



**2016 TECHNICAL ASSESSMENT REPORT ON THE  
GEOLOGY AND GEOPHYSICS OF THE CARMACKS COPPER  
PROJECT, YUKON**

**Submitted on January 20<sup>th</sup> 2017**

Whitehorse Mining District, Yukon Territory

NTS 115I07

62° 20' N 136° 41' W

Grant numbers: Y 51118; Y 51149-Y 51152; Y 51181; Y 59373; Y 59382; YB26708-YB26750; YB36240-YB36252; YB36254; YB36256; YB36446-YB36451; YB36765-YB36777; YB36898; YB36899; YB36929-YB36931; YB36933; YB36962-YB36964; YB96620; YB96622; YB96626-YB96630; YB96632; YB96634; YB96636-YB96647; YB96986-YB96998; YB97068; YB97251; YC39221-YC39254; YC60381-YC60420; YC65320-YC65324; YC65554- YC65580; YC66844-YC66873; YF50001-YF50025.

Owner and operator of claims: Carmacks Mining Corp., a wholly owned subsidiary of Copper North Mining Corp.

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January 2017

**Table of contents**

<b>1. INTRODUCTION AND TERMS OF REFERENCE .....</b>	<b>2</b>
<b>2. LOCATION AND ACCESS.....</b>	<b>2</b>
<b>3. PHYSIOGRAPHY AND CLIMATE.....</b>	<b>4</b>
<b>4. CLAIM INFORMATION .....</b>	<b>4</b>
<b>5. HISTORY.....</b>	<b>5</b>
<b>6. REGIONAL GEOLOGY .....</b>	<b>8</b>
<b>7. LOCAL GEOLOGY .....</b>	<b>12</b>
<b>8. 2016 EXPLORATION PROGRAM.....</b>	<b>13</b>
<b>9. MAGNETIC SURVEY METHODS.....</b>	<b>13</b>
<b>10. MAGNETIC SURVEY RESULTS.....</b>	<b>17</b>
<b>11. TRENCHING .....</b>	<b>20</b>
<b>12. CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>26</b>
<b>13. STATEMENT OF COSTS.....</b>	<b>27</b>
<b>14. REFERENCES .....</b>	<b>28</b>
<b>15. STATEMENT OF QUALIFICATIONS .....</b>	<b>29</b>
<b>16. APPENDIX 1: Table of Quartz Claim/Lease information.....</b>	<b>30</b>
<b>17. APPENDIX 2: Supplementary digital materials .....</b>	<b>37</b>
<b>18. APPENDIX 3: Assay certificates .....</b>	<b>38</b>

## 1. INTRODUCTION AND TERMS OF REFERENCE

In 2016 Copper North Mining Corp. conducted an exploration program on the Carmacks Copper project. The program comprised trenching and ground magnetic surveys. The Carmacks Copper property comprises contiguous claims and leases. Exploration work was conducted only on the claims and therefore all eligible expenses for the 2016 program are being considered for assessment credit.

The exploration program was managed by Jack Milton, Ph.D., of Copper North Mining Corp., and the exploration team comprised Nikolett Kovacs, B.Sc. with an assistant Mervyn Johnson. The exploration program was carried out in the summer between June 1<sup>st</sup> and June 16<sup>th</sup> 2016; mobilization, access-improvements and camp set-up was carried out from June 1<sup>st</sup> to June 6<sup>th</sup> and the magnetic survey and trenching was carried out from June 6<sup>th</sup> to June 15<sup>th</sup>.

## 2. LOCATION AND ACCESS

The Carmacks Copper property is located at Williams Creek, 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° 20' N 136° 41' 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.

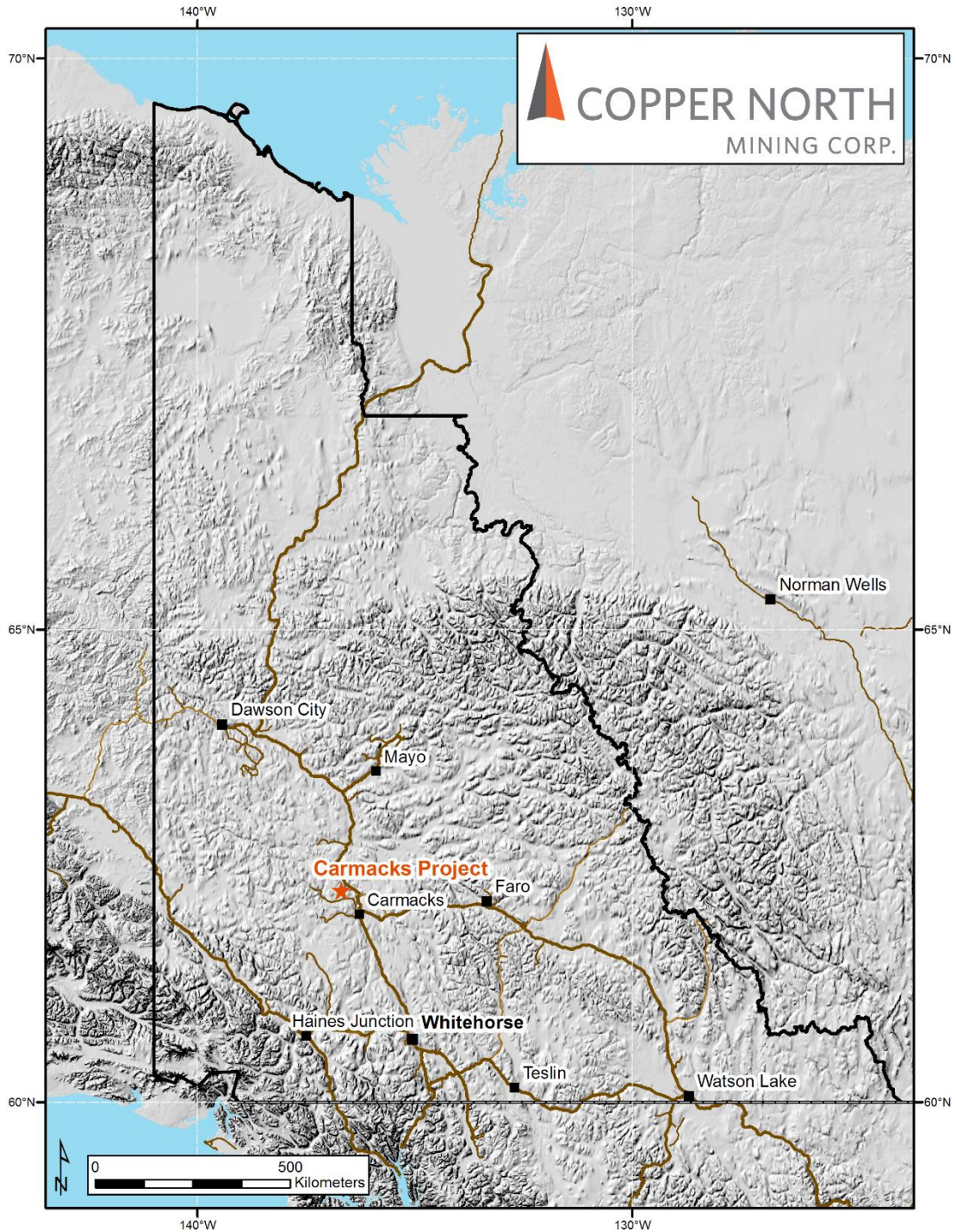


Figure 1 Location of the Carmacks Copper project, Yukon Territory, Canada.

### 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 claims and leases comprising the Carmacks Project are held directly by Carmacks Mining Corp., a wholly-owned subsidiary of Copper North Mining Corp. The Carmacks Project claims are in the Whitehorse Mining District and were acquired in accordance with the Yukon Quartz Mining Act. The Carmacks Project consists of 284 quartz mineral claims and 20 quartz mineral leases, covering approximately 3,970 hectares (ha) (Figure 2). An additional 89 contiguous claims comprise the WASP claims (Figure 2), however these were staked in July 2016, after the magnetic survey and trenching program was completed. Therefore, the work described in this report is not being filed for assessment credit on the WASP claims.

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.

