



Kicking off 2025 with exploration on multiple fronts

**10 January 2025** 

**Bell Potter Unearthed Virtual Conference** 

#### COMPETENT PERSON AND FORWARD LOOKING STATEMENT



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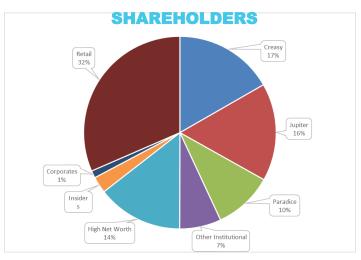
The information in this presentation that relates to S2's Exploration Results is based on information compiled by Mr John Bartlett who is an employee and shareholder of the Company and which fairly represents this information. Mr Bartlett is a member of the Australasian Institute of Mining and Metallurgy and has 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 consents to the inclusion in this presentation of the matters based on information in the form and context in which it appears. The information in this presentation that relates to Valkea's Exploration Results is based on information compiled by Dr Christopher Leslie, P.Geo., who is an employee of Valkea Resources. Dr Leslie is a Qualified Person as defined under the terms of Canadian National Instrument 43-101 and has 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. Dr Leslie consents 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 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 in Pe

#### **S2 CORPORATE METRICS**







#### **5 YEAR SHARE PRICE CHART**

**TOP 20 HOLDERS: 53.8%** 

FINANCIALS			
	Cash <sup>1</sup>	A\$3.47M	Sh
	TX3 shareholding <sup>2</sup>	A\$0.04M	Ор
	Valkea shareholding <sup>3</sup>	A\$6.16M	Ma
	Debt	Nil	En

#### **CAPITAL STRUCTURE**

nares on issue 452.86M ptions on issue4 46.00M arket capitalisation<sup>5</sup> A\$28.53M nterprise value<sup>6</sup> A\$18.86M

#### **NOTES**

- 1. Cash at 31st December 2024
- 2. 38M shares in Trinex Minerals (ASX:TX3) @ A\$0.001/share
- 3. 14.375M shares in Valkea (TSXV:OZ) @ C\$0.385/share and FX rate of 1.114
- 4. Weighted average price of A\$0.22 per option = A\$10.12M if exercised
- 5. Based on share price of A\$0.063 per ordinary share
- 6. Based on market capitalisation less cash & investments

#### **SUMMARY**



#### Doing what most don't:

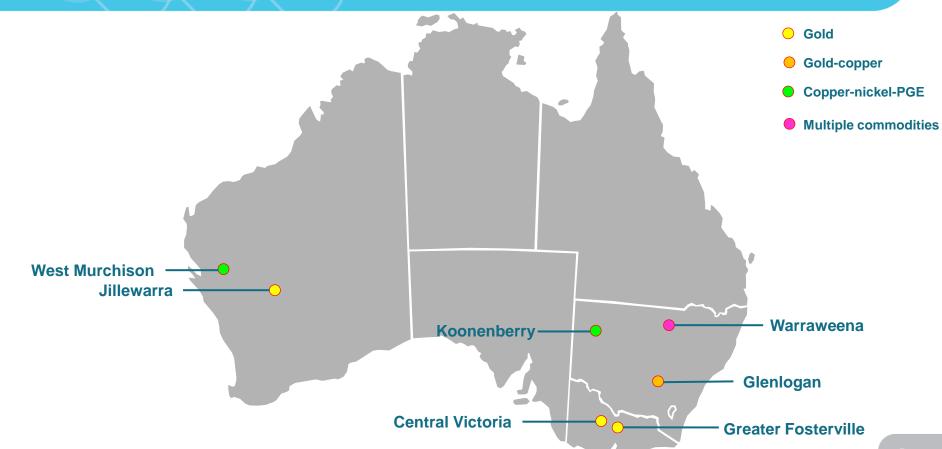
- Ambitious greenfields exploration seeking the next BIG ONE
- Multiple projects provide tactical optionality
- Target identification + disciplined drill testing = constant turnover
- Continually refreshing portfolio with new opportunities
- Monetising and/or maintaining exposure to non-core projects (eg, Valkea) to manage risk and help fund core activities

After a quiet 2024 we are coming out swinging in 2025



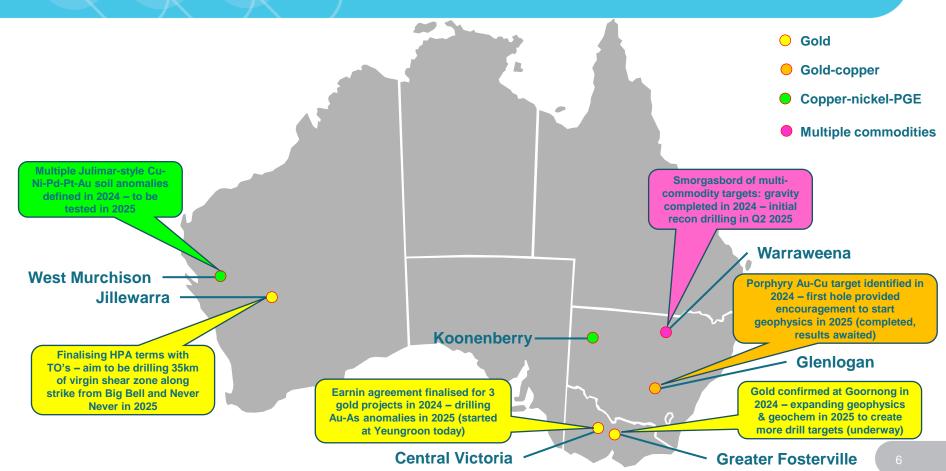
#### **PROJECT LOCATIONS**





#### **PROJECT STATUS**





#### WEST MURCHISON (S2 100%) BIG NEW SOIL ANOMALIES IN THE NEW WEST YILGARN NI-Cu-PGE PROVINCE



Ultrafine soil sampling in 4 target areas

Significant soil anomalies identified over three of these areas (yellow ellipses)

