Major Airborne Magnetic and Radiometric survey commences, Byro East Project WA

Highlights:

- **7000 line kilometre Airborne Magnetic and Radiometric (AMAG/RAD) survey underway at Byro East project to be completed in early May**
- **New data set will significantly improve the current structural understanding of the Byro East project and further assist in identifying additional mafic/ultramafic lithologies (hosts rocks for magmatic Ni-Cu-PGE deposits)**
- **These combined data will be a powerful tool for identifying and ranking targets for drill testing and further follow-up work**
- **Ground gravity and AEM surveys are currently scheduled for next month**
- **Regional and Infill Soil Sampling ongoing**

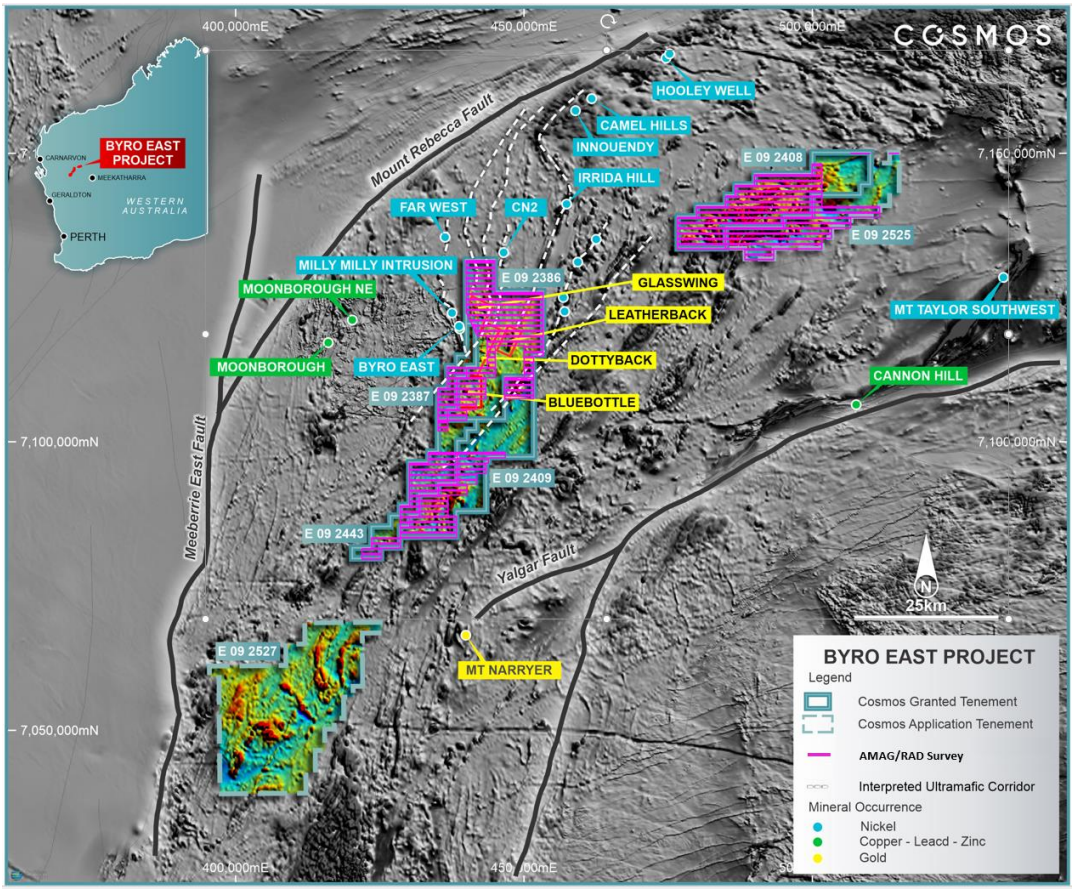

Figure 1 – Planned Airborne Magnetic and Radiometric survey (AMAG/RAD) at the Byro East Project (pink), background = regional magnetics

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Cosmos Exploration (ASX: C1X) ("Cosmos" or "the Company") is pleased to announce a detailed airborne magnetic and radiometric (AMAG/RAD) survey has commenced at its 100% owned **Byro East Ni-Cu-PGE Project** (the **Project**) in Western Australia (Figures 1).

