



Victorian Gold Mining and Exploration Forum February 2023 Melbourne

#### COMPETENT PERSON AND FORWARD LOOKING STATEMENT



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The information in this presentation that relates to Exploration Results is based on information compiled by Mr John Bartlett (for WA, NSW and Finland) and Mr Rohan Worland (for Victoria) who are employees and security holders of the Company and which fairly represents this information. Mr Bartlett and Mr Worland are members of the Australasian Institute of Mining and Metallurgy and have sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, Mr Bartlett and Mr Worland consent to the inclusion in this presentation of the matters based on information in the form and context in which it appears. Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Reverse circulation (RC), aircore (AC) and rotary air blast (RAB) drilling samples are collected as composite samples of 4 or 2 metres and as 1 metre splits (stated in results). Mineralised intersections derived from composite samples are subsequently re-split to 1 metre samples to better define grade distribution. Core samples are taken as half NQ core or quarter HQ core and sampled to geological boundaries where appropriate. The quality of RC drilling samples is optimised by the use of riffle and/or cone splitters, dust collectors, logging of various criteria designed to record sample size, recovery and contamination, and use of field duplicates to measure sample representivity. For soil samples, PGM and gold assays are based on an aqua regia digest with Inductively Coupled Plasma (ICP) finish and base metal assays may be based on aqua regia or four acid digest with inductively coupled plasma optical emission spectrometry (ICPOES) or atomic absorption spectrometry (AAS) finish. In the case of reconnaissance RAB, AC, RC or rock chip samples, PGM and gold assays are based on lead or nickel sulphide collection fire assay digests with an ICP finish, base metal assays are based on a four acid digest and inductively coupled plasma optical emission spectrometry (ICPOES) and atomic absorption spectrometry (AAS) finish, and where appropriate, oxide metal elements such as Fe, Ti and Cr are based on a lithium borate fusion digest and X-ray fluorescence (XRF) finish. In the case of strongly mineralised samples, base metal assays are based on a special high precision four acid digest (a four acid digest using a larger volume of material) and an AAS finish using a dedicated calibration considered more accurate for higher concentrations. Sample preparation and analysis is undertaken at Minanalytical, Genalysis Intertek, and laboratories in Perth and Kalgoorlie, Western Australia, ALS laboratories in Loughrea and Ireland. The quality of analytical results is monitored by the use of internal laboratory procedures and standards together with certified standards, duplicates and blanks and statistical analysis where appropriate to ensure that results are representative and within acceptable ranges of accuracy and precision. Where quoted, nickel-copper intersections are based on a minimum threshold grade of 0.25% Ni and/or Cu, and gold intersections are based on a minimum gold threshold grade of 0.1q/t Au unless otherwise stated. Intersections are length and density weighted where appropriate as per standard industry practice. In Australia, all sample and drill hole co-ordinates are based on the GDA/MGA grid and datum unless otherwise stated. In Finland, all sample and drill hole co-ordinates are based on the ETRS-TM35FIN grid and datum unless otherwise stated. Exploration results obtained by other companies and quoted by S2 have not necessarily been obtained using the same methods or subjected to the same QAQC protocols. These results may not have been independently verified because original samples and/or data may no longer be available.

#### PROVEN TEAM - QUALITY PROJECTS - BEST LOCATIONS



Proven track record of discovery and development of multiple mines, including Nova-Bollinger nickel-copper mine and Thunderbox gold mine

Quality portfolio of gold and base metal exploration projects in tier one jurisdictions

Advancing application for key Exploration Licence at Greater Fosterville, with walk-up drill targets adjacent to and along strike from Agnico Eagle's world class Fosterville gold mine

Drilling at Polar Bear continues to identify disseminated nickel sulphides\*

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<sup>3</sup> 

#### SUCCESSFUL AND EXPERIENCED BOARD





Mark Bennett
Executive Chairman

- Founding managing director and CEO of Sirius Resources and S2 Resources, and PhD qualified geologist
- Two-time winner of the "Prospector of the Year" award for discovery of Thunderbox, Waterloo & Nova-Bollinger mines, and 2014 Mines & Money "Legend in Mining"
- · Experienced in equity capital markets and transactions, chairman of Falcon Metals, former director of IGO



