

# Exploring and Developing Mineral Prospectivity in Eastern Australia

**Victorian Gold Mining & Exploration Forum** 

21st February 2024 12:10 AEDT

Mr. Owen Greenberger - Head of Exploration

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Certain statements contained in this document constitute forward looking statements. Such forward-looking statements are based on a number of estimates and assumptions made by the Company and its consultants in light of experience, current conditions and expectations of future developments which the Company believes are appropriate in the current circumstances.

These estimates and assumptions while considered reasonable by the Company are subject to known and unknown risks, uncertainties and other factors which may cause the actual results, achievements and performance of the Company to be materially different from the future results and achievements expressed or implied by such forward-looking statements.

Investors are cautioned that forward looking information is no guarantee of future performance and accordingly, investors are cautioned not to place undue reliance on these forward-looking statements.



# **CORPORATE PROFILE**

# **Board & Management**



- Mr. James Chirnside
  - · Chairman, Managing Director



- Mr. Dean Turnbull
  - Non-Executive Director,
  - Founder, Geologist



- Mr. Richard Udovenya
  - Non-Executive Director, Lawyer

ASX Code	DTM
Shares on issue	~227m
Options & Performance	~13m
Market Capitalisation @ 0.013	~A\$3.2m

# Management

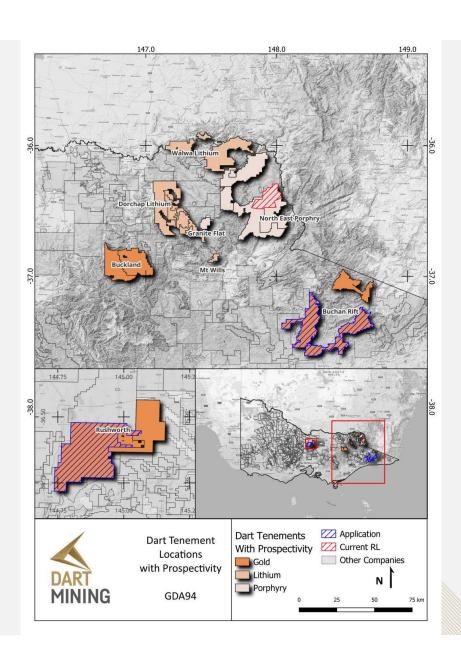
- Mr. Owen Greenberger
  Manager Exploration, Geologist
- Ms. Julie Edwards
  Co. Secretary, Accounting
- Mr. Tommy Ashley
  Manager Operations
- Ms. Aimee Coates
  Manager Business
- Mr. Brad Milne
  Manager Drilling



