

*“THE BEST PLACE TO FIND A GOLD MINE  
IS NEXT TO A GOLD MINE”*



TSX-V: AMO

Investor Presentation  
October 2021





# FORWARD LOOKING STATEMENTS

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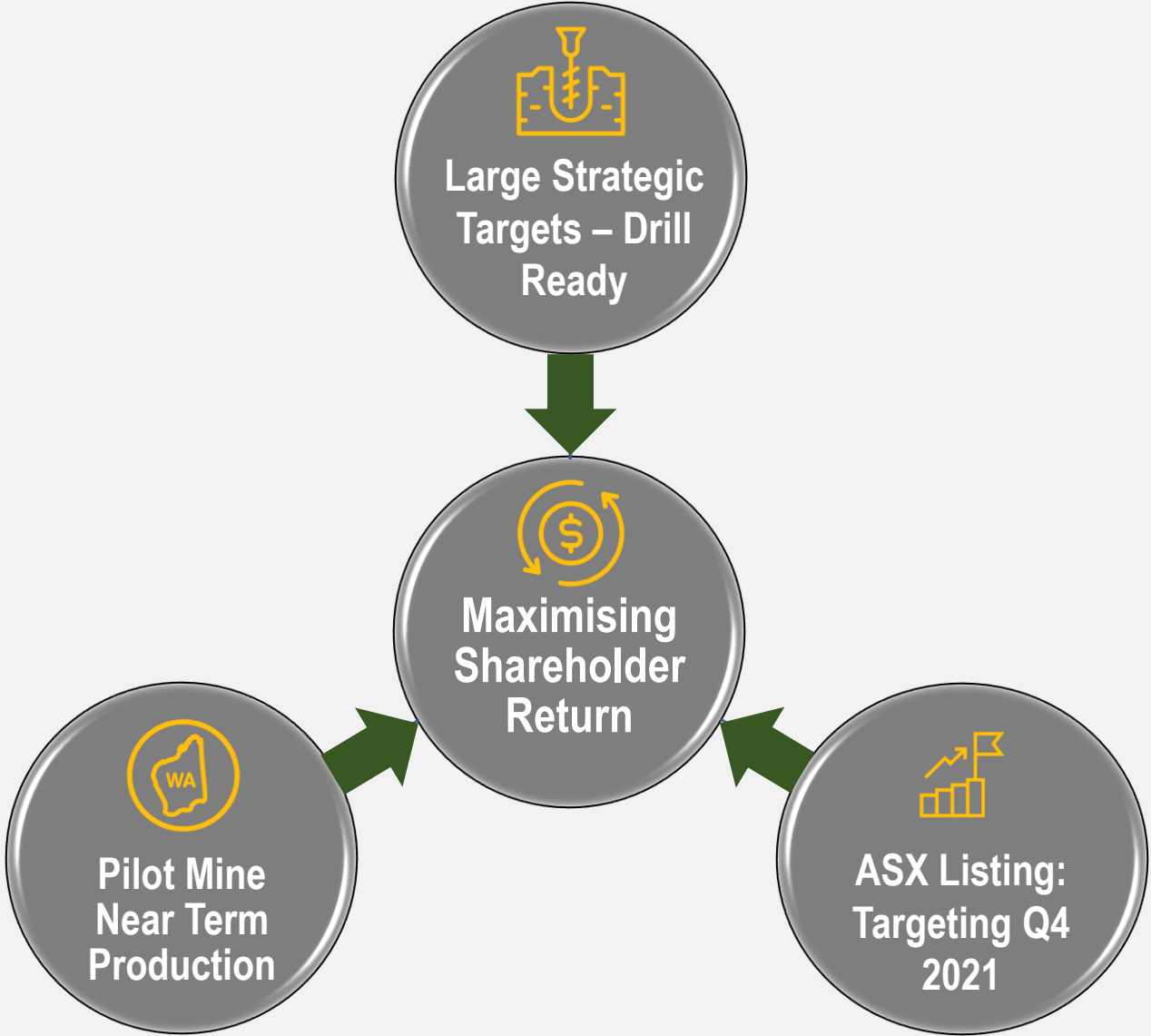
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All technical and scientific information contained in this presentation has been reviewed and approved by Neal Leggo, a “Qualified Person” as such term is defined in NI 43-101 of the Canadian Securities Administrators. Mr. Leggo is a Member of the Australian Institute of Geoscientists and is a Principal Geologist with CSA Global Pty Ltd, Mining Industry Consultants, an ERM Group Company.

## On the cover – PILOT Mine – Southern Cross Western Australia



# FOCUS –Consistently increase the company’s gold reserves per share



# CORPORATE OVERVIEW – SHARE STRUCTURE

## Altan Rio

Current Price  
 12 Month High  
 Shares on Issue (m)  
 Options On issue (m)  
 Warrants On issue (m)  
 Market Capitalization (\$m)  
 Cash (\$T)<sup>1</sup>  
 Debt (\$A)

## AMO

C\$0.15  
 C\$0.23  
 96.6  
 5.7  
 16.8  
 C\$14.4  
 C\$ 50  
 A\$ 350K

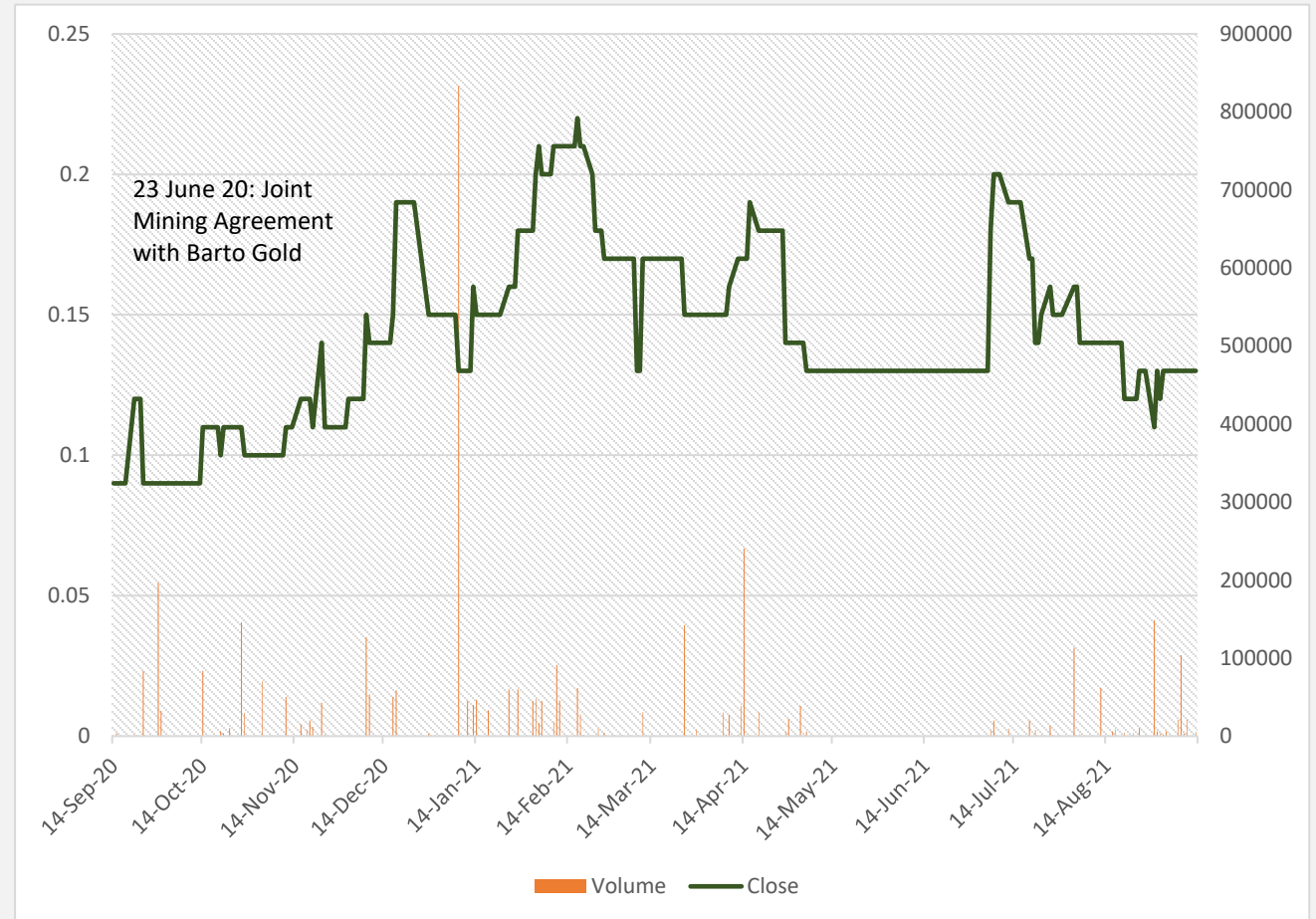
## Top Shareholders

Surveyor Resources	9.99%
John Jones	9.14%
Verite Trust	8.67%
Double Dragon	4.94%
UT International Pty Ltd	4.44%
Andrew Barclay	2.91%

1- As at Sept 30<sup>th</sup> 2021



## Share Price & Volumes (Past 12 Months)



# EXPERIENCED BOARD & MANAGEMENT



**John L.C. Jones**  
Chairman

- Prominent player in the international mining sector for over thirty years.
- Chairman and Director of Altan Nevada Minerals Limited and Altan Rio Minerals Ltd.
- Former Director & Chairman of Troy Resources NL & Chairman of Anglo Australian Resources NL since 1990.
- Formerly Chairman & Director of North Kalgurli Mines Ltd and a founding director of Jones Mining NL.



**Paul Stephen**  
CEO

- Held directorships across ASX and London publicly listed companies and has a strong knowledge of operations and compliance across multiple jurisdictions.
- Co-founder and Executive Director of Crusader Resources Ltd
- Extensive operational experience in mine site servicing and contracting as a founder and Managing Director of Integrated Fuel Services.



**Jim Harris**  
Director

- Experienced executive in management of construction & engineering projects in Australia and overseas.
- Exec Director of Swanline Developments Pty Ltd - property development and investment, project management and business investment.
- 10 years' experience at both Alcoa of Australia Ltd and United Group Ltd.
- Former MD & Chairman of Silver Swan Group Ltd and Non-Exec Director of Caravel Minerals Ltd.



**Kerry Griffin**  
Director

- 24 years' experience in mining geology, resource development and exploration in Australia and overseas with +18 years in senior roles with Newcrest Mining, Sons of Gwalia, Consolidated Minerals, Ivanhoe Mines, Aspire Mining, Haranga Resources, Lindian Resources & Latin Resources
- 5 years with Ivanhoe Mines as Senior Development Geologist during the discovery and development of the world class Oyu Tolgoi Project.
- Both a Competent Person under JORC and a Qualified Person for 43-101 reporting.



**Evan Jones**  
Director

- Non-Executive Director of Altan Nevada Minerals and Altan Rio Minerals.
- Previously Commercial Manager of Troy Resources Brasil Participacoes, a subsidiary of Troy Resources NL
- Previously Exec Advisor with Westchester Corporate Finance in Australia.
- 12 years' experience in corporate advisory and commercial management in the mining industry, including 6 years based in developing countries.



**Keith Ross**  
VP Ops

- GM for +10 years. Managed open cut and underground operations at Marra Mamba, Nevoria, Western Queen, Sandstone, Orient Well with good safety record & good relationship with local community.
- Corporate head office business management for +10 years with Western Reefs company's representative in charge of JV with Equigold at the Dalgaranga and Western Queen mines
- Established the 'Indigenous Students Action Group'



**Greg Wilson**  
Head of Geology

- Highly experienced geologist with a proven track record in discovery and development of mineral deposits.
- Expertise in Archaean lode/orogenic gold and litho-structural analysis has resulted in identification of in excess of 4.0 million ounces of gold.
- Previously Exploration Manager at Integra Mining - instrumental in discovery of Salt Creek and Majestic deposits in the Mt Monger Area
- Discovered the +500Koz Strezlecki deposit now forms part of the 5Moz Kundana gold camp owned by Northern Star.



