing the economic potential of the deposit, and on delineating the copper-gold mineralization within the Gully and Far West Zones. The cost of this recommended exploration work is estimated at CAN \$ 2.1 million.

RECOMMENDATIONS

The exploration potential of both the Red-Chris deposit and the Yellow Chris area is good and their continued exploration is justified. For the purposes of this report, recommendations for further exploration work will be restricted to the evaluation of inferred copper-gold mineralization and other areas with exploration potential within the property. Proposals for the detailed infill drilling of the measured and indicated geologic resources within the Red-Chris deposit will be the responsibility of mining engineers cognizant of the requirements of a feasibility report on the property.

It is recommended that further work should focus on defining near-surface inferred geologic resources within the Red-Chris deposit to enhance its economic potential and delineate the geologic resources of the Gully and Far West Zones. This exploration work should commence in July and be completed by the end of August. The recommended exploration work should include:

- 1) Detailed HQ- and/or NQ-core diamond drilling - to define and advance the near-surface inferred geologic resources in the southwestern quadrant of the proposed Red-Chris open pit and along gridline 50400 East because these resources could add substantially to the economic potential of the project. It is estimated that a minimum of 16 drill holes, totalling 5,000 metres, will be required to accomplish this recommendation. All of this drilling should be on section and at an azimuth of 180° and dip of -60° to maintain established drilling profiles for resource estimations, and should be extended, if possible, to the 1,100- or 12,00-metre elevation. The established assaying and check-assaying procedures should be maintained, and systematic geochemical analyses (31-element I.C.P.) should be undertaken on a minimum of 20 percent of the samples.
- 2) Exploratory NQ-core diamond drilling - to evaluate the North and South Gully Zones, the Far West Zone, and the geochemical and geophysical anomalies 300 metres south of the Gully Zone. Nine NQ-core diamond drill holes, totalling 3,100 metres, are proposed to test the Gully Zone. This drilling should be at an azimuth of 180°, a dip of -60°, and staggered to intersect any east-west structural trends. Six NQ-core diamond drill holes, totalling 1,900 metres, are recommended to test the lateral extensions of the Far West Zone. The proposed drill sites are shown on Figure 10 and Table V of this report.
- 3) Geophysical and geochemical surveying - to identify any sulphide mineralization underlying the soil geochemical anomaly 300 m south of the Gully Zone, and complete soil sampling of the 1994 survey grid area. This work will require extending the existing survey grid south of the Gully Zone; and
- 4) Environmental studies - to continue the baseline environmental monitoring program.

The estimated cost of the above recommended exploration program is CAN \$ 2,099,670.00 (see Proposed 1996 Exploration Budget).

INTRODUCTION

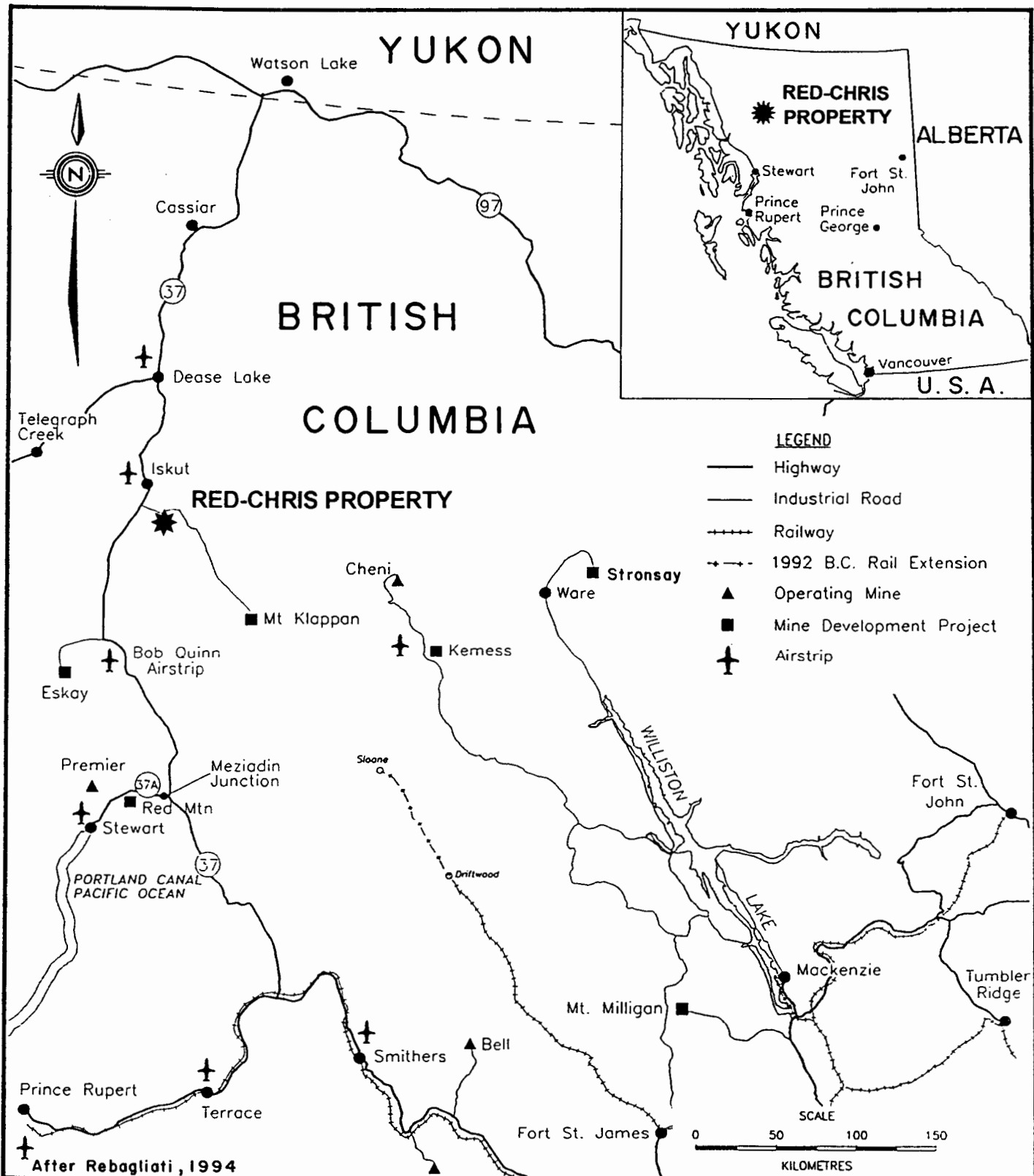
American Bullion Minerals Ltd. controls and operates the **Red-Chris** porphyry copper-gold property which is comprised of 156 mineral claims totalling 452 units. The property is located in the eastern Todagin Plateau area, approximately 20 kilometres southeast of the village of Iskut, in the Liard Mining Division of northwestern British Columbia, Canada.

The first recorded exploration of the Todagin Plateau was undertaken by Conwest Exploration Limited in 1956. Later, Great Plains Development Company of Canada (1969-74) and Silver Standard Mines Ltd. (1970-74) staked and explored their own Chris-Money and Red-Sus claim holdings respectively. In 1974, Ecstall Mining Limited (later Texasgulf Inc.) negotiated joint venture agreements with these two companies and amalgamated their respective claim holdings. Following the discovery of low-grade copper mineralization, drilling programs were conducted by Texasgulf Inc. from 1974 to 1980. This work discovered the 'Red-Chris' deposit comprising two coalescing, east-northeasterly trending zones of porphyry-style copper-gold mineralization, called the 'Main' and 'East' Zones, hosted by an altered feldspar-hornblende porphyry intrusion called the 'Red' stock. Later, as a result of a series of corporate reorganizations and takeovers, the ownership of the property passed to Norcen Energy Resources Limited (20%), Falconbridge Limited (60%) and Teck Corporation (20%).

In March, 1994 American Bullion Minerals Ltd. finalized agreements with the respective owners and acquired an eighty percent (80%) interest in and operatorship of the Red-Chris property with Teck Corporation retaining a ten percent participating interest and ten percent carried net profits interest in the property. Between June and November 1994 American Bullion Minerals conducted an aggressive exploration program to evaluate the Red-Chris deposit and the exploration potential of the property. This work discovered continuous copper-gold mineralization over vertical distances of 400 metres and expanded the lateral dimensions of the Red-Chris deposit in a north-south direction. Two kilometres west of the Red-Chris deposit, in an area known as the 'Yellow Chris', geophysical and geochemical surveying discovered the 'Far West' and 'Gully' Zones with strong chargeability highs, resistivity lows and coincident anomalous copper and gold soil geochemistry. A geostatistical resource inventory of the Red-Chris deposit from a surface elevation of 1,530 m to 1,050 m A.M.S.L. indicated combined measured and indicated geological resources (equivalent of 'mineralization per National Policy No. 2-A) of 181 million tonnes grading 0.40 percent copper and 0.31 gram gold per tonne with additional inferred resources of 139 million tonnes grading 0.35 percent copper and 0.28 gram gold per tonne using a 0.20 percent copper cut-off grade and ordinary kriging techniques (Giroux, 1995). Continued detailed exploration work was recommended for the 1995 exploration field season at an estimated cost of \$4.16 million.

Between April 27 and November 12, 1995 American Bullion Minerals Ltd. conducted an aggressive two-stage exploration program on the property to delineate the Red-Chris deposit, evaluate the two large exploration targets within the Yellow-Chris area, and collect the necessary metallurgical, engineering and environmental data to complete a prefeasibility study of the property in early 1996. The results of the first stage of exploration work, including 21,336 m (70,000 ft.) of diamond drilling, was reviewed in August 1995 and a second stage of additional diamond drilling (15,000 m) was recommended and undertaken from September to November 1995. A total of one hundred and twelve exploratory HQ- and/or NQ-core holes and three geotechnical BQTK-core holes, totalling 36,830 metres or 120,833 feet, were drilled during this program. In addition, the geology of the East and West Gully drainages were mapped at a scale of 1:2,000, and extensive environmental, engineering, acid base accounting, metallurgical and mineral resource inventory studies were completed.

This report describes the location, access, ownership, claim holdings, exploration history and geology of the Red-Chris property, and documents the results of the 1995 exploration program. Recommendations and cost estimates accompany this report for a proposed program to continue exploration drilling of the Red-Chris deposit and continue assessing the economic potential of the Gully and Far West Zones.



J. D. Blanchflower

TO ACCOMPANY REPORT BY J. D. BLANCHFLOWER, P. GEO.



MINOREX CONSULTING LTD.
 GEOLOGICAL CONSULTANTS, VANCOUVER, B.C.

AMERICAN BULLION MINERALS LTD.
 Vancouver, British Columbia, Canada

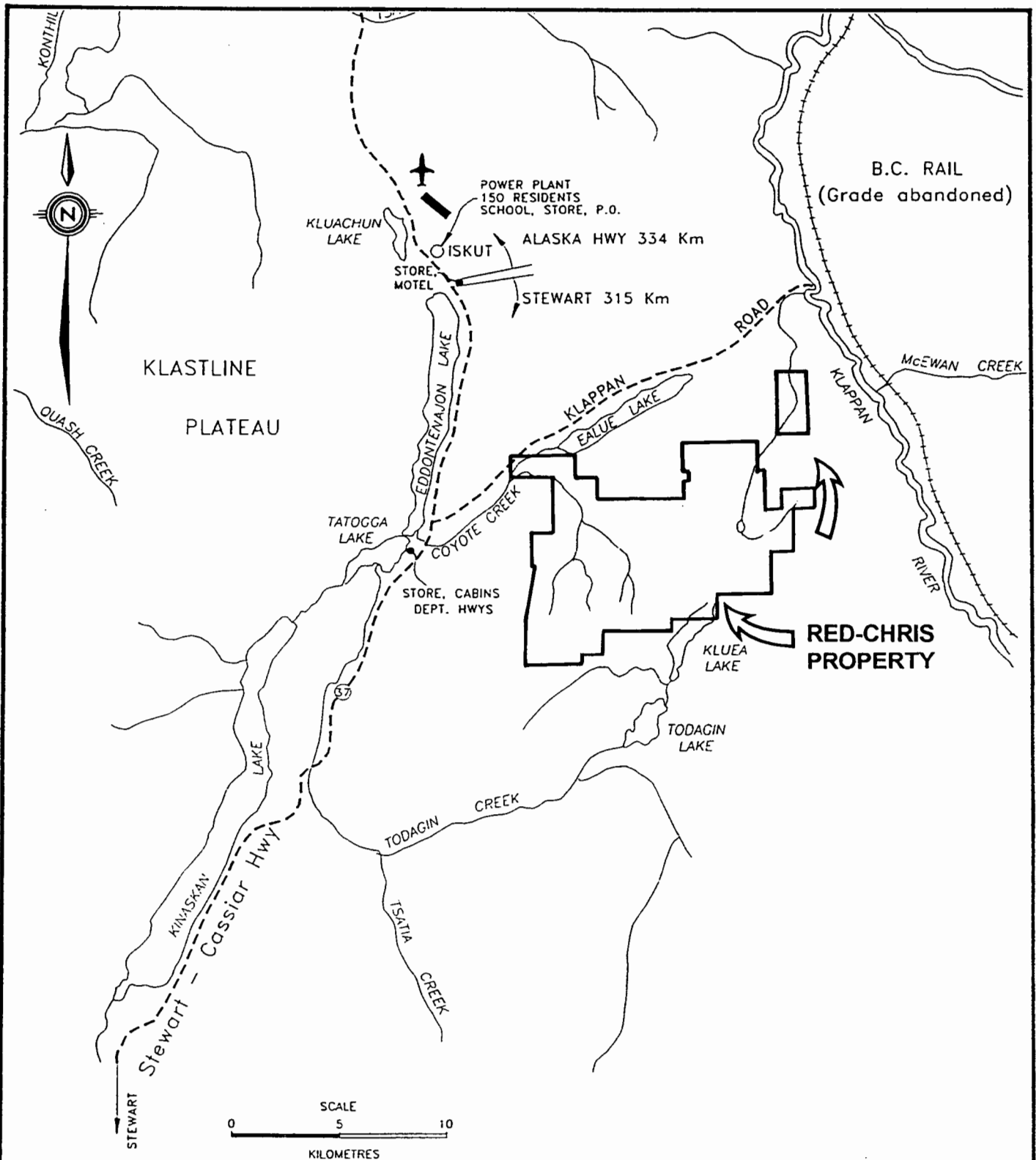
LOCATION MAP
RED-CHRIS PROPERTY
 LIARD MINING DIVISION
 BRITISH COLUMBIA, CANADA

DATE: APRIL 1996

SCALE: AS SHOWN

DRAWN BY: J. M.

FIGURE NO. 1



After Rebagliati, 1994

PROFESSIONAL
 PROVINCE OF
 J. D. Blanchflower
 BRITISH COLUMBIA
 GEOSCIENTISTS

TO ACCOMPANY REPORT BY J. D. BLANCHFLOWER, P. GEO.



MINOREX CONSULTING LTD.
 GEOLOGICAL CONSULTANTS, VANCOUVER, B.C.

AMERICAN BULLION MINERALS LTD.
 Vancouver, British Columbia, Canada

REGIONAL MAP

RED-CHRIS PROPERTY
 LIARD MINING DIVISION
 BRITISH COLUMBIA, CANADA

DATE: APRIL 1996

SCALE: AS SHOWN

DRAWN BY: J. M.

FIGURE NO. 2

GENERAL DESCRIPTION

Location

The Red-Chris property is located on the north-facing Todagin Plateau which is situated between Ealue and Kluea Lakes, approximately 20 kilometres southeast of the village of Iskut, 80 kilometres south of Dease Lake, or 190 kilometres north of the deep seaport of Stewart, in northwestern British Columbia, Canada. Its geographic coordinates are centred at latitude 57° 42' North by longitude 129° 47' West (N.T.S. map-sheet 104H/12W) within the Liard Mining Division (see Figures 1 and 2).

Access

The property is readily accessible with helicopter support from either the gravel Coyote Creek-Ealue Lake road which is situated immediately north of the property, or from several landing sites along Highway 37 (Stewart-Cassiar Highway) which is approximately 12 kilometres west of the central claim holdings. The Coyote Creek-Ealue Lake road was constructed in the mid-1970's to connect Highway 37 at Tatogga Lake with the now-abandoned B.C. Rail grade which was being constructed at the time. It is a seasonal gravel road but moderately-well maintained by the local B.C. Ministry of Highways contractor.

There is a rough tote road to the centre of the property which joins the Coyote Creek-Ealue Lake road just west of Ealue Lake, or approximately 8 kilometres east of Highway 37. This trail crosses two drainages, and is very steep and muddy in places. It was constructed by Texasgulf Inc. in the 1970's to mobilize and demobilize heavy equipment and it was utilized again in 1994 and 1995 by American Bullion Minerals Ltd. for the same purposes. American Bullion Minerals Ltd. has applied to the B.C. Ministry of Employment and Investment, Geological Survey Branch, for permission to upgrade this road for 5-ton vehicle access.

The village of Iskut is approximately 315 kilometres by road northeast of the town of Stewart, or 82 kilometres south of the settlement of Dease Lake. Regularly-scheduled commercial airline flights service Dease Lake from Terrace. There is also a gravel airstrip situated two kilometres north of the village of Iskut, adjacent to Highway 37, that could be utilized for DC-3 aircraft but there are no regularly-scheduled flights here. Various helicopter charter companies maintain seasonal bases at Dease Lake, Watson Lake and Stewart.

Several resorts and motels situated along Highway 37 between Iskut and Tatogga Lake provide seasonal accommodation and meals to tourists and local workers.

Property and Ownership

The subject property covers approximately 110 square kilometres and is comprised of 120 two-post, 8 fractional and 28 modified grid mineral claims, or 156 mineral claims totalling 452 units. Figures 1, 2, 3A and 3B of this report show the location and configuration of the claim holdings, and Table 1 documents all of the pertinent claim data.

In 1993 the ownership of the Red-Chris property was subdivided between Falconbridge Limited (60%), Norcen Energy Resources (20%) and Teck Corporation (20%). American Bullion Minerals Ltd. negotiated agreements with these owners to acquire an eighty percent (80%) interest in the property. These agreements were finalized on January 5th, January 14th and March 1st, 1994 respectively. Falconbridge Limited and Norcen Energy Resources sold a combined 80 percent interest in the property to American Bullion Minerals for a combination of cash and shares. Falconbridge retained a 1.8% Net Smelter Return Royalty in the property, which may be reduced to 1.0% in consideration for a \$1 million payment. Teck Corporation retained a 10 percent participating interest and 10 percent carried net profits interest in the property. When American Bullion has completed and submitted a preliminary feasibility

report to its joint venture partner, Teck will have the option to become operator and provide 100 percent of all future financing required to bring the property to commercial production thereby increasing its interest to a 55% participating interest in the property. American Bullion would then retain a 45 percent carried and non-assessable interest.

Since acquiring its interest in the property, American Bullion Minerals Ltd. staked the 'RC-1' to 'RC-7' modified grid mineral claims (108 units) in January 1994, the 'ABM-1 to 'ABM-6' modified grid mineral claims (85 units) in September 1994, and the 'ABM-7 to -11' modified grid mineral claims (56 units) in June and July 1995. These mineral claims are subject to the same terms and conditions as those pre-existing claims included in above referenced agreements (see Figures 3A and 3B, and Table I).

Physiography

The property is situated on eastern portion of the Todagin upland plateau; a subdivision of the Klastline Plateau which lies along the northern margin of the Skeena Mountains (Ash *et al.*, 1995). Most of the claim holdings have relatively low relief; although there are several deeply-incised creek gullies. Elevations range from 1,036 m (3,400 ft.) along Coyote Creek to 1,676 m (5,500 ft.) A.M.S.L. on the slopes of Todagin Mountain, but near the Red-Chris copper-gold deposit they are typically 1,500 ± 30 m.

The climatic conditions are typical for the region, although the upland plateaus east of Highway 37 usually have more moderate weather conditions. Annual temperatures range from more than 25° C. in July to below -25° in December. Total annual precipitation is in the order of 465 mm along Coyote Creek to 725 mm in the vicinity of Red-Chris deposit; of which approximately 60 percent is rainfall equivalent (i.e. snow). Precipitation is relatively well distributed throughout the year with April to May being the driest period and August through December being the wettest (Hallum, Knight Piesold, 1996).

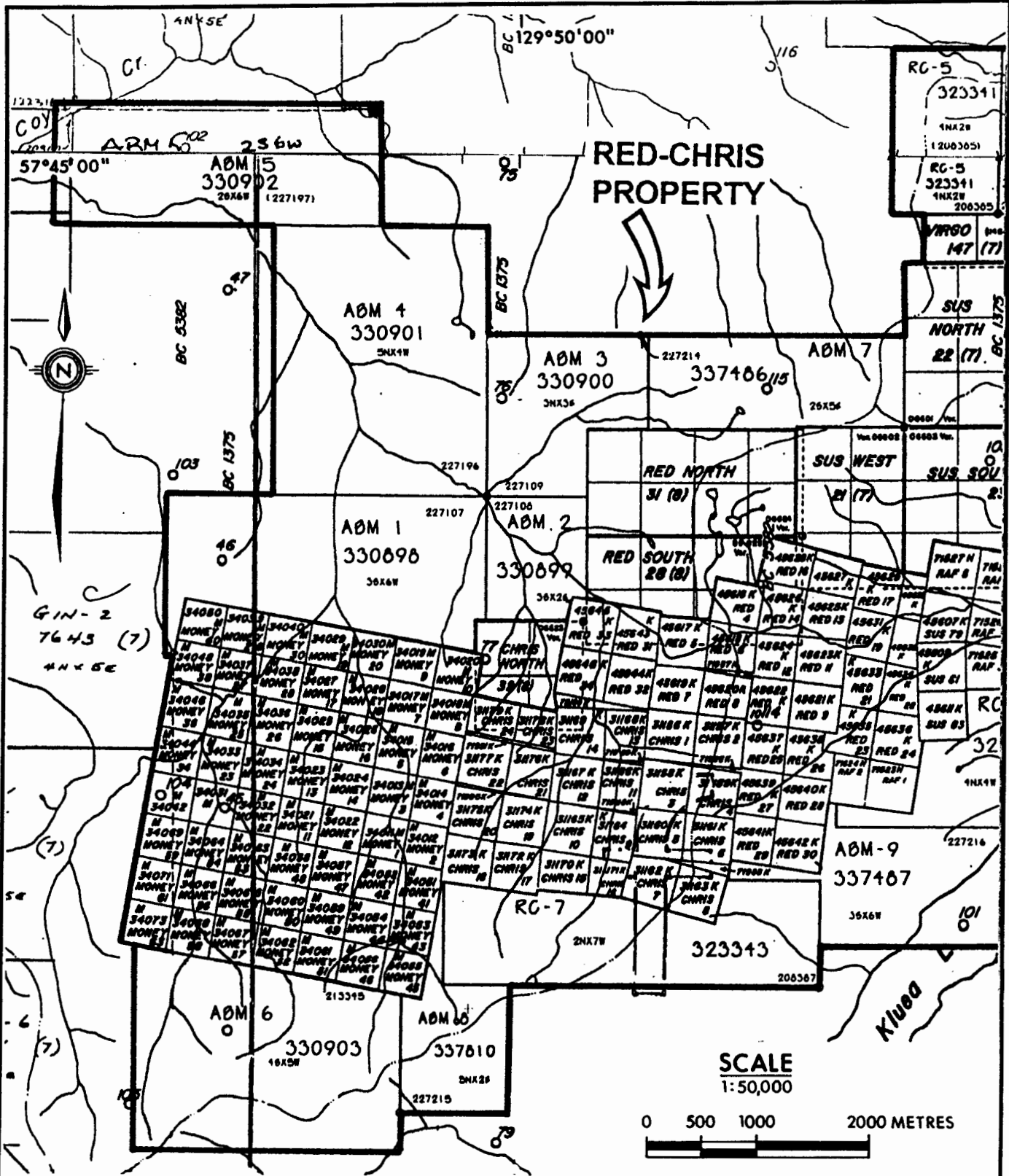
Bedrock exposures are generally absent in areas of low to even moderate relief within the central portion of the property and in the valley bottoms. Most of the low-relief areas of the Todagin Plateau are extensively covered by several metres of glacial till comprising a basal limonitic sand, gravel and boulder layer and overlying black organic silt. However, there is abundant outcrop along the higher-relief drainages and mountainous ridges.

Vegetation on the plateau is dominated by low shrubs (scrub birch and willow), grasses and mosses but within the eastern drainages and valley bottoms there are several varieties of conifer and deciduous trees; including balsam, fir, cedar, spruce and aspen.

Infrastructure


Any future mining operation on the property would utilize the well-maintained and paved Highway 37 which is the main access route from the Terrace area to Stewart, Iskut, Dease Lake and Watson Lake. The town of Stewart has deep-water port facilities for vessels in the 65,000 DWT capacity range and is well located to supply Pacific Rim copper smelters in North America and Asia (Rebagliati, 1994). There are bulk fuel facilities at Terrace and Stewart that currently supply the local resource industries. Electrical power for a possible mining and milling operation on the property could be provided by extending the B.C. Hydro transmission line approximately 200 kilometres north from Meziadin Junction (see Figure 1).

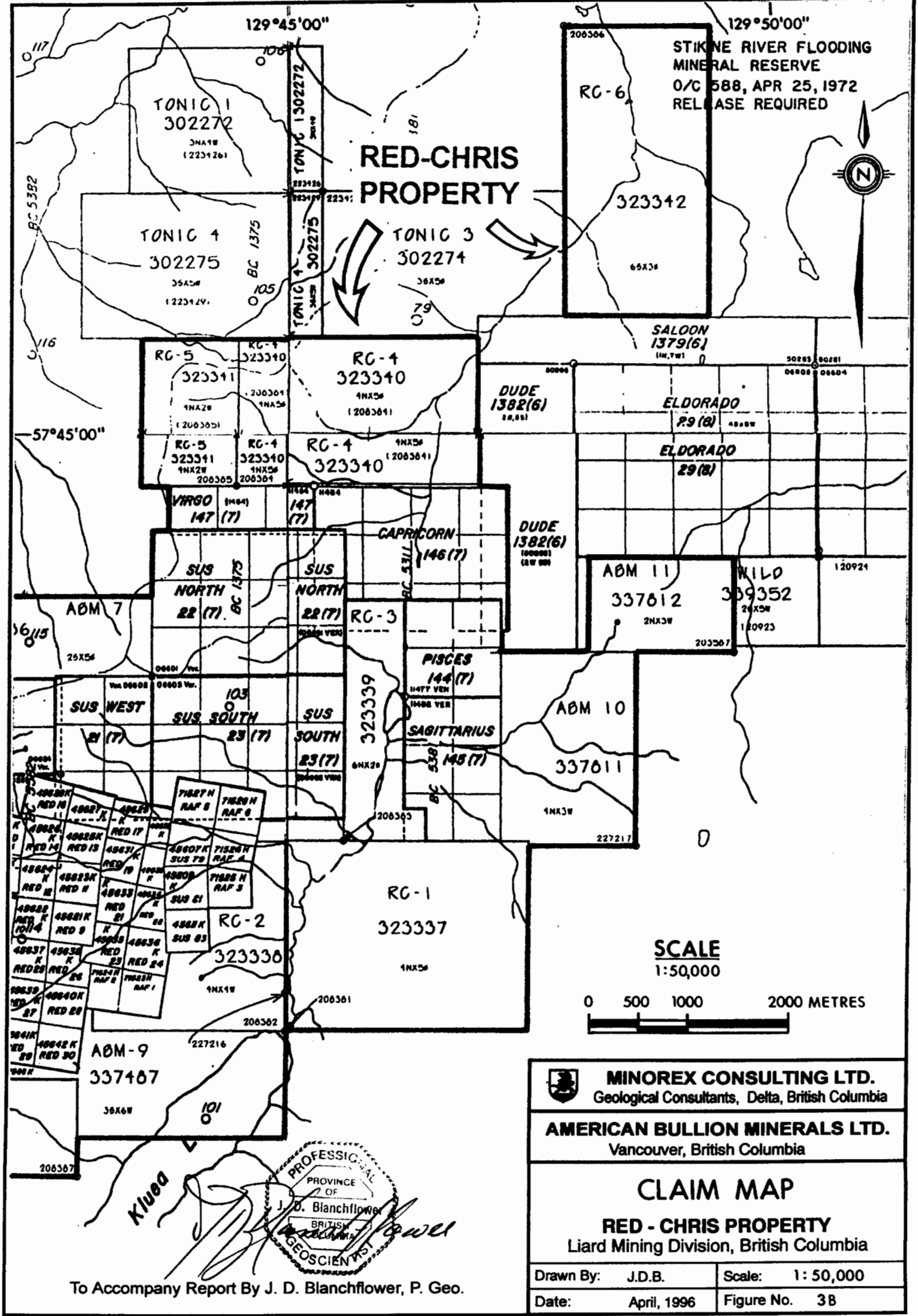
The property is well located with respect to a readily-available, indigenous labour force. American Bullion Minerals Ltd. employed and trained members of the local Iskut Indian Band during the 1994 and 1995 exploration programs and will do so again during any forthcoming programs. Furthermore, there is a well-qualified and experienced exploration, mining and construction labour force available from the Stewart, Watson Lake and Smithers-Terrace areas (see Figure 1).



D. Blanchflower
 P. Geo.

To Accompany Report By J. D. Blanchflower, P. Geo.

| | |
|---|------------------|
|  MINOREX CONSULTING LTD. Geological Consultants, Delta, British Columbia | |
| AMERICAN BULLION MINERALS LTD. Vancouver, British Columbia | |
| CLAIM MAP RED - CHRIS PROPERTY Liard Mining Division, British Columbia | |
| Drawn By: J.D.B. | Scale: 1: 50,000 |
| Date: April, 1996 | Figure No. 3A |



**RED-CHRIS
PROPERTY**

STIKINE RIVER FLOODING
MINERAL RESERVE
O/C 588, APR 25, 1972
RELEASE REQUIRED



SCALE
1:50,000



MINOREX CONSULTING LTD.
Geological Consultants, Delta, British Columbia

AMERICAN BULLION MINERALS LTD.
Vancouver, British Columbia

CLAIM MAP
RED - CHRIS PROPERTY
Liard Mining Division, British Columbia

| | |
|-------------------|-----------------|
| Drawn By: J.D.B. | Scale: 1:50,000 |
| Date: April, 1996 | Figure No. 3B |



To Accompany Report By J. D. Blanchflower, P. Geo.

TABLE I

MINERAL CLAIM DATA

| Claim No. | Units | Record No. | Tenure No. | Record Date | Expiry Date |
|------------------|--------------|-------------------|-------------------|--------------------|--------------------|
| ABM-1 | 18 | 227107 | 330898 | Sep 11, 1994 | Sep 11, 2005 |
| ABM-2 | 6 | 227108 | 330899 | Sep 11, 1994 | Sep 11, 2005 |
| ABM-3 | 9 | 227109 | 330900 | Sep 11, 1994 | Sep 11, 2005 |
| ABM-4 | 20 | 227196 | 330901 | Sep 12, 1994 | Sep 12, 2005 |
| ABM-5 | 12 | 227197 | 330902 | Sep 13, 1994 | Sep 13, 2005 |
| ABM-6 | 20 | 213345 | 330903 | Sep 13, 1994 | Sep 13, 2005 |
| ABM-7 | 10 | 227214 | 337486 | Jun 29, 1995 | Jun 29, 1996 |
| ABM-8 | 10 | 227215 | 337810 | Jul 4, 1995 | Jul 4, 1996 |
| ABM-9 | 18 | 227216 | 337487 | Jul 1, 1995 | Jul 1, 1996 |
| ABM-10 | 12 | 227217 | 337811 | Jul 7, 1995 | Jul 7, 1996 |
| ABM-11 | 6 | 203587 | 337812 | Jul 8, 1995 | Jul 8, 1996 |
| Capricorn | 12 | 146 | 221682 | July 7, 1976 | July 7, 2004 |
| Chris North | 4 | 32 | 221642 | Aug 13, 1975 | Aug 13, 2004 |
| Chris 01 | 1 | 31156 | 226748 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 02 | 1 | 31157 | 226749 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 03 | 1 | 31158 | 226750 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 04 | 1 | 31159 | 226751 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 05 | 1 | 31160 | 226752 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 06 | 1 | 31161 | 226753 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 07 | 1 | 31162 | 226754 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 08 | 1 | 31163 | 226755 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 09 | 1 | 31164 | 226756 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 10 | 1 | 31165 | 226757 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 11 | 1 | 31166 | 226758 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 12 | 1 | 31167 | 226759 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 13 | 1 | 31168 | 226760 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 14 | 1 | 31169 | 306684 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 15 | 1 | 31170 | 226761 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 16 | 1 | 31171 | 226762 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 17 | 1 | 31172 | 226763 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 18 | 1 | 31173 | 226764 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 19 | 1 | 31174 | 226765 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 20 | 1 | 31175 | 226766 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 21 | 1 | 31176 | 226767 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 22 | 1 | 31177 | 226768 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 23 | 1 | 31178 | 226769 | Aug 24, 1968 | Aug 24, 2004 |
| Chris 24 | 1 | 31179 | 226770 | Aug 24, 1968 | Aug 24, 2004 |
| Cougar 1 | 1 | 71985 | 228048 | Aug 29, 1974 | Aug 29, 2004 |
| Cougar 2 | 1 | 71986 | 228049 | Aug 29, 1974 | Aug 29, 2004 |
| Cougar 3 | 1 | 71987 | 228050 | Aug 29, 1974 | Aug 29, 2004 |
| Cougar 4 | 1 | 71988 | 228051 | Aug 29, 1974 | Aug 29, 2004 |

TABLE I

MINERAL CLAIM DATA

| Claim No. | Units | Record No. | Tenure No. | Record Date | Expiry Date |
|------------------|--------------|-------------------|-------------------|--------------------|--------------------|
| Cougar 5 | 1 | 71989 | 228052 | Aug 29, 1974 | Aug 29, 2004 |
| Cougar 6 | 1 | 72180 | 228060 | Aug 29, 1974 | Aug 29, 2004 |
| Cougar 7 | 1 | 71990 | 228053 | Aug 29, 1974 | Aug 29, 2004 |
| Cougar 8 | 1 | 71991 | 228054 | Aug 29, 1974 | Aug 29, 2004 |
| Money 01 | 1 | 34011 | 226792 | Sep 30, 1968 | Sep 30, 2004 |
| Money 02 | 1 | 34012 | 226793 | Sep 30, 1968 | Sep 30, 2004 |
| Money 03 | 1 | 34013 | 226794 | Sep 30, 1968 | Sep 30, 2004 |
| Money 04 | 1 | 34014 | 226795 | Sep 30, 1968 | Sep 30, 2004 |
| Money 05 | 1 | 34015 | 226796 | Sep 30, 1968 | Sep 30, 2004 |
| Money 06 | 1 | 31016 | 226797 | Sep 30, 1968 | Sep 30, 2004 |
| Money 07 | 1 | 34017 | 226798 | Sep 30, 1968 | Sep 30, 2004 |
| Money 08 | 1 | 34018 | 226799 | Sep 30, 1968 | Sep 30, 2004 |
| Money 09 | 1 | 34019 | 226800 | Sep 30, 1968 | Sep 30, 2004 |
| Money 10 | 1 | 34020 | 226801 | Sep 30, 1968 | Sep 30, 2004 |
| Money 11 | 1 | 34021 | 226802 | Sep 30, 1968 | Sep 30, 2004 |
| Money 12 | 1 | 34022 | 226803 | Sep 30, 1968 | Sep 30, 2004 |
| Money 13 | 1 | 34023 | 226804 | Sep 30, 1968 | Sep 30, 2004 |
| Money 14 | 1 | 34024 | 226805 | Sep 30, 1968 | Sep 30, 2004 |
| Money 15 | 1 | 34025 | 226806 | Sep 30, 1968 | Sep 30, 2004 |
| Money 16 | 1 | 34026 | 226807 | Sep 30, 1968 | Sep 30, 2004 |
| Money 17 | 1 | 34027 | 226808 | Sep 30, 1968 | Sep 30, 2004 |
| Money 18 | 1 | 34028 | 226809 | Sep 30, 1968 | Sep 30, 2004 |
| Money 19 | 1 | 34029 | 226810 | Sep 30, 1968 | Sep 30, 2004 |
| Money 20 | 1 | 34030 | 226811 | Sep 30, 1968 | Sep 30, 2004 |
| Money 21 | 1 | 34031 | 226812 | Sep 30, 1968 | Sep 30, 2004 |
| Money 22 | 1 | 34032 | 226813 | Sep 30, 1968 | Sep 30, 2004 |
| Money 23 | 1 | 34033 | 226814 | Sep 30, 1968 | Sep 30, 2004 |
| Money 24 | 1 | 34034 | 226815 | Sep 30, 1968 | Sep 30, 2004 |
| Money 25 | 1 | 34035 | 226816 | Sep 30, 1968 | Sep 30, 2004 |
| Money 26 | 1 | 34036 | 226817 | Sep 30, 1968 | Sep 30, 2004 |
| Money 27 | 1 | 34037 | 226818 | Sep 30, 1968 | Sep 30, 2004 |
| Money 28 | 1 | 34038 | 226819 | Sep 30, 1968 | Sep 30, 2004 |
| Money 29 | 1 | 34039 | 226820 | Sep 30, 1968 | Sep 30, 2004 |
| Money 30 | 1 | 34040 | 226821 | Sep 30, 1968 | Sep 30, 2004 |
| Money 32 | 1 | 34042 | 226822 | Sep 30, 1968 | Sep 30, 2004 |
| Money 34 | 1 | 34044 | 226823 | Sep 30, 1968 | Sep 30, 2004 |
| Money 36 | 1 | 34046 | 226824 | Sep 30, 1968 | Sep 30, 2004 |
| Money 38 | 1 | 34048 | 226825 | Sep 30, 1968 | Sep 30, 2004 |
| Money 40 | 1 | 34050 | 226826 | Sep 30, 1968 | Sep 30, 2004 |
| Money 41 | 1 | 34051 | 226827 | Sep 30, 1968 | Sep 30, 2004 |
| Money 42 | 1 | 34052 | 226828 | Sep 30, 1968 | Sep 30, 2004 |

TABLE I

MINERAL CLAIM DATA

| Claim No. | Units | Record No. | Tenure No. | Record Date | Expiry Date |
|-----------|-------|------------|------------|---------------|---------------|
| Money 43 | 1 | 34053 | 226829 | Sep 30, 1968 | Sep 30, 2004 |
| Money 44 | 1 | 34054 | 226830 | Sep 30, 1968 | Sep 30, 2004 |
| Money 45 | 1 | 34055 | 226831 | Sep 30, 1968 | Sep 30, 2004 |
| Money 46 | 1 | 34056 | 226832 | Sep 30, 1968 | Sep 30, 2004 |
| Money 47 | 1 | 34057 | 226833 | Sep 30, 1968 | Sep 30, 2004 |
| Money 48 | 1 | 34058 | 226834 | Sep 30, 1968 | Sep 30, 2004 |
| Money 49 | 1 | 34059 | 226835 | Sep 30, 1968 | Sep 30, 2004 |
| Money 50 | 1 | 34060 | 226836 | Sep 30, 1968 | Sep 30, 2004 |
| Money 51 | 1 | 34061 | 226837 | Sep 30, 1968 | Sep 30, 2004 |
| Money 52 | 1 | 34062 | 226838 | Sep 30, 1968 | Sep 30, 2004 |
| Money 53 | 1 | 34063 | 226839 | Sep 30, 1968 | Sep 30, 2004 |
| Money 54 | 1 | 34064 | 306687 | Sep 30, 1968 | Sep 30, 2004 |
| Money 55 | 1 | 34065 | 226840 | Sep 30, 1968 | Sep 30, 2004 |
| Money 56 | 1 | 34066 | 226841 | Sep 30, 1968 | Sep 30, 2004 |
| Money 57 | 1 | 34067 | 226842 | Sep 30, 1968 | Sep 30, 2004 |
| Money 58 | 1 | 34068 | 226843 | Sep 30, 1968 | Sep 30, 2004 |
| Money 59 | 1 | 34069 | 226844 | Sep 30, 1968 | Sep 30, 2004 |
| Money 61 | 1 | 34071 | 226845 | Sep 30, 1968 | Sep 30, 2004 |
| Money 63 | 1 | 34073 | 306685 | Sep 30, 1968 | Sep 30, 2004 |
| Pisces | 4 | 144 | 221680 | July 7, 1974 | July 7, 2004 |
| Raf 1 | 1 | 71523 | 227970 | July 31, 1974 | July 31, 2004 |
| Raf 2 | 1 | 71525 | 227971 | July 31, 1974 | July 31, 2004 |
| Raf 3 | 1 | 71524 | 227972 | July 31, 1974 | July 31, 2004 |
| Raf 4 | 1 | 71526 | 227973 | July 31, 1974 | July 31, 2004 |
| Raf 5 | 1 | 71527 | 227974 | July 31, 1974 | July 31, 2004 |
| Raf 6 | 1 | 71528 | 227975 | July 31, 1974 | July 31, 2004 |
| RC-1 | 20 | 323337 | 323337 | Jan 11, 1994 | Jan 11, 2005 |
| RC-2 | 16 | 323338 | 323338 | Jan 14, 1994 | Jan 14, 2005 |
| RC-3 | 12 | 323339 | 323339 | Jan 12, 1994 | Jan 12, 2005 |
| RC-4 | 20 | 323340 | 323340 | Jan 17, 1994 | Jan 17, 2005 |
| RC-5 | 8 | 323341 | 323341 | Jan 16, 1994 | Jan 16, 2005 |
| RC-6 | 18 | 323342 | 323342 | Jan 18, 1994 | Jan 18, 2005 |
| RC-7 | 14 | 323343 | 323343 | Jan 18, 1994 | Jan 18, 2005 |
| Red North | 8 | 31 | 221641 | Aug 13, 1975 | Aug 13, 2004 |
| Red South | 8 | 28 | 221638 | Aug 13, 1975 | Aug 13, 2004 |
| Red 04 | 1 | 45616 | 227043 | Aug 5, 1970 | Aug 5, 2004 |
| Red 05 | 1 | 45617 | 227044 | Aug 5, 1970 | Aug 5, 2004 |
| Red 06 | 1 | 45618 | 227045 | Aug 5, 1970 | Aug 5, 2004 |
| Red 07 | 1 | 45619 | 227046 | Aug 5, 1970 | Aug 5, 2004 |
| Red 08 | 1 | 45620 | 227047 | Aug 5, 1970 | Aug 5, 2004 |
| Red 09 | 1 | 45621 | 227048 | Aug 5, 1970 | Aug 5, 2004 |

TABLE I

MINERAL CLAIM DATA

| Claim No. | Units | Record No. | Tenure No. | Record Date | Expiry Date |
|------------------|--------------|-------------------|-------------------|--------------------|--------------------|
| Red 10 | 1 | 45622 | 227049 | Aug 5, 1970 | Aug 5, 2004 |
| Red 11 | 1 | 45623 | 227050 | Aug 5, 1970 | Aug 5, 2004 |
| Red 12 | 1 | 45624 | 227051 | Aug 5, 1970 | Aug 5, 2004 |
| Red 13 | 1 | 45625 | 227052 | Aug 5, 1970 | Aug 5, 2004 |
| Red 14 | 1 | 45626 | 227053 | Aug 5, 1970 | Aug 5, 2004 |
| Red 15 | 1 | 45627 | 227054 | Aug 5, 1970 | Aug 5, 2004 |
| Red 16 | 1 | 45628 | 227055 | Aug 5, 1970 | Aug 5, 2004 |
| Red 17 | 1 | 45629 | 227056 | Aug 5, 1970 | Aug 5, 2004 |
| Red 18 | 1 | 45630 | 227057 | Aug 5, 1970 | Aug 5, 2004 |
| Red 19 | 1 | 45631 | 227058 | Aug 5, 1970 | Aug 5, 2004 |
| Red 20 | 1 | 45632 | 227059 | Aug 5, 1970 | Aug 5, 2004 |
| Red 21 | 1 | 45633 | 227060 | Aug 5, 1970 | Aug 5, 2004 |
| Red 22 | 1 | 45634 | 227061 | Aug 5, 1970 | Aug 5, 2004 |
| Red 23 | 1 | 45635 | 227062 | Aug 5, 1970 | Aug 5, 2004 |
| Red 24 | 1 | 45636 | 227063 | Aug 5, 1970 | Aug 5, 2004 |
| Red 25 | 1 | 45637 | 227064 | Aug 5, 1970 | Aug 5, 2004 |
| Red 26 | 1 | 45638 | 227065 | Aug 5, 1970 | Aug 5, 2004 |
| Red 27 | 1 | 45639 | 227066 | Aug 5, 1970 | Aug 5, 2004 |
| Red 28 | 1 | 45640 | 227067 | Aug 5, 1970 | Aug 5, 2004 |
| Red 29 | 1 | 45641 | 227068 | Aug 5, 1970 | Aug 5, 2004 |
| Red 30 | 1 | 45642 | 227069 | Aug 5, 1970 | Aug 5, 2004 |
| Red 31 | 1 | 45643 | 227070 | Aug 5, 1970 | Aug 5, 2004 |
| Red 32 | 1 | 45644 | 227071 | Aug 5, 1970 | Aug 5, 2004 |
| Red 33 | 1 | 45645 | 227072 | Aug 5, 1970 | Aug 5, 2004 |
| Red 34 | 1 | 45646 | 227073 | Aug 5, 1970 | Aug 5, 2004 |
| Sagittarius | 6 | 145 | 221681 | July 7, 1976 | July 7, 2004 |
| Sus North | 12 | 22 | 221636 | July 15, 1975 | July 15, 2004 |
| Sus South | 12 | 23 | 221637 | July 15, 1975 | July 15, 2004 |
| Sus West | 6 | 21 | 221635 | July 15, 1975 | July 15, 2004 |
| Sus 79 | 1 | 45607 | 227040 | Aug 5, 1970 | Aug 5, 2004 |
| Sus 81 | 1 | 45609 | 227041 | Aug 5, 1970 | Aug 5, 2004 |
| Sus 83 | 1 | 45611 | 227042 | Aug 5, 1970 | Aug 5, 2004 |
| Virgo | 3 | 147 | 221683 | July 7, 1976 | July 7, 2004 |

Total Number of Claims

156

Total Number of Units

452

History

Exploration work in the district dates back to the late 1920's but it was not until 1956 that Conwest Exploration Limited staked the Windy claims to cover some of the prominent limonitic gossans on the Todagin Plateau. Their work included the drilling of several short x-ray diamond drill holes using pack horses to move the drill rig (B.C.M.M. Annual Report, 1956).

