

# **Quarterly Report**

for the three months ended 31 March 2021

30<sup>th</sup> April 2021 ASX Announcement

# **MARCH 2021 QUARTERLY ACTIVITIES REPORT**

During the March 2021 quarter ("the Quarter") Surefire Resources NL ("Surefire", "the Company") commenced a major drilling program at the Yidby Gold Project, the first phase of which was completed post the end of the Quarter with the majority of the holes intersecting the mineralised structures (see Project plan Figure 1, regional location Figure 2 and WA location plan Figure 3).

At the **Perenjori Gold, Base Metals and Iron Ore Project** (regional location Figure 4), previous gold exploration information was compiled and interpreted (Figure 5), with further exploration now planned, and the iron-ore project on E70/5311 was reviewed and re-evaluated, highlighting potential for production of a high-grade, high-purity, concentrate ideally located near existing infrastructure. The Company is preparing a new Scoping Study and planning to upgrade the resource.

On the **Kooline Silver - Lead and Copper – Gold Project** (regional location Figure 6), re-processing, and interpretation of geophysical data (in particular VTEM and magnetics) has identified potential for a major intrusive related Silver-Lead and Copper-Gold system (Figure 7) as well as high-grade gold potential in the northern part of the project (Figure 8).

# YIDBY GOLD PROJECT (E59/2390, E59/2426, E59/2444)

The Yidby Gold Project is well located close to the Great Northern Highway, 40km southwest of Paynes Find in the Mid-West of Western Australia, and in the southern portion of the Yalgoo-Singleton Greenstone Belt, part of the mid to late-Archaean Youanmi Terrane.

The Project comprises three granted exploration licences, total area 114 km² (Figure 1) and includes three prospects where significant gold mineralisation has been identified, associated with historical workings at Delaney Well and Cashens Find, and a virgin discovery at Yidby Road gold prospect.

The Project is surrounded by several significant gold projects, including the +1.1 million-ounce Minjar Gold Project approximately 65km to the northwest, the 1 million-ounce Kirkalocka Gold Project approximately 70km to the northeast, the 0.9Moz Mount Gibson Gold Project 30km to the south and the Rothsay Gold Project 30km to the west (see Figure 2).

#### Major drilling program commenced at Yidby Road

During the Quarter, the Company commenced its major drilling program at Yidby Road gold prospect. This first phase of the drilling program was focused on extending the previously intersected zone that produced thick and relatively high-grade intersections (ASX: SRN 30 November 2020 and 15 December 2020) from a northwest-southeast trending, east dipping, mineralised zone across the boundary between sheared ultramafic/mafic rocks and a large felsic "porphyry" intrusion.

The drilling has extended the mineralised zone both at depth and along strike of the previous exceptional intersections that include, YBRC007: 56m @ 1.97 g/t Au from 44m including 4m @ 14.47 g/t Au and YBRC008: 40m @ 3.01 g/t Au from 24m including 4m @ 26.57 g/t Au, and remains open in all directions.

#### Regional potential identified along major 5km structural corridor

Historical aircore drilling at Yidby Road intersected gold mineralisation across a 400m wide corridor extending well to the west of the recently intersected zone. Mobile Metal Ions (MMI) soil sampling results have confirmed this 400m wide anomalous/mineralised corridor and indicate that the zone extends at least another 400m to the northwest – where it remains un-tested.

This mineralised zone occurs at the centre of a major structural corridor identified through interpretation of new gravity imagery and re-processed aeromagnetic data. Projection of this structural corridor to the south corresponds with an interpreted structure evident in magnetics that has cut through a regional anticline in the BIF units. Field examination of this zone, over 2km southeast of the drilled area, has located a mineralised and sulphide bearing felsic porphyry that occupies the hinge zone of this anticline (Figure 3).

The regional scale structural corridor that hosts the Yidby Road mineralisation has now been identified over a >5km strike length within the Surefire tenements and offers considerable potential for the discovery of a major gold mineralised system.