The 7000 line kilometre survey will be flown at 100m spaced flight lines covering a large portion of the project with poor resolution. The new dataset will have a vital role in improving the structural understanding of the project and assist in identifying additional mafic/ultramafic lithologies; host rocks for Ni-Cu-PGE orthomagmatic deposits.

The central and north-eastern tenements within the Bryo East project are largely outcropping with a mixture of granitic gneiss, metasedimentary and mafic/ultramafic units. Acquiring detailed potassium (K) radiometric data will be particularly useful to differentiate between outcropping K-High gneissic granites and K-Low metasedimentary and mafic units. This contrast will enable Cosmos to quickly screen and prioritise areas that have the potential to host mafic and ultramafic rocks.

Magnetic data plays an important role in the structural interpretation of the project and in identifying potential mafic host rocks. Mafic bodies can produce magnetic highs if the unit has undergone a degree of serpentinisation. These magnetic mafic lithologies commonly produce oval or irregular-shaped anomalies compared to the linear anomalies produced from metasedimentary BIFs.

In December 2021, a circular "bulls-eye" magnetic anomaly was targeted at the Dottyback prospect and followed up with surface geochemical sampling (Figure 3). Analytical results received in April 2022 from the program indicated a strong, concentric Ni-Cr-Cu-PGE anomaly indicative of a mafic host unit.

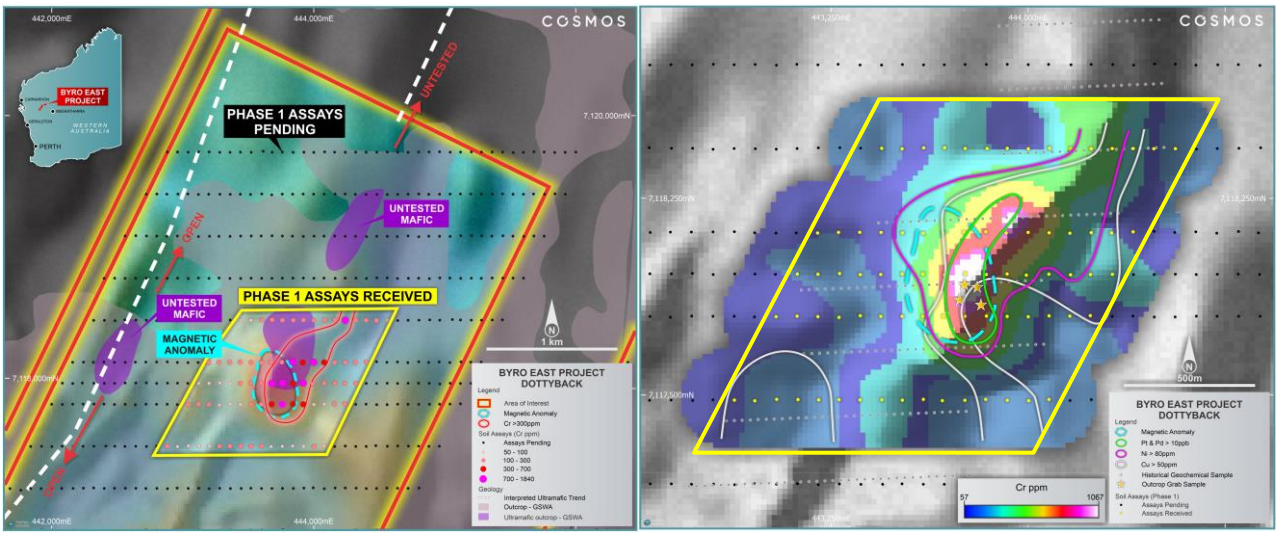

Figure 2 – 300ppm Cr soil anomaly (mafic signature) over RTP magnetic image (left). Ni-Cu-PGE contours over gridded Cr image showing the relative position of magnetic high "bullseye" feature and whole-rock sample locations (right)

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Other concentric magnetic anomalies have been identified on the project, with the Bluebottle anomaly being a high priority (Figures 1 and 3). Bluebottle is a 1km wide, concentric magnetic and semi coincident gravity anomaly masked by residual soils and float. The current 400m line spaced magnetic data is too coarse to determine if the anomaly is likely produced from a mafic or metasedimentary unit. It is expected that the newly acquired 100m flight line spaced magnetic data will resolve these issues.

