CM
881939
92P/101

Tom Schroeter
May 14/95

1994 GEOLOGICAL, GEOPHYSICAL and LITHOGEOCHEMICAL REPORT on the CM PROPERTY

Barriere, B.C.

CM 1 to 7 Claims

KAMLOOPS MINING DIVISION

NTS 92P/8E

Lat: 51° 18'N Long: 120° 07'W

Owner:
INCO LIMITED

Operator:
INCO EXPLORATION AND TECHNICAL SERVICES INC. (IETS)
Suite 800, 666 Burrard Street
Vancouver, B.C.
V6C 2X8

Scott Casselman, P.Geo.
Cameron Bell, P.Geo.

SUMMARY

The CM property is underlain by oceanic, mafic volcanic and sedimentary rocks of the Fennel Formation of the Slide Mountain Assemblage. The Fennel Formation hosts the Chu Chua volcanogenic massive sulphide (VMS) deposit which has a reserve of 5 million tonnes grading 1.5% copper and is located 9 kilometres northeast of the CM property.

Copper, zinc and precious metals mineralization has been identified on the CM property at the Upper and Lower showings, where it is hosted in a chert/argillite horizon within tholeiitic basaltic rocks. Delineation of the mineralized horizon by diamond drilling has been difficult due to intense faulting and fracturing of the rock near the showings. High-grade copper has also been identified at the "Gold Zone", but it has been difficult to trace and its genesis is not fully understood.

The 1994 program focused on obtaining a better understanding of the geology, alteration, mineralization and structure. To this end, geological mapping, lithogeochemical sampling, line-cutting, MaxMin and magnetometer surveys were performed. This work determined that there are a number of sub-parallel, northerly trending chert or mixed chert/argillite horizons within the mafic volcanics. As well, a large zone (1.7 km x 150 m) of quartz-carbonate-chlorite alteration of the mafic volcanic rocks was identified in the footwall of the Lower and Upper showing horizon near the central part of the property.

The magnetometer survey identified an area of lower magnetic intensity which corresponds with the footwall alteration zone, indicating that alteration caused destruction of the magnetite. A number of weak magnetic highs were identified in the southern portion of the property, many of which coincide with MaxMin conductors. There is little to no outcrop exposure in this area, and the causes of the MaxMin anomalies are not known. A 1.7-kilometre long conductor was identified up-section from the alteration zone. This conductor is weak and, because of its long strike, is likely formational.

Recommendations for future work on the property include further geological mapping and lithogeochemical sampling on the northern part of the property, and drilling of the coincident MaxMin and magnetic anomalies.

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1.0 Introduction

1.1 General

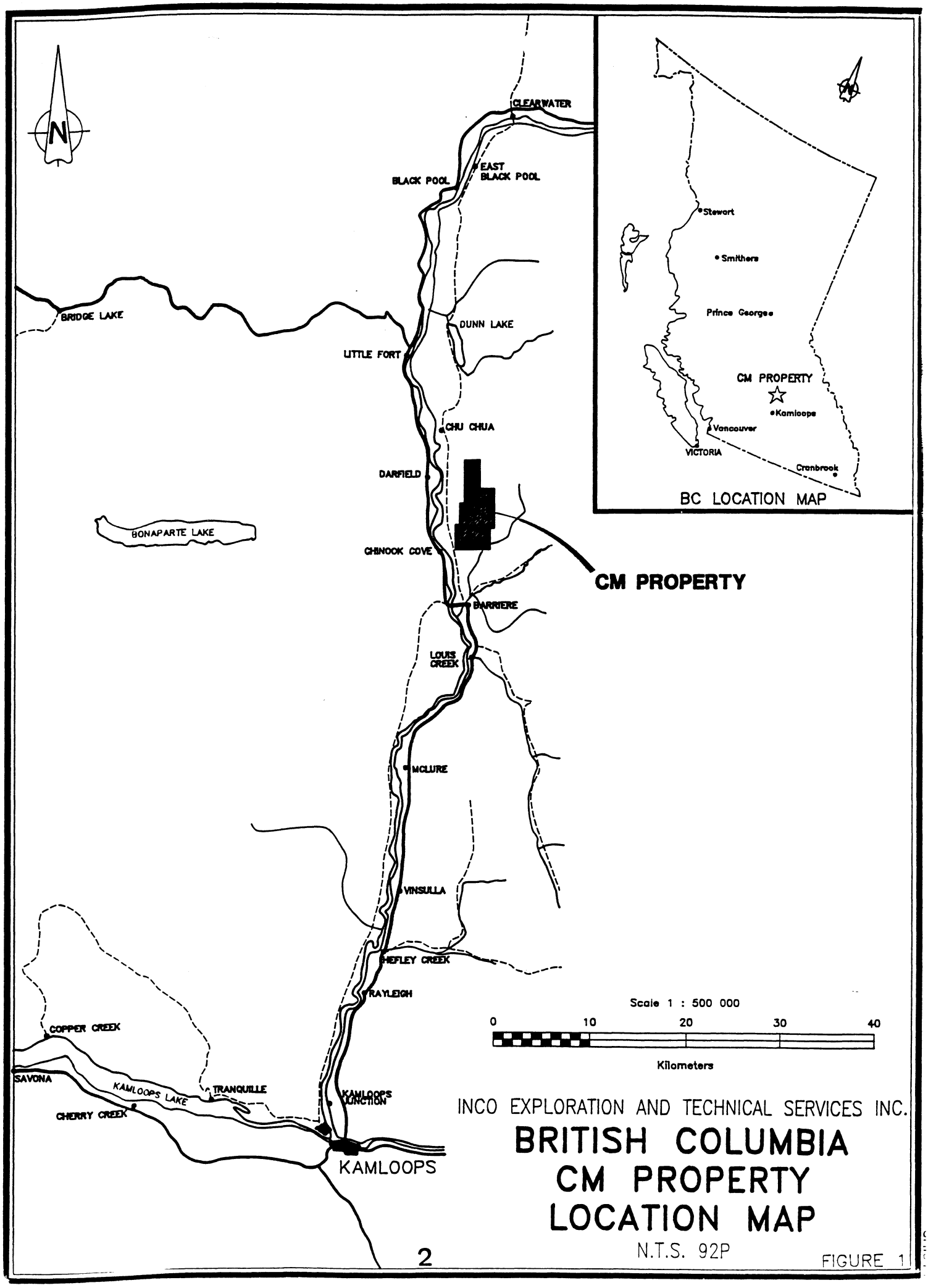
This report documents the 1994 field exploration program on the CM property. The program consisted of two phases of work. The first phase consisted of geological mapping, rock sampling and line-cutting conducted by Inco Exploration and Technical Services. The second phase consisted of MaxMin and magnetometer surveys conducted by Frontier Geosciences Inc. A separate report on the geophysical program, by Clifford Candy of Frontier, is included as Appendix III.

1.2 Location and Access

The CM property is located 12 kilometres north of the community of Barriere, B.C., or roughly 70 km north of Kamloops (Figure 1). The claims are on the east side of the Thompson River on NTS map sheet 92P/8E, and are centred at latitude 51° 18' North, longitude 120° 07' West.

Access to the property is by way of Highway #5 from Kamloops to Barriere. From Barriere there are two routes to the property. The Dunn Lake Road provides access to the north, and the Leonie Creek forestry road provides access to the south (Figure 2). The Dunn Lake road extends from Barriere 15 kilometres north, along the eastern side of the Thompson River, to the village of Chu Chua. From there, the Cold Creek logging road runs east one kilometre to the property. The Leonie Creek forestry road is accessed 2 km northeast of Barriere via the Barriere Lakes road. From the turn-off, the property is approximately 7.5 km north on the Leonie Creek road.

Access on the claims is by way of the Cold Creek road which winds through the northern part of the property and joins the Leonie Creek road to the south. Further access is provided by numerous gravel spur roads. The roads are in fair shape; in poor weather, 4X4 vehicles are recommended.



INCO EXPLORATION AND TECHNICAL SERVICES INC.

BRITISH COLUMBIA CM PROPERTY LOCATION MAP

N.T.S. 92P

FIGURE 1

1.3 Physiography

The CM property covers the west slope of Chinook Mountain. Elevations on the property range from 580 metres in the west to 1430 metres in the east. Drainage on the property is predominantly from east to west; Newhykulston Creek which drains the north and central portions of the property and Skowootum Creek drains the south. Both creeks flow into the North Thompson River, 1 kilometre west of the western claim boundary. The North Thompson River flows from north to south and is at an elevation of 390 metres at the valley floor.

