2015 TECHNICAL ASSESSMENT REPORT ON THE GEOLOGY AND GEOPHYSICS OF THE HIP-REM PROPERTY, CARMACKS COPPER PROJECT

Submitted on 22nd March 2016

Whitehorse Mining District, Yukon Territory

NTS 115I07

62° 23' 30"N 136° 36' 13"W

Grant numbers: YC65560-YC65565; YC65569-YC65570; YC39221-YC39234; YC39251-YC39254.

Owner and operator of claims: Copper North Mining Corp.

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1. INTRODUCTION AND TERMS OF REFERENCE

In 2015 Copper North Mining Corp. conducted an exploration program on the Carmacks Copper project. The program comprised diamond drilling, trenching and ground magnetic surveys on the main lease-claim block. The HIP-REM claims are not contiguous with the main claim block, and therefore the majority of the 2015 work program does not qualify for assessment work on the HIP-REM claims. A small ground magnetic survey, prospecting and mapping program was carried out on the HIP-REM claims that does qualify for assessment purposes. This report provides details on the ground magnetic and prospecting carried out on the HIP-REM claims.

The exploration program was managed by Jack Milton, Ph.D., of Copper North Mining Corp. The ground magnetic program was carried out by Jesse Hallé, B.Sc., P. Geo., and Emily Hallé B.Sc on 8th November 2015. The mapping program was carried out by Nikolett Kovacs, B.Sc on 28th July 2015.

2. LOCATION AND ACCESS

The HIP-REM property is located where Williams Creek drains in to the Yukon River, in the Dawson Range, approximately 200 km north of Whitehorse, or 37 km northwest of Carmacks, Yukon (Figure 1). It is located on NTS mapsheet 115I07 at 62° 23' N 136° 36' W.

Access to the property is by road. The Freegold road runs from Carmacks northwest for approximately 34 km and then the northward Carmacks Copper access road heads for 13 km to the Carmacks Copper camp, crossing Merrice Creek and Williams Creek. The gravel-surface Freegold road is maintained by the government and was readily accessible from spring through fall. The Carmacks Copper access road is narrow and has rough and steep sections, requiring a 4x4 vehicle, especially after heavy rains.

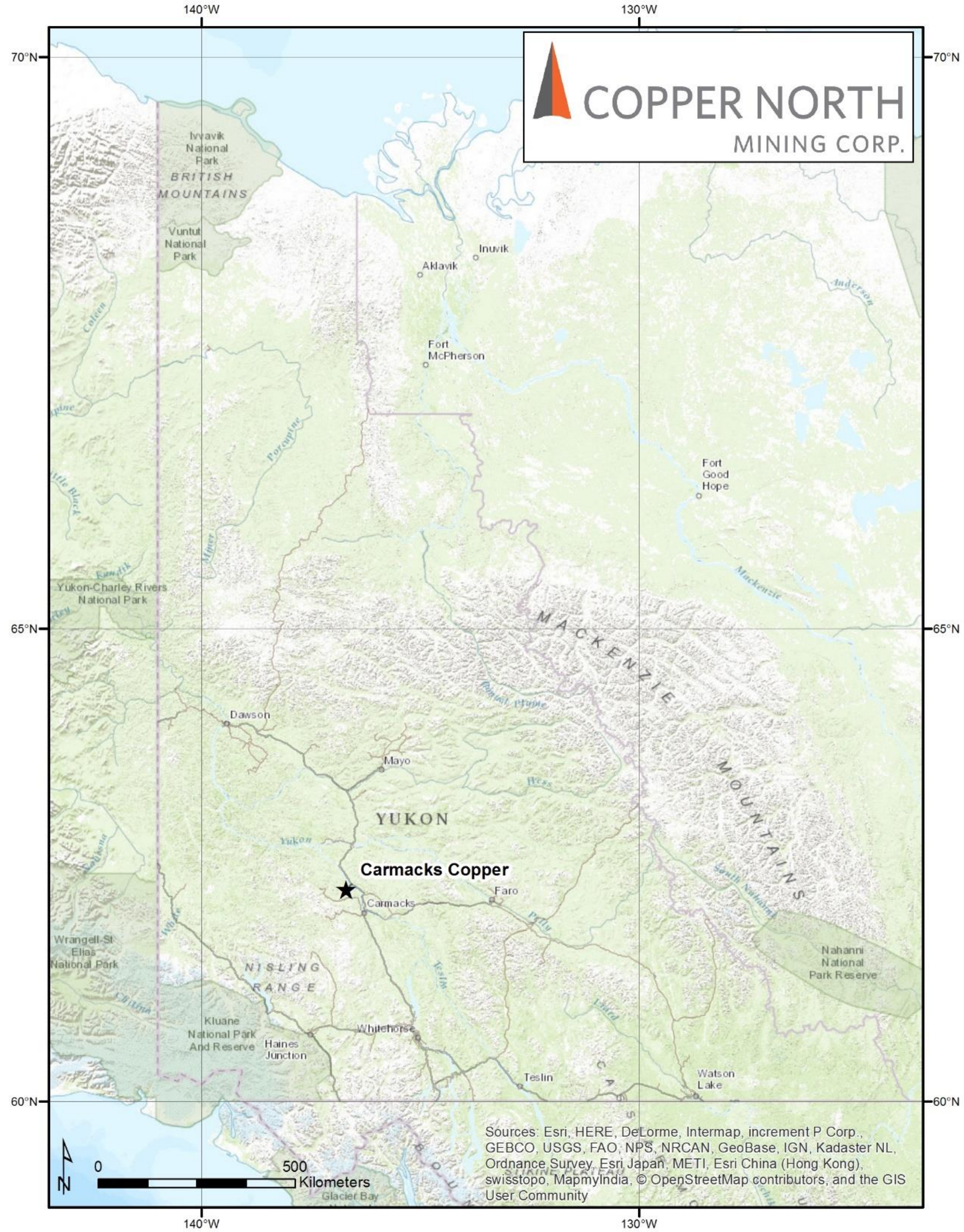

Figure 1 Location of the Carmacks Copper project, Yukon Territory, Canada.

3. PHYSIOGRAPHY AND CLIMATE

The property is located in the Dawson Range Mountains. The area is characterized by gently rolling hills that are generally less than 1800 m elevation and are covered by black spruce, white spruce, pine, poplar, birch and alder trees at lower elevations and alpine grasses and scrub willows at higher elevations and in the alpine terrain.

