### Mt Fisher - Mt Eureka Project Update



#### "850km<sup>2</sup> ground position in one of the least explored greenstone belts in the prolific Yilgarn Craton"

26 October 2021



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#### **Exploration Results**

The information in this report that relates to previous Exploration Results, was either prepared and first disclosed under the JORC Code 2004 or under the JORC Code 2012 and has been properly and extensively cross-referenced in the text to the date of original announcement to ASX. In the case of the 2004 JORC Code Exploration Results and Mineral Resources, they have not been updated to comply with the JORC Code 2012. Images of grade shells do not represent an Exploration Target nor a Mineral Resource and should not be construed as such.

#### **Resource Statements**

The information in this report that relates to gold Mineral Resources for the Mt Fisher project was reported to the ASX on 11 July 2018 (JORC 2012). Rox confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 11 July 2018, and that all material assumptions and technical parameters underpinning the estimates in the announcement of 11 July 2018 continue to apply and have not materially changed.

# Highlights



Sokm<sup>2</sup> ground position in one of the least explored greenstone belts in the prolific Yilgarn Craton

Targeting orogenic gold mineralisation and strata-bound VMS style mineralisation

VMS prospectivity identified through extensive project review

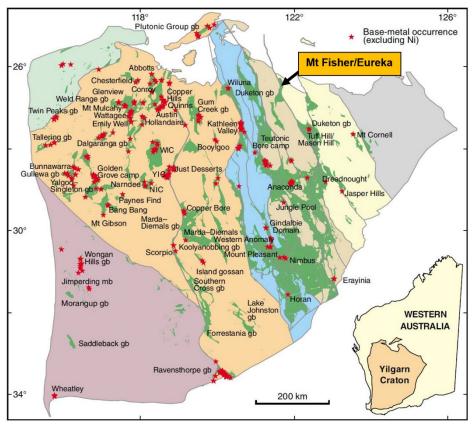
Immediate work programs Aircore drilling, RC drilling and high resolution airborne magnetic survey

Mt Fisher Project includes a Gold Mineral Resource of 1.0Mt @ 2.7 g/t Au for 89,000 ounces of gold <sup>(1)</sup>

Strong potential to add gold resources

# **Project Location - Yilgarn Craton**

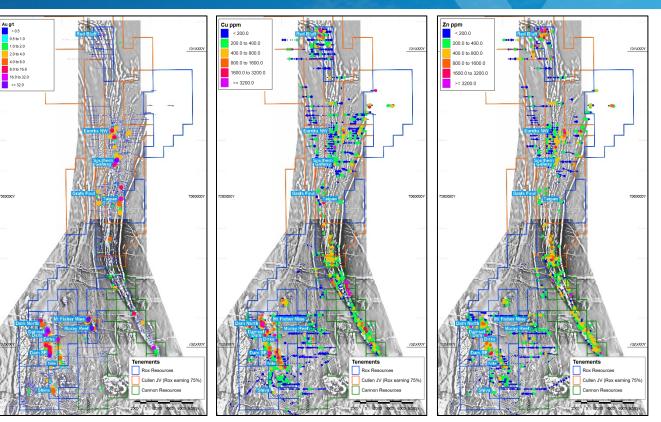
- Mt Fisher Mt Eureka Project is located in the Eastern Goldfields
   Superterrane of the Yilgarn Craton
- Yilgarn Craton is one of the World's great gold provinces
- The project's landholding is 850km<sup>2</sup> in one of the least explored greenstone belts in the prolific Yilgarn Craton



## **Overview**



- The greenstone belt hosts extensive orogenic gold mineralisation
- More recently the belt has been recognised as showing potential for VMS Cu-Zn style deposits. Zones of strong multielement geochemical anomalism in regolith (including Au, Cu and Zn) were identified in several areas throughout the project.
  - The project has strong potential to host significant sized gold deposits and economic VMS mineralisation
- Strong potential to increase the Mt Fisher Gold Resource
- Several areas have been identified as drill ready targets
- Work planned for Q4 2021 includes AC drilling, RC drilling and high resolution aeromagnetics



Au, Cu, Zn occurrences at Mt Fisher – Eureka over 1VDTMI

# **Planned Work Programs**



#### **Key Objectives**

**1. Test drill ready targets:** Demonstrate potential for know gold occurrences to host significant Au deposits a depth

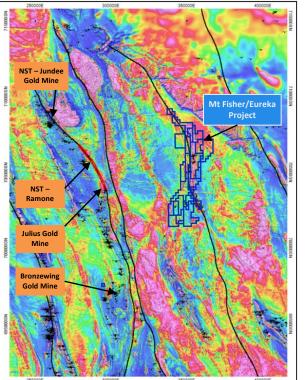
2. Systematic exploration: Aircore drilling over new target areas (growth fault, untested VTEM targets)

