Drilling Underway at Kadungle NSW

Highlights

- 1700m diamond drill program underway at Emmerson's Kadungle project in NSW – testing below shallow epithermal gold mineralisation and also for deeper, porphyry style copper-gold
- Large 3D MIMDAS geophysical survey at Emmerson's Kiola project showing promising early results - aimed at vectoring to the core of the copper-gold mineralisation and directing the next round of drilling that is planned for early 2021
- Exploration drilling at the Sebastopol Goldfield to follow up rock chip samples of up to 75.8g/t gold (ASX: 24 June 2020) and test below historic mine workings – planned for February 2021
- Kadungle and Sebastopol Projects now part of the exploration alliance with Longreach Mineral Exploration

Kadungle Project (figure 1) – Deep Drilling Underway

A new interpretation of the geology, geophysics and geochemistry – particularly the trace element analysis from the outer, green rock alteration zones indicates that the Mt Leadley and Mt Leadley South prospects have good potential to host epithermal gold-silver and deeper porphyry copper-gold mineralisation.

Both prospects occur within a circular, 2.5km zone of intense silica-sulphide alteration and demagnetisation that contains numerous broad and anomalous copper-gold intersections (figure 2). Historical drilling has identified several styles of mineralisation including shallow epithermal quartz-gold-silver-copper vein style mineralisation (12m at 7.73 g/t gold in drill hole KDD002, ASX: 18 July 2017), plus deeper disseminated chalcopyrite ± bornite ± molybdenite. Of note is the intersection of high-grade copper (6m at 1.1% copper from 560m in drill hole KDD013, ASX: 18 July 2017) associated with highly altered (K-feldspar alteration with hematite dusting) intrusion, indicating proximity to the mineralised core of this system.

The first drill hole KAD-prop 1 at Mount Leadley is now underway and will test beneath the quartz-pyrite zone some 200m east of historical hole KDD002 (which intersected 12m at 7.7g/t gold and 0.12% copper). The main target however is around 850m where the vectors from the chlorite alteration (application of chlorite and green rock proximity indicators) and the geology suggest a potential source at depth (figure 3). There is no historical drilling in this vicinity and the geological interpretation is based on drilling to the west where a shoshonitic porphyry dyke yielded 6m at over 1% copper. We anticipate that this drill hole may be extended, providing the mineralisation and alteration are consistent with approaching the source of the copper and gold (increasing rank and intensity of alteration and mineralisation) as at these depths, this style of deposit is still well within the economic parameters for mining.

The second drill hole KAD-prop 2 at Mount Leadley South will also test deeper extensions to the silica-pyrite zone ± gold, where the alteration vectors coincide with a steeply dipping fault, interpreted to be the feeder fault for the copper and gold mineralisation (figure 4).

Sebastopol Gold Project – Drill follow-up to high-grade gold at surface and in shallow workings

Seven drill holes for approximately 1,500m are now expected to commence in February 2021 due to the need to schedule activities around the seasonal harvesting of crops.

The greater Sebastopol area was originally identified by Emmerson for its porphyry copper-gold potential however minimal modern exploration across this historic high-grade goldfield provides potential for the discovery of orogenic gold deposits.

This style of deposit is interpreted to be associated with second order structures emanating from the regional Gilmore Fault Zone (GFZ). The GFZ is a long lived, crustal scale structure that is recognised as being a significant control on the gold mineralisation in the area, including large gold deposits of Cowal (7.5Moz) and Gidginbung (0.7Moz).

Field work has now traced multiple subparallel veins, historic workings and prospects over an area of 4km^2. Assay results from both historical and recent sampling has yielded up to 75.8g/t gold (Figure 5) (ASX: 24 June 2020)

Although there are seven historic mines identified, most of the gold was derived from the Morning Star Mine, with records indicating it produced over 30koz from 1869 to 1935. It was mined to a depth of 110m over a strike length of 335m, with mining widths of up to 3m and an average of 0.6m. The principal veins strike northwest and dip ~60º to the southwest, with offshoot (spur veins) striking east-west.

