NI 43-101 Technical Report

Chester Project
New Brunswick, Canada

Effective Date: March 7, 2014
Report Date: April 1, 2014

Report Prepared for:

Explor Resources Inc.
Noranda, Quebec, CANADA

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1 SUMMARY

Explor Resources Inc. (Explor) commissioned Robert Sim, SIM Geological Inc. (SIM Geological), to provide an updated independent Technical Report for the Chester Copper Property (Property) located in north-central New Brunswick (NB), Canada.

In 2008, SIM Geological submitted a Technical Report (dated May 30, 2008) for the Property to First Narrows Corp. (FNR), who owned the Property at that time. Since 2008, and the subsequent change of ownership, there has been essentially no additional work conducted on the Property, except for some limited prospecting. This report summarizes the work conducted to date. There has been no drilling or other work since that time that could affect the resource estimate and, therefore, the 2008 model remains valid for the Chester project. The 2008 resource considered only an underground mining scenario for the project. This updated statement of mineral resources has been altered to reflect current metal prices and has been evaluated considering a combination open pit and underground extraction options. The effective date of the resource estimate presented in this Technical Report is March 7, 2014.

Robert Sim, P.Geo, an independent consultant, served as the Qualified Person responsible for preparing the Technical Report, as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects (NI 43-101), in compliance with Form 43-101F1 (the Technical Report). Mr. Sim is a Geologist with more than 30 years of experience primarily in base and precious metals exploration, operations, resource modeling, and feasibility-level evaluations. Mr. Sim has worked on similar volcanogenic massive sulphide (VMS) deposits, including the Winston Lake deposit in Ontario and the Cayeli deposit in Turkey. Mr. Sim received assistance from Geostatistician Bruce Davis, Ph.D., FAusIMM, BD Resource Consulting, Inc.

The Property is located in Northumberland County, 70 km southwest of Bathurst, NB and 50 km west-northwest of Miramichi, NB, within the Bathurst Mining Camp. This area has an extensive history in base metal production from VMS deposits.

The Property consists of four claim groups with 114 contiguous mineral claim units covering a total area of approximately 2,508 hectares.

The Chester deposit was originally discovered in the mid-1950s and it has undergone numerous exploration and delineation drilling programs with almost 800 holes drilled on the Property to date. The Property hosts several small zinc-copper massive sulphide deposits which are underlain by an extensive copper-bearing Stringer zone. An underground drift, totalling approximately 470 m, was driven in 1974-75 to evaluate the nature of the mineralization in the Stringer zone. At that time, a small amount of material was extracted from this drift and processed at the nearby Nigadoo mine. During the period from 2002 through 2008, FNR drilled a total of 198 holes on the Property; the primary objective was to delineate the upper portion of the Stringer zone of the deposit to facilitate its advancement into commercial production. This work culminated in the generation of a mineral resource estimate that was originally described in the May 20, 2008 Technical Report. There has been no additional work conducted on the Chester Property that would influence the 2008 estimate of mineral resources.

This report summarizes the work conducted on the Property and the generation of a mineral resource estimate.

This Technical Report includes mineral resource estimates for the Stringer zone mineralization on the Property. The resource estimate has been generated using drill hole sample assay results and the interpretation of a geologic model which relates to the spatial distribution of copper and minor constituents: zinc and silver. Interpolation characteristics have been defined based on the geology, drill hole spacing, and geostatistical analysis of the data. The resources have been classified by their proximity to the sample locations and are reported, as required by NI 43-101, according to the *CIM Definition Standards on Mineral Resources and Mineral Reserves*.

Extensive analysis of the drill sample database shows that it is sound and reliable for the purposes of resource estimation. The resource model has been developed in accordance with accepted industry standards resulting in a mineral resource defined within the Measured, Indicated, and Inferred categories.

As required under NI 43-101, “reasonable prospects of economic viability”, has been demonstrated assuming a combination of open pit and underground extraction options. An open pit cut-off grade of 0.5% copper and an underground cut-off grade of 2% copper are considered appropriate based on assumptions derived from operations with similar characteristics, scale and location. It is important to realize that the mineral resources listed in Table 1.1 are not mineral reserves as the economic viability has not been demonstrated. Note that resources in the Inferred category are primarily based on older drilling that does not have sufficient analysis for zinc and silver to support reliable resource grades for these elements.

TABLE 1.1: MINERAL RESOURCE ESTIMATE – CHESTER DEPOSIT (MARCH 7, 2014)

Class	Cut-off (Cu%)	Ktonnes	Cu (%)	Zn (%)	Ag (g/t)
In-Pit					
Measured	0.5	101	1.87	0.14	6.7
Indicated	0.5	1,296	1.34	0.06	3.3
Measured and Indicated	0.5	1,397	1.38	0.06	3.5
Inferred	0.5	2,060	1.25	n/a	n/a
Below Pit					
Inferred	2.0	29	2.33	n/a	n/a
Combined					
Measured	0.5	101	1.87	0.14	6.7
Indicated	0.5	1,299	1.34	0.06	3.3
Measured and Indicated	0.5	1,400	1.38	0.06	3.5
Inferred	variable	2,089	1.26	n/a	n/a

Note: Inferred resources are based primarily on older drilling results which do not have sufficient zinc and silver analyses to generate resource grades for these elements.

In 2008, FNR's objective for the Chester deposit was to develop it into a producing mine as quickly as possible in order to provide a source of cash flow from which to grow the company. FNR concentrated its drilling efforts on the upper portion of the Stringer zone deposit in order to gain information related to the initial years of active production. Recommendations for the project at that time focused primarily on drilling to further delineate the mineral resource.

The objectives of the current project are more focused on expanding the resource through exploration than on near-term production. Recommendations are as follows:

1. Drilling program to confirm the historic drilling on the Central and East VMS Zones. This involves a grid of new holes over representative areas from which comparisons can be made with the old drilling results. The Central Zone would require 30 holes at 50m each and the East Zone would require 40 drill holes at 40m each. Total of 3100m of drilling at $150/m = $465,000.

2. Drilling: Exploration drilling to test for extensions of existing Stringer zone and nearby VMS targets. Total of 5000m of drilling at $200/m = $1,000,000.

3. Metallurgical Test Work: Conduct additional metallurgical test work on both the extensions of the Stringer zone and the VMS material. $200,000.

2 INTRODUCTION

Explor Resources Inc. (Explor) commissioned Robert Sim, SIM Geological Inc., to provide an independent review and Technical Report for the Chester Copper Property in north-central New Brunswick (NB), Canada. Robert Sim, P.Geo, an independent consultant, served as the Qualified Person (QP) responsible for preparing the Technical Report, as defined in National Instrument 43-101, Standards of Disclosure for Mineral Projects (NI 43-101), in compliance with Form 43-101F1 (the Technical Report). Mr. Sim is a Geologist with more than 30 years of experience primarily in base and precious metals exploration, operations, resource modeling, and feasibility-level evaluations. Mr. Sim has worked on similar VMS deposits, including the Winston Lake deposit in Ontario and the Cayeli deposit in Turkey. Mr. Sim received assistance with the generation of the resource model and some data validation from Geostatistician Bruce Davis, Ph.D., FAusIMM, BD Resource Consulting, Inc.

The Chester deposit was originally discovered in the mid-1950s and it has undergone numerous exploration and delineation drilling programs. A total of almost 900 holes have been drilled on the Property testing several small zinc-copper massive sulphide deposits which are underlain by an extensive copper-bearing Stringer zone. The most recent drilling, conducted by First Narrows Resources (FNR) during the period from 2003 to 2008, focused on the upper portion of the Stringer zone of the deposit in order to facilitate its advancement into commercial production.

Information and data for this independent review were provided in 2007 by Earnest Brooks, Project Geologist for FNR, who managed the site operations from 2002 through 2008. Mr. Brooks contributed to the content of this report, providing historical background and geological insight. His contributions are greatly appreciated. Since 2008, the only work conducted on the Property includes some minor prospecting activities which searched for additional satellite zones of mineralization. A previous Technical Report submitted on the Chester Copper Property titled *Technical Report Chester Copper Property, New Brunswick, Canada* (dated May 30, 2008) included a mineral resource estimate for the Stringer zone mineralization. The 2008 report forms the basis for much of the information included in this Technical Report.

Mr. Sim conducted two visits to the Chester Copper Property in November 2006, and again in October 2007 during which he reviewed drilling activities and related geological issues with Mr. Brooks and then FNR President, Peter Gummer. Mr. Davis tracked the QA/QC program during the drilling program conducted by FNR. Mr. Davis did not visit the Property.

Neither Robert Sim nor Bruce Davis is an associate or affiliate of Explor or any associated company. Fees paid for the preparation of this Technical Report are not dependent in whole or in part on any previous or future engagement or understanding resulting from the conclusions of this report.

In preparing this report, Mr. Sim reviewed the geological reports, maps, and miscellaneous technical papers listed in *Section 19 References.*

The mineral resource estimate presented in this report is based on information known to Mr. Sim as of March 7, 2014. This report includes estimates for mineral *resources*. No mineral reserves are presented in this report.

3 RELIANCE ON OTHER EXPERTS

The property status was reviewed using the New Brunswick Department of Energy and Mines web site (http://www1.gnb.ca/0078/GeoscienceDatabase/claims/ClaimGroup-e.asp). The information regarding the land tenure included in Section 4 of this report was reviewed by Explor and deemed to be correct. The QP believes this information to be reliable but the QP has not conducted an in-depth independent review of the land tenure and ownership of the Chester Copper Property.

4 PROPERTY DESCRIPTION AND LOCATION

The Property, under option by Explor, is situated in Northumberland County, 70 km southwest of the city of Bathurst, NB and 50 km west-northwest of the city of Miramichi, NB near the centre of NTS Map sheet 21 O/01 in northern New Brunswick (Figure 4-1). The Property is located in the south part of the Bathurst Mining Camp and comprises the four claim groups (1571, 2428, 6003, and 6005) shown in Figure 4-2, and consists of 114 contiguous mineral claim units (Figure 4-3), all of which are on Crown Lands (i.e., owned by the Province of New Brunswick). The Property covers a total area of approximately 2,508 hectares. The Heath Steele Mine, which shut down in 1999 due to depletion of ore reserves, is located 24 km northeast of the Property. The Brunswick No. 12 Mine, located 49 km northeast of the Property, produced copper, lead, zinc, and silver over a 48 year period prior to closing in March 2013.

On February 28, 2013, Explor announced that they had entered into an agreement with Earnest Brooks of Bathurst, NB to acquire 75 contiguous mineral claim units which now comprise claim groups 6003, 1571, and 2428. Explor agreed to pay Cdn$150,000 and issue 6,500,000 common shares over a three-year period for an option to acquire 100% interest in the Chester Copper Property. Mr. Brooks has retained a 1% Net Smelter Return (NSR) royalty in the Property. There is also an additional 1% NSR royalty associated with claim group 1571 retained by Northeast Exploration Services Ltd. (Northeast Exploration) and Bathurst Silver Mines Ltd. (Bathurst Silver Mines), both of Bathurst, NB.

On April 10, 2013, Explor announced that they had acquired an additional 39 mineral claim units comprising claim 6005 from a prospecting group in the City of Miramichi, NB, consisting of Mr Frank Ross, June Ross, Mr Anthony Johnston and Mr Delbert Johnston (Figures 4-2 and 4-3). Explor agreed to pay the prospecting group Cdn$30,000 and issued 750,000 common shares for an option to acquire 100% interest in the additional claims. The prospecting group retains a 2% NSR royalty on claim group 6005.

Between February 2012 and February 2014, Mr. Brooks filed several assessment reports describing exploration (prospecting) activities on the Property, including line-cutting, soil sampling, geologic mapping, and geophysics (Mag and VLF). The Property appears to be in good standing as of the date of this Technical Report

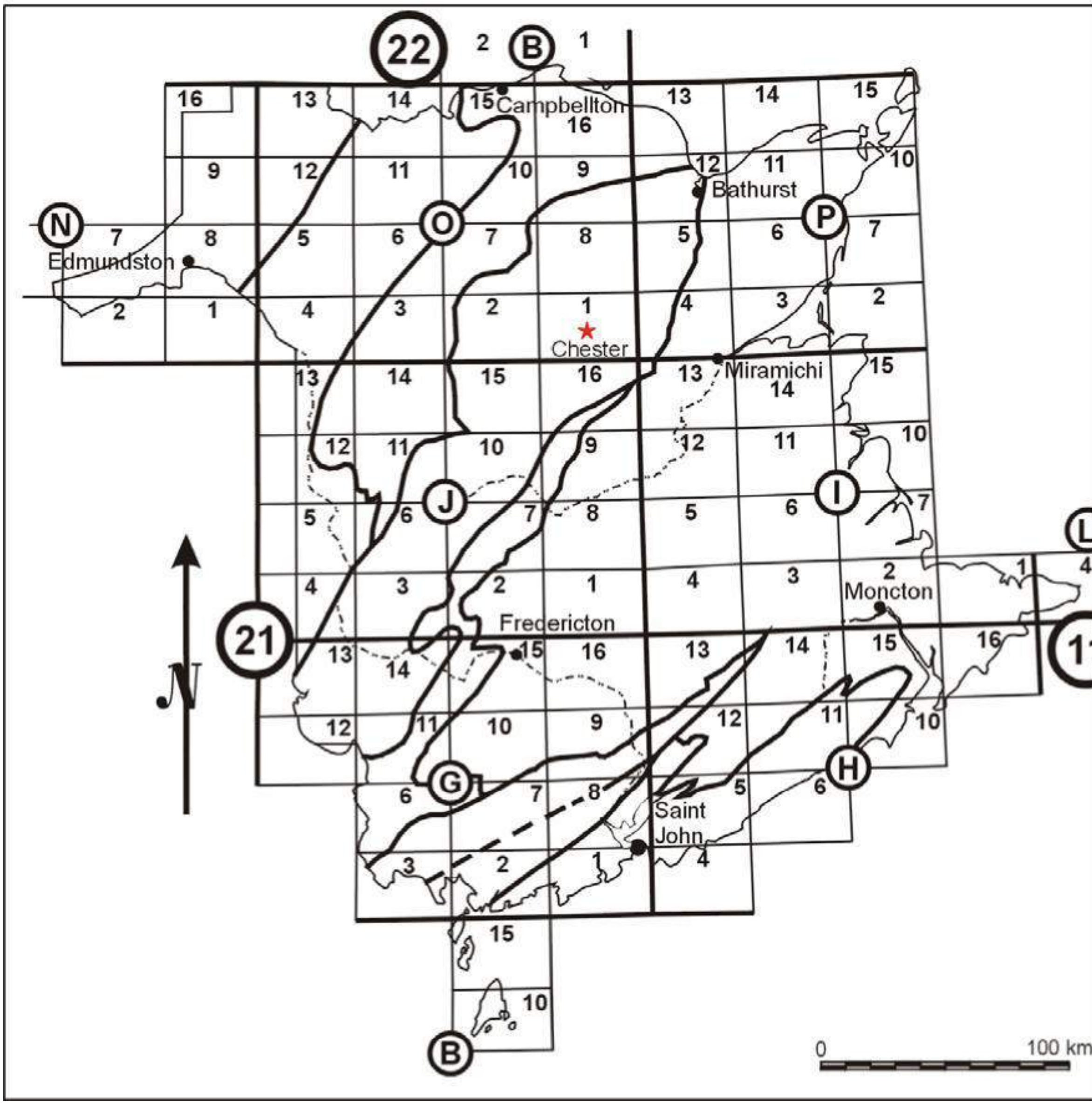

FIGURE 4-1: PROPERTY LOCATION MAP

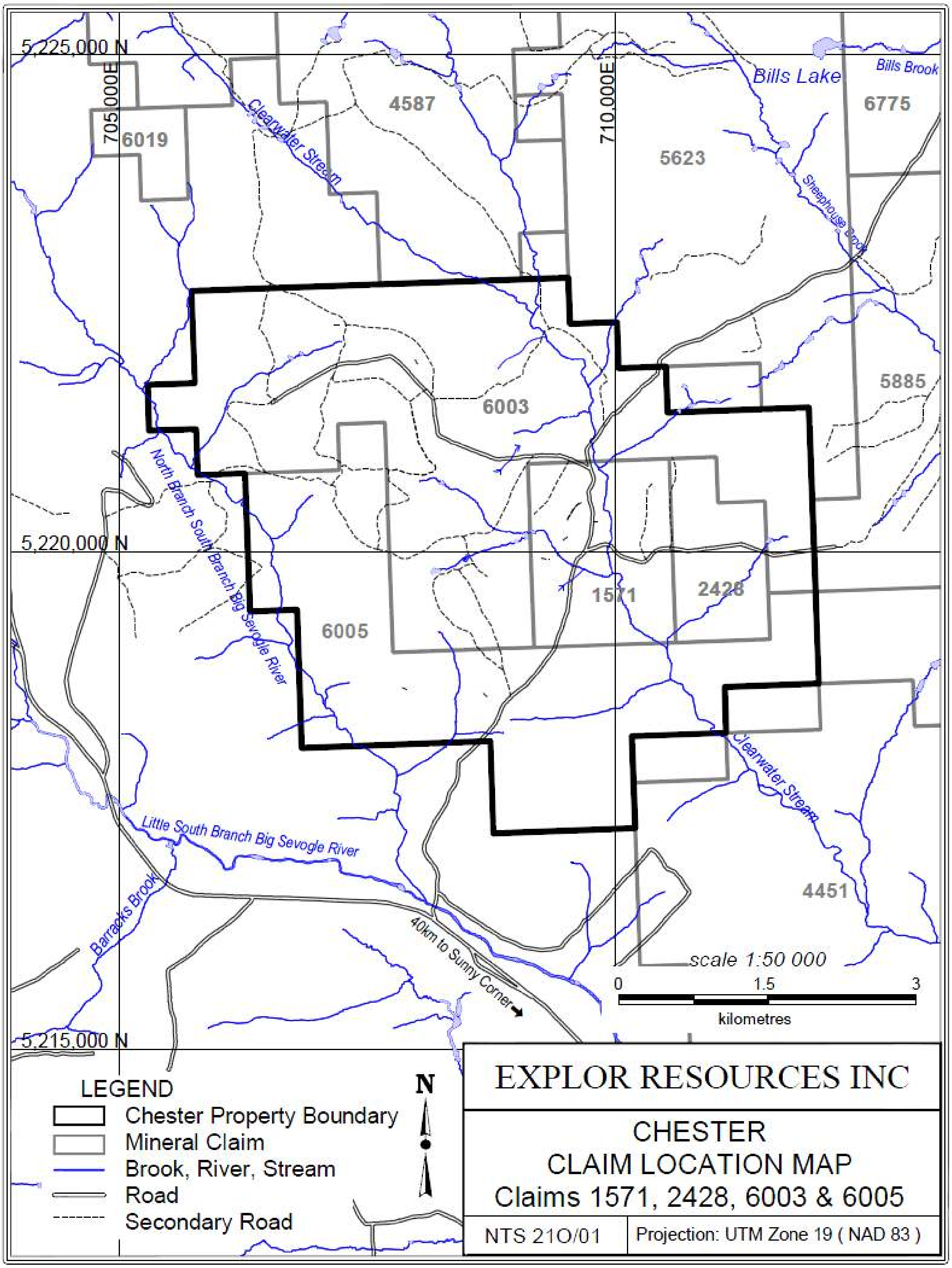

FIGURE 4-2: CHESTER CLAIM LOCATION MAP

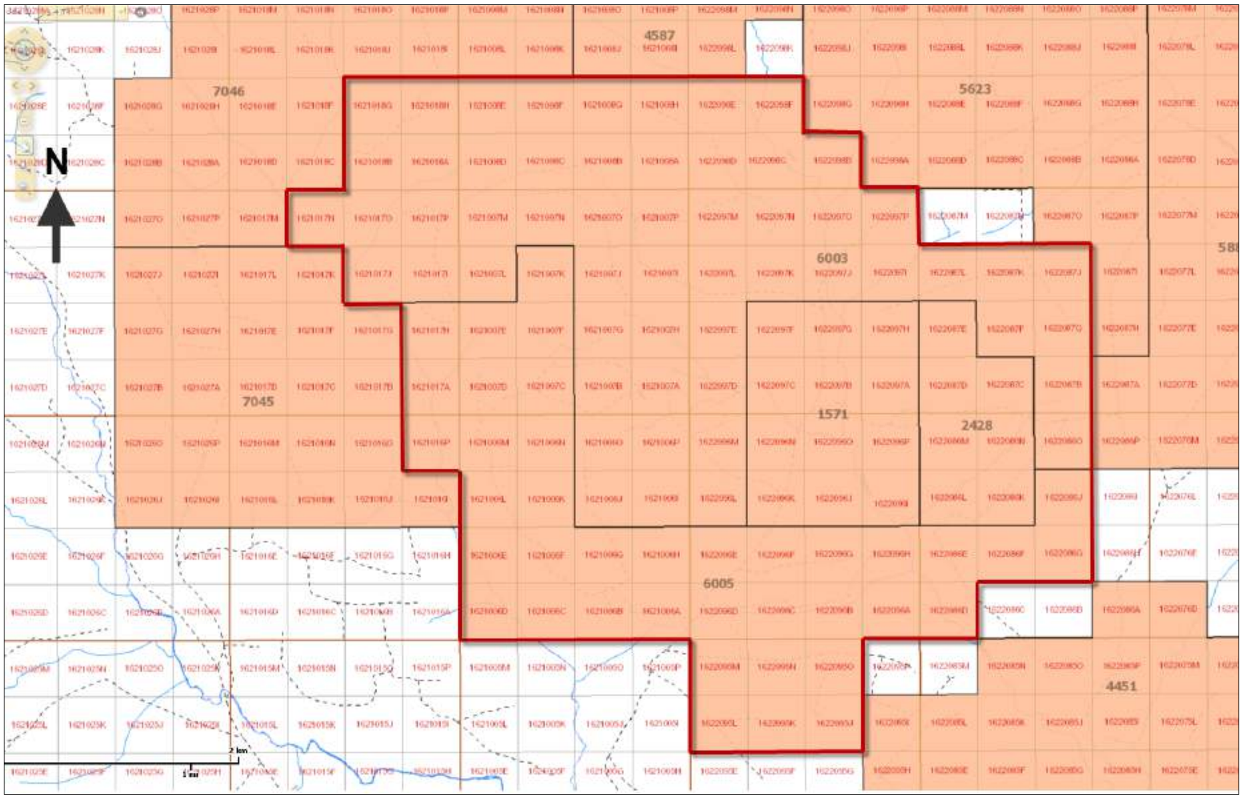

FIGURE 4-3: CHESTER PROPERTY MINERAL CLAIM UNIT NUMBERS

5 ACCESSIBILITY, CLIMATE, INFRASTRUCTURE AND PHYSIOGRAPHY

Elevation on the Property varies between 300-m and 450-m above mean sea level (amsl). Relief is quite high throughout the Property with the lowest parts being the steep and deeply cut valley of Clearwater Stream. The elevation of the portal on the Northeast Claims is about 330-m amsl. On the west side of the main access road there is a very thick area of gravel that has a relief of about 50-m. This area has been developed as a gravel pit and is active on an as-required basis, mostly by the local lumbering companies. For the most part, it appears from previous mapping that the Property is overlain by a variable thickness of glacial till and gravel. The thickness can be as little as 0.5-m and up to 50-m. Historical geological mapping by early geologists was concentrated in the stream valleys of the area. Topographic maps indicate that stream valleys have quite steep sides. More recent mapping has been completed in both the stream valleys and in logging roads, which also seem to expose a lot of bedrock, indicating shallow depths of overburden. The highest point on the Property is in the northwest corner, and the lowest point is in the Clearwater Stream valley near the centre. Vegetation consists of boreal forest (e.g., spruce, balsam fir, etc.), although it is estimated that more than 35-60% of this has been clear-cut since about 1980, and a large part of that has been replanted and/or thinned.

The Property is 50 km west-northwest of the City of Miramichi. It is accessible via roads from the City of Miramichi by way of Sunny Corner and south of the Big Sevogle River. Access in the summer months is readily available by car or truck. A bridge on the main haulage road crosses the Clearwater Stream over the Copper Stringer Zone was removed at the end of September, 2012. It had been installed by a logging company on the main log-haulage road. A logging road crosses above parts of the massive sulphide deposits. A number of other logging roads provide access throughout the Property from the main road. Access to the west side of Clearwater Stream is from the south and to the east side, and portal area, is from the east through a series of recently opened logging roads of hwy 430.

The main CNR railroad line from Moncton to Quebec and Western Canada passes through the City of Miramichi and Bathurst. Snow cover in the project area is normal from November or December through to April. Most exploration work, with the exception of geological mapping, prospecting, and trenching can be carried out throughout the year, although, typically, little field work is carried out during spring break-up.

A power line is located about 30 km to the east of the Property servicing residents of Red Bank and the community of Sunny Corner. Another power line that services the Heath Steele Mine area is about 22 km northeast of the Property.

