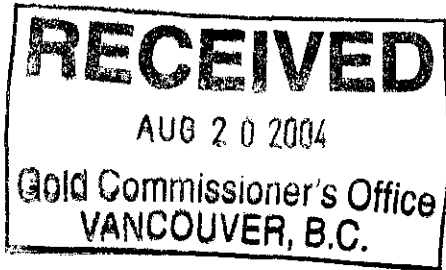


2004 EXPLORATION REPORT



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 -

RED CHRIS DEVELOPMENT COMPANY LTD.

Suite 488 - 625 Howe Street
Vancouver, British Columbia
Canada V6C 2T6

- Prepared By -

J. R. Bellamy, P. Geo.

August, 2004 **GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

27,479

bcMetals

**RED CHRIS PROJECT
2003 EXPLORATION & DRILLING REPORT**

for

RED CHRIS DEVELOPMENT COMPANY LTD



East Zone Drilling

J. Bellamy P. Geo.

AUGUST, 2004

bcMetals Corporation

488 – 625 Howe St., Vancouver, British Columbia, Canada V6C 2T6 Tel: 1 (604) 683 0140 Fax: 1 (604) 683 0126

TABLE OF CONTENTS

1.0	SUMMARY	1
2.0	RECOMMENDATIONS	3
3.0	INTRODUCTION	5
4.0	PROPERTY DESCRIPTION AND LOCATION	5
4.1	Location and Access	5
4.2	Claim Information.....	8
4.3	Physiography and Climate	15
4.4	History.....	17
4.5	Discussion of 1995 Results.....	21
5.0	2003 EXPLORATION PROGRAM.....	24
5.1	3003 Diamond Drilling.....	24
5.2	2003 Geotechnical Drilling.....	27
5.3	Site and Drill hole Surveying.....	30
5.4	Sampling Method and Security.....	30
5.5	Sample Preparation and Analyses.....	32
5.6	Quality Assurance and Quality Control.....	34
5.7	Environmental Studies.....	36
5.8	Mineral Resource Inventory Study	37
6.0	GEOLOGY	37
6.1	Regional Geology	37
6.2	Local Geology.....	40
6.3	Mineralization.....	45
6.4	Veining and Stockwork.....	47
6.5	Alteration	51
6.6	Structure.....	53
6.7	Deposit Model.....	55
7.0	DISCUSSION OF 2003 DRILLING RESULTS.....	56
7.1	Geologic Model	56
7.2	Mineral Resource Inventory Results.....	61
8.0	STATEMENT OF 2003 EXPENDITURES	62
9.0	PROPOSED 2004 EXPLORATION PROGRAM	64
9.1	Delineation drilling within the proposed Red Chris open pit	64

9.2	Peripheral Exploration Drilling.....	65
9.3	Environmental Studies.....	65
10.0	PROPOSED 2004 EXPLORATION BUDGET.....	66
11.0	STATEMENT OF QUALIFICATIONS.....	68
12.0	BIBLIOGRAPHY.....	69

TABLES

Table 1:	Mineral Claim Information.....	12
Table 2:	Summary of Pre-2004 Red Chris Resource Estimates.....	21
Table 3:	2003 Geotechnical Drill Holes.....	29
Table 4:	Table of 2003 Diamond Drilling.....	59
Table 5:	Mineral Resource Inventory Results.....	61
Table 6:	Proposed 2004 Diamond Drilling.....	66
Table 7:	Proposed 2004 Exploration Budget.....	67

APPENDICES

I.	Diamond Drill Hole Collar and Downhole Survey Data
II.	Diamond Drill Hole Geological Logs (DDH 03-248 to 03-295), (Geotechnical Holes)
III.	Diamond Drill Hole Sampling Intervals and Assay Results (DDH 03-248 to 03-295)
IV.	Certificates of Analysis IPL – (ICP)
V.	Certificates of Assay IPL – Diamond Drill Core Assays
VI.	Certificates of Assay (ALS Chemex), (Acme) – Check Assay Results
VII.	CDN Resource Laboratories Ltd. – Preparation of Assay Standards
VIII.	Report on Analytical Quality by A. J. Sinclair (January, 2004)
IX.	Summary of 2003 Geotechnical Program by Knight Piésold (2003)
X.	Update Report on the Red Chris Copper-Gold Project (Geostatistical Resource Evaluation by G. Giroux and J Bellamy, (2004)
XI.	Water Quality Field Report 2003 – Red Chris Mine by J. Chaplin MSc. (Nov., 2003)
XII.	Red Chris Baseline Environmental Monitoring by C. Schell MSc., RPBio. (Jan., 2004)
XIII.	Results of a Fall Survey of Stone’s Sheep and Mountain Goats in the Todagin Area
XIV.	Figures 10 – 49.

FIGURES

1	Location Map.....	6
2	Regional Map.....	7
3	Mineral Claim Map.....	11

4	Property Boundary and Physiography	16
5	Drill Hole Locations and Zones	26
6	Regional Geology Map	41
7	Property Geology Map	42
8	Vertical Cross Section 50750 E - East Zone	48
9	Vertical Cross Section 50100 E - Main Zone	49
10	Geology Cross Section 49800 East, 1:2000	In Pocket
11	Geology Cross Section 49875 East, 1:2000	In Pocket
12	Geology Cross Section 49900 East, 1:2000	In Pocket
13	Geology Cross Section 49925 East, 1:2000	In Pocket
14	Geology Cross Section 49950 East, 1:2000	In Pocket
15	Geology Cross Section 49975 East, 1:2000	In Pocket
16	Geology Cross Section 50000 East, 1:2000	In Pocket
17	Geology Cross Section 50025 East, 1:2000	In Pocket
18	Geology Cross Section 50050 East, 1:2000	In Pocket
19	Geology Cross Section 50075 East, 1:2000	In Pocket
20	Geology Cross Section 50100 East, 1:2000	In Pocket
21	Geology Cross Section 50125 East, 1:2000	In Pocket
22	Geology Cross Section 50150 East, 1:2000	In Pocket
23	Geology Cross Section 50175 East, 1:2000	In Pocket
24	Geology Cross Section 50200 East, 1:2000	In Pocket
25	Geology Cross Section 50225 East, 1:2000	In Pocket
26	Geology Cross Section 50250 East, 1:2000	In Pocket
27	Geology Cross Section 50275 East, 1:2000	In Pocket
28	Geology Cross Section 50300 East, 1:2000	In Pocket
29	Geology Cross Section 50325 East, 1:2000	In Pocket
30	Geology Cross Section 50350 East, 1:2000	In Pocket
31	Geology Cross Section 50400 East, 1:2000	In Pocket
32	Geology Cross Section 50450 East, 1:2000	In Pocket
33	Geology Cross Section 50500 East, 1:2000	In Pocket
34	Geology Cross Section 50550 East, 1:2000	In Pocket
35	Geology Cross Section 50600 East, 1:2000	In Pocket
36	Geology Cross Section 50650 East, 1:2000	In Pocket
37	Geology Cross Section 50700 East, 1:2000	In Pocket
38	Geology Cross Section 50725 East, 1:2000	In Pocket
39	Geology Cross Section 50750 East, 1:2000	In Pocket
40	Geology Cross Section 50775 East, 1:2000	In Pocket
41	Geology Cross Section 50800 East, 1:2000	In Pocket
42	Geology Cross Section 50825 East, 1:2000	In Pocket
43	Geology Cross Section 50850 East, 1:2000	In Pocket
44	Geology Cross Section 50875 East, 1:2000	In Pocket
45	Geology Cross Section 50900 East, 1:2000	In Pocket
46	Geology Cross Section 50990 East, 1:2000	In Pocket
47	1200 Level Geology Plan 1:2000	In Pocket
48	1400 Level Geology Plan 1:2000	In Pocket
49	1500 Level Geology Plan 1:2000	In Pocket

1.0 SUMMARY

- bcMetals Corporation acquired the Red Chris property in 2003 by completing the purchase of Red Chris Development Company Ltd. (RCDC) with its only material asset, the Red Chris mineral property interest. Red Chris Development Company is the operator of the Red Chris Project and owns the mineral claims. The 2003 fall drilling program was designed to confirm and update the resource model of the East and Main zones generated from 71,472 metres of diamond drilling conducted over the period from 1974 to 1995. The fall 2003 infill drill program, which was undertaken between September 5th and November 14th, was comprised of 49 diamond drill holes totalling 16,591 metres. The new resource model generated from this drilling will be used to complete a Feasibility Study which is forecast to be completed by September 30, 2004.
- Portions of this report relating to property description, work history, regional and local geology, have been taken from the American Reserve Energy Corporation, November 18, 2002 report by J.D Blanchflower, G.H. Giroux, and R. Rodger. Doug Blanchflower, P. Geo., who managed the 1994-1995 programs at Red Chris for American Bullion Minerals Ltd. completed the above sections in this report which was an accepted NI 43-101 report.
- The Red Chris property is located about 20 km southeast of the village of Iskut and 80 km south of Dease Lake on the north-facing Todagin Plateau in northwestern British Columbia, Canada.
- The Red Chris property consists of 120 two-post, 8 fractional, and 28 modified grid contiguous mineral claims for a total of 452 units. The total claim block covers approximately 110 square km.
- From 1968 to 1981 the property was explored by Conwest Exploration Ltd., Great Plains Development Co., Silver Standard Mines Ltd., Ecstall Mining Limited and Texasgulf Canada Limited with geochemistry, geologic mapping, ground magnetics, induced polarization, trenching, and percussion and diamond drilling.
- During the 1994 field season, American Bullion completed mineral claim staking, land surveying, line cutting, soil geochemistry, geophysics (including magnetics, V.L.F. EM and induced polarization), camp and core logging facility construction, HQ and NQ diamond drilling totalling 21,417 m in 58 holes, core sample assaying, acid base accounting studies, base-line environmental studies, a mineral resource estimate, petrographic and metallurgical studies, and documentation. The programs were completed between June and November, 1994 at a cost of CAN \$4.2 million.
- The 1995 American Bullion exploration program consisted of claim staking, survey control, soil geochemistry, geologic mapping, diamond drilling (112 holes totalling 36,770 m), geotechnical diamond drilling at three proposed tailings dam sites, acid base accounting analysis, baseline environmental studies, metallurgical studies, a resource estimate, and a scoping study by Fluor Daniel Wright Ltd. American Bullion Minerals Ltd. reported the 1995 exploration program cost CAN \$5.9 million.

- 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.
- The Red-Chris porphyry deposit (copper-gold mineralization) is distributed along the central axis of the pervasively altered and fractured Red stock. At the Red-Chris deposit, the Red stock is the predominant host of the mineralization. Mineralization and associated alteration are more intense adjacent to the ancestral en echelon fault system along the axis of the stock which controlled the emplacement of the stock and later altering and mineralizing hydrothermal fluids – more typical of a shear-hosted copper-gold deposit. It has long been recognized that the Red-Chris copper-gold mineralization has good near-vertical and longitudinal continuity, controlled largely by post-mineral faulting superimposed on and along the ancestral, en echelon, central axis fault zone, commonly referred to as the ‘East Zone Fault.’
- It was recognized during early exploration of the Red Chris property that most of the mineralization is closely associated with individual and sheeted quartz (\pm carbonate) veining, and quartz (\pm carbonate) stockwork zones.
- Pyrite, chalcopyrite and lesser bornite are the principal sulphide minerals of the Red-Chris deposit. 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 copper mineralization.
- RCDC’s 2003 drilling campaign commenced September 7th and finished November 7th. A total of 49 holes totalling 16,591 metres were drilled into both the East and Main zones. This drilling included nine geotechnical, orientated core holes totalling 2,499 metres. Three of the 49 Red Chris drill holes totalling 793.44 metres were drilled vertically using HQ sized core to provide material for metallurgical grinding tests. The geotechnical holes, while drilled primarily for pit slope design purposes, also provided assay information that was used in the new resource calculations. The geotechnical drilling was supervised by personnel from Knight Piésold Consulting and the geological logging and sampling by RCDC’s personnel.
- Knight Piésold Consulting personnel also designed and supervised geotechnical drilling programs in the areas of the proposed Waste Dump Site, Plant Site, and Tailings storage Facility. The Knight Piésold Consulting report is appended to this Report (Appendix VIII)
- During the 2003 field season, additional information on geotechnical and hydrogeological issues were collected. Kinetic tests, to better understand and quantify the acid producing potential of various rock types in the area, are ongoing. During 2003, additional test pitting and drilling on a potential tailings dam site were completed. Additional base line studies were conducted in the fall of 2003 and included water

quality, hydrology, fish habitat assessment, and wildlife surveys. More studies will be conducted in the summer of 2004 to fill identified gaps in the base line data including Terrestrial Eco-System mapping, archaeology, traditional use surveys, water quality, vegetation, metals and soils survey. Also, during the winter of 2004, additional snow course studies will be undertaken.

- A new resource estimate based on the 2003 drilling program was prepared by Gary Giroux, P. Eng., and was classified by 43-101 standards as 'measured', 'indicated', and 'inferred' by a system that involves both geologic and grade continuity and distance of blocks from drill holes.
- During the 2003 drill campaign RCDC retained A.J. Sinclair, Ph.D., P.Eng. to evaluate the earlier analytical work and comment on the 2003 Quality Assurance and Quality Control procedures and results. Dr Sinclair's report is appended to this Report (Appendix 2).
- The 2004 resource estimate at a 0.5 % Cu cut-off reports 60.1 million tonnes measured + indicated at an average grade of 0.70% Cu and 0.59 g Au.

2.0 RECOMMENDATIONS

The 2003 fall infill diamond drilling and geotechnical program was designed to confirm and update the resource model of the East and Main zones generated from 71,472 metres of diamond drilling conducted over the period from 1974 to 1995. The geotechnical programs, conducted by Knight Piésold Consulting personnel for RCDC, provided data for the design parameters of a proposed pit slope, waste dump, plant site, and tailings storage facility. Geotechnical drill holes and test pits also provided condemnation information for the mining site plan.

With the data and information compiled from the 2003 drilling and geotechnical programs a new Feasibility Study, which is currently underway, is to be completed by September 30, 2004. The company has awarded the Red Chris Feasibility Study to AMEC E&C Services Limited.

During the compilation and interpretation of data derived from the various Red Chris diamond drilling programs, it was determined that several areas within the proposed ultimate open pit contained unconstrained zones of mineralization. These zones require a program of delineation drilling, prior to the finalizing of an ultimate pit design.

The Yellow Chris area lies to the west of the Main Zone and contains several partly delineated mineral zones called the Gully and Far West zones. The 2004 resource update for the Red Chris property was compiled by Giroux Consultants Ltd. and included an Inferred resource estimate for these two satellite zones. At a 0.2% Cu cut-off grade, this resource is estimated at 116 million tonnes @ 0.32% Cu and 0.30 gpt Au. These zones have not been entirely delineated by past drilling and require further drilling to both upgrade the near-surface inferred geologic resources and define the extents of the various zones.

Doug Blanchflower, P. Geo., who managed the 1994-1995 exploration programs at Red Chris for American Bullion Minerals Ltd. and who coauthored the November 18, 2002 *Report on the Red Chris Copper-Gold Project* by G.H. Giroux, J.D Blanchflower, and R. Rodger for American Reserve Energy Corporation, also recommended drilling the geochemical and geophysical anomalies located 300 metres south of the Gully Zone. As these zones lie outside of the intended Red Chris open pit, no time frame for the commencement of this proposed drilling program is proposed.

3.0 INTRODUCTION

bcMetals Corporation acquired the Red Chris property in 2003 by completing the purchase of Red Chris Development Company Ltd. (RCDC) with its only material asset, the Red Chris mineral property interest. The 2003 fall drilling program was designed to confirm and update the resource model of the East and Main zones generated from 71,472 metres of diamond drilling conducted over the period from 1974 to 1995. The new resource model will be used to complete a *Feasibility Study* which is forecast to be completed by September 30, 2004.

Portions of this report relating to property description, work history, regional and local geology, have been taken from the American Reserve Energy Corporation, November 18, 2002 report by G.H. Giroux, J.D Blanchflower, and R. Rodger. Doug Blanchflower, P. Geo., who managed the 1994-1995 programs at Red Chris for American Bullion Minerals Ltd., completed the above mentioned sections in this report.

John Bellamy P. Geo. managed the fall 2003 drilling program on the Red Chris project and completed the remaining sections on drilling, sampling method and approach, sample preparation, analysis and security, in this document

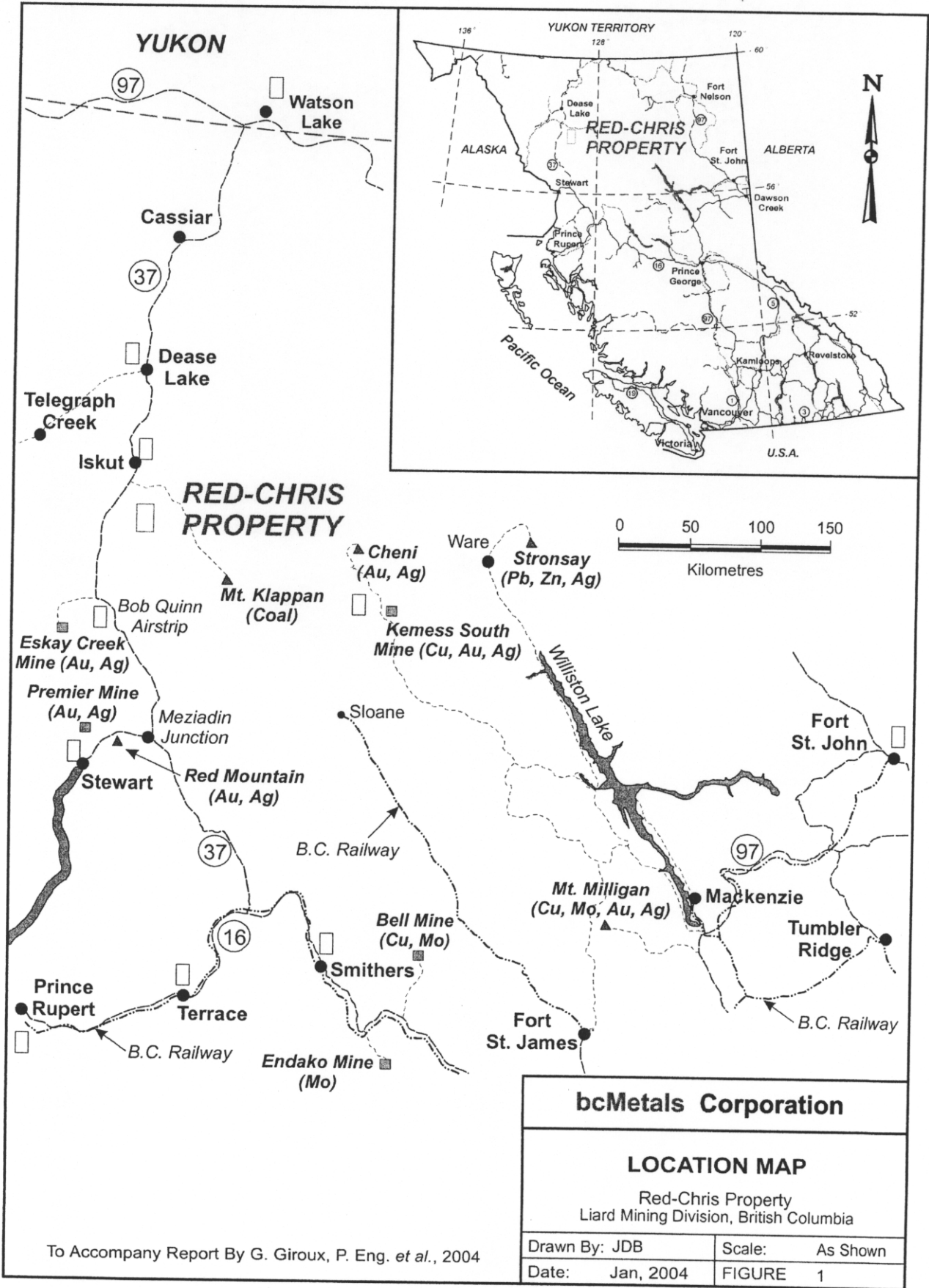
4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location and Access

The Red Chris property is located about 20 km southeast of the village of Iskut and 80 km south of Dease Lake on the north-facing Todagin Plateau between Ealue and Kluea Lakes in northwestern British Columbia, Canada. The property is within the designated area for mineral resource development in the Cassiar Iskut-Stikine Land and Resource Management Plan. A deep sea port is situated at Stewart about 322 km to the south by road (including 23 km of mine access road from Highway 37, yet to be constructed), (see Figure 1). The property is centred on latitude 57° 42' North, longitude 129° 47' West within NTS map sheet 104H/12W, Liard Mining Division.