The outlines and records of the historic underground workings and samples from 1922 (ref. NSWGS) were georeferenced by Emmerson. From these records it appears the higher grades of up to 151g/t are associated with structurally controlled ore shoots. Further, the mineralisation continues at the deepest level and was not mined out, with grades ranging from 2.3g/t to 25.3g/t gold (ASX: 24 June 2020).

Strategic Alliance – targeting innovative exploration and discovery for gold and copper

The strategic alliance with Longreach Mineral Exploration (ASX: 24 June 2020) complements Emmerson's existing capabilities and will provide a further path to accelerating project generation and early stage exploration. Either party can submit a project to the project working group and if unanimously accepted, becomes a strategic alliance project (SAP). In accordance with the strategic alliance agreement each party contributes 50% of costs to the agreed work program with the work program undertaken by the nominated Manager who will receive a 6% management fee. Providing the SAP meets the agreed milestone, the project then becomes the subject of a Joint Venture between the parties.

Emmerson and Longreach Mineral Exploration have reached agreement that both the Kadungle and Sebastopol projects will be added to the exploration alliance portfolio, with exploration costs shared equally between the parties. Importantly, in recognition of Emmerson's investment in the early stages of exploration at Kadungle, any future Joint Venture will be structured on a 60% equity interest to Emmerson. The Sebastopol Gold project has also been accepted as a Strategic Alliance Project with all costs and equity interest on a 50/50 basis.

For and on behalf of the Board of Emmerson Resources Limited

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About Emmerson Resources, Tennant Creek and New South Wales

Emmerson is fast tracking exploration across five exciting early-stage gold-copper projects in NSW, identified (with our strategic alliance partner Kenex/Duke Exploration) from the application of 2D and 3D predictive targeting models – aimed at increasing the probability of discovery. Duke can earn up to 10% (to pre BFS) of any project generated (except Kadungle), providing certain success milestones are met.

The highly prospective Macquarie Arc in NSW hosts >80Mozs gold and >13Mt copper with these resources heavily weighted to areas of outcrop or limited cover. Emmerson's five exploration projects contain many attributes of the known deposits within the Macquarie Arc but remain underexplored due to historical impediments, including overlying cover (farmlands and younger rocks) and a lack of exploration. Kadungle is a JV with Aurelia Metals covering 43km^2 adjacent to Emmerson's Fifieldproject.

Emmerson Resources formed a Strategic Alliance with Longreach Mineral Exploration in June 2020. The aim of the Strategic Alliance is to apply new technology such as machine learning, green rock and seismic geophysics to the identification of new gold and copper opportunities. Longreach Mineral Exploration Pty Ltd is a subsidiary of Longreach Capital Investment Pty Ltd, based in Perth, Western Australia. The strategic alliance with Longreach Mineral Exploration compliments Emmerson's existing capabilities and will provide a further path to accelerating project generation and early stage exploration.

In addition, Emmerson has a commanding land holding position and is exploring the Tennant Creek Mineral Field (TCMF), one of Australia's highest-grade gold and copper fields producing over 5.5 Moz of gold and 470,000 tonnes of copper from deposits including Warrego, White Devil, Orlando, Gecko, Chariot, and Golden Forty. These high-grade deposits are highly valuable exploration targets, and to date, discoveries include high-grade gold at Edna Beryl and Mauretania, plus copper-gold at Goanna and Monitor. These are the first discoveries in the TCMF for over two decades.

About Longreach Mineral Exploration

Longreach Mineral Exploration Pty Ltd is a subsidiary of Longreach Capital Investment Pty Ltd, based in Perth, Western Australia. Established in 2005, Longreach Capital Investment has earned a strong reputation in the global petroleum industry through the success of its numerous subsidiaries focused on oil and gas exploration, seismic services, and machine learning technologies.