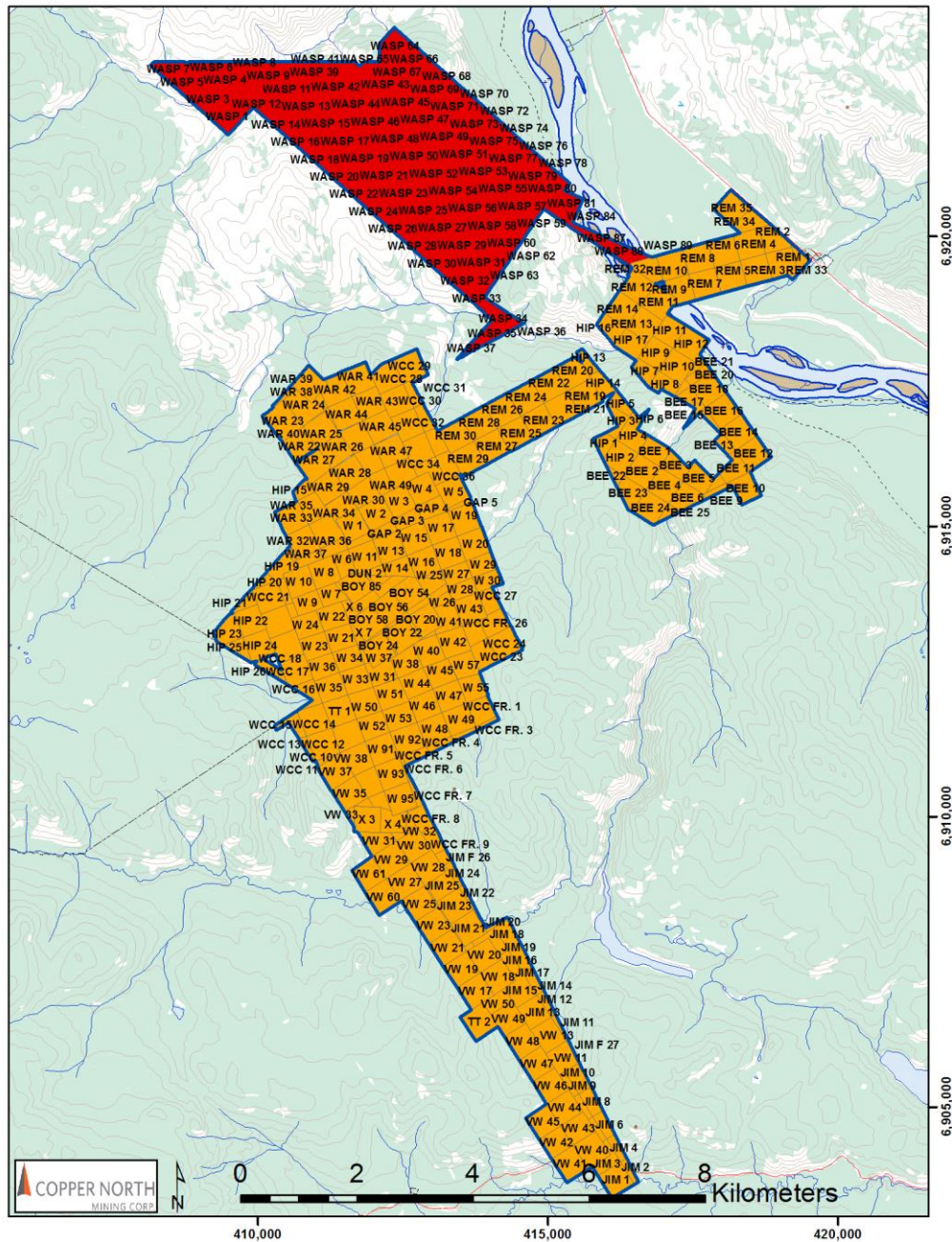


Figure 2 Claim location map for the Carmacks Copper project claims (orange) and the WASP claims (red).

## 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 an 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 its 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, Copper North carried out a program of ground magnetic surveys, excavator trenching, mapping and 3,271 m of diamond drilling. The drilling led to the calculation of a maiden resource for zones 2000S, 12 and 13, bringing the total oxide Measured and Indicated resource to 15.7 Mt of 0.94% Cu, 0.38 g/t Au and 3.97 g/t Ag, with a further 0.9 Mt of Inferred oxide resource at 0.45% Cu 0.12 g/t Au and 1.9 g/t Ag. The total project sulphide resources were increased to 8.1 Mt of 0.68% Cu, 0.18 g/t Au, 2.33 g/t Ag (M&I) with an additional Inferred resource of 8.4 Mt of 0.63% Cu, 0.15 g/t Au and 1.99 g/t Ag. These resource numbers are totals including Zones 1, 4, 7, 7A, 2000S, 12 and 13.

## 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 volcanoclastic rocks. The Lewes River Group is Upper Triassic and comprises augite phyric basalts, basaltic andesites and volcanoclastic 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.

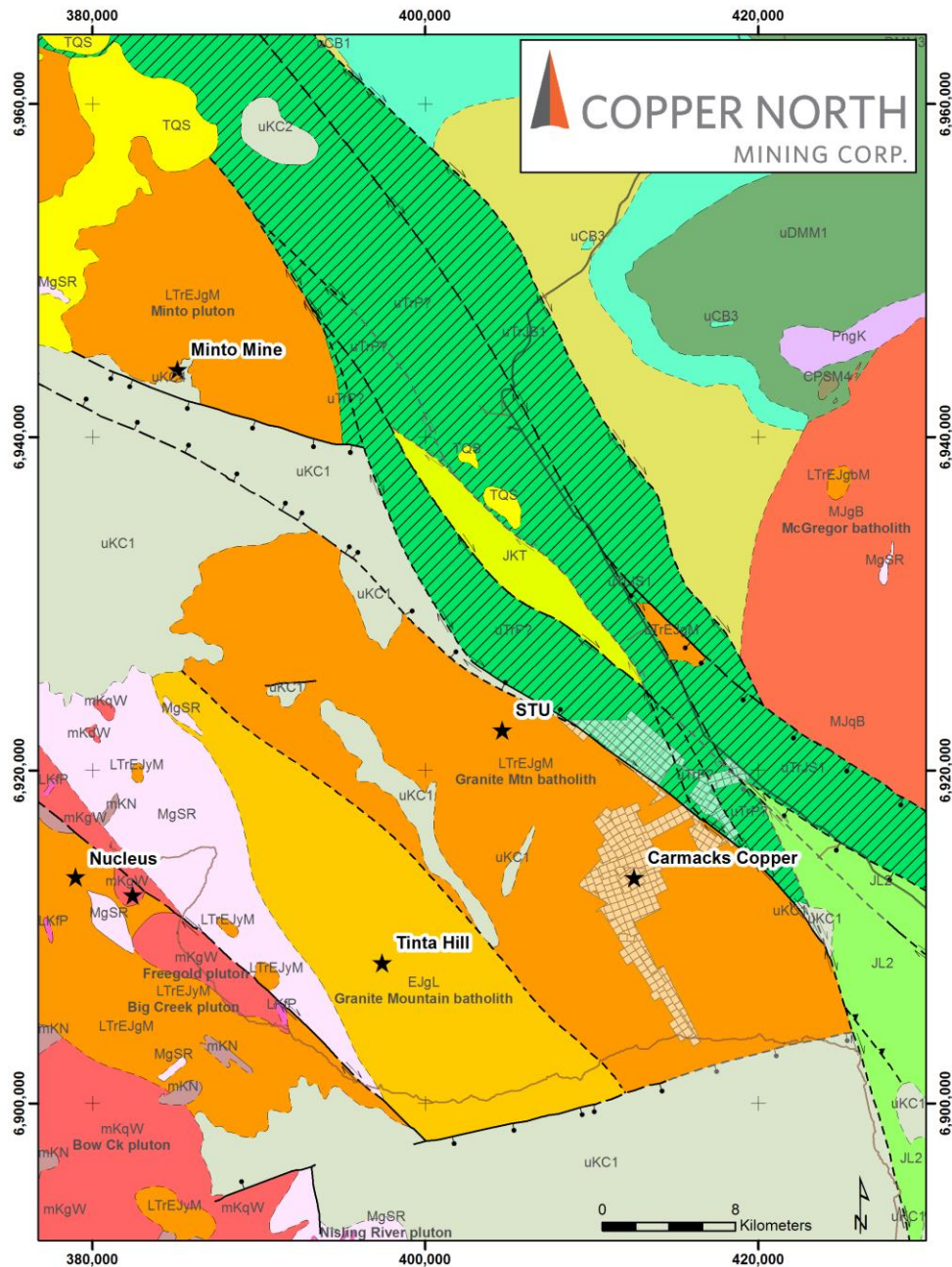



Figure 3 Regional geology surrounding the Carmacks Copper project. Copper North’s claims are overlain on the bedrock geology map from the YGS. Significant mineral occurrences are marked with stars. Legend for geology on following page.

## 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 granodiorite, 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 hornblende; pink, potassium feldspar megacrystic, hornblende granite to granodiorite and associated easterly trending mafic dyke swarms (Mt. Bryde Pluton; Bennett Granite)

### EARLY JURASSIC

 LTrEjM: 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)


 LTrEjgB: 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, hornblende-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 granoblastic amphibolite 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. Along the margins of the amphibolite bodies, migmatization has occurred, producing melanosome and leucosome interfingered with the amphibolite.

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. 2016 EXPLORATION PROGRAM

The 2016 exploration program comprised 21.55 line-km of ground magnetic surveying, and excavator trenching.

## 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 DRM Exploration, Vancouver.

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 412,084E, 6,913,973N, 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





*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 program).*

## 10. MAGNETIC SURVEY RESULTS

The ground magnetic survey was conducted 2016. A total of 21.55 line-km were surveyed. In the 2015 ground-mag program, discrete grids were surveyed and given a letter designation: A, B, C etc.. The grids are contiguous, with the exceptions of grids BN and G (and Grid I, which is located on the HIP-REM claims and described in a separate assessment report). The same letter designation was continued for 2016 and one grid was surveyed: Grid J. The same base station location was used for all grids. The same make and model of magnetometer, but a different serial number unit, was used as a rover for Phase 1 and Phase 2 of the 2015 program and for the 2016 program. This allowed all data collected to be compiled in to a single database and gridded as a whole to produce an overall magnetic map encompassing all grids spanning both the 2015 and 2016 programs. All digital data for 2015/2016 are given in Appendix 2.

The line locations, line numbers and grids are shown in Figure 5. The line data are taken from the GPS unit built in to the magnetometer. Daily production was slowed owing to inclement weather conditions, difficult access and thick bush.

Grid J was intended as a contiguous grid, however owing to slow data collection, only three discrete areas within the grid were surveyed. Two of these area adjoin Grid G and the other covers the exposed mineralized outcrop at Zone 2. The line spacing was 50 metres and the line azimuth was 066°.