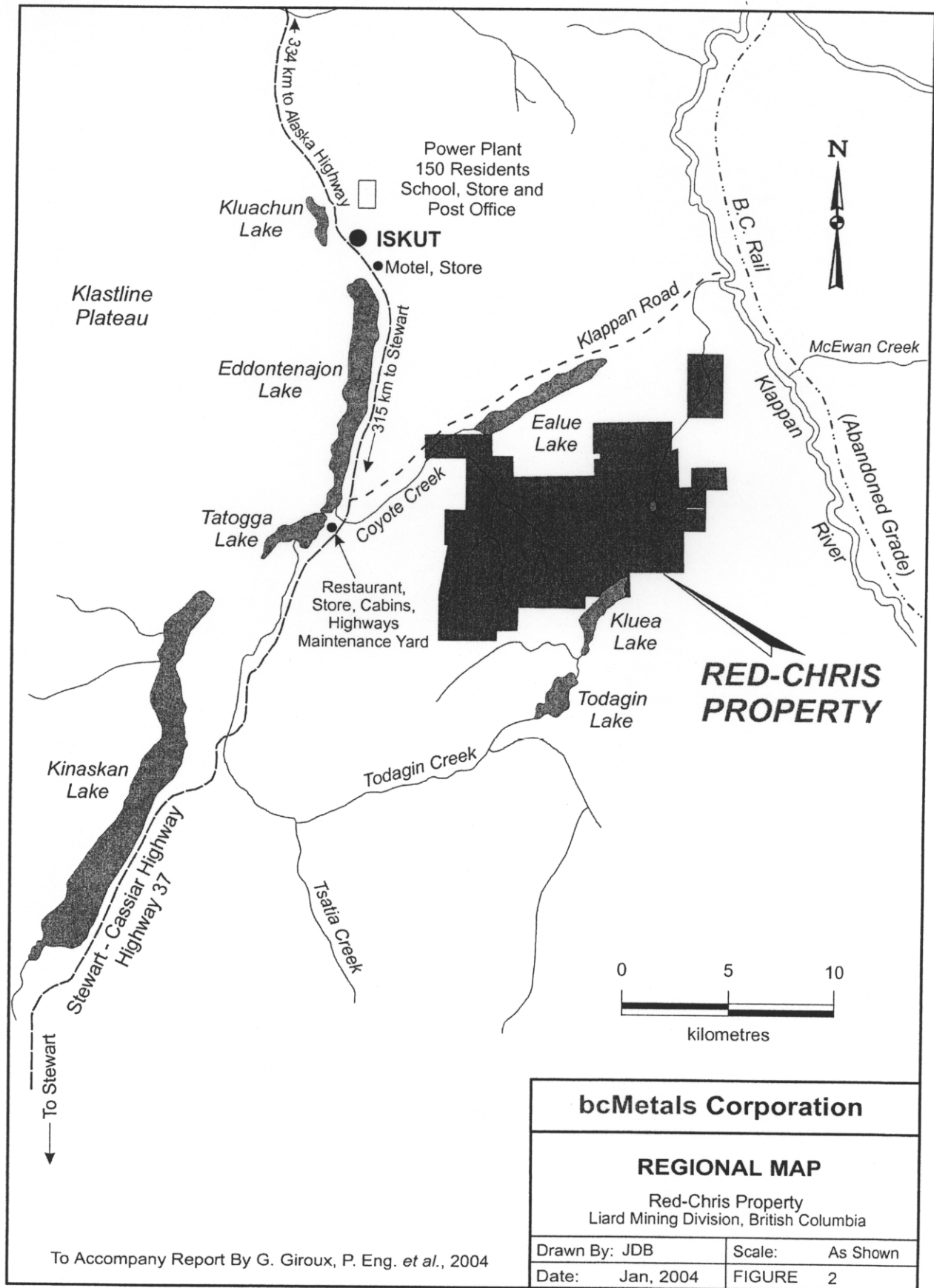
The property is helicopter accessible from Dease Lake or from several landing sites along the Stewart-Cassiar Highway (Highway 37) which is 12 km to the west of the claims centre (see Figure 2). Dease Lake is regularly serviced by scheduled commercial airline flights from either Smithers or Terrace. There is also a gravel airstrip 2 km north of the village of Iskut that could handle DC-3 aircraft. Several resorts and motels are situated along Highway 37 between Iskut and Tatogga Lake, which provide seasonal accommodation and meals.

A rough tote road to the camp area leaves the Klappan Road just west of Ealue Lake. The road was constructed by Texasgulf Inc. in the 1970's and was utilized by American Bullion in the 1990's and Red Chris Development Company in 2003 to haul drilling rigs to the project site. Because of sensitive drainage crossings and the steepness of the road, project permitting allowed only a single movement of equipment at the commencement and termination of the 2003 drilling project. Personnel, ancillary drilling equipment and supplies, and camp supplies were flown to the Red Chris project site by helicopter, from a staging site at Tatogga Lake. A Pacific Western,



bcMetals Corporation	
LOCATION MAP	
Red-Chris Property Liard Mining Division, British Columbia	
Drawn By: JDB	Scale: As Shown
Date: Jan, 2004	FIGURE 1

To Accompany Report By G. Giroux, P. Eng. et al., 2004



To Accompany Report By G. Giroux, P. Eng. *et al.*, 2004

Bell 206 helicopter was based at the Red Chris camp for the fall 2003 drilling campaign.

4.2 Claim Information

The Red Chris property consists of 120 two-post, 8 fractional and 28 modified grid contiguous mineral claims for a total of 452 units (see Table 1 and Figure 3). The total claim block covers approximately 110 square km. While limited drill hole surveys have been completed, no legal property-wide survey has been conducted. The core, two-post mineral claims were surveyed by McElhanney Associates in 1974 for the then owner Texasgulf Inc. McElhanney Consulting Services Ltd, while in the process of surveying in the 2003 drill hole collars for bcMetals, re-established some of the original claim survey controls and subsequently integrated this 1974 survey into the 2003 digital format property controls.

The property is owned as to 80% by Red Chris Development Company (RCDC), a wholly owned subsidiary of bcMetals Corporation. Pursuant to an Option Agreement dated November 4, 2003 and amended November 26, 2003, RCDC has an option on Tech Cominco Limited's 20 % interest in the property. RCDC holds 30% of its 80% property interest in trust on behalf of American Bullion Minerals Ltd. (ABM).

By way of an agreement dated Oct. 18, 2002, the private company RCDC formed a joint venture (the "JV Agreement") with ABM such that:

- RCDC shall be owner of 70% interest in the JV while ABM will own 30%
- RCDC will be the operator
- RCDC pays American Bullion \$2,000,000 in cash in staged payments.

As a result of acquiring the option to Teck Cominco's interest, RCDC's cash payments to ABM were reduced to a total of \$1,625,000; payable as follows:

- \$25,000 on signing the JV agreement; (paid);
- \$225,000 on completion of a 60 day due diligence study; (paid);
- \$500,000 on receipt of all necessary regulatory and shareholder approvals for the acquisition and the proposed assignment of this JV agreement ("the Approval Date" – subsequently determined to be August 20, 2003) ;
- \$562,500 on the first anniversary of the Approval Date;
- \$62,500* on the second anniversary of the Approval Date;
- \$62,500* on the third anniversary of the Approval Date;
- \$62,500* on the fourth anniversary of the Approval Date;
- \$62,500* on the fifth anniversary of the Approval Date;
- \$62,500* on the sixth anniversary of the Approval Date.

subject to an overriding requirement that the first four payments be made within 18 months of the date of the agreement, or April 18, 2004.

* The above cash commitments were reduced by \$62,500 due to bcMetals' subsequent option to purchase Teck Cominco Limited's interest in the property.

ABM's 30% of the JV constitutes a reversionary carried ownership interest ("RCOI") with the following terms:

- a) ABM shall receive payment under the RCOI after commercial production on the property and after RCDC has been repaid in full for all of its costs incurred on or in connection with the Property;
- b) Notwithstanding a) above, the parties recognize that ABM shall be entitled to be repaid for the \$10,000,000 it has expended on the Property and ABM shall be entitled to receive repayment of the \$10,000,000 out of commercial production from the Property, on a pro rata basis to the costs incurred by RCDC, concurrently with and on the same basis as RCDC is repaid for its costs;
- c) after commencement of commercial production, the RCOI shall be a 30% Working Interest in RCDC's interest;
- d) the ROCI shall be subject to and, after commencement of commercial production on the Property, ABM shall be liable for its costs and pro rata portion of the following:
 - i) the Falconbridge Royalty;* and
 - ii) the Teck Cominco Rights**
- e) American Bullion has the right to register its RCOI interest in the Property at any time;
- f) ABM shall be entitled to elect to receive in kind its pro rata portion of minerals produced from the Property;
- g) RCDC has a first right of refusal in respect to the RCOI.

* bcMetals has an option agreement with Falconbridge that allows bcMetals to purchase the 0.8% portion of the 1.8% gross overriding Falconbridge Royalty with a payment of \$1,000,000.

bcMetals has entered into an agreement to purchase the final outstanding 0.571428% carried interest owned by one of the original staking prospectors to the Red Chris claims, Mr. Jim McAusland.

** bcMetals has, pursuant to the option agreement described below, purchased the Teck Cominco Rights.

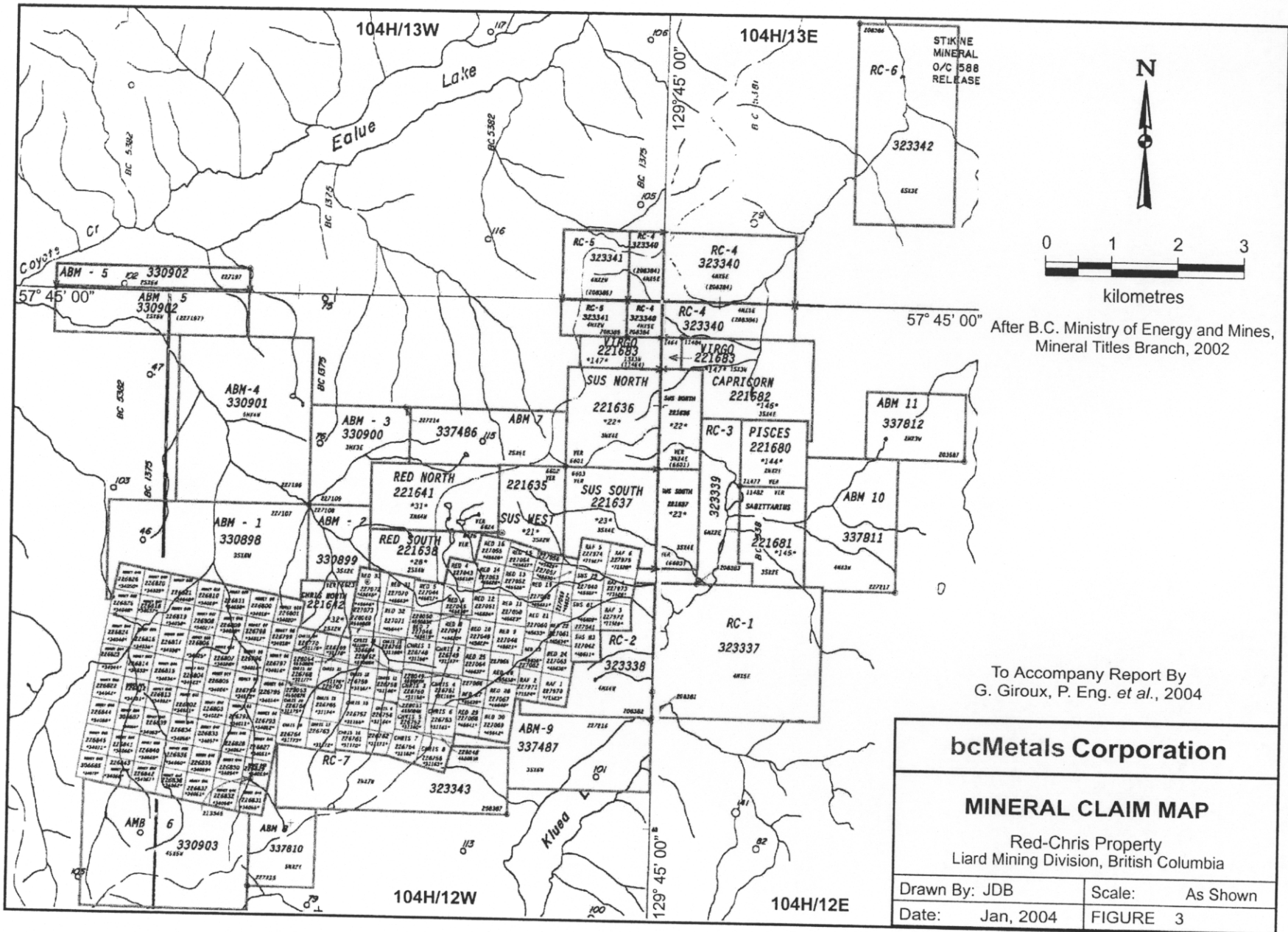
Pursuant to an Option Agreement dated November 4, 2003 and amended November 26, 2003 between bcMetals Corporation, Red Chris Development Ltd. (its wholly owned subsidiary) and Teck Cominco Limited the Company has been granted an option to acquire all of Teck's ownership, rights and interest in and to the Red Chris porphyry copper-gold project. Teck held a 10% working interest and a 10% carried interest in the property as well as back in rights to 43.75% of RCDCs' interest.

To exercise the option Red Chris Development Company must:

1. pay \$300,000 in cash; (paid)
2. issue 250,000 share purchase warrants exercisable into 250,000 common shares of the Company at \$0.60 per share until December 31, 2006; (issued)
3. issue 500,000 common shares and 500,000 share purchase warrants on or before March 31, 2004;(issued)
4. issue 500,000 common shares and 500,000 share purchase warrants on or before July 31, 2004;
5. issue 500,000 common shares and 250,000 share purchase warrants on or before December 31, 2004; and
6. pay \$1,000,000 within one year of commencement of commercial production on the property.

The share purchase warrants have a three year term from the date of issuance and shall be exercisable at a price equal to the greater of (a) \$0.60 and (b) the average closing price of the Company's shares on the 10 trading days preceding the date of issuance of each respective tranche of warrants, plus a 20% premium in the first year, a 40% premium in the second year, and a 50% premium in the third year.

Upon exercise of the Option, Red Chris Development Corporation will be the 100% owner of the Red Chris property, subject to American Bullion's 30% reversionary interest which becomes effective after RCDC has recovered 100% of costs from production.