The mountain slopes are covered by second-growth spruce, fir, pine and poplar trees. The property has undergone recent logging activity in the central and southern portions. The climate is hot and dry in the summer and fairly mild in the winter with moderate amounts of snowfall from November to March. A forest fire burned the south and west portion of the property during early August of 1994.

1.4 Claim Information

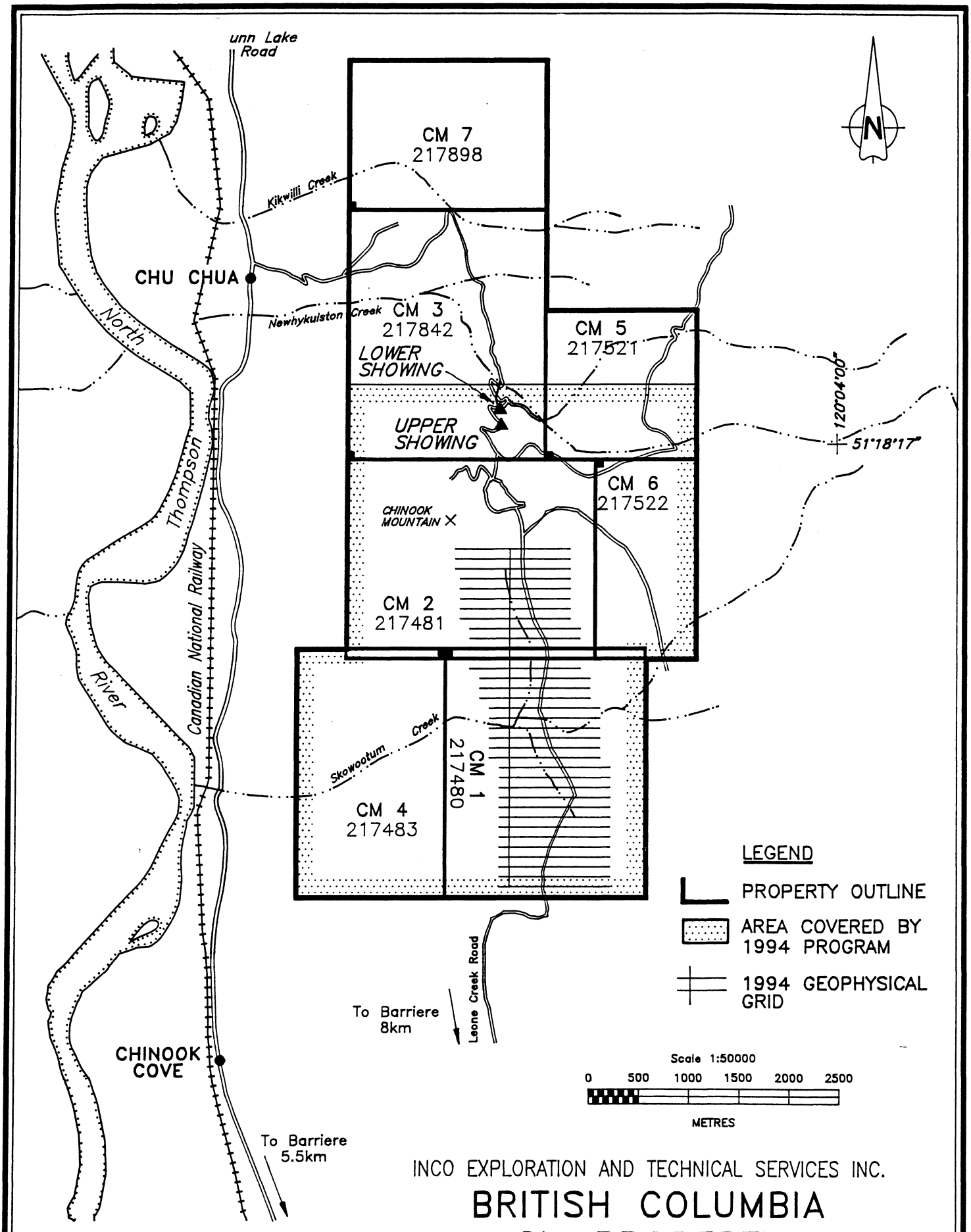
The CM property is in the Kamloops Mining Division and consists of 7 mineral claims comprising 104 claim units covering 2600 hectares (6425 acres). The claims have been divided into two claim groups; the Chinook Group consists of the CM 1, CM 3, CM 5, CM 6 and CM 7 claims; the Chinook 1 Group consists of the CM 2 and CM 4 claims (Figure 2). Claim data is as follows:

Table 1. CM Property Claim Information.

NAME	TENURE #	# OF UNITS	RECORD DATE day/mo/yr	EXPIRY DATE * day/mo/yr
CM 1	217480	20	13/09/85	13/09/96
CM 2	217481	20	13/09/85	13/09/96
CM 3	217482	20	13/09/85	13/09/96
CM 4	217483	15	13/09/85	13/09/96
CM 5	217521	9	30/12/85	30/12/96
CM 6	217522	8	30/12/85	30/12/96
CM 7	217898	12	03/11/87	03/11/96

* Expiry date is based on this report being accepted for assessment.

The claims are owned by Inco Limited of Copper Cliff, Ontario. Inco Exploration and Technical Services Limited of Vancouver is the operator of the project.



INCO EXPLORATION AND TECHNICAL SERVICES INC.

BRITISH COLUMBIA
CM PROPERTY
CLAIM AND WORK INDEX MAP

FIGURE 2

CHU15

1.5 Property History

The Barriere area has undergone extensive exploration since the 1950's, when massive sulphides were first discovered on Newhykulston Creek on what is now the CM property. This activity led to the discovery of the Chu Chua VMS deposit located 9 km north-northeast of the CM property. The reserve at Chu Chua is approximately 5 million tonnes of 1.5 % copper in a "Besshi-type" VMS deposit. The ground covered by the CM 1 to 7 claims has been explored by numerous companies since the initial discovery. Inco Limited evaluated the property in the summer of 1993 and acquired it on April 12, 1994. Table 2 outlines some of the more recent programs performed on the CM 1 to 7 claims:

Table 2. CM Property Historical Work Programs.

YEAR	COMPANY	WORK PERFORMED
1979	Noranda Exploration Company Limited	- established grid - 1021 soil and silt samples (Cu, Zn, Pb and Mo) - 48 line-km of vertical shootback E.M. and magnetic surveys
1979	Craigmont Mines Ltd.	- 2274 line-km of Airborne DIGHEM II surveying; part of which covered the CM claims - survey involved magnetic and EM data collection
1985 and 1986	BP Resources Canada Ltd.	- established 4 small grids (22.3 line-km) - MAX/MIN (444 and 1777 Hz) and magnetic surveys
1987	BP Resources Canada Ltd.	- expanded grids by 7.3 line-km - 6.6 line-km of MAX/MIN (444 and 1777 Hz) - 563 soil samples (32 elements by ICP and Au by AAS) - 2 diamond drill holes totalling 243 m
1988	BP Resources Canada Ltd. and Skylark Resources Ltd.	- geological mapping - 3 line-km MAX/MIN (444 and 1777 Hz) - extended soil geochem grid 200 m west, collected 150 samples (30 elements by ICP and Au by AAS) - 9 trenches totalling 355 m - 17 diamond drill holes totalling 1,985 m
1989	Minnova Inc.	- 25.7 km of line-cutting - geological mapping and lithogeochemical sampling (204 rocks for whole rock analysis) - 992 soil samples (Ag, As, Cu, Pb, Sb, Zn and Au) - 26 line-km of MAX/MIN (444 and 1777 Hz) and magnetic surveys - minor trenching - 5 diamond drill holes totalling 585 m
1990	Minnova Inc.	- 22.5 km of line-cutting (mainly on grid C north) - geological mapping and lithogeochemical sampling (69 rocks for whole rock analysis) - 647 soil samples (Ag, As, Ba, Cu, Pb, Sb, Zn, Au) - 19.1 line-km of HLEM surveying on grid C north - 37 reconnaissance soil samples (Ag, As, Ba, Cu, Pb, Sb, Zn and Au) west of Gold Zone - HLEM (2.4 line-km) and Pulse EM (7.72 line-km) surveys on Grid C South - 3 diamond drill holes totalling 594 m
1993	Inco Exploration and Technical Services Inc.	- geological mapping and lithogeochemical sampling (35 rocks for ICP-32, whole rock and INAA analysis) - re-interpretation of geochemical and geophysical data