Jeff Dowling
Non-Executive Director

- 40 year career in financial sector as an accountant and former managing partner with Ernst & Young, WA
- Extensive experience in corporate finance and transactions, and company management
- Director of Fleetwood, Battery Minerals, NRW, former director of Atlas Iron



Anna Neuling
Non-Executive Director

- Chartered accountant with BSc in Mathematics
- Former executive director and company secretary of Sirius Resources
- · Chair of Tombador, director of MLG, former auditor with Deloitte, London and Perth



Andrea Betti Company Secretary

- Accounting and corporate governance professional with 20 year's experience
- Chartered accountant with BComm, Grad Dip in Applied Finance, and MBA
- Company Secretary of various public and private companies

#### SUPPORTIVE INSTITUTIONAL / HIGH NET WORTH REGISTER



#### **3 YEAR SHARE PRICE GRAPH**



#### **WELL FUNDED**

Cash¹ A\$2.6M Investments² A\$1.3M Debt NiI

# FAVOURABLE CAPITAL STRUCTURE

Shares on issue 356.9M

Options on issue<sup>3</sup> 46.7M

Market A\$51.7M Capitalisation<sup>4</sup>

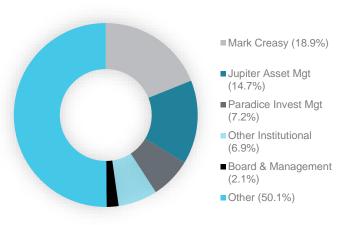
Enterprise Value<sup>4</sup> A\$49.1M

#### STRONG SHAREHOLDER BASE

Top 20 holders **60%** 

Unusually institutional register for an explorer – reflects track record of making material discoveries

#### **CURRENT SHAREHOLDERS**

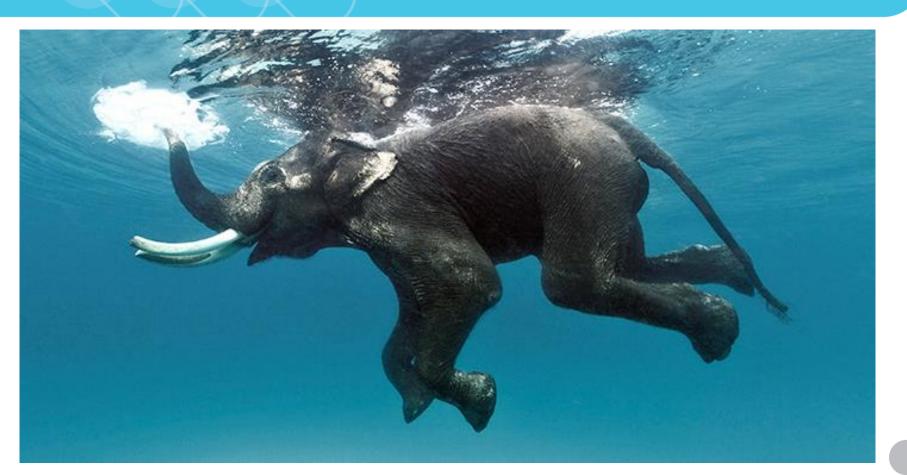


#### NOTES

- 1. Cash at 31st December 2022
- 75.2m shares in Todd River Resources (ASX:TRT) @ A\$0.014/share, plus 200k shares in Aurion Resources (TSXV:AUR) @ C\$0.64/share and AUD/CAD FX rate of 0.94
- 3. Weighted average price of A\$0.38 per option = A\$17.9M if exercised
- 4. Based on share price of A\$0.145 per ordinary share

