



ESSENTIAL METALS

for a sustainable future

**Presentation to
the Annual
General Meeting
of
ESS Shareholders
15 December
2020**



Drilling at Juglah Dome

Forward looking statements and disclosures



Forward looking statements

This document may contain “forward-looking statements” and other forward looking information based on the Company’s expectations, estimates and projections as of the date on which the statements were made. This forward looking information includes, among other things, statements with respect to the Company’s business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, Mineral Resources and results of exploration. Generally, this forward looking information can be identified by the use of forward- looking terminology such as ‘outlook’, ‘anticipate’, ‘project’, ‘target’, ‘likely’, ‘believe’, ‘estimate’, ‘expect’, ‘intend’, ‘may’, ‘would’, ‘could’, ‘should’, ‘scheduled’, ‘will’, ‘plan’, ‘forecast’, ‘evolve’ and similar expressions. Persons reading this document are cautioned that such statements are only predictions, and that the Company’s actual future results or performance may be materially different. Forward looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward looking information. Forward looking information is developed based on assumptions about such risks, uncertainties and other factors, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future commodity prices; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward looking information. These and other factors should be considered carefully and readers should not place reliance on such forward looking information. Recipients of this document must make their own investigations and inquiries regarding all assumptions, risks, uncertainties and contingencies which may affect the future operations of the Company and the Company’s securities. The Company disclaims any intent or obligations to or revise any forward looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

Exploration Results & Competent Person Statement

Dome North Lithium Project: The information in this presentation that relates to lithium Mineral Resource for the Dome North Lithium Project was extracted from an announcement reported to ASX on 29 September 2020 (JORC 2012) titled “Dome North Lithium Project – Resource upgrade”.

Blair Nickel Mine: The information in this presentation that relates to nickel Mineral Resource for the Blair Nickel Mine was extracted from an announcement reported to ASX on 28 November 2013 (JORC 2012) titled “Blair Nickel Sulphide Mine Mineral Resource Statement”.

Blair - Golden Ridge Gold/Nickel Project: The information in this presentation that relates to exploration results was extracted from an announcement reported to ASX on 6 July 2020 titled “Golden Ridge – compelling gold targets”.

Juglah Dome Gold Project: The information in this presentation that relates to exploration results was extracted from an announcement reported to ASX on 28 August 2020 titled “Juglah Dome Project exploration commences”; 29 October 2020 titled “Juglah Dome drilling to commence in November” and 1 December 2020 titled “Drilling commences at Juglah Dome”.

Sinclair Caesium Mine: The information in this presentation that relates to exploration results was extracted from an announcement reported to ASX on 12 November 2020 titled “High grade caesium intersected at Sinclair”.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

This presentation has been approved by the Company’s Board of Directors.

an **essential**
part of your
investment
portfolio
because...

- **A diversified portfolio of advanced gold, lithium/caesium and nickel exploration projects with near-term focus on gold:**

- **Gold** Two highly prospective exploration projects near Kalgoorlie
- **Lithium/Caesium** 11.2Mt @ 1.21% Li₂O Mineral Resource + Sinclair Caesium Mine - Stage 1 completed generating significant cash & exploration continuing for more caesium
- **Nickel** including an established nickel sulphide mine with existing Mineral Resources 222,710t at 2.92% Ni

- **Well funded + experienced management with strong commitment to ESG principles.**

- \$4.7M cash at Bank (30 November 2020)
- Experienced Board and management team with proven discovery and development expertise
- A name that reflects what we stand for, namely finding and producing metals that are essential for a sustainable future, based on ESG principles.



Working on our next
discovery & development
opportunity

The right commodities in the right locations
Our **three main projects** are easy to access

GOLD

Golden Ridge & Juglah Dome 20km & 60km east-northeast of Kalgoorlie (2)

Kangan JV - Pilbara (3)

Acra JV & Balagundi JV - Eastern Goldfields; (2)

LITHIUM / CAESIUM

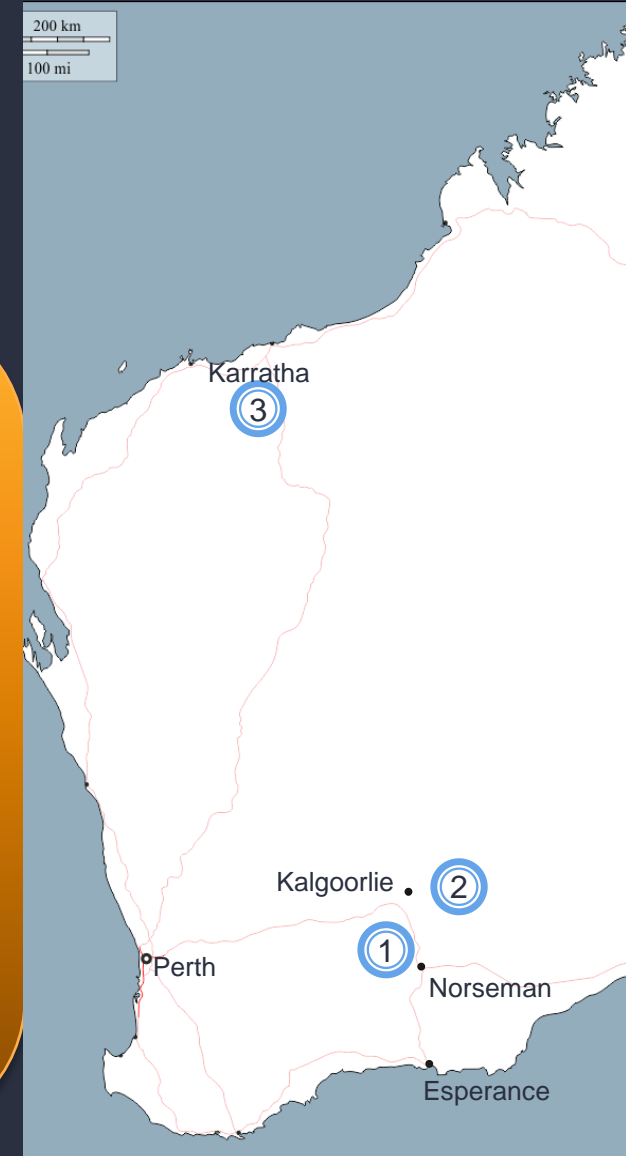
Dome North Lithium Project (1)

Sinclair Caesium Mine 35km north of Norseman (1)

NICKEL

Blair Nickel Mine + exploration upside 25km ENE of Kalgoorlie (2)

We want to be a part of a sustainable mining
future



Corporate Profile



The team & expertise to do it

Experienced and effective Management & Board

Executive Team

Tim Spencer Managing Director – commercial/corporate; project development
Carl Travaglini CFO & Company Secretary – gold & lithium project developments
Andrew Dunn Exploration Manager – 17 years' in gold exploration across WA

Non-Executive Directors

Craig McGown Non-Exec Chairman – capital markets; corporate;
Paul Payne Non-Exec Director – geologist; exploration/development; corporate
Warren Hallam Non-Exec Director – metallurgist, mining operations; corporate

Successfully developed the Sinclair Caesium Mine

Three **highly skilled and experienced** gold & lithium geologists supported by WA's best technical consultants

- 12-month trading range: \$0.08 - \$0.16
- Top 20 shareholders hold 23% of issued shares
- Shareholders are predominantly retail

Market Capitalisation
\$13.8M

Enterprise Value
\$9.1M

Cash at Bank
\$4.7M⁽¹⁾⁽²⁾

Debt
\$Nil

ASX : ESS
(175M shares on issue)⁽²⁾

Share price (14/12/2020)
\$0.079

(1) 30 November 2020 (2) Does not include share purchase plan





Capital raising details

- **\$2.05M Placement & SPP (to be announced)**

- **Placement** Oversubscribed and scaled back to \$2.05M before issue costs at an \$0.085 issue price plus a 1 for 2 free option.
- **Share Purchase Plan** Heavy demand – amount to be raised to be announced shortly.

