ASX ANNOUNCMENT

3 April 2020

Geological Review of Golden Cup and Big Rush Completed

Great Northern Minerals Limited ("**Great Northern Minerals**" or the "**Company**") (**ASX:GNM**) is pleased to advise that a detailed data review of the Golden Cup and Big Rush projects, located 150 km west of Townsville Qld, has now been completed with particular focus on the geological setting of each gold deposit. This work has provided a number of compelling drill targets which will be tested as soon as the company finishes its current fund raising.

The work involved relogging and reinterpretation of the recent successful drill programs beneath the Central Pit at Big Rush and Golden Cup which had returned a number of significant intersections including ***(See ASX announcements dated 12 December 2019 and 28 January 2020):***

BIG RUSH

- **BRRC1009: 24m @ 4.0 g/t Au and 2m @ 35.2 g/t Au**
- **BRRC1004: 27 m at 2.7 g/t Au including 5 m at 12.6 g/t Au**
- **BRRC1008: 29 m at 2.2 g/t Au including 3 m at 14.5 g/t Au**

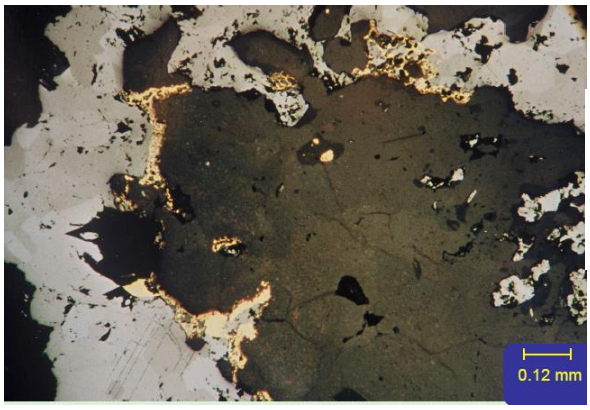
GOLDEN CUP

- **GCRC074: 7 m at 7.5 g/t Au including 1 m at 43.2 g/t Au**
- **GCRC078: 9m at 4.7 g/t Au including 3 m at 11.5 g/t Au**

Based on the age and type of the host rocks, structural setting and sulphide mineralogy, an analogy with Fosterville is apparent, and assists with the Companys' geological targeting. Similarities between Big Rush, Camel Creek and Golden Cup with Fosterville are documented below:

- Similar rock types and age of the host rocks – folded carbonaceous horizons critical;
- Mineralisation related to oblique structures intersecting anticline and syncline axis;
- Comparable arsenopyrite-pyrite-stibnite sulphide mineralogy and quartz veining (see photo)
- Drilling to date at Big Rusha and Golden Cup equivalent to the upper parts of Fosterville; and
- Original resource at Fosterville similar tonnage and grade to the Golden Ant Goldfield.

Deep drilling in 2015 at Fosterville below the shallow modest resource unlocked the deep potential by intersecting bonanza free gold ore zones. Similar depth potential is believed possible at both Golden Cup and Big Rush and drill targets have now been defined from the recent review.



Micrograph of mineraliation from Camel Creek showing gold (yellow) associated with stibnite (dark grey) and quartz vein (light grey). Figure from Teale, Vos and Bierlein.

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Gold mineralisation at Big Rush, Golden Cup and Camel Creek all occur within a very large northeast trending regional fold complex with the Camel Creek Subprovince (CCSB) to the northeast and the Graveyard Creek Subprovince (GCSP) to the southwest (Figure 1). The host rocks of each deposit are Silurian to Devonian aged carbonaceous siltstone and shale interbedded with sandstones and siltstones that are highly folded and deformed.

Gold mineralisation style is characterised by multiple quartz veining and disseminated pyrite-arsenopyrite-stibnite sulphide alteration in close association with northeast trending shear zones and brittle structures that crosscut the folded stratigraphy.