Great Plains Development Company of Canada, Ltd. staked the Chris and Money claims in September, 1968 to cover the headwaters of a stream in the western portion of the present property that yielded a strong copper-in-silt geochemical anomaly (Rebagliati, 1994). Over the next two years Great Plains Development conducted geological and geochemical surveys along the gully and over the adjacent plateau to delineate the pyrite, chalcopyrite and bornite mineralization exposed in the gully area. The results of this work were tested in 1970 by the drilling of two diamond drill holes totalling 309 metres. Drill hole 70-2 intersected low-grade copper mineralization grading 0.25 percent over a length of 73 metres (McInnis, 1972). Subsequent exploration in 1972 included further geological mapping, geophysical surveying (ground magnetics and induced polarization) and eight diamond drill holes totalling 922 metres. These holes intersected pervasive, argillically-altered intrusive rocks hosting only low, possibly supergene, copper mineralization (Panteleyev, 1973). No gold assaying was undertaken.

As a result of the Great Plains Development's drilling on their property, in July and August, 1970 Silver Standard Mines Ltd. staked the Red and Sus claims north and east of the Chris claims. The next year Silver Standard Mines conducted geological and soil geochemical surveys over a poorly-exposed portion of their claim holdings and tested the results of this work with a bulldozer trenching program near the common boundary of the Red and Chris claim groups. Two trenches exposed low-grade copper mineralization in intrusive rocks. Chip sampling results from one 84-metre section of these trenches graded 0.25 percent copper and a separate 9-metre section returned 0.57 percent copper (McAusland and Rebagliati, 1972).

In early 1973 Ecstall Mining Limited (later Texasgulf Canada Limited), the Canadian subsidiary of Texasgulf Inc., negotiated an option agreement with Silver Standard Mines for the Red claims, and drilled fourteen percussion drill holes, totalling 914 metres, along four sections. Only one-half of these holes intersected low grade copper mineralization. However, two of these holes returned values of 0.55 and 0.41 percent copper over 3.0 and 15.2 metres respectively and these values appeared to be increasing with depth (Newell and Peatfield, 1995). These results were sufficiently encouraging to instigate negotiations between Texasgulf Canada Limited and Great Plains Development for an option on the adjoining claim holdings. The negotiations between Great Plains Development, Silver Standard Mines and Ecstall Mining Limited (Texasgulf Canada Limited) resulted in a 1974 joint venture agreement with the owners pooling their properties on a 20-20-60 basis respectively, and Texasgulf Canada Limited (Texasgulf Inc.) became the operator.

During the 1974, 1975, 1976, 1978 and 1980 field seasons Texasgulf Canada Limited drilled a total of 74 BQ-core diamond drill holes (13,301 m) and 30 percussion drill holes (2,261 m) to test for near-surface copper-gold mineralization (Newell and Peatfield, 1995). Texasgulf Canada Limited also conducted property-wide geological, geochemical and geophysical surveying. Bedrock geochemical sampling, utilizing an overburden drill, was carried out in poorly-exposed areas and the results of this work outlined a 3.4-kilometre long, east-northeasterly trending zone with multiple copper-in-bedrock anomalies (>500 ppm copper) that effectively outlined the Red intrusive stock. These samples were later assayed for gold and the results essentially confirmed the anomalous copper-in-bedrock distribution (Peatfield, 1981). According to Newell and Peatfield (1995), magnetometer surveys delineated the intrusive contact of the Red stock with the volcanic and volcanoclastic rocks to the north but did not discriminate between the various intrusive lithologies or the clastic rocks of the Bowser Lake Group to the south. Furthermore, Induced polarization chargeability anomalies crudely outlined the better mineralized zones but were influenced by abundant pyrite mineralization near the intrusive contact.

The results of the Texasgulf exploration work outlined two coalescing, east-northeasterly trending zones of copper-gold mineralization, called the 'Main' and 'East' Zones. Pyrite, chalcopyrite and lesser bornite mineralization occurs spatially- and probably genetically-associated with zones of quartz vein stockwork near the centre of the Red intrusive stock. In 1976, estimated resources of these two zones were 41 million tonnes with an average grade of 0.56 percent copper and 0.34 gram per tonne gold (Newell and Peatfield, 1995). Later reserve calculations assumed a cut-off grade of 0.25 percent copper and a specific gravity of 2.81. They estimated the Main Zone to contain 33 million tonnes grading 0.51 percent copper and 0.27 gram per tonne (0.008 o.p.t.) gold (Newell and Schmitt, 1978) and the East Zone to contain 6.7 million tonnes grading 0.78 percent copper and 0.65 gram per tonne (0.019 o.p.t.) gold (Peatfield, 1981) at a waste to ore stripping ratio of 1.4 to 1. Using a much higher cut-off grade the two combined zones were estimated to contain 22.3 million tonnes grading 0.75 percent copper and 0.45 gram per tonne gold (Newell and Peatfield, 1995).

No exploration work was conducted on the property from 1981 to 1994. As a result of a complex series of corporate takeovers and reorganizations in January, 1994 the ownership of the property was divided between Falconbridge (60%), Norcen Energy Resources (20%) and Teck Corporation (20%) (Newell and Peatfield, 1995). While American Bullion Minerals Ltd. was negotiating with the various owners Mr. C. M. Rebagliati, P. Eng., was retained to review and evaluate all of the exploration data and prepare a report. According to Rebagliati (1994), "A possible geological resource, at a 0.20 percent copper cut-off grade, of 136 million tonnes (150 million tons) grading 0.38 percent copper and 0.25 grams gold per tonne (0.007 ounces per ton) is indicated. The geological resource contains higher grade core zones containing approximately 37 million tonnes (41 million tons) grading 0.67 percent copper and 0.45 gold per tonne (0.013 ounces per ton). The higher grade core zones are open to depth and potentially along strike." He recommended an exploration program, including 15,000 metres of diamond drilling, to upgrade and expand the higher grade core zones and explore the rest of the property.

The 1994 exploration program comprised: mineral claim staking; land surveying; linecutting; soil geochemical sampling; geophysical surveying (magnetics, V.L.F. EM and I.P.); camp and core logging facilities construction; HQ- and NQ-core diamond drilling (58 holes totalling 21,417.08 m or 70,266 ft.); drill core assaying, analyses and acid base accounting studies, base-line environmental studies; mineral resource estimates; petrographic and metallurgical studies; and documentation. It was conducted by American Bullion Minerals from June 15th to November 7th, and cost CAN \$4.3 million.

The 1994 diamond drilling discovered continuous copper-gold mineralization within the Red-Chris deposit over vertical distances of 400 metres and expanded the lateral dimensions of the deposit in a north-south direction. Geophysical and geochemical surveying showed that the mineralization extends well beyond the limits of drilling, and identified the 600- by 600-metre 'Far West' Zone and the 700- by 400-metre 'Gully' Zone within 2 kilometres west of the Red-Chris deposit. The area comprising the Far West and Gully Zones is called the 'Yellow Chris' area.

Mr. G. Giroux, P. Eng., conducted a geostatistical resource evaluation the Red-Chris mineral deposit based upon all of the diamond drilling results to the end of the 1994 exploration program. The results of this study indicated combined "drill proven" and "drill probable" resources of approximately 181 million tonnes grading 0.40 percent copper and 0.31 grams per tonne gold with additional "drill possible" resources of 139 million tonnes grading 0.35 percent copper and 0.28 grams per tonne gold using a 0.20 percent copper cut-off grade and ordinary kriging techniques (Giroux, 1995). These resources were represented as mineralized blocks over a 1,300- by 200- to 600-metre area, and extend vertically between a surface elevation of 1,530 m to 1,050 m A.M.S.L. Since the economic viability of these resources had not been demonstrated, the term 'resources' was the equivalent of 'mineralization (as per National Policy No. 2-A).

Continued detailed exploration of the Red-Chris deposit and the two large untested exploration targets, including 21,336 m (70,000 ft) of diamond drilling, was recommended to expand the mineral inventory of the property and complete a prefeasibility study at an estimated cost of CAN \$4.16 million.

GEOLOGICAL SETTING

The Stikine River area was mapped in 1957 by the Geological Survey of Canada as Operation Stikine (G.S.C. Map 9-1957). Later geological mapping by Souther (1972) of the Telegraph Creek sheet (N.T.S. 104G, 1:250,000), and by Gabrielse and Tipper (1984) of the Spatsizi sheet (N.T.S. 104H, 1:125,000) have been the regional geological database until quite recently. Recent geological mapping at a scale of 1:50,000 by Read (1984) and Read and Psutka (1990) for the eastern Ealue Lake area (104H/13E and W), and by the B.C. Ministry of Employment and Investment, Geological Survey Branch (Ash and Fraser, 1994; Ash *et al.*, 1995, Ash *et al.*, 1996) in the Tatogga Lake area have provided valuable geological information in the vicinity of the subject property. The geological setting and history of the Bowser Lake Group, which crops out south of the Red-Chris deposit, have been documented as part of the multidisciplinary Bowser Basin project (Evenchick, 1991a, b; Evenchick and Green, 1990; Evenchick and Thorkelson, 1993; Green, 1991; Poulton *et al.*, 1991; Ricketts, 1990; Ricketts and Evenchick, 1991).

The Red-Chris property geology and copper-gold mineralization have been the subject of thesis research and corporate geological studies. Detailed geological studies include those by Schink (1977) who investigated the petrology, alteration and mineralogy of the deposit for a Master of Science thesis, and Leitch and Elliot (1976) who mapped the detailed geology and mineralization of the property for Texasgulf Inc. Furthermore, geological reports by J. R. Forsythe (1975; 1977a, b; Forsythe and Peatfield, 1974; Forsythe *et al.*, 1976), G. R. Peatfield (1980, 1981) and other Texasgulf Inc. geologists have greatly contributed to the understanding of the deposit. Three very recent geological reports on the deposit and its geological setting are by Newell and Peatfield (1995), Ash *et al.* (1995) and Ash *et al.* (1996).

The property is situated regionally within the Stikinia Terrane of northern British Columbia. This terrane is dominated by Early Mesozoic and lesser Late Paleozoic island-arc volcanic strata and related subvolcanic intrusions that form a broad northwesterly trending belt along the centre of the province from southern British Columbia into southwestern Yukon Territory, often referred to as the 'Intermontane Belt' (Woodsworth *et al.*, 1991). Stikinia terrane arc rocks have been regionally subdivided into Late Paleozoic Stikine, Late Triassic Stuhini, and Early to Middle Jurassic Hazelton Groups. The Late Triassic Stuhini Group rocks are dominated by submarine calc-alkaline basaltic volcanic rocks which are commonly augite-phyric versus those of the Hazelton Group which are dominated by subaerial volcanics that display a broad range in composition from basalt to rhyolite (Souther, 1991).

The Stikinia terrane probably developed as primarily Late Triassic and Early and Middle Jurassic oceanic island-arcs outboard of the ancient North American continental margin (Monger 1984). Island arcs evolved along the western margin of the intervening, Late Paleozoic ocean basin in response to westerly subduction. Early Middle Jurassic arc-continent collision, related to docking of the Stikinia arc with the ancient margin, resulted in southwesterly tectonic emplacement of oceanic Cache Creek terrane rocks above the Stikinia terrane. The uplifted oceanic crust shed clastic flysch sediments southwardly into the newly developed continental margin to form the Bowser Lake Group (Ash *et al.*, 1995).

According to Ash *et al.* (1996),

" The map area (Kluea Lake - 104H/12, Kinaskan Lake - 104G/9) is underlain almost entirely by Upper Triassic and Lower Jurassic arc-volcanic rocks that are overlain along their southeastern margin by Middle Jurassic Bowser Lake Group sediments. These Mesozoic volcanic rocks are divisible into three broad northeast-trending belts. The northwestern belt is dominated by Middle (?) to Upper Triassic andesitic volcanoclastics, mainly massive breccias. The central belt is underlain primarily by Upper Triassic and possibly Lower Jurassic fine to medium-grained epiclastic rocks. Lower Jurassic rocks comprise a bimodal suite of basalts and rhyolites and related subvolcanic rocks that overlie and intrude very fine to medium-grained sedimentary rocks primarily to the southeast. The younger rocks also locally intrude and overlie Triassic rocks throughout the map area.

These rocks have been affected by folding and faulting. Mesoscopic folding is generally only identified with the Lower Jurassic and older, thinly bedded sediments, mainly siltstones, and rarely in limestone. Broader warping of thicker bedded sequences is a characteristic megascopic feature commonly seen in cliff exposures. High-angle brittle faults are abundant throughout the map area and contacts are rarely exposed. As a result it is difficult to establish continuity of contacts between individual Mesozoic volcanic units."

Based upon fossil evidence, Ash *et al.* (1996) found that most of the Lower Jurassic sections within the map area probably represent a short interval between 200 and 193 Ma (Sinemurian to Pliensbachian).

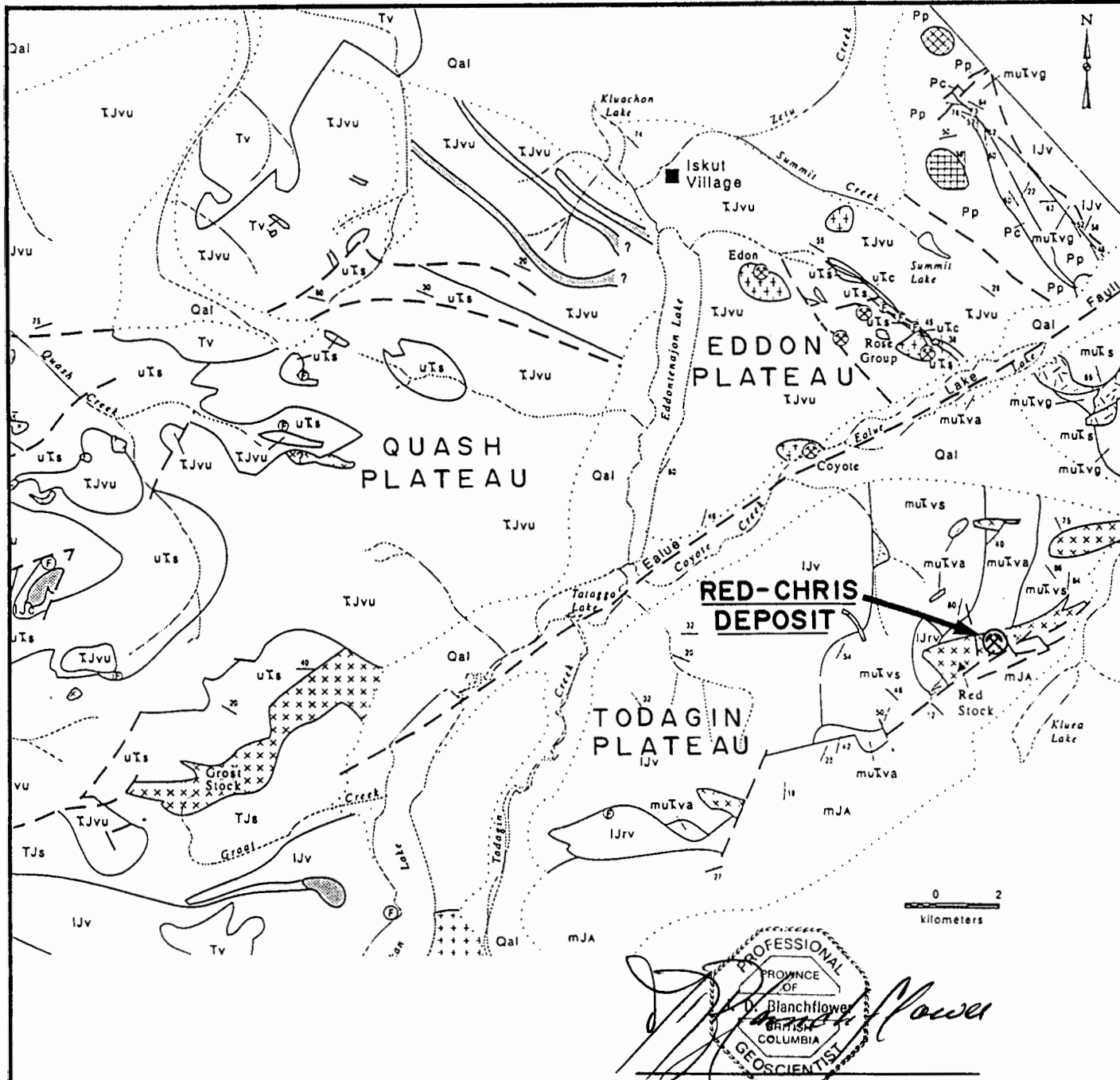
A suite of earliest Early Jurassic (195 to 205 Ma) stocks and dykes occur throughout the region. These intrusions are compositionally variable, ranging from hornblende quartz diorite to quartz monzodiorite, and are characteristically medium-grained, equigranular to porphyritic and weather a buff-white to light grey colour. The largest intrusion of this suite is the Red stock which hosts the Red-Chris deposit. It intrudes Upper Triassic massive volcanic wackes, siltstone and possibly augite-porphyritic basalt within the Red-Chris property (Ash *et al.*, 1996).

Middle Jurassic (Bathonian to Early Oxfordian) marine clastic sedimentary rocks (Gabrielse and Tipper, 1984; Poulton *et al.*, 1991) of the Bowser Lake Group, underlying the southern portion of the subject property, are assigned to the basal Ashman Formation and comprise siltstone, chert pebble conglomerate and sandstone (Evenchick and Thorkelson, 1993). Sedimentological studies indicate that Bowser Lake Group rocks become progressively younger to the south and that deposition was from the north into the tectonically active northern margin of the Bowser Basin (Ricketts, 1990; Ricketts and Evenchick, 1991; Green, 1991).

Within the region there are several isolated outcrops of olivine-phyric basalt flows, belonging to the Early Pliocene Maitland Volcanics, overlying the Stikinia terrane rocks; a few of which occur on the subject property (Ash *et al.*, 1996).

Major regional faulting has affected the local stratigraphy during Middle Cretaceous and Tertiary tectonism. The east-northeasterly trending Ealue Lake Fault is the most prominent structural feature in the vicinity of the subject property. Although not exposed, it has been projected along the Coyote Creek-Ealue Lake Valley (Ash *et al.*, 1995). Its presence is evident by contrasting lithologies and styles of alteration on either side. Zones of intense carbonatization with localized areas of ankerite flooding are widespread in rocks only south of the fault (Ash *et al.*, 1995). Also, its continuity to the east has been determined for an additional 30 kilometres where it has been designated the McEwan Creek Fault with a south side-down movement sense (Read and Psutka, 1990). There are also similarly-oriented faults along the northern contact of the Bowser Lake Group; one of which is the southside-down normal bounding fault between the Bowser Lake Group rocks and the Red stock near the centre of the property.

There are fourteen mineral occurrences recorded within the N.T.S. 104G/9,16 and 104H/12,13 map-areas (MINFILE 104G and 104H). Most are related to high level, subvolcanic dykes and stocks that intrude volcanic and sedimentary rocks throughout the region. Copper mineralization with elevated concentrations of gold and silver is usually hosted by the intrusions but may also be present in the stratified volcanic and sedimentary rocks marginal to the intrusions. Chalcopyrite commonly occurs as fracture-controlled veinlets or disseminations associated with quartz stockwork and, to a lesser extent, as finely-disseminated with pyrite disseminations in silicified felsic (rhyolitic) dykes and stocks and their immediate host rocks. The former style of mineralization dominates the occurrences south of the Ealue Lake Fault whereas the latter style of mineralization is more common north of the fault. In 1995, exploration activity in the district was dominated by American Bullion Minerals with its prefeasibility work on the Red-Chris property. Elsewhere, Homestake Canada Inc. carried out a preliminary evaluation of their Klappan property situated 5 kilometres east of the Red-Chris property, and Teck Corporation conducted regional geological and geochemical surveys (Ash *et al.*, 1996).



- Layered Rocks**
- Tertiary to Recent*
 Tv - Edziza olivine basalt
 Qal - glacial till, unconsolidated sediment
- Middle Jurassic*
 mJA - Ashman Formation; marine clastic sediments
- Lower to Middle Jurassic(?)*
 IJc - conglomerate, volcanoclastics
 IJv - Andesite volcanic flows, breccias and conglomerate
 IJrv - trachyte to rhyolite flow (may include areas in the SW shown as felsite)
- Triassic-Jurassic undivided*
 IJvu - massive volcanoclastics, conglomerate and mudstone
 IJs - siltstone, conglomerate
- Upper Triassic*
 uTc - carbonate
 uTs - volcanic wacke, siltstone
- Middle-Upper Triassic(?)*
 muTs - siltstone, argillite, minor limestone and chert
 muTvs - volcanic sandstone, siltstone
 muTvg - aphyric green volcanics
 muTva - augite phryic volcanics
- Permian Stikine Assemblage*
 Pc - carbonate, recrystallized
 Pp - Perman phyllite and greenstone

- Plutonic Rocks**
- | | |
|-------------------------------|---|
| <i>Early Jurassic(?)</i> | <i>Late Triassic(?)</i> |
| [Pattern] Felsite | [Pattern] Biotite-hornblende quartz diorite |
| [Pattern] Syenite | <i>Late Paleozoic(?)</i> |
| [Pattern] Quartz monzonite | [Pattern] Hornblende granodiorite |
| [Pattern] Quartz monzodiorite | [Pattern] Diorite |
- ⊗ Significant Mineral Occurrence
 ⊕ Fossil locality (from sources as discussed)

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 GEOLOGICAL CONSULTANTS, VANCOUVER, B.C.

AMERICAN BULLION MINERALS LTD.
 Vancouver, British Columbia, Canada

REGIONAL GEOLOGY MAP

RED-CHRIS PROPERTY
 LIARD MINING DIVISION
 BRITISH COLUMBIA, CANADA

| | |
|---------------------|-----------------|
| DATE: APRIL 1996 | SCALE: AS SHOWN |
| DRAWN BY: D. MILLER | DWG. NO. 4 |

After Ash *et al*, 1995

TO ACCOMPANY REPORT BY J. D. BLANCHFLOWER, P. GEO.

PROFESSIONAL
 PROVINCE OF
 D. Blanchflower
 BRITISH
 COLUMBIA
 GEOSCIENTIST

[Signature]

1995 EXPLORATION PROGRAM

The 1995 exploration program was designed and directed to explore, expand and delineate the mineral resources of the Red-Chris copper-gold deposit, both laterally and vertically, and to evaluate the two large exploration targets, called the 'Gully' and 'Far West' Zones, which were identified by the 1994 exploration work. The program also comprised baseline environmental and resource inventory studies to fulfill the requirements of a prefeasibility report on the property. All of the exploration work was conducted by American Bullion Minerals Ltd. on behalf of the American Bullion Minerals Ltd. and Teck Corporation joint venture.

The 1995 exploration program was originally proposed to include: extending the existing survey control grid westward, soil geochemical sampling, geological mapping, rock geochemical sampling, reclamation work, baseline environmental studies, and 21,336 metres (70,000 feet) of HQ-and NQ-core diamond drilling with survey control. In September, the diamond drilling program was expanded to 36,830 metres (120,833 feet). Field work commenced on April 27th with the mobilization of American Bullion Minerals' field geological personnel to the site, and it was completed on November 12th with the closure of the camp and demobilization of the field personnel. The drill core was left stored at the core logging facilities on the property, and the field camp was winterized and secured. All of the heavy equipment, including a D6E bulldozer, excavator, and the two Longyear diamond drills with support equipment, and all fuels and their containers were removed from the property.

American Bullion Minerals Ltd. contracted most of the exploration work to various mineral exploration industry contractors who will be documented individually later in this report; however, most of the geological, sampling and camp management duties were carried out by employees of American Bullion Minerals Ltd. Brian Thurston, Theresa Fraser, John Deighton, Ian Foreman and Tanya Heaton, all qualified geologists with considerable exploration experience, were employed by the Company as field geologists. The drill core sampling work was supervised by Mr. Chris Kuntz and drill core splitting, sampling and processing duties were undertaken by several residents of Iskut; all employees of American Bullion Minerals Ltd. In addition to these employees, American Bullion Minerals contracted geological services from Gordon Allen, a qualified and professional geological consultant. The writer, an employee of Minorex Consulting Ltd., was contracted by American Bullion Minerals to supervise the field work and document the results of the program. Vancouver Island Helicopters Ltd. provided Hughes 500D helicopter support for the project.

During the five and one-half months duration of the 1995 exploration program on- and off-site work included:

- 1) relocation and reconstruction of the core logging facilities to within 125 metres of the campsite;
- 2) claim staking (ABM-7 to -11 modified grid mineral claims (56 units));
- 3) extending the survey control grid westward (20.525 line-km);
- 4) soil geochemical sample collection and analyses (412 A-, B- or C-horizon soil samples collected);
- 5) geological mapping of the East and West Gully drainages at a scale of 2:1,000 with coincident rock geochemical sampling (5 rock samples collected and analysed for copper and gold);
- 6) exploratory HQ- and NQ-core diamond drilling (112 holes totalling 36,770.46 m or 120,638 ft.);
- 7) geotechnical diamond drilling at three proposed tailings dam sites along Kluea Lake valley (3 BQTK-core diamond drill holes totalling 59.44 m or 195 ft.);

- 8) diamond drill collar and survey control grid surveying;
- 9) drill sample analyses (9,783 samples assayed for copper and gold and 1,796 samples geochemically-analysed for copper (A.A.) and gold (F.A./A.A.);
- 10) drill sample check-assaying (1,235 and 1,227 duplicate drill core samples assayed for copper and gold, and 451 standard and blank samples assayed for copper and gold);
- 11) mineral characterization analyses (2,458 samples for 31-element I.C.P.);
- 12) preliminary acid base accounting analyses (123 A.B.A. analyses including 110 drill core samples and 13 duplicate samples based proportionately on major rock types and styles of mineralization);
- 13) geotechnical core samples processed by Knight and Piesold Ltd.
- 14) environmental studies (baseline monitoring programs for site hydrology, water quality and meteorology, and fish and wildlife population studies);
- 15) metallurgical testing diamond drill core rejects from selected drill holes within the Red-Chris deposit and Gully Zone (documented in prefeasibility report by Fluor Daniel Wright Ltd.);
- 16) geological resource estimation studies by G. Giroux, P. Eng., of Montgomery Consultants Ltd. and mining engineers of Fluor Daniel Wright Ltd. (documented in prefeasibility report); and
- 17) subsequent collation, compilation and documentation of the results of the program.

This field work and subsequent investigative studies are fully described in the following text.

Relocation and Reconstruction of Core Logging Facilities

In June, 1994 American Bullion Minerals Ltd. contracted the relocation and reconstruction of the core logging building and core storage racks. The 4- by 25-metre wood-frame building was reconstructed with a transparent plastic and clear tarp roof and a core splitting room addition; including logging and splitting tables and a separate rock sawing room. The original building and adjacent core storage racks were utilized throughout the 1994 diamond drilling program; however, the facilities were surrounded by marshy, soft ground that prohibited most vehicle access and their original location at grid coordinates 100050 North by 50350 East, in the middle of the Main Zone, prevented detailed drilling in their vicinity.

Prior to the 1995 diamond drilling program, American Bullion Minerals Ltd. contracted Pellow Construction Ltd. of Smithers, British Columbia to disassemble, move and reconstruct the core logging building approximately 400 metres north of its original location at grid coordinates 104025 North by 50400 East. The new location is situated on a gentle south-facing slope with good drainage and sandy gravel soils, and within 125 metres of the existing field camp.

Electrical power for the core logging facility was provided by a 15 Kw generator, and water was piped from the field camp water system. The core logging building was reconstructed in such a way that it could be dismantled and removed or disposed of should reclamation of the site ever be required.

Mineral Claim Staking

In June and July, 1995 American Bullion Minerals Ltd. contracted three qualified field personnel employed by Coueur Des Bois Ltee. of Whitehorse, Yukon Territory to stake five modified grid system (M.G.S.) minerals claims, called the 'ABM-7', 'ABM-8', 'ABM-9', 'ABM-10' and 'ABM-11', totalling 56 units.

These claims were staked to cover open ground south and east of their claim holdings mainly in the vicinity of proposed tailings dam sites along Kluea Lake valley. These claims are subject to the same terms and conditions as those claims included in the agreements between the original property vendors and American Bullion Minerals Ltd. The location and configuration of these recently-acquired mineral claims are shown on Figures 3A and 3B, and Table I of this report contains their pertinent claim data.

Survey Control Grid

American Bullion Minerals Ltd. contracted Coueur Des Bois Ltee. of Whitehorse, Yukon Territory to extend the 1994 survey control grid westward to cover the mapped western contact of the Red stock. This extended survey control grid required cutting and picketing a baseline which crosses two steep drainages and cutting 1-metre wide gridlines at 100-metre intervals due north and south of the baseline. This work was carried out in June, 1995.

A total of 20.525 line-kilometres (12.754 line-miles) of survey control grid was picketed and labelled, including 1.99 line-kilometres (1.24 line-miles) of baselines, 700 metres of tie lines, and 17.835 line-kilometres (11.08 line-miles) of gridlines. The baseline was cut westward (270°) from grid coordinate 47000 East to 44000 East at 100000 North. Gridlines were picketed, flagged and locally cut 500 metres south (180°) and north (000°) of the baseline at 100-metre intervals where topographic relief is low to moderate. Elsewhere, the gridlines were terminated at the edge of steep gully slopes. A short 700-metre tie line was cut between 46300 and 47000 East along 99500 North to connect the gridlines.

The baseline and gridlines were measured by a two-person linecutting crew using a drag chain; they were oriented using a compass or by sight-picketing between visible stations; and they were slope-corrected using a clinometer. The end points of the baseline were surveyed by ADW Engineering Ltd. personnel using an E.D.M. distamat surveying instrument and survey points were pre-established prior to the linecutting and station picketing. Later, ADW Engineering Ltd. personnel surveyed points along the baselines and gridlines to tie them into the local coordinate system. A magnetic declination of 26.5° East was utilized for control grid linecutting.

The baseline was cut to a width of one metre and marked at 50-metre intervals with cedar lath pickets. Their grid coordinates written on aluminum tags that are stapled to the pickets. Each of the pickets are well flagged with pink or orange flagging, as are the intervening cut lines. Denser vegetated sections of the gridlines were cut to a one-metre width but most of the gridlines were simply picketed and flagged like the baseline. The location and configuration of the extended survey control grid are shown with the soil geochemical sampling results on Figure 93 of this report.

Soil Geochemical Survey

Soil geochemical sampling was carried out within the newly-established western extension of the survey control grid to assess the exploration potential of the underlying Red stock and correlate any soil geochemical anomalies with those within the previously-sampled 1994 survey control grid area.

Coueur Des Bois Ltee. of Whitehorse, Yukon Territory was contracted in June to collect four hundred and twelve (412) B-horizon soil samples at specific locations on the survey control grid. Due to local conditions, some of the samples were collected from A-horizon soils in swampy alpine areas and C-horizon soils on the steep slopes with poor soil development. American Bullion Minerals' field personnel supervised this work to ensure that the samples were correctly collected, bagged and labelled. These samples were delivered to Min-En Laboratories in Smithers for drying and sieving. During the drying process 122 soil samples were destroyed by a fire in the drying oven. Thus, only 290 processed samples were later shipped to Min-En Laboratories in North Vancouver for analysis.

All of the soil samples were analysed for copper (Cu) and gold (Au) by professional assayers using established analytical procedures, as described by Min-En Laboratories (1996). After the samples were dried at 60° C. they were sieved to obtain a minus 80 mesh subsample for analysis. A 0.5 gram portion of each subsample was digested for 2 hours with an aqua regia mixture and, after cooling, the solution was diluted to standard volume. The resultant solution was then analysed by an atomic absorption spectrometer (A.A.) using a suitable standard set and its copper (Cu) content in parts per million (ppm) was then reported.

A 10.0-gram portion from each soil subsample was weighed and placed into a porcelain crucible, and cindered at 800° C. for 3 hours. All of these subsamples were then transferred to beakers and digested using aqua regia, diluted to volume and mixed. Seventy-five percent of each of the diluted samples was further oxidized, treated and extracted for gold analyses using methyl iso-butyl ketone (MIBK). The MIBK solutions were then analysed by an atomic absorption spectrometer (A.A.) using a suitable standard set and their gold (Au) contents were then reported. Gold values are reported in parts per billion (ppb) with a detection limit of 1 ppb.

The copper- and gold-in-soil geochemical values are plotted at their respective sample locations on Figure 93 of this report. The copper- and gold-in-soil analyses accompany this report as Appendix VII.

Geological Mapping and Rock Geochemical Sampling Survey

Most of the Red stock is poorly-exposed over much of its strike length due to a thin but extensive till layer covering the alpine plateau from the eastern end of the Red-Chris deposit to Bowers Creek which cuts the western end of the stock. Bedrock exposures are locally restricted to deeply eroded creek drainages, such the East and West Gullies and Bowers Creek. Prior to drill testing the Gully and Far West exploration targets Gordon Allen, Brian Thurston, Theresa Fraser and John Deighton, all qualified and experienced geologists, mapped the geology of the East and West Gully drainages at scale of 1:2,000 to correlate past geological work by Leitch and Elliot (1976) with recent diamond drilling results. Furthermore, this work was also intended to provide updated lithologic and structural information for the placement and orientation of drill holes for the proposed drilling program. Five rock geochemical samples were collected from several gossaneous outcrops during the geological survey (see Figure 92).

The five rock geochemical samples were properly collected, bagged and labelled, and their respective sample sites were flagged and labelled. The samples were delivered to Min-En Laboratories in Smithers for processing prior to being shipped to Min-En Laboratories in North Vancouver for analysis. In Smithers, the rock samples were dried at 60° C. and later crushed in a jaw crusher. The minus 1/4 inch product of the jaw crusher was then put through a secondary roll crusher to reduce it to minus 1/8 inch. The whole sample was then riffled on a Jones Riffle to a statistically representative 300 gram subsample. This subsample was then pulverized on a ring pulverizer to 95% minus 150 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle was bagged and stored.

All of the rock samples were analysed for copper (Cu) and gold (Au) by professional assayers using established analytical procedures, as described by Min-En Laboratories (1996). A 0.5 gram portion of each subsample was digested for 2 hours with an aqua regia mixture and, after cooling, the solution was diluted to standard volume. The resultant solution was then analysed by an atomic absorption spectrometer (A.A.) using a suitable standard set and its copper (Cu) content in parts per million (ppm) was then reported.