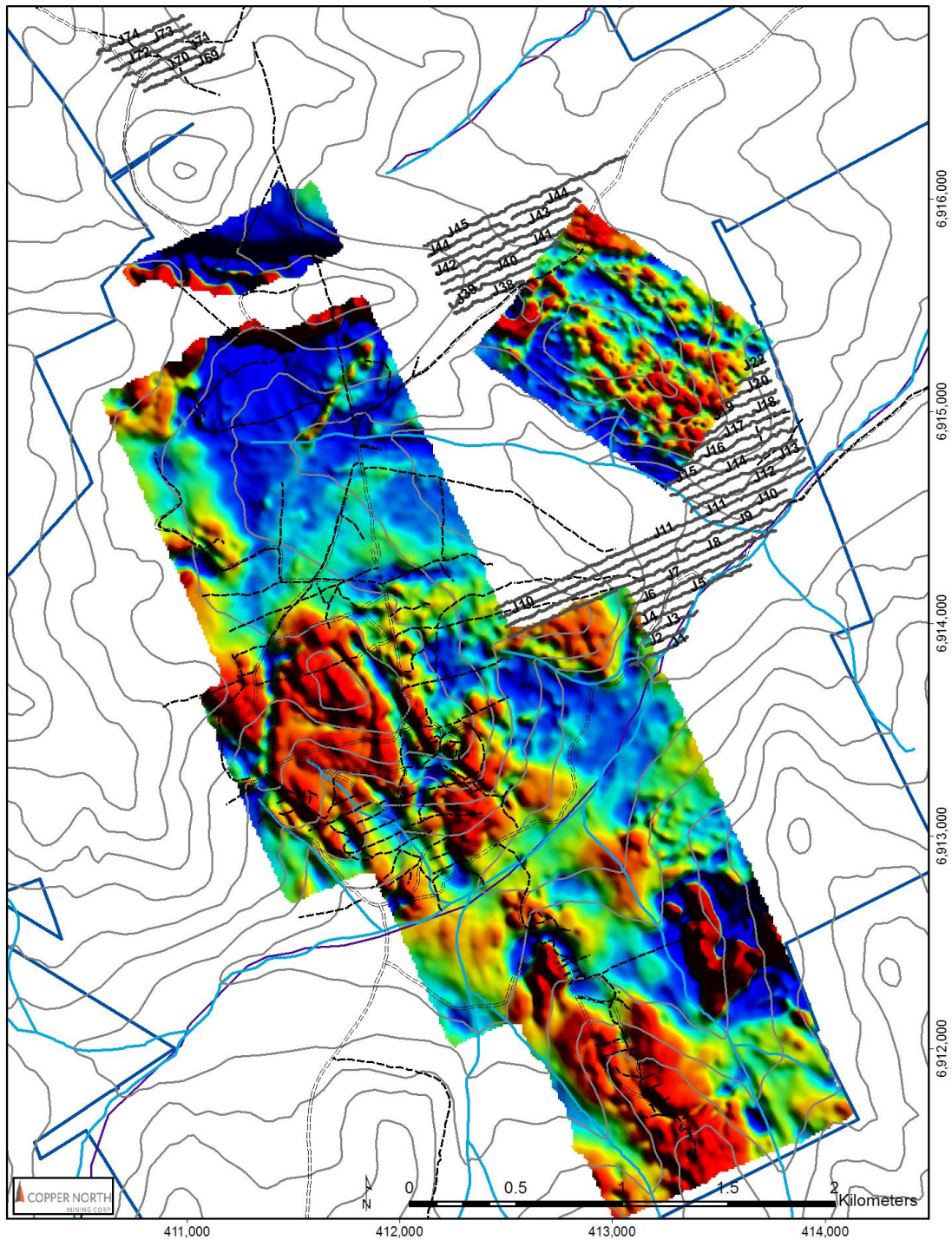
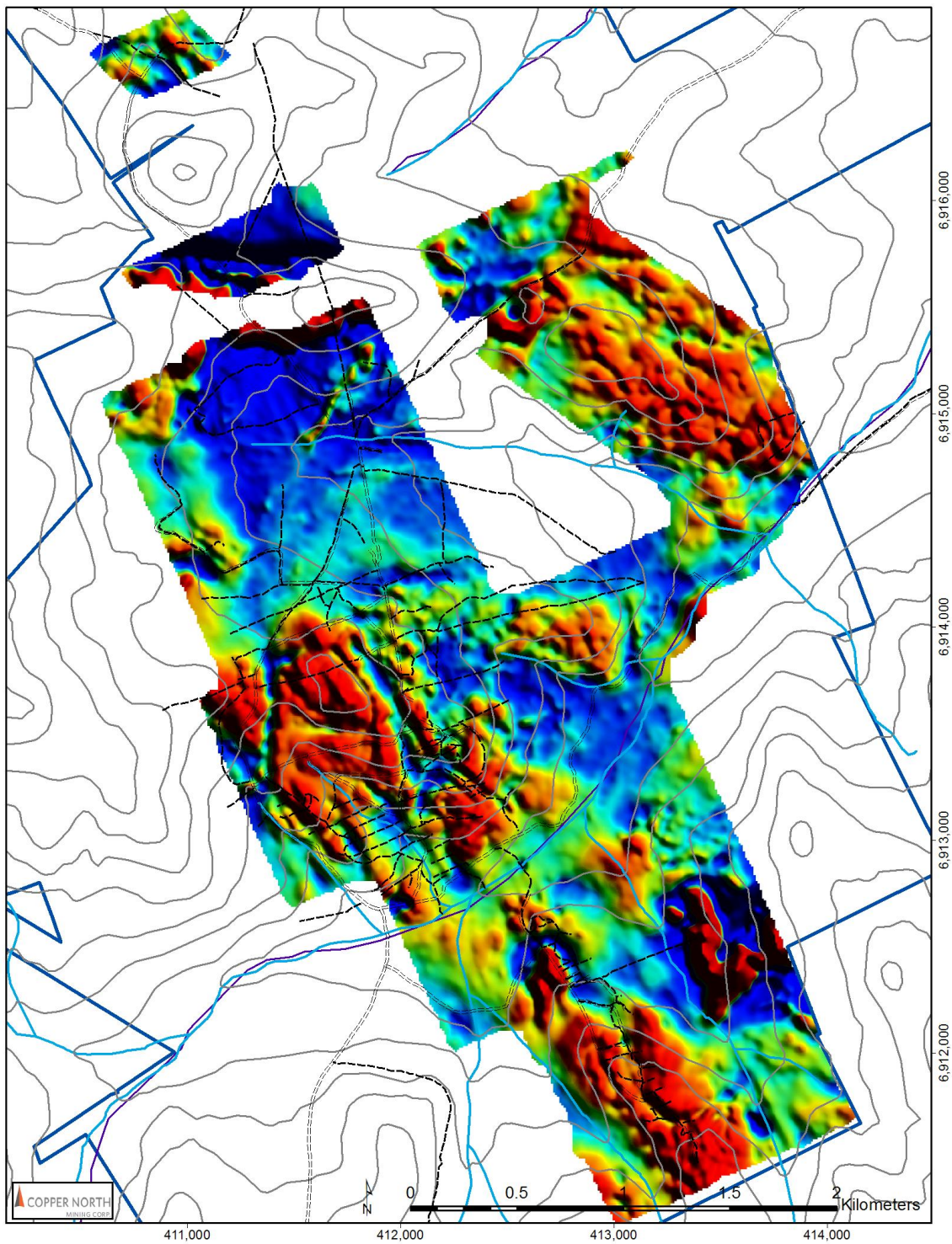


Figure 5 2016 Grid J Ground mag lines, derived from the GPS of the mag console, labelled with line number. Background is 2015 total magnetic field data.



*Figure 6 Total magnetic intensity from the combined data of the 2015 and 2016 ground magnetic surveys.*

The results of the magnetic survey (Figure 6) indicate a strong correlation between mineral zones and magnetic lows. This is likely due to the oxidation of magnetite to hematite in the highly oxidized amphibolites and foliated rocks. The oxidation is more prominent in these rocks as the fabric and its steep dip has facilitated deep circulation of oxygen-rich meteoric fluids, compared to the massive, less permeable intrusions in which the amphibolite is hosted. The surrounding intrusions also bear magmatic magnetite and mostly appear as magnetic highs. This provides a good contrast between mineral zones and background host intrusions. Some linear magnetic lows do not correlate with mineral zones – these are mostly fault structures along which deep oxidation and hematite alteration are present.

The Carmacks Group volcano-sedimentary rocks and volcanic rocks show up as highly magnetic areas surrounded by magnetic lows, likely owing to the dipole effect of the strongly magnetic bodies. Abrupt linear changes in the magnetic intensity are inferred to be caused by the offset of lithologies with different magnetic susceptibility along fault structures. In areas where deep till cover is present, the magnetic method becomes less effective at distinguishing features in the underlying bedrock.

The 2016 magnetic survey did not identify any conspicuous magnetic lows suitable for follow-up trenching. Some anomalies generated during 2015 magnetic survey could not be trenched as the ground was frozen by November. These anomalies were chosen for trenching in 2016.

## 11. TRENCHING

A total of 9 trenches were excavated for a total of 520 lineal trench metres and a total estimated excavated volume of 2,994 m<sup>3</sup> (see Table 1). All trenching was performed with a CAT 320 mechanical excavator. Trenches were logged by a geologist and grab samples were taken for assay where appropriate. Trenching in some areas was hampered by thick overburden of till or permafrost.

Quality assurance and quality control procedures include the systematic insertion of duplicate and standard samples in to the sample stream. Grab samples were located by GPS, placed in sealed bags and were shipped straight to the preparatory laboratory of ALS Minerals in Whitehorse. All geochemical analyses were performed by ALS Minerals in North Vancouver. Total copper assays were performed by four-acid digestion with an AAS finish. Soluble copper assays were carried out by sulphuric acid digestion with an AAS finish. Gold was analysed by a 30 gram charge fire assay with an AAS finish. Silver was analyzed by four-acid digestion and ICP-AES finish. Other elements were reported by a standard four-acid digestion multi-element package. All digital data are included in Appendix 2. Assay certificates are in Appendix 3.

Five areas were investigated: A to E. Each trench is numbered within each area e.g. A2 or D3.

