

## **Discovering Nickel-Copper Sulphides in Western Australia**



**A newly discovered and unexplored belt scale opportunity in  
West Kimberley  
Nickel boom upon us**

**June 2018**

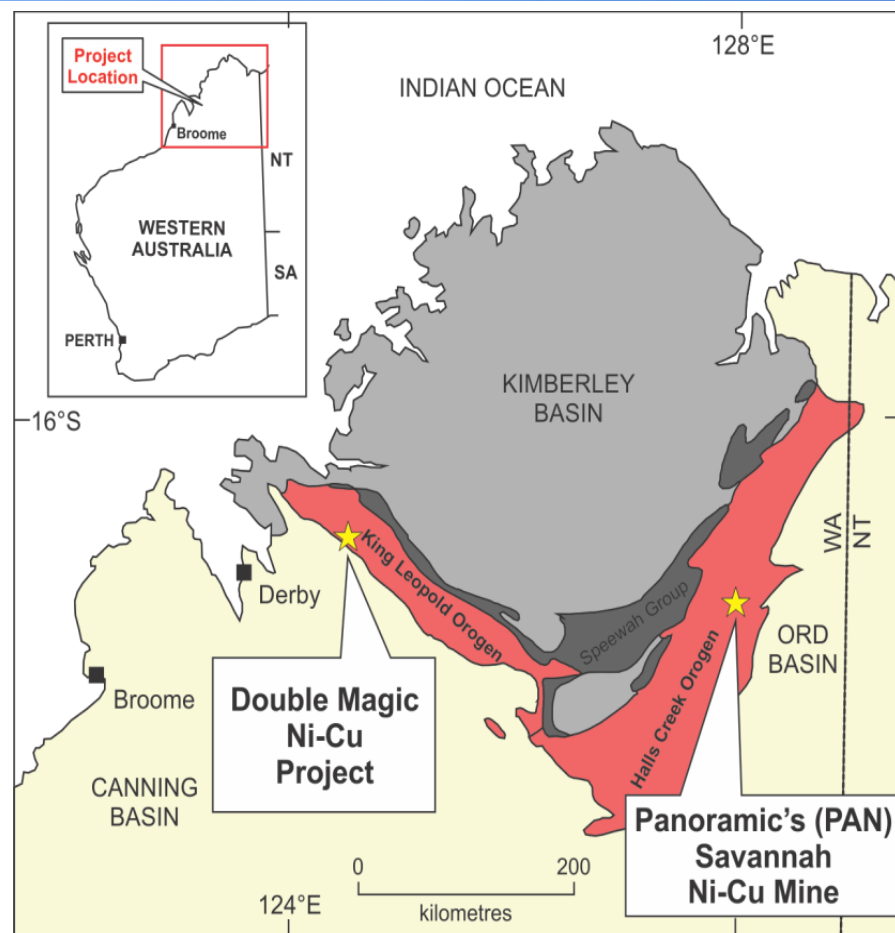
**Eamon Hannon, Managing Director**

# Buxton first mover advantage in West Kimberley

## Tenure control of a new Fraser Range?



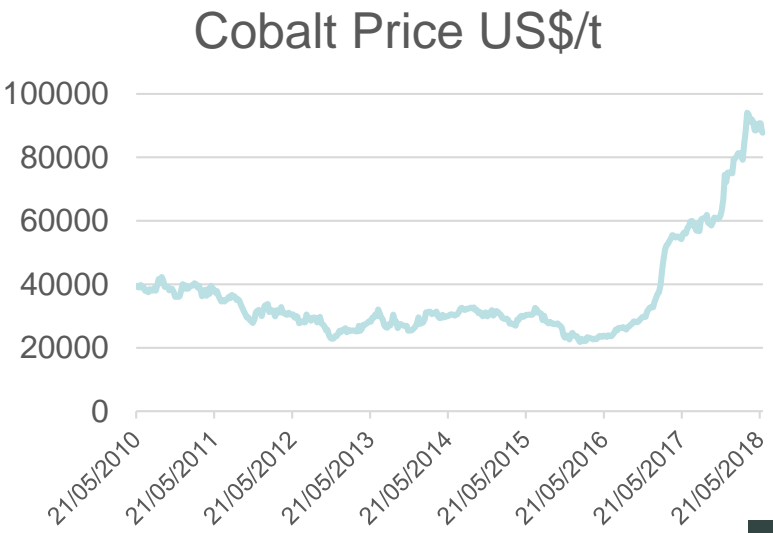
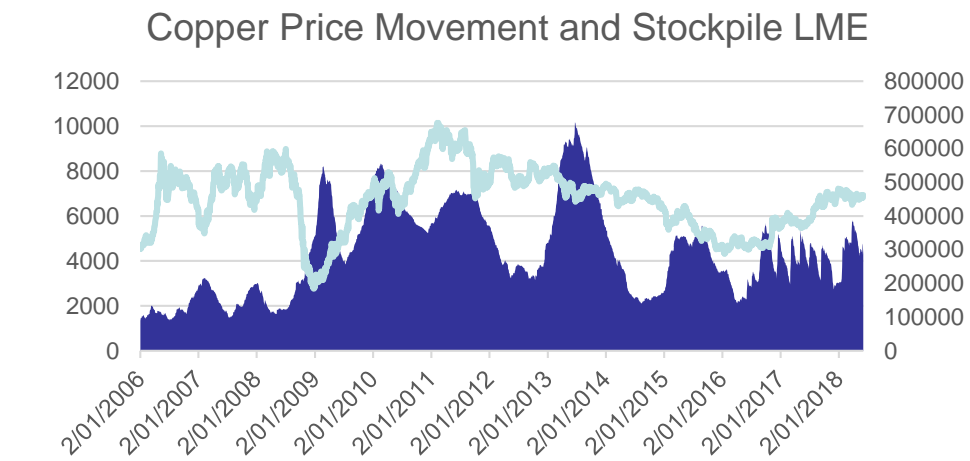
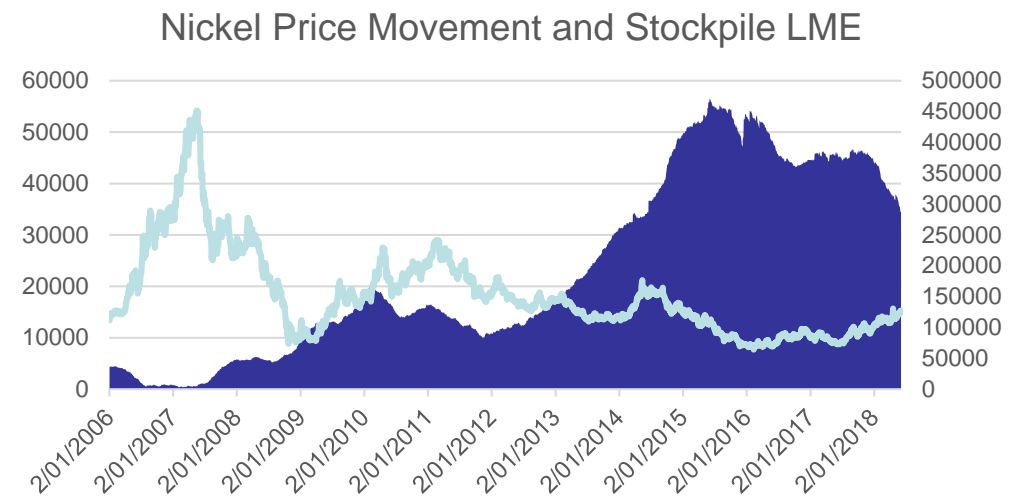
- Buxton owns 100% of all West Kimberley assets
- Tight Capital Structure, 110m shares
- Well funded; \$2.4m cash at bank
- Double Magic-Merlin Prospect returned Multiple High Grade and High Tenor fresh Nickel-Copper Sulphide intersections close to surface and depth. Open in all directions
- Massive potential upside with belt scale new province tenements 100% owned holding - 824km<sup>2</sup>-tenure control
- Exploration pipeline to advance this field season
- Drilling imminent-news flow
- Merlin discovery emphatically reinforces Ruins Dolerite potential