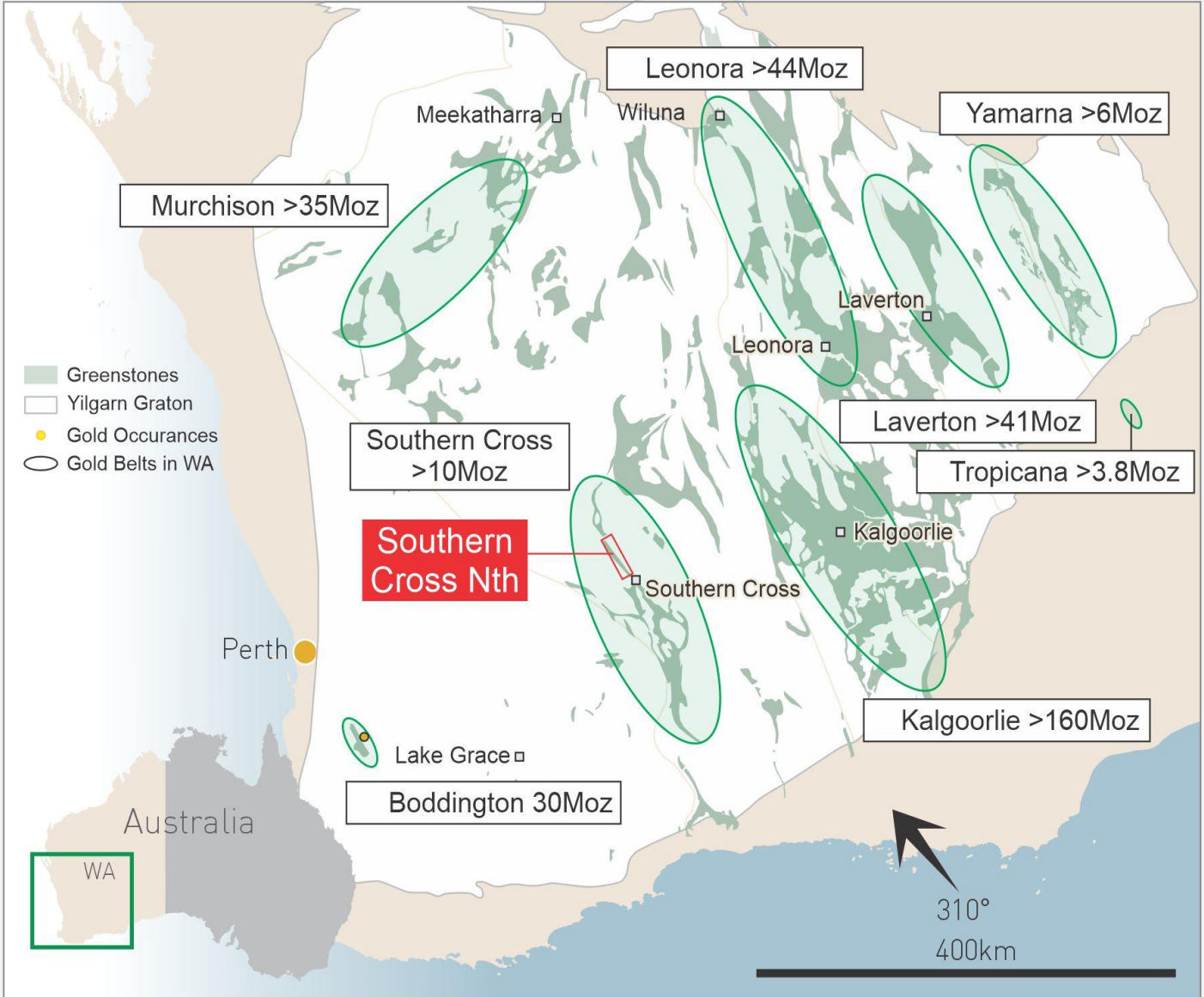
**David Talbot**  
Strategic Advisor US

- A Mining Engineer with experience in South Africa, Australia & Europe
- Held roles in global investment banks Deutsche and BNP Paribas.
- Led institutional energy sales business at leading oil & gas research firm John S. Herold.
- 10 years with McKinley Capital as Director of Investments.



# SOUTHERN CROSS: A PREMIER GOLD REGION

- Yilgarn Craton is Australia's premier gold province with major Archean greenstone-hosted deposits
- Altan Rio holds rights to 16 granted Prospecting & Exploration Licenses covering 139.6 km<sup>2</sup> - 2<sup>nd</sup> largest tenure over the proven gold hosting structure, Frasers-Corinthian Shear Zone (FCSZ).
- Targeting large brownfield discovery within trucking distance of two operating gold mills (Marvel Loch & Edna May).
- Targeting Brown field +1M oz discoveries - highly prospective and accessible (under Salt Lakes and Farmland) terrain which is untested at depth.



1 Geoscience Australia

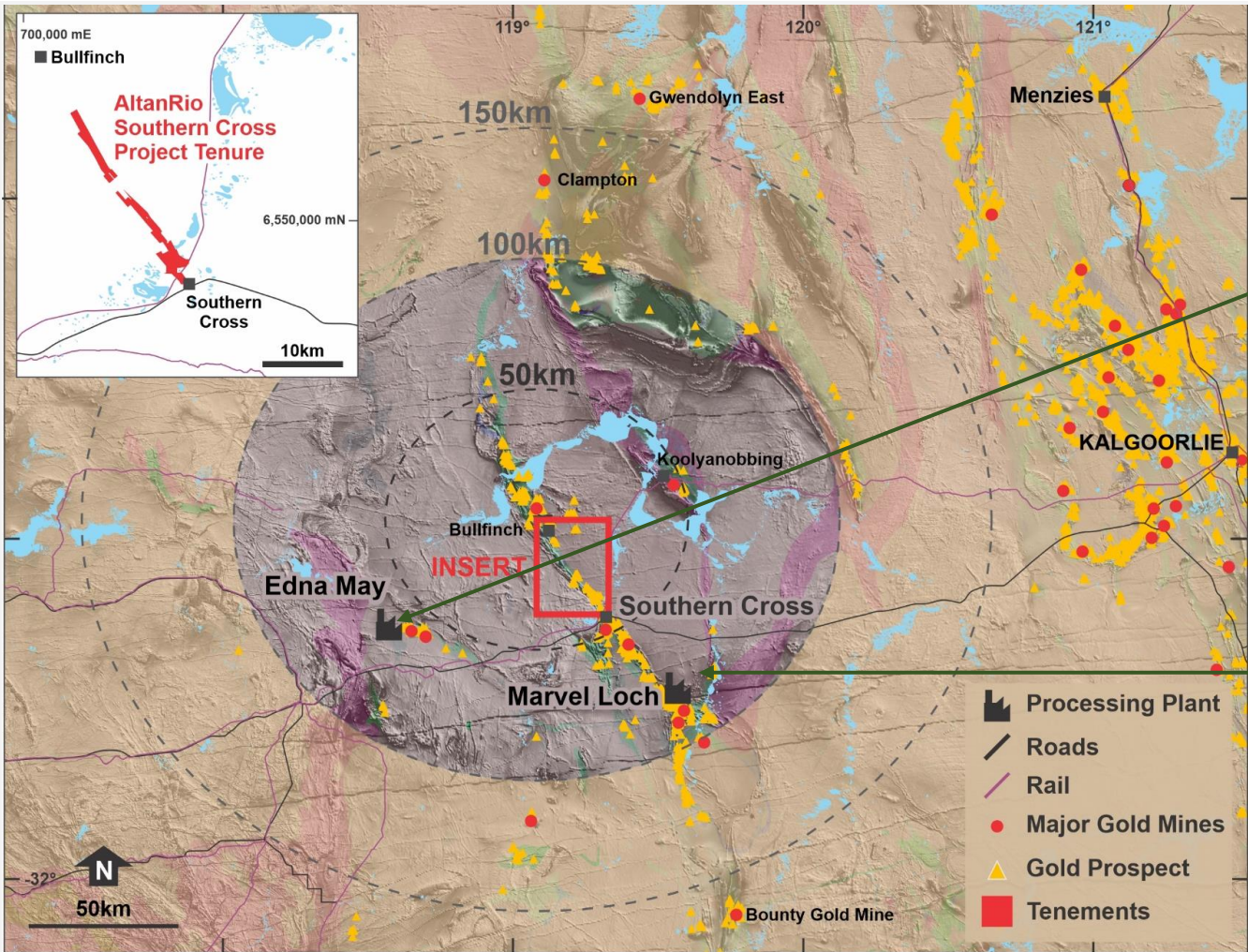


\*\* Government of Western Australia Department of Mines, Industry Regulation and Safety.



# SOUTHERN CROSS: A PREMIER GOLD REGION

Targeting multi-million ounce gold discoveries in close proximity to 2 operating gold mines in a region that has recorded gold production of 12.3 Moz. from 1900 to 2019



RAMELIUS RESOURCES' EDNA MAY MINE & PROCESSING PLANT



BARTO GOLD'S MARVEL LOCH MINE & PROCESSING PLANT



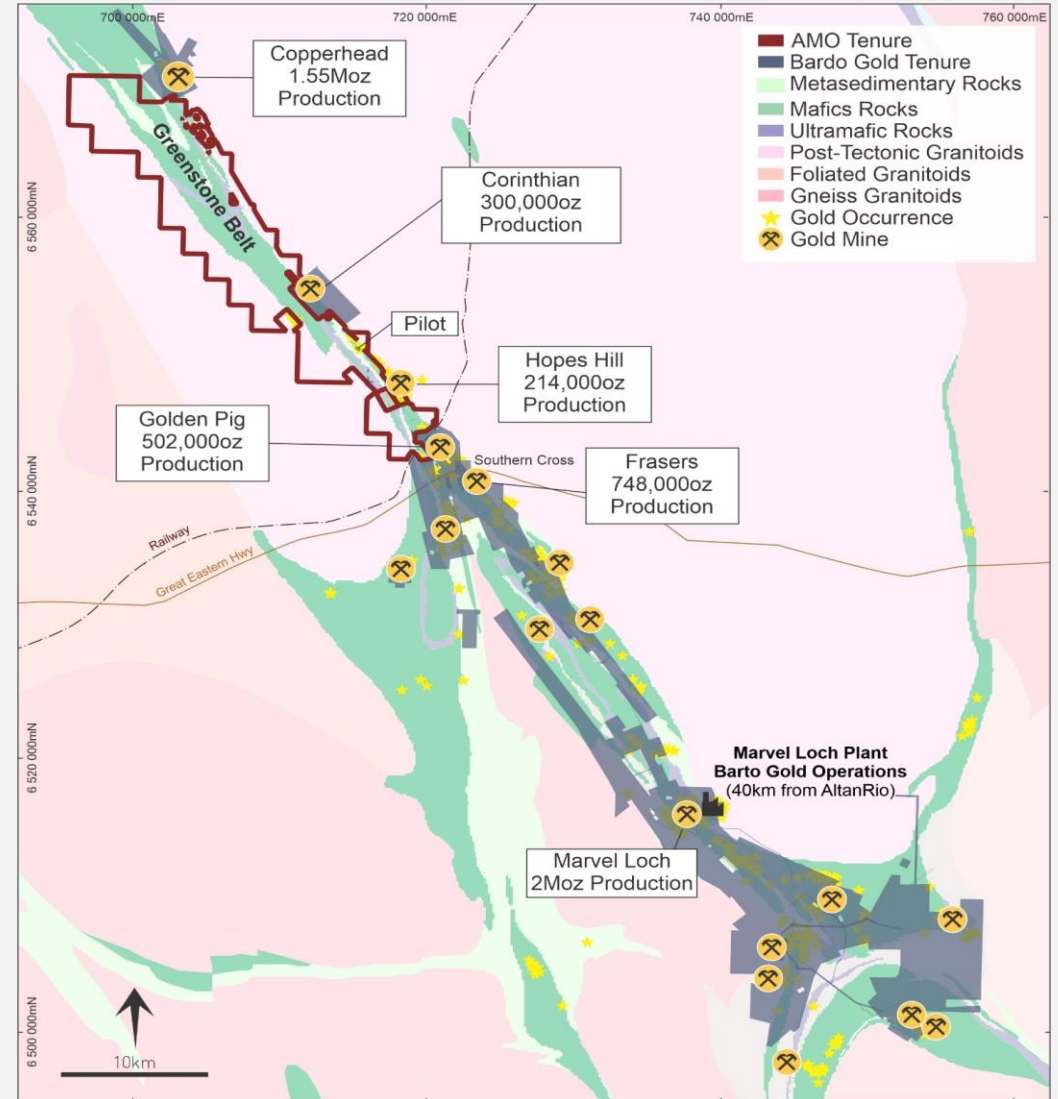


# FRASERS CORINTHIAN SHEAR ZONE (FCSZ) DEFINED GOLD RICH BEARING STRUCTURE

- FCSZ is host to gold mineralization along its entire length, including multiple high-grade ore bodies including:

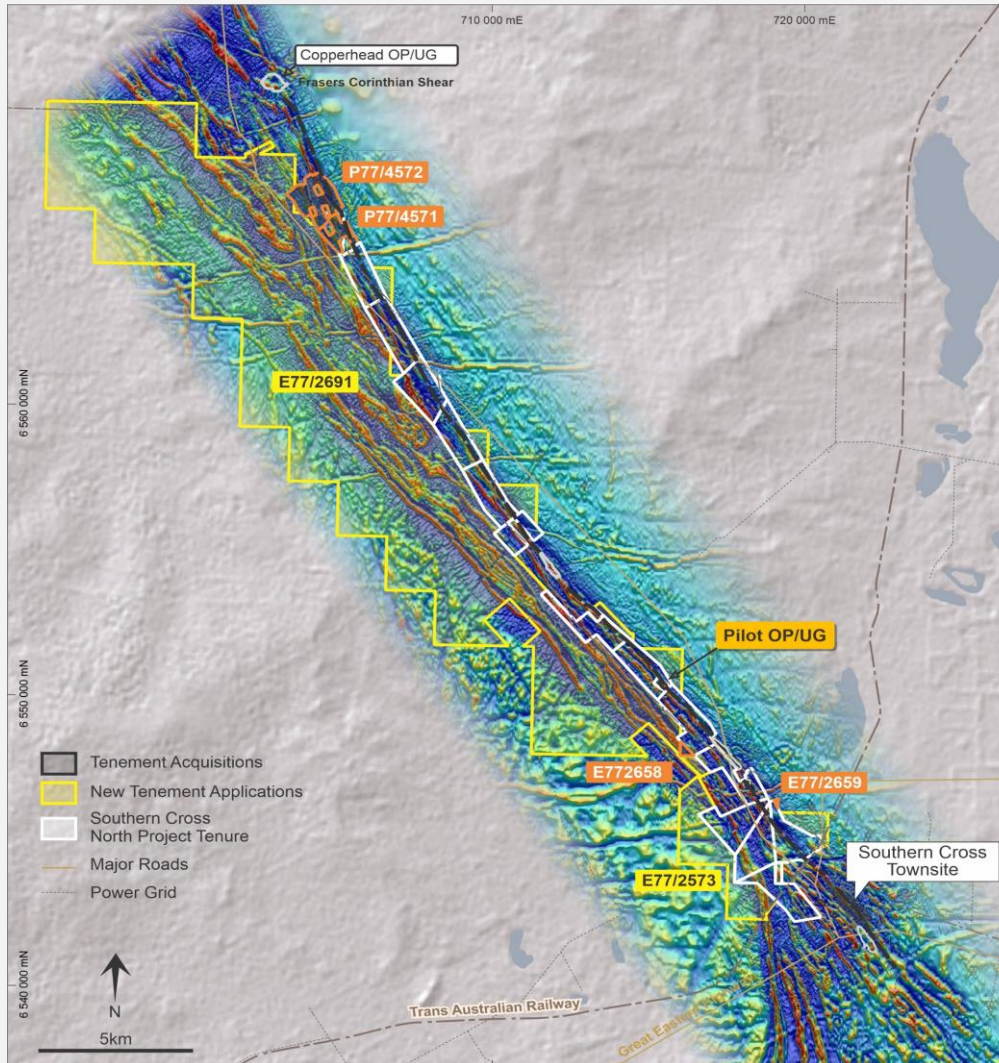
- Frasers (1.2 Moz.)
- Golden Pig (640Koz)
- Hopes Hill (214 Koz)
- Pilot (54 Koz)
- Corinthia (190 Koz)
- Copperhead (1.5 Moz.)

- Along strike and dip extensions of Frasers and Golden Pig Mines extend into Southern Cross North tenure
- Thick lacustrine sediments (Salt Lakes) obscuring the extension of the Golden Pig and Frasers mines
- Known drill targets** - highlight the potential for virgin discovery under the Lake Koorkoordine salt lake system and surrounding farmland

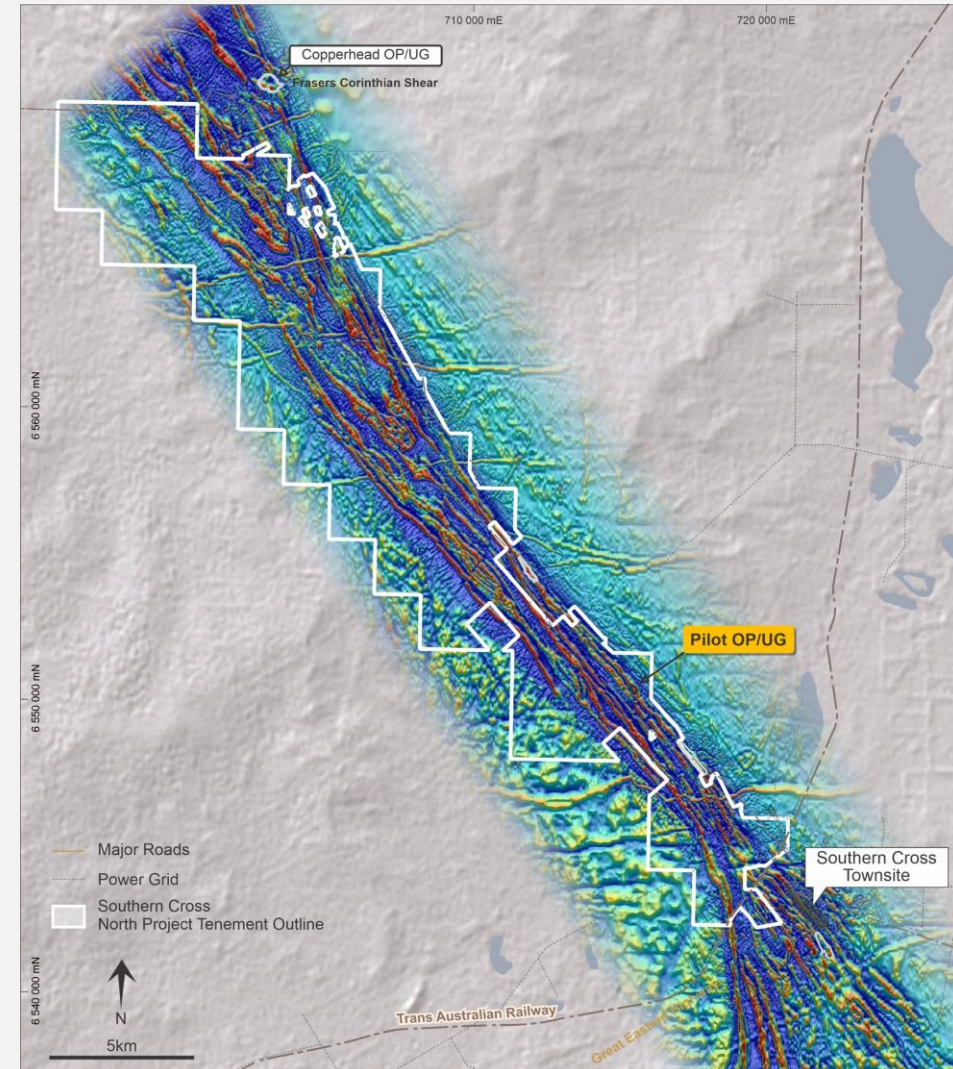




Altan Rio has a binding option agreement to acquire 90% of “E” tenement (E77/2691) covering a strategic ~115.9km<sup>2</sup> land position – Altan controls 139.6km<sup>2</sup> of continuous tenements.