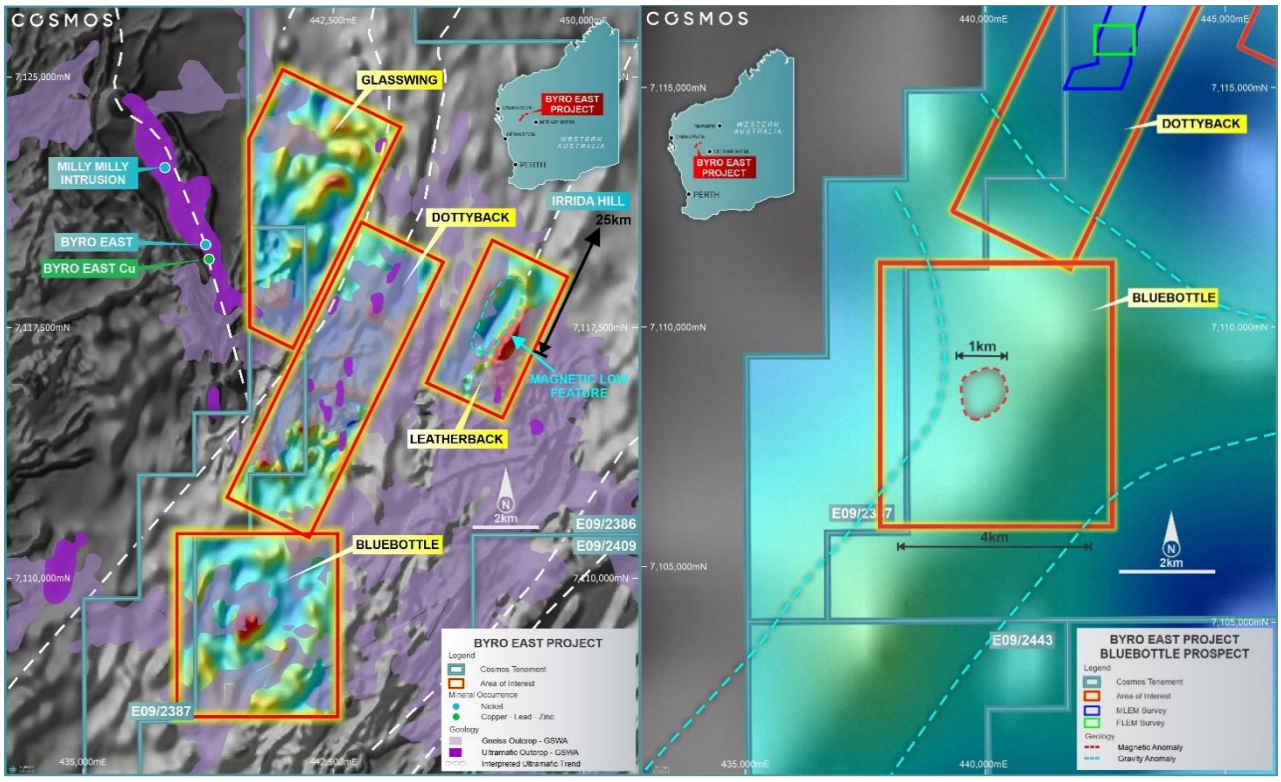

Figure 3 – Byro East Bluebottle prospect, GSWA mapped outcrop over RTP magnetic image (left). Bluebottle 1km wide magnetic outline over gravity (right)

Background – Byro East Project

Byro East is a greenfields project and one of the most extensive under-explored landholdings not held by Chalice Mining Ltd (Chalice) (ASX:CHN) within the West Yilgarn Ni-Cu-PGE province, with a substantial land holding of over >1,600 km2, prospective for intrusion-related Ni-Cu-Co-Au-PGE mineralisation (Fig 5). The discovery of the Gonneville (Julimar) PGE-Ni-Cu-Co-Au deposit by Chalice in March 2020 has demonstrated that the western margin of the Yilgarn craton is highly prospective for intrusion-related Ni-Cu-PGE deposits and can host large >10 Moz (Pt+Pd+Au) tier 1 deposits [1].