A 10.0-gram portion from each rock subsample was weighed and placed into a porcelain crucible, and cindered at 800° C. for 3 hours. All of the subsamples were then transferred to beakers and digested using aqua regia, diluted to volume and mixed. Seventy-five percent of each of the diluted samples was further oxidized, treated and extracted for gold analyses using methyl iso-butyl ketone (MIBK). The MIBK solutions were then analysed by an atomic absorption spectrometer (A.A.) using a suitable standard set

and the values of gold (Au) were then reported. Gold values are reported in parts per billion (ppb) with a detection limit of 1 ppb.

The geology of the East and West Gully drainages and the rock geochemical sample sites and analytical results are plotted on Figure 92 of this report. The copper- and gold-in-soil analytical reports accompany this report as Appendix VII.

Diamond Drilling

J. T. Thomas Diamond Drilling Ltd. of Smithers, British Columbia was contracted to provide equipment and personnel capable of completing a minimum of 21,300 metres of HQ- and/or NQ-core diamond drilling. The necessary heavy equipment to fulfill this drilling contract, including a Caterpillar D6E bulldozer, Caterpillar 210B excavator, two Longyear drill rigs, rods and support equipment, had been stored on the property after the 1994 exploration program.

Diamond drilling commenced on May 5th and was completed on November 8th, 1995. One hundred and twelve (112) HQ- and/or NQ-core exploratory diamond drill holes (36,770.46 m or 120,638 ft.) and three (3) BQTK-core geotechnical diamond drill holes (59.44 m or 195 ft.) were completed during this period, totalling 36,830.00 metres or 120,833 feet. The first 1995 hole was labelled '133' following the last 1994 drill hole which was labelled '132'. Therefore, the 1995 exploratory drill holes are numbered consecutively from 133 to 244, and the three geotechnical drill holes were labelled BH 95-1 to -3.

Two Longyear skid-mounted, unitized drilling rigs, namely a 'Super 38' and a '44', carried out the exploratory diamond drilling campaign, and a JT 2000 drill rig, which is manufactured by J. T. Thomas Diamond Drilling Ltd. of Smithers, British Columbia and capable of drilling BQTK-size core, was utilized for the geotechnical drilling because it could be easily dismantled for helicopter-supported moves between drill sites. The bulldozer and excavator were utilized for excavating drill sites and access roads, moving the drill rigs and support equipment, and reclaiming any surface disturbances including a few open trenches dating back to the early 1970's. Due to local marshy ground conditions and abnormally high rainfalls during July and August, a Hughes 500D helicopter was used extensively to service and supply the drilling rigs, and move the drill core to the logging and sampling site.

All of the diamond drill core was properly handled, processed, logged and sampled on site. After the drill core had been delivered to the logging and sampling facility its footage markers were converted to metric measurements and each box was properly labelled with its respective hole number, box number and drilling length interval. The core was then logged in detail by qualified geologists utilizing a 'matrix' coding log form. Geological data was then inputted into a computerized database for both documentation and computer-assisted drafting (CAD). Core recovery, rock quality and specific gravity measurements were also logged and recorded. Core recoveries were generally good to excellent; except in extremely fractured near-surface rock or wider fault structures. Specific gravity measurements were recorded at 8-metre intervals. All of the drill core was photographed prior to sampling. Following the logging procedures, the drill core was split in half lengthwise using a Longyear manual splitter and sampled between drilling length blocks; usually at 3.05-metre or 10-foot intervals. A duplicate sample of every twentieth sample was inserted into the sampling sequence as a 'blind' check-assay sample duplicate. All of the samples were then labelled, double-bagged and flown to a landing and collection site at Tatogga Lake Resort, situated on Highway 37, for shipping to the Min-En Laboratories' preparation facility in Smithers, British Columbia. The remaining one-half of the split core is stored at the core logging and storage facilities on the property.

A total of 11,579 drill core samples were shipped to Min-En Laboratories in Smithers during the exploration program. Of this total, 9,783 drill core samples were assayed for both copper and gold, and copper and gold geochemical analyses were conducted the remaining 1,796 drill core samples where no

obvious copper mineralization was visible, such as within wide post-mineral dykes or Bowser Lake Group strata. However, all of the bedrock diamond drill core was either assayed or analysed.

In Smithers, Min-En Laboratories' personnel dried each sample at 60° C. before crushing it to minus 1/4 inch. The crushed sample was then reduced to minus 1/8 inch size by a secondary roll crusher. The whole sample was then split on a Jones Riffle to a statistically-representative 300-gram sample pulp. This sample pulp was then pulverized in a ring pulverizer to 95 percent minus 150 mesh, rolled and bagged. All of the sample pulps were then shipped to the Min-En Laboratories facility in Vancouver, British Columbia for assay. The remaining coarse rejects from the Jones Riffle were bagged, catalogued and stored in a J. T. Thomas Diamond Drilling warehouse at Smithers, British Columbia.

All of the drill core sample pulps were assayed or analysed initially for their copper and gold values. Min-En Laboratories' fire assay procedures for copper use a 0.500 to 2.00 gram subsample which is weighed from the sample pulp for analysis. Each batch of 70 assays has a natural standard and a reagent blank included. The samples are digested using a HNO₃ - KClO₃ mixture and when the reaction subsides HCl is added before it is placed on a hotplate to digest. After digestion is complete the flasks are cooled, diluted to volume and mixed. The resulting solutions are analyzed on an atomic absorption spectrometer using the appropriate standard sets. The natural standard digested along with this set must be within 2 standard deviations of its known or the whole set is re-assayed. If any of the assays are more than 1 percent copper they are re-assayed at a lower weight, and 10 percent of the submitted samples are assayed in duplicate (Min-En Laboratories, 1995). During the program, 9,783 drill core samples, 1,235 'blind' duplicate samples and 1,804 assay laboratory standards (i.e. 451 samples of each of the AM-A, AM-B, STD and BLK laboratory standards) were assayed for copper. The 'blind' duplicate samples were inserted into the sample sequence by the field geologists and samplers.

The remaining 1,796 drill core samples that were geochemically analysed for copper were treated differently. After the samples were dried at 65° C., they were crushed by a jaw crusher and pulverized by a ceramic-plated pulverizer or ring mill pulverizer. The resultant sample was rolled and sieved to obtain a minus 80-mesh pulp for analysis. A 0.5 gram subsample was digested for 2 hours with an aqua regia mixture and, after cooling, the solution was diluted to standard volume. The resultant solution was then analysed for its copper content by atomic absorption methods. The copper values are quoted as parts per million (ppm).

Gold fire assays were conducted on 9,783 drill core samples and 1,227 'blind' duplicate samples. All gold fire assay procedures at Min-En Laboratories were conducted on one assay ton sample weights. The subsamples were fluxed and a silver inquart was added and mixed. These subsamples were fluxed in batches of 24 assays with a natural standard and a blank. This batch of 26 assays were carried through the whole procedure as described. After cupellation the precious metal beads were transferred into new glassware, dissolved with aqua regia solution, and diluted to volume and mixed. The resulting solutions were analysed on an atomic absorption spectrometer using a suitable standard set. The natural standard fused along with this set must be within 2 standard deviations of its known or the whole set is re-assayed. Likewise, the blank assay must be less than 0.015 g.p.T. The top 10 percent of all assays per printed page were rechecked and reported along with the standard and blank. Gold values are reported in grams per tonne (g.p.T.) with a detection limit of 0.02 g.p.T.

The remaining 1,796 drill core samples were geochemically analysed for their gold values. A 10.0-gram portion from each rock subsample was weighed and placed into a porcelain crucible, and cindered at 800° C. for 3 hours. All of the subsamples were then transferred to beakers and digested using aqua regia, diluted to volume and mixed. Seventy-five percent of each of the diluted samples was further oxidized, treated and extracted for gold analyses using methyl iso-butyl ketone (MIBK). The MIBK solutions were then analysed by an atomic absorption spectrometer (A.A.) using a suitable standard set and the values of gold (Au) were then reported. Gold values are reported in parts per billion (ppb) with a detection limit of 1 ppb.

After the copper and gold assay results were reported by Min-En Laboratories, four hundred and ninety-five (495) selected sample pulps were delivered to Chemex Labs Ltd. in North Vancouver, British Columbia for copper and gold check-assaying. These sample pulps were re-assayed using similar procedures as those undertaken at Min-En Laboratories. Thus, by the end of the program 491 pairs of copper assays (4 cases outside scale) and 488 pairs of gold assays (7 cases outside scale) were directly comparable for bias and precision studies. American Bullion Minerals Ltd. contracted Barry W. Smee, of Smee & Associates Consulting Ltd. in Vancouver, British Columbia, to prepare a report on the analytical quality of the assay data using the assay pairs (Smee, 1996).

Appendices I to VI and VIII to X of this report pertain to the diamond drilling work and the assay and analytical results obtained from the drill core samples. Appendix I contains all pertinent drill hole location and downhole surveying data; Appendix II of this report contains photocopies of the original geological logs; Appendix III contains the geological database; Appendix IV contains the diamond drill core sampling intervals and tabulated assay or analytical results; Appendix V contains the tabulated rock quality data; and Appendix VI contains the tabulated specific gravity data. Appendices VII, VIII and X contain photocopies of the original assay certificates received from Min-En Laboratories. The check-assay certificates and "Report on Analytical Quality for the 1995 Drill Results" by B. W. Smee (1996) comprise Appendices IX and XIII of this report respectively. Table III of this report summarizes all of the pertinent diamond drill hole data, including a summary of any mineralized intercepts with weighted average copper (percent) and gold (g.p.T.) grades, for each of the 1995 drill holes, and plan and cross-sectional plots of the drilling results are shown on Figures 6, and 11 to 75 of this report.

Drill Hole and Control Grid Surveying

ADW Engineering Ltd. of Smithers, British Columbia was contracted to survey all 1995 drill hole collars, establish survey benchmarks along the proposed baseline for the western survey control grid extension, and re-survey the water monitoring gauge at the main hydrology site (Station H1). This surveying work was carried out during intermittent property visits throughout field exploration program.

An E.D.M. (electrodistamat) surveying instrument was used to survey all of the exploratory drill hole collars, the western survey control grid extension, and the water monitoring gauge. A G.P.S. (Global Positioning System) surveying instrument, accurate to within ± 1 metre in geographic positioning and elevation, was utilized to properly locate the three geotechnical diamond drill collars situated along Kluea Lake valley since their locations were beyond line-of-sight measurements from established topographic benchmarks.

When a unitized drill rig was occupying a drill site during a survey period that drill collar was re-surveyed during a subsequent survey. The surveying work was completed during the following work periods.

| Work Period | Description of Surveying Work |
|--------------------|--|
| May 28 to June 2 | Surveyed collars of DDH 95-133 to 95-147 (drill on DDH 95-147 site); |
| July 7 to 10 | Surveyed collars of DDH 95-147 to 95-166 (drills on DDH 95-165 and -166 sites); |
| August 26 to 27 | Surveyed collars of DDH 95-167 to 95-190 (drills on DDH 95-189 and -190 sites); |
| September 26 to 27 | Surveyed collars of DDH 95-189 to 95-213 (drills on DDH 95-210, -212 and -213 sites) and surveyed collars of geotechnical drill holes KP-A (BH 95-1), BH 95-2 and BH 95-3; and |
| November 9 to 11 | Surveyed collars of DDH 95-211 to 95-244 and water monitoring gauge site. |

The results of the 1995 surveying work accompany this report in Appendix I and Table III of this report, and they have been utilized to provide topographic control for Figures 6, 11 and 12 of this report.

Reclamation Work

Many of the old trenches, abandoned drill sites and access roads dating back to Texasgulf's tenure during the 1970's were reclaimed during the 1994 field season by American Bullion Minerals Ltd. The net result of this work was that after preparing sixty-one 1994 drill sites and their access roads, clearing the camp and core logging building sites and burying the camp waterline the unreclaimed disturbance was reduced to 7.19 hectares which included the pre-existing 8-kilometre tote road and old trenches and access roads in the East and West Gully area.

During the 1995 field season, all of the remaining old trenches and drill sites in the East and West Gully area without vegetation cover, the three remaining unreclaimed 1994 drill sites, and all of the 1995 drill sites and most of their local access roads were reclaimed. These disturbances were backfilled and landscaped with an organic soil layer when the bulldozer and excavator were not servicing the drilling rigs. Due to the abnormally high precipitation during the months of July and August, after the drill rig had departed from a drill site or drilled area quick-release 13-16-10 fertilizer was spread over all of the reclaimed areas at the rate of 500 kilograms per hectare. Later, an approved 'Canada No. 1 Ground Clover' seed mixture consisting of Creeping Red Fescue (35%), Clover Alsike (35%), Foxtail Meadow (15%) and Alma Timothy (15%) was sown over all of the disturbed areas at the rate of 60 kilograms per hectare. This process was repeated using slow-release fertilizer and the same grass seed mixture in any areas of slow revegetation after the first seasonal snowfall. In addition to the reclaimed trenches, drill sites and roads, the fertilizer and seed mixtures were sown over the access roads, helicopter landing site, campsite and septic field, and all of the unreclaimed drill site access roads. Although these disturbances were not reclaimed because of their anticipated future use, the seeding of these sites was conducted to inhibit any possible soil erosion. The current status of the property-wide surficial disturbances and pending reclamation work is as follows:

- 1) the primary, secondary and local drill access roads within the Red-Chris deposit and East and West Gully areas that have been seeded but not fully reclaimed total 5.6 hectares;
- 2) the Gully Zone trenches and access roads that were and may be used for East Gully drainage access total 1.0 hectares;
- 3) the access road from the Far West Zone to drill site 95-203 which was not reclaimed pending further drilling in the vicinity totals 0.68 hectares;
- 4) the area of the existing camp, helicopter landing site, and core logging and storage facilities totals 0.4 hectares; and
- 5) the tote road from the Ealue Lake road to the centre of the property that requires both landscaping, erosion control and seeding totals 3.2 hectares (i.e. 8 km long by 4 m wide);

Thus, the total disturbed but not fully reclaimed area which represents a reclamation liability to the project now totals 10.88 hectares after both the 1994 and 1995 field seasons.

Some of the drill sites, trenches and access roads dating back to the early 1970's have self-revegetated, and, in the opinion of the representatives of the British Columbia Ministry of Employment and Investment (formerly Energy, Mines and Petroleum Resources) should not be reclaimed because the reclamation process would be more detrimental than the current revegetated disturbance. These revegetated disturbances are not included in the above total disturbance areas and may not represent a future reclamation liability.

Environmental Studies

American Bullion continued baseline environmental and preliminary waste rock characterization (i.e. acid base accounting) studies during the 1995 field season. This work was undertaken to, firstly, fulfill the necessary environmental monitoring work which would be required for a 'Project Approval Certificate' and, secondly, to identify both positive and negative environmental factors that would have to be addressed prior to the completion of a prefeasibility report on the property.

Environmental consultants employed by Hallum Knight Piesold Ltd. and based in Vancouver, British Columbia were contracted to supervise and document the ongoing baseline environmental monitoring program in the vicinity of the property. The program was maintained by American Bullion Minerals' field personnel and regularly supervised by qualified chemists and biologists employed by Hallum Knight Piesold Ltd.

Appendix XIV of this report contains the complete "Summary of 1995 Environmental Program" report which was prepared by Hallam Knight Piesold Ltd. (1996). This report also contains all of the environmental data that was collected during the field season, including the water quality results for the camp water supply.

Mineral Characterization Study

At monthly intervals throughout the 1995 exploration program every fifth and tenth drill core sample, or 20 percent of the total samples, were analysed for their 31-element geochemistry using inductively coupled plasma (I.C.P.) analysis techniques at Min-En Laboratories in North Vancouver, British Columbia. The purpose of these analyses was to determine if there is any other unrecognized economic or detrimental metals associated with the known copper-gold mineralization. Thus, 2,458 samples were analysed for: silver (Ag), aluminum (Al), boron (B), barium (Ba), beryllium (Be), bismuth (Bi), calcium (Ca), cadmium (Cd), cobalt (Co), copper (Cu), iron (Fe), potassium (K), lithium (Li), magnesium (Mg), manganese (Mn), molybdenum (Mo), sodium (Na), nickel (Ni), phosphorus (P), lead (Pb), antimony (Sb), strontium (Sr), thallium (Th), titanium (Ti), vanadium (V), zinc (Zn), gallium (Ga), tin (Sn), tungsten (W) and chrome (Cr).

The Min-En Laboratories' I.C.P. analytical procedures require a 0.5-gram subsample from the original sample pulp. This subsample is digested for 2 hours with an aqua regia mixture. After cooling the sample is diluted to standard volume and the solution is analyzed by a Jarrell Ash ICP computer (Inductively Coupled Plasma Spectrometer). The analytical results and a tabulation of the significant base, precious and pathfinder metal analytical data accompany this report in Appendix X.

Mineral Resource Inventory Study

Geological, geotechnical, assay/analytical and drill survey data, comprising all of the pre-1994, 1994 and 1995 diamond drilling results, were collated, compiled and tabulated by the writer into several databases for computer-assisted plan and cross-sectional plotting. The geological contacts and structural features were interpreted and 'hand' plotted on drill hole trace cross-sections at 50-metre intervals and then these cross-sections were digitized by computer-assisted drafting (CAD) technicians at Fluor Daniel Wright Ltd. in Vancouver, B.C. The inputted geological data was then correlated at 15-metre bench level intervals from a surface elevation of approximately $1,530 \pm 30$ metres to 900 metres A.M.S.L. using Fluor Daniel Wright 'CADMIN' mining engineering software. The result of this work is a detailed three-dimensional geologic block model with blocks measuring 20 metres long by 20 metres wide by 15 metres high. None of the early percussion drilling results were utilized for the geologic block or later resource estimations.

For the purposes of the geologic block model the geology was simplified, firstly, into known mineralized and unmineralized rock types and, secondly, into major mineralized and unmineralized rock groups or domains. The mineralized rock group comprised Main Phase plagioclase hornblende porphyry (PPHM) and Main Phase Type 2 plagioclase hornblende porphyry (PPH2) of the earliest Early Jurassic Red Stock, designated as 'Main Phase' porphyry, and a 'Volcanic' group comprising the volcanic (VOLC) and volcanically-derived sedimentary rocks (VSED) of the Mid to Late Triassic Stuhini Group. The unmineralized rock group, designated 'Late Phase Porphyry', was dominated by barren Late Phase plagioclase hornblende porphyry (PPHL) dykes with lesser various post-mineral dykes of the earliest Early Jurassic Red Stock, and the clastic sedimentary rocks of the Mid Jurassic Bowser Lake Group.

Mr. G. H. (Gary) Giroux, P. Eng., M A Sc., of Montgomery Consultants Ltd. in Vancouver, B.C. was retained by American Bullion Minerals Ltd. to calculate the geological resources of the Red-Chris deposit and Gully and Far West Zones utilizing ordinary kriging geostatistical calculations. This geological resource estimate was intended as an audit of the resource evaluation, using inverse distance cubed geostatistical calculations, being completed for the prefeasibility report by Fluor Daniel Wright mining engineers. Both geostatistical estimates utilized the same geological block model that the writer and mining engineers of Fluor Daniel Wright Ltd. had constructed.

The following text is derived directly from the report by Giroux (1996) describing the methodology of the ordinary kriging geostatistical resource estimation. According to Giroux (1996),

"Variography indicated anisotropic spherical models for both copper and gold with longest ranges down dip and at azimuth 090° in the Main Zone and 045° in the East Zone.

Grades for copper and gold were interpolated by ordinary kriging for each block in the geologic model coded as main phase porphyry, late phase porphyry and volcanic. Three separate estimates were completed to test the sensitivity to search distances and capping of composite grades. A final estimate was completed using search radius of 150 m along strike, 100 m down dip and 100 m across dip. Composites were capped at 1.5% Cu and 1.5 g Au/t. In an attempt to better define inferred material within the geologic model the search radii were doubled if a minimum of 3 composites were not found. Blocks were classified as measured, indicated and inferred based on the distance from the block centroid to the nearest composite used to estimate the block.

To allow for a comparison with a Fluor Daniel Wright estimate a conversion to a NSR (Net Smelter Return) value was produced using an equation supplied by FDW (NSR (Can\$) = 16.96 X Cu grade + 10.18 X Au)."

The fixed N.S.R. equation utilized by Giroux (1996) was based upon an earlier scoping study Net Smelter Return value calculated by Fluor Daniel Wright (1995) which was based upon a US \$1.00 per pound copper and US \$350.00 per ounce gold unit price. A calculated mean specific gravity of 2.79, based upon 6,969 specific gravity measurements, was utilized for the resource calculations.

The complete mineral resource inventory report, titled "A Geostatistical Resource Evaluation of the Red Chris Copper-Gold Deposit", prepared by Giroux (1996) accompanies this report as Appendix XV.

**Statement Of
Expenditures**

STATEMENT OF 1995 EXPENDITURES

The following exploration expenditures are for the period of January 1 to December 31, 1995 and are exclusive to the Red-Chris property. They have been provided by American Bullion Minerals Ltd.

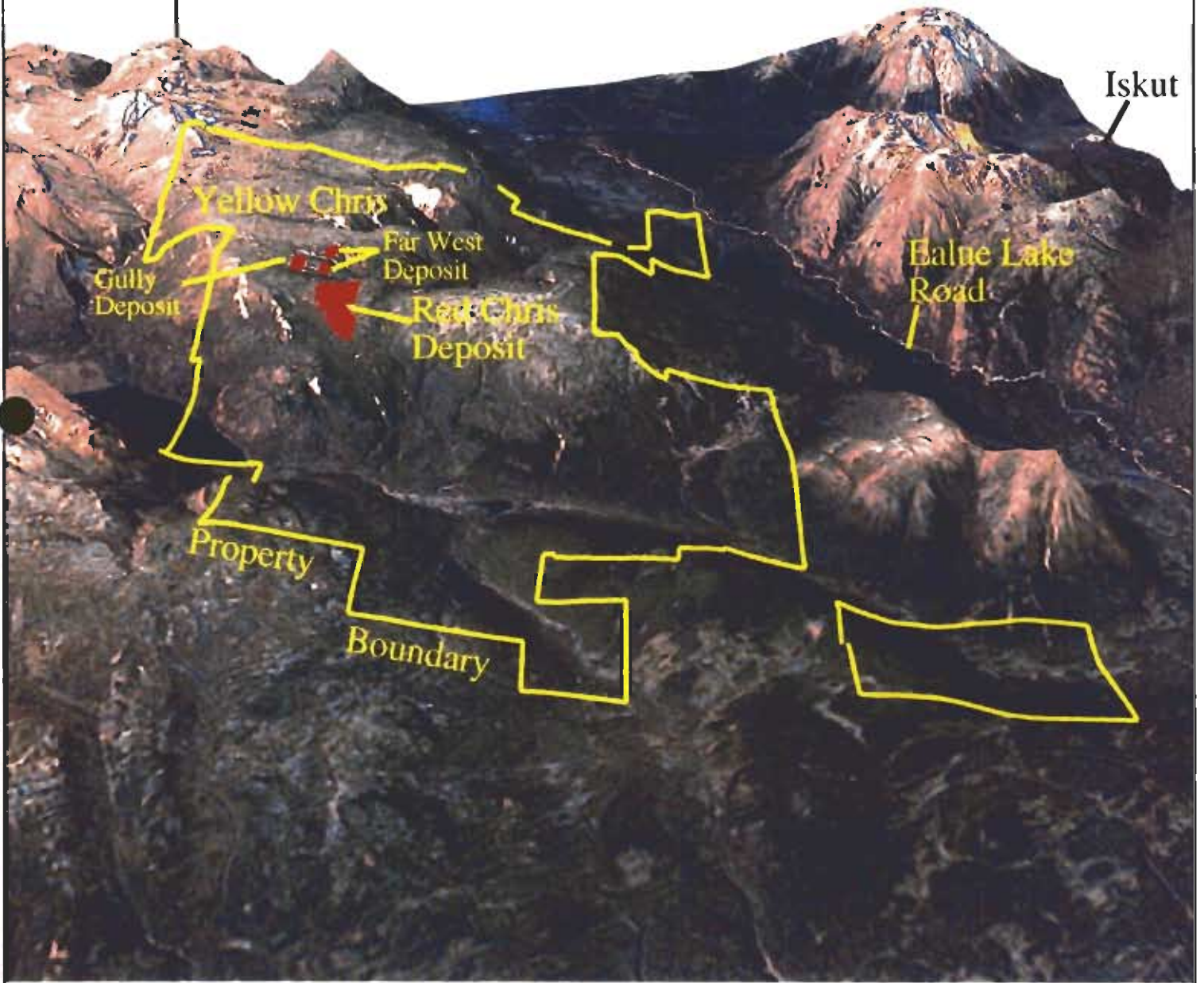
| Item | Description | Cost (CAN \$) |
|--|---|-------------------------------|
| Analyses | Copper and gold geochemical analyses, I.C.P. | \$ 2,750.00 |
| Assays | Drill core assays, check-assays, duplicate assays, etc. | 275,478.94 |
| Accommodation | Camp and logging facilities maintenance | 113,601.66 |
| Consulting | Environmental | 174,483.50 |
| Consulting | Feasibility | 84,688.12 |
| Consulting | Geological | 105,990.50 |
| Consulting | Geotechnical | 26,560.76 |
| Consulting | Metallurgical | 63,007.37 |
| Consulting | Legal | 450.00 |
| Drafting | CAD drafting, map preparation, reproduction | 57,354.38 |
| Expediting | SatTel rental, telephone, expediting | 61,219.25 |
| Drilling | 115 HQ-, NQ- and BQ-core holes - 36,830 m or 120,833 ft. | 3,080,365.48 |
| Drilling | Site Preparation and heavy equipment rental | 127,065.00 |
| Equipment | Lease/rentals | 31,084.30 |
| Equipment | Consumables | 76,006.58 |
| Equipment | Capital | 6,332.12 |
| Fuel | Camp and camp service vehicle fuel | 26,730.84 |
| Insurance | Insurance for rental vehicles | 1,000.00 |
| Salary and Wages | American Bullion field and support employees | 537,616.14 |
| Casual Salaries | American Bullion casual field and support employees | 1,040.00 |
| Surveys | Geophysical | 2,335.69 |
| Surveys | Control | 28,130.65 |
| Surveys | Linecutting | 9,976.00 |
| Surveys | Other | 1,499.82 |
| Transportation | Airlines | 46,037.03 |
| Transportation | Fixed Wing | 900.00 |
| Transportation | Helicopter | 486,502.16 |
| Transportation | Vehicle | 39,087.28 |
| Transportation | Freight | 66,710.14 |
| Trenching and roads | Trench and road reclamation; drill access road construction | 4,188.00 |
| Project Management Fees | | 334,033.43 |
| | | <hr/> |
| | | \$ 5,900,836.01 |
| Property Acquisition and Option Payments | | 572.84 |
| Property Maintenance | | 550.00 |
| | | <hr/> |
| TOTAL PROJECT EXPENDITURES | | <u>\$ 5,901,958.85</u> |



LOOKING WEST

Todagin Mtn.

Iskut



Property

Boundary

Yellow Chris

Gully
Deposit

Far West
Deposit

Red Chris
Deposit

Balne Lake
Road

RED CHRIS PROJECT

LOOKING NORTHEAST

RED CHRIS
CAMP



DISCUSSION OF 1995 EXPLORATION RESULTS

The 1995 exploration program successfully increased the geological resources of the Red-Chris deposit across the width of the Red stock and over a 400-metre strike length west of the known mineralization. Significant near-surface copper-gold mineralization was also discovered at the Gully and Far West Zones which were identified by 1994 geophysical and geochemical surveying within 2 kilometres of the Red-Chris deposit. The property has now been tested by a total of 244 diamond and 44 percussion drill holes, or 74,782.52 metres of drilling. The results of this work indicate that the Red-Chris deposit is still open both laterally and vertically, and the newly-discovered Gully and Far West Zones could also host significant geological resources amenable to open pit mining. There are also other exploration targets on the property, such as the altered and pyritized volcanic rocks north of the Red stock, that have only received minimal investigation and should be evaluated during future exploration work.

The geology, mineralization and alteration within the Red-Chris property are atypical of the characteristics that are generally associated with a strictly calc-alkalic or alkalic suite porphyry copper system. The Red-Chris and Yellow Chris mineralization can best be described as a structurally-controlled, bulk-tonnage copper-gold deposit with hybrid volcanic porphyry copper characteristics.

Most of the copper-gold mineralization is hosted by two plutonic units of the earliest Early Jurassic Red stock which is a hypabyssal plagioclase-hornblende porphyry intrusion of monzodioritic composition, and to a lesser extent in the Yellow Chris area by volcanically-derived sedimentary rocks of the Mid to Late Triassic Stuhini Group. The emplacement of the intrusion and the subsequent alteration, sulphide mineralization and late-stage dyking within the stock and surrounding country rocks were controlled by reactivated, east-northeasterly faulting. Several north-northwesterly normal and oblique faults occur along the length of the stock, and they appear to have been responsible for displacements of the copper-gold mineralization and its associated quartz vein stockwork zones. Copper versus gold grade ratios of the mineralization vary from 1:0.8 to 1:4 (percent copper to grams gold per tonne) in a westward direction. This westward transition of copper-gold ratios is coincident with increased pyritization, decreased bornite versus chalcopyrite mineralization, and the dominance of a phyllic versus potassic-phyllic alteration assemblage. It appears that the alteration and mineralization was 'telescoped' along the axis of the Red stock in a westward direction rather than being equidimensional.

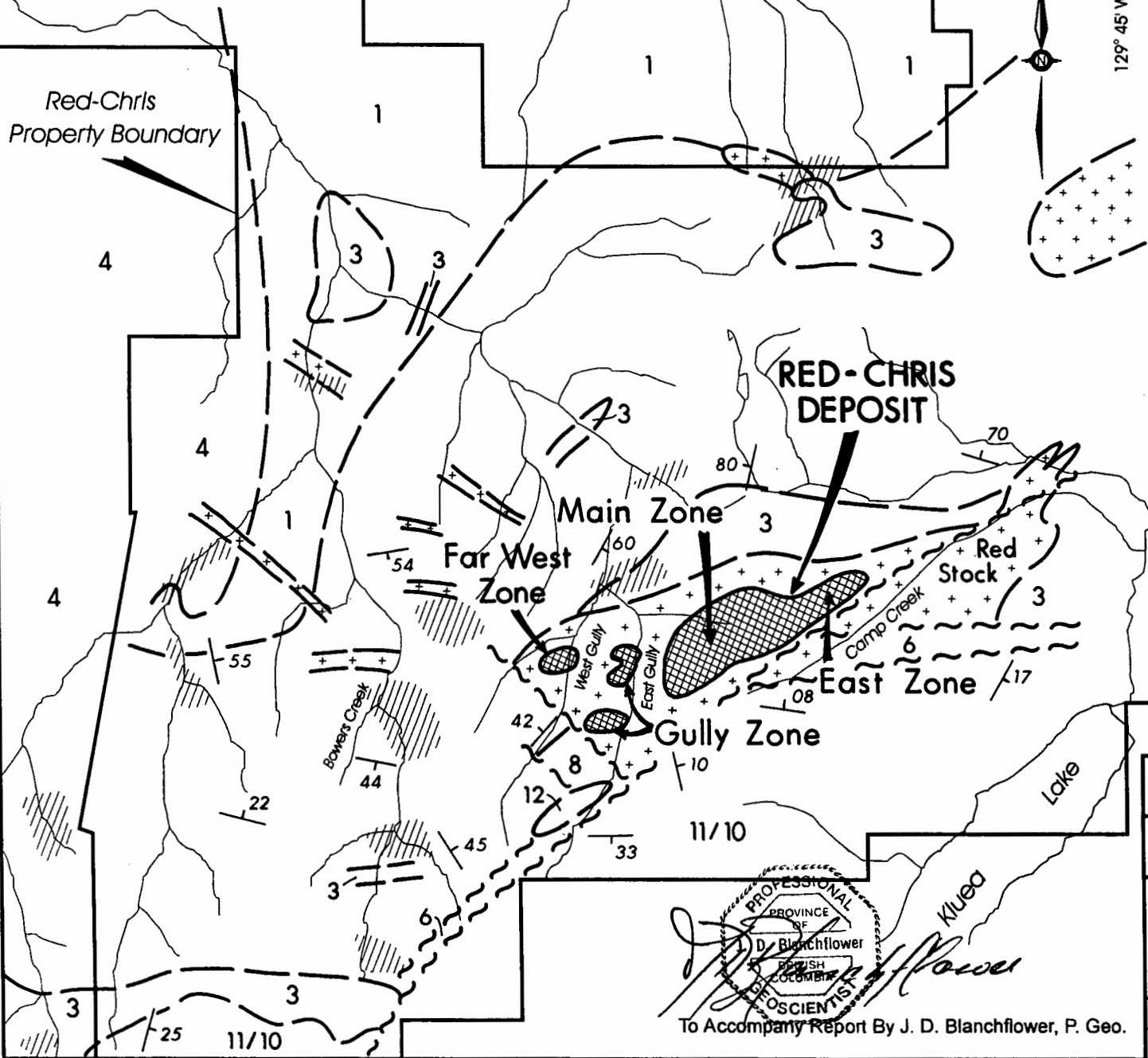
The Red-Chris deposit is a continuous zone of copper-gold mineralization with an apparent east-northeasterly strike length of approximately 1,700 metres and widths ranging from 250 to 700 metres or more. It has two zones of higher grade copper-gold mineralization (greater than 0.6% copper and 0.6 g.p.T. gold), centred on the former 'Main' and 'East' Zones, that could be readily utilized for a 'starter' open pit mining operation. The mineralized host rock, dominantly Main Phase plagioclase hornblende porphyry of the Red stock, has been locally intruded by various post-mineral dykes and slightly displaced by younger faulting.

The copper-gold mineralization at the Gully and Far West Zones is hosted by Main Phase and Main Phase Type 2 plagioclase hornblende porphyry of the Red stock and volcanically-derived sedimentary rocks of the Stuhini Group. Both zones of mineralization are open laterally and vertically requiring further definition drilling to determine their dimensions.

The following text summarizes the geological, geochemical, diamond drilling, environmental and mineral inventory results from the 1995 exploration program on the property.

57° 45' North

129° 45' West



- Legend -

- Early Pliocene
 - Maitland Volcanics
 - 12 Olivine-phyric basalt
- Middle Jurassic
 - Bowser Lake Group
 - 11 Bedded pebble conglomerate; sandstone
 - 10 Bedded siltstone
- Lower to Middle Jurassic
 - Hazelton Group
 - 9 Rhyolite-bearing volcanics
 - 8 Mafic and minor felsic epiclastic rocks
 - 7 Rhyolite; massive, brecciated, flow banded
 - 6 Bedded siliceous siltstone, tuffaceous siltstone, fine sandstone
- Upper Triassic to Lower Jurassic
 - Stuhini Group
 - 5 Andesitic conglomerate
 - 4 Plagioclase ± hornblende-phyric volcanics;
 - 3 Augite-phyric basalt flow and pillow breccia, minor pillowed and massive flows, and coarse epiclastics
 - 2 Massive feldspathic wacke, siltstone beds
 - 1 Bedded siltstone, feldspathic wacke beds

INTRUSIVE ROCKS

- Early Jurassic
 - Plagioclase-hornblende porphyry quartz diorite to monzodiorite (i.e. Red Stock)
 - ////// Ankerite alteration
 - ⊗ Quartz stockwork
 - - - Geologic contact
 - ~ ~ ~ Fault

0 500 1000 2000 Metres



MINOREX CONSULTING LTD.
Geological Consultants, Delta, British Columbia

AMERICAN BULLION MINERALS LTD.
Vancouver, British Columbia

PROPERTY GEOLOGY MAP

RED - CHRIS PROPERTY
Liard Mining Division, British Columbia

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| Drawn By: J.D.B. | Scale: 1:50,000 |
| Date: April, 1996 | Figure No. 5 |

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GEOLOGICAL RESULTS

The property covers the eastern portion of a large east-northeasterly trending, stratigraphically-distinct, fault bounded upland called the Todagin Plateau (Ash *et al.*, 1995). Forsythe (1977) refers to this terrain as the 'Red Massif'; perhaps more because of its distinctive topography than its geologic terrane. Within the boundaries of this plateau, Early Jurassic-age (199 to 205 Ma) stocks and dykes of plagioclase-hornblende porphyritic monzodiorite to quartz diorite intruded Middle to Upper Triassic volcanic and intercalated volcanically-derived sedimentary rocks and Lower Jurassic volcanic rocks (Ash *et al.*, 1995). The older augite-phyric volcanic and intercalated volcanically-derived sedimentary rocks may be possible lithologic equivalents to the Middle Triassic Tsaybahe Group or the Upper Triassic Stuhini volcanics (Ash *et al.*, 1995). The plutons appear to be partially-unroofed, high-level, hypabyssal intrusions; perhaps comagmatic and coeval with the enclosing dominantly-alkaline arc volcanic rocks. The Red stock within the property is the largest of the plutons.

The Middle Jurassic Ashman Formation, a basal unit of the Bowser Lake Group, crops out and forms the ridgeline along the southern property boundary. It is comprised of siltstone, chert-pebble conglomerate and sandstone, and occurs in fault contact with all of the aforementioned rocks.

Rare remnant flows of Early Pliocene olivine basalt, belonging to the Maitland Volcanics, occur locally capping hills west of the headwaters of the East Gully drainage.

LITHOLOGY

The lithologic units on the property have been described chronologically from oldest to youngest.

1) Middle to Upper Triassic Volcanic and Sedimentary Rocks (μ Tva and μ Tvs)

Recent geological mapping by Ash *et al.* (1994 and 1995) has identified an intercalated sequence of augite-phyric volcanic and volcanically-derived sedimentary rocks cropping out between the northeastern slopes of Todagin Mountain and Ealue Lake, underlying most of the northern portion of the property.

a) Volcanic Rocks (VOLC)

Alkaline volcanic rocks, informally called the 'Dynamite Hill' volcanics (Leitch and Elliot, 1976), crop out immediately north and northwest of the Red stock, along the East Gully to Bowers Creek drainages north to Ealue Lake. They also reportedly occur on the southeastern side of the Red stock in fault contact with the Middle Jurassic Bowser Lake Group sedimentary rocks.

Ash *et al.* (1995) found the volcanic rocks to be dominated by augite-phyric pillowed flows and flow breccias of basaltic composition. Leitch and Elliot (1976) describe these rocks as massive porphyritic basic volcanics with no visible structure; however, Schink (1977) and Forsythe (1976) suggest that they are dominated by relatively massive flows which locally exhibit poorly developed pillow structures and flow banding. They appear on surface to be dark green-coloured, quite massive, and with varying amounts augite, hornblende and plagioclase phenocrysts in a green chloritic groundmass. Rocks observed along the intrusive contact of the Red Stock are often bleached and pyritized resulting in a pale green to buff colour, and a more felsic macroscopic colouration.

The dark green augite-hornblende (\pm plagioclase) porphyry volcanics are characterized by 5 to 15 percent, black, euhedral augite phenocrysts, ranging in size from 1 to 2 mm long. Hornblende also occurs as dark green, euhedral phenocrysts up to 2 mm in size which comprise 5 to 15 percent of the rock. Plagioclase as a phenocryst phase is usually absent, but it may occur as microphenocrysts ranging up to 0.5 to 1 mm long; usually where augite phenocrysts are locally abundant (Ash *et al.*, 1995). Amygdules

from 2 to 5 mm in diameter are observed locally, peripheral to the Red Stock. These amygdules commonly comprise from 5 to 15 percent of the volcanic rock outside the deposit area and are filled with amorphous, pink material which has been identified as feldspar (Schink, 1977; Ash *et al.*, 1995). The matrix is comprised of very fine-grained chlorite, magnetite and pervasive calcite. The volcanic rocks are pyritized, as fracture infillings and fine-grained disseminations, near the Red stock contact; however, the pyrite mineralization diminishes to less than 1 percent within 120 metres of the contact (Schink, 1977).

b) Volcanically-Derived Sediment Rocks (VSED)

The volcanic rocks are locally intercalated with volcanically-derived fine-grained sedimentary rocks (VSED), including volcanic wacke (feldspathic sandstone), siltstone and siliceous siltstone, on a scale of metres to tens of metres (Leitch and Elliot, 1976; Ash *et al.*, 1995). Volcanically-derived sedimentary rocks are much more prevalent in the Yellow Chris area. At the Gully Zone the volcanically-derived sedimentary rocks have been intersected by deep drilling and host a significant portion of the copper-gold mineralization where they occur as faulted slices and wedges within the fault-brecciated margins of the Red Stock. These rocks also occur at the Far West Zone where they host a portion of the mineralization and occur in intrusive contact with the Red stock.

