



11 November 2020

Corporate presentation on Boda

Alkane Resources Limited (ALK) (Alkane or the Company) advises that a Corporate Presentation on Boda is being given as part of the Company's routine corporate update to various industry analysts and institutional investors. A video of a typical presentation by Managing Director Nic Earner and Technical Director Ian Chalmers is available on the Alkane website for people to view.

The video can be found at <https://youtu.be/c7t9o3Cbw9M>.

This document has been authorised for release to the market by Nic Earner, Managing Director.

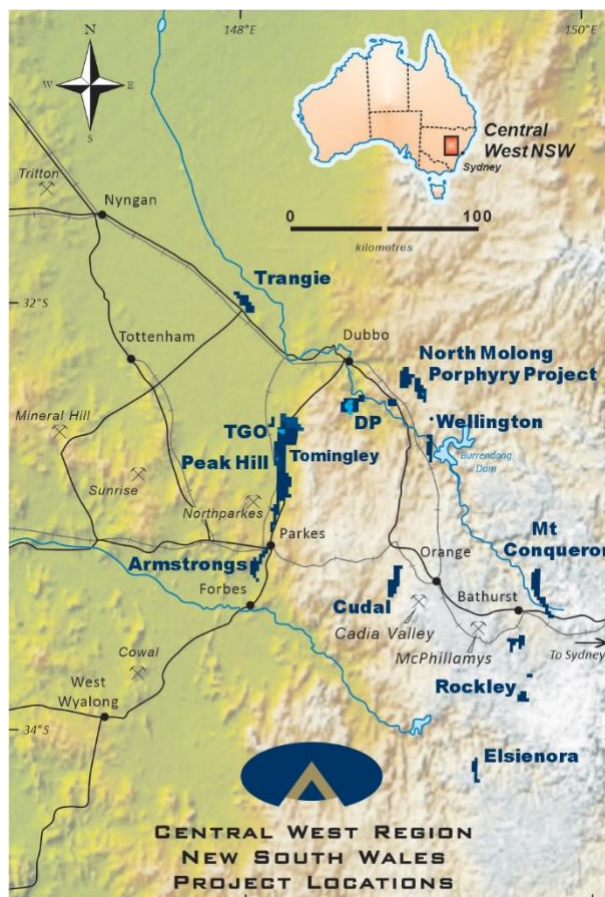
ABOUT ALKANE - www.alkane.com.au - ASX: ALK and OTCQX: ANLKY

Alkane is a gold production company with a multi-commodity exploration and development portfolio. Alkane's projects are predominantly in the Central West Region of NSW, but extend throughout Australia through investments in other gold exploration and mining companies.

Alkane's gold production is from the Tomingley Gold Operations (TGO) which has been operating since early 2014 and its most advanced gold exploration projects are in the 100% Alkane owned tenement area between TGO and Peak Hill and have the potential for sourcing additional ore for TGO.

Alkane has other 100% owned exploration tenements in the Central West NSW prospective for gold and copper. The recently announced significant porphyry gold-copper mineralisation intersected at Boda is an example of this potential.

Alkane's largest non-gold project is the Dubbo Project (DP), a large in-ground resource of zirconium, hafnium, niobium, yttrium and rare earth elements. As it is an advanced polymetallic project outside China, it is a potential strategic and independent supply of critical minerals for a range of sustainable technologies and future industries. The DP is development ready, subject to financing, with the mineral deposit and surrounding land acquired and all major State and Federal approvals in place



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ALKANE
RESOURCES LTD

BODA PORPHYRY UPDATE

Nic Earner, Managing Director
Ian Chalmers, Technical Director

November 2020

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Competent Person

Unless otherwise stated, the information in this presentation that relates to mineral exploration, mineral resources and ore reserves is based on information compiled by Mr D I Chalmers, FAusIMM, FAIG, (director of the Company) who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ian Chalmers consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

Strategy, Growth and Investment

“Alkane is growing shareholder value through increased gold production at Tomingley alongside targeted exploration, development and cornerstone investments.”

CORPORATE STRENGTH AND TRACK RECORD

- \$92.0M in cash, bullion and listed investments (as at 30 September 2020)
- Extensive senior management expertise in the full mining life-cycle (exploration, approvals, construction, operation, rehabilitation)
- Highly-credentialed and experienced Board
- Significant value created through demerger of Australian Strategic Materials (ASX: ASM)

RELIABLE, EXISTING PRODUCTION

- Tomingley mill processing underground ore; met FY20 guidance with 33,507 oz gold produced
- FY21 guidance 45-50,000 oz (Q1 11,499 oz produced)
- Production growth through Tomingley Corridor (San Antonio, Roswell)
- Expediting development pathway; both underground and open pit
- Potential for strong near-term cash flow

LANDMARK DISCOVERY AT BODA

- Extensive porphyry mineralisation province confirmed at Northern Molong
 - Similar characteristics to Newcrest’s Cadia Valley Mine (110km south)
- Strong indications of large system at Boda, including:
 - 689m at 0.46g/t Au, 0.19% Cu
 - 1,167m at 0.55g/t Au, 0.25% Cu
- Further 30,000m drill program at Boda in progress

STRATEGIC INVESTMENT TO SUPPORT GROWTH

- Extensive tenement holding in NSW with strong exploration potential
- Cornerstone investments with strategic alliance:
 - 19.9% of Genesis Minerals (ASX: GMD); market cap ~\$163M
 - 12.7% of Calidus Resources (ASX: CAI); market cap ~\$159M