### **HUNTING FOR HIDDEN ELEPHANTS**







### **GREATER FOSTERVILLE**

THE MOST SOUGHT AFTER GOLD EXPLORATION BLOCK IN AUSTRALIA









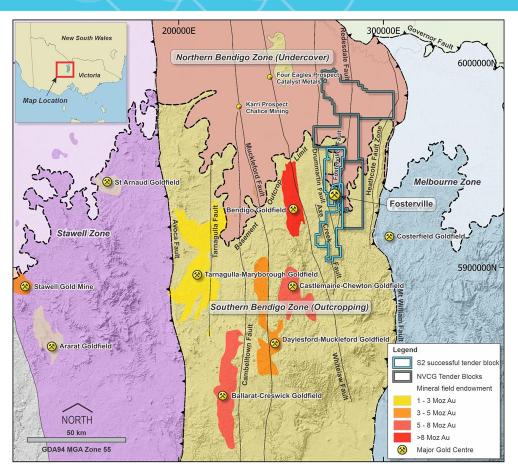


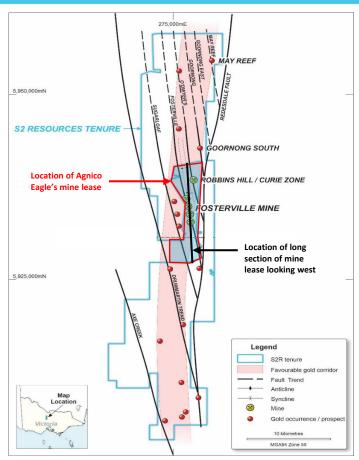




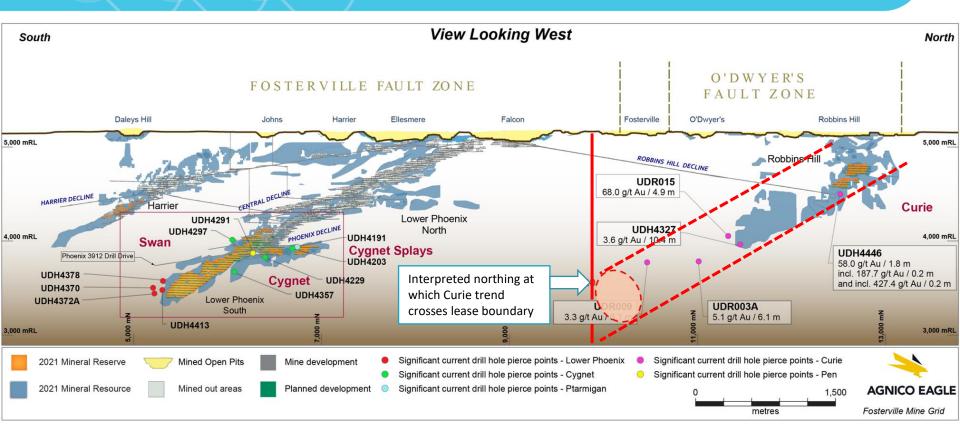
Ownership	100% S2 Resources - won in highly competitive Victorian ground release tender process – awaiting grant of tenement by Victorian government
Premier location	Flagship project - surrounds Agnico Eagle Mines' world class +7.5Moz Fosterville Gold Mine – highly strategic position
Tenement	Exploration Licence Application (ELA) covers 394km <sup>2</sup> over a 55km strike, abutting and surrounding Agnico Eagle's world class Fosterville gold mine
Prospectivity	Multiple known gold occurrences and anomalies – Structures and stratigraphy hosting Fosterville mine extend into S2's tenure both north and south
Drill Ready	Multiple drill-ready targets and intercepts awaiting follow-up once tenement is granted and land access agreements reached
Expenditure	5-year spending commitment of A\$10.4M, approx. A\$2M spend in first two years - Agnico Eagle committed A\$90M across surrounding three blocks