Each has significant Cu-Ni-Pd-Pt-Au anomalism over area of 3-4km strike

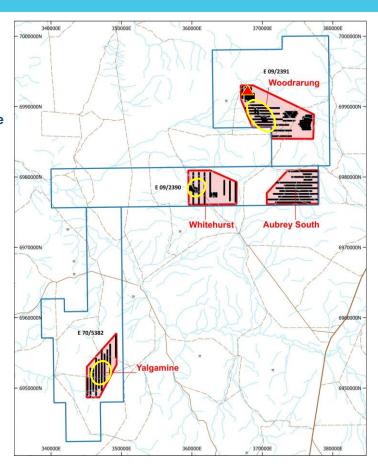
Each is associated with significant structures (as seen in mags)

The only previous drilling is by S2, comprising 5 RC holes (red triangle), well north of the new Woodrarung soil anomaly

Despite not being in the new soil anomaly, one of these holes intercepted:

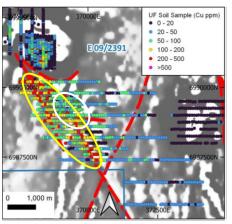
- 2m @ 0.62% Cu, 0.68% Ni, 0.64g/t Au
- 3m @ 0.68% Cu, 0.39% Ni, 0.51g/t Au

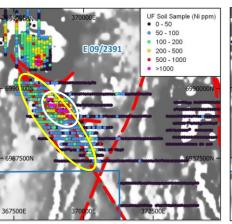
Proof of concept + big soil anomalies + no drilling = opportunity

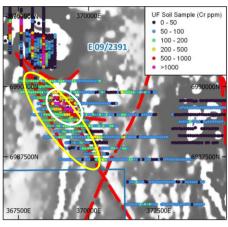


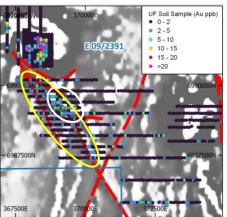
### WEST MURCHISON (S2 100%) WOODRARUNG – BIG COPPER ANOMALY WITH INTERNAL NI-Pt-Pd-Au HOTSPOT

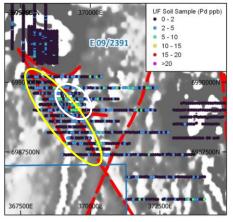


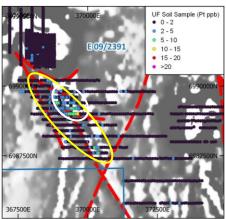












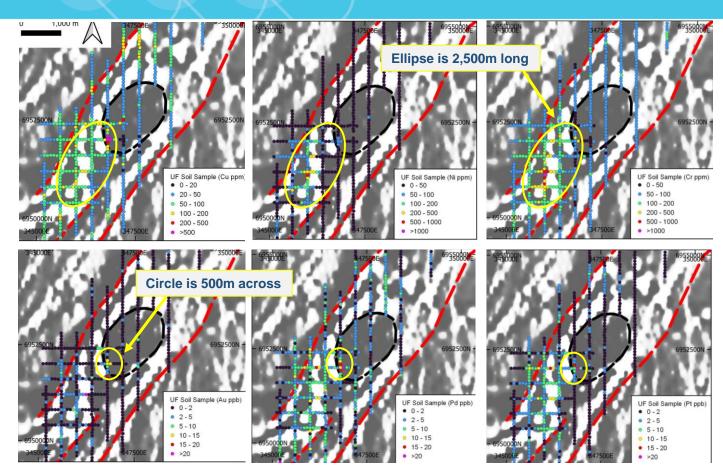
Broad 4,000m long copper anomaly (yellow ellipse) straddling NW-SE striking structural discontinuity (red dashed line)

Internal 1,200m long coincident zone of Ni, Cr, Pt, Pd, Au anomalism (white ellipse) directly over intersection of two structural discontinuities (red dashed lines)

Note: previous drilling (with Ni-Cu sulphide intercepts) is located outside these anomalies, over circular magnetic feature to the north

## WEST MURCHISON (S2 100%) YALGAMINE SOIL ANOMALY – A NOVA LOOK-ALIKE





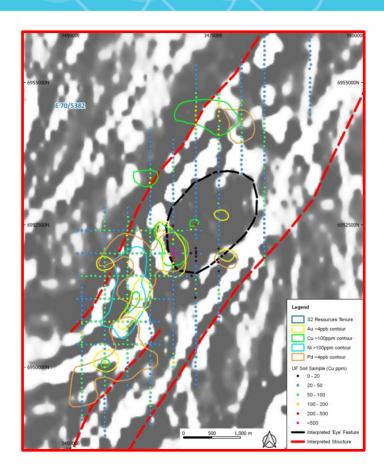
2,500m long Ni-Cr anomaly adjacent to eye-like magnetic feature

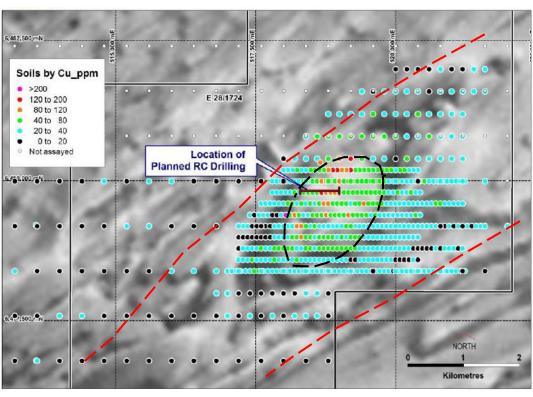
Discrete Cu-Au-Pt-Pd anomaly on margin of eye-like magnetic feature

This may look small but sampling is on 400m x 80m grid!