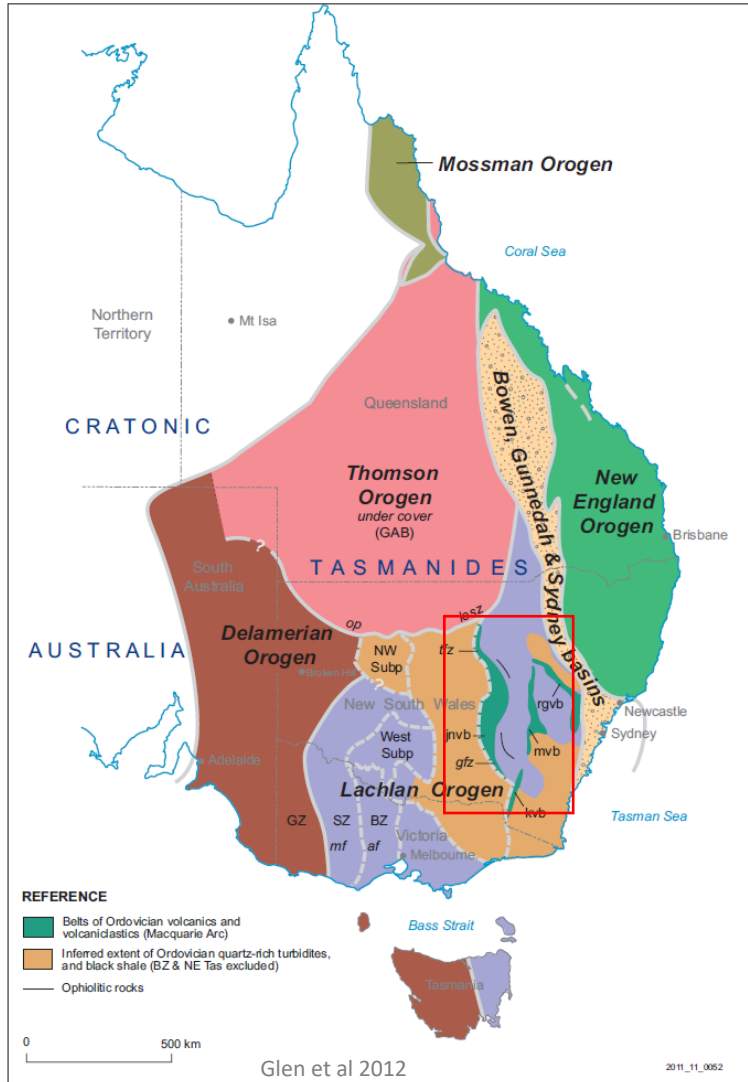
Boda: History, Results and Next Steps



AGENDA

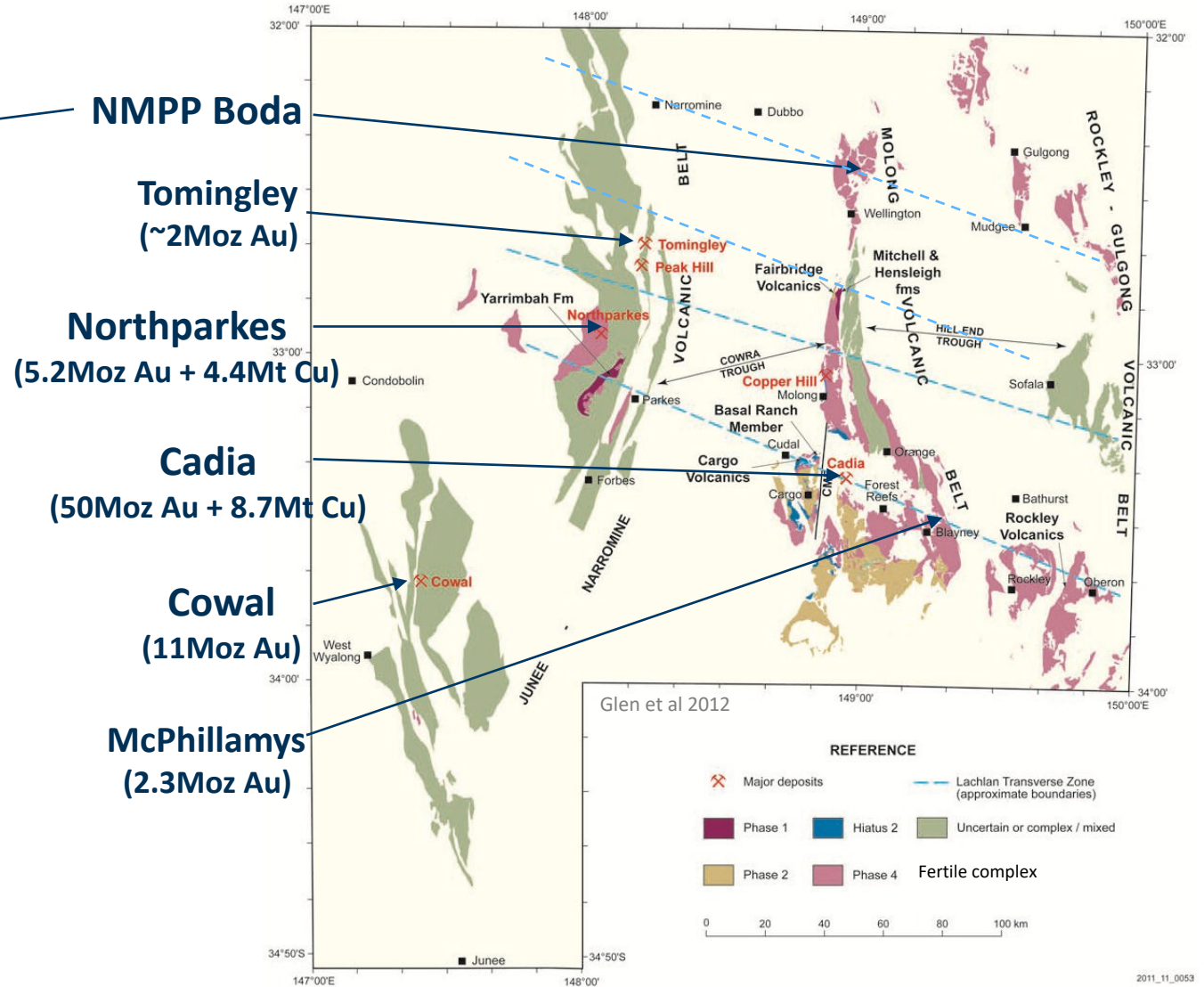
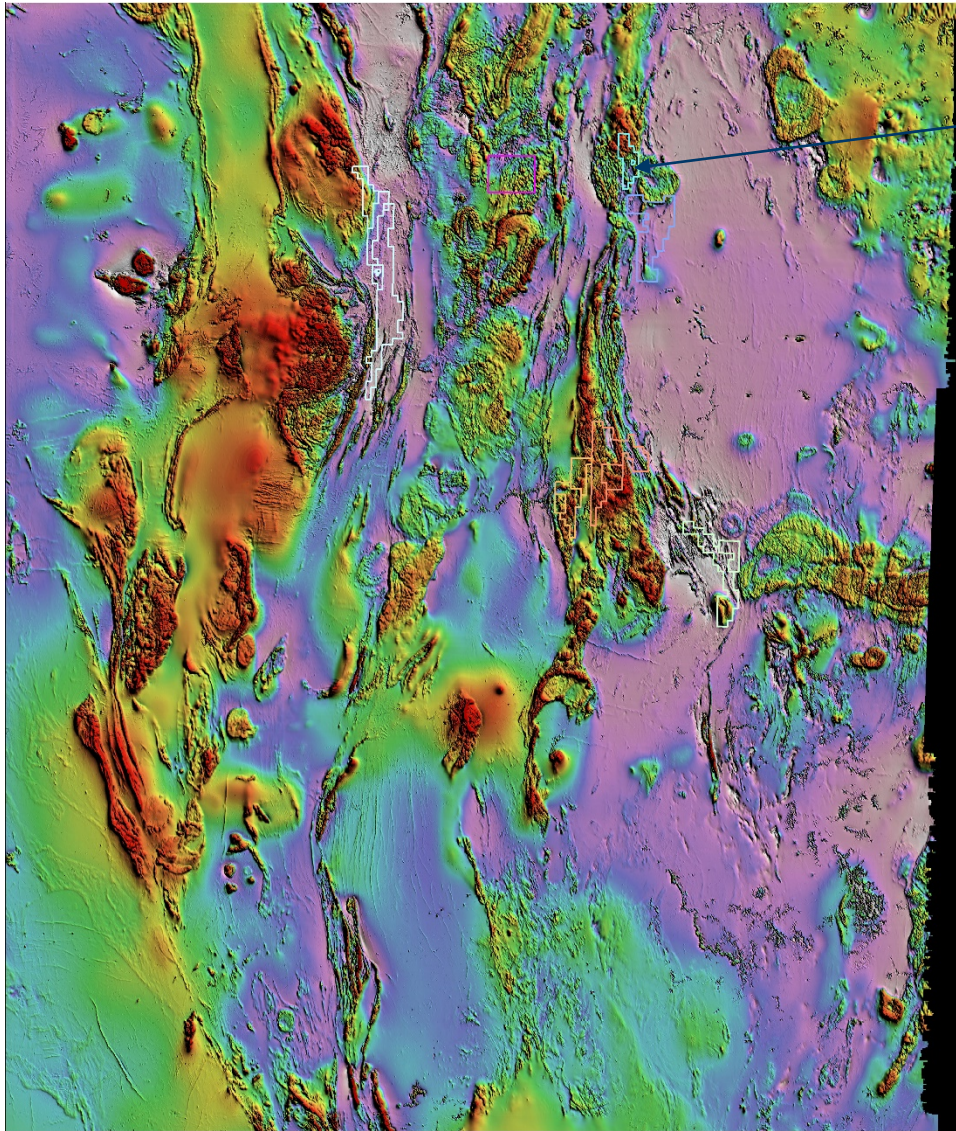
- Macquarie Arc
- Alkane's History with Boda
- Targets
- Understanding to Date
- Latest Results
- Next Steps at Boda
- Next Steps regionally