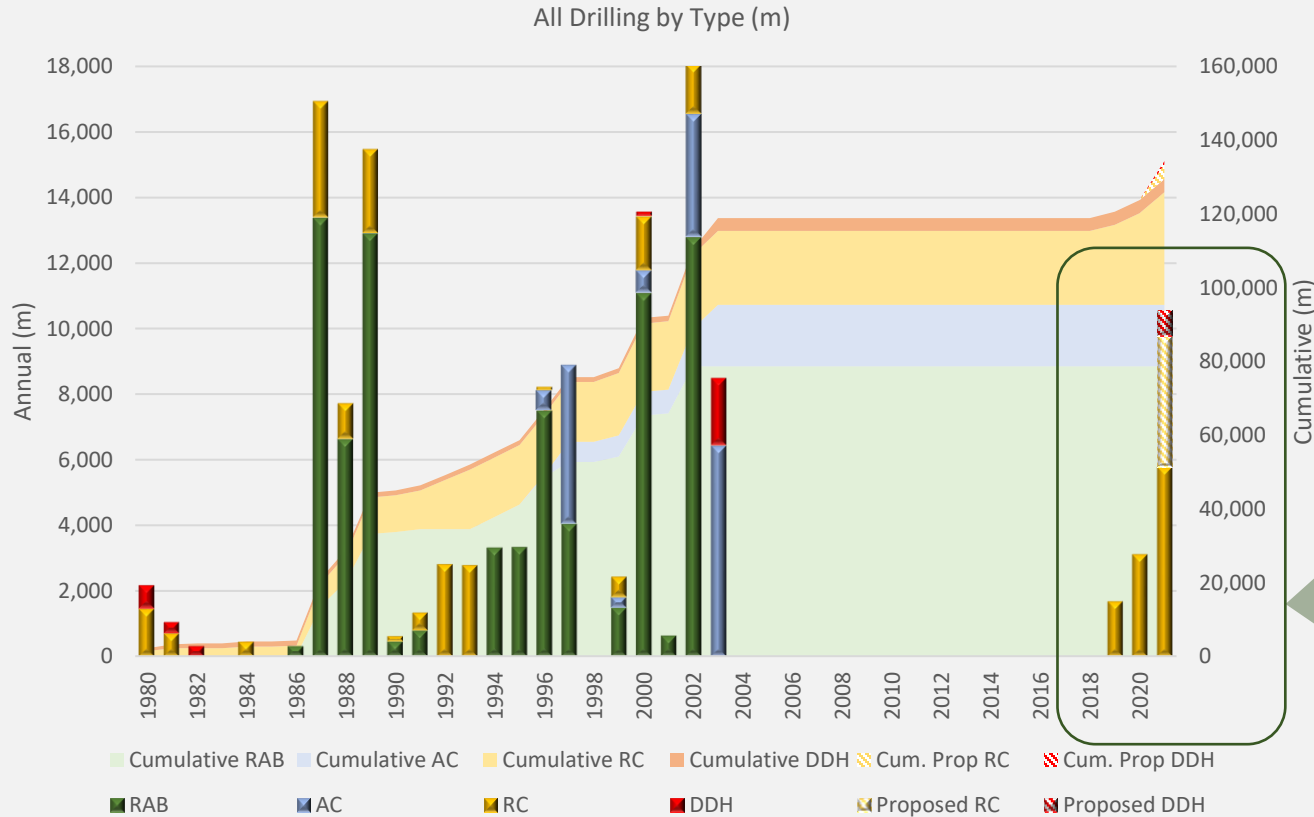


Altan Rio 16 Tenements

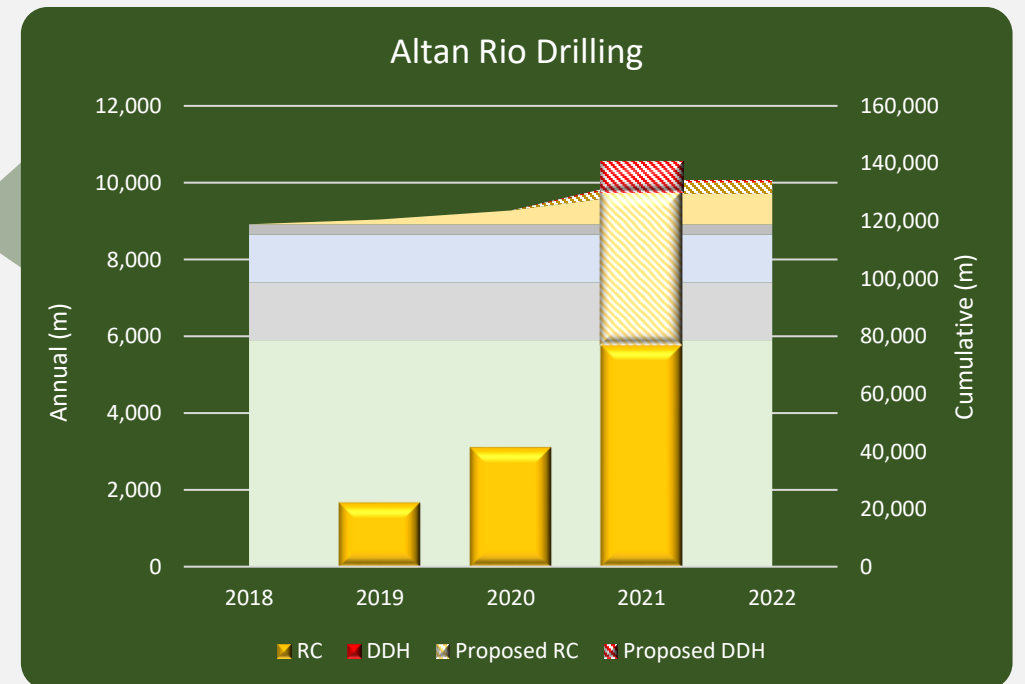


Altan Rio – Combined over greenstone belt

# LEVERAGING SIGNIFICANT HISTORIC DRILLING



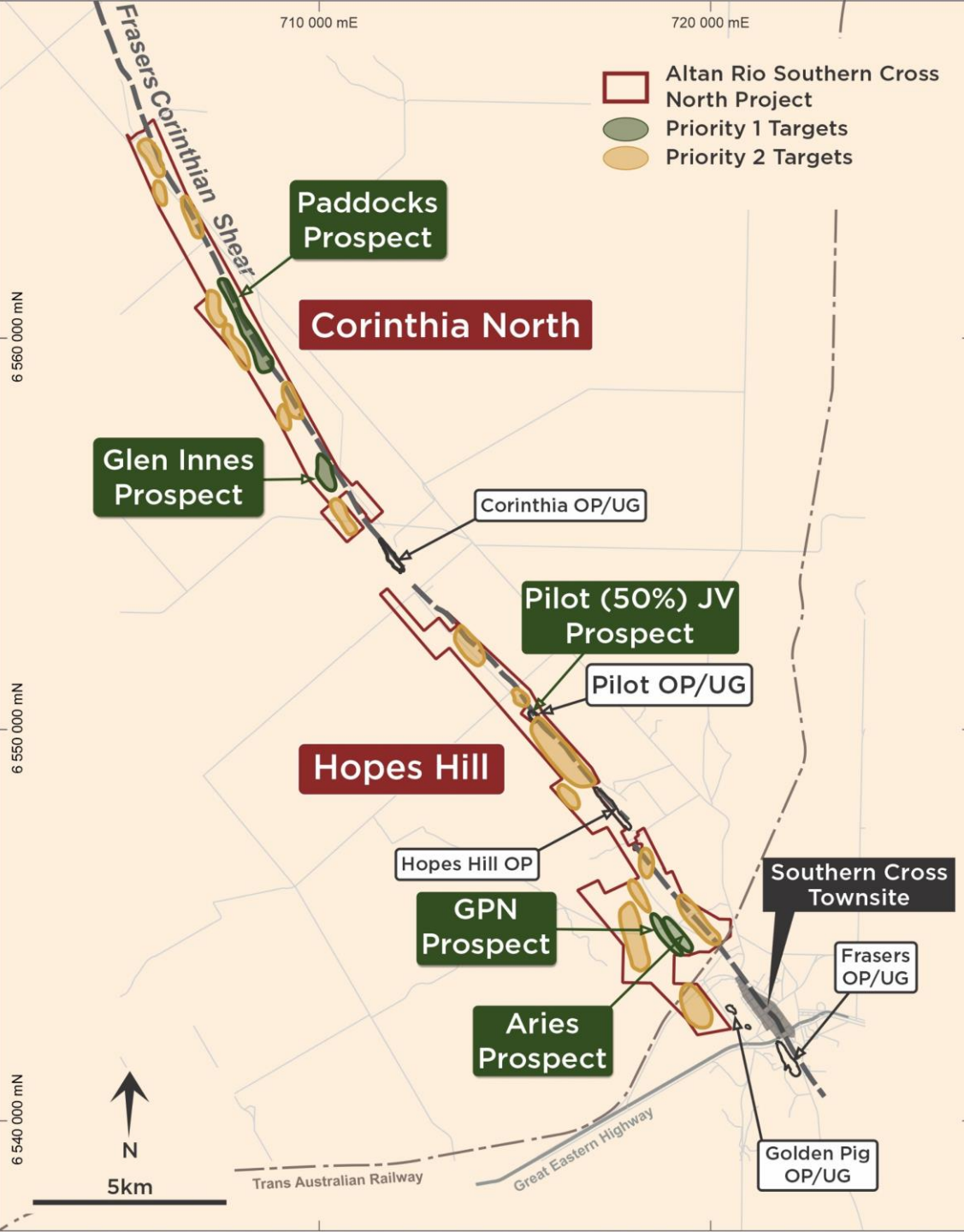
- FCSZ a well understood mineralised trend but all drilling is shallow
- Approximately 130,290m of combined historic RAB, AC, RC and Diamond Drilling



- Equates to ~A\$9m worth of drilling already conducted
- Provides a highly detailed database of results to inform deeper drilling



# HIGH PRIORITY TARGETS IDENTIFIED



## Hopes Hill

**Pilot** - 50% Exploration and Mining JV – Barto Gold

- Resource / Reserve definition
- High grade
- Near term cashflow potential

**Aries** - 80% Earn in Joint Venture - Surveyor Resources Pty Ltd<sup>2</sup>

- EIS - WA Government co-funded drilling completed. Assays in progress
- Historical drilling of 12m @ 4.51g/t

**GPN** - 80% Earn in Joint Venture - Surveyor Resources Pty Ltd<sup>2</sup>

- Extension of the Golden Pig Mine (640 K0z)
- Golden Pig Underground working extend towards Altan Tenements.

## Corinthia North

**Glen Innes**  
80% Earn in Joint Venture - Surveyor Resources Pty Ltd<sup>2</sup>

- Altan Drilling in 2019 successfully discovered mineralisation North of the Corinthian Mine
- Follow up drilling 2021

**Paddocks** - 80% Earn in Joint Venture - Surveyor Resources Pty Ltd<sup>2</sup>

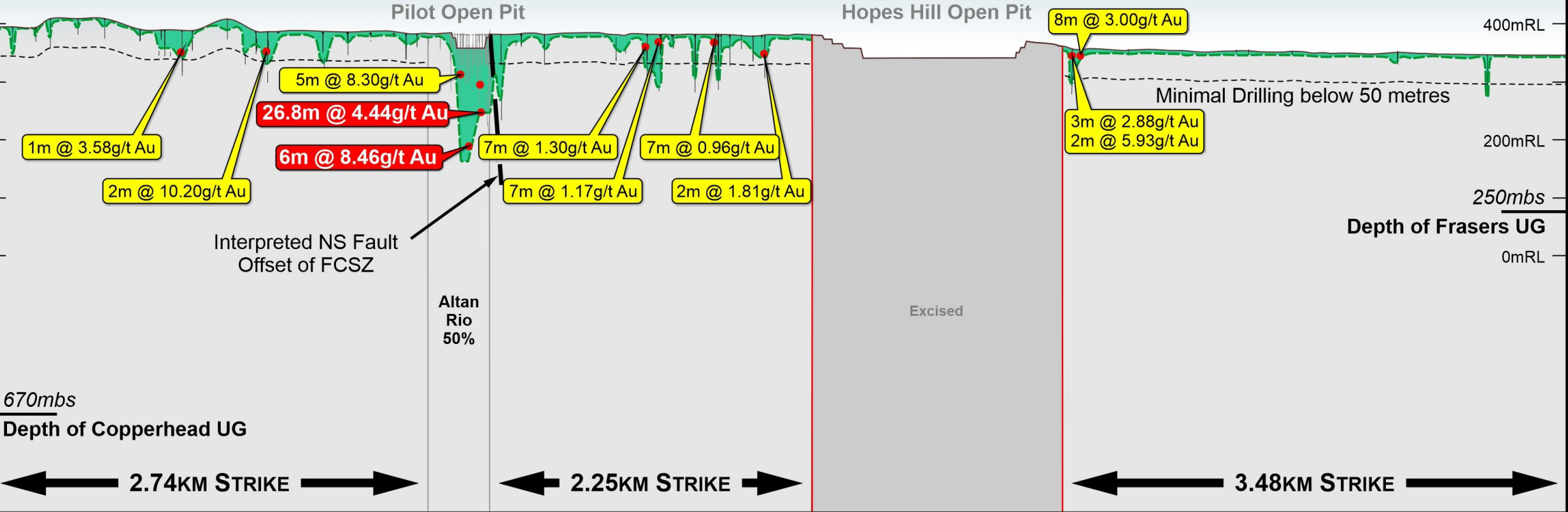
JV Terms:

1. [www.altanrio.com/news/pilot-exploration-mining-agreement/](http://www.altanrio.com/news/pilot-exploration-mining-agreement/)
2. [www.altanrio.com/news/17924/](http://www.altanrio.com/news/17924/)

# FCSZ LONG SECTION: VERY FEW DRILL HOLES +50M

## FCSZ Long Section Hopes Hill Tenements

(vertical exaggeration x3.8)