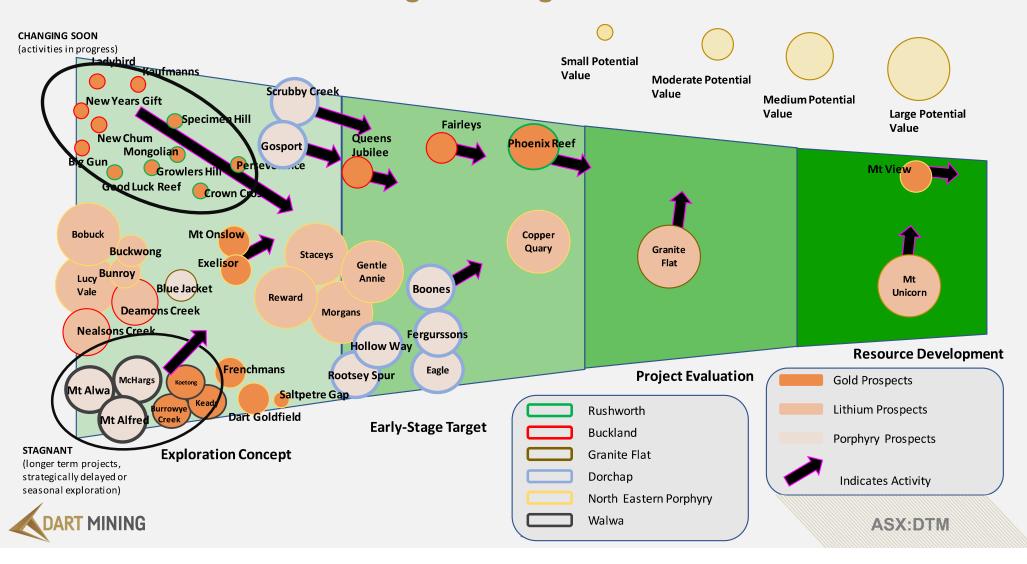
# **EXPLORATION FOOTPRINT**

- Significant landholding in Eastern Australia with ~7,000 km2 tenement area
- Rich in historic Gold and Tin mining, the area is largely unexplored in contemporary times
- Footprint includes:
  - 80+ Geological targets across 6 regions
  - 9 Historic Goldfields
  - >1,000 LCT Pegmatite dykes
  - 8 Au-Cu, Mo-Cu Porphyry targets
- Geographic focus on NE Victoria, Eastern Victoria and NSW (Lachlan Fold Belt)
- Diverse geological setting
  - Orogenic Au
  - · Porphyry (Bulk tonnage) Cu-Au, Mo-Cu-Ag
  - Li-Cs-Ta Pegmatites
- · Commodity exposures to Precious, Base and Critical minerals
- Established team with extensive experience in Lachlan Fold Belt Geology



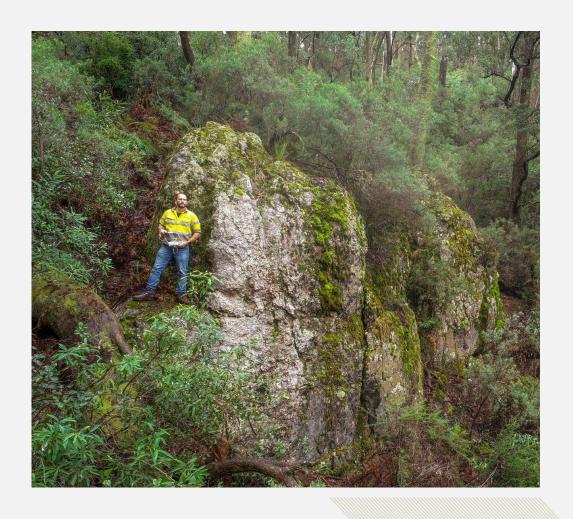


# PROJECT PIPELINE – Shifting to the right \*Not all prospects shown



# **Projects Review**

- Dorchap Li
- Rushworth Au
- Buckland Au
- Unicorn Mo, Cu, Ag





# **DORCHAP (Farm-in JV) Lithium Project - Summary**

### Location

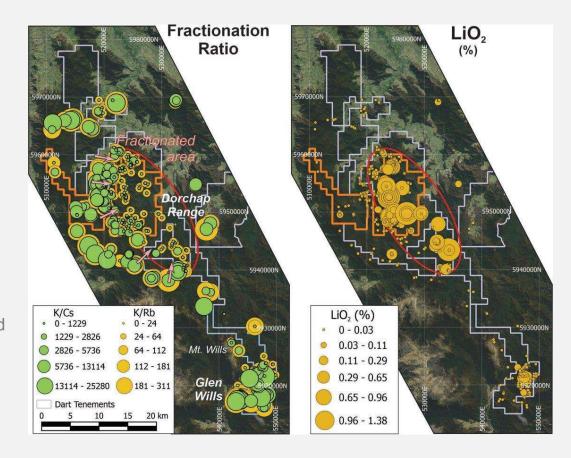
- Situated in the Dorchap Range, between the townships Eskdale & Glen Wills
- First mover land position over important project location

## **Style**

- Pegmatite hosted Lithium-Caesium-Tantalum (LCT) mineralisation
- Spodumene & Petalite mineralisation, with localised lepidolite & amblygonite

#### Scale

- 20x12km zone of highly-fractionated pegmatites identified from surface sampling
- >1,000 LCT pegmatite dykes across the dyke swarm
- Multiple Li mineralised pegmatite dykes identified, with Li hosted primarily by spodumene