1.6 1994 Work Program

The 1994 field exploration program on the CM property was conducted in two phases. The first phase consisted of geological mapping, rock sampling and line cutting. The geological mapping and sampling was conducted by Cameron Bell and Scott Casselman of Inco Exploration and Technical Services from May 9 to June 17. Line-cutting at 100 metre spacing was initiated by four Inco personnel from June 20 to July 4 (28.6 km), and was completed by a 2-man Amex Exploration Services crew from July 15 to 19 (8.8 km). Forest fires in the region delayed the second phase of the program, which was conducted in late August and consisted of magnetometer and MaxMin EM geophysical surveys by Frontier Geosciences Inc. The magnetometer survey covered 38 line-kilometres at 12.5 metre station intervals and the MaxMin survey of 36 line-kilometres at 25 metre intervals. A report on the geophysical surveys was prepared by Clifford Candy of Frontier Geosciences Inc. and is included as Appendix III. The areas covered by the mapping and sampling program and the geophysical grid are illustrated in Figure 2.

2.0 Geology

2.1 Regional Geology

The Adams Plateau-Clearwater-Vavenby map area was mapped at 1:100,000 scale by Schiarizza and Preto (1987). The area is on the western edge of the Omineca Belt and is underlain by the Fennel Formation of the Slide Mountain Assemblage to the west and by the Eagle Bay Assemblage to the east (Figure 3).

The Early Cambrian to Mississippian Eagle Bay Assemblage is in the pericratonic Kootenay Terrane and consists of metasedimentary and metavolcanic rocks which are repeated in four northwest-dipping thrust sheets. The assemblage is comprised of a Lower Palaeozoic succession of clastic metasediments, carbonate and mafic metavolcanic rocks, and an overlying Devono-Mississippian succession of felsic to intermediate metavolcanic rocks and metasediments. The Homestake and Rea VMS deposits are hosted by intermediate to felsic metavolcanic rocks of the Lower Devono-Mississippian succession.

The Slide Mountain Assemblage is part of Slide Mountain Terrane and consists of the Devonian to Middle Permian Fennel Formation. The formation is an oceanic sequence consisting of two major divisions. The structurally lower (eastern) division comprises a heterogeneous assemblage of bedded chert, gabbro, diabase, pillowed basalt, clastic metasediments, quartz-feldspar-porphyry rhyolite and intraformational conglomerate. The upper (western) division consists almost entirely of pillowed and massive basalt with gabbro and minor bedded chert and argillite. Both intrusive and extrusive mafic igneous rocks are tholeiitic. Tops throughout the succession consistently face west.

The Fennel Formation and Eagle Bay Assemblage are intruded by mid-Cretaceous granodiorite and quartz-monzonite of the Raft and Baldy batholiths. The package is locally overlain by Eocene Kamloops Group volcanic and sedimentary rocks and Miocene lavas.

The map area is dominated by easterly-directed thrust faults which imbricate the Fennel Formation and separate it from the underlying Eagle Bay Assemblage. Tectonic emplacement of the Fennel Formation over the Eagle Bay Assemblage was followed by southwesterly-directed folding and associated thrust faulting. Folding and fabrics associated with this event are evident in the Eagle Bay Assemblage, but are rarely seen in the Fennel Formation.

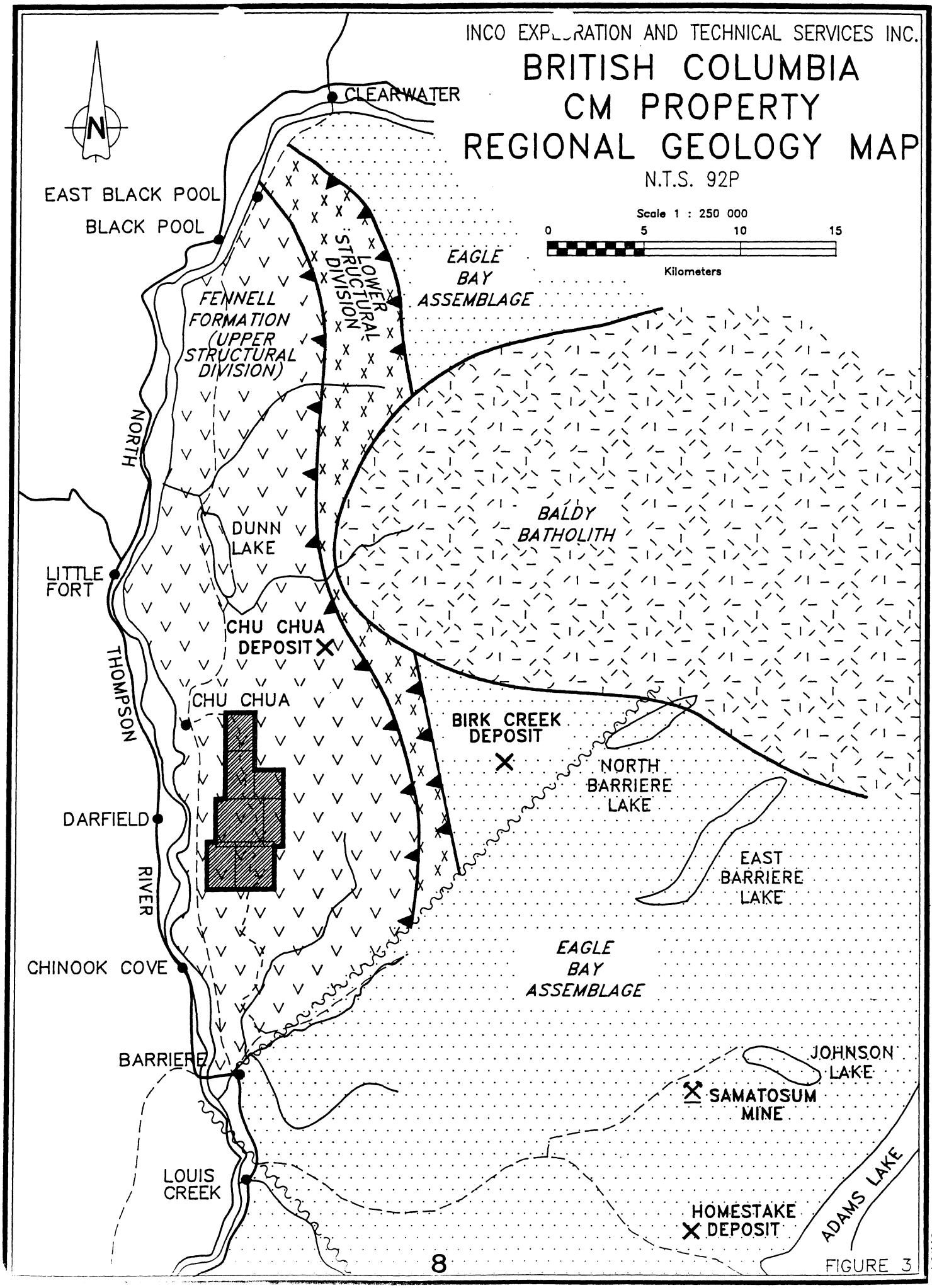


FIGURE 3

CHUC1

2.2 Property Geology

2.2.1 Introduction

The 1994 geological mapping program focused on the central and southern parts of the property. Information collected during this program was synthesized with work from previous years and is plotted at 1:5,000 scale on Figures 13, 14 and 15. Figure 17 is a 1:10,000 scale compilation map of geological and geophysical information from the 1994 and previous programs. Geological units discussed below are followed, in brackets, by the corresponding map symbols as they appear on Figures 13, 14, 15 and 17.

2.2.2 Lithology

The property is underlain by rocks of the Upper Fennel Formation which is comprised predominantly of mafic volcanic and sub-volcanic rocks (90%) with lesser lenses and beds of chert and argillite (10%). The sequence youngs westward, in agreement with regional trends. The Upper Fennel is intruded by small plugs of granodiorite of the Baldy Batholith in the eastern portion of the property. Narrow dykes of diorite to granodiorite of probable Baldy Batholith origin cut the volcano-sedimentary pile in a roughly southwest-northeast direction.