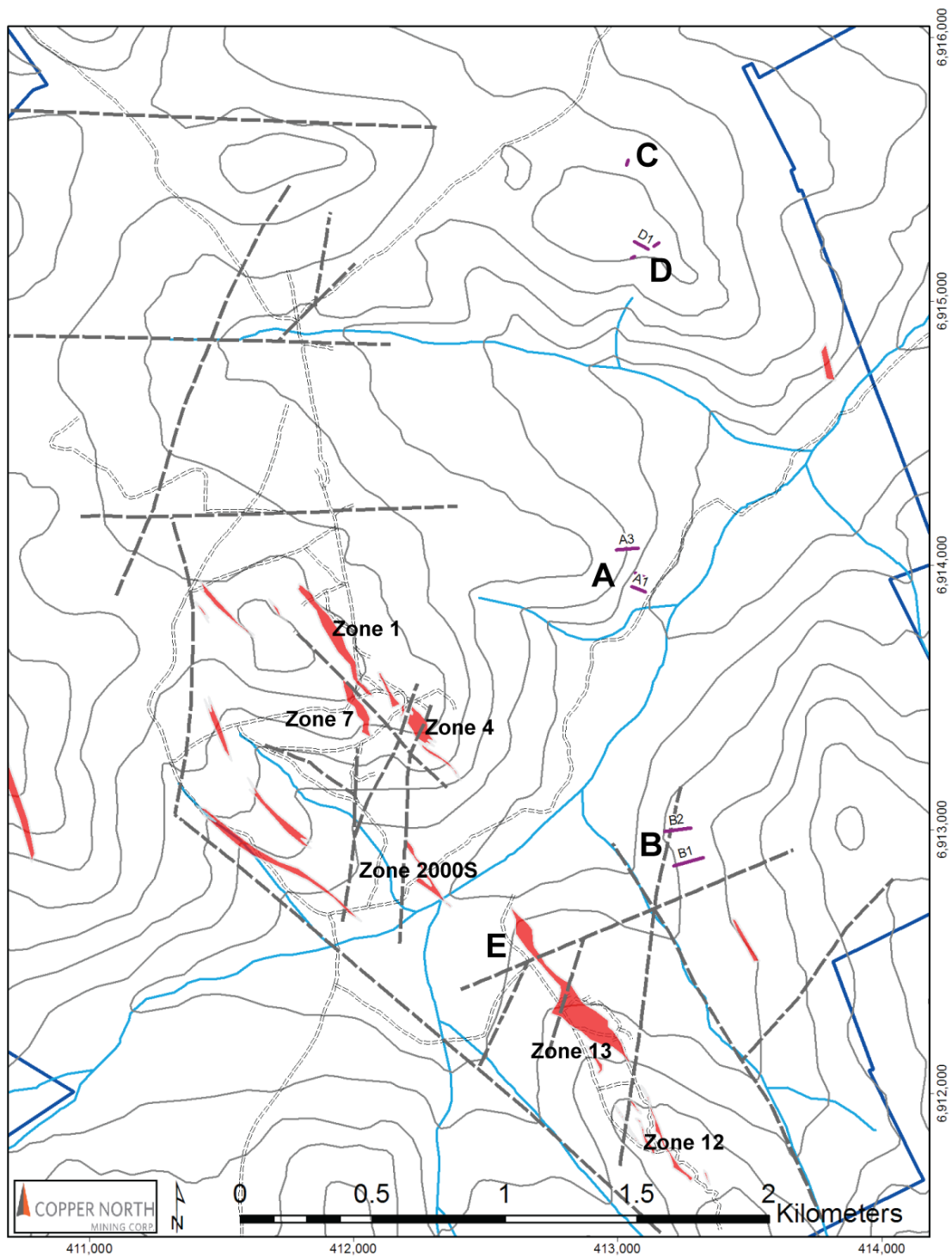


Figure 7 Trench location overview map for the 2016 trenching program – trench areas A to E labelled. Mineral zones in red, labelled, and faults inferred from magnetics as dashed grey lines.

Trench	Start		End		Location			Average (m)			(m <sup>3</sup> )	(m <sup>2</sup> )	Reclaimed?	
	Easting	Northing	Easting	Northing	Claim 1	Claim 2	Title	Length	depth	width	volume	surface area		
A1	413,051	6,913,920	413,103	6,913,900	BOY 52 (60%)	BOY 51 (40%)	Claim	55	2	3	330	165	Yes	
A2	413,066	6,913,971	413,112	6,913,949	BOY 52		Claim	50	2	3	300	150	Yes	
A3	412,995	6,914,058	413,077	6,914,065	BOY 52		Claim	82	2.5	3	615	246	Yes	
B1	413,211	6,912,862	413,323	6,912,894	W 42		Claim	115	1.5	4	690	460	Yes	
B2	413,179	6,912,992	413,276	6,913,005	W 42		Claim	98	1.5	4	588	392	Yes	
C1	413,031	6,915,516	413,040	6,915,534	W 4		Claim	20	1	4	80	80	Yes	
D1	413,061	6,915,226	413,116	6,915,196	GAP 4 (80%)	W 17 (20%)	Claim	63	1	3.5	220.5	220.5	Yes	
D2	413,051	6,915,163	413,063	6,915,170	W 17		Claim	13	1	2	26	26	Yes	
D3	413,134	6,915,208	413,155	6,915,222	GAP 4 (60%)	W 17 (40%)	Claim	24	2	3	144	72	Yes	
											TOTAL	2993.5		

*Table 1 Trench location, claim, dimensions and reclamation status.*

#### Area A

Area A contains a NNW trending magnetic low that was thought to be the northwards extension of Zone 14. Trenching across three trenches in this area did not locate any copper mineralization (Figure 8). The trenches intersected granodiorite with some hematite staining. The anomaly is thought to be due to oxidation along a fault structure and unrelated to copper mineralization. No samples were taken.

#### Area B

Area B contains patchy magnetic lows and was thought to be a northwards continuation of Zone 14. Two trenches were cut in this area (Figure 8) but failed to intersect any copper mineralization. Granodiorites were present throughout the trenches. However, Zone 14 is covered by a cap of barren granodiorite and therefore the anomaly may be present due to a deeper body of mineralization that does not intersect the surface. This target would have to be tested by drilling but is a low-priority target as if mineralization is present, it will likely be sulphides not oxides.

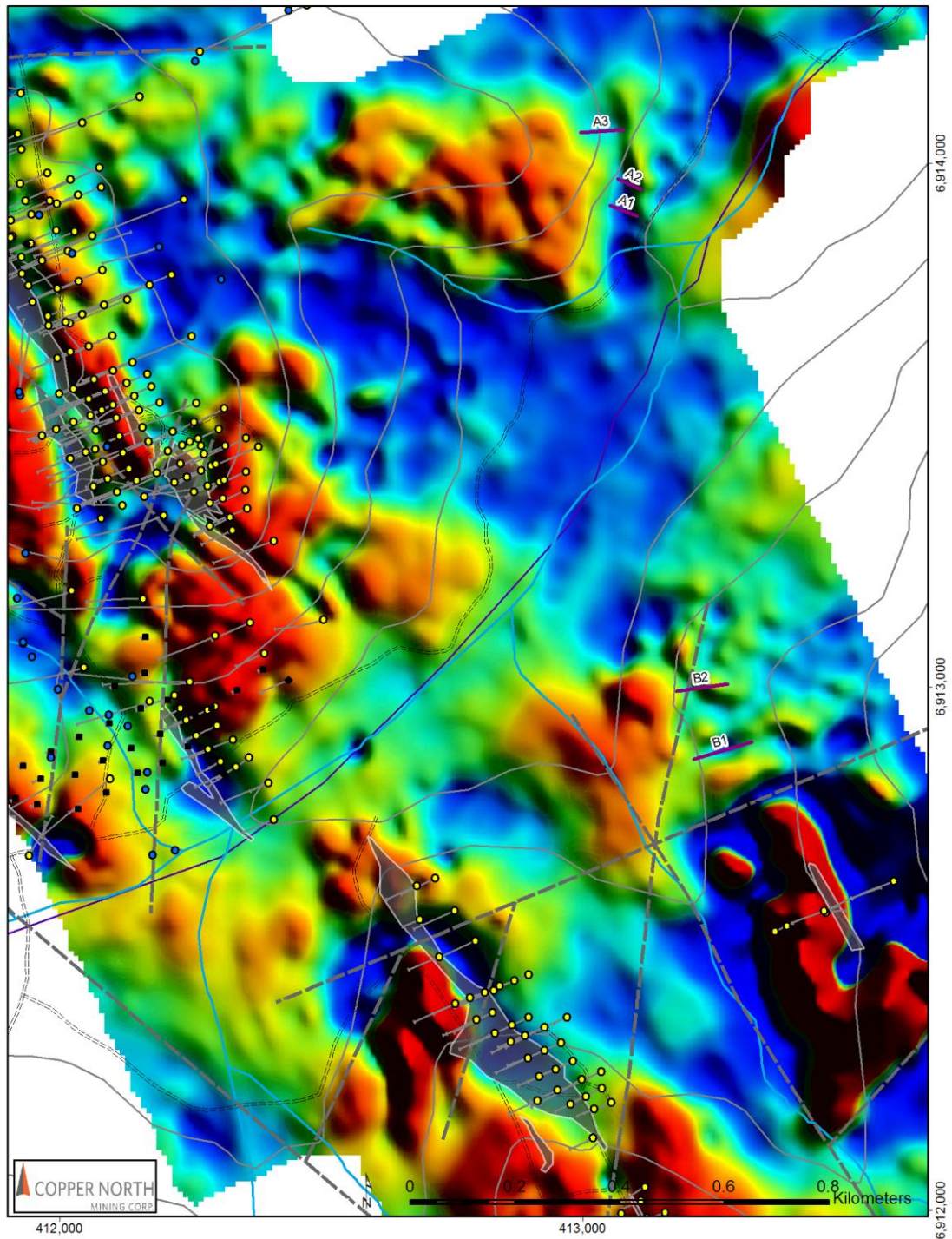


Figure 8 Locations of trenches (purple lines, labelled with trench number) in areas A and B on total magnetic field map from 2015/2016 surveys. Drillholes (yellow, black and blue) in defined mineral zones (grey outlines).



### Area C

Area C contains a NW trending magnetic low that is approximately 2 km along-strike from Zone 2. A short, 20 metre section of one trench, C1, was excavated in this area (Figure 9), exposing only granodiorite just south of the main magnetic low feature. Further trenching in this area was prevented by frozen ground on the north-facing slopes.