North facing slopes are generally underlain by permafrost and are generally swampy or boggy with much less tree growth and thick sphagnum moss cover. South facing slopes are generally drier and, in some locations, are free of permafrost.

The climate of the property area is generally fairly dry in the summer months with most precipitation occurring in July and early August. In the winter months snow accumulation is generally less than 2 m. Temperatures generally range from -40 °C in the winter to 30 °C in the summer. Snow begins accumulating in mid to late September and is mostly melted by mid to late May. Forest fires can pose a hazard during fire season in dry years.

4. CLAIM INFORMATION

The ‘HIP-REM’ Quartz Claims referred to in this report comprise the HIP 7-12, HIP 16-17, REM 1-14 and REM 32-35 claims that form a contiguous claim block that spans the Yukon River. The HIP-REM Quartz Claims are in the Whitehorse Mining District and were acquired in accordance with the Yukon Quartz Mining Act. The claims are registered for 100% ownership in the name of Carmacks Mining Corp., a wholly owned subsidiary of Copper North Mining Corp. The claim location map is shown in Figure 2. The detailed claim information is tabled in Appendix 1.

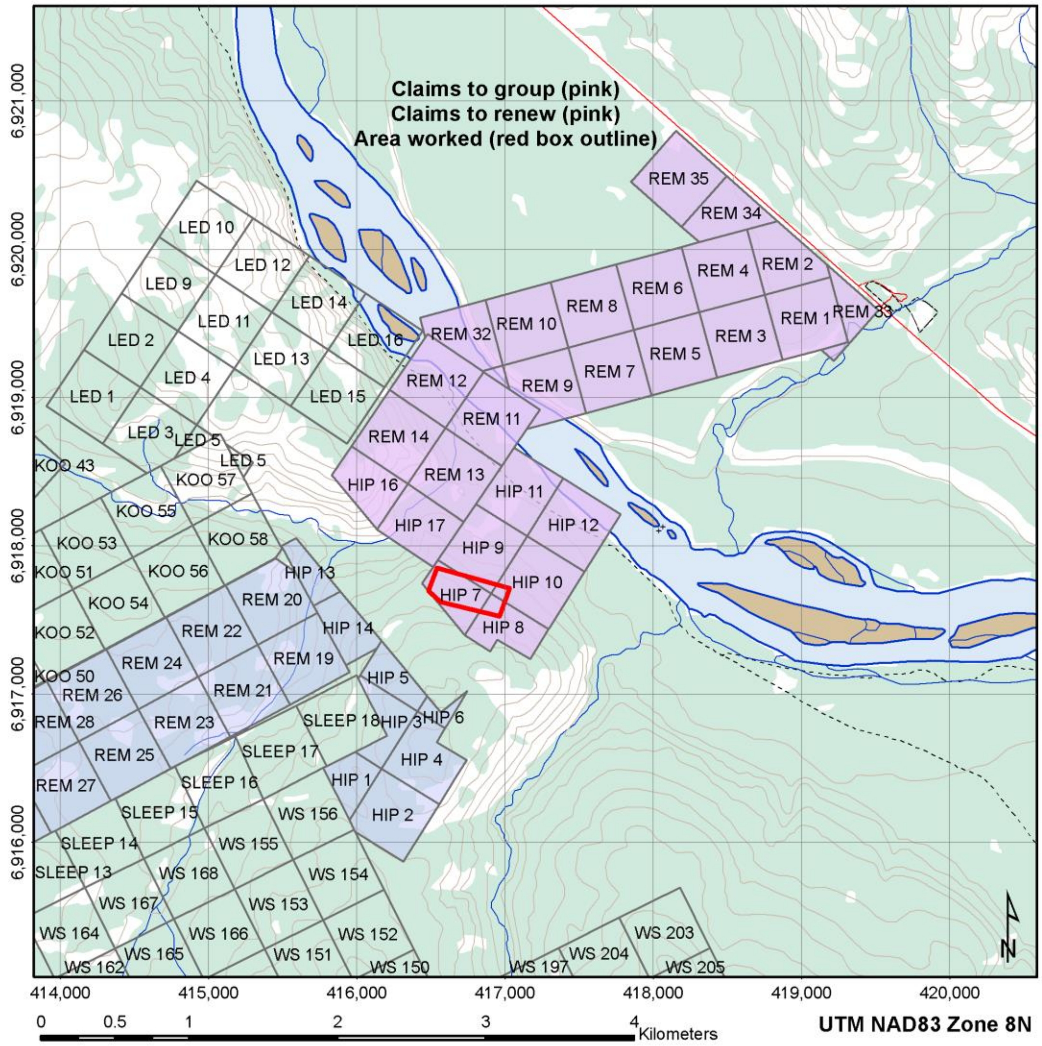

Figure 2 Claim location map for the HIP-REM claims (pink) that span the Yukon River. Other Copper North Mining Corp. claims that are part of the main Carmacks Copper claim-lease block are indicated in blue.

5. HISTORY

The following history section relates to the Carmacks Copper project and most recorded activity, unless otherwise stated, took place on the main claim-lease block.

The exploration history of the region dates back to the Klondike Gold Rush of 1898, when placer miners traveling the Yukon River started prospecting along the route. The earliest exploration work in the area was directed to the few outcrops in the Williams Creek, Merrice Creek, Nancy Lee Creek and Hoochekoo Creek canyons. The first claims staked in the region were staked west of the Yukon River on Nancy Lee Creek. There are a number of small adits and workings on the claims targeting vein copper mineralization. A few tons of copper ore were shipped to the Granby Smelter in 1917. These claims are now Crown Grants.

In 1969, the Casino Porphyry Deposit was discovered, which prompted a staking rush in the region. In March of 1970, the Boy Claims were staked by Whitehorse businessmen, G. Wing and A. Arsenault. The original claims consisted of 134 units. The property was optioned to the Dawson Range Joint Venture (DRJV), later that year. The DRJV consisted of Straus Exploration Inc., Great Plains Development of Canada Ltd., Trojan Consolidated Minerals Ltd. and Molybdenum Corporation of America.