Close to excellent infrastructure  
Port and Highways



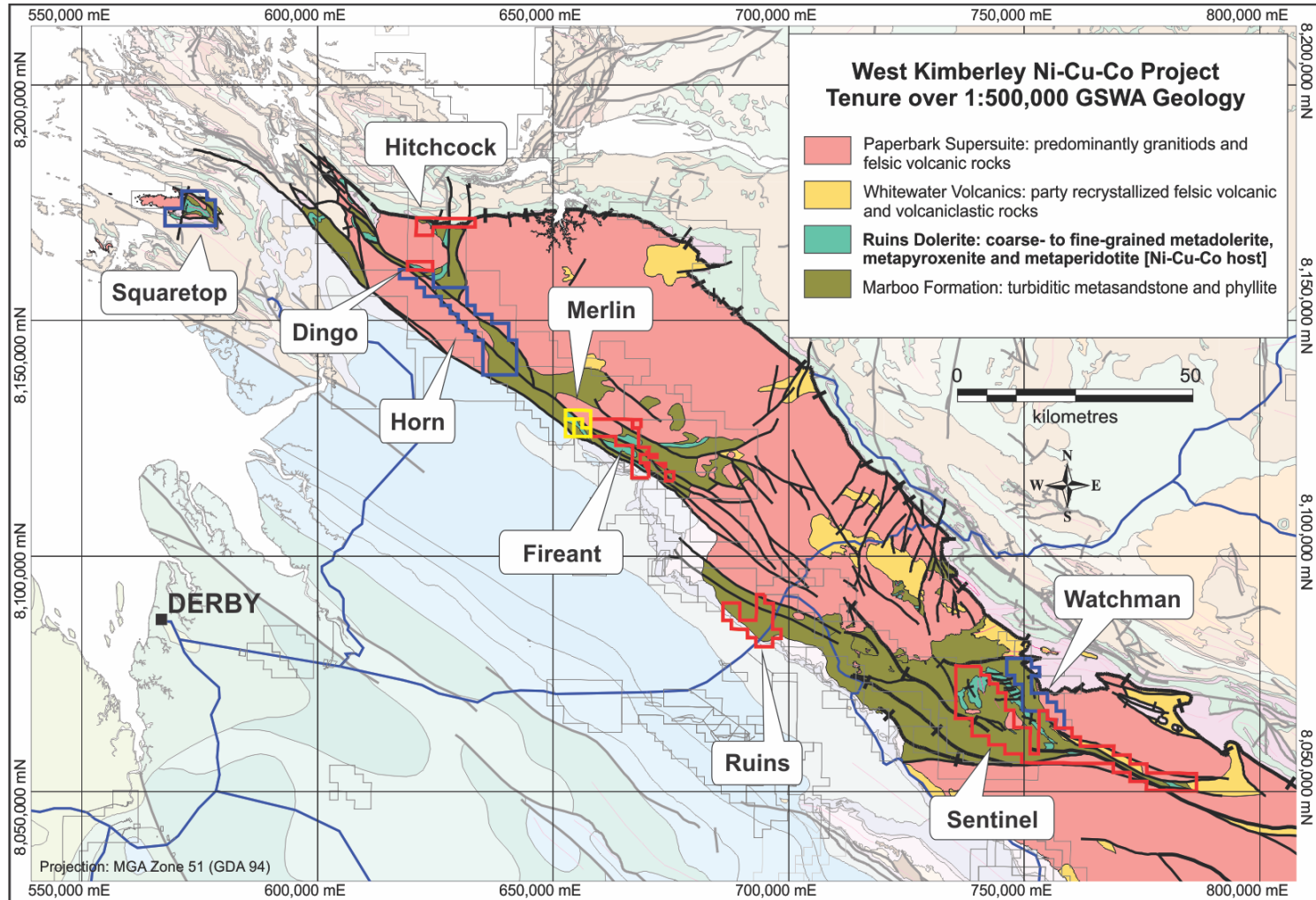
**Clear fundamentals. Bux is a Class 1 Nickel-Copper-Cobalt sulphide play with 100% ownership of Kimberley assets. Timing is everything so jump on the wave!**



Source: LME Website, June 2018

**A newly discovered and unexplored belt scale opportunity, 100% owned tenure.  
Merlin is proof of concept**

**Buxton has established the Ruins Dolerite and the West Kimberley as a de-risked, fertile and un-explored new Ni-Cu-Co province**

