The discovery of the Edna Beryl deposit – a journey with a destination!

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Edna Beryl deposit, located in the Tennant Creek Mineral Field, was discovered by prospectors in 1936 and mined underground until the closure of the mine in 1942. Mining recommenced at Edna Beryl in 1945–46 when several shafts and drives were developed to a maximum depth of approximately 50 m before encountering the water table. Production up to 1952 was reportedly 2700 t of ore at an exceptional grade of 53 g/t gold (**Figure 1**). In one crushing, 1015 oz were won from just 249 t of ore! The source of this high grade ore later became known as Edna Beryl East Mine.

Exploration during the period 1996–2000 by Giants Reef Mining outlined additional high-grade gold mineralisation below the historic workings of the Edna Beryl East Mine, resulting in a small but very high grade resource reported in 1998.

In late 2015, Emmerson announced a plan to monetise this resource via a 'small mines' Tribute Agreement with the Edna Beryl Mining company. This agreement relates to a 3D envelope immediately around the mineralisation at the Edna Beryl East Mine (**Figure 2**). The Tribute Agreement also contemplates further underground exploration and drilling, however any mineralisation discovered outside of this envelope remains 100% Emmerson.

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Although too early to calculate, the recent drilling success at Edna Beryl has greatly increased the potential for a significant upgrade to the existing mineral resource. However, more importantly, Emmerson has now discovered three hematite-hosted ironstone systems that exhibit exceptionally high gold and copper grades. These include bonanza gold grades encountered in the Edna Beryl North and Deeps ironstones, high-grade gold at the Mauretania prospect, and exceptionally high-grade copper at Goanna. These new deposits are the first discoveries in over a decade and auger well for the success of future exploration.

Since inception of Emmerson Resources in late 2007, our strategy has been firmly focussed on discovery from the implementation of a science-based approach to exploration but within a clear, risk-based business framework. Of fundamental importance to Emmerson's success is the calibre of our team, the support of the Emmerson Board, shareholders, joint venture (JV) partners (Ivanhoe Australia in 2009, and Evolution Mining in 2014), plus various other stakeholders, including the Traditional Owners.

Undoubtedly Emmerson has benefited greatly from the excellent work of previous explorers and the Northern Territory Geological Survey (NTGS), which to a large extent has provided the imperative to innovate and unlock new search space through the adoption of new ideas and technology.