### WEST MURCHISON (S2 100%) COMPARISON OF YALGAMINE & NOVA MAG EYES AND COPPER ANOMALISM



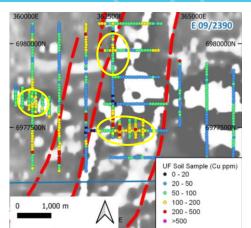


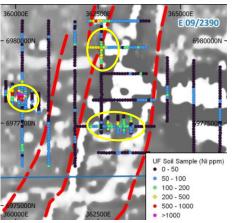


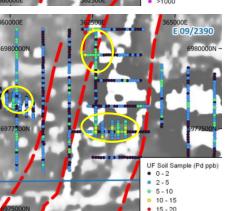
Same-scale comparison of Yalgamine (LHS) with original soil anomaly over Nova (RHS) from December 2011 Sirius presentation

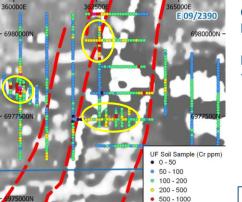
### WEST MURCHISON (S2 100%) WHITEHURST SOIL ANOMALY – MULTIPLE HOTSPOTS

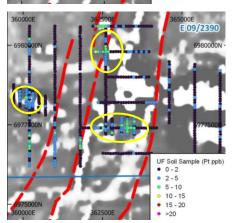












Cluster of three Ni-Cr-Cu-Au-Pt-Pd anomalies

Each anomaly measures 500-1,500m long

Next step is field mapping, geophysics and recon drilling

UF Soil Sample (Au ppb)
0 - 2
0 - 2
2 - 5
5 - 10
10 - 15
15 - 20

• >20

E 09/2390

• >20

### JILLEWARRA JOINT VENTURE (S2 EARNING UP TO 70%) VIRGIN STRUCTURE ALONG STRIKE FROM BIG BELL & NEVER NEVER



At a district scale the Karbah shear zone controls the location of Westgold's Big Bell gold mine and Spartan's Dalgaranga (Never Never) gold discoveries

36km of strike strike of this shear zone passes through the Jillewarra project

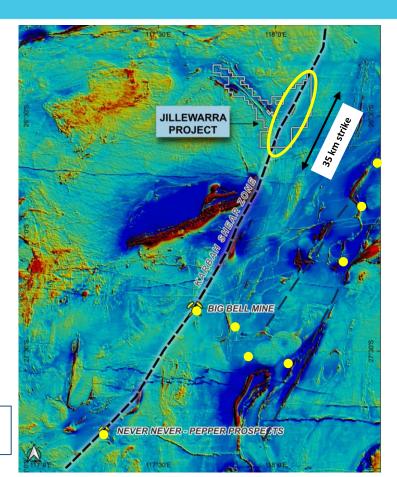
Where it does so, it is under cover and unexplored

This represents a major exploration opportunity for S2 once the Exploration Licence Applications are granted

Granting is subject to signing a Heritage Protocol Agreement (HPA) with the traditional owners

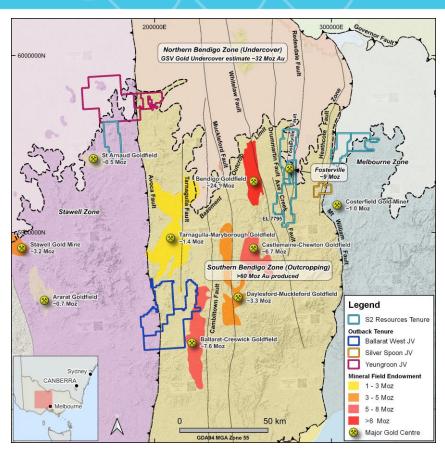
This is in the final stages of negotiation

Once signed, and EL's granted, S2 intends to start a major systematic aircore drilling program covering this target



## NEW CENTRAL VICTORIAN GOLD JV (S2 EARNING 80%) YEUNGROON, SILVER SPOON & BALLARAT WEST





Earning 80% interest in three projects by spending \$1.2m within 4 years

**Projects comprise Yeungroon, Silver Spoon and Ballarat West** 

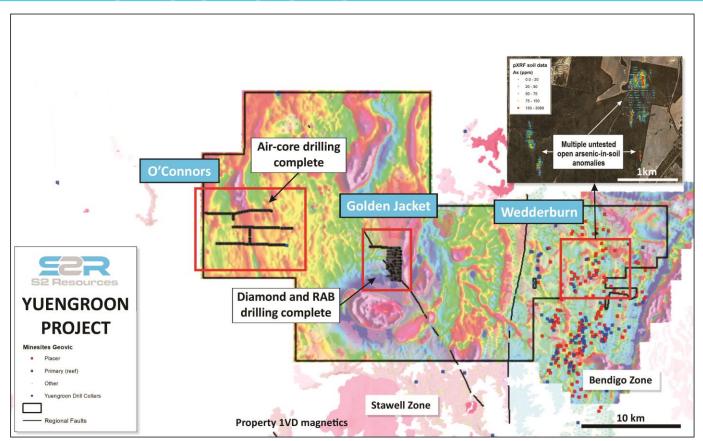
Complement existing project at Greater Fosterville

Provide tactical flexibility/optionality with respect to the land access process

<sup>\*</sup> access agreements are a prerequisite to undertaking exploration activities on freehold land and are not guaranteed

### NEW CENTRAL VICTORIAN GOLD JV (S2 EARNING 80%) YUENGROON: THREE SOIL / AIRCORE HOTSPOTS





Yeungroon contains three target areas

Aircore drilling has started at O'Connors, where previous shallow aircore has defined consistent Au-As anomalies associated with a major structure and along strike from the St Arnaud goldfield

Previous aircore drilling at Golden Jacket has partly defined a bedrock Au-As anomaly

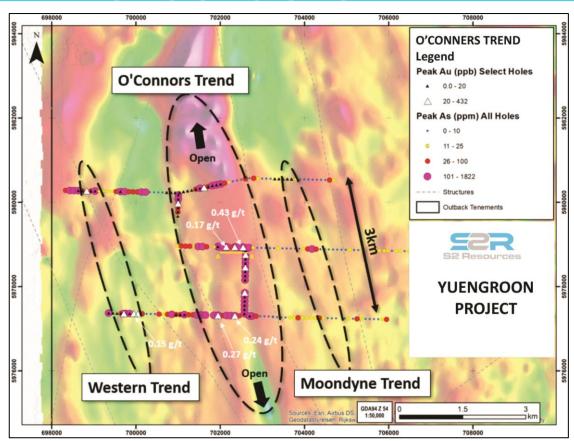
pXRF analysis of soils from north of the Wedderburn Goldfield has defined several arsenic anomalies – gold assays are awaited for soils collected in January