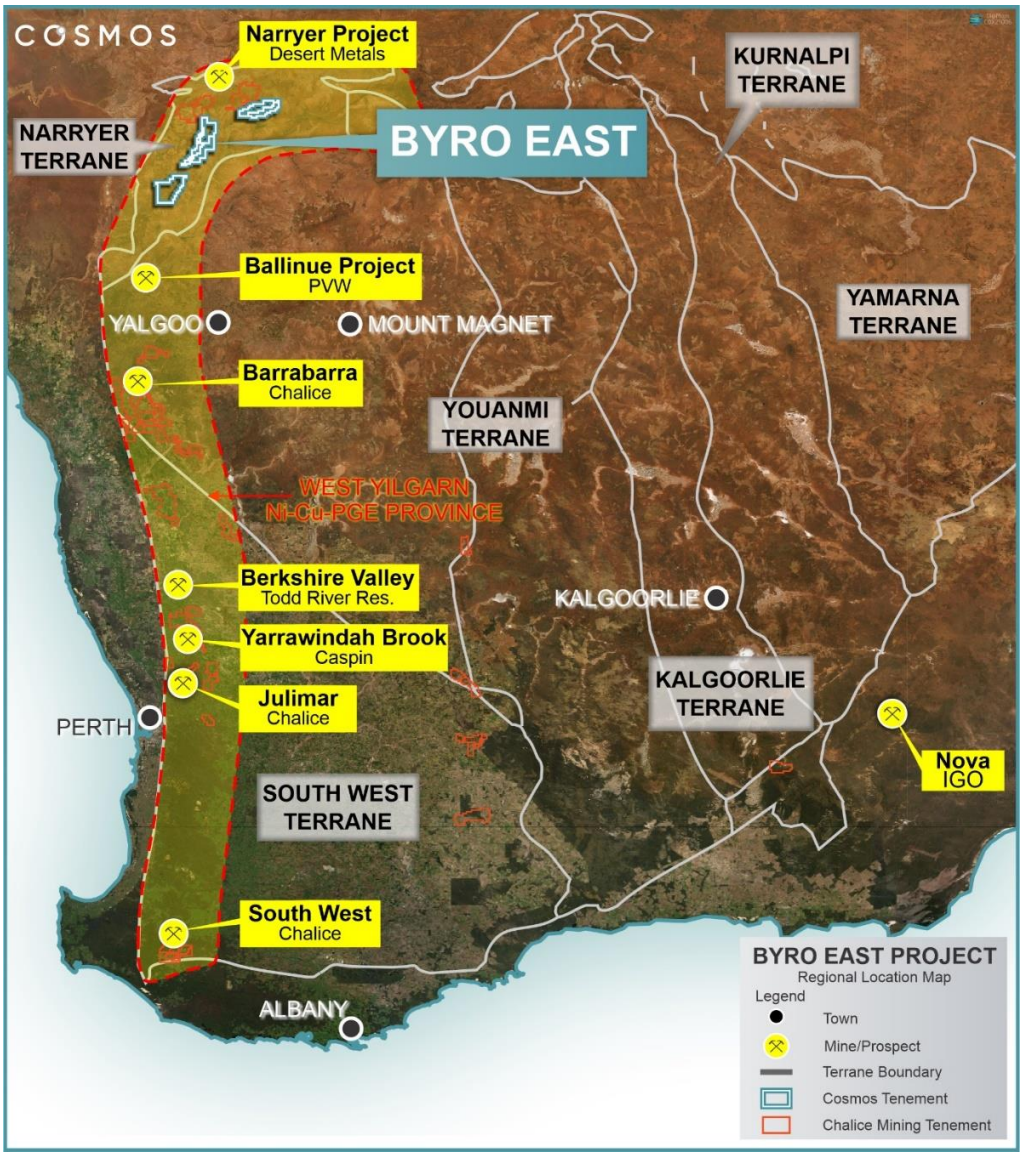

Figure 4: West Yilgarn Ni-Cu-PGE province

[1] Refer to Chalice Mining Ltd (ASX: CHN) announcement 9 November 2021

Planned Activities

Byro East Ni-Cu-PGE Project (100% Cosmos)

- Regional geochemical sampling (ongoing) April & May 2022
- Phase 2 infill geochemical sampling will begin when all results are received from Phase 1 (Mid May)
- Broad 1km spaced Ground gravity scheduled to commence during May 22
- AEM – Currently Scheduled for May/June 2022

This announcement has been authorised by the Board of Cosmos Exploration Limited.