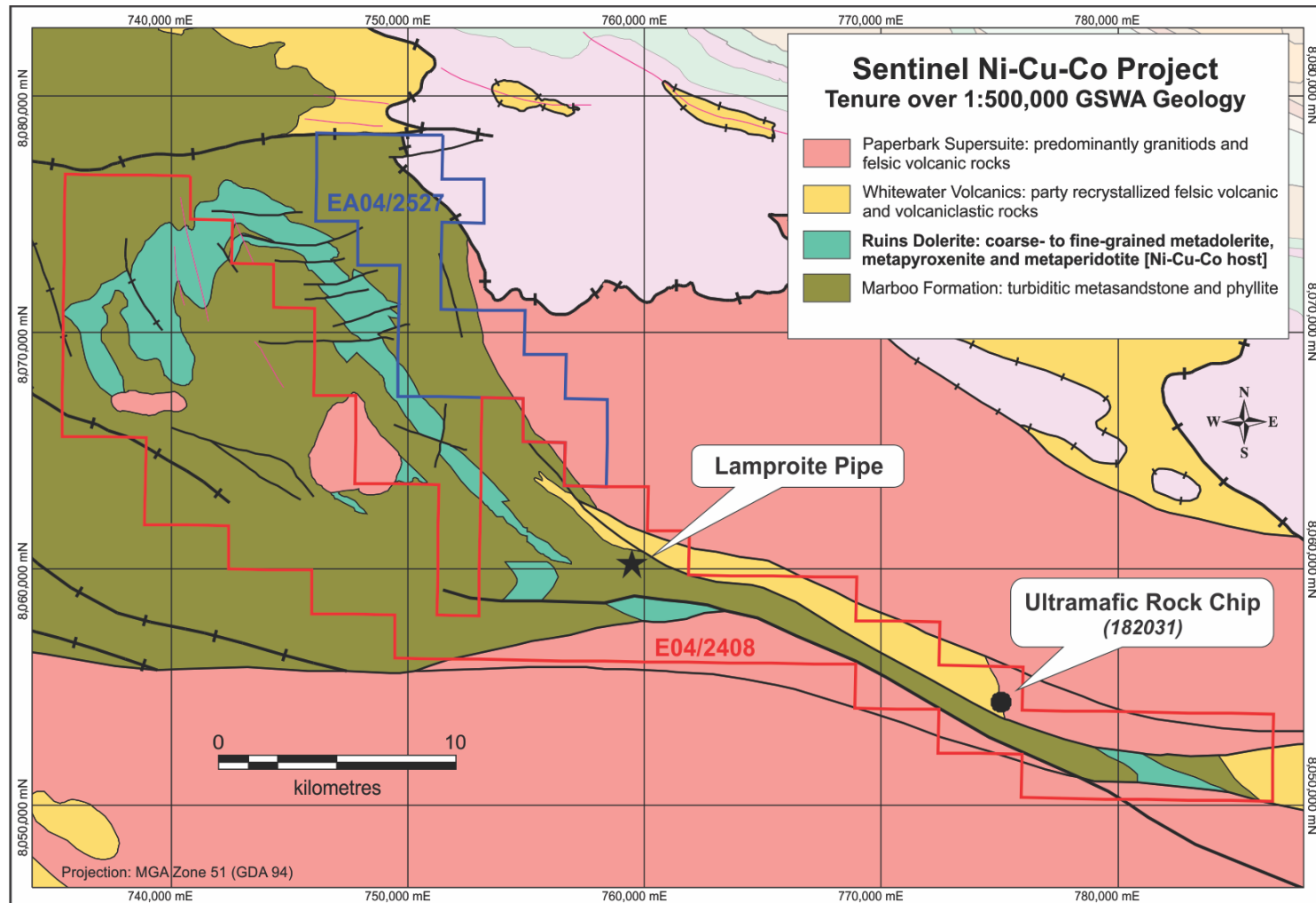


**Belt-scale tenement holding of 824 km<sup>2</sup> along 250 km of strike extent**

# Project Pipeline

## Sentinel Project; next in line

**Sentinel Ni-Cu-Co Project; extensive Ruins Dolerite in outcrop and undercover, major crustal scale structures, primitive rocks & no modern exploration (e.g., no electromagnetics)**



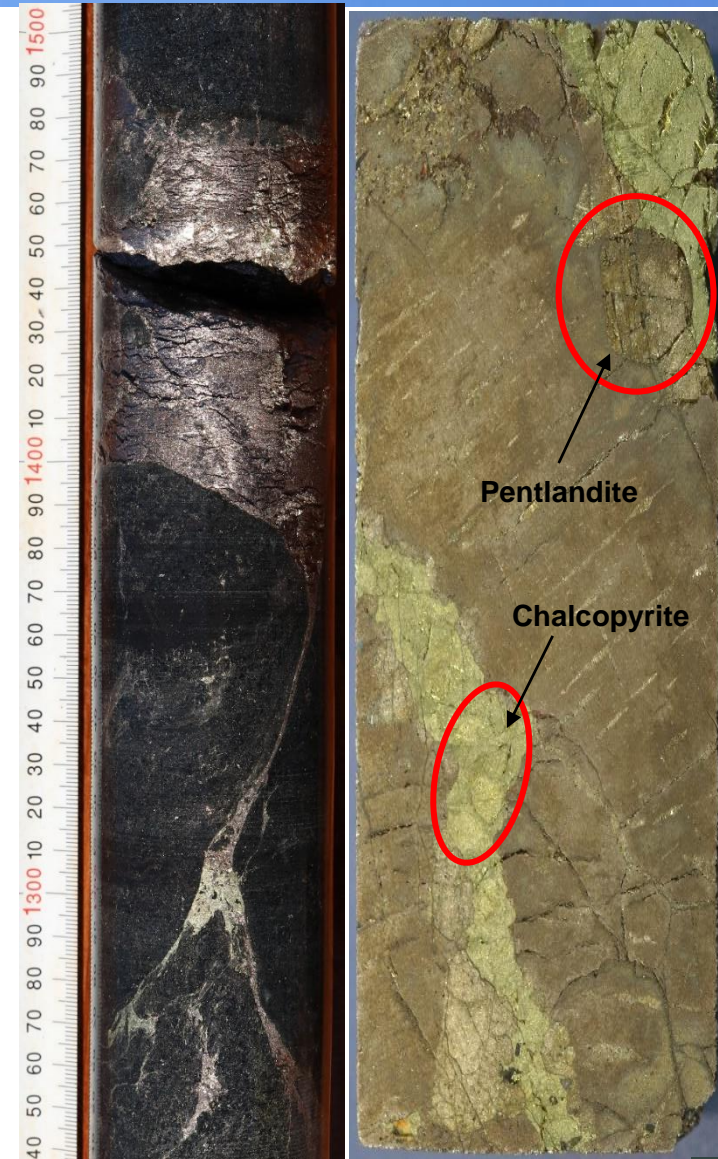
**Full coverage of E04/2408 with electromagnetics (VTEM) and aeromagnetics (AMAG) planned in 2018**



