

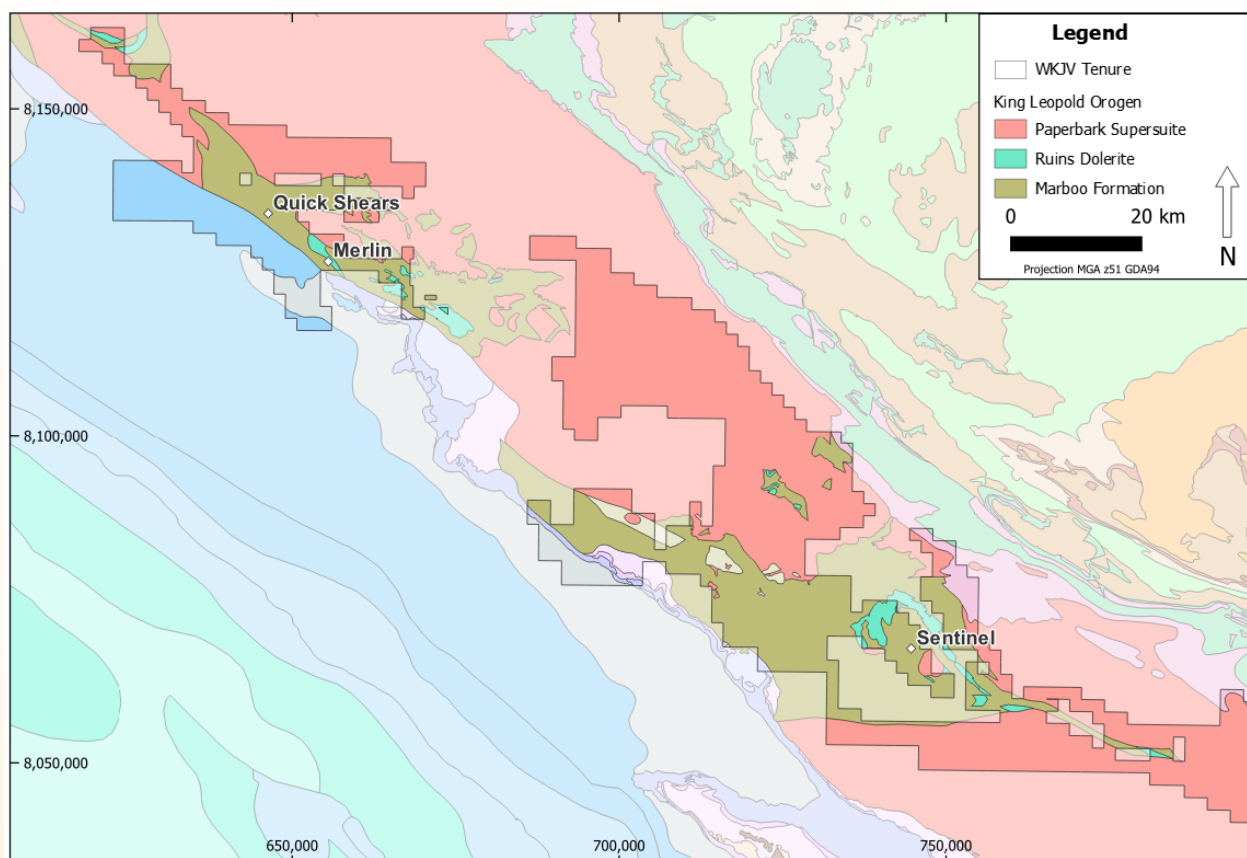
ASX Release

2<sup>nd</sup> May 2022

## BUX/IGO West Kimberley JV on road to discovery

- Buxton has established the West Kimberley as a fertile and under-explored magmatic Ni-Cu-Co-PGE province
- Joint Venture Partner IGO is funding and executing an extensive regional exploration program aimed at discovering a Tier 1 Ni-Cu-Co-PGE deposit
- Buxton is free carried at 20% interest to a decision to mine

Buxton Resources updates its shareholders with background technical context supporting IGO's extensive exploration program at the Sentinel Project, part of the BUX/IGO West Kimberley JV (see Figure 1).