- **Use of Funds**

- The net proceeds will underpin upcoming multi-phase exploration programs aimed at advancing the Company's two exciting gold projects near Kalgoorlie, Juglah Dome and Golden Ridge, including:
- Drilling to test the Gards, Golden Shovel and Moonbaker prospects at Juglah Dome, planned to commence in two weeks.
- Drilling at Golden Ridge to test two parallel ~1km long gold elevated gold soil anomalies (AC75 prospect) in the 2021 March Quarter.
- A follow-up drill program at Juglah Dome based on the results of the November drilling.



the **golden** part of our project portfolio...

- **Two exciting 100% owned gold projects near Kalgoorlie:**
 - **JUGLAH DOME** – 47km² with 10 exciting prospects identified – 4 have just been drilled (assays pending...)
 - **GOLDEN RIDGE** – 140km² explored primarily for nickel since the late 1960s BUT there are gold anomalies everywhere...!
- **Three significant interests (25-30%) in potentially large gold projects – ESS is free-carried to a Decision to Mine – all with highly credentialled partners:**
 - Kangan JV – Novo Resources Corp & Sumitomo Corporation
 - Acra JV – Northern Star Resources Ltd
 - Balagundi JV – Black Cat Syndicated Ltd



Juglah Dome Project – Gold

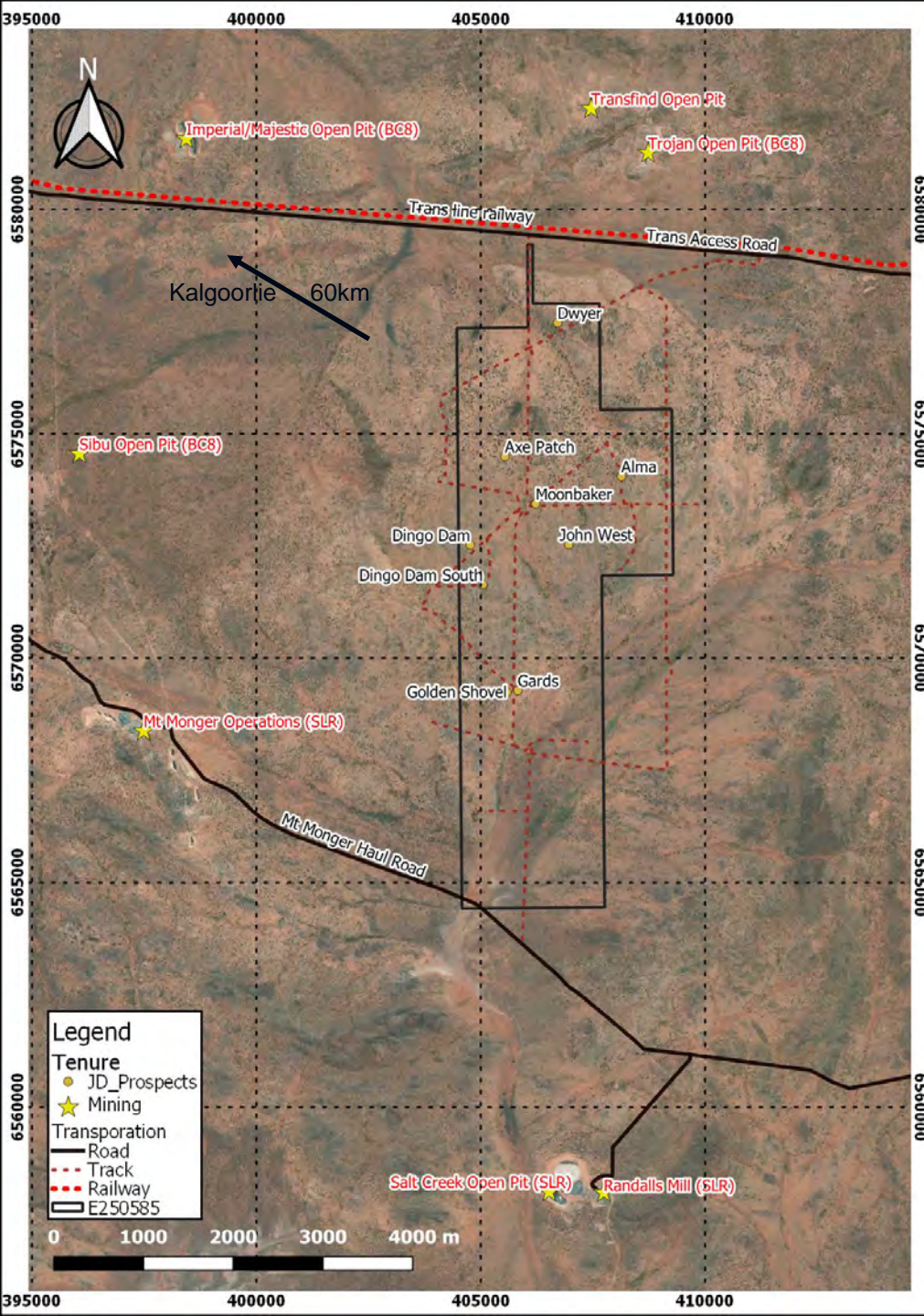
An outstanding gold project surrounded by large historical and existing gold deposits

- 55km east-south-east of Kalgoorlie Boulder
- Western limb of the south-east plunging Bulong Anticline.
- Along strike of Trojan Au deposit (1.97Mt @ 1.97 g/t Au for 125,129oz Au mined from open cut pit and a Mineral Resource of 115,000oz¹).
- Previous explorers focused on VMS and orogenic gold potential.
- Previous drill intercepts^{2&3} at Juglah Dome Project include:
 - **15m@4.35g/t Au** from 6m incl. **6m@9.6g/t Au** (hole ID: JDRB0327-Moonbaker Prospect)
 - **9m@1.15g/t Au** from 33m (hole ID: GFRC003 – Gards Prospect).
 - **7m@1.47g/t Au** from 73m (hole ID: GFDD001 – Gards Prospect).