For further information please contact:

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About Cosmos Exploration

Cosmos Exploration (ASX: C1X) is an ASX listed and Australian focussed Nickel-Copper-PGE and Gold-Copper explorer focussed on making world class discoveries at both its highly prospective Byro East Nickel-Copper-PGE Project located in Western Australia and Orange East Gold Project located in New South Wales.

Byro East (100% Cosmos) was identified by RareX prior to the Julimar Discovery and has potential for mafic-ultramafic intrusion related nickel-copper and PGE mineralisation.

Orange East (75% Cosmos) is an advanced exploration project located on the boundary between the Molong Arc and Hill End Trough within the Lachlan Fold Belt, a major mineral province, within a similar geological setting and along strike from the multi-million-ounce McPhillamys Gold Mine.

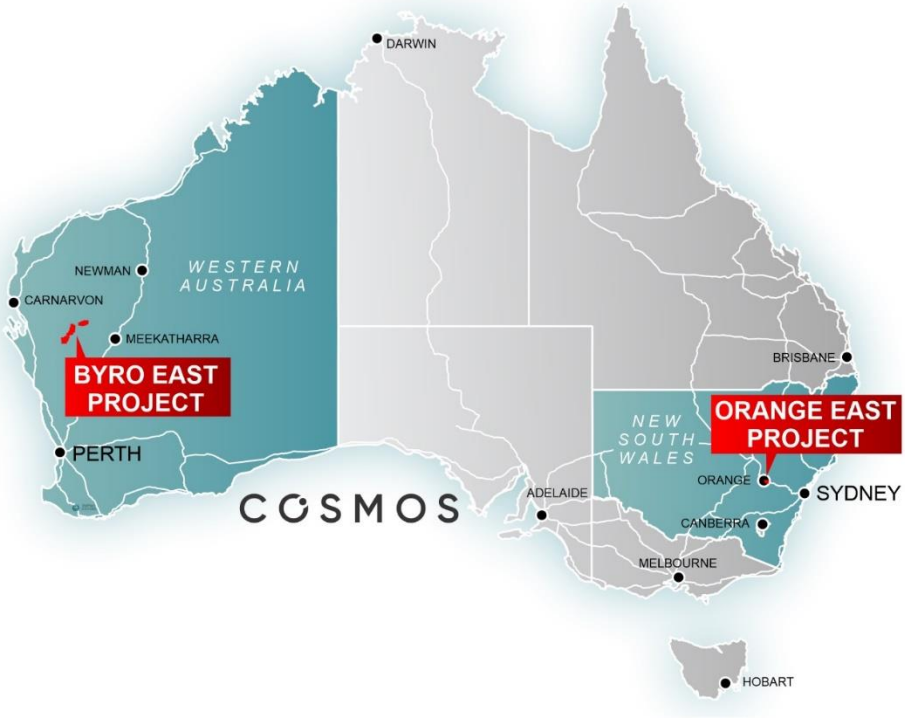

Fig 5 - Project Location Map

Competent Person Statement

This report's information related to Exploration Results is based on information and data compiled or reviewed by Mr Kristian Hendricksen. Mr Hendricksen is an employee and shareholder of Cosmos Exploration Limited (Cosmos) and is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM).

Mr Hendricksen has sufficient experience relevant to the style of mineralisation under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Accordingly, Mr Hendricksen consents to the inclusion of the matters based on the information compiled by him, in the form and context it appears.

Information on historical results outlined in this announcement is contained in the Independent Geologist Report within Cosmos' Prospectus dated 20 September 2021, released in an ASX announcement on 29 November 2021.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases. The form and context of the announcement have not materially changed. This announcement has been authorised for release by the Board of Cosmos Exploration Ltd.