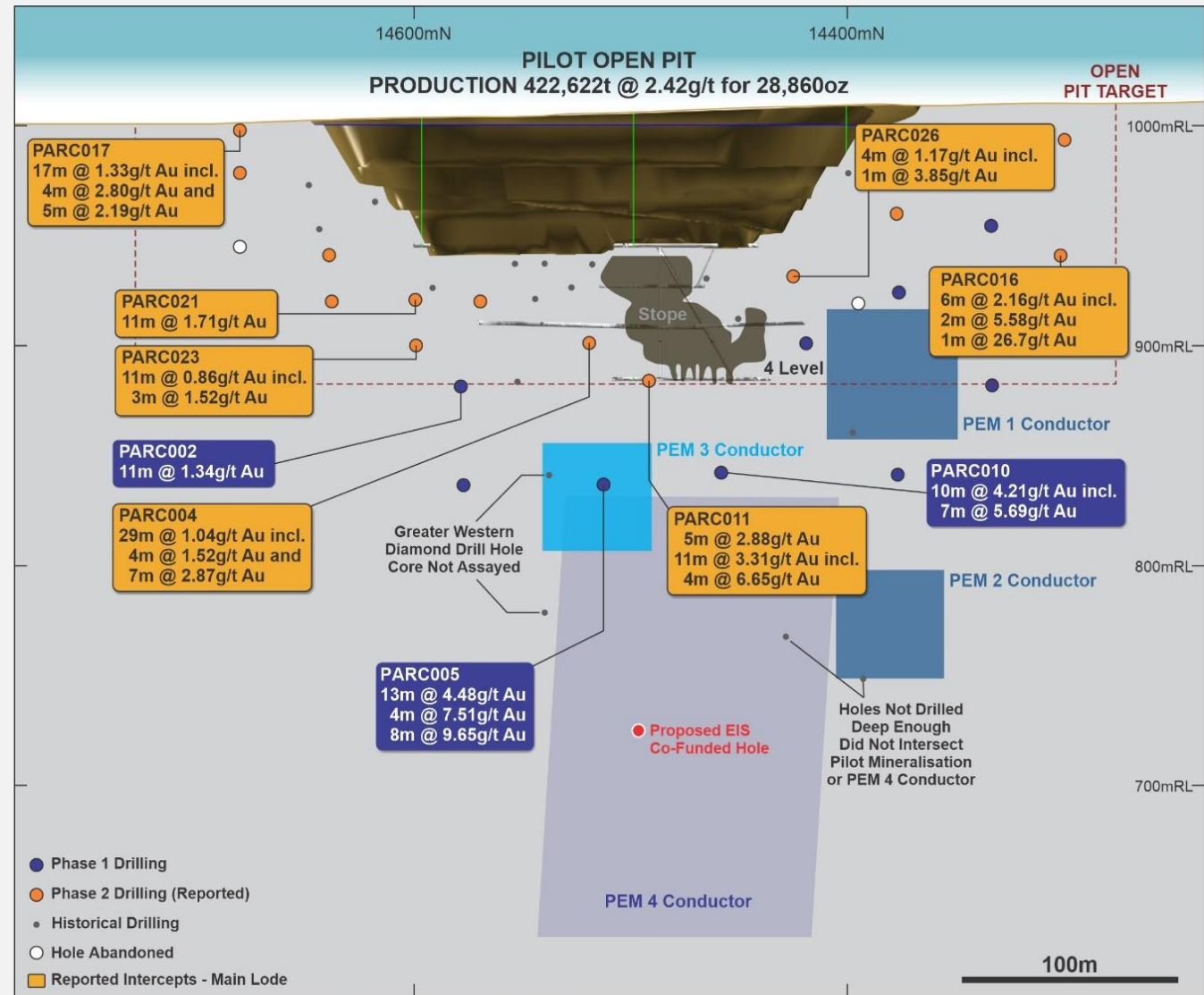
# PILOT: GOLD EXTENSIONS CONFIRMED BELOW MINE

## INITIAL RC PROGRAM (10 holes)

- Assay results confirmed High Grade gold mineralisation at depth:
  - PARC010: 10m grading 4.21 g/t from 182m, including 7m @ 5.69 g/t
  - PARC005: 12m grading 4.41 g/t from 160m, 4m grading 7.51 g/t from 176m, including 1m @ 19.14 g/t, 8m grading 9.65 g/t from 199m including 5m @ 13.93 g/t
- Results confirm the near vertical dip of the mineralising system with up to three +1g/t gold zones within the mineralised envelope

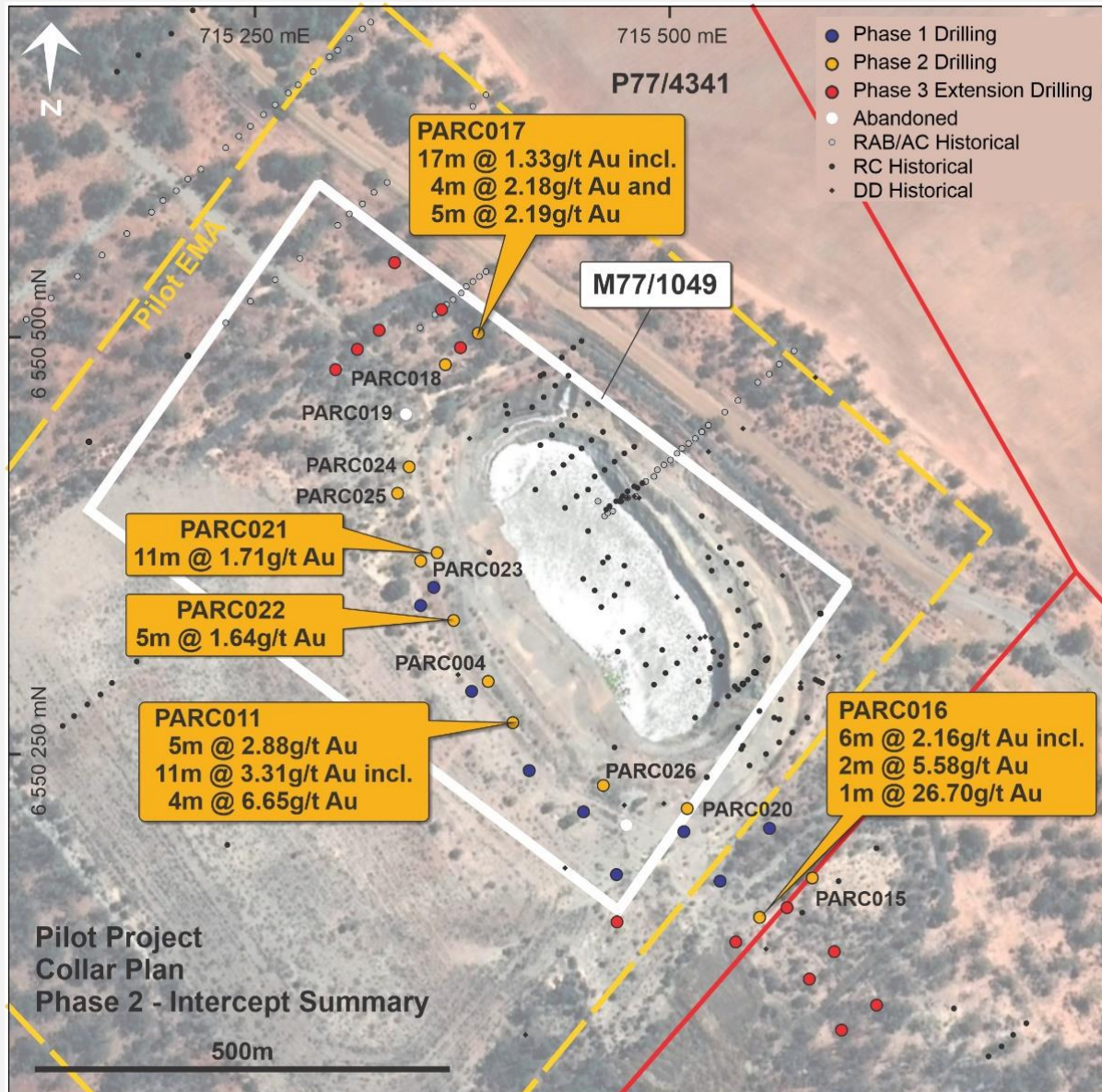
## PHASE 2 RC PROGRAM (9 holes)

- High Grade gold mineralisation further confirmed at depth:
  - PARC004: 7m @ 2.87g/t from 140m within a broad gold anomalous zone of 29m @ 1.04g/t, and
  - PARC011: 4m @ 6.65g/t from 159m within an overall intercept of 11 m grading 3.31g/t, and
  - PARC021: 6m @ 2.32g/t from 138m within an overall intercept of 11 m grading 1.71 g/t.



Pilot Long Section – Open Pit & Underground Targets

# PILOT: STRIKE EXTENSIONS TO MINE CONFIRMED



- Phase 2 Drilling Program (5 RC holes for 734m) targeted strike extensions north (PARC017) and south (PARC016) of the existing pit. Mineralisation confirmed with intercepts of:

- PARC017:** 17m @ 1.33g/t from surface

Mineralisation interpreted to be associated with a splay off the main trend of the Pilot mineralisation. Significance and extent of this mineralised zone is unknown.

- PARC016:** 1m @ 26.70g/t from 70m within broad gold anomalous zone of 9m @ 3.15g/t, 6m @ 2.16g/t from 53m

Mineralisation interpreted to be extensions to the main trend of the Pilot mineralisation and to be open along strike to the south

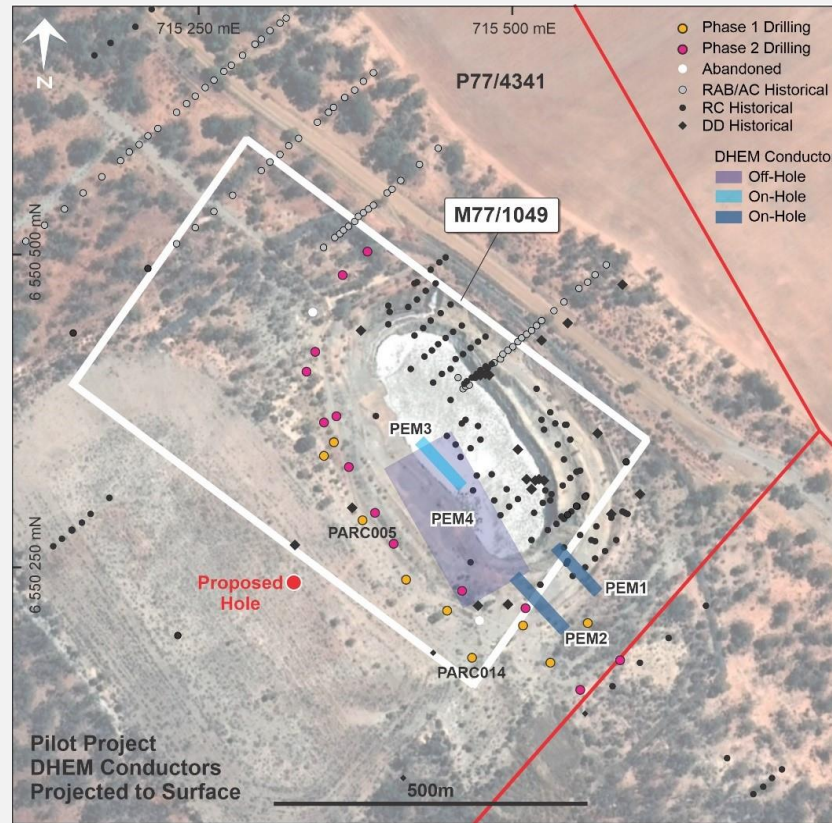
- Phase 3 RC drill program targeting Pilot strike extensions completed with assay results pending.
- Moving Loop EM geophysical survey to be undertaken to evaluate extensions of the Pilot mineralisation along strike to the north and south