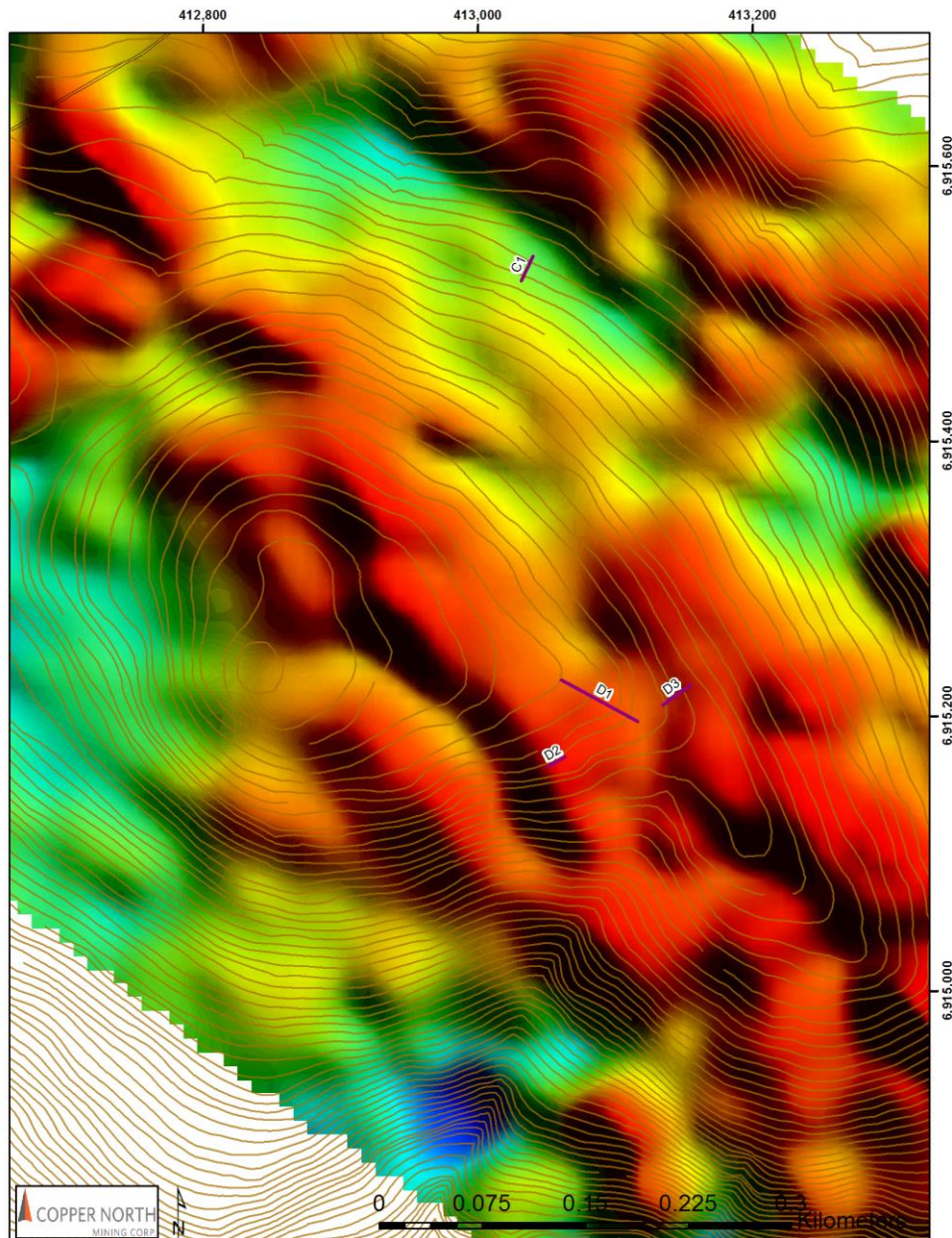


Figure 9 Location of trenches (purple lines, labelled) in areas C and D. Total magnetic field map (2015/2016 surveys) with topographic contours.

### Area D

During trenching activity in Area C, some foliated porphyritic amphibolite float was discovered by prospecting in the roots of blown-down trees, approximately 300 metres south of Area C. Based on this encouraging sign, three trenches were cut in this area, Area D (Figure 9). Bedrock was close to surface, likely due to the location on a subtle ridge.

In trenches D1 and D3, foliated amphibolite was exposed with short <2 m, localized sections of oxide copper mineralization. Only certain portions of the amphibolite are mineralized, much of the trenches comprises dark, black, barren foliated amphibolite. Where present, the mineralization comprised abundant malachite staining on fracture surfaces and some limonite/hematite staining. Bornite and minor chalcopyrite occur locally, with some weathering to copper limonite. Copper limonite follows the foliation planes and the mineralized rocks tend to be hard and brittle, expressed topographically as minor ridges or humps. The amphibolites are hosted and cut by granodiorite intrusions. Assays for four grab samples collected from the mineralized portions of the trenches are given in Table 2.

SAMPLE	Easting	Northing	Trench		Cu-AA62	Cu-AA05	Au-AA23	ME-ICP61
					Total Cu	Acid-soluble Cu	Au	Ag
	UTM NAD83 Z8N				%	%	g/t	g/t
S045051	413,089	6,915,210	D1	Foliated amphibolite with malachite stain on fracture surfaces	1.239	1.175	0.603	8.9
S045052	413,107	6,915,201	D1	Amphibolite with malachite stain on fracture surfaces and some limonite/hematite stain	0.684	0.611	0.089	3.4
S045054	413,073	6,915,219	D1	Foliated microdiorite with minor malachite stain on fracture surfaces	0.716	0.616	0.358	4.4
S045053	413,145	6,915,215	D3	Foliated amphibolite with abundant copper stain on fractures. Bornite with minor chalcopyrite altered to copper limonite, following foliation planes.	1.772	1.56	0.802	6.9

*Table 2 Grab sample assays from trenches D1 and D3.*

The copper, gold and silver grades of the four grab samples taken in these trenches indicate that the metal tenor and oxidized nature of mineralization is similar to that found elsewhere across the property. The minor mineralization present in these trenches can explain the two anomalous historic soil samples of 160 ppm Cu and 134 ppm Cu within 90 metres downslope. The mineralization in this area has some impressive grab samples but lacks the size or continuity to warrant further investigation.

### Area E

Area E contains a linear NNW trending magnetic low, thought to be the faulted offset continuation of Zone 13 or possibly Zone 2000S. Area E is a north-facing slope with thick moss in spruce forest. Excavation was attempted at several locations in this area but frozen ground was encountered at surface, preventing trenching.

## 12. CONCLUSIONS AND RECOMMENDATIONS

The mineralization discovered in the course of this exploration program was not sufficiently continuous or large enough to consider further exploration of that target. The targets that could not be reached owing to frozen ground are still considered worthy exploration targets and would require drill-testing. A two phase exploration program is recommended to evaluate the potential for additional mineralization in known zones and to evaluate the potential for discovering new zones on the remainder of the property. Phase 1 would involve a comprehensive ground magnetic survey at a 50 metre line spacing across the remainder of the property. This could be infilled at 25 metres for areas that warranted higher resolution of prospective magnetic features. The magnetic data should be inverted in 3D, constrained by all available geological information and magnetic susceptibility measurements taken from drill core. The magnetic model may generate targets that can be followed up by trenching. The total budget proposed for Phase 1 is \$70,000.

Phase 2 would comprise the drilling of targets trenched in Phase 1, targets that could not be reached by trenching and additional drilling in known zones. The highest priority target is the gap between Zone 13 and Zone 2000S. The northern end of Zone 13 should be drill tested for the possibility of northwards continuation, possibly to connect with 2000S. In particular, the linear magnetic low that appears to be the continuation of zone 2000S should be drill tested near Zone 13 as a test of offset along a NE-SW trending fault. The NE-SW trending fault may be synsedimentary with the Carmacks Group, controlling the sedimentation in a small, fault-bound pull-apart basin. If oxidation pre-dates the deposition of the Carmacks Group, i.e. pre-late Cretaceous, then a full profile of the oxidation may be present at depth in the hangingwall of the fault. The area between Zones 12 and 13 would be targeted as 25 m step-out fence drilling starting at the south end of Zone 13. The magnetic low approximately 280 m NE of the northern end of Zone 12 should be drilled to test the possibility of the offset of the southern end of Zone 13 along a NE-SW trending (strike-slip?) fault. The limonite-stained amphibolites in trench TR15-34 should be drilled to test for mineralization at depth. The very weak linear magnetic low 640 metres NNW of the north end of Zone 1 should be drill tested. Phase 2 would comprise up to 2,000 metres of drilling with a proposed budget of \$460,000.

## 13. STATEMENT OF COSTS

<b>YMEP Eligible Costs</b>	<b>Rate</b>	<b>Days</b>	<b>Cost</b>
Assistant 1	\$ 250	9	\$ 2,250.00
Geologist	\$ 270	13	\$ 3,510.00
Senior Geologist	\$ 450	18	\$ 8,100.00
Magnetometer rental	\$ 750	4	\$ 3,000.00
Kluane Drilling invoice (including excavator, bulldozer, fuel, equipment operator, mechanic, truck rental, side by side rental)			\$ 13,980.00
Daily field expenses	\$ 100	36	\$ 3,600.00
Assays (trench)			\$ 335.54
Report preparation	\$ 450	5	\$ 2,250.00
		<b>TOTAL</b>	<b>\$ 37,025.54</b>
<b>YMEP Ineligible costs</b>	<b>Rate</b>	<b>Days</b>	<b>Cost</b>
Flights to Yukon			\$ 716.43
		<b>GRAND TOTAL</b>	<b>\$ 37,741.97</b>
<b>DOUBLED VALUE FOR ASSESSMENT UNDER MIP 2016</b>			<b>\$ 75,483.94</b>

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

## 15. STATEMENT OF QUALIFICATIONS

I, Jack Edward Milton, do hereby state that:

I reside at 589 East 27<sup>th</sup> Avenue, Vancouver, BC, V5V 2K7.

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.

I managed and supervised the exploration program at the Carmacks Copper project in the field season of 2016.

This statement refers to the 2016 Technical Assessment Report for the Geology and the Geophysics of the Carmacks Copper project, Yukon that describes work carried out in the 2016 field season.

Jack Milton [signed], 20<sup>th</sup> January 2017

Project Geologist,

Copper North Mining Corp.