¹Refer Black Cat Syndicated Ltd (ASX:BC8) release 7 October 2020

² Refer Company ASX release 20 July 2012

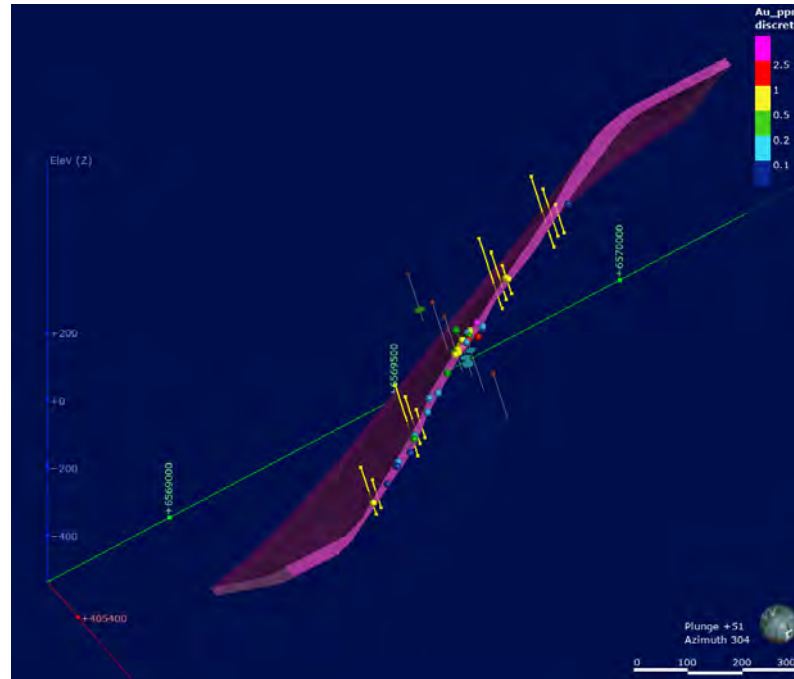
³ Refer Company ASX release 28 August 2020



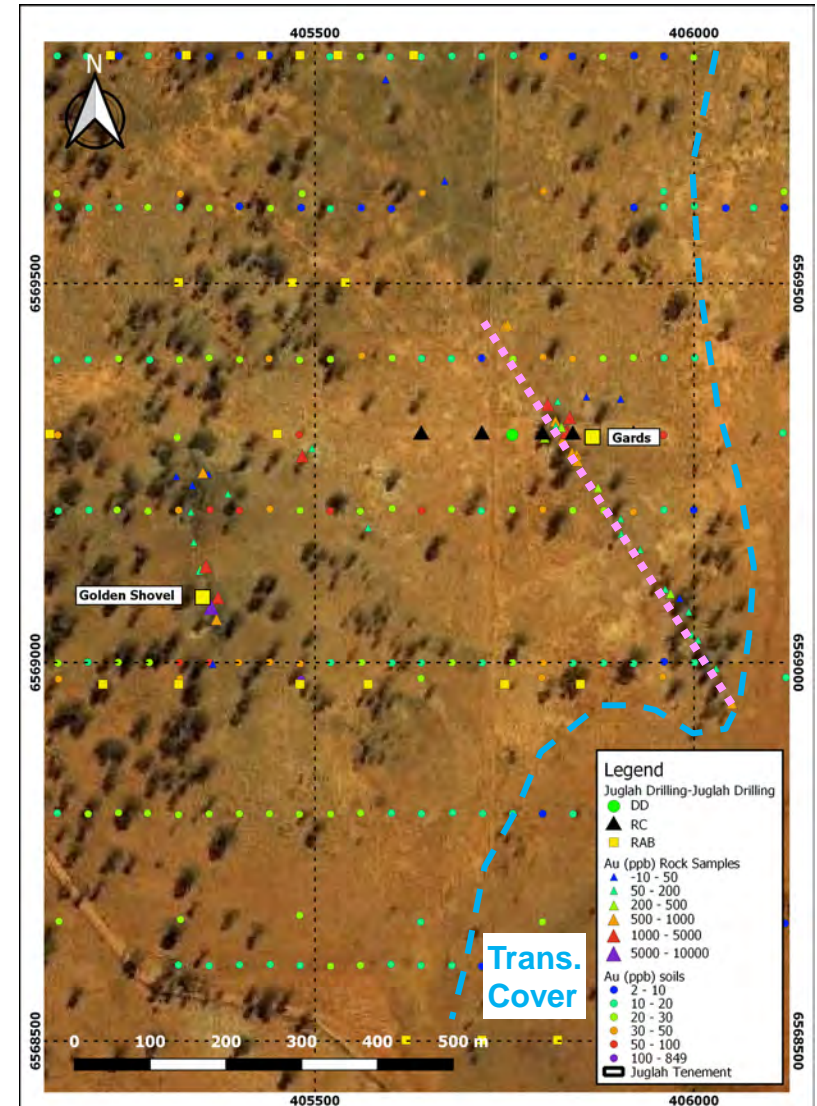
Juglah Dome Project – Gards prospect



- **Just drill tested – results to follow end-January 2021**
- >1,200m of outcrop/sub-outcrop mineralised porphyry unit with rock chips up to 4.4g/t Au.
- Extends under cover to south-east.
- ~1,000m long and 200m wide >20ppb Au-in-soil anomaly (up to 105ppb Au).
- Five holes drilled in 2003 on one section and returned results of:
 - **9m@1.15g/t Au** from 33m (GFRC003).
 - **7m@1.47g/t Au** from 74m (GFDD001).
- No follow up drilling to date.



Above: An oblique section of the Gards prospect, showing proposed drill hole locations along the strike of the mapped outcrop.

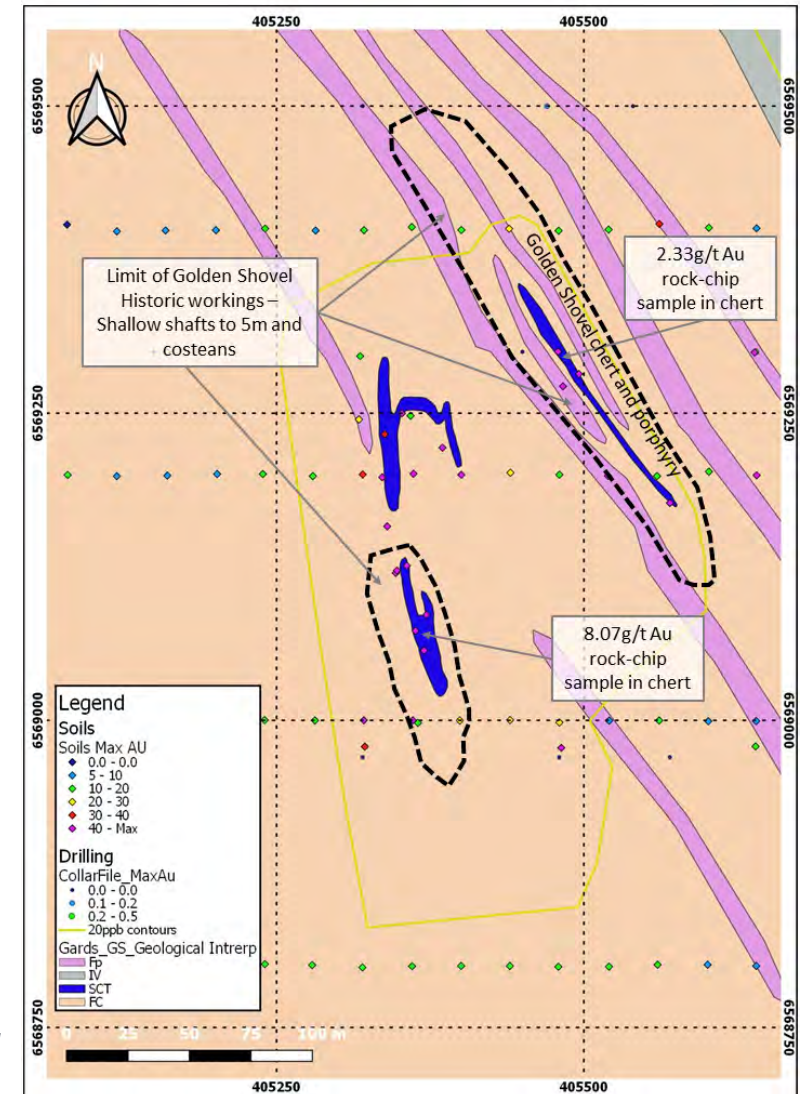


Right: The proximal locations of the Gards and Golden Shovel prospects.