<sup>\*</sup> access agreements are a prerequisite to undertaking exploration activities on freehold land and are not quaranteed

# NEW CENTRAL VICTORIAN GOLD JV (S2 EARNING 80%) YUENGROON: >3KM LONG As-Au AIRCORE ANOMALY AT O'CONNORS



Blah blah blah

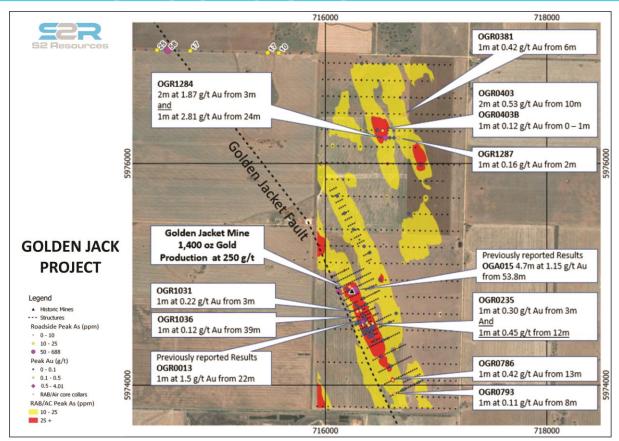


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### NEW CENTRAL VICTORIAN GOLD JV (S2 EARNING 80%) YUENGROON: EXTENSIVE As-Au AIRCORE ANOMALY AT GOLDEN JACKET



Blah blah blah

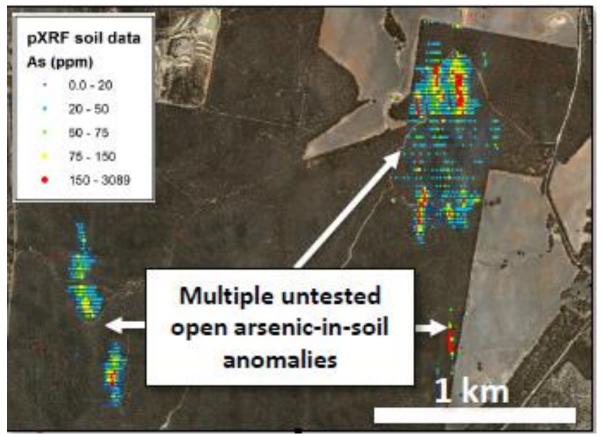


access agreements are a prerequisite to undertaking exploration activities on freehold land and are not guaranteed

# NEW CENTRAL VICTORIAN GOLD JV (S2 EARNING 80%) MULTIPLE AS SOIL ANOMALIES NORTH OF WEDDERBURN GOLDFIELD



Blah blah blah



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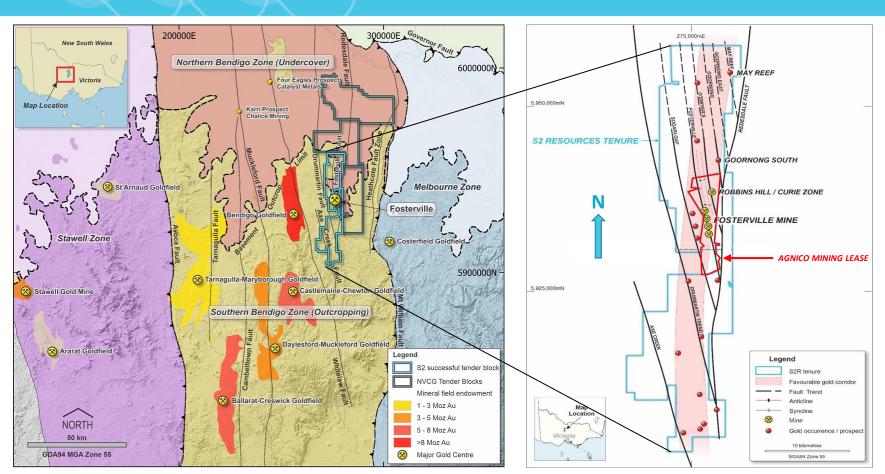
#### **GREATER FOSTERVILLE (S2 100%)**





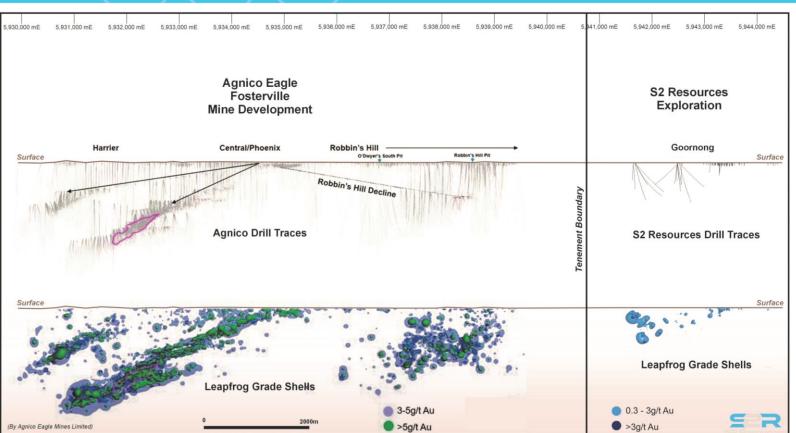
# GREATER FOSTERVILLE (S2 100%) THE 4 TENDER BLOCKS – AND THE IMPORTANCE OF BLOCK 4