The volcanically-derived sedimentary rock unit varies considerably in texture, colour and grain size, and can be tentatively subdivided into four varieties based on 1995 drill core descriptions; including:

- i) a fine-grained massive to locally bedded variety with rare graded beds over 5 to 30 cm. Its colour ranges from beige to dark green and black, but is typically beige to grey. Approximately 5 percent of the rock is comprised of 1 to 2 mm unidentified grey phenocrysts. Chlorite and hematite are pervasive throughout this sub-unit;
- ii) a locally porphyritic variety with a grey-green aphanitic matrix and 10 to 20 percent remnant subhedral to euhedral feldspar phenocrysts, averaging 1 to 3 mm long. Hematite is locally finely disseminated and present as 1 to 6 mm irregular masses;
- iii) a coarse-grained variety with rare, 1 to 3 mm quartz grains and 20 to 30 percent feldspar phenocrysts. There are locally 0.5 to 2 cm black subrounded to angular siltstone fragments. Chlorite is abundant and pervasive, and hematite is rare; and
- iv) a brecciated or conglomeratic variety which typically contains 10 to 20 percent, locally up to 40 percent, 1 to 12 cm subangular to subrounded reworked volcanic fragments in a fine-grained matrix. The fragments have aphanitic to porphyritic textures. The breccia is rarely up to 2 metres in thickness.

The finely-laminated sedimentary rock unit is dominantly grey siltstone and black argillite with lesser limy siltstone or dolomitic breccia. Often the fine-grained rocks display slump structures within a fine-grained wacke matrix. The more siliceous units crop out as resistant units but usually the sediments are recessively eroded. North of the Red stock, siltstones dip steeply eastward from -45° to -85° and strike north-northwesterly to north-northeasterly (Leitch and Elliot, 1976). Elsewhere, Ash *et al.* (1995) report that the siltstones strike northeasterly to southeasterly with steep to moderate northerly dips, and that graded bedding, scour marks and load structures indicate the bedding is right way up or locally overturned in some steeply-dipping beds.

Recent regional mapping by Ash *et al.* (1996) indicates that the Middle to Upper Triassic volcanically-derived sedimentary rocks are much more widespread than previously reported and that the sedimentary component of the Middle to Upper Triassic strata may dominate volcanic stratigraphy. Sedimentary rocks occur north, east and west of the Red stock mainly as plagioclase-rich volcanic sandstone with interbeds of laminated siltstone and fine sandstone. The volcanic sandstone reportedly

weathers grey to tan-brown when it is carbonatized and is light grey on fresh surfaces. It is characteristically massive without obvious sedimentary features, fine- to medium-grained, and equigranular. Angular siltstone fragments, from 3 to 15 mm long, often account for 1 to 2 percent of rock volume. Massive, coarse-grained, poorly sorted varieties of the sandstone with similar siltstone clasts also occur locally (Ash *et al.*, 1995).

2) Upper Triassic Plutonic Rocks

Several stocks and dykes of hornblende-plagioclase porphyritic quartz monzodiorite composition have been mapped within the Todagin Plateau area by Leitch and Elliot (1976) and Ash and Fraser (1994) (see Figure 4). These intrusions occur in close proximity to the Red stock and are very similar to it in geometry and texture. They are described by Ash *et al.* (1995) as intrusive rocks that weather buff white to light grey, and have distinctive medium- to coarse-grained hornblende and plagioclase phenocrysts randomly oriented in an aphanitic grey groundmass. Plagioclase is the dominant phenocryst phase, occurring as 2 to 5 mm subhedral tabular grains comprising from 30 to 45 modal percent of the unit. Hornblende grains are less abundant, comprising from 6 to 12 modal percent, they are usually of similar grain size, but also locally form coarser tabular phenocrysts up to 1 cm long. The groundmass mineralogy comprises microcrystalline, anhedral, granular quartz, carbonate and feldspar. Leitch and Elliot (1976) report identifying microscopic potash feldspar as a significant component of the groundmass mineralogy at the Red stock. Recent petrographic studies by Payne (1995) indicate that the fine-grained potash feldspar in the groundmass is probably secondary and may be due to potassic metasomatic overprinting.

Ash (1996) reported to the writer that four zircon fractions from drill core of the Red stock (i.e. DDH 94-224) have been Pb-U dated as 203.8 ± 1.3 Ma, or of earliest Early Jurassic age. This date correlates well with three dates from various other plutons throughout the Tatogga Lake map area that ranged from 199 to 205 Ma. All samples also show an Early Paleozoic inheritance at 500 Ma.

Red Stock

The Red stock is elongate, irregular in shape, and occupies a major east-northeasterly en echelon fault structure. It is at least 4.5 kilometres long by 300 to 1,500 metres wide, but it may also extend well beyond its exposed boundaries as a buried pluton beneath the partially eroded older volcanic and sedimentary cover. Various plutons both east and west of the main stock were identified by Leitch and Elliot (1976) but, except for variation of pyrite and hornblende contents, they were apparently identical and are probably apophyses of the larger intrusion (see Figures 4 and 5).

According to Leitch and Elliot (1976), volcanic rocks in contact with the Red stock display local thermal metamorphic and metasomatic features, such as moderate hornfelsing, increased pyritization and propylitic alteration, but they have not been foliated. These features suggest that the stock was indeed emplaced hypabyssally and is probably comagmatic with the surrounding volcanic country rocks.

Two compositionally-similar phases of plutonic rocks comprise the stock and these rocks are cut by several post-mineral dykes of dioritic to monzonitic composition. The 'Main Phase' unit is a medium-grained, weakly- to intensely-altered plagioclase-hornblende porphyritic monzodiorite that hosts most of the known copper-gold mineralization and constitutes approximately seventy to eighty (70-80) percent of the stock. The 'Late Phase' unit is now thought to comprise both unaltered and barren Main Phase unit and post-mineral dykes with indistinct flow banded and chilled margins; all of which are remarkably similar in composition and texture to very weakly altered Main Phase rocks. However, the Late Phase unit appears to be fresher looking and less altered than the Main Phase unit, usually barren of copper-gold mineralization, and represents approximately twenty to twenty-eight (20-28) percent of the stock. The late-stage, post-mineral dykes are commonly porphyritic, range in composition from dioritic to monzonitic, are usually less than 1 to 5 metres wide; although they may attain widths of up to fifty (50) metres wide in the western end of the Red-Chris deposit and throughout the Yellow-Chris area. These dykes comprise the remaining volume of the Red stock.

a) **Main Phase Unit (PPHM)**

The 'Main Phase' plutonic rocks were probably plagioclase-hornblende porphyritic monzodiorite or possibly quartz diorite prior to several secondary alteration facies (Ash *et al.*, 1995). Schink (1977) and Leitch and Elliot (1976) consider these rocks to be more monzonitic in composition, and Payne (1995) classifies them as hypabyssal porphyritic latites and lesser porphyritic quartz diorites and dacites.

Weathered Main Phase rocks appear buff white to light grey or green in colour, but usually they have a distinct orange-brown colour due to ankerite alteration. Translucent green plagioclase forms randomly oriented, subhedral to euhedral phenocrysts averaging 0.5 to 4.0 mm in size and ranging up to 7.0 mm long. These phenocrysts commonly comprise 25 to 35 modal percent of the unit. Biotite and hornblende phenocrysts are less abundant, often less than 2 percent but occasionally as high as 10 percent. The hornblende phenocrysts are slightly larger than biotite, averaging 2 to 3 mm for hornblende versus less than 1 mm for biotite; however, both minerals may range up to 4 mm locally. Hornblende is more prominent within the Gully Zone; comprising 10 to 15 percent of the unit. In more intensely altered zones the porphyritic texture of the unit is often obliterated. The groundmass usually represents 40 to 50 modal percent of the rock; comprising colourless, anhedral, microcrystalline feldspar and minor quartz with local variations (Schink, 1977). Most of the original plagioclase in the groundmass has been variably altered to sericite-illite-ankerite-kaolinite and potassium feldspar. Apatite, sphene and zircon occur in trace amounts. Pyrite and chalcopyrite constitute between 1 and 3 percent of the unit within the known mineralized zones.

Payne (1994) subdivided the Main Phase unit into two dominant lithologies. Based upon texture and phenocryst mineralogy, one has anhedral to subhedral plagioclase phenocrysts in a very fine-grained groundmass which is generally void of mafic phenocrysts and the other has both plagioclase phenocrysts and moderately abundant to abundant, euhedral to subhedral hornblende and biotite phenocrysts. Quartz phenocrysts are extremely rare. Small anhedral apatite grains, ranging from 0.1 to 0.2 mm, occur locally. In this latter unit the groundmass is dominated by cryptocrystalline to very fine-grained feldspar; generally too altered to classify its composition. These compositional differences can be accounted for by slightly different temperature and pressure regimes during intrusion, variable contamination of the melt near its margins, and variations of the intensity and distribution of secondary alteration. Such detailed petrographic subdivisions are macroscopically indistinguishable. See Figures 76 to 83 for the distribution of the Main Phase unit within drill-tested portion of the Red Stock.

b) **Main Phase 2 Unit (PPH2)**

Main Phase Type 2 unit is a subdivision of the Main Phase unit, occurring as dykes cutting the Main Phase unit. This rock unit was first recognized in 1994 as being macroscopically different from the Main Phase unit because the plagioclase phenocrysts are more crowded and it has a light greenish grey to buff or cream color. Plagioclase phenocrysts are generally smaller in size than the Main Phase unit phenocrysts, from 1 to 2 mm, and they comprise 40 to 60 percent of the rock volume. The unit is compositionally similar to the Main Phase unit and is often trachytically textured. Distinctive tan-coloured hornblende phenocrysts are euhedral, comprise 10 to 12 percent of the rock volume, and occur up to 1 cm long. Generally, this unit has a fresher appearance than the Main Phase unit but is less well mineralized. Its contacts with the Main Phase unit are sharp and may rarely show very slight chilled margins. Dykes are generally quite narrow ranging in size from 3 to 10 metres. Larger dykes or bodies of Main Phase Type 2 unit occur in the Yellow-Chris area, especially in the Gully Zone, where widths of 100 metres were intersected by diamond drilling (see Figures 76 to 83).

The Main Phase Type 2 unit is thought to be comagmatic and coeval with dominant Main Phase unit but some of the Main Phase Type 2 dykes appear to be intruded the partially cooled and crystallized Main Phase melt prior to any alteration or mineralization.

c) **Late Phase Unit (PPHL)**

The 'Late Phase' plutonic unit has also been called 'Barren Phase' by past geologists (Schink, 1977; Leitch and Elliot, 1976; Forsythe, 1977) and, as its names imply, it is a later, post-mineral phase of the Red stock. This unit may comprise slightly younger comagmatic intrusions that postdate several periods of fracturing, hydrothermal alteration and sulphide mineralization, and very weakly altered and barren Main Phase rocks that have been juxtaposed with mineralized Main Phase rocks by later faulting.

Late Phase intrusions occur as steeply-dipping dyke-like bodies up to 180 meters wide. The largest of these occurs at the east end of the Red-Chris deposit, between the highly fractured, altered and mineralized Main Phase unit and 'Dynamite Hill' volcanic country rocks. On the southern side of the Red-Chris deposit there is another section of the Late Phase unit that occurs between the Main Phase unit and the south bounding fault contact of the Red stock. This section appears to be discontinuous between the western and eastern portions of the Red-Chris deposit because of inferred north-northwesterly faulting. Most of the narrower, internal dyke-like bodies of the Late Phase unit occur in the western portion of the Red-Chris deposit and some of these have indistinct foliated and chilled margins along their contacts with the host Main Phase unit. These dykes are usually less than 20 meters wide, and they appear to infill east-west fracture and fault structures that have been later displaced by north-northwesterly faulting. Late Phase intrusive rocks appear to truncate the mineralization at the east end of the Red-Chris deposit; although only a few drill holes have tested this area (see Figures 77, 79, 81 and 83).

Large dykes of Late Phase unit occur on the north and south sides of the Gully Zone and in the Far West Zone in the Yellow-Chris area. They dominantly underlie the area immediately east of the East Gully drainage between gridlines 49400 E to 49500 E, where they attain widths of greater than 140 metres. Intrusive contacts between the Late Phase unit and older volcanic rocks east of the East Gully drainage and north of the Far West Zone are obscured by subvertical to vertical faulting (see Figures 76, 78, 80 and 82).

Some geologists have suggested that the Late Phase unit can be distinguished from the Main Phase unit on the basis of colour, grain size, trachytoid texture and fresher appearance (Schink, 1977; Leitch and Elliot, 1976). It was found during the 1994-95 diamond drilling that colour and grain size variations between the two units are not so obvious. A trachytoid texture, although observed in Late Phase unit, was also observed in Main Phase rocks and was not diagnostic. Indistinct intrusive contacts between Main Phase and Late Phase rocks occasionally distinguish the two units but they are often obscured by local faulting, brecciation and increased carbonatization over several metres. Commonly, the intrusive contacts are very gradational, supporting a comagmatic genesis.

The pyrite to chalcopyrite ratio is very high in the Late Phase unit (i.e. commonly more than 20:1), and the copper grades are usually less than 0.05 percent. Pyrite and carbonate veins are common but quartz veins are very rare. The lack of quartz stockwork and associated secondary alteration undoubtedly accounts for much of the 'fresh' appearance that was described for the Late Phase unit (Schink, 1977). Magnetite and hematite occur locally and this association may also be due to lack of secondary alteration and quartz vein stockwork.

The distinction of the Main and Late Phase units was problematic throughout the drilling programs. On the basis of mineralogy and composition, the Late Phase unit is virtually indistinguishable from the Main Phase unit. However, in an attempt to develop core logging continuity, Late Phase and Main Phase units were distinguished on the degree of quartz stockwork veining and copper content. Thus, some barren Main Phase rocks with very weak quartz veining may have been identified as the Late Phase unit and/or the Late Phase unit with trace to very weak quartz veining may indeed be poorly altered and mineralized Main Phase unit.

d) **Main and Late Phase Breccia Units (PBRM, PBRL and PBRX)**

Intrusive breccia occurs throughout the Red stock; especially along the northeastern and western margins of the Red-Chris deposit and within the Gully and Far West Zones (see Figures 13 to 83). Breccia bodies may range locally in width from a few metres to 100 metres or more. Their contacts are relatively distinct; marked by a rapid increase or decrease of subangular to angular fragments of plutonic rock. These fragments can vary from less than a centimetre to several metres in diameter.

The Main Phase intrusive breccia unit, designated 'PBRM', has Main Phase breccia fragments within a matrix of Main Phase composition. Locally, the breccia fragments may have narrow alteration selvages and the matrix may show evidence of slight chilling near fragment contacts but generally the breccias appear to be auto intrusive breccia produced during the emplacement of the pluton. The Late Phase intrusive breccia unit, designated 'PBRL', is differentiated by the composition of the breccia fragments and its matrix; both are composed of Late Phase unit material. Undivided intrusive breccia units (Unit PBRX) comprise those reported by Texasgulf Inc. without documented compositions and ones that the composition of the fragments and matrix can not be distinguished.

e) **Late-Stage Dykes (Units DPFH, DQCA, DLAT, DAND, and DYKE)**

The Red stock and older country rocks are cut by several varieties of late-stage, post-mineral dykes. Leitch and Elliott (1976) document six dyke varieties within the property; four of which cut the Red stock. These include: Bird's Eye Porphyry Dykes (BEP) that are most abundant within the western portion of the stock; Magnetite Andesite Dykes that trend 080° to 340°; Biotite Porphyry Dykes that trend 045° to 070° and have been reportedly dated by a biotite K-Ar isochron age of 195 ± 8 Ma (Forsythe, 1977); and Amygdaloidal Andesite Dykes that trend east-west. Schink (1977) and Newell and Peatfield (1995) divided these dykes into Amygdaloidal Felsite Dykes (subdivided into two varieties) and Mafic Dykes. In 1994 and 1995 the late-stage dykes were distinguished by their texture, mineralogy and appearance. There are three main varieties, from oldest to youngest: Porphyritic Feldspar-Hornblende-Biotite Dykes (DPFH), Quartz-Carbonate Amygdaloidal Dykes (DQCA), and Mafic Dykes (DMAF). When vague descriptions of dykes in historical exploration data prevented their definitive categorization they were plotted and recorded as being latitic (leucocratic; DLAT), andesitic (melanocratic; DAND), or simply undivided dyke (DYKE). See Figures 13 to 83 of this report for the distribution of these dykes.

i) **Feldspar-Hornblende-Biotite Porphyry Dyke Unit (DPFH)**

Feldspar-hornblende-biotite porphyry dykes are very similar in composition to the Main and Late Phase units which may indicate that they are late-stage comagmatic intrusions; however, they are macroscopically distinct. They are commonly 10 to 15 metres wide except in the western margins of the Red-Chris Deposit and in Yellow-Chris area where they may be up to 100 metres wide. Their colour ranges from buff, pale green, green, orange-brown to dark orange; depending upon groundmass mineralogy and alteration. Locally, the groundmass may be entirely comprised of orthoclase feldspar. These dykes are usually magnetic with 1 to 2 percent disseminated magnetite which may be altered to hematite. Compositionally-similar dykes without magnetite or hematite have been included with this unit.

Within this rock unit plagioclase phenocrysts are euhedral to subhedral, prismatic, 1 to 2 mm, grains representing 20 to 25 percent of the volume. They often have indistinct boundaries and are moderately to completely altered to sericite-illite-ankerite-kaolinite. Hornblende phenocrysts are subhedral to euhedral, and average 1 to 2 mm long by 0.5 to 1 mm wide with some as long as 3 to 7 mm. Hornblende and biotite usually comprise 10 to 12 modal percent of the rock, and are usually altered to muscovite-sericite-chlorite-calcite-ankerite. Minor pyrite or magnetite and leucoxene occur within the dykes as disseminations. Distinct mafic phenocrysts in an aphanitic groundmass typically are trachytically textured; a characteristic of the feldspar-hornblende-biotite porphyry dyke unit. Payne (1995) classified these dykes as porphyritic latite/andesite and andesite.

ii) **Quartz-Carbonate Amygdaloidal Dyke Unit (DQCA)**

Quartz-Carbonate Amygdaloidal dykes are the most common of the late-stage dykes cutting the Red stock. They were classified by Schink (1977) as part of a suite of altered porphyry and microporphyry amygdaloidal felsite dykes. Leitch and Elliott (1976) refer to this dyke variety as 'Bird's Eye Porphyry'. Varieties of this unit range from those characterized by spherical amygdules set in a fine- to very fine-grained groundmass, to those with few or no amygdules and variable contents of plagioclase microliths, and to others with few to no amygdules and variable amounts of plagioclase, hornblende, or biotite phenocrysts. No attempt has been made to further subdivide this unit.

This dyke unit commonly cuts Main and Late Phase intrusive rocks in the western portion of the stock. The dykes are usually more resistant to weathering than the older intrusive and country rocks and, thus, form slightly raised ridges 2 to 3 metres wide that stand out on steep cleared slopes. They characteristically contain white spherical quartz-carbonate amygdules, up to 1 cm in diameter, set in a fine- to very fine-grained, buff, tan or grey, felted groundmass that is dominantly comprised of carbonatized plagioclase microphenocrysts. Plagioclase microphenocrysts are euhedral to subhedral, prismatic 0.7 to 1.5 mm grains. Hornblende and biotite form euhedral to subhedral phenocrysts up to 2 mm long. The total mafic phenocryst content is variable but generally less than 10 percent. Hydrothermal alteration of the unit is usually moderate to intense, and it is characteristically altered to carbonate, sericite, kaolinite, apatite, quartz, chlorite and rutile assemblages. Minor pyrite and magnetite occur as disseminations in the groundmass and/or within some of the amygdules.

iii) **Mafic Dyke Unit (DMAF)**

Mafic dykes are medium-grained with local relict euhedral pyroxene and biotite phenocrysts, ranging up to 1 cm long, in a light to dark green aphanitic groundmass. Phenocrysts comprise 10 to 15 percent of the rock volume. Pyroxene is light green to buff, biotite is brown to black, and there are rare plagioclase phenocrysts. Pyroxene and biotite phenocrysts, as well as the groundmass, are often extensively replaced by actinolite, granular carbonate and chlorite with minor quartz in the relict pyroxene phenocrysts. Fine radial aggregates of dark green tourmaline (schorl) have been described by Schink (1977). Accessory pyrite, rutile, apatite and rare olivine are also present. Often there are chilled margins present where the phenocryst size is smaller and the colour is bleached.

3) **Lower to Middle Jurassic Volcanic Rocks (Units IJv and IJv)**

Lower to Middle Jurassic trachytic to rhyolitic flows have been mapped at the western end of the Red stock along the Bower Creek drainage (Ash *et al.*, 1995). These volcanics were also mapped by Leitch and Elliot (1976) who classified them as intermediate to acid volcanics and minor pyroclastics. They reported that these volcanics are more varied than those underlying Dynamite Hill and that the rocks ranged from dark green andesite to orange trachyte and white rhyolite. Minor tuffaceous volcanoclastics are intercalated with the volcanics rocks. They appear to be late-stage extrusives of the Red Stock intrusion (Schink, 1977) with bedding attitudes striking 090° and dipping northward at -45° along the north side of the stock to striking north and dipping sub-vertically further to the west (Leitch and Elliot, 1976).

4) **Middle Jurassic Ashman Formation (basal Bowser Lake Group; mJ_A)**

Marine clastic sedimentary rocks of the Ashman Formation, a basal unit of the Middle Jurassic Bowser Lake Group, underlie the southern property boundary, along the ridgeline between the Red stock and Kluea Lake. The Ashman Formation is comprised of siltstone, chert-pebble conglomerate and sandstone (Evenchick and Thorkelson, 1993). Bowser Lake Group rocks young progressively to the south; indicating that deposition was from the north into the tectonically-active northern margin of the Bowser Basin (Ricketts, 1990; Ricketts and Evenchick, 1991; Green, 1991).

Massive to well-bedded chert-pebble conglomerates occur in fault contact with the southern margins of the Red stock. Repetitively-bedded laminae, varying from 5 to 15 cm thick, are defined by an upsection reduction in both size and abundance of chert clasts. Local massive conglomerates contain 40 to 60 percent sandstone clasts and/or matrix sandstone. Both laminated and massive conglomerates have subrounded, 0.5 to 3 cm diameter, light to dark grey or green chert pebbles in a tan brown to grey sandstone matrix.

5) **Maitland Volcanics**

Near the headwaters of the East and West Gully drainages there are small outcrops of columnar olivine-phyric basalt flows (Schink, 1977). These rocks represent the youngest rocks in the region, probably of Early Pliocene age (Gabrielse and Tipper, 1984; Ash *et al.*, 1996).

STRUCTURE

The structural setting of the property is dominated by east-northeasterly trending en echelon fault structures. The elongated Red stock occupies and has been displaced by at least one major east-northeasterly trending ancestral fault structure that has been repetitively reactivated during Middle Triassic to Middle Jurassic time. This fault structure and several similarly-oriented faults, such as the one bounding the northern margins of the Bowser Lake Group, are probably subsidiary or parasitic structures related to movements along the larger and east-northeasterly striking Ealue Lake Fault.

Structural evidence for the repeated reactivation of a fault zone centred on and beneath the Red stock is obvious from the shape of the intrusion, the orientation of its major rock units, and the distribution and displacements of the alteration facies, sulphide mineralization and late-stage dykes. Forsythe (1976) and Meade (*in* Peatfield, 1975) both concluded that much of the faulting is normal dip-slip in character, typified by hinge movements with the south-side blocks rotating and sliding downward, and that the fault planes seem to be concave to the south. Recent deep drilling results indicate that the faulting may have a more significant lateral component and that the fault planes appear convex to the south.

The Red stock is cut by several en echelon fault zones that probably reflect the youngest tectonic event but appear to be superimposed over the inferred trace of the larger ancestral structure. The most important of these, from an exploration standpoint, is the 'East Zone Fault'. This steeply southeasterly-dipping (-75°) fault zone strikes west-southwesterly (240°) from the eastern end of the Red stock, through the middle of the East Zone, to grid coordinates 100025 North by 50300 East. At this point it appears to bend due westerly and steepen vertically. It then splays into several east-west, sub-vertical fault structures that cut through the middle of the Main Zone. Both the strong to intense quartz stockwork zones and the associated fracture filling copper-gold mineralization are spatially-related to this structure. In the East Zone, the bornite-rich mineralization has an east-west trend and moderate easterly plunge related to east-west splay faults joining the East Zone fault. On drill cross-sections this mineralization is subvertical to very steeply southerly dipping. In the Main Zone the mineralization has a similar orientation but a more moderate easterly plunge, and the majority of the Late Phase dykes appear to be similarly controlled by these east-west splay faults.

Earlier geological work by Texasgulf personnel (Leitch and Elliot, 1976; Forsythe, 1977) inferred that the East Zone fault dipped steeply north within both the East and Main Zones. Most of their drilling was directed southwardly and oriented at -45° to -60° to intersect the inferred steeply north-dipping structurally-related mineralization. It now appears that, except for the eastern portion of the East Zone, most of this mineralization is vertical to sub-vertical and could be tested by either southerly or northerly directed drilling. Furthermore, despite the structural complexity of the deposit much of the youngest faulting and many of the late-stage dykes are remarkably continuous, both laterally and vertically. Less than one-metre wide faults and dykes can be readily traced from multiple drill intercepts in a vertical plane, and usually laterally, over distances of several hundreds of metres.

Another major northeasterly trending fault structure underlies much of the Camp Creek drainage, called the 'South Boundary Fault' (Newell and Peatfield, 1995). It unconformably separates the southern margins of the Red stock and the surrounding Upper Triassic volcanic strata from Middle Jurassic Bowser Lake Group (Ashman Formation) clastic sedimentary rocks. This fault is not exposed on surface; however, geological, geomorphological and drill hole evidence show that it has been responsible for downdropping the Bowser Lake Group rocks and obliquely truncating the southwestern margin of the Red stock. Several east-west splay faults from this structure appear to cut and displace the mineralization of the Main, East and Gully Zones and parallel the distribution of the Late Phase dykes in the Main and Gully Zones. Thus, it can be assumed that the East Zone and South Boundary fault zones have been repetitively and concurrently active and may have a common buried origin.

The quartz stockwork zones, mineralization and some late-stage dykes in the Main Zone and western end of the East Zone and in the Yellow Chris area appear to have been locally displaced by a set of north-northwesterly (340°) strike-slip faults; probably conjugate scissor structures related to transcurrent movements along the East Zone and South Boundary fault zones. Texasgulf Inc. plotted geological surface and bench plans with regular multiple sets of north-northwesterly and north-northeasterly faults to explain truncations of various geological features they encountered. Recent deep drilling has shown that some of these features are indeed displaced by such faulting but most are quite continuous at depth. Until more extensive drilling information is available only those conjugate scissor fault sets that have been inferred from deep drilling results have been plotted.

Larger fault structures occur as gouge and/or brecciated zones. Gouge zones range from a few centimetres to several metres wide. They are usually grey to black in colour and commonly contain rounded to angular fragments, usually less than 2 cm in diameter, of altered Main Phase, Late Phase and occasionally mineralized quartz stockwork fragments in a matrix of clay, quartz and carbonate and finely grained pyrite. Fault breccia zones may be several tens of metres wide.

There are local discontinuous healed breccia zones, commonly less than 2 metres wide, throughout the deposit. These zones have angular fragments of Main Phase surrounded by a pyritic fine-grained matrix with green to black tourmaline or buff-coloured carbonate-quartz (Schink, 1977). These healed breccia zones are usually barren of copper-gold mineralization.

A bowl-shaped breccia zone overlies the South Gully Zone mineralization. This breccia zone is unusual in that the bedrock cannot be recovered by ordinary NQ- or HQ-core diamond drilling but it is resistant to excavator trenching. Core recoveries are extremely poor (i.e. less than 20%), usually small rounded pea-size pieces of bedrock, while trenching exposes oxidized and brecciated bedrock boulders up to 0.5 metres in diameter. It has been suggested that this zone reflects a breccia zone that was infilled with gypsum prior to the main mineralizing event and that the gypsum has since dissolved leaving porous bedrock. Drill sample analytical results indicate local but significant copper-gold mineralization. Pre-development work on the South Gully Zone will require detailed reverse circulation drilling to recover the bedrock from this breccia zone.

The structural setting and geologic history of the Red stock are quite complex; more so than its lithological diversity. Some of the structures are quite obvious, such as the East Zone fault, and others are more subtle, such as the trend of specific dykes. Nevertheless, it is obvious that the Red-Chris deposit is dominantly structurally-controlled and that the Main Phase and volcanically-derived sedimentary rock units were readily-fractured hosts for the subsequent hydrothermally-emplaced alteration and mineralization.

Figures 13 to 75 of this report show the various aforementioned individual and en echelon fault structures in cross-section, and Figures 76 to 83 show the interpreted traces of these structures at various levels throughout the Red-Chris deposit and Yellow Chris area.

ALTERATION

The mineralogy, distribution and diversity of secondary alteration facies within the Red-Chris deposit have been the subject of several geological studies. Several explorationists have applied typical porphyry copper alteration facies to describe the observed alteration mineralogy. It is the writer's opinion that the property-wide mineralization does not fit the typical porphyry copper model, be it calc-alkaline or alkaline.

A Master of Science thesis was completed by Schink (1977) which discussed alteration and mineralization types on the property and their distribution. He stated in his thesis that the alteration types at the Red-Chris deposit are significantly different from those described in most porphyry copper deposits (Lowell and Guilbert, 1970), and that the difference may reflect the dominance of oceanic water as a surface water component of the hydrothermal fluids, rather than the fresh meteoritic water suggested by isotopic studies of other porphyry deposits.

Most of the Main Phase unit of the Red stock has been repeatedly and variably altered by apparently epizonal hydrothermal fluids since its emplacement. The post-mineral Late Phase unit is usually quite fresh to only very weakly altered. A primary porphyritic texture is always observed but it may be partially obliterated by alteration around late-stage quartz-carbonate fracture fillings. None of the Bowser Lake Group rocks have been affected by any of the pervasive alteration present in the Middle Triassic to Lower Jurassic intrusive and volcanic rocks that are situated immediately north of the South Boundary fault structure.

Six alteration facies were identified by Schink (1977) based on petrography and the presence of ankerite. American Bullion Minerals field personnel could not recognize six facies because both ankerite the albitization of feldspars are only visible microscopically. The following alteration assemblages have been modified from Schink (1977) and adapted for diamond drill core logging during the 1994 and 1995 exploration programs.

1) **Potassic (Orthoclase-Biotite-Hematite-Magnetite) Facies**

Potassic alteration is sporadic and quite limited; perhaps representing only 10 to less than 15 percent of the total altered area. It dominantly occurs in the eastern portion of the Red-Chris deposit as narrow discontinuous zones a few metres wide that have gradational to sharp contacts with zones of quartz-sericite \pm hematite \pm kaolinite \pm ankerite alteration. Where the Main Phase unit has been affected by potassic alteration the rocks have a light orange-brown to salmon colour and mottled appearance. The porphyritic texture of the rock is often partially or completely destroyed and its primary mineral constituents show complete replacement. Plagioclase phenocrysts are pseudomorphed by microcrystalline sericite, hematitic albite, ankerite and quartz. Relict hornblende phenocrysts are more commonly altered to a fine grained, felted brown biotite and but may also be pseudomorphed by granular ankerite, pyrite and light coloured chlorite. Rare primary biotite phenocrysts are replaced by pseudomorphic muscovite with minor ankerite. The groundmass is flooded with secondary very fine-grained orthoclase and biotite phenocrysts, and it may also contain ankerite, sericite, kaolinite, quartz, magnetite, hematite, pyrite, and trace apatite, tourmaline and zircon in varying amounts (Schink, 1977).

This alteration assemblage includes 2 to 10 percent hematite after magnetite (martite) as fine-grained disseminations and fracture fillings. Very fine-grained magnetite disseminations and rare veins usually account for less than 2 percent of the rock volume. Fine-grained pyrite disseminations and lesser fracture fillings may locally total 2 to 3 percent. Panteleyev (1975) commented that the presence of hematite and siderite impart a buff pink appearance to hand specimens that may be mistaken for orthoclase feldspar flooding. Suspected orthoclase alteration was always stained for potassium and typically the alteration varied from weak to intense orthoclase flooding with the occasional vein selvage. Locally some potassically-altered rock contains more than 20 percent fine-grained pervasive brown biotite with pyrite, magnetite and only trace orthoclase feldspar.

2) **Phyllic (Quartz-Sericite-Pyrite ± Ankerite) Facies**

Phyllic (quartz-sericite-pyrite ± ankerite) alteration is pervasive and strongly developed throughout the Red-Chris deposit and Yellow Chris area. It occurs discontinuously throughout the Red stock, commonly in the Late Phase unit, and as restricted zones in the volcanic and volcanoclastic country rocks (Schink, 1977).

In hand specimen, phyllic alteration is pale grey with a distinctive bleached appearance. Primary textures are only partially obliterated. Relict plagioclase phenocrysts are bleached with a pale green colour; their grain boundaries are generally preserved but the interiors are usually replaced by microcrystalline sericite and ankerite with minor quartz, dolomite and kaolinite. Groundmass feldspars are replaced by fine, anhedral quartz and interstitial sericite. Hornblende phenocrysts are typically completely destroyed; with rare remnant phenocrysts showing replacement by sericite and minor dolomite (Schink, 1977). Pervasive and abundant ankerite occurs usually in the groundmass and less commonly with quartz as vein selvages, but it is only obvious in weathered diamond drill core. It can account for 1 to 7 percent of the rock volume.

Quartz and sericite are the dominant alteration minerals, constituting 30 to 40 percent of the rock. Fine-grained, subhedral to euhedral pyrite disseminations and fracture fillings may represent 4 to 7 percent of the rock volume within quartz-sericite-pyrite alteration facies and in areas of intense quartz-pyrite-carbonate veining the pyrite content may exceed 15 percent. Tourmaline is widely distributed and most abundant in the quartz-sericite-pyrite ± ankerite alteration. Generally, tourmaline is less than 2 percent of the rock, as discontinuous tourmaline-pyrite stringers and disseminated 1 mm rosettes, but it can constitute up to 25 percent of the rock. Apatite and trace rutile are common accessory minerals (Schink, 1977).

3) **Mottled Phyllic (Quartz-Sericite-Pyrite-Ankerite-Kaolinite) Facies**

Mottled phyllic alteration was thought to be a transition between argillic (quartz-sericite ± hematite ± kaolinite ± ankerite) and pervasive phyllic (quartz-sericite-pyrite ± ankerite) alteration. Its inner margins may coincide with the disappearance of widespread hematite and magnetite, and with the appearance of abundant pyrite, marking the edge of the pyrite halo. It is now thought that the mottled phyllic assemblage represents a zone of alteration overprinting.

Quartz-sericite-pyrite-ankerite-kaolinite alteration has a pronounced mottled appearance due to numerous dark grey-green patches of intense fine-grained sericite-quartz alteration. The altered rock is usually pale buff and the sericite-quartz patches may represent 10 to 15 percent of the rock and average 3 to 7 mm in diameter. Primary texture within patches is completely obliterated. Fine- to medium-grained pyrite occurs as irregular intergrowths with minor apatite near the centre of the grey-green patches. The altered groundmass is typically beige to buff-grey comprising interlocking grains of quartz, pseudomorphic plagioclase, ankerite, sericite, kaolinite, illite, pyrite and accessory apatite, and tourmaline. Pyrite-quartz-ankerite veins within this alteration type have well developed sericite selvages up to 5 mm wide. The total pyrite content varies from 5 to 10 percent of the rock volume.

4) **Quartz-Sericite ± Hematite ± Kaolinite ± Ankerite Facies**

Quartz-sericite ± hematite ± kaolinite ± ankerite alteration is usually restricted to zones of moderate to intense quartz-sulphide stockwork veining that are developed within the Main Phase unit. This alteration facies is characterized by the presence of pale green plagioclase relics and pale brown hornblende pseudomorphs set in a pale, light to medium brown, aphanitic groundmass. It was the opinion of Schink (1977) that this alteration facies occurred quite early during the hydrothermal process; however, since it usually occurs within zones of intense fracturing and quartz vein stockwork it is difficult to determine its temporal relationships with other alteration facies. This alteration facies occurs with the majority of copper-gold mineralization.

Sericite and kaolinite occur as aggregates completely replacing plagioclase phenocrysts and with sericite-pyrite replacing hornblende and biotite phenocrysts. Pervasive and abundant fine-grained ankerite alteration produces an aphanitic rock with little or no relict porphyritic texture. Red to black hematite is commonly disseminated and occurs as narrow stringer veins comprising up to 5 percent. It is not clear if the hematite is after magnetite (martite). Remnant plagioclase phenocrysts are occasionally iron stained and appear pink. Accessory minerals include tourmaline, apatite and rutile (Schink, 1977).

5) **Propylitic (Epidote-Chlorite-Pyrite-Calcite) Facies**

Propylitic alteration is poorly developed within the Red stock. In the Main Phase unit epidote-chlorite-pyrite-calcite alteration is characterized by pseudomorphic replacement of andesine phenocrysts by hematitic albite and lesser epidote. Biotite and hornblende are replaced by chlorite and calcite (Schink, 1977) and occasional epidote. Locally some feldspar-hornblende-biotite porphyry dykes (DPFH) have epidote replacement of hornblende phenocrysts. The augite-phyric volcanic country rocks situated immediately north of the Red stock, underlying Dynamite Hill, are altered by this facies and host 5 percent disseminated epidote and 2 to 5 percent pyrite as disseminations and veinlets.

According to Schink (1977), the sequence of alteration "involves the early formation of a core of orthoclase-albite-biotite alteration in the East and Main Zones, grading out into a fringe of albite-chlorite-calcite alteration. Later alteration involved the formation of a broad zone of quartz-sericite-pyrite alteration which, in the East Zone, grades into kaolinite bearing alteration types characterized by abundant ankerite". Leitch and Elliott (1976) also theorized that a large alkali feldspar-magnetite (potassic) core was overprinted by the present quartz-sericite-pyrite (phyllitic) zone. Payne (1994) suggests that a study of the distribution of hematite after magnetite may be useful in proving this theory, assuming that magnetite was formed originally only in the potassic zone, and that it was altered to hematite but not destroyed during the quartz-sericite-pyrite alteration overprinting process.

Major and minor alteration types and their intensities have been recorded on individual geologic logs and tabulated with the geologic database. However, these observations have not been plotted on the cross-sections or plans due to their secondary importance to host rock type, quartz stockwork distribution and assay results.

VEINING AND STOCKWORK

It was recognized early in the exploration of this property that most of the mineralization is closely associated with individual and sheeted quartz (\pm carbonate) veining, and quartz (\pm carbonate) stockwork zones. Thus, considerable work has been undertaken to understand the relationship and distribution of very weak to intense quartz veining and stockwork zones with potentially economic copper-gold mineralization. Following the discovery of the Gully and Far West Zones in 1995, it is now recognized that a significant portion of the mineralization occurs as very fine- to fine-grained disseminations and fracture-fillings; resulting in visual under estimations of grades. The various quartz, gypsum and carbonate veins, and quartz (\pm carbonate, sulphide) stockwork zones are described in the following text.

1) **Quartz-Carbonate (\pm Sulphide) Veining**

Quartz-carbonate veining is ubiquitous throughout the Red stock and in Middle to Upper Triassic country rocks; especially in zones of fracturing and carbonatization. Pyrite, chalcopyrite, magnetite with lesser hematite and rare molybdenite are often associated with quartz-carbonate veining as fine-grained disseminations within the vein core or as disseminations and/or fracture filling along the vein selvages.

2) **Sheeted Quartz-Sulphide (\pm Carbonate) Veining**

Several discontinuous zones of intense silica flooding, accompanied by significant copper-gold mineralization, form the core of the quartz-carbonate-sulphide vein stockwork in the Red-Chris deposit.

These zones are from 10 to 40 metres wide and are more common at the eastern end. They have an apparent 060° to 070° strike but cross-sectional plots show their orientation is controlled by east-west, sub-vertical splay fault structures from the larger East Zone fault structure. Geological modelling of high grade copper-gold mineralization associated with these zones shows the sheeted quartz veining to trend easterly (090°) and plunge -25° to -40° eastward. A similar orientation is indicated for the less common sheeted quartz zones in the western half of the deposit. These sheeted quartz zones have not been intersected by any recent drilling in the Yellow Chris area.

The sheeted quartz zones are lenticular and composed of parallel to subparallel quartz-sulphide (\pm carbonate) veins. They grade outward into an intense quartz-carbonate-sulphide vein stockwork, and are often associated with younger intense faulting that appears to be superimposed on a pre-existing zone of structural weakness through which the highly siliceous hydrothermal fluids were emplaced. Their present discontinuity appears to be a function of later faulting, rather than a primary feature. Altered Main Phase host rock fragments are occasionally included in the quartz sheeted zones. They have sharp boundaries with the enclosing quartz veins and abundant chalcopyrite disseminations near their margins; indicating that the sheeted quartz-sulphide veins were emplaced quite quickly without pervasive silicification (Schink, 1977).