Juglah Dome Project – Golden Shovel prospect



- **Just drill tested – results to follow end-January 2021**
- ~500m long and 300m wide >20ppb Au-in-soil anomaly (up to 76ppb Au).
- Rock chips samples of the cherts have returned grades up to **8.07g/t Au**, 6.8g/t Ag, 0.33% Zn and 0.13% Pb.
- Previously been targeted for both VMS and Orogenic gold mineralisation.
- Previous percussion drilling occurred before 1992 testing the mineralised porphyry, however, data is unavailable.
- A Reverse Circulation drill program will test for economic gold or base metal mineralisation below cherts and shallow historic workings.



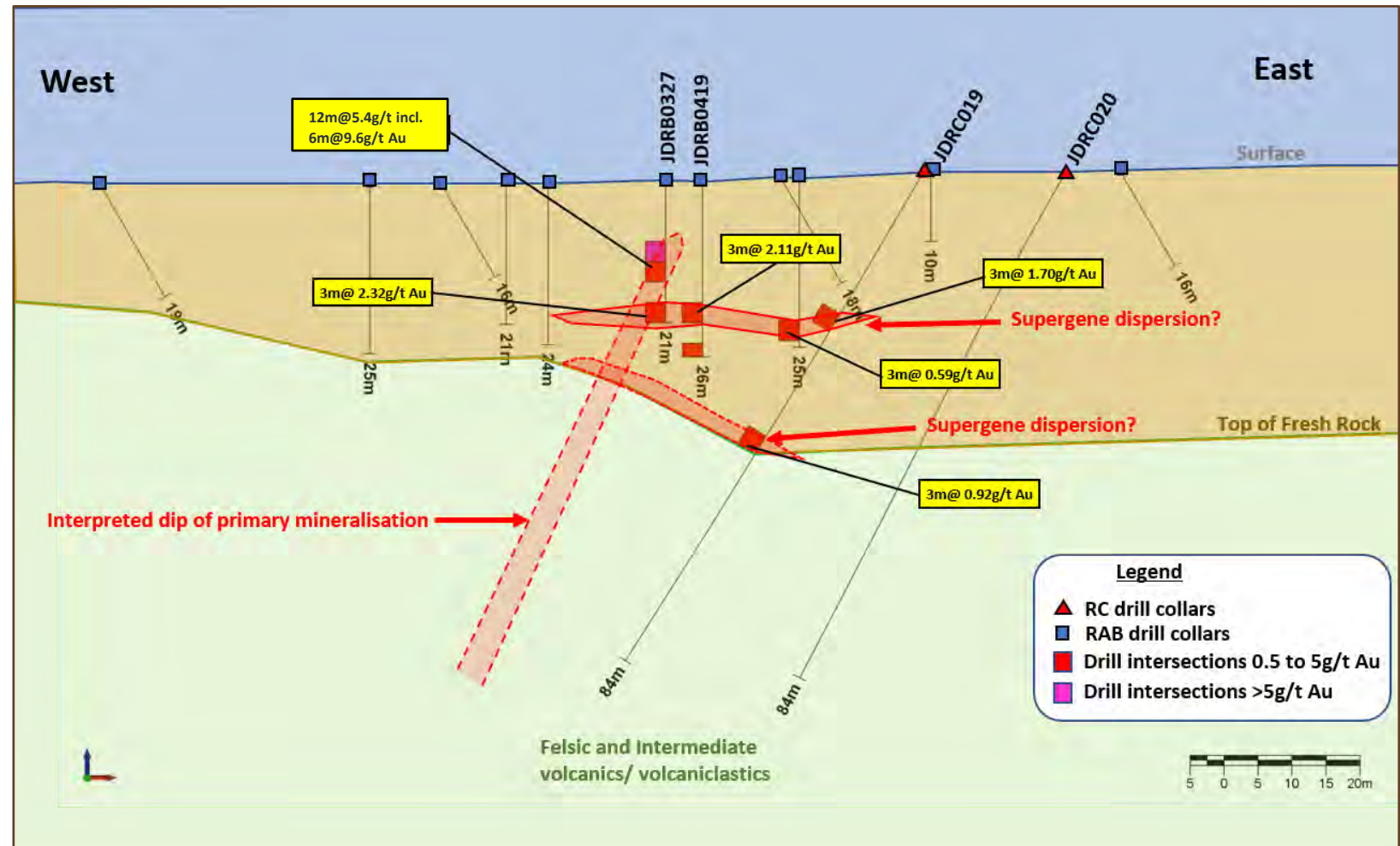
Right: Plan view geological map showing soil sample and drill collar locations.

Juglah Dome Project – Moonbaker prospect



Just drill tested – results to follow end-January 2021

- ~300m long by 250m wide >20ppb Au-in-soil anomaly (up to 119ppb Au).
- Previous aircore intersection of 12m@5.4g/t Au from 6m incl. 6m@9.6g/t Au (JDRB0327).
- Two west dipping RC holes were drilled to follow up but failed to adequately resolve the dip of the mineralisation.
- Limited outcrop/subcrop in the area along with known mineralisation in the surrounding region, including Trojan (8km along strike to the NNE) all appear to be west dipping, not east dipping.



Above: Cross section of Moonbaker prospect.