Longreach Mineral Exploration, established in 2018, is a mineral resource exploration company, with a focus on copper-gold exploration in Australia. The company has tenements and applications for mineral exploration permits targeting copper and gold in the Curnamona Province (NSW, SA), QLD and WA. Longreach's strategy is to utilize its experience of superior geophysical imaging of the sub surface in the oil and gas sector and apply this to mineral exploration for identifying deeper targets.

Longreach Mineral Exploration have a partnership agreement with Kenex Pty Ltd (Kenex) whereby Kenex's existing IP and predictive mapping skills are used for targeting assessment.

Competency Statement

The information in this report which relates to NSW Projects Exploration Results is based on information compiled by Dr Ana Liza Cuison, MAIG, MSEG. Dr Cuison is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2004 edition and the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Cuison is a full-time employee of the Company and consents to the inclusion in this report of the matters based on her information in the form and context in which it appears.

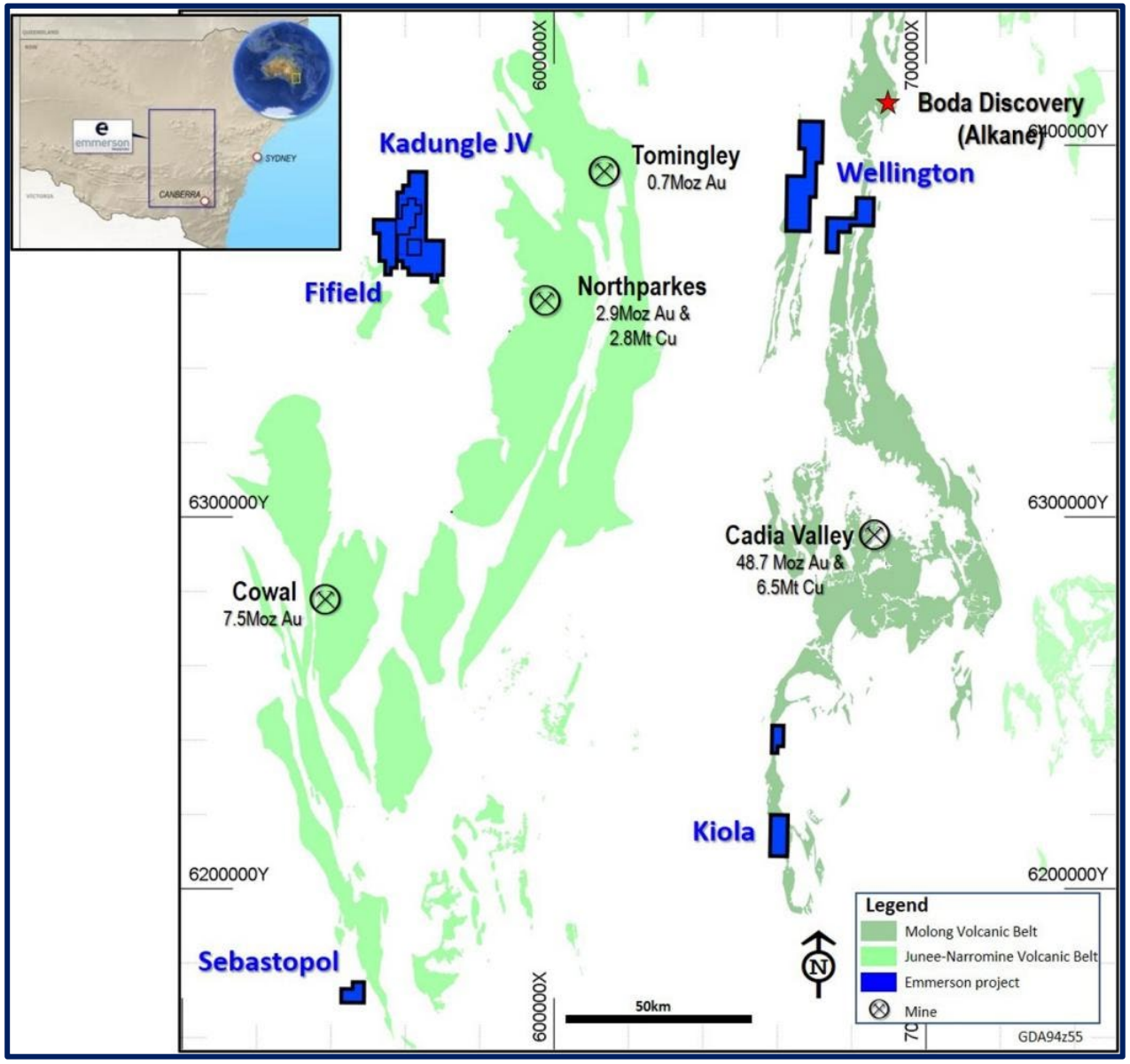


Figure 1. Location of Emmerson's NSW Projects (held by Lachlan Resources – a 100% owned subsidiary of Emmerson).