## 16. APPENDIX 1: Table of Quartz Claim/Lease information

GrantNumber	Name	Nbr	Recording	Staking	Expiry	Ops Number	Renewal period (years)	New Expiry
YF50001	BEE	1	2016-06-16	2016-06-05	2017-06-16	1500436597	4	2021-06-16
YF50002	BEE	2	2016-06-16	2016-06-05	2017-06-16	1500436598	4	2021-06-16
YF50003	BEE	3	2016-06-16	2016-06-05	2017-06-16	1500436599	4	2021-06-16
YF50004	BEE	4	2016-06-16	2016-06-05	2017-06-16	1500436600	4	2021-06-16
YF50005	BEE	5	2016-06-16	2016-06-05	2017-06-16	1500436601	4	2021-06-16
YF50006	BEE	6	2016-06-16	2016-06-05	2017-06-16	1500436602	4	2021-06-16
YF50007	BEE	7	2016-06-16	2016-06-09	2017-06-16	1500436603	4	2021-06-16
YF50008	BEE	8	2016-06-16	2016-06-09	2017-06-16	1500436604	4	2021-06-16
YF50009	BEE	9	2016-06-16	2016-06-09	2017-06-16	1500436605	4	2021-06-16
YF50010	BEE	10	2016-06-16	2016-06-09	2017-06-16	1500436606	4	2021-06-16
YF50011	BEE	11	2016-06-16	2016-06-09	2017-06-16	1500436607	4	2021-06-16
YF50012	BEE	12	2016-06-16	2016-06-09	2017-06-16	1500436608	4	2021-06-16
YF50013	BEE	13	2016-06-16	2016-06-09	2017-06-16	1500436609	4	2021-06-16
YF50014	BEE	14	2016-06-16	2016-06-09	2017-06-16	1500436610	4	2021-06-16
YF50015	BEE	15	2016-06-16	2016-06-09	2017-06-16	1500436611	4	2021-06-16
YF50016	BEE	16	2016-06-16	2016-06-09	2017-06-16	1500436612	4	2021-06-16
YF50017	BEE	17	2016-06-16	2016-06-09	2017-06-16	1500436613	4	2021-06-16
YF50018	BEE	18	2016-06-16	2016-06-09	2017-06-16	1500436614	4	2021-06-16
YF50019	BEE	19	2016-06-16	2016-06-09	2017-06-16	1500436615	4	2021-06-16
YF50020	BEE	20	2016-06-16	2016-06-09	2017-06-16	1500436616	4	2021-06-16
YF50021	BEE	21	2016-06-16	2016-06-09	2017-06-16	1500436617	4	2021-06-16
YF50022	BEE	22	2016-06-16	2016-06-09	2017-06-16	1500436618	4	2021-06-16
YF50023	BEE	23	2016-06-16	2016-06-09	2017-06-16	1500436619	4	2021-06-16
YF50024	BEE	24	2016-06-16	2016-06-09	2017-06-16	1500436620	4	2021-06-16
YF50025	BEE	25	2016-06-16	2016-06-09	2017-06-16	1500436621	4	2021-06-16
YC65569	HIP	16	2007-08-14	2007-08-07	2019-03-09	500150558	4	2023-03-09
YC39226	REM	6	2005-04-11	2005-04-08	2019-04-11	500128211	4	2023-04-11
YC39228	REM	8	2005-04-11	2005-04-08	2019-04-11	500128213	4	2023-04-11
YC39230	REM	10	2005-04-11	2005-04-08	2019-04-11	500128215	4	2023-04-11
YC39232	REM	12	2005-04-11	2005-04-07	2019-04-11	500128217	4	2023-04-11
YC39234	REM	14	2005-04-11	2005-04-07	2019-04-11	500128219	4	2023-04-11
YC39251	REM	32	2005-04-11	2005-04-08	2019-04-11	500128236	4	2023-04-11
YC65560	HIP	7	2007-08-14	2007-08-07	2020-03-09	500150549	4	2024-03-09
YC65561	HIP	8	2007-08-14	2007-08-07	2020-03-09	500150550	4	2024-03-09
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YC65563	HIP	10	2007-08-14	2007-08-07	2020-03-09	500150552	4	2024-03-09
YC65564	HIP	11	2007-08-14	2007-08-07	2020-03-09	500150553	4	2024-03-09
YC65565	HIP	12	2007-08-14	2007-08-07	2020-03-09	500150554	4	2024-03-09
YC65570	HIP	17	2007-08-14	2007-08-07	2020-03-09	500150559	4	2024-03-09
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YC39223	REM	3	2005-04-11	2005-04-08	2020-04-11	500128208	4	2024-04-11
YC39224	REM	4	2005-04-11	2005-04-08	2020-04-11	500128209	4	2024-04-11
YC39225	REM	5	2005-04-11	2005-04-08	2020-04-11	500128210	4	2024-04-11

GrantNumber	Name	Nbr	Recording	Staking	Expiry	Ops Number	Renewal period (years)	New Expiry
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YC39231	REM	11	2005-04-11	2005-04-07	2020-04-11	500128216	4	2024-04-11
YC39233	REM	13	2005-04-11	2005-04-07	2020-04-11	500128218	4	2024-04-11
YC39252	REM	33	2005-04-11	2005-04-08	2020-04-11	500128237	4	2024-04-11
YC39253	REM	34	2005-04-11	2005-04-08	2020-04-11	500128238	4	2024-04-11
YC39254	REM	35	2005-04-11	2005-04-08	2020-04-11	500128239	4	2024-04-11
Y 51118	BOY	20	1970-03-09	1970-02-22	2024-03-09	500057556	2	2026-03-09
Y 51149	BOY	51	1970-03-09	1970-02-22	2024-03-09	500057559	2	2026-03-09
Y 51150	BOY	52	1970-03-09	1970-02-22	2024-03-09	500057560	2	2026-03-09
Y 51151	BOY	53	1970-03-09	1970-02-22	2024-03-09	500057561	4	2028-03-09
Y 51152	BOY	54	1970-03-09	1970-02-22	2024-03-09	500057562	4	2028-03-09
Y 51181	BOY	83	1970-03-09	1970-02-23	2024-03-09	500057567	2	2026-03-09
Y 59373	WAR	22	1970-10-19	1970-10-16	2024-03-09	500057600	4	2028-03-09
Y 59382	DUN	1	1970-10-19	1970-10-17	2024-03-09	500057601	2	2026-03-09
YB26708	W	1	1989-08-31	1989-08-21	2024-03-09	500079923	2	2026-03-09
YB26709	W	2	1989-08-31	1989-08-21	2024-03-09	500079924	2	2026-03-09
YB26710	W	3	1989-08-31	1989-08-21	2024-03-09	500079925	2	2026-03-09
YB26711	W	4	1989-08-31	1989-08-21	2024-03-09	500079926	2	2026-03-09
YB26712	W	5	1989-08-31	1989-08-21	2024-03-09	500079927	2	2026-03-09
YB26713	W	6	1989-08-31	1989-08-24	2024-03-09	500079928	4	2028-03-09
YB26714	W	7	1989-08-31	1989-08-24	2024-03-09	500079929	4	2028-03-09
YB26715	W	8	1989-08-31	1989-08-24	2024-03-09	500079930	4	2028-03-09
YB26716	W	9	1989-08-31	1989-08-24	2024-03-09	500079931	4	2028-03-09
YB26717	W	10	1989-08-31	1989-08-24	2024-03-09	500079932	4	2028-03-09
YB26718	W	11	1989-08-31	1989-08-24	2024-03-09	500079933	4	2028-03-09
YB26719	W	12	1989-08-31	1989-08-24	2024-03-09	500079934	4	2028-03-09
YB26720	W	13	1989-08-31	1989-08-24	2024-03-09	500079935	4	2028-03-09
YB26721	W	14	1989-08-31	1989-08-24	2024-03-09	500079936	4	2028-03-09
YB26722	W	15	1989-08-31	1989-08-24	2024-03-09	500079937	4	2028-03-09
YB26723	W	16	1989-08-31	1989-08-24	2024-03-09	500079938	4	2028-03-09
YB26724	W	17	1989-08-31	1989-08-24	2024-03-09	500079939	2	2026-03-09
YB26725	W	18	1989-08-31	1989-08-24	2024-03-09	500079940	2	2026-03-09
YB26726	W	19	1989-08-31	1989-08-24	2024-03-09	500079941	2	2026-03-09
YB26727	W	20	1989-08-31	1989-08-24	2024-03-09	500079942	2	2026-03-09
YB26728	W	21	1989-08-31	1989-08-24	2024-03-09	500079943	4	2028-03-09
YB26729	W	22	1989-08-31	1989-08-24	2024-03-09	500079944	4	2028-03-09
YB26730	W	23	1989-08-31	1989-08-24	2024-03-09	500079945	2	2026-03-09
YB26731	W	24	1989-08-31	1989-08-24	2024-03-09	500079946	2	2026-03-09
YB26732	W	25	1989-08-31	1989-08-24	2024-03-09	500079947	2	2026-03-09
YB26733	W	26	1989-08-31	1989-08-24	2024-03-09	500079948	2	2026-03-09
YB26734	W	27	1989-08-31	1989-08-24	2024-03-09	500079949	2	2026-03-09
YB26735	W	28	1989-08-31	1989-08-24	2024-03-09	500079950	2	2026-03-09
YB26736	W	29	1989-08-31	1989-08-24	2024-03-09	500079951	2	2026-03-09