The sheeted quartz vein material is comprised of 1 to 4 mm wide alternating bands of white to light grey slightly coarser grained quartz and dark grey sulphide-rich microcrystalline quartz. The fine-grained quartz is irregular, with highly sutured grain boundaries, while the coarse material tends to be polygonal (Schink, 1977). Carbonate often occurs in cross-cutting fractures. Magnetite, extensively replaced by specular hematite, may account for up to 30 percent of the vein material. Fine sulphide stringers, both parallel and crosscutting the quartz veins, are composed of dominantly chalcopyrite with lesser pyrite and bornite. Pyrite usually occurs as fine, subhedral to euhedral grains and irregular aggregates in the quartz veins but coarser pyrite is usually poikilitic with inclusions of magnetite, hematite and carbonate. The pyrite to chalcopyrite ratio rarely exceeds 1:50 (Schink, 1977). The upper transition from intensely developed quartz stockwork mineralization to sheeted material is gradational, whereas the lower contact is often faulted and carbonatized (Ash *et al.*, 1995).

Sheeted quartz-carbonate-sulphide zones generally host quite high grade copper-gold mineralization but the zones of weak to intense quartz-sulphide-carbonate stockwork account for most of the mineralized resources.

3) **Quartz-Sulphide-Carbonate Stockwork Zones**

Quartz-sulphide stockwork veins range from 3 to 10 mm in width, rarely attain 1 cm, and form a randomly orientated network pattern with at least two generations present. They are usually symmetrical and characterized by sharp, parallel walls and regular selvages. Sulphides are usually confined to a central vein fracture or core, and to minute cross-fractures. Minor ankerite, magnetite and hematite are usually present in the vein core. Repeated episodes of fracturing and mineralization are reflected by crosscutting relationships. Alteration envelopes appear to be lacking, or they have been overprinted by later alteration facies.

In the stockwork zones the Main Phase rocks are affected by intense and pervasive carbonate alteration associated with lesser fine-grained quartz, sericite and sulphides. Mafic minerals are intensely altered to chlorite-sericite-ankerite-magnetite. Although no ankerite is readily visible, the groundmass of weathered drill core quickly colours orange-brown. Plagioclase phenocrysts are locally kaolinized, but more often strongly sericitized.

Quartz-sulphide vein stockwork is typically absent in Late Phase rocks. Trace quartz stringers or veins are occasionally observed but they usually barren of sulphides. These veins are generally less than 1 cm wide with irregular, vague boundaries and are comprised of white quartz \pm magnetite.

The grades of copper-gold mineralization are very correlative with the intensity of quartz-sulphide stockwork veining in the Red-Chris deposit, unlike the Yellow Chris mineralization. Quartz-sulphide stockwork intensity was based upon the following categories:

| | |
|-----------|------------------------------|
| Trace | Occasional vein |
| Very Weak | Less than 1 vein per metre |
| Weak | 1 to 12 veins per metre |
| Moderate | 12 to 30 veins per metre |
| Strong | More than 30 veins per metre |

These are arbitrary values since it is recognized that the intensity of stockwork veining, although usually gradational, can increase or decrease rapidly across fault structures.

The majority of the mineralized resources occurs in well developed quartz-sulphide (\pm carbonate) vein stockwork zones. These zones are spatially- and probably genetically-related to major east-northeasterly faulting in the East Zone and easterly faulting in the Main, Gully and Far West Zones. Although younger reactivated faults, such as the East Zone fault and its splay faults, have cut and locally displaced the quartz-sulphide stockwork zones they are distributed along the central long axis of the Red stock and dip steeply southward in the East Zone to subvertical in the Main Zone; similar to later faulting.

The quartz-sulphide (\pm carbonate) stockwork zones in the Far West and Gully Zones appear to be vertical or steeply south dipping similar to the east-west reactivated faulting to the east, but they are not as intense as those in the Red-Chris deposit. Within the Yellow Chris area very weak to moderate quartz stockwork zones are also hosted by volcanically-derived sedimentary rocks, and there is considerable finely disseminated chalcopyrite mineralization with gold values associated with these stockwork zones; unlike similar stockwork zones within the plutonic rocks.

As a result of recent reclamation work the mineralized stockwork zones do not crop out within the Red-Chris deposit. A number of weakly mineralized stockwork zones or zones of weak quartz veining were mapped in the East Gully drainage and north of drill hole 95-200. Weak quartz veining was also observed in the West Gully drainage near the Far West Zone. See Figures 13 to 75 and 84 to 91 of this report for the distribution of quartz-sulphide veining and stockwork.

4) **Gypsum Veining**

Irregular zones of weak to strong gypsum veining are located west and southwest of the Red-Chris deposit and in the Yellow Chris area. Gypsum veins and fracture fillings cut all other vein types on the property, and are hosted by the Main and Late Phase units and late-stage quartz-carbonate amygdaloidal dykes (Unit DQCA) of the Red stock. Gypsum zones do not crop out but are most often intersected at depths of less than 10 metres to greater than 350 metres with continuous intersections over 100 metres. Drilling results indicate they may be irregular flat-lying features.

Gypsum commonly occurs as colourless to pale pink, fibrous crystals in planar to irregular veins that average 2 to 5 mm wide but may range up to 10 cm wide. Two exceptionally wide veins of gypsum, 2.13 and 2.84 metres wide, were intersected by drill hole 95-198 situated in the eastern portion of the Far West Zone. Minor pyrite and chalcopyrite rarely occur as coatings along gypsum vein selvages; indicating that gypsum veins may have infilled refractured sulphide-bearing veins or scavenged minor sulphide mineralization from the host rocks.

There are at least two periods of gypsum veining present on the property; one period either pre-dates or is contemporaneous with the emplacement of the Red stock and a second period post-dates the mineralization. Schink (1977) postulated that gypsum was deposited from the interaction of hydrothermal fluids and oceanic waters circulating through the near-surface pluton after the mineralizing events. Gypsum does not appear to have been formed by supergene hydration of anhydrite since anhydrite is

deficient in the Red-Chris hydrothermal system and because the gypsum persists to such substantial depths.

5) Carbonate Veining

Carbonate (\pm quartz) veins and carbonatization of groundmass minerals to ankerite and iron-rich magnesite are widespread throughout the Red stock. Within structural zones the Middle to Upper Triassic volcanic and sedimentary rocks are also intensely carbonatized. Carbonate (ankerite more than calcite) veins occur as white to pale pink irregular veins averaging 2 to 7 mm wide. These veins are commonly barren of sulphides but rarely and locally host pyrite, chalcopyrite and minor sphalerite and galena. Carbonate is also common as fracture fillings and locally occurs as the matrix to tectonic breccias. Sphalerite and minor galena often occur together in pink to buff carbonate-dolomite veins cutting mineralization. Carbonate veins appear to be very late structures since they cut mineralized quartz veins and late-stage quartz-carbonate amygdule dykes; thus, they appear to post-date the main copper-gold hydrothermal mineralizing event.

MINERALIZATION

Pyrite, chalcopyrite and lesser bornite are the principal sulphide minerals of the Red-Chris deposit and Yellow-Chris area. Minor covellite occurs as inclusions in pyrite, and molybdenite, sphalerite and galena occur locally in trace amounts. Gold, second in economic importance to copper, occurs as electrum spatially- and genetically-associated with the chalcopyrite mineralization. Gold was observed in two samples by T. Fraser (Ash *et al.*, 1994). Silver values are geochemically significant but are of minor economic importance.

Pyrite occurs commonly as very fine- to fine-grained, anhedral to euhedral disseminations or fracture fillings. Within the mineralized zones it is commonly poikilitic with numerous copper sulphide and iron oxide inclusions, while elsewhere the inclusions are commonly sericite and dolomite. The pyrite content usually varies disproportionately with quartz vein stockworks. It ranges from 5 to 15 percent in Late Phase rocks, 2 to 4 percent in Main Phase rocks with very weak to weak quartz veining, and often less than 1 to 2 percent in well mineralized Main Phase rocks with moderate to intense quartz stockworks. Pyrite (\pm chalcopyrite) veins cut quartz vein stockworks, and are often associated with narrow hematite veinlets. The partial replacement of mafic phenocrysts and, to a lesser degree, plagioclase phenocrysts is occasionally seen. Pyrite occurs in the Dynamite Hill Volcanics up to 100 to 150 m from the intrusive contact, and occurs as disseminations and fracture fillings in the sedimentary country rocks up to 300 metres from the Red stock north of the Far West Zone.

Pyrite usually occurs as fracture fillings and veinlets peripheral to the quartz-sulphide stockwork zones which coincide with a decrease of quartz-sericite-pyrite alteration. Schink (1977) has defined this transition as the inner limits of the pyrite halo for the Red-Chris deposit. Within the halo, the pyrite to chalcopyrite ratio is very high with pyrite representing up to 15 percent of the rock. Minor copper sulphide are present as inclusions and exsolutions in pyrite, and molybdenite is found in the pyrite halo as quartz-pyrite-molybdenite veins. Tourmaline-pyrite and apatite-pyrite intergrowths occur locally. Minor sphalerite and traces of galena occur in late dolomitic veins and breccias that cut the pyrite halo (Schink, 1977).

Chalcopyrite is most abundant in the quartz-sulphide vein stockworks and quartz-sericite-ankerite alteration selvages. Its content is usually proportional to the intensity of quartz vein stockwork except in the Yellow Chris area. Beyond the quartz stockwork zones chalcopyrite occurs as disseminations, along fractures often associated with pyrite veinlets, and rarely as veinlets. In quartz veins it occurs as disseminations, aggregates, and fracture coatings and fillings both parallel to and crosscutting the quartz veins. When quartz-sulphide vein stockwork intensity diminishes elevated copper grades remain constant due to the presence of fine-grained disseminated chalcopyrite which is associated with pyrite.

Bornite is most common as fracture fillings and fine-grained (0.5 mm) disseminations in the quartz-sulphide vein stockwork zones of the East Zone but it also occurs as fine-grained disseminations in the highly altered Main Phase rocks of the eastern Main Zone. Bornite also occurs in the Gully Zone, but is less abundant than in the Red-Chris deposit. Within quartz stockwork veins bornite occurs as disseminations and microveinlets both within their cores and as crosscutting veins. Bornite is also intimately associated with disseminations, fracture fillings and coatings of specular hematite, and with specular hematite aggregates. This association makes visual grade estimates difficult and invariably low.

Magnetite and hematite are most commonly associated with mineralized quartz stockwork zones and plagioclase-hornblende-biotite dykes where they may represent up to 10 modal percent. They usually occur as fine-grained disseminations in the veins and host rocks but they also occur as magnetite-hematite veinlets and quartz-magnetite veinlets. Magnetite typically forms fine, hexagonal grains which are usually replaced by specular and earthy hematite.

All of the known native gold or electrum mineralization on the property is microscopic. Preliminary thin section and SEM studies of the quartz-sulphide stockwork vein material discovered two grains of gold intimately associated with copper mineralization (Ash *et al.*, 1994). One subround gold grain occurs within a bornite grain hosted by a quartz vein and another gold grain occurs interstitially with a chalcopyrite and bornite-bearing quartz vein.

Copper to gold grade ratios (*i.e.* % Cu to g.p.T. Au) were plotted for several drill holes in the Red-Chris deposit. The results indicate that the gold-bearing mineralization is intimately associated with the copper mineralization and that, with only slight local variations, they are consistent with depth. However, copper to gold grade ratios do vary laterally in a westward direction from 1:0.8 within the Red-Chris deposit, to 1:2 or 1:2.5 within the Gully Zone, and to 1:3 or locally 1:4 within the Far West Zone. This westward transition coincides with increased pyritization, decreased bornite versus chalcopyrite mineralization, and the dominance of phyllic versus potassic-phyllic alteration of the host rocks. Thus, it appears that the alteration and mineralization was 'telescoped' along the axis of the Red stock in a westward direction rather than being equidimensional like a stereotypical porphyry copper-gold deposit.

Prominent limonitic gossans occur within the East and West Gully drainages and along their steep slopes. However, in areas of low relief, such as over the Red-Chris deposit, weak limonite only extends 1 or 2 metres beneath the bedrock surface. The gravel till layer overlying the bedrock is often very limonitic or ferrocrete. Thus, it appears that Recent glaciation has removed any of the supergene mineralization that might have existed over the Red-Chris deposit. However, Great Plains Development reportedly intersected supergene chalcocite mineralization in shallow drilling near the headwaters of the East Gully drainage, and recent drilling in the vicinity has confirmed the possibility of chalcocite mineralization in near-surface fractures within the oxidized layer. Chalcocite occurs along with malachite, azurite and manganese oxides in this oxidized zone. It is possible that there may be other graben-like structures elsewhere within the property where supergene copper mineralization might have been preserved after continental and alpine glaciation.

Deposit Model

The Red-Chris copper-gold deposit has genetic characteristics of both the alkalic and calc-alkalic suites of volcanic porphyry copper deposits in the Canadian Cordillera. The following table, modified after Schink (1977) and Ash *et al.* (1995), illustrates these ambiguities.

TABLE II

Porphyry Copper Characteristics of the Red-Chris Deposit

| | Alkalic Suite | Calc-Alkalic Suite | Red-Chris Deposit |
|---|--|---|--|
| Intrusive Host Rock | Diorite, Monzonite Syenite | Quartz Diorite, Granodiorite | Monzodiorite |
| Host Rock Geochemistry | Alkalic; high K/Na ratio; high alkali/silica ratio | Calc-alkalic; low K/Na ratio; low alkali/silica ratio | Calc-alkalic; low K/Na ratio; moderate alkali/silica ratio |
| Morphology of Host Intrusive | Volcanic | Plutonic, Plhallic | Volcanic |
| Level of Intrusion | Epizonal | Mesozonal | Epizonal to hypabyssal |
| Country Rocks | Generally potassic volcanic rocks | Generally calc-alkalic plutonic and volcanic rocks | Sodic and potassic volcanic rocks |
| Alteration Types (core to rim) | Potassic, Propylitic | Potassic, Phyllic Argillic, Propylitic | Potassic, Argillic, Phyllic, Propylitic |
| Position of Ore in Alteration Sequence | Potassic, Propylitic | Potassic, Phyllic | Potassic, Argillic |
| Associated Metals | Gold, Silver | Molybdenum, Silver, minor Gold | Significant Gold; minor silver; rare molybdenum |
| Style of Mineralization | Sulphide fracture fillings, massive lenses and breccia | Quartz-sulphide vein stockwork breccia | Quartz-sulphide vein stockwork, silicified zone |
| Grade Distribution and Relative Size of Deposit | Moderately erratic; Small to Moderate | Consistent: Moderate to Large | Moderately consistent: Moderate to Large |

The classification of the Red-Chris deposit, as to its genetic porphyry copper suite, remains the subject of debate. Newell and Peatfield (1995) tend to place it in the alkalic suite of volcanic porphyry copper deposits and conclude that the calc-alkalic features are the result of secondary processes, such as the influence of oceanic waters on the hydrothermal fluids. It is the writer's opinion that the Red-Chris deposit and Yellow Chris mineralization should be classified as a 'bulk tonnage copper-gold deposit with hybrid or transitional porphyry copper characteristics' since, despite its relatively long exploration history, more geological research is required to refine its specific classification.

GEOCHEMICAL RESULTS

Soil Geochemical Survey

When the results of the 1995 extended soil geochemical survey were compared to the results of previous soil sampling surveys it was apparent that there was only one anomalous copper-in-soil sample (i.e. greater than 100 ppm copper) within the survey area. The soil sample from grid coordinates 99800 North by 46300 East returned a value of 187 ppm copper. All other samples were less than 100 ppm copper and most were less than 65 ppm copper. Only five other widely distributed soil samples returned values between 65 and 99 ppm copper. The highest of these secondary sites is located at grid coordinates 100300 North by 46200 East and may be significant. Generally, there appears to be an apparent increase in copper-in-soil values from the northeastern corner of the extended soil sampling grid but no obvious multi-site copper-in-soil anomalies were indicated from the sampling work.

Anomalous gold-in-soil values are considered to be greater than 50 ppb, based upon previous soil sampling survey results. Only four soil samples returned gold-in-soil values greater than 25 ppb. Their sample sites are located at: 100350 North by 44700 East (40 ppb Au), 100450 North by 45100 East (45 ppb Au), 100250 North by 46300 East (65 ppb Au), and 99650 North by 46600 East (45 ppb Au). These sample sites are widely distributed throughout the grid and do not form any obvious or significant anomaly.

A review of past soil geochemical data revealed that there are several small soil geochemical anomalies beyond the limits of the presently known mineralization. A single-site copper-in-soil anomaly (greater than 1,000 ppm) is situated at 99300 North by 49700 East and is considered significant; especially since the adjacent gridlines were not sampled. This anomaly may be reflecting the upward migration of copper ionized waters along the South Boundary Fault and, thus, may reflect buried and untested mineralization. In addition, there are several near near-threshold copper-in-soil anomalies located south of the Red-Chris deposit, in the area apparently underlain by barren Bowser Lake Group clastic sedimentary rocks. These weak anomalies may be reflecting similar seepages of copper ionized waters along the South Boundary Fault faults but not mineralization within the Bowser Lake Group.

A copper-in-soil anomaly with values up to 1,000 ppm is situated east of the South Gully Zone, east of the East Gully drainage, and may reflect the eastern strike extension of the Gully Zone. It was tested by drill hole 95-190 east of the highest copper-in-soil values but no significant mineralization was intersected. It is recommended that at least one more drill hole test this anomaly during future work.

A copper-in-soil anomaly is situated west of the Far West Zone, possibly reflecting an offset of the Far West Zone mineralization west of Bowers Creek. This 200-metre wide anomaly was discovered by Great Planes in 1970, located between grid coordinates 99700 to 99750 North by 47900 to 48300 East. A plot of recent drilling in the vicinity indicates that drill holes 95-167 and 95-196 tested the area 100 metres north of this soil anomaly between it and another copper-in-soil anomaly north of the holes.

The Great Planes survey results show two copper-in-soil anomalies approximately 300 metres south of the Gully Zone. These anomalies were partly resampled by the last two sites of the 1994 soil geochemical sampling survey undertaken by American Bullion Minerals but the survey grid area only covered the northern edge of the anomaly and the gridlines to the west did not extend far enough south. Within this copper-in-soil anomaly one sample site that returned a value of 32 ppb gold and there is increased charginabilities in the the vicinity, based on 1994 induced polarization results, but unfortunately the geophysical survey did not cover the area of interest.

A single-site copper- and gold-in-soil anomaly (i.e. greater than 100 ppm copper and 30 ppb gold) occurs at grid coordinates 10750 North by 51700 East. This anomaly may not significant but it is underalin by the Red stock.

A small soil geochemical survey was conducted in 1970 on the Sus claims, now the western portion of the Sus North claim, situated approximately 4.0 km northeast of the Red-Chris deposit. A sporadic molybdenum-in-soil anomaly (greater than 10 ppm molybdenum), measuring 1,000 by 300 metres, was discovered with a smaller but coincident copper-in-soil anomaly (greater than 100 ppm copper). Silver Standard Mines Ltd. and Texasgulf Inc. tested the coincident soil anomaly with hand trenching, chip sampling and two percussion drill holes but only geochemically-significant molybdenum and copper mineralization was found. The two percussion drill holes intersected up to 0.03 % Cu and 0.007 % Mo over lengths of more than 60 metres. It is recommended that during future field work geologists visit the site of this work and re-assess its exploration potential.

Further geochemical soil sampling and induced polarization surveying are warranted south and west of the Gully Zone. Current gridlines should be extended to the south and west for at least 1,000 metres. Also, further soil sampling should be conducted west and north of the Far West Zone to complete the soil sampling coverage of the existing control grid area. This soil sampling would serve to confirm at least two copper- and gold-in-soil anomalies that are indicated from previous survey results.

Mineral Characterization Study

The results of 2,458 I.C.P. analyses on 20 percent of the drill core samples indicate that, except for copper and gold, there are no other metals of significant economic interest. Silver values are generally quite low but silver could add significant value to a copper-gold concentrate. Lead and zinc values appear to be of little economic significance, and arsenic, antimony, barium and other elements that are generally considered to be detrimental from a metallurgical standpoint are all quite low. No mercury analyses were conducted on the samples, but Ash *et al.* (1995) reports that trace amounts (i.e. less than 6 ppm mercury) may be associated with the high grade mineralization. The following table shows the analytical and statistical results for some the more commonly associated elements with porphyry copper-gold mineralization and, for comparison, the statistical results for gold which was compiled for the same sample set as the I.C.P. data but was determined using fire assay techniques.

| | Highest Value (ppm) | Lowest Value (ppm) | Mean (ppm) | Median (ppm) | Standard Deviation |
|--------------------------|------------------------|-----------------------|---------------|-----------------|-----------------------|
| Silver | 200.0 | 0.1 | 1.30 | 0.9 | 4.20 |
| Arsenic | 1,760.0 | 1.0 | 85.00 | 56.0 | 105.00 |
| Antimony | 1,259.0 | 1.0 | 6.00 | 1.0 | 31.00 |
| Barium | 1,972.0 | 15.0 | 123.00 | 94.0 | 99.00 |
| Bismuth | 35.0 | 1.0 | 3.00 | 1.0 | 3.00 |
| Cadmium | 100.0 | 0.1 | 0.40 | 0.1 | 4.70 |
| Chrome | 538.0 | 1.0 | 41.00 | 32.0 | 46.00 |
| Cobalt | 88.0 | 4.0 | 15.00 | 14.0 | 7.00 |
| Lead | 4,359.0 | 1.0 | 76.00 | 62.0 | 160.00 |
| Molybdenum | 463.0 | 1.0 | 12.00 | 7.0 | 18.00 |
| Nickel | 309.0 | 2.0 | 21.00 | 16.0 | 24.00 |
| Tungsten | 19.0 | 1.0 | 2.00 | 1.0 | 2.00 |
| Zinc | >10,000.0 | 12.0 | 251.00 | 128.0 | 560.00 |
| Gold (Fire Assay-g.p.T.) | 3.22 | 0.01 | 0.16 | 0.09 | 0.21 |

The writer utilized a geostatistical software program to calculate the correlation coefficients for the database, correlate each of the 31 elements with the copper and gold assays for the same sample set, and plot a dendograph of the correlation coefficients. The results of this work show a positive correlation between gold, copper, silver and potassium but there is no correlation between these elements and any of the other base and trace elements. The geochemical association of gold, copper and silver with

potassium is obvious since the mineralization is hosted by plutonic and volcanically-derived sedimentary rocks that have undergone weak to strong sericitization and/or potassic alteration. However, the results also indicate that the rare galena, sphalerite and molybdenite mineralization may not be genetically associated with the porphyry copper-gold (\pm silver) mineralization.

The results of mineral characterization study are very positive for the project since they indicate that a relatively 'clean' copper-gold-silver concentrate could be produced without any serious penalty contaminants. Nevertheless, continued analytical work must be undertaken during future drilling campaigns to quantify and qualify the elemental characteristics of the Red-Chris mineralization. A compilation of the 31-element analytical results with statistical summaries and the Certificates of Analysis accompany this report as Appendix X.

Check Assaying and Analytical Quality Study

Mr. Barry W. Smee, Ph. D., P. Geo., of Smee and Associates Consulting Ltd. in Vancouver, B.C. was retained by American Bullion Minerals Ltd. to examine the analytical quality of the 1995 diamond drill core assaying work as an addition to the detailed evaluation undertaken on the 1994 analytical results (Smee, 1995).

During the 1995 exploration program, 1,235 'blind' duplicate samples and 1,804 assay laboratory standards (i.e. 451 samples of each of the AM-A, AM-B, STD and BLK laboratory standards) were assayed for copper. The 'blind' duplicate samples were inserted into the sample sequence by the field geologists and samplers. In addition, after the copper and gold assay results were reported by Min-En Laboratories, four hundred and ninety-five (495) selected sample pulps were delivered to Chemex Labs Ltd. in North Vancouver, British Columbia for copper and gold check-assaying. These sample pulps were re-assayed using similar procedures as those undertaken at Min-En Laboratories. Thus, by the end of the program 491 pairs of copper assays (4 cases outside scale) and 488 pairs of gold assays (7 cases outside scale) were directly comparable for bias and precision studies by Barry W. Smee.

According to Smee (1996),

"The 1995 drill core sampling and analysis appears to be slightly better controlled than the 1994 program. The standards show that the data is accurate; no samples lie outside of acceptable limits. (However, the blank samples indicate that the 1995 analysis is free of contamination, and transcription errors should be few. However, the standards analyzed in 1995 are marginally lower in mean concentrations than they were in 1994.)

The geochemical analysis for both copper and gold show a slight rotational bias, when Min-En is compared to Chemex. This bias does not affect the validity of the data. The assay data also shows a slight rotational bias for gold. This bias may be related to the fact that Chemex reports gold analysis in ounces per ton, then uses a multiplication factor to convert to grams per tonne. This biases the data in 0.03 increments. At low concentrations, this rounding-off can bias the low concentrations by more than 10%.

The precision calculations show that the 1995 data is slightly more precise than found in 1994. The precision for both datasets is excellent at the higher concentrations; however, gold at the 0.3 gpt concentration has a precision of 30%. This must be considered when calculating ore reserves."

The above results of the analytical examination work are contained in the "Report on Analytical Quality for the 1995 Drill Results, Red Chris Property" by Barry W. Smee, dated February, 1996, and the entire report accompanies this report in Appendix XIII.

DIAMOND DRILLING RESULTS

The 1995 diamond drilling program was successful in discovering copper-gold mineralization across the width of the Red stock and over a 400-metre strike length west of the known Red-Chris deposit. Exploration drilling over a 2-kilometre strike length, west of the deposit, also discovered significant copper-gold mineralization underlying the Gully and Far West exploration targets which were identified in 1994. The property has now been tested by 244 exploratory diamond drill holes, 3 geotechnical diamond drill holes and 44 percussion drill holes, totalling 74,782.52 metres of drilling. The results from this work indicate that the Red-Chris deposit is still open both laterally and vertically, and the Far West and Gully Zones may host substantial copper-gold mineralization amenable to open pit mining.

Most of the 1995 diamond drilling in the Main and East Zones of the Red-Chris deposit was concentrated along the northern, southern and western margins of the deposit. In 1994, diamond drilling had shown that the Main and East Zones are not discretely mineralized bodies but comprise a continuous zone of copper-gold mineralization that has been locally intruded by post-mineral dykes and slightly displaced by younger faulting. In 1995, diamond drilling tested the Red-Chris deposit from the southern to northern contacts of the Red stock and for more than 500 metres along the western strike extension of the Main Zone. It also tested the vertical continuity of the mineralization to a depth of over 750 metres.

Diamond drilling along the southern margins of the Red stock discovered copper-gold mineralization south of the previously-assumed limits of the Red-Chris deposit. More importantly, the copper (%) to gold (g.p.T.) grade ratios of this mineralization varied locally from the deposit average of 1:0.8 to ratios of 1:1 or 1:2. These results indicate that there was probably a later structurally-controlled gold-bearing mineralizing event superimposed on the earlier more-pervasive copper-gold mineralization. Furthermore, this event was probably related to reactivation of the South Boundary fault structure since the higher grade gold-bearing mineralization appears to be spatially-related to this structure.

Copper-gold mineralization occurs throughout the Red stock but appears to decrease in grade near the northern intrusive contact of the stock; although this margin is still only sparsely tested along its strike length. There appears to be a zone of either poorly mineralized Main Phase or barren Late Phase plutonic rocks between the Red-Chris deposit and the intrusive contact of the stock with the Late Triassic Dynamite Hill volcanic strata. The width of this poorly-mineralized margin appears to vary from 50 to more than 100 metres and may be related to the proximity and distribution of pre-mineral fault structures along the axis of the stock. It is also noteworthy that propylitically-altered volcanics only occur over a very narrow width, usually less than 100 metres, along the northern margins of the intrusive contact. Beyond this narrow band the Dynamite Hill volcanic strata are only regionally metamorphosed to lower greenschist facies and host less than one percent pyrite. Such a narrow alteration band indicates that the structural features controlling the alteration and mineralization of the Red-Chris deposit were largely restricted to axis of the stock and did not pervade the older volcanic strata to the north.

One of the most important results of the 1995 diamond drilling program was the discovery of the western extension of the Red-Chris deposit. Diamond drilling by Texasgulf had indicated that the Main Zone might be truncated at a north-northwesterly fault structure situated near gridline 49800 East. Two 1994 drill holes (i.e. 94-123 and 94-124) tested for buried mineralization near this fault structure and found that the mineralization might have been downdropped and displaced laterally by the fault structure. Further drilling was recommended west of this structure to test for mineralization trending northwesterly from the Main Zone (Blanchflower, 1995). This drilling discovered that the western mineralization of the Red-Chris deposit probably splits into two relatively-distinct bodies west of the fault structure and that these bodies, although displaced by westside-down, strike-slip faulting, do continue to at least gridline 49550 East. At this grid easting the mineralization is beneath grid northings 99900 and 99700, and buried from 300 to 350 metres beneath the surface. This deep copper-gold mineralization may not be readily amenable to open pit mining but the intervening nearer-surface mineralization increased the geological resources of the Red-Chris deposit (see Giroux, 1996).

Drill holes 95-140 and 95-145 were drilled in the East Zone to test the vertical continuity of its higher grade copper-gold mineralization. Drill hole 95-140 was collared at grid coordinates 100600 North by 50750 East and was finally terminated at a length of 812.90 metres or approximately 750 metres vertically beneath the surface. This hole intersected 292.61 metres of mineralization grading 0.573 percent copper and 0.565 g.p.T. gold from 520.29 to 812.90 metres, and the last 3.05-metre section of drill core returned a grade of 0.496 percent copper and 0.59 g.p.T. gold. Drill hole 95-145, located 100 metres due east of DDH 95-140, was terminated at a length of 599.54 metres and it intersected 0.77 percent copper and 0.80 g.p.T. gold over 140.2 metres from 360 to 480 metres vertically beneath the surface. These results show that the copper-gold mineralization of the deposit occurs over significant vertical distances, and that the depth of the mineralization remains to be determined.

Current drilling results indicate that there are two near-surface core zones within the Main and East Zones of the Red-Chris deposit that grade greater than 0.6 percent copper and 0.6 g.p.T. gold and are amenable for 'starter' open pit mining. These zones are separated and surrounded by a much larger, less well delineated zone of greater than 0.25 percent copper and 0.2 g.p.T. gold mineralization. The strike length of the Red-Chris deposit, comprising both the Main and East Zones, is now in the order of 1.7 kilometres with widths ranging from 250 to 700 metres or more.

The Gully Zone is a 700-metre long by 400-metre wide coincident geochemical and geophysical anomaly centred between the East and West Gully drainages. Exploration drilling discovered two east-west trending, subvertical zones of significant copper-gold mineralization. The northern zone is centred at grid coordinates 99800 North by 49000 East, and the southern zone is centred at 99200 North by 49000 East. Both zones, although they remain open laterally and vertically, have been tested by widely-spaced drilling over strike distances of 400 to 500 metres and widths from 200 to 300 metres.

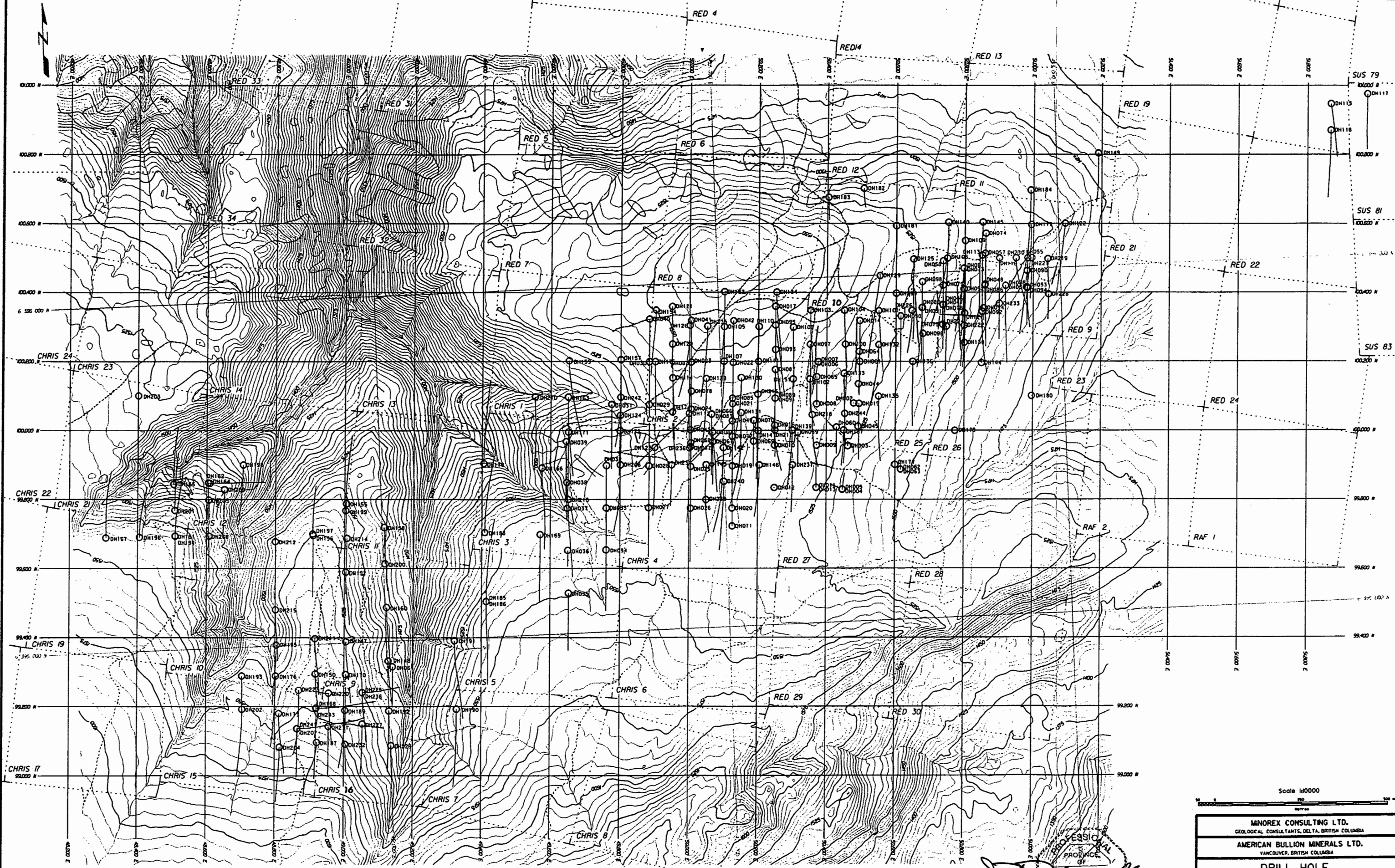
The southern portion of the Gully Zone hosts a subvertical zone of copper-gold mineralization with a tested strike length of 500 metres and widths over 300 metres. Drill intercepts within this zone typically range from more than 0.3 percent copper and 0.3 g.p.T. gold over lengths of 15 to more than 300 metres. There are also exceptionally high grade sections within this mineralized zone, such as the one intercepted by DDH 95-168, with grades of 1.486 percent copper and 3.266 g.p.T. gold over 18.29 metres (see Figure 25).

The northern portion of the Gully Zone hosts several narrower subvertical zones of copper-gold mineralization with grades generally ranging up from 0.15 to 0.40 percent copper but with significant associated gold values, usually grading 0.20 to 0.40 g.p.T. gold. Due to the widely-spaced drilling, the distribution and delineation of this mineralization remains to be tested.

Aside from the importance of its discovery, it is important to note that the Gully Zone mineralization generally occurs with copper to gold grade ratios averaging from 1:1.5 to 1:2.5 (i.e. percent copper to grams gold per tonne); indicating that the sulphide mineralization hosts higher gold grades and becomes more pyritic along the western strike extensions of the Red stock.

The Far West Zone is a 600-metre by 600-metre coincident geochemical and geophysical exploration target centred at grid coordinates 99900 North by 48400 East. It was tested with widely-spaced drill holes directed at the centre of a strong high chargeability-low resistivity geophysical anomaly. These holes intersected gold-rich pyrite-chalcopyrite mineralization in two subvertical, easterly trending structures centred at 99800 North by 48500 East. Assay results indicate that the copper to gold grade ratios are in the order of 1:3 with copper grades typically ranging from 0.2 to 0.35 percent and gold values ranging from 0.6 to 0.75 g.p.T. Considerably more drilling will have to be conducted within this zone to delineate the mineralized sections and their trends.

See Table III of this report for the tabulated drilling results, and Figures 6, 7, 8 and 10 to 83 for plan and cross-sectional plots of all diamond drill holes.