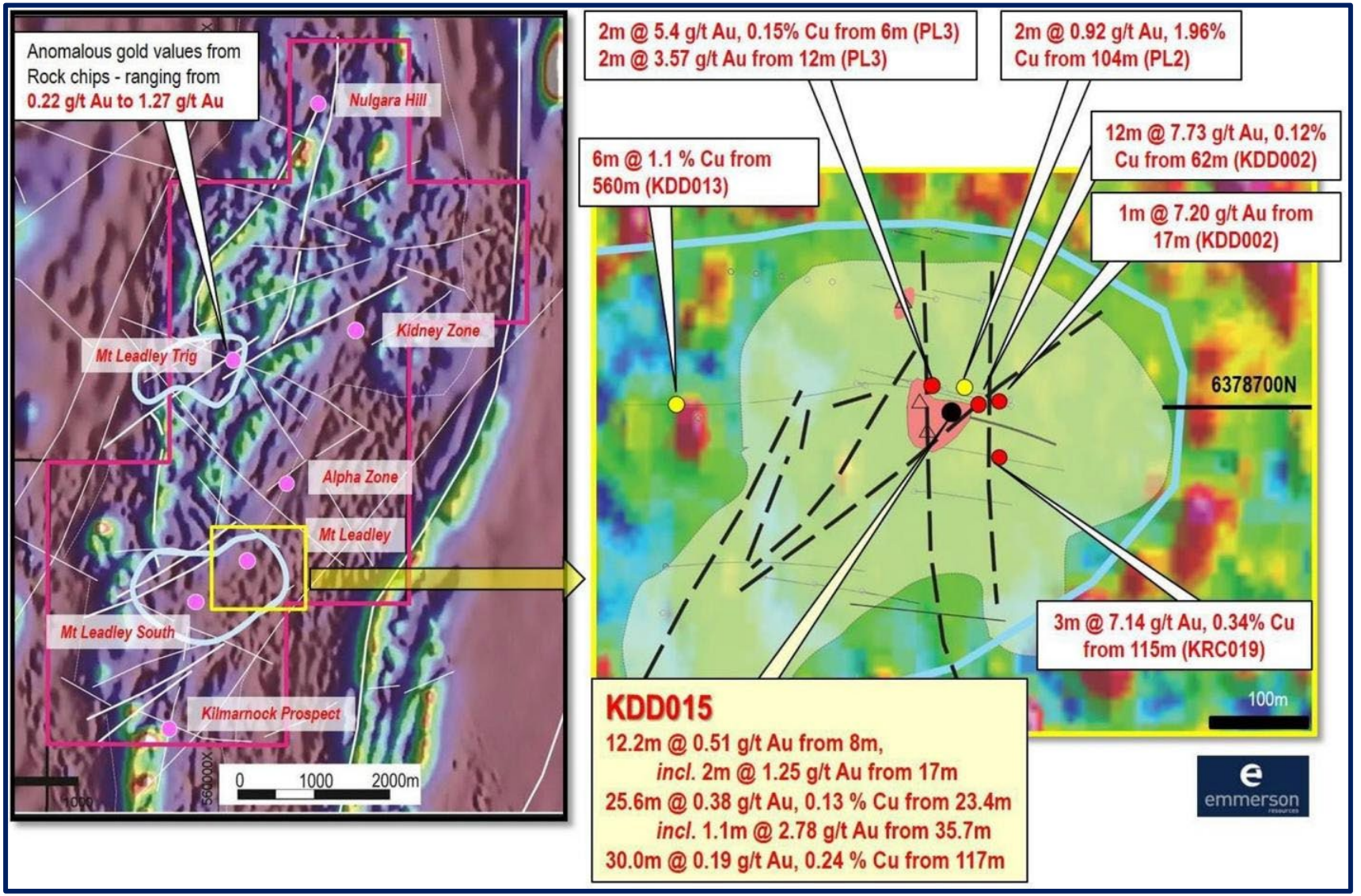


Figure 2. Plan of the Mt Leadley prospects within the Kadungle tenement. Note ERM drill hole KDD015 plus historic intersections. Background is the 1VD of the recent aeromagnetics with the zone of magnetite destruction interpreted as the fingerprint from upwelling hydrothermal gold and copper fluids (delineated by everything inside the blue line).

