

## ASX Announcement

7 August 2018

# CLASSIC IMPLEMENTS EXPLORATION TARGET REVISION TO UNLOCK VALUE OF ITS FRASER RANGE NI-CU-CO PROJECT

### Highlights:

- Renewed interest in exploration at Fraser Range Ni-Cu-Co project following Mark Creasy's recent discovery <10km Classic's Fraser Range project
- Classic will allocate a portion of exploration expenditure to commence follow up of priority targets
- Significant potential within major regional conductive target zone – 6km running south west from Mammoth Ni prospect and hosting 10 key targets
- Highly encouraging results from Mammoth and Alpha including:
  - FRRC040; 2m @ 1.0% Ni from 106m (Mammoth)
  - FRRC039; 1m @ 1.4% Cu from 42m; and (Mammoth)
  - FRRC036; 5m @ 0.1% Co from 10m (Mammoth)
  - 1m of 1.95% Cu from 104m (FRRC001) (Alpha)
  - 1m of 1.04% Cu from 27m (FRRC016) within 5m at 0.47% Cu (Alpha)
  - 5m thick zone of 0.57% Cu (FRRC013) (Alpha)
  - 1m of 1.27% Cu from 36m (FRRC024) within 2m at 0.795 Cu (Alpha)
- Eye structure similar to Nova/Bollinger demanding follow up geochem and MLEM survey
- Mammoth Ni-Cu prospect requiring further drill testing to extend mineralisation beyond current 240m strike plunging north east
- Alpha Copper prospect mineralisation zone proven to extend over 500m by 100m wide, remaining open to the north and east.

### 1. INTRODUCTION

WA-focused gold exploration and development company Classic Minerals Limited (ASX: CLZ) ("Classic", or "the Company") is pleased to provide an update on its exploration targeting strategy at its Fraser Range Nickel-Copper-Cobalt project in WA.

Although Classic has been primarily focused on gold exploration at its flagship Forrestania Gold Project ("FGP"), the Company is pleased to announce that a recent review of its Fraser Range dataset has identified several high-priority targets.

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Furthermore, the Company notes increased interest in Ni-Cu-Co exploration in the Fraser Range following the recent discovery made by Mark Creasy <10km from Classic's Fraser Range project. Creasy's "Silver Knight" deposit contains a current JORC resource at 4.2m/t grading 0.8% nickel, 0.6% copper and 0.04% cobalt, including a higher grade 200,000/t grading 3% nickel, 1.9% copper and 0.17% cobalt. Creasy has applied to convert the Silver Knight tenement into a mining lease which suggests that the deposit is economic and expected to grow.

Classic CEO Dean Goodwin said:

*The time is ripe for us to re-assess our Fraser Range project which has generated exciting targets requiring further follow up. With Nova/Bollinger 45 km along strike to the South-West, and Creasy's promising Silver Knight deposit less than 10km to the south of Classic's Fraser Range project, we feel the project remains an exciting asset with proven Nickel, Copper and Cobalt mineralisation that justifies additional review and inclusion in the Company's exploration budget and planning.*

## 2. LOCATION – PRIME REAL ESTATE

Classic's Fraser Range tenure is completely surrounded by major holders and successful explorers/producers such as Independence Group (IGO) and the Mark Creasy Group. Classic views the proximity of its tenure in relation to IGO and Creasy Group holdings as extremely encouraging.