The DRJV conducted a program of prospecting and geochemical sampling in the summer of 1970 and discovered two outcrops with copper oxide mineralization; the No. 1 and No. 2 zones. The discovery prompted the staking of a further 185 claims, some trenching and drilling of two x-ray diamond drill holes in the No. 1 Zone for a total of 103 feet (31.4 m).

In 1971, the DRJV conducted a program consisting of 24.5 km of road building, bulldozer trenching, 108 line-km of grid geochemistry, 27 line-km of VLF-EM geophysical surveying, 48 km of line-cutting, geological mapping, an airphoto survey and 5,583 m of diamond drilling in 25 holes in five separate zones (Zones 1, 2, 3, 5 and 6). Highlights of this program included drill indicated reserves in the No. 1 Zone of 16, 334,000 tons grading 1.15% copper at a 0.6% copper cut-off (this reserve figure is not 43-101 compliant). The program also identified copper oxide mineralization in the No. 3 and 4 zones.

In 1972, the DRJV conducted a program consisting of an additional 2.1 km of road construction, bulldozer trenching, 31 km of line cutting, 150 line-km of soil sampling, and 1,531 m of diamond drilling in 8 holes in the No.1, No 4, and No. 8 zones. A recommendation for additional drilling in the No.3, No. 12 and No. 13 zones was made following the exploration program. However, the mining industry went into a slump and no further work was performed for 17 years.

In 1982, the DRJV returned its’ interest in the property to Archer, Cathro & Associates, which later sold the property to Archer, Cathro & Associates (1981) Ltd. In 1989, Archer, Cathro optioned the property to Western Copper Holdings Ltd. And Thermal Exploration Company. Western Copper and Thermal conducted metallurgical test work later that year.

In 1990, Western Copper and Thermal upgraded the access road to the property and drilled 322 m in three holes in the Zone 1. Each of the 3 holes intersected copper oxide mineralization. The following year the two companies conducted a program consisting of 3,464 m of diamond drilling in 36 holes; 35 in Zone 1 and 1 in Zone 4. They also dug 22 trenches in zones 1 and 4 for a total of 1,856 m of trenching, surveyed 83.2 line-km of magnetic and VLF-EM geophysics, and initiated baseline environmental studies. The program was successful in delineating and expanding the area of mineralization in Zone 1 and identifying additional copper oxide mineralization in Zone 4.

In 1992, Western Copper and Thermal drilled 1,164 m in 11 holes in zones 1, 4, 12 and 13 and drilled 856 m in 11 Reverse Circulation holes at various locations on the property. The companies also conducted additional metallurgical test work, baseline environmental testing, a biophysical assessment of the area and contracted Knight Piesold Ltd to conduct geotechnical studies on the deposit consisting of test pit excavation, overburden sampling, oriented diamond drill core logging and geologic mapping.

In 1994, the companies expanded the grid on the property and conducted further magnetic and VLF-EM surveying, soil sampling and prospecting. A new area of copper mineralization was identified at the far northern part of the property, the 4000 Zone.

Also in 1994, Kilborn Engineering Pacific Ltd. was contracted to conduct a Feasibility Study. The study indicated that, based on the copper price at the time, the project was viable using open pit mining methods and solvent extraction-electrowinning.

In 1995, the company contracted Knight and Piesold Ltd. to initiate a preliminary mine design and also initiated clearing and grubbing of a site access road and leach pad area. The company submitted a mine permit application later that year.

While the company was awaiting a mine permit, they contracted Kilborn Engineering to produce a basic engineering report, in 1997. The permit was not forthcoming and, due to changing market conditions the company withdrew the permit application. The property sat dormant until the re-initiation of permitting in 2005 and exploration in 2006. During this time the property was consolidated into a single company and it changed its' name to Western Silver Corporation.

In February, 2006 Western Silver Corporation was taken over by Glamis Gold and a new company, Western Copper Corporation, was formed. The Carmacks Copper Property was spun off to Western Copper as part of the arrangement.

In 2006, Western Copper resumed mineral exploration activities on the Carmacks Copper Project after it had lain dormant for 11 years. The company conducted and exploration program that consisted of 7,100 m of diamond drilling in 34 holes, 1,201 m of Rotary Air Blast drilling (RAB) in 61 holes, access road upgrade work, 9.2 km of line-cutting, re-initiation of environmental baseline studies, surveying of drill hole collars and claim posts and re-initiation of the mine permitting process.

In 2007, Western Copper drilled 17,829 m in 123 diamond drill holes, 790 m in 33 overburden geotechnical drill holes and 55 m in one hydro-geological monitoring well. The company also performed line cutting, IP geophysical surveying, prospecting, continuation of baseline environmental studies and engineering work.

In 2008, Western Copper conducted additional geotechnical investigations in preparation for development. A soil sampling and prospecting program was carried out on the HIP-REM claims in 2008, collecting 125 soil samples over the course of 5 days. However, no copper mineralization was identified on the claims.

In April 2009, Western Copper received a Quartz Mining License for the project. On May 10, 2010 the company was notified that the Water License had been denied with a list of deficiencies in the application and design process.

In 2011, Copper North Mining Corp. was spun out from Western Copper, with the Carmacks Copper Project being it's key asset. In 2012 a feasibility study was completed for a copper-only heap-leach operation. In 2014, gold and silver recovery were added to the project, encapsulated in a new Preliminary Economic Assessment.

In Copper North's 2014 exploration program, trenching in zone 2 led to the discovery of an additional ~500 metre strike length that was subsequently tested by 10 short diamond drillholes.

In 2015, an approximately $1M program was carried out on the Carmacks Copper project, comprising trenching, ground magnetics and diamond drilling in 35 holes. The focus was the definition and expansion of zones 2000S, 12 and 13 and resulted in a new 43-101 resource estimate and a significant expansion of mineral resources.

6. REGIONAL GEOLOGY

The regional geology is shown in Figure 3. Much of the regional geology is taken from Nelson et al. (2013), Allan et al. (2013) and Colpron et al. (2015).

The Carmacks region lies within the Intermontane Belt, which in the Carmacks map-area includes the Yukon-Tanana, Stikine and Quesnellia Terranes that have been intruded by multiple plutonic suites and are covered by younger volcanic rocks or sedimentary sequences of the Whitehorse Trough.