# Merlin-High grades, high tenor with excellent recoveries

## Class 1 high value product

- All ore textures intersected with high grades and very high tenor
- Multiple strongly mineralised conductors remain open
- Analogues include Nova-Bolinger, Sally-Malay and Voisey's Bay
- Highlights include 17m @ 1.82% Ni, 1.15% Cu, including 8m 3.13% Ni, 1.87% Cu from 50m
- Very high metal tenor with up to 13.85% Ni, average 8.37% equates to high grade
- Preliminary Metallurgy shows Nickel recoveries of 95%, Copper 95 to 99% and Cobalt 92% with coarse grind and simple conventional sulphide flotation-Class 1 Product



# Grade, thickness and tenor established Next tons -mineralised system is massive

## Conductor D

**17m@ 1.82% Ni, 1.15% Cu, 596ppm Co**

from 46m, including

**8m@ 3.13% Ni, 1.87% Cu, 996ppm Co**

from 50m (DMRC0003)

## Conductor J

**3.5m@ 1.36% Ni, 0.19% Cu, 379ppm Co**

from 318m, including

**1.6m@ 2.40% Ni, 0.32% Cu, 629ppm Co**

from 318m (DMDD0014)

## Conductor B

**6m@ 1.15% Ni, 0.39% Cu, 290ppm Co**

from 221m, including

**2m@ 2.59% Ni, 0.59% Cu, 664ppm Co**

from 221m (DMRC0023)

## DMRC0038

**6m@ 1.04% Ni, 0.19% Cu, 328ppm Co**

from 53m, including

**2m@ 1.58% Ni, 0.29% Cu, 496ppm Co**

from 57m (DMRC0038)