The Property lies within the surface watershed of the South Branch of the Big Sevogle River, which is a tributary to the Northwest Miramichi River drainage system. Clearwater Stream is a moderate-sized stream that runs through the middle of the Property and drains into the Big Sevogle River about 7 km downstream from the centre of the Property.

The Heath Steele Mine, located 24 km northeast of the Property, operated from 1957 to 1999 (with occasional shut-down periods) and processed approximately 25 million tonnes of VMS ore at its on-site concentrator.

Mining has been a major industry in the Bathurst and Miramichi areas since the mid-1960s and experienced personnel are available locally.

6 HISTORY

The Chester deposit was detected by an airborne electromagnetic survey flown by Kennco Explorations (Canada) Ltd. (Kennco) in 1955. Ground follow-up included geological mapping, which identified disseminated sulphides in outcrop along Clearwater Stream, and a Slingram electromagnetic survey which located the Chester deposit. Two holes were drilled in September 1955 using a packsack diamond drill, and both holes intersected massive sulphides. Ground acquisition, grid cutting, and magnetometer and electromagnetic surveys followed. Diamond drilling (C-series holes) resumed in January 1956 (Black, 1957), and, by the end of 1956, 100 holes had been completed. In 1959, the Kennco property was sold to Chesterville Mines Limited (Chesterville Mines) and drilling continued until 1960, mainly on the eastern part of the Chester deposit. Newmont Mining Corp. of Canada Ltd. optioned the property from Chesterville Mines in 1963 and drilled three holes north of the deposit. The Sullivan Mining Group Ltd. (Sullivan Mining Group) optioned the property in 1966 and formed a new company, Sullico Mines Limited (Sullico), which attempted to develop the Chester deposit. Sullico drilled more than 400 holes (S-series holes) to delineate the deposit and further explored the property. In 1970, the Sullivan Mining Group acquired 100% interest in the Chester Property. When initial plans for open pit mining were abandoned, Sullico drove a 470-m decline in 1974-75 in order to explore the Copper Stringer Zone (i.e., Chester West Zone) and confirm diamond drill Indicated grade and tonnage, as well as check rock competency and water flows for a potential underground mine operation. There were 35,000 tons grading 2.06% Cu reportedly taken from underground. Results of the underground investigation were apparently favourable and the grade of the underground material was above the diamond drill Indicated grade of 1.58% Cu (Boylan, 1976). Further development was postponed, reportedly due to low copper prices, and the project was later abandoned.

In 1992, Teck Exploration Ltd. (Teck), through an option with Brunswick Mining and Smelting Corporation Ltd. (Brunswick Mining and Smelting), began exploration work on the Chester Property with stream and lithogeochemical sampling programs, VLF-EM, and magnetometer and TDEM surveys. In 1993, Teck drilled two holes well outside the area of the known VMS and Copper zones testing anomalous geophysical results which intersected thin zones of massive sulphides.

In 1997, Teck, while exploring for new deposits close to Chester, conducted an IP survey and followed up with drilling also well outside the known area of the VMS and Copper zones, but had no significant results.

During the period from 1998 to 2000, Black Bull Resources Ltd., under an option with Teck, conducted surface sampling, geophysical surveys, and minor diamond drilling in the Chester deposit area, but had no significant results.

In 2002, four claims contained within claim blocks 1571 and 2428 were optioned from Northeast Exploration and Bathurst Silver Mines, respectively, by Mr. Brooks, and then optioned to FNR in 2003; this is referred to as the "Brooks Option". In March 2003, FNR entered into an option agreement with Teck for claim block 2186, which included the 97 claim blocks that surround the claims in the Brooks Option.

During the period from 2002 to 2007, FNR drilled a total of 198 holes on the Property. The majority of this work was concentrated on the near-surface Copper Stringer Zone, as FNR had intentions to put the Project into operation. In May 2008, FNR released a Technical Report for the Stringer zone that included Measured and Indicated resources, at a 2% Cu cut-off limit, of 284,000 tonnes at 2.78% Cu, 0.13% Zn, and 7.3 g/t Ag, plus Inferred resources of 298,000 tonnes at 2.51% Cu. This was planned for underground extraction methods and the cut-off threshold of 2% Cu was considered appropriate for that time.

In 1973, the following historical resources were reported by Sullivan Mining Group:

- East Zone – 0.5 million tonnes of massive and disseminated sulphide grading 0.78% Cu, 0.36% Pb, and 1.14% Zn.
- Central Zone – 1.1 million tonnes of massive sulphide grading 0.47% Cu, 0.90% Pb, and 2.22% Zn.
- West Zone (Copper Stringer Zone) – 15.2 million tonnes of disseminated and stringer sulphides grading 0.78% Cu. The West Zone includes 3.4 million tonnes grading 1.58% Cu.

There is no information regarding the method or parameters used to calculate these historic resource estimates, and the cut-off limits are not known. These resource estimates were calculated more than 40 years ago and do not comply with the guidelines of NI 43-101 and should not be considered reliable.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

(after Thomas, et al., 2000)

The Chester Property is within the Bathurst Mining Camp, which is considered to be a world-class base metal mining district (Figure 7-1). The Bathurst Mining Camp stratigraphy is comprised of an Ordovician sequence of felsic and mafic volcanic rocks and sedimentary rocks, which overlie the Cambrian to Lower Ordovician Miramichi Group. A major east-west-trending high-strain zone (Moose Lake-Tomogonops/Mountain Brook fault system) in the south part of the Bathurst Mining Camp (Figure 7-2) divides it into northern and southern structural and stratigraphic domains (Wilson and Fyffe, 1996). The Chester deposit is situated in the southern domain. Figure 7-3 shows a schematic representation of the tectonostratigraphic subdivisions of the Bathurst Mining Camp.

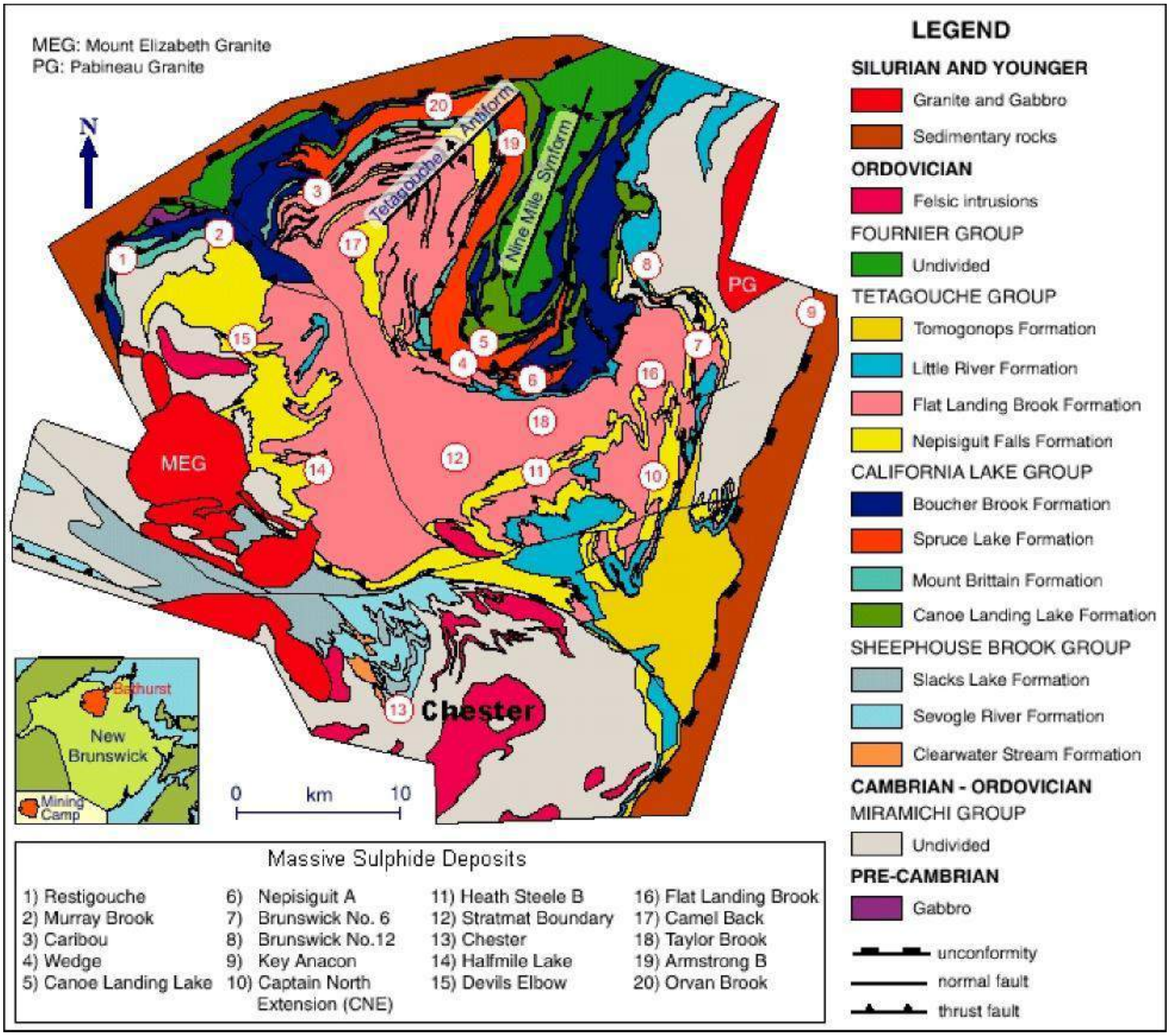

FIGURE 7-1: GEOLOGY MAP OF THE BATHURST MINING CAMP
(AFTER THOMAS, ET AL., 2000)

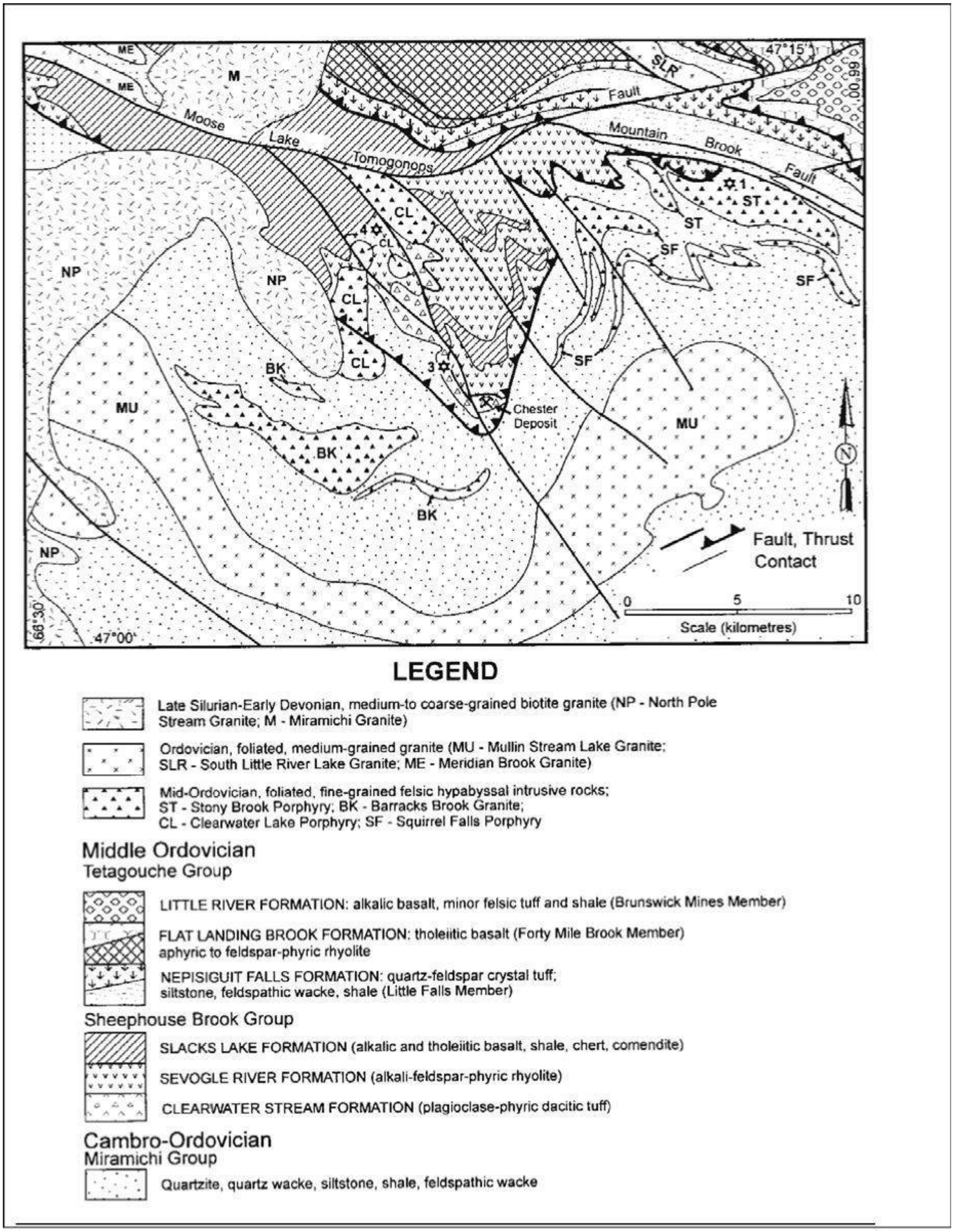

FIGURE 7-2: GEOLOGY MAP OF THE CHESTER AREA
(WILSON AND FYFFE, 1999)

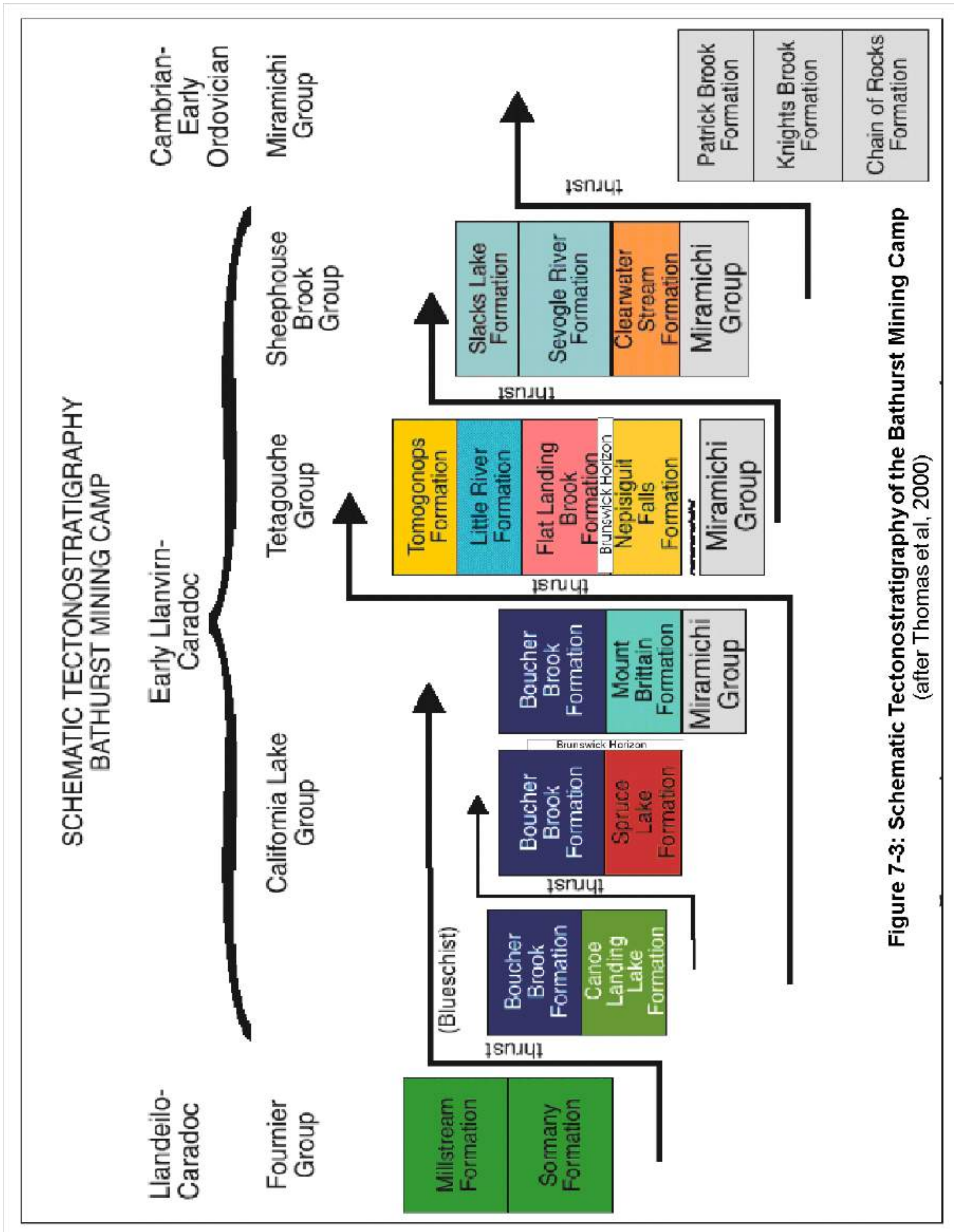

FIGURE 7-3: SCHEMATIC TECHONOSTRATIGRAPHY OF THE BATHURST MINING CAMP

The Miramichi Group, in ascending stratigraphic order, is comprised of the Chain of Rocks, Knights Brook, and Patrick Brook formations. The Chain of Rocks Formation comprises fine- to coarse-grained, light greenish grey, quartzose sandstone with some interbedded light to dark greenish grey shale. The Knights Brook Formation is comprised of interbedded quartzose sandstone, siltstone, shale, and quartzose wacke. The shale is commonly pyritic and is locally graphitic. The Patrick Brook Formation contains dark grey to black shale and dark grey volcaniclastic wacke that commonly contains clear quartz and/or plagioclase phenoclasts.

The Miramichi Group is conformably to disconformably overlain by the Tetagouche Group which comprises, in ascending order, the Nepisiguit Falls, Flat Landing Brook, Little River and Tomogonops formations. The Tetagouche Group hosts most of the Bathurst Mining Camp base metal massive sulphide deposits.

The Nepisiguit Falls Formation consists of massive, quartz-feldspar porphyritic (2-15 mm) tuff lava, and medium- to coarse-grained, granular, quartz-feldspar-rich volcaniclastic rocks with minor intercalated ash tuff. The volcaniclastic rocks near the top of the unit are commonly interbedded with light to dark greenish grey, chloritic mudstone that is locally iron-rich and constitutes the “Brunswick Horizon”. There are three other mappable units, which are assigned to the Nepisiguit Falls Formation and include the Lucky Lake, Little Falls, and Vallee Lourdes members. The Lucky Lake Member consists of felsic ash tuff, lapilli tuff and minor quartz-phyric tuff. The Little Falls Member comprises greenish grey ash tuff and fine- to medium-grained quartz-feldspar-phyric volcaniclastic rocks interbedded with dark greenish grey to black shale. The Vallee Lourdes Member comprises a thin unit of nodular to siliciclastic limestone, calcareous sandstone and siltstone, which disconformably overlies the Miramichi Group.

The Flat Landing Brook Formation consists of feldspar-phyric (+/- quartz) rhyolite flows, hyaloclastic, pyroclastic rocks and minor sedimentary rocks, including some iron formation. Phenocrysts are small (1-3 mm) and constitute less than 10% of the rock. There are three other mappable units assigned to the Flat Landing Brook Formation, which include the Moody Brook, Forty Mile Brook, and Roger Brook members. The Moody Brook Member consists of fragmental pyroclastic rocks which contain felsic clasts in a greenish grey to greenish black matrix of mixed intermediate to mafic composition grading upward into mafic lavas. The Forty Mile Brook Member comprises tholeiitic pillow basalt flows and associated diabase and gabbro. The Roger Brook Member consists of felsic crystal lithic tuff and minor rhyolite.

Mafic volcanic and associated sedimentary rocks of the Little River Formation conformably overlie the Flat Landing Brook Formation. Sedimentary rocks include shales interstratified with siltstone and volcaniclastic sandstone. Two other mappable units, the Brunswick Mines and Beresford members, are also included in the Little River Formation. The Brunswick Mines Member comprises massive to pillowed basalt, breccia, hyaloclastite and interflow sedimentary rocks, including chert and red metalliferous shale. The Beresford Member consists of alkalic basalt interlayered with black shale.

The Tomogonops Formation consists of light grey, thinly bedded, commonly calcareous siltstone (+/- limestone) and fine-grained sandstone.

The California Lake Group occurs in a different structural nappe than the Tetagouche Group, but is considered to be approximately coeval with the Tetagouche Group. The Canoe Landing Lake, Mount Brittain, Spruce Lake and Boucher Brook formations comprise the California Lake Group. The Canoe Landing Lake, Mount Brittain and Spruce Lake formations are overlain by the Boucher Brook Formation and therefore considered to be more or less contemporaneous.

The Canoe Landing Lake Formation consists of alkali basalt with intercalated red shale, chert and rare felsic volcanic rocks. Three other mappable units within the Canoe Landing Lake Formation include the Nine Mile Brook, Orvan Brook and Spruce Lake members. The Nine Mile Brook Member consists of tholeiitic pillow basalt with intercalated alkali basalt, red shale and chert. The Orvan Brook Member includes basalts which are transitional between alkalic and tholeiitic. The Spruce Lake Member consists of feldspar-phyric, locally amygdaloidal rhyolite.

The Mount Brittain Formation consists of feldspar crystal-lithic tuff that overlies aphyric to sparsely feldspar-phyric dacitic lava. This formation conformably overlies the Patrick Brook Formation and is overlain by the Boucher Brook Formation. The Charlotte Brook Member of the Mount Brittain Formation is a transitional unit overlying the Patrick Brook Formation and is predominantly a sedimentary sequence of shale and siltstone with local thin tuff beds.

The Spruce Lake Formation consists of feldspar-phyric felsic lavas, autobrecciated lavas and pyroclastic rocks, including polymictic fragmental rocks and crystal tuff with minor mafic volcanic rocks, and also includes a fine-grained sedimentary unit. Two other mappable units within the Spruce Lake Formation are the Canoe Landing Lake and Shellalah Hill members that consist of tholeiitic mafic volcanic rocks, and quartz-feldspar-phyric rhyolite and crystal tuff, respectively.

The Boucher Brook Formation consists of thinly bedded, bluish grey siltstone and greenish black shale with minor amounts of fine- to medium-grained quartz wacke. The Camel Back Member consists of massive and pillowed basalt in the lower part and shale and minor limestone in the upper part.

A high strain zone, which represents a ductile thrust, defines the contact between the California Lake Group and the Fournier Group. The Fournier Group is divided into the Sormany and Millstream formations. The Sormany Formation consists of pillow basalt and minor gabbro and the Millstream Formation comprises lithic and feldspathic wacke and shale with minor intercalated limestone and basalt.

In the southern part of the Bathurst Mining Camp, Miramichi Group sedimentary rocks are overlain by volcanic and associated sedimentary rocks of the Sheephouse Brook Group. Ordovician and Devonian felsic intrusives are common in this area. The Moose Lake - Tomogonops Fault and the Mountain Brook Fault separate the Sheephouse Brook Group from the Tetagouche Group to the north. According to Wilson, et al. (1999), the petrographic and geochemical diversity of the Tetagouche and Sheephouse Brook groups suggests that the formations were emplaced in separate basins and derived from separate magma sources. The Sheephouse Brook Group consists of the Clearwater Stream, Sevogle River, and Slacks Lake formations, in ascending stratigraphic order.

The Clearwater Stream Formation consists of medium to dark green, strongly foliated plagioclase-phyric volcanic rocks of dominantly dacitic composition that overlie the Patrick Brook Formation (Miramichi Group). Muscovite and biotite (partially altered to chlorite) define the schistosity, and porphyroblasts of carbonate are characteristic of the unit. Primary volcanic structures and textures have generally been destroyed by structural and metamorphic (i.e. up to biotite grade) overprinting, however the high abundance of plagioclase crystals and crystal fragments (10 to 45%), and local rare bedding indicate pyroclastic emplacement (Wilson and Fyffe, 1996). In the past the contact of the Clearwater Stream Formation with the underlying Patrick Brook Formation has been interpreted as highly strained and also interpreted as a thrust (MacNaughton Pool) Fault (Wilson and Fyffe, 1996). As well local subordinate rhyolites were also noted to be present in the Clearwater Stream Formation.