After B.C. Ministry of Energy and Mines,
Mineral Titles Branch, 2002

To Accompany Report By
G. Giroux, P. Eng. et al., 2004

bcMetals Corporation	
MINERAL CLAIM MAP	
Red-Chris Property Liard Mining Division, British Columbia	
Drawn By: JDB	Scale: As Shown
Date: Jan, 2004	FIGURE 3

Table 1: Mineral Claim Information

Claim Number	UNITS	Record No.	Tenure No.	Record Date	Expiry Date
ABM-1	18	227107	330898	Sep 11, 1994	September 11, 2006
ABM-2	6	227108	330899	Sep 11, 1994	September 11, 2006
ABM-3	9	227109	330900	Sep 11, 1994	September 11, 2006
ABM-4	20	227196	330901	Sep 12, 1994	September 12, 2006
ABM-5	12	227197	330902	Sep 13, 1994	September 13, 2006
ABM-6	20	213345	330903	Sep 13, 1994	September 13, 2006
ABM-7	10	227214	337486	Jun 29, 1995	June 29, 2006
ABM-8	10	227215	337810	Jul 4, 1995	July 4, 2006
ABM-9	18	227216	337487	Jul 1, 1995	July 1, 2006
ABM-10	12	227217	337811	Jul 7, 1995	July 7, 2006
ABM-11	6	203587	337812	Jul 8, 1995	July 8, 2006
Capricorn	12	146	221682	July 7, 1976	July 7, 2006
Chris North	4	32	221642	Aug 13, 1975	August 13, 2006
Chris 01	1	31156	226748	Aug 24, 1968	August 24, 2006
Chris 02	1	31157	226749	Aug 24, 1968	August 24, 2006
Chris 03	1	31158	226750	Aug 24, 1968	August 24, 2006
Chris 04	1	31159	226751	Aug 24, 1968	August 24, 2006
Chris 05	1	31160	226752	Aug 24, 1968	August 24, 2006
Chris 06	1	31161	226753	Aug 24, 1968	August 24, 2006
Chris 07	1	31162	226754	Aug 24, 1968	August 24, 2006
Chris 08	1	31163	226755	Aug 24, 1968	August 24, 2006
Chris 09	1	31164	226756	Aug 24, 1968	August 24, 2006
Chris 10	1	31165	226757	Aug 24, 1968	August 24, 2006
Chris 11	1	31166	226758	Aug 24, 1968	August 24, 2006
Chris 12	1	31167	226759	Aug 24, 1968	August 24, 2006
Chris 13	1	31168	226760	Aug 24, 1968	August 24, 2006
Chris 14	1	31169	306684	Aug 24, 1968	August 24, 2006
Chris 15	1	31170	226761	Aug 24, 1968	August 24, 2006
Chris 16	1	31171	226762	Aug 24, 1968	August 24, 2006
Chris 17	1	31172	226763	Aug 24, 1968	August 24, 2006
Chris 18	1	31173	226764	Aug 24, 1968	August 24, 2006
Chris 19	1	31174	226765	Aug 24, 1968	August 24, 2006
Chris 20	1	31175	226766	Aug 24, 1968	August 24, 2006
Chris 21	1	31176	226767	Aug 24, 1968	August 24, 2006
Chris 22	1	31177	226768	Aug 24, 1968	August 24, 2006
Chris 23	1	31178	226769	Aug 24, 1968	August 24, 2006
Chris 24	1	31179	226770	Aug 24, 1968	August 24, 2006
Cougar 1 FR	1	71985	228048	Aug 29, 1974	August 29, 2006
Cougar 2 FR	1	71986	228049	Aug 29, 1974	August 29, 2006
Cougar 3 FR	1	71987	228050	Aug 29, 1974	August 29, 2006
Cougar 4 FR	1	71988	228051	Aug 29, 1974	August 29, 2006
Cougar 5 FR	1	71989	228052	Aug 29, 1974	August 29, 2006
Cougar 6 FR	1	72180	228060	Aug 29, 1974	August 29, 2006
Cougar 7 FR	1	71990	228053	Aug 29, 1974	August 29, 2006

Claim Number	UNITS	Record No.	Tenure No.	Record Date	Expiry Date
Cougar 8 FR	1	71991	228054	Aug 29, 1974	August 29, 2006
Money 01	1	34011	226792	Sep 30, 1968	September 30, 2006
Money 02	1	34012	226793	Sep 30, 1968	September 30, 2006
Money 03	1	34013	226794	Sep 30, 1968	September 30, 2006
Money 04	1	34014	226795	Sep 30, 1968	September 30, 2006
Money 05	1	34015	226796	Sep 30, 1968	September 30, 2006
Money 06	1	31016	226797	Sep 30, 1968	September 30, 2006
Money 07	1	34017	226798	Sep 30, 1968	September 30, 2006
Money 08	1	34018	226799	Sep 30, 1968	September 30, 2006
Money 09	1	34019	226800	Sep 30, 1968	September 30, 2006
Money 10	1	34020	226801	Sep 30, 1968	September 30, 2006
Money 11	1	34021	226802	Sep 30, 1968	September 30, 2006
Money 12	1	34022	226803	Sep 30, 1968	September 30, 2006
Money 13	1	34023	226804	Sep 30, 1968	September 30, 2006
Money 14	1	34024	226805	Sep 30, 1968	September 30, 2006
Money 15	1	34025	226806	Sep 30, 1968	September 30, 2006
Money 16	1	34026	226807	Sep 30, 1968	September 30, 2006
Money 17	1	34027	226808	Sep 30, 1968	September 30, 2006
Money 18	1	34028	226809	Sep 30, 1968	September 30, 2006
Money 19	1	34029	226810	Sep 30, 1968	September 30, 2006
Money 20	1	34030	226811	Sep 30, 1968	September 30, 2006
Money 21	1	34031	226812	Sep 30, 1968	September 30, 2006
Money 22	1	34032	226813	Sep 30, 1968	September 30, 2006
Money 23	1	34033	226814	Sep 30, 1968	September 30, 2006
Money 24	1	34034	226815	Sep 30, 1968	September 30, 2006
Money 25	1	34035	226816	Sep 30, 1968	September 30, 2006
Money 26	1	34036	226817	Sep 30, 1968	September 30, 2006
Money 27	1	34037	226818	Sep 30, 1968	September 30, 2006
Money 28	1	34038	226819	Sep 30, 1968	September 30, 2006
Money 29	1	34039	226820	Sep 30, 1968	September 30, 2006
Money 30	1	34040	226821	Sep 30, 1968	September 30, 2006
Money 32	1	34042	226822	Sep 30, 1968	September 30, 2006
Money 34	1	34044	226823	Sep 30, 1968	September 30, 2006
Money 36	1	34046	226824	Sep 30, 1968	September 30, 2006
Money 38	1	34048	226825	Sep 30, 1968	September 30, 2006
Money 40	1	34050	226826	Sep 30, 1968	September 30, 2006
Money 41	1	34051	226827	Sep 30, 1968	September 30, 2006
Money 42	1	34052	226828	Sep 30, 1968	September 30, 2006
Money 43	1	34053	226829	Sep 30, 1968	September 30, 2006
Money 44	1	34054	226830	Sep 30, 1968	September 30, 2006
Money 45	1	34055	226831	Sep 30, 1968	September 30, 2006
Money 46	1	34056	226832	Sep 30, 1968	September 30, 2006
Money 47	1	34057	226833	Sep 30, 1968	September 30, 2006
Money 48	1	34058	226834	Sep 30, 1968	September 30, 2006
Money 49	1	34059	226835	Sep 30, 1968	September 30, 2006
Money 50	1	34060	226836	Sep 30, 1968	September 30, 2006
Money 51	1	34061	226837	Sep 30, 1968	September 30, 2006

Claim Number	UNITS	Record No.	Tenure No.	Record Date	Expiry Date
Money 52	1	34062	226838	Sep 30, 1968	September 30, 2006
Money 53	1	34063	226839	Sep 30, 1968	September 30, 2006
Money 54	1	34064	306687	Sep 30, 1968	September 30, 2006
Money 55	1	34065	226840	Sep 30, 1968	September 30, 2006
Money 56	1	34066	226841	Sep 30, 1968	September 30, 2006
Money 57	1	34067	226842	Sep 30, 1968	September 30, 2006
Money 58	1	34068	226843	Sep 30, 1968	September 30, 2006
Money 59	1	34069	226844	Sep 30, 1968	September 30, 2006
Money 61	1	34071	226845	Sep 30, 1968	September 30, 2006
Money 63	1	34073	306685	Sep 30, 1968	September 30, 2006
Pisces	4	144	221680	July 7, 1974	July 7, 2006
Raf 1	1	71523	227970	July 31, 1974	July 31, 2006
Raf 2	1	71525	227971	July 31, 1974	July 31, 2006
Raf 3	1	71524	227972	July 31, 1974	July 31, 2006
Raf 4	1	71526	227973	July 31, 1974	July 31, 2006
Raf 5	1	71527	227974	July 31, 1974	July 31, 2006
Raf 6	1	71528	227975	July 31, 1974	July 31, 2006
RC-1	20	323337	323337	Jan 11, 1994	January 11, 2005
RC-2	16	323338	323338	Jan 14, 1994	January 14, 2005
RC-3	12	32339	323339	Jan 12, 1994	January 12, 2005
RC-4	20	323340	323340	Jan 17, 1994	January 17, 2005
RC-5	8	323341	323341	Jan 16, 1994	January 16, 2005
RC-6	18	323342	323342	Jan 18, 1994	January 18, 2005
RC-7	14	323343	323343	Jan 18, 1994	January 18, 2005
Red North	8	31	221641	Aug 13, 1975	August 13, 2006
Red South	8	28	221638	Aug 13, 1975	August 13, 2006
Red 04	1	45616	227043	Aug 5, 1970	August 5, 2006
Red 05	1	45617	227044	Aug 5, 1970	August 5, 2006
Red 06	1	45618	227045	Aug 5, 1970	August 5, 2006
Red 07	1	45619	227046	Aug 5, 1970	August 5, 2006
Red 08	1	45620	227047	Aug 5, 1970	August 5, 2006
Red 09	1	45621	227048	Aug 5, 1970	August 5, 2006
Red 10	1	45622	227049	Aug 5, 1970	August 5, 2006
Red 11	1	45623	227050	Aug 5, 1970	August 5, 2006
Red 12	1	45624	227051	Aug 5, 1970	August 5, 2006
Red 13	1	45625	227052	Aug 5, 1970	August 5, 2006
Red 14	1	45626	227053	Aug 5, 1970	August 5, 2006
Red 15	1	45627	227054	Aug 5, 1970	August 5, 2006
Red 16	1	45628	227055	Aug 5, 1970	August 5, 2006
Red 17	1	45629	227056	Aug 5, 1970	August 5, 2006
Red 18	1	45630	227057	Aug 5, 1970	August 5, 2006
Red 19	1	45631	227058	Aug 5, 1970	August 5, 2006
Red 20	1	45632	227059	Aug 5, 1970	August 5, 2006
Red 21	1	45633	227060	Aug 5, 1970	August 5, 2006
Red 22	1	45634	227061	Aug 5, 1970	August 5, 2006
Red 23	1	45635	227062	Aug 5, 1970	August 5, 2006
Red 24	1	45636	227063	Aug 5, 1970	August 5, 2006

Claim Number	UNITS	Record No.	Tenure No.	Record Date	Expiry Date
Red 25	1	45637	227064	Aug 5, 1970	August 5, 2006
Red 26	1	45638	227065	Aug 5, 1970	August 5, 2006
Red 27	1	45639	227066	Aug 5, 1970	August 5, 2006
Red 28	1	45640	227067	Aug 5, 1970	August 5, 2006
Red 29	1	45641	227068	Aug 5, 1970	August 5, 2006
Red 30	1	45642	227069	Aug 5, 1970	August 5, 2006
Red 31	1	45643	227070	Aug 5, 1970	August 5, 2006
Red 32	1	45644	227071	Aug 5, 1970	August 5, 2006
Red 33	1	45645	227072	Aug 5, 1970	August 5, 2006
Red 34	1	45646	227073	Aug 5, 1970	August 5, 2006
Sagittarius	6	145	221681	July 7, 1976	July 7, 2006
Sus North	12	22	221636	July 15, 1975	July 15, 2006
Sus South	12	23	221637	July 15, 1975	July 15, 2006
Sus West	6	21	221635	July 15, 1975	July 15, 2006
Sus 79	1	45607	227040	Aug 5, 1970	August 5, 2006
Sus 81	1	45609	227041	Aug 5, 1970	August 5, 2006
Sus 83	1	45611	227042	Aug 5, 1970	August 5, 2006
Virgo	3	147	221683	July 7, 1976	July 7, 2006

Totals

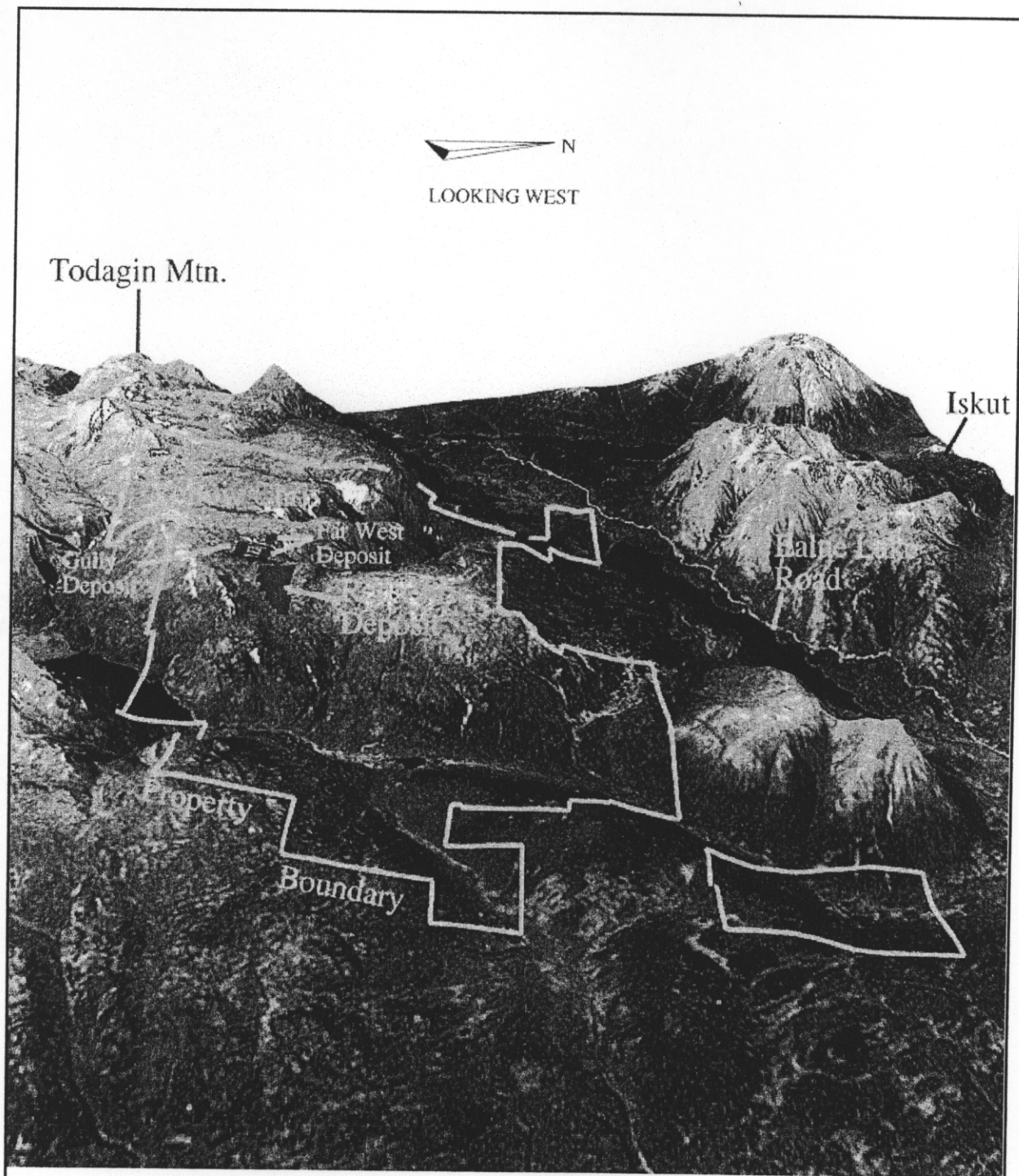
156 Claims 452 Units

4.3 Physiography and Climate

The following section has been taken from G.H. Giroux, Blanchflower *et al.*, (2002)

The Red Chris property is situated on the eastern portion of the Todagin upland plateau which forms a subdivision of the Klastine Plateau along the northern margin of the Skeena Mountains. Elevations on the property are typically $1,500 \pm 30$ m with relatively flat topography broken by several deep creek gullies. Bedrock exposure is confined to the higher-relief drainages and along mountainous ridges (see Figure 4). The majority of the property is covered by several metres of glacial till. Vegetation on the plateau consists of scrub birch and willow, grasses and mosses. Within the creek valleys are several varieties of conifer and deciduous trees including balsam, fir, cedar, spruce and aspen.

The project area lies in a region of moderate annual precipitation with an average of 426 mm measured over a 35 year period at Dease Lake (90km north of the property). Precipitation is more or less evenly distributed throughout the year, with April to May receiving the least and August to December the most. Temperatures vary from a low of -21° C in January to a high of 9° C in July with temperature extremes ranging from -50° C to 30° C.



Picture simulated from digital topography and Landsat TM. Vertical exaggeration is 2 times. (after Blanchflower, 1996)

bcMetals Corporation	
PROPERTY BOUNDARY AND PHYSIOGRAPHY	
Red-Chris Property Liard Mining Division, British Columbia	
Drawn By: JDB	Scale: As Shown
Date: Jan, 2004	FIGURE. 4

To Accompany Report By G. Giroux, P. Eng. *et al.*, 2004

4.4 History

taken from G. H. Giroux, Blanchflower *et al.*, (Nov. 18, 2002)

The first recorded exploration of the project area occurred in 1956 when Conwest Exploration Limited staked the Windy claims to cover prominent limonitic gossans on the Todagin Plateau. The showings reported (B.C.M.M. Annual Report, 1956) consisted of a large oxidized area with small amounts of azurite and malachite. Work consisted of a limited amount of open-cutting and pack-sack drilling.

In September 1968, Great Plains Development Co. of Canada staked the Chris and Money claims to cover the headwaters of a stream in the western portion of the present project area, based on a strong copper anomaly in stream sediments. Over the next 2 years Great Plains conducted geological and geochemical surveys followed by two diamond drill holes in 1970 totalling 309 m. One of the holes (70-2) intersected 0.25 % Cu over 73 metres. During the next two years additional surveys were completed including geologic mapping, ground magnetics and induced polarization surveys, followed by the drilling of eight diamond drill holes in 1972, totalling 922 m. These holes intersected weak pervasive (hypogene) alteration controlled by fracturing with low supergene copper mineralization near surface (Panteleyev, 1973).

In 1970 Silver Standard Mines Ltd. staked the Red and Sus claims to the north and east of the Chris claim group. In 1971 Silver Standard conducted geologic mapping and soil geochemical surveys over the claims and tested anomalies with bulldozer trenches near the common boundary between the Red and Chris claims. Two trenches exposed low-grade copper mineralization in intrusive rocks. Ecstall Mining Limited (which later became Texasgulf Canada Limited, the Canadian subsidiary of Texasgulf Inc.) optioned the Silver Standard claims in 1973 and drilled 14 percussion holes totalling 914 m, of which half intersected low grade copper mineralization.

In 1974, Texasgulf Canada Ltd. formed an agreement with Silver Standard and Great Plains to acquire an option on 60 per cent of the combined Red and Chris groups of claims and paying 80% of costs with Silver Standard and Great Plains both retaining 20 per cent.

During the years from 1974 to 1976, Texasgulf drilled a total of 67 diamond drill holes (12,284 m) and 30 percussion holes (2,261 m). During the 1978 and 1980 field seasons Texasgulf drilled an additional 7 shallow core holes totalling 1,017 m to test for near-surface copper-gold mineralization (Newell and Peatfield, 1995). Property-wide geological, geochemical, and geophysical surveys were also completed during this time. An overburden drill was utilized to test bedrock geochemistry in poorly exposed areas of the property. The results of this program outlined an area 3.4 km long striking east-northeast, with multiple anomalies greater than 500 ppm copper. This anomalous copper zone effectively outlines the limits of the Red intrusive stock. Magnetometer surveys delineated the northern intrusive contact of the Red Stock with volcanics but could not discriminate between the various intrusive lithologies or the Bowser Lake Group of clastics to the south.