## GREATER FOSTERVILLE (S2 100%) GOORNONG PROSPECT RELATIVE TO FOSTERVILLE MINE



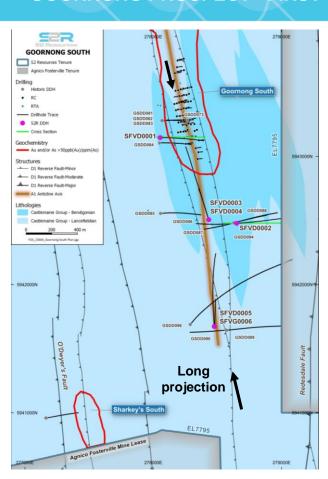


#### Composite long projection showing:

- Intensity of drilling and distribution of grade on Agnico's Fosterville mine lease
- Lack of drilling on S2's side of the boundary
- Note that this is composite and mineralisation is on three separate but parallel en echelon structures

### GREATER FOSTERVILLE (S2 100%) GOORNONG PROSPECT - FIRST CAB OFF THE RANK

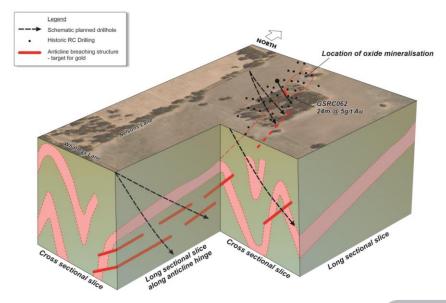




The most obvious place to start was where Kirkland Lake (now Agnico Eagle) left off

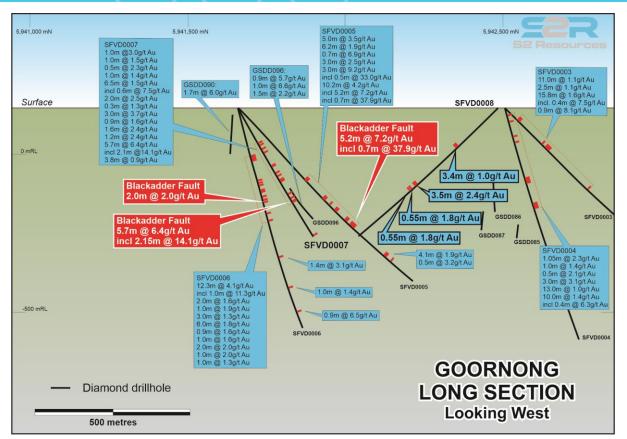
At Goornong a favourable target zone is interpreted to plunge south from a historic oxide resource

The target comprises a south plunging corridor where faults intersect the hinge zone of an anticline – exactly the sort of situation where these faults may refract, flatten and dilate



# GREATER FOSTERVILLE (S2 100%) GOORNONG PROSPECT – EARLY DRILLING SUCCESS





The first 6 holes (1-6) have defined the overall framework, but with so many intercepts it was not possible to join the dots



The next 2 holes (7 & 8) have tested the defined framework



They have successfully identified a discrete mineralised structure – the Blackadder Fault



This structure is MINERALISED



This structure broadly lines up with well delineated structures containing gold and being mined at Robbins Hill to the south on Agnico's mining lease!



We have achieved everything we hoped to at this stage – WITH JUST 8 HOLES



### GREATER FOSTERVILLE (\$2 100%) GOORNONG PROSPECT – THE BLACKADDER FAULT DEFINED



Blackadder fault strikes NNE, dips W, plunges N

Defined by intercepts in 4 holes:

5.7m @ 6.4g/t gold (incl 2.15m @ 14.1g/t gold)

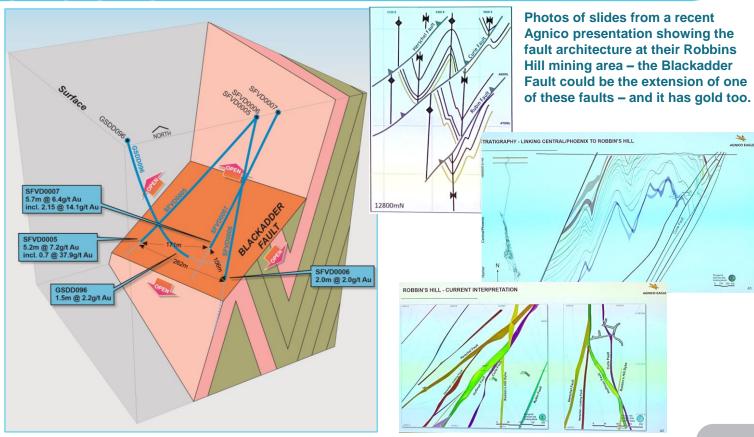
5.2m @ 7.2m gold (incl 0.7m @ 37.9g/t gold)

These are 171m apart!

Most likely the same family of faults that host mineralisation at the Robbins Hill/Curie zone on Agnico's ML

Requires infill and extensional drilling up and down dip and along strike\*

Constrained by access issues



<sup>\*</sup> access agreements are a prerequisite to undertaking exploration activities on freehold land and are not quaranteed

# GREATER FOSTERVILLE (S2 100%) BEYOND GOORNONG

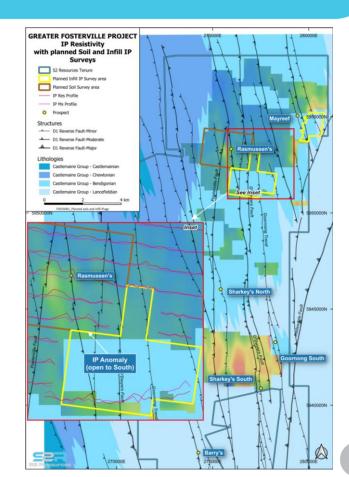


...but Goornong/Blackadder is only one prospect of many

Rather than over-invest, concentrate risk, and be slowed down we are spreading our wings and reverting to earlier stage (=cheaper) work over several prospects

Soil geochemistry and induced polarisation (IP) geophysics is underway in selected areas covering S2's 20km of prospective strike to the north of the ML