GrantNumber	Name	Nbr	Recording	Staking	Expiry	Ops Number	Renewal period (years)	New Expiry
YB26737	W	30	1989-08-31	1989-08-24	2024-03-09	500079952	2	2026-03-09
YB26738	W	31	1989-08-31	1989-08-25	2024-03-09	500079953	4	2028-03-09
YB26739	W	32	1989-08-31	1989-08-25	2024-03-09	500079954	4	2028-03-09
YB26740	W	33	1989-08-31	1989-08-25	2024-03-09	500079955	4	2028-03-09
YB26741	W	34	1989-08-31	1989-08-25	2024-03-09	500079956	4	2028-03-09
YB26742	W	35	1989-08-31	1989-08-25	2024-03-09	500079957	2	2026-03-09
YB26743	W	36	1989-08-31	1989-08-25	2024-03-09	500079958	2	2026-03-09
YB26744	W	37	1989-08-31	1989-08-25	2024-03-09	500079959	2	2026-03-09
YB26748	W	41	1989-08-31	1989-08-25	2024-03-09	500079963	2	2026-03-09
YB26749	W	42	1989-08-31	1989-08-25	2024-03-09	500079964	2	2026-03-09
YB26750	W	43	1989-08-31	1989-08-25	2024-03-09	500079965	2	2026-03-09
YB36240	WAR	23	1991-08-02	1991-07-28	2024-03-09	500082053	4	2028-03-09
YB36241	WAR	24	1991-08-02	1991-07-28	2024-03-09	500082054	4	2028-03-09
YB36242	WAR	25	1991-08-02	1991-07-28	2024-03-09	500082055	4	2028-03-09
YB36243	WAR	26	1991-08-02	1991-07-28	2024-03-09	500082056	4	2028-03-09
YB36244	WAR	27	1991-08-02	1991-07-28	2024-03-09	500082057	2	2026-03-09
YB36245	WAR	28	1991-08-02	1991-07-28	2024-03-09	500082058	2	2026-03-09
YB36246	WAR	29	1991-08-02	1991-07-28	2024-03-09	500082059	2	2026-03-09
YB36247	WAR	30	1991-08-02	1991-07-28	2024-03-09	500082060	2	2026-03-09
YB36248	WAR	31	1991-08-02	1991-07-28	2024-03-09	500082061	2	2026-03-09
YB36249	W	50	1991-08-02	1991-07-28	2024-03-09	500082062	2	2026-03-09
YB36250	W	51	1991-08-02	1991-07-28	2024-03-09	500082063	2	2026-03-09
YB36251	W	52	1991-08-02	1991-07-28	2024-03-09	500082064	2	2026-03-09
YB36252	W	53	1991-08-02	1991-07-28	2024-03-09	500082065	2	2026-03-09
YB36254	W	55	1991-08-02	1991-07-27	2024-03-09	500082067	2	2026-03-09
YB36256	W	57	1991-08-02	1991-07-27	2024-03-09	500082069	2	2026-03-09
YB36446	WAR	32	1991-09-17	1991-09-10	2024-03-09	500082259	2	2026-03-09
YB36447	WAR	33	1991-09-17	1991-09-10	2024-03-09	500082260	2	2026-03-09
YB36448	WAR	34	1991-09-17	1991-09-10	2024-03-09	500082261	2	2026-03-09
YB36449	WAR	35	1991-09-17	1991-09-10	2024-03-09	500082262	2	2026-03-09
YB36450	WAR	36	1991-09-17	1991-09-10	2024-03-09	500082263	4	2028-03-09
YB36451	WAR	37	1991-09-17	1991-09-10	2024-03-09	500082264	4	2028-03-09
YB36765	WAR	38	1992-02-25	1992-02-23	2024-03-09	500082578	2	2026-03-09
YB36766	WAR	39	1992-02-25	1992-02-23	2024-03-09	500082579	2	2026-03-09
YB36767	WAR	40	1992-02-25	1992-02-23	2024-03-09	500082580	2	2026-03-09
YB36768	WAR	41	1992-02-25	1992-02-22	2024-03-09	500082581	2	2026-03-09
YB36769	WAR	42	1992-02-25	1992-02-22	2024-03-09	500082582	2	2026-03-09
YB36770	WAR	43	1992-02-25	1992-02-22	2024-03-09	500082583	2	2026-03-09
YB36771	WAR	44	1992-02-25	1992-02-22	2024-03-09	500082584	2	2026-03-09
YB36772	WAR	45	1992-02-25	1992-02-22	2024-03-09	500082585	2	2026-03-09
YB36773	WAR	46	1992-02-25	1992-02-22	2024-03-09	500082586	4	2028-03-09
YB36774	WAR	47	1992-02-25	1992-02-22	2024-03-09	500082587	2	2026-03-09
YB36775	WAR	48	1992-02-25	1992-02-22	2024-03-09	500082588	4	2028-03-09
YB36776	WAR	49	1992-02-25	1992-02-22	2024-03-09	500082589	2	2026-03-09

GrantNumber	Name	Nbr	Recording	Staking	Expiry	Ops Number	Renewal period (years)	New Expiry
YB36777	WAR	50	1992-02-25	1992-02-22	2024-03-09	500082590	2	2026-03-09
YB36898	X	3	1992-06-19	1992-06-12	2024-03-09	500082711	2	2026-03-09
YB36899	X	4	1992-06-19	1992-06-12	2024-03-09	500082712	2	2026-03-09
YB36929	W	91	1992-07-06	1992-07-02	2024-03-09	500082742	2	2026-03-09
YB36930	W	92	1992-07-06	1992-07-02	2024-03-09	500082743	2	2026-03-09
YB36931	W	93	1992-07-06	1992-07-02	2024-03-09	500082744	2	2026-03-09
YB36933	W	95	1992-07-06	1992-07-02	2024-03-09	500082746	2	2026-03-09
YB36962	X	5	1992-08-13	1992-08-01	2024-03-09	500082775	4	2028-03-09
YB36963	X	6	1992-08-13	1992-08-01	2024-03-09	500082776	4	2028-03-09
YB36964	X	7	1992-08-13	1992-08-01	2024-03-09	500082777	4	2028-03-09
YB96620	VW	11	1996-10-09	1996-10-06	2024-03-09	500089132	2	2026-03-09
YB96622	VW	13	1996-10-09	1996-10-06	2024-03-09	500089134	2	2026-03-09
YB96626	VW	17	1996-10-09	1996-10-06	2024-03-09	500089138	2	2026-03-09
YB96627	VW	18	1996-10-09	1996-10-06	2024-03-09	500089139	2	2026-03-09
YB96628	VW	19	1996-10-09	1996-10-06	2024-03-09	500089140	2	2026-03-09
YB96629	VW	20	1996-10-09	1996-10-06	2024-03-09	500089141	2	2026-03-09
YB96630	VW	21	1996-10-09	1996-10-06	2024-03-09	500089142	2	2026-03-09
YB96632	VW	23	1996-10-09	1996-10-06	2024-03-09	500089144	2	2026-03-09
YB96634	VW	25	1996-10-09	1996-10-06	2024-03-09	500089146	2	2026-03-09
YB96636	VW	27	1996-10-09	1996-10-06	2024-03-09	500089148	2	2026-03-09
YB96637	VW	28	1996-10-09	1996-10-06	2024-03-09	500089149	2	2026-03-09
YB96638	VW	29	1996-10-09	1996-10-06	2024-03-09	500089150	2	2026-03-09
YB96639	VW	30	1996-10-09	1996-10-06	2024-03-09	500089151	2	2026-03-09
YB96640	VW	31	1996-10-09	1996-10-06	2024-03-09	500089152	2	2026-03-09
YB96641	VW	32	1996-10-09	1996-10-06	2024-03-09	500089153	2	2026-03-09
YB96642	VW	33	1996-10-09	1996-10-06	2024-03-09	500089154	2	2026-03-09
YB96643	VW	34	1996-10-09	1996-10-06	2024-03-09	500089155	2	2026-03-09
YB96644	VW	35	1996-10-09	1996-10-06	2024-03-09	500089156	2	2026-03-09
YB96645	VW	36	1996-10-09	1996-10-06	2024-03-09	500089157	2	2026-03-09
YB96646	VW	37	1996-10-09	1996-10-06	2024-03-09	500089158	2	2026-03-09
YB96647	VW	38	1996-10-09	1996-10-06	2024-03-09	500089159	2	2026-03-09
YB96986	VW	40	1996-12-06	1996-12-04	2024-03-09	500089498	2	2026-03-09
YB96987	VW	41	1996-12-06	1996-12-04	2024-03-09	500089499	2	2026-03-09
YB96988	VW	42	1996-12-06	1996-12-04	2024-03-09	500089500	2	2026-03-09
YB96989	VW	43	1996-12-06	1996-12-04	2024-03-09	500089501	2	2026-03-09
YB96990	VW	44	1996-12-06	1996-12-04	2024-03-09	500089502	2	2026-03-09
YB96991	VW	45	1996-12-06	1996-12-04	2024-03-09	500089503	2	2026-03-09
YB96992	VW	46	1996-12-06	1996-12-04	2024-03-09	500089504	2	2026-03-09
YB96993	VW	47	1996-12-06	1996-12-04	2024-03-09	500089505	2	2026-03-09
YB96994	VW	48	1996-12-06	1996-12-04	2024-03-09	500089506	2	2026-03-09
YB96995	VW	49	1996-12-06	1996-12-04	2024-03-09	500089507	2	2026-03-09
YB96996	VW	50	1996-12-06	1996-12-04	2024-03-09	500089508	2	2026-03-09
YB96997	VW	60	1996-12-06	1996-12-04	2024-03-09	500089509	2	2026-03-09
YB96998	VW	61	1996-12-06	1996-12-04	2024-03-09	500089510	2	2026-03-09

GrantNumber	Name	Nbr	Recording	Staking	Expiry	Ops Number	Renewal period (years)	New Expiry
YB97068	TT	1	1996-12-27	1996-12-20	2024-03-09	500089580	2	2026-03-09
YB97251	TT	2	1997-01-15	1997-01-10	2024-03-09	500089763	2	2026-03-09
YC39239	REM	19	2005-04-11	2005-04-07	2024-03-09	500128224	3	2027-03-09
YC39240	REM	20	2005-04-11	2005-04-07	2024-03-09	500128225	3	2027-03-09
YC39241	REM	21	2005-04-11	2005-04-07	2024-03-09	500128226	3	2027-03-09
YC39242	REM	22	2005-04-11	2005-04-07	2024-03-09	500128227	3	2027-03-09
YC39243	REM	23	2005-04-11	2005-04-07	2024-03-09	500128228	3	2027-03-09
YC39244	REM	24	2005-04-11	2005-04-07	2024-03-09	500128229	3	2027-03-09
YC39245	REM	25	2005-04-11	2005-04-07	2024-03-09	500128230	3	2027-03-09
YC39246	REM	26	2005-04-11	2005-04-07	2024-03-09	500128231	3	2027-03-09
YC39247	REM	27	2005-04-11	2005-04-07	2024-03-09	500128232	3	2027-03-09
YC39248	REM	28	2005-04-11	2005-04-07	2024-03-09	500128233	3	2027-03-09
YC39249	REM	29	2005-04-11	2005-04-07	2024-03-09	500128234	3	2027-03-09
YC39250	REM	30	2005-04-11	2005-04-07	2024-03-09	500128235	3	2027-03-09
YC60381	WCC FR.	1	2007-05-10	2007-04-27	2024-03-09	500146402	2	2026-03-09
YC60382	WCC FR.	2	2007-05-10	2007-04-27	2024-03-09	500146403	2	2026-03-09
YC60383	WCC FR.	3	2007-05-10	2007-04-27	2024-03-09	500146404	2	2026-03-09
YC60384	WCC FR.	4	2007-05-10	2007-04-27	2024-03-09	500146405	2	2026-03-09
YC60385	WCC FR.	5	2007-05-10	2007-04-27	2024-03-09	500146406	2	2026-03-09
YC60386	WCC FR.	6	2007-05-10	2007-04-27	2024-03-09	500146407	2	2026-03-09
YC60387	WCC FR.	7	2007-05-10	2007-04-28	2024-03-09	500146408	2	2026-03-09
YC60388	WCC FR.	8	2007-05-10	2007-04-28	2024-03-09	500146409	2	2026-03-09
YC60389	WCC FR.	9	2007-05-10	2007-04-28	2024-03-09	500146410	2	2026-03-09
YC60390	WCC	10	2007-05-10	2007-04-29	2024-03-09	500146411	2	2026-03-09
YC60391	WCC	11	2007-05-10	2007-04-29	2024-03-09	500146412	2	2026-03-09
YC60392	WCC	12	2007-05-10	2007-04-29	2024-03-09	500146413	2	2026-03-09
YC60393	WCC	13	2007-05-10	2007-04-29	2024-03-09	500146414	2	2026-03-09
YC60394	WCC	14	2007-05-10	2007-04-29	2024-03-09	500146415	2	2026-03-09
YC60395	WCC	15	2007-05-10	2007-04-29	2024-03-09	500146416	2	2026-03-09
YC60396	WCC	16	2007-05-10	2007-04-29	2024-03-09	500146417	2	2026-03-09
YC60397	WCC	17	2007-05-10	2007-04-30	2024-03-09	500146418	2	2026-03-09
YC60398	WCC	18	2007-05-10	2007-04-30	2024-03-09	500146419	2	2026-03-09
YC60399	WCC	19	2007-05-10	2007-04-30	2024-03-09	500146420	2	2026-03-09
YC60400	WCC FR.	20	2007-05-10	2007-04-30	2024-03-09	500146421	2	2026-03-09
YC60401	WCC	21	2007-05-10	2007-04-30	2024-03-09	500146422	2	2026-03-09
YC60402	WCC FR.	22	2007-05-10	2007-04-30	2024-03-09	500146423	2	2026-03-09
YC60403	WCC	23	2007-05-10	2007-05-01	2024-03-09	500146424	2	2026-03-09
YC60404	WCC	24	2007-05-10	2007-05-01	2024-03-09	500146425	2	2026-03-09
YC60405	WCC FR.	25	2007-05-10	2007-05-01	2024-03-09	500146426	2	2026-03-09
YC60406	WCC FR.	26	2007-05-10	2007-05-01	2024-03-09	500146427	2	2026-03-09
YC60407	WCC	27	2007-05-10	2007-05-01	2024-03-09	500146428	2	2026-03-09
YC60408	WCC	28	2007-05-10	2007-05-08	2024-03-09	500146429	2	2026-03-09
YC60409	WCC	29	2007-05-10	2007-05-08	2024-03-09	500146430	2	2026-03-09
YC60410	WCC	30	2007-05-10	2007-05-08	2024-03-09	500146431	2	2026-03-09