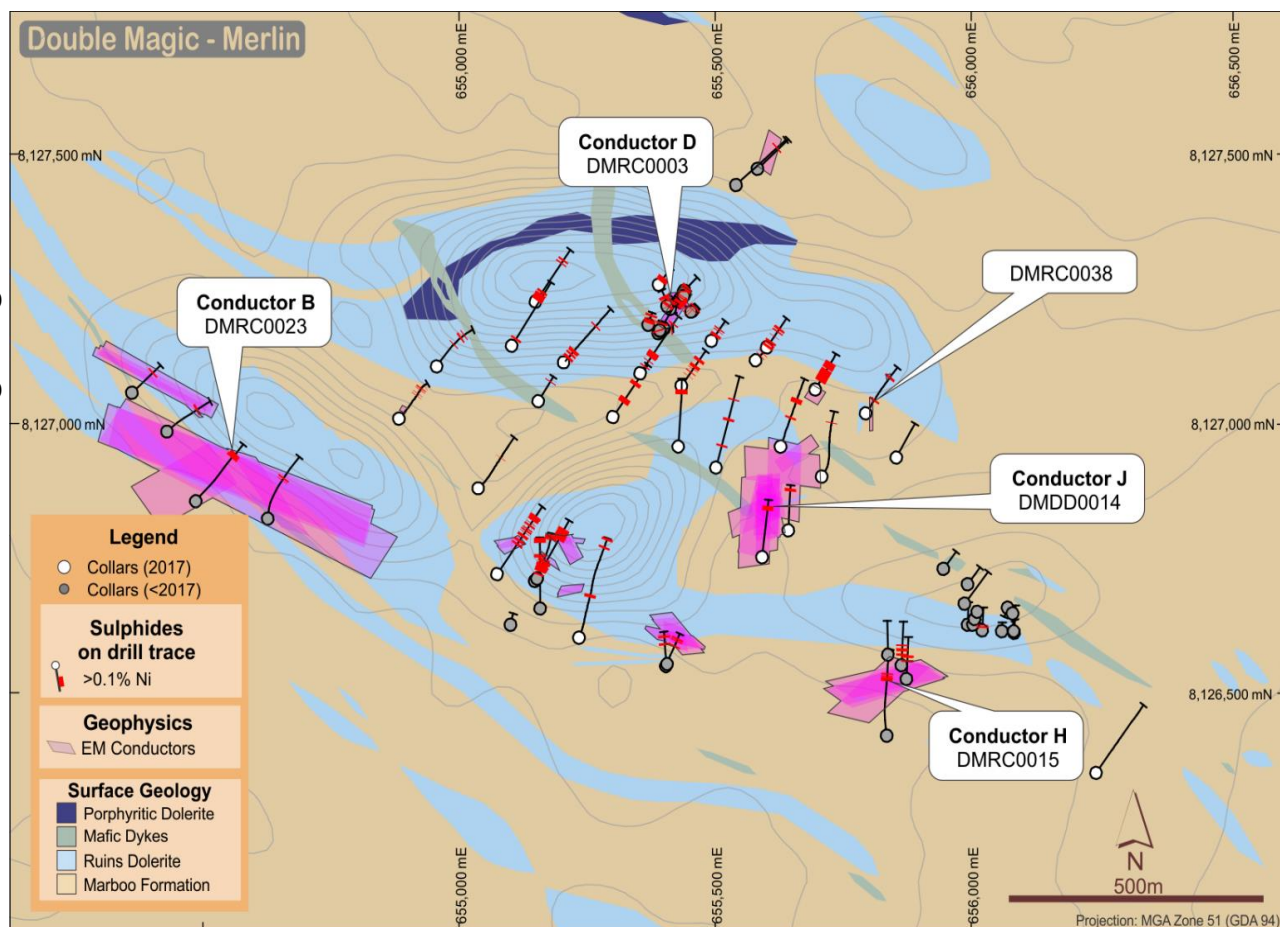
## Conductor H

**1m@ 1.70% Ni, 1.05% Cu, 432ppm Co**

from 205m, and

**1m@ 1.39% Ni, 0.32% Cu, 345ppm Co**

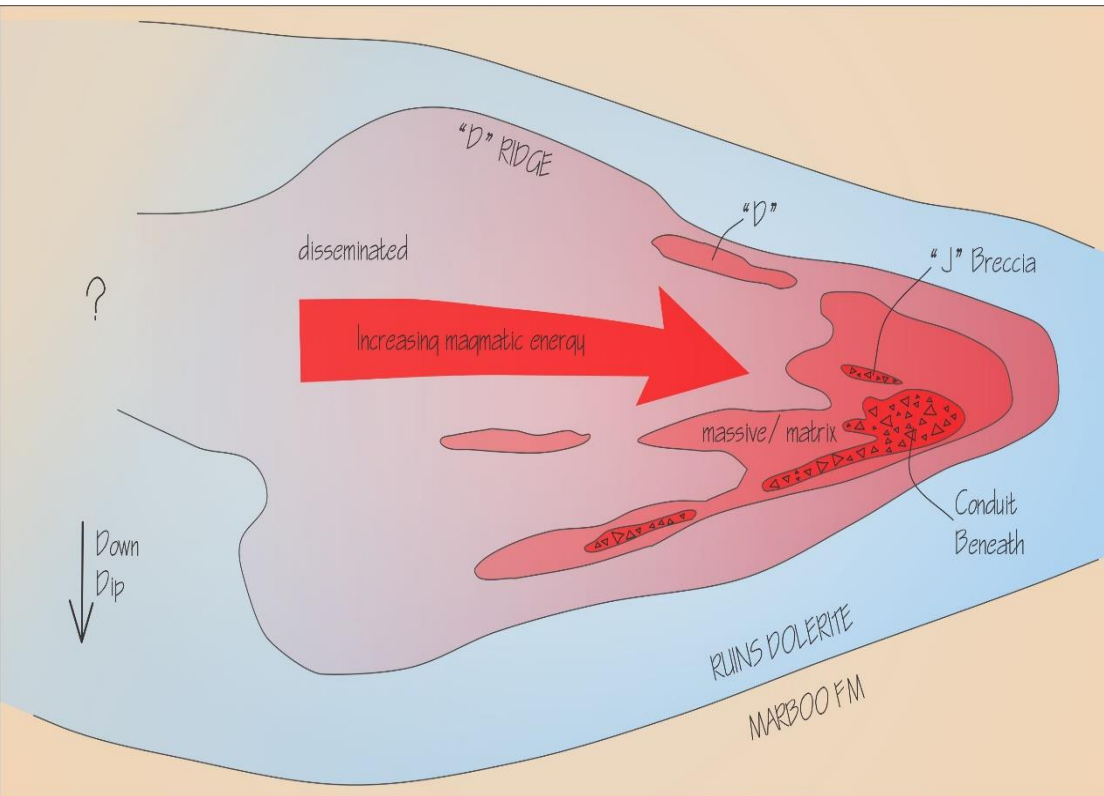
from 212m (DMRC0015)



**Every drill hole within Merlin Prospect  
host rocks has intersected fresh Ni-Cu Sulphides**



# Drilling indicates the magmatic system energy increasing eastwards and down-dip -most prospective location



**Vectoring towards a conduit or feeder, the highest-energy and most prospective part of these magmatic systems**



Vari-textured intrusive  
DMDD0009

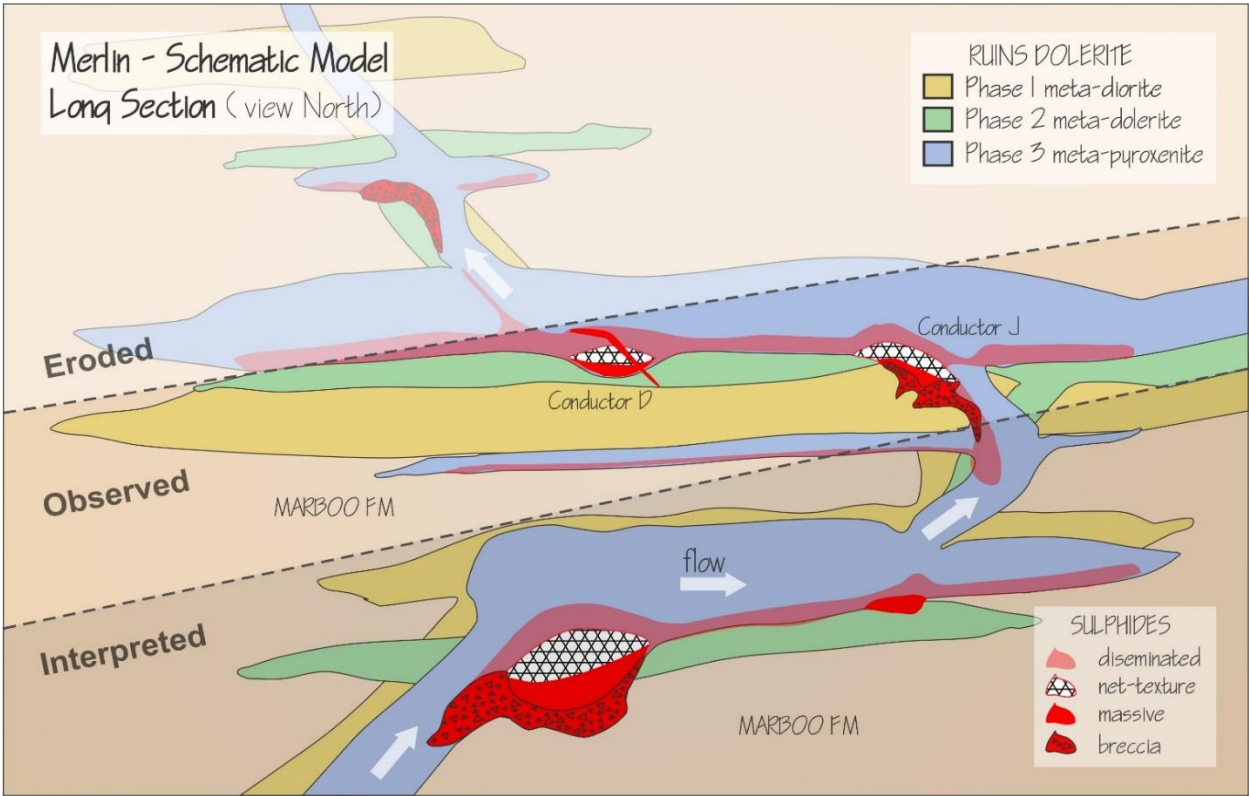


Primary Massive  
Brecciation DMDD0014



# Vectoring in; Buxton regards DMDD0014 as the most important hole yet drilled at Merlin and in the West Kimberley for Ni-Cu Sulphide Mineralisation