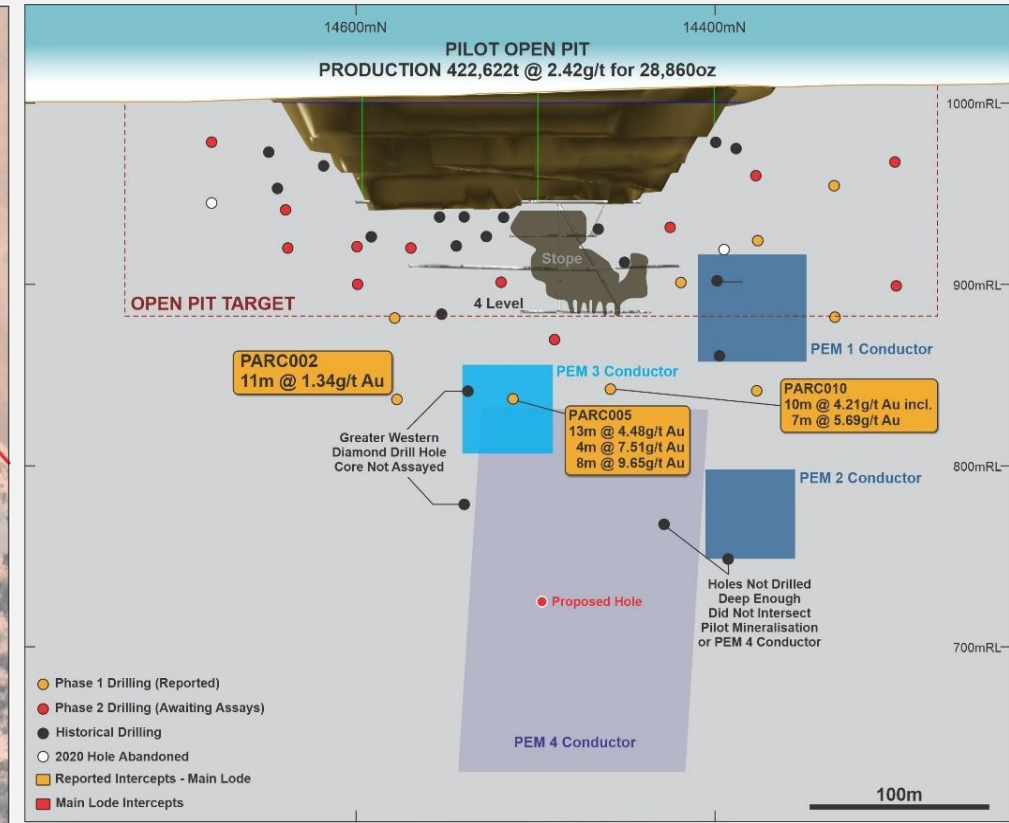
# PILOT: SIGNIFICANT EXPLORATION OPPORTUNITY

## Downhole EM (DHEM) Identifies Potential For Extensions to High Grade Mineralisation

- Identifies on-hole conductor (PEM 3) in PARC005 coincident with reported mineralisation of 13m @ 4.48 g/t from 159m.
- Identifies significant off-hole conductor (PEM 4) at depth below PARC005.
- PEM 4 conductor interpreted to be associated with sulphide rich zone intersected in PARC005 with reported mineralisation of 8m @ 9.65 g/t from 199m.



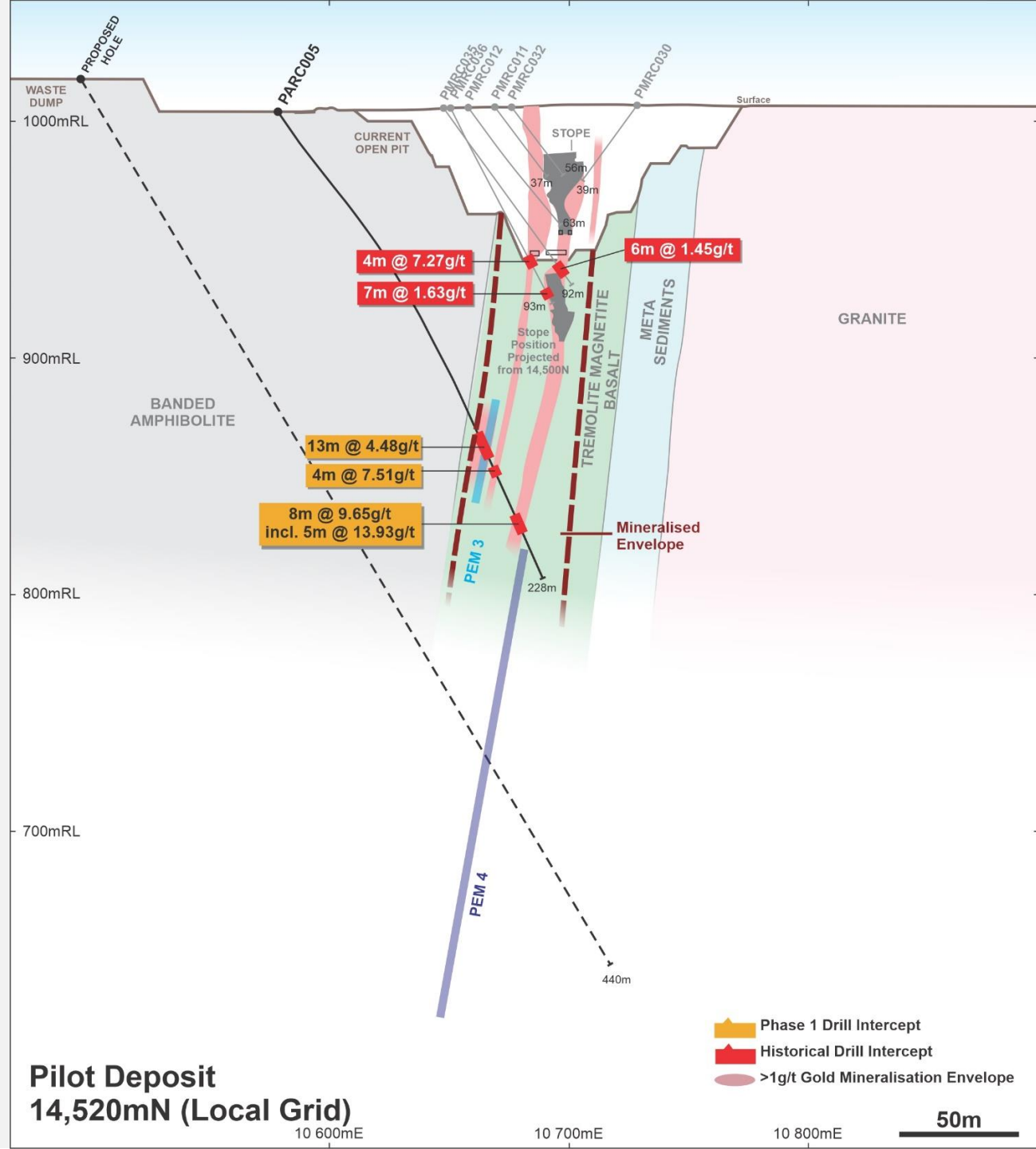
Drill Collar Plan with DHEM Conductors projected to Surface.



Pilot – Longitudinal Section

# PILOT: NEAR-TERM DRILLING CAMPAIGNS

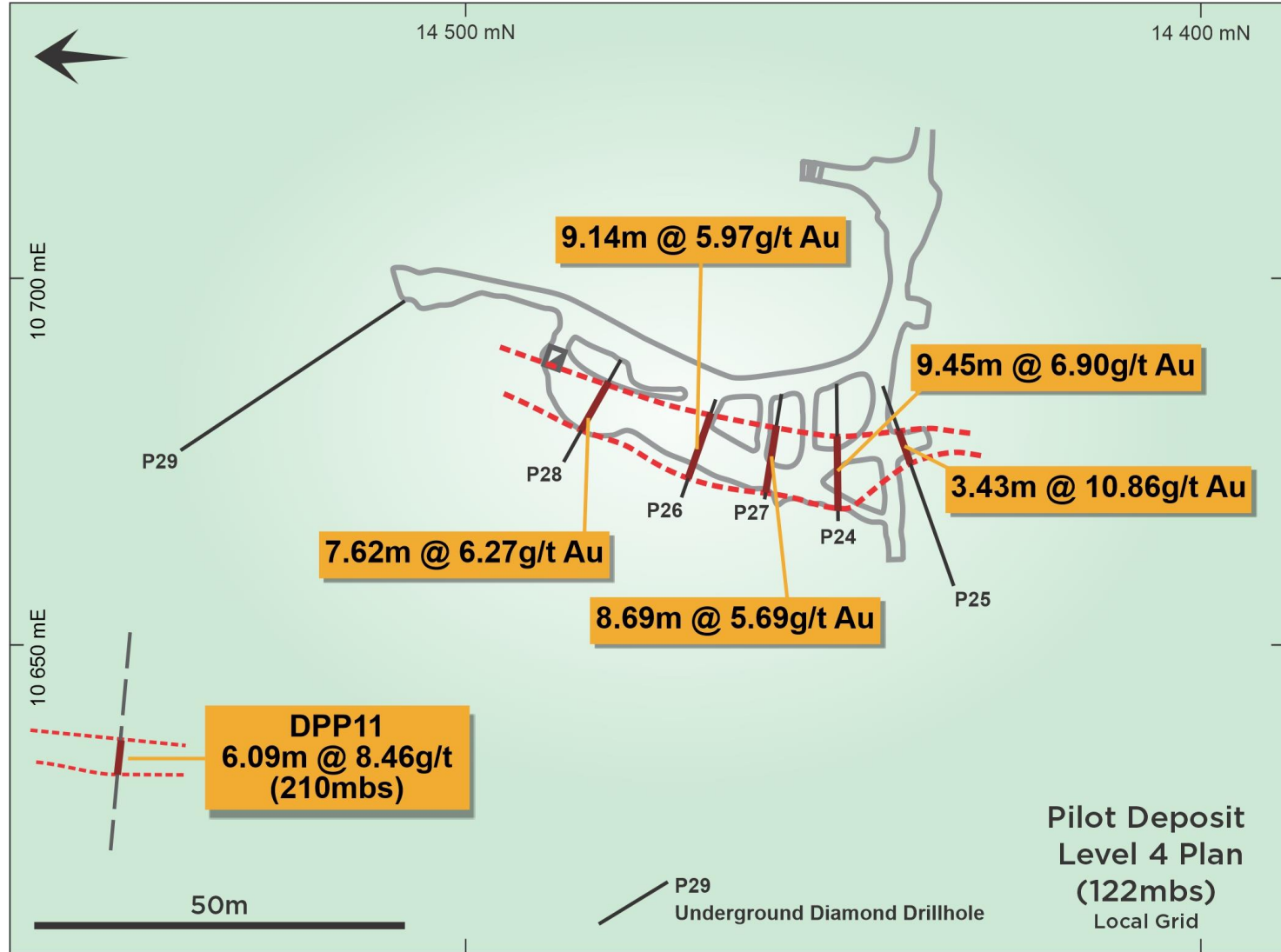
- A two-hole diamond drill program targeting the PEM 4 conductor is planned to commence in late-July/early-August.
- The two holes are co-funded by WA Government's EIS program
- Drill program is designed to evaluate a modelled strong "off hole" DHEM conductor at Pilot.
- Gold mineralisation at Pilot occurs within a highly sheared tremolite, chlorite, magnetite volcanic sequence. Individual mineralised lodes can vary in width from 1 to 12 metres and be traced over a 250 metre strike length.
- Confirmation of a new mineralised zone identified by DHEM will greatly enhance the overall prospectivity of the Pilot area and potential extensions to the north and south.