Scale 1:10000

MINOREX CONSULTING LTD.
GEOLOGICAL CONSULTANTS, DELTA, BRITISH COLUMBIA

AMERICAN BULLION MINERALS LTD.
VANCOUVER, BRITISH COLUMBIA

**DRILL HOLE
PLAN**
RED-CHRIS PROPERTY
LARD MINE DIVISION, BRITISH COLUMBIA, CANADA

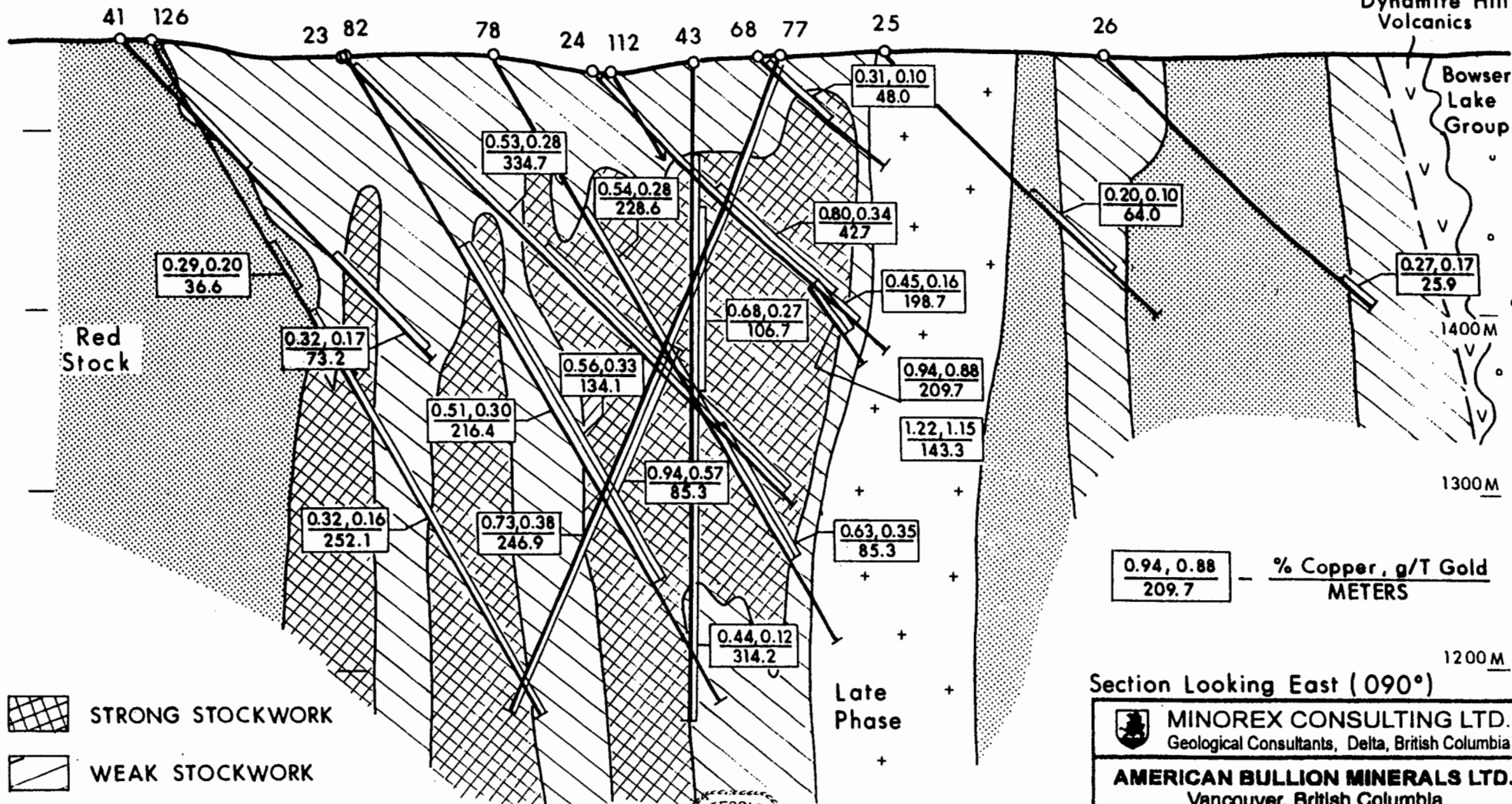
Date: April, 1996 Scale: 1:10000 File: 6
 Drawn By: JDB/REM File:

J. Blanchflower
 J. Blanchflower
 BRITISH COLUMBIA
 GEOLOGICAL ENGINEER

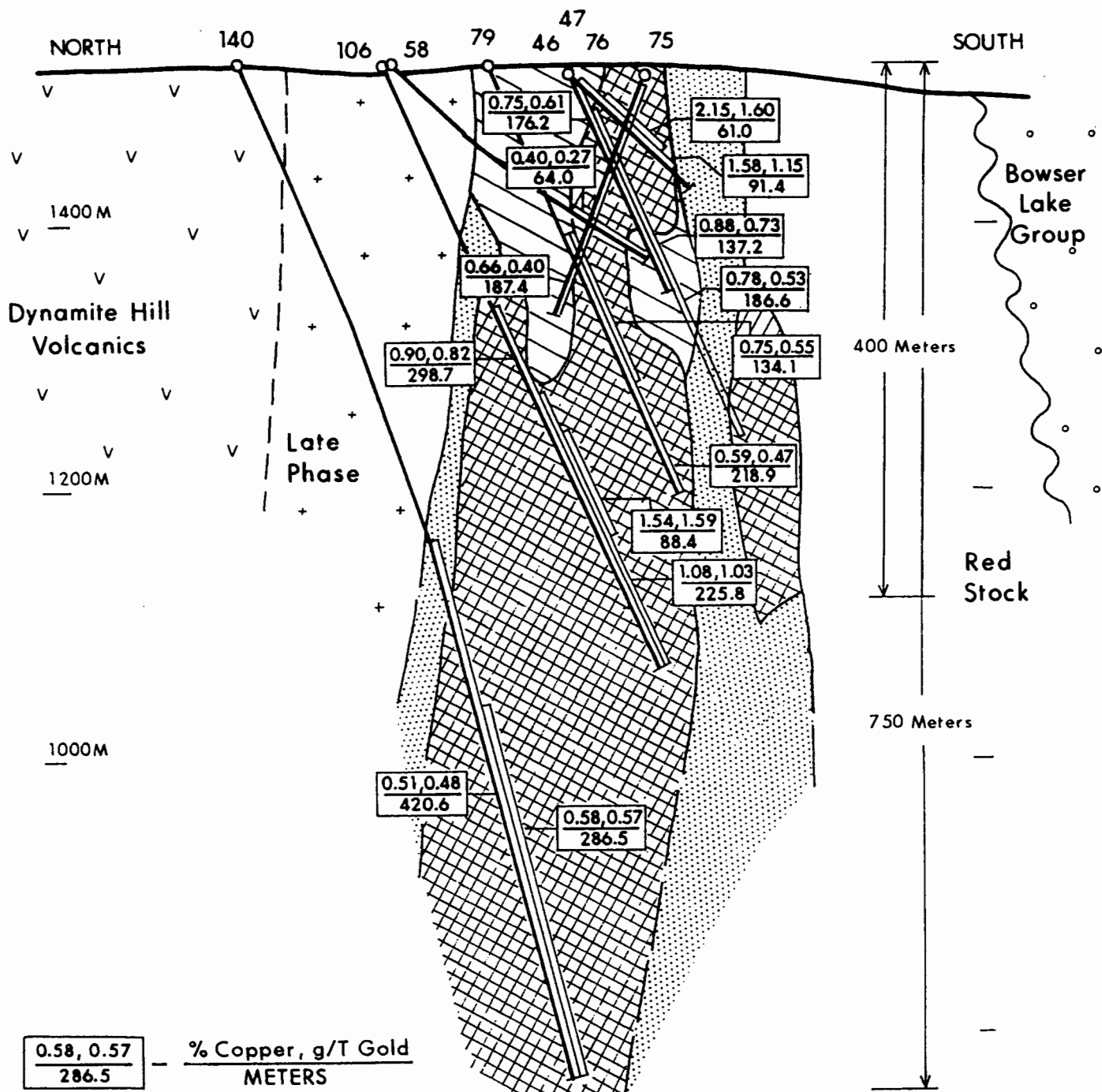
Report 1 by J.D. Blanchflower, P. Geo.

NORTH




SOUTH
Dynamite Hill
Volcanics

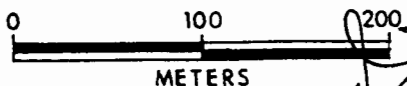


To Accompany Report By J. D. Blanchflower, P. Geo.



0.58, 0.57 / 286.5 — % Copper, g/T Gold
METERS

-  STRONG STOCKWORK
-  WEAK STOCKWORK
-  DISSEMINATED



PROFESSIONAL
PROVINCE
OF
J. D. Blanchflower
BRITISH
COLUMBIA
GEOLOGICAL
ENGINEER

To Accompany Report By J. D. Blanchflower, P. Geo.

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Vancouver, British Columbia

**CROSS SECTION 50,750E
RED CHRIS DEPOSIT**

| | |
|------------------|-----------------|
| Drawn By: J.S., | Scale: As Shown |
| Date: April 1996 | Figure No. 8 |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) | |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|-------|--------------|--------|-----------|--------|------------|------------|-------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | | |
| 133 | HQ/NQ | 100165.26 | 50450.60 | 1527.26 | 5-May | 10-May | 180.0 | -60.0 | 449.88 | 1,476 | 41.45 | 50.44 | 8.99 | 29.5 | 0.471 | 0.399 | |
| | | | | | | | | | | | 206.65 | 257.86 | 51.21 | 168.0 | 0.473 | 0.747 | |
| | | | | | | | | | | | 266.09 | 273.10 | 7.01 | 23.0 | 0.580 | 0.518 | |
| | | | | | | | | | | | 309.68 | 343.20 | 33.52 | 110.0 | 0.308 | 0.304 | |
| | | | | | | | | | | | or | 204.22 | 364.54 | 160.32 | 526.0 | 0.313 | 0.395 |
| 134 | HQ/NQ | 100400.71 | 50252.45 | 1554.43 | 5-May | 10-May | 180.0 | -60.0 | 508.10 | 1,667 | 309.98 | 441.05 | 131.07 | 430.0 | 0.305 | 0.211 | |
| | | | | | | | | | | | 441.05 | 508.10 | 67.05 | 220.0 | 0.404 | 0.334 | |
| | | | | | | | | | | | or | 309.98 | 508.10 | 198.12 | 650.0 | 0.338 | 0.253 |
| | | | | | | | | | | | or | 288.65 | 508.10 | 219.45 | 720.0 | 0.325 | 0.240 |
| | | | | | | | | | | | or | 288.65 | 508.10 | 219.45 | 720.0 | 0.325 | 0.240 |
| 135 | HQ | 100098.49 | 50550.28 | 1519.86 | 10-May | 13-May | 180.0 | -60.0 | 370.64 | 1,216 | 260.91 | 297.48 | 36.57 | 120.0 | 0.213 | 0.383 | |
| | | | | | | | | | | | 297.48 | 312.72 | 15.24 | 50.0 | 0.409 | 1.290 | |
| | | | | | | | | | | | or | 260.91 | 312.72 | 51.81 | 170.0 | 0.271 | 0.650 |
| 136 | HQ | 100199.35 | 50649.85 | 1517.02 | 10-May | 13-May | 180.0 | -60.0 | 385.88 | 1,266 | | | | | | | |
| 137 | HQ | 100000.58 | 50449.76 | 1524.08 | 15-May | 16-May | 180.0 | -60.0 | 200.25 | 657 | 53.95 | 87.48 | 33.53 | 110.0 | 0.441 | 0.655 | |
| | | | | | | | | | | | 102.72 | 111.86 | 9.14 | 30.0 | 0.308 | 0.290 | |
| | | | | | | | | | | | or | 53.95 | 111.86 | 57.91 | 190.0 | 0.337 | 0.480 |
| or | 50.90 | 111.86 | 60.96 | 200.0 | 0.329 | 0.465 | | | | | | | | | | | |
| 138 | HQ | 100254.23 | 50799.23 | 1504.31 | 15-May | 17-May | 180.0 | -60.0 | 216.71 | 711 | | | | | | | |
| 139 | HQ | 100000.53 | 50300.01 | 1530.56 | 16-May | 19-May | 180.0 | -60.0 | 349.61 | 1,147 | 130.15 | 163.68 | 33.53 | 110.0 | 0.330 | 0.229 | |
| | | | | | | | | | | | 163.68 | 236.83 | 73.15 | 240.0 | 0.500 | 0.112 | |
| | | | | | | | | | | | 236.83 | 261.21 | 24.38 | 80.0 | 0.302 | 0.043 | |
| | | | | | | | | | | | or | 130.15 | 261.21 | 131.06 | 430.0 | 0.419 | 0.129 |
| or | 130.15 | 276.45 | 146.30 | 480.0 | 0.401 | 0.121 | | | | | | | | | | | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|-------|--------------|--------|-----------|-------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | |
| 140 | HQ/NQ | 100603.22 | 50751.94 | 1519.07 | 17-May | 27-May | 180.0 | -65.0 | 812.90 | 2,667 | 392.28 | 438.00 | 45.72 | 150.0 | 0.744 | 0.572 |
| | | | | | | | | | | | 471.53 | 498.04 | 26.51 | 87.0 | 0.247 | 0.198 |
| | | | | | | | | | | | 520.29 | 690.98 | 170.69 | 560.0 | 0.555 | 0.524 |
| | | | | | | | | | | | 690.98 | 730.61 | 39.63 | 130.0 | 0.320 | 0.232 |
| | | | | | | | | | | | 730.61 | 812.90 | 82.29 | 270.0 | 0.734 | 0.809 |
| | | | | | | | | | | | or 520.29 | 812.90 | 292.61 | 960.0 | 0.573 | 0.565 |
| or 392.28 | 812.90 | 420.62 | 1,380.0 | 0.513 | 0.480 | | | | | | | | | | | |
| 141 | HQ | 99998.89 | 50200.06 | 1534.77 | 19-May | 21-May | 180.0 | -60.0 | 303.58 | 996 | 102.72 | 145.39 | 42.67 | 140.0 | 0.525 | 0.254 |
| | | | | | | | | | | | 218.54 | 233.78 | 15.24 | 50.0 | 0.470 | 0.248 |
| 142 | HQ/NQ | 99949.92 | 50099.60 | 1540.78 | 21-May | 26-May | 180.0 | -60.0 | 529.44 | 1,737 | 8.53 | 90.53 | 82.00 | 269.0 | 0.778 | 0.311 |
| | | | | | | | | | | | 130.15 | 258.17 | 128.02 | 420.0 | 0.454 | 0.140 |
| | | | | | | | | | | | 306.93 | 398.37 | 91.44 | 300.0 | 0.323 | 0.301 |
| | | | | | | | | | | | 410.57 | 428.85 | 18.28 | 60.0 | 0.474 | 0.643 |
| | | | | | | | | | | | 428.85 | 453.24 | 24.39 | 80.0 | 1.034 | 1.140 |
| | | | | | | | | | | | 453.24 | 497.13 | 43.89 | 144.0 | 0.555 | 0.423 |
| | | | | | | | | | | | 497.13 | 506.27 | 9.14 | 30.0 | 0.185 | 0.257 |
| | | | | | | | | | | | 506.27 | 523.34 | 17.07 | 56.0 | 0.452 | 0.452 |
| or 410.57 | 523.34 | 112.77 | 370.0 | 0.600 | 0.605 | | | | | | | | | | | |
| or 8.53 | 523.34 | 514.81 | 1,689.0 | 0.449 | 0.281 | | | | | | | | | | | |
| or 130.15 | 523.34 | 393.19 | 1,290.0 | 0.423 | 0.301 | | | | | | | | | | | |
| 143 | HQ | 99900.15 | 50049.61 | 1543.34 | 26-May | 29-May | 180.0 | -60.0 | 415.14 | 1,362 | 273.41 | 288.65 | 15.24 | 50.0 | 0.408 | 0.290 |
| | | | | | | | | | | | 288.65 | 300.84 | 12.19 | 40.0 | 1.005 | 0.923 |
| | | | | | | | | | | | 300.84 | 328.27 | 27.43 | 90.0 | 0.376 | 0.412 |
| | | | | | | | | | | | 328.27 | 343.51 | 15.24 | 50.0 | 0.606 | 1.028 |
| | | | | | | | | | | | 343.51 | 358.75 | 15.24 | 50.0 | 0.310 | 0.430 |
| | | | | | | | | | | | or 273.41 | 358.75 | 85.34 | 280.0 | 0.501 | 0.576 |
| | | | | | | | | | | | 395.33 | 401.42 | 6.09 | 20.0 | 0.297 | 0.405 |
| or 273.41 | 401.42 | 128.01 | 420.0 | 0.389 | 0.461 | | | | | | | | | | | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|--------|--------------------------|--------|-----------|-------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | |
| 144 | HQ | 100195.37 | 50849.63 | 1491.01 | 27-May | 29-May | 360.0 | -65.0 | 29.57 | | 97 Abandoned in Fault | | | | | |
| 145 | HQ/NQ | 100603.23 | 50851.78 | 1515.41 | 29-May | 5-Jun | 180.0 | -60.0 | 599.54 | 1,967 | 367.89 | 380.09 | 12.20 | 40.0 | 0.850 | 0.680 |
| | | | | | | | | | | | 386.18 | 398.37 | 12.19 | 40.0 | 1.016 | 0.740 |
| | | | | | | | | | | | or 367.89 | 398.37 | 30.48 | 100.0 | 0.778 | 0.587 |
| | | | | | | | | | | | 425.81 | 465.43 | 39.62 | 130.0 | 0.574 | 0.438 |
| | | | | | | | | | | | 480.36 | 526.39 | 46.03 | 151.0 | 1.090 | 1.283 |
| | | | | | | | | | | | or 425.81 | 566.01 | 140.20 | 460.0 | 0.770 | 0.801 |
| or 474.27 | 566.01 | 91.74 | 301.0 | 0.907 | 1.018 | | | | | | | | | | | |
| | | | | | | | | | | 589.79 | 599.54 | 9.75 | 32.0 | 0.365 | 0.351 | |
| 146 | HQ | 99899.62 | 50203.65 | 1533.63 | 29-May | 31-May | 180.0 | -60.0 | 309.98 | 1,017 | Low Grade Mineralization | | | | | |
| 147 | NQ | 99388.53 | 49005.28 | 1524.87 | 31-May | 3-Jun | 180.0 | -60.0 | 377.04 | 1,237 | 273.41 | 291.69 | 18.28 | 60.0 | 0.879 | 0.522 |
| | | | | | | | | | | | 300.84 | 328.27 | 27.43 | 90.0 | 0.780 | 0.471 |
| | | | | | | | | | | | 337.41 | 346.56 | 9.15 | 30.0 | 0.478 | 0.303 |
| | | | | | | | | | | | or 273.41 | 346.56 | 73.04 | 240.0 | 0.594 | 0.383 |
| 148 | NQ | 99332.56 | 49127.86 | 1485.34 | 3-Jun | 5-Jun | 180.0 | -60.0 | 288.65 | 947 | 117.96 | 147.83 | 29.87 | 98.0 | 0.309 | 0.150 |
| | | | | | | | | | | | 242.93 | 264.26 | 21.33 | 70.0 | 0.290 | 0.159 |
| 149 | HQ | 100803.96 | 51189.57 | 1463.06 | 5-Jun | 7-Jun | 180.0 | -60.0 | 300.84 | 987 | | | | | | |
| 150 | NQ | 99294.21 | 48916.91 | 1540.61 | 5-Jun | 9-Jun | 180.0 | -60.0 | 401.42 | 1,317 | 99.67 | 130.15 | 30.48 | 100.0 | 0.509 | 0.423 |
| | | | | | | | | | | | or 99.67 | 157.58 | 57.91 | 190.0 | 0.339 | 0.365 |
| | | | | | | | | | | | 291.69 | 373.99 | 82.30 | 270.0 | 0.407 | 0.369 |
| | | | | | | | | | | | or 255.12 | 373.99 | 118.87 | 390.0 | 0.341 | 0.321 |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) | |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|-------|--------------------------|--------|-----------|--------|------------|------------|-------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | | |
| 151 | HQ | 100148.82 | 50301.74 | 1534.56 | 7-Jun | 11-Jun | 180.0 | -60.0 | 401.42 | 1,317 | 17.37 | 23.47 | 6.10 | 20.0 | 0.316 | 0.245 | |
| | | | | | | | | | | | 166.73 | 178.31 | 11.58 | 38.0 | 0.298 | 0.088 | |
| | | | | | | | | | | | 185.01 | 206.35 | 21.34 | 70.0 | 0.380 | 0.149 | |
| | | | | | | | | | | | 215.49 | 313.03 | 97.54 | 320.0 | 0.360 | 0.353 | |
| | | | | | | | | | | | or | 150.57 | 313.03 | 162.46 | 533.0 | 0.327 | 0.257 |
| 152 | NQ | 99589.50 | 49003.72 | 1514.67 | 9-Jun | 15-Jun | 180.0 | -60.0 | 328.27 | 1,077 | 63.09 | 72.24 | 9.15 | 30.0 | 0.289 | 0.413 | |
| | | | | | | | | | | | or | 40.23 | 90.53 | 50.30 | 165.0 | 0.239 | 0.307 |
| | | | | | | | | | | | 206.35 | 224.64 | 18.29 | 60.0 | 0.269 | 0.345 | |
| 153 | HQ | 100401.23 | 50100.50 | 1557.05 | 11-Jun | 15-Jun | 180.0 | -60.0 | 447.14 | 1,467 | 157.28 | 166.73 | 9.45 | 31.0 | 0.279 | 0.143 | |
| | | | | | | | | | | | 218.54 | 239.80 | 21.26 | 69.8 | 0.303 | 0.154 | |
| | | | | | | | | | | | 252.07 | 264.26 | 12.19 | 40.0 | 0.280 | 0.125 | |
| | | | | | | | | | | | 297.79 | 303.89 | 6.10 | 20.0 | 0.322 | 0.145 | |
| | | | | | | | | | | | 355.70 | 370.94 | 15.24 | 50.0 | 0.292 | 0.128 | |
| | | | | | | | | | | | 396.54 | 416.67 | 20.13 | 66.0 | 0.305 | 0.209 | |
| | | | | | | | | | | | 434.95 | 444.10 | 9.15 | 30.0 | 0.363 | 0.217 | |
| or | 215.49 | 303.89 | 88.40 | 290.0 | 0.253 | 0.123 | | | | | | | | | | | |
| 154 | HQ | 100348.85 | 49900.65 | 1546.19 | 15-Jun | 19-Jun | 180.0 | -60.0 | 385.27 | 1,264 | 297.79 | 385.27 | 87.48 | 287.0 | 0.352 | 0.160 | |
| | | | | | | | | | | | or | 258.17 | 385.27 | 127.10 | 417.0 | 0.308 | 0.137 |
| 155 | NQ | 99787.66 | 49004.87 | 1497.77 | 15-Jun | 19-Jun | 180.0 | -60.0 | 358.14 | 1,175 | 5.18 | 14.33 | 9.15 | 30.0 | 0.325 | 0.220 | |
| | | | | | | | | | | | 99.67 | 114.91 | 15.24 | 50.0 | 0.307 | 0.378 | |
| | | | | | | | | | | | or | 78.33 | 117.96 | 39.63 | 130.0 | 0.230 | 0.288 |
| | | | | | | | | | | | 145.39 | 151.49 | 6.10 | 20.0 | 0.277 | 0.250 | |
| | | | | | | | | | | | 221.59 | 227.69 | 6.10 | 20.0 | 0.338 | 0.465 | |
| 156 | NQ | 99695.52 | 48908.29 | 1521.24 | 19-Jun | 22-Jun | 180.0 | -60.0 | 372.77 | 1,223 | Low Grade Mineralization | | | | | | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) | | | | | | | | | | |
|------------|-----------|-----------------|----------|-----------|--------|---------|----------|-----------|--------|-------|--------------------------|--------|-----------|-------|------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | | | | | | | | | | | |
| 157 | HQ | 100205.32 | 49799.98 | 1527.20 | 19-Jun | 24-Jun | 180.0 | -60.0 | 538.58 | 1,767 | 261.21 | 267.31 | 6.10 | 20.0 | 0.300 | 0.100 | | | | | | | | | | |
| | | | | | | | | | | | 297.79 | 316.08 | 18.29 | 60.0 | | | 0.219 | 0.087 | | | | | | | | |
| | | | | | | | | | | | 331.32 | 377.04 | 45.72 | 150.0 | | | | | 0.324 | 0.151 | | | | | | |
| | | | | | | | | | | | 377.04 | 395.33 | 18.29 | 60.0 | | | | | | | 0.461 | 0.322 | | | | |
| | | | | | | | | | | | 395.33 | 410.57 | 15.24 | 50.0 | | | | | | | | | 0.302 | 0.302 | | |
| | | | | | | | | | | | 419.71 | 425.81 | 6.10 | 20.0 | | | | | | | | | | | 0.381 | 0.380 |
| | | | | | | | | | | | or 331.32 | 425.81 | 94.49 | 310.0 | | | | | | | | | | | | |
| or 331.32 | 428.81 | 97.49 | 320.0 | 0.334 | 0.225 | | | | | | | | | | | | | | | | | | | | | |
| 158 | NQ | 99719.20 | 49114.81 | | | 1473.86 | 22-Jun | 25-Jun | 180.0 | -60.0 | 386.18 | 1,267 | 5.18 | 20.42 | 15.24 | 50.0 | 0.265 | 0.167 | | | | | | | | |
| | | | | 53.95 | 96.62 | | | | | | | | 42.67 | 140.0 | 0.309 | 0.215 | | | | | | | | | | |
| 159 | HQ | 100202.32 | 49651.35 | 1509.37 | 24-Jun | 2-Jul | 180.0 | -60.0 | 502.01 | 1,647 | 212.45 | 233.78 | 21.33 | 70.0 | | | 0.286 | 0.201 | | | | | | | | |
| | | | | | | | | | | | 245.97 | 255.12 | 9.15 | 30.0 | 0.302 | 0.107 | | | | | | | | | | |
| | | | | | | | | | | | 282.55 | 309.98 | 27.43 | 90.0 | | | | | 0.306 | 0.183 | | | | | | |
| | | | | | | | | | | | 325.22 | 380.09 | 54.87 | 180.0 | | | | | | | 0.332 | 0.239 | | | | |
| | | | | | | | | | | | 392.28 | 407.52 | 15.24 | 50.0 | | | | | | | | | 0.295 | 0.132 | | |
| | | | | | | | | | | | or 328.27 | 407.52 | 79.25 | 260.0 | | | | | | | | | | | 0.309 | 0.219 |
| 444.09 | 465.43 | 21.34 | 70.0 | 0.433 | 0.343 | | | | | | | | | | | | | | | | | | | | | |
| 492.86 | 502.00 | 9.14 | 30.0 | | | 0.342 | 0.163 | | | | | | | | | | | | | | | | | | | |
| 160 | NQ | 99487.83 | 49122.48 | 1475.31 | 25-Jun | | | 28-Jun | 180.0 | -60.0 | 398.37 | 1,307 | | | | | | | | | | | | | | |
| 161 | NQ | 99694.48 | 48509.37 | 1529.66 | 28-Jun | 1-Jul | 180.0 | -60.0 | 395.33 | 1,297 | Low Grade Mineralization | | | | | | | | | | | | | | | |
| 162 | NQ | 99848.27 | 48604.60 | 1466.34 | 1-Jul | 4-Jul | 180.0 | -60.0 | 349.61 | 1,147 | 133.20 | 203.30 | 70.10 | 230.0 | 0.334 | 0.750 | | | | | | | | | | |
| | | | | | | | | | | | or 99.67 | 203.30 | 103.63 | 340.0 | | | 0.284 | 0.616 | | | | | | | | |
| 163 | HQ | 100096.54 | 49649.61 | 1495.10 | 2-Jul | 9-Jul | 180.0 | -60.0 | 495.91 | 1,627 | 230.73 | 239.88 | 9.15 | 30.0 | 0.326 | 0.520 | | | | | | | | | | |
| | | | | | | | | | | | 300.84 | 316.08 | 15.24 | 50.0 | | | 0.336 | 0.190 | | | | | | | | |
| | | | | | | | | | | | 352.04 | 389.23 | 37.19 | 122.0 | | | | | 0.381 | 0.269 | | | | | | |
| | | | | | | | | | | | or 300.84 | 419.71 | 118.87 | 390.0 | | | | | | | 0.281 | 0.186 | | | | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|---------------------------------------|--------------|--------|-----------|--------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | |
| 164 | NQ | 99846.75 | 48609.37 | 1466.21 | 4-Jul | 8-Jul | 90.0 | -60.0 | 329.79 | 1,082 | | | | | | |
| 165 | NQ | 99844.02 | 48504.74 | 1477.73 | 8-Jul | 10-Jul | 360.0 | -60.0 | 343.51 | 1,127 | 78.33 | 84.43 | 6.10 | 20.0 | 0.287 | 0.620 |
| 166 | HQ | 99891.16 | 49574.56 | 1505.87 | 9-Jul | 15-Jul | 180.0 | -60.0 | 514.20 | 1,687 | 316.08 | 337.41 | 21.33 | 70.0 | 0.408 | 0.381 |
| | | | | | | | | | | | 373.99 | 514.20 | 140.21 | 460.0 | 0.385 | 0.533 |
| | | | | | | | | | | | or | 386.18 | 514.20 | 128.02 | 420.0 | 0.396 |
| 167 | NQ | 99688.62 | 48306.97 | 1538.51 | 10-Jul | 13-Jul | 180.0 | -60.0 | 410.57 | 1,347 | 313.03 | 319.03 | 6.00 | 19.7 | 0.321 | 0.717 |
| 168 | NQ | 99195.82 | 48919.45 | 1544.69 | 14-Jul | 20-Jul | 180.0 | -60.0 | 380.09 | 1,247 | 99.67 | 157.58 | 57.91 | 190.0 | 0.403 | 0.483 |
| | | | | | | | | | | | 157.58 | 175.87 | 18.29 | 60.0 | 1.486 | 3.266 |
| | | | | | | | | | | | 175.87 | 194.16 | 18.29 | 60.0 | 0.362 | 0.335 |
| | | | | | | | | | | | 212.45 | 239.88 | 27.43 | 90.0 | 0.320 | 0.258 |
| | | | | | | | | | | | 373.99 | 380.09 | 6.10 | 20.0 | 0.325 | 0.295 |
| | | | | | | | | | | | or | 99.67 | 194.16 | 94.49 | 310.0 | 0.604 |
| or | 78.33 | 380.09 | 301.76 | 990.0 | 0.314 | 0.430 | | | | | | | | | | |
| 168A | NQ | 99195.82 | 48919.00 | 1544.69 | 14-Jul | 14-Jul | 180.0 | -60.0 | 20.42 | 67 Abandoned Due to Drilling Problems | | | | | | |
| 169 | HQ | 99698.11 | 49570.40 | 1530.52 | 15-Jul | 20-Jul | 180.0 | -60.0 | 389.23 | 1,277 | | | | | | |
| 170 | NQ | 99293.43 | 49005.06 | 1530.60 | 20-Jul | 26-Jul | 180.0 | -60.0 | 350.82 | 1,151 | 105.46 | 133.20 | 27.74 | 91.0 | 0.426 | 0.458 |
| | | | | | | | | | | | 133.20 | 200.25 | 67.05 | 220.0 | 0.776 | 0.689 |
| | | | | | | | | | | | 200.25 | 215.49 | 15.24 | 50.0 | 0.713 | 0.738 |
| | | | | | | | | | | | 221.59 | 270.36 | 48.77 | 160.0 | 0.356 | 0.244 |
| | | | | | | | | | | | 288.65 | 303.89 | 15.24 | 50.0 | 0.343 | 0.124 |
| | | | | | | | | | | | or | 105.46 | 215.49 | 110.03 | 361.0 | 0.679 |
| or | 105.46 | 270.36 | 164.90 | 541.0 | 0.562 | 0.502 | | | | | | | | | | |
| or | 99.36 | 303.89 | 204.53 | 671.0 | 0.498 | 0.428 | | | | | | | | | | |
| 171 | HQ | 99995.61 | 49650.27 | 1526.00 | 20-Jul | 24-Jul | 180.0 | -60.0 | 428.85 | 1,407 | 322.17 | 358.75 | 36.58 | 120.0 | 0.395 | 0.307 |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|-----------------------------------|--------------|--------|-----------|--------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | |
| 172 | HQ | 99999.46 | 49798.32 | 1531.00 | 24-Jul | 28-Jul | 180.0 | -60.0 | 261.21 | 857 | 38.71 | 60.05 | 21.34 | 70.0 | 0.409 | 0.121 |
| | | | | | | | | | | | 73.46 | 163.68 | 90.22 | 296.0 | 0.420 | 0.221 |
| | | | | | | | | | | | 169.77 | 191.11 | 21.34 | 70.0 | 0.379 | 0.176 |
| | | | | | | | | | | | 212.45 | 218.54 | 6.09 | 20.0 | 0.392 | 0.160 |
| | | | | | | | | | | | 236.83 | 245.97 | 9.14 | 30.0 | 0.298 | 0.113 |
| | | | | | | | | | | | 255.12 | 261.21 | 6.09 | 20.0 | 0.334 | 0.110 |
| or | 73.46 | 191.11 | 117.65 | 386.0 | 0.396 | 0.204 | | | | | | | | | | |
| 173 | NQ | 99180.16 | 48811.99 | 1539.21 | 26-Jul | 30-Jul | 180.0 | -60.0 | 349.61 | 1,147 | 261.21 | 270.36 | 9.15 | 30.0 | 0.387 | 0.720 |
| 174 | HQ | 100053.41 | 49950.63 | 1533.94 | 28-Jul | 30-Jul | 180.0 | -60.0 | 300.84 | 987 | 23.47 | 87.48 | 64.01 | 210.0 | 0.334 | 0.113 |
| | | | | | | | | | | | 142.34 | 181.92 | 39.58 | 129.9 | 0.515 | 0.074 |
| | | | | | | | | | | | 209.40 | 215.49 | 6.09 | 20.0 | 0.365 | 0.080 |
| | | | | | | | | | | | 273.41 | 300.84 | 27.43 | 90.0 | 0.478 | 0.051 |
| 175 | HQ | 100199.29 | 49899.70 | 1539.75 | 30-Jul | 4-Aug | 180.0 | -60.0 | 428.85 | 1,407 | 163.68 | 178.92 | 15.24 | 50.0 | 0.285 | 0.132 |
| | | | | | | | | | | | 200.25 | 245.97 | 45.72 | 150.0 | 0.321 | 0.164 |
| | | | | | | | | | | | 252.07 | 288.65 | 36.58 | 120.0 | 0.444 | 0.330 |
| | | | | | | | | | | | 288.65 | 352.65 | 64.00 | 210.0 | 0.740 | 0.421 |
| | | | | | | | | | | | 352.65 | 373.99 | 21.34 | 70.0 | 1.574 | 1.147 |
| | | | | | | | | | | | 373.99 | 386.18 | 12.19 | 40.0 | 0.543 | 0.323 |
| | | | | | | | | | | | 416.66 | 425.81 | 9.15 | 30.0 | 0.337 | 0.220 |
| | | | | | | | | | | | or | 200.25 | 386.18 | 185.93 | 610.0 | 0.637 |
| or | 154.53 | 395.33 | 240.80 | 790.0 | 0.548 | 0.339 | | | | | | | | | | |
| 176 | NQ | 99288.57 | 48802.44 | 1521.95 | 30-Jul | 5-Aug | 180.0 | -60.0 | 441.05 | 1,447 | 270.36 | 373.99 | 103.63 | 340.0 | 0.519 | 0.372 |
| | | | | | | | | | | | 386.18 | 441.05 | 54.87 | 180.0 | 0.484 | 0.336 |
| | | | | | | | | | | | or | 290.78 | 441.05 | 150.27 | 493.0 | 0.513 |
| 177 | NQ | 99900.84 | 50599.74 | 1500.83 | 4-Aug | 5-Aug | 360.0 | -60.0 | 41.76 | 137 Geotechnical Engineering Hole | | | | | | |
| 178 | NQ | 99999.49 | 50773.53 | 1487.95 | 5-Aug | 6-Aug | | -90.0 | 32.61 | 107 Geotechnical Engineering Hole | | | | | | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length (m) | Length (ft) | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) | |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|------------|-------------|-------------------------------|--------|-----------|--------|------------|------------|-------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | | | From | To | (m) | (ft) | | | |
| 179 | NQ | 99904.32 | 49404.38 | 1452.52 | 6-Aug | 9-Aug | 360.0 | -45.0 | 358.75 | 1,177 | Geotechnical Engineering Hole | | | | | | |
| 180 | NQ | 100099.58 | 50996.63 | 1467.50 | 6-Aug | 6-Aug | | -90.0 | 29.57 | 97 | Geotechnical Engineering Hole | | | | | | |
| 181 | NQ | 100593.14 | 50600.29 | 1526.21 | 6-Aug | 7-Aug | 180.0 | -45.0 | 50.90 | 167 | 17.37 | 23.47 | 6.10 | 20.0 | 0.055 | 1.050 | |
| 182 | NQ | 100701.72 | 50504.45 | 1510.49 | 7-Aug | 7-Aug | 180.0 | -45.0 | 78.33 | 257 | Geotechnical Engineering Hole | | | | | | |
| 183 | NQ | 100675.48 | 50402.78 | 1517.27 | 7-Aug | 8-Aug | 180.0 | -45.0 | 91.44 | 300 | Geotechnical Engineering Hole | | | | | | |
| 184 | HQ | 100696.80 | 50991.58 | 1517.32 | 8-Aug | 15-Aug | 180.0 | -60.0 | 623.93 | 2,047 | 337.41 | 343.51 | 6.10 | 20.0 | 0.289 | 0.140 | |
| | | | | | | | | | | | 349.61 | 373.99 | 24.38 | 80.0 | 0.329 | 0.194 | |
| | | | | | | | | | | | 373.99 | 438.00 | 64.01 | 210.0 | 0.425 | 0.296 | |
| | | | | | | | | | | | 438.00 | 447.14 | 9.14 | 30.0 | 0.269 | 0.173 | |
| | | | | | | | | | | | 447.14 | 544.68 | 97.54 | 320.0 | 0.520 | 0.277 | |
| | | | | | | | | | | | 578.21 | 593.45 | 15.24 | 50.0 | 0.357 | 0.196 | |
| | | | | | | | | | | | 605.64 | 617.83 | 12.19 | 40.0 | 0.248 | 0.310 | |
| | | | | | | | | | | | or | 349.61 | 544.68 | 195.07 | 640.0 | 0.453 | 0.268 |
| 185 | NQ | 99505.02 | 49413.33 | 1529.86 | 9-Aug | 13-Aug | 180.0 | -45.0 | 358.75 | 1,177 | | | | | | | |
| 186 | NQ | 99505.02 | 49413.33 | 1529.86 | 13-Aug | 17-Aug | 360.0 | -45.0 | 349.61 | 1,147 | | | | | | | |
| 187 | NQ | 99095.96 | 48921.54 | 1555.38 | 15-Aug | 21-Aug | 180.0 | -60.0 | 345.03 | 1,132 | | | | | | | |
| 188 | NQ | 99704.41 | 49408.23 | 1510.04 | 17-Aug | 22-Aug | 360.0 | -45.0 | 334.06 | 1,096 | | | | | | | |
| 189 | NQ | 99188.95 | 49003.32 | 1536.46 | 21-Aug | 26-Aug | 180.0 | -60.0 | 316.08 | 1,037 | 39.62 | 57.00 | 17.38 | 57.0 | 0.274 | 0.389 | |
| | | | | | | | | | | | 85.34 | 114.91 | 29.57 | 97.0 | 0.508 | 0.425 | |
| | | | | | | | | | | | or | 85.34 | 120.09 | 34.75 | 114.0 | 0.469 | 0.396 |
| | | | | | | | | | | | 160.63 | 175.87 | 15.24 | 50.0 | 0.378 | 0.350 | |
| | | | | | | | | | | | 197.21 | 209.40 | 12.19 | 40.0 | 0.284 | 0.173 | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|-------|--------------|--------|-----------|-------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | |
| 190 | NQ | 99192.35 | 49328.25 | 1541.09 | 22-Aug | 26-Aug | 180.0 | -45.0 | 322.17 | 1,057 | | | | | | |
| 191 | NQ | 99391.22 | 49321.69 | 1516.54 | 26-Aug | 29-Aug | 180.0 | -45.0 | 349.61 | 1,147 | | | | | | |
| 192 | NQ | 99187.83 | 49130.69 | 1505.62 | 26-Aug | 28-Aug | 180.0 | -60.0 | 361.49 | 1,186 | 26.52 | 38.71 | 12.19 | 40.0 | 0.372 | 0.140 |
| | | | | | | | | | | | 105.77 | 117.96 | 12.19 | 40.0 | 0.281 | 0.128 |
| | | | | | | | | | | | 124.05 | 130.15 | 6.10 | 20.0 | 0.285 | 0.135 |
| | | | | | | | | | | | or 105.77 | 130.15 | 24.38 | 80.0 | 0.270 | 0.140 |
| 193 | NQ | 99288.79 | 48704.43 | 1532.26 | 28-Aug | 31-Aug | 180.0 | -60.0 | 317.60 | 1,042 | | | | | | |
| 194 | NQ | 99693.61 | 48509.63 | 1529.83 | 29-Aug | 2-Sep | 360.0 | -60.0 | 391.97 | 1,286 | 75.29 | 102.72 | 27.43 | 90.0 | 0.223 | 0.427 |
| | | | | | | | | | | | 139.29 | 166.73 | 27.44 | 90.0 | 0.250 | 0.697 |
| | | | | | | | | | | | 233.78 | 273.41 | 39.63 | 130.0 | 0.295 | 0.607 |
| | | | | | | | | | | | 273.41 | 297.79 | 24.38 | 80.0 | 0.712 | 1.366 |
| | | | | | | | | | | | 297.79 | 325.22 | 27.43 | 90.0 | 0.458 | 0.692 |
| | | | | | | | | | | | or 233.78 | 325.22 | 91.44 | 300.0 | 0.455 | 0.835 |
| | | | | | | | | | | | or 75.29 | 325.22 | 249.93 | 820.0 | 0.280 | 0.550 |
| 195 | NQ | 99378.49 | 48804.12 | 1508.09 | 31-Aug | 3-Sep | 180.0 | -60.0 | 365.46 | 1,199 | 90.53 | 99.67 | 9.14 | 30.0 | 0.091 | 0.617 |
| | | | | | | | | | | | 163.68 | 172.82 | 9.14 | 30.0 | 0.313 | 0.283 |
| | | | | | | | | | | | 185.01 | 236.83 | 51.82 | 170.0 | 0.274 | 0.269 |
| | | | | | | | | | | | 242.93 | 261.21 | 18.28 | 60.0 | 0.210 | 0.287 |
| | | | | | | | | | | | 285.59 | 313.03 | 27.44 | 90.0 | 0.359 | 0.394 |
| | | | | | | | | | | | 322.17 | 365.50 | 43.33 | 142.2 | 0.510 | 0.477 |
| | | | | | | | | | | | or 185.01 | 261.21 | 76.20 | 250.0 | 0.252 | 0.269 |
| or 285.59 | 365.50 | 79.91 | 262.2 | 0.408 | 0.402 | | | | | | | | | | | |
| or 185.01 | 365.50 | 180.49 | 592.2 | 0.410 | 0.400 | | | | | | | | | | | |
| 196 | NQ | 99690.71 | 48405.49 | 1533.56 | 2-Sep | 4-Sep | 360.0 | -60.0 | 291.69 | 957 | | | | | | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length (m) | Length (ft) | Interval (m) | | Intercept (m) | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|------------|--|--------------|--------|---------------|-------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | | | From | To | (m) | (ft) | | |
| 197 | NQ | 99700.05 | 48907.22 | 1520.90 | 3-Sep | 5-Sep | 360.0 | -45.0 | 200.56 | 658 | 117.96 | 127.10 | 9.14 | 30.0 | 0.378 | 0.317 |
| | | | | | | | | | | or | 117.96 | 130.20 | 12.24 | 40.2 | 0.340 | 0.300 |
| 198 | NQ | 99900.47 | 48705.46 | 1434.25 | 5-Sep | 9-Sep | 180.0 | -60.0 | 364.85 | 1,197 | | | | | | |
| 198A | NQ | 99900.47 | 48705.46 | 1434.25 | 5-Sep | 5-Sep | 180.0 | -60.0 | 46.33 | 152 Abandoned Due to Drilling Problems | | | | | | |
| 199 | NQ | 99767.69 | 49002.75 | 1501.28 | 5-Sep | 8-Sep | 360.0 | -45.0 | 313.03 | 1,027 | | | | | | |
| 200 | NQ | 98613.58 | 49117.27 | 1471.37 | 8-Sep | 11-Sep | 360.0 | -45.0 | 300.84 | 987 | 18.29 | 41.76 | 23.47 | 77.0 | 0.731 | 0.591 |
| | | | | | | | | | | | 44.81 | 69.19 | 24.38 | 80.0 | 0.321 | 0.327 |
| | | | | | | | | | | | 78.33 | 96.62 | 18.29 | 60.0 | 0.341 | 0.252 |
| | | | | | | | | | | or | 18.29 | 96.62 | 78.33 | 257.0 | 0.413 | 0.352 |
| 201 | NQ | 99768.17 | 48508.36 | 1510.59 | 9-Sep | 12-Sep | 360.0 | -60.0 | 331.32 | 1,087 | 108.81 | 139.29 | 30.48 | 100.0 | 0.251 | 0.519 |
| | | | | | | | | | | | 178.92 | 199.03 | 20.11 | 66.0 | 0.398 | 0.666 |
| | | | | | | | | | | or | 41.76 | 249.02 | 207.26 | 680.0 | 0.232 | 0.458 |
| 202 | NQ | 99192.07 | 48705.40 | 1548.91 | 11-Sep | 14-Sep | 180.0 | -60.0 | 377.04 | 1,237 | | | | | | |
| 203 | NQ | 100100.30 | 48400.79 | 1522.35 | 12-Sep | 15-Sep | 180.0 | -45.0 | 295.96 | 971 | | | | | | |
| 204 | NQ | 99082.98 | 48814.38 | 1557.29 | 15-Sep | 17-Sep | 180.0 | -60.0 | 334.37 | 1,097 | | | | | | |
| 205 | NQ | 99798.59 | 48606.28 | 1479.88 | 16-Sep | 17-Sep | 180.0 | -60.0 | 233.78 | 767 | 3.66 | 123.44 | 119.78 | 393.0 | 0.331 | 0.650 |
| | | | | | | | | | | | 145.39 | 203.30 | 57.91 | 190.0 | 0.274 | 0.615 |
| | | | | | | | | | | or | 3.66 | 203.30 | 199.64 | 655.0 | 0.282 | 0.576 |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) | |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|-------|--------------|--------|-----------|-------|------------|------------|-------|
| | | Northng | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | | |
| 206 | NQ | 99900.50 | 49799.99 | 1539.62 | 17-Sep | 21-Sep | 180.0 | -60.0 | 401.42 | 1,317 | 47.85 | 57.00 | 9.15 | 30.0 | 0.253 | 0.073 | |
| | | | | | | | | | | | 160.63 | 175.87 | 15.24 | 50.0 | 0.274 | 0.106 | |
| | | | | | | | | | | | 215.49 | 221.59 | 6.10 | 20.0 | 0.333 | 0.095 | |
| | | | | | | | | | | | 239.88 | 319.13 | 79.25 | 260.0 | 0.392 | 0.307 | |
| | | | | | | | | | | | 319.13 | 343.51 | 24.38 | 80.0 | 0.782 | 1.019 | |
| | | | | | | | | | | | 343.51 | 367.89 | 24.38 | 80.0 | 0.491 | 0.423 | |
| or | 239.88 | 367.89 | 128.01 | 420.0 | 0.485 | 0.464 | | | | | | | | | | | |
| 207 | NQ | 99136.19 | 48864.02 | 1553.23 | 17-Sep | 19-Sep | 180.0 | -60.0 | 294.74 | 967 | | | | | | | |
| 208 | NQ | 99694.08 | 48607.22 | 1492.15 | 20-Sep | 21-Sep | 180.0 | -60.0 | 209.40 | 687 | 6.10 | 44.81 | 38.71 | 127.0 | 0.201 | 0.549 | |
| | | | | | | | | | | | 102.72 | 110.64 | 7.92 | 26.0 | 0.278 | 1.252 | |
| | | | | | | | | | | | or | 93.57 | 142.34 | 48.77 | 160.0 | 0.156 | 0.705 |
| | | | | | | | | | | | 151.49 | 181.97 | 30.48 | 100.0 | 0.151 | 0.496 | |
| | | | | | | | | | | | or | 93.57 | 181.97 | 88.40 | 290.0 | 0.146 | 0.584 |
| or | 6.10 | 181.97 | 175.87 | 577.0 | 0.140 | 0.510 | | | | | | | | | | | |
| 209 | NQ | 99828.27 | 48651.36 | 1469.44 | 21-Sep | 23-Sep | 180.0 | -60.0 | 261.21 | 857 | | | | | | | |
| 210 | HQ | 100097.32 | 49554.17 | 1472.79 | 21-Sep | 26-Sep | 180.0 | -60.0 | 453.23 | 1,487 | 355.70 | 444.55 | 88.85 | 291.5 | 0.698 | 0.677 | |
| 211 | NQ | 99397.35 | 48915.09 | 1535.84 | 23-Sep | 26-Sep | 180.0 | -60.0 | 349.61 | 1,147 | | | | | | | |
| 212 | NQ | 99677.99 | 48799.51 | 1506.28 | 26-Sep | 27-Sep | 360.0 | -45.0 | 203.30 | 667 | | | | | | | |
| 213 | HQ | 99800.07 | 49650.73 | 1526.12 | 27-Sep | 1-Oct | 180.0 | -45.0 | 337.41 | 1,107 | | | | | | | |
| 214 | NQ | 99687.48 | 49006.53 | 1508.94 | 27-Sep | 30-Sep | 180.0 | -60.0 | 334.67 | 1,098 | 133.20 | 334.67 | 201.47 | 661.0 | 0.320 | 0.390 | |
| 215 | NQ | 99480.81 | 48800.99 | 1510.76 | 30-Sep | 1-Oct | 180.0 | -60.0 | 300.84 | 987 | 102.80 | 111.90 | 9.10 | 29.9 | 0.350 | 0.420 | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length (m) | Length (ft) | Interval (m) | | Intercept (m) | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|-------|--------|----------|-----------|------------|-------------|--------------|--------|---------------|-------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | | | From | To | (m) | (ft) | | |
| 216 | HQ | 100104.91 | 50199.06 | 1537.14 | 1-Oct | 5-Oct | 180.0 | -60.0 | 438.00 | 1,437 | 93.57 | 108.81 | 15.24 | 50.0 | 0.284 | 0.146 |
| | | | | | | | | | | | 127.10 | 172.82 | 45.72 | 150.0 | 0.432 | 0.188 |
| | | | | | | | | | | | 242.93 | 270.36 | 27.43 | 90.0 | 0.371 | 0.436 |
| | | | | | | | | | | | 297.79 | 385.57 | 87.78 | 288.0 | 0.300 | 0.297 |
| | | | | | | | | | | | 385.57 | 416.66 | 31.09 | 102.0 | 0.217 | 0.267 |
| or | 297.79 | 416.66 | 118.87 | 390.0 | 0.278 | 0.290 | | | | | | | | | | |
| 217 | NQ | 100001.02 | 50249.32 | 1532.34 | 1-Oct | 3-Oct | 180.0 | -60.0 | 253.29 | 831 | 139.29 | 154.53 | 15.24 | 50.0 | 0.276 | 0.255 |
| | | | | | | | | | | | 172.82 | 218.54 | 45.72 | 150.0 | 0.406 | 0.142 |
| | | | | | | | | | | | or | 139.29 | 218.54 | 79.25 | 260.0 | 0.315 |
| 218 | NQ | 100045.00 | 50358.43 | 1529.60 | 4-Oct | 6-Oct | 180.0 | -60.0 | 328.27 | 1,077 | 78.03 | 111.86 | 33.83 | 111.0 | 0.336 | 0.391 |
| | | | | | | | | | | | 141.12 | 251.16 | 110.04 | 361.0 | 0.290 | 0.185 |
| | | | | | | | | | | | 300.84 | 313.03 | 12.19 | 40.0 | 0.291 | 0.108 |
| 219 | NQ | 100497.58 | 51041.87 | 1488.92 | 5-Oct | 6-Oct | 180.0 | -60.0 | 151.49 | 497 | 38.71 | 66.14 | 27.43 | 90.0 | 0.249 | 0.164 |
| 220 | NQ | 99239.34 | 48955.27 | 1538.68 | 6-Oct | 9-Oct | 180.0 | -60.0 | 306.93 | 1,007 | 57.00 | 86.87 | 29.87 | 98.0 | 0.481 | 0.584 |
| | | | | | | | | | | | 119.48 | 127.10 | 7.62 | 25.0 | 0.317 | 0.476 |
| | | | | | | | | | | | 160.63 | 172.82 | 12.19 | 40.0 | 0.394 | 0.481 |
| | | | | | | | | | | | 178.92 | 209.40 | 30.48 | 100.0 | 0.455 | 0.530 |
| | | | | | | | | | | | 215.49 | 242.93 | 27.44 | 90.0 | 0.581 | 0.616 |
| | | | | | | | | | | | 279.50 | 285.60 | 6.10 | 20.0 | 0.364 | 0.275 |
| or | 160.63 | 242.93 | 82.30 | 270.0 | 0.438 | 0.513 | | | | | | | | | | |
| 221 | NQ | 100500.94 | 50995.38 | 1495.62 | 7-Oct | 9-Oct | 180.0 | -60.0 | 245.06 | 804 | 151.49 | 178.92 | 27.43 | 90.0 | 0.292 | 0.382 |
| | | | | | | | | | | | 217.32 | 245.06 | 27.74 | 91.0 | 0.538 | 0.392 |
| 222 | HQ | 100303.77 | 50798.49 | 1506.04 | 9-Oct | 11-Oct | 180.0 | -60.0 | 251.76 | 826 | 178.92 | 188.06 | 9.14 | 30.0 | 0.263 | 0.263 |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) | |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|-------|--------------|--------|-----------|--------|------------|------------|-------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | | |
| 223 | NQ | 99247.27 | 48869.15 | 1543.48 | 9-Oct | 13-Oct | 180.0 | -60.0 | 408.74 | 1,341 | 130.15 | 186.54 | 56.39 | 185.0 | 0.323 | 0.342 | |
| | | | | | | | | | | | 194.16 | 227.69 | 33.53 | 110.0 | 0.297 | 0.305 | |
| | | | | | | | | | | | 233.78 | 322.17 | 88.39 | 290.0 | 0.300 | 0.235 | |
| | | | | | | | | | | | 322.17 | 391.67 | 69.50 | 228.0 | 0.481 | 0.339 | |
| | | | | | | | | | | | 391.67 | 408.74 | 17.07 | 56.0 | 0.342 | 0.290 | |
| | | | | | | | | | | | or | 233.78 | 408.74 | 174.96 | 574.0 | 0.376 | 0.282 |
| or | 130.15 | 408.74 | 278.59 | 914.0 | 0.344 | 0.291 | | | | | | | | | | | |
| 224 | HQ | 100301.74 | 50747.09 | 1511.81 | 12-Oct | 14-Oct | 180.0 | -60.0 | 264.26 | 867 | 160.63 | 174.65 | 14.02 | 46.0 | 0.303 | 0.264 | |
| | | | | | | | | | | | 188.06 | 224.64 | 36.58 | 120.0 | 0.267 | 0.271 | |
| | | | | | | | | | | | or | 160.63 | 224.64 | 64.01 | 210.0 | 0.257 | 0.246 |
| 225 | NQ | 99240.89 | 49053.41 | 1520.45 | 13-Oct | 16-Oct | 180.0 | -60.0 | 310.90 | 1,020 | 40.23 | 68.88 | 28.65 | 94.0 | 0.239 | 0.134 | |
| | | | | | | | | | | | 77.11 | 155.75 | 78.64 | 258.0 | 0.399 | 0.229 | |
| | | | | | | | | | | | or | 86.87 | 136.25 | 49.38 | 162.0 | 0.455 | 0.262 |
| | | | | | | | | | | | or | 40.23 | 155.75 | 115.52 | 379.0 | 0.340 | 0.195 |
| | | | | | | | | | | | 230.12 | 234.70 | 4.58 | 15.0 | 0.322 | 0.193 | |
| 226 | HQ | 100347.70 | 50647.11 | 1520.39 | 14-Oct | 17-Oct | 180.0 | -60.0 | 242.93 | 797 | 72.24 | 78.33 | 6.09 | 20.0 | 0.285 | 0.185 | |
| | | | | | | | | | | | 105.77 | 160.63 | 54.86 | 180.0 | 0.341 | 0.146 | |
| | | | | | | | | | | | 167.03 | 178.92 | 11.89 | 39.0 | 0.311 | 0.203 | |
| | | | | | | | | | | | 105.77 | 178.92 | 73.15 | 240.0 | 0.319 | 0.150 | |
| | | | | | | | | | | | 203.30 | 218.54 | 15.24 | 50.0 | 0.324 | 0.280 | |
| | | | | | | | | | | | or | 105.77 | 218.54 | 112.77 | 370.0 | 0.298 | 0.171 |
| 227 | NQ | 99149.46 | 49053.63 | 1531.72 | 16-Oct | 18-Oct | 180.0 | -60.0 | 302.40 | 992 | 50.90 | 62.18 | 11.28 | 37.0 | 0.332 | 0.286 | |
| | | | | | | | | | | | 74.68 | 93.57 | 18.89 | 62.0 | 0.371 | 0.350 | |
| | | | | | | | | | | | 99.67 | 132.59 | 32.92 | 108.0 | 0.341 | 0.275 | |
| | | | | | | | | | | | or | 74.68 | 132.59 | 57.91 | 190.0 | 0.337 | 0.292 |
| | | | | | | | | | | | or | 50.90 | 132.59 | 81.69 | 268.0 | 0.293 | 0.261 |
| 228 | HQ | 100394.83 | 51044.44 | 1482.20 | 17-Oct | 18-Oct | 180.0 | -60.0 | 148.44 | 487 | | | | | | | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length (m) | Length (ft) | Interval (m) | | Intercept (m) | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|------------|-------------|--------------|--------|---------------|-------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | | | From | To | (m) | (ft) | | |
| 229 | NQ | 99086.99 | 49137.22 | 1512.60 | 18-Oct | 19-Oct | 180.0 | -60.0 | 197.21 | 647 | | | | | | |
| 230 | HQ | 100500.59 | 50949.17 | 1502.24 | 18-Oct | 22-Oct | 180.0 | -60.0 | 299.31 | 982 | 230.73 | 242.93 | 12.20 | 40.0 | 1.014 | 0.825 |
| | | | | | | | | | | | 242.93 | 299.31 | 56.38 | 185.0 | 0.407 | 0.401 |
| | | | | | | | | | | | or 230.73 | 299.31 | 68.58 | 225.0 | 0.515 | 0.477 |
| 231 | NQ | 99142.15 | 48955.05 | 1547.53 | 19-Oct | 21-Oct | 180.0 | -60.0 | 297.79 | 977 | 56.69 | 65.84 | 9.15 | 30.0 | 0.373 | 0.274 |
| | | | | | | | | | | | 75.29 | 111.86 | 36.57 | 120.0 | 0.430 | 0.341 |
| | | | | | | | | | | | or 56.69 | 111.86 | 55.17 | 181.0 | 0.366 | 0.295 |
| 232 | NQ | 99090.73 | 49004.53 | 1546.57 | 21-Oct | 22-Oct | 180.0 | -60.0 | 157.58 | 517 | | | | | | |
| 233 | HQ | 100367.35 | 50900.54 | 1496.11 | 22-Oct | 24-Oct | 180.0 | -60.0 | 212.45 | 697 | 26.52 | 35.66 | 9.14 | 30.0 | 0.209 | 0.360 |
| | | | | | | | | | | | 50.60 | 75.29 | 24.69 | 81.0 | 0.198 | 0.310 |
| | | | | | | | | | | | 105.77 | 111.86 | 6.09 | 20.0 | 0.281 | 0.220 |
| | | | | | | | | | | | 127.10 | 172.82 | 45.72 | 150.0 | 0.244 | 0.229 |
| 234 | NQ | 99900.01 | 49948.97 | 1545.73 | 22-Oct | 24-Oct | 180.0 | -60.0 | 252.07 | 827 | 66.14 | 75.29 | 9.15 | 30.0 | 0.298 | 0.037 |
| | | | | | | | | | | | 194.16 | 200.25 | 6.09 | 20.0 | 0.307 | 0.160 |
| 235 | NQ | 100301.72 | 50051.36 | 1551.57 | 24-Oct | 28-Oct | 180.0 | -60.0 | 440.14 | 1,444 | 8.23 | 14.33 | 6.10 | 20.0 | 0.273 | 0.125 |
| | | | | | | | | | | | 26.52 | 38.71 | 12.19 | 40.0 | 0.301 | 0.133 |
| | | | | | | | | | | | 53.95 | 69.19 | 15.24 | 50.0 | 0.288 | 0.204 |
| | | | | | | | | | | | 136.25 | 148.44 | 12.19 | 40.0 | 0.272 | 0.138 |
| | | | | | | | | | | | 188.06 | 306.93 | 118.87 | 390.0 | 0.429 | 0.169 |
| | | | | | | | | | | | 325.22 | 352.65 | 27.43 | 90.0 | 0.267 | 0.119 |
| | | | | | | | | | | | 364.24 | 425.20 | 60.96 | 200.0 | 0.426 | 0.238 |
| | | | | | | | | | | | 434.34 | 440.14 | 5.80 | 19.0 | 0.272 | 0.232 |
| or 188.06 | 440.14 | 252.08 | 827.0 | 0.359 | 0.166 | | | | | | | | | | | |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) |
|------------|-----------|-----------------|----------|-----------|--------|--------|----------|-----------|--------|-------|--------------|--------|-----------|--------|------------|------------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | |
| 236 | NQ | 99949.70 | 49999.86 | 1542.14 | 24-Oct | 26-Oct | 180.0 | -60.0 | 332.84 | 1,092 | 11.28 | 46.33 | 35.05 | 115.0 | 0.325 | 0.045 |
| | | | | | | | | | | | 215.49 | 230.12 | 14.63 | 48.0 | 0.377 | 0.293 |
| | | | | | | | | | | | 291.69 | 332.84 | 41.15 | 135.0 | 0.379 | 0.333 |
| 237 | NQ | 99899.94 | 50301.14 | 1530.72 | 26-Oct | 28-Oct | 180.0 | -60.0 | 286.82 | 941 | 3.05 | 65.23 | 62.18 | 204.0 | 0.377 | 0.084 |
| | | | | | | | | | | | 90.53 | 96.32 | 5.79 | 19.0 | 0.327 | 0.224 |
| | | | | | | | | | | | 108.81 | 163.37 | 54.56 | 179.0 | 0.311 | 0.168 |
| | | | | | | | | | | | or | 3.05 | 163.37 | 160.32 | 526.0 | 0.308 |
| 238 | NQ | 99240.89 | 49053.41 | 1520.45 | 29-Oct | 31-Oct | 90.0 | -60.0 | 216.41 | 710 | 32.31 | 111.56 | 79.25 | 260.0 | 0.554 | 0.248 |
| | | | | | | | | | | | 138.38 | 195.68 | 57.30 | 188.0 | 0.329 | 0.139 |
| 239 | HQ | 99799.40 | 50049.39 | 1543.57 | 28-Oct | 29-Oct | 180.0 | -60.0 | 63.09 | 207 | | | | | | |
| 240 | HQ/NQ | 99851.83 | 50101.29 | 1541.33 | 29-Oct | 2-Nov | 180.0 | -60.0 | 406.91 | 1,335 | 4.27 | 35.66 | 31.39 | 103.0 | 0.290 | 0.034 |
| | | | | | | | | | | | 57.00 | 169.77 | 112.77 | 370.0 | 0.371 | 0.178 |
| | | | | | | | | | | | 217.63 | 285.60 | 67.97 | 223.0 | 0.323 | 0.131 |
| | | | | | | | | | | | 297.48 | 389.23 | 91.75 | 301.0 | 0.496 | 0.307 |
| | | | | | | | | | | | or | 217.63 | 389.23 | 171.60 | 563.0 | 0.407 |
| 241 | NQ | 99136.17 | 48864.09 | 1553.54 | 31-Oct | 4-Nov | 90.0 | -60.0 | 404.47 | 1,327 | 96.62 | 117.96 | 21.34 | 70.0 | 0.351 | 0.335 |
| | | | | | | | | | | | 121.01 | 163.37 | 42.36 | 139.0 | 0.859 | 0.764 |
| | | | | | | | | | | | 172.82 | 187.15 | 14.33 | 47.0 | 0.370 | 0.486 |
| | | | | | | | | | | | 195.99 | 215.49 | 19.50 | 64.0 | 0.426 | 0.478 |
| | | | | | | | | | | | 221.59 | 236.22 | 14.63 | 48.0 | 0.576 | 0.464 |
| | | | | | | | | | | | 242.32 | 264.26 | 21.94 | 72.0 | 0.757 | 0.835 |
| | | | | | | | | | | | 264.26 | 285.60 | 21.34 | 70.0 | 0.246 | 0.137 |
| | | | | | | | | | | | 339.55 | 377.04 | 37.49 | 123.0 | 0.302 | 0.240 |
| | | | | | | | | | | | or | 96.62 | 285.60 | 188.98 | 620.0 | 0.484 |