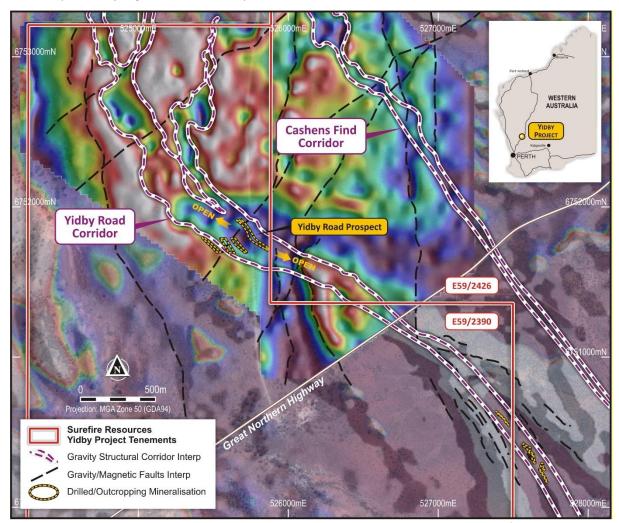


Figure 1: Yidby detailed gravity image on TMI Magnetics with structural corridors & identified mineralisation

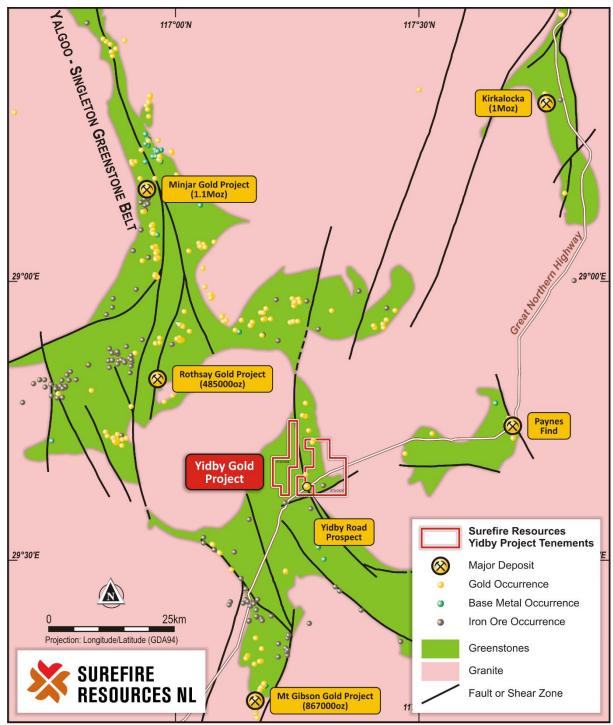


Figure 2: Yidby Gold Project location on regional geology with major gold projects & mineral occurrences

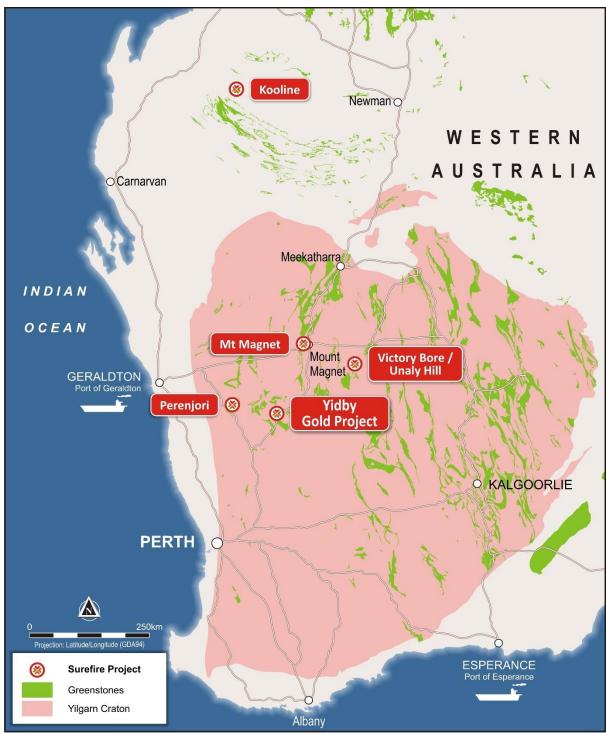


Figure 3: Project Location Map showing Surefire's Tenements

#### PERENJORI GOLD, BASE-METALS & IRON ORE (E70/5311, E70/5573, E70/5575 & E59/2446)

The Perenjori Gold, Base Metals and Iron Ore Project includes four granted Exploration Licences (E70/5311, E70/5573, E70/5575 and E59/2446) and a further three Exploration licence applications (ELA59/2432, ELA59/2445 and ELA70/5572), over a combined area of 642km², located in Midwest Region of WA (Figures 3 and 4).