The Yukon-Tanana Terrane includes greenschist to amphibolite metamorphic rocks, plutonic rocks and volcanic rocks of dominantly Devonian, Carboniferous or Permian age. The Stikine and Quesnellia Terranes include rocks of the Joe Mountain Formation and Lewes River Group. The Joe Mountain Formation comprises Middle Triassic mafic-ultramafic intrusives, basalts and volcaniclastic rocks. The Lewes River Group is Upper Triassic and comprises augite phyric basalts, basaltic andesites and volcaniclastic rocks of the informal Povoas Formation and the upper part of the Lewes River Group includes epiclastic rocks and limestones.

The Carmacks Copper project is located within a portion of the Granite Mountain Batholith that is part of the ~204-195 Ma Minto Suite. The Minto Suite is one of several late Triassic-early Jurassic plutonic suites that intrude the Yukon-Tanana, Stikine and Quesnellia Terranes and the contacts between them. The Minto Suite hosts the copper-gold mineralization at the Minto Mine. Weakly-foliated, mesocratic, biotite-hornblende, Granite Mountain Batholith granodiorite contains screens or pendants of strongly foliated feldspar-biotite-hornblende-quartz amphibolite-gneisses that host the Carmacks Copper deposit.

The Whitehorse Trough lies to the east of the Hoochekoo Fault, east of the Carmacks Copper Project. The Whitehorse Trough comprises Lower Jurassic and younger greywacke, shale and conglomerate, derived from the underlying Upper Triassic rocks (Laberge Group). Mesozoic strata of the Whitehorse Trough are in fault contact with the adjacent terranes, or rest unconformably on them.

The late Cretaceous Carmacks Group and mid-Cretaceous Mount Nansen Group volcanic rocks overlie portions of all older rocks and obscure relationships between the older rocks.

The predominant northwest structural trend is represented by the major Hoochekoo, Tatchun and Teslin faults to the east of the Carmacks Copper Project and the Big Creek Fault to the west. East to northeast younger faulting is represented by the major Miller Fault to the south of the Carmacks Copper Project.

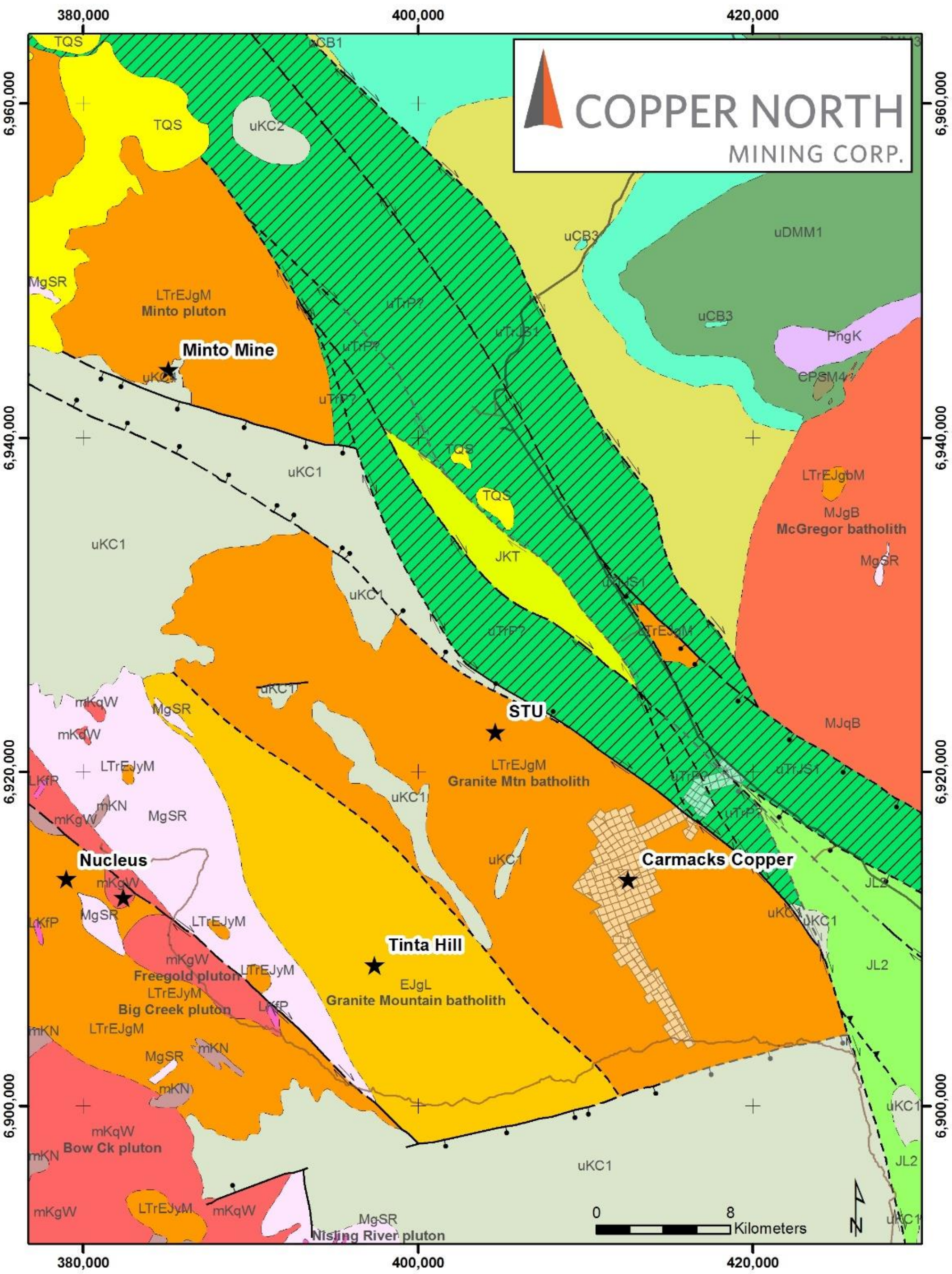

Figure 3 Regional geology of the Carmacks Copper project and HIP-REM claims. Copper North's claims are overlain on the bedrock geology map from the YGS. Significant mineral occurrences are marked with stars. Legend for geology on following page.