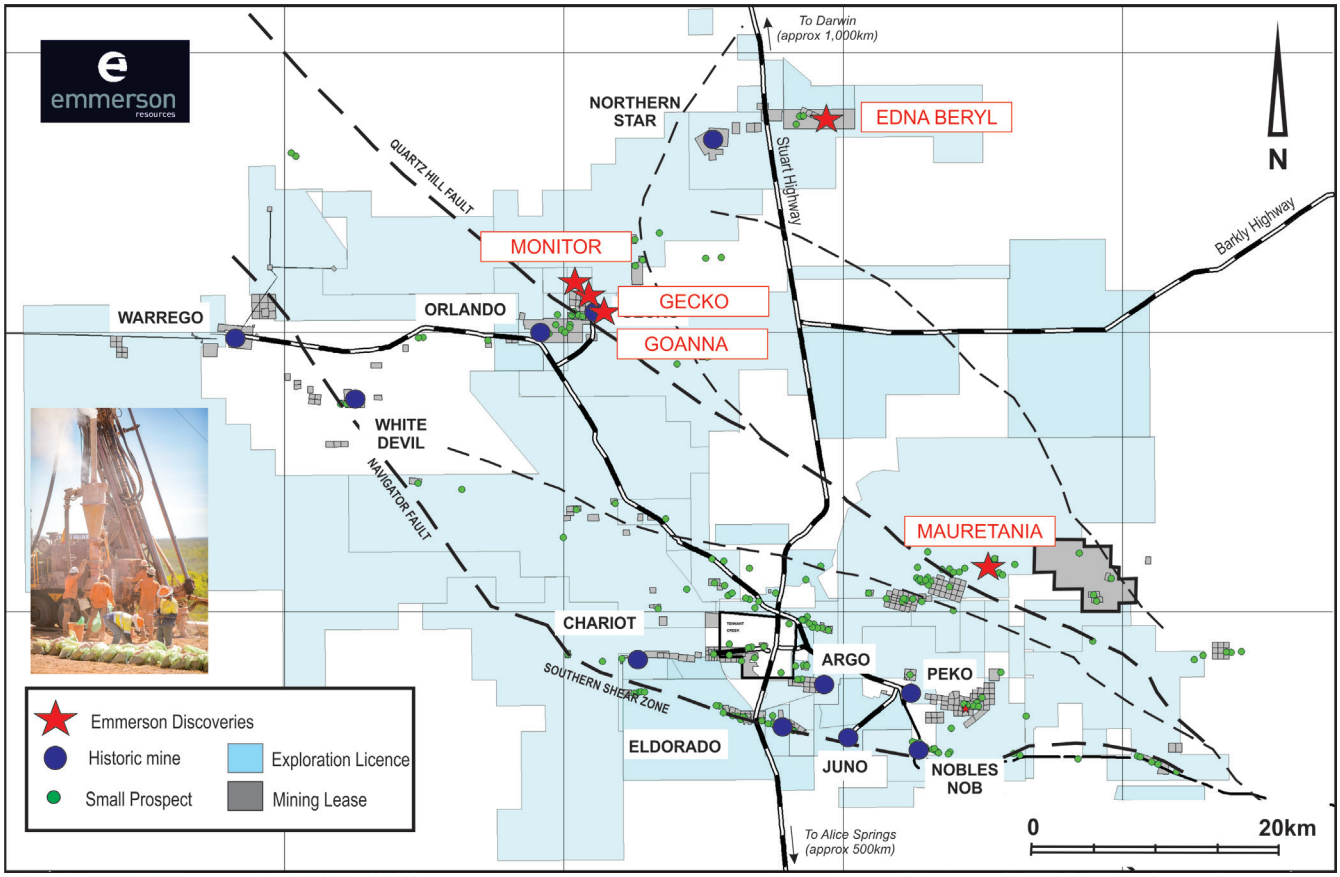

Figure 1. Location of the Emmerson Resources tenements and new discoveries.