The Clearwater Stream Formation is overlain by the Sevogle River Formation which consists of light greenish grey to greyish pink, massive to well-foliated, potassium-feldspar-phyric rhyolite (Wilson and Fyffe, 1996). Feldspar phenocrysts range from 0.2 to 2.0 mm and may constitute up to 15% of the rock. Local intercalated sedimentary rocks occur within the Sevogle River Formation, including dark grey siltstones and shales, minor carbonaceous shale and rare lenses of crystalline limestone. Substantial differences in ages had previously been determined for the Sevogle River (466 +/- 2 Ma) and Clearwater Stream (478 +3/-1 Ma) formations that lead to the suggestion that a depositional hiatus or tectonic break exists between the formations (Wilson et al., 1999). FNR did two age determinations on core samples from the Clearwater Stream Formation intersected in Drill core in holes C-04-015 and in CNW-04-001 in 2004. The results yield an age of 469 +/- 0.3 Ma for each sample. As a result the New Brunswick Department of Natural Resources, Geological Surveys Branch (NBDNR, GSB) asked the GSC to redo the previous age dating. However, the sample was lost and NBDNR-GSB took another sample from their type section for Clearwater Stream and had it checked. That sample confirmed the results of FNR of 469+/- 0.3 Ma. This new data places the Clearwater Stream Formation at the same age as the

Nepisiguit Falls Formation and therefore the same age as the stratigraphic unit that hosts the majority of the massive sulphide deposits in the Bathurst Mining Camp, and places the Chester VMS deposit in the same time frame as the biggest VMS deposits in the camp. Age dating indicates that the Sevogle River Formation is coeval with the Flat Landing Brook Formation (465 +2/-1 Ma) of the Tetagouche Group. The Sevogle River Formation is conformably overlain by the Slacks Lake Formation, which consists of basalt with interbedded sedimentary rocks and minor comendite. Sedimentary rocks include dark grey, locally graphitic, shale, and red and green chert. Chemical similarities between felsic volcanic rocks and felsic intrusive rocks in the Chester area suggests that rocks of the Clearwater Stream and Sevogle River formations may be the volcanic counterparts of, respectively, the Squirrel Falls Porphyry and the Clearwater Lake Porphyry.

The work by FNR from 2003 to 2008 has shown that there are numerous layers of Rhyolite in the Clearwater Stream Formation. Because of the flat nature of the rocks and stratigraphy in this area of the Bathurst Mining Camp along with the general thick glacial and vegetation cover most of the lithologies have been blind and are only visible and identifiable in drill core. Whereas there had not been any regulations prior to the proclamation of the present Mining Act in July of 1986 regarding the disposal and storage of drill core, all the core drilled in this area of the BMC before July, 1985, has been lost. For example, the 110,000 feet (33,500 m) of historical drilling on the Chester deposit area from 1956 to 1968 has all been lost. It was found in 2003 at the site of the old core shed as noted on old maps of the area. However the core had been dumped many years ago and it formed two mounds about 30-m long along where the edge of the core racks, from the old maps of the area, should have been. For this reason none of the old drill core was ever available for study by recent workers. Also the initial drill logs of the 50’s and 60’s had very poor descriptions of the rock units and had identified the basal footwall rock unit of the mineralized zone as a quartzite. That “quartzite” was used as a marker horizon and at about 10 ft (3 m) into it the drill holes were stopped. That unit has now been renamed as a Rhyolite (by rock chemistry and thin sections by NBDNR-GSB geologists as well as by visual). This, along with the age dating by FNR has changed the interpretations of the local geology tremendously from the previous interpretations and as such has also significantly enhanced the exploration potential of this area of the BMC. As well FNR had drilled several holes well past the traditional basal footwall marker horizon (aka the quartzite and now identified as a Rhyolite) of the Copper Stringer Zone and has found new copper stringer mineralization in the lower units below the rhyolite. The deepest holes drilled by FNR is No. P1 and P1x which was collared just south of the underground drift portal and drilled to a vertical depth of 608 m, the capacity of the drill used, and stopped in rhyolites and other felsic volcanics but still failed to intersect the Miramichi Group sedimentary package, the footwall rocks, or basement rocks, of the BMC, by definition. This hole confirmed that the felsic package in this part of the BMC is much thicker than previously thought, thereby enhancing the Exploration potential of the Chester area dramatically. Because the stratigraphy if this area is very flat-lying, then any new massive sulphide zone will most likely be blind and will be found by geology and by drilling.

7.1.1 Structure

Five generations of folds (i.e., F1 to F5) have been interpreted in the Bathurst Mining Camp, based on overprinting relationships. The earliest deformation (D1) which produced tight to isoclinal, steeply inclined to recumbent, non-cylindrical folds (F1) also resulted in the development of high strain zones which may crosscut the stratigraphy and represent major thrust faults. During the second deformation (D2), tight to isoclinal folds (F2) developed with generally shallow plunges and reoriented the stratigraphy into a near-vertical attitude. Local interference of F1 and F2 structures resulted in steep to shallow plunge variations. During the latter stages of D2, a series of thrust faults developed which are interpreted to form the boundaries of major nappes. These early periods of deformation (D1 and D2) are responsible for most of the complex geometry of the Bathurst Mining Camp. The D1 and D2 structures were reoriented by open to tight, recumbent folds (F3). In areas where D3 was more intense, such as the southern structural/stratigraphic domain, the F3 folds reoriented the stratigraphy to shallow-dipping attitudes. Later folds (F4 and F5) are generally open structures, which refolded earlier structures and produced dome and basin structures.

Recent work suggests that the Chester area may not be a recumbent fold structure. Rock, interpreted to be Clearwater Formation, have been intersected in several deep drill holes located near the underground Portal.

7.2 PROPERTY GEOLOGY

Historically, older sedimentary rocks of the Miramichi Group have been interpreted as occupying the west and south parts of the Property and have also been interpreted as being overlain by mafic and felsic volcanic rocks of the Sheephouse Brook Group which occupy the central to northeast part of the Property (Figure 7-2). This interpretation may now be in question based on more recent work by FNR, E. Brooks and, currently on-going, by Explor.

In the area north of the Chester deposit, the Sheephouse Brook Group is interpreted to occupy the core of a northerly shallowly plunging F4 fold and as being underlain by sedimentary rocks of the Patrick Brook Formation (Miramichi Group) (Figures 7-4 and 7-5). The axial surface of an earlier fold (F1 or possibly F2) is interpreted to have a shallow westerly dip in the deposit area (Figure 7-5). The Sheephouse Brook Group is bounded to the east by a thrust fault and several northwest-southeast trending fault zones are interpreted in the area.

Dacitic tuffs of the Clearwater Stream Formation form the base of the Sheephouse Brook Group on the Property, and are overlain by rhyolite flows of the Sevogle River Formation. Mafic volcanic rocks of the Slacks Lake Formation overlie the Sevogle River Formation and are found in the northeast part of the Property.

As stated above, recent work suggests some re-interpretation of the geology of the Chester Property. Rather than isoclinal folding, there are indications that the presence of potentially mineralized Clearwater Stream formation rocks, located above the Patrick Brooks sediments in the western part of the property, is the result of thrust faulting. Explor plans to continue to evaluate the geologic interpretation of the Chester Project.

7.3 PLEISTOCENE GEOLOGY

Petruk (1959) reported evidence of glaciation including kames, eskers, glacial striae and glacial erratics. Stratified sands and gravels are reported as present but generally not thick enough to produce visible topographic features. The most prominent feature is a hill of stratified gravel just west of the massive sulphide zone but on the west side of Clearwater Stream. This hill of gravel was indicated by Petruk to be 500 feet wide and 150 feet high. He also reported a boulder train of granite erratics throughout his mapping area and concluded that they had been transported at least 3 miles (4.8 km). More recent mapping by other workers have not reported much on the glaciation of the area, however Black Bull Resources reported problems with the gravity survey data due to terrain effects caused by local eskers.

7.4 MINERALIZATION

The Chester deposit consists of the West, Central, and East Zones (Figure 10-1). The East Zone is flat-lying, exposed at surface, and overlain by up to 7.5-m of gossan and glacial sediments. It consists of intermixed massive and disseminated sulphides (50% average), which are mainly pyrite, and varies in thickness from 3-m to 15-m. The massive sulphide zone is 60-m wide and 300-m long and the disseminated mineralization covers an area up to 220-m wide by 450-m long. The Central Zone is also exposed at surface and is overlain by 1 to 15-m of gossan and overburden. It consists of both massive sulphide (mainly pyrite) and disseminated sulphide mineralization, varies from 4-m to 13-m thick, and plunges gently to the west. The massive sulphide zone is 130-m wide and 200-m long and disseminated mineralization covers an area up to 300-m by 350-m. The dominant minerals in the massive sulphide zones are pyrite, pyrrhotite, sphalerite, chalcopyrite, and galena (Irrinki, 1986). Zonation is evident in the massive sulphide lenses with copper-rich, lead/zinc-rich, lead/zinc/copper-rich zones, and pyrite or pyrrhotite zones with minor base metal mineralization.

The West Zone (or Copper Stringer Zone) consists of 5% to 10% stringer and disseminated sulphide (mainly chalcopyrite and pyrrhotite) and extends to the west from the Central Zone. Mineralization is concentrated in three (or more) zones contained within a 75-m thick section of quartz-chlorite schist that dips 15-20° to the west. The West Zone covers an area up to 300-m wide and 1,000-m long. Mineralization in the Stringer zone consists of, in order of relative abundance, chalcopyrite, pyrrhotite, pyrite, with minor amounts of galena and sphalerite occurring in a host rock of quartz chlorite schist.

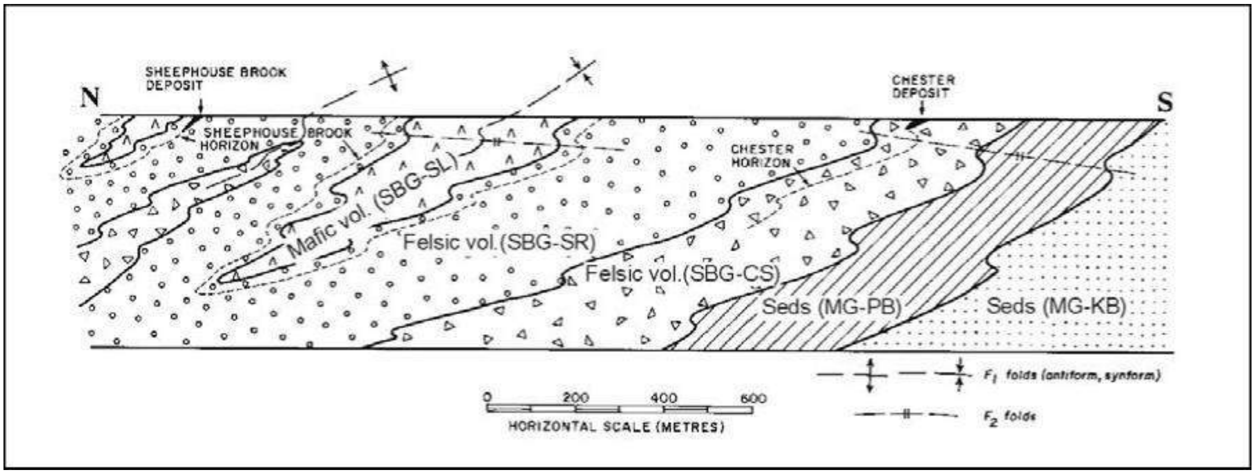

FIGURE 7-4: INTERPRETED N-S CROSS SECTION IN THE CHESTER AREA (SUB-PARALLEL TO AXIAL SURFACE OF F4 FOLDS)

Note: MG = Miramichi Group; KB = Knights Brook Formation; PB = Patrick Brook Formation; SBG = Sheephouse Brook Group; CS = Clearwater Stream Formation; SR = Sevogle River Formation; SL = Slacks Lake Formation. (After Wilson & Fyffe, 1996)

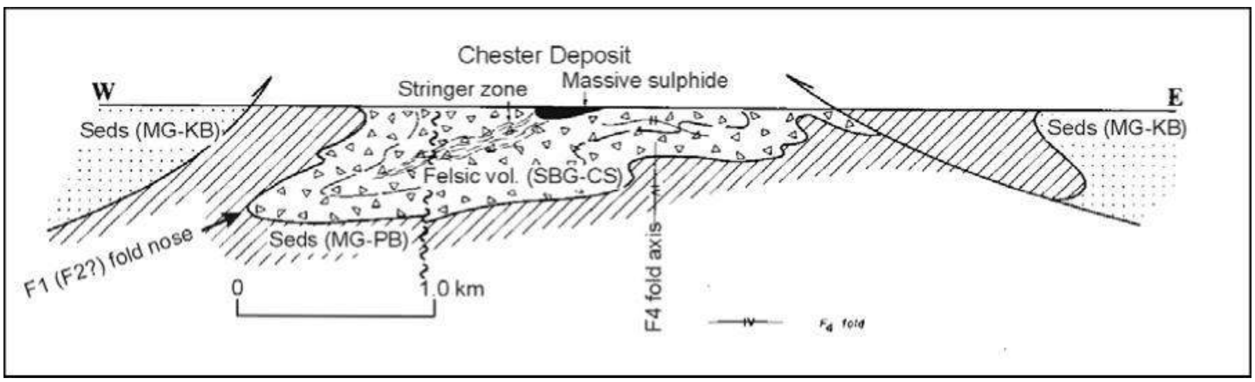

FIGURE 7-5: INTERPRETED E-W CROSS SECTION AT CHESTER DEPOSIT AREA (NORMAL TO AXIAL SURFACE OF F4 FOLDS)

Note: See Figure 7-2 for legend. The F1 (or F2?) fold nose is interpreted and has not been defined by diamond drilling. (After Wilson & Fyffe, 1996)

8 DEPOSIT TYPES

The Chester sulphide deposits are interpreted to be volcanogenic massive sulphide (VMS) deposits and associated feeder or Stringer-zone sulphide mineralization. The Chester deposit is one of more than 30 known VMS deposits in the Bathurst Mining Camp, which include the world class Brunswick No. 12 deposit. As of closure in March, 2013, the Brunswick No. 12 mine produced a total of 136,600,000 tonnes of ore at a grade of 8.74% Zn, 3.44% Pb, 0.37% Cu, and 102.2 g/t Ag. The Brunswick No. 6 Mine, on the same stratigraphic horizon, produced about 12 million tonnes of ore from open pit and underground operations. VMS deposits in the Bathurst Mining Camp occur at various stratigraphic positions, and deposits are known to occur in the Tetagouche Group, California Lake Group, and the Sheephouse Brook Group (McCutcheon, et al., 2001).

VMS systems develop from the heat from a subvolcanic intrusion which drives metal-bearing hydrothermal fluids along fault/fracture zones. The metals are deposited both on the seafloor as VMS deposits, and in the subsurface feeder zone as disseminated and stringer mineralization (Figure 8-1).

The VMS deposits are stratabound, commonly stratiform, and typically associated with felsic volcanic rocks. They may contain varying concentrations of pyrite, pyrrhotite, sphalerite, galena, chalcopyrite, and tennantite-tetrahedrite, as well as other sulphide and sulphosalt phases (Thomas, et. al., 2000). Zonation of the sulphides is often present. At Brunswick No. 12, the footwall is comprised of pyrite with variable amounts of pyrrhotite and chalcopyrite; overlain by banded pyrite, sphalerite, and galena, with minor chalcopyrite and pyrrhotite; overlain by massive pyrite with some layers/lenses of sphalerite and galena; and, overlain by oxide (magnetite-hematite and iron-rich chlorite) iron formation (McCutcheon, et al., 2001).

The feeder zones associated with VMS deposits are characterized by intense alteration and disseminated and Stringer sulphide mineralization. The Copper Stringer Zone of the Chester deposit is considered to be a feeder zone associated with the volcanogenic massive sulphide lenses of the Chester deposit. This is supported by the occurrence of talc, sericite, silicification, intense chlorite alteration, and disseminated and stringer chalcopyrite, pyrrhotite (+/- pyrite) in the Copper Stringer Zone.

As a result of the intense polyphase deformation in the Bathurst district, the feeder zones are often transposed into the S1 or S1/S2 schistosity such that they are now sub-parallel to the massive sulphide lenses (Thomas, et al., 2000). Franklin (1981) illustrated similar deformation of a VMS deposit and associated feeder zone as shown in Figure 8-1. This is apparently the case with the Copper Stringer Zone at Chester which is sub-parallel, or at a low angle, to the orientation of the massive sulphides. However, it is important to note that three generations of tight to isoclinal folds (F1, F2, and F3) and later open folds (F4, +/- F5) have also had an impact on the structure of the Chester deposit.

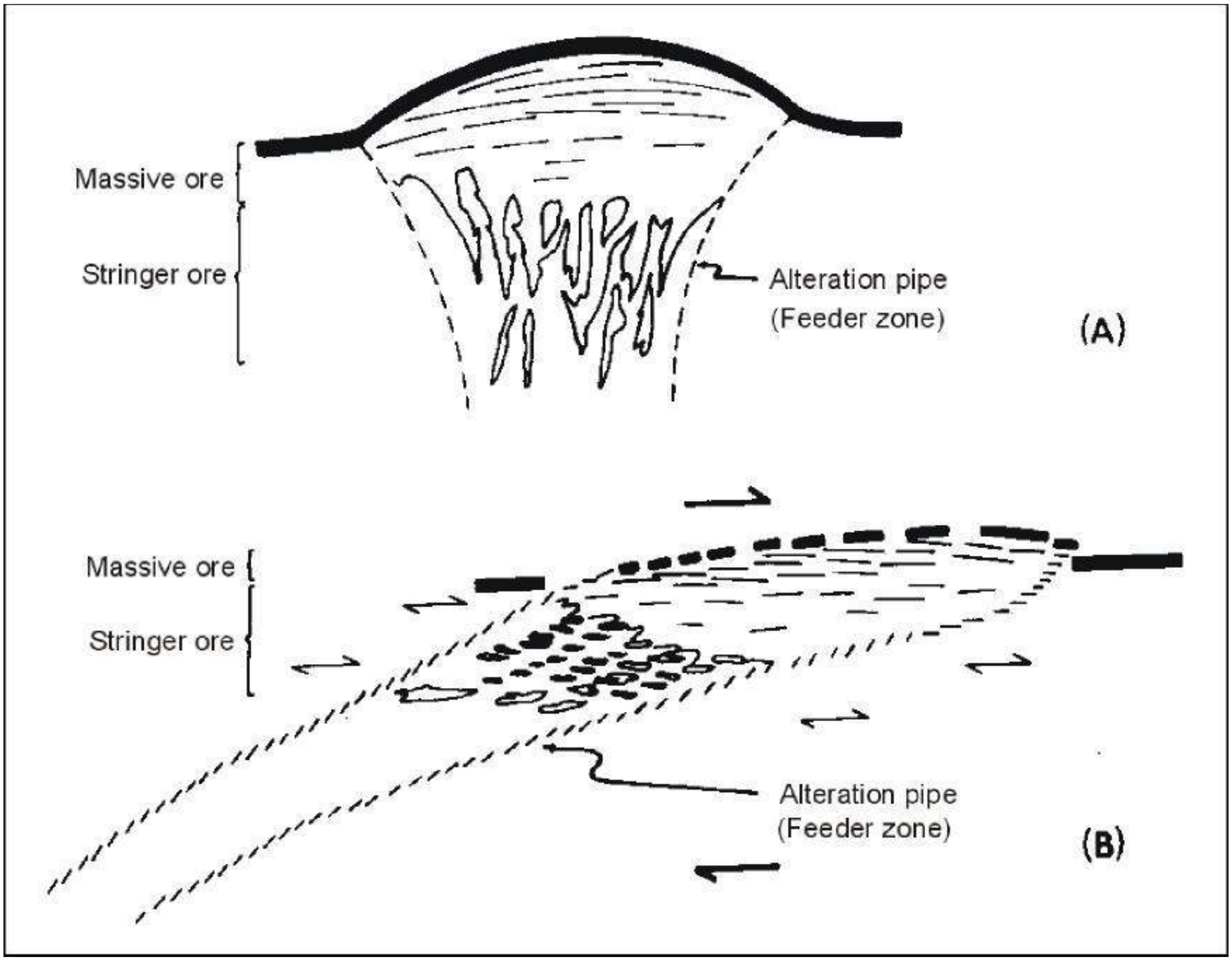

FIGURE 8-1: SCHEMATIC DIAGRAM OF VMS DEPOSIT AND STRINGER ZONE (FRANKLIN 1981)

9 EXPLORATION

This section summarizes exploration activities on the Property since FNR became involved in the project in 2003. Previous exploration is summarized in *Section 6 History* of this report.

FNR drilled a total of 13 holes in 2003, primarily testing the upper part of the Stringer zone mineralization (referred to as the West Zone) and parts of the VMS zone (referred to as the Central Zone). The results of this drilling confirmed the location, thickness, and grades present in the pre-FNR drilling data. Three holes (C-03-009, C-03-010, and C-03-011) were pushed to depths of up to 250-m (the capacity of the drill) and intersected felsic volcanics of the Clearwater Stream Formation rather than the expected Quartzites of the Miramichi Group. This finding provided evidence to support exploration potential within the favourable host stratigraphy below the Chester deposit. The felsic rocks below the Chester deposit contain local zones of copper-rich, Stringer-type mineralization such as hole C-03-010 which intersected 8.64-m of 1.56% Cu from 92.96-m to 101.60 m, including 3.40-m of 2.51% Cu with highly anomalous indium (In), bismuth (Bi), silver (Ag), gold (Au), and cobalt (Co). Higher up in this hole, from 72.54-m to 75.0 m, another zone returned 2.46-m of 2.80% Cu and 622 ppb Au.

In October 2004, Geotech Ltd. (Aurora, Ontario) (www.geotechairborne.com) was contracted to perform a VTEM survey on the Chester deposit area and the surrounding lands. A total of 675 line km covering 31 km^2 was flown with lines at 50-m intervals. A detailed interpretation was done by Condor Consulting of Lakewood, Colorado, USA the following year. The Chester VMS and Stringer zones were clearly shown in the survey, including several other anomalies located 2-3 km to the north.

In 2004, a soil geochemical survey was also conducted over the Property. The results were consistent with the known mineralization at Chester and also produced several anomalous areas west and northwest of Chester.

In the fall of 2004, a VTEM survey was conducted at the same time as the drilling program. The drilling program included two drill holes (C-04-014 and C-04-015) collared 600-m west of the limit of the current sulphide zone Indicated resources. These were following up on pre-FNR drill hole S-436 which reported 0.91-m of 2.30% Cu, 1.40% Pb, and 1.11% Zn at 315.15-m depth, followed by 23.16-m of 1.53% Cu, 1.64% Pb, and 0.94% Zn from 324.6-m to 347.76-m depth. Vertical drill hole C-04-014 deviated slightly to the south and intersected chloritic alteration with variable sulphides from 233.8-m to 339.5-m. A grade of 2.23% Cu over 1.3-m at 325.5 m, and 2.75-m at 1.84% Cu was intersected at 336.5 m, plus several other minor intervals. Drill hole C-04-015 was oriented to the south and intersected chloritic alteration from 319.7-m to 393.3-m but with only local sulphides. Although these two drill holes did not replicate the results in S-

436, they did confirm the presence of the Chester Stringer zone for a total strike length of at least 800 m, and that the zone contained appreciable copper grades.

In 2004, three additional holes were drilled to test the upper part of the Chester Stringer zone. Another two holes followed up a coincident VTEM/soil geochemical anomaly located 3.5 km northwest of the Chester underground portal. Both of these holes intersected felsic volcanics with local disseminated to semi-massive, pyrrhotite-pyrite with local chalcopyrite. Hole CNW-04-001 intersected up to 0.31% Cu over 0.9-m (from 3.0-m to 3.9 m), and CNW-04-002, located 70-m to the northwest of CNW-04-001, intersected 5.2-m (from 3.0-m to 8.2 m) grading 0.28% Cu at the top of the bedrock in the hole.

Follow-up mapping in the area of CNW-04-001 and CNW-04-002, and extending for approximately 1 km south, uncovered felsic volcanic rocks of the Clearwater Stream Formation in this area that were previously believed to host sedimentary rocks of the Miramichi Group. Many outcrops in this area are gossanous with visible pyrite and sericite alteration. This is a large area of favourable stratigraphy with the presence of hydrothermal alteration and sulphides. It remains a highly prospective exploration target.

Samples taken from felsic volcanic rocks near the bottom of holes C-04-015 and CNW-04-001 were age-dated at Activation Laboratories Ltd. (Actlabs) using the lead/zirconium method. Both samples returned an age of 469+/- 0.3 Ma; this correlates with an age date obtained by the NBDNR on a surface sample taken from Clearwater Stream Formation rocks west of Chester. These results indicate that the Chester Property contains significant thicknesses of Clearwater Stream Formation rocks, over 580 m, which are known to host the deposits of the Bathurst Mining Camp.

In the fall of 2006 and continuing through most of 2007, FNR concentrated its efforts on drilling the near-surface portion of the Stringer zone mineralization at Chester. The objective of this drilling was to evaluate the nature of the thickness, grade, and continuity of this part of the deposit in order to provide information with respect to planned, near-future mining activities.

Several exploration drill holes were completed in 2007, including 2186-07-001 and 2186-07-002 which tested a geophysical anomaly approximately 700-m north of the underground portal. These holes intersected altered felsic volcanic rocks but with only rare traces of sulphides. Drill hole C-07-P1X was collared beside the underground portal and was extended to a final depth of 609-m. This hole intersected a series of felsic tuffaceous and rhyolitic rocks of the Clearwater Formation with local zones of sericite and/or chlorite alteration. Sulphides are rare in this hole, but the presence of alteration is encouraging.