Macquarie Arc within the Lachlan Orogen

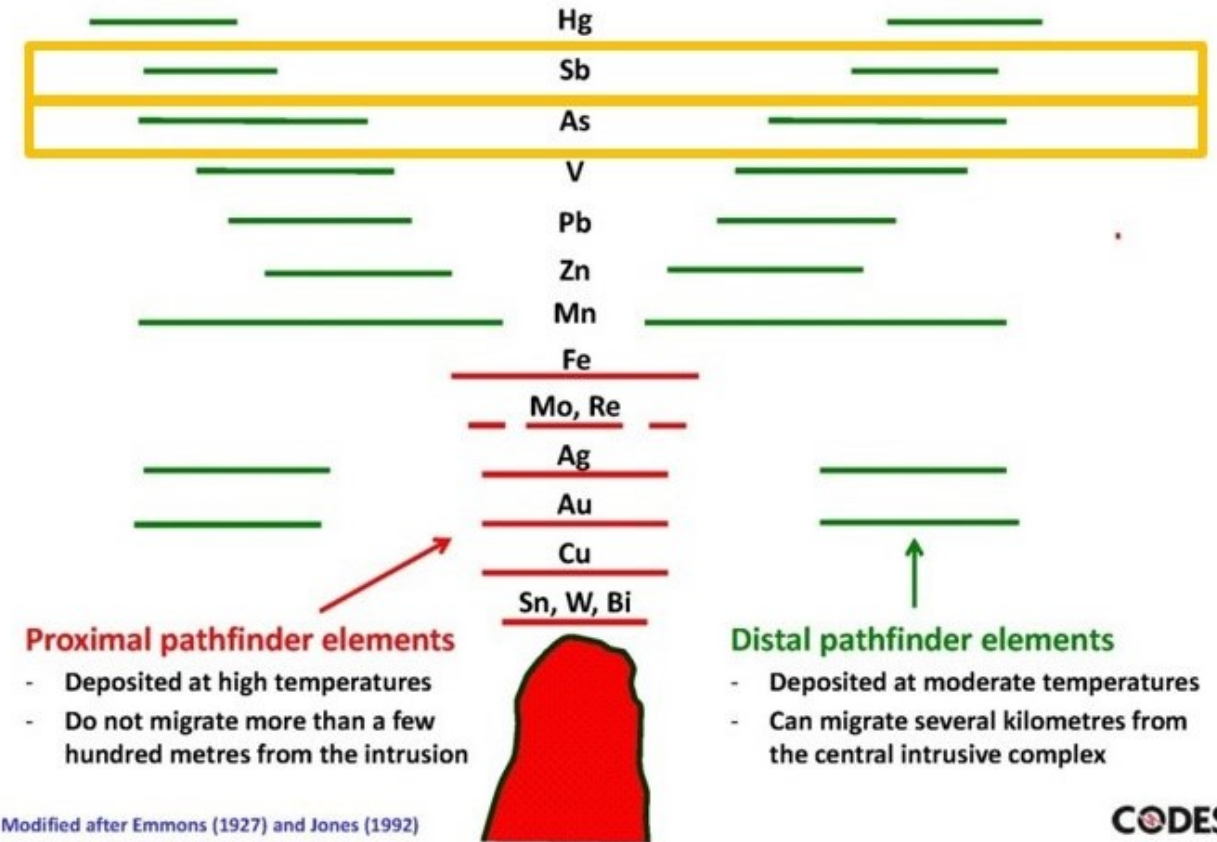
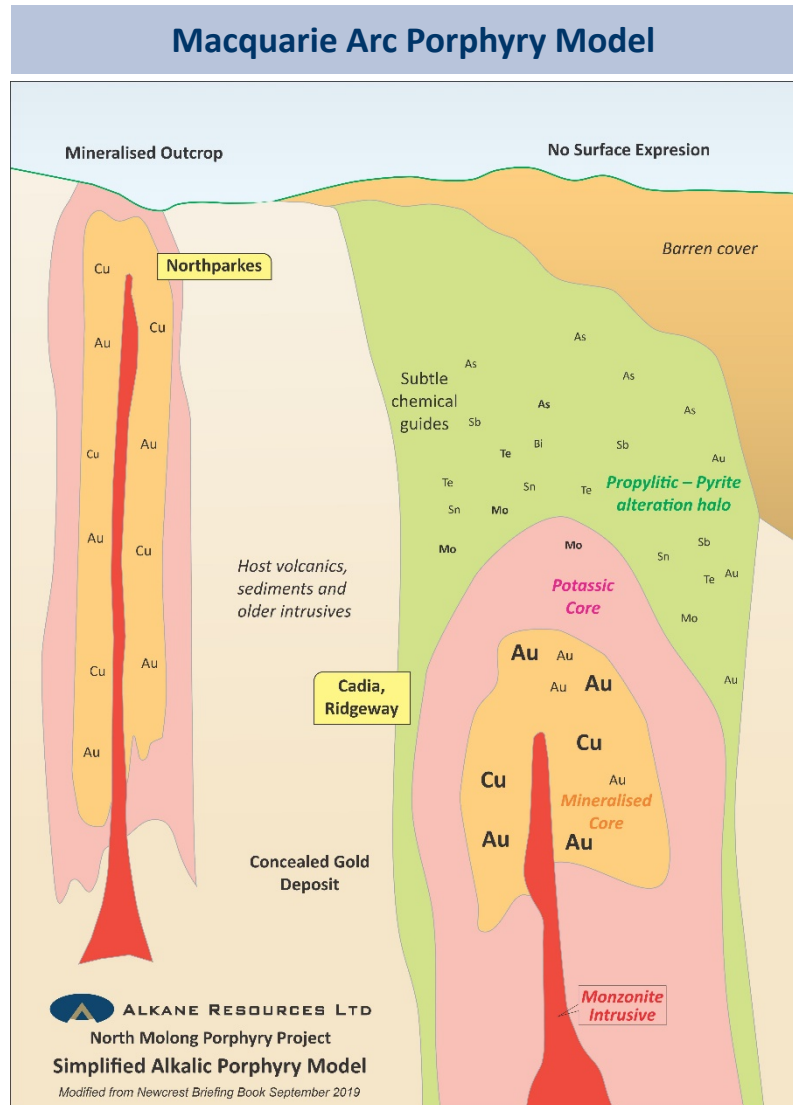


- CODES (UTAS), GSNSW and industry combined in a major regional study of the Macquarie Arc geology, geochemistry, structure and geophysical signature, 1998 - 2002.
- Key findings:
 - Long-lived Ordovician to Early Silurian oceanic island arc
 - Subaqueous volcanic rocks
 - Calc-alkalic to alkalic affinity
 - Episodic evolution over ~50 m.y.
 - Island-chain and deep-marine environments
 - One contiguous volcanic belt that was separated into four parts during Silurian to Devonian rifting
 - West-dipping subduction zone that became complex before the cessation of the arc...
 - Mineralisation associated with the culmination of arc magmatism

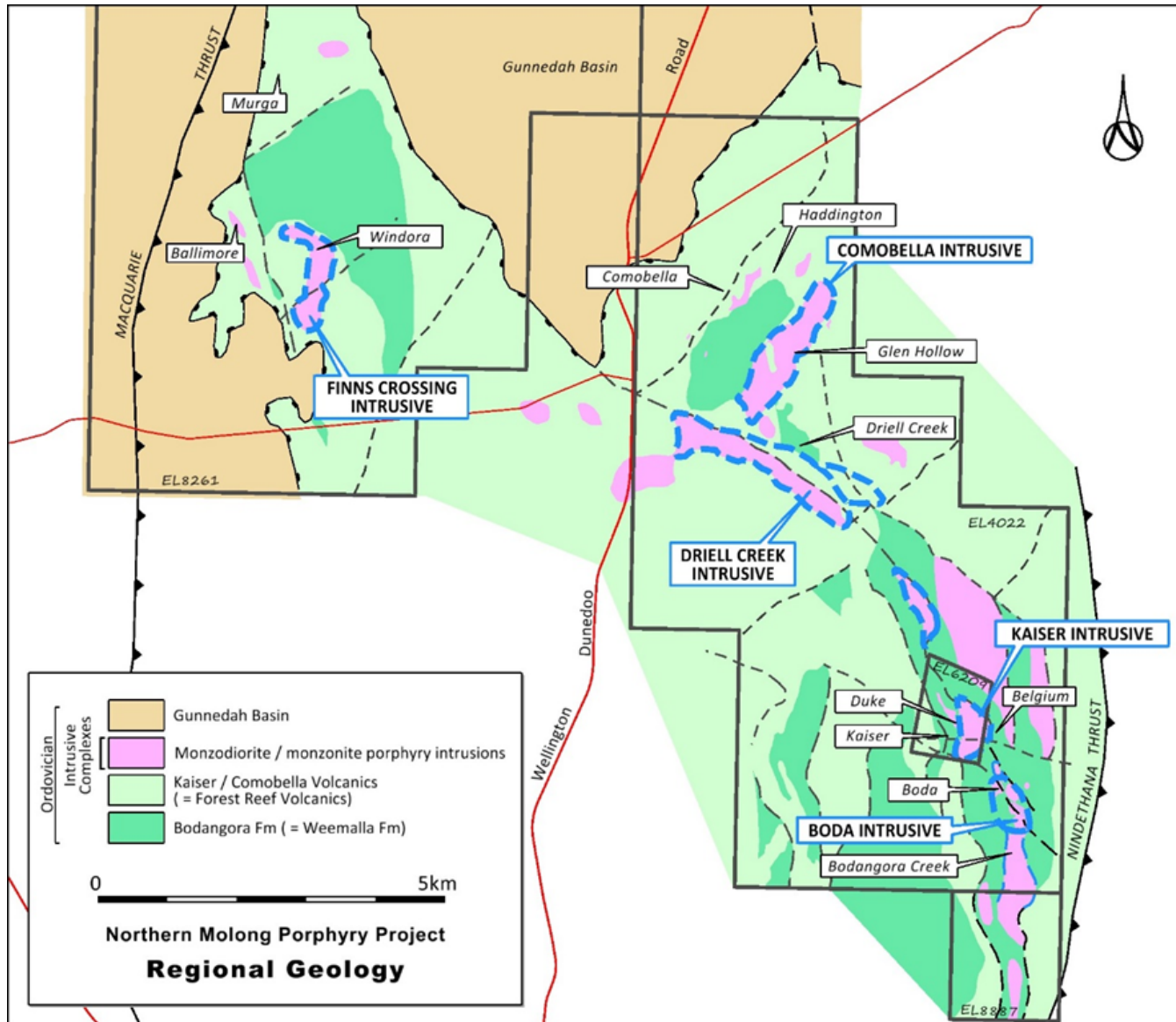
Macquarie Arc: Aeromagnetics and Geology