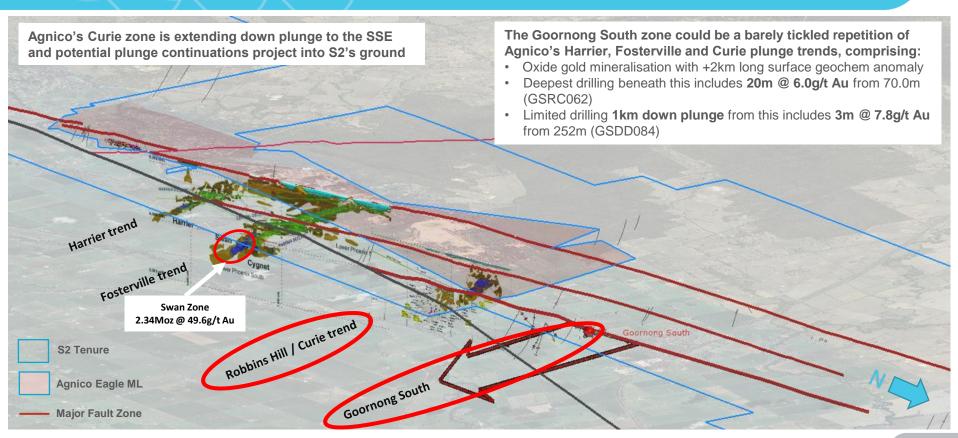










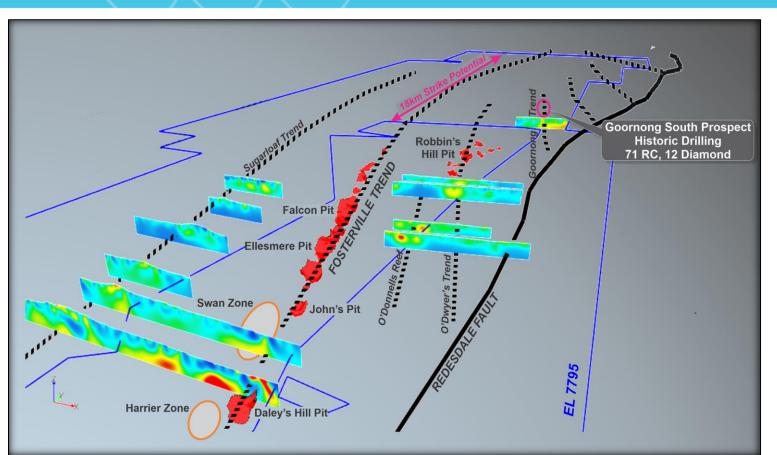






S2's ELA <u>surrounds</u> Agnico Eagle's Fosterville gold mine and contains the projected mineralised trends.......

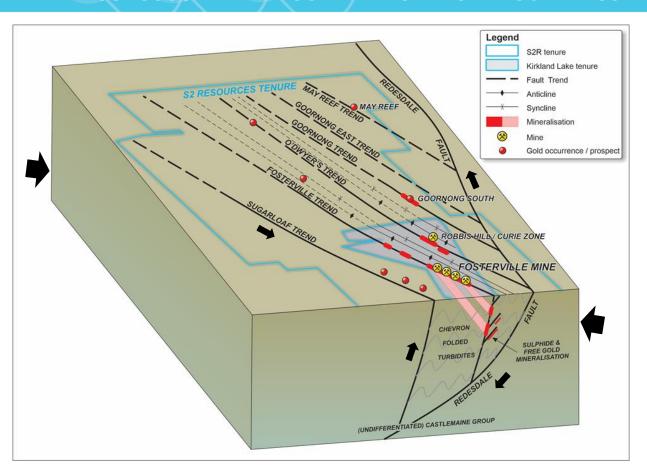


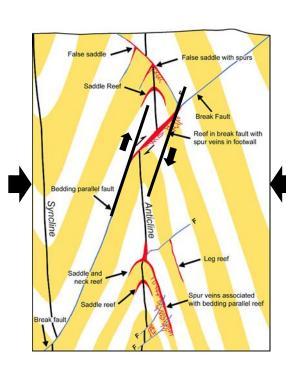


Reprocessing of inherited induced polarisation (IP) provides vector to gold:

- 13 survey lines across Agnico's mine lease and S2's ELA
- On Agnico's ground, IP highlights the Swan, Harrier and Robbins Hill / Curie zones
- Similar IP anomalies along defined structures on S2's ELA, on the Sugarloaf and Goornong structures and on the strike continuation of the Robbins Hill / Curie structure
- Room for much more IP to be done to search for additional zones