Bedrock Geology

TERTIARY(?) AND QUATERNARY

TQS: SELKIRK: resistant, brown weathering, columnar jointed, vesicular to massive basalt flows; minor pillow basalt; basaltic tuff and breccia (Selkirk Volcanics)

LATE CRETACEOUS TO TERTIARY

LKfP: PROSPECTOR MOUNTAIN SUITE: quartz-feldspar porphyry

MID-CRETACEOUS

mKdW: WHITEHORSE SUITE: hornblende diorite, biotite-hornblende quartz diorite and mesocratic, often strongly magnetic, hypersthene-hornblende diorite, quartz diorite and gabbro (Whitehorse Suite, Coast Intrusions)

mKgW: WHITEHORSE SUITE: biotite-hornblende granodiorite, hornblende quartz diorite and hornblende diorite; leucocratic, biotite hornblende granodiorite locally with sparse grey and pink potassium feldspar phenocrysts (Whitehorse Suite, Casino granodiorite, McClintock granodiodrite, Nisling Range granodiorite)

mKqW: WHITEHORSE SUITE: biotite quartz-monzonite, biotite granite and leucogranite, pink granophyric quartz monzonite, porphyritic biotite leucogranite, locally porphyritic (K-feldspar) hornblende monzonite to syenite, and locally porphyritic leucocratic quartz monzonite (Mt. McIntyre Suite, Whitehorse Suite, Casino Intrusions, Mt. Ward Granite, Coffee Creek Granite)

mKN: MOUNT NANSEN: massive aphyric or feldspar-phyric andesite to dacite flows, breccia and tuff; massive, heterolithic, quartz- and feldspar-phyric, felsic lapilli tuff; flow-banded quartz-phyric rhyolite and quartz-feldspar porphyry plugs, dykes, sills and breccia (Mount Nansen Gp., Byng Creek Volcanics, Hutshi Gp.)

UPPER CRETACEOUS

uKC1: CARMACKS: augite olivine basalt and breccia; hornblende feldspar porphyry andesite and dacite flows; vesicular, augite phyric andesite and trachyte; minor sandy tuff, granite boulder conglomerate, agglomerate and associated epiclastic rocks (Carmacks Gp., Little Ridge Volcanics, Casino Volcanics)

uKC2: CARMACKS: andesite

uKC4: CARMACKS: medium-bedded, poorly sorted, coarse- to fine-grained sandstone, pebble conglomerate, shale, tuff, and coal; massive to thick bedded locally derived granite or quartzite pebble to boulder conglomerate (Carmacks Gp.)

UPPER JURASSIC AND LOWER CRETACEOUS

JKT: TANTALUS: massive to thickly bedded chert pebble conglomerate and gritty quartz-chert-feldspar sandstone; interbedded dark grey shale, argillite, siltstone, arkose and coal; at one locality includes red-weathering dacite to andesite flows at base (Tantalus)

MID-JURASSIC

MJqB: BRYDE SUITE: medium to fine grained, equigranular, leucocratic monzonite, syenite and granite and related dykes of dacite to andesite porphyry with euhedral andesine, hornblende and locally quartz in aphanitic greenish, or grey groundmass (Teslin Crossing Stock)

MJgB: BRYDE SUITE: medium grained, hornblende monzodiorite, hornblende-biotite quartz monzodiorite and minor hornblendite; pink, potassium feldspar megacrystic, hornblende granite to granodiorite and associated easterly trending mafic dyke swarms (Mt. Bryde Pluton; Bennett Granite)

EARLY JURASSIC

LTrEJyM: MINTO SUITE: syenite

LTrEJgM: MINTO SUITE: medium- to coarse- grained, variably foliated to massive biotite-hornblende granodiorite; biotite-rich screens and gneissic schlieren; foliated hornblende diorite to monzodiorite with local K-feldspar megacrysts (Minto Suite)

LTrEJgbM: MINTO SUITE: gabbro

EJgL: LONG LAKE SUITE: massive to weakly foliated, fine to coarse grained biotite, biotite-muscovite and biotite-hornblende quartz monzonite to granite, including abundant pegmatite and aplite phases; commonly K-feldspar megacrystic (Long Lake Suite)

LOWER AND MIDDLE JURASSIC, HETTANGIAN TO BAJOCIAN

JL2: TANGLEFOOT:

UPPER TRIASSIC, CARNIAN AND OLDER (?)

uTrP?: POVOAS: augite or feldspar phyric, locally pillowed andesitic basalt flows, breccia, tuff, sandstone and argillite; local dacitic breccia and tuff with minor limestone; greenschist, chlorite schist, chlorite-augite-feldspar gneiss, amphibolite (Povoas)

UPPER TRIASSIC TO LOWER JURASSIC

uTrJS1: SEMENOF:

LATE DEVONIAN TO MISSISSIPPIAN

MgSR: Simpson Range - tonalite, diorite

UPPER CARBONIFEROUS, LOWER AND MIDDLE PENNSYLVANIAN

PngK: KELLY STOCK: tonalite orthogneiss

uCB1: BOSWELL: recessive, dark weathering, slate, phyllite, greywacke chert, chert conglomerate and breccia, volcanic breccia, greenstone and limestone (Boswell)

uCB3: BOSWELL: massive, dark weathering, coarse to medium grained, hornblendite-gabbro (Boswell)

uDMM3: Moose - interm. volc.

uDMM1: MOOSE: basalt, greenstone

CARBONIFEROUS TO PERMIAN

CPSM4: SLIDE MOUNTAIN: ultramafic

7. LOCAL GEOLOGY

Most of the geological information for the Carmacks Copper Project comes from geophysics, drill core and trenches, as there is only limited outcrop on the property found along spines on the ridges and hill tops. Float, derived locally because the area was not glaciated by continental glaciation, can be seen in the old trenches on the property and along the cuts of the drill roads.

The Carmacks copper-gold-silver deposit is enclosed within the late Triassic-early Jurassic Granite Mountain Batholith. The copper mineralization is hosted by amphibolite, gneisses, and intrusive rocks that range from granodiorite to diorite. Copper mineralization occurs along a linear trend, following a brittle-ductile deformation zone.

The deposit is sub-divided into several zones, each comprising a tabular raft of amphibolite-gneisses that dip steeply to the east and are up to 100 metres wide, strike up to 700 metres and persist down-dip to at least 450 metres, being open at depth. Exploration has identified at least 14 mineralized zones comprising steep easterly dipping zones that occur along a strike length of at least 5 kilometres. The discoveries also include local zones of mineralization that appear sub-parallel to the main mineralized structure. The rafts of copper bearing amphibolite-gneisses are enclosed within a younger granodiorite batholith as roof pendants or partially digested rafts. The copper mineralization at depth comprises copper sulphides bornite and chalcopyrite. Gold and silver accompany the copper mineralization; higher gold grades are associated with the more bornite-rich areas.