**Figure 1: Map of West Kimberley JV geology and tenure.**

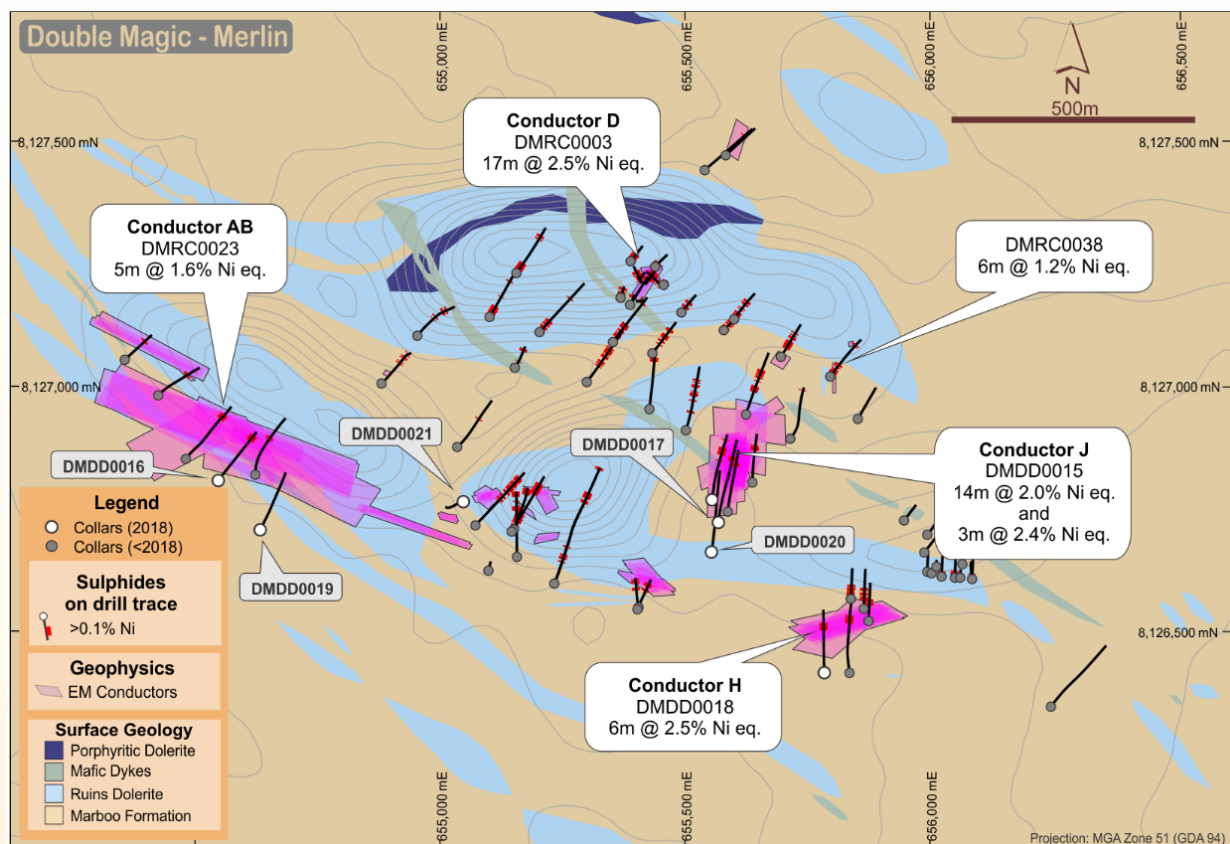
Buxton's discovery of high-tenor Ni-Cu-Co mineralisation at Merlin in 2015 established the magmatic nickel prospectivity of the King Leopold Orogen in the West Kimberley Region of WA.

The King Leopold Orogen is located along the Kimberley Craton margin and includes a suite of 1.88 Ga mafic/ultramafic intrusions known as the Ruins Dolerite. These rocks were formed during the broad Proterozoic global magmatic Ni event which formed multiple Tier 1 size Ni-Cu-Co-PGE deposits, including those at Sudbury, the Thompson, and Raglan belts in North

America, and at Pechenga in Russia. The King Leopold Orogen has analogous geology to the Halls Creek Orogen, which hosts the Savannah Ni-Cu-Co deposit.

Alongside a series of compelling magmatic sulphide intersections (see Figure 2), Buxton's exploration at Merlin documented compelling textural, geochemical, isotopic, and petrographic evidence of sulphur saturation and crustal assimilation in a dynamic intrusive magmatic system within a specific MgO-rich Ruins Dolerite meta gabbroic unit having Cr in excess of 1,000 ppm.

Buxton's technical work unequivocally identified the mineralisation to be of magmatic conduit-style (aka "chonolith" hosted – see Figure 3) and in doing so, Buxton defined the entire King Leopold Orogen as a new exploration province for Tier 1 Ni-Cu-Co-PGE magmatic sulphide deposits.