Macquarie Arc: Porphyry Model and Geochemical Signature



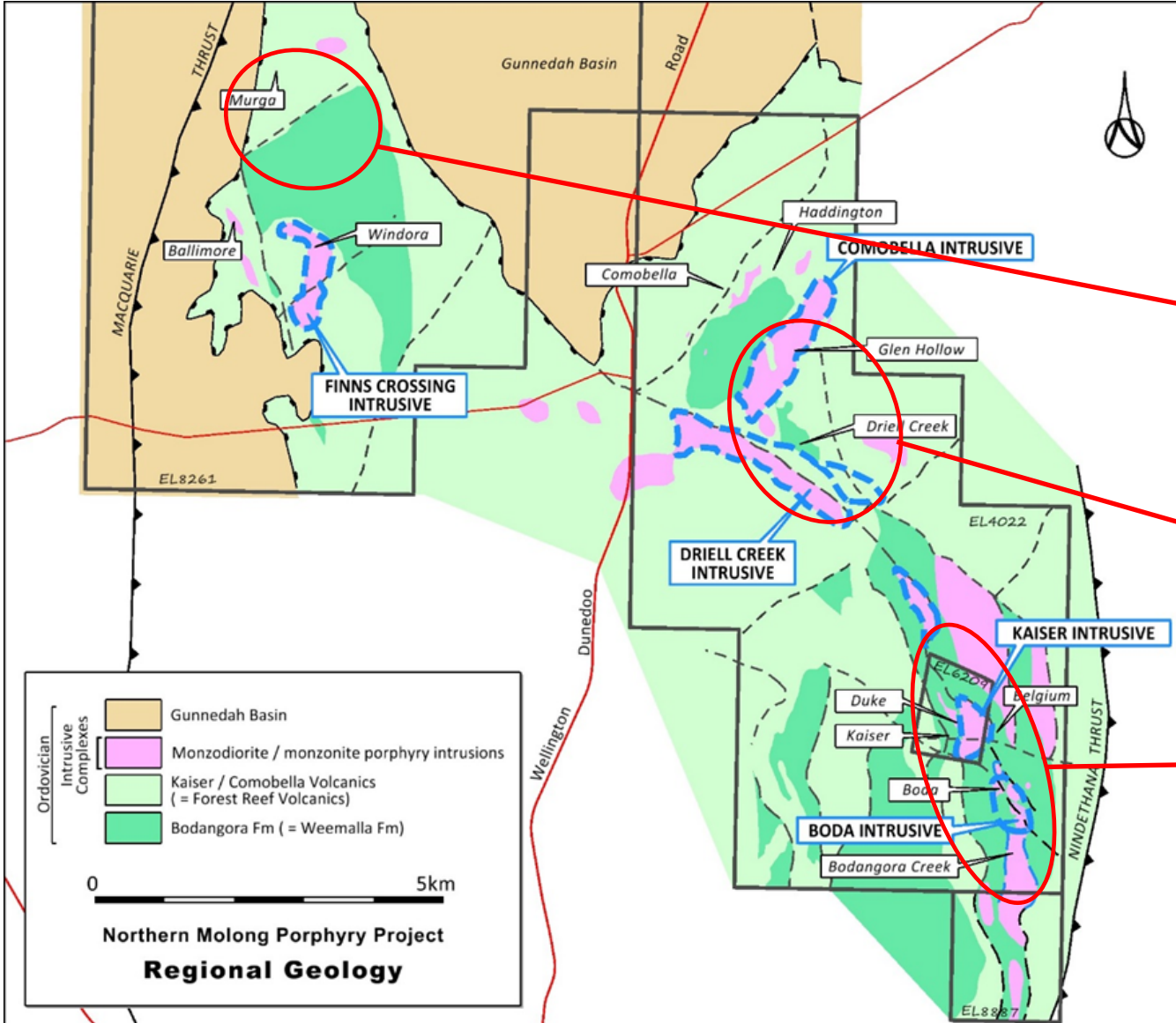
North Molong Porphyry Project (NMPP): Geology and Targeting



How does Alkane target?

- Detailed aeromagnetics to define monzonite intrusives.
- Surface geological mapping (alteration) and sampling.
- Application of multi element lithogeochemistry for target ranking (pathfinder elements).
- Application of “green rock” sampling – chlorite and epidote chemistry vectoring.
- Electrical geophysics to assist with drill targeting.
- Early drill testing to confirm alteration and geochemical vectors.
- Systematic and directed drilling.
- Defined ‘fertile’ monzonite intrusive complexes.

NMPP: Targets



Current Targets

15km northwest trending structural corridor with multiple 'fertile' alkalic (monzonite) intrusive complexes.

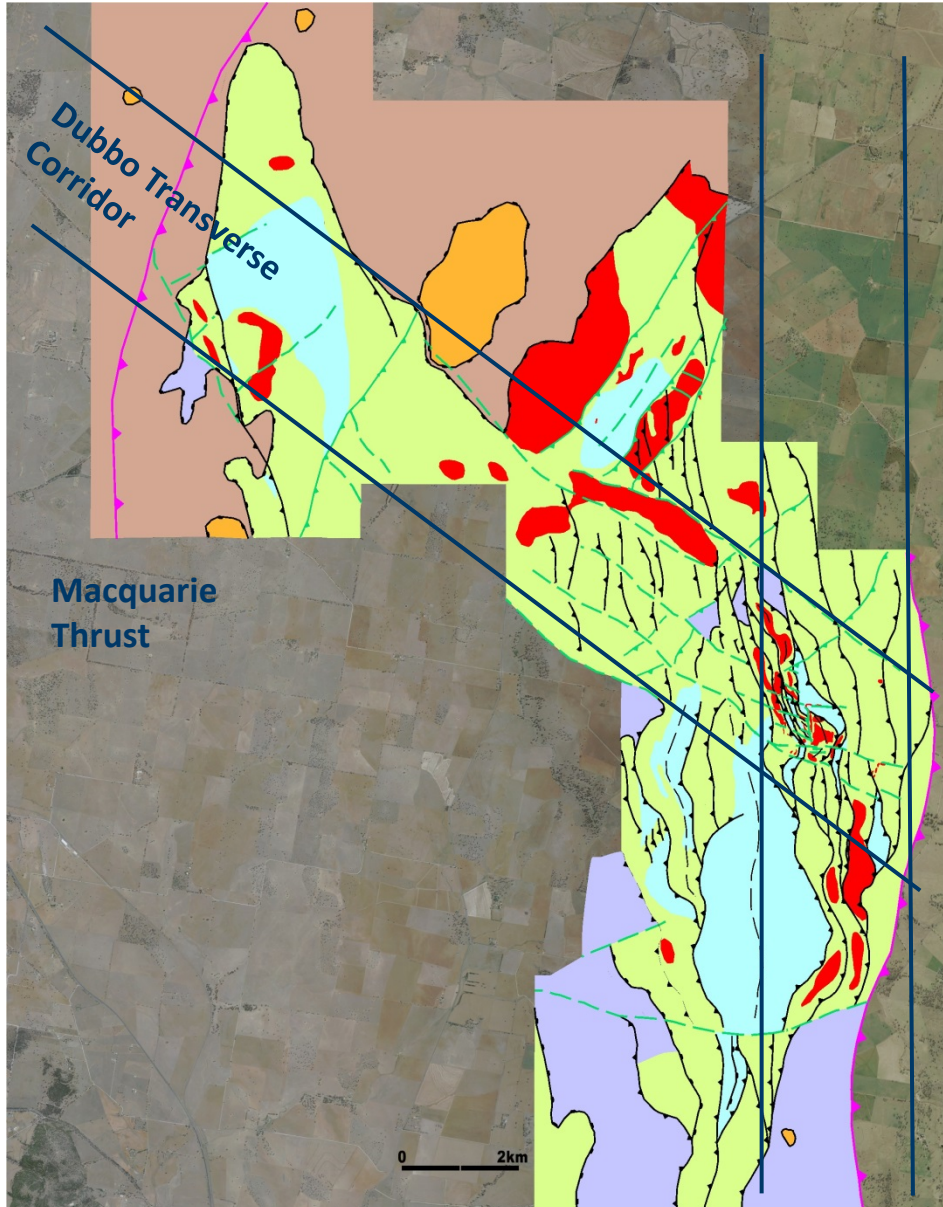
Finns Crossing-Murga Prospect: aeromag target (skarn like characteristics) and separate strong IP chargeability anomaly. Extensive argillic lithocap.

Surface float samples 6.4g/t Au 7.6% Cu; 3.8g/t Au 0.12% Cu.

Comobella Intrusive Complex: 21km² area, several copper-gold intercepts associated with extensive altered monzonite intrusives. Best COMRC009 46m @ 0.9g/t Au and 0.25% Cu (ASX Announcement 1 Feb 2011).

Kaiser-Boda: 5km long, 1km wide corridor of monzonite intrusives, extensive propylitic to potassic alteration with gold and copper mineralisation. Numerous intercepts at Kaiser with a small high grade historically mined body.