### **POLAR BEAR**

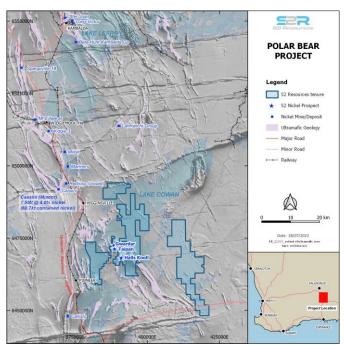
PROVEN NICKEL SULPHIDE MINERALISATION

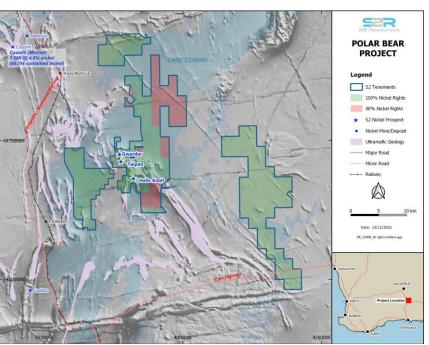
**AWAITING DOWN HOLE ELECTROMAGNETIC GEOPHYSICS** 

## POLAR BEAR PROVEN NICKEL SULPHIDE ENDOWED REGION



- Southern extension of the world class Kambalda & Widgiemooltha nickel belts, with recent Cassini discovery along strike to north
- Only ~10% of prospective ultramafics tested to date, with 3 nickel sulphide mineralised zones discovered (Taipan, Gwardar, Halls Knoll)
- Nickel rights retained over 435km² after sale of tenements and Baloo gold deposit to Westgold no holding costs



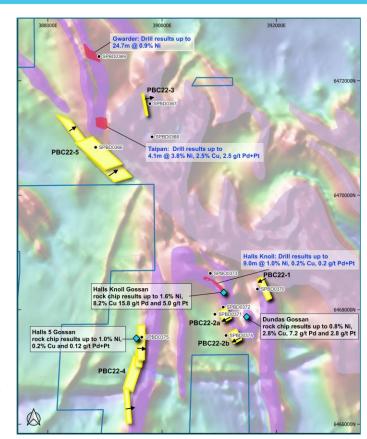


### POLAR BEAR HUGE NEW SEARCH SPACE UNLOCKED BY NEW TECHNOLOGY



- Application of new EM technology (low temperature SQUID) has highlighted 5 clusters of new EM conductors beneath the Lake Cowan salt lake and its marginal transported sand dunes
- These conductors have good geophysical response characteristics considered compatible with potential sulphide sources
- They are located in favourable geological positions (interpreted as in-situ on ultramafic contacts, or remobilised along structures intersecting these contacts)
- They are located down dip/structure from either nickel sulphide gossans or zones of strongly anomalous nickel, copper, platinum and/or palladium intersected in shallow reconnaissance aircore holes
- Recent drilling has intersected disseminated nickel sulphides\* in 50% of holes, and also may have narrowly missed EM conductors in known favourable geological positions





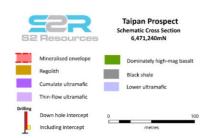
### POLAR BEAR PROVEN NICKEL SULPHIDE MINERALISED ULTRAMAFICS

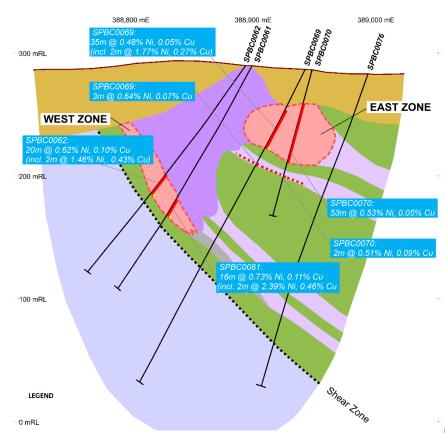


#### **Taipan prospect**

Stacked lenses of sulphide on margin of gently north plunging komatiite channel

- SPBD0046: 4.1m @ 3.8% Ni, 2.45% Cu & 2.49g/t Pt-Pd, incl.
   2.2m @ 5.84% Ni, 3.73% Cu, 0.12% Co & 2.75g/t Pt-Pd
- SPBC0061: 16m @ 0.73% Ni, incl. 2m @ 2.39% Ni, 0.46% Cu
- SPBC0062: 20m @ 0.62% Ni, incl. 2m @ 1.46% Ni
- SPBC0069: 35m @ 0.48% Ni, incl. 2m @ 1.77% Ni, 0.27% Cu
- SPBC0070: 53m @ 0.53% Ni