Due to poor documentation, the pre-1973 drill holes could not be located accurately. Thus, the total pre-1994 drilling which could be located is as follows (Rebagliati, 1994).

Year	Percussion Drilling		Diamond Drilling	
	Holes	Metres	Holes	Metres
1973	14	914		
1974	10	780	16 BQ	2,265
1975	20	1,481	33 BQ	6,925
1976			18 BQ	3,094
1978			5 BQ	391
1980			2 BQ	626
Total	44	3,175 m	74 BQ	13,301 m

As a result of the Texasgulf exploration, two coalescing east-north-easterly trending zones of copper-gold mineralization named the Main and East zones were outlined. The mineralization was described as pyrite, chalcopyrite and lesser bornite occurring spatially with zones or quartz vein stockwork near the centre of the Red intrusive stock. The estimated resource in 1976 at a 0.25% Cu cut-off was 34.4 million tonnes with an average grade of 0.51% Cu and 0.27 g/t Au to a depth of 270 m in the Main Zone and 6.6 million tonnes with average grade of 0.83% Cu and 0.72 g/t Au to a depth of 150 m in the East Zone (Newell and Peatfield, 1995).

No exploration was done on the property in the period 1981 to 1994. A series of corporate takeovers and reorganizations in January, 1994 resulted in the ownership of the property divided amongst Falconbridge (60%), Norcen Energy (20%), and Teck Corporation (20%). American Bullion Minerals Ltd. acquired an 80% interest in the property in early 1994 with Teck Corporation retaining the remaining 20%. American Bullion retained Mark Rebagliati to review and evaluate the exploration completed by previous owners. Rebagliati estimated a possible resource at a 0.20 % Cu cut-off of 136 million tonnes averaging 0.38 % Cu and 0.25 g Au/t. He estimated a higher grade core containing 37 million tonnes averaging 0.67% Cu and 0.45 g Au/t. Rebagliati recommended 15,000 m of diamond drilling to upgrade and expand the higher grade core zones and explore the remainder of the property (Rebagliati, 1994).

In 1994, American Bullion Minerals Ltd. contracted J. T. Thomas Diamond Drilling Ltd. of Smithers, British Columbia to provide equipment and personnel capable of completing a minimum of 15,000 metres of HQ- and/or NQ-core diamond drilling. The drill rigs, rods and support equipment were all mobilized to the property in June via the tote trail from the Coyote Creek-Ealue Lake road. A Caterpillar D6E bulldozer and Caterpillar 210B excavator were utilized to tow the rigs and equipment to the property. They were later used to excavate drill sites, access roads and construction sites, and reclaim those surface disturbances and many of the open trenches dating back to the early 1970's.

During the 1994 field season, American Bullion completed mineral claim staking, land surveying, line cutting, soil geochemistry, geophysics (including magnetics, V.L.F. EM, and induced polarization), camp and core logging facility construction, HQ and NQ diamond drilling totalling 21,417 m in 58 holes, core sample assaying, acid base accounting studies, base-line environmental studies, a mineral resource estimate, petrographic and metallurgical studies and

documentation. The programs were completed between June and November, 1994 at a cost of CAN \$4.2 million.

Drilling completed in 1994 extended the lateral dimensions for mineralization in a north-south direction and extended the known copper-gold mineralization over vertical distances of up to 400 m. Geochemical and geophysical surveys extended the mineralization to the west to include the 600 by 600 m Far West zone and the 700 by 400 m Gully zone.

Based on the additional 1994 drill data the measured+indicated resource was estimated at 181 million tonnes averaging 0.4% Cu and 0.31 g Au/t at a 0.2% Cu cut-off (Giroux, 1995). In this report, terms of proven, probable and possible were used that under 43-101 Guidelines would conform to Measured, Indicated and Inferred. An additional 139 million tonnes averaging 0.35% Cu and 0.28 g Au/t at the 0.2% Cu cut-off was classed as inferred. This resource, estimated by ordinary kriging of 20 x 20 x 15 m³ blocks, estimated the resource within a 1,300 x 200 m area to depths between 1,050 to 1,530 m A.M.S.L.

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 Gully and Far West zones. Field work was carried out from April 27th to November 12th. The 1995 on- and off-site exploration 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 respectively, 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 Piésold 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;
- 16) geological resource estimation studies by G. Giroux, P. Eng., of Montgomery Consultants Ltd. and mining engineers of Fluor Daniel Wright Ltd.; and
- 17) subsequent collation, compilation and documentation of the results of the program.

The 1995 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.

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. As of November, 1995 the property had been tested by a total of 244 diamond and 44 percussion drill holes, or 74,782 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 near-surface geological resources. 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 by future exploration work.

American Bullion Minerals Ltd. reported the 1995 exploration program cost CAN \$ 5.9 million.

The following is a brief summary of various resource estimates completed previous to the 2003 fall infill diamond drilling program.

Table 2: Summary of Pre-2004 Red Chris Resource Estimates

Year	Zone	Measured Resource			Indicated Resource			Inferred Resource		
		Million Tonnes	Cu (%)	Au (g/t)	Million Tonnes	Cu (%)	Au (g/t)	Million Tonnes	Cu (%)	Au (g/t)
1976 ¹	Main				34.4	0.51	0.27			
	East				6.6	0.83	0.72			
1988 ²	Main				19.79	0.65	0.34			
	East				2.59	1.52	1.3			
1994 ⁴	Combined	11.2	0.4	0.3	169.72	0.4	0.31	139.44	0.35	0.28
1994 ⁵	Combined	2.75	0.66	0.46	38.46	0.68	0.56	19.62	0.67	0.54
1998 ⁶	Main	1.25	0.62	0.35	19.4	0.65	0.45	27.9	0.61	0.50
	East	10.5	0.88	0.82	18.1	0.72	0.70	0.25	0.60	0.55

- Notes** 1976¹ - Estimate reported in Newell and Peatfield 1995 used cut-off of 0.25% Cu, Main zone taken to 270 m depth and East zone taken to 150 m.
- 1988² - Estimate by Wrigglesworth of Falconbridge (Newell and Peatfield, 1995) taken at a 0.5 % Cu cut-off.
- 1994³ - Estimated by Giroux (1995) at a 0.2 % Cu cut-off, Main zone and East zone combined to form a possible large low grade pit.
- 1994⁴ - Estimated by Giroux (1995) at a 0.5 % Cu cut-off, Main zone and East zone combined
- 1998⁶ - Estimated by Giroux in 1998 and Reported in Giroux *et al.*, (2002) at a 0.5% Cu cut-off

4.5 Discussion of 1995 Results

taken from G. H. Giroux, Blanchflower *et al.*, Nov. 18, 2002

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 intersected copper-gold mineralization south of the previously-assumed limits of the Red-Chris deposit. More importantly, the copper (%) to gold (g/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 contain 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 the 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 grid line 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 down-dropped 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 grid line 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/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/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/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/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/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 (see Figure 5).

The Gully Zone is a 700-metre long by 400-metre wide coincident geochemical and geophysical anomalies 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/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/t. gold over 18.29 metres.

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/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); 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 targets 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/t.. Considerably more drilling will have to be conducted within this zone to delineate the mineralized sections and their trends.

5.0 2003 EXPLORATION PROGRAM

5.1 2003 Diamond Drilling

In September 2003, Red Chris Development Corporation commenced drilling on the Red Chris project using equipment and personnel supplied by Hy-Tech Drilling Ltd. of Smithers, British Columbia. Hy-Tech initially supplied two Hy-Tech 5000 drills, which along with their drill rods and support equipment, were mobilized to the property in the first week of September. A Caterpillar D6D bulldozer was used to tow the drilling rigs and rod sloops from the staging site on the Ealue Lake Road up the Coyote Creek-Red Chris property tote trail. A third HY-Tech 4000 drilling rig was mobilized to the property September 22nd to speed up the drilling progress and free up a rig for geotechnical drilling.

Fuel, extra rods, consumables, and ancillary drilling equipment were flown by helicopter from the Tatogga Lake Resort staging area to the property. All project personnel, camp support, fuel, and other project supplies were flown to the Red Chris camp using a Bell 206 helicopter supplied by Pacific Western Helicopters Ltd. of Prince George, B.C. The helicopter was used extensively to service the drilling rigs and transport drill core to the core logging and sampling site due to the poor road conditions caused by marshy ground and adverse weather during the project. The helicopter was based in camp for convenience and project safety requirements.

The drills, which were skid mounted, were moved from site to site using the D6D bulldozer and/or a tracked Caterpillar 320C excavator. The excavator was also utilized for positioning the drills, digging drill sumps, and reclaiming site and access surface disturbances. The light, helicopter-portable Hy-Tech drills were normally pulled into position without site or access construction, thereby minimizing surface disturbances.

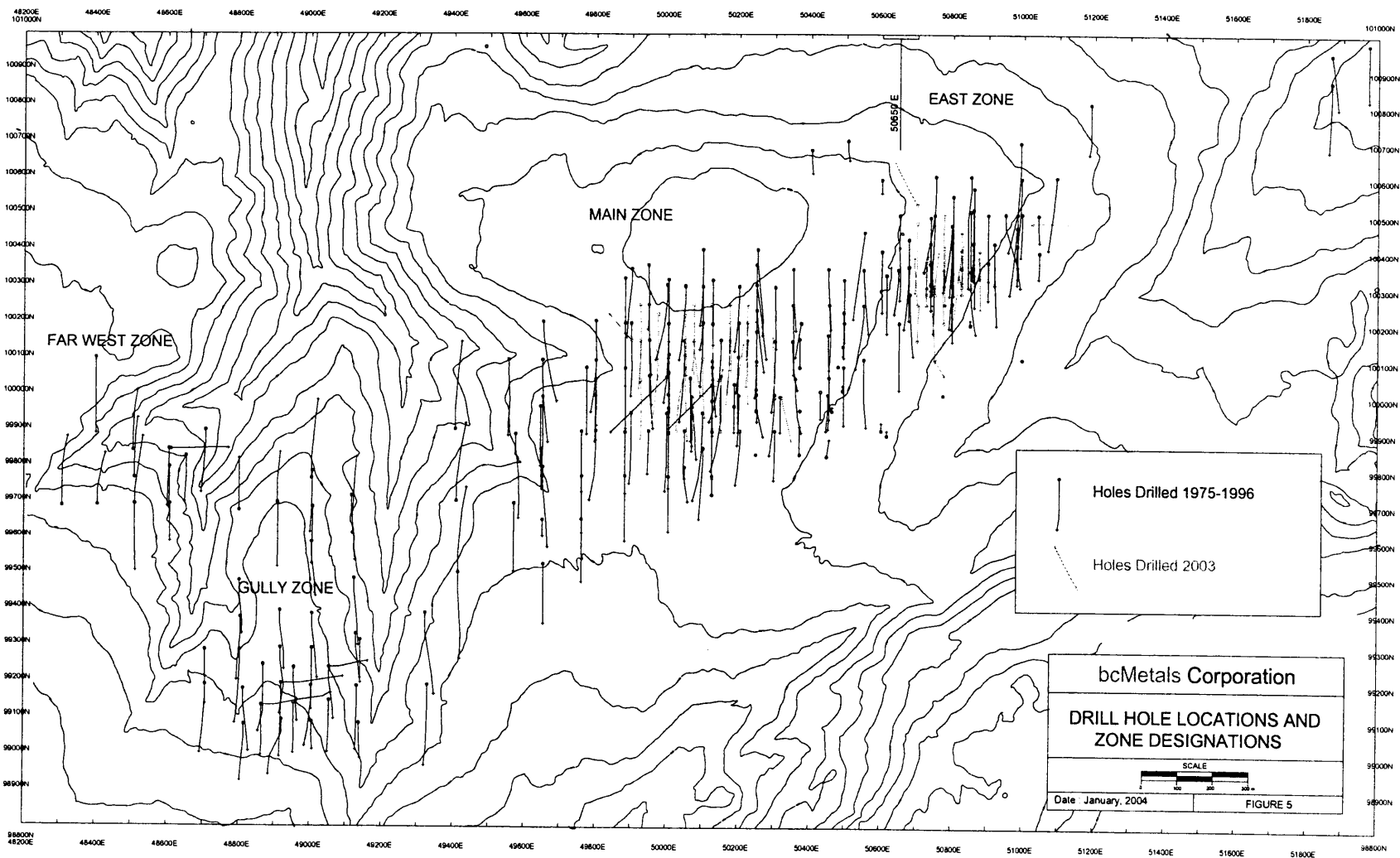
The drill contractor, Hy-Tech Drilling, was responsible for all down-hole surveys. Two systems were used, with the Reflex digital magnetic instrument being the primary survey system and the Accushot photo system as a backup in case of Reflex breakdown or unavailability. Twenty four of the 235 down-hole surveys were deemed unacceptable due to incorrect azimuth readings and were rejected. Blocked bits and operator error were responsible for most survey failures.

The proposed drill hole sites were surveyed in by McElhanney Consulting Services Ltd. using a total station instrument and established property grid controls. The final drill hole collar locations were surveyed by McElhanney using both a total station and a survey quality Global Positioning System (GPS). The Plant Site and Waste Dump Site geotechnical drill holes were also surveyed by GPS. A complete list of the 2003 drill holes with coordinates is tabulated in Table 4.

The 2003 drilling campaign commenced September 7th and finished November 7th. A total of 49 holes totalling 16,591 metres were drilled into both the East and Main Zones. This drilling included nine geotechnical, orientated core holes totalling 2,499 metres. The geotechnical holes, while drilled primarily for pit slope design purposes, also provided assay information that was used in the new resource calculations. The core size for the orientated holes was NQ3 although the upper portions of some holes were cored using HQ in order to install 2 inch groundwater monitoring wells. The geotechnical drilling was supervised by personnel from Knight Piésold Consulting and the geological logging and sampling by RCDCs' personnel.

Three of the 49 Red Chris drill holes totalling 793.44 metres were drilled vertically using HQ sized core to provide material for metallurgical grinding tests. Hole 03-256A (hole 03-256 was lost at 57.16m) was drilled in the core of the East Zone and Hole 03-283 in the centre of the Main Zone. A 2 inch groundwater monitoring well was installed in the latter hole. The two holes were geologically logged and a 15 cm whole core sample was taken from each assay interval for metallurgical testing. The remaining core was then split and the half-cores sent in for assay. The analytical results were used as the basis for the January 19th, 2004 resource update.

The remaining NQ2 sized diamond drill holes were sited to in-fill drilling gaps in the Main and East Zones produced by the 1972 to 1995 drilling campaigns. The first hole in the 2003 program was labelled DDH 03-248 and follows consecutively from the last 1995 exploratory drill hole 05-244 plus the three BQTK-core geotechnical diamond drill holes BH 95-1 to -3. The last hole drilled in the 2003 program was hole DDH 03-295.



5.2 Geotechnical Drilling

The purpose of the geotechnical drilling was to formulate the design parameters for the proposed pit slopes, Plant Site foundations, Waste Dump, Low Grade Ore Pile, and the Tailings Storage Facility prior to the commencement of a detailed feasibility study on the Red Chris project. Knight Piésold Ltd, under contract to Red Chris Development Company Ltd. designed, supervised and documented the various geotechnical programs.

In the 2003 fall drilling program, nine geotechnical, orientated, inclined core holes totalling 2,499 metres were drilled within the proposed pits centred on the East and Main zones of the Red Chris copper-gold porphyry deposit. This geotechnical drilling was designed to:

- fully log the core for geotechnical properties;
- determine the locations of the contacts between the rock units;
- determine the frequency, locations, and orientations of the key structural discontinuities in the rock units;
- obtain samples for field and laboratory shear and strength testing;
- carry out in-situ packer (Lugeon) permeability tests;
- install 1" standpipe piezometers and 2" groundwater monitoring wells in selected holes;

The holes were strategically located and orientated to intersect the anticipated pit walls at different orientations and in different rock units. As these holes were also geologically logged and sampled by RCDC personnel they are numbered within the DDH 03 series of holes and were sent for assay following the routine sample shipment and analytical procedures implemented by RCDC.

Knight Piésold Ltd also designed and supervised geotechnical drilling programs in the areas of the proposed Waste Dump Site, Plant Site, and Tailings storage Facility.

The geotechnical investigation at the proposed Waste Dump site involved drilling two shallow (approximately 35 metres in total) inclined drill holes and excavating 6 test pits in an area underlain by volcanics belonging to the Middle to Upper Triassic Stuhini Group. The HQ size drill holes were drilled by a HY-Tech 5000 rig that was pulled over snow to the drill sites. Both drill holes were subsequently equipped with a 2" groundwater monitoring well. The core was geologically logged and photographed but not sampled. The geotechnical core is stored in racks adjacent to the core logging facility.

On November 5th an inclined condemnation drill hole (03-WS-3) was drilled to 18.3 metres within the proposed north east limits of the Waste Dump site. A demobilizing Hy-Tech 5000 drill rig drilled this hole under the supervision of the author. The hole encountered volcanics belonging to the Middle to Upper Triassic Stuhini Group under a thin veneer of overburden. On November 8th the author supervised the digging, using the "Cat" 320C excavator, of three condemnation test pits along the southeast margin of the proposed Waste Dump site. Two of the pits encountered Stuhini Group volcanic sediments and the third bottomed in glacial fluvial sand.

The Knight Piésold supervised geotechnical program at the proposed Plant Site included the drilling of two shallow vertical drill holes (approximately 35 metres in total) with one of HQ size to accommodate a 2" groundwater monitoring well and the other NQ2 size to accommodate a 1" standpipe piezometer. Two test pits, in shallow overburden, were also excavated at the Plant Site. The test pits and drill holes intersected Middle Jurassic, Ashman Formation finely bedded siltstones intercalated with a few thin beds of chert-pebble conglomerate. The overburden depths were from 1 to 4 metres in the proposed Plant Site.

On October 15th a Hy-tech 3000 light weight, helicopter portable drill rig was flown to the site of the proposed Tailings Storage Facility. Four geotechnical HQ3 size diamond drill holes, totalling 210 metres, were advanced in deep overburden at sites chosen by Knight Piésold. Soil samples were recovered using a HQ3 split inner tube and minimal water pressure. None of the holes encountered bedrock (deepest hole 77.1 metres). Two 2" groundwater monitoring wells and two 1" standpipe piezometers were placed into the four geotechnical holes. In addition, a total of 16 test pits were excavated by the CAT 320C hydraulic excavator into the upper layers of overburden at selected locations at the site of the Tailings Storage Facility. The Knight Piésold Consulting geotechnical report is appended to this Report (Appendix IX).