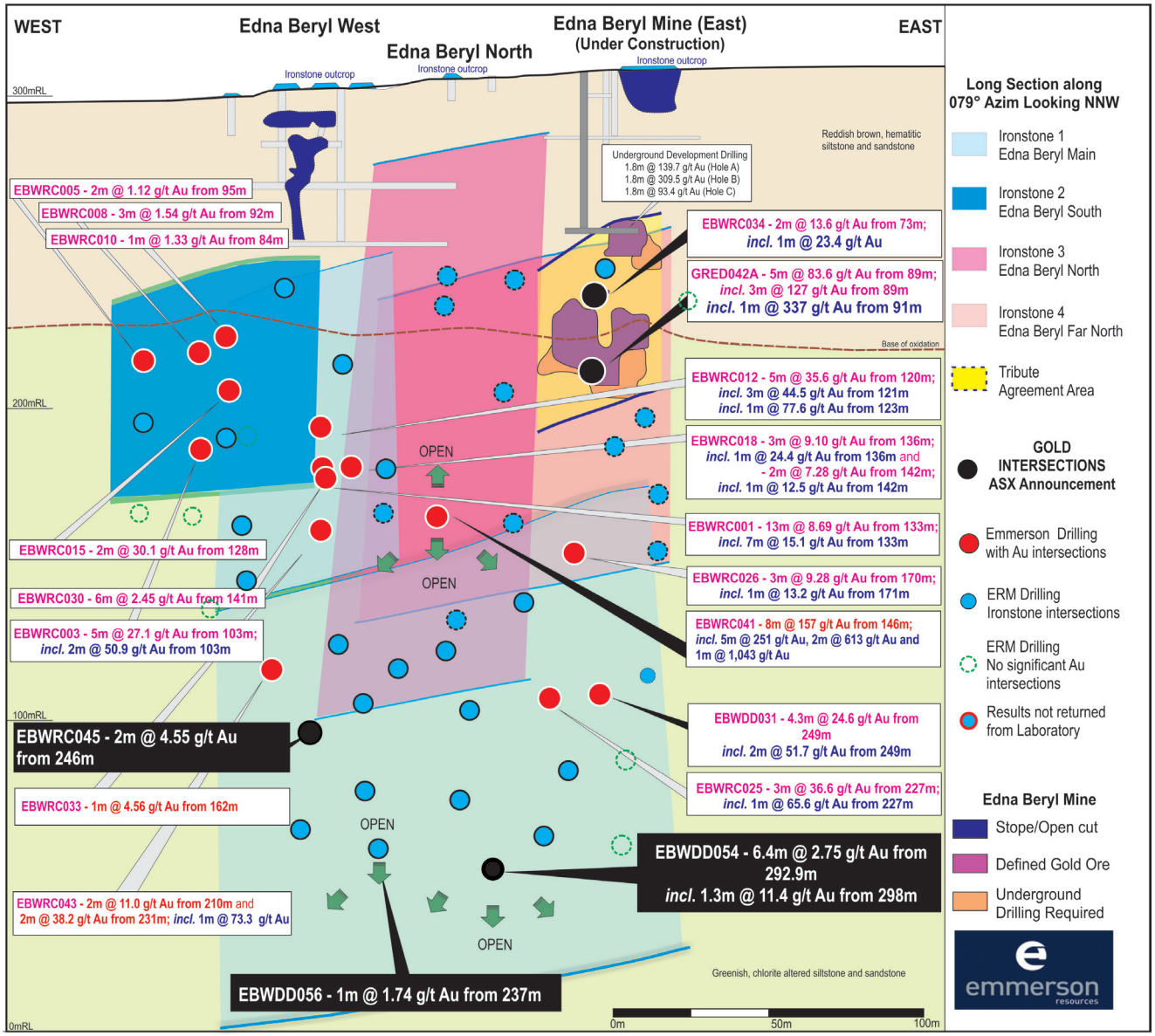

Figure 2. Long section of the Edna Beryl drilling. Note the multiple intersections of high grade gold in subparallel hematite ironstones. The first 'small mines' development via a Tribute agreement with the Edna Beryl Mining Company is marked in yellow.

Emmerson's technical approach includes integrating both the Prediction and Detection elements of our exploration model across all geological scales. With the assistance of Kenex Limited (world leaders in constructing 2 and 3D probabilistic target models), we have adopted an objective, probabilistic targeting methodology whereby target ranking is derived from a solid understanding of ore processes and their fingerprints – the critical step of turning data into information. No one data layer is definitive; rather the more robust targets are derived from multiple geoscientific data that are highly correlated to the mineralisation. Our probability-based prediction concept is illustrated in **Figure 3.**

This approach is underpinned by geoscience and allows interrogation of the various attributes and data layers with respect to the mineralisation. It also allows a more clinical approach to exploration aimed at filling gaps in the highly correlated data layers. An example being Edna Beryl which historically suffered from a lack of structural context given the subdued magnetics of this very oxidised (hematite stable) environment. Thus the recently completed co-funded (NTGS and Emmerson/Evolution) 60 km seismic traverse proved pivotal in confirming the similarities of the structural architecture at Edna Beryl to the other major deposits in the south of the Tennant Creek Mineral Field. Moreover, it also provided further insight into the spatial association of the Tennant Creek Supersuite that, from recent age dating, brackets the main stage of Au-Cu-Bi mineralisation.

The application of various detection techniques are aimed at precisely pinpointing the location of the mineralisation for drill testing. The Au-Cu-Bi mineralised ironstones (generally hematite-dominant) are notoriously difficult to detect both from the geophysical and geochemical perspective. To date, Emmerson (and JV partners) have trialled gravity geophysics, a number of electrical techniques (including airborne EM), high resolution magnetics, and various geochemical techniques including ironstone fertility indices. The journey continues this field season with the testing of ultra-high resolution gravity and passive seismic methods.

In summary, Emmerson (and JV partners) have invested considerable resources in the Tennant Creek Mineral Field, all within a risk-based business framework and with the clear aim of discovery. We are increasingly confident that this approach will continue to be supported by our shareholders and provide a point of difference for retaining and attracting new joint ventures, such as at our recently acquired Rover and New South Wales projects.