**3. Target generation:** Build the project pipeline by identifying new targets (aeromagnetics, geological review)

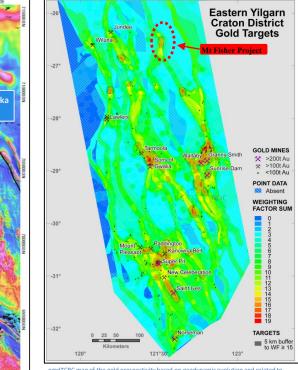
- Immediate work streams to achieve objectives include:
  - Internal project scale review and target generation (COMPLETED)
  - Reconnaissance aircore drilling over Mt Fisher growth fault (IN PROGRESS)
  - Geophysical review and geologic interpretation of Mt Fisher to be undertaken by Terra Resources (IN PROGRESS)
  - Regional scale review on Mt Fisher Mt Eureka greenstone belt to be undertaken by Dr Dennis Gee (IN PROGRESS)
  - 4,000m RC program to test priority drill ready gold targets (TO COMMENCE IN NOVEMBER)
  - Project wide high resolution (50m spaced) aeromagnetic surveying (TO COMMENCE IN NOVEMBER)

# Mt Fisher - Eureka Regional Setting

- Major orogenic Au deposits occur proximal to crustal scale faults in settings where there has been favorable mineralising fluid migration and a gold deposition mechanism
  - The Mt Fisher-Mt Eureka project area straddles the Kurnalpi – Burtville Terrane boundary, with the boundary transecting the greenstone belt (Hootanui Shear)
- This major NNW trending structure is potentially a deep-seated gold plumbing conduit
  - Such features are linked to the occurrence of nickelsulphide and gold deposits
- Bends/kinks along these regional structures, together with NNE to ENE structures intersecting these major regional structures, provide high priority target areas
- Strong potential to host major gold deposits



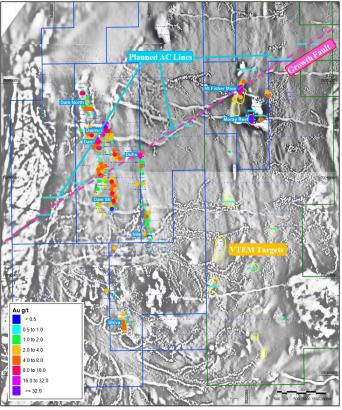
Major NNW regional structures in the North Eastern Goldfields provide principal fluid conduits for mineralisation



pmd\*RC map of the gold prospectivity based on geodynamic evolution and related to hydrothermal alteration of the eastern Yilgarn Craton overlain with known deposit locations. The map has successfully predicted most of the known major gold deposits. (Czarnotaa K., Blewett R.S., Goscombe B.D., 2010. Predictive mineral discovery in the eastern Yilgarn Craton, Western Australia: An example of district scale targeting of an orogenic gold mineral system) **7** 

### **Mt Fisher Exploration - AC Drilling**

- Reconnaissance aircore drilling of 160 holes for 7,000m has commenced to test the intersection of a regional scale NE trending growth fault with favorable NNW trending stratigraphy
- The fault is interpreted as a possible feeder conduit, syngenetic with Au and VMS style mineralisation at the Mt Fisher Mine and Dam-Damsel-Dirk Au trend



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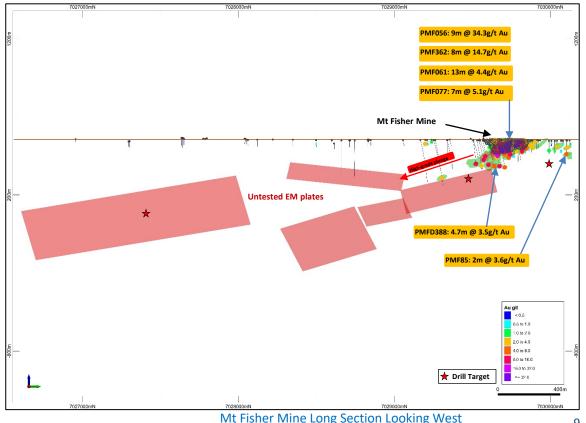
### **Mt Fisher - Mine**