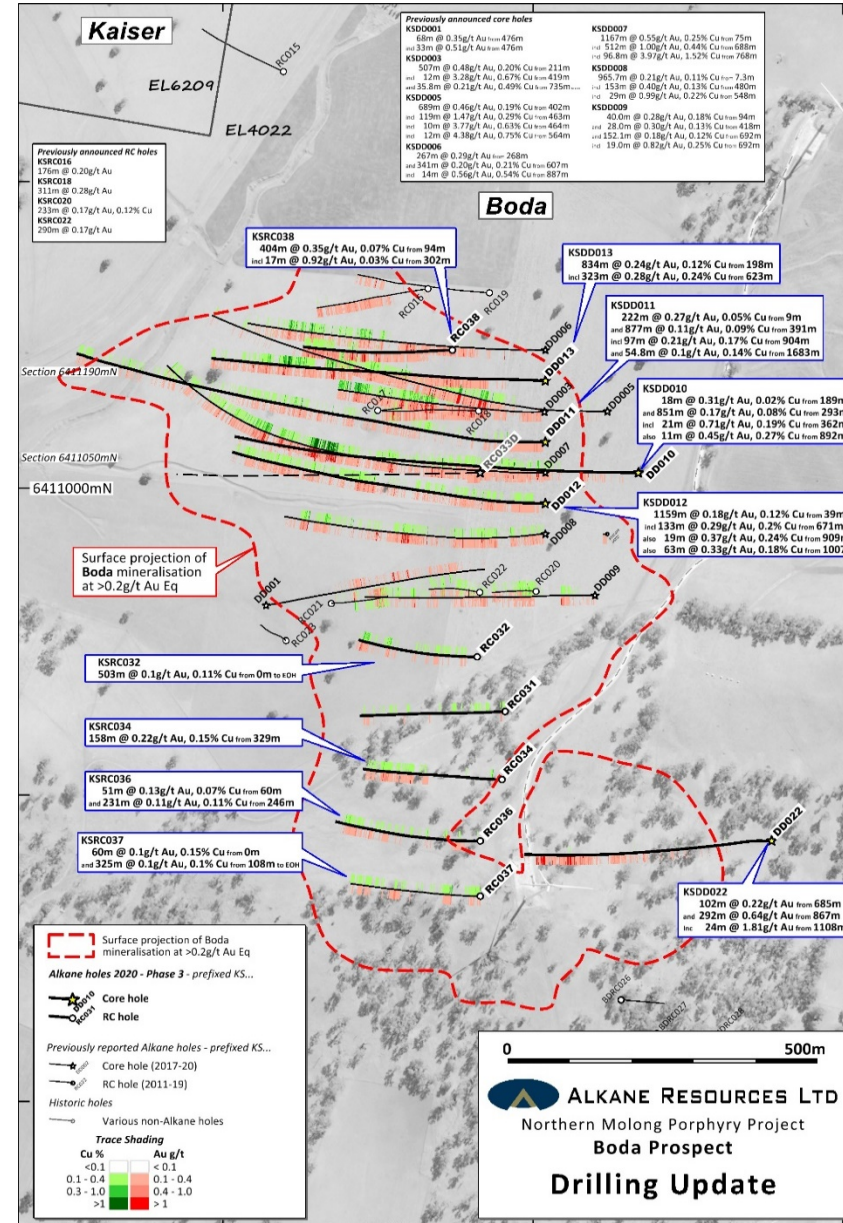
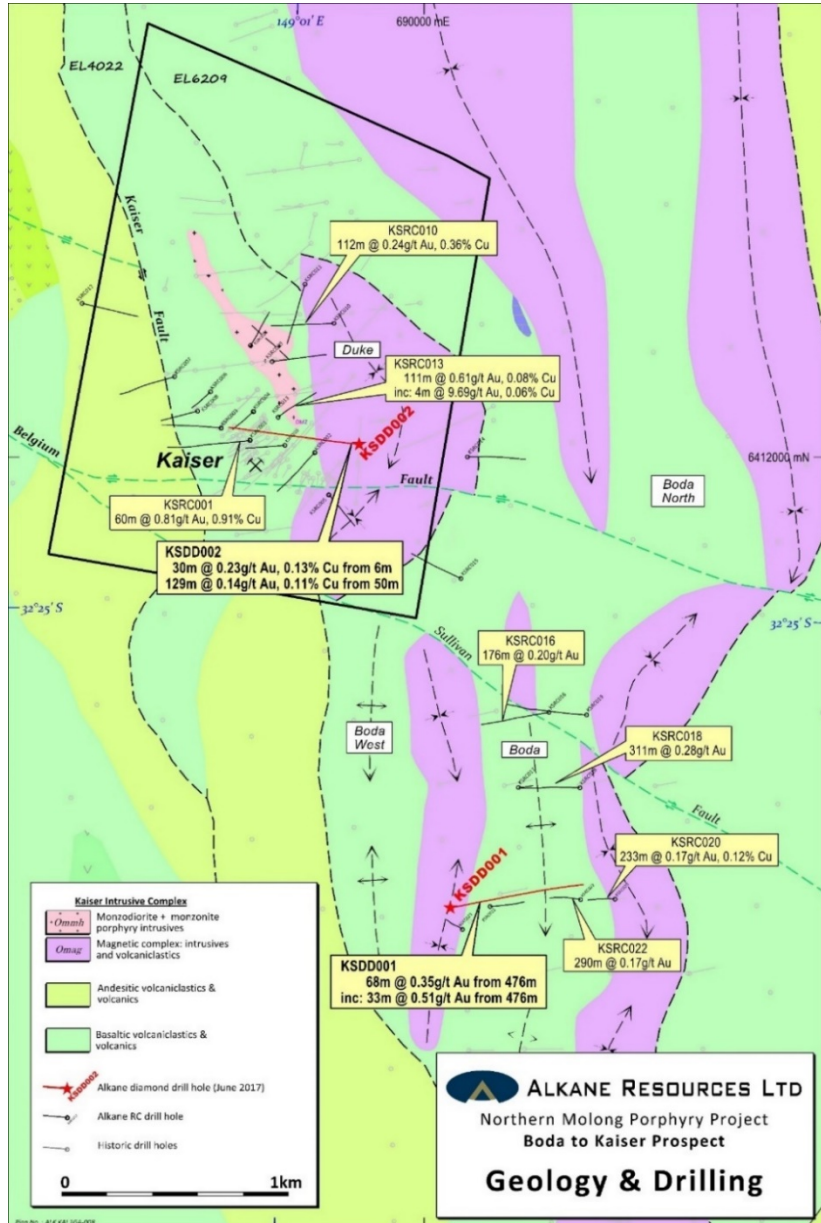
NMPP: Structural / Intrusive Summary