TABLE 3
2003 Geotechnical Drill Holes

Drill Hole ID	Location	Northing (m)	Easting (m)	Collar Elevation (m)	Hole Length (m)	Core Size	Azimuth (Deg)	Dip (Deg)	Groundwater Monitoring Installation	Orientated Core	Date Started	Date Completed
03-262	Pit Area	100401	50825	1510	400.0	NQ2	180	60	None	yes	Oct. 01/03	Oct. 05/03
03-267	Pit Area	100302	50775	1510	417.4	HQ, NQ2	0	60	2" Well	yes	Oct. 06/03	Oct. 10/03
03-272	Pit Area	100475	51024	1491	200.0	NQ2	90	60	None	yes	Oct. 10/03	Oct. 12/03
03-275	Pit Area	100524	50700	1522	222.3	NQ2	330	53	1" Piezo	yes	Oct. 12/03	Oct. 13/03
03-278	Pit Area	100100	50750	1496	362.2	NQ2	0	63	None	yes	Oct. 14/03	Oct. 19/03
03-282	Pit Area	100094	50750	1496	93.6	NQ2	150	60	1" Piezo	yes	Oct. 19/03	Oct. 21/03
03-285	Pit Area	100150	49901	1537	200.9	NQ2	315	60	1" Piezo	yes	Oct. 21/03	Oct. 22/03
03-286	Pit Area	100040	49926	1533	350.3	NQ2	180	60	None	yes	Oct. 23/03	Oct. 25/03
03-289	Pit Area	99991	50319	1530	251.5	NQ2	165	60	None	yes	Oct. 25/03	Oct. 27/03
DH-03-01	Tailings	6397645	455920 *	1120	36.3	HQ	-	90	2" Well	No	Oct. 17/03	Oct. 19/03
DH-03-02	Tailings	6397434	456173 *	1125	34.8	HQ	-	90	1" Piezo	No	Oct. 20/03	Oct. 21/03
DH-03-03	Tailings	6399947	456611 *	1106	60.7	HQ	-	90	2" Well	No	Oct. 22/03	Oct. 23/03
DH-03-04	Tailings	6396947	455969 *	1111	77.2	HQ	-	90	1" Piezo	No	Oct. 25/03	Oct. 26/03
03-PS-01	Plant Site	99984	51394	1456	16.5	HQ	-	90	2" Well	No	Oct. 28/03	Oct. 28/03
03-PS-02	Plant Site	99985	51798	1460	18.0	NQ2	-	90	1" Piezo	No	Oct. 29/03	Oct. 29/03
03-WD-01 **	Waste Dump	50497	1460	1460	18.9	HQ	0	60	2" Well	No	Oct. 29/03	Oct. 30/03
03-WD-02 **	Waste Dump	50566	1495	1495	17.0	HQ	170	60	2" Well	No	Oct. 30/03	Oct. 30/03
03-WD-03 ***	Waste Dump	50213	1506	1506	18.5	NQ2	90	70	None	No	Nov 05/03	Nov 05/03

Note: *The four geotechnical holes from the tailings area have NTS coordinates for their collar locations.

**Knight Piésold has labelled the two plant site and two waste dump geotechnical holes DH-03-04 through DH-03-08.

***Hole 03-WD-03 was a condemnation hole and was not geotechnically logged.

5.3 Site and Drill Hole Surveying

The first few drill holes in the 2003 drilling program were sited in by a chain and compass survey from the collars of nearby pre-existing drill holes. McElhanney Consulting Services Ltd. was retained by RCDC to survey in the remaining proposed drill holes and re-establish the American Bullion grid and drilling control benchmarks. McElhanney used a TC 1600 total station electrodistamat surveying instrument (EDM) to survey in the proposed drilling sites and to tie in control points related to the 1974, Texasgulf two-post mineral claim survey.

A three person McElhanney survey crew commenced work on the Red Chris property on September 11th and completed the initial surveying September 14th. McElhanney re established the American Bullion grid and drilling survey benchmarks, surveyed in selected old drill hole collars in the East and Main zones to check the 1994/1995 surveying, surveyed in the sites of the proposed 2003 drilling, and picked up the collars of the completed 2003 drill holes.

A registered BCLS McElhanney surveyor revisited the Red Chris project on October 21st to continue surveying the locations of completed drill holes. A Global Positioning System (GPS) transmitter was set up on the property survey control benchmark, located on Dynamite Hill, and enabled McElhanney to survey drill collars, drill site disturbances and remediation areas, camp and core logging facilities, drill access roads, and old two-post claim corners using “real-time” GPS surveying. McElhanney was able to provide RCDC with drill and benchmark coordinates based on both the local mine grid and the Universal Transverse Mercator (UTM) grid. The GPS surveying was completed on October 23rd.

McElhanney completed the 2003 surveying on the 10th and 11th of November using the GPS instrument to pick up the remaining un surveyed 2003 drill holes, the project access roads, and any un surveyed drill site disturbances. The surveyor also visited the area of the proposed plant and waste dump sites and surveyed the collar locations of the geotechnical and condemnation holes.

Subsequent to the completion of the 2003 drilling program, McElhanney was able to provide RCDC with a compilation of the 1974 Texas Gulf claim survey in digital format in both local mine grid and UTM coordinates. The two-post claim survey covers the area of the proposed open pits, plant site, waste dump, and site infrastructure. The mineral claims of the controlled survey were then integrated into the B.C. Ministry of Energy and Mines, Minerals Titles Branch claim maps to produce a property Mineral claim Map (Figure 3).

5.4 Sampling Method and Security

The drill core from the fall 2003 diamond drilling program was handled, logged, photographed, and sampled at the Red Chris drill camp. Most of the drill core was transported, from the drill sites to the core logging facilities, by helicopter due to the poor condition of the marshy roads and the need to prevent undue ground access disturbances. At the logging and sampling building, the core was handled and logged by qualified geologists. First core box footage markers were converted to metric, then the boxes were labelled with hole number, box number, and the contained core interval. The core recoveries and rock-quotient-density measurements (RQD) were done concurrently with the labelling. Qualified geologists, on contract to Red Chris

Development Company, then geologically logged the drill core for rock type, alteration, structure, and mineralization. The logging forms were similar to those used by American Bullion in the 1995 drill program. The geologists then laid out the sample intervals with assigned assay tags, inserted the standards, and digitally photographed the core in four box groups.

The length of the sampled interval depended upon geological rock contacts, core size, and changes in mineral intensity, but generally averaged 3 metres with NQ2 core and 2 metres with HQ. As core recovery generally approached 95 to 100% there were no problems with recovery that could materially impact the accuracy or reliability of the sampling method. To check that the longitudinal half splitting of the drill core could produce an unbiased sample, 32 half-core assay intervals from archived core drilled in the East Zone and 30 half-core intervals from the Main Zone were collected, analysed, and the results compared with the original submitted half of the core. The results, which indicated a close comparison, are discussed in the quality control section of this technical report by A.J. Sinclair, P. Eng.

During the core logging, RCDC geologists collected, for specific gravity testing, 134, 15 cm long core samples representing the various Red Chris rock types. The samples were wrapped and shipped in plastic buckets to the University of British Columbia Mining and Mineral Process Engineering Group for laboratory testing. Knight Piésold Ltd provided oversight and input into the specific gravity testing.

The standards (high copper, medium, low, and blanks) were inserted at every twentieth sample interval by the logging geologist. After being photographed with the tagged assay intervals, the core was split in half lengthwise using a Longyear manual splitter and half the sample, between the assay interval tags, was placed in labelled, tagged, double-bagged plastic sample bags. Up to 5 consecutively numbered sample bags were then placed in a white numbered and labelled "rice sack." The consecutively numbered "rice sacks" were then sealed with a randomly numbered security tag and were flown by helicopter in sling loads of 10 to a secure landing site at Tatogga Lake Resort which is located on Highway 37.

At Tatogga Lake, a RCDC contractor took possession of the samples, palletized each sling load, wrapped them in shrink-wrap, numbered the pallets and moved the pallets into a locked 20 foot steel container using a Bobcat. Twice a week, Bandstra Trucking of Smithers would pick up the pallets, under the supervision of a RCDC representative, and ship the samples, in a closed truck, directly, via Smithers, to International Plasma Labs in Vancouver. The assay lab recorded the number and arrival time of the sample shipment and noted the security tag numbers. The total weight of samples shipped to IPL was greater than 45 tonnes. The remaining half core samples are stored in their labelled core boxes in newly constructed core storage racks located on the Red Chris property.

At monthly intervals throughout the 1994 and 1995 exploration programs every fifth and tenth drill core sample, or 2,458 samples, were analyzed 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), Arsenic (As), 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), thorium (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 sub-sample from the original sample pulp. This sub-sample 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).

5.5 Sample Preparation and Analyses

The 2003 fall, 49 hole diamond drilling program added 6,042 assayed samples to the previous exploration drilling assay database. In addition to these samples 307 assay standards (56 blanks, 81 low grade, 83 medium grade, and 89 high grade) were also shipped from the property and analyzed as part of the initial quality control program.

The assay standards used in the 2003 drilling program were prepared for RCDC by CDN Resource Laboratories Ltd. (CDN) of Delta, BC. The initial material for the preparation of the standards was collected from the remaining American Bullion 1994-1995 drilling program rejects (Min-En sample rejects) which were loosely stored near Smithers, BC. The assay intervals selected for standards were chosen to give a low, a medium, and a high copper reference assay. CDN used this material to prepare three homogenous pulps suitable for use as assay standard reference material.

The samples from Smithers were first dried, mechanically ground and screened through a 200 mesh screen. Oversize material was reground and then re-screened. The minus 200 mesh fraction was mechanically mixed for 24 hours (tumbled end-over-end in a 50 gallon drum at approximately 12 rpm). Cuts were taken from the three standard sets and assayed by Assayers Ltd (Vancouver), to test for homogeneity. In all cases assay results were deemed acceptable for purposes of homogeneity. Random splits were taken from the sample sets for round-robin analysis. Twenty sub-samples, of each pulped standard, were sent each to Acme Laboratories, ALS Chemex, Assayers Canada, and International Plasma Laboratory Ltd; for round-robin analysis for assay copper and gold. The standards were bagged in tin-top kraft bags, in lots of approximately 100 grams and were given tear-off labels. The calculated assay values for the three sets of assay standards are 0.353% Cu (0.288 gpt Au), 0.561% Cu (0.561 gpt Au), and 0.907% Cu (0.744 gpt Au).

CDN Laboratories also supplied the drilling project with blank standards. The material for the blanks was purchased "turkey grit", which is crushed granodiorite from local Vancouver sources used to help turkeys feed. The samples were mechanically ground, pulverized and bagged in kraft bags in lots of 100 grams. The assay standards were shipped to the Red Chris project and were inserted into the sample stream by RCDC geologists.

Metallurgical composites were taken from the East Zone and the Main Zone archived drill half-cores. The 495 composite samples were taken by quarter splitting the stored half-core over predetermined assay intervals to provide representative mill feed grades as a hypothetical pit

advanced down through the East and Main Zones. More than 900 kilograms of East Zone composite samples (comprising 6 sample types) and greater than 800 kilograms of Main Zone composite samples (comprising 5 sample types) were sent to G&T Metallurgical Services of Kamloops, BC, for metallurgical test work.

An additional 67 samples, totalling 300 kilograms, and representing the various property rock types were collected from the stored half-core and were sent to BC Research in Vancouver for acid base accounting studies. Enough sample was taken over a 15 metre core length to produce either a 2 kilogram or a 5 kilogram sample.

The 6,042 diamond drill core samples were sent directly to International Plasma Laboratory Ltd. (IPL) of Vancouver for copper and gold assay. IPL is an ISO 9002 registered analytical laboratory. Bedrock diamond drill core intersecting Ashman Formation sediments were not assayed or analyzed. One in every twentieth sample with greater than 0.3% Cu was run for 30 element ICP (AqR) analysis. In total 221 samples were run by IPL for multi-element ICP analysis.

The core samples upon arrival at IPL were sorted into batches with ascending, consecutively numbered assay tags by IPL's personnel and dried at 55-60° C overnight. The samples were then crushed to minus 10 mesh using a Rhino jaw crusher. The entire sample was then split on a Jones Riffle to a statistically-representative 250-gram sample pulp. The sample pulp is then pulverized in a TM double ring and puck pulverizer to a 95 percent minus 150 mesh then rolled and bagged. All of the drill core samples submitted to IPL were assayed for copper and gold.

International plasma Laboratories' assay procedures for copper uses a 0.500 gram sub-sample of the 250 gram assay pulp for AA analysis. Each laboratory batch of 40 samples is composed of thirty six assay samples, one reagent blank, one in-house standard (5, 10, or 15 ppm Cu) and two repeats. The repeats are from the 1st and 20th batch samples. IPL uses a multi-acid (HNO₃, HCL, HCLO₄, and HF) slow hot plate digestion to digest the copper. The dried sample is then re-boiled in 5% HCL acid to dissolve any soluble matter. After digestion is complete the beakers are cooled, diluted to volume, and mixed. The resulting solutions are analyzed on an atomic absorption spectrometer using the appropriate standard sets. If any copper analysis returns values higher than the in-house standard then the sample or samples are further diluted and re assayed. In addition to the 6,042 samples sent to IPL for assay there were 307 standards submitted as part of bcMetals' initial quality control program. Copper values are reported in percent and have a minimum detection limit of 0.01% Cu.

Gold fire assays were also conducted on all the submitted samples and on rechecks returned from ALS Chemex Labs. IPL conducted their fire assay procedures on a 30 gram or one assay ton sample weight. The sub-samples were fluxed and a silver inquart was added and mixed. These sub-samples were fluxed in batches of 24 assays which included one blank and one repeat sample. After cupellation the precious metal beads were transferred into new glassware, dissolved with aqua regia solution in a hot water bath, diluted to volume, and mixed. The resulting solutions were analyzed on an atomic absorption spectrometer (AA) using a suitable standard set. Any gold assays over one gram per tonne were re-run by fire assay with a gravimetric finish rather than an AA finish. Gold values are reported in grams per tonne (g/t) with a detection limit of 0.01 g/t.

As part of RCDCs' quality control and quality assurance program 125 grams of one in every twenty samples submitted to IPL were set aside and sent to ALS Chemex. ALS Chemex then split the sample in two, returned one half to IPL for re-assay, and assayed the remaining half in-house for copper and gold.

As mentioned above, one in every twentieth sample, submitted to IPL, with a greater than 0.3% Cu assay value was run for 30 element geochemistry using inductively coupled plasma (ICP) (AqR) analysis. In total 221 samples were run by IPL for multi element ICP analyses. The 30 elements analyzed in the ICP are: silver (Ag), aluminium (Al), arsenic (As), barium (Ba), bismuth (Bi), calcium (Ca), cadmium (Cd), cobalt (Co), copper (Cu), chrome (Cr), iron (Fe), Mercury (Hg), potassium (K), Lanthanum (La), magnesium (Mg), manganese (Mn), molybdenum (Mo), sodium (Na), nickel (Ni), phosphorus (P), lead (Pb), Scandium (Sc), antimony (Sb), strontium (Sr), thallium (Tl), titanium (Ti), vanadium (V), zinc (Zn), tungsten (W) and Zircon (Zr).

The IPL I.C.P. analytical procedures require a 0.5-gram sub sample from the original sample pulp. This sub-sample is digested with an aqua regia mixture for 90 minutes in a hot water bath at ~95°. After cooling the sample is diluted to standard volume and the solution is analyzed by a Jarrell Ash 6100 Inductively Coupled Plasma Spectrometer.

5.6 Quality Assurance and Quality Control

5.6.1 Introduction

Quality assurance and quality control ('QA/QC') programs began on the Red Chris Project during the 1994 drill program conducted by American Bullion and have continued through to the 2003 infill program completed by RCDC. The analytical quality of the 1994 and 1995 diamond drill programs were assessed by Barry Smee, Ph.D., P.Geo., of Smee and Associates Consulting Ltd. and presented in two separate reports (Smee, 1995 and Smee, 1996). During the 2003 drill campaign RCDC retained A.J. Sinclair, Ph.D., P.Eng. to evaluate the earlier work and comment on the 2003 QA/QC procedures and results. A copy of Dr. Sinclair's final report "Quality Control of Assay Data – Red Chris Exploration, (Jan. 22, 2004) is appended to this drilling report (Appendix VIII).

5.6.2 QA/QC Procedures

The QA/QC program instituted for the 2003 drill program was as follows:

- 3 in-house standards were prepared to reflect low, medium and high grades. Expected values for the three standards were obtained by a round robin analysis between 4 laboratories. The standards were introduced into the sampling stream to monitor sample bias.
- blank samples were analyzed with all analytical batches
- pulps from approximately 1 in every 20th sample assayed at the primary lab (IPL) were shipped to a second lab (Chemex) for re-analysis. At Chemex these pulps

were then renumbered with a random number sequence to produce a set of 'blind' samples that were then sent back to IPL for re-analysis.

- a set of 83 samples with Cu > 0.3% and Au > 0.3 gpt from the first hole drilled in 2003 (03-248) were sent to Acme Lab for re-analysis.
- a second sampling of half-cores for analysis at IPL was completed to provide an indication of inherent geological (short range sampling) variability.

5.6.3 Conclusions by A.J. Sinclair, (Sinclair, 2004)

- *"The 1994 and 1995 American Bullion assay data for Au and Cu by Min-En lab are of an acceptable and consistent quality, based on a re-evaluation of quality control information summarized by Smee (1995, 1996) and including (1) replicate analyses of three standards and (2) duplicate analyses of many pulps by an independent lab (Chemex).*
- *Three in-house standards prepared for Red Chris Development Company. by CDN Resource Laboratories Ltd. in 2003, have well-established mean values for Cu and Au that make the standards useful reference materials for quality control of sampling and assaying related to the 2003 drilling program. These standards were inserted routinely with analytical batches to obtain the 2003 analytical data.*
- *The principal lab for assaying samples from the 2003 drilling program is IPL Ltd. Repeat analyses of standards indicate that IPL 2003 Cu and Au analyses are of acceptable accuracy.*
- *Every 20th IPL pulp was submitted to an independent lab (Chemex) in order to monitor for bias. Results indicate that for both Cu and Au the two labs agree satisfactorily. Where bias is noted, it is either negligible in magnitude or affects so few samples near the cutoff grade that the bias will have negligible impact on resource/reserve estimates.*
- *Precision of IPL data is adequate, as demonstrated by independent data sets including (1) repeat analyses of standards, and (2) repeat analyses of pulps checked by Chemex.*
- *Inherent geological (sampling) variability is the principal contributor to total variability within the data. For Cu the sampling variability is about 5 times the combined subsampling plus analytical variability; for Au the sampling variability is about 2.5 times the combined subsampling plus analytical variability. All these sources of error are random and will be minimized during resource/reserve estimation because many data will be used for the estimation of each block and the errors are compensating.*
- *The Au/Cu ratio for various data sets is consistent, ranging from about 0.8 to 1.0."*
- *Checks on standards in various grade ranges have shown acceptable accuracy at both the 1994-95 and 2003 primary analytical laboratories. Blank samples reported low values at or near the detection limit indicating the absence of contamination of material during preparation. Duplicate pulps sent to second labs have shown no significant*

analytical bias. The analysis of 'blind' duplicates by the primary lab (IPL) has shown the data are unbiased and have a moderate level of random analytical error. Re-analysis of 2nd half cores have shown sampling variability to be random and as a result should be minimized during the resource estimation. In the writers opinion the assay data base at Red Chris are both suitable and of the quality necessary to use in a Resource Estimate.