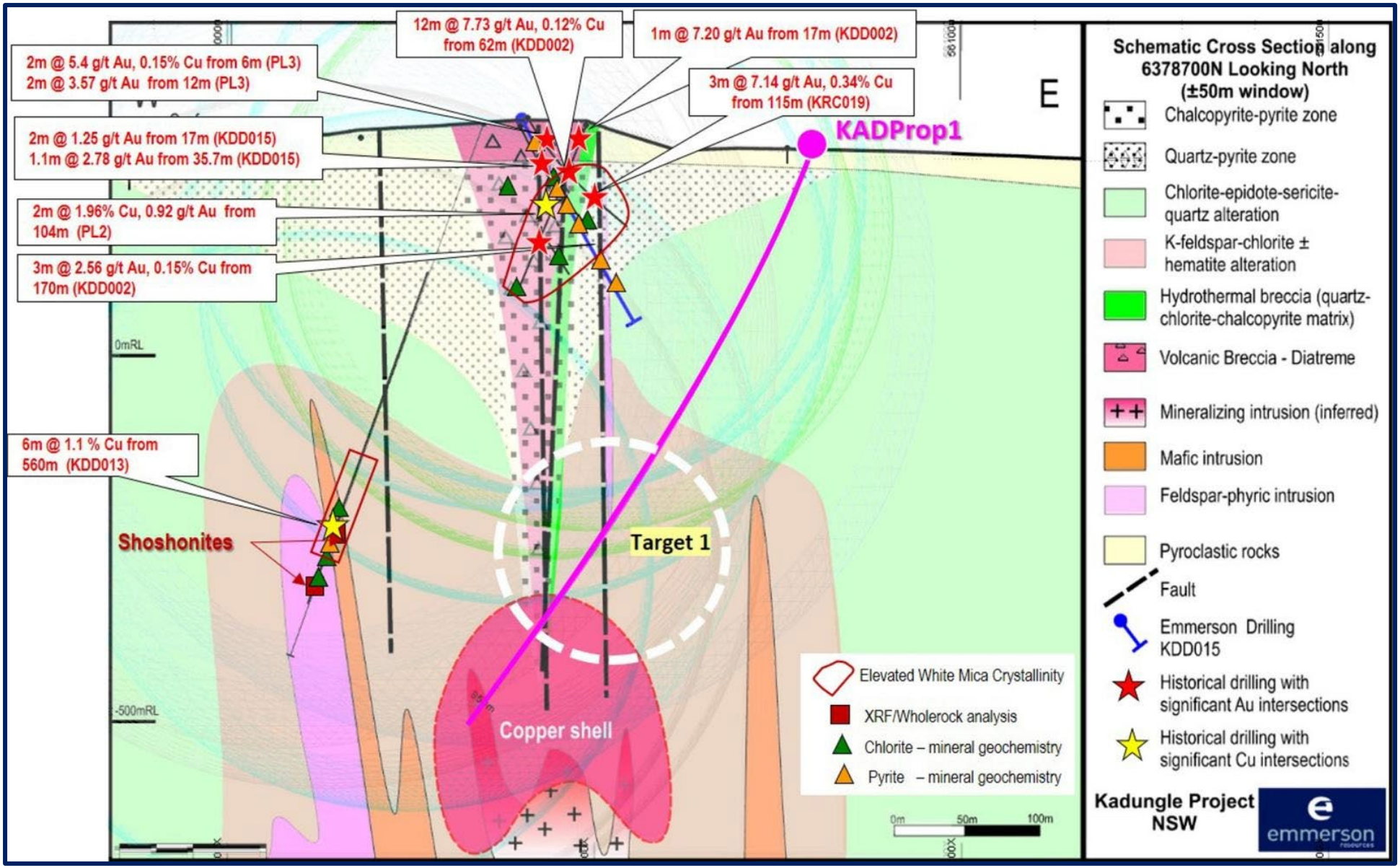


Figure 3. Cross section of the Mt Leadley North prospect showing current drill hole KDD-prop1 and Target 1 at the intersection of the chlorite proximity vectors (blue and green coloured circles), geology and previous drilling.