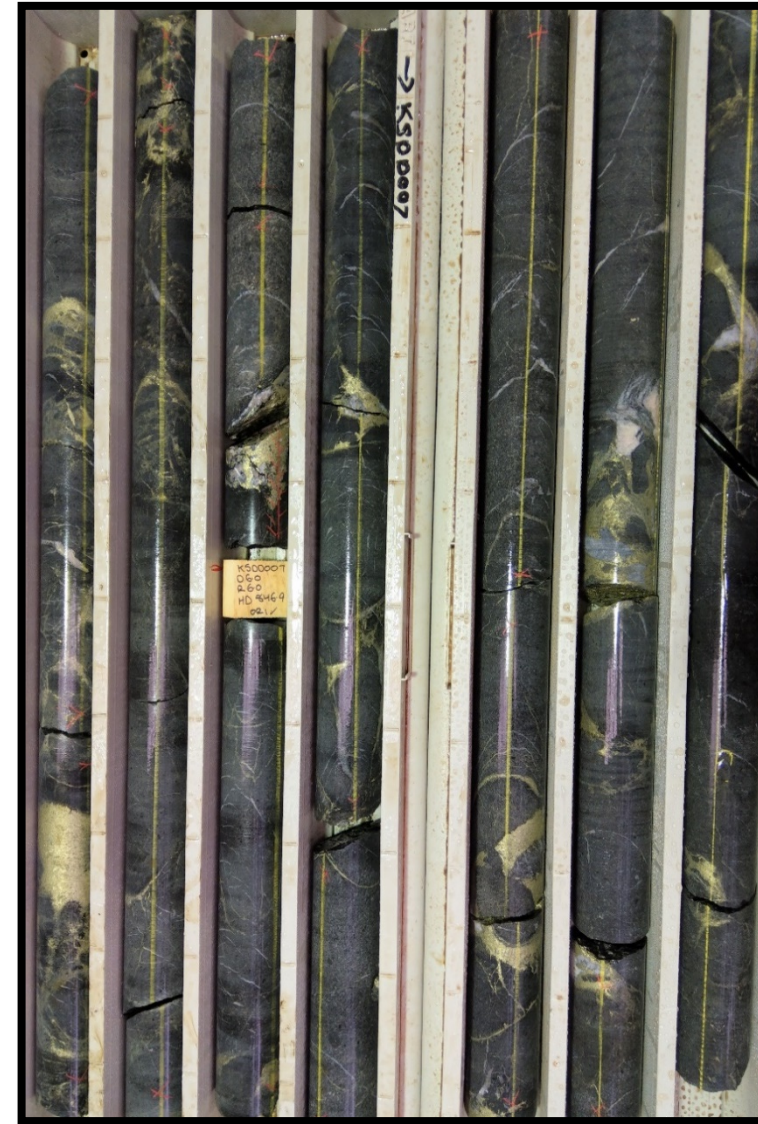
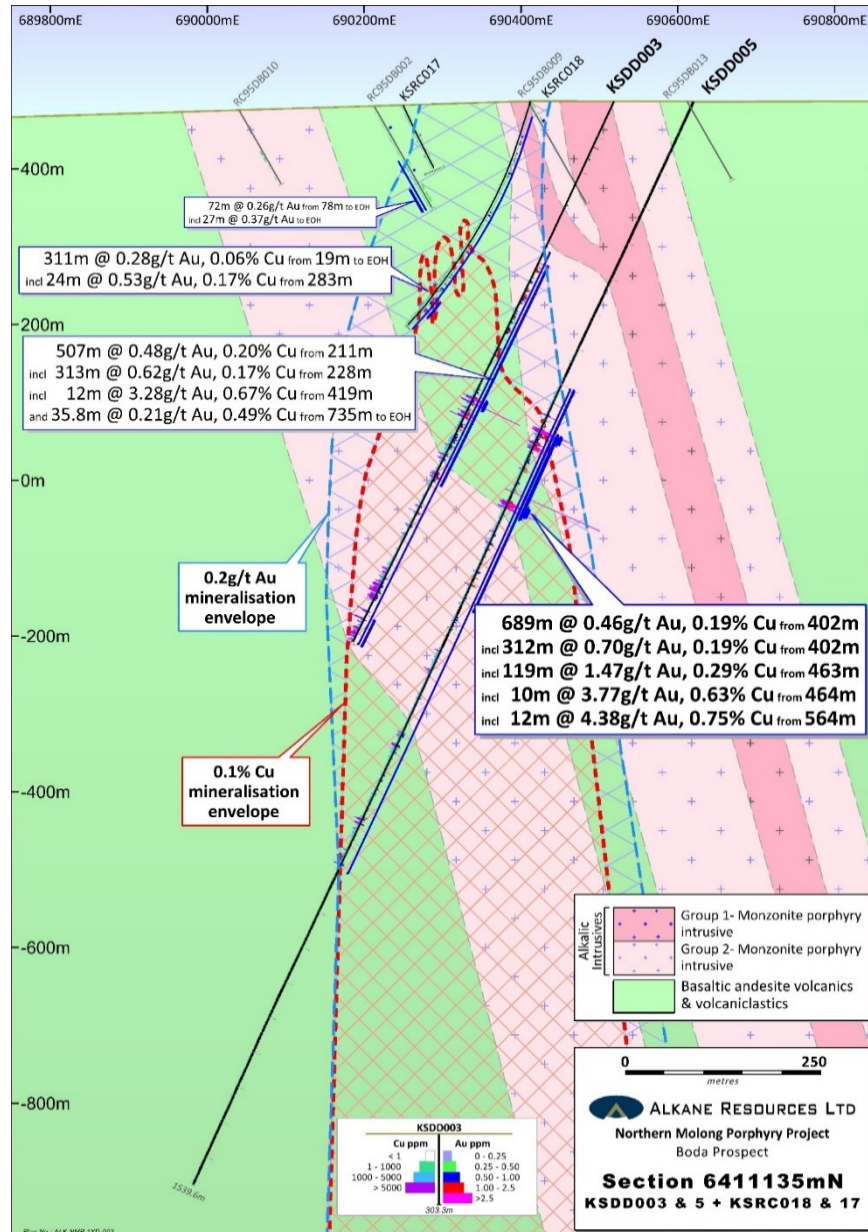
- **Boda-Kaiser** located at the intersection of the Arc parallel Nindethana Thrust and northwest 'Dubbo' transverse corridor. Other north-south thrust structures offset the belt to the west (Macquarie Thrust).
- Dilatory intersection and offset provides enhanced environment for monzonite intrusive bodies and focus for large fluid flow.
- Intrusive and alteration assemblage are distinctly alkalic (not calc-alkalic) gold-copper and have more similarities to the alkalic porphyry deposits of the Golden Triangle in British Columbia (Canada).

Nindethana Thrust

Kaiser-Boda Drilling: 2017-2020 (to date)

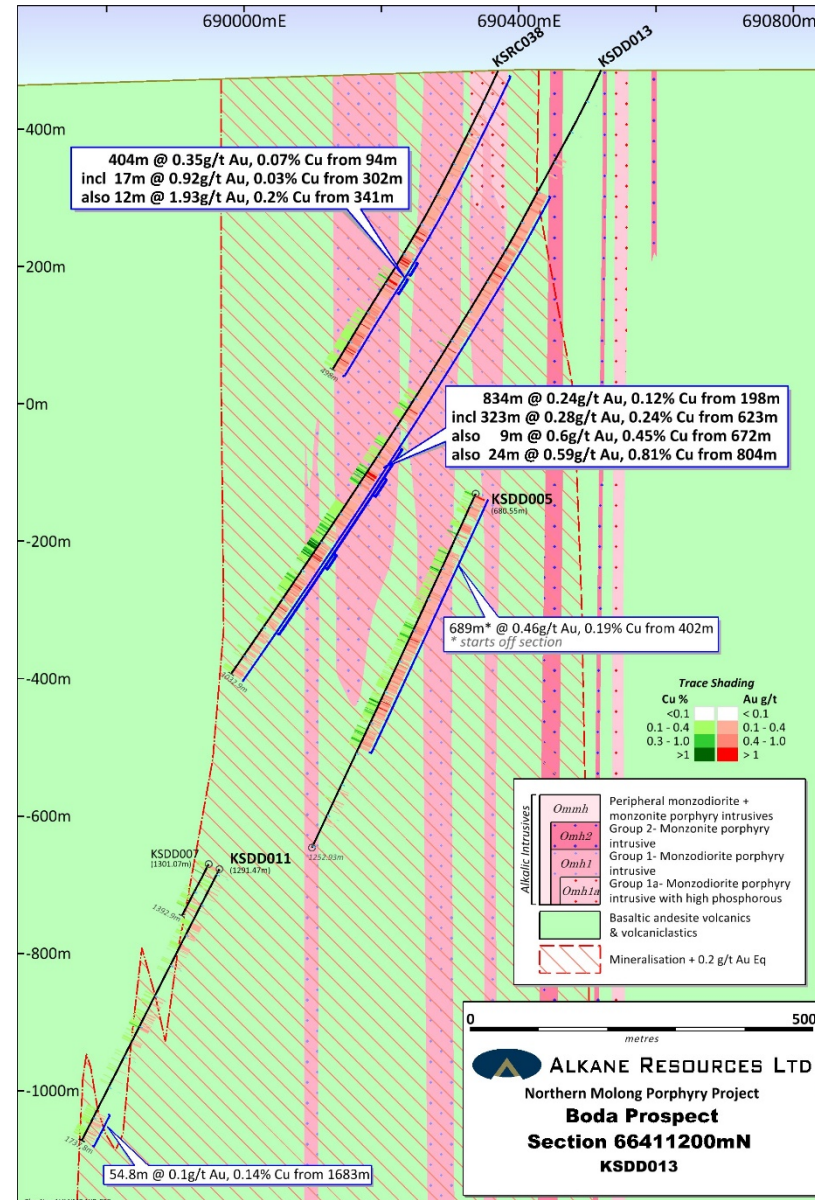
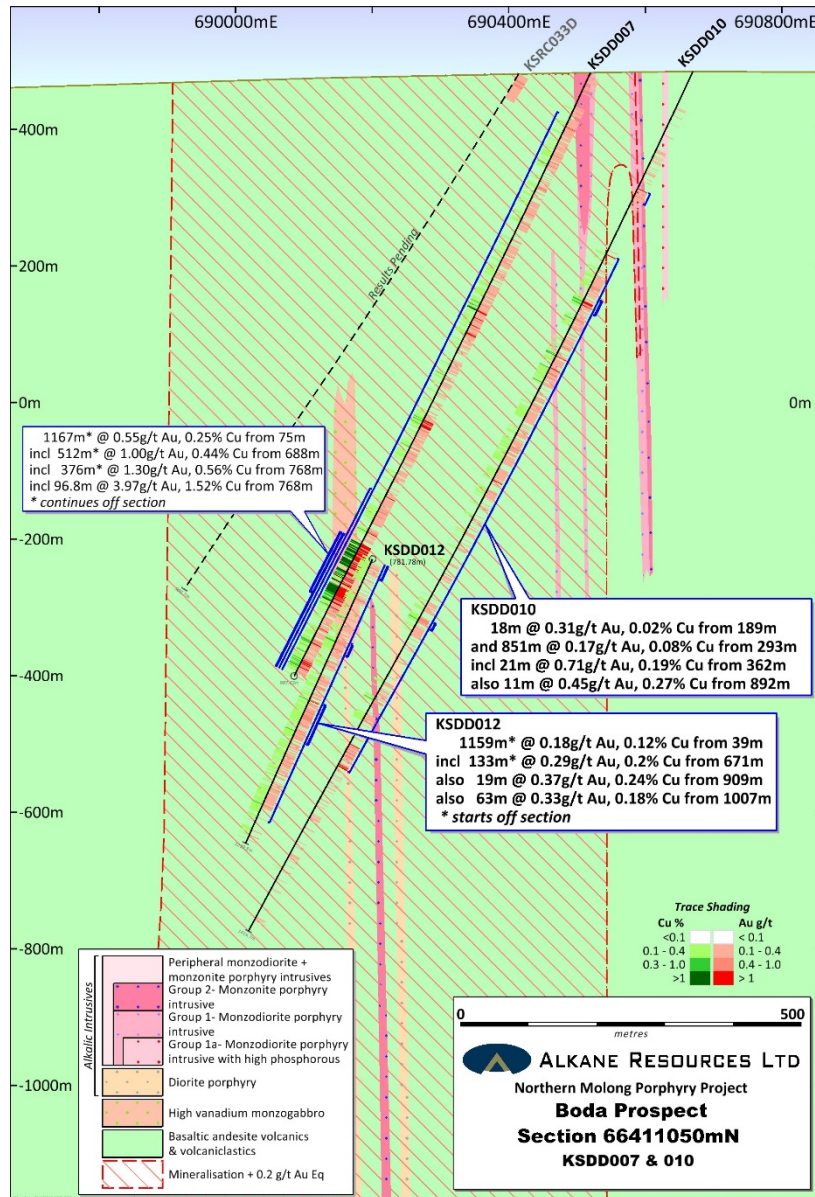