Since Explor acquired the Property in 2013, it has concentrated its exploration program on the west side of Clearwater Stream in an area that had not been explored since the 1950s.

The 2013 grassroots exploration program included the following:

- Line Cutting or Grid Establishment: A total of 74.7 km of lines were cut and chained.
- Geological Mapping: The entire grid was walked and mapped in July and August 2014, searching for outcrops, boulders, and mineralization. Stream sediment samples were also taken as required. The objective was to search for sections of the favourable mineral-bearing horizons at surface to the west of the known mineralization. The objective of the program was to correlate the underlying rock types with current knowledge and published maps of the Bathurst Mining Camp. During the mapping program, a new zone of sericitization was discovered coincident with a very strong lead-in-soil anomaly. Following this anomaly along strike, well-defined Clearwater Stream rocks, altered and unaltered, were found south of the soil anomalies on several lines, defining considerable strike length. The identification of this rock type, which hosts the known Chester VMS and Copper Stringer deposits, is very important for defining the exploration potential of the Property.
- Ground Magnetometer and VLF EM Surveys: These were conducted on the grid to be used as a mapping tool for later interpretations of the geological and geochemical results.
- Soil Sampling: A sampling program for the “B” horizon was completed on the newly established grid. A total of 3,357 soil samples were collected, screened through a -80 mesh, and analysed by ICP at Actlabs in Ancaster, Ontario.

Several anomalous areas were encountered that warrant follow-up exploration. One of the more interesting areas is located about 1 km northwest of the current Chester copper resource where elevated copper, zinc, and lead levels were found in soils; this is coincident with anomalous magnetometer and VLF results. Mapping in this area suggests that sericite-altered volcanic host rocks may be present. The location of this untested copper soil anomaly is shown in Figure 9-1.

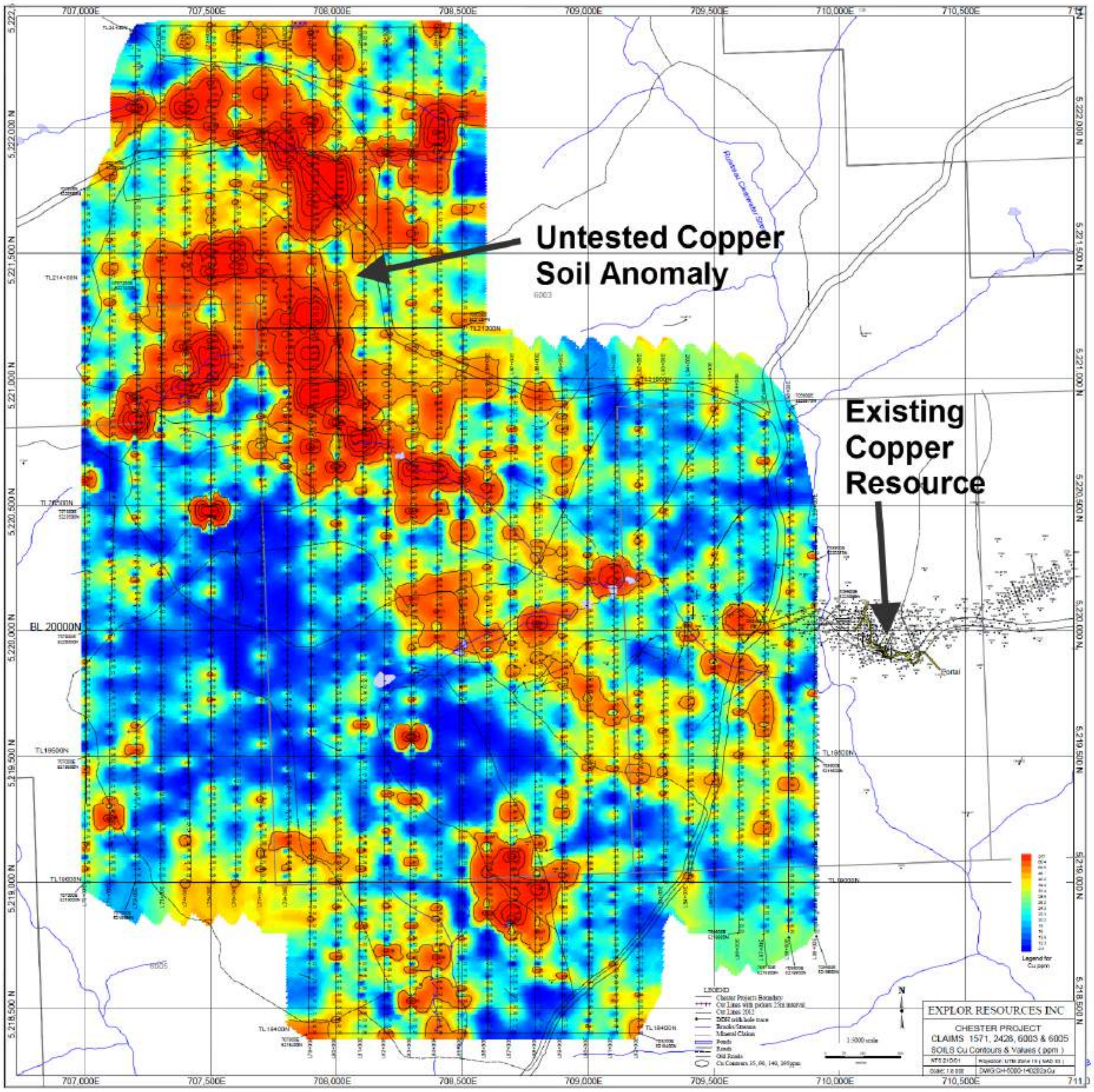

FIGURE 9-1: CHESTER PROJECT COPPER IN SOILS (BROOKS 2013)

10 DRILLING

There are two vintages of drilling referred to in this report: FNR and Pre-FNR drilling. Pre-FNR drilling includes all holes drilled on the Property before FNR became involved in the project in 2003. The distribution of drill holes is shown in plan view in Figures 10-1 and 10-2.

In 2003, one of the first challenges that FNR encountered was how to tie in the Pre-FNR drilling database locations because very few of the recognizable landmarks still existed at that time. A small bridge crossing a creek near the old core shack location (approximately 709580E, 5219860N) was present in 2002 and can be seen on 1969-vintage air photos (this bridge has been recently removed). The location of this bridge was determined using a GPS and this formed the basis for locating the original drilling. The geology and grades encountered showed good correlation between the two vintages of drilling.

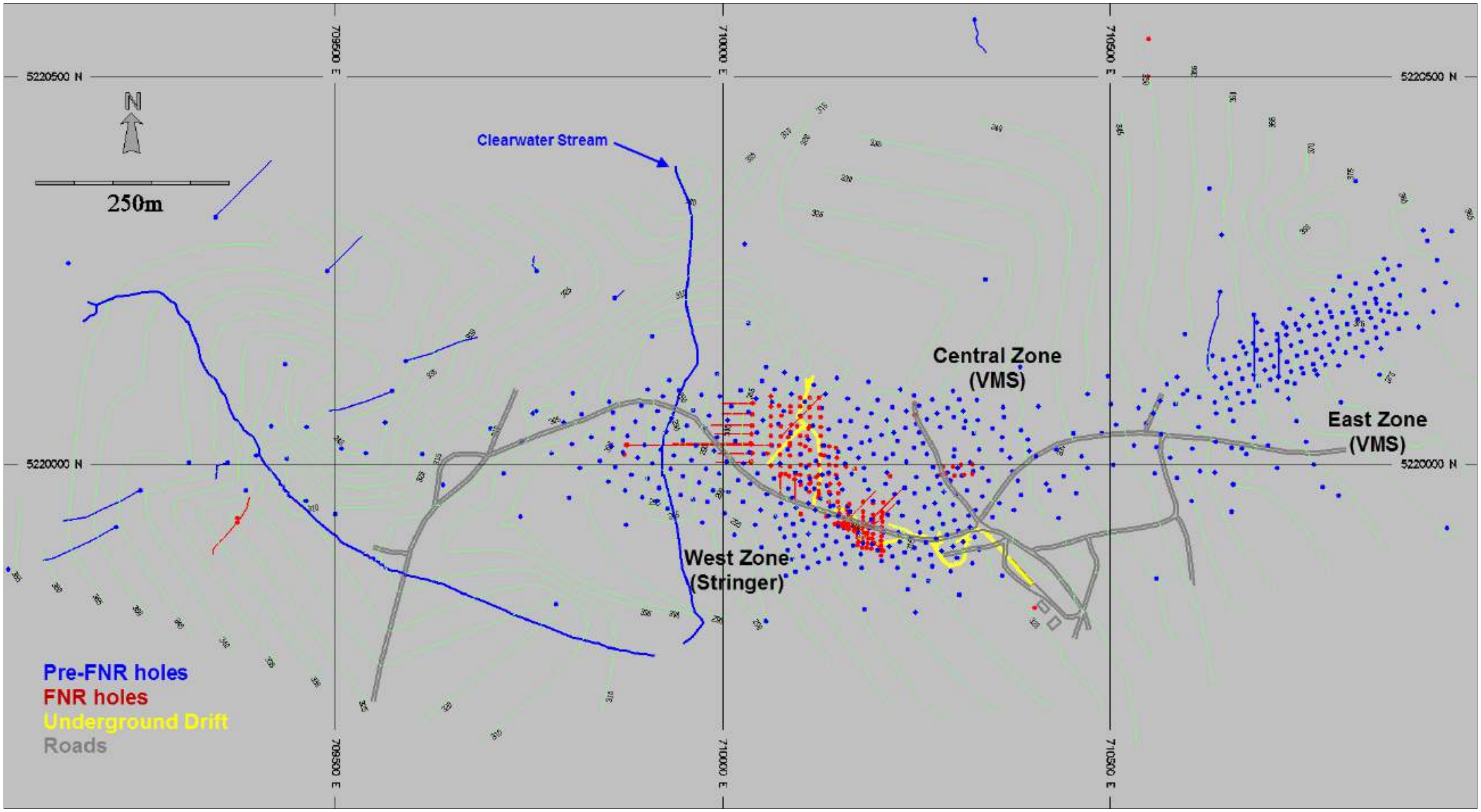

FIGURE 10-1: CHESTER DRILL HOLE PLAN

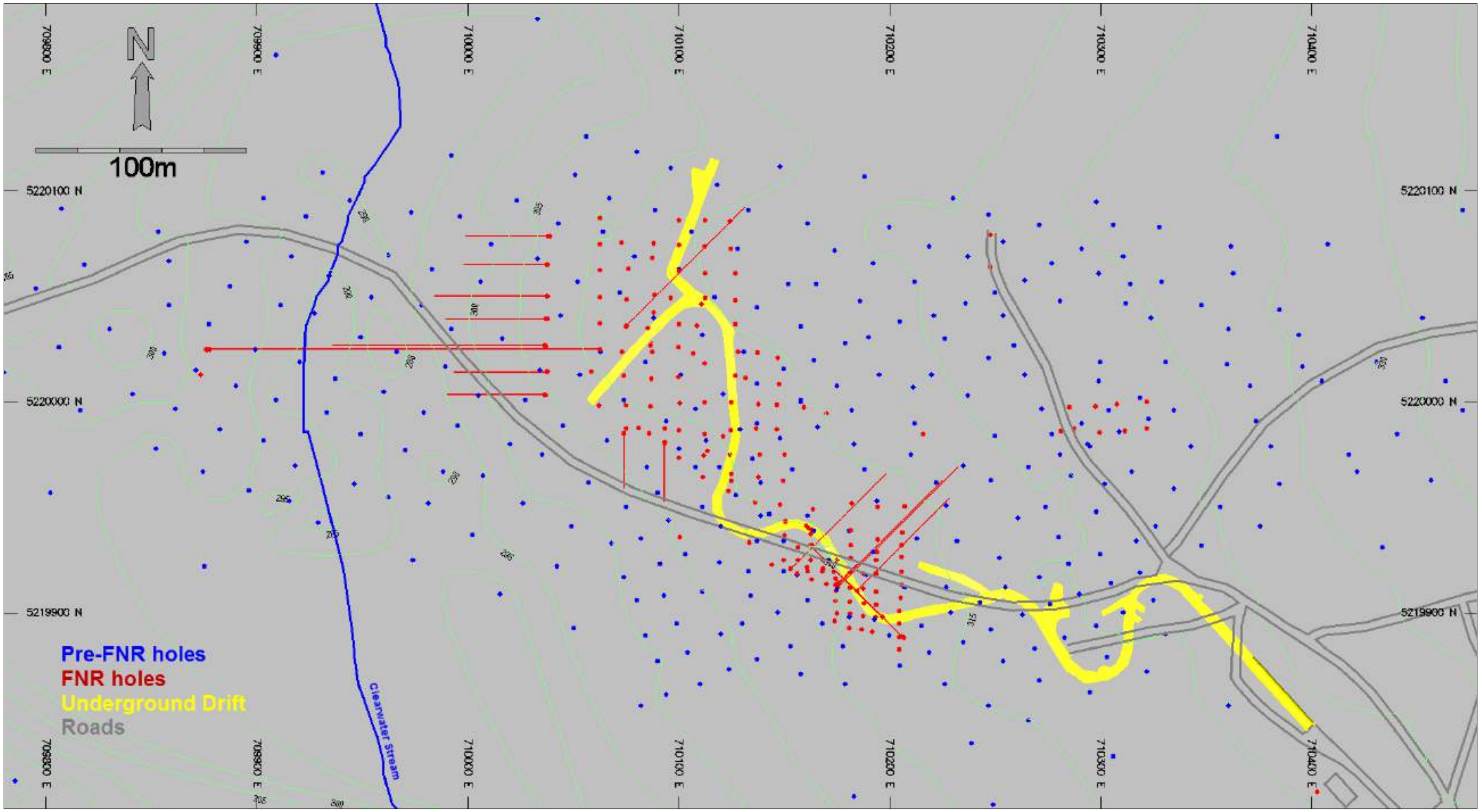

FIGURE 10-2: CHESTER DETAILED DRILL HOLE PLAN

In September 1955, massive sulphides of the Chester deposit were intersected in the first hole that was diamond drilled on the Property. Subsequently, approximately 800 diamond drill holes were completed to delineate the massive, disseminated, and Stringer sulphide zones of the Chester deposit. Approximately 50 of these drill holes that are exploratory in nature, testing for satellite deposits. There are reports of an additional 100 exploratory drill holes in the area but these are not present in the current database.

The majority of the Pre-FNR drilling focused on the near-surface, Central, and East VMS Zones located between 710200E and 710900E. Significant drilling was also completed on the West Zone comprised of Stringer-type mineralization which is the focus of the mineral resource estimation in this Technical Report. The Pre-FNR drill holes intersecting the Stringer zones are spaced on approximately 25-m centres between 709800E and 710200E. Farther to the west, holes become more widely-spaced, but they continue to intersect significant thickness and grade of copper mineralization. This down-plunge drilling, between 709100E and 709800E, is not considered sufficient to support a mineral resource estimate.

FNR took a methodical approach to delineating the eastern (near-surface) portion of Stringer mineralization. The objective of this approach was to evaluate the nature of the thickness, continuity, and grade and ultimately provide information from a mining perspective. FNR drilled a total of 198 holes on the Property: 179 are proximal to the Stringer zone mineralization described in this report, and the remaining 19 holes test the VMS zone or other targets too distant to affect the resource model. FNR drill holes are variably spaced at 12.5-m intervals (and locally 6.25 m) in the upper part of the Stringer zones, with an average of 12.5-m spacing throughout the majority of the drilled area, expanding to 25-m spacing at the western limits of the program.

The FNR diamond drilling was done under contract by Maritime Diamond Drilling Ltd. of Truro, Nova Scotia using a Longyear Model 38.

The vast majority of both FNR and Pre-FNR drill holes are oriented vertically which result in favourable pierce angles with the shallow-dipping mineralized zone. A series of FNR drill holes between 709875E and 710040E have been inclined in order to retain the required distance between drilling activities and the Clearwater Stream. Also, a certain area south of the access road was closed to drilling by the Forest Rangers because it was considered a wet zone.

All drill holes were diamond core holes. The core from the Pre-FNR drilling was dumped, probably by vandals, after the site was abandoned in 1977; the majority of it was found in a pile located beside the creek at 709950E, 5220100N. All FNR drill core was originally stored indoors in a clean and very well organized office facility in Bathurst. Initial core logging was done on site at Chester in a tent erected for that purpose, then transported to the Bathurst facility and sampled. Following the insolvency of FNR in 2011, some of the core was moved to the government facility in Madran, to the northwest of Bathurst. Approximately 40 trays are stored on Mr. Brooks' property in Bathurst. The remainder of the core was dumped in the Bathurst No. 12 Mine tailings pond.

All FNR drilling produced NQ-size drill core. The core from Pre-FNR drilling is a combination of AXT, BQ, and NQ sizes.

The drill core was inspected during two site visits by the QP showed that core recovery is excellent except for very rare, isolated intervals. Recoveries, calculated from only a handful of the FNR drill holes which have tabulated recovery data, average 96%. FNR personnel estimate that overall core recovery was in excess of 99%.

10.1 SAMPLING METHOD AND APPROACH

10.1.1 Pre-FNR Drilling

In the 1950s and 1960s, drilling included AXT, and then BQ and NQ drill core sizes were included in later years. The old drill logs do not identify the core size that was drilled. Brunswick Mining and Smelting took sludge samples in the gossan evaluation study for gold in 1987, but no other worker reported sludge samples.

Most of the drilling on the Property (i.e., > 500 holes) was conducted before 1977. This early core has been lost but most of the assay results were documented in historic drill logs which have subsequently been entered into the digital database (i.e. 128 holes of the C-series drilled from 1956 to 1959). It is apparent from a pile of discarded drill core found by Brooks in November 2002 at the reported location of Kennco and Sullivan Mining Group's field campsite, that the drill core was, at least in part, split for assay. The sample interval for drilling by Sullico (1965-1976) varied from 3-m to 12.5-m and the interval length was, to some extent, adjusted for grade variations. The small diameter of the core (AXT, AQ, and BQ core) found from the pre-1977 drilling would have some impact on the accuracy of the sample, notably within the disseminated and Stringer zones where, on a small scale, mineral distribution is quite variable.

Samples taken by workers from 1985 through 2002 were split and any core retained is stored at the New Brunswick Government's central core storage facility in Madran. Most of these later holes were drilled in the massive sulphide zone and are, therefore, of no significance for the purpose of this report. Since Sullico drilled in the late 1960s, no additional drill holes were reported in the Copper Stringer Zone.

10.1.2 FNR Drilling

FNR drilling in 2006-07 produced NQ-size core. The drill core was initially logged at the core facilities set up on the Property. Samples were typically no greater than 1-m in mineralized zones and up to 2-m in length in barren zones. Sample intervals honoured geology contacts where identified. The core was bundled with lids and driven to FNR's office facility in Bathurst for detailed logging and sampling as follows:

- Bundled core was opened and inspected for any sign of irregularity.
- Sample intervals that had been marked for cutting by the on-site geologist at Chester and listed in the drill logs were identified and recorded in a master spreadsheet. Sample numbers were assigned and the sample information (e.g., drill hole number, from, to, etc.) was entered in sample books.
- Core was aligned in the core trays for cutting so that the same side of the entire hole was sent to the lab for assay.
- Core was split using a Vancon diamond core saw along the length of the core.
- Core sampling of sawed half core on intervals marked by a geologist. Drill core samples were bagged with sample tags, and tied up with packing tape. Bags were packed in shipping boxes, and the boxes were sealed. The other half of the core was kept in the core tray and stored in racks for future reference. Core trays were labelled with Dymo aluminium tape stapled onto the end of the tray. The drill hole number, box number, and the "from-to" distance down-the-hole was embossed onto the metallic tape.
- Quality control samples were inserted into the sample stream (standards and blanks) and duplicate samples were identified.
- Upon receipt of assay results, higher grade core was reviewed again and spot checks were made on low grade samples, especially on the boundaries of the higher grade sections to ensure analysis grades correlated with observed quantities of sulphide mineralization.

FNR developed an extensive set of guidelines for core handling, core sampling, and sample tagging and shipment. The guidelines and procedures were reviewed by the QP during his site visits in 2006 and 2007. Sample practice adhered to the established procedures and was in accord with industry standard practice. Adherence to the procedures produced samples that were representative of the geologic environment and mineralization and free from any bias. There were no drilling, sampling, or recovery factors that would adversely affect the resource estimation.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 SITE VISIT

Robert Sim visited the Chester Property twice, once from November 9-10, 2006 and again from October 1-5, 2007. These included visits to the Chester site, with several days dedicated to reviewing the drill core and the then-current data recording practices in FNR's Bathurst office facilities. There has been no additional work conducted on the Property since that time that could materially affect the estimate of mineral resources.

The site visit included a detailed review of the data stream from logging, to database entry, to section plotting, and, finally, rechecking the information with respect to the surrounding geologic interpretation. Mr. Sim also inspected the core sampling facility and equipment which was found to be clean and organized, and appeared to be in good working condition. The equipment and practices used followed accepted industry standards.

11.2 SAMPLE PREPARATION AND ANALYSIS

Samples collected by FNR were sent for analysis to Activation Laboratories Ltd. at the following address:

Activation Laboratories Ltd. (Actlabs)
1336 Sandhill Drive,
Ancaster, Ontario, Canada
Telephone: (905) 648-9611
Fax: (905) 648-9613
Email: ancaster@actlabs.com

Actlabs is 9001:2000 certified.

11.2.1 Sample Preparation

Sawed core samples were shipped by truck to Actlabs' sample preparation facility in Ancaster, Ontario. Actlabs used the following sample preparation protocol at the lab:

1. Receive samples. Lay them out on benches, check sample state, order and identification. Notify client of any irregularities and wait for instructions before continuing.
2. Leave samples in original plastic bags which are opened and placed on carts in the drying rooms. Samples are kept at 60°C until they are dry.

3. Crush each sample in Terminator jaw crusher to > 85% passing -10 mesh. The crusher is cleaned with barren river rock and compressed air after each order processed.
4. Split sample immediately after crushing to obtain a 250-g sample using riffle splitter.
5. Pulverize a 250-g split to 95% passing -150 mesh. The pulverizer mill is cleaned with cleaner sand between each sample.
6. Bag the rejects with original sample tag and Actlabs label.
7. Make a new pulp from another split of reject for every order more than 40 samples (internal lab pulp duplicates).

Actlabs used the following assay procedures:

- Actlabs cleans the crusher for every order with barren river rock and compressed air. The pulverizer is cleaned with white lightening after every sample and then brushed clean and blown out with compressed air. Actlabs takes 3.5% pulp duplicates after stage 5 and checks grain size of crusher and pulverizer daily.
- Two analytical techniques were used: an Aqua Regia digestion ICP-OES for the majority of elements, and an AR Ultratrace 1 (UT-1) for additional trace elements.

Assays for Cu, Co, Pb, and Zn: ICP-OES

Actlabs used the following assay digestion:

1. Weigh sample (0.5 g).
2. Quantitatively transfer sample to 250-ml volumetric flask.
3. Dispense 25 ml of concentrated HNO_3.
4. Dispense 75 ml of concentrated HCl.
5. Place sample on hot plate for 1 hour and set hot plate on high.
6. Cool sample and dilute it to 250 ml with de-ionized (DI) water.
7. Analyze on a Varian Vista 735 ICP or a Thermo ICAP 6500 ICP.

Actlabs used the following digestion for UT-1:

1. Weigh sample (0.5 g).
2. Moisten sample with some DI water.
3. Dispense 0.6 ml of concentrated HNO_3. Wait for a minimum of ten minutes, and then dispense 1.8 ml of concentrated HCl.
4. Vortex sample and put it in hot block for digestion at 120°C for 2 hours.
5. Cool sample and dilute it to final volume (10 ml) with DI water.
6. Addition of an Rh, Ir internal standard.

7. Analyze using a Perkin Elmer Elan 9000 ICP/MS.

The QC sample insertion was as follows:

- FNR sampling staff inserted blind standards and blanks as specified in the quality sample handling procedure memo. Approximately 13% of all samples were check samples. There was every indication that the procedure was being strictly followed and QC sample coverage was adequate for the drilling.
- Blank material was inserted randomly using a pre-assigned tag number at the rate of one in every 30 samples. Blank material was pre-purchased swimming pool filter sand with no visible mineralization; this was supported by the analysis results.

Actlabs and FNR used the following Chain of Custody:

During drilling, sample shipments to the lab were sent once a week and up to 4 times a week, or once after approximately every 60 – 100 samples of material had accumulated in the sampling facility. Careful attention was taken to make sure complete holes were not split between two or more batches. Shipping was via contracted carrier, Day and Ross Transportation Group (Day and Ross), from its warehouse in Bathurst, NB. The samples were checked into the warehouse by FNR personnel, stacked on a pallet, weighed, wrapped in cellophane wrapping and a shipping receipt was received by the FNR representative. The pallet was then loaded onto a truck and transported to the Actlabs facility in Ancaster, Ontario.