All work fully funded through Joint Venture with SQM

Sociedad Quimica y Minera

# **DORCHAP** (Farm-in JV) Lithium Project - Highlights

## Results released 13/9/23

# **Drilling**

- MIDDH009
  - 10.0m @ <u>1.08%</u> Li<sub>2</sub>O from 313m
    - Including 7.0m @ <u>1.38%</u> Li<sub>2</sub>O from 315m
- MIDDH010
  - 2.0m @ 1.07% Li<sub>2</sub>O from 302m
    - Including 1.0m @ <u>1.38%</u> Li<sub>2</sub>O from 303m
- MIDDH002
  - 16.75m @ <u>0.21%</u> Li<sub>2</sub>O (Eagle Dyke)
    - inc. 0.81m @ 1.2% Li<sub>2</sub>O
- MIDDH005
  - 3.01m @ **0.26%** Li<sub>2</sub>O (Fergussons Dyke)
    - inc. 0.62m @ 1.63% Li<sub>2</sub>O

# **Rock Chips**

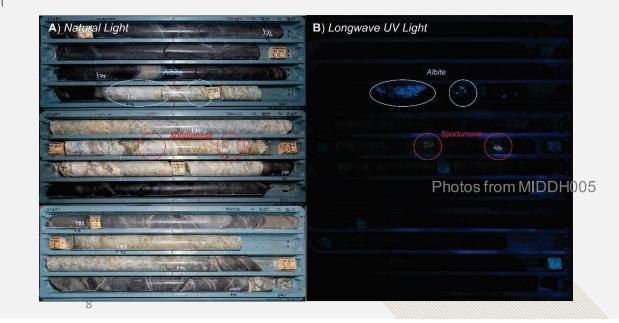
10m @ 1.38% Li<sub>2</sub>O (rockchip sampling)

10m @ 1.22% Li<sub>2</sub>O (rockchip sampling)

10m @ 0.95% Li<sub>2</sub>O & 20m @ 0.33% Li<sub>2</sub>O (Eagle Dyke)

16m @ 0.32% Li<sub>2</sub>O, (Bluejacket Dyke)

4m @ **12.3% spodumene** & 1.13% Li<sub>2</sub>O (Gosport)





# **DORCHAP (Farm-in JV) Lithium Project**

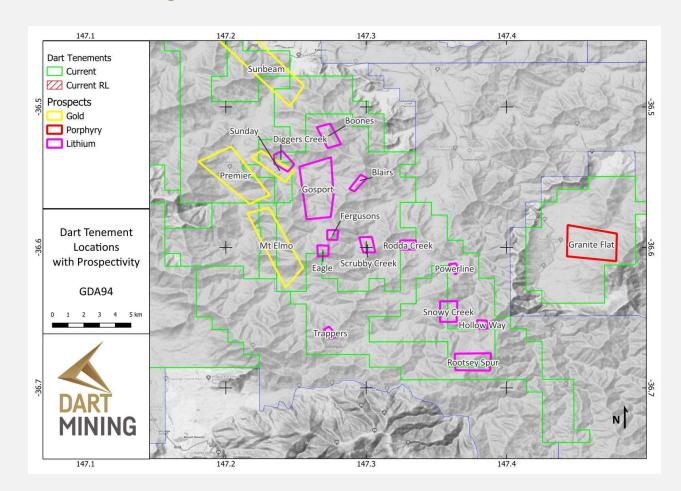
## **Future Work**

#### **Field Activities**

- Continued ground truthing of LiDAR generated Pegmatite targets across the project
- LiDAR targeting generated 1000's of potential targets, with over 100 targets tested in so far in 2024.
- Sampling results imminent.

## **Drilling**

- Work Plan application in progress to allow for the drill testing of the Gosport Target
- Gosport target represents a zone of several close spaced pegmatites with some of the best Li<sub>2</sub>Oresults
- Drilling planned for 2024, if Lithium sentiment improves.