The intrusive and extrusive volcanic rocks are chemically similar as is demonstrated in the Lithogeochemistry section of this report (Section 3.2). The mafic volcanic rocks are classified as low potassium, ocean floor tholeiites and are believed to have formed in an oceanic rift environment. Basalts are aphanitic to fine-grained, medium to dark grey or green in colour, and are variably pillowed **(Bp)**, massive **(Bm)**, and variolitic **(Bv)**. The massive flows are fairly homogeneous and structureless and up to tens of metres thick. In many places it is difficult to distinguish pillowed varieties from the massive flows because of the fine-grained nature of the rock. Often pillowed varieties can only be discerned by peeling moss from the outcrop to expose the pitted rims outlining the pillows.

Pillowed basalt occurs as masses up to several tens of metres thick which pass both laterally and vertically into unpillowed basalt. Individual pillows range from a few centimetres to over a metre across. They have narrow selvages (up to 1.5 cm), sharp outer contacts, gradational inner contacts and occasionally contain variolites occupying a zone several centimetres wide near their outer margins. The variolites are up to 2 millimetres in diameter and can form up to 25% of the rock. Intra-pillow material is generally aphanitic and quartz-epidote rich. Hyaloclastite occasionally occurs between pillow lobes with interpillow chert and sediments. These rocks lack vesicles and amygdules which may be an indication of deep water origin.

Gabbro (**gb**) and diabase (**db**) intrusive rocks are observed predominantly in the eastern and central portion of the property. These rocks are fine to medium-grained, and generally have a blocky joint pattern. The intrusions are interpreted to be sills, although good exposures of contact relationships are rare. Gabbro dykes are also present, cutting sediments and extrusive volcanic rocks. The dykes and sills appear to be synvolcanic with the basalt and may represent feeders to the overlying flows.

The argillite (**arg**) units range from 1 to greater than 30 metres thick. They are massive and locally contain 2-3% pyrite as disseminations and blebs. The argillite is non-graphitic to highly graphitic, locally siliceous near chert beds, and in places is rhythmically laminated with chert in alternating 1 centimetre thick layers. A good exposure of the laminated chert/argillite up to 40 metres thick can be seen in the south-central portion of the property. A poorly exposed chert/argillite unit appears to underlie the north-south depression running through the centre of the property. This unit is approximately 200 metres wide and is cut by gabbro intrusions.

Chert (**ch**) units are amorphous, light grey to buff coloured, weakly bedded and are interpreted to be of exhalative origin. Locally, chert horizons are argillaceous or tuffaceous. The chert horizons contain only minor amounts of finely disseminated sulphides (mainly pyrite). However, chert in the Lower and Upper showing areas and in drill core contain up to 10% sulphides and variable amounts of magnetite. The chert beds range from less than 1 to approximately 10 metres thick. The thicker chert beds are more common in the north-south trending central depression which bisects the property.

An outlier of the Cretaceous Baldy Batholith (**Kg**) is exposed along the eastern margin of the central part of the property. The intrusive body is medium-grained, granodioritic in composition and contains approximately 10% biotite. The size of the intrusion was not delineated. Narrow dykes (1 to 3 metres wide) of granodioritic to dioritic (**d**) composition were observed in the west-central portion of the property. They trend north-easterly with a sub-vertical dip and are believed to be related to the Cretaceous plutonism of the Baldy Batholith.

2.2.3 Alteration and Mineralization

The mafic volcanic rocks are pervasively weakly chloritized with local epidote and silica alteration indicating regional greenschist facies metamorphism. Rare, patchy dolomitization of the mafic volcanic rocks was observed as an orange-brown discolouration at scattered locations on the property, especially in the Gold Zone (Figure 14). The 1994 mapping program partially delineated a zone of intense quartz $\pm$ calcite veining with variable chlorite alteration and silicification in the east-central portion of the property. This alteration zone is roughly conformable to bedding and occurs over a strike length of 1.7 kilometres and a width of approximately 150 metres, from line 7900 to 9600N and from 104500 to 10600E. It occurs in pillowed and variolitic basalt in the stratigraphic footwall to the central chert/argillite horizon that hosts the Lower and Upper Showings. Chlorite alteration observed on weathered surfaces as dark grey-green patches within light grey, weakly chloritized rock. Quartz $\pm$ calcite veining

is more intense within the dark grey-green chloritized patches and locally displays a "ladder vein" type morphology. Variolites are most common on the margins of the chloritic patches and are rarely cut by the quartz/calcite veinlets. Silicification is erratic in the alteration zone.

Examination of drill core from the Lower and Upper Showing revealed the basalt in the vicinity of the mineralized zone to be intensely silicified. In some cases the primary volcanic textures are difficult to discern due to silicification. Sulphides at the Lower Showing consist of semi-massive to disseminated pyrite > chalcopyrite > sphalerite in a chert/argillite unit. Surface trenching by previous workers returned values of 5.7% copper, 29.7 g/t silver and 2.95 g/t gold over 3.4 metres. The Upper Showing consists of massive magnetite with up to 10% disseminated sulphides (pyrite and chalcopyrite) in chert. Previous trenching of the massive magnetite returned values of 0.4% copper and 2.0 g/t gold over 3.0 metres.

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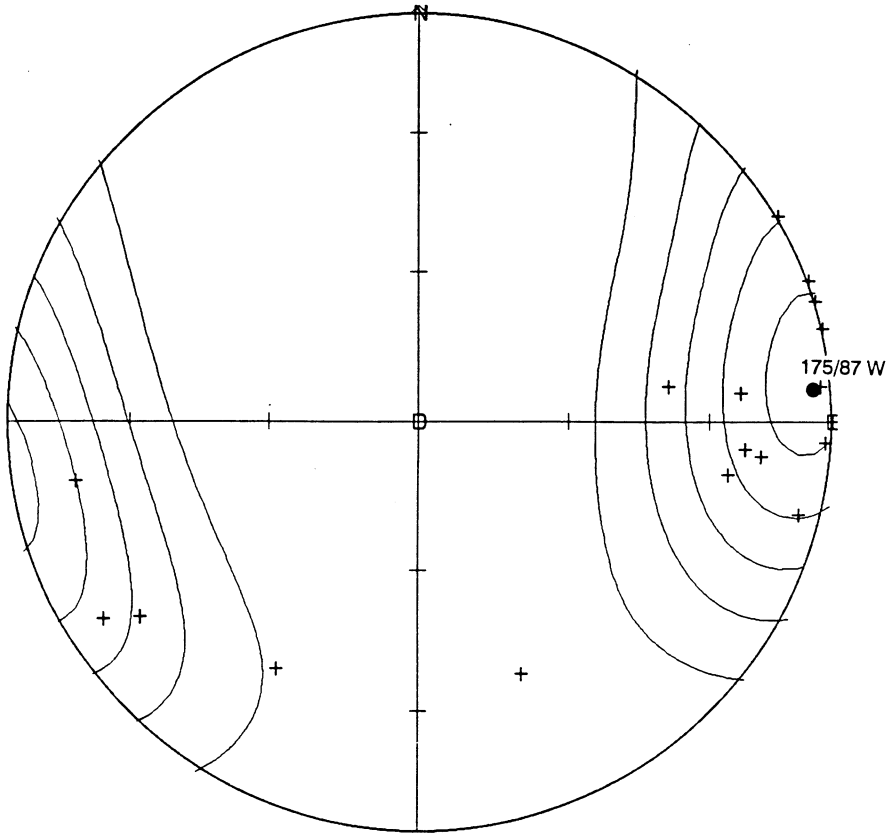
The Gold Zone is characterized by vuggy quartz-carbonate fracture-filling which is anomalous in gold and may represent a late stage epithermal event. The mafic volcanic rocks have patchy dolomitization. Mineralization in drill hole 87-2 from the Gold Zone consists of semi-massive pyrite and chalcopyrite in a silica-rich sediment. The intersection grades 4.8% copper, 0.2% zinc, 14.1 g/t silver and 0.12 g/t gold over 2.9 metres. Numerous subsequent drill holes in the area were unsuccessful at expanding this intersection.