TABLE III

SUMMARY OF 1995 DIAMOND DRILL HOLE DATA

| Drill Hole | Core Size | Collar Location | | | Date | | Az (deg) | Dip (deg) | Length | | Interval (m) | | Intercept | | Copper (%) | Gold (gpT) | |
|------------|-----------|-----------------|----------|-----------|-------|-------|----------|-----------|--------|-------|--------------|--------|-----------|--------|------------|------------|-------|
| | | Northing | Easting | Elev. (m) | Start | Comp | | | (m) | (ft) | From | To | (m) | (ft) | | | |
| 242 | HQ | 100096.21 | 49800.02 | 1517.42 | 2-Nov | 6-Nov | 180.0 | -60.0 | 398.07 | 1,306 | 35.66 | 220.98 | 185.32 | 608.0 | 0.414 | 0.271 | |
| | | | | | | | | | | | | 227.08 | 232.87 | 5.79 | 19.0 | 0.401 | 0.304 |
| | | | | | | | | | | | or | 35.66 | 232.87 | 197.21 | 647.0 | 0.403 | 0.267 |
| 243 | NQ | 99195.54 | 48919.45 | 1544.66 | 5-Nov | 8-Nov | 90.0 | -60.0 | 340.16 | 1,116 | 77.72 | 111.86 | 34.14 | 112.0 | 0.509 | 0.467 | |
| | | | | | | | | | | | | 127.10 | 144.17 | 17.07 | 56.0 | 0.216 | 0.285 |
| | | | | | | | | | | | | 144.17 | 172.82 | 28.65 | 94.0 | 0.402 | 0.475 |
| | | | | | | | | | | | | 172.82 | 188.06 | 15.24 | 50.0 | 0.757 | 0.624 |
| | | | | | | | | | | | | 188.06 | 264.26 | 76.20 | 250.0 | 0.398 | 0.259 |
| | | | | | | | | | | | or | 127.10 | 264.26 | 137.16 | 450.0 | 0.416 | 0.348 |
| or | 77.72 | 264.26 | 186.54 | 612.0 | 0.410 | 0.356 | | | | | | | | | | | |
| 244 | HQ | 100048.33 | 50453.09 | 1524.76 | 6-Nov | 8-Nov | 180.0 | -60.0 | 300.84 | 987 | 69.19 | 84.43 | 15.24 | 50.0 | 0.368 | 0.414 | |
| | | | | | | | | | | | | 99.67 | 124.05 | 24.38 | 80.0 | 0.679 | 0.742 |
| | | | | | | | | | | | | 124.05 | 151.49 | 27.44 | 90.0 | 0.285 | 0.403 |
| | | | | | | | | | | | or | 99.67 | 151.49 | 51.82 | 170.0 | 0.471 | 0.563 |
| | | | | | | | | | | | | 160.63 | 181.97 | 21.34 | 70.0 | 0.262 | 0.287 |
| | | | | | | | | | | | | 200.25 | 215.49 | 15.24 | 50.0 | 0.254 | 0.270 |
| or | 69.19 | 215.49 | 146.30 | 480.0 | 0.317 | 0.363 | | | | | | | | | | | |

Geotechnical Diamond Drill Holes

| | | | | | | | | | | |
|--------|----|-----------|----------|---------|--------|--------|--|-------|-------|----------------------------------|
| BH95-1 | BQ | 100948.57 | 53453.71 | 1080.14 | 29-Aug | 30-Aug | | -90.0 | 24.38 | 80 Geotechnical Engineering Hole |
| BH95-2 | BQ | 103829.89 | 56746.01 | 1172.15 | 31-Aug | 1-Sep | | -90.0 | 12.19 | 40 Geotechnical Engineering Hole |
| BH95-3 | BQ | 105264.93 | 54488.93 | 1080.86 | 2-Sep | 2-Sep | | -90.0 | 22.86 | 75 Geotechnical Engineering Hole |

Total Diamond Drilling

36,830.00 metres
or 120,833 feet

ENVIRONMENTAL RESULTS

1) Baseline Environmental Monitoring Results

The baseline environmental monitoring program has been maintained throughout the 1994 and 1995 field seasons. The program included collecting baseline environmental data for meteorology, hydrology and water quality monitoring, and recording of wildlife observations. Automatic water level recorders were installed at hydrology site H2 in "White Rock Canyon" in October, 1994, and at site H3 in "Quarry Creek" in November, 1995. The 1995 field work also included a series of preliminary vegetation transects, preliminary fisheries studies, and preliminary waste rock characterization studies. In addition to the field environmental work, existing background information relating to physiographic, socioeconomic, cultural, health and land use issues was compiled for incorporation into the 'Application for a Project Approval Certificate' submitted to the British Columbia Environmental Assessment Office in October, 1995. A series of 'Open House' presentations were held by American Bullion Minerals Ltd. in five local communities during the week of November 20th 1995, as part of the Public Consultation Program which is a component of the Project Approval Certificate application process.

According to Hallum Knight Piesold Ltd. (1996, pages E-1 to E-3), the results of the 1995 baseline environmental studies are as follows.

"A weather station, including a rain gauge and minimum temperature thermometers, was established in July 1994. Data was recorded twice daily by ABM (American Bullion Minerals) personnel throughout the 1994 and 1995 exploration programs. Based on site and regional data, the Red Chris project area is located in a region characterized by moderate total annual precipitation and extreme variations in temperature. Average annual precipitation in the project area ranges from approximately 465 mm in the area of the proposed tailings facilities to 725 mm in the area of the site meteorological station and proposed open pit. Approximately 60% of the annual precipitation falls as snow, with daily temperatures below freezing from October through April. Average monthly temperatures range from a low of approximately -21° C in January to a high of approximately 9° C in July, with temperature extremes ranging from approximately -50° C to 30° C.

The initial hydrology monitoring program consisted of installation of staff gauges at five selected locations, and automatic water level recorders were installed in 1994 and 1995. Based on site and regional data, streamflows in the Red Chris Project Area are generally characterized by peak flows in the spring and low flows in the winter. Maximum discharges typically occur during the spring as the results of snow melt or rain-on-snow events, with flows gradually decreasing following the disappearance of snow.

Surface water quality samples were collected monthly between July and October 1994, and between May and October 1995, at selected locations at the project site. Average surface water quality data for the entire period indicated that water quality at the Red Chris property is generally slightly basic, conductive, hard, alkaline, high in dissolved solids, and low in suspended solids and turbidity. Levels of anions and nutrients were generally moderate to low, average total cyanide concentrations were generally low, and total and dissolved metals concentrations were variable, depending on proximity to the ore body. Surface water near the headwaters of "Red Rock Canyon" reflects the mineralization of the deposit, containing levels of fluoride, sulphate, aluminum, cadmium, copper, iron, manganese and zinc exceeding provincial and/or federal criteria. The influence of the deposit is evident downstream, though, with dilution, the concentrations were not as high.

Drinking water from the camp supply was found to be of good quality when compared to provincial and federal Health and Welfare Canada drinking water guidelines.

A field study was conducted in July 1995 to confirm vegetation community types in the Red Chris Project area. Thirty metre transects were set at 14 locations and all plant species were identified and categorized as to overstory, understory, herb and moss/lichen layers. Based on the available site information and regional bioclimatic mapping, the Red Chris Project lies mostly within the Spruce-Willow-Birch zone of the Prince Rupert Forest District. Higher elevations fall within the Alpine Tundra zone, while lower elevations along Highway 37 are located within the Boreal White and Black Spruce zones. The mine site and facilities lie on an area dominated by scrub birch, willows, grasses and sedges at higher elevations, and a mixed coniferous forest consisting of spruce, lodgepole pine and sub-alpine fir at mid- and lower elevations. Forest resources are rated as low to very low.

Wildlife observations were recorded in field logs during both the 1994 and 1995 exploration programs, and habitat potential was assessed in 1995, based on the biogeoclimatic zones present at the site. Based on wildlife habitat potential and field observations, the Todagin Mountain region provides good habitat for moose, grizzly and black bear, mountain goats, stone sheep, and a variety of bird species, including several species of raptors such as gyrfalcon, owls and bald eagles. Based on the B.C. Ministry of Environment, Wildlife Branch 1993 Red and Blue Lists of native birds, mammals, reptiles and amphibians at risk in B.C., no Red list species and nine Blue List species potentially inhabit the Red Chris project area. Specifically, mountain goats and stone sheep are of significant concern within the immediate area, and key habitat for stone sheep has been identified on Todagin Mountain; however, this habitat does not extend to the proposed mine development area.

A preliminary fisheries study utilizing electrofishing and minnow traps was conducted in August 1995, and available regional fisheries data was acquired from government and private sources, for comparison to site data. Site drainage is part of the Stikine River system is inaccessible to anadromous fish due to natural barriers and velocity blocks and the lower river and most tributaries are glacially occluded.

The Klappan River flows into the Stikine River above the "Grand Canyon of the Stikine", which begins above the confluence with the Tahltan River, extends for 90 km and consists of a series of cascades, chutes and rapids. Anadromous fish known to inhabit the lower Stikine River have not been detected above this reach and the canyon is considered a barrier to migration. Species identified within the Klappan system include: mountain whitefish, longnose sucker, burbot, arctic grayling, Dolly Varden, cutthroat and rainbow trout.

Lakes surrounding the Red Chris Project include the Iskut Lakes, Edontennajon and Todagin, Kluea Lake and Ealue Lake. These lakes eventually flow into the Iskut River, which flows for approximately 195 km before confluencing with the Stikine River. A 5 km long canyon acts as barrier to the upstream migration of fish approximately 80 km upstream from the Stikine River confluence on the Iskut River, and anadromous fish reported to inhabit the Iskut River system have not been detected above this barrier. Based on available site and regional fisheries data, the above mentioned lakes and associated streams apparently contain monoculture populations of rainbow trout."

2) Preliminary Waste Characterization (Acid Base Accounting) Study Results

The results of the 1995 preliminary waste characterization study are as follows (Hallum Knight Piesold, 1996, pages E-7 and E-8).

"Preliminary waste characterization test work was completed in 1994 and 1995 with analysis of pyritic and non-pyritic ore and waste rock samples for acid-base accounting (ABA), whole rock analysis and multielemental (ICP) scan. Samples analyzed in 1994 consisted primarily of ore grade material, and the 1995 samples represented the four main waste rock types: Bowser Lake

Sediments; Dynamite Hill Volcanics ("proximal and distal"); Main Phase Monzodiorite; and Late Phase Dyke material. Additionally, 6 samples of tailings from metallurgical test work were submitted for ABA analysis.

The "ARD Guidelines for Mine Sites in British Columbia (January 1995)", used for interpreting the ABA results, suggests that sample results which fall below the 0.3% sulphur range are regarded as having insufficient oxidizable sulphide-sulphur content to sustain acid generation. Sample results with an NP/AP ratio above 3:1 are regarded as containing sufficient buffering capacity to neutralize any oxidation products of the contained sulphide-sulphur. Samples with an NP/AP ratio of between 1:1 and 3:1 are not conclusive with respect to acid generating potential and samples with an NP/AP ratio below 1:1 and sulphide-sulphur above 0.3% are regarded as being potentially acid generating. Samples falling within either of these two groups generally require further kinetic testing.

Waste rock samples from 1994 containing very weak and no stockwork generally represented the Main Phase Monzodiorite rock type. The ABA data for these samples suggested that waste rock may have a high potential to generate acid; however, these samples were not representative of all the waste rock types, and were not designed to have been representative of the monzodiorite in general.

All four waste rock types may have some propensity to generate acid, though there is great variability between rock types. Based on the ABA results, Late Phase Dyke material appears to have the highest acid generating potential, Main Phase Monzodiorite material slightly less, Bowser Lake Sediments less again, and Dynamite Hill Volcanics have the lowest potential to generate acid. "Distal" Dynamite Hill Volcanics are not likely to generate acid, possibly even providing neutralizing potential. It may be possible to determine a specific NP/AP ratio for each rock type, above which acid generation is unlikely, in order to minimize the volume of waste rock that will require special handling or disposal.

Tailings samples from the East Pit and West Starter Pit are similar in ABA characteristics and have a relatively high acid generating potential. In contrast, based on ABA results, Gully Zone tailings material is not likely to generate acid, and may contain substantial acid neutralizing capacity.

On the basis of criteria set out in the "ARD Guidelines", additional studies of all rock types and tailings, such as detailed mineralogical characterization and kinetic testing, are warranted to determine potential seepage quality, and possibly specific cut-off NP/AP ratios to ascertain whether or not delineation and separation of non-acid generating material (based on such a cut-off ratio) is practicable.

Whole rock analysis results suggest that the Main Phase Monzodiorite, Late Phase Dykes and Bowser Lake Sediments are fairly similar in composition, and differ significantly from the Dynamite Hill Volcanics. On the basis of average values, the former three rock types were found to comprise primarily silicon and aluminum, with lesser amounts of iron, calcium, potassium, magnesium and sodium, all in concentrations which were generally consistent with continental crust averages. Dynamite Hill Volcanics, however, were found to comprise primarily silicon, with lesser and approximately equal amounts of calcium, magnesium, iron and aluminum, closely resembling oceanic crustal averages.

Based on multielemental scan results, the Main Phase Monzodiorite and Late Phase Dyke samples were found to be moderately high in silver (though not to economic levels), arsenic, copper, lead, molybdenum, vanadium and zinc concentrations compared to global crustal averages. All other metals were found to be low or well within the range of common non-mineralized rock, and variability in concentrations of some metals was quite high. Bowser Lake

Sediments samples generally contained less variable levels of most metals, distinctly lower levels of arsenic and copper, and higher concentrations of lithium. Dynamite Hill Volcanics were typically more variable in metals concentrations than the other three rock types and generally contained notably lower concentrations of copper, potassium and molybdenum, and higher levels of calcium, cobalt, chromium, lithium, magnesium, nickel and tungsten."

According to Hallam Knight Piesold Ltd. (1996), "Drinking water from the camp supply was found to be of good quality when compared to AWCWQ and Health and Welfare Canada drinking water guidelines. In 1994, the sample of drinking water slightly exceeded the guidelines for colour and iron concentration, both of which are aesthetic objectives related to the appearance, taste and odour of the water, but are not generally health concerns. The elevated colour measurement was likely due to the slightly elevated iron level. The drinking water sample collected in 1995 did not exceed guideline levels for any parameters, except pH which was moderately basic (9.79). The upper criteria limit for pH (8.5) has been designed to minimize precipitation of carbonate salts with the distribution system and maximize the effectiveness of chlorination; however, the AWCWQ states that "natural source water outside the criteria may be safe to drink from a public health perspective."

Hallum, Knight Piesold (1996) recommended that further work was required to fulfill a "Project Report" for the government including: detailed baseline aquatic, terrestrial and climatic studies, socioeconomic studies, an archaeological assessment, and waste characterization studies.

MINERAL RESOURCE INVENTORY RESULTS

Mr. G. H. Giroux, M. A. Sc., P. Eng., of Montgomery Consultants Ltd. calculated the geological resources of the Red-Chris deposit and Yellow Chris area mineralization using ordinary kriging geostatistical techniques for each block in the 1995-96 geologic block model that was constructed by the writer and mining engineers of Fluor Daniel Wright Ltd. For the purposes of this study, individual blocks measuring 20 metres long by 20 metres wide by 15 metres deep were constrained by drill hole density, geology and composite assay data. Variography indicated anisotropic spherical models for both copper and gold with longest ranges down dip and at an azimuth of 090° in the western portion of the Red-Chris deposit (i.e. Main Zone) and the Yellow Chris area, and 045° in the eastern portion of the Red-Chris deposit (i.e. East Zone). An ellipsoidal search radius of 150 metres along strike, 100 metres down dip and 100 metres across dip was utilized only if a minimum of 3 assay composites were found. Blocks were classified as measured, indicated and inferred based on the distance from the block centroid to the nearest composite used to estimate the block. The resources were calculated for all blocks from a surface elevation of approximately 1,530 ± 30 m to an arbitrary elevation of 900 m A.M.S.L.. Based upon a normal distribution of 6,969 specific gravity measurements, a mean specific gravity of 2.79 was used for the following grade-tonnage calculations. See Appendix XV of this report for the complete report by Giroux (1996).

The report by Giroux (1996) contains a complete tabulation of the in-situ geologic resources of the Red-Chris deposit and Yellow Chris area at copper cut-off grades ranging from 0.200 to 0.500 percent copper. It also contains a table of the same in-situ geologic resources related to a fixed Net Smelter Return conversion (i.e. N.S.R. CAN \$ = 16.96 X % copper + 10.18 X g.p.T gold) using a US \$1.00 per pound copper and US \$350.00 per ounce gold unit value. Table IV summarizes the measured, indicated and inferred geologic resources for cut-off grades ranging from 0.200 to 0.500 percent copper and cut-off Net Smelter Returns from CAN \$5.00 to \$12.00 (Giroux, 1996). Since the economic viability of these resources has not yet been demonstrated, the term 'resources' is the equivalent of 'mineralization (as per National Policy No. 2-A).