Anomalous gold mineralisation is known to occur over large strike lengths with mineralisation at Big Rush extending over 2.5 kilometres of strike and is open at depth and at Golden Cup gold mineralisation extends for over 1.7 kilometres of strike and is also open at depth. The recent drilling completed by GNM has confirmed the continuity and tenor of the higher gold grades and allowed additional targets to be highlighted and defined. A recent geological review of the data has been completed specifically at Big Rush Central and Golden Cup North and a series of cross sections and contoured long sections have been generated.

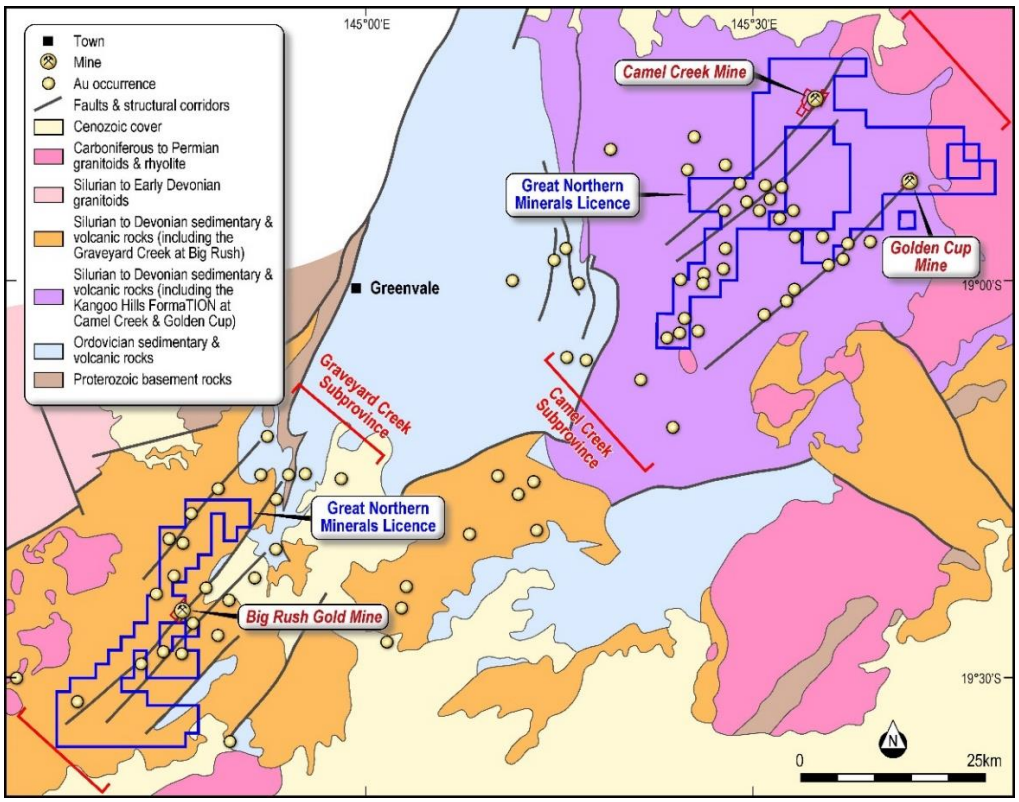

Figure 1: Geological Setting of the Golden Ant Project with the location of the Big Rush, Golden Cup and Camel Creek mine sites and licenses held by Great Northern Minerals

The geological review at Big Rush and Golden Cup incorporates new drilling by GNM with drilling results by previous explorers reported by Great Northern Mining on 10 December 2019 and 7 February 2020 and Green Power on 20 June 2019 and 11 July 2019.

Big Rush Central Geological Review

The Big Rush Central cross sections highlight that mineralisation is controlled by vertical axial planar shear zone within or on the western limb of a tight anticline fold hinge and that the best gold mineralisation occurs within the carbonaceous shale below contact with sandstone-siltstone (Figures 2 and 3).