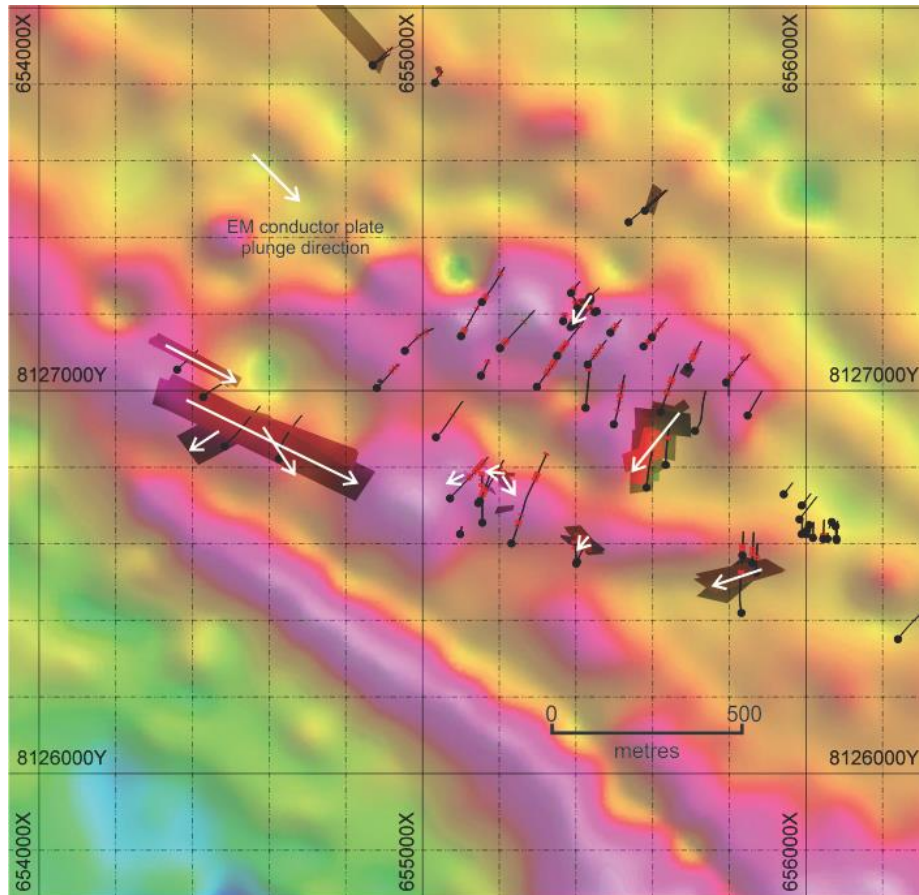
Discovering evidence of high energy and chaotic behaviour  
is vectoring in to the heart of the system



# Strong gravity feature highlights depth potential

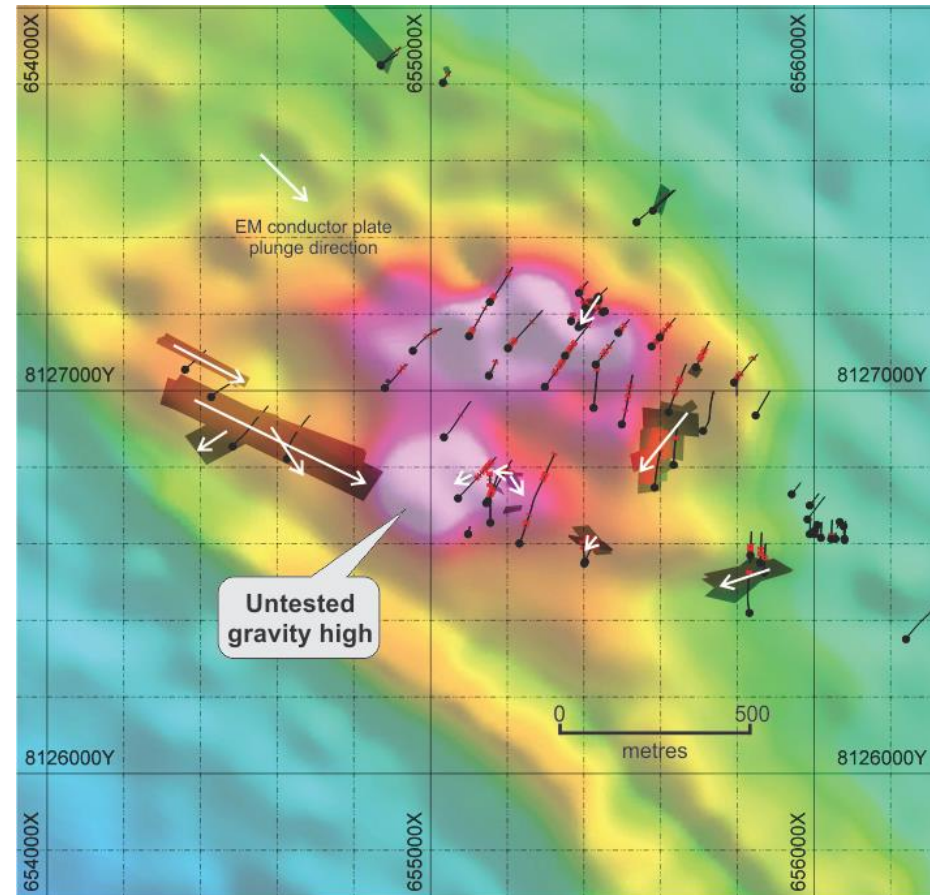
## Mineralised Magma source still present?