The tenements are located over the Koolanooka Greenstone Belt, within a typical granite-greenstone terrain of the southern Murchison Geological Province of the Archaean Yilgarn Craton. The area is an under-explored and highly prospective, with numerous gold, base metals and iron-ore deposits in the region, including the Deflector Gold Mine 30km to the north, the Karara Iron Ore deposit 30km to the east and the Golden Grove base metals deposits 50km to the northeast (Figure 4).

During the Quarter, the Company compiled and re-interpreted previous gold and base metals exploration data, including previous soil sampling data which highlighted trends in both gold and arsenic data that may correlate with gold bearing structures, as well as previous drilling data that included significant gold-mineralised intersections.

In addition, the iron-ore potential of tenement, E70/5311, was reviewed and re-evaluated, highlighting potential for production of a high-grade, high-purity concentrate ideally located near existing infrastructure. The Company is preparing a new Scoping Study and planning to upgrade the resource.

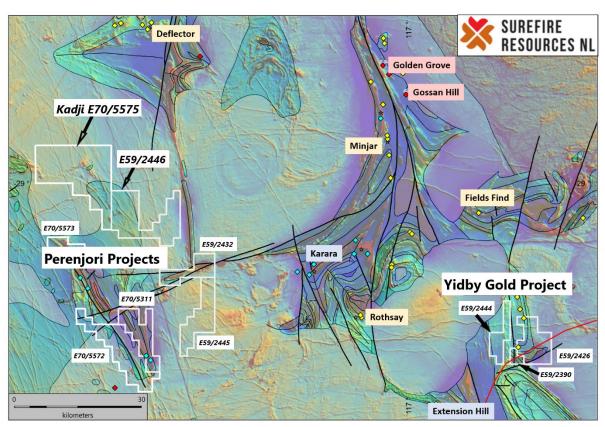


Figure 4: Perenjori and Yidby Projects tenements location on geology and aeromagnetics

#### **Perenjori Gold Potential**

A review of previous exploration data, focused on E70/5311 and E70/5572 (locations, see Figure 4), has highlighted soil sampling geochemistry that has been interpreted to highlight key trends in both gold (see Figure 5 below) and arsenic data.

A broadly sampled (>1km spacing) north-south trending, gold-anomalous corridor has been contoured – running parallel but to the east of the Banded Iron Formation (BIF) on E70/5311 (Figure 5). This trend corresponds with a north-south trending structure interpreted from regional aeromagnetic imagery in the poorly exposed greenstones to the east of the BIF, linking to an area of historical drilling that generated significant intersections (see SRN, ASX release 23 November 2020) including:

- 28m @ 0.72g/t Au from 8m, including 4m @1.24g/t Au from 32m in PC16.
- 8m @ 1.18 g/t Au from 20m, repeating at 2m @ 2.15g/t Au (18-20m) in PC01.
- 4m @ 2.31 g/t Au from 40m, repeating 1m @ 11.6 g/t Au in PC05

Other, northeast – southwest gold anomalous trends associated with interpreted cross faults intersect the north-south corridors and represent targets for focused gold mineralisation.

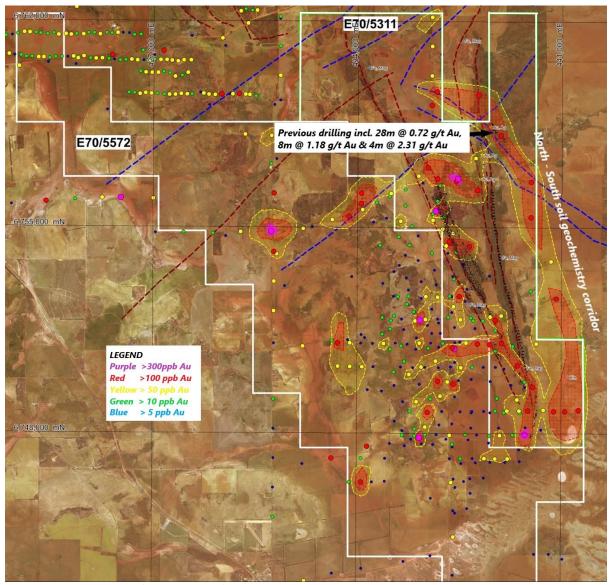


Figure 5: Perenjori E70/5311 and E70/5572 tenements with soil sampling data (Au) on aerial photography

#### Perenjori Iron-Ore Project review

Due to the high iron-ore price, the iron-ore potential of the Perenjori tenements was assessed during the Quarter, based on a review of historical open file data and geophysical data sets.