TABLE IV
SUMMARY OF GEOLOGIC RESOURCES

Geologic Resources Based Upon Copper (%) Cut-Off Grade
(After Giroux, 1996)

Total Geologic Resources
Red-Chris Deposit (Main and East Zones) and Yellow Chris Area (Gully and Far West Zones)

| Cut-Off Grade Cu % | Measured | | | Indicated | | | Measured & Indicated | | | Inferred | | |
|--------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|----------------------|---------------|-----------------|------------------|---------------|-----------------|
| | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au |
| 0.20 | 87.10 | 0.394 | 0.309 | 696.30 | 0.347 | 0.294 | 783.40 | 0.352 | 0.296 | 478.20 | 0.333 | 0.288 |
| 0.25 | 69.40 | 0.437 | 0.339 | 533.80 | 0.384 | 0.326 | 603.20 | 0.390 | 0.327 | 389.80 | 0.357 | 0.311 |
| 0.30 | 53.20 | 0.486 | 0.378 | 387.50 | 0.426 | 0.362 | 440.70 | 0.433 | 0.364 | 279.10 | 0.390 | 0.344 |
| 0.35 | 39.20 | 0.545 | 0.418 | 266.50 | 0.472 | 0.401 | 305.70 | 0.481 | 0.403 | 186.20 | 0.423 | 0.384 |
| 0.40 | 29.80 | 0.599 | 0.456 | 177.50 | 0.521 | 0.440 | 207.30 | 0.532 | 0.442 | 109.00 | 0.459 | 0.404 |
| 0.45 | 22.90 | 0.652 | 0.501 | 113.70 | 0.577 | 0.483 | 136.60 | 0.589 | 0.486 | 58.10 | 0.494 | 0.401 |
| 0.50 | 18.40 | 0.696 | 0.540 | 77.30 | 0.626 | 0.529 | 95.70 | 0.639 | 0.531 | 21.90 | 0.537 | 0.461 |

Geologic Resources of the Red-Chris Deposit
(Main and East Zones)

| Cut-Off Grade Cu % | Measured | | | Indicated | | | Measured & Indicated | | | Inferred | | |
|--------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|----------------------|---------------|-----------------|------------------|---------------|-----------------|
| | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au |
| 0.20 | 76.60 | 0.400 | 0.302 | 591.70 | 0.349 | 0.289 | 668.30 | 0.355 | 0.290 | 359.10 | 0.326 | 0.287 |
| 0.25 | 61.20 | 0.443 | 0.334 | 459.10 | 0.385 | 0.322 | 520.30 | 0.392 | 0.323 | 295.10 | 0.347 | 0.311 |
| 0.30 | 47.20 | 0.494 | 0.373 | 333.90 | 0.426 | 0.361 | 381.10 | 0.434 | 0.362 | 211.50 | 0.376 | 0.346 |
| 0.35 | 35.10 | 0.553 | 0.417 | 225.60 | 0.475 | 0.405 | 260.70 | 0.486 | 0.407 | 128.50 | 0.410 | 0.400 |
| 0.40 | 26.60 | 0.611 | 0.456 | 147.30 | 0.528 | 0.449 | 173.90 | 0.541 | 0.450 | 61.50 | 0.450 | 0.448 |
| 0.45 | 20.70 | 0.664 | 0.500 | 94.00 | 0.589 | 0.496 | 114.70 | 0.603 | 0.497 | 23.70 | 0.503 | 0.484 |
| 0.50 | 16.70 | 0.709 | 0.540 | 66.20 | 0.638 | 0.543 | 82.90 | 0.652 | 0.542 | 13.00 | 0.532 | 0.509 |

Geologic Resources of the Yellow Chris Area
(Gully and Far West Zones)

| Cut-Off Grade Cu % | Measured | | | Indicated | | | Measured & Indicated | | | Inferred | | |
|--------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|----------------------|---------------|-----------------|------------------|---------------|-----------------|
| | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au |
| 0.20 | 10.46 | 0.352 | 0.364 | 104.60 | 0.337 | 0.325 | 115.06 | 0.338 | 0.329 | 119.10 | 0.356 | 0.292 |
| 0.25 | 8.19 | 0.387 | 0.382 | 74.70 | 0.383 | 0.350 | 82.89 | 0.383 | 0.353 | 94.70 | 0.389 | 0.309 |
| 0.30 | 5.99 | 0.428 | 0.418 | 53.60 | 0.426 | 0.367 | 59.59 | 0.426 | 0.372 | 67.60 | 0.435 | 0.339 |
| 0.35 | 4.13 | 0.475 | 0.428 | 40.90 | 0.458 | 0.379 | 45.03 | 0.460 | 0.383 | 57.70 | 0.454 | 0.350 |
| 0.40 | 3.20 | 0.505 | 0.451 | 30.20 | 0.487 | 0.398 | 33.40 | 0.489 | 0.403 | 47.50 | 0.470 | 0.348 |
| 0.45 | 2.18 | 0.545 | 0.514 | 19.70 | 0.519 | 0.422 | 21.88 | 0.522 | 0.431 | 34.40 | 0.487 | 0.343 |
| 0.50 | 1.67 | 0.566 | 0.540 | 11.10 | 0.557 | 0.442 | 12.77 | 0.558 | 0.455 | 8.92 | 0.545 | 0.390 |

Note: Based on search ellipsoid measuring 150 X 100 X 100 m with high values capped at 1.5% Cu and 1.5 g Au/T, and using Specific Gravity = 2.79;
If minimum 3 composites not found search expanded to 300 X 200 X 200 m; and
Maximum of 8 assay composites used.

TABLE IV
SUMMARY OF GEOLOGIC RESOURCES

Geologic Resources Based Upon Net Smelter Return (CAN \$) Cut-Off
(After Giroux, 1996)

Total Geologic Resources
Red-Chris Deposit (Main and East Zones) and Yellow Chris Area (Gully and Far West Zones)

| Cut-Off N.S.R. CAN \$ | Measured | | | Indicated | | | Measured & Indicated | | | Inferred | | |
|-----------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|----------------------|---------------|-----------------|------------------|---------------|-----------------|
| | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au |
| 5.00 | 88.79 | 0.388 | 0.315 | 733.40 | 0.336 | 0.302 | 822.19 | 0.342 | 0.303 | 495.70 | 0.326 | 0.291 |
| 6.00 | 73.10 | 0.424 | 0.346 | 586.80 | 0.367 | 0.331 | 659.90 | 0.373 | 0.333 | 416.90 | 0.348 | 0.311 |
| 7.50 | 52.63 | 0.483 | 0.400 | 406.10 | 0.414 | 0.377 | 458.73 | 0.422 | 0.380 | 279.10 | 0.386 | 0.359 |
| 9.00 | 37.72 | 0.545 | 0.456 | 267.30 | 0.465 | 0.430 | 305.02 | 0.475 | 0.433 | 190.40 | 0.419 | 0.398 |
| 10.00 | 30.07 | 0.588 | 0.494 | 202.30 | 0.498 | 0.462 | 232.37 | 0.510 | 0.466 | 147.00 | 0.438 | 0.413 |
| 11.00 | 24.47 | 0.629 | 0.526 | 146.40 | 0.535 | 0.500 | 170.87 | 0.548 | 0.504 | 84.90 | 0.459 | 0.453 |
| 12.00 | 19.85 | 0.670 | 0.562 | 106.00 | 0.573 | 0.537 | 125.85 | 0.588 | 0.541 | 46.10 | 0.485 | 0.486 |

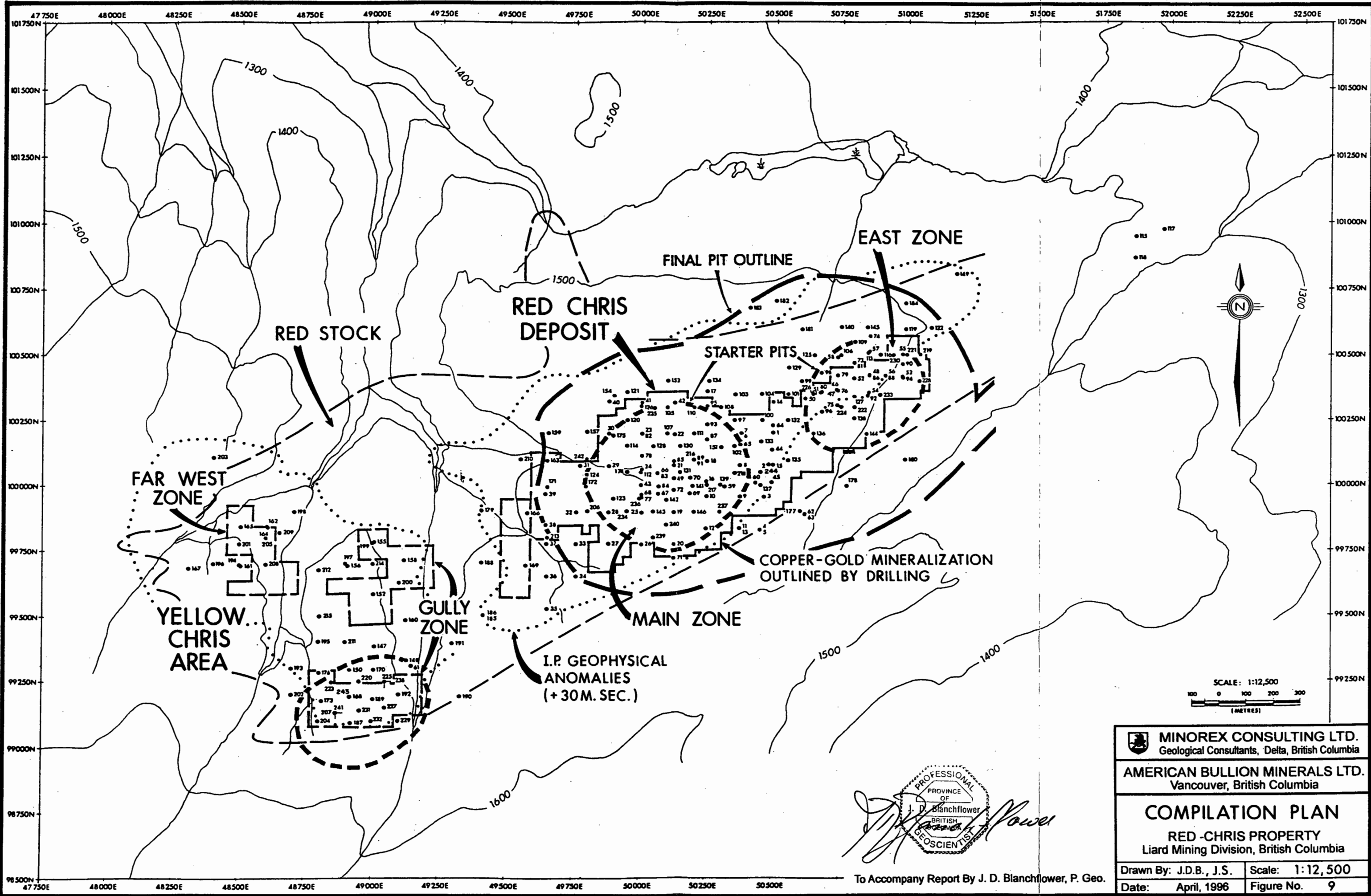
Geologic Resources of the Red-Chris Deposit
(Main and East Zones)

| Cut-Off N.S.R. CAN \$ | Measured | | | Indicated | | | Measured & Indicated | | | Inferred | | |
|-----------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|----------------------|---------------|-----------------|------------------|---------------|-----------------|
| | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au |
| 5.00 | 76.00 | 0.400 | 0.307 | 583.90 | 0.349 | 0.295 | 659.90 | 0.355 | 0.296 | 354.40 | 0.327 | 0.292 |
| 6.00 | 62.20 | 0.439 | 0.339 | 476.00 | 0.378 | 0.324 | 538.20 | 0.385 | 0.326 | 304.30 | 0.343 | 0.313 |
| 7.50 | 44.70 | 0.502 | 0.394 | 333.70 | 0.422 | 0.375 | 378.40 | 0.431 | 0.377 | 207.00 | 0.373 | 0.366 |
| 9.00 | 32.20 | 0.565 | 0.456 | 219.00 | 0.473 | 0.434 | 251.20 | 0.485 | 0.437 | 133.10 | 0.404 | 0.419 |
| 10.00 | 26.10 | 0.607 | 0.494 | 167.70 | 0.505 | 0.469 | 193.80 | 0.519 | 0.472 | 95.40 | 0.425 | 0.444 |
| 11.00 | 21.80 | 0.645 | 0.524 | 123.60 | 0.542 | 0.508 | 145.40 | 0.557 | 0.510 | 58.00 | 0.447 | 0.484 |
| 12.00 | 17.50 | 0.690 | 0.563 | 90.50 | 0.582 | 0.546 | 108.00 | 0.600 | 0.549 | 33.30 | 0.474 | 0.513 |


Geologic Resources of the Yellow Chris Area
(Gully and Far West Zones)

| Cut-Off N.S.R. CAN \$ | Measured | | | Indicated | | | Measured & Indicated | | | Inferred | | |
|-----------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|----------------------|---------------|-----------------|------------------|---------------|-----------------|
| | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au |
| 5.00 | 12.77 | 0.317 | 0.363 | 149.50 | 0.282 | 0.330 | 162.27 | 0.285 | 0.333 | 141.30 | 0.325 | 0.290 |
| 6.00 | 10.93 | 0.338 | 0.386 | 110.80 | 0.320 | 0.360 | 121.73 | 0.322 | 0.362 | 112.60 | 0.361 | 0.305 |
| 7.50 | 7.92 | 0.380 | 0.431 | 72.40 | 0.376 | 0.390 | 80.32 | 0.376 | 0.394 | 72.10 | 0.425 | 0.340 |
| 9.00 | 5.51 | 0.429 | 0.458 | 48.40 | 0.428 | 0.410 | 53.91 | 0.428 | 0.415 | 57.30 | 0.454 | 0.351 |
| 10.00 | 3.98 | 0.465 | 0.492 | 34.60 | 0.462 | 0.428 | 38.58 | 0.462 | 0.435 | 51.60 | 0.463 | 0.356 |
| 11.00 | 2.64 | 0.504 | 0.548 | 22.80 | 0.496 | 0.457 | 25.44 | 0.497 | 0.466 | 26.90 | 0.486 | 0.388 |
| 12.00 | 2.31 | 0.520 | 0.558 | 15.50 | 0.524 | 0.485 | 17.81 | 0.523 | 0.494 | 12.80 | 0.515 | 0.415 |

Note: Based on search ellipsoid measuring 150 X 100 X 100 m with high values capped at 1.5% Cu and 1.5 g Au/T, and using S.G.=2.79. If minimum 3 composites not found search expanded to 300 X 200 X 200 m. Maximum of 8 assay composites used.
Net Smelter Return (NSR) (CAN \$) = 16.96 X %Cu(US\$1.00/lb) + 10.18 X g Au/Tonne (US\$350.00/oz)



| | |
|---|-----------------|
|  MINOREX CONSULTING LTD. Geological Consultants, Delta, British Columbia | |
| AMERICAN BULLION MINERALS LTD. Vancouver, British Columbia | |
| COMPILATION PLAN RED-CHRIS PROPERTY Liard Mining Division, British Columbia | |
| Drawn By: J.D.B., J.S. | Scale: 1:12,500 |
| Date: April, 1996 | Figure No. 9 |


J. D. Blanchflower

To Accompany Report By J. D. Blanchflower, P. Geo.

EXPLORATION POTENTIAL

The exploration potential of this property continues to be good and further exploratory work, especially diamond drilling, is justified during the 1996 field season. It is the writer's opinion that further field work should be directed at the following exploration targets, in descending order of priority:

1) Exploratory Drilling of the Red-Chris Deposit (Main and East Zones)

The Red-Chris deposit remains open to expansion both laterally and vertically; however, short-term diamond drilling should concentrate on defining those near-surface inferred geologic resources identified along gridline 50400 East and in the southwestern quadrant of the deposit.

No diamond drilling has been conducted along gridline 50400 East and, as a result, there is a 100-metres gap in exploration along the axis of the Red-Chris deposit. Such a gap in geologic information results in a downgrading of the geologic resource classification for that mineralization in the immediate vicinity. A minimum of two diamond drill holes along this gridline will rectify this situation.

Several 1995 diamond drill holes tested the southern margins of the Red Stock from 50000 to 50600 East. Ten of the fourteen holes intersected significant to substantial mineralization within 400 metres of the fault zone. Furthermore, it was discovered that there are local zones with notably higher gold grades superimposed on the more pervasive copper-gold mineralization. When these drilling results were being considered for geologic resource calculations it was evident that the southern near-surface mineralization has the greatest potential for enhancing the economic potential of the deposit versus the deeper, north-plunging mineralization along the northern margins of the stock. Thus, it is recommended that the southern margins of the Red stock from gridlines 49800 to 50400 East be thoroughly evaluated.

2) Exploratory Drilling of the Yellow Chris Area (Gully and Far West Zones)

Twelve NQ-core diamond drill holes are proposed to delineate the recently discovered copper-gold mineralization within the Gully and Far West Zones.

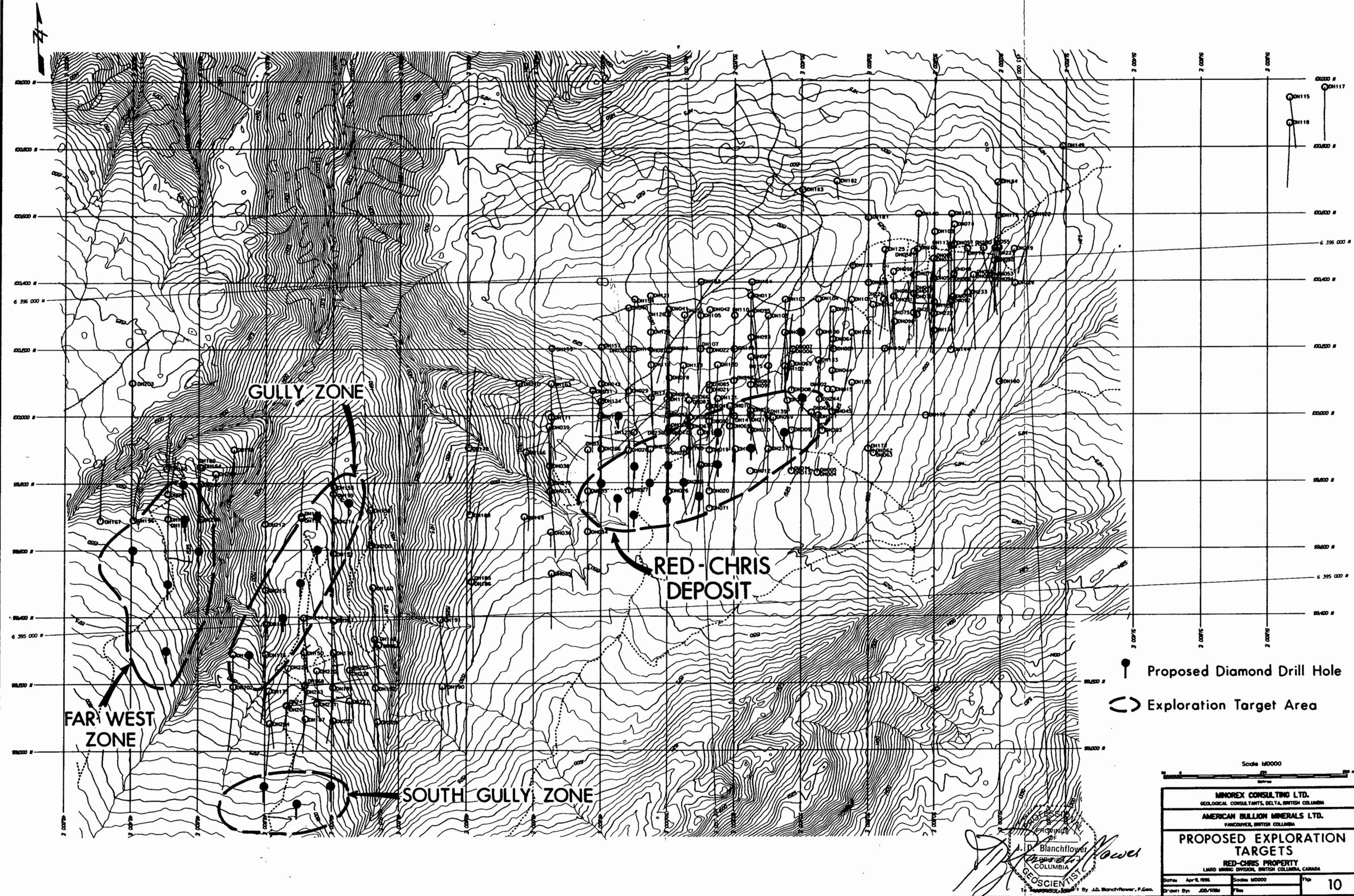
Three drill holes are recommended to trace the strike and dip extensions of the mineralization intersected by drill hole 95-214 in the North Gully Zone (i.e. 201.5 m averaging 0.32% copper and 0.39 g.p.T. gold). The South Gully Zone should be tested with three drill holes to evaluate the area between the two Gully Zones and the northwestern side of the South Gully Zone.

Six drill holes are proposed within the Far West Zone to test the strike and dip extensions of the mineralization intersected by drill hole 95-205 (i.e. 89.8 m averaging 0.33 % copper and 0.65 g.p.T. gold) and 95-208 (i.e. 88.4 m averaging 0.15 % copper and 0.58 g.p.T. gold), and the area south of drill holes 95-167 and -196 where there is an untested copper-in-soil geochemical anomaly.

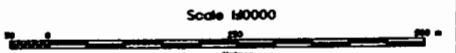
3) Other Exploration Targets within the Yellow Chris Area

Three of the proposed drill holes for the Gully Zone are designated to test the open copper-in-soil geochemical anomaly situated 300 metres south of the South Gully Zone. This drilling should be conducted after the recommended soil geochemical sampling and extended induced polarization surveying.

The writer has documented drill hole collar locations, azimuths, dips and estimated lengths for all of the proposed diamond drilling. See Table V and Figure 10 of this report for the pertinent drilling data and locations of the above proposed drill holes.



Proposed Diamond Drill Hole
 Exploration Target Area



| | | |
|--|----------------|----------|
| MINOREX CONSULTING LTD. GEOLOGICAL CONSULTANTS, DELTA, BRITISH COLUMBIA | | |
| AMERICAN BULLION MINERALS LTD. VANCOUVER, BRITISH COLUMBIA | | |
| PROPOSED EXPLORATION TARGETS | | |
| RED-CHRIS PROPERTY LAMP MINE DISTRICT, BRITISH COLUMBIA, CANADA | | |
| Date: Apr 9, 1996 | Scale: 1:60000 | File: 10 |
| Drawn By: JDB/SBM | File: | |

J.D. Blanchflower
 GEOSCIENTIST
 BRITISH COLUMBIA
J.D. Blanchflower

CONCLUSIONS

The Red-Chris copper-gold mineralization has hybrid alkalic and calc-alkalic porphyry copper characteristics. It is dominantly hosted by the Red stock which is an earliest Early Jurassic hypabyssal plagioclase-hornblende porphyry intrusion of monzodioritic composition. The emplacement of the stock and its subsequent pervasive alteration, sulphide mineralization and late-stage dykes were controlled by reactivated, east-northeasterly faulting. Several north-northwesterly normal and oblique faults occur along the length of the stock, and they appear to have been responsible for displacements of the copper-gold mineralization and its associated quartz vein stockwork zones. Copper versus gold grade ratios of the mineralization vary from 1:0.8 to 1:4 (% copper versus g.p.T. gold) in a westward direction. This westward transition of copper-gold ratios is coincident with increased pyritization, decreased bornite versus chalcopyrite mineralization, and the dominance of a phyllic versus potassic-phyllic alteration assemblage. It appears that the alteration and mineralization was 'telescoped' along the axis of the Red stock in a westward direction rather than being equidimensional.

The 1995 diamond drilling program successfully traced a 400-metre western extension of the Red-Chris deposit and discovered significant gold-bearing mineralization along the southern margins of the Red stock. The strike length of the Red-Chris deposit, comprising the Main and East Zones, is now in the order of 1.7 kilometres with widths ranging from 250 to 700 metres or more.

Exploration drilling over a 2-kilometre strike length, west of the Red-Chris deposit, discovered significant near-surface copper-gold mineralization underlying the Gully and Far West exploration targets. Two east-west trending, subvertical zones of significant copper-gold mineralization were discovered in the Gully Zone; centred at grid coordinates 99800 North by 49000 East and 99200 North by 49000 East. Both zones, although they remain open laterally and vertically, have been tested by widely-spaced drilling over strike distances of 400 to 500 metres and widths from 200 to 300 metres. Drill intercepts from within the southern zone typically grade more than 0.3 percent copper and 0.3 g.p.T. gold over lengths of 15 to more than 300 metres and include local sections with higher copper and gold grades.

The Far West Zone was tested with widely-spaced diamond drilling that intersected chalcopyrite-gold mineralization in two subvertical, easterly trending structures centred at 99800 North by 48500 East. Assay results indicate that the copper to gold grade ratios are in the order of 1:3 with copper grades typically ranging from 0.2 to 0.35 percent and gold values ranging from 0.6 to 0.75 g.p.T.

Detailed geological mapping of the East and West Gully drainages was undertaken at a scale of 1:2,000. The results of this work were utilized during the subsequent drilling of the Gully and Far West Zones and was instrumental in the discovery of the near-surface mineralization at each of these zones.

The 1994 survey control grid was extended westward to 44000 East with one-kilometre north-south gridlines. Soil geochemical sampling was undertaken over the extended grid area and the analytical results from the soil samples were compared to those from past soil geochemical sampling programs. Only one sample site at 99800 North by 46300 East returned a statistically-anomalous value of 187 ppm copper. Five other widely-distributed samples returned values greater than 65 ppm copper and only four soil samples returned gold-in-soil values greater than 25 ppb. There appears to be a general increase in copper-in-soil values from the northeastern corner of the extended soil sampling grid but no obvious multi-site and multi-element anomalies were indicated from the sampling work.

A review of past soil geochemical data revealed that there are several untested soil geochemical anomalies. There are several anomalous copper-in-soil sample sites adjacent to the South Boundary Fault which may be reflecting buried mineralization hosted by the Red stock or Stuhini Group volcanic rocks near the fault zone. There is also an open copper- and possibly gold-in-soil anomaly south of the Gully Zone that should be evaluated with additional geophysical and geochemical surveying and possible diamond drilling. Old soil geochemical results in the vicinity of the Far West Zone indicate possible

mineralization 100 metres south of drill holes 95-167 and 95-196. In addition, the reported copper-molybdenum mineralization within the Sus North claim should be re-assessed.

The results of I.C.P. analyses on 20 percent of the drill core samples indicate that copper, gold and possibly silver are the only metals of economic interest, and a relatively 'clean' concentrate could be produced without any serious penalty contaminants. Check assaying of 'blind' duplicate samples and selected sample pulps indicates that the 1995 drill core sampling and analytical procedures were well controlled and that the assay and analytical data are both accurate and precise (Smee, 1996).

Mr. G. H. Giroux of Montgomery Consultants Ltd. updated the geological resources of the Red-Chris deposit and Yellow Chris mineralization using ordinary kriging geostatistical calculations on a geologic block model that was constructed by the writer and mining engineers of Fluor Daniel Wright Ltd. Individual blocks measuring 20 metres long by 20 metres wide by 15 metres deep were constrained by drill hole density, geology and composite assay data, and classified as measured, indicated and inferred based on the distance from the block centroid to the nearest composite used for its estimate. The geologic resources were calculated from a surface elevation of approximately $1,530 \pm 30$ m to an arbitrary elevation of 900 m A.M.S.L.; using a mean specific gravity of 2.79. Giroux (1996) reported the in-situ geologic resources at various copper cut-off grades and Net Smelter Returns (i.e. N.S.R. CAN \$ = 16.96 X % copper + 10.18 X g.p.T gold) based on metal prices of US \$1.00 per pound copper and US \$350.00 per ounce gold. Since the economic viability of the following geologic resources has not yet been demonstrated, the term 'resources' is the equivalent of 'mineralization' (as per National Policy No. 2-A).

| Cut-Off Grade Cu % | Measured | | | Indicated | | | Measured & Indicated | | | Inferred | | |
|--------------------------|------------------|---------------|-----------------|------------------|---------------|-----------------|----------------------|---------------|-----------------|------------------|---------------|-----------------|
| | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au | Tonnes (X106) | Grade Cu % | Grade gpT Au |
| 0.20 | 87.10 | 0.394 | 0.309 | 696.30 | 0.347 | 0.294 | 783.40 | 0.352 | 0.296 | 478.20 | 0.333 | 0.288 |
| 0.25 | 69.40 | 0.437 | 0.339 | 533.80 | 0.384 | 0.326 | 603.20 | 0.390 | 0.327 | 389.80 | 0.357 | 0.311 |
| 0.30 | 53.20 | 0.486 | 0.378 | 387.50 | 0.426 | 0.362 | 440.70 | 0.433 | 0.364 | 279.10 | 0.390 | 0.344 |
| 0.35 | 39.20 | 0.545 | 0.418 | 266.50 | 0.472 | 0.401 | 305.70 | 0.481 | 0.403 | 186.20 | 0.423 | 0.384 |
| 0.40 | 29.80 | 0.599 | 0.456 | 177.50 | 0.521 | 0.440 | 207.30 | 0.532 | 0.442 | 109.00 | 0.459 | 0.404 |
| 0.45 | 22.90 | 0.652 | 0.501 | 113.70 | 0.577 | 0.483 | 136.60 | 0.589 | 0.486 | 58.10 | 0.494 | 0.401 |
| 0.50 | 18.40 | 0.696 | 0.540 | 77.30 | 0.626 | 0.529 | 95.70 | 0.639 | 0.531 | 21.90 | 0.537 | 0.461 |

Continued detailed exploration of the Red-Chris deposit and the Yellow Chris area is justified. This work should focus on defining the near-surface resources of the Red-Chris deposit with the best probability of enhancing the economic potential of the deposit, and on delineating the copper-gold mineralization of the Gully and Far West Zones. The cost of this recommended exploration work is estimated at CAN \$ 2.1 million.

Submitted by,
MINOREX CONSULTING LTD.



J. Douglas Blanchflower, P. Geo.
Consulting Geologist

PROPOSED 1995 EXPLORATION PROGRAM

It is recommended that the detailed exploration of the property be continued. Recommendations are restricted to the evaluation of inferred copper-gold mineralization and other areas with exploration potential within the property. Proposals for the detailed infill drilling of the measured and indicated geologic resources within the Red-Chris deposit will be the responsibility of mining engineers cognizant of the requirements of a feasibility report on the property.

It is recommended that further work should focus on defining near-surface inferred geologic resources within the Red-Chris deposit to enhance its economic potential and delineate the geologic resources of the Gully and Far West Zones. This exploration work should commence in July and be completed by the end of August. The recommended exploration work should include:

- 1) Detailed HQ- and/or NQ-core diamond drilling - to define and advance the near-surface inferred geologic resources in the southwestern quadrant of the proposed Red-Chris open pit and along gridline 50400 East because these resources could add substantially to the economic potential of the project. It is estimated that a minimum of 16 drill holes, totalling 5,000 metres, will be required to accomplish this recommendation. Further drilling should be on section and at an azimuth of 180° and dip of -60° to maintain established drilling profiles for resource estimation.

Drilling should be extended, if possible, to the 1,100- or 1,200-metre elevation. The assaying and check-assaying procedures of the 1995 drilling campaign should be maintained, and systematic geochemical analyses (31-element I.C.P.) should be undertaken on a minimum of 20 percent of the samples. The proposed drill sites are shown on Figure 10 and in Table V of this report.

- 2) Exploratory NQ-core diamond drilling - to evaluate the North and South Gully Zones, the Far West Zone, and the geochemical and geophysical anomalies 300 metres south of the Gully Zone.

Nine NQ-core diamond drill holes, totalling 3,100 metres, are proposed to test the Gully Zone. This drilling should be at an azimuth of 180°, a dip of -60°, and staggered to intersect any east-west structural trends.

Six NQ-core diamond drill holes, totalling 1,900 metres, are recommended to test the lateral extensions of the Far West Zone.

- 3) Geophysical and geochemical surveying - to identify any sulphide mineralization underlying the soil geochemical anomaly 300 m south of the Gully Zone, and complete soil sampling of the 1994 survey grid area. This work will require extending the existing survey grid south of the Gully Zone; and
- 4) Environmental studies - to continue the established baseline environmental monitoring program.

The estimated cost of the above recommended exploration program is CAN \$ 2,099,670.00 (see Proposed 1996 Exploration Budget).

TABLE V
PROPOSED 1996 DIAMOND DRILLING

| Core Size | Collar Location | | Azimuth (deg) | Dip (deg) | Estimated Length (m) | Comment |
|--|------------------------|----------------|----------------------|------------------|-----------------------------|---------------------------------|
| | Northing | Easting | | | | |
| YELLOW CHRIS AREA | | | | | | |
| Far West Zone | | | | | | |
| NQ | 99600.00 | 48400.00 | 180.0 | -60.0 | 300 | Test south of DDH 95-196 |
| NQ | 99300.00 | 48500.00 | 180.0 | -60.0 | 350 | Test for Gully zone extension |
| NQ | 99500.00 | 48500.00 | 180.0 | -60.0 | 350 | Test for Gully zone extension |
| NQ | 99700.00 | 48550.00 | 180.0 | -60.0 | 300 | Test W of DDH 95-208 |
| NQ | 99800.00 | 48550.00 | 180.0 | -60.0 | 300 | Test W of DDH 95-208 |
| NQ | 99600.00 | 48600.00 | 180.0 | -60.0 | 300 | Test S of DDH 95-208 |
| Proposed Drilling for Far West Zone | | | | | 1,900 metres | |
| Gully Zone | | | | | | |
| NQ | 99300.00 | 48750.00 | 180.0 | -60.0 | 400 | Test W of DDH 96-176 |
| NQ | 98900.00 | 48800.00 | 180.0 | -60.0 | 300 | Test geochem S of Gully zone |
| NQ | 99400.00 | 48850.00 | 180.0 | -60.0 | 400 | Test E of DDH 95-195 |
| NQ | 98800.00 | 48900.00 | 180.0 | -60.0 | 300 | Test geochem S of Gully zone |
| NQ | 99500.00 | 48900.00 | 180.0 | -60.0 | 350 | Test between DDH 156 & 211 |
| NQ | 99600.00 | 48950.00 | 180.0 | -60.0 | 350 | Test W of DDH 95-214 |
| NQ | 99700.00 | 48950.00 | 180.0 | -60.0 | 350 | Test W of DDH 95-214 |
| NQ | 98900.00 | 49000.00 | 180.0 | -60.0 | 300 | Test geochem S of Gully zone |
| NQ | 99750.00 | 49050.00 | 180.0 | -60.0 | 350 | Test E of DDH 95-214 |
| Proposed Drilling for Gully Zone | | | | | 3,100 metres | |
| RED CHRIS DEPOSIT | | | | | | |
| HQ/NQ | 99800.00 | 49800.00 | 180.0 | -60.0 | 250 | Test above DDH 95-206 |
| HQ/NQ | 99750.00 | 49850.00 | 180.0 | -60.0 | 300 | Infill gridline 49850 E |
| HQ/NQ | 100000.00 | 49850.00 | 180.0 | -60.0 | 350 | Infill gridline 49850 E |
| HQ/NQ | 99700.00 | 49900.00 | 180.0 | -60.0 | 250 | Test for min'l in DDH 027 & 028 |
| HQ/NQ | 99850.00 | 49900.00 | 180.0 | -60.0 | 300 | Test for min'l in DDH 027 & 028 |
| HQ/NQ | 99800.00 | 49950.00 | 180.0 | -60.0 | 300 | Test S of DDH 95-234 |
| HQ/NQ | 99750.00 | 50000.00 | 180.0 | -60.0 | 300 | Test for min'l in DDH 025 & 026 |
| HQ/NQ | 99850.00 | 50000.00 | 180.0 | -60.0 | 300 | Test for min'l in DDH 025 & 026 |
| HQ/NQ | 99800.00 | 50050.00 | 180.0 | -60.0 | 300 | Extend DDH 95-239 |
| HQ/NQ | 99750.00 | 50100.00 | 180.0 | -60.0 | 250 | Test S of DDH 240 intercept |
| HQ/NQ | 99850.00 | 50150.00 | 180.0 | -60.0 | 350 | Test S of DDH 94-131 intercept |
| HQ/NQ | 99950.00 | 50150.00 | 180.0 | -60.0 | 350 | Test S of DDH 94-131 intercept |
| HQ/NQ | 99900.00 | 50250.00 | 180.0 | -60.0 | 250 | Test beneath DDH 012 |
| HQ/NQ | 99950.00 | 50350.00 | 180.0 | -60.0 | 250 | Test between DDH 009 & 011 |
| HQ/NQ | 100050.00 | 50400.00 | 180.0 | -60.0 | 400 | Infill gridline 50400 E |
| HQ/NQ | 100250.00 | 50400.00 | 180.0 | -60.0 | 500 | Infill gridline 50400 E |
| Proposed Drilling for Red-Chris Deposit | | | | | 5,000 metres | |
| Total Proposed Diamond Drilling | | | | | 10,000 metres | |
| | | | | | or | 32,800 feet |

PROPOSED 1996 EXPLORATION BUDGET

The following cost estimates for the recommended exploration program are based upon actual 1995 expenditures.

| Item | Description | Estimated Cost (CAN \$) |
|----------------------|---|----------------------------|
| Analyses - | 500 soil samples @ \$20.00/sample | \$ 10,000.00 |
| Assays - | 100 surface rock samples @ \$17.00/sample | 1,700.00 |
| | 1,000 core samples @ \$17.00/sample | 17,000.00 |
| | 2,000 core samples @ \$26.00/sample | 52,000.00 |
| | 300 check samples @ \$26.00/sample | 7,800.00 |
| | 600 ICP samples @ \$6.00/sample | 3,600.00 |
| Accommodation - | Camp operations - 20 persons @ 60 days @ \$40.00/day | 48,000.00 |
| | Hotel/motel during mob/demob | 7,000.00 |
| Environmental - | Baseline environmental studies | 40,000.00 |
| | Reclamation | 60,000.00 |
| Consulting - | Geological/project supervision with project documentation | 66,000.00 |
| Legal - | | 1,000.00 |
| Drafting | CAD drafting, map preparation, reproduction | 28,000.00 |
| Expediting - | SatTel rental, telephone, expediting | 26,000.00 |
| Drilling - | 10,000 m of HQ/NQ core drilling @ \$95.00/m | 950,000.00 |
| | Mob/demob of drilling and heavy equipment | 35,000.00 |
| | Site preparation, heavy equipment rental | 30,000.00 |
| Equipment - | Sperry Sun, generator, radios | 10,000.00 |
| Equipment - | Consumables | 30,000.00 |
| Fuel - | Camp and camp service vehicle fuel | 10,000.00 |
| Assessment - | Filing of 1995 exploration work for assessment credit | 10,000.00 |
| Salaries and wages - | American Bullion office and field personnel | 206,800.00 |
| Surveys - | 10 I-km of I.P. south of Gully Zone | 20,000.00 |
| Surveys - | Control | 6,000.00 |
| Linecutting - | 10 I-km south of Gully Zone | 7,000.00 |
| Transport - | Mob/demob of field personnel | 8,400.00 |
| | Fixed-wing charters | 10,000.00 |

PROPOSED 1996 EXPLORATION BUDGET (Continued)

| Item | Description | Estimated Cost (CAN \$) |
|---|--|------------------------------------|
| Helicopter Support - | Drilling and camp support | 180,000.00 |
| Vehicle Support - | Truck rental; quad motorcycle rental | 11,400.00 |
| Freight Expenses - | Sample shipping to Smithers; food/supplies from Smithers | 15,000.00 |
| Miscellaneous - | Indirect expenses | 2,000.00 |
| Total Estimated Expenses | | \$ 1,899,700.00 |
| Project Management Fee | | 189,970.00 |
| TOTAL ESTIMATED EXPLORATION BUDGET | | <u>\$ 2,099,670.00</u> |

The above Estimates of Cost consider the use of Canadian-based contractors but do not include any applicable Goods and Services taxes which are refundable.

This report only addresses the exploration and evaluation of inferred copper-gold mineralization and those areas with exploration potential within the property. Proposals for detailed infill drilling of the measured and indicated geologic resources within the Red-Chris deposit will be the responsibility of mining engineers that are cognizant of the requirements of a feasibility report on the property.

STATEMENT OF QUALIFICATIONS

I, **J. DOUGLAS BLANCHFLOWER**, of the Municipality of Delta, Province of British Columbia, DO HEREBY CERTIFY THAT:

- 1) I am a Consulting Geologist with a business office at 11967 - 83A Avenue, Delta, British Columbia, V4C 2K2; and President of Minorex Consulting Ltd.
- 2) I am a graduate of Economic Geology with a Bachelor of Science, Honours Geology degree from the University of British Columbia in 1971.
- 3) I am a Registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia (No. 19086).
- 4) I am a Fellow of the Geological Association of Canada (No. F0046).
- 5) I have practised my profession as a geologist for the past twenty-three years.

Pre-Graduate field experience in Geology, Geochemistry and Geophysics (1966 to 1970).

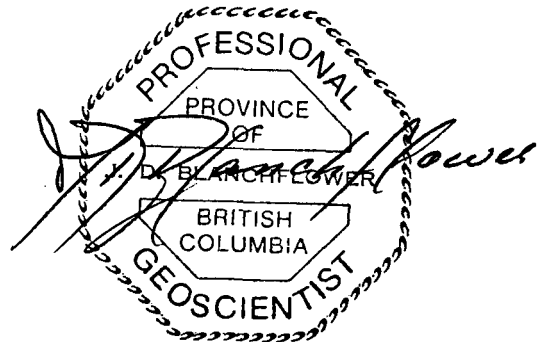
Three years as Geologist with the B. C. Ministry of Energy, Mines and Petroleum Resources (1970 to 1972).

Seven years as Exploration Geologist with Canadian Superior Exploration Limited (1972 to 1979).

Three years as Exploration Geologist with Sulpetro Minerals Limited (1979 to 1982).

Thirteen years as Consulting Geologist and President of Minorex Consulting Ltd. (1982 to 1995).

- 6) I own no direct, indirect or contingent interest in the subject claims, nor shares in or securities of **AMERICAN BULLION MINERALS LTD.**
- 7) I supervised the 1995 exploration program on the **RED - CHRIS** Property from April 27, 1994 until November 12, 1994, and wrote this report which documents the results of this work.
- 8) I consent to the use of this report in a Prospectus.



J. Douglas Blanchflower, P. Geo.
 Consulting Geologist

Dated at Delta, British Columbia, Canada this 30th day of April, 1996

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