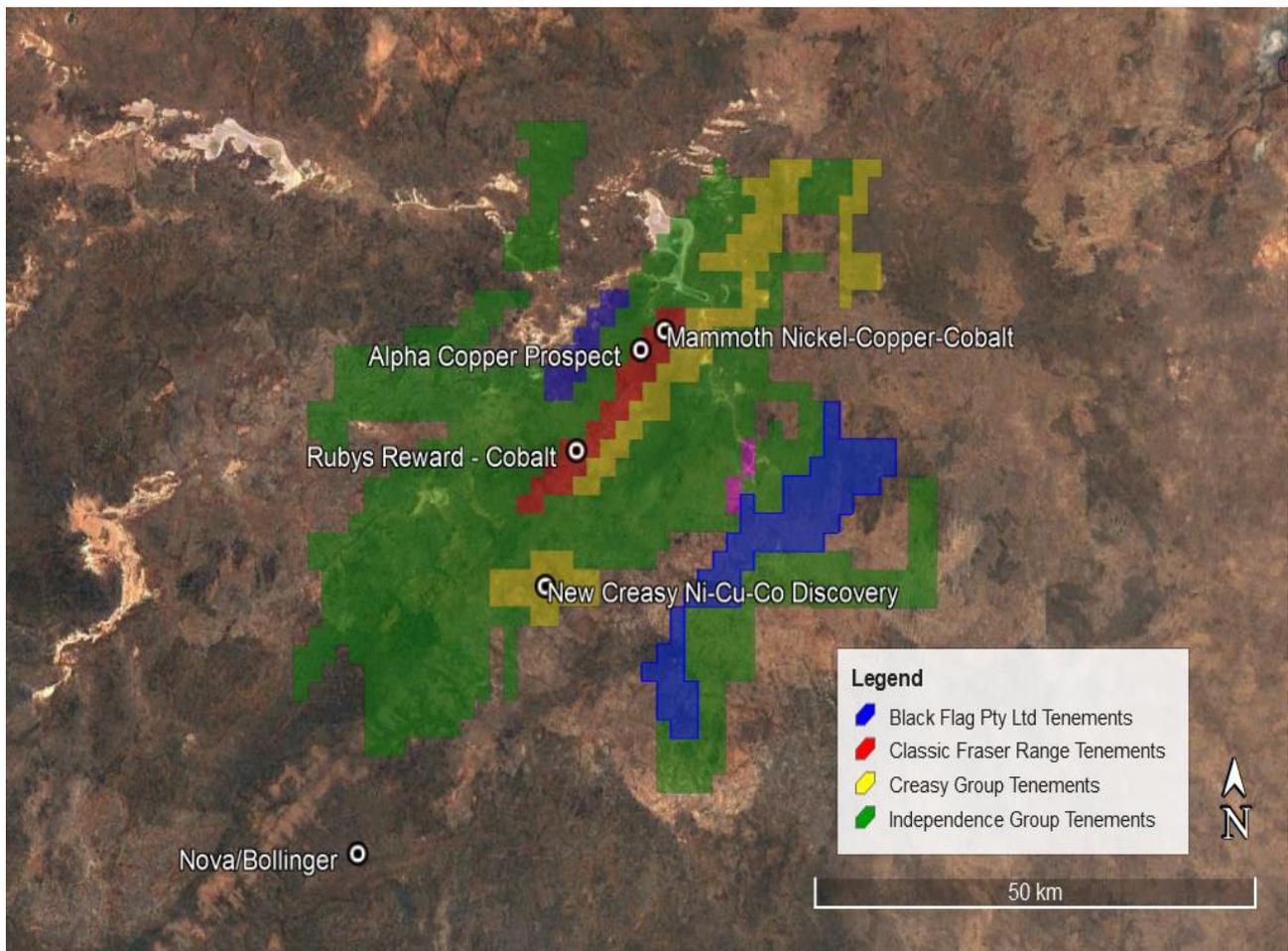


Figure 1: Tenure surrounding Classic's Fraser Range Project

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### 3. MAMMOTH NICKEL-COPPER PROSPECT

Classic discovered the Mammoth Nickel-Copper prospect in 2013. Mammoth is a new style of magmatic nickel-copper mineralisation on the Fraser Range. Drilling at Mammoth has so far proven the extension of the mineralisation to over 240m plunging north east.