# **RUSHWORTH Goldfield - Summary**

#### Location

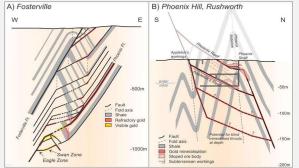
 Dart Mining tenements cover the entire Rushworth Goldfield, located in Central Victoria, 45km northeast of the Fosterville Gold Mine

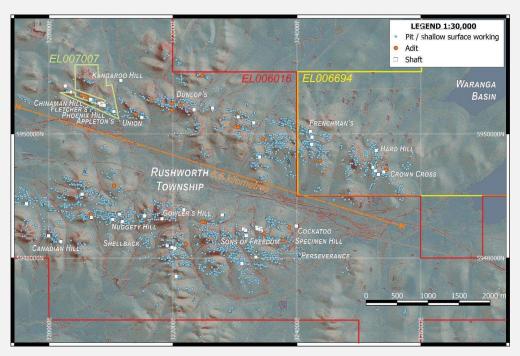
# Style

 Rushworth mineralisation is of an orogenic epizonal quartz-vein style that is interpreted to be genetically similar to the nearby Central Victorian high-grade gold systems

### Scale

- Recent LiDAR processing has identified >4,600
  (shallow) historic workings along some 14km of strike
- Vastly under-explored





Location of historic workings identified in LiDAR imagery, with key historic prospects and Dart Mining tenements identified. Even at this broad scale, structural trends and the orientation of multiple reef systems is apparent—Dart Mining ASX April 2023

Structural model of Fosterville (A) and the Phoenix Hill – Chinaman's Gully area, Rushworth (B), displaying structural and mineralisation characteristics typical of Central Victorian orogenic gold mineralisation. In particular, mineralisation along limb-thrust faults, is notable of most significant Central Victorian goldfields (Castlemaine, Bendigo, Ballarat, Fosterville, Rushworth). Fosterville model (A) modified from Volleger et al. (2020). Phoenix Hill cross-section compiled from geological mapping completed by Jones & Turnbull (2014) and Boucher (2016). Figure modified from Dart Mining ASX November 2020.

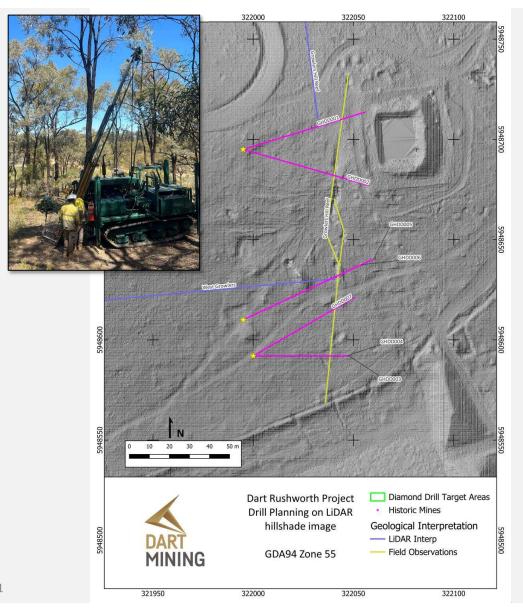


# **RUSHWORTH Goldfield - Summary**

## **Drilling**

- Drilling has commenced at Rushworth targeting the Growlers Hill Reef.
- 3 Structural Targets
  - East West Thrust Hosted Quartz Veins
    - Bedding and hinge related faulting
  - North South Veins
    - Structural accommodation of Lachlan Origin subduction roll back
  - Saddle Reefs
    - Bendigo style hinge related mineralisation
- Drilling is targeting the North South Growlers Hill Reef dilation zone, and the intersection of the Thrust Hosted Quartz Veins of West Growlers