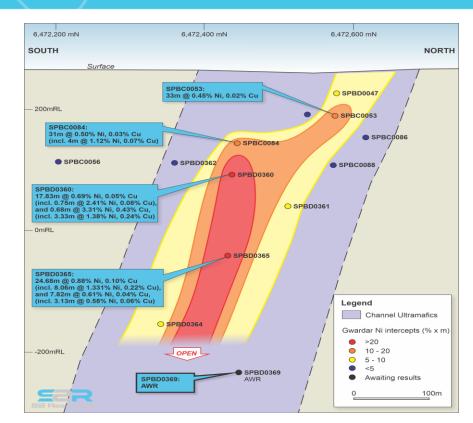
### POLAR BEAR PROVEN NICKEL SULPHIDE MINERALISED ULTRAMAFICS



#### **Gwardar prospect**

Thick south plunging komatiite channel, open down plunge, comprising broad intervals of disseminated sulphides with multiple massive sulphide accumulations at base and in footwall

- SPBC0053: 33m @ 0.45% Ni
- SPBC0084: 31m @ 0.5% Ni, incl. 4m
   @ 1.12% Ni
- SPBD0360: 17.83m @ 0.69% Ni, incl. 0.75m @ 2.41% Ni, and 0.68m @ 3.31% Ni, and 3.33m @ 1.38% Ni
- SPBD0365: 24.68m @ 0.88% Ni, incl. 8.06m @ 1.33% Ni, and 7.82m @ 0.61% Ni, and 3.13m @ 0.58% Ni
- Recent hole (SPBD0369) drooped and missed axis of plunge, so still open





### POLAR BEAR HIGH IMPACT TARGETS BEING DRILLED



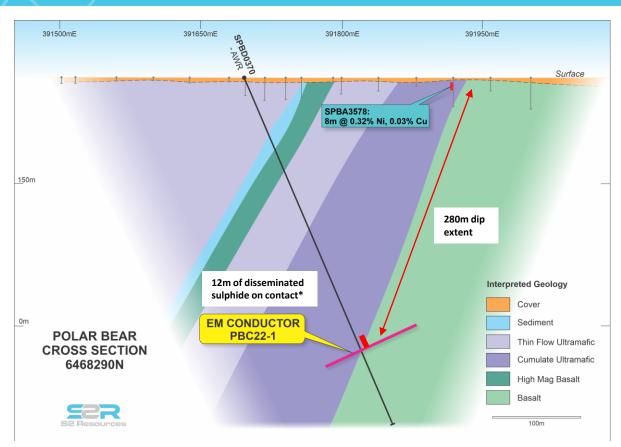
### Example of new targets: SQUID EM conductor PBC22-1

Modeled as a plate with approx 400m strike extent and 100m dip extent

Good conductor with geophysical properties consistent with a sulphide source

Drillhole SPBD0370 did not explain the conductor but did intersect 12m of disseminated sulphides\* on the basal contact of the ultramafic

This may be a near-miss: down hole EM is required to determine presence/location of any conductive source for the EM anomaly and to guide next drillhole



<sup>\*</sup> Refer to S2 ASX announcement of 13 February for details. Sulphide abundance and mineral types based on visual logging only. Assay results are awaited

# POLAR BEAR PROVEN NICKEL SULPHIDE MINERALISED ULTRAMAFICS



#### Halls Knoll prospect

Outcropping gossan (weathered sulphide)