The typical host rock for the hypogene mineralization is a dark grey to black hornblende-biotite amphibolite with a pervasive foliation. The amphibolite varies from massive to bearing relict hornblende phenocrysts (or hornblende after pyroxene) and may represent variation in the, possibly volcanic, protolith. Locally, the amphibolite becomes more gneissic where mineralogical and colour segregation occurs. The content of mafic minerals is variable from ~50% to ~100%. Locally, the amphibolite lacks a penetrative fabric and appears to have recrystallized to microdiorite from the heat of the adjacent granodiorite intrusions. Sulphide mineralization in the amphibolite is typically foliaform with some discordant sulphide veinlets. Diorite is also host to sulphide mineralization, where chalcopyrite and bornite occur interstitially between hornblende crystals as a net-texture. Alteration phases include proximal potassic (K-spar-Bt) alteration and hematization.

Deformation is seen to increase towards the mineralized zones, suggesting that an underlying structure may be a control on the mineralization. There is a complex magmatic-deformation history involving multiple phases of granitoid intrusions, boudinage and faulting. There are at least two stages of pegmatite-aplite intrusions, each associated with epidote alteration.

The mineralization is cross-cut by barren late phases of the Granite Mountain Batholith including K-feldspar porphyritic granodiorite, aplite and pegmatite. The porphyritic phases contain phenocrysts of K-(potassium) feldspar, plagioclase and/or quartz. In some instances, the K-feldspar phenocrysts range up to 3 cm long. Post mineralization granitic pegmatite and aplite dykes are widespread in the area and range from a few centimetres to approximately three metres in thickness. Hornblende is present in dioritic intrusive rocks and locally in the granodioritic phases. Quartz, K-feldspar and plagioclase are present in all intrusive phases. Plagioclase is subhedral and very locally displays growth zoning. Petrographic examination indicates Granite Mountain granodiorites have a varied mineralogical content with areas of silica under-saturation and plagioclase oversaturation. These variations may be the result of the assimilation of precursor rock to the amphibolite-gneiss units.

The combined strike length from the northern end of Zone 1 to the southern tip of zone 12 is just over 2 km. The character of the deposit changes along strike leading to a division into northern and southern halves. The northern half is more regular in thickness, dip angle, width and down dip characteristics. The southern half splays into irregular intercalations, in zones 7 and 7A, terminating against sub-parallel faults down dip.

Zones 12 and 13 are located 1.2 km south of Zone 1 and occur over a strike length of 1.2 km and up to 100 m in width. The mineralization in Zones 12 and 13 is hosted by less mafic amphibolite and gneisses than those found in Zone 1. The gneisses are highly silicified and K-feldspar altered; the gneissic texture may be the result of alteration along closely spaced parallel planes, rather than the product of high strain. The gap between Zones 12 and 13 has not been drill tested and it is unclear as to whether mineralization is continuous between the two zones. In Zone 12, the mineral zones bifurcate and split into several parallel zones and are affected by post mineralization faulting.

The Carmacks Group is a late Cretaceous, post-mineralization sequence of andesitic-basaltic volcanic rocks and basal conglomerates and sandstones. The Carmacks Group is present in across the property in several areas, but most prominently affects mineralization in Zones 13 and 14 where it forms a fault-bounded segment of cover rocks. Thin mafic dykes that were feeders for Carmacks Group volcanic are uncommon.

8. 2015 EXPLORATION PROGRAM

The 2015 exploration program comprised geological mapping, prospecting and a ground magnetic survey. The objective was to try to identify copper-gold mineralization of similar character to that found on the adjacent, historic workings on the crown grants. A total of three person-days were spent on the property on July 28th and November 8th. Time spent on the property was limited owing to the difficult access by quad or side-by-side trails and therefore production on the magnetic survey was not high. Prospecting during November was hampered in part by snow-cover.

9. MAGNETIC SURVEY METHODS

The survey method requires a minimum of two magnetometers; one of which is employed as a static monitor of the total magnetic field intensity while the other is moved across the survey area in a regular manner. The difference between the value of the total magnetic field intensity at the rover (moving magnetometer) and the base (static magnetometer) is a record of the spatial variations of the magnetic field over the survey area. Typically the resulting data are gridded to provide a continuous surface representing the variation in the magnetic field. Generally, areas of relatively high total magnetic field intensity correlate with rocks of relatively high magnetic susceptibility and areas of relatively low total magnetic field intensity correlate with rocks or overburden of relatively low magnetic susceptibility. Magnetic susceptibility is directly related to the approximate proportion of magnetite and pyrrhotite and to a limited extent other minerals present in the sample.

A magnetometer and accompanying base station (each a GSM-19) from GEM Systems were rented from Terraplus Inc. of Markham, Ontario.

From the Manufacturer:

> Overhauser effect magnetometers are essentially proton precession devices - except that they produce an order-of magnitude greater sensitivity. These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption. The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field. The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal -- that is ideal for very high sensitivity total field measurements. In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and eliminates noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously - which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

The base station was located at a site well away from human-induced magnetic interference and its location remained constant for the entirety of the surveying period. A hand-held GPS located the base station at 412084E, 6913973N, to the east of mineral Zone 1. A GSM-19 walk-mag backpack with an overhead mounted sensor was used as the rover (Figure 4).

The GSM-19 rover magnetometer was equipped with a GPS and real-time DGPS receiver allowing both accurate positioning and instrument clock synchronization. The Canada- wide DGPS service (CDGPS) broadcast was used for differential positioning; it is transmitted on L-band frequencies from the MSAT-1 communications satellite. The manufacturer quoted accuracy of the GPS receiver is less than 1 m.

The sensor on each GSM-19 instrument is a scalar magnetometer capable of measuring the earth's total magnetic field intensity. The Overhauser version allows sample rates down to 0.2 s with an absolute accuracy of +/- 0.1 nT. Instrument internal clock synchronization was accomplished by establishing link to one of the GPS enabled GSM-19 magnetometers at the beginning of each the survey day using a data cable.