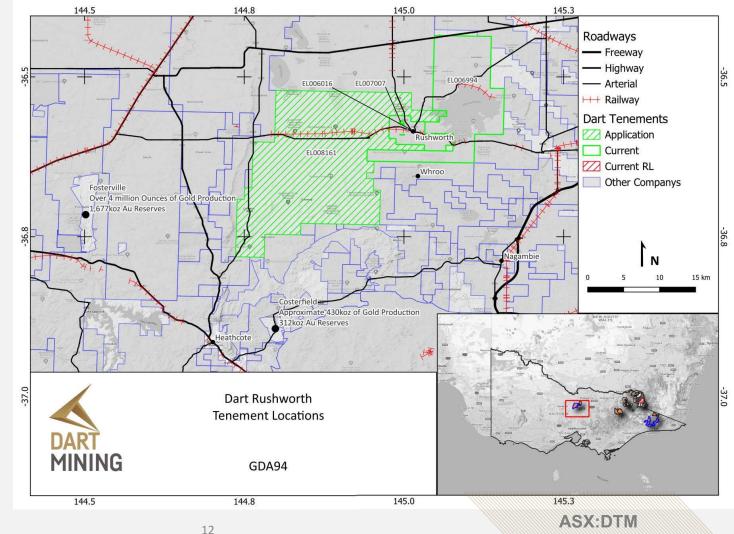




**RUSHWORTH Goldfield - Summary** 

# Regional

- EL8161 application in progress, highest ranked of competing applications over the area.
- Contains the extension of:
  - Rushworth Goldfield,
  - Historic Whroo Goldfield,
    - Containing the Historic Balaclava Mine, and
  - Extension of the Moormbool Fault,
    - a major north South structure associated with Costerfield Mine
- Region well serviced with infrastructure





# **GRANITE FLAT Cu-Au Project- Summary**

#### Location

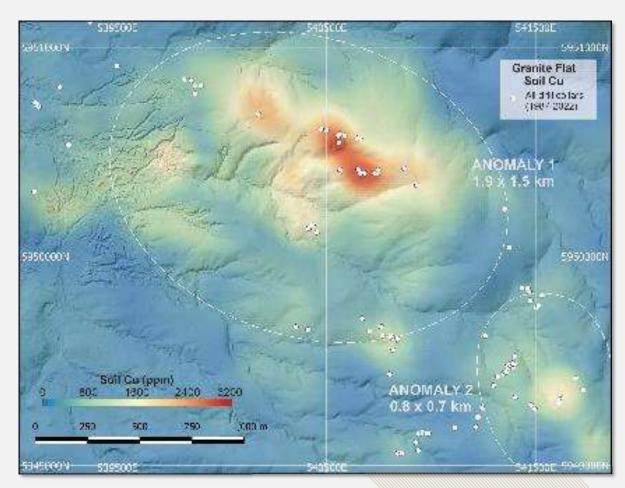
 Situated adjacent to the Omeo Highway, between Mitta Mitta & Glen Wills

### **Style**

- Two mineralisation styles identified:
- Intrusion-related Cu-Au long intervals of low-grade
  Cu-Au
- Hydrothermal overprint Narrow silica-sulphide veins of high-grade Au-Cu-Ag ± Pb, Zn

#### Scale

- 1.8x 2.4km soil Cu-Au footprint, additional anomalies open in all directions
- Significant remanent magnetism anomalies identified north of project footprint
- IP chargeability and resistivity anomalies identified across 1.5 × 2.0km footprint
- Significant intervals of Cu-Au mineralisation intersected up to 180m below surface





# **GRANITE FLAT Cu-Au Project- Highlights**

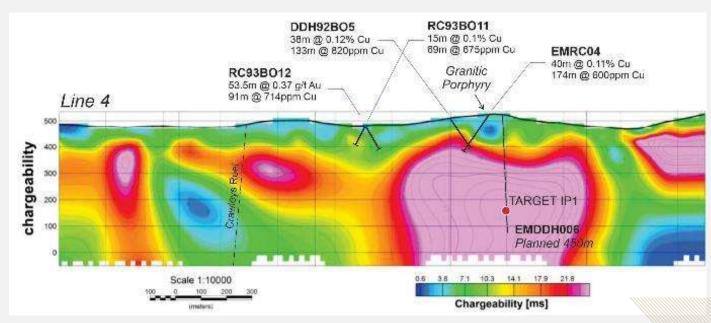
## **Results Highlights**

### Gold

- 19m @ 9.39 g/t Au, including 3m @ 41.1 g/t from 28m
- 4m @3.23 g/t Au, including 1m @ 7.84 g/t from 15m