Initial target areas are Rasmussens and May Reef



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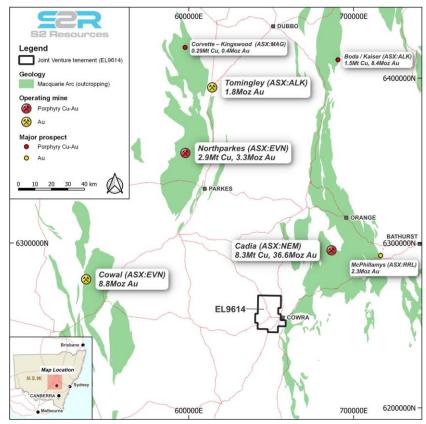
S2 can earn <80% interest by spending A\$6 million in 5 years

Project is located in the Lachlan Fold Belt of central NSW

District contains multiple Tier 1 copper and/or gold mines with a combined known endowment of over 61Moz gold and 12.7Mt copper

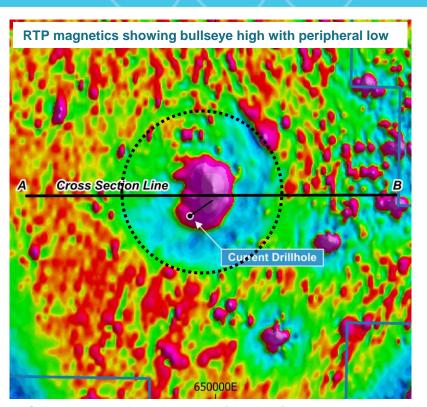
Target and host stratigraphy (Ordovician age) is concealed beneath younger (Silurian age) rocks

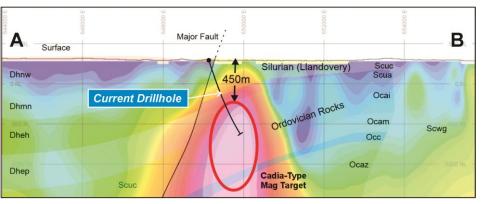
The most prominent target – a big magnetic anomaly - has been known about for ~30 years but never drilled before now

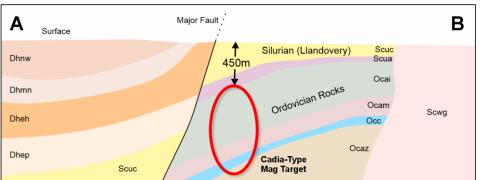


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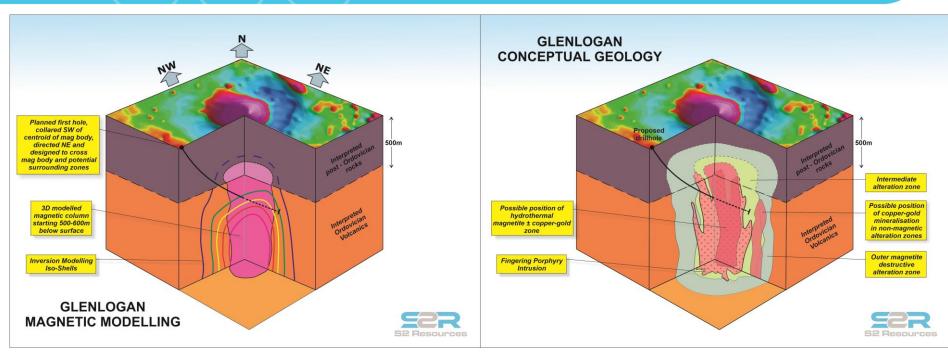


LHS: Reduced-to-the-pole magnetics showing large central bullseye anomaly surrounded mag low halo

RHS upper: 3D mag inversion model showing planned trace of first drillhle

RHS lower: Mag body is interpreted to be within Ordovician, which implies correct age for Cadia-Ridgeway style intrusion





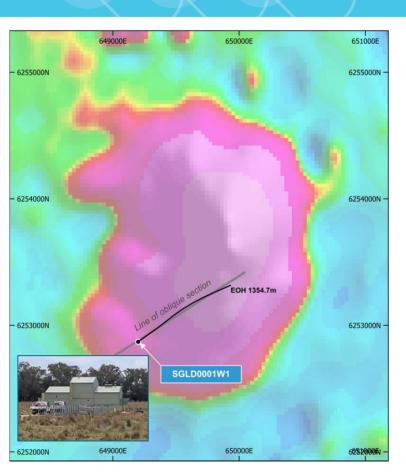
#### Schematic 3D isometric block diagram showing:

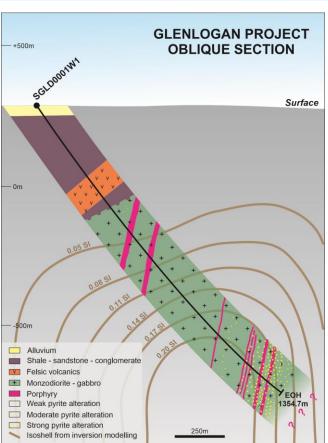
- surface mag anomaly as seen in RTP processed aeromagnetics
- · modelled columnar magnetic body at depth
- · isoshells of magnetic susceptibility

#### Schematic 3D isometric block diagram showing:

- · interpreted Ordovician and post-Ordovician stratigraphy
- · conceptual porphyry intrusion within Ordovician
- conceptual zones of alteration, magnetism and mineralisation associated with porphyry







First hole (SGLD0001W1) drilled to 1,354.7m

Hit source of magnetic anomaly – so tested the magnetic target: the wrong rock, no copper or gold

#### BUT...

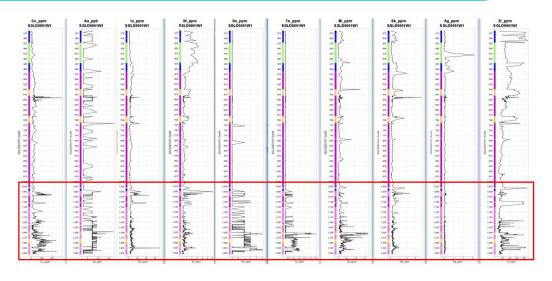
In so doing, hit propylitic alteration, red rock alteration, pyrite alteration and a swarm of quartz diorite dykes in the lowermost 300m of the hole







- Propylitic (Qtz-Chlor-Py) alteration
- Intense Epid-Chlor alteration
- Py-Cpy in vein margin
- Redrock (Kspar-Hem) alteration
- Skarn-style alteration
- Intense propylitic (Chlor-Epid-Py) alteration



Downhole geochemistry traces showing increase in key elements associated with swarm of quartz diorite porphyry dykes in bottom 300m of hole

L to R: Cu, Au, As, W, Se, Te, Bi, Sb, Ag, Zr

Is the hole approaching a mineralised system?