Merlin gravity BAVD (Bouguer Anomaly Vertical Derivative)



Gravity data strongly correlated to known geology  
(gravity highs = Ruins Dolerite intrusives rocks)  
**AND coincident with all EM plates**

Merlin gravity BA (Bouguer Anomaly)

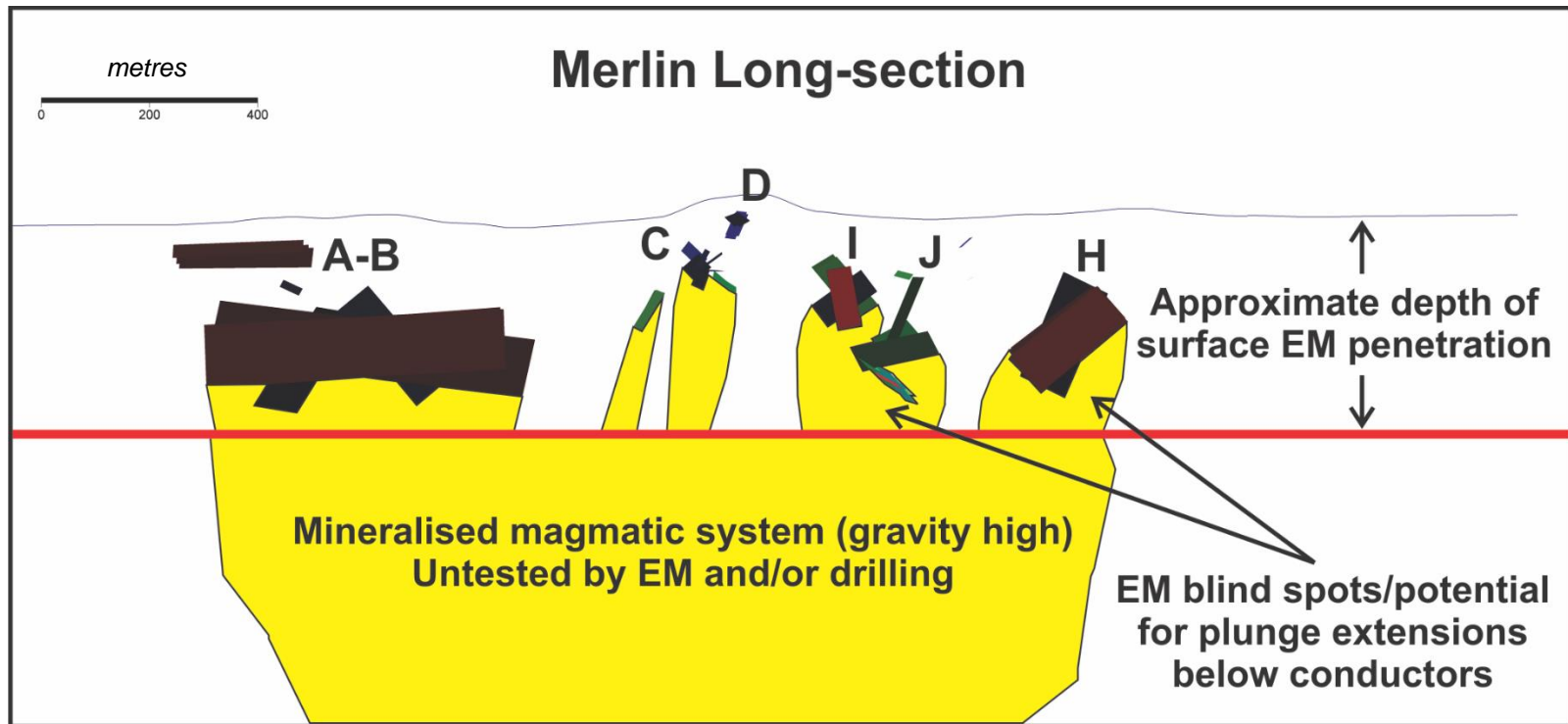


Majority of EM plates plunging towards a central  
gravity high in the core of the Merlin Prospect,  
**conduit/feeder intact at depth(?)**