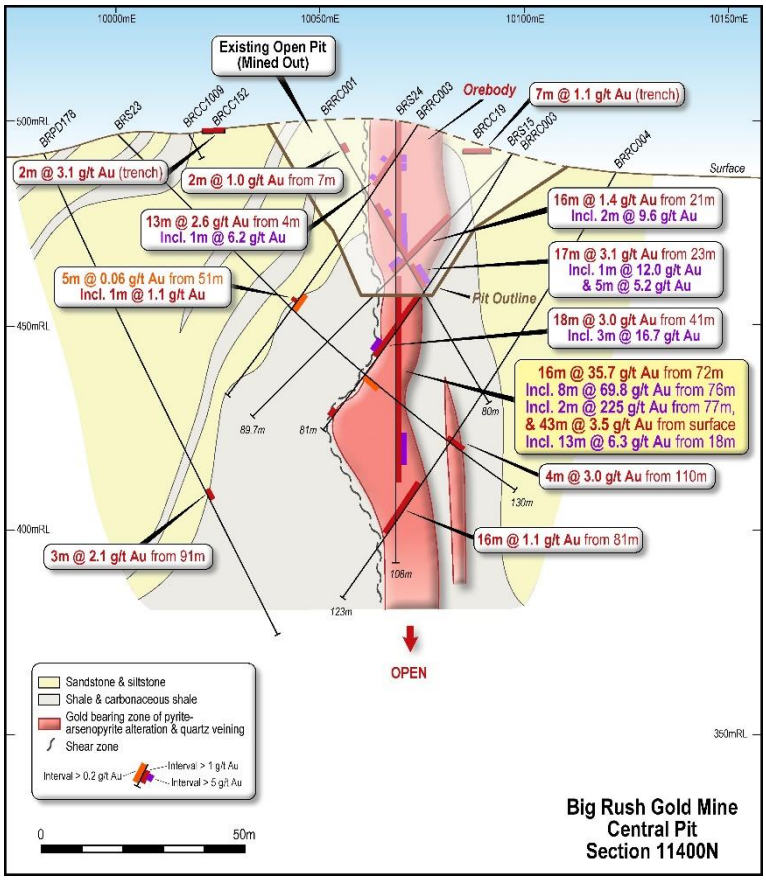

Figure 2: Big Rush Central Cross Section 11400 North

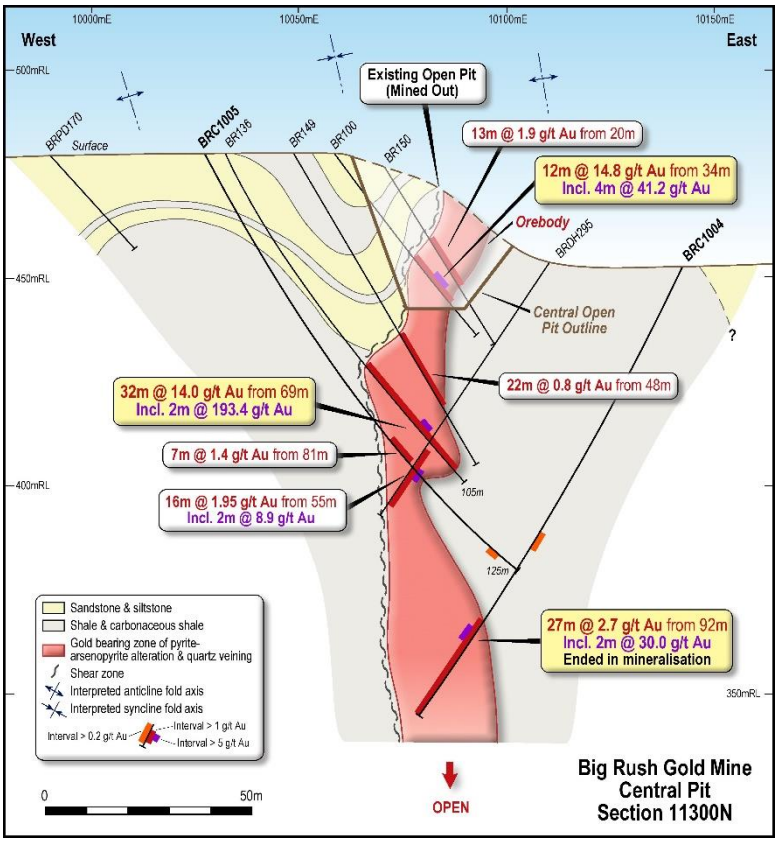

Figure 3: Big Rush Central Cross Section 11300 North

The grade contours at Big Rush suggest an overall shallow south plunge to the mineralization where significant intersections such as **27 m at 2.7 g/t Au*** *including* **5 m at 12.6 g/t Au** in BRRC1004 are open down plunge (Figure 4).