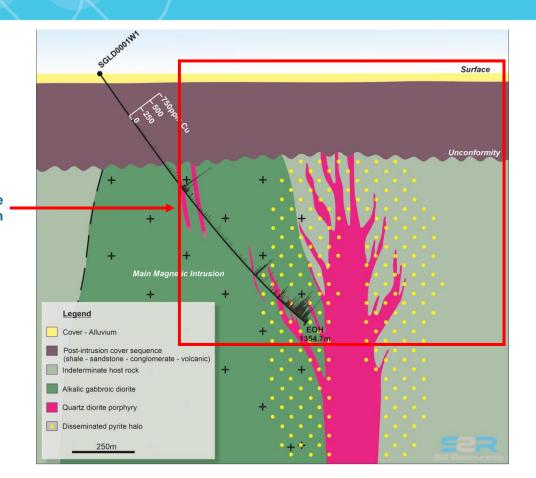
Geophysics may sharpen the focus

Sediments
 Fault/shear zone
 FRY - Volcanic Rhyolite
 AGD - Alkalic Gabbroic Diorite
 AGD- Alkalic Gabbroic Diorite - variably mineralised
 Andesitic dyke
 QDP - Quartz-diorite porphyry - unmineralised
 QDP - Quartz-diorite porphyry - mineralised

Maybe a distal alteration halo?



Illustrative figure showing search space where geophysics may detect the signature of mineralisation related to an adjacent smaller, later intrusion



Tensor induced polarisation and magnetotelluric geophysical surveys have just been completed – results awaited

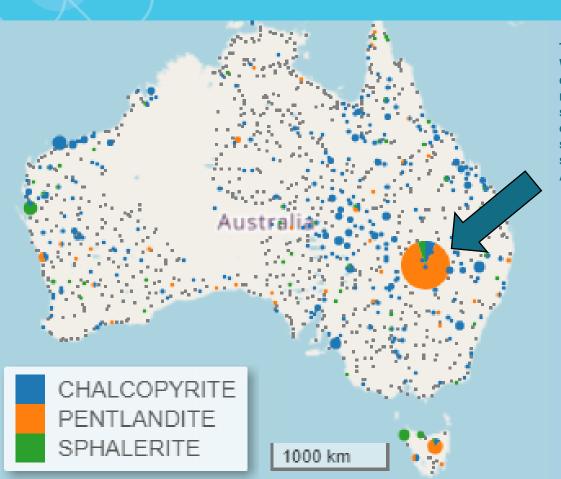
Their aim is to detect any chargeability anomalies (that may reflect the presence of disseminated sulphides) and/or resistivity anomalies (that may reflect the presence of silica/quartz alteration) that may point to a smaller, fertile intrusion adjacent to the main magnetic intrusion

#### WARRAWEENA (S2 EARNING 70%) THE MOST ANOMALOUS HEAVY MINERAL SAMPLE IN AUSTRALIA



Recently published Heavy Mineral Map of Australia showing the concentration of pentlandite, chalcopyrite and sphalerite in all 1,315 samples collected across Australia

Bubble size represents the abundance of minerals in each sample, and pie slices depict the relative abundance of each of these minerals in each sample



The sample collected in the Warraweena drainage catchment contains 10x more pentlandite and the second highest abundance of chalcopyrite and sphalerite in all of the samples collected across Australia

#### WARRAWEENA (S2 EARNING 70%) A SMORGASBORD OF TARGET STYLES



S2 can earn a 70% interest in EL9269 by spending A\$2.7 million by July 2027

Surrounding EL applications are 100% S2

Target geology is concealed beneath two layers of cover – younger rocks and alluvial sediments of the upper Darling River catchment

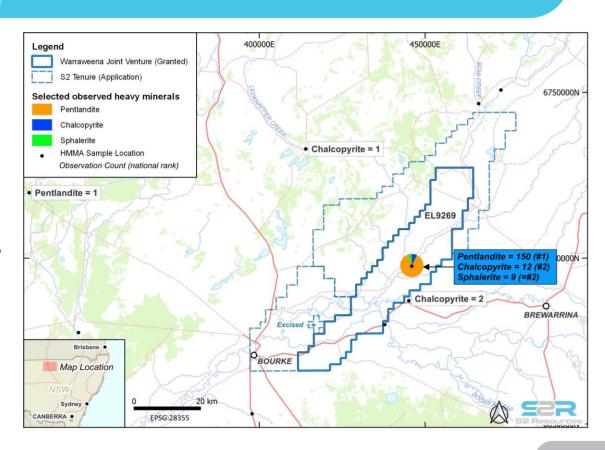
Known concealed calc-alkaline and shoshonitic rocks of potential Macquarie Arc affinity = prospective for porphyry copper-gold

Known concealed mafic & possible ultramafic rocks, with district-scale groundwater nickel anomalism = prospective for magmatic nickel-copper-PGE

Possible concealed Devonian Cobar Basin rocks = prospective for Cobar-style zinc-lead-copper