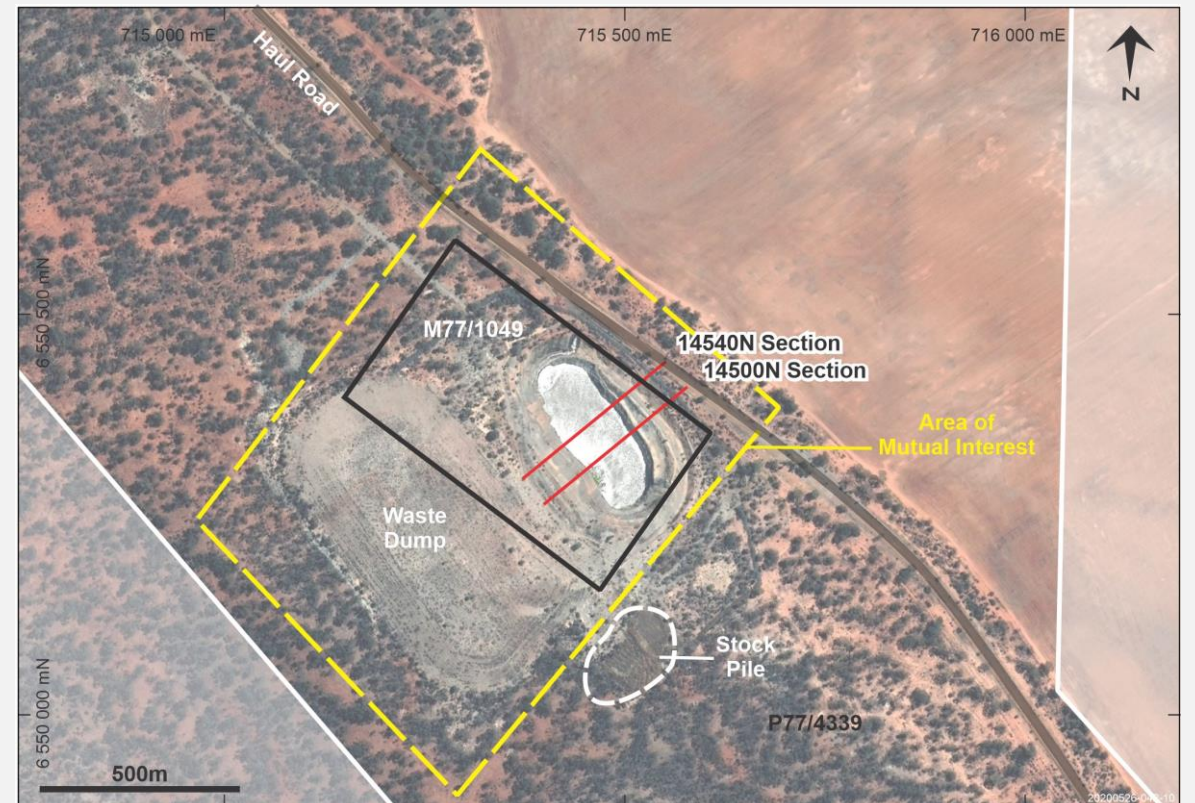
# Pilot: Underground & Open Pit Mine Last mined 1994 - Au ~ 350/oz

- Historical production (open pit – 1994): 0.56 Mt @ 3.03 g/t for 54,554 oz Au.
- Mineralisation occurs in three lode systems, West, Main and East, which merge and split along strike.
- Open pit mining was completed to 65 m below surface, with stopes immediately below pit floor estimated to be 15 m in width and 40 m in length.
- Underground sampling and drilling by Greater Western Consolidated (c. 1961) determined mineralisation extended to depths of 150 m below surface (Troy Resources, 1994).



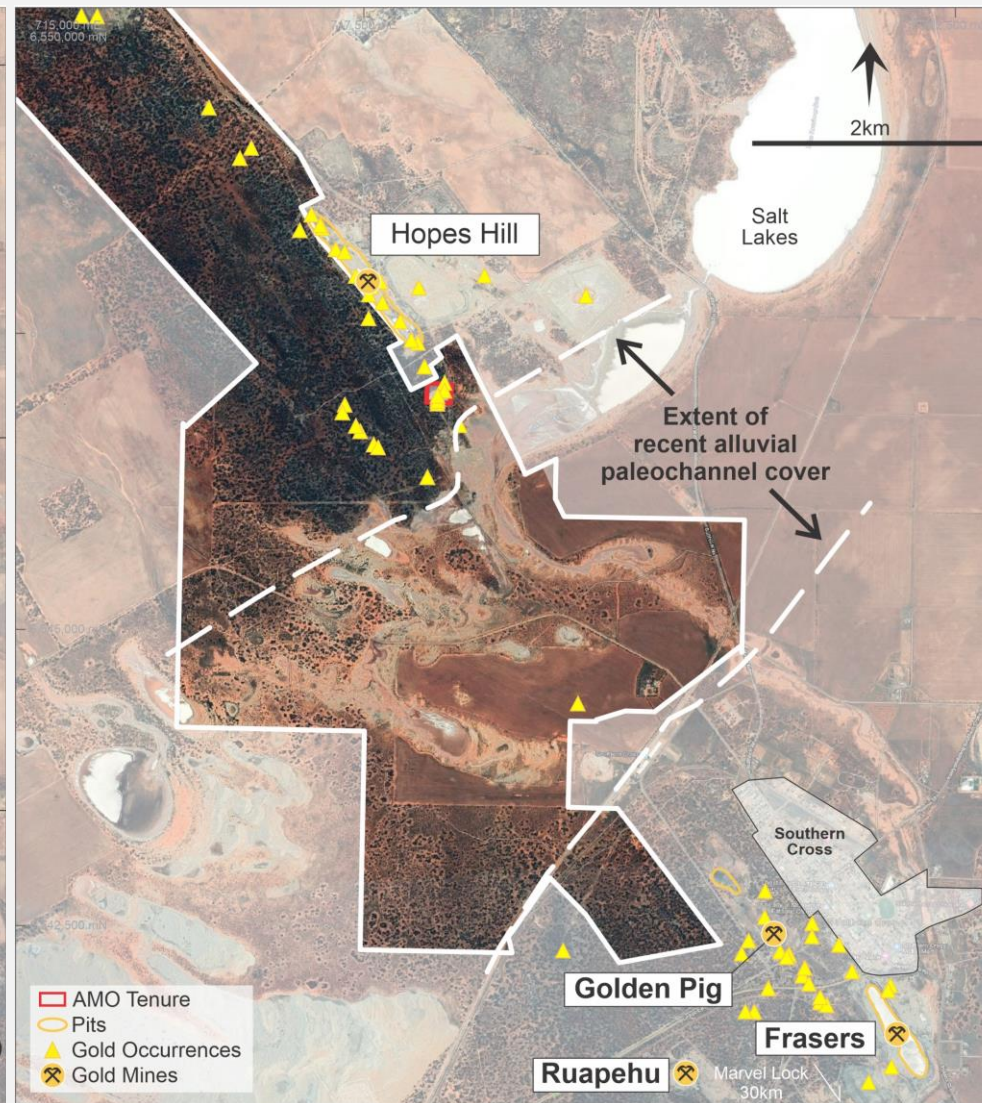
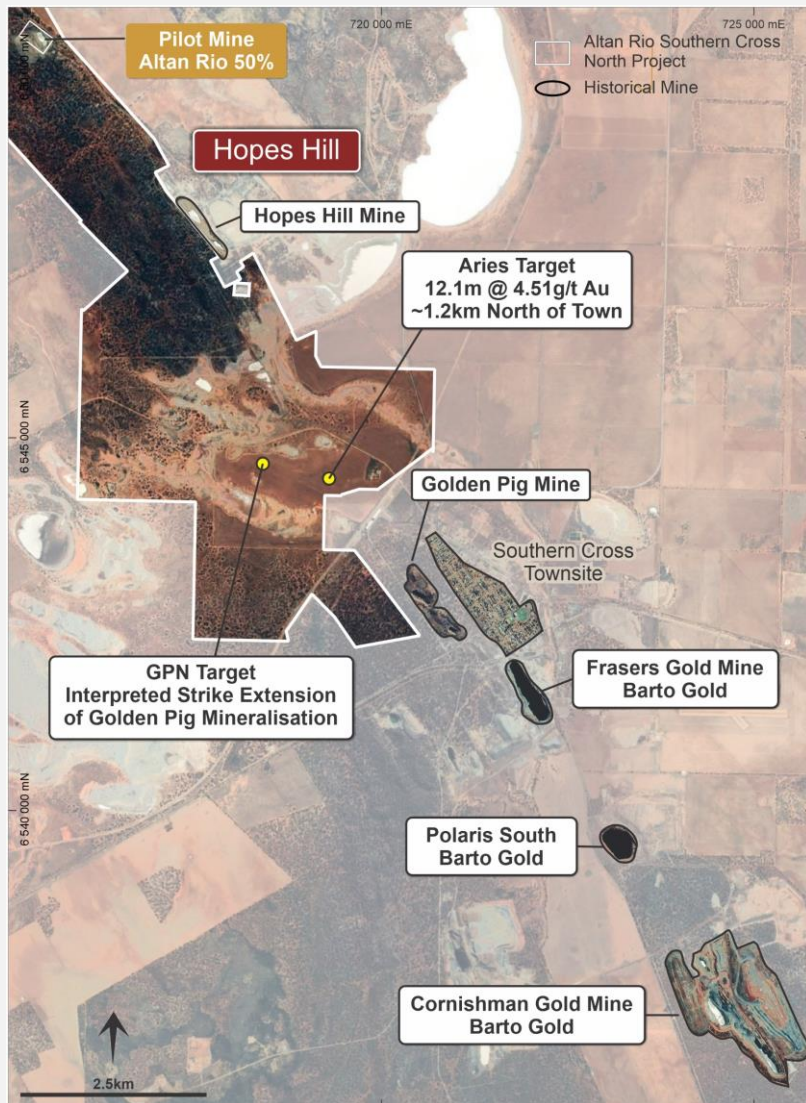
# PILOT: CASHFLOW TO FUND EXPLORATION

- Pilot mine provides potential for near-term cashflow to fund significant drilling of entire Shear Zone Southern Cross to Bullfinch ~ 30 km
- Joint mining agreement with Barto Gold, owner of nearby Marvel Loch milling facility which is currently undergoing a major upgrade - economic trucking distance ~ 40km





# GOLDEN PIG NORTH & FRASERS EXTENSION



- 3km gap in drilling between three Major Gold Mines – Hopes Hill mine, Golden Pig mine & Frasers mine
- Targets include the Northern strike extension of the Frasers mine trending under the Lake Koorkoordinate salt lake along with the continuation of the Golden Pig trend into the SW corner of the tenement package.
- The Fraser/Golden Pig mineralised complex can be traced north using both the aeromagnetic and existing drill data directly into Altan Rio Tenements.
- The Aries prospect is considered to have similar characteristics to the mineralisation observed at Golden Pig