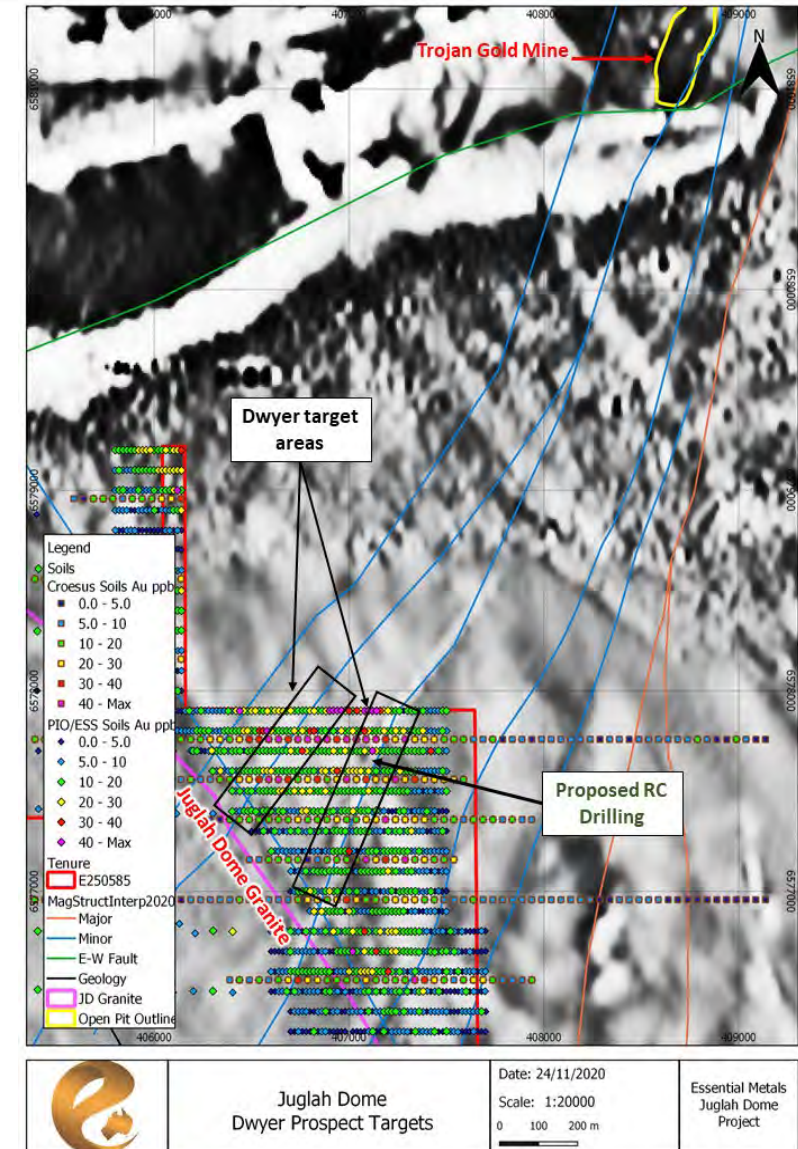
Juglah Dome Project – Dwyer prospect



Just drill tested – results to follow end-January 2021

- The Dwyer prospect is located in the north eastern zone of the Juglah Dome Project area.
- Multiple parallel features have been identified in the recently reprocessed magnetic images that transect the area towards the Trojan pit.
- Just completed drilling involved two RC holes for ~220m to test for potential west dipping mineralisation associated with the previous Au intersections within the saprolite, in an area of limited outcrop exposure. This proposed orientation for mineralisation is consistent with that observed at Trojan deposit and other prospects/ targets within the Juglah Dome project.
- The Dwyer prospect is less than 3km along strike from the Trojan Gold Mine, recently acquired by Black Cat Syndicate (ASX:BC8). Previous RAB drilling at the Dwyer prospect included:
 - 4m @ 0.51g/t Au from 38m (DB44); and
 - 13m @ 0.66g/t Au from 30m, incl. 2m @ 2.22g/t Au (DB49).

Right: Soil anomalism associated with the Dwyer target (coloured symbols – see legend for details) and the structural interpretation (coloured lines) from the recently reprocessed magnetic 1VD RTP image (grey scale background)..

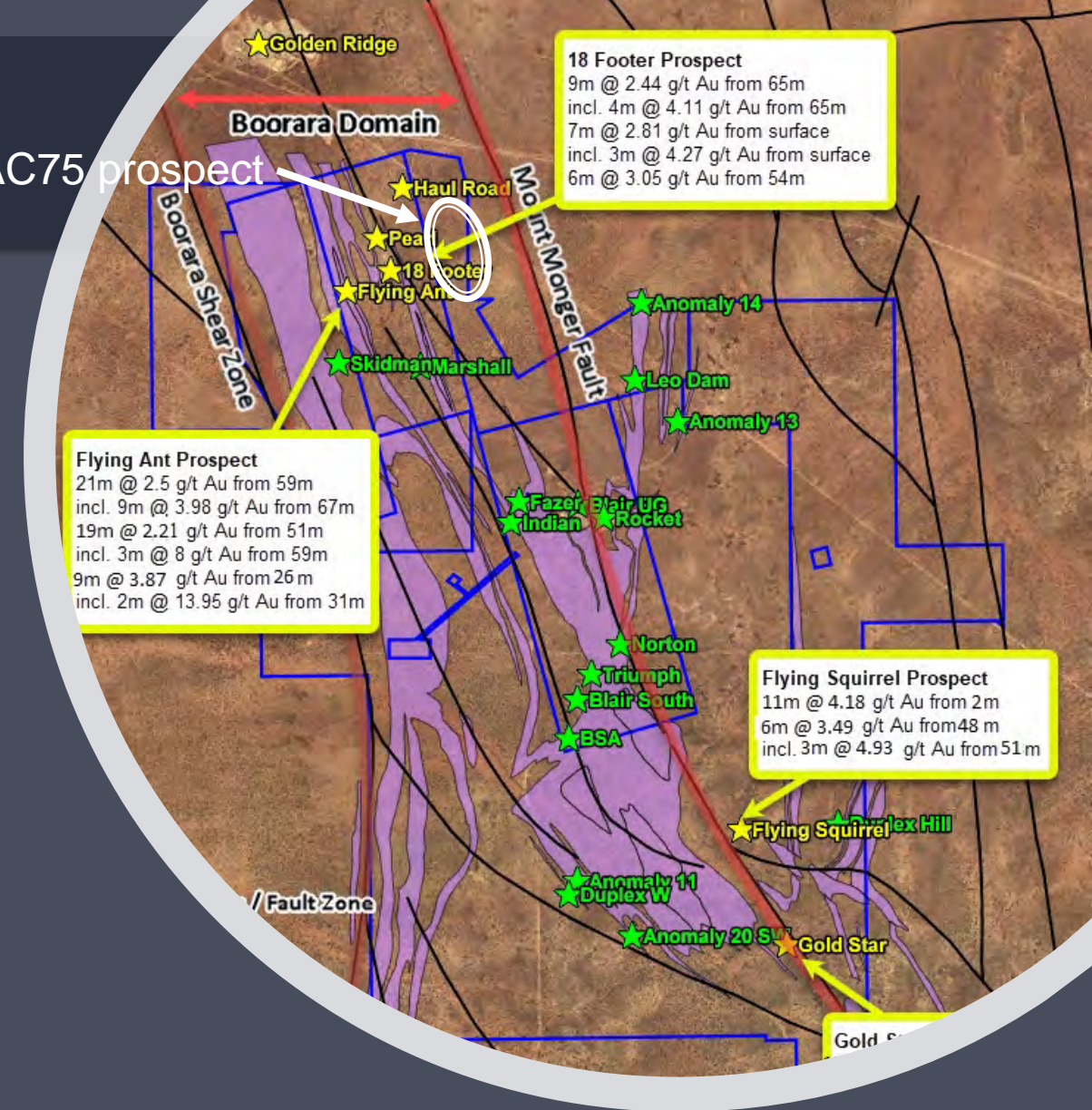


Golden Ridge Project – Gold

Multiple high tenor gold anomalies – the goal is to unlock its potential for a large discovery

- Project straddles the Boorara Domain in between the Menzies - Boorara Shear Zone (MBSZ) and the Mt Monger Fault
- The MBSZ hosts six major gold mines including Paddington, Boorara and the Golden Ridge Gold Mine.
- Previous exploration focused on Ni and old Au workings e.g. Flying Ant and 18-Footer.
- Sporadic drilling followed up other Au targets and prospects.
- Significant intersections from Flying Ant and 18-Footer prospects include⁴:
 - 9m@3.87g/t Au from 26m incl. 2m@13.95g/t Au (GOD0094) - Flying Ant
 - 21m@2.5g/t Au from 59m incl. 9m@3.98g/t Au (GOC0288) - Flying Ant
 - 19m@2.21g/t Au from 51m incl. 3m@8.00g/t Au (GOC0259) - Flying Ant
 - 9m@2.44g/t Au from 65m incl. 4m@4.11g/t Au (AMRC026) - 18-Footer
 - 7m@2.81g/t Au from Surface incl. 3m@4.27g/t Au (GOC0264) - 18-Footer