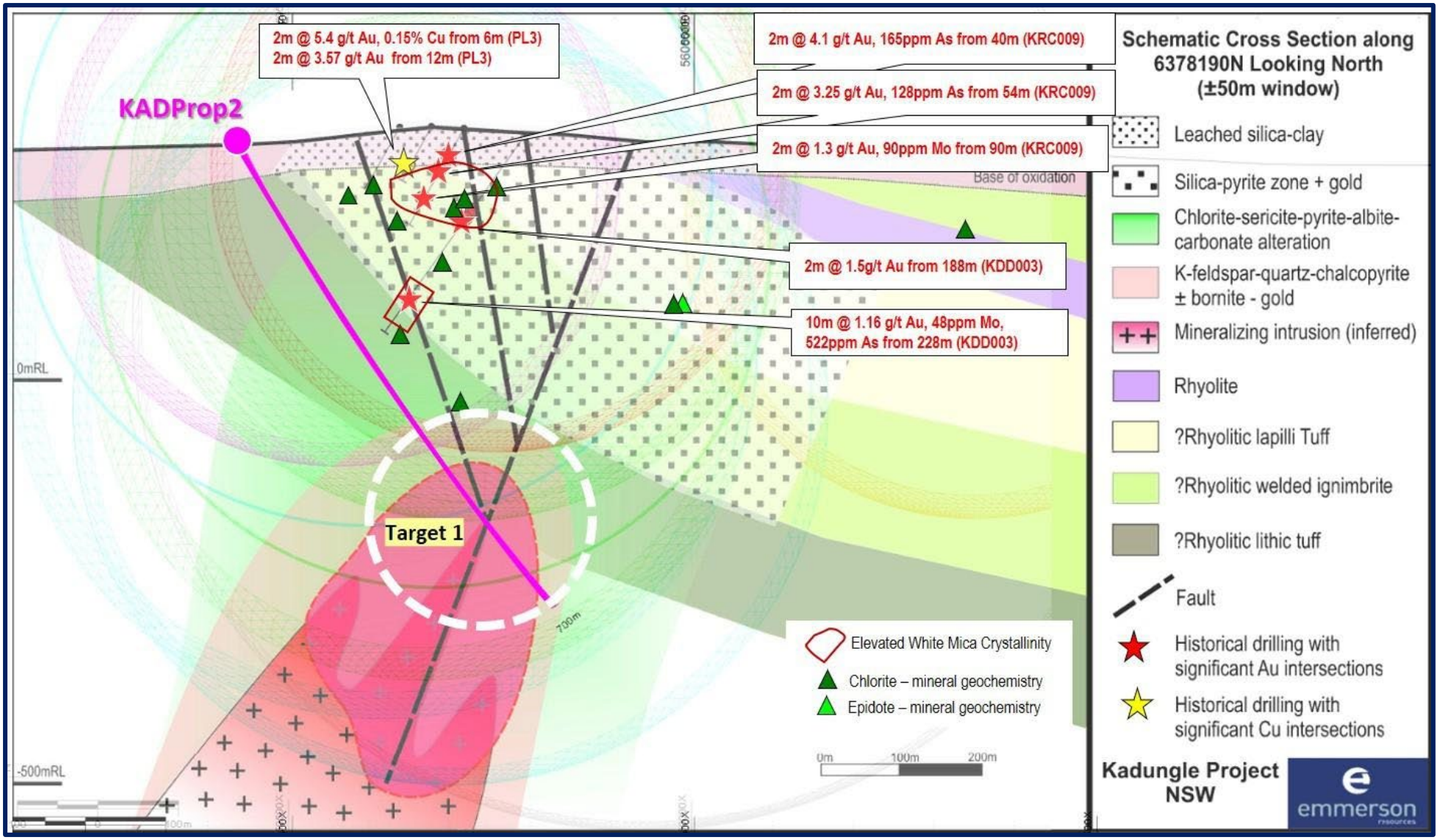