Each shipment was considered a “batch” and was assigned its own unique work order number. A list of samples was included in each of the boxes on the pallet, attached to the shipping receipt, and a copy was kept at the FNR office in Bathurst. All Day and Ross trucks were tracked electronically by a dispatcher and GPS locaters. Actlabs was notified of the sample numbers that were being sent and, on arrival and after inspection, the lab sent confirmation of the samples received, their condition, and the assigned batch number. No irregularities in the sample shipment process were detected.

Sample handling, preparation, and analysis procedures met accepted industry standards.

11.2.2 Control Sample Performance

Standard Reference Material (SRM) Performance

FNR purchased standard reference material for the project. The copper/gold standard reference material was purchased from CDN Resource Laboratories Ltd. in Delta, BC, Canada. The five certified standards for copper are named: CGS-2, CGS-4, CGS-7, CGS-10, and CDN-FCM-2. The performance of standard reference material (SRM or standards) was evaluated using the criterion that 90% of the results must fall within ± 10% of the accepted value for the assay process to be in control.

Results are presented using statistical process control charts (control charts, for short). In the chart the "accepted" or average value appears as a black horizontal line. Control limits at ± 10% of the accepted value appear as red lines above and below the line showing the accepted value. The assay result values for the standard appear on the chart as green triangles.

Results for all standards fall within control limits more frequently than the prescribed rate (Figures 11-1 to 11-5). There is no indication of systematic assaying problems in the copper values.

Sample Blank Performance

Control results exceeded the control limit for the blank material assays less than 5% of the time (Figure 11-6).

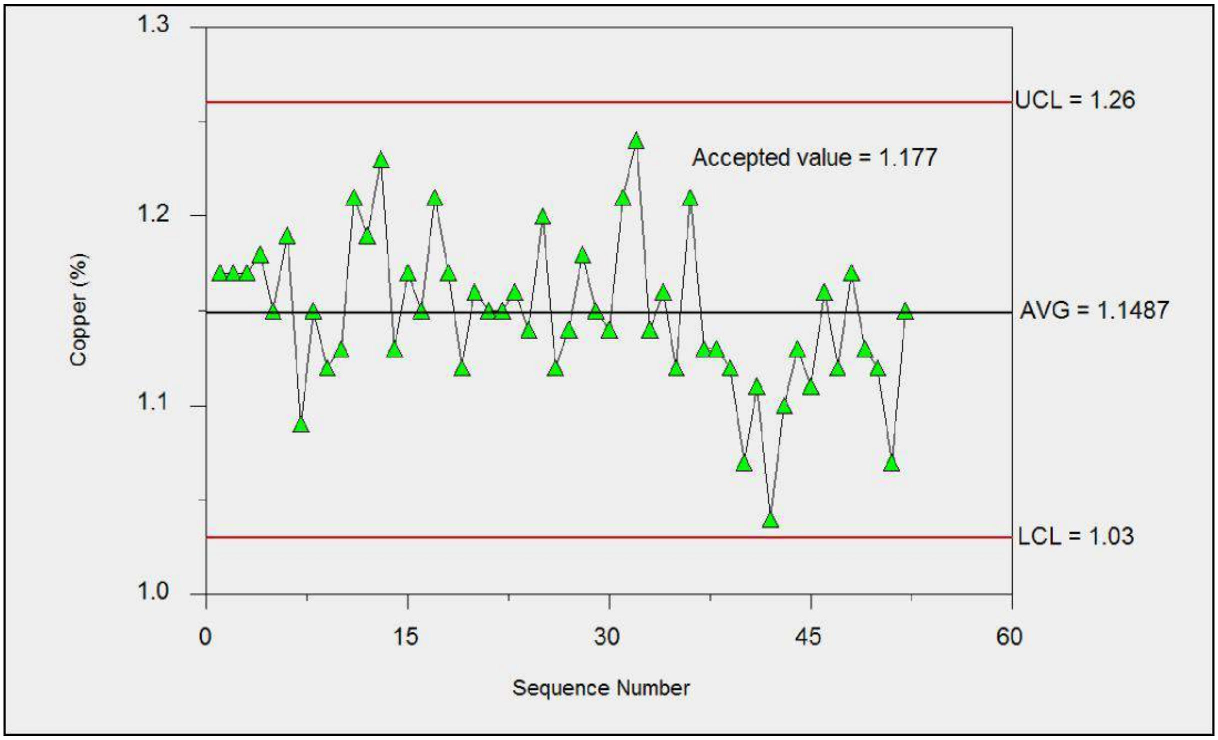

FIGURE 11-1: SRM CGS-2

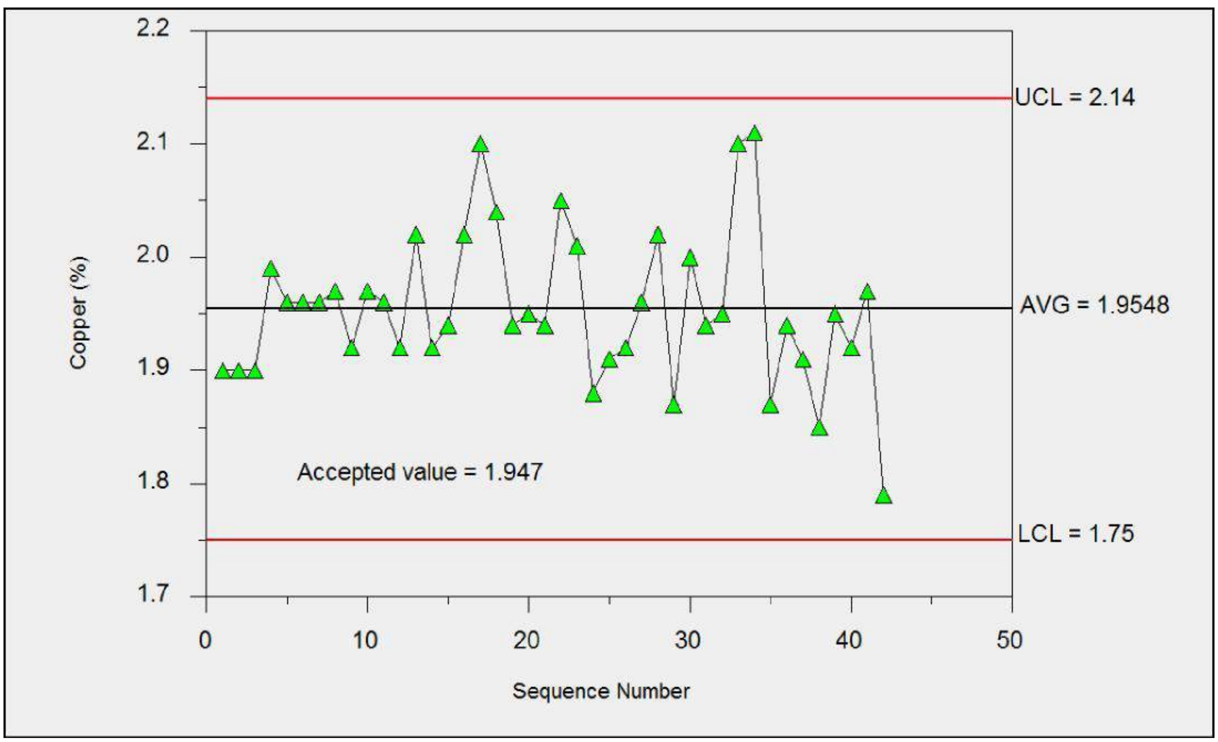

FIGURE 11-2: SRM CGS-4

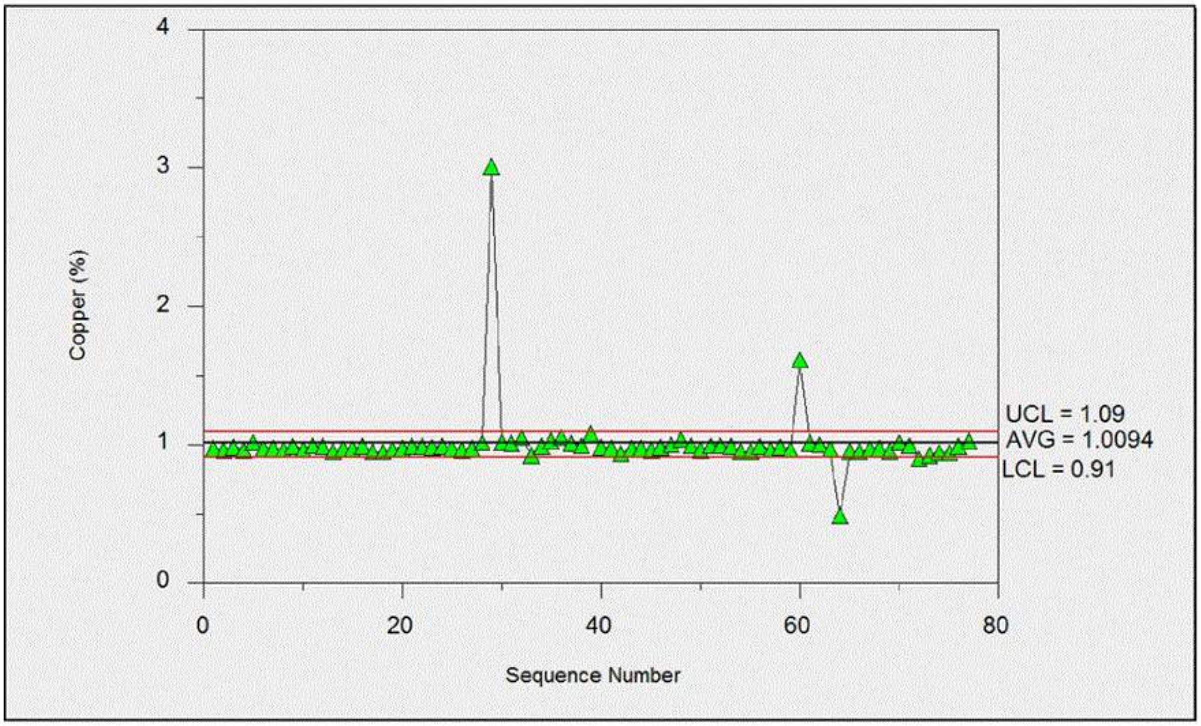

FIGURE 11-3: SRM CGS-7

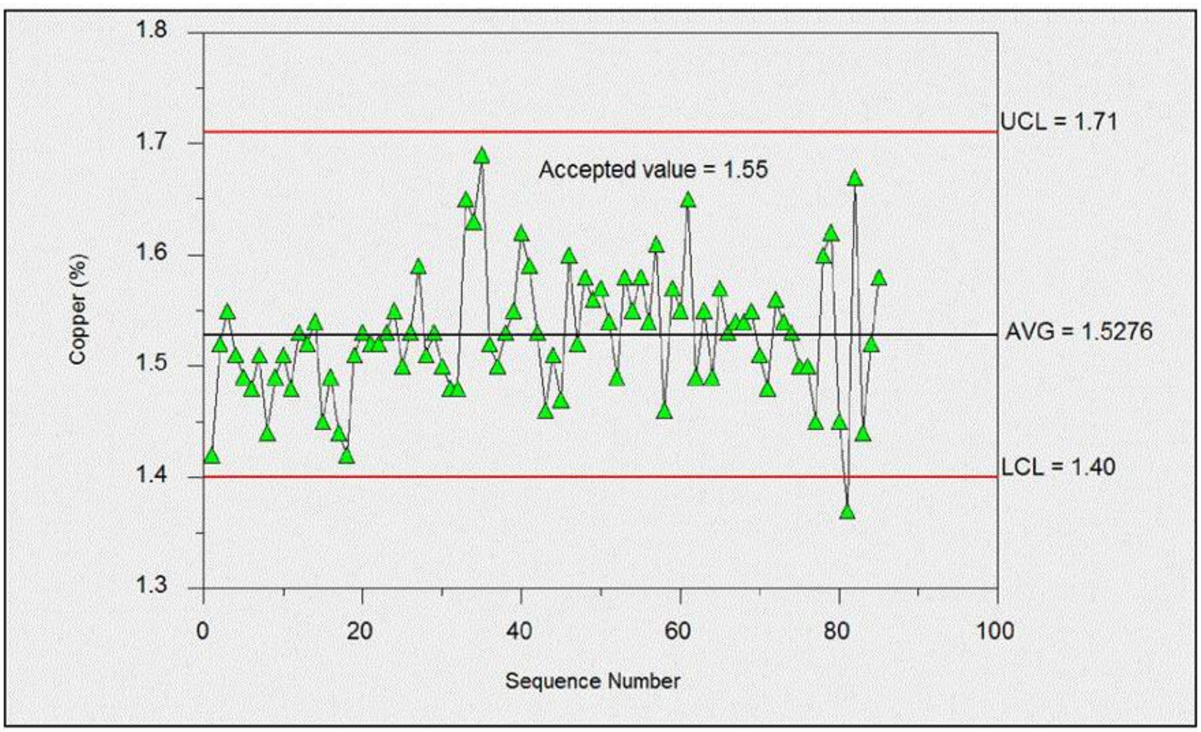

FIGURE 11-4: SRM CGS-10

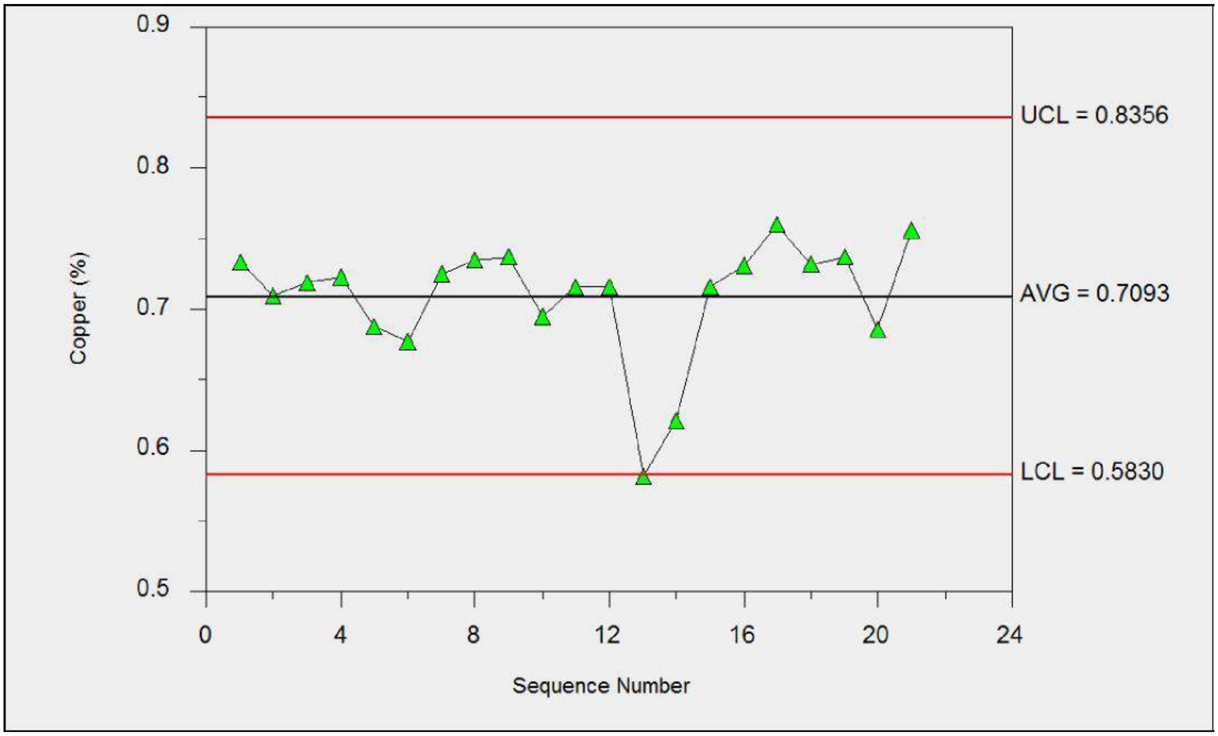

FIGURE 11-5: SRM CDN-FCM-2

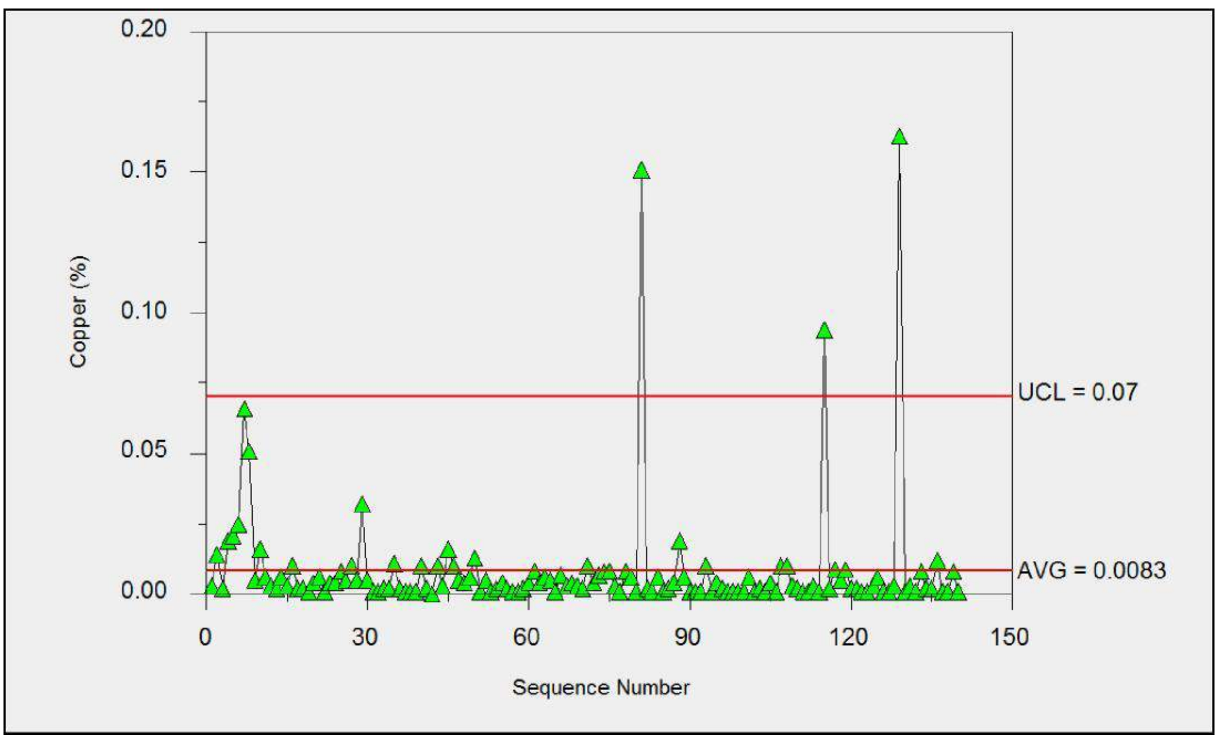

FIGURE 11-6: SRM BLANKS

Coarse Duplicate Sample Performance

Duplicate samples of coarse reject material were assayed to check the sample preparation protocol. If the protocol is adequate, 90% of the duplicate pairs of assays should fall within ± 30% of each other. More than 90% of the pair duplicates fell within the control limits (Figure 11-7).

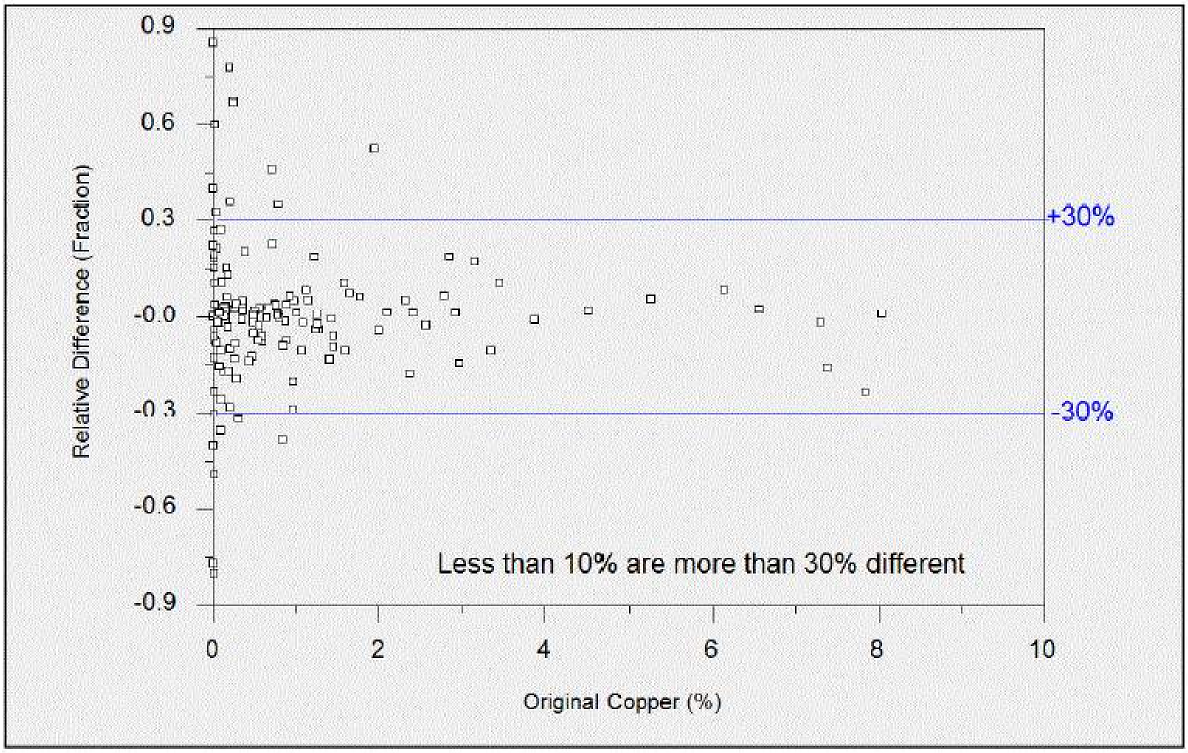

FIGURE 11-7: COARSE DUPLICATES

Conclusions

Results from SRM indicate that the copper assay process was under sufficient control to produce reliable sample assay data for resource estimation. Blank results indicate no contamination in the assay process. Coarse reject results confirm that the sample preparation protocol was adequate to produce the necessary reliability for sample results.

The Chester deposit sampling and assaying program was producing sample information that met industry standards for copper accuracy and reliability. The assay results were sufficiently accurate and precise for use in resource estimation.

11.2.3 Pre-FNR Drill Hole Samples

All diamond drilling was conducted before 1999 (i.e., prior to implementation of NI 43-101) and assessment reports filed with the NBDNR-GSB were the source for information regarding drill hole sampling and procedures. The assessment reports pre-1986 had no details of sample preparation or security measures taken to ensure validity and integrity of the samples taken. It is also not known where the assaying was performed on the drilling in the S-Series of holes. It is assumed, because it is known that most of the staff working on the Chester project at the time were also Nigadoo staff and that the Chester Project was a project of the Sullivan Mining Group, that assaying of the samples taken in the decline in the mid-70s by Sullivan Mining Group was done at its Nigadoo Mine, just northwest of Bathurst. The mine was operating at the time and it has been confirmed by personal communication (by Brooks) with the metallurgist at the mine at the time that the “ore” from the decline was run through the Nigadoo mill. Only a small number of higher grade assays from the early drilling by Kennco are plotted on some of the few drill sections that were found.

There are no known reasons to dispute historical analytical data reported for the Property, since it was done by, or on behalf of, reputable mining companies. However, diamond drilling and analytical techniques of the 1950s and 1960s are different than they are today. Drill core today is generally larger (in diameter) and multi-element analytical techniques are the norm. Typically, drill core in the Bathurst Mining Camp was only analyzed for copper, lead, and zinc, and occasionally for silver during the period that the Chester deposit delineation drilling was conducted.

Various workers conducted more recent sampling in the 1980s and 1990s, but none of them detailed their sampling and analytical techniques in their reports. Noranda, Brunswick Mining and Smelting, and Heath Steele Mines Ltd. had their own geochemical and assay laboratories in the area and most of the assaying was done in-house. Some other assaying may also have been done at a local assay lab, Custom Laboratories Limited (also known as Stairs Laboratories Ltd.), in Bathurst.

As described in *Section 14 Mineral Resource Estimate* of this report, the Pre-FNR data were sufficiently validated through comparisons with the FNR sample data and were deemed reliable for estimation of mineral resources in the Inferred category.

12 DATA VERIFICATION

The data from ten drill holes, representing approximately 6% of the database, were randomly selected and manually verified against the original sources. Collar locations were checked against the original survey reports and the assay intervals were checked with sample books and the grades back to the original assay certificates. No errors were identified in the collar locations. There were two data entry errors identified in the assay results, in both copper and silver grades, for sample 143013 in drill hole C07-073. This is an error rate of less than 0.1% which is considered excellent.