5.7 Environmental Studies

Environmental baseline studies were initiated in 1994, and data was collected until 2000. In addition to meteorology at the site, hydrology and water quality in the lakes and streams around the project area, the studies have also covered aquatic life, wildlife and vegetation.

Additional base line studies were conducted in the fall of 2003 and included water quality, hydrology, fish habitat assessment, and wildlife surveys. More studies will be conducted in the summer of 2004 to fill identified gaps in the base line data including Terrestrial Eco-System mapping, archaeology, traditional use surveys, water quality, vegetation metals and soils survey. Also, during the winter of 2004, additional snow course studies will be undertaken.

The 2003 water quality and fisheries studies were conducted by McElhanney Consulting Services Ltd. The fish habitat survey was conducted on trail Creek and Black Lake, the potential site of the tailings dam. No fish were found upstream of Kluea Lake due in large part to a complex series of beaver dams beginning immediately upstream of the lake. The water quality report by McElhanney Consulting Services Ltd is titled "Water Quality Field Report 2003 – Red Chris Mine" by J. Chaplin MSc., BC RPBio, (November 2003) and is included in Appendix XI. The report on the fish habitat survey is titled "Red Chris Baseline Environmental Monitoring" by C. Schell MSc., RPBio, (Jan., 2004) and is appended in Appendix XII.

Viasat Data Systems re-established three automated hydrology monitoring stations on streams draining the Todagin Plateau. Flows in the project area are characterized by peaks during the spring snowmelt runoff and troughs in the winter when precipitation is in the form of snow, and icing occurs in the rivers and streams. Intense rain storms in late summer can result in high local stream flows.

A large mammal survey was conducted in the fall of 2003 by Dave Hatler, on contract to RCDC. This study confirmed the 1996 and 1997 results regarding wildlife concentrations within and around the project area. Hatler's wildlife studies progress report is titled "Results of a fall Survey of Stone's sheep and mountain goats in the Todagin area, Northwestern British Columbia", and is appended in Appendix XIII.

In 2002, RCDC continued the waste rock characterization studies that were started by American Bullion in the 1994 and 1995 field seasons. Using geochemical sample collection requirements set by BC Research, the author collected 2 kg and 5 kg samples from the archived split core derived from the 2003 drilling program. The samples contained a variety of oxidized and un-oxidized rock types that would be encountered in the development of a proposed open pit. Sixty seven samples were collected and delivered to BC Research for acid base accounting studies and kinetic testing. The kinetic testing is ongoing.

5.8 Mineral resource Inventory Study

G.H. Giroux, of Giroux consultants Ltd., was engaged by Red Chris Development Company to update the resource estimate on the Red Chris property. Based on the additional drilling completed in the fall of 2003, the geologic model controlling the resource estimation at Red Chris was adjusted from the 1998 and 2002 interpretations. The development of the 2003 geologic model is discussed in detail in section 7.1.

The updated 2003 resource estimate utilized 236 diamond drill holes (69,493 m) contained within the Main and East zones. The boundary for the designation Main and East zone was set at 50,650 E. Within this drilling, a total of 28,595 Cu assays and 28,009 Au assays were collected and used in the resource calculations. Down hole 15 m composites were produced to honour the domain boundaries composites at contacts less than 7.5 m were combined with the previous sample to produce a uniform support of 15 ± 7.5 m. Within the Main Zone, the mineralized intrusive was modeled as a single unit with only post mineral dykes segregated. This differs from the 1998 and 2002 interpretations which separated out an inner core, outer core, and main phase. Within the East Zone, the inner core, outer core, and background intrusive domains were maintained but the boundaries were adjusted to reflect the additional drill data.

The Yellow Chris area, to the west of the Main Zone, contains two copper-gold mineral zones named the Far West Zone and the Gully Zone. An inferred resource was calculated for these zones for the 2003 update. The Far West Zone has been drill tested by 16 diamond drill holes totalling 5,107 m and is located between the coordinates 99,600 N to 100,100 N and 48,300 E to 48,750 E. The Gully Zone has been explored by 35 diamond drill holes totalling 11,325 m and is located between the coordinates 48,650 E to 49,200 E and 98,900 N to 99,900 N. As little geologic modeling has been completed in this area, no geologic domains were created and all material was classed inferred. A complete description of the generation of the 2003 resource update is contained within the "Update Report on the Red Chris Copper-Gold Project by G.H. Giroux, P.Eng., M.A.Sc. and J. Bellamy, (Feb. 16, 2004) which is contained in Appendix IX.

6.0 GEOLOGY

The following geology summary, with the exception of section 6.6, has been taken from Blanchflower *et al.*, (2002).

6.1 Regional Geology

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.*, 1996a and b; Ash *et al.*, 1997) 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. Six more recent published geological reports on the deposit and its geological setting are by Newell and Peatfield, (1995), Ash *et al.*, (1995), Ash *et al.*, (1996a and b), Ash *et al.*, (1997), and Friedman and Ash, (1997).

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.*, (1996a),

"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 (i.e. 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.

6.2 Local Geology

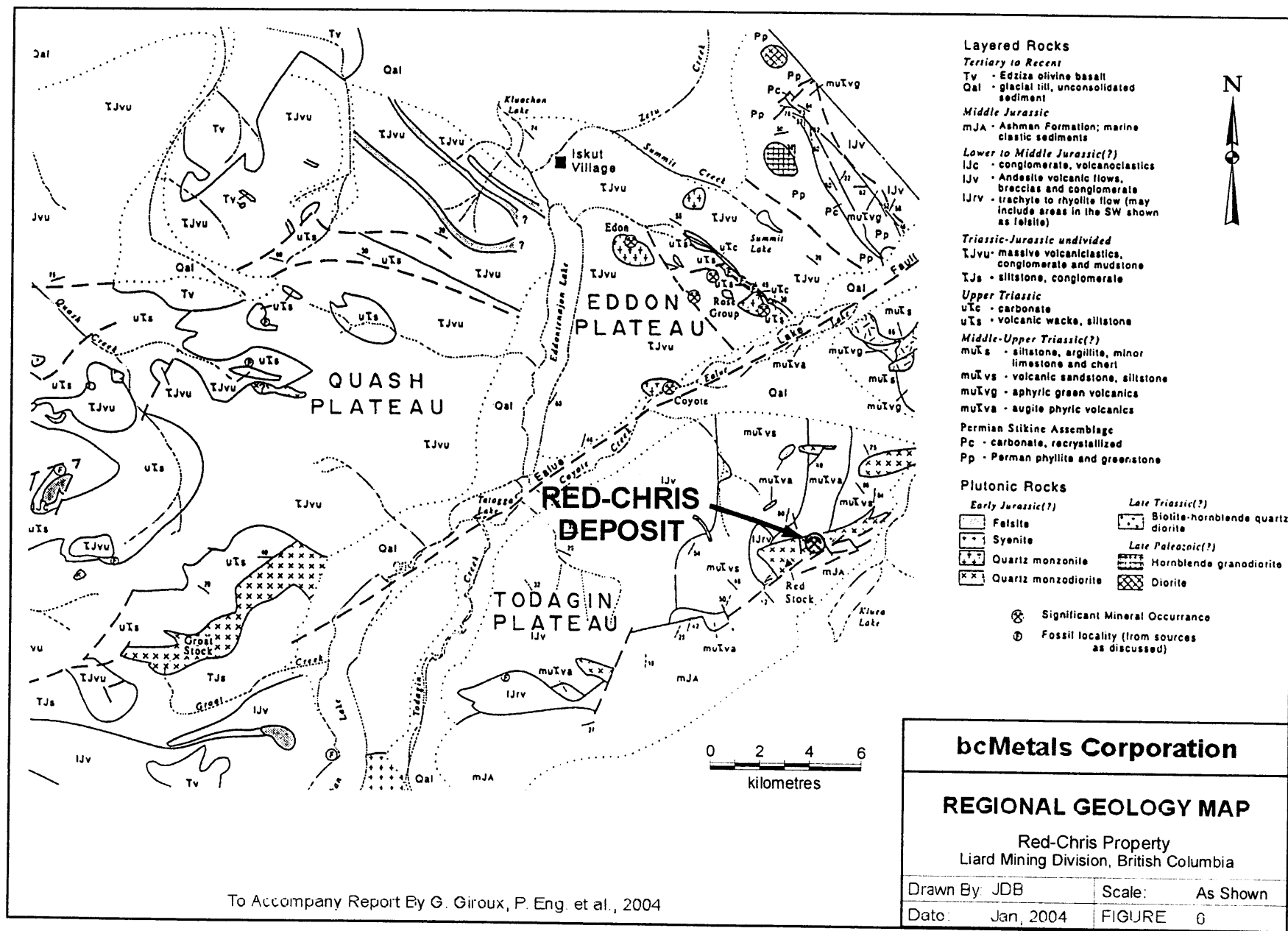
6.2.1 Lithology

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

a) Middle to Upper Triassic Volcanic and Sedimentary Rocks (muTva and muTvs)
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.

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 volcanic rocks are locally intercalated with Middle to Upper Triassic 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 western map-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.

b) Early Jurassic 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). 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.

Ash (1996) reports 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.

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 a larger intrusion.

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 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 in the western end of the Red-Chris deposit area. These dykes comprise the remaining volume of the Red stock.

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. 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 Red stock and older country rocks are cut by several varieties of late-stage, post-mineral dykes; identified 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).

c) Lower to Middle Jurassic Volcanic Rocks (Units IJrv 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 extrusive equivalents 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).

d) Middle Jurassic Ashman Formation (basal Bowser Lake Group; mJA)

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 margin of the Red stock. Repetitively-bedded laminae, varying from 5 to 15 cm thick, are defined by an up-section 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.

e) 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).

6.3 Mineralization

Pyrite, chalcopyrite and lesser bornite are the principal sulphide minerals of the Red-Chris deposit. 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 copper 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.

Chalcopyrite is most abundant in the quartz-sulphide vein stockworks and quartz-sericite-ankerite alteration selvages. Its content is roughly proportional to the intensity of quartz vein stockwork except in the Gully and Far West zones. 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. Where 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.

The known native gold or electrum mineralization is all 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 subrounded 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 gpt. 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. 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.

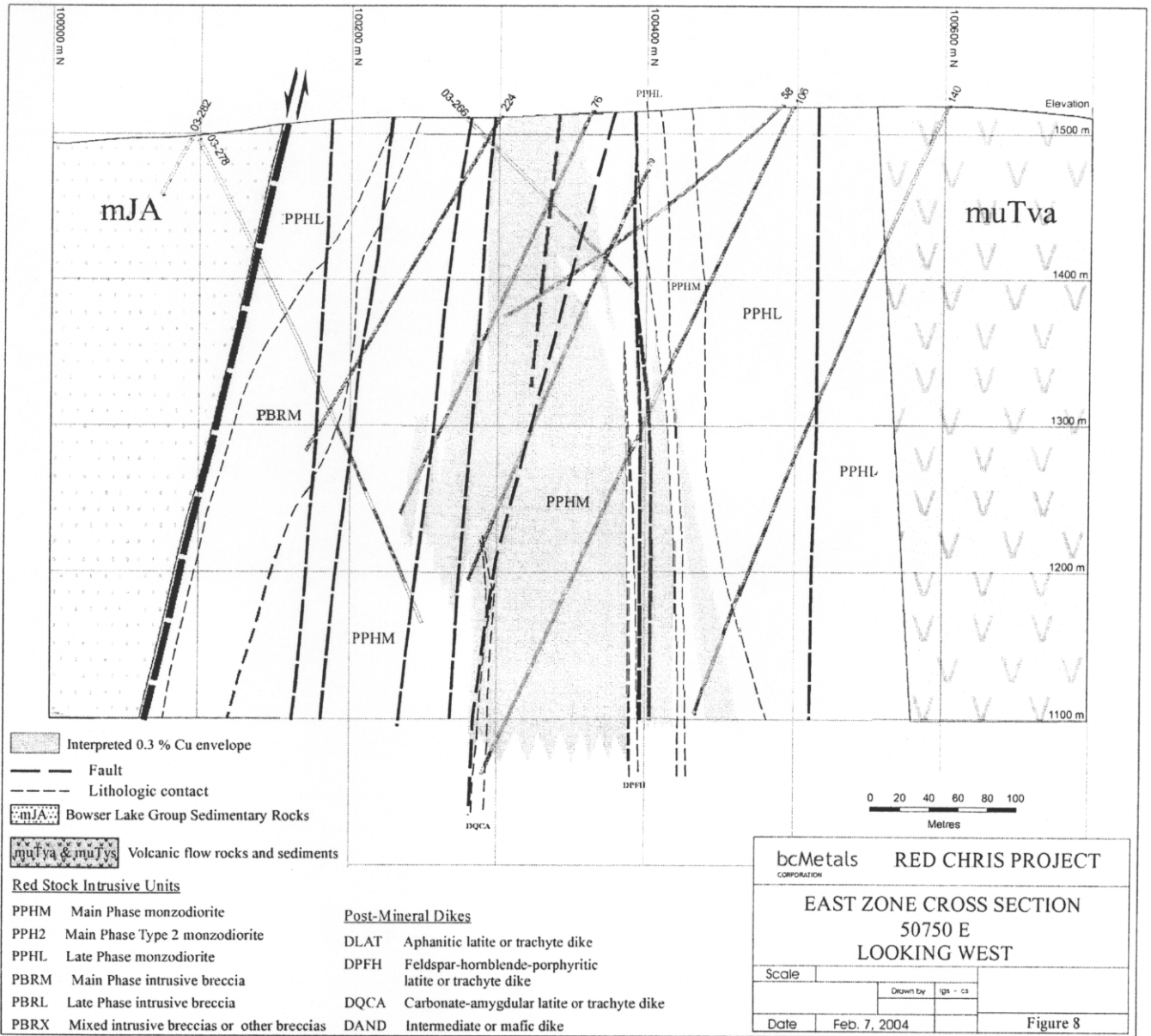
6.4 Veining and Stockwork

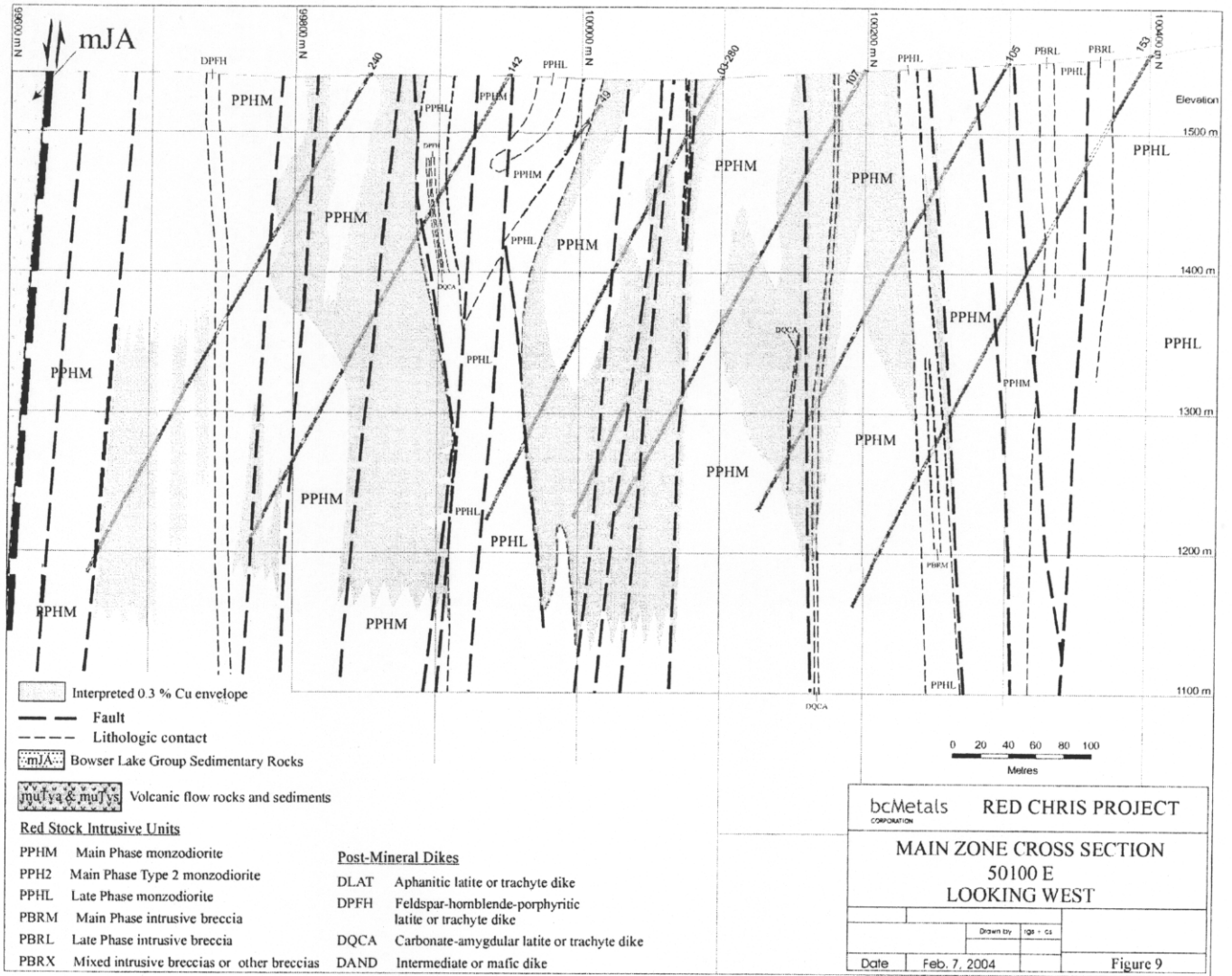
It was recognized during early exploration of this property that most of the mineralization is closely associated with individual and sheeted quartz (\pm carbonate) veining, and quartz (\pm carbonate) stockwork zones. Thus, considerable work has been undertaken to understand the relationship and distribution 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 also occurs as very fine- to fine-grained disseminations and fracture-fillings; resulting in visual under estimations of grades.