AC75 prospect



¹Refer ASX release 6 July 2020

Golden Ridge Project – AC75 prospect

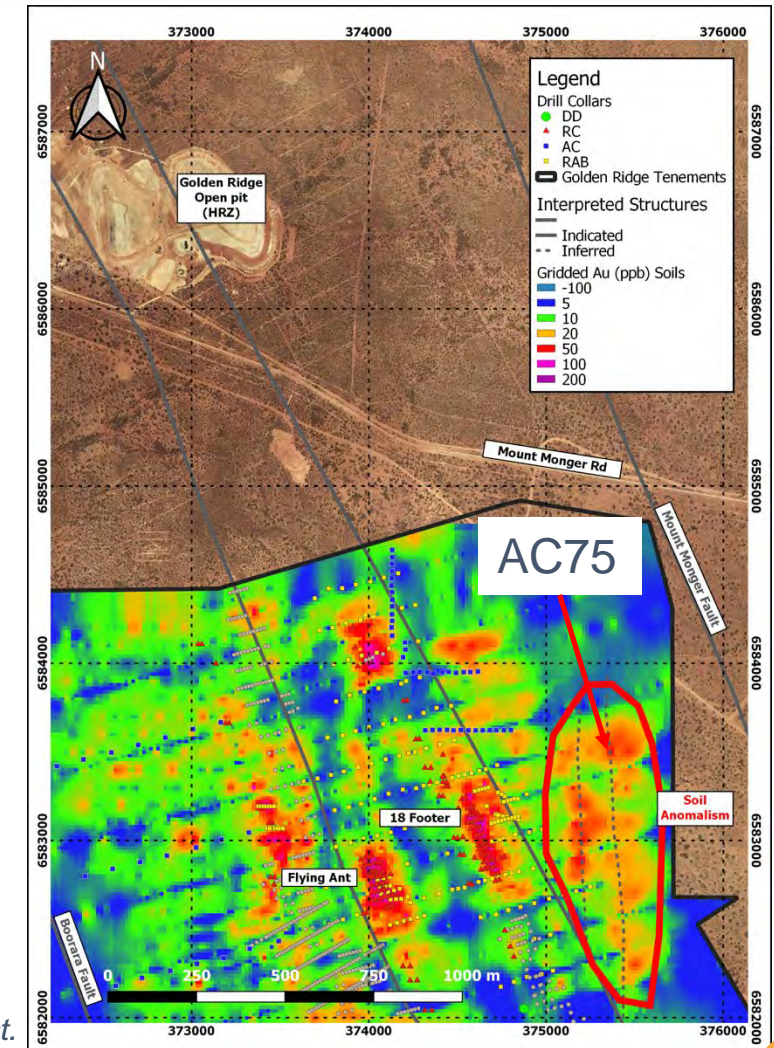


To be drill tested in early 2021

- Both of the Mount Monger Fault (MMF) and Boorara Shear Zone (BSZ) transect the project.
- Majority of gold occurrences in the area lie between these structures.
- Tenement previously covered with soil sampling by WMC Resources Ltd, however, the focus was primarily on nickel exploration.
- Most of the previous RC drilling for gold occurred at old workings such as at Flying Ant and 18-Footer with sporadic AC, RAB or Percussion drilling covering other gold targets.
- Subsequent 100m x 20m soil grids completed by the Company over selected areas for nickel and/or gold.
- **Significant gold anomalism** (>20ppb Au) was identified to the east of 18-Footer in two parallel north trending zones. (refer diagram) – **newly named as the AC75 prospect** (in keeping with naming the prospects after yachts)
- These zones have up to 87 and 70ppb gold-in-soils, also having strike lengths of >800m and >1,000m, respectively.
- They will be drilled tested for the first time in the 2021 March Quarter.



Left: The 2021 America's Cup AC75 model



Right: Location of the AC75 prospect.



Three free-carried gold farm-in/joint ventures

Balagundi Farm-in/JV : Black Cat (ASX:BC8)

- ESS has a 25% free-carry up to a Decision to Mine.
- Balagundi is adjacent to Black Cat's Bulong Project, location of the the planned Myhree Mining Centre.

Kangan Farm-in/JV : Novo Resources Corp (TSXV.NVO) & Sumitomo Corporation

- ESS has a 30% free-carry up to a Decision to Mine.
- Kangan is part of Novo's Egina Project where a model is coming together of gravel gold mineralisation across very large areas.

Acra JV : Northern Star Resources Ltd (ASX.NST)

- ESS has a 25% free-carry up to a Decision to Mine.
- Acra is a large tenure forming part of NST's Kalgoorlie Operations.
- \$3.8 million spent by NST to date.





Pioneer Dome Hosts lithium & caesium... also prospective for gold and nickel



A multi-commodity Project in a corridor hosting large mineral deposits:

- **Lithium** Mt. Marion; Bald Hill; Buldania.
- **Caesium** Sinclair Mine contained only the third known deposit containing economic quantities of high grade caesium in the world.
- **Gold** Higginsville; Widgiemooltha; Norseman.
- **Nickel** Numerous Kambalda nickel mines, including Cassini 17km away and the Juno trend heading south into Pioneer Dome.

The Pioneer Dome Project

- 391km² with 45kms north-south strike length extending from the Norseman township.
- Includes the Sinclair Caesium Mine and the Dome North Lithium Project – **11Mt @ 1.21% Li₂O**.
- Has been explored by reputable companies including Newmont in the late 1960s - early '70s and Panoramic Resources Ltd up to 2016.