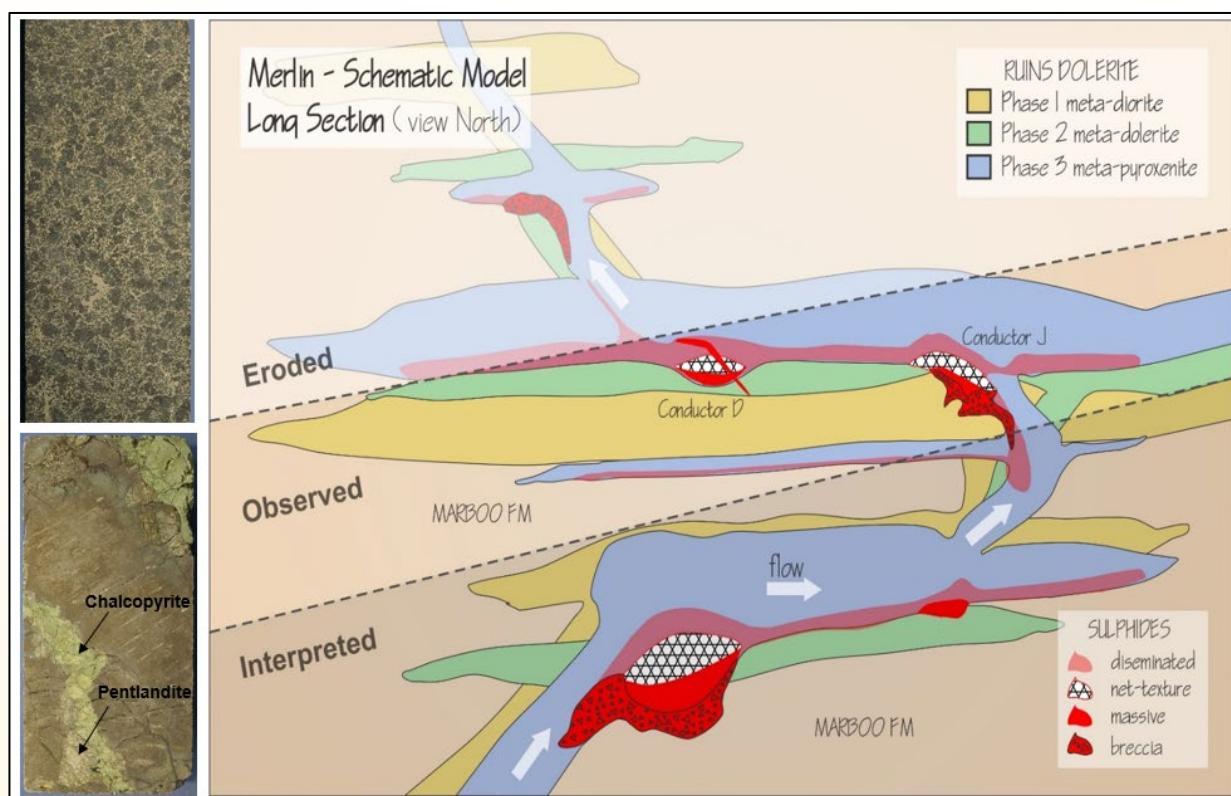
**Figure 2: Buxton's drilling results from Merlin Prospect as of September 2018.**

Supported by the detailed follow-up at Merlin, Buxton's early mover, belt-scale project generation resulted in a series of agreements with IGO, including the establishment of the West Kimberley Regional Joint Venture in 2018. IGO continue to fund a comprehensive exploration program, providing Buxton's shareholders substantial leverage in terms of \$ into the ground.

For the upcoming West Kimberley Joint Venture field season, the priority focus is in the Sentinel area. The Sentinel area hosts the largest volume of Marboo sediments and Ruins Dolerite in the King Leopold Orogen (Figure 1). No drilling has been undertaken to-date at Sentinel, with the maiden drill program anticipated to commence during the 3<sup>rd</sup> calendar quarter this year, which is only a handful of months away.

IGO's initial on-ground exploration at Sentinel commenced late in the 2021 field season and was limited to only a few months prior to the summer wet season. Nevertheless, this work resulted in defining high-conductance ground EM conductors and the discovery of sulphide bearing, high MgO / Cr ultramafic rocks with highly anomalous Ni, Cu and PGE.

Buxton is therefore looking forward to new discoveries at Sentinel in 2022 where extensive ground EM and drilling are planned. Buxton intends to provide detailed updates on the planned work at Sentinel as exploration commences on the ground in the coming weeks.



**Figure 3: Massive and net textured sulphides from the Merlin Project with schematic deposit model.**

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## Competent Persons

*The information in this report that relates to Exploration Results is based on information compiled by Mr Eamon Hannon, Member of the Australasian Institute of Mining and Metallurgy, and Mr Martin Moloney, Member of the Australian Institute of Geoscientists. Mr Hannon and Mr Moloney are full-time employees of Buxton Resources. Mr Hannon and Mr Moloney have sufficient experience which is relevant to the activity being 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. Mr Hannon and Mr Moloney consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.*

## **Previously Reported Results**

*There is information in this announcement relating to exploration results previously announced on:*

- 1) 10 August 2015 – New Nickel Copper Discovery at Double Magic Ni-Cu Project
- 2) 18 June 2018 – Buxton Resources Investor Presentation
- 3) 17th September 2018 - 6m @ 2.51% Nickel Equivalent at Conductor H
- 4) 29 November 2018 – Double Magic Exploration Success Secures IGO Partnership
- 5) 22 November 2021 – Update on West Kimberley JV
- 6) 11 April 2022 – West Kimberley Field Season