Boda Drilling: Discovery Section



Chalcopyrite cemented breccia in potassic altered volcanics
KSD007 (96.8m @ 3.97g/t Au and 1.52% Cu).

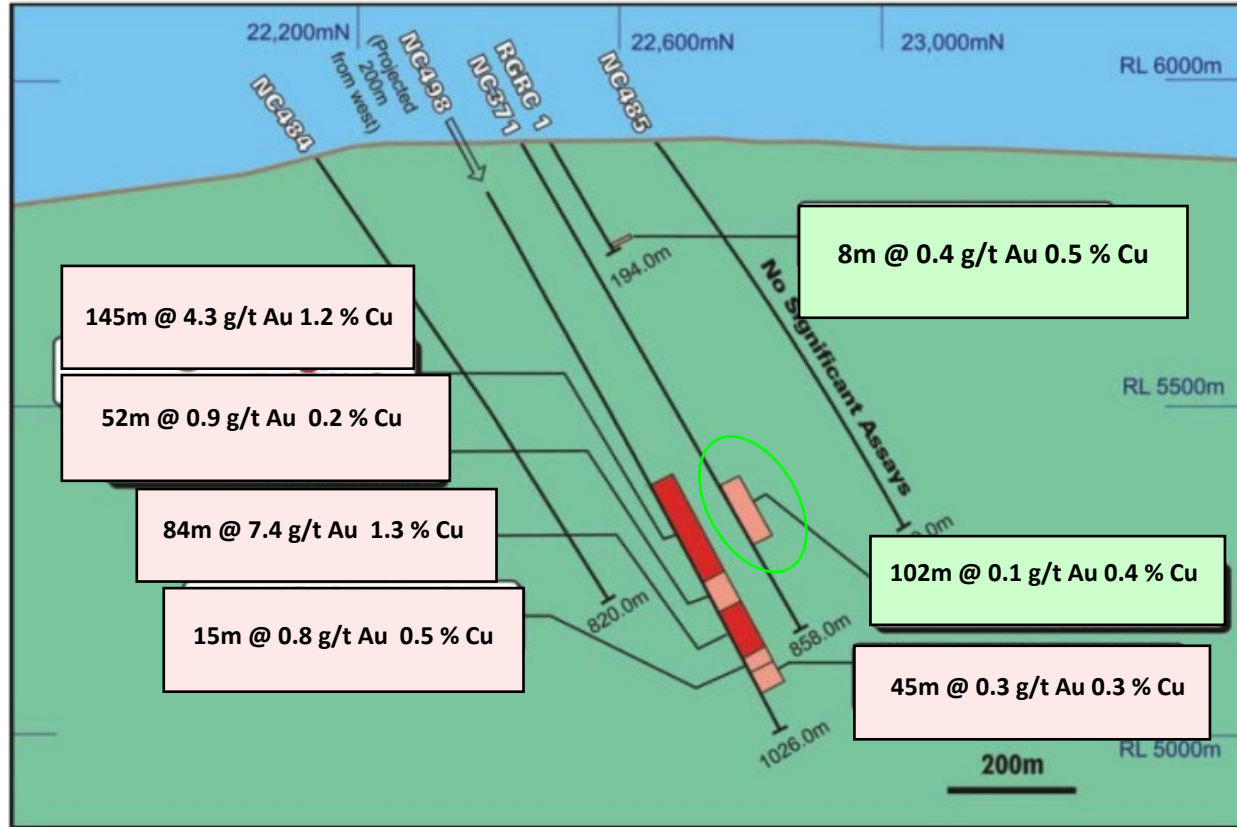
Boda Drilling: Latest Results



- Drilling has confirmed broad mineralised alteration envelope which shows clear zonation of outer propylitic pyrite; inner propylitic pyrite-chalcopyrite; to potassic core with chalcopyrite – bornite – pyrite.
- Evidence of an outer Mo shell with other pathfinder elements.

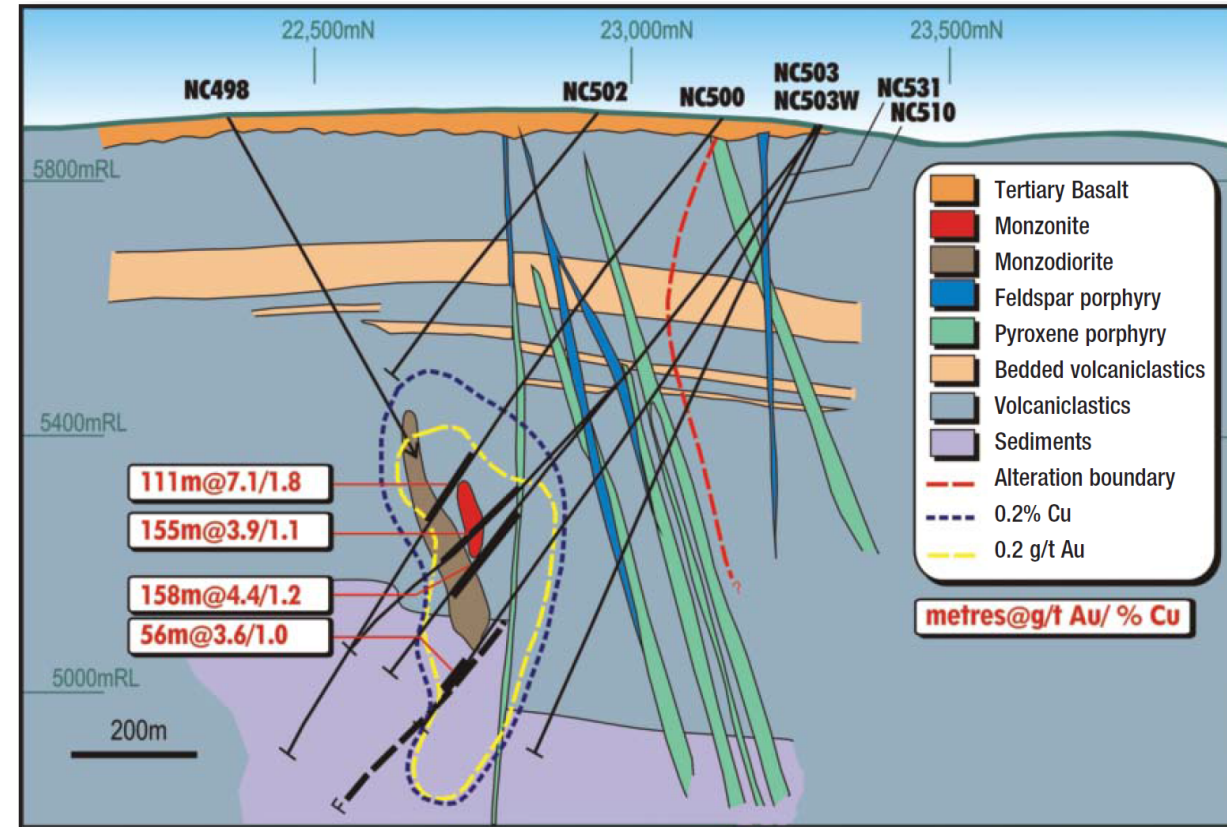
Boda Targeting: Ridgeway (Cadia) Analogy – Newcrest