## Copper

- 19m @ 0.61% Cu, including 3m @ 1.52%
- 28m @ 0.35% Cu, including 9m @ 0.73% from 7m
- 40m @ 0.11% Cu including 19m @ 0.18% Cu from 35m
- 138m @ 0.09% Cu from surface (entire hole)
- 111m @ 0.07% Cu from surface





# **UNICORN Mo-Cu-Ag Porphyry - Summary**

#### Location

 Situated approximately 20km to the South of Corryong, and approximately 30km west of Mt Kosciusko on the Victorian-NSW Border

### Style

- Large rhyolite intrusive with similar geology to the giant Climax & Henderson Molybdenum mines in the USA
- But also contains significant Copper and Silver

#### Scale

 Total Resource: 203Mt JORC (2004<sup>2</sup>) Measured + Indicated + Inferred Resource at 0.06% MoEq<sup>1</sup>

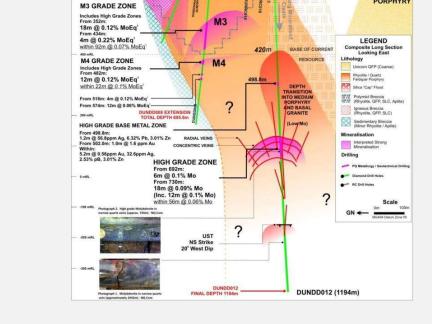
#### Mineralisation

- Open at Depth and Laterally below 1200m
- · Expand initial oxide molybdenum metallurgical studies

**Note 1:** <u>Moly bdenum Equivalent Assumptions</u>: Based on relative value (with reference to the average price) of each metal in the 2 months June 22<sup>nd</sup> to August 23<sup>rd</sup> 2012 listed on the LME for Moly bdenum and Copper and average price for the same period for Silver as follows:

- Mo US\$25,871 per tonne
- Cu US\$7515.7 per tonne
- Ag US\$27.6 per ounce

The Moly bdenum Equivalent grade should not be interpreted as actual moly bdenum grade as the conversion ratios vary with the volatile prices of Mo, Cu and Ag. However, it is the Company's opinion that elements considered here have a reasonable prospect to be recovered.



<sup>&</sup>lt;sup>1</sup> MoEq (ppm) = Mo (ppm) + (Cu (ppm) / 3.44) + (Ag (ppm) x 34.3) (Dart Mining ASX September 2012)

Scoping Study Pit Shell



UNICORN

<sup>&</sup>lt;sup>2</sup> A Resource Update using a new geological model that defines the extent of Oxide, Transition and Sulphide zones is required due to identified variation in the metallurgical recovery for Oxide Mo & Cu zones. Resource update planned during the PFS phase.

# **Northern Porphyry targets**

#### Location

 Surrounding Unicorn, additional porphyry targets exist within 10km radius

## **Style**

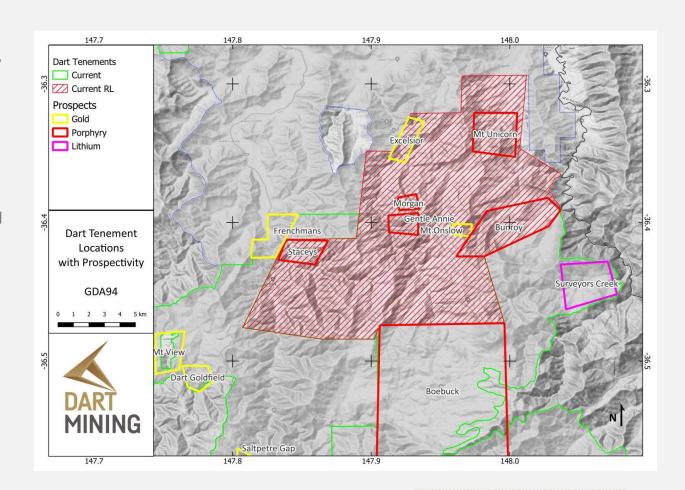
- Development of the Unicorn System.
- Large Silica Cap, and Unidirectional Solidification Textures (UST's) indicate overpressureing of the system and development of multiple, more developed intrusive stocks

#### Scale

Unknown, but holds significant potential.