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.

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 modeling 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 Gully and Far West zones.

The sheeted quartz zones are lenticular and composed of parallel to sub parallel 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 locally 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).





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.

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.

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 Gully and Far West mineralization. Quartz-sulphide stockwork intensity was based upon the following arbitrary categories:

Trace	Rare 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

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 occur 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 (see Figure 8) and easterly faulting in the Main (see Figure 9), 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 Gully and Far West areas, 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.

Irregular zones of weak to strong gypsum veining are located west and southwest of the Red-Chris deposit and in the Gully and Far West zones. 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 as irregular flat-lying features at depths of less than 10 metres to greater than 350 metres with continuous intersections over 100 metres. 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.

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.

6.5 Alteration

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 and 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. RCDC geologists used the same alteration categories and alteration codes for the 2003 in-fill diamond drilling program. The following alteration descriptions described by Blanchflower (Blanchflower *et al* (Nov. 18, 2002)) were followed in logging the 2003 drill core.

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.

Phyllic (quartz-sericite-pyrite \pm ankerite) alteration is pervasive and strongly developed throughout the Red-Chris deposit and western map-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.

Mottled phyllic alteration was thought to be a transition between argillic (quartz-sericite \pm hematite \pm kaolinite \pm ankerite) and pervasive phyllic (quartz-sericite-pyrite \pm 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 \pm hematite \pm kaolinite \pm 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.

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.

6.6 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 down-dropping 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.

The quartz stockwork zones, mineralization and some late-stage dykes in the Main Zone and eastern end of the East Zone and in the Gully and Far West zones 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.

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 (Blanchflower *et al* (Nov. 18, 2002)). In the Main Zone, many of these east-west structures contain fragments of or are partially occupied by narrow late-stage dykes. Faults intersecting mineralized zones can either contain the copper values of their host rocks or appear to be dramatically diluted by faulted and sheared dyke material.

In the 2002 drilling program the large South Boundary Fault was intersected in the north orientated (-63° N) geotechnical hole DDH 03-278. This hole was collared in heavily

faulted and sheared Ashman Formation argillaceous siltstones and chert-pebble conglomerates. The Red Stock contact was intersected at 81 metres and the South Boundary Fault cut between 81 and 134 metres. The fault consisted of angular fragments of intensely silicified Late Phase and Main Phase rock in a matrix of light grey intense clay-fault altered granulated wall rock. At 134.1 metres the clay alteration ends and the matrix is composed of quartz-sericite altered intrusive, 5-7% disseminated pyrite and low copper values. The estimated width of this south dipping fault is 50 to 85 metres.

The regional structures that controlled the emplacement of the Red Stock have been repetitively reactivated before, during, and after the structurally controlled mineralizing event that formed the various Red Chris mineral zones. The above described South Boundary Fault was one of the latest fault movements but essentially parallels the 'East Zone Fault' and is probably a reactivation of the original structures that controlled the emplacement of the Red Stock.

6.7 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.

Porphyry Copper Characteristics

	Alkalic Suite	Calc-Alkalic Suite	Red-Chris Deposit
Intrusive Host Rock	Diorite, Monzonite Syenite Granodiorite	Quartz Diorite,	Monzodiorite
Host Rock Geochemistry moderate alkali/	Alkalic; high K/Na ratio; high alkali/ silica ratio	Calc-alkalic; low K/Na ratio; low alkali/silica ratio	Calc-alkalic; low /Na ratio; silica ratio
Morphology of Host Intrusive	Volcanic	Plutonic, Phallic	Volcanic
Level of Intrusion hypabyssal	Epizonal	Mesozonal	Epizonal to
Country potassic Rocks	Generally potassic volcanic rocks and volcanic rocks	Generally calc-alkalic plutonic	Sodic and 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	Moderately erratic	Consistent	Moderately consistent
Relative Size of Deposit	Small to Moderate	Moderate to Large	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.

7.0 DISCUSSION OF 2003 DRILLING RESULTS

7.1 Geologic Model

The 2003, 49 hole diamond drilling program undertaken by Red Chris Development Corp, on the Red Chris property, was designed to upgrade the known drill resources and verify the previous geologic model. In December 1995, D. Blanchflower and engineers of Fluor Daniel Wright Ltd. prepared a geological model of the Red Chris deposit which encompassed the lateral and vertical limits of the known mineralization. As a large scale open pit operation was planned, only Late Phase dykes exceeding 10 metres in thickness were modelled as internal waste, and no narrow barren dykes or structural features, such as shear and fault zones, were distinguished.

The model was refined by Blanchflower and Giroux in 1998 when the then property owner, American Bullion Minerals Ltd., contracted them to identify the detailed geological and structural features that control the higher grade copper-gold mineralization in the Red Chris deposits. American Bullion had been re-evaluating the earlier resource model in order to plan a more selective and potentially lower cost innovative open pit mining operation. Blanchflower in his November 18, 2002 report for American Reserve Energy Corporation, describes the geologic model used in this study as follows.

"It has long been recognized that the Red-Chris copper-gold mineralization has good near-vertical and longitudinal continuity, controlled largely by post-mineral faulting superimposed on and along the ancestral, en echelon, central axis fault zone, commonly referred to as the 'East Zone Fault'. Furthermore, some post-mineral dykes, such as the quartz-eye porphyry variety, are recognized as occupying the same structural features that controlled the late-stage and higher grade copper-gold mineralization. Thus, detailed modelling of the deposit incorporated the local geologic and structural features unique to each of the Main and East zones.

For modelling purposes, American Bullion provided vertical sections and plan views spaced at 50 metres and 15 metres respectively; covering the entire Red-Chris deposit. It was decided to subdivide the copper mineralization into three mineralized domains. These domains were designated as being: 'Inner Core' which comprised most copper mineralization equal to or exceeding a grade of 0.4 percent copper; 'Outer Shell' which comprised most copper mineralization ranging from 0.2 to 0.4 percent copper; and 'Main Phase' which comprised the remainder of the Red stock and included mineralization with grades dominantly less than 0.2 percent copper. The distribution of the gold mineralization was not modelled because it is intimately and proportionately associated with the copper mineralization.

The factors controlling the distribution of the three mineralized domains were identified as being: structural features (i.e. post-mineral faults and shear zones), geological features (i.e. Main Phase host rock versus post-mineral Late Phase and other dykes) and the distribution of mineralization based upon assay results. These three factors were all considered in outlining the boundaries of the 'Inner Core', 'Outer Shell' and 'Main Phase' mineral domains."

The 2003 in-fill diamond drilling program was concentrated on the core areas of the East and Main mineral zones and the drill holes were sited between the previous 50 metre drill sections and were often orientated northerly rather than to the south, as had been the case with previous programs. The additional in-fill drilling data allowed for the construction of vertical sections on 25 metre centres along the axis of the Red Chris East and Main Zones. This work is ongoing at the time of this report writing but sufficient data have been compiled to provide an updated geologic model for the 2004 resource calculations.

It was decided to impose a hard boundary around the East Zone core mineralization similar to the "Inner Core" domain constructed by American Bullion in 1998. The 2003 drilling provided more data to incorporate into the detailed construction of the 2004 domain shells. The "Inner" shell outline, which comprises most copper mineralization equal to or exceeding a grade of 0.3 percent copper, was drawn on vertical cross sections constructed on 25 metre centres. Because of the abrupt termination in copper grade in the

East Zone, this grade shell often matched the 0.4% shell used by American Bullion. The digitized, vertical section grade shell was transferred and smoothed onto plan views spaced on 15 metre levels down to the 1145 metre elevation. Below the 1145 metre level, the plans were produced on 30 metre intervals to the model base at 900 metres. A solid model of the core zone was then constructed from the level plan boundaries.

In the East Zone, a second copper grade shell was placed around the copper mineralization grading from 0.2 to 0.3 percent copper and the entire zone was constrained by the Bowser sediment contact to the south and the Dynamite Hill volcanics to the north. A small isolated 0.2 shell 'Satellite Zone' was put around drill holes DH 119 and DH 184 on section 51,000 E to restrain their influence on blocks within the 0.2 percent shell surrounding the "Inner Core" domain.

The new geologic model developed for the Main Zone differed significantly from that used in the previous 1998 study. The 2003 Main Zone drilling results indicated that there was no need to define a higher grade "Core Zone" boundary or limit the copper mineralization domain with a 0.2 copper percent grade shell. Like the East Zone, the Main Zone was constrained by the Bowser sediment contact to the south and the Dynamite Hill volcanics to the north. Late Phase monzodiorite dykes and other dykes whose widths were greater than 10 metres were digitized using the new cross sections and solid models of the dykes were developed and used as hard boundaries during the block modeling. These barren dykes frequently occupy the core structures that controlled the higher grade copper-gold mineralization in the Main Zone. The smaller dykes, which were too small to model, provided some of the samples for the metallurgical composites, and thus provided an internal dilution to account for their presence.

No new drilling was done on the Far West and Gully zones so the unconstrained (except by search radius) resources generated were all consigned to an inferred category. Further drilling is required within and adjacent to these zones to upgrade the current resource estimate. As this drilling is not necessary for the immediate Feasibility Study no time frame is proposed for this drilling.

TABLE 4

TABLE of 2003 DIAMOND DRILLING

EAST ZONE

Hole	Easting	Northing	Elevation	Length Hole (m)	Azimuth	Dip
03-248	50777.80	100250.36	1506.40	405.18	0	-65
03-249	50876.27	100398.76	1504.02	339.63	180	-60
03-250	50774.65	100198.65	1503.93	375.00	0	-66
03-251	50825.10	100450.17	1514.05	387.70	180	-67
03-252	50725.91	100249.13	1512.24	366.77	0	-76
03-253	50725.70	100298.18	1514.08	420.43	0	-77
03-254	50824.77	100300.02	1502.63	383.20	0	-85
03-255	50700.29	100249.79	1515.05	389.94	0	-68
03-256	50825.05	100349.74	1506.23	57.10	0	-90
03-256A	50825.29	100352.06	1506.37	381.10	0	-90
03-257	50699.84	100474.57	1520.32	404.77	180	-60
03-259	50700.09	100149.25	1509.70	380.79	0	-73
03-261	50849.89	100301.71	1499.11	362.80	0	-76
03-262	50824.84	100400.54	1509.95	400.20	180	-60
03-264	50824.91	100279.86	1500.96	198.10	0	-45
03-266	50750.48	100278.55	1511.20	164.33	0	-45
03-267	50775.00	100302.20	1510.07	417.38	0	-60
03-269	50725.34	100280.32	1513.80	131.10	0	-45
03-270	50875.03	100323.62	1497.06	253.66	0	-88
03-272	51024.05	100475.04	1491.12	200.00	90	-60
03-273	50875.06	100324.01	1496.73	169.21	0	-70
03-275	50700.05	100524.30	1521.64	222.26	330	-53
03-278	50750.48	100099.87	1495.94	362.20	0	-63
03-282	50750.17	100094.23	1495.56	93.60	150	-60
2003 Drill Holes - East Zone			24 holes	7266.55	metres	

MAIN ZONE

Hole	Easting	Northing	Elevation	Length Hole (m)	Azimuth	Dip
03-258	50050.10	100219.68	1546.11	348.80	180	-62
03-260	50075.02	100249.06	1547.99	368.30	180	-60
03-263	50124.82	100249.85	1547.63	371.30	180	-60
03-265	50175.45	100199.26	1543.60	398.50	180	-60
03-268	50174.99	100149.70	1541.31	364.33	180	-60
03-271	50224.97	100249.83	1544.92	365.55	180	-65
03-274	50225.35	100200.01	1541.63	351.83	180	-60
03-276	50074.79	100149.58	1542.75	352.90	180	-60
03-277	50224.81	100149.61	1539.09	351.74	180	-60

03-279	50174.94	100249.90	1546.45	353.40	180	-60
03-280	50099.70	100099.22	1539.64	356.70	180	-60
03-281	49975.18	100223.74	1545.19	368.50	180	-60
03-283	50140.33	100040.40	1538.52	355.20	0	-90
03-284	49925.53	100149.83	1540.11	364.63	180	-68
03-285	49900.71	100150.04	1537.06	200.91	180	-60
03-286	49925.67	100040.31	1532.73	350.30	180	-68
03-287	49973.58	100121.95	1540.19	402.00	180	-60
03-288	50300.60	99989.88	1530.53	423.80	0	-65
03-289	50319.25	99991.28	1529.70	251.50	165	-60
03-290	50050.04	100110.23	1540.81	452.60	180	-60
03-291	50149.75	99897.60	1537.32	448.20	0	-66
03-292	49925.10	100249.23	1544.69	441.40	180	-60
03-293	50075.01	99898.66	1542.66	432.90	0	-67
03-294	50025.72	99899.24	1544.88	435.70	180	-65
03-295	50200.21	100050.07	1535.92	413.60	0	-78
2004 Drilling totals Main Zone			25 Holes	9324.59	metres	

7.2 Mineral Resource Inventory Results

Table 5 :Red Chris All Zones all blocks classed Measured or Indicated

All Blocks Classed Measured				All Blocks Classed Indicated		
Cutoff (Cu %)	Tonnes > Cutoff (tonnes)	Grade>Cutoff		Tonnes > Cutoff (tonnes)	Grade>Cutoff	
		Cu (%)	Au (g/t)		Cu (%)	Au (g/t)
0.05	158,000,000	0.33	0.27	776,100,000	0.21	0.18
0.10	135,300,000	0.38	0.30	616,800,000	0.25	0.21
0.15	115,500,000	0.42	0.33	472,800,000	0.29	0.23
0.20	99,300,000	0.46	0.36	339,000,000	0.33	0.27
0.25	83,400,000	0.50	0.40	239,500,000	0.38	0.31
0.30	68,600,000	0.55	0.45	167,300,000	0.42	0.34
0.35	55,500,000	0.61	0.49	112,000,000	0.47	0.38
0.40	44,700,000	0.67	0.54	71,200,000	0.52	0.42
0.45	36,200,000	0.72	0.60	45,600,000	0.58	0.48
0.50	29,800,000	0.78	0.66	30,400,000	0.63	0.53
0.55	24,800,000	0.83	0.72	21,000,000	0.68	0.58
0.60	20,300,000	0.88	0.79	14,000,000	0.73	0.63
0.65	16,300,000	0.95	0.87	9,400,000	0.78	0.69
0.70	13,100,000	1.01	0.95	6,300,000	0.83	0.76
0.75	11,000,000	1.07	1.02	4,800,000	0.87	0.80
0.80	9,300,000	1.12	1.08	3,500,000	0.90	0.86
0.85	8,100,000	1.16	1.13	2,200,000	0.95	0.94
0.90	6,700,000	1.22	1.19	1,200,000	1.02	1.08
0.95	5,700,000	1.28	1.25	800,000	1.06	1.15
1.00	4,900,000	1.32	1.30	500,000	1.12	1.25
1.10	3,800,000	1.40	1.38	153,000	1.27	1.35
1.20	2,900,000	1.48	1.44	67,000	1.44	1.43
1.30	2,100,000	1.57	1.53	50,000	1.52	1.53
1.40	1,500,000	1.66	1.61	33,000	1.59	1.48
1.50	1,100,000	1.74	1.67	33,000	1.59	1.48

8.0 STATEMENT OF 2003 EXPENDITURES

The following exploration expenditures are for the period of April 1, 2003 to March 31, 2004 and are exclusive to the Red Chris property. They have been provided by Red Chris Development Corporation.

Item	Description	Cost (CAN \$)
Accommodation	Camp refit, equipment, supplies, food, and cooks wages	185,177.99
Accommodation	Travel accommodation and Tatogga Lodge	15,520.33
Analyses	Sample bags and tags, blank standards	3,733.84
Assays	Drill core assays (6,042), standards (307), and re-assays	129,358.00
Assays	Check assaying and standards preparation	17,707.28
Communications	SatTel rental, telephone	7,326.39
Consulting	Environmental	62,521.03
Consulting	Geotechnical – Knight Piésold	225,624.61
Consulting	Metallurgical	90,095.00
Consulting	Mining Engineering	15,038.65
Consulting	Project management – 257 man days @ \$400.00/day	102,862.50
Consulting	Geological resource modelling	2,047.50
Expediting	Expediting services	10,516.15
Drilling	37 HQ, NQ2, NQ3 core holes – 13,292.4 m @ \$58.78/m	781,327.00
Drilling	9 pit Geotechnical holes – 2,498.5 m @ \$91.12/m	227,663.00
Drilling	Metallurgical, 3 HQ core holes - 793.4 m @ \$70.24/m	55,728.00
Drilling	9 engineering HQ, HQ3, NQ3 – 298.3 m @ 241.72/m	72,152.00
Equipment	Generator rental, first aid, core splitter, and computer	8,779.35
Equipment	Bobcat rental	6,295.00
Equipment	Excavator lease – reclamation and drill sumps	46,300.00
Fuel	Camp heating and power, fuel oil, gasoline, and propane	54,903.20
Salary and Wages	RCDC field and support employees- core splitters	47,120.00
Salaries	Project professional staff	160,889.75
Surveys	Drilling and property survey control - McElhanney	16,001.46
Transportation	Commercial airlines	10,037.83
Transportation	Helicopter	246,444.83
Transportation	Quadra Track rental	5,980.00
Transportation	Freight and delivery, incl. 45 tonnes core shipped to Van.	42,757.75
Transportation	Project service vehicle, parking, and other	4,862.17
		2,654,770.10

Statement of first quarter 2004 Expenditures

NI 43-101 Report Preparation

Consulting	Geological – 38 man days @ \$400.00/day	15,200.00
Consulting	Resource Modelling	39,700.00
Consulting	Quality assurance and quality control	5,275.00

Exploration Report Preparation		
Consulting	Geological – 67 man days @ \$375.00/day	25,250.00
Drafting and printing		6,283.00
Environmental Assessment Report – AMEC Earth & Environmental		33,006.18
Metallurgical Consulting		44,192.85
Metallurgical Lab work		<u>62,549.00</u>
	Sub Total	\$231,456.03
Total 2003/2004 Red Chris Exploration Expenditures		\$2,886,226.20

9.0 PROPOSED 2004 EXPLORATION PROGRAM

As the 2003 infill drilling program was designed to be an infill resource upgrade program and not an exploration program *per se*, the exploration potential of the Red Chris property remains the same as at the conclusion of the 1995 drilling program by American Bullion. The new detailed x-sections, constructed on 25 metre sections from 49,800 E to 59,090 E, have revealed information gaps along the projections of specific mineralization trends within the limits of the proposed open pit. Some of these trends follow deeper seated structures along the southern Main Zone dyke trend but others, between the Main and East zones (~50,400 E) and along the southwest margin of the Main Zone, project upwards to fall within the upper benches of a proposed pit.