Ridgeway Discovery Drill Sequence 1996



Ridgeway discovery sequence schematic section (Wood 2012)

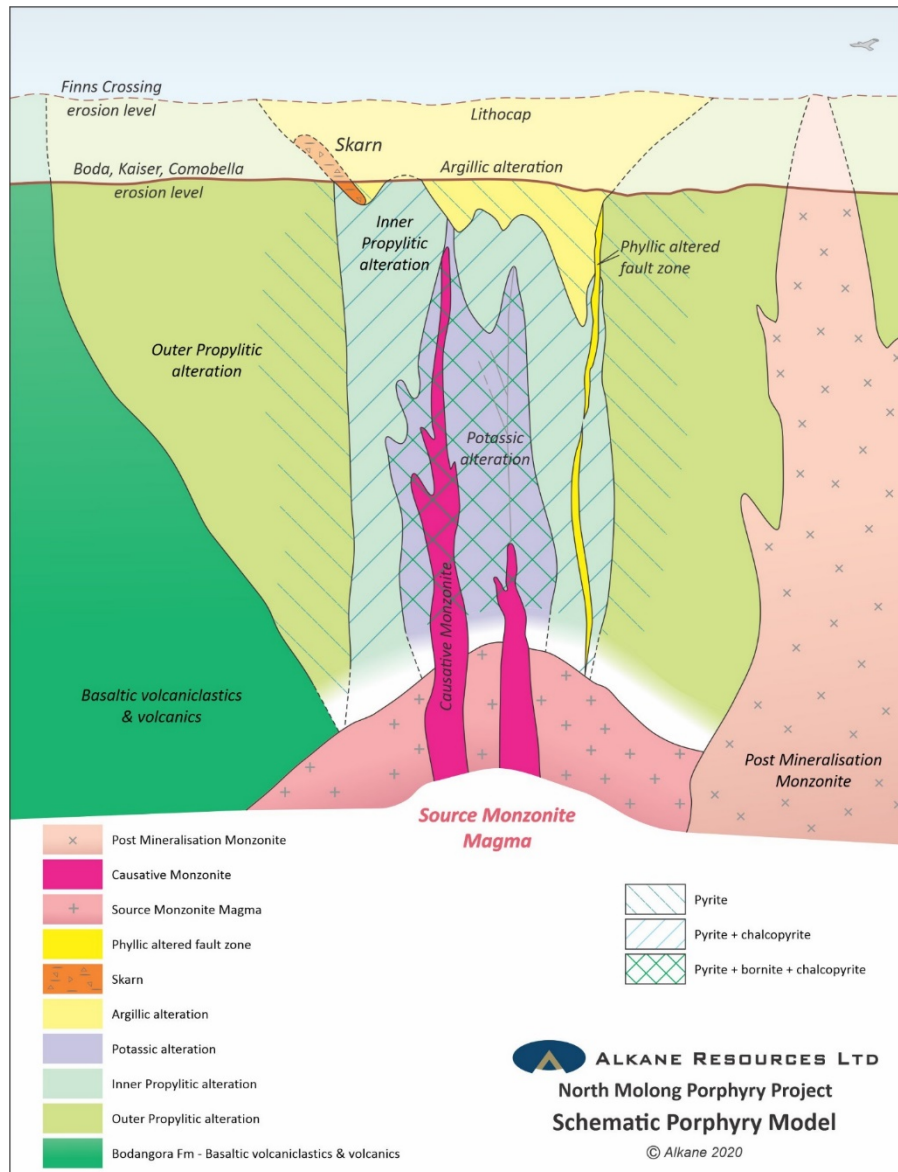
Ridgeway Deposit Definition 1996-1997



Ridgeway discovery section 11,000 E (Wood 2012)

Ridgeway 1998 pre-mining Indicated and Inferred Resource 44Mt @ 2.8g/t Au and 0.82% Cu (Wood 2012)

NMPP: Porphyry Model and Boda-Kaiser Mineralisation



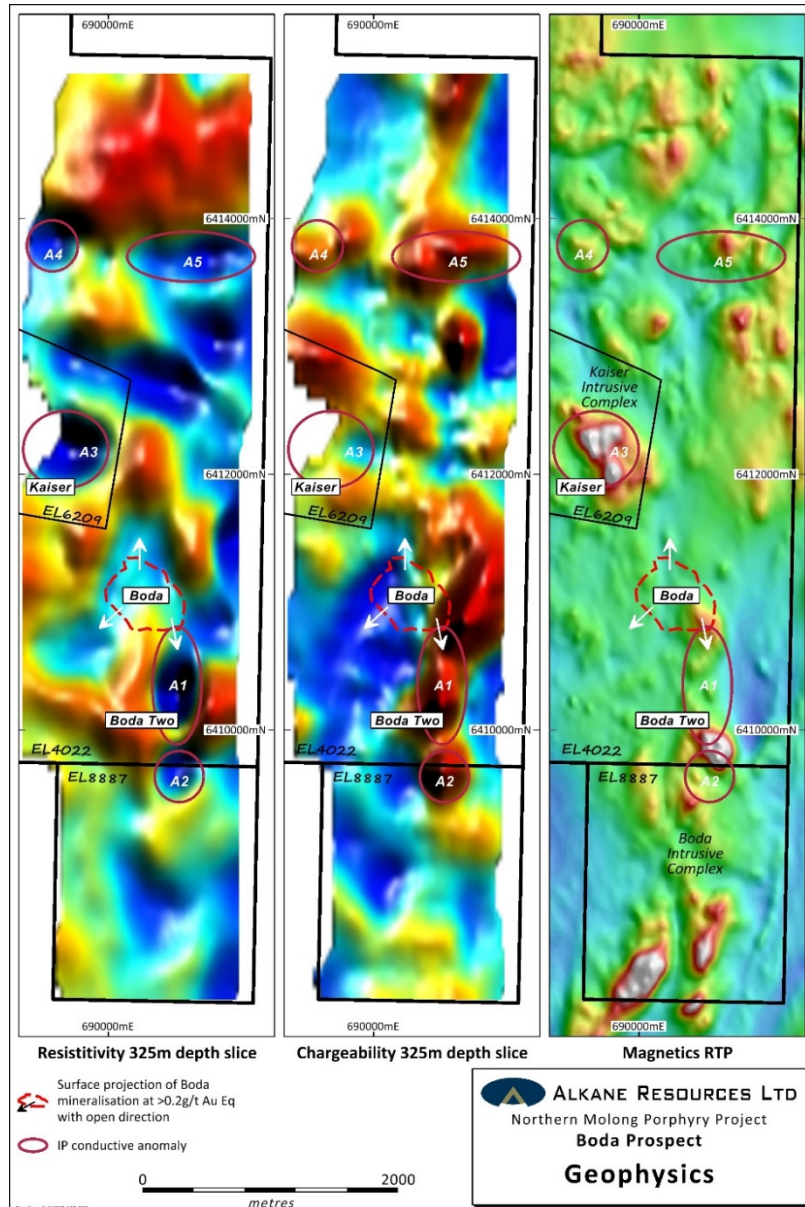
Key Learnings to Date

- The host sequence is evolved basalt to andesite, flat lying volcanoclastics and lavas, cut by near vertical monzonitic bodies with at least three separate monzonite intrusives.
- Lithogeochemistry and age dating clearly place the NMPP in late Ordovician – Early Silurian shoshonitic (high K) volcanic - intrusive event (460 – 430Ma) that extends over the 150km of the Molong Volcanic Belt. The MVB includes the giant Cadia deposits.
- Alteration of the host volcanics is extensive, clearly displaying classic zonation from outer propylitic (some sericitic) -> propylitic -> potassic (and calc potassic). The potassic alteration is dominated by biotite with minor k-spar.
- Structural control to high grade zones still being determined.

Next Steps at Boda

Current Boda Program

- The currently defined Boda mineralisation (>0.2g/t AuEq) has horizontal dimensions of 1,000m x 400m, with a NW strike and extends to 1,100m depth. It remains open along strike and at depth.
- High grade Au-Cu zones currently interpreted to trend NW-SE (as small +1g/t Au and +1% Cu deposit at Kaiser). Boda drilling has been near to parallel to this, minimising intersection probability.
- Plan to test this by rotating drill direction to NE-SW/SW-NE, similar to Kaiser drill direction. Current orientation E-W.
- A 30,000m RC and core drilling program in progress to test the dimensions and extensions to the large low grade mineralised envelope as well as internal high grade zones within Boda.
- In addition, the drilling will also test other IP anomalies and known Au-Cu mineralisation within the Kaiser-Boda corridor over a 3km strike length.



Boda: Summary



- Boda is a large system with high grade portions.
- We continue to expand the mineralised envelope.
- Multiple anomalies being tested.
- Two diamond rigs on site for latest drilling campaign.
- Results continuing, expect next before year end.

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