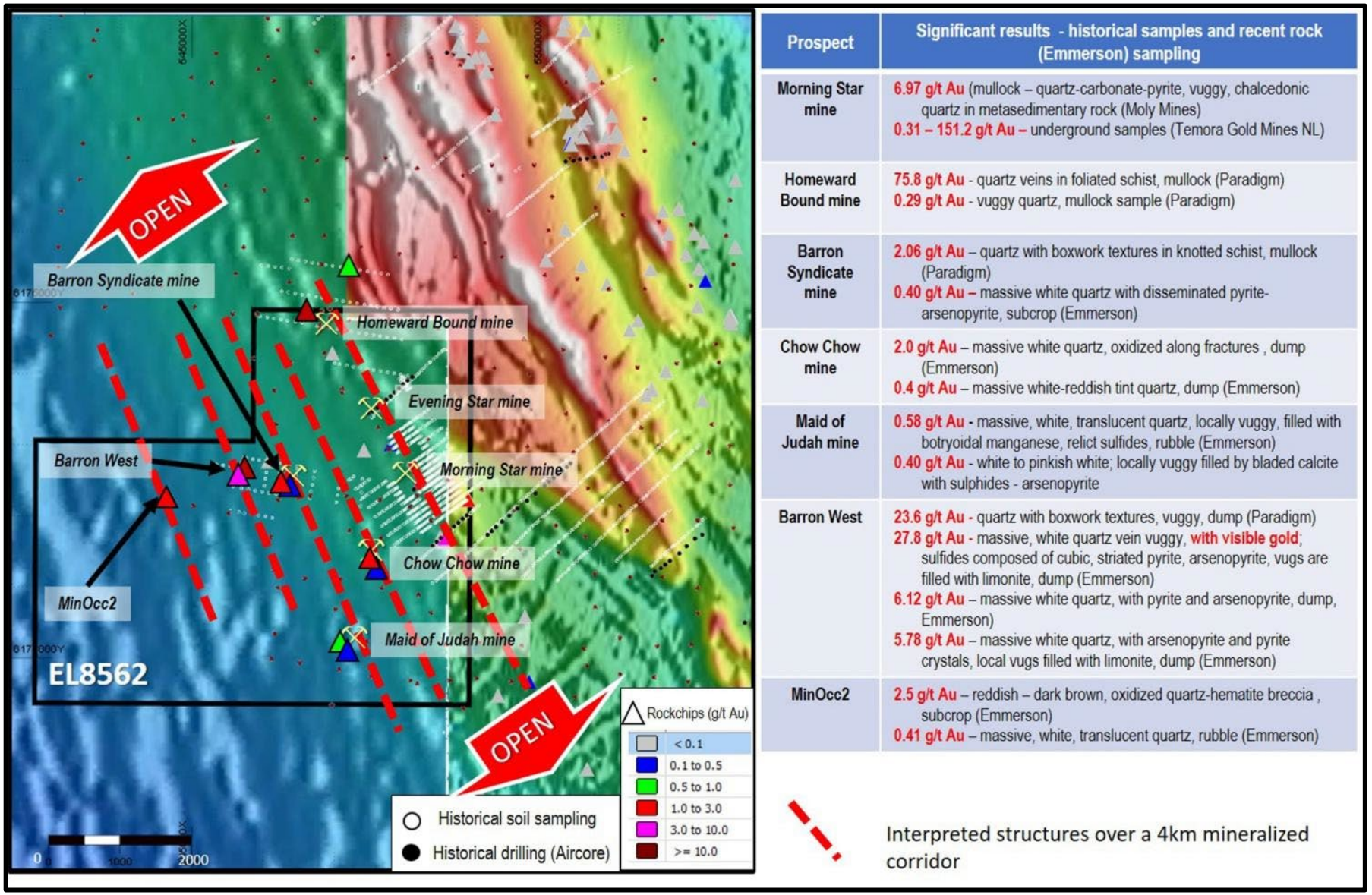