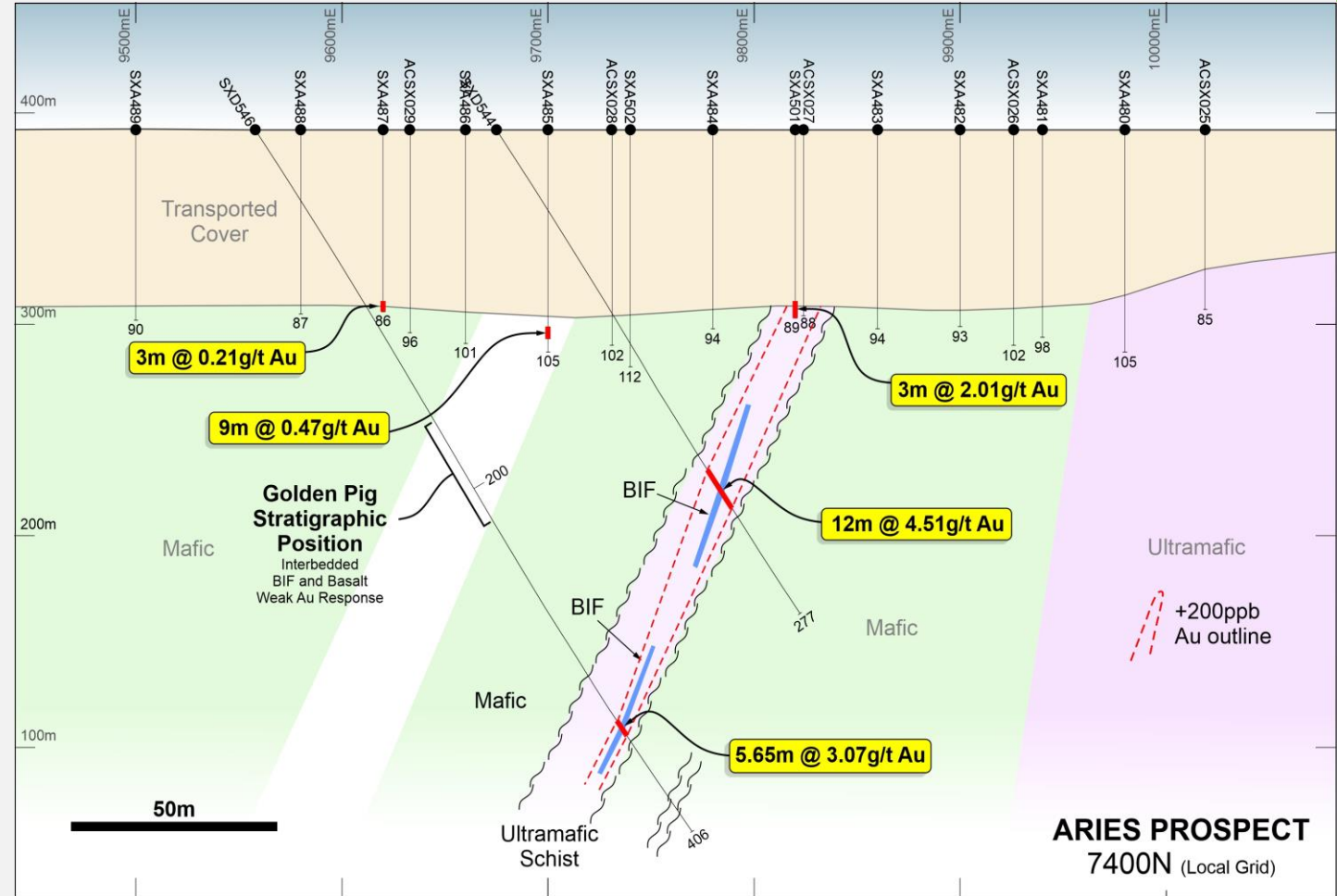


# ARIES: DIAMOND DRILLING CAMPAIGN

- Two, 400m diamond holes at Aries to follow up historical diamond drilling of **12m @ 4.51g/t Au** have been completed
- Holes co-funded by WA Government's EIS program
- Core processing, logging and assaying in progress

## HISTORICAL DRILLING

- Regional aircore drilling on 400m x 80m with infill to 200m x 40m spacing defined a 1,000m x 400m gold in bedrock gold anomaly (>0.1 g/t Au) beneath deep (50-100m) transported cover under agricultural lands.
- A five-hole diamond drilling program targeted the anomaly - best intercept of **12m @ 4.51g/t Au** from **201m** (SXD 544) highlighting potential of the area





# Aries Co Funded Diamond Drilling

Altan Rio Minerals have safely and successfully completed two 400m+ diamond drillholes (ARD001 408.5m E.O.H. & ARD002 401.9m E.O.H.) following ten days of round-the-clock drilling at the Aires Prospect north of Southern Cross, WA.

Technically, drilling successfully tested the target with excellent core recoveries and orientation surveys which will enable valuable and accurate structural measurement to guide future drill targeting.

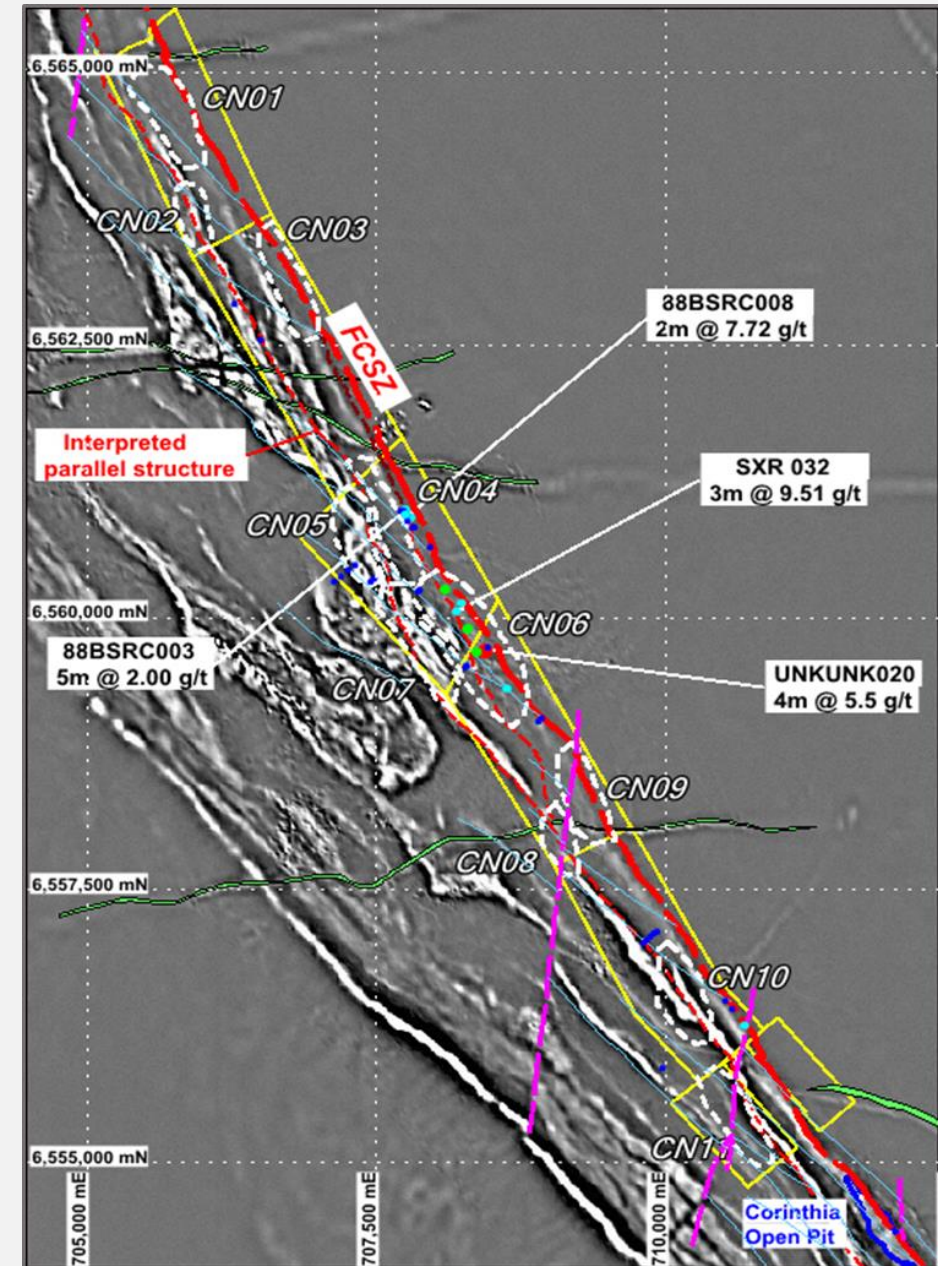
Initial geological observations reveal both Aires holes successfully intersected targeted Banded Iron Formations (BIFs) which have been associated with gold mineralisation in nearby/neighbouring gold-producing deposits (Golden Pig). Further observations reveal the presence of quartz diopside veining with proximal amphibole and pyrrhotite sulphide alteration assemblages developed in places.

PVC linings are prepared for Downhole Electro-Magnetic surveying planned to map out conductors and improve geological knowledge while drill core continues to be logged and prepared for laboratory assaying in coming weeks.



# REGIONAL GEOLOGY: NORTHERN TENEMENTS

- Covers 11.5km of the FCSZ.
- Several structures, subparallel to the FCSZ, identified using geophysical and geochemical datasets.
- All structures considered highly prospective for gold with strong auger geochemical gold anomalism and near surface drill intersections.
- 12 discrete geophysical and/or geochemical targets have been identified (CN01-CN12).
- CN06 - structural complexity/disruption of magnetic units evident in the aeromagnetic image / significant near surface drill intercepts:
  - 3m @ 9.51g/t from 48 meters in drill hole SXR032 and 4m @ 5.5g/t from 18m in drill hole UNKUNK020.
- CN04 - interpreted magnetic destruction adjacent to the FCSZ with drill intercepts of :
  - 2m @ 7.72g/t from 53m in drill hole 88BSRC008 and 5m @ 2.0g/t from 23m in drill hole 88BSRC003.





# SIGNIFICANT ACHIEVEMENTS IN A SHORT TIME

**Feb 2019:**

Listing transferred to Tier 2 NEX (from TSX Venture Exchange Tier 2 Company)

**Nov 2019:**

Kerry Griffin & James Harris appointed as Directors

**June 2020:**

Exploration & mining agreement with Tianye SXO Gold Mining

**Oct 2020:**

Closes private placement to raise \$C1.5m

**March 2021:**

High grade gold extensions confirmed below historic Pilot mine

**April 2021:**

David Talbot appointed as Strategic Advisor – North America.

**June 2021:**

Diamond drilling completed at Aries prospect Assay Results due September 2021

**July 2021:**

Phase 3 RC drill program targeting Pilot strike extensions completed

2019

2020

2021

**May 2019:**

Paul Stephen appointed as CEO

**April 2020:**

Enters JVA with Surveyor Resources to acquire up to 80% interest in Surveyor's wholly owned Southern Cross North project

**Sept 2020:**

RC drilling confirms gold mineralisation potential at Glen Innes and Hopes Hill South Prospects

**Nov 2020:**

Commences drill program at Pilot targeting extensions to mineralisation

**March 2021:**

DHEM geophysical survey completed at Pilot noting significant gold mineralisation

**April 2021:**

Keith Ross appointed as Vice President of Mining Operations. Greg Wilson appointed as Altan Rio's key geological consultant

**July 2021:**

Phase 2 drilling identifies strike extensions to gold mineralisation at Pilot



# THE INVESTMENT OPPORTUNITY

The background image shows a mining operation in a dry, hilly landscape. A large, white and red drilling rig is the central focus, with its mast extended upwards. Several white trucks are visible, some with 'IMPACT DRILLING' written on them. Workers in orange safety gear are positioned around the equipment. The terrain is rocky and sparsely vegetated under a clear blue sky.

1. Strategic landholding in a top 5 Australian gold production province

2. Numerous defined drill-ready exploration targets

3. Major opportunity to identify additional high-grade gold

4. Strong management to oversee project development





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