 Rockchips grade up to 1.6% Ni, 8.2% Cu, 15.8g/t Pd and 5.0g/t Pt







### **JILLEWARRA**

SEARCHING FOR ANOTHER THUNDERBOX / BIG BELL BENEATH 35 KM STRIKE OF COVERED SHEAR ZONE

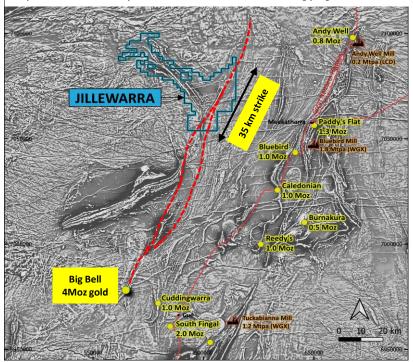
## JILLEWARRA JOINT VENTURE SEARCHING FOR A THUNDERBOX / BIG BELL LOOKALIKE

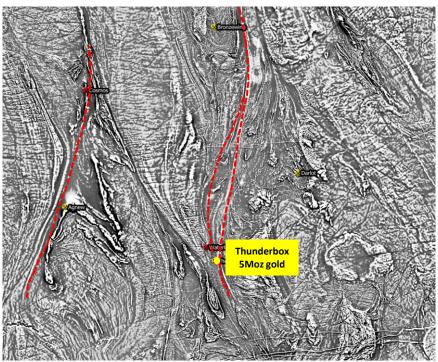


Comparison of Jillewarra - Big Bell trend (LHS) with Thunderbox - Bronzewing trend (RHS). Thunderbox and Big Bell are located at the south end of a NNE trending regional shear zones

The Jillewarra project area covers 35 strike km of the same structure. This area is hidden beneath transported cover and very lightly drilled, and is covered by exploration licence applications

S2 plans to commence a systematic reconnaissance aircore drilling program once ELA's are granted – estimated in the next few months







### **KOONENBERRY**

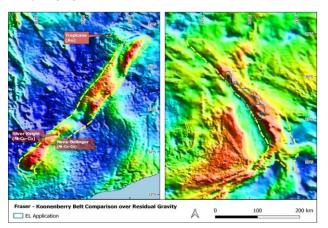
A FRASER RANGE STYLE AND SCALE NICKEL PLAY
THE RIGHT ROCKS WITH KNOWN NICKEL SULPHIDES

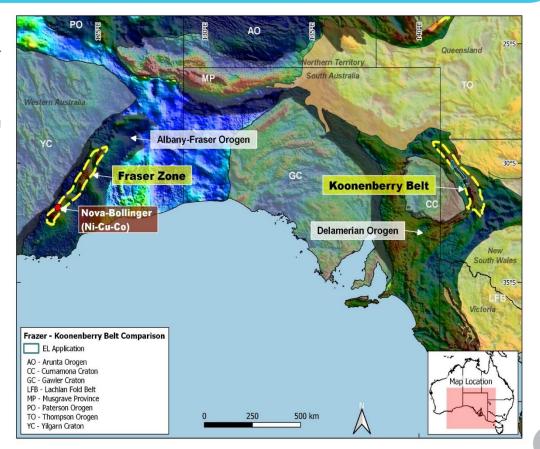
### KOONENBERRY BELT SCALE NICKEL-COPPER-PGE OPPORTUNITY



#### Belt scale blank canvas

- Analogous craton edge setting to Nova Bollinger Ni-Cu-Co deposit (discovered by S2 team)
- District-scale project covering 2,712km<sup>2</sup>
- Little exploration despite known magmatic Ni-Cu sulphide occurrences
- · Tenements awaiting grant
- EM, geochemical surveys and drilling planned for 2023







### **WESTERN YILGARN**

PART OF THE NEW Ni-Cu-PGE PROVINCE OF WA
TWO LARGE 100% OWNED PROJECTS
EXPOSURE TO MORE VIA SHAREHOLDING IN TRT

# WESTERN YILGARN NEW NICKEL-COPPER-PGE FRONTIER IN WESTERN AUSTRALIA



#### Exposure to over 1,054km² in the emerging Western Yilgarn province

Host to Chalice Mines' 330Mt Ni-Cu-PGE Julimar discovery

#### **West Murchison Project**

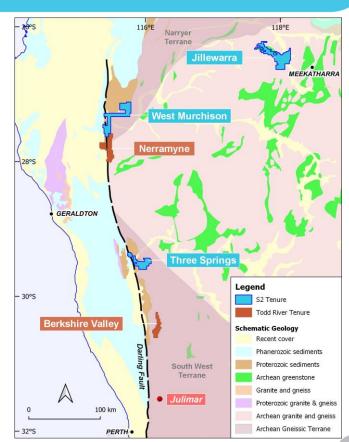
- Maiden RC drilling in 2022 intercepted disseminated sulphides
- Hole SWMC007 Two zones of disseminated sulphides totaling 8m, with highest grade interval grading 1.06% Cu and 0.70% Ni over 1m
- Follow-up drilling planned once heritage clearance area is extended