The bulk of previous work was focused in the area covered by granted tenement E70/5311, including a previous (JORC 2004) resource estimate by CSA Global of 191.7Mt @ 36.6% Fe, released by Quest Minerals Ltd (ASX: QNL), 27 September 2013, and a Scoping Study completed by Mintrex, also in 2013.

Previous metallurgical (Davis Tube Recovery) test results for Quest produced a high-quality concentrate can be produced of close to 70% Fe, with Main Zone material producing very high results of 84% to 86% Fe yield.

Significant iron-ore exploration potential was also identified — largely for extensions to the BIF associated magnetite ore in E70/5311, but also for detrital and supergene (Haematite) direct shipping ore (DSO). Interpretation of available aeromagnetic imagery and through extrapolation of existing drilling, it is estimated that the tenements have the potential to host >500Mt of iron-ore that may be defined through further, step-out, resource drilling. The Company is preparing a new Scoping Study and planning to upgrade the resource prior to considering a Feasibility Study.

# **KOOLINE HIGH GRADE LEAD-SILVER & COPPER-GOLD (E08/2373 & E08/2956)**

The Kooline lead-silver and copper-gold Project includes two exploration licences (E08/2373 and E08/2956) that cover a total area of 386 km<sup>2</sup>, located in the Ashburton Province of Western Australia, 55 kilometres south of the 1 million-ounce Paulsen's Gold Mine (Figure 6).

The tenements are highly prospective for extensions to the high-grade Kooline silver-lead lodes at the Kooline Mineral field, historically Western Australia's largest producer of lead.

In addition, through re-processing and interpretation of geophysical data, the Company has identified potential for a large intrusive related silver-lead to copper-gold system at the Kooline Project.

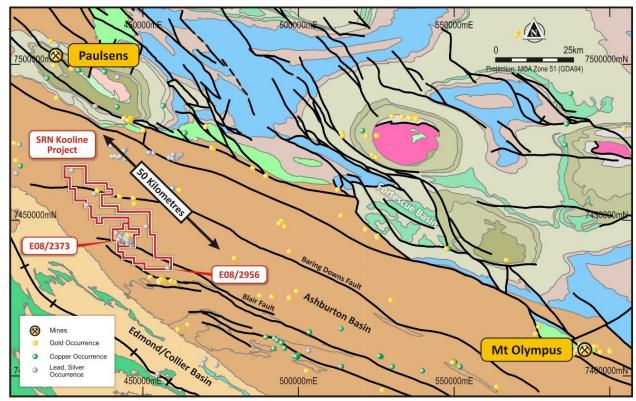


Figure 6: Kooline Project Tenements and Major Gold and Base Metal Deposits

#### Kooline review of geophysics highlights major silver-lead and copper-gold potential

During the Quarter, data from a previous Versatile Time Domain Electromagnetics or "VTEM" survey has been re-processed and interpreted, highlighting a large intrusive body and a series of VTEM conductors along strike to the west of the previously mined high-grade silver-lead lodes of the Kooline Mineral Field (Figure 7).

The VTEM conductors are located on the south-eastern side of the interpreted intrusive body, interpreted to represent a heat and potential mineralised magmatic fluid source for an intrusive related "intracratonic magmatic copper-gold" or IMCG system (as highlighted by CSA Global Pty Ltd – see ASX release 14/12/2018).

The high-grade Pb-Ag lodes at Kooline are interpreted to represent the distal (cooler) zone of this IMCG mineralised system that show increasing copper (Cu) content in workings closer to the intrusive, indicating that the conductors may be associated with Cu-Au sulphides closer to the interpreted intrusive heat source.

The key target area indicated on Figure 6 includes five conductors within a 2km x 2km area, that correspond with an area of deep erosion / transported cover immediately along strike from the Ag-Pb workings. This key target area is essentially un-tested and a series of deep pre-collared diamond drillholes have been planned and submitted to the WA Government for joint EIS funding, targeting both high-grade extensions of the Ag-Pb lode structures as well as copper-gold mineralisation closer to the interpreted intrusive.