2.2.4 Structural Geology

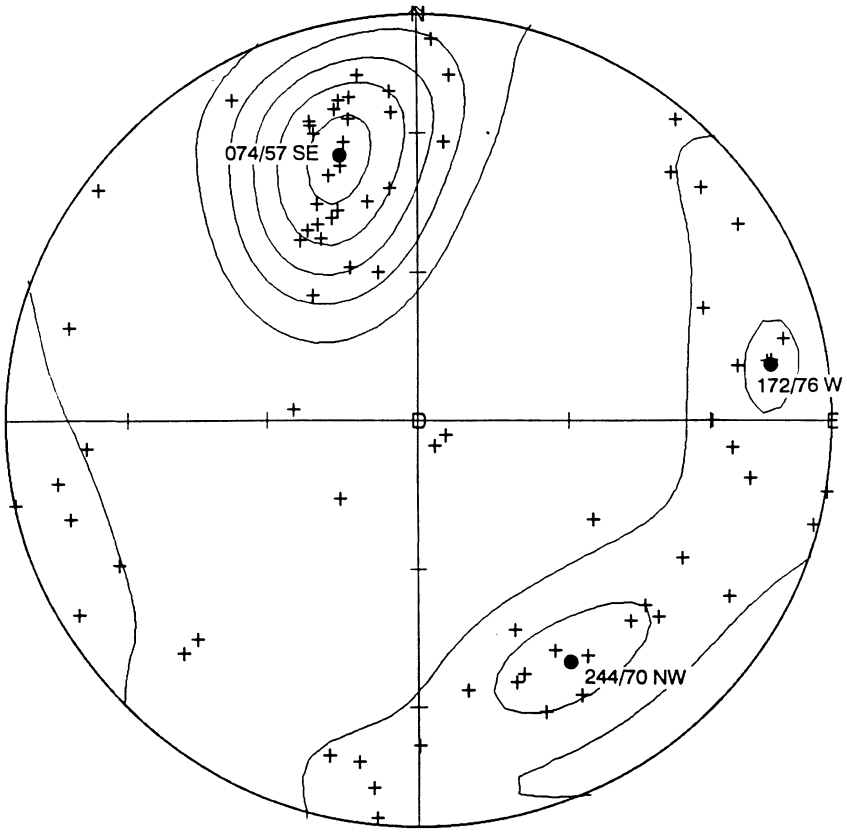
Structural interpretation of the geology of the CM Property involved identification of airphoto lineations, macroscopic field observations and numerous bedding and joint/foliation measurements. Figure 4 is a stereonet plot of bedding measurements from the 1994 mapping program. Local folding and faulting of beds gives a few erratic measurements; however, the majority of the readings show roughly north-south strike with a near vertical dip. The average bedding orientation from all measurements is 175/87 west.

Figure 4 is a stereonet plot of joint and/or foliation measurements. Three prominent structural orientations are indicated. The dominant trend is 074/57 southeast which is readily observed in the field as prominent joints in the western portion of the property and as lineations on airphotos. The two remaining orientations indicated on Figure 5 are 244/70 northwest and 172/76 west. The three orientations are sub-orthogonal. The 172/76 west trend is expressed as strong airphoto lineations which are parallel to the Newhykulston Creek Fault zone, a zone of brittly fractured rock up to 50 metres wide which runs north-south through the property and is sub-parallel to bedding. The fault runs through the Lower and Upper showing area and has made drilling of these targets very difficult due to the blocky nature of the ground. Further south of the showings, the fault zone coincides with a MaxMin geophysical conductor which can be traced for 2 kilometres.



N = 19

Figure 4. Stereonet Plot of Bedding Measurements



N = 76

Figure 5. Stereonet Plot of Joint/Foliation Measurements

3.0 Geochemistry

3.1 Introduction

A total of 140 rock samples were collected and sent for geochemical analysis in 1994. All samples were sent to Chemex Labs Ltd. in Vancouver for crushing, pulverizing and analysis for 32 elements by Inductively Coupled Plasma (ICP). Of these, 138 samples were analyzed by X-ray Fluorescence (XRF) whole rock analysis. Seventeen pulps were analyzed for gold plus 34 element Instrumental Neutron Activation Analysis (INAA) by Activation Laboratories Ltd. of Ancaster, Ontario, and 60 pulps were analyzed by X-ray Fluorescence (XRF) for whole rock minor elements at Inco's laboratory in Copper Cliff, Ontario. Descriptions of the digestion and analytical procedures are included with the geochemical analytical certificates in Appendix II. Rock sample descriptions are included in Appendix I and sample locations with geochemical values for copper, zinc and silver are plotted on Figure 16.

3.2 Lithogeochemistry (Whole Rock Results)

Figures 6 to 11 are plots of whole rock analytical data to determine volcanic rock type, chemical affinity, and depositional setting. The SiO_2 content of the unaltered volcanic rocks indicates a basalt composition (Figure 6). Figure 7 is a Winchester & Floyd rock classification plot of Zr/TiO_2 versus Nb/Y, and shows the rocks to be of andesite to basalt composition. The mafic volcanic rocks appear to be of transitional to tholeiitic chemistry based on major element classification of Irvine & Baragar and Miyashiro (Figures 8 and 9, respectively). However, due to the possibility of major element mobility during metamorphism, discriminant diagrams based on relatively immobile trace elements may provide a more reliable indication of magmatic affinities and paleotectonic setting. Thus, the relatively immobile trace elements Ti, Zr and Y are used in Figures 10 and 11 to show the mafic volcanic rocks to be low potassium, ocean-floor tholeiites. The rare earth element spidergram for the basalts (Figure 12) have flat slopes suggesting mid-ocean ridge basalt affinity. This classification of the Fennel Formation basalts is in agreement with Schiarizza and Preto (1987).