#### **Three Springs Project**

 Several prominent magnetic features, interpreted to be ultramafic intrusions with coincident anomalous Ni-Cu-PGEs in soil geochemistry

#### 13.2% shareholding in Todd River Resources (ASX:TRT)

Indirect exposure to several additional West Yilgarn Ni-Cu-PGE exploration projects





### **FINLAND**

AARNIVALKEA GOLD PROSPECT DICOVERED BY S2

NEXT DOOR TO AGNICO EAGLE'S KITTILA GOLD MINE
IN AN EMERGING GOLD AND NICKEL PROVINCE

## CENTRAL LAPLAND GREENSTONE BELT - FINLAND EMERGING LODE GOLD AND BASE METAL PROVINCE



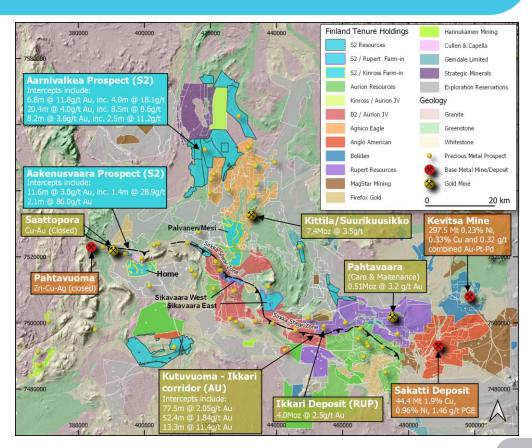
### Large 494km² landholding in emerging gold and nickel province

- Host to S2's Aarnivalkea gold discovery
- Region also host to Rupert Resources' maiden 3.95 Moz gold Ikkari discovery (released 2021)
- B2 Gold / Aurion Resources JV emerging discovery at the Kutuvuoma East, with intercepts including 77.5m grading 2.05g/t gold

#### Two farm-in agreements with quality partners:

- Kinross Gold earning in up to 70% on 83km<sup>2</sup>
   6 year spend up to US\$9.5M
- Rupert Resources earning in up to 70% on 37km<sup>2</sup>
   6 year spend up to €3.4M (~US\$3.6M)
- Sold small land parcel to Aurion Resources

Retained core land holding with high strategic value



## CENTRAL LAPLAND GREENSTONE BELT - FINLAND AARNIVALKEA - SCALE, HIGH GRADE, PROXIMITY TO MAJOR GOLD MINE



System has scale: 1.3km gold anomaly

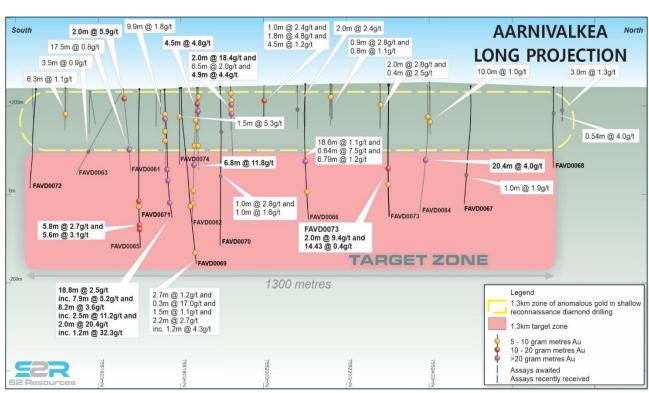
#### High-grade intercepts, including:

- 6.8m @ 11.8g/t gold from 223.0m, including 4.0m @ 18.1g/t gold
- 20.4m @ 4.0g/t gold from 193.1m, including 8.5m at 8.6g/t gold

Proximal to a major regional fault and running parallel to host structure of the nearby 7.4Moz Kittilä gold mine – owned by .... Agnico Eagle



Photo: Hole FAVD0064 core section grading 73.6g/t gold





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