- Past production of 30,000 ounces of gold at 4.3 g/t Au<sup>(1)</sup>
- Existing resource of 230kt @ 3.6g/t Au for 26,000oz (1)
  - Gold mineralisation at the Mt Fisher Mine is strata bound, being contained within the sulphide facies chert horizon. The ore body is considered to be of syngenetic exhalative origin
  - Ground EM by Rox in 2011 defined several conductive anomalies that many relate to high-grade gold mineralisation. The conductors appear to represent an along strike, down plunge extension of mineralisation from the Mt Fisher mine. The size of the EM anomaly to the south of the Mt Fisher mine indicates potential for a larger body of mineralisation. The conductors remain untested by drilling
  - Best results from the Mt Fisher Gold mine are summarised below:<sup>(1)</sup>
    - PMF056: 9m @ 34.34g/t Au from 67m including 4m @ 74.25g/t Au from 70m:
    - PMF362: 8m @ 14.72g/t Au from 13m including 4m @ 27.4g/t Au from 16m; and
    - PMF061: 13m @ 4.41g/t Au from 80m including 3m @ 11.13g/t Au from 83m

Notes: (1) Refer ASX announcement 26 October 2021

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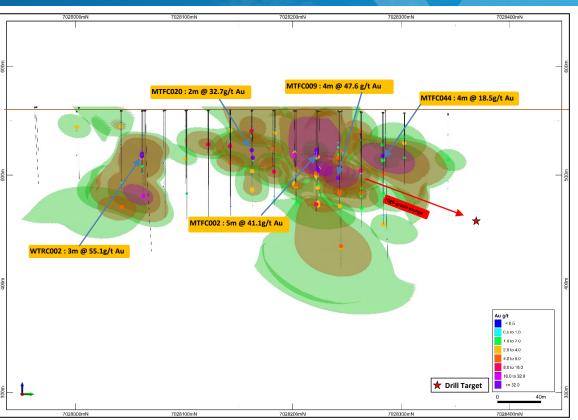
### **Mt Fisher - Wagtail Prospect**



- The Wagtail prospect (also known as Moray Reef) is a typical Archaean narrow vein quartz hosted gold reef system
- Historic production from the deposit between 1949 and 1952 produced a reported 2,384 ounces at an average grade of 66 g/t Au  $^{(1)}$
- Existing resource of 30kt @ 7.5g/t Au for 7,700oz (1)
- The reef strikes north-south, with an sub-vertical to steep easterly dip
- High-grade mineralisation plunges moderately north
  - Best results from the Mt Fisher Gold mine are summarised below: <sup>(1)</sup>
    - MTFC002: 5m @ 41.13g/t Au from 44m, including 3m @ 67.94g/t Au from 45m
    - WTRC002: 3m @ 55.14g/t Au from 47m, including 2m @ 81.6g/t Au from 47m; and
    - MTFC020: 2m @ 32.69g/t Au from 42m

(1) Refer ASX announcement 26 October 2021

Notes



Wagtail Long Section Looking West

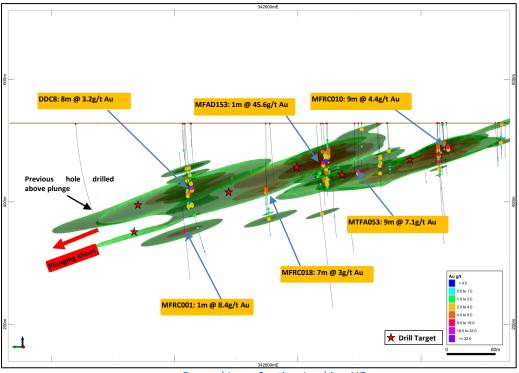
### **Mt Fisher - Damsel Prospect**



- Existing resource of 770kt @ 2.2g/t Au for 55,400oz <sup>(1)</sup>
- Most drilled in oxide with minimal bedrock testing carried out along the Dam-Damsel-Dirk corridor
  - Primary gold mineralisation strikes north-northwest, dips west and plunges moderately north
  - Best results from the Damsel Prospect are summarised below:
    - MTFA053: 9m @ 7.12g/t Au from 76m, including 4m @ 12.44g/t Au from 76m;
    - MFAD153: 1m @ 45.63g/t Au from 70m; and
    - MFRC010: 9m @ 4.43g/t Au from 54m, including 2m @ 10.24g/t Au from 57m