During the data review, and subsequent to the generation of the resource model, it was recognized that drill hole C03-013 had been incorrectly entered using the magnetic azimuth of 45° instead of the true azimuth of 30°. The drill hole was surrounded by a number of FNR drill holes on 12.5-m spacing. This error does not significantly affect the resource estimate.

The collars of all FNR holes were marked with cemented steel rods. The locations of all the holes were visually validated during the site visit.

During the site visit, the QP, Mr. Sim, visually correlated the chalcopyrite content in drill core with the reported assay grades for a random selection of drill holes. No discrepancies were noted.

The sampling protocols used in the development of the FNR database followed accepted industry standards and were verified through an extensive QA/QC program.

Comparisons were made between the validated FNR drilling results and the Pre-FNR drilling data selected over a restricted "test" area. The test involved an interpretation of +0.5% Cu in Stringer Zones 2 and 3 derived from each dataset, and then comparisons of declustered sample data within each domain. The results showed similar grades in each zone, but the Pre-FNR drilling generated a higher volume of lower-grade material. It should be noted that the Pre-FNR drill holes averaged 25-m spacing throughout the test area compared to the 6.25 and 12.5-m spaced FNR holes. It was concluded that the results between the two drilling vintages were sufficiently similar and that the Pre-FNR drilling could be considered reliable for estimating mineral resources within the Inferred category.

The results of the data verification indicate that the database is sound and reliable for the purposes of resource estimation.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

Several sets of drill core samples from the Chester deposit have been submitted to RPC in Fredericton, NB for metallurgical test work. A final report detailing the results of this work was never provided to FNR, but the information outlined below was derived from a series of interim RPC reports.

The location of the various metallurgical test samples is shown in Figure 13-1. Initial test work was conducted on samples submitted from holes C03-001, C03-010 and C03-013. One of these holes (C03-010) intersected VMS-type mineralization and the other two were located in the Stringer zone mineralization. It is suspected that the test results were compromised because the core samples had been stored for more than three years and were oxidized.

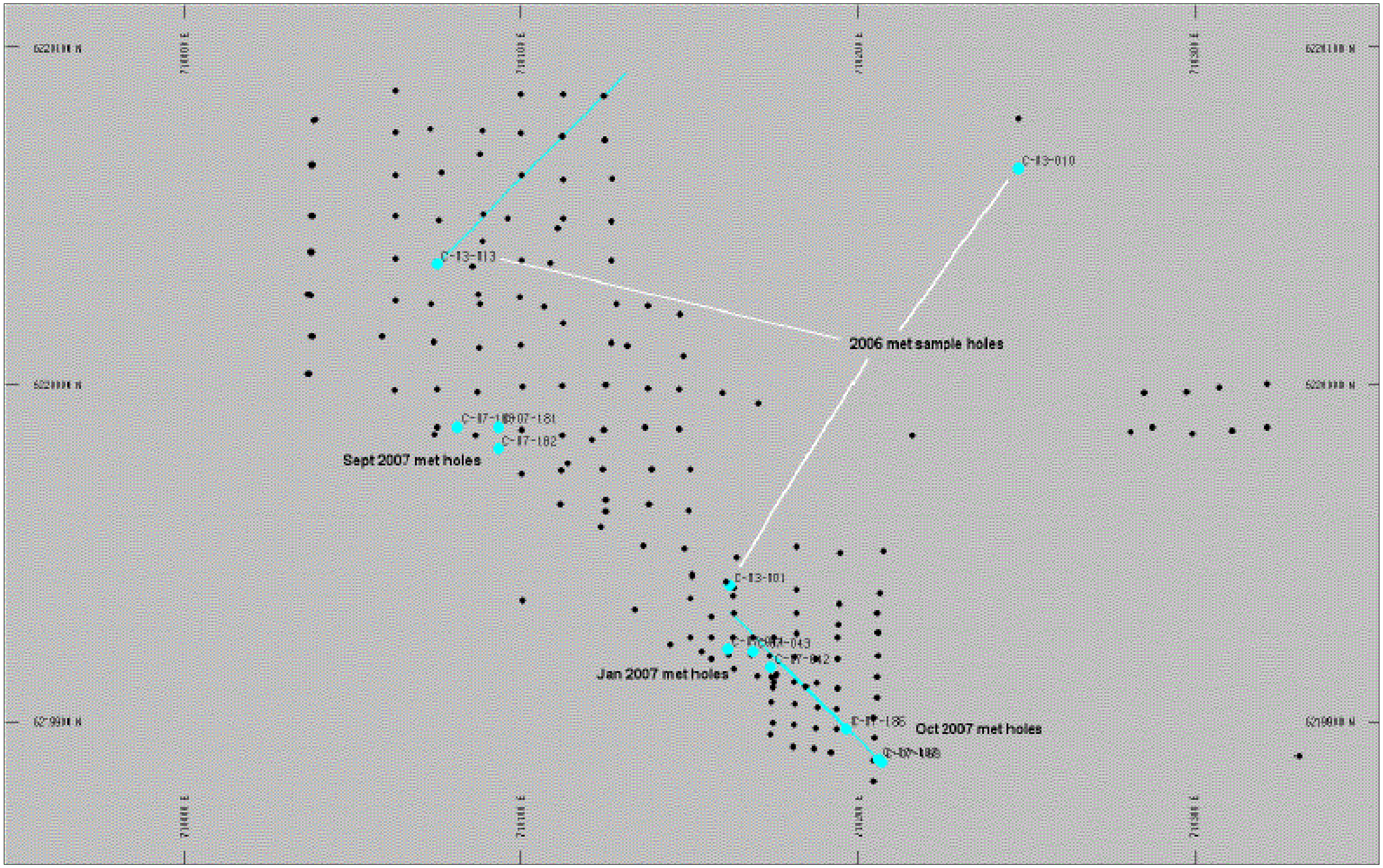

FIGURE 13-1: PLAN SHOWING DRILL HOLE LOCATIONS FOR METALLURGICAL TEST WORK

In January 2007, a second series of (fresh) samples was submitted from drill holes C-07-042, C-07-043, and C-07-044 located in the thick, near-surface portion of the Stringer zone mineralization. These holes intersect representative mineralized material from middle and lower Stringer zone domains (Zones 2 and 3, as described in *Section 14 Mineral Resource Estimate*) with copper grades ranging from 1.20% Cu to 17.11% Cu. The blended, 200-kg sample ran an average grade of 3.5% Cu, 19% Fe, 0.03% Pb, 0.36% Zn, 15 g/t Ag, and 21 ppm In. Two floatation tests were carried out to investigate floatation performance at different grind sizes (P80 < 74.2 um and P80 < 89.9 um). Bulk sulphide (rougher) concentrates produced in both tests contained 10% Cu with copper recoveries greater than 99%. The total sulphur level of the bulk rougher tails was only 0.06% S.

In September 2007, another series of samples was submitted from holes C07-180, C07-181 and C07-182. These holes were located approximately 100-m down-dip of the previous metallurgical samples and intersected the upper and middle Stringer zones. Four individual samples were produced from these holes with grades ranging from 1.65% Cu to 8.50% Cu. Individual bulk sulphide floatation tests were carried out on these samples. Recoveries were unaffected by the range of head-grades with an average greater than 99%. The rougher concentrate grades ranged from 10.4% from the low head grades to as high as 24% Cu from the higher grade samples. Bulk sulphur levels of the rougher tails for this second set of metallurgical tests averaged 2.1% S.

In October 2007, three additional holes were drilled in the upper portion of the Stringer zone (C07-186, C07-187, and C07-188) producing ten individual samples ranging in grade from 2.46% Cu to 10.85% Cu. Samples selected from the September and October metallurgical drill holes were combined to produce a 58-kg composite sample for locked cycle and concentrate cleaning tests. This combined sample averaged 2.41% Cu, 15.9% Fe, 0.04% Pb, 0.35% Zn, 12 g/t Ag, and 11 ppm In. Rougher and cleaner testing showed that regrinding is not required (P80 < 76.8 um) and that one stage of cleaning was necessary to produce saleable concentrates. The rougher concentrate grade was 12.1% Cu (99.4% recovery) using 3418A and PAX as rougher reagents and 18.0% Cu (98.4% recovery) using 5100 reagent. First stage cleaning produced a concentrate grade of 25.5% Cu and the second stage increased the grade to 27-28% Cu (96-97% recoveries).

Locked cycle tests were carried out on a series of 10, 1,760-g samples split from the 58-kg composited drill core sample. Each sample was crushed in a rod mill and run through the circuit for 10 complete cycles with the Copper cleaner 1 scavenger concentrates and Copper cleaner 2 tails recycled to each subsequent cycle. The results of the testing showed that the batch floatation tests achieved the best performance (27% Cu concentrate grade with 97% recovery) compared to the locked cycle tests (25% Cu concentrate grade with 100% recovery). The increased residential time in the locked cycle tests resulted in higher recoveries but a lower concentrate grade due to dilution (floating) of low-grade intermediate products.

The location of samples selected for metallurgical testing appears to be representative of the Stringer zone mineralization present in the Chester deposit. The test work conducted to date indicates that concentrates grades in the range of 27-28% Cu can be produced at copper recoveries of 97-98%. Testing also shows that the tailings contain very low levels of contained sulphur.

14 MINERAL RESOURCE ESTIMATES

14.1 INTRODUCTION

The mineral resource estimate was prepared under the direction of Robert Sim, P.Geo, with the assistance of Bruce Davis, PhD, FAusIMM. Mr. Sim is the independent Qualified Person within the meaning of NI 43-101 for the purposes of mineral resource estimates contained in this report. The resource model was originally generated for FNR and presented in a Technical Report dated May 30, 2008, with an effective date of March 20, 2008. There has been no drilling or additional work conducted on the Property since that time that could affect the resource estimate and, therefore, the 2008 model remains valid for the Chester project. The 2008 resource considered only an underground mining scenario for the project. This updated mineral resource statement has been updated to reflect current metal prices and has been evaluated using combinations of open pit and underground extraction options.

Estimations are made from 3D block models based on geostatistical applications using commercial mine planning software (MineSight® v4.00.02). The project limits are based in the UTM coordinate system using a nominal block size of 2x2x2m. The primary orientation of the drilling and the subsequent geologic interpretation has been conducted using a series of vertical north-south cross sections spaced at varying intervals throughout the deposit.

The resource estimate was generated using drill hole sample assay results and the interpretation of a geologic model which relates to the spatial distribution of copper, zinc, and silver. Interpolation characteristics were defined based on the geology, drill hole spacing, and geostatistical analysis of the data. The resources were classified according to their proximity to the sample locations and are reported, as required by NI 43-101, according to the *CIM Definition Standards for Mineral Resources and Mineral Reserves* (November 2010).

This report includes estimates for mineral resources. No mineral reserves were prepared or reported.

14.2 AVAILABLE DATA

As described in *Section 10 Drilling*, there are essentially two sets of drilling data on the Chester Property: Pre-FNR and FNR drilling.

Pre-FNR drilling includes a total of 598 holes drilled prior to FNR's involvement in the project; 200 of those holes are located in the area of the Stringer zone mineralization. Pre-FNR drill holes tend to be spaced on 20-m intervals.

FNR drilling includes a total of 198 holes on the Property; 179 of those holes are proximal to the Stringer zone mineralization described in this report. The remaining 19 holes test the VMS zone or other targets too distant to affect the resource model. FNR drill holes are variably spaced at

6.25-m intervals (and locally 3.25 m) in the upper part of the Stringer zones to an average of 12.5-m spacing throughout the majority of the drilled area, expanding to 25-m spacing at the western limits. The distribution of these holes is shown in plan view in Figures 10-1 and 10-2.

The FNR drilling contains a total of 6,543 samples analyzed for copper, zinc, and silver (as part of a 58-element ICP/MS analysis package). Individual sample intervals range from 0.1-m to 11.9-m with an average of 1.41 m; the longest rock sample is 6-m long, and there are several longer samples obtained from the overburden. Sample intervals have been selected so that they do not straddle a geologic boundary, and samples have been selected to represent intervals of similar sulphide type or content.

The geologic information is derived primarily through observations during logging and includes lithology and alteration assemblage.

Pre-FNR drilling sample data were obtained from several sources including drill log records and old cross sections. Some of the intervals in this database are composites derived from historic cross sections. The 200 historic drill holes in the area of interest to this mineral resource contain a total of 2,850 samples which average 2.13-m long. The Pre-FNR drill hole samples which intersected Stringer zone mineralization have only been analyzed for copper. Comments from previous reports indicate that the historical data may exclude much of the lower-grade copper intervals.

Sampling in both the FNR and Pre-FNR drilling has been selective based on the visual identification of mineralized intervals. All drill hole intervals that have not been sampled and analyzed have been set to a grade of zero (0) prior to compositing.

14.3 GEOLOGIC MODEL, DOMAINS AND CODING

The Chester deposit exhibits properties typical of a volcanogenic massive sulphide (VMS) deposit comprising an upper massive sulphide (MS) zone underlain by a “stringer” zone which occurs as a network of veins. Stringer zones often show a very erratic distribution of mineralization as a network of dendritic veins. At Chester, however, the Stringer zone mineralization occurs in a series of three (or possibly more) sub-parallel lenses or zones which show a reasonable degree of consistency in location, thickness, and grade. It is believed that these represent paleo-structures through which the mineralizing fluids were channelled during the formation of the MS zone. This consistency has allowed for the interpretation of three mineralized horizons which are used as distinct domains during the development of the resource model.

Three Stringer zones have been interpreted from the drill hole information based on the distribution of copper grades which exceed 0.5% Cu. These zones strike 200 degrees and dip at

-20 degrees to the west-northwest and range from 1-m up to 20-m thick, with individual zones separated by 10-m to 15-m of barren to patchy mineralized chlorite schist. The upper zone (Zone 1) is the smallest lens of mineralization, averaging about 4-m thick, and measuring about 90-m in diameter. Based on a combination of FNR and historic drilling results, the middle (Zone 2) and lower (Zone 3) Stringer zone domains extend for about 200-m along strike and approximately 500-m down plunge. Wider spaced drilling farther down-dip indicates that copper mineralization continues for up to an additional 500 m, but based on limited data it appears to be relatively narrow and somewhat irregularly distributed.

Stringer zone mineralization occurs in veins ranging from less than one centimetre to several decimetres thick, containing varying amounts of chalcopyrite, pyrrhotite, and pyrite in a matrix typically comprised of chlorite (+/- biotite). The host rocks are most likely pervasively altered dacitic volcanics.

Immediately east of the Stringer zone domains there exists a lens of massive sulphides comprised of varying amounts of pyrite, pyrrhotite, sphalerite, galena, and chalcopyrite. FNR did not effectively test the MS zone with drilling and, as a result, this Technical Report includes only mineral resource estimations for the copper-rich Stringer zone mineralization on the Chester Property.

Stringer domain Zone 3, the lower domain, increases in thickness and grade on the eastern extents where it ultimately comes in contact with the MS zone. This feature indicates that this may be the primary feeder zone for the MS zone and that additional lenses related to Stringer Zones 1 and 2 may be eroded away.

Other than some thin surficial oxidation where sulphides occur at surface, there are no indications of leaching or significant oxidation of the resource. Although (small) outcrops are relatively common on the Property, the majority of the area above the deposit area is covered by overburden ranging in thickness from 1-m to 10-m. The bedrock-overburden interface has been interpreted from the drill hole lithology codes.

The Stringer zone domains have been interpreted from drill hole sample data on a series of north-south-oriented cross sections through the deposit. This sectional interpretation has been linked to form a series of three distinct, 3D wireframe domains (Stringer Zones 1, 2, and 3). In the area covered by the 2006-07 FNR drilling program, the interpretation ignores all pre-FNR drill holes. Pre-FNR drilling data were only used in the Stringer zone resource model estimates in areas which have not yet been tested by FNR.

The domains used during the development of the resource model are summarized in Table 14.1 and are shown in Figures 14-1 and 14-2.

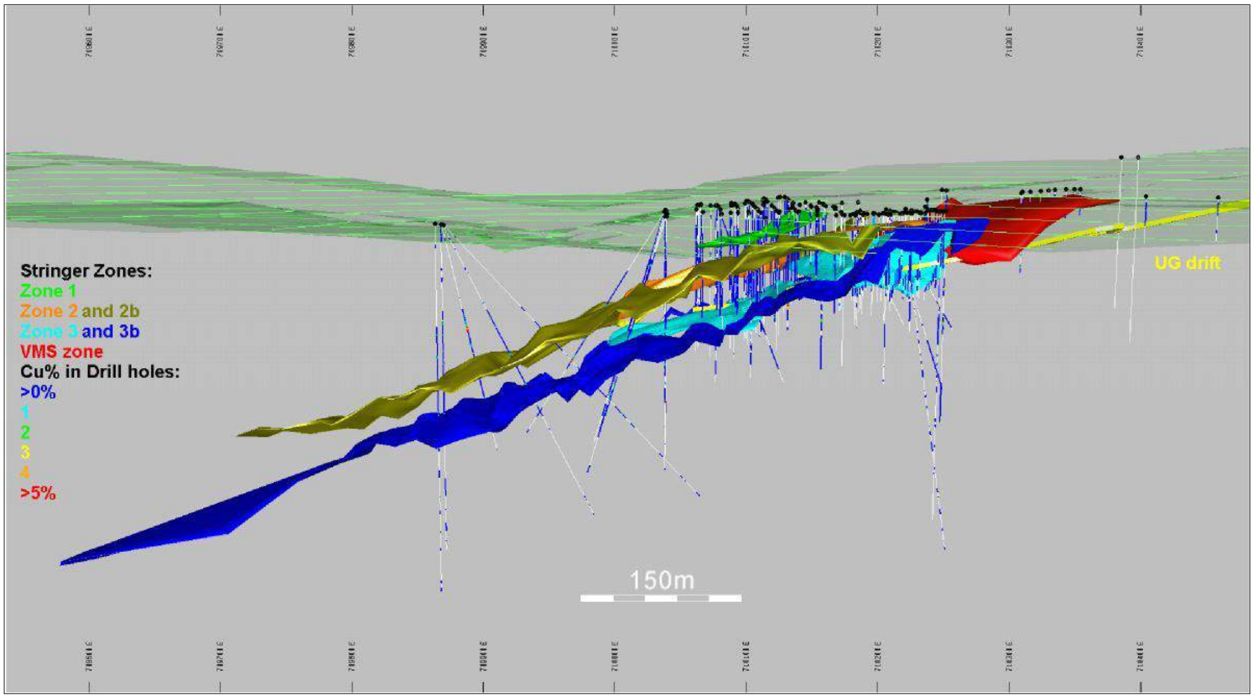

FIGURE 14-1: GEOLOGY MODEL LOOKING NORTH

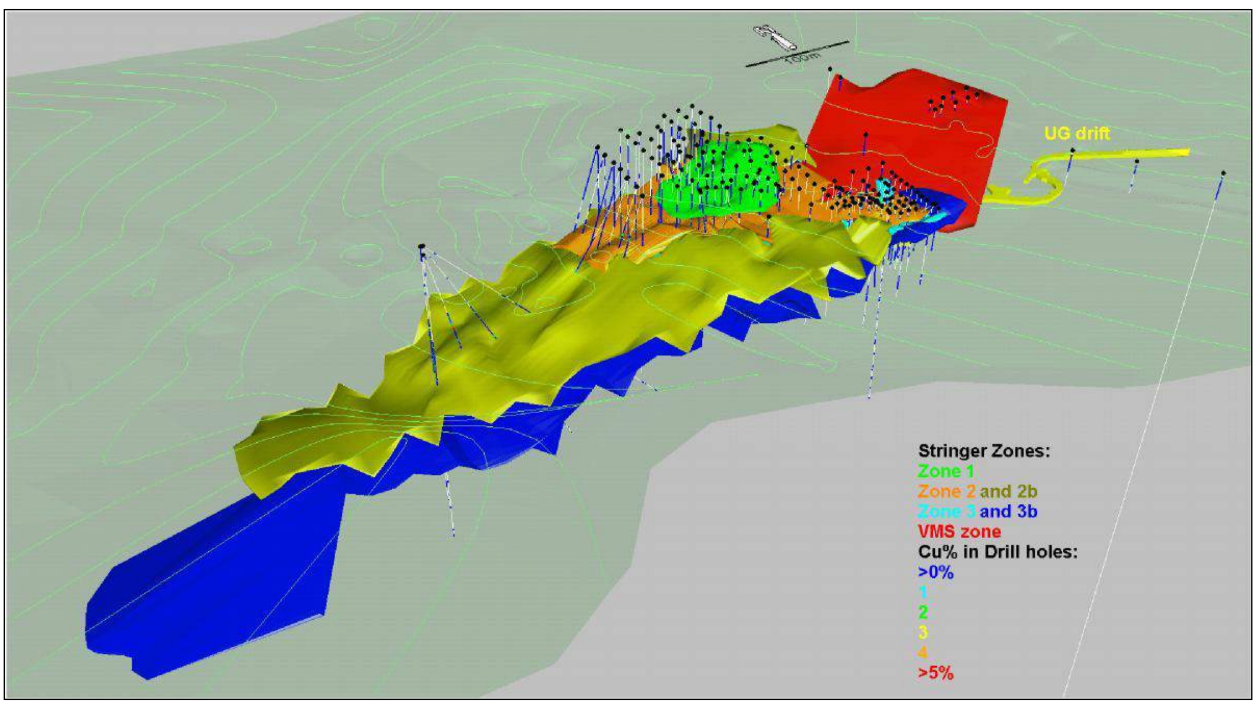

FIGURE 14-2: GEOLOGY MODEL ISOMETRIC VIEW

TABLE 14.1: STRINGER ZONE AND VMS DOMAINS AND CODING

Domain	Code #	Comments
Zone 1	10	Upper Stringer zone domain based on FNR drilling data
Zone 2	20	Middle Stringer zone domain based on FNR drilling
Zone 2b	21	Lateral extension of middle Stringer zone based on Pre-FNR drilling data
Zone 3	30	Lower Stringer zone domain based on FNR drilling
Zone 3b	31	Lateral extension of lower Stringer zone domain based on Pre-FNR drilling data
Zone 4	40	Patchy mineralized area between the three main Stringer zones
OVB	0	Overburden

14.4 COMPOSITING

Compositing of drill hole samples is carried out in order to standardize the database for further statistical evaluation. This step eliminates any effects related to the sample length which may exist in the data.

The original sample data were composited to standard lengths of 1-m. Drill hole composites are length-weighted and have been generated “down-the-hole” meaning that composites begin at the top of each hole and are generated at 1-m intervals down the length of the hole. The contacts of the Stringer and MS zone domains were honoured during compositing of drill holes. Several holes were randomly selected and the composited values were checked for accuracy. No errors were found.

Note: Due to a lack of bulk density (specific gravity) data in the majority of drill holes, composites have only been weighted by the sample length. There is a moderate correlation between grade and specific gravity (SG) and it is common practice, in deposits of this type, to generate composites that are weighted by both length and density. Averaging of data using both sample length and density results in composite samples with higher grades over the mineralized intervals. It is recommended that, if possible, the bulk density database, which is currently limited to 25 holes, be expanded.

14.5 EXPLORATORY DATA ANALYSIS

Exploratory data analysis (EDA) involves the statistical evaluation of the database in order to better understand the characteristics of the data that may control grade. One of the main purposes of this exercise is to determine if there is evidence of spatial distinctions in grade which may require the separation and isolation of domains during interpolation. The application of separate domains prevents unwanted mixing of data during interpolation and, therefore, the resulting grade model will better reflect the unique properties of the deposit. However, applying domain boundaries in areas where the data are not statistically unique may impose a bias in the distribution of grades in the model.

A domain boundary, which segregates the data during interpolation, is typically applied if the average grade in one domain is significantly different from that of another domain. A boundary may also be applied where there is evidence that a significant change in the grade distribution has occurred across the contact.

Unless otherwise noted, the EDA and conclusions presented below are restricted to FNR drill holes and sample data.

14.5.1 Basic Statistics by Domain

The basic statistics for the distribution of copper, zinc, and silver by zone domain are listed in Tables 14.2, 14.3, and 14.4; the data are derived from FNR drill holes only.

TABLE 14.2: SUMMARY OF BASIC STATISTICS OF COPPER BY ZONE DOMAIN

Domain	# smp	Min (Cu%)	Max (Cu%)	Mean (Cu%)	Standard Deviation
Zone 1	152	0.03	9.40	1.30	1.51
Zone 2	667	0	12.11	1.86	1.67
Zone 3	1,327	0.02	12.70	2.02	1.89
Zone 4	7,099	0	11.05	0.29	0.61

Note: 1-m composite DH data weighted by sample length.

TABLE 14.3: SUMMARY OF BASIC STATISTICS OF ZINC BY ZONE DOMAIN

Domain	# smp	Min (Zn%)	Max (Zn%)	Mean (Zn%)	Standard Deviation.
Zone 1	152	0.01	1.77	0.12	0.25
Zone 2	667	0	0.86	0.06	0.06
Zone 3	1,326	0	8.97	0.15	0.46
Zone 4	7,108	0	15.35	0.14	0.76

Note: 1-m composite DH data weighted by sample length.