In addition, the possibility of additional south plunging shoots have been identified and the interpretation provides a clear focus for further work targeting the down plunge position of the favourable carbonaceous contacts.

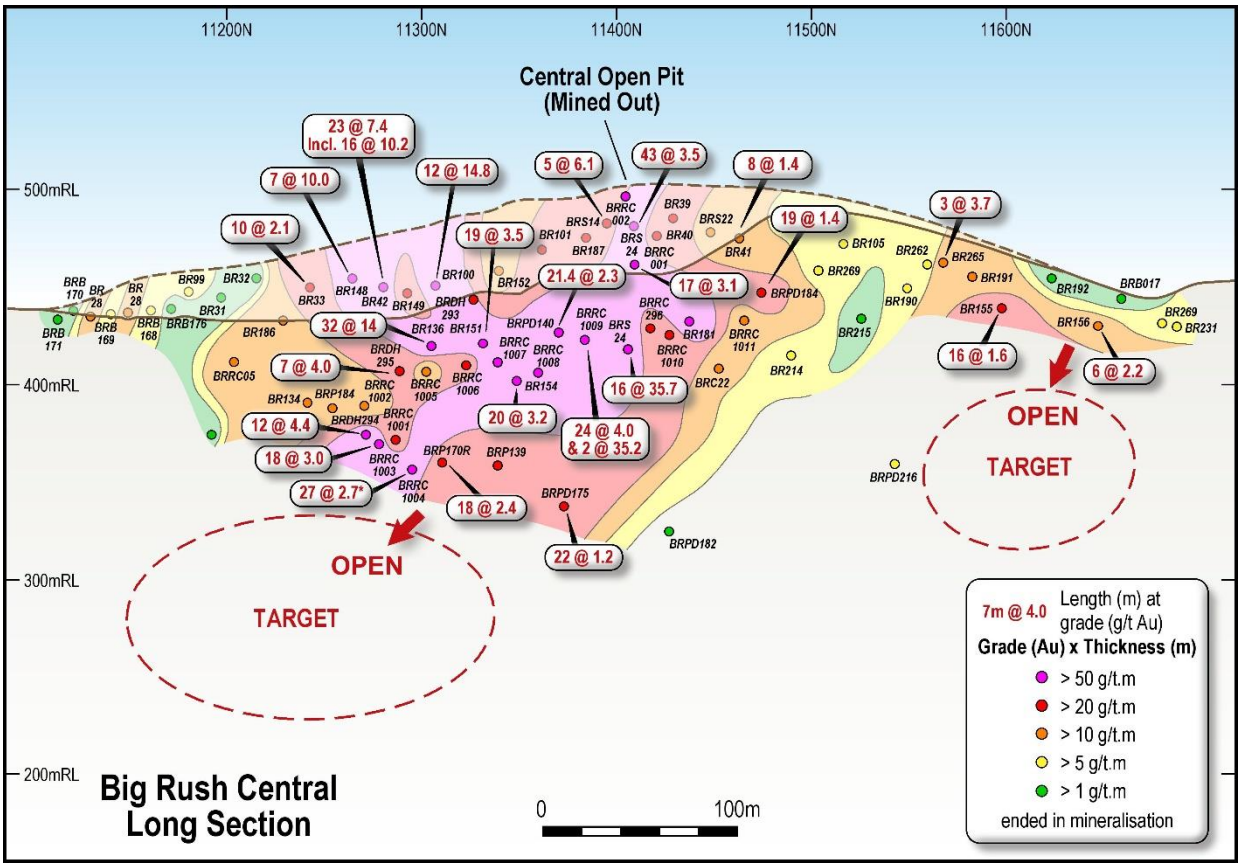

Figure 4: Big Rush Central Long Section

Golden Cup North Geological Review

The Golden Cup North cross sections highlight tight isoclinal anticlinal fold closure dipping steeply to the east. Sulphide and quartz vein mineralisation appears to be related to a steeply dipping shear zone slightly oblique to the axial plane of the anticline (Figures 5 and 6). The best gold intersections occur where the shear zone cross cuts the anticline hinge and the western limb of the folded carbonaceous shale. In addition, the better grades and thicker intersections occur where there is structural thickening of multiple shale sequences (Figure 5).

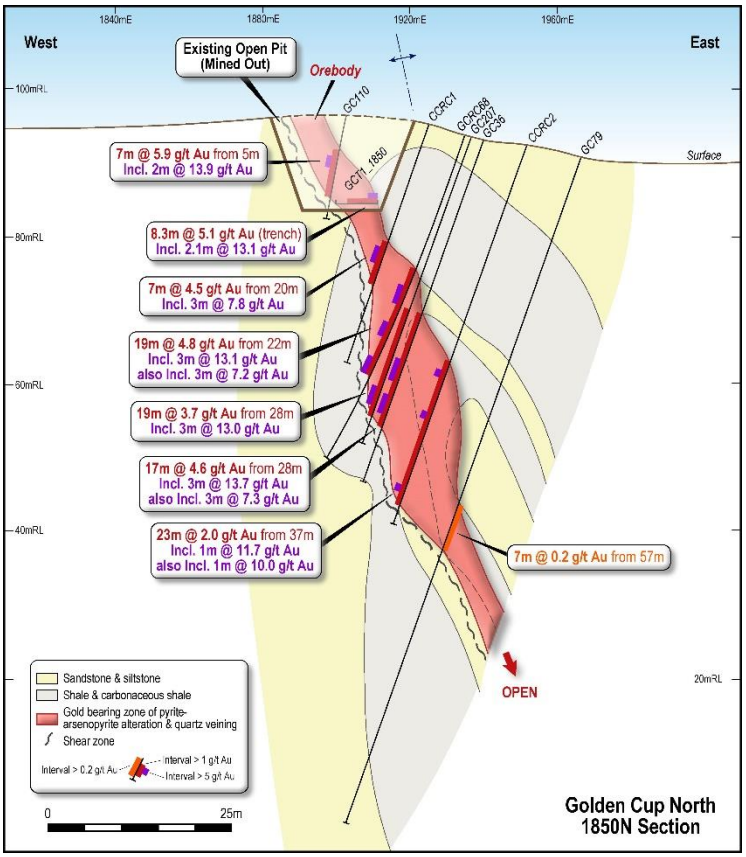

Figure 5: Golden Cup North Cross Section 1850 North

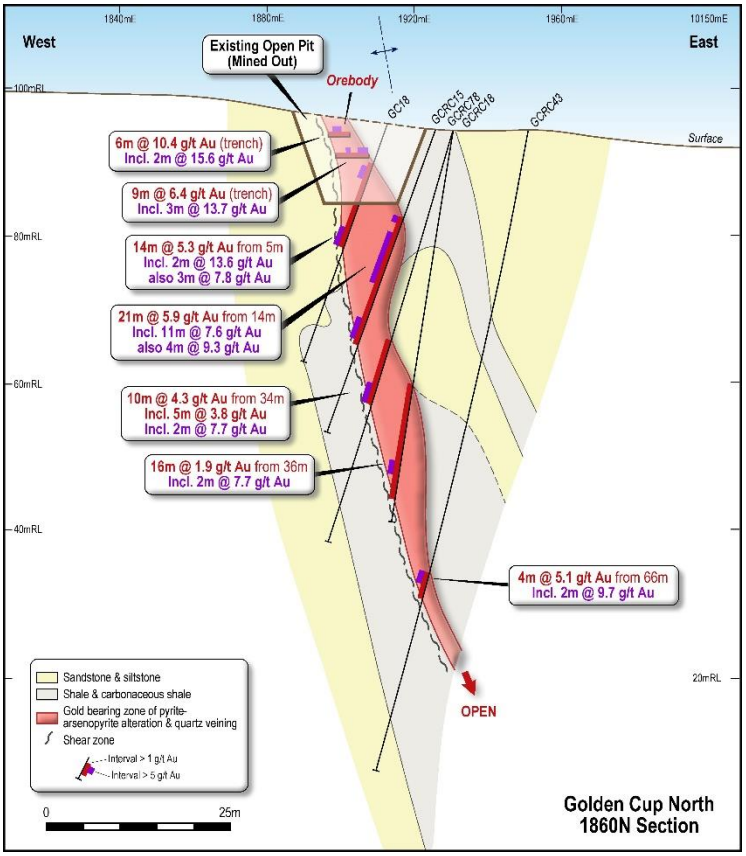

Figure 6: Golden Cup North Cross Section 1860 North

The grade contours at Golden Cup North suggest an overall steep south plunge to the mineralization where significant intersections such as **19 m at 3.7 g/t Au** including **3 m at 13.0 g/t Au** in GCRC207 are open down plunge (Figure 7). In addition, the possibility of at least two additional south plunging shoots have been identified including below the intersections **10 m at 7.9 g/t Au** in BGC115 to the north and **10 m at 3.0 g/t Au** in GC103 to the south (Figure 7). This work provides a clear focus for further work targeting the down plunge position of the favourable carbonaceous lithological contacts.

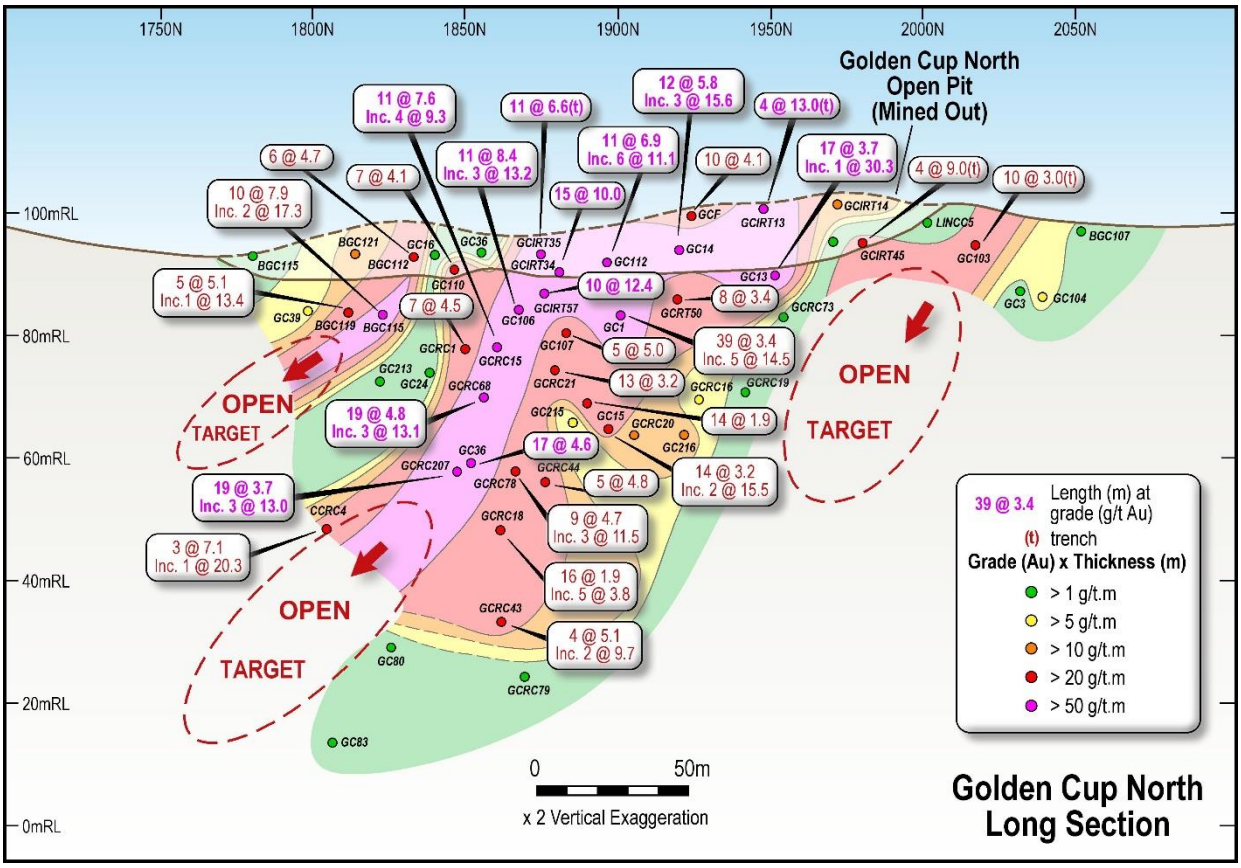

Figure 7: Golden Cup North Long Section

Comparison to Fosterville

The work completed has highlighted several comparisons with the Fosterville Gold Deposit:

1. The host rocks at Big Rush, Golden Cup and Camel Creek are Silurian to Devonian aged turbidite sequence sedimentary rocks where the best mineralisation occurs within or at contacts with carbonaceous horizons. The host rocks at Fosterville are slightly older Ordovician aged rocks however the dating of mineralisation indicates multiple mineralising events occurred between Ordovician, through Silurian and into the Devonian period (Arne et. al., 1998).
2. Mineralisation at Big Rush and Golden Cup is controlled by oblique shear zones and faulting that crosscut the hinge and limbs of a south plunging anticline fold. The mineralisation at Fosterville is also controlled by the extensive Fosterville fault system that obliquely cross cuts the Fosterville anticline and Phoenix Syncline (Figure 9). This complex interplay of structures cross-cutting the folded stratigraphy controls the south plunge component at each area.
3. Gold mineralisation at Big Rush, Golden Cup and Camel Creek is closely associated with arsenopyrite, pyrite and stibnite (antimony sulphide) sulphide mineralogy and quartz veining in places (Photo 1). Similarly at Fosterville, the gold at shallow levels is also closely associated with disseminated arsenopyrite-pyrite sulphide in the sedimentary host rock

surrounding barren quartz-carbonate stockwork veins. Down plunge at depth a late primary visible gold event overprints the sulphide mineralisation and occurs within cross cutting quartz-carbonate veins and characteristic stibnite (Fuller and Hann, 2019; Figure 8 and 9).

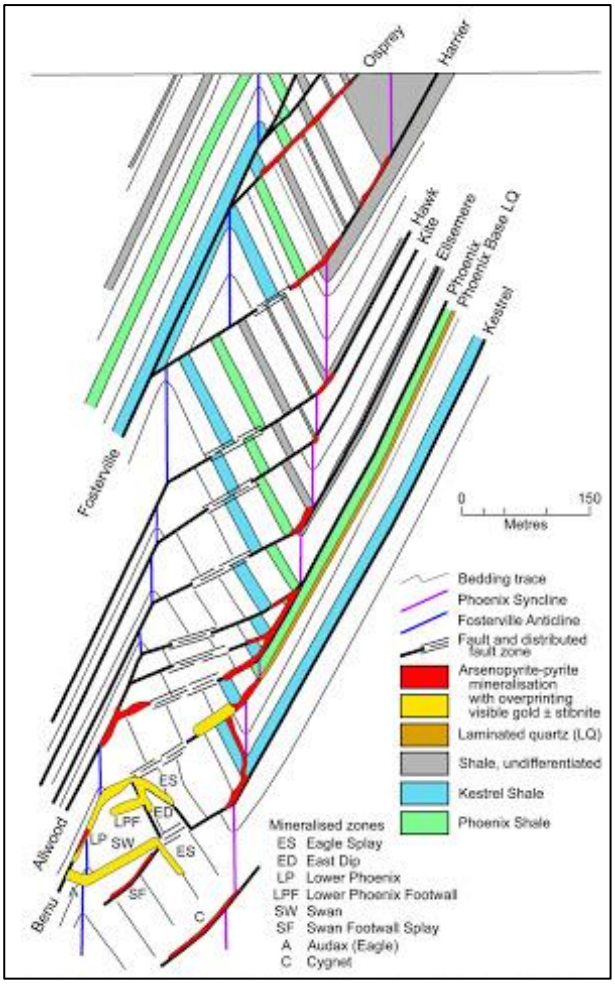

Figure 8: Schematic cross section through the Fosterville Fault System showing the structural architecture and distribution of mineralization (Fuller and Hann, 2019 and Hitchman et. al., 2017)

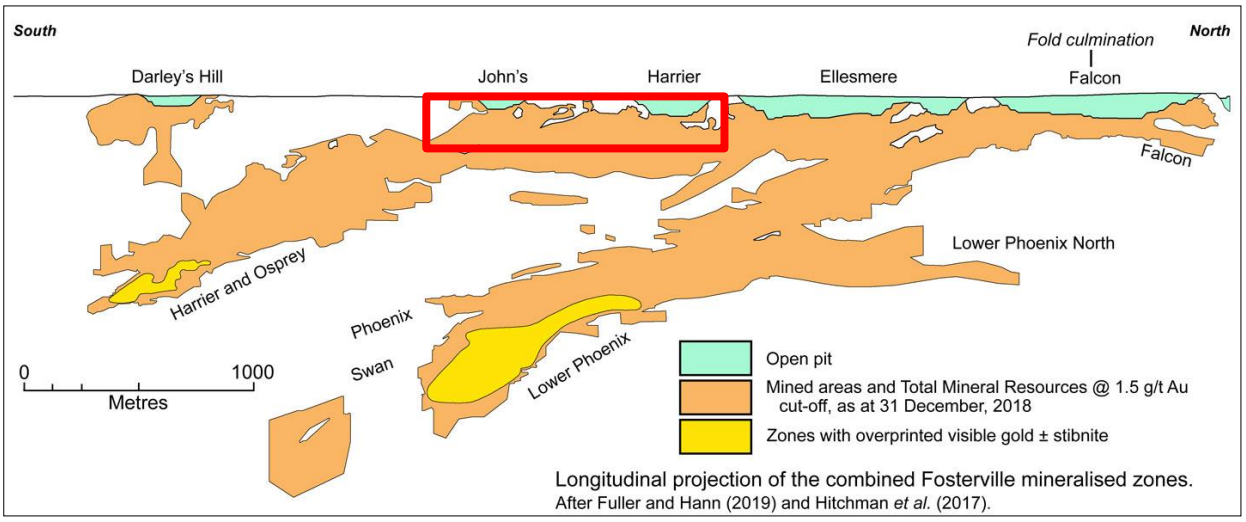

Figure 9: Fosterville Diagrammatic Long Section showing equivalent position of drilling to date at Big Rush, Golden Cup and Camel Creek (red box)

Exploration to date at Big Rush, Golden Cup and Camel Creek to date has focused on shallow mineralisation less than 100 m depth (Figures 4 and 7). This distribution of drilling at the same scale at Fosterville indicates the depth potential at the Golden Ant Goldfield is essentially untested.

The recent geological review completed has highlighted several geological similarities with Fosterville and generated new drill targets which are planned to be drilled as soon as possible. These historic gold mining centres at Big Rush, Camel Creek and Golden Cup have had very limited work completed over the last 15 years and the Company looks forward to updating the market with further news as work progresses.

This announcement has been authorised by the Board or Directors of the Company.

*****ENDS*****

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Competent Persons Statement

Information in this release that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared and compiled by Mr Leo Horn, an experienced geologist consulting for Great Northern Minerals. Mr Horn is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Horn consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.