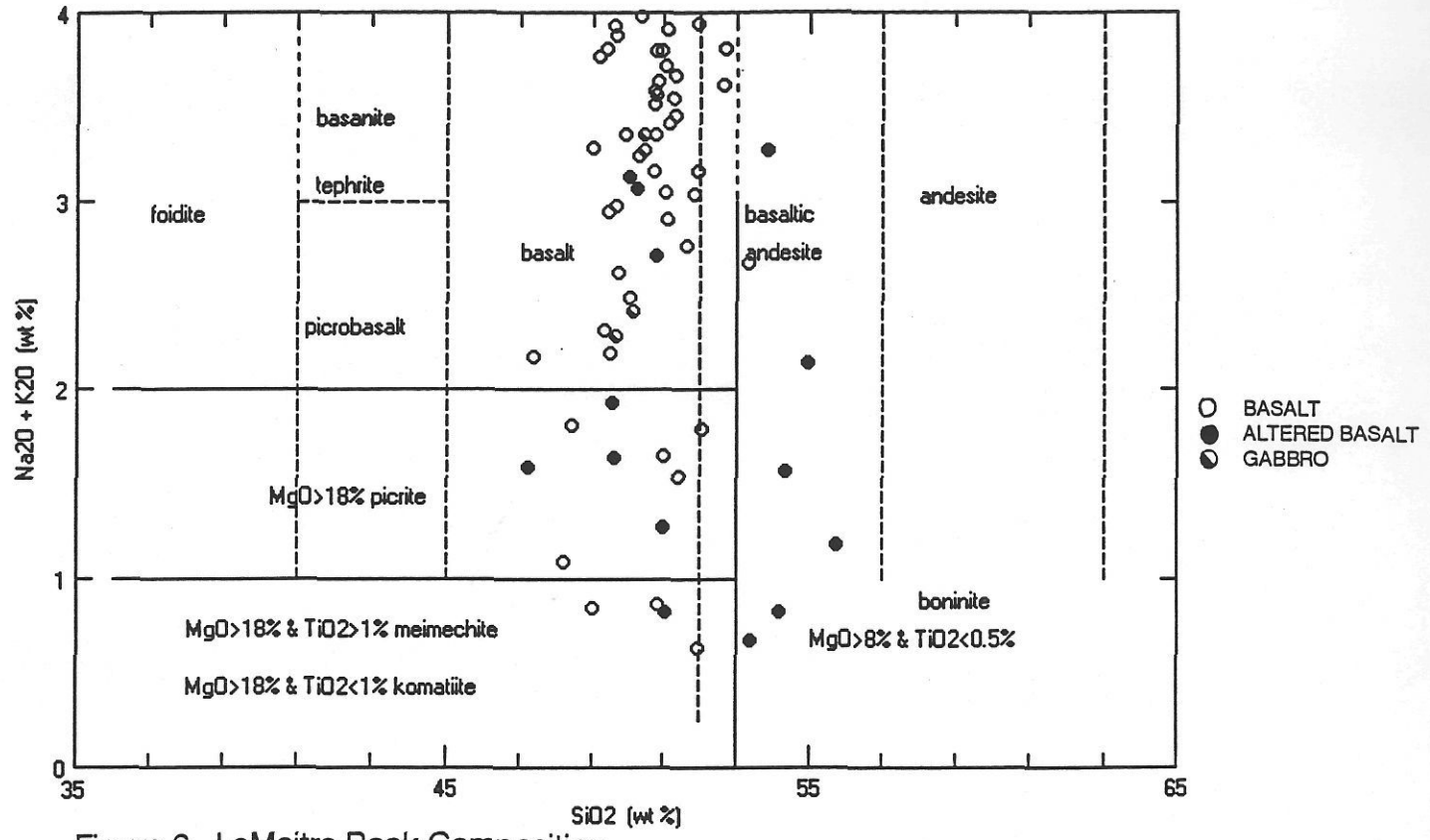


Figure 6. LeMaitre Rock Composition

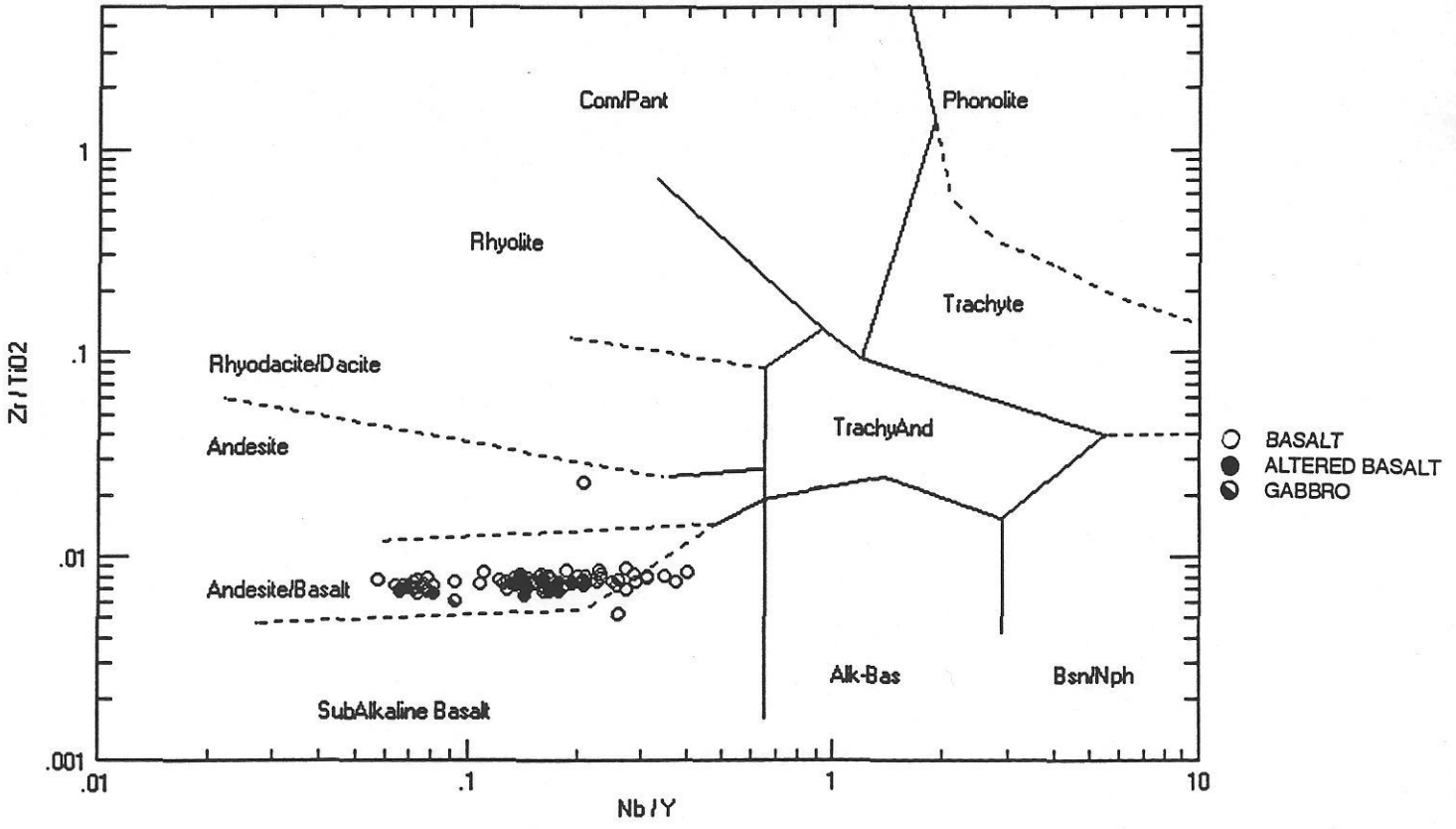


Figure 7. Winchester & Floyd Rock Composition

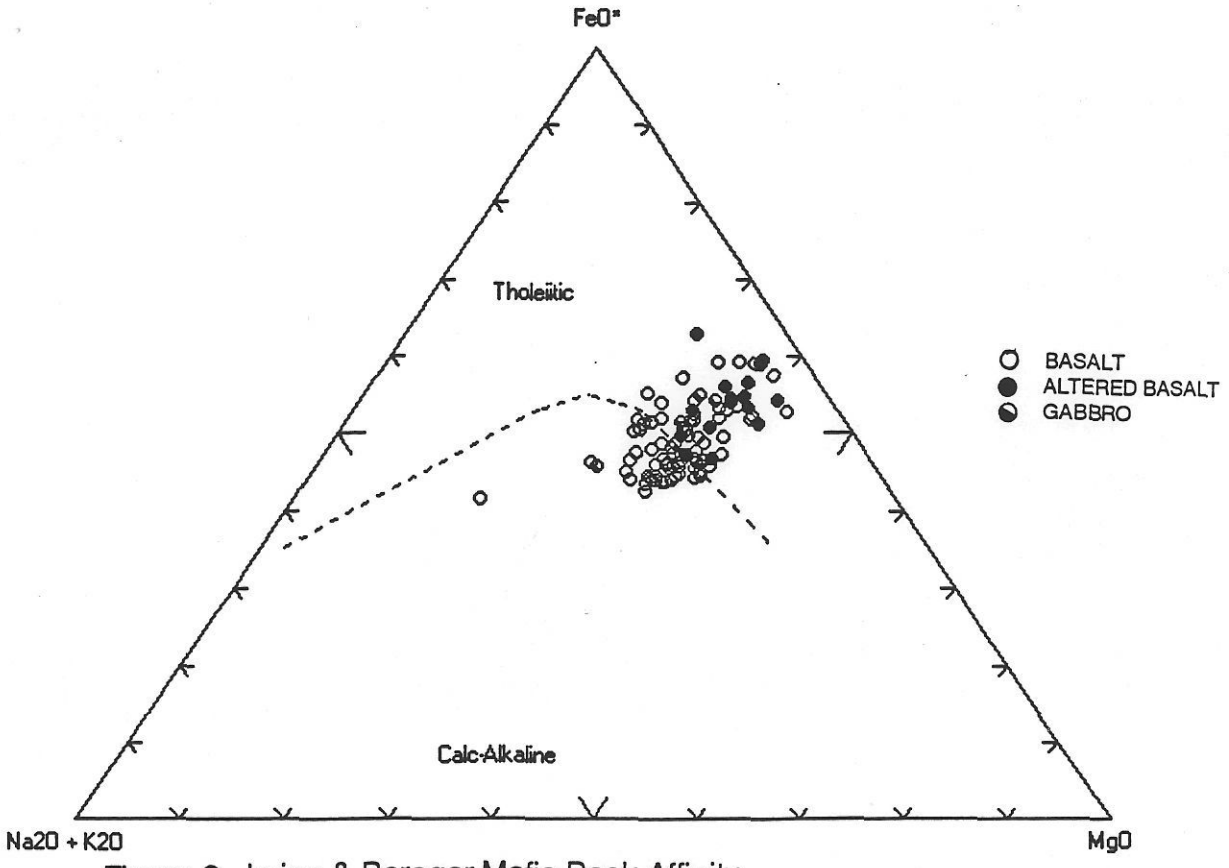


Figure 8. Irvine & Baragar Mafic Rock Affinity

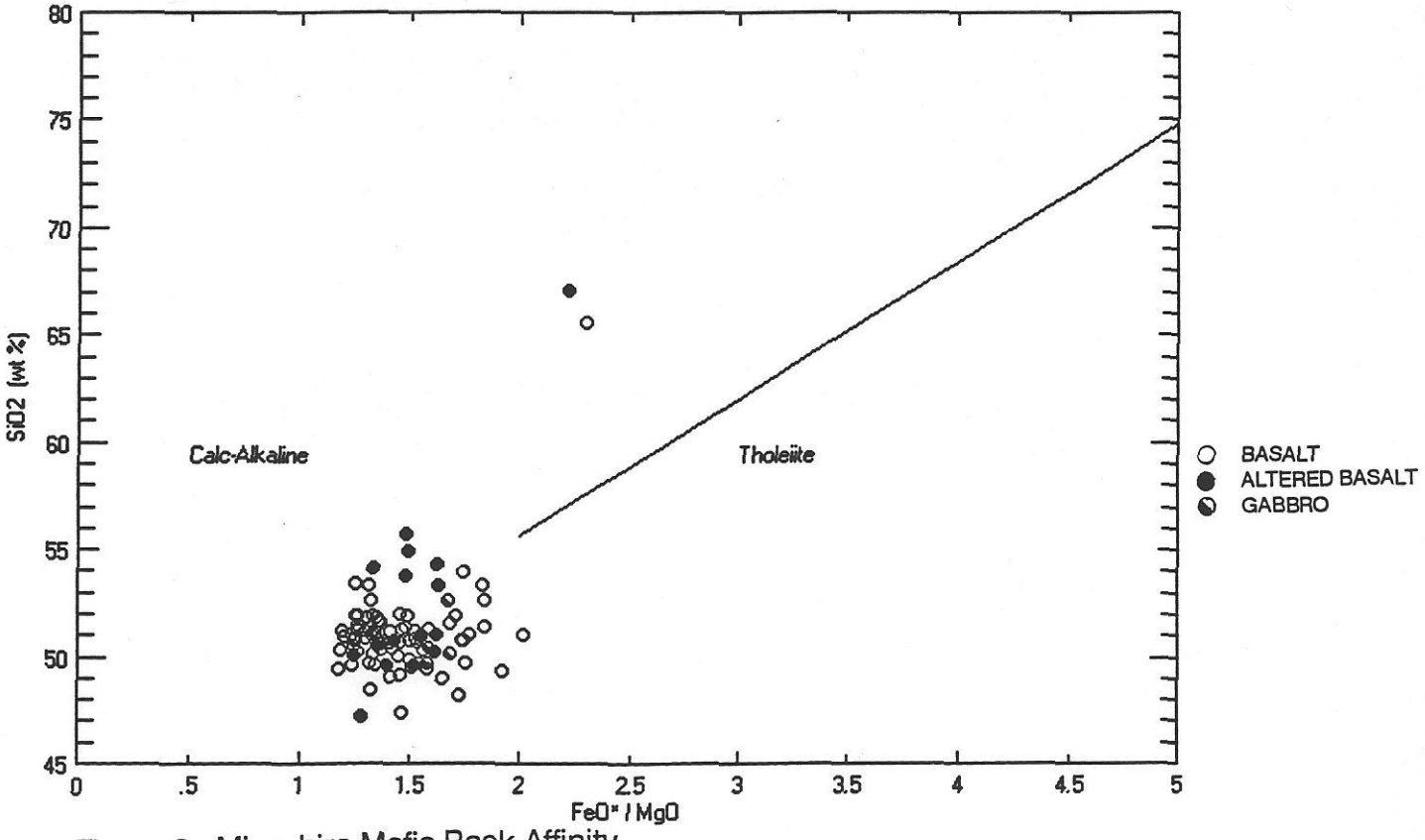


Figure 9. Miyashiro Mafic Rock Affinity

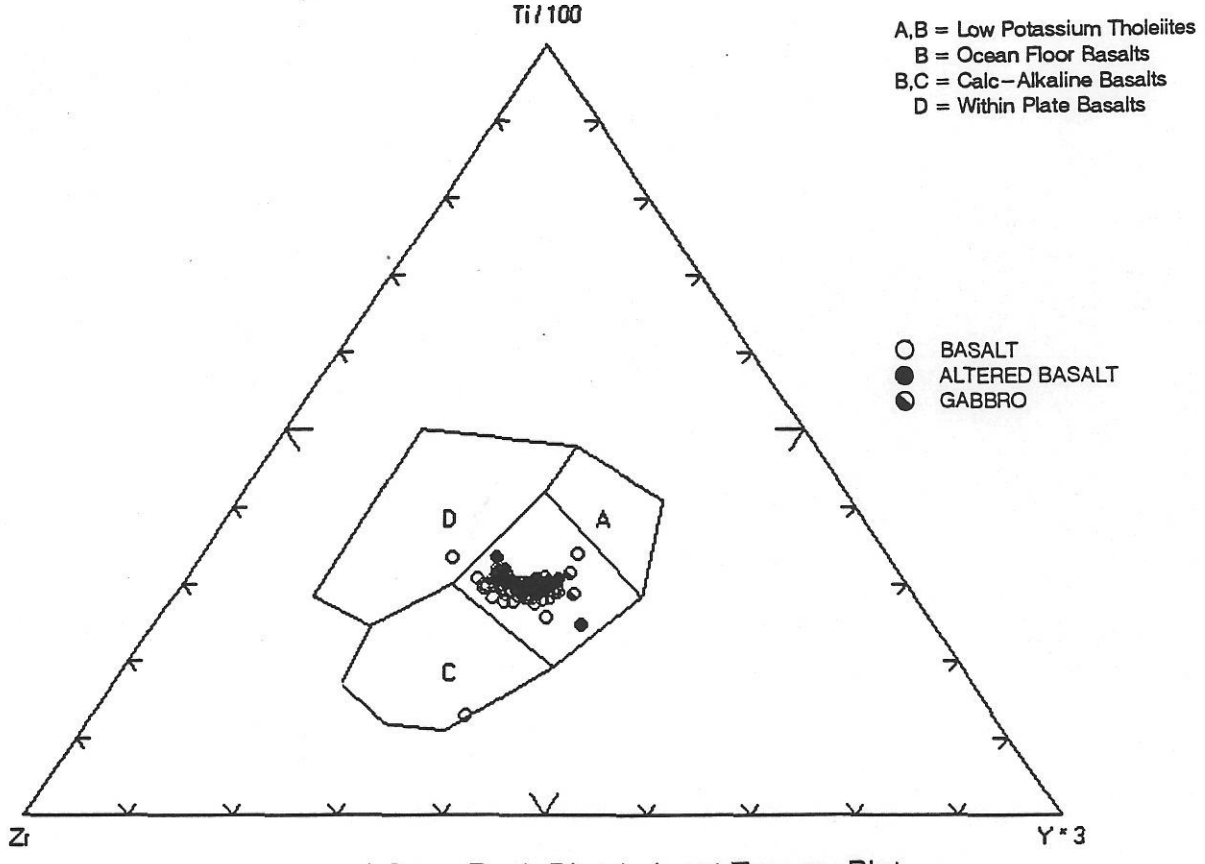


Figure 10. Pearce and Cann Rock Discriminant Ternary Plot

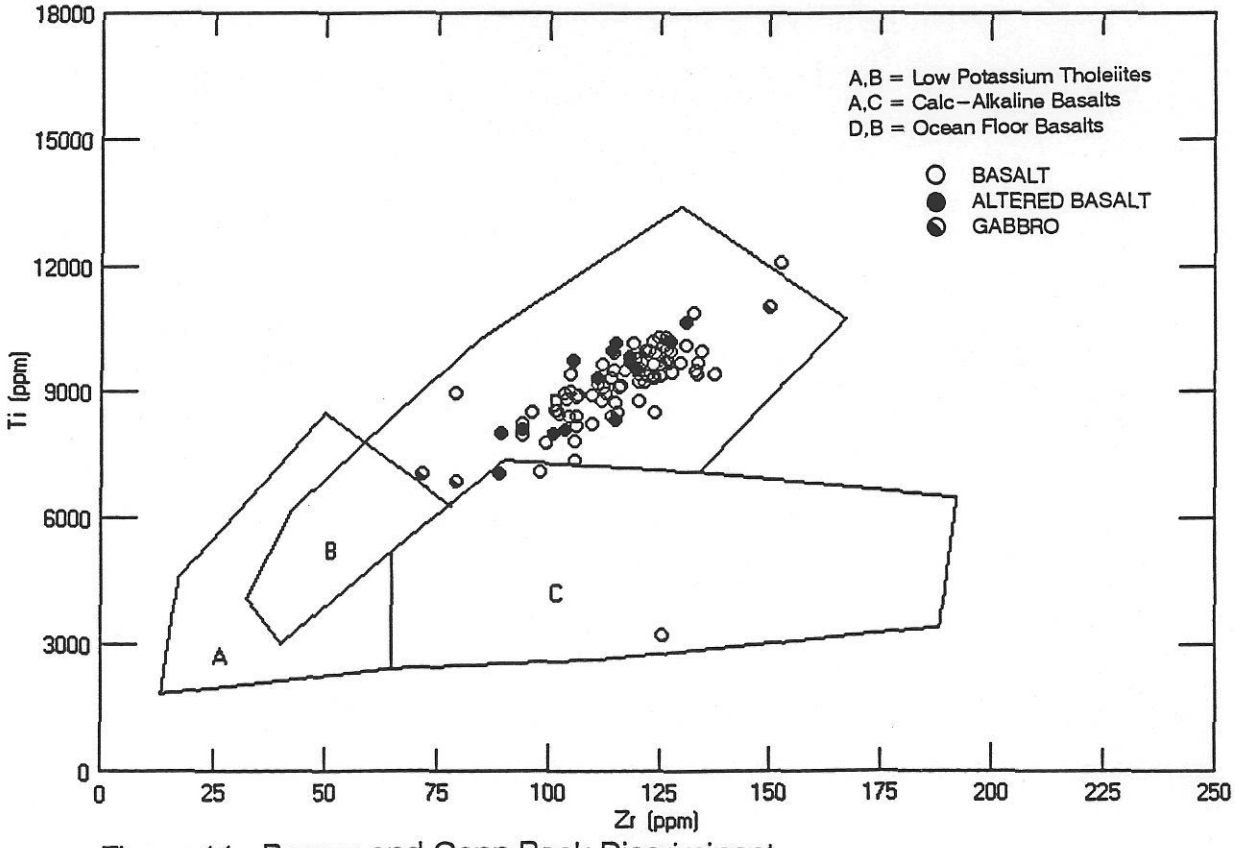


Figure 11. Pearce and Cann Rock Discriminant

3.3 Rock Sample Results (ICP Results)

Three rock samples were collected from the Lower Showing which is intensely fractured by the Newhykulston Creek Fault. The fault is expressed as a 2 to 4 metre-wide gouge zone bordered by intensely brittly fractured rocks on either side. Sample RX 225501 is of the deep red-ochre coloured limonitic clay gouge zone approximately 2 metres wide adjacent to the sulphide-chert mineralization and contains 9087 ppm copper. Sample RX 225502 is of a ferricrete cap overlying the gouge zone and contains 4588 ppm copper. Rock sample RX 225503 is of a brittly fractured chert/sulphide zone adjacent to the gouge zone and contains 8898 ppm copper and 6540 ppm barium.

± sulphates (eg. $CuSO_4$ - chalcanthite)

The fault zone has abundant acidic groundwater flow. The high copper content of the limonitic gouge and ferricrete is an indication the groundwater is transporting base metals and precipitating them at the surface as metal oxides. It is unknown whether the copper in solution is coming from local sulphide bearing rocks or is being transported from sulphide bearing rocks some distance away.

Rock sample RX 225504 is of a sulphide bearing chert which is 20 metres south and along strike of the Lower Showing and contains 10,900 ppm barium with anomalous copper (559 ppm). The high barium content of this sample and sample RX 225503 is believed to indicate a primary, syn-sedimentary origin to the bedded sulphide mineralization in the chert horizon. No significant base or precious metal values were obtained from samples collected outside of the Lower and Upper Showing area in 1994.

silicification (i.e. not chemical sediment (chert))

4.0 Geophysics

4.1 Introduction