(1) Refer ASX announcement 26 October 2021

Notes:

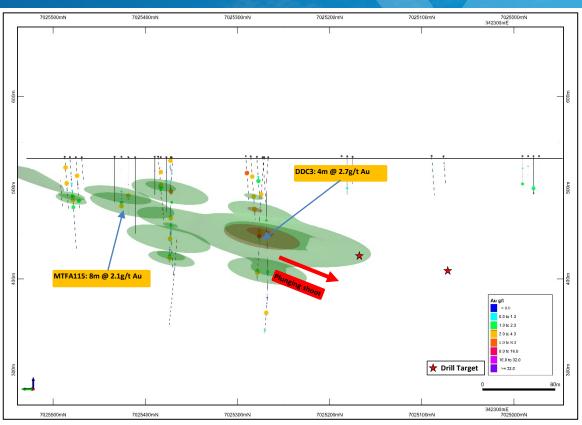


Damsel Long Section Looking NE

### **Mt Fisher - Dam South Prospect**



- Dam is defined by a ~2.5km gold in regolith anomaly
  - Mostly drilled in oxide with minimal bedrock testing carried out
    - Historical drilling at depth has mostly focused drilling directly beneath the regolith anomaly
  - Overall primary plunge of the system is not understood
    - Primary gold mineralisation strikes northnortheast, dips west, possible southerly plunge
  - Drilling potential down-plunge targets is warranted
  - Further review required at Dam to identify more potential down-plunge targets



#### Dam South Long Section Looking E

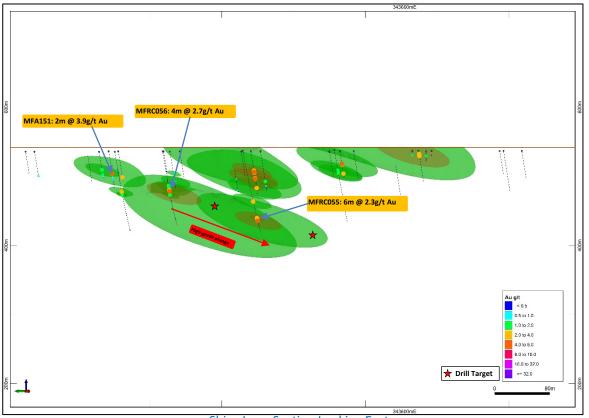
### **Mt Fisher - Shiva Prospect**



- The Shiva Prospect is located to the south and generally along strike of 8km south the Dam-Damsel-Dirk prospects
  - The gold in regolith anomaly has a broad strike length of over 1 km and overlies a complex zone of mafic extrusive and mafic intrusive lithologies
  - Primary gold mineralisation strikes north-northwest, dips west and plunges moderately south
  - Best results from the Shiva prospect are summarised below: <sup>(1)</sup>
    - MFRC055: 6m @ 2.3 from 114m, including 1m @ 6.01g/t Au from 119m;
    - MFRC056: 4m @ 2.74g/t Au from 66m, including 1m @ 7.09g/t Au from 68m; and
    - MFA151: 2m @ 3.88g/t Au from 37m, including 1m
      @ 7.26g/t Au from 37m

(1) Refer ASX announcement 26 October 2021

Notes:



# **Mt Eureka Exploration**



- The Mt Eureka gold prospects are characterised by an anomalous gold zone of 15km of strike extent. The project area is host to multiple high-grade gold occurrences including; Southern-Galway, Grafs Find, Taipan and Eureka North-West for further exploration.
  - Drilling has been insufficient to date to understand the geological control to the mineralisation along strike and at depth

Further work is required to fully evaluate the potential of these areas

#### Southern-Galway

Mineralisation is possibly localised by an interpreted felsic intrusive and its bounding faults/shears. Best intersections include; 9m @ 7.08g/t Au from 116m, including 2m @ 28.32g/t Au from 120m, and 11m @ 3.3g/t Au from 83m including 2m @ 11.74g/t Au from 89m <sup>(1)</sup>

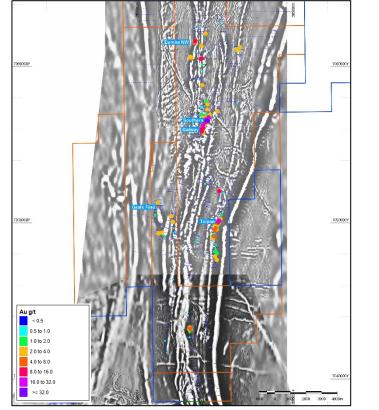
Taipan

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Hosted by the Taipan shear zone - the Taipan target area has a best drill intercept of 20m @ 2.28g/t Au from 100m, including 2m @ 9.85g/t Au from 102m. The mineralised system of quartz veining, pyrite and carbonate alteration is hosted by sheared mafic schists over a strike length of 700m <sup>(1)</sup>