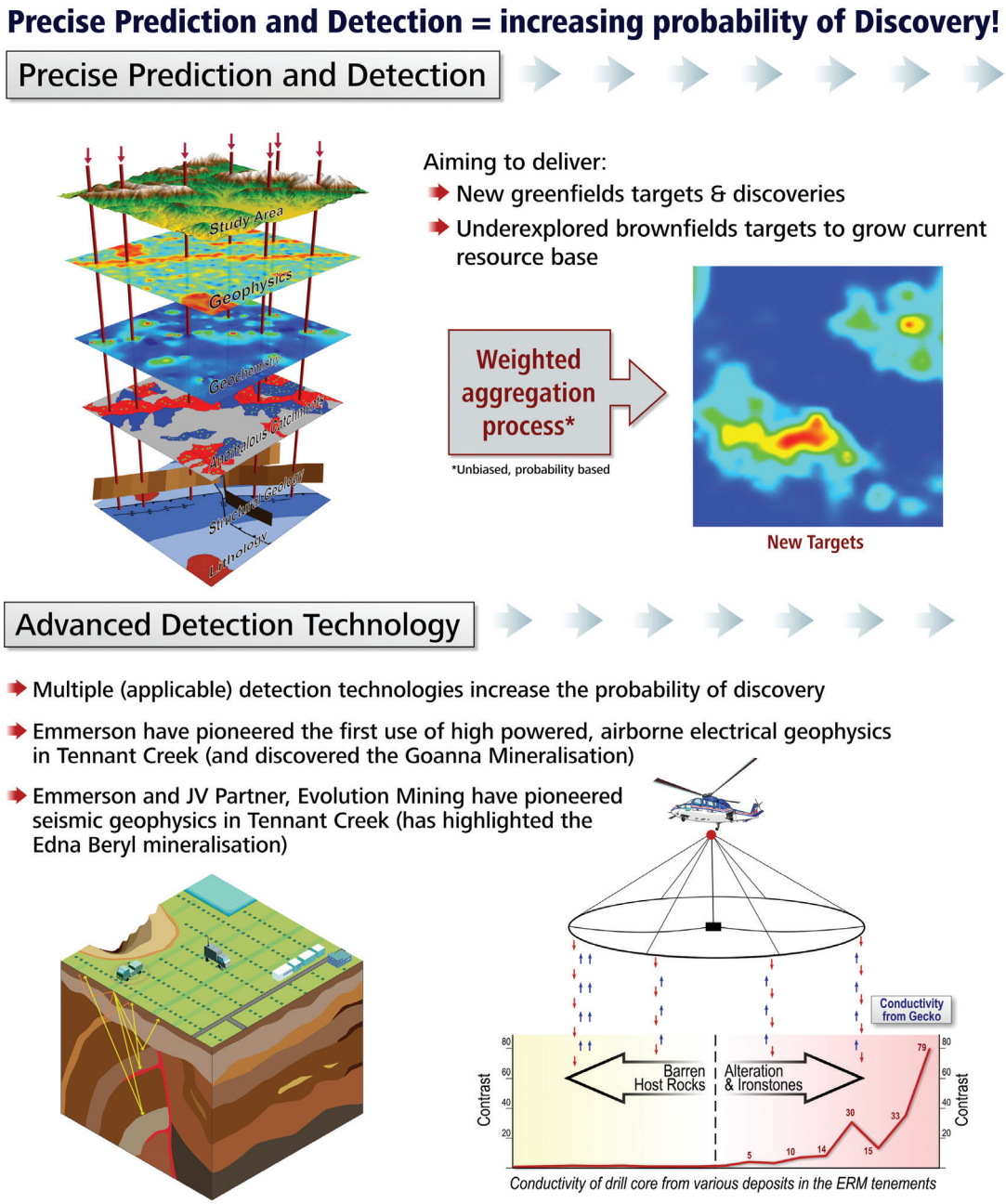

Figure 3. Probability-based prediction, followed by defining drill targets from various detection techniques.