Dome North Lithium Project



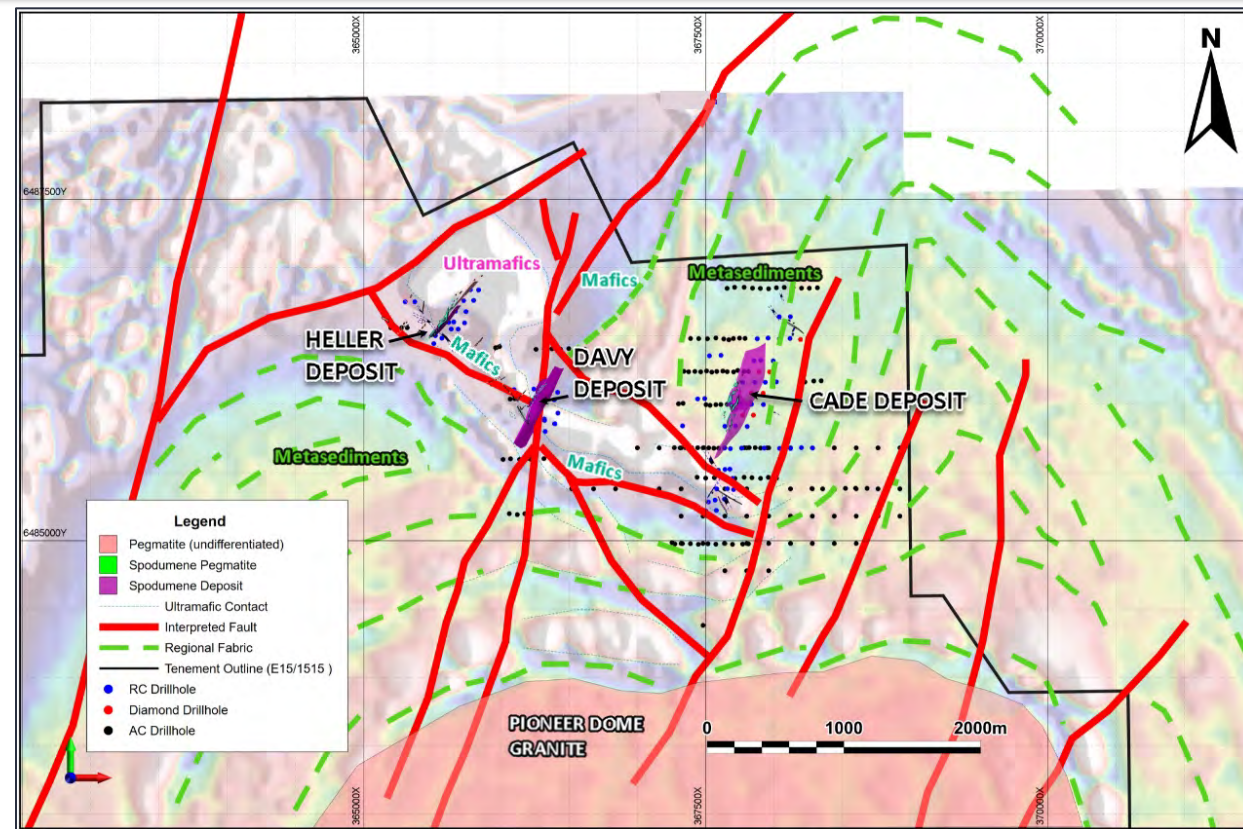
Achievements to Date

- Lithium (**spodumene**) in outcrop discovered June 2019
- First drill campaign August 2019 with two more completed since then
- Mineral Resource **11.2Mt @ 1.21% Li₂O** – three pegmatites mineralised from surface ⁽¹⁾

The Dome North Project is located <10km from key infrastructure, including a major highway and gas and water pipelines. It is approximately 275km from the Esperance bulk and container Seaport.

Work programmes

- 'First pass' metallurgical test work on Cade Deposit completed with the report due to be finalised shortly.
- The likely process route will utilise a dense medium separation (DMS) and flotation hybrid circuit.
- Further field work to follow.



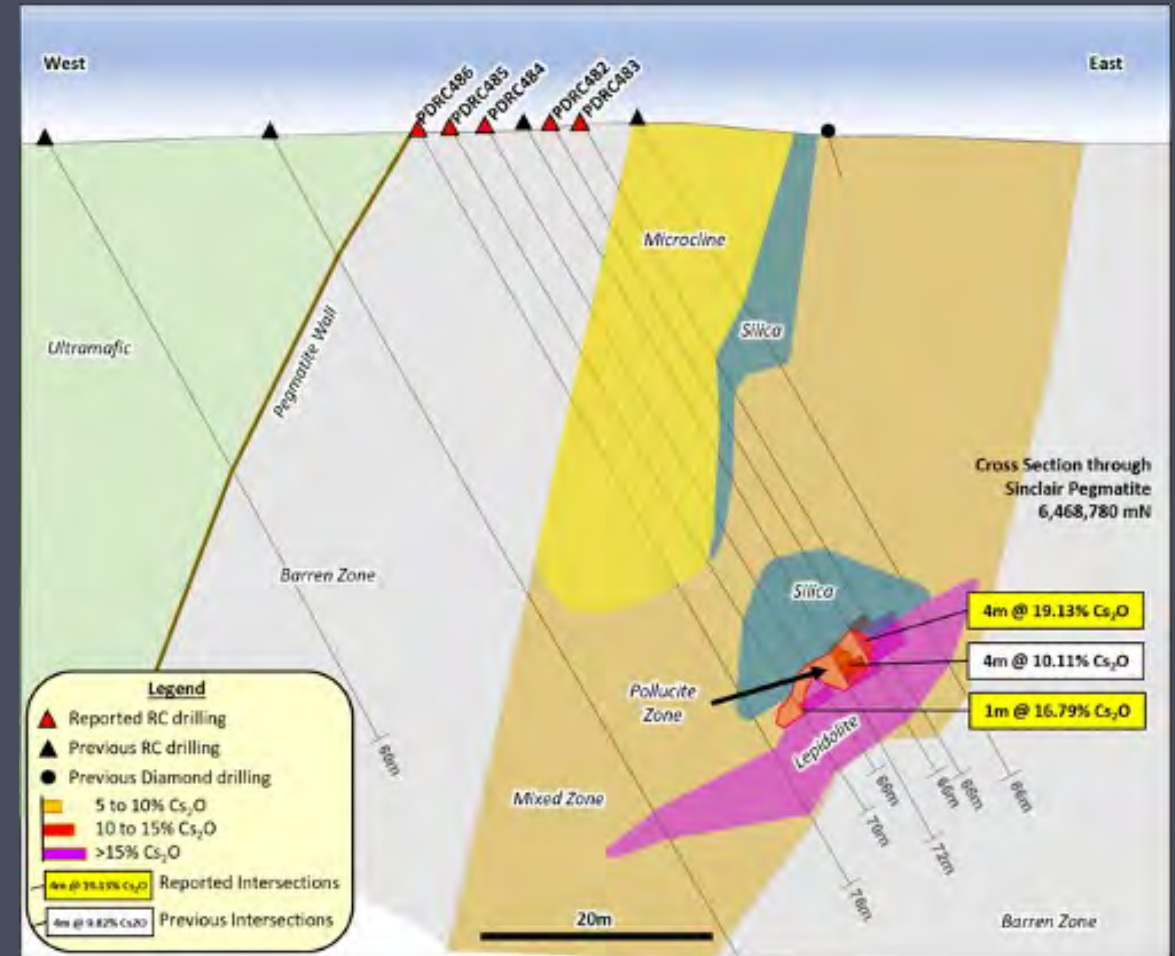
Above: Local geology and structural interpretation of the Dome North Project area - Cade, Davy and Heller Deposits underlain by magnetics TMI_1VD_Eshade_NL imagery.