TABLE 14.4: SUMMARY OF BASIC STATISTICS OF SILVER BY ZONE DOMAIN

Domain	# smp	Min (Ag g/t)	Max (Ag g/t)	Mean (Ag g/t)	Standard Deviation
Zone 1	148	0.1	32.4	4.5	5.36
Zone 2	643	0.1	97.7	4.4	5.01
Zone 3	1,316	0	278.2	6.3	12.14
Zone 4	6,760	0	40.2	1.1	2.77

Note: 1-m composite DH data weighted by sample length.

The results in Tables 14.2, 14.3, and 14.4 show the Stringer zones to contain appreciable copper content and moderate silver grade but very low zinc grades. The area between the three main Stringer zones (Zone 4) shows local high grades, but, overall, this is generally weakly mineralized. Samples have only been collected in localized areas in Zone 4.

14.5.2 Contact Profiles

Contact profiles evaluate the nature of grade trends between two domains; they graphically display the average grades at increasing distances from the contact boundary. Those contact profiles that show a marked difference in grade across a domain boundary indicate that the two datasets should be isolated during interpolation. Conversely, if a more gradual change in grade occurs across a contact, the introduction of a *hard* boundary (i.e., segregation during interpolation) may result in a much different trend in the grade model; in this case, the change in grade between domains in the model is often more abrupt than the trends seen in the raw data. Finally, a flat contact profile indicates no grade changes across the boundary; in the case, *hard* or *soft* domain boundaries will produce similar results in the model.

A series of contact profiles were generated to evaluate the nature of copper grades through the various Stringer zone domains. Although the three main Stringer zones are separated by 10-15 m, a series of contact profiles were evaluated. As expect, there are no indications of significant grade differences between Zones 1, 2, and 3. Figure 14-3 shows a contact profile for copper grades across the boundary between Zones 1, 2, and 3 (combined) verses Zone 4. The abrupt change in grade across this contact indicates that this should be treated as a hard boundary during block grade interpolations.

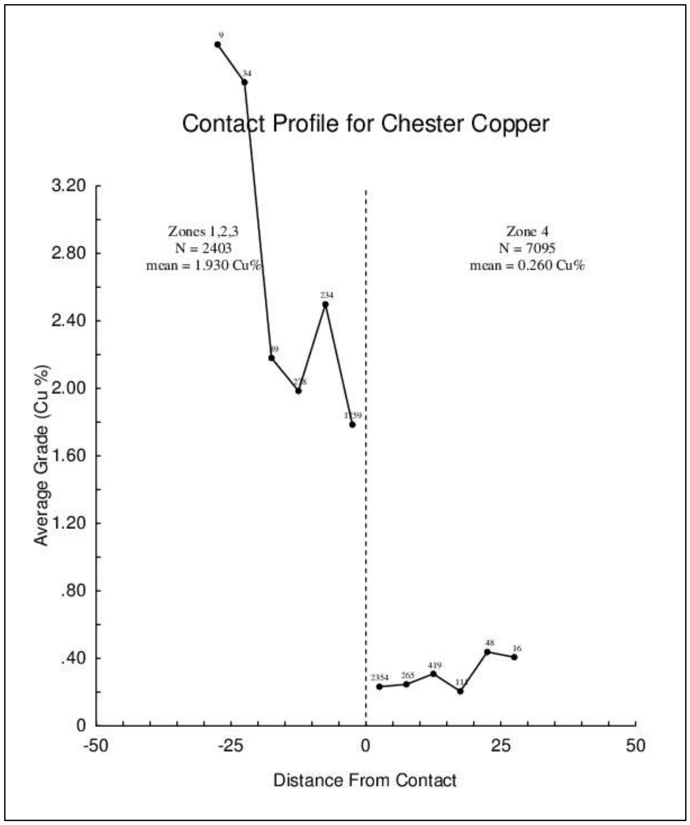

FIGURE 14-3: CONTRACT PROFILE OF COPPER IN STRINGER ZONE DOMAINS

14.5.3 Conclusions and Modeling Implications

The results of the EDA indicate very similar results for the distribution of copper, zinc, and silver in the three main Stringer zone domains and these tend to be distinctly different from the surrounding Stringer zone area (Zone 4). The Stringer zones tend to contain appreciable copper and only minor amounts of silver with essentially no zinc content. This trend is typical of Stringer zones underlying most VMS deposits.

Although the three main Stringer zones show similar nature and grade distributions, they remain separated with “hard” boundaries during grade interpolations due to the fact that these zones are physically separated from one another. The distribution of samples in Zone 4 is inconsistent and generally restricted to areas of visual mineralization. Although grade estimates are made in Zone 4 for information purposes, the distribution of samples in this domain does not support the estimation of mineral resources.

14.6 BULK DENSITY DATA

Measurements for bulk density (SG) have been completed on samples within the Stringer zone domains in a total of 25 drill holes spaced at between 12.5-m and 25-m intervals throughout the deposit area.

Bulk density measurements were conducted by FNR personnel in sawed (½) drill core sample material stored at the FNR facility in Bathurst. Representative pieces of core, measuring between 10 and 15 centimetres long, were selected on approximately 1-m intervals and weighed to the nearest 0.10 g. The volume of the core was determined by water displacement in a graduated cylinder. The core was not sealed prior to submersion, but porosity is not considered an issue in these rocks. A total of 403 individual measurements were taken which ranged between 2.55 t/m^3 and 4.18 t/m^3, with a mean of 3.05 t/m^3. Six percent of the samples were checked by a second person and the relative difference between these duplicate measurements was found to be 0.5% indicating that the process and results can be considered reliable.

The distribution of samples is considered to be sufficient to allow for estimation of SG values in Stringer Zones 1, 2, and 3 in the block model using the inverse distance interpolation method. Due to the variability in density inherent in stringer-type deposits, additional SG measurements are required, however, the drill core has subsequently been discarded.

As an alternative, density values have been assigned to blocks in the resource model based on the estimated copper grade. A scatter plot of SG verses copper grade in Zones 1-3 show a correlation coefficient of 0.73. SG values are estimated in (Inferred) resources which use the Pre-FNR drilling (Stringer Zones 2b and 3b), using the following regression formula:

$$SG=2.82 + (0.101 * Cu\%)$$

14.7 EVALUATION OF OUTLIER GRADES

Histograms and probability plots were reviewed in order to identify the presence of anomalous outlier grades for copper, zinc, and silver in the composited (1-m) drilling database. Following a review of the physical location of potentially erratic samples in relation to the surrounding sample data, it was decided that these would be controlled during block grade interpolations using an outlier limitation. An outlier limitation controls the distance of influence of samples above a defined grade threshold; in this case, all samples are limited to a maximum distance of influence of 5-m during block grade interpolation. The grade thresholds for copper, zinc, and silver are listed in Table 14.5.

TABLE 14.5: OUTLIER GRADE ANALYSIS BY ZONE DOMAIN

Domain	Copper			Zinc			Silver		
	Cu (%)	# smp	Metal Lost (%)	Zn (%)	# smp	Metal Lost (%)	Ag (g/t)	# smp	Metal Lost (%)
Zones 1,2 & 3 (1)	10.0	13	-1.0%	1.0	17	-16.7%	30.0	10	-2.5%
Zones	10.0	2	-2.8%	n/a	-	-	n/a	-	-

2b & 3b (2)									
Zone 4 (3)	4.0	38	-12.4%	n/a	-	-	n/a	-	-

Notes: 1-m composite DH data. # smp is number of intervals above threshold limit.

(1) Based on FNR DH data.

(2) Based on Pre-FNR DH data, no Zn or Ag grades available in these samples.

(3) Insufficient Zn and Ag data in Zone 4.

14.8 VARIOGRAPHY

The degree of spatial variability in a mineral deposit depends on both the distance and direction between points of comparison. Typically, the variability between samples increases as the distance between those samples increases. If the degree of variability is related to the direction of comparison, then the deposit is said to exhibit anisotropic tendencies which can be summarized with the search ellipse. The semi-variogram is a common function used to measure the spatial variability within a deposit.

The components of the variogram include the nugget, the sill, and the range. Often samples compared over very short distances, even samples compared from the same location, show some degree of variability. As a result, the curve of the variogram often begins at some point on the y-axis above the origin; this point is called the *nugget*. The nugget is a measure of not only the natural variability of the data over very short distances but also a measure of the variability which can be introduced due to errors during sample collection, preparation, and the assay process.

The amount of variability between samples typically increases as the distance between the samples increases. Eventually, the degree of variability between samples reaches a constant, maximum value; this is called the *sill*, and the distance between samples at which this occurs is called the *range*.

Variograms were generated using the commercial software package Sage 2001© developed by Isaaks & Co. Multidirectional variograms were generated for copper, zinc, and silver in the Stringer zone domains; the results are summarized in Tables 14.6, 14.7, and 14.8.

Note: Although referred to as a “variogram” in this report, the spatial evaluation of the data was conducted using a correlogram rather than the traditional variogram. The correlogram is normalized to the variance of the data and is less sensitive to outlier values, generally giving better results.

TABLE 14.6: VARIOGRAM PARAMETERS – COPPER

				1st Structure			2nd Structure		
Zone	**Nugget**	**S1**	**S2**	**Range (m)**	**AZ**	**Dip**	**Range (m)**	**AZ**	**Dip**
Zones 1,2,2b,3,3b	0.255	0.565	0.181	11	118	20	204	310	-11
	Spherical model			4	243	58	24	329	78
				3	19	24	18	41	-4
Zone 4	0.279	0.595	0.126	8	99	21	125	96	-4
	Spherical model			6	265	69	62	6	-4
				4	8	5	44	53	84

Note: Correlograms conducted on 1-m DH composite data.

TABLE 14.7: VARIOGRAM PARAMETERS – ZINC

				1st Structure			2nd Structure		
Zone	**Nugget**	**S1**	**S2**	**Range (m)**	**AZ**	**Dip**	**Range (m)**	**AZ**	**Dip**
Zones 1,2,2b,3,3b	0.169	0.374	0.458	16	136	-4	89	145	4
	Spherical model			8	47	18	48	53	19
				5	34	-72	19	246	71
Zone 4	0.133	0.175	0.692	27	88	-1	121	88	11
	Spherical model			13	4	77	36	358	2
				4	358	-13	16	257	79

Note: Correlograms conducted on 1-m DH composite data.

TABLE 14.8: VARIOGRAM PARAMETERS – SILVER

				1st Structure			2nd Structure		
Zone	**Nugget**	**S1**	**S2**	**Range (m)**	**AZ**	**Dip**	**Range (m)**	**AZ**	**Dip**
Zones 1,2,2b,3,3b	0.169	0.700	0.131	20	117	5	199	67	12
	Spherical model			3	13	70	71	338	-2
				3	29	-19	19	257	78
Zone 4	0.142	0.255	0.603	24	97	33	148	94	16
	Spherical model			11	285	57	38	5	-1
				4	9	-4	23	278	74

Note: Correlograms conducted on 1-m DH composite data.

14.9 MODEL SETUP AND LIMITS

A block model was initialized in MineSight® and the dimensions are defined in Table 14.9. The selection of a nominal block size measuring 2 x 2 x 2 mV is considered appropriate with respect to the current drill hole spacing, as well as the selective mining unit (SMU) size which is typical of an operation of this type and scale.

TABLE 14.9: BLOCK MODEL LIMITS

Direction	Minimum	Maximum	Block Size (m)	# Blocks
East	709590	710400	2	405
North	5219800	5220150	2	175
Elevation	40	334	2	147

Blocks in the model were coded on a majority basis with the stringer and VMS zone domains. During this stage, blocks along a domain boundary are coded if >50% of the block occurs within the boundaries of that domain. The proportion of blocks which occur within either the three main Stringer zones (Zones 1-3) or the VMS zone are stored as a percentage from which accurate in-situ resources can be determined.

The proportion of blocks which occur below the bedrock/overburden interface is also calculated and stored within the model as individual percentage items. These values are also used as a weighting factor in determining the in-situ resources for the deposit.

14.10 INTERPOLATION PARAMETERS

The block model grades for copper, zinc, and silver have been estimated using Ordinary Kriging (OK). The results of the OK estimation were compared with the Hermitian Polynomial Change of Support model (also referred to as the Discrete Gaussian Correction). This method is described in greater detail in *Section 14.11.2*.

The Chester OK model was generated with a relatively limited number samples in order to match the change of support or Herco (*Her*mitian *Co*rrection) grade distribution. This approach reduces the amount of smoothing or averaging in the model, and, while there may be some uncertainty on a localized scale, this approach produces reliable estimates of the recoverable grade and tonnage for the overall deposit.

All grade estimations use length-weighted composite drill hole sample data.

The interpolation parameters for copper, zinc, and silver are summarized by domain in Tables 14.10, 14.11, and 14.12.

TABLE 14.10: INTERPOLATION PARAMETERS FOR COPPER

Interpolation Domain	Search Ellipse Range (m)			# Composites			Other
	X	Y	Z	Min/block	Max/block	Max/hole	
Zone 1	100	100	100	3	10	2	1 DH per octant
Zones 2 & 2b	100	100	100	4	12	3	1 DH per quadrant
Zones 3 & 3b	100	100	100	4	12	3	1 DH per quadrant
Zone 4 (1)	75	75	15	3	8	2	1 DH per quadrant

Note: (1) Ellipse orientation 290 Az, -15 Dip.

TABLE 14.11: INTERPOLATION PARAMETERS FOR ZINC

Interpolation Domain	Search Ellipse Range (m)			# Composites			Other
	X	Y	Z	Min/block	Max/block	Max/hole	
Zones 1,2,2b,3,3b	100	100	100	3	10	2	1 DH per octant
Zone 4 (1)	75	75	15	3	10	2	1 DH per quadrant

Note: (1) Ellipse orientation 290 Az, -15 Dip.

TABLE 14.12: INTERPOLATION PARAMETERS FOR SILVER

Interpolation Domain	Search Ellipse Range (m)			# Composites			Other
	X	Y	Z	Min/block	Max/block	Max/hole	
Zones 1,2,2b,3,3b	100	100	100	3	6	2	1 DH per octant
Zone 4 (1)	75	75	15	3	8	2	1 DH per quadrant

Note: (1) Ellipse orientation 290 Az, -15 Dip.

14.11 VALIDATION

The results of the modeling process were validated using several methods, including a thorough visual review of the model grades in relation to the underlying drill hole sample grades, comparisons with the change of support model, comparisons with other estimation methods, and grade distribution comparisons using swath plots.

14.11.1 Visual Inspection

A detailed visual inspection of the block model was conducted in both section and plan to ensure the desired results following interpolation. This includes confirmation of the proper coding of blocks within the respective domains and below the topographic surface. The distribution of block grades were also compared relative to the drill hole samples in order to ensure the proper representation in the model.

14.11.2 Model Checks for Change of Support

The relative degree of smoothing in the block model estimates were evaluated using the Discrete Gaussian of Hermitian Polynomial Change of Support method (described by Journel and Huijbregts, Mining Geostatistics, 1978). With this method, the distribution of the hypothetical block grades can be directly compared to the estimated (OK) model through the use of pseudo-grade/tonnage curves. Adjustments are made to the block model interpolation parameters until an acceptable match is made with the Herco distribution. In general, the estimated model should be slightly higher in tonnage and slightly lower in grade when compared to the Herco distribution at the projected cut-off grade. These differences account for selectivity and other potential ore-handling issues which commonly occur during mining.

The Herco (*He*rmitian *co*rrection) distribution is derived from the declustered composite grades which have been adjusted to account for the change in support going from smaller drill hole composite samples to the large blocks in the model. The transformation results in a less skewed distribution but with the same mean as the original declustered samples.

Separate Herco plots were generated for the copper distribution in Stringer domains Zone 1, 2, and 3. All show the desired degree of correspondence between the OK and Herco curves. These plots are shown in Figures 14-4 through 14-6.

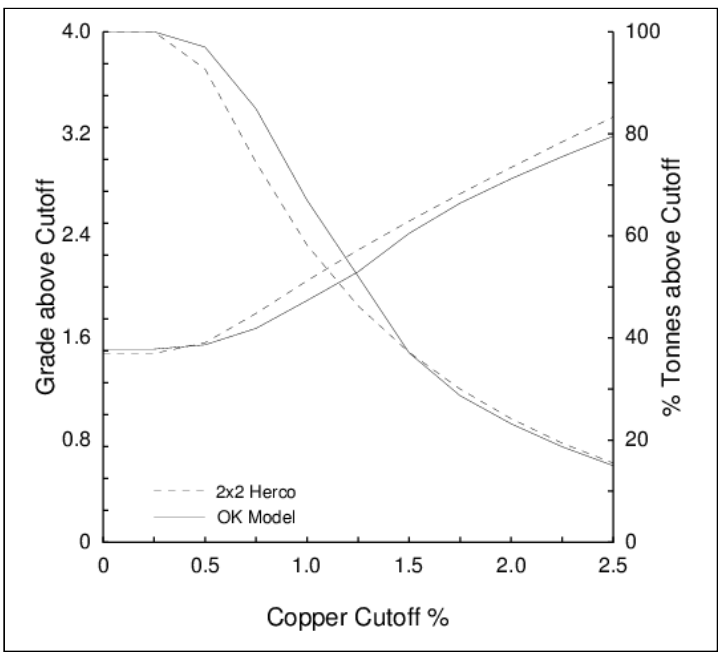

FIGURE 14-4: CHANGE OF SUPPORT GRAPH FOR COPPER IN ZONE 1

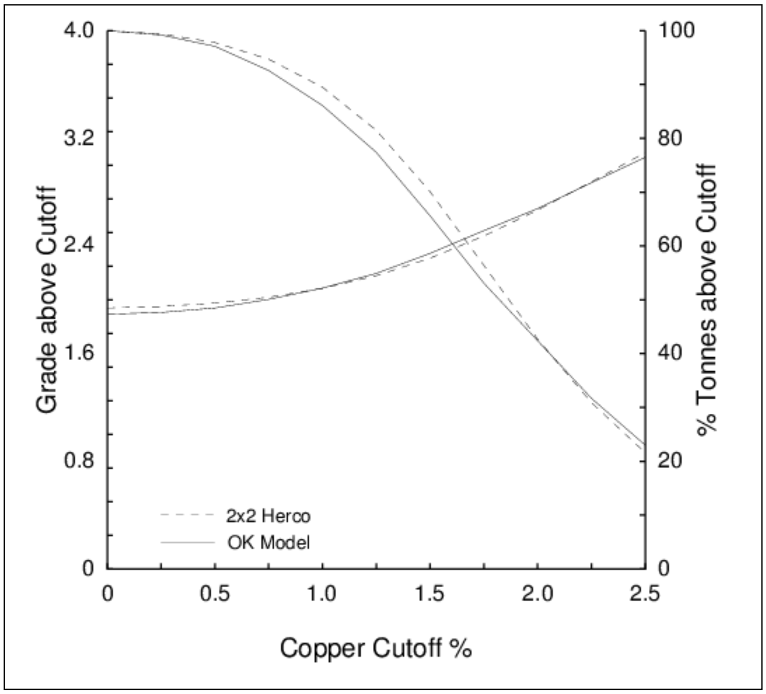

FIGURE 14-5: CHANGE OF SUPPORT GRAPH FOR COPPER IN ZONE 2

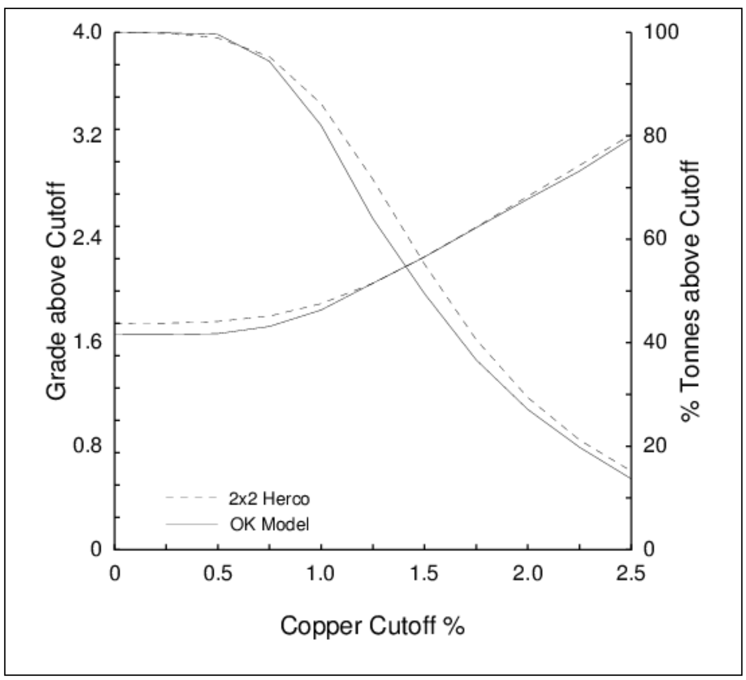

FIGURE 14-6: CHANGE OF SUPPORT GRAPH FOR COPPER IN ZONE 3

14.11.3 Comparison of Interpolation Methods

For comparison purposes, additional models for copper, zinc, and silver were generated using both the inverse distance weighted (IDW) and nearest neighbour (NN) interpolation methods (the NN model was made using data composited to 2-m intervals). Comparisons are made between these models on grade/tonnage curves for the distribution of copper in the Stringer zones (Figure 14-7). The results show very good correlation between these models. Reproduction of the model using different methods tends to increase the confidence in the overall resource.

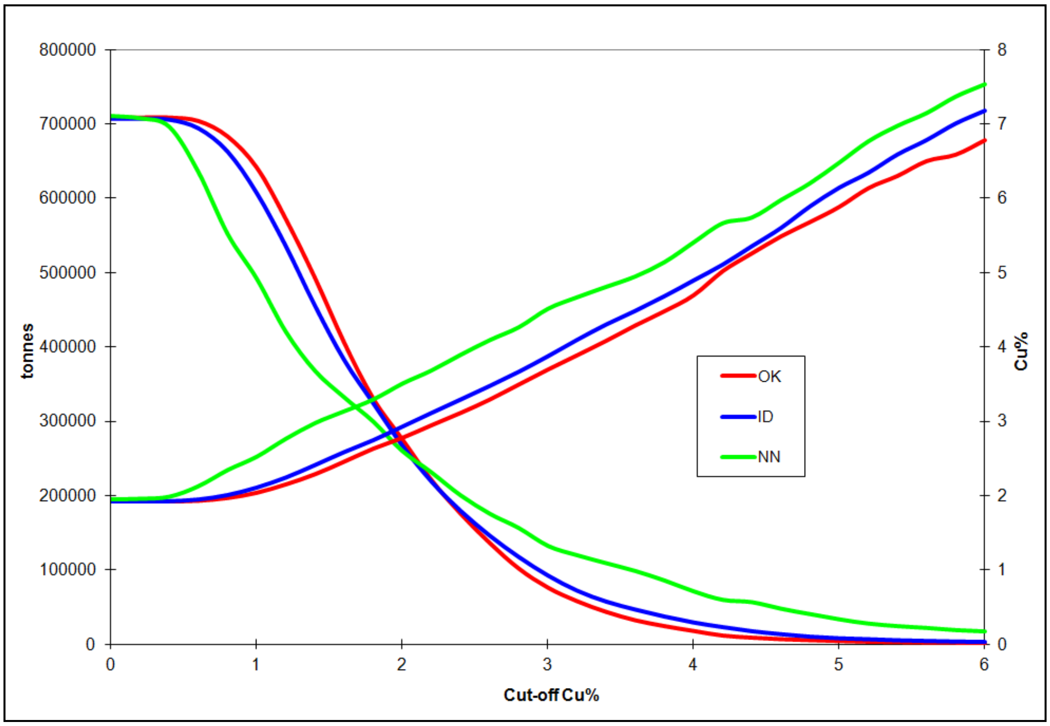

FIGURE 14-7: COPPER GRADE - TONNAGE COMPARISON OK, NN, AND IDW MODELS

14.11.4 Swath Plots (Drift Analysis)

A swath plot is a graphical display of the grade distribution derived from a series of bands, or swaths, generated in several directions through the deposit. Grade variations from the OK model are compared using the swath plot to the distribution derived from the declustered (NN) grade model.

On a local scale, the NN model does not provide reliable estimations of grade but, on a much large scale, it represents an unbiased estimation of the grade distribution based on the underlying data. Therefore, if the OK model is unbiased, the grade trends may show local fluctuations on a swath plot, but the overall trend should be similar to the NN distribution of grade.

Swath plots have been generated in three orthogonal directions for distribution of copper, zinc, and silver in the Stringer zones. An example in the East direction for the distribution of copper is shown in Figure 14-8.