Magnetometer and MaxMin surveys were conducted in late August on the 1994 grid which covers a north-south trending topographic depression in the central portion of the property. There is very little outcrop exposure in the depression and it is suspected to be filled by a substantial thickness of overburden. The report prepared by Cliff Candy of Frontier Geosciences addresses the details and instrumentation of the surveys and is included as Appendix III. The report includes a contoured map of the magnetometer data and three profiles of the MaxMin data at 444, 1777 and 3555 HZ. The following is a discussion of the relationship between Candy's geophysical interpretation and the current understanding of the geology of the property.

4.2 Magnetometer Survey Results

The magnetic relief in the survey area is fairly low (< 1,000 nT, Figure 2 in Candy's report). In general, mafic volcanic rocks are more magnetic than sedimentary rocks. However, magnetic highs in the western part of the grid are underlain by chert and/or argillite. The magnetic low in the north-central portion of the geophysical grid coincides with the chlorite/carbonate alteration zone and the hangingwall to this zone. This response may indicate a process of magnetite destruction occurred along with the chlorite/carbonate alteration. The magnetic highs in the southeastern portion of the grid are relatively weak, but are in an area of thick overburden which would weaken the magnetic field. These responses are considered significant and warrant follow-up.

4.3 MaxMin EM Survey Results

The MaxMin survey identified a number of sub-parallel north-northwest trending conductors (Figures 3, 4 and 5 in Candy's report). The magnetic low region has a series of weak, fairly continuous conductors (conductors A-D) stretching from L9800N/9975E to L8100N/10650E. These conductors occur up section from the alteration zone and are near the volcanic/sediment contact. They are parallel to and along strike with a MaxMin conductor, identified by Minnova in 1989, which continues to the north. The Minnova conductor was drilled and was deemed to be caused by the Newhykulston Creek Fault which contains graphitic material where it cuts argillite. Conductors G, H, I, M and N are fairly weak and may be a response to the contact between basalt to the west and sediments to the east. This relationship is exposed in outcrop at conductor N. The conductors in the southeastern corner of the grid (E, J, L and K), are coincident with magnetic highs and occur in an area where little is known of the geology due to thick overburden.