¹ Refer ASX release 29 September 2020



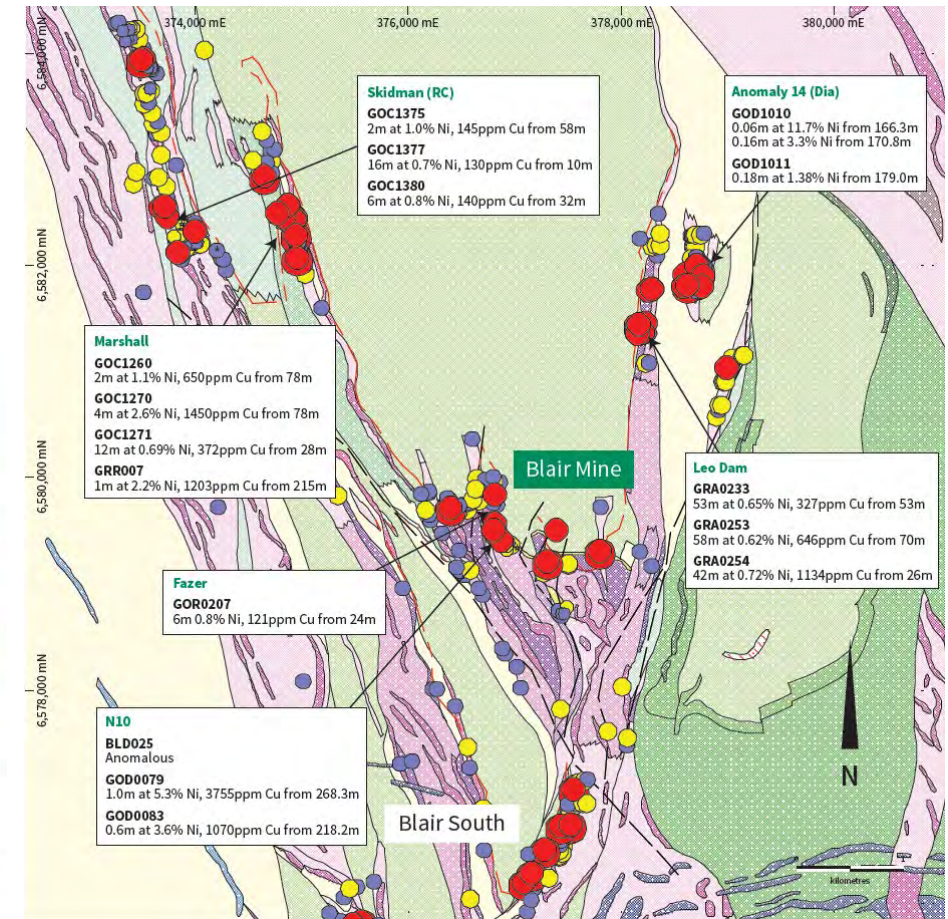
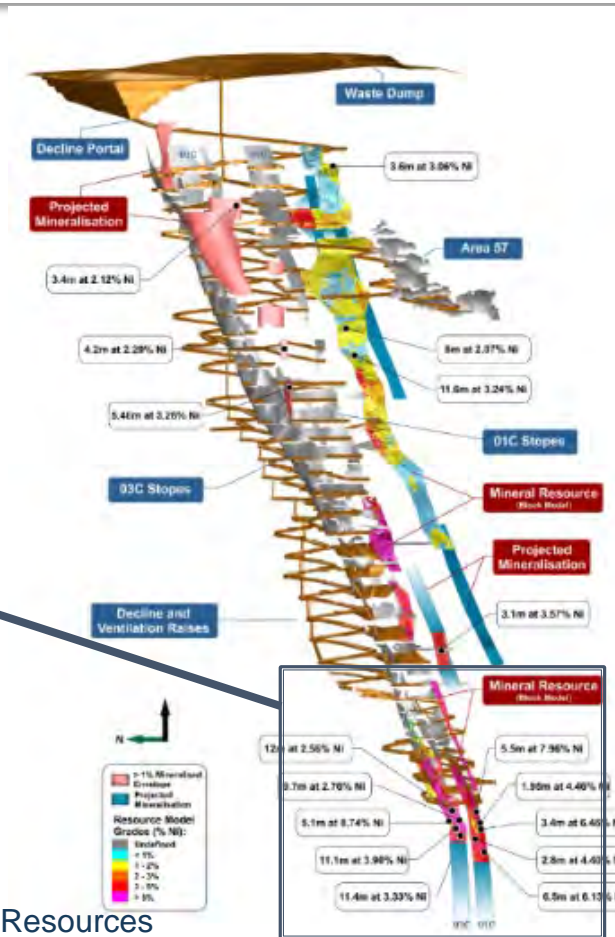
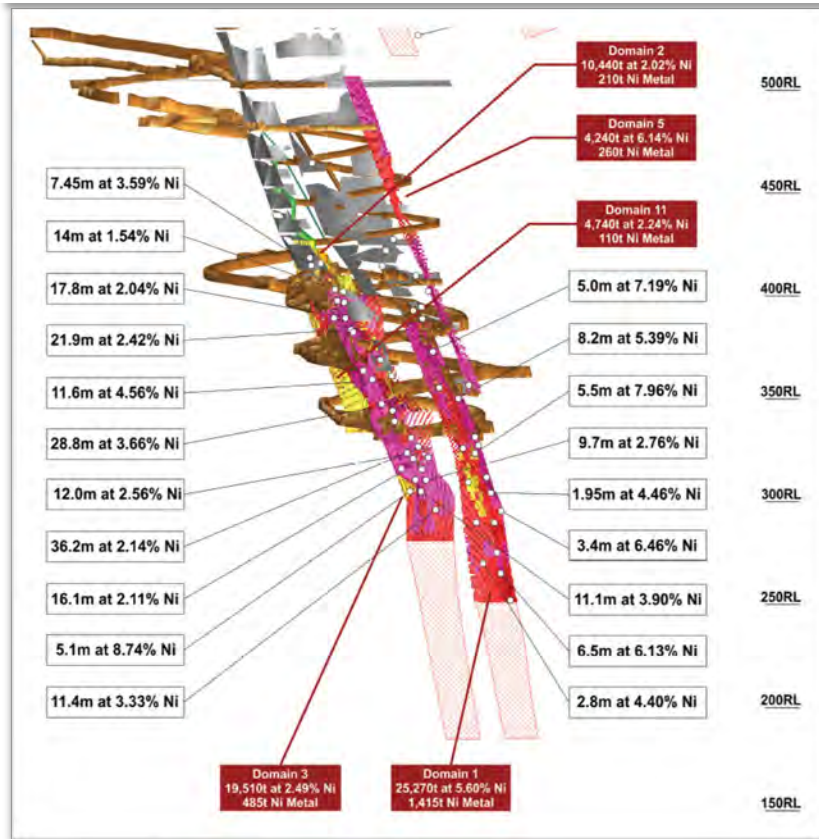
Sinclair Caesium Mine

- Extension target zone drilled in September 2020 demonstrated a high-grade central zone of mineralisation.
- The central zone measures approximately 30 metres in length and up to 6 metres laterally. The height of the mineralised zone varies from 1 metre to 5 metres.
- More caesium will be required to be delineated in and around the Sinclair Deposit to form the basis of a second mining campaign.
- Exploration to determine if further drilling targets exist.



Cross section illustrating some of the Cs₂O intersections from the September 2020 drilling.

Blair Nickel Mine & exploration for nickel & cobalt



- Discovered in the late 1960s and developed in 1989 by WMC Resources
- 33,000t of nickel produced as Direct Shipped Ore over three operating periods. Mining suspended in 2008.
- Considered open below mined vertical depth of ~900m
- Mineral Resource: (Indicated and Inferred) 222,710t at 2.92% Ni\$



an **essential**
addition to
your
investment
portfolio
NOW...

- Drilling of four exciting gold prospects at Juglah Dome has just finished...**DRILL RESULTS PENDING**...drill results to follow in January and straight into planning for the next campaign.
- We're starting to make sense of Golden Ridge's many tantalizing gold anomalies. Drilling to commence in the 2021 March Quarter.
- **Dome North Lithium Project** – it already has a significant **11Mt lithium Resource** and plenty of exploration upside
- **Sinclair Caesium Mine** – a unique environment for a high value, severely supply constrained commodity
- **Blair Nickel Mine** – existing mine infrastructure with a Mineral Resource and near-mine prospects
- The expertise – a high quality team management and technical team back by a very experienced Board



THE TEAM

OUR VALUES

- ✓ Excellence – we set ambitious goals and try to beat them through innovation and hard work
- ✓ Safely – we work in a safe way based on transparency, trust and culture
- ✓ Sustainable – we want our actions to be consistent with ESG principles