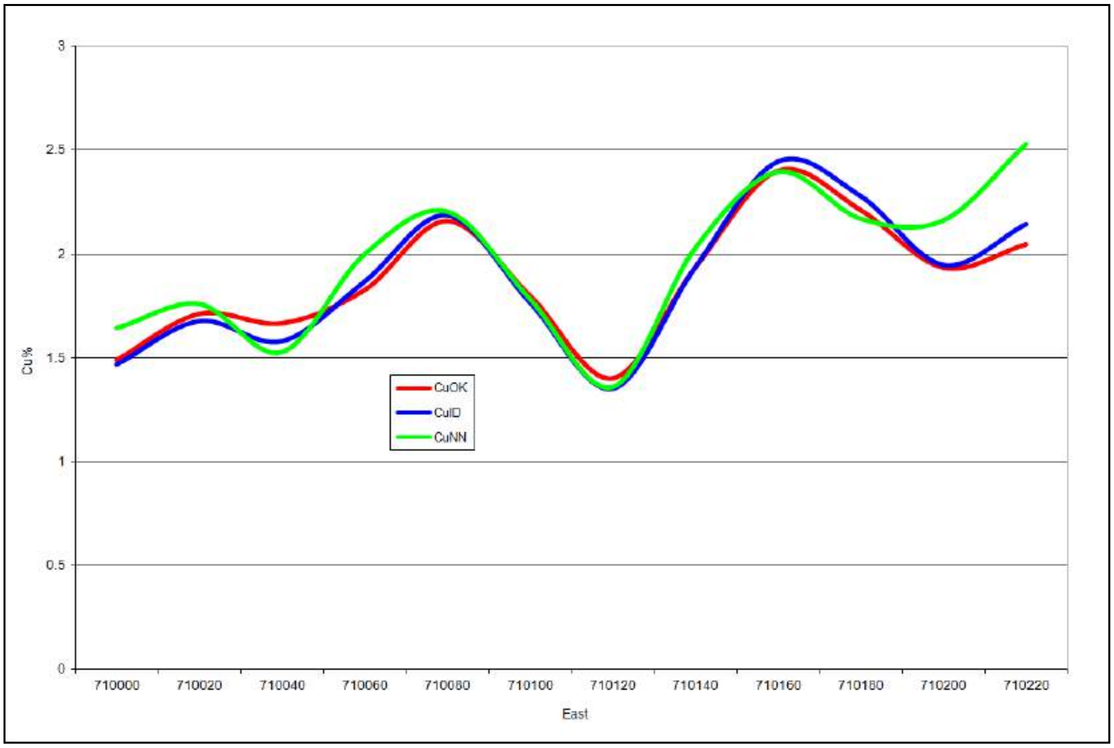

FIGURE 14-8: SWATCH PLOT EAST - COPPER

There is good correspondence between the models in all areas.

14.12 RESOURCE CLASSIFICATION

The mineral resources at the Chester deposit have been classified in accordance with the CIM *Definition Standards for Mineral Resources and Mineral Reserves* (November 2010). The classification parameters, listed below, are defined in relation to the distance to and quantity of sample data, the type of data used in the estimates, and the thickness of the mineralized zone. Factors considered in the definitions are as follows:

- Measured or Indicated mineral resources can only be estimated using FNR drilling data which has been validated with an accepted QA/QC program. Although the Pre-FNR drilling data are supported by proximal FNR drilling results, the resources estimated using this older dataset have all been classified in the Inferred category.

- Grade estimates for the eastern portion of the Stringer zone mineralization, currently drilled on 6.25-m spacing (or less), meet the level of confidence required to be included in the Measured category.

- In order to ensure that “reasonable prospects for economic extraction” have been met, the Stringer zone mineral resource has been evaluated with respect to a combination of open pit and underground extraction options. Open pit extraction assumes a scale of selectivity measuring 6 x 6 x 6-m (the original 2-m model blocks are scaled up to 6-m). A resource limiting pit shell has been derived assuming a metal price of $3/lb Cu, mining cost of $3/tonne, milling cost of $12/tonne, G&A cost of $5/tonne, and a pit slope of 45 degrees. Underground extraction (i.e., below the pit shell) assumes 2-m selectivity and is limited to mineralization which is a minimum of 2-m vertical thickness at a minimum grade of 2% Cu. Underground mining costs are assumed to be $75/tonne.

- Resources are limited to the three interpreted Stringer zone domains (Zones 1, 2, 2b, 3, and 3b). Although there are indications of appreciable copper mineralization between these domains (in Stringer Zone 4), the lack of sample density and apparent lack of continuity of the mineralization in this area does not support the estimation of mineral resources.

The mineral resource classification definitions are described as follows:

Measured Resources
Areas delineated by recent (FNR) drilling with a maximum drill hole spacing of 6.25-m showing a high degree of geologic continuity.

Indicated Resources
Areas delineated by recent (FNR) drilling with a maximum drill hole spacing of 25-m showing a high degree of geologic continuity.

Inferred Resources
Areas delineated by a combination of FNR and Pre-FNR drilling with a maximum drill hole spacing of 25-m showing a reasonable degree of geologic continuity.

14.13 MINERAL RESOURCES

The mineral resource estimate for the Chester deposit is shown in Table 14.13. As described in *Section 14.12*, the "reasonable prospects of economic viability", as required under NI 43-101, has been demonstrated assuming a combination of open pit and underground extraction options. An open pit cut-off grade of 0.5% Cu and an underground cut-off grade of 2% Cu are considered appropriate based on assumptions derived from operations with similar characteristics, scale, and location. It is important to realize that the mineral resources shown in Table 14.13 are not mineral reserves as the economic viability has not been demonstrated. Note: Resources in the Inferred category are primarily based on older drilling that does not have sufficient analysis for zinc and silver to support reliable resource grades for these elements.

There are no known factors related to environmental, permitting, legal, title, taxation, socio-economic, marketing, or political issues which could materially affect the mineral resource.

TABLE 14.13: MINERAL RESOURCE ESTIMATE – CHESTER DEPOSIT (MARCH 7, 2014)

Class	Cut-off (Cu%)	Ktonnes	Cu (%)	Zn (%)	Ag (g/t)
In-Pit					
Measured	0.5	101	1.87	0.14	6.7
Indicated	0.5	1,296	1.34	0.06	3.3
Measured and Indicated	0.5	1,397	1.38	0.06	3.5
Inferred	0.5	2,060	1.25	n/a	n/a
Below Pit					
Inferred	2.0	29	2.33	n/a	n/a
Combined					
Measured	0.5	101	1.87	0.14	6.7
Indicated	0.5	1,299	1.34	0.06	3.3
Measured and Indicated	0.5	1,400	1.38	0.06	3.5
Inferred	variable	2,089	1.26	n/a	n/a

The distribution of the mineral resources is shown in a series of viewpoints in Figure 14-9.

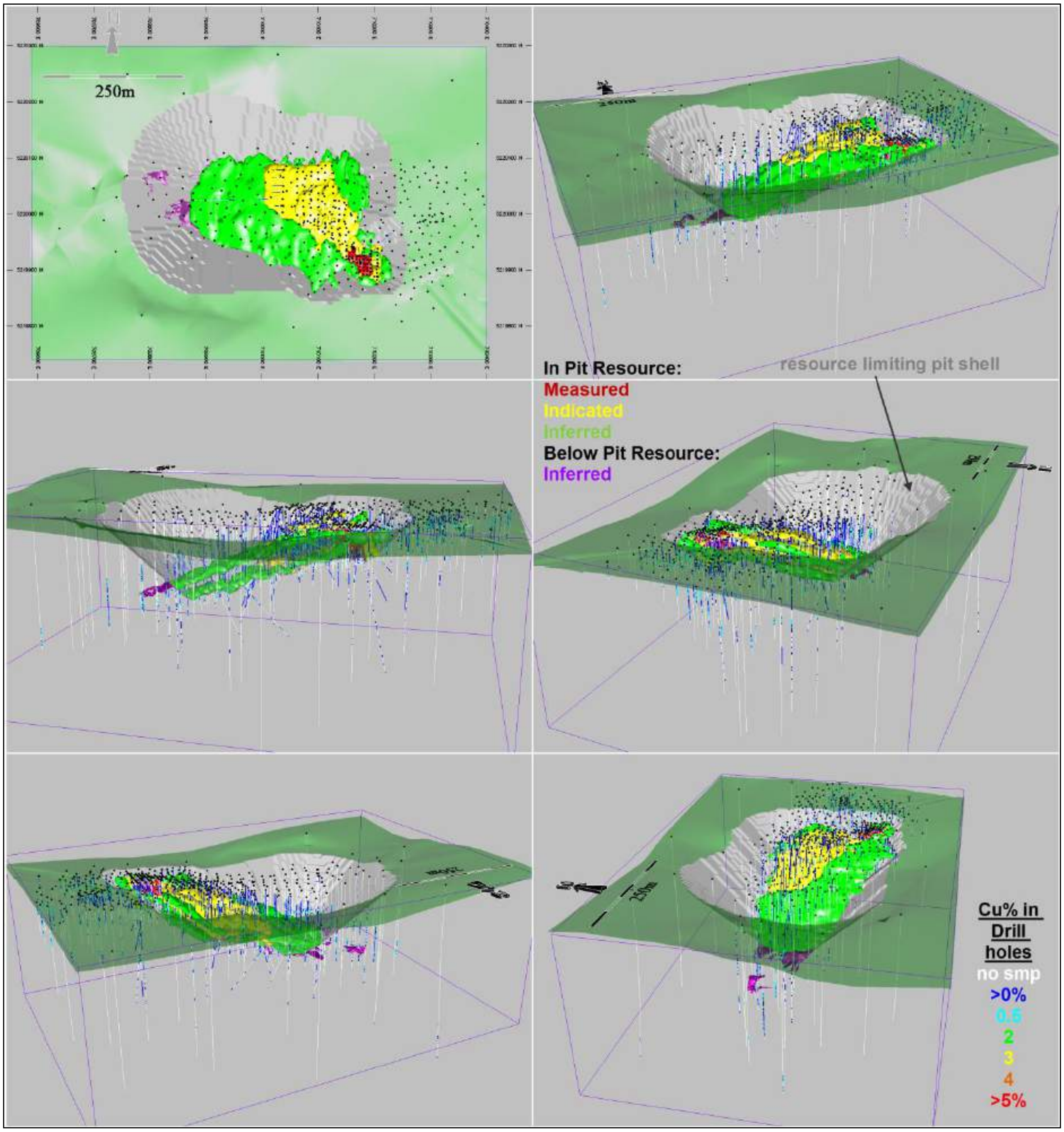

FIGURE 14-9: DISTRIBUTION OF MINERAL RESOURCES AND RESOURCE LIMITING PIT SHELL

14.14 SENSITIVITY OF MINERAL RESOURCES

The sensitivity of mineral resources is demonstrated by listing resources at a series of cut-off thresholds as shown in Table 14.14.

TABLE 14.14: SENSITIVITY OF MINERAL RESOURCE ESTIMATES

Class	Cut-off (Cu%)	Ktonnes	Cu (%)	Zn (%)	Ag (g/t)
In-Pit					
Measured	0.35	107	1.78	0.13	6.4
	0.4	105	1.81	0.13	6.5
	0.45	104	1.83	0.13	6.5
	0.5	**101**	**1.87**	**0.14**	**6.7**
	0.55	100	1.89	0.14	6.7
	0.6	98	1.91	0.14	6.8
	0.65	95	1.95	0.14	6.9
Indicated	0.35	1,449	1.24	0.05	3.0
	0.4	1,394	1.28	0.06	3.1
	0.45	1,342	1.31	0.06	3.2
	0.5	**1,296**	**1.34**	**0.06**	**3.3**
	0.55	1,238	1.38	0.06	3.3
	0.6	1,188	1.41	0.06	3.4
	0.65	1,144	1.44	0.06	3.5
Measured and Indicated	0.35	1,556	1.28	0.06	3.3
	0.4	1,499	1.31	0.06	3.3
	0.45	1,446	1.35	0.06	3.4
	0.5	**1,397**	**1.38**	**0.06**	**3.5**
	0.55	1,338	1.42	0.07	3.6
	0.6	1,285	1.45	0.07	3.7
	0.65	1,240	1.48	0.07	3.8
Inferred	0.35	2,342	1.15	n/a	n/a
	0.4	2,239	1.18	n/a	n/a
	0.45	2,143	1.22	n/a	n/a
	0.5	**2,060**	**1.25**	n/a	n/a
	0.55	1,980	1.28	n/a	n/a
	0.6	1,895	1.31	n/a	n/a
	0.65	1,803	1.34	n/a	n/a
Below Pit					
Inferred	0.5	116	1.62	n/a	n/a
	1	95	1.79	n/a	n/a
	1.5	70	1.98	n/a	n/a
	2	**29**	**2.33**	n/a	n/a
	2.5	8	2.73	n/a	n/a
	3	1	3.13	n/a	n/a

14.15 COMPARISON WITH THE PREVIOUS ESTIMATE

The previous mineral resource estimate for the Chester deposit is described in a technical report dated May 30, 2008. There has been no drilling or other work since that time that could affect the resource estimate and, therefore, the 2008 model remains valid for the Chester project. However, the resource, as reported in 2008, considered only an underground mining scenario for the project whereas this updated report considers a combination of open pit and underground extraction options resulting in differences in the overall reported resource for the deposit. Table 14.15 compares the reported mineral resources for the Chester deposit Stringer zone in 2008 and 2014.

TABLE 14.15: COMPARISON OF MINERAL RESOURCE ESTIMATES (2008 VS. 2014)

Class	Cut-off (Cu%)	Ktonnes	Cu (%)	Zn (%)	Ag (g/t)
May 2008					
Measured	2.0	44	3.05	0.22	10.2
Indicated	2.0	240	2.73	0.11	6.8
Measured and Indicated	2.0	284	2.78	0.13	7.3
Inferred	2.0	298	2.51	n/a	n/a
March 2014					
Measured	0.5	101	1.87	0.14	6.7
Indicated	0.5	1,299	1.34	0.06	3.3
Measured and Indicated	0.5	1,400	1.38	0.06	3.5
Inferred	variable	2,271	1.23	0.38	3.2

The significant difference between the two resources is primarily the result of differing cut-off thresholds between open pit and underground extraction methods. Not only was the base case cut-off grade significantly higher in 2008, the resource was also limited to material that was greater than a minimum thickness of 2-m. In the 2014 open pit based estimate, the selectivity has been scaled up from 2-m to 6-m model blocks. Even though the deposit may be quite narrow in some areas, the high grade nature of the mineralization results in additional resources at the larger block size coupled with the lower cut-off limit.

15 ADJACENT PROPERTIES

No additional information regarding adjacent properties was used in the Chester Property resource estimations.

16 OTHER RELEVANT DATA AND INFORMATION

No additional data or information is known that would materially affect the mineral resources stated in this Technical Report.

17 INTERPRETATION AND CONCLUSIONS

The Chester Property contains a copper-silver-bearing deposit which is the feeder or Stringer zone underlying proximal VMS deposits containing zinc, copper, and minor lead and silver. The most recent work on the Property, conducted by FNR from 2002 to 2007, was directed primarily at evaluating the copper-rich Stringer zone portion of the deposit.

Stringer zone mineralization has been traced through drilling over an area measuring almost 1,000-m by 300-m. Vein and disseminated chalcopyrite-pyrrhotite-pyrite occurs in three (or possibly more) sub-parallel, west-dipping zones ranging from less than 1-m thick to greater than 20-m thick, and separated by 10-15-m of patchy mineralized chlorite-altered rhyolite.

The geologic model interpreted for the Chester deposit is similar to many other VMS deposits found in New Brunswick. Analysis of the drill sample database shows that it is sound and reliable for the purposes of resource estimation. Comparisons between recent drilling conducted by FNR and drilling conducted before FNR's involvement in the project indicate that the Pre-FNR data are sufficiently reliable to estimate mineral resources in the Inferred category. The resource model has been developed in accordance with accepted industry standards resulting in a mineral resource estimate defined in the Measured, Indicated, and Inferred categories.

The exploration potential on the Chester Property is considered to be very good. The Stringer zone mineralization has been traced to the west, with more widely spaced Pre-FNR drilling for a distance of approximately 400-m beyond the limit of the current Inferred resources. East of the Stringer zones there are two known VMS occurrences with extensive Pre-FNR drill holes. There are historic resource estimates for these VMS zones but no recent (NI 43-101 compliant) resource estimates have been generated for these mineralized zones.

Metallurgical studies indicate that the Stringer zone material is amenable to standard grinding and floatation segregation with recoveries averaging more than 97% and final concentrate grades of 27% Cu.

FNR produced a Technical Report, dated May 30, 2008, that includes a mineral resource estimate for the Stringer zone. At that time, FNR intended to use it as the basis for future mine planning and feasibility-level studies. The 2008 mineral resource assumed an underground extraction scenario using a 2% Cu cut-off grade with an estimated mineral resource of 284 Ktonnes averaging 2.78% Cu and 7.3 g/t Ag in the Measured and Indicated categories, plus 298 Ktonnes averaging 2.51% Cu in the Inferred category.

There has been no drilling or additional work conducted on the Property since FNR's involvement in the Project that could affect the resource estimate, and, therefore, the 2008 resource model remains valid for the Chester Project. The updated statement of mineral resources presented in this report reflects the extraction of the resource using a combination of open pit and underground methods. At a cut-off grade of 0.5% Cu for open pit and 2% Cu for underground extraction, the mineral resource estimate includes 101 Ktonnes at 1.87% Cu and 6.7 g/t Ag in the Measured category, 1.3 Mtonnes at 1.34% Cu and 3.3 g/t Ag in the Indicated category, and 2.1 Mtonnes at 1.26% Cu in the Inferred category. Inferred resources are based on older drilling that does not have sufficient assay results to support estimates for silver grades.

18 RECOMMENDATIONS

In 2008, FNR's objective for the Chester deposit was to develop it into a producing mine as quickly as possible in order to provide a source of cash flow from which to grow the company. FNR concentrated its drilling efforts on the upper portion of the Stringer zone deposit in order to gain information related to the initial years of active production. Recommendations for the project at that time focused primarily on drilling to further delineate the mineral resource.

The objectives of the current project are more focused on expanding the resource through exploration than on near-term production. Recommendations are as follows:

1. Drilling program to confirm the historic drilling on the Central and East VMS Zones. This involves a grid of new holes over representative areas from which comparisons can be made with the old drilling results. The Central Zone would require 30 holes at 50m each and the East Zone would require 40 drill holes at 40m each. 3100m of drilling at $150/m = $465,000.

2. Drilling: Exploration drilling to test for extensions of existing Stringer zone and nearby VMS targets. 5000m x $200/m = $1,000,000.

3. Metallurgical Test Work: Conduct additional metallurgical test work on both the extensions of the Stringer zone and the VMS material. $200,000.

19 REFERENCES

Black, P.T. 1957. Interim report on the Clear Group, Northumberland County, New Brunswick. Kennco Exploration (Canada) Limited. New Brunswick Department of Natural Resources and Energy Division, Assessment File 470717, 39p.

Boylan, R.E. 1976. Chester Mines Ltd., Mining License # 1234, Work Report – March 1, 1975 to February 27, 1976. Internal report of Sullivan Mining Group Ltd. - Chester Mines Ltd. located on file at: New Brunswick Department of Natural Resources and Energy, Fredericton, New Brunswick, 2 p.

Brooks, E.A., March 18, 2013. Report of Work on the Chester EAB Property in New Brunswick.

Extech II (compact disc), 1999. Extech II Caris-based Viewer for the Bathurst Mining Camp. Compiled by: Langton, J., Banks, P. and van de Poll, R.; New Brunswick Department of Natural Resources and Energy, Mineral Resources Report 99-5.

Davis, B. M., 1997. Some Methods of Producing Interval Estimates for Global and Local Resources, SME Preprint 97-5, 4p.

Irrinki, R.R. 1986. Geology of Big Bald Mountain map area (NTS 21 O/1), New Brunswick. Mineral Resources Division, Department of Forests, Mines and Energy New Brunswick, Map Report 86-2.

Franklin, J.M. 1996. Volcanic-associated massive sulphide base metals. In: Geology of Canadian Mineral Deposit Types. Edited by: O.R. Eckstrand, W.D. Sinclair, and R.I. Thorpe; Geological Survey of Canada, Geology of Canada, no. 8, p. 158-183.

Franklin, J.M.; Sangster, D.M.; Lydon, J.W.; 1981, Volcanic Associated Massive Sulphide Deposits; Economic Geology 75th Anniversary Volume; pp. 485-627.

Journel, A.G., and Huijbregts, Ch. J., 1978, Mining Geostatistics: London, Academic Press, 600p.

Lydon, J.W. 1984. Volcanogenic massive sulphide deposits. Part 1: A descriptive model. In: Ore Deposit Models. Edited by: R.G. Roberts and P.A. Sheahan. Geoscience Canada, Reprint Series 3, p. 145-153.

Lydon, J.W. 1984. Volcanogenic massive sulphide deposits. Part 2: Genetic models. In: Ore Deposit Models. Edited by: R.G. Roberts and P.A. Sheahan. Geoscience Canada, Reprint Series 3, p. 155-181.

McCutcheon, S.R., Walker, J.A., and McClenaghan, S.H. 2001. The geological settings of massive sulphide deposits in the Bathurst Mining Camp: a synthesis. In, Current Research, 2000. Edited by B.M.W. Carroll. New Brunswick Department of Natural Resources and Energy, Minerals and Energy Division, Mineral Resource Report 01-4.

Montreal Engineering Company Ltd, 1970. Appraisal of Proposed Chester Mine Development, New Brunswick Department of Natural Resources and Energy – Geological Services Branch, Bathurst, New Brunswick.

Petruk, W. 1959. The Clearwater copper-zinc deposit and its setting with a special study of mineral zoning around such deposits. Unpublished Ph.D. thesis, McGill University, Montreal, 1959, 122p. Mining Act, c.M 14.1 of the Acts of New Brunswick, 1985, Regulation 86-98 General Regulation, Regulation 86-99 Forms Regulation.

Sullivan Mining Group Ltd., 1973. Submission to the New Brunswick Department of Fisheries and Environment for approval in principle to proceed with the subsurface exploration phase of the proposed Chester Mine development, 44 p.

Thomas, M.D., Walker, J.A., Keating, P., Shives, R., Kiss, F., Goodfellow, W.D. 2000. Geophysical Atlas of Massive Sulphide Signatures Bathurst Mining Camp, New Brunswick, Geological Survey of Canada Open File D3887, New Brunswick Department of Natural Resources and Energy, Minerals and Energy Division, Open File 2000-9.

van Staal, C.R., Wilson, R.A., Rogers, N., Fyffe, L.R., Gower, S.J., Langton, J.P., McCutcheon, S.R., and Walker, J.A. 2002. Geology, Bathurst Mining Camp and Surrounding Areas, New Brunswick; Geological Survey of Canada, Open File 4182, scale 1:100 000.

Williams, D.A. 1973. Chester (Cu-Zn-Pb). In Mineral Occurrence file, New Brunswick Department of Natural Resources and Energy – Geological Surveys Branch, Bathurst, New Brunswick. 1 p.

Wilson, R.A., and Fyffe, L.R. 1996. Geologic setting of mineralization in the Big Bald Mountain area (NTS 21 O/1), Bathurst camp, New Brunswick. In Current Research 1995. Edited by B.M.W. Carroll. New Brunswick Department of Natural Resources and Energy, Minerals and Energy Division, Mineral Resource Report 96-1, pp.179-217.

Wilson, R.A., Fyffe, L.R., McNicoll, V., and Wodicka, N. 1999. Lithogeochemistry, petrography and geochronology of Ordovician rocks in the Big Bald Mountain area (NTS 21 O/1), Bathurst Mining Camp, New Brunswick. In Current Research 1998. Edited by B.M.W. Carroll. New Brunswick Department of Natural Resources and Energy, Minerals and Energy Division, Mineral Resource Report 99-4, pp.89-142

20 DATE AND SIGNATURE PAGE

CERTIFICATE of AUTHOR

I, Robert Sim, P.Geo, do hereby certify that:

1. I am an independent consultant of:

SIM Geological Inc.
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Delta, British Columbia, Canada V4E 3C5

2. I graduated from Lakehead University with an Honours Bachelor of Science (Geology) in 1984.
3. I am a member, in good standing, of the Association of Professional Engineers and Geoscientists of British Columbia, License Number 24076.
4. I have practiced my profession continuously for 30 years and have been involved in mineral exploration, mine site geology and operations, mineral resource and reserve estimations and feasibility studies on numerous underground and open pit base metal and gold deposits in Canada, the United States, Central and South America, Europe, Asia, Africa and Australia.
5. I have read the definition of "qualified person" 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 preparation of the technical report titled "NI 43-101 Technical Report Chester Project, New Brunswick, Canada", dated April 1, 2014 (the "Technical Report"). The effective date of this Technical Report is March 7, 2014. (the "Technical Report"),
7. I visited the Chester Property on November 9-10, 2006 and on October 1-5, 2007.
8. I have had prior involvement with the property that is the subject of the Technical Report. I was a co-author of a previous Technical Report dated May 30, 2008.
9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I am independent of Explor Resources Inc. applying all of the tests in Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 1st Day of April, 2014.

"Original signed and sealed"

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Robert Sim P.Geo