Multiple land access agreements\* signed

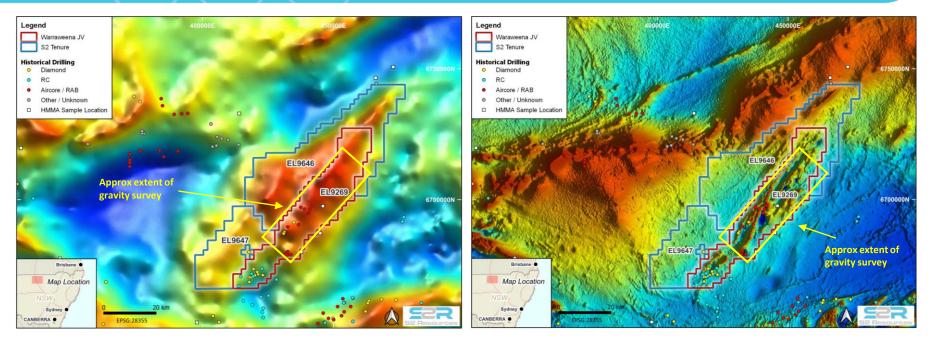
**Detailed gravity survey COMPLETED** 



<sup>\*</sup> access agreements are a prerequisite to undertaking exploration activities on freehold land and are not quaranteed

### WARRAWEENA (S2 EARNING 70%) ENTICING EXISTING GEOPHYSICS





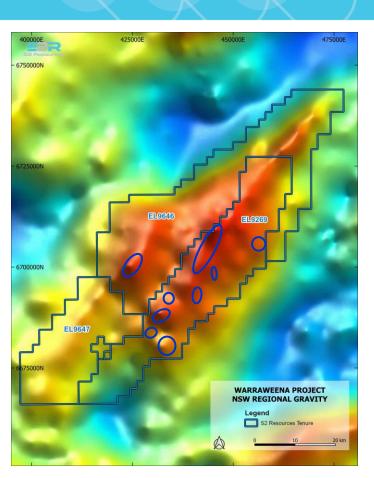
Project area contains distinct magnetic and gravity anomalies hidden beneath two layers of cover (younger rocks + Darling basin alluvium)

A distinct NE trending gravity high suggests a buried block of dense older rocks within and surrounded by Devonian basinal rocks

The magnetics suggests numerous magnetic (mafic/ultramafic?) units with several circular lows (porphyry intrusions?) punching through the stratigraphy – a gravity survey has been completed to distinguish nickel-copper targets, copper-gold targets and copper-zinc targets

### WARRAWEENA (S2 EARNING 70%) FIRST STEP DONE – NEW DETAILED GRAVITY IDENTIFIES SPECIFIC TARGETS



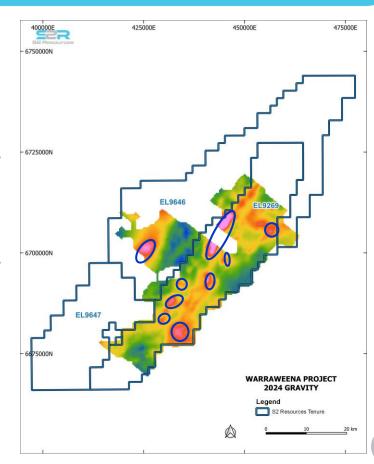


Old regional gravity (LHS)

New detailed gravity (RHS)

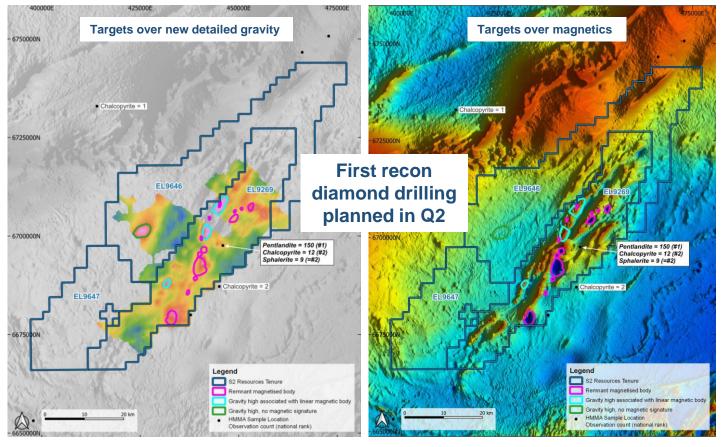
New detailed gravity has highlighted linear highs and discrete bodies

denserstratigraphy anddenser intrusions



### WARRAWEENA (S2 EARNING 70%) MULTIPLE BURIED TARGETS NOW READY FOR DRILL TESTING





Integration of gravity with magnetics shows three distinct target types:

- 1. Gravity high + magnetic high/low bullseye = dense (or shallow) and magnetic source:
- mafic/ultramafic intrusions (magmatic Ni-Cu-PGE)
- diatremes (IOCG Cu-Au)
- Shallow felsic intrusions (porphyry Cu-Au)
- 2. Gravity high on more extensive linear magnetic high = dense (or shallow body within more extensive less dense but magnetic stratigraphy:
- mafic/ultramafic sill (Ni-Cu-PGE)
- Volcanogenic massive sulphide (Cu-Zn-Pb-Ag-Au)
- 3. Gravity high only = unexplained dense body

#### FINLAND - STATUS

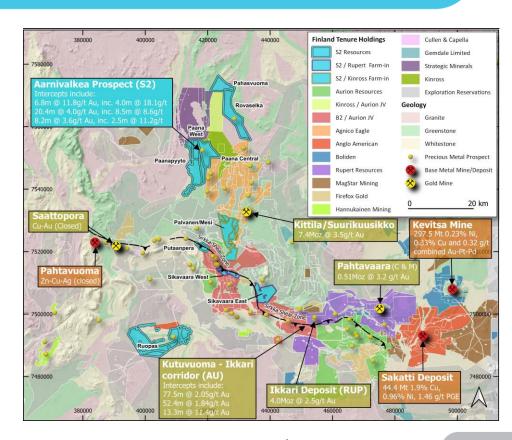


S2 owns ~44% of Valkea Resources (formerly Outback Goldfields, TSXV:OZ) as a result of the sale of S2's Finnish subsidiary, Sakumpu, to Valkea

Valkea is now exploring S2's former Finnish ground

Valkea has recently completed a follow up diamond drilling program at the Aarnivalkea gold prospect, discovered by S2 in 2018

Refer to Valkea's TSXV news releases for further information





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