# EM blind-spots, significant potential for extensions below known Ni-Cu Sulphide Mineralisation

***All conductors proven to be due to Ni-Cu sulphide mineralisation***

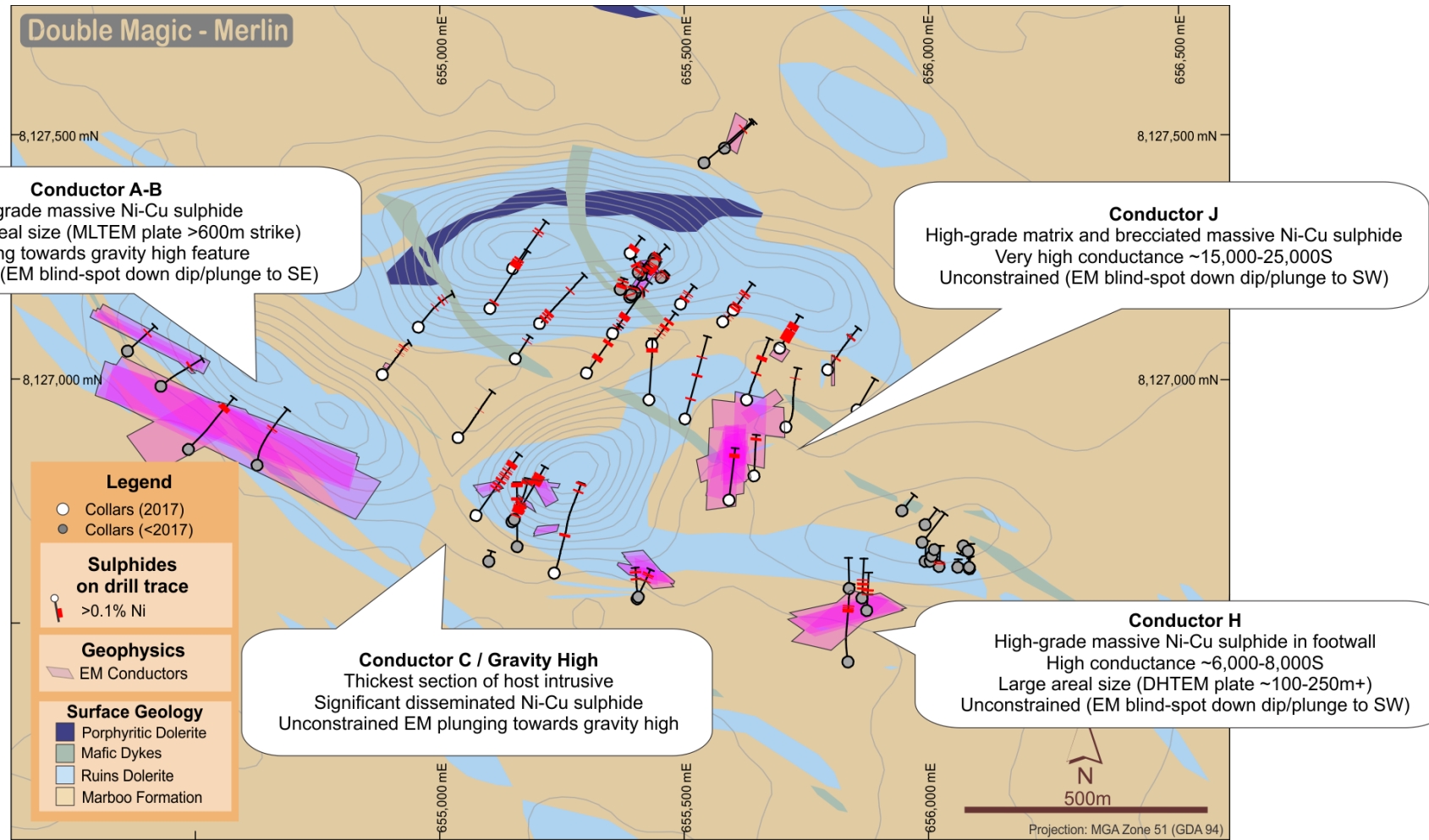


*Merlin long-section (view towards north) showing all modelled conductive responses (MLTEM/DHTEM), highlighting the potential for conductive Ni-Cu sulphide both below currently defined conductors and at depth within the core of the magmatic system (gravity high feature)*



# Planned 2018 drilling at Merlin

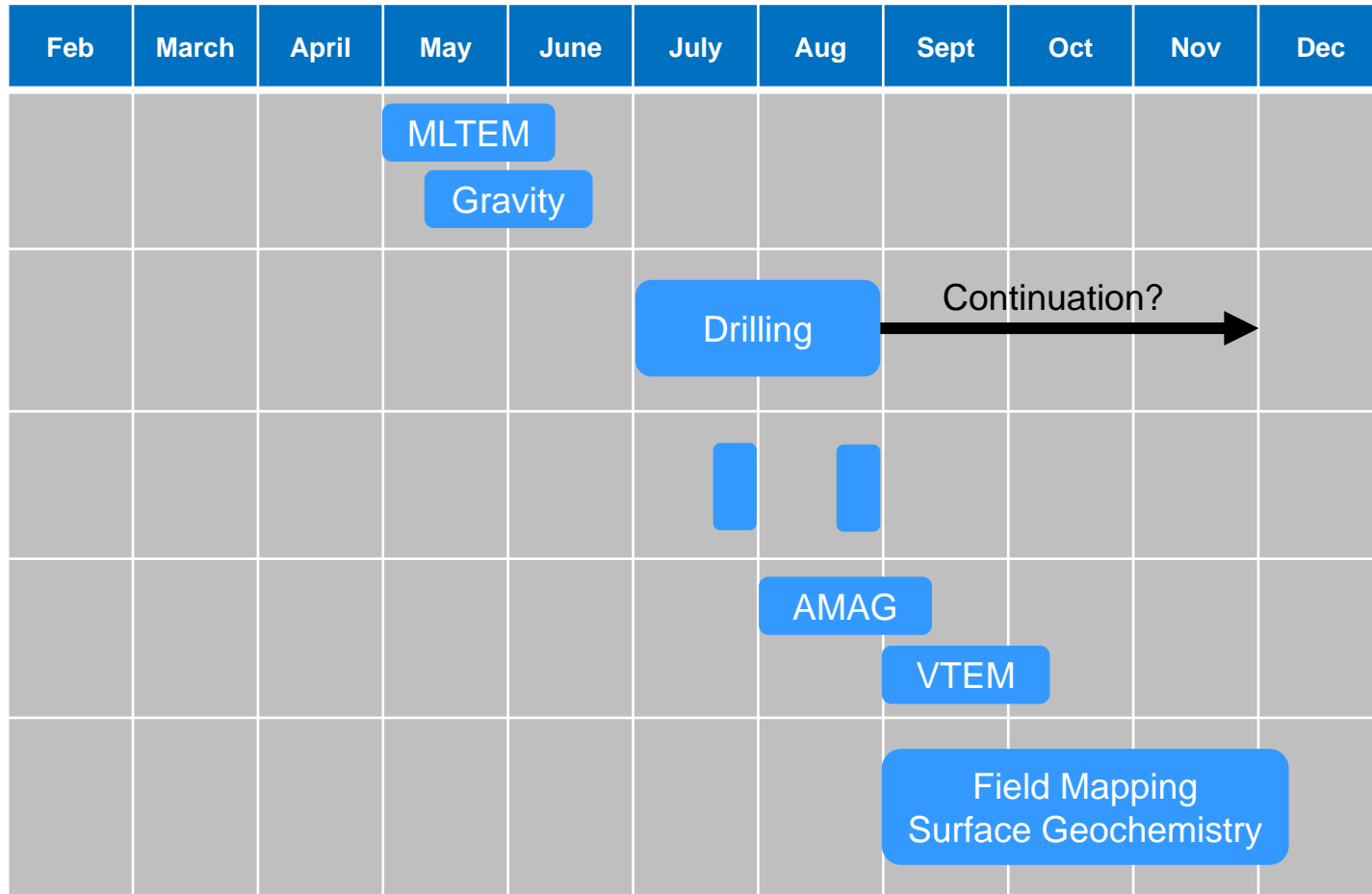
## Down dip/plunge from known Ni-Cu Sulphide Mineralisation and ore textures -Primary Brecciation



Drilling planned below unconstrained known Ni-Cu sulphide conductors, EM blind spots & gravity feature

# 2018 Field Schedule

2018



\*Company's best estimates of work program timing. Actual program timing may vary due to operational or other factors.

## Buxton Resources Limited

ASX Code	BUX
Shares on Issue	110.8 million
Options on Issue <sup>1</sup>	19.87 million
Market Cap. (at \$0.13)	\$14.4 million
Cash (31 March 2018)	\$2.6 million
Debt	Nil
Enterprise Value	\$11.8 million

## Shareholders

National Business Holdings	9.8%
Directors & Management	2.9%
Top 20	37.7%

## Board & Management

Seamus Cornelius	Chairman
Eamon Hannon	Managing Director
Anthony Maslin	Non Executive Director
Stuart Fogarty	Non Executive Director
Feng (Frank) Xue	Non Executive Director





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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, Fellow of the Australasian Institute of Mining and Metallurgy, and Mr Derek Marshall, Member of the Australian Institute of Geoscientists. Mr Hannon and Mr Marshall are full-time employees of Buxton Resources Limited. Mr Hannon and Mr Marshall 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 Marshall consent to the inclusion in this report of the matters based on the information in the form and context in which it appears. All exploration results and geological information has been previously reported in numerous Company ASX announcements under the 2012 JORC Code. This information has not materially changed since it was initially reported.



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