Figure 4. Cross section for the Mt Leadley South prospect showing current proposed drill hole KDD- prop2 and Target 1 at the intersection of the chlorite proximity vectors (blue and green coloured circles), geology and previous drilling.



Prospect	Significant results - historical samples and recent rock (Emmerson) sampling
Morning Star mine	6.97 g/t Au (mullock – quartz-carbonate-pyrite, vuggy, chalcedonic quartz in metasedimentary rock (Moly Mines) 0.31 – 151.2 g/t Au – underground samples (Temora Gold Mines NL)
Homeward Bound mine	75.8 g/t Au - quartz veins in foliated schist, mullock (Paradigm) 0.29 g/t Au - vuggy quartz, mullock sample (Paradigm)
Barron Syndicate mine	2.06 g/t Au – quartz with boxwork textures in knotted schist, mullock (Paradigm) 0.40 g/t Au – massive white quartz with disseminated pyrite-arsenopyrite, subcrop (Emmerson)
Chow Chow mine	2.0 g/t Au – massive white quartz, oxidized along fractures , dump (Emmerson) 0.4 g/t Au – massive white-reddish tint quartz, dump (Emmerson)
Maid of Judah mine	0.58 g/t Au - massive, white, translucent quartz, locally vuggy, filled with botryoidal manganese, relict sulfides, rubble (Emmerson) 0.40 g/t Au - white to pinkish white; locally vuggy filled by bladed calcite with sulphides - arsenopyrite
Barron West	23.6 g/t Au - quartz with boxwork textures, vuggy, dump (Paradigm) 27.8 g/t Au - massive, white quartz vein vuggy, with visible gold; sulfides composed of cubic, striated pyrite, arsenopyrite, vugs are filled with limonite, dump (Emmerson) 6.12 g/t Au – massive white quartz, with pyrite and arsenopyrite, dump, Emmerson) 5.78 g/t Au – massive white quartz, with arsenopyrite and pyrite crystals, local vugs filled with limonite, dump (Emmerson)
MinOcc2	2.5 g/t Au – reddish – dark brown, oxidized quartz-hematite breccia , subcrop (Emmerson) 0.41 g/t Au – massive, white, translucent quartz, rubble (Emmerson)

Figure 5. Regional Total Magnetic Intensity (TMI) over Sebastopol (EL8652) showing the location of historic mines, prospects and significant rock chip samples.