GrantNumber	Name	Nbr	Recording	Staking	Expiry	Ops Number	Renewal period (years)	New Expiry
YC60411	WCC	31	2007-05-10	2007-05-08	2024-03-09	500146432	2	2026-03-09
YC60412	WCC	32	2007-05-10	2007-05-08	2024-03-09	500146433	2	2026-03-09
YC60413	WCC	33	2007-05-10	2007-05-08	2024-03-09	500146434	2	2026-03-09
YC60414	WCC	34	2007-05-10	2007-05-08	2024-03-09	500146435	3	2027-03-09
YC60415	WCC	35	2007-05-10	2007-05-08	2024-03-09	500146436	3	2027-03-09
YC60416	WCC	36	2007-05-10	2007-05-08	2024-03-09	500146437	3	2027-03-09
YC60417	WCC	37	2007-05-10	2007-05-08	2024-03-09	500146438	3	2027-03-09
YC60418	WCC FR.	38	2007-05-10	2007-05-07	2024-03-09	500146439	2	2026-03-09
YC60419	WCC FR.	39	2007-05-10	2007-05-07	2024-03-09	500146440	2	2026-03-09
YC60420	WCC FR.	40	2007-05-10	2007-05-07	2024-03-09	500146441	2	2026-03-09
YC65320	GAP	1	2007-07-10	2007-07-06	2024-03-09	500149698	4	2028-03-09
YC65321	GAP	2	2007-07-10	2007-07-06	2024-03-09	500149699	4	2028-03-09
YC65322	GAP	3	2007-07-10	2007-07-06	2024-03-09	500149700	2	2026-03-09
YC65323	GAP	4	2007-07-10	2007-07-06	2024-03-09	500149701	2	2026-03-09
YC65324	GAP	5	2007-07-10	2007-07-06	2024-03-09	500149702	2	2026-03-09
YC65554	HIP	1	2007-08-14	2007-08-07	2024-03-09	500150543	2	2026-03-09
YC65555	HIP	2	2007-08-14	2007-08-07	2024-03-09	500150544	2	2026-03-09
YC65556	HIP	3	2007-08-14	2007-08-07	2024-03-09	500150545	2	2026-03-09
YC65557	HIP	4	2007-08-14	2007-08-07	2024-03-09	500150546	2	2026-03-09
YC65558	HIP	5	2007-08-14	2007-08-07	2024-03-09	500150547	2	2026-03-09
YC65559	HIP	6	2007-08-14	2007-08-07	2024-03-09	500150548	2	2026-03-09
YC65566	HIP	13	2007-08-14	2007-08-07	2024-03-09	500150555	3	2027-03-09
YC65567	HIP	14	2007-08-14	2007-08-07	2024-03-09	500150556	3	2027-03-09
YC65568	HIP	15	2007-08-14	2007-08-07	2024-03-09	500150557	2	2026-03-09
YC65571	HIP	18	2007-08-14	2007-08-07	2024-03-09	500150560	2	2026-03-09
YC65572	HIP	19	2007-08-14	2007-08-07	2024-03-09	500150561	2	2026-03-09
YC65573	HIP	20	2007-08-14	2007-08-07	2024-03-09	500150562	2	2026-03-09
YC65574	HIP	21	2007-08-14	2007-08-07	2024-03-09	500150563	2	2026-03-09
YC65575	HIP	22	2007-08-14	2007-08-07	2024-03-09	500150564	2	2026-03-09
YC65576	HIP	23	2007-08-14	2007-08-07	2024-03-09	500150565	2	2026-03-09
YC65577	HIP	24	2007-08-14	2007-08-07	2024-03-09	500150566	2	2026-03-09
YC65578	HIP	25	2007-08-14	2007-08-07	2024-03-09	500150567	2	2026-03-09
YC65579	HIP	26	2007-08-14	2007-08-07	2024-03-09	500150568	2	2026-03-09
YC65580	HIP	27	2007-08-14	2007-08-07	2024-03-09	500150569	2	2026-03-09
YC66844	JIM	1	2008-03-10	2008-03-04	2024-03-09	500154685	2	2026-03-09
YC66845	JIM	2	2008-03-10	2008-03-04	2024-03-09	500154686	2	2026-03-09
YC66846	JIM	3	2008-03-10	2008-03-05	2024-03-09	500154687	2	2026-03-09
YC66847	JIM	4	2008-03-10	2008-03-05	2024-03-09	500154688	2	2026-03-09
YC66848	JIM	5	2008-03-10	2008-03-05	2024-03-09	500154689	2	2026-03-09
YC66849	JIM	6	2008-03-10	2008-03-05	2024-03-09	500154690	2	2026-03-09
YC66850	JIM	7	2008-03-10	2008-03-05	2024-03-09	500154691	2	2026-03-09
YC66851	JIM	8	2008-03-10	2008-03-05	2024-03-09	500154692	2	2026-03-09
YC66852	JIM	9	2008-03-10	2008-03-05	2024-03-09	500154693	2	2026-03-09
YC66853	JIM	10	2008-03-10	2008-03-05	2024-03-09	500154694	2	2026-03-09

GrantNumber	Name	Nbr	Recording	Staking	Expiry	Ops Number	Renewal period (years)	New Expiry
YC66854	JIM	11	2008-03-10	2008-03-06	2024-03-09	500154695	2	2026-03-09
YC66855	JIM	12	2008-03-10	2008-03-06	2024-03-09	500154696	2	2026-03-09
YC66856	JIM	13	2008-03-10	2008-03-06	2024-03-09	500154697	2	2026-03-09
YC66857	JIM	14	2008-03-10	2008-03-06	2024-03-09	500154698	2	2026-03-09
YC66858	JIM	15	2008-03-10	2008-03-06	2024-03-09	500154699	2	2026-03-09
YC66859	JIM	16	2008-03-10	2008-03-06	2024-03-09	500154700	2	2026-03-09
YC66860	JIM	17	2008-03-10	2008-03-06	2024-03-09	500154701	2	2026-03-09
YC66861	JIM	18	2008-03-10	2008-03-06	2024-03-09	500154702	2	2026-03-09
YC66862	JIM	19	2008-03-10	2008-03-06	2024-03-09	500154703	2	2026-03-09
YC66863	JIM	20	2008-03-10	2008-03-05	2024-03-09	500154704	2	2026-03-09
YC66864	JIM	21	2008-03-10	2008-03-05	2024-03-09	500154705	2	2026-03-09
YC66865	JIM	22	2008-03-10	2008-03-05	2024-03-09	500154706	2	2026-03-09
YC66866	JIM	23	2008-03-10	2008-03-05	2024-03-09	500154707	2	2026-03-09
YC66867	JIM	24	2008-03-10	2008-03-05	2024-03-09	500154708	2	2026-03-09
YC66868	JIM	25	2008-03-10	2008-03-05	2024-03-09	500154709	2	2026-03-09
YC66869	JIM F	26	2008-03-10	2008-03-04	2024-03-09	500154710	2	2026-03-09
YC66870	JIM F	27	2008-03-10	2008-03-05	2024-03-09	500154711	2	2026-03-09
YC66871	JIM	28	2008-03-10	2008-03-07	2024-03-09	500154712	2	2026-03-09
YC66872	JIM	29	2008-03-10	2008-03-07	2024-03-09	500154713	2	2026-03-09
YC66873	JIM	30	2008-03-10	2008-03-07	2024-03-09	500154714	2	2026-03-09

## 17. APPENDIX 2: Supplementary digital materials

Included on the enclosed DVD are the following digital files:

Assay certificates (VA16095703) for trench grab samples in PDF and CSV formats.

Trench database with trench location, size, sample GPS coordinates and sample descriptions in Excel spreadsheet format and PDF format.

Total magnetic field data with GPS coordinates for the combined 2015 and 2016 survey data (MagMaster2016.csv), in both PDF and CSV formats.

## 18. APPENDIX 3: Assay certificates

Appended here are assay certificates for grab samples collected from trenches D1 and D3.