No cut lines were used any of the lines. Instead, the GPS Navigation feature on the GSM system was employed which pre-programs the survey grid and guides the user along each line to its end using a track display and audio indicator. Plan maps showing the topographic contours and survey lines were created and distributed to the survey crew prior to commencing operations.

The survey position data were collected in NAD 83 UTM Zone 8N coordinates. Sample locations were recovered using real-time differentially corrected GPS sampling at one Hz.

The magnetic data on the rovers were collected at a continuous one Hertz sample rate while the magnetic data on the base were collected at a continuous 0.33 Hertz sample rate (one sample each three seconds). The rover data were collected in “walking mode” where time, magnetic field and position values are continuously recorded while the base station data were recorded in “base mode” where only the time and magnetic field data are continuously recorded.

The data were recorded to the GSM-19 data loggers in real-time and downloaded to a laptop computer at the end of each day. Basic data processing and quality control procedures were conducted at the end of the survey after the crew returned to the camp. The data processing flow included the following steps:

1. Download data from rover and base GSM-19W to laptop using GEMLINK
2. Use GEMLINK diurnal variation correction tool to correct TFM data using a datum of 57000 nT
3. Import of ASCII data files to Microsoft Excel
4. Add Grid and Line columns to spreadsheets
5. Review and edit data for any irregularity, errors or noise
6. Grid diurnally corrected magnetic data
7. Determine total line kilometers from straight line path between start and end points of each line.

Significant effort was required to extract useful position data for some lines. The GSM-19W GPS unit suffered from periods of inaccurate position data. In most cases a “clean” line path was easily resolvable as inaccurate positions were manifested as outliers.

Figure 4 Overhauser walk-mag GSM-19 magnetometer rover backpack mounted unit with GPS in action at the Carmack Copper Project (this unit also has a modular VLF sensor, which was not used in the HIP-REM program).

10. RESULTS

The mapping program was hindered by a lack of outcrop in the areas traversed. Only the small south-western portion of the claim block that has moderate relief is anticipated to have near-surface bedrock. The remainder of the claim block is covered by alluvial sediments of the Yukon River. The 2008 prospecting program covered the area on the HIP 16 and REM 14 claims where anomalous copper in soils were found. The 2015 program involved a traverse that passed over parts of Quartz Claims HIP 7 and HIP 9, however no outcrops were noted. The only outcrop observed was of the late Triassic Povoas Formation augite phyric basalts that were noted during access to the property on the crown grants that divide the two Carmacks Copper project claim blocks.

The ground magnetic survey on the HIP-REM claims comprised 4 parallel lines of 500 metres, spaced by 50 metres, oriented along an azimuth of 110° for a total of 2 line-km. The data were gridded by minimum curvature and were smoothed with one pass of a 3x3 filter. The results show an apparent WNW contact between two rock units of different magnetic susceptibility (Figure 5). The northern half of the survey shows a magnetic high and the southern half a magnetic low. The area is mapped on a regional scale on government maps as the late Triassic Povoas Formation and this formation is inferred to be juxtaposed against the late Triassic- early Jurassic Minto Suite Granite Mountain Batholith granodiorite by faulting. The WNW contact inferred from the magnetic survey runs parallel to the regional fault-contact with the granodiorite and may represent a splay of the controlling fault or a parallel structure. However, owing to a lack of outcrop, trenching or drilling in the area, the geological interpretation of this contact remains speculative.

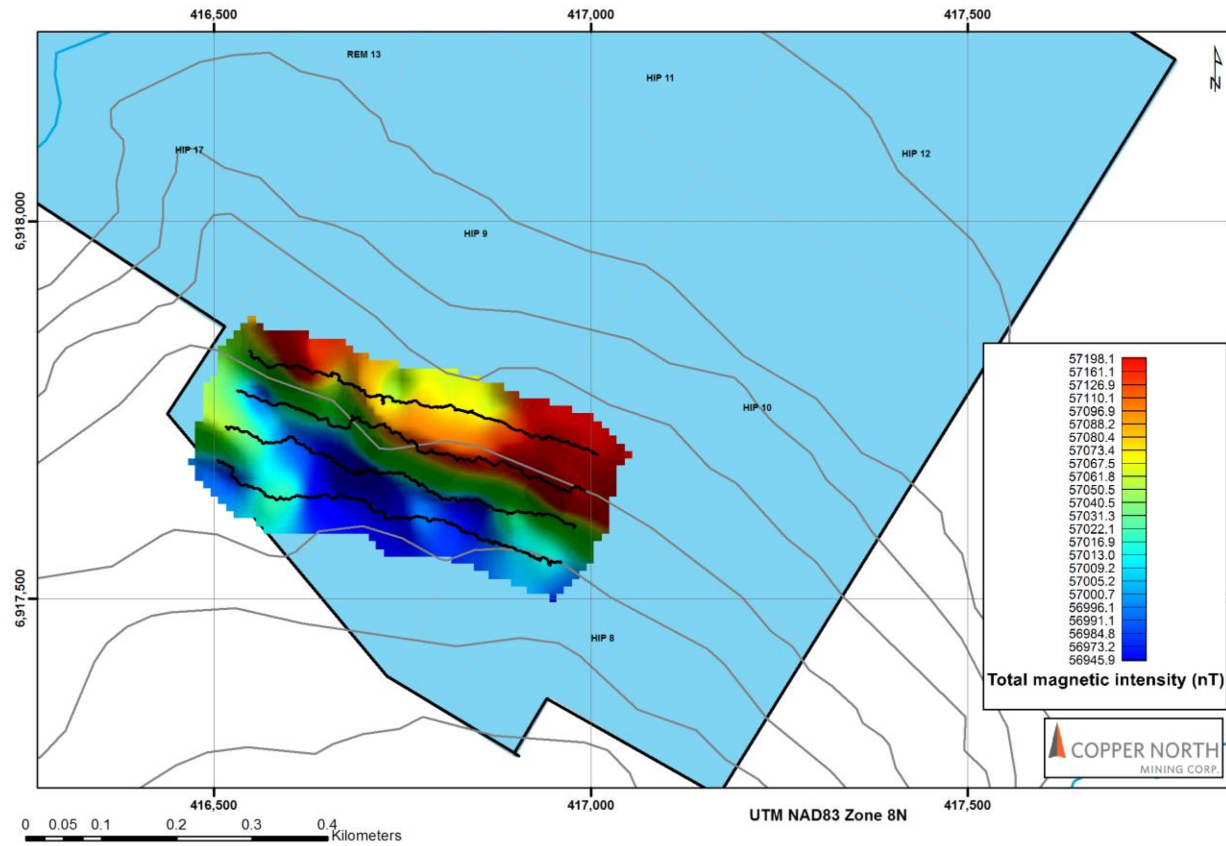

Figure 5 Magnetic survey over the HIP REM claims. GPS line locations are marked with solid black lines.