#### Mt Eureka Northwest

Gold mineralisation is related to quartz veining and shearing in mafics associated with the granitegreenstone contact. Primary gold mineralisation strikes north-northeast, dips east and plunges moderately south



#### (1) Refer ASX announcement 26 October 2021

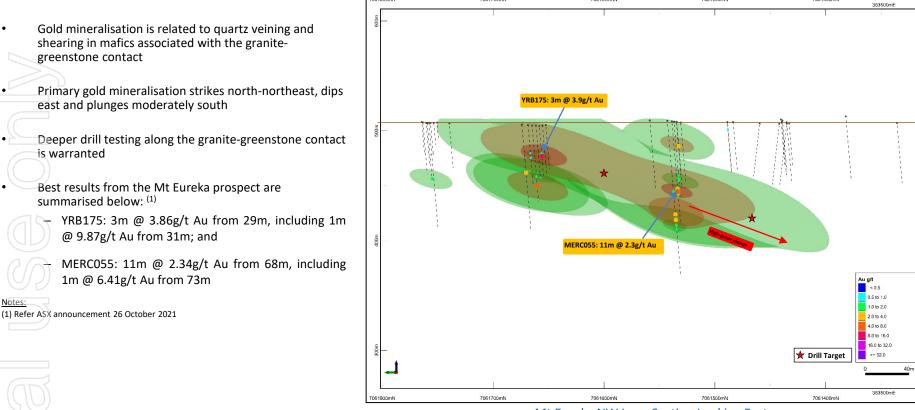
#### Mt Eureka gold prospect over 1VDTMI

### **Mt Eureka Exploration - RC Drilling**

is warranted

Notes

7061800mN



7061700mN

7061600mN

7061500mN

Mt Eureka NW Long Section Looking East

ROX RESOURCES

7061400mN

# **Mt Eureka - Red Bluff VMS**



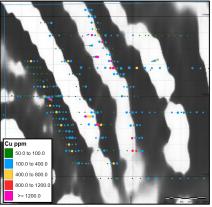
The norther section of the Mt Eureka area is characterised by a zone of repetitive sequences of thin UM hangingwall and sediment footwall

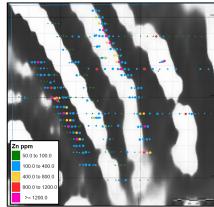
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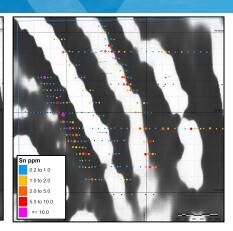
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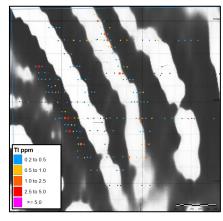
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- AC drilling by Rox identified strong VMS pathfinder multielements at Red Bluff (Cu, Zn, Sn and Tl)
- Two main target horizons where significant anomalism occurs are strata-bound within the sediment footwall lithologies
- Follow up drilling planned



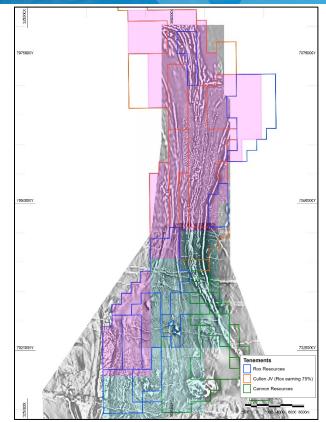






### **High Resolution Aeromagnetic Survey**

- 50m spaced AMAG survey to cover the western Mt Fisher tenements and the entire Mt Eureka package (shown in magenta hatching)
- Existing AMAG coverage is of very low quality over survey areas - 200m line spacing
- Designed to tie in with existing 50m coverage surveys (shown in blue hatching)
- 650km survey area
- Commencing November



# Highlights / Recap



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Mt Fisher Project includes a Gold Mineral Resource of 1.0Mt @ 2.7 g/t Au for 89,000 ounces of gold <sup>(1)</sup>

Strong potential to add gold resources





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