5.0 Conclusions and Recommendations

The CM Property is underlain by rift-related ocean floor tholeiitic massive and pillowed basalt, syn-volcanic gabbro dykes and sills, and interbedded argillite and chert of the Devonian to Permian Fennel Formation. The Fennel Formation is intruded by mid-Cretaceous granodiorite plugs and dykes of the Baldy Batholith.

Copper, zinc and precious metals mineralization has been identified and drilled at the Lower and Upper Showings, where it is hosted in a north-south trending chert/argillite horizon. The rocks in the area are intensely fractured by the Newhykulston Creek Fault. Delineation of the mineralized horizon by diamond drilling is very difficult. High-grade copper has also been encountered in drill holes in the Gold Zone, but has also proven difficult to trace.

The 1994 mapping and sampling program identified a large (1.7 km x 150 m) quartz-calcite-chlorite alteration zone in mafic volcanic rocks in the footwall to the sedimentary horizon that hosts the mineralization at the Lower and Upper showings, 2 kilometres to the north. This alteration zone, and the rocks stratigraphically overlying it coincide with a magnetic low, which may indicate a process of magnetite destruction. This alteration zone may be related to the sulphide mineralization at the Upper and Lower Showings.

The MaxMin survey identified numerous north-northwest trending conductors in the central portion of the property. The northern-most conductor set occurs over a distance of 2 kilometres, appears to be formational, and may represent the surface trace of the Newhykulston Creek Fault Zone. An extension of this conductor to the north was identified by a MaxMin survey conducted by Minnova in 1989. Minnova drilled the conductor and found its cause to be a graphite-bearing fault zone in argillaceous sediments.

Coincident magnetic high anomalies and MaxMin conductors in the southeastern corner of the property occur in an area of thick overburden cover with no outcrop. This area is believed to be underlain by sedimentary rocks of the central chert/argillite horizon that hosts the Lower and Upper Showings. Recommendations for further work on the property are to drill the coincident anomalies and to conduct further mapping and sampling on the northern portion of the property.