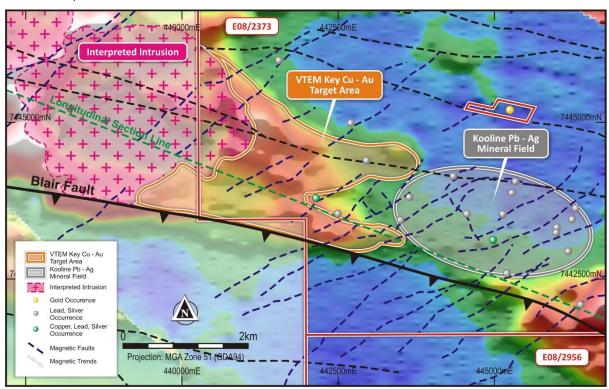


Figure 7: VTEM depth slice at Kooline Silver-Lead Field showing mineralised trends and key target area

#### Kooline review of geophysics highlights major silver-lead and copper-gold potential

In addition to the major VTEM targets, interpretation of detailed aeromagnetics has identified extensions to major crustal scale fault structures – including the Baring Downs Fault (see Figure's 6 and 8 below), that continue into the northern end of the Kooline tenements. Interpreted splays from this major structural corridor are associated with a key gold corridor with potential for high-grade orogenic gold of the Paulsen's style.

A second key corridor at Kooline North broadly corresponds with a bend in the projection of the crustal-scale Baring Downs Fault from WNW to east-west, with a number of splays interpreted. Gold workings, including the historical True Grit and Sunken Treasure mines, occur along this trend to the east of the tenement area, and continue into the Kooline Project tenements (e.g. Griffiths Mine - see Figure 8).

Within the southern part of this corridor a series of sub-cropping, east-west trending, quartz – carbonate veins were mapped and sampled by Golden Deeps Ltd in the mid 1980's over an area of 300 x 400m (E 08/159, WAMEX Report A23240). One gossanous quartz vein produced a rock chip fire assay result of 38 g/t Au (repeat 31 g/t Au) with 450 ppm As. This quartz vein has a strike length of approximately 250m, trends WNW and projects into an area of deep erosion / transported cover that remains largely untested.

Kooline North represents a key target area for high-grade orogenic gold deposits associated with deep, crustal scale structures, similar to the 1 Moz Paulsen's Deposit located immediately to the north of the Kooline tenements (see Figure 6). Evidence of high-grade veining projecting into covered, untested, areas presents a compelling target for further exploration.

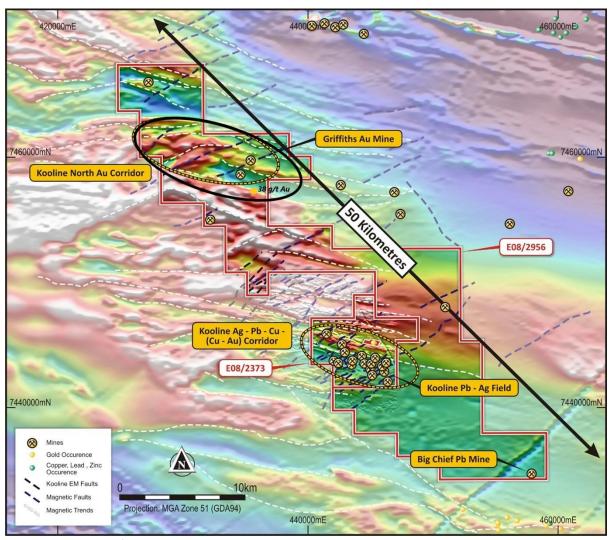


Figure 8: Regional 1st Vertical Derivative (1VD) magnetics with interpreted structures and prospect locations

#### UNALY HILL HPA (E57/1068) & VICTORY BORE VANADIUM (E57/1036)

The Unaly Hill E57/1068 includes the base of the Atley Igneous Complex that hosts a Vanadium ( $V_2O_5$ ), Iron (Fe), Titanium ( $TiO_2$ ) and Silica ( $SiO_2$ ) resource that also contains a significant Alumina ( $Al_2O_3$ ) content.

A second stage of testwork, at Nagrom laboratories in Perth, designed to evaluate potential of the Unaly Hill resource as a source of alumina for high purity alumina (HPA) production was reported in 2020. The conclusions from the work were that a relatively high-purity  $Al_2O_3$  concentrate can be produced through non-magnetic concentration then sulphuric acid leaching followed by solvent extraction to remove Ti and through high Oxidation-Reduction Potential (ORP) extraction in multiple stages, 90% of Fe removal.

The Company is currently working through the recommended next steps in this process and considering including further purification solvent extraction steps on the BNMS Leach Filtrate to produce a sample of Aluminium Chlorohydrate (ACH) from the purified Leach Filtrate.

# **MOUNT MAGNET GOLD (E58/559)**