#### **Mineralisation**

 Holds the potential for further developed intrusives moving from Mo dominated to Au-Cu potentials similar to NSW.





# **BUCKLAND Goldfield – Summary**

#### Location

- Part of 6.9Moz<sup>1</sup> Rutherglen-Beechworth-Harrietville gold district
- Primary + Alluvial production
- Buckland shows extensive shallow primary workings (>100) but low primary production

#### Scale

- 17.5km strike identified to date from ~7,500 surface samples
- · Multiple parallel structures identified
- Thick mineralisation intersected >180m below surface
- Mineralisation extends to over 10m width at surface and down hole

#### Style

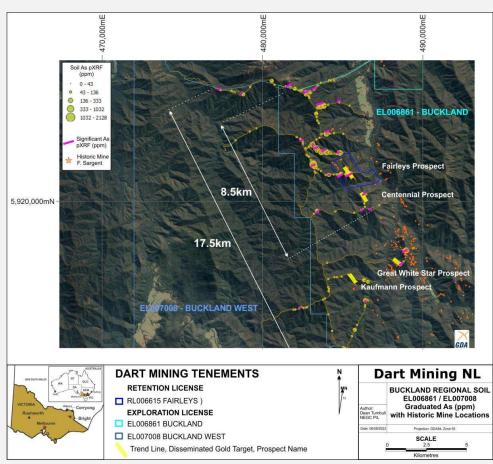
- Shear hosted, orogenic gold system
- Multiple mineralization styles evident
  - · Vein-hosted high-grade gold
  - Broad zones of disseminated sulphide hosted gold

## Recent RAB Drilling Highlights<sup>2</sup> Fairleys Prospect

- 13m @ 4.82 g/t Au from 12m
  - incl 2m @ 11.6 g/t Au from 20m
- 11m @ 2.64 g/t Au from 28m
  - incl 3m @ 7.49 g/t Au from 29 m
- 10m @ 2.27 g/t Au from 4m
  - incl 2m @ 5.52 g/t Au from 7m
- 2m @ 4.70 g/t Au from 17m and 3m @ 2.62 g/t Au from 26m

 $Note 1. \ Historic production figures from: PHILLIPS G.N., 2010. \ Victorian Gold Province, Australia: A Contemporary Exploration Guide. \ \textit{GeoScience Victoria Special Publication}$ 





Buckland goldfield with graduated regional soil arsenic (As) level (ppm) with significant anomalies highlighted (magenta). Historic mine location data (red dots) from F. Sargent Historical Mining Activity layer (GeoVic;

 $https://earthresources.vic.gov.au/geologyexploration/maps-reports-data/geovic) for reference. \ Modified from \underline{Dart Mining ASX September 2019}$ 

# **WORK SCHEDULE 2024**

# **Priority Projects**

# Dorchap Lithium (Li)

- Continuation of Surface mapping sampling program
- Ground-truthing of LiDAR identified outcrop (~400)
- Diamond Drilling program planning underway for 2024
- Geochemical review and additional drill target identification

# Rushworth (Au)

- Initial 1,200m of Diamond Drilling across Growlers Reef & West Growlers
- Regional fieldwork across EL008161 upon grant
- 4,000m of additional drilling across multiple high priority targets

# **Other Projects**

# Northern (Corryong) Porphyries (Cu, Au, Mo)

Field Mapping and sampling of Gold targets

## Mt Unicorn (Mo, Cu, Ag)

Metallurgical review of historic bulk samples

### Walwa (Li)

Field mapping and sampling of Lithium targets

## **Buckland Valley** (Au)

- Field mapping and sampling across priority targets
- · Diamond Drilling program north of Fairley's ridge



# **OPERATIONAL IMAGES**













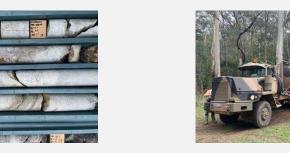
















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