The Yellow Chris area (Gully and Far West Zones) eventually requires further drilling to delineate the mineral zones and upgrade the resources generated from the 1995 American Bullion drilling (J.D. Blanchflower *1995 Exploration Report on the Red Chris Property*, (April 30, 1996)). The grades reported within this zone do not currently justify exploratory drilling at this time. The areas with exploration potential are divided into zones within the proposed open pit limits and zones outside of this limit. These are discussed below.

9.1 Delineation drilling within the proposed Red Chris open pit

The 2003 infill drill program pinpointed several mineral trends within the proposed open pit that remain un-delineated and which are capable of being upgraded to a higher resource category. Four specific areas are recommended for further infill drilling.

- At the north east end of the East Zone along section 50,990 E drill holes 94-119 (0.63 Cu, 0.40 Au over 107.3 m) and 95-184 (0.45 Cu, 0.27 Au over 195.1 m) intersected significant copper-gold mineralization at depth and holes 76-53 and 94-94 encountered mineralization near surface. As neither the extent nor the connections between these zones are defined it is proposed to drill three north trending, minus 65°, 400 m holes from ~100,300 N on sections 50,950, 50,975 E, and 51,025 E.
- The gap in drilling along grid line 50,400 E occurs between the East and Main zones and is in an area where an upgrade in inferred resources would influence pit design. The near surface resource subcrops along grid north line 99,950 N and a deeper resource is indicated along the 100,100 N line (see section 50,350 E). Four north orientated, minus 65° drill holes are proposed to drill test the inferred resources in this gap. Three of the 400 metre long holes would be collared on grid north line 99,925 N and on sections 50,375 E, 50,400 E, and 50,425 E. The fourth hole would be sited on section 50,400 E at 100,025 N.
- At the western end of the Main Zone, in the area between section 49,750 E and 49,875 E, only section 49,800 E has received an extensive fence of drilling. As the cross section indicates that copper-gold mineralization extends to within 50 metres of the surface and as the proposed pit begins to daylight into the adjacent

- Meteorology studies and the re-establishment of an automated weather station on “Dynamite Hill” to collect rainfall, relative humidity, solar radiation, temperature, and wind velocities.
- Vegetation metals and soils survey
- Benthonic studies on the local streams draining the Todagin plateau and
- Terrestrial Eco-System mapping.

10.0 PROPOSED 2004 EXPLORATION BUDGET

In order to facilitate the ongoing Feasibility Study it is recommended that further drilling within the ultimate proposed pit limits be undertaken to upgrade more of the inferred resources, define the southern Red Stock – Ashman Formation contact in greater detail, and examine the geologic controls on copper-gold mineralization adjacent this contact. At this time, it is recommended that further exploration not be undertaken on the copper-gold resources within the Yellow Chris area.

The environmental studies will be ongoing and their extent and costs are beyond the scope of this exploration report

The recommended 5,800 metres of NQ2 core diamond drilling in the four discrete zones within the proposed Red Chris open pit should commence in early July and can be integrated with any further, required geotechnical drilling. A list of the proposed drill holes is contained in Table 6.

**TABLE 6
PROPOSED 2004 DIAMOND DRILLING**

Collar Location		Azimuth (deg)	Dip (deg)	Estimated Length (m)
Northing	Easting			
EAST ZONE				
A - 100,300	50,950	0.0	-65.0	400
B - 100,300	50,975	0.0	-65.0	400
C - 100,300	51,025	0.0	-65.0	400
Proposed East Zone Drilling				1,200 metres
MAIN ZONE				
D - 99,925	50,375	0.0	-65.0	400
E - 99,925	50,400	0.0	-65.0	400
F - 99,925	50,425	0.0	-65.0	400
G - 100,025	50,400	0.0	-65.0	400
H - 99,850	49,775	0.0	-45.0	300
I - 99,900	49,825	0.0	-40.0	250
J - 99,900	49,825	0.0	-70.0	400
K - 99,950	49,850	0.0	-70.0	400
L - 99,950	49,875	0.0	-70.0	400

M - 99,850	50,125	180.0	-60.0	400
N - 99,900	50,150	180.0	-65.0	350
O - 99,675	49,800	0.0	-55.0	250
P - 99,675	49,850	0.0	-55.0	<u>250</u>
	Proposed Main Zone Drilling			4,600 metres
	Total Proposed Diamond Drilling			5,800 metres

TABLE 7

PROPOSED 2004 EXPLORATION BUDGET

Item	Description	Cost (CAN \$)
Accommodation	Camp refit, equipment, supplies, food, and cooks wages	40,000.00
Accommodation	Travel accommodation and Tatogga Lodge	6000.00
Analyses	Sample bags and tags, blank standards	1,000.00
Assays	Drill core assays (2,000), standards(100), re-assays	40,000.00
Assays	Check assaying and standards preparation	5,000.00
Communications	SatTel rental, telephone	3,500.00
Consulting	Project management	50,000.00
Expediting	Expediting services	3,000.00
Drilling	16 NQ2 core holes – 5,800 m @ \$60.00/m	348,000.00
Equipment	Generator rental, first aid, core splitter, and computer	4,000.00
Equipment	Bobcat rental	2,000.00
Equipment	Excavator lease – reclamation and drill sumps	20,000.00
Fuel	Camp heating and power, fuel oil, gasoline, and propane	18,000.00
Salary and Wages	RCDC field and support employees- core splitters	16,000.00
Salaries	Project professional staff	20,000.00
Surveys	Drilling and property survey control - McElhanney	6,000.00
Transportation	Commercial airlines	4,000.00
Transportation	Helicopter	80,000.00
Transportation	Quadra Track rental	2,000.00
Transportation	Freight and delivery	15,000.00
Transportation	Project service vehicle, parking, and other	<u>2,000.00</u>
	Estimated Expenditures	\$685,500.00
Contingencies	Indirect expenses and contingencies at 5%	35,000.00
Report Writing and copying		15,000.00
	TOTAL ESTIMATED EXPLORATION BUDGET	<u>\$735,500.00</u>

11.0 STATEMENT OF QUALIFICATIONS

I, John R. Bellamy, P. Geo., do hereby certify that:

1. I am currently employed as a consulting geologist residing at 1855 Vine Street Vancouver, British Columbia, Canada, V6K 3J8
2. I graduated in 1970 with a degree in Geology, BSc. from the University of Calgary.
3. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (Registered Professional Geoscientist, No. 19085) and a Fellow of the Geological Association of Canada (F4346).
4. I have practiced my profession continuously since my graduation in 1970.
5. I have read the definition of “qualified persons” set out in National Instrument 43-101 (“NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101
6. I am responsible for the compilation and or preparation of sections summarizing the history, geology and drilling of the technical report titled Update Report on the Red Chris Copper-Gold Project and dated February 121, 2004. Portions of the above mentioned sections were taken directly from J. D. Blanchflower’s contribution to the November 18, 2002 technical report “*Report on the Red Chris Copper-Gold Project*” by G. H Giroux, P Eng., Robert Rodger, P. Eng., and J.D. Blanchflower, P. Geo.
7. I supervised the 2003 fall drilling program on the Red Chris property for Red Chris Development Company Ltd. I was on the property for the entire drilling program (September 4th through November 14th) and was responsible for all facets of the program including drilling, sample preparation, analyses and security, and geotechnical coordination.
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report.
9. I consent to the filing of the Exploration Report, with its appended Technical Report, with any stock exchange and other regulatory authority.

Dated this ____ Day of August, 2004

J. R. Bellamy, P. Geo. - Consulting Geologist

12.0 BIBLIOGRAPHY

Anderson, R. G. (1989): A Stratigraphic, Plutonic, and Structural Framework for the Iskut River Map Area, Northwestern, British Columbia; in Current Research, Part E, Geological Survey of Canada, Paper 89-1E, pages 145 - 154.

American Bullion Minerals Ltd.(June 1998): Red Chris Project 1998 Pre-Feasibility Study; Private report; 236 pages plus appendices.

Ash, C. H. and Fraser, T. M. (1994): 1994 Geological Mapping of the Tatogga Lake Project; An Ongoing Four-Year Geological Mapping Project for the B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch.

Ash, C. H., Fraser, T. M., Blanchflower, J. D. and Thurston, B. G. (1995): Tatogga Lake Project, Northwestern British Columbia (104H/11,12); B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch; Geological Fieldwork 1994, Paper 1995-1, pages 343-360.

Ash, C. H., Stinson, P. K. and Macdonald, R. W. J. (1996a): Geology of the Todagin Plateau and Kinaskan Lake Area, Northwestern British Columbia (104H/12, 104G/9); B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch; Geological Fieldwork 1995, Paper 1996-1, pages 155-174.

Ash, C. H., Stinson, P. K., Macdonald, R. W. J. and Nelson, K. J. (1996b): Geology of the Todagin Plateau (104H/12NW); B.C. Ministry of Employment and Investment; Paper 1996-1, pages 155-174.

Ash, C. H., Macdonald, R. W. J., Stinson, P. K., Fraser, T. M., Nelson, K. J., Arden, K. M. and Lefebure, D. V. (1997): Geology and Mineral Occurrences of the Todagin Lake Map Area (104H/12NW & 13SW; 104G/9NE & 16SE); B.C. Ministry of Employment and Investment, Open File 1997-3, 1:50 000 map.

Blanchflower, J. D. (1995): 1994 Exploration Report on the Red-Chris Property, Todagin Plateau Area, Liard Mining Division, British Columbia, Canada; Unpublished Report for American Bullion Minerals Ltd., 79 pages plus appendices, maps and sections.

Barr, D. A., Fox, P. E., Northcote, K. E. and Preto, V. A. (1976): The Alkaline Suite Porphyry Deposits - A Summary; in Porphyry Deposits of the Canadian Cordillera, Sutherland Brown, A. Editor, Canadian Institute of Mining and Metallurgy, Special Volume 15, pages 359-367.

Carter, N. C. (1976): Regional Setting of Porphyry Deposits in West-Central British Columbia; in Sutherland-Brown, A. (ed.) Porphyry Copper Deposits of the Canadian Cordillera, C.I.M.M. Sp. Vol. 15, p. 227-238.

Evenchick, C. A. and Thorkelson, D. J. (1993): Geology, Spatsizi River, British Columbia (104H); Geological Survey of Canada, Open File 2719, Scale 1:250,000.

Forsythe, J. R. (1975): Report of Diamond Drilling, Percussion Drilling, Geophysical Surveys, Red-Chris Property, Ealue Lake Area, Liard Mining Division; B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 5741.

Forsythe, J. R. (1977a): Report of Geochemical and Geophysical Surveys, Red-Chris Property, Ealue Lake Area, Liard Mining Division; B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 6489.

Forsythe, J. R. (1977b): 1976 Summary Report Red-Chris Property; Unpublished Internal Report, Texasgulf Inc., 33 pages plus appendices, maps and sections.

Forsythe, J. R. and Peatfield, G. R. (1974): Report of Diamond Drilling, Percussion Drilling and Line cutting, Red-Chris Property, Ealue Lake Area, Liard Mining Division; B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 5297.

Friedman, R. M. and Ash, C. H. (1997): U-Pb Age of Intrusions Related to Porphyry Cu-Au Mineralization in the Tatogga Lake Area, Northwestern British Columbia; in Geological Fieldwork 1996, Lefebure, D. V., McMillan, W. J. and McArthur, J. G., Editors, B.C. Ministry of Employment and Investment, Paper 1997-1, p. 291-297.

Fluor Daniel Wright Ltd., (May 1995): Red-Chris Project Scoping Study Project 2360; private report prepared for American Bullion Minerals Ltd.; 150 pages with appendices and maps.

Fluor Daniel Wright Ltd (April 1996): Red Chris Project Prefeasibility Study; Private report prepared for American Bullion Minerals Ltd.; 135 pages plus appendices.

Giroux, G H. (1995): A Geostatistical Resource Evaluation of the Red Chris Copper Gold Deposit; private report prepared for American Bullion Minerals Ltd., 22 pages.

Giroux, G H. (1996): A Geostatistical Resource Evaluation of the Red Chris Copper Gold Deposit; private report prepared for American Bullion Minerals Ltd., 49 pages and appendices.

Giroux, G.H., R. Rodger, J.D. Blanchflower (2002) Report on the Red Chris Copper-Gold Project, private report prepared for American Reserve Energy Corporation., 90 pages.

Hallum Knight Piesold Ltd. (1995): Summary of 1994 Environmental Program; private report prepared for American Bullion Minerals Ltd., 37 pages.

Hallum Knight Piesold Ltd. (1996): Summary of 1995 Environmental Program; private report prepared for American Bullion Minerals Ltd., 62 pages, maps and appendices.

Lakefield Research Limited (April 19, 1996): An Investigation of the Recovery of Copper and Gold from Red Chris Samples; Private report prepared for American Bullion Minerals Ltd.; 63 pages plus appendices.

Leitch, C. H. B. and Elliot, T. M. (1976): Geology and Mineralization, Red-Chris Property; unpublished internal report, Texasgulf Inc., 28 pages.

Lloyd, J. (1995): A Geophysical Report on Ground Magnetometer, VLF-EM and Induced Polarization Surveys on the Red-Chris Gold-Copper Porphyry Deposit, Liard Mining Division, British Columbia, Canada; private report prepared for American Bullion Minerals Ltd., Volumes 1 and 2, 37 pages and maps.

Lowell, J. D. and Guilbert, J. M. (1971): Lateral and Vertical Alteration-Mineralization Zoning in Porphyry Copper Deposits; *Economic Geology*, Vol. 65, p. 373-408.

McAusland, J. H. and Rebagliati, C. M. (1972): Report on the Red Claim Group; private report prepared for Silver Standard Mines Ltd.

McInnis, M. D. (1972): Interim Report on the Chris Group, Hotailuh Area, N. W. British Columbia; report prepared for Great Plains Development Company of Canada, Ltd., 8 pages plus maps.

McMillan, W. J. (1991): Porphyry Deposits in the Canadian Cordillera; in *Ore Deposit, Tectonics and Metallogeny in the Canadian Cordillera*, B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1991-4, pages 253-276.

Min-En Laboratories (1996): Procedures for Copper Assaying and Gold Fire-Assaying; Analytical Procedures for Geochemical Analyses of Silver, Copper, Lead and Zinc, and Geochemical Fire-Assay for Gold; and Analytical Procedures for 31-Element I.C.P. Analyses.

MINFILE Map 104H, Spatsizi River; Ministry of Energy, Mines and Petroleum Resources, Mineral Occurrence Map, Scale 1:250,000, Revised Jan. 1992, Updated July, 1992. Researched and Compiled by J. L. Gravel.

Newell, J. M. (1978): Report on Diamond Drilling on Chris 2 and 4 Mineral Claims, Ealue Lake Area, Liard Mining Division; B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 6872.

Newell, J. M. and Leitch, C. H. B. (1976): Report on Diamond Drilling, Red-Chris Property, Ealue Lake Area, Liard Mining Division; B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 6111.

Newell, J. M. and Peatfield, G. R. (1995), The Red-Chris Porphyry Copper-Gold Deposit; in Schroeter, T. G. (ed.) Porphyry Deposits of the Northwestern Cordillera of North America, Canadian Institute of Mining and Metallurgy Special Volume 46.

Ney, C. S. and Hollister, V. F. (1976): Geological Setting of Porphyry Deposits of the Canadian Cordillera; in Sutherland-Brown, A. (ed.) Porphyry Copper Deposits of the Canadian Cordillera, C.I.M.M. Sp. Vol. 15, p. 21-29.

Panteleyev, A. (1973): Chris; in Geology, Exploration in British Columbia in 1972; B.C. Ministry of Energy, Mines and Petroleum Resources, pages 535 - 536.

Panteleyev, A. (1975): Windy, Red, Chris, Sus; in Geology, Exploration in British Columbia in 1974; B.C. Ministry of Energy, Mines and Petroleum Resources, pages 340 - 343.

Peatfield, G. R. (1981): Report on Diamond Drilling on the Red 9 Mineral Claim (part of the Red-Chris Property), Liard Mining Division; B.C. Ministry of Energy, Mines and Petroleum Resources, Assessment Report 8994.

Read, P. B. (1984): Geology, Klastline River (104G/16E), Ealue Lake (104H/13W), Cake Hill (104I/4W) and Stikine Canyon (104J/1E); Geological Survey of Canada, Open File 1080, Scale 1:50,000.

Read, P. B. and Psutka, J. F. (1990): Geology of Ealue Lake East-Half (104H/13E) and Cullivan Creek (104H/14) Map Areas, British Columbia; Geological Survey of Canada, Open File 2241, Map with Notes, Scale 1:50,000.

Rebagliati, C. M. (1994): Summary Report Red-Chris Gold-Copper Porphyry Deposit, Liard Mining Division, British Columbia; Internal Company Report on Behalf of American Bullion Minerals Ltd., 40 pages.

Schink, E. A. (1977): Geology of the Red-Chris Porphyry Copper-Deposit, Northwestern British Columbia; unpublished M. Sc. thesis, Queen's University, 211 pages.

Smee, B. W. (1995): Report on Analytical Quality, Red Chris Project; private report prepared for American Bullion Minerals Ltd., 21 pages.

Smee, B. W. (1996): Report on Analytical Quality, Red Chris Project; private report prepared for American Bullion Minerals Ltd., 25 pages and appendices.

Souther, J. G. (1972): Telegraph Creek Map-Area, British Columbia; Geological Survey of Canada, Paper 71-44, 38 pages and Map 11-1971.

Thorkelson, D. J. (1988): Jurassic and Triassic volcanic and Sedimentary Rocks in Spatsizi map area, north-central British Columbia; in Current Research, Geological Survey of Canada, Paper 88-1E, pages 43-48.

Thorkelson, D. J. (1992): Volcanic and Tectonic Evolution of the Hazelton Group in Spatsizi River (104H) Map Area, North-central British Columbia; unpublished Ph.D. thesis; Carleton University, 281 pages.

Tipper, H. W. and Richards, T. A. (1976): Jurassic Stratigraphy and History of North-Central British Columbia; Geological Survey of Canada, Bulletin 270, 73 pages.