11. CONCLUSIONS AND RECOMMENDATIONS

Although there is recorded production from the adjacent crown grants, no mineralization has yet been discovered on the HIP-REM claims. Given the high potential for finding additional oxide and sulphide copper mineralization on the main Carmacks Copper lease-claim block, the HIP-REM claims are a low-priority target. Therefore, no further work is recommended on the claims.

12. STATEMENT OF COSTS

	Cost	Days	subtotal
Geologists	$ 500.00	2	$ 1,000.00
Geologist	$ 275.00	1	$ 275.00
Mag rental*	$ 250.00	1	$ 250.00
truck rental*	$ 150.00	2	$ 300.00
camp rental*	$ 100.00	2	$ 200.00
kubota rental*	$ 100.00	2	$ 200.00
fuel share*	$ 50.00	2	$ 100.00
food and supplies per person per day	$ 100.00	3	$ 300.00
cook	$ 420.00	2	$ 840.00
sat phone, computers, GPS, SPOT rental	$ 30.00	1	$ 30.00
fuel and mobilization share*	$ 100.00	2	$ 200.00
expediting share*	$ 200.00	2	$ 400.00
communications share*	$ 50.00	2	$ 100.00
2015 expenses eligible for double assessment			
		TOTAL	$ 4,195.00
		$4,195.00 under OIC 2015/20 =	$ 8,390.00
February 2016 expenses (not eligible for double assessment):			
report writing, data analysis and map production	$ 450.00	3	$ 1,350.00
GRAND TOTAL TO BE APPLIED FOR ASSESSMENT CREDIT			**$ 9,740.00**

*costs are estimated as a share of the total cost of an exploration program that covered additional quartz claims and leases.

A one day visit to the claims was made by two geologists for a magnetic survey and prospecting, in addition a one day visit was made on another day by another geologist for mapping

13. REFERENCES

Archer, A.R., 1971. Geology and Geochemistry of the Williams Creek Property. Yukon Government assessment report # 060203.

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Holtby, M., 1993. Assessment Report, Williams Creek Property, Whitehorse Mining Division, Western Copper Holdings Limited. Yukon Government assessment report # 093100.

McNaughton, K., 1994. Carmacks Copper Project, 1994 Exploration Program.

Robinson, R. J., Casselman, S. G., 2006. Mineral Resource Estimate For the Carmacks Copper Project. Western Copper Corporation Private report.

14. STATEMENT OF QUALIFICATIONS

I, Jack Edward Milton, do hereby state that:

I reside at 1209-1212 Howe St., Vancouver, BC, V6Z 2M9.

I am not a Professional Geologist.

I graduated from the Camborne School of Mines, University of Exeter, UK, in 2008 with a first class honours Bachelor of Science degree in Applied Geology.

I graduated from the Camborne School of Mines, University of Exeter, UK, in 2009 with a Master of Science degree in Mining Geology.

I graduated from the University of British Columbia in 2015 with a Ph.D. in Geological Sciences.

I have been employed by Copper North Mining Corp. since graduating from my Ph.D. and I own shares in Copper North Mining Corp.

I managed and supervised the exploration program at the Carmacks Copper project in the field season of 2015.

This statement refers to the 2016 Technical Assessment Report for the Carmacks Copper HIP-REM property that describes work carried out in the 2015 field season.

Jack Milton [signed]

Project Geologist,

Copper North Mining Corp.

15. APPENDIX 1: Table of HIP-REM Quartz Claim information

Grant Number	Claim Name	Claim Number	Operation Recording Date	Staking Date	Claim Expiry Date
YC65560	HIP	7	2007-08-14	2007-08-07	2016-03-09
YC65561	HIP	8	2007-08-14	2007-08-07	2016-03-09
YC65562	HIP	9	2007-08-14	2007-08-07	2016-03-09
YC65563	HIP	10	2007-08-14	2007-08-07	2016-03-09
YC65564	HIP	11	2007-08-14	2007-08-07	2016-03-09
YC65565	HIP	12	2007-08-14	2007-08-07	2016-03-09
YC65569	HIP	16	2007-08-14	2007-08-07	2016-03-09
YC65570	HIP	17	2007-08-14	2007-08-07	2016-03-09
YC39221	REM	1	2005-04-11	2005-04-08	2016-04-11
YC39222	REM	2	2005-04-11	2005-04-08	2016-04-11
YC39223	REM	3	2005-04-11	2005-04-08	2016-04-11
YC39224	REM	4	2005-04-11	2005-04-08	2016-04-11
YC39225	REM	5	2005-04-11	2005-04-08	2016-04-11
YC39226	REM	6	2005-04-11	2005-04-08	2016-04-11
YC39227	REM	7	2005-04-11	2005-04-08	2016-04-11
YC39228	REM	8	2005-04-11	2005-04-08	2016-04-11
YC39229	REM	9	2005-04-11	2005-04-08	2016-04-11
YC39230	REM	10	2005-04-11	2005-04-08	2016-04-11
YC39231	REM	11	2005-04-11	2005-04-07	2016-04-11
YC39232	REM	12	2005-04-11	2005-04-07	2016-04-11
YC39233	REM	13	2005-04-11	2005-04-07	2016-04-11
YC39234	REM	14	2005-04-11	2005-04-07	2016-04-11
YC39251	REM	32	2005-04-11	2005-04-08	2016-04-11
YC39252	REM	33	2005-04-11	2005-04-08	2016-04-11
YC39253	REM	34	2005-04-11	2005-04-08	2016-04-11
YC39254	REM	35	2005-04-11	2005-04-08	2016-04-11

Claim expiry dates are prior to credit of the assessment work described in this report being applied to the claims.