Key points concerning the Mammoth Prospect:

- Intersecting thick zones of disseminated sulphides, including visible nickel and copper sulphides
- Disseminated, blebby, vein and semi-massive styles of sulphide mineralisation
- Thickness up to 23m downhole
- Close to surface – from 25m to ~100m so far
- Strongest intercepts to date include:
  - FRR040; 2m @ 1.0% Ni from 106m
  - FRR039; 1m @ 1.4% Cu from 42m; and
  - FRR036; 5m @ 0.1% Co from 10m
- DHEM and ground loop work has helped determine strike, depth extension and potential feeder structures at Mammoth
- Conductor now drilled to over 240m in length and open
- Mineralisation is sub vertical and plunges to the north east
- Currently ready for drill testing for strike and depth extensions



Image 1: Drill core from Mammoth showing Semi massive & veined mixed sulphides in sheared mafic host

**The Mammoth prospect is of interest as it appears to represent a genuine mineralised Ni-Cu system. The grades intersected to date are generally modest, but the presence of such a system is highly encouraging.** The sulphide mineralisation is hosted in a metamorphosed Gabbro that strikes about 040° and dips more-or-less vertically. The mineralised unit appears to split into 2 distinct horizons at the north end, and the better grading material appears to have a shallow north-easterly plunge.

The use of MLEM to more thoroughly search for additional mineralisation to the north is endorsed from a geological standpoint. The completion of DHEM in a larger selection of drill holes would also be beneficial, in order to aid targeting along strike and also in delineating targets that may be deeper within the vertically dipping host rock.

As with the Alpha deposit, the priority must be given to defining larger and consequently more strongly conductive targets which may indicate thicker and/or higher-grade mineralisation. One area of promise is beneath the currently drilled extents, where the DHEM plate identified in the survey of hole FRR018 (discussed below). The plate appears to map a horizon of marginally higher grade, and is poorly constrained, and poorly drilled, at depth. This may represent an opportunity to target mineralisation that is of higher grade down-dip of the current drill coverage.

In regards to drill hole FRR018, the anomaly in this drill hole corresponds to the Mammoth mineralisation. The conductor is explained, however, it is poorly drilled at depth. Given that the anomaly appears to correspond to a

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horizon of higher grade mineralisation, it's worth drilling a deep hole into the centre bottom of the plate to assess for grade and as a platform for DHEM to assess for any further down-dip continuation.

The Company sees great potential with following up the numerous Mammoth-style anomalies and delineating the next Ni-Cu ore body in the Fraser Range.

## 4. ALPHA COPPER PROSPECT

Classic discovered the Alpha Copper prospect in 2013. Hole FRRC001 intersected 1 m at 1.95% Cu, 0.11% Zn, 4.5 g/t Ag and 13 ppb Au from 103 m. Mineralisation is regarded as a possible vein which may be associated with a larger mineralized zone. 12 RC holes drilled at Target A2 along the re-interpreted EM conductor, intersecting thicker mixed sulphides, with up to 20% sulphides in some samples, and in zones up to 12 m thick. Mineralized zone is over 200 m long and over 60 m wide, plunging about 30 degrees to the NNW and outcrops as narrow, iron rich rocks. Include 1 m at 1.04% Cu at 27 m within a 5 m thick zone of iron copper mineralization in hole FRRC016 (see announcement dated 10 Oct 2013).

- Identified mineral zone over 500m long and over 100m wide
- Discovery hole was 1m of 1.95% Cu from 104m
- Dips NW, Plunges approx. 30 degrees NNE, remains open to north and east
- Drilling intersecting up to 20% sulphides in some samples with zones up to 12m thick.
- Delivered excellent early Copper intercepts with highlights including:
- 1m of 1.95% Cu from 104m (FRRC001) (Discovery Hole)
- 1m of 1.04% Cu from 27m (FRRC016) within 5m at 0.47% Cu
- 5m thick zone of 0.57% Cu (FRRC013)
- 1m of 1.27% Cu from 36m (FRRC024) within 2m at 0.795 Cu
- Thicker zones from 2m-8m of copper mineralisation from 0.2% Cu to 0.79% Cu occur through the deposit
- Mineralisation in all holes with most intersecting pyrite chalcopyrite mineralization

DHEM surveys have been undertaken on two wide spaced holes to help revise the conductor position.

At the Nova Nickel-Copper deposit, the near surface ore is limited and the ore body plunges to around 300m below surface where it flattens out into a substantial deposit. Deeper drilling should be undertaken at Alpha to explore for depth extensions to the current mineralisation.

The geochemistry and mineralogy of the Alpha Prospect are of some interest. Mineralogical evaluation conducted by Townend (2014) is suggestive of mostly mafic protoliths, with possibly minor siliciclastic material. Much of the logging indicates the presence of gabbro and mafic gneiss. However, the base metals present (Cu and Zn) and the notable absence of Ni, give a distinctly non-intrusive character to the system, instead suggesting more of a sedimentary or volcanic-related mineral system.

## 5. REVISITING THE "EYE" STRUCTURE – POTENTIAL INTRUSION PRIORITY TARGET

The "eye" structure in the south of the tenement is interpreted to be a large mafic intrusion, possibly fertile for Ni-Cu mineralisation and similar to the Nova/Bollinger intrusion system. MLEM, FLEM and geochemical sampling over the whole feature is being planned to assist with drill targeting.

Classic has planned a 200m x 80m soil sampling programme over the 2.5km long southwest-northeast orientated oval shaped airborne magnetic feature (identified from TMI survey data). Much like with Sirius' Nova discovery, the magnetic feature because of its eye-like appearance has been colloquially called the "Eye" with the core of the Eye interpreted at the time to be a dome or plug of ultramafic rocks or a layered mafic-ultramafic intrusion. It should be noted that Nova was discovered by the exploration of its own "Eye" prospect so named because of a lenticular shape seen in the magnetic data. This is inferred to represent a metamorphosed modified mafic-ultramafic intrusive complex. Consequently, magnetic structures similar to this seen in the Fraser Range Project are of high interest as Ni-Cu targets.

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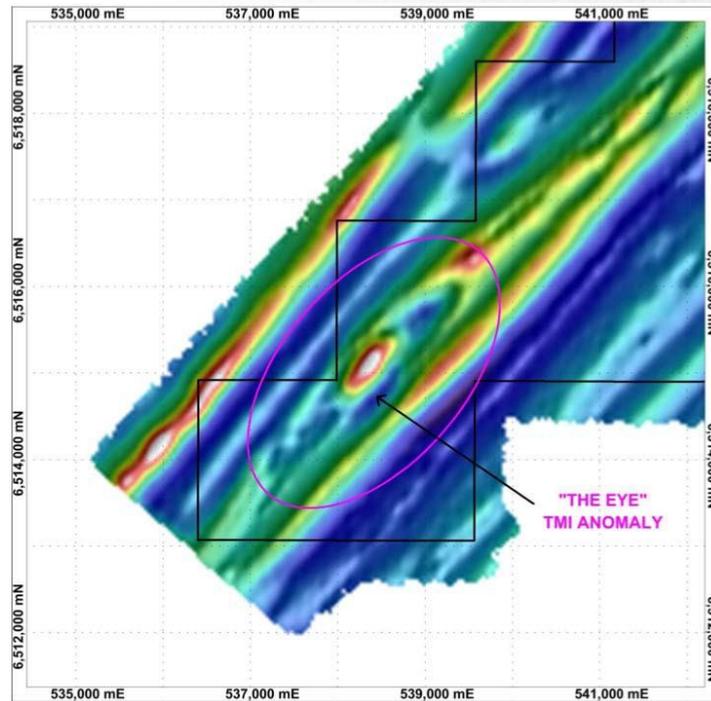


Figure 2: “The Eye” Anomaly

Should the proposed geochemical sampling and mapping produce encouraging results, a RAB/aircore drilling programme together with a ground moving loop electromagnetic survey (“MLEM”) will be completed at the Eye to delineate targets at depth for drill testing. The RAB/aircore drilling will aim to drill to the base of the regolith over the eye shaped airborne magnetic feature.

## 6. HIGH PRIORITY GEOPHYSICAL TARGETS – CENTRAL ZONE

Classic has conducted a number of geophysical surveys over the Fraser Range project that have yielded an impressive number of targets (18 conductors in total). **The prospectivity for discovering a large massive sulphide orebody on Classic Minerals’ Fraser Range tenement has received a big boost with preliminary results from a new Sub Audio Magnetics (SAM) survey identifying a major EM anomaly 1km long extending from 40m to at least 500m deep, which is a further 350m below the depth of existing drilling at prospect A17.**

The survey, completed over the northern part of the tenement, has focused on a trend running northeast through the Alpha Copper Deposit and Mammoth Nickel Copper Deposit. In addition to the EM anomaly at A17, three new conductors have been identified at depth and the conductive target “hot zone” in this already target rich area has been extended to over 6km in strike.



Image 2: Classic in the field at Fraser Range

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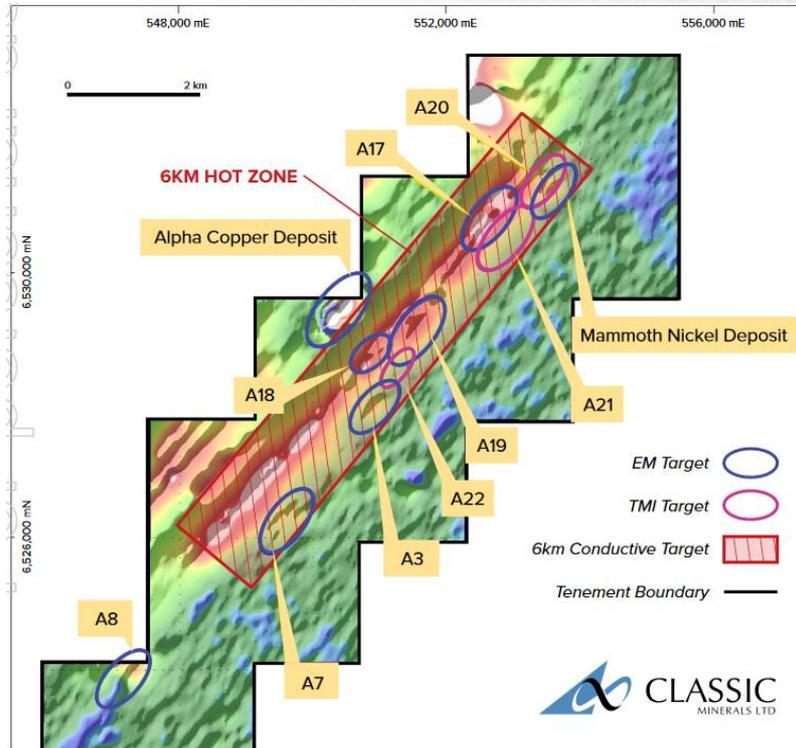


Figure 3: Central Hotzone with Geochem and Geophys Targets

In terms of future exploration, the Company is focused on what is refers to as the Hotspot Central Zone as shown below:

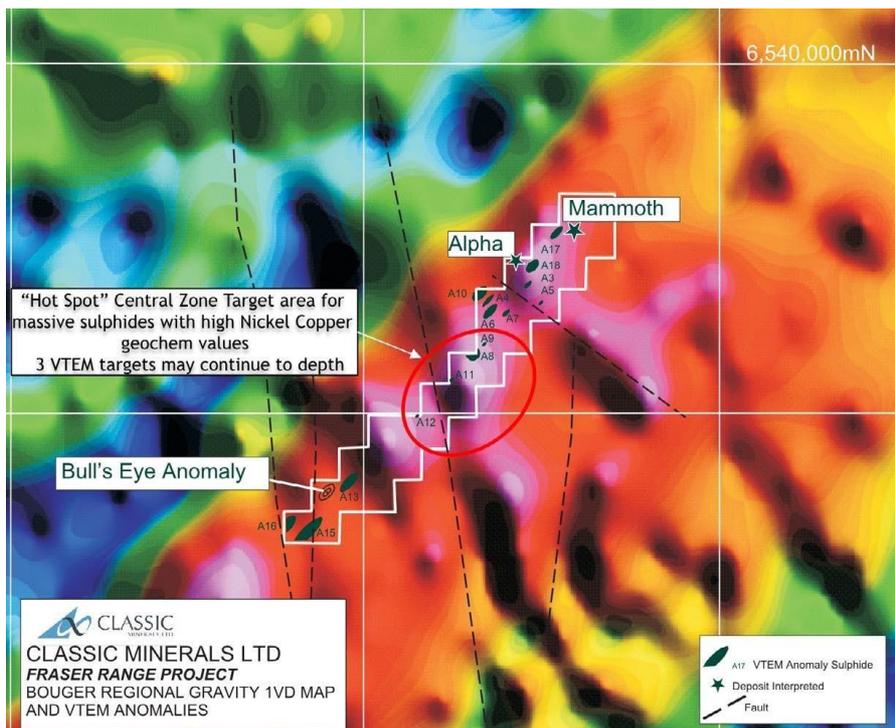


Figure 5: Hotspot Central Zone Target Area

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The Central Hotspot is attractive for many reasons including:

- Significant number of VTEM anomalies without any drill hole follow up
- Gravity image showing high gravity bouger anomalies (pink) under Classic's tenement
- Remarkably these VTEM anomalies are situated within these high gravity bouger anomalies
- Deep EM search ready to commence over geochem targets on gabbro's with a view to detect deep EM conductors for follow up drilling

Exploration will be focused on the Central Hotspot with additional surveys, geochemical sampling and eventually drilling to test the targets. These works will likely commence in the current quarter.

### 7. CONCLUSION

There is no doubt that the Fraser Range Project remains a highly prospective tenement with many significant targets to be assessed further. Classic sees potential in targeting anomalies within the "Eye" structure and following up EM conductors in the Central Hotspot region.

Fraser Range hosts a very large number of VTEM anomalies, which are very difficult to prioritise in the absence of other data. The key to further exploration in the area therefore is to generate other datasets that can facilitate the categorisation and prioritisation of VTEM (and other) anomalies for follow-up work and drilling. It is further crucial to identify what deposit models are being targeted, and to tailor exploration toward these particular models. From our recent re-examination of the data, it would appear that the major targets are Ni-Cu-(PGE) mineralisation associated with gabbro intrusive, analogous to the Nova-Bollinger deposit, Cu-Zn mineralisation related to the volcano-sedimentary regime of the Arid Basin, and perhaps gold mineralisation.

One of the key factors in identifying prospective rocks for hosting Ni-Cu mineralisation is the delineation of the extent(s) of gabbros in the region. This will be done in an accurate and objective manner, probably based on geochemical analyses and surface rock chip samples, due to the difficulties in identifying strongly metamorphosed rocks. The search for fertile gabbroic units will be guided by all available datasets, especially the magnetics and VTEM, as well as existing and proposed mapping and geochemical programmes. The existing gravity dataset can be utilised to help identify gabbroic intrusions within the hosting metamorphosed Fraser Range stratigraphy. However, based on previous Ni exploration experience, CEO Dean Goodwin will also be carrying out and employing detailed magnetics and ground gravity surveys to identify the gabbroic host rock.

In addition, magnetic and gravity inversion will assist in identifying potential gabbroic intrusions, as well as constraining the boundary between the two geological domains. This approach appears to be important as the Mammoth deposit, and several other similar-looking targets that lie immediately adjacent to this structure.

We have allocated a healthy portion of exploration expenditure and resources to commence follow up of these targets and will keep the market informed.

On behalf of the board,



Dean Goodwin CEO

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## Classic Minerals Limited

Phone: (08) 6305 0221  
Address: 71 Furniss Road, Landsdale WA 6065  
Postal: PO Box 487, Osborne Park WA 6917  
Website: [www.classicminerals.com.au](http://www.classicminerals.com.au)  
Email: [contact@classicminerals.com.au](mailto:contact@classicminerals.com.au)



### Forward Looking Statements

*This announcement may contain certain "forward-looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have reasonable basis. However, forward looking statements are subjected to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to Resource risk, metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the Countries and States in which we operate or sell product to, and governmental regulation and judicial outcomes. For a more detailed discussion of such risks and other factors, see the Company's annual reports, as well as the Company's other filings. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statements" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.*

### Competent Persons Statement

*The information contained in this report that relates to Mineral resources and Exploration Results is based on information compiled by Dean Goodwin, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Goodwin is a consultant exploration geologist with Reliant Resources Pty Ltd and consults to Classic Minerals Ltd. Mr. Goodwin has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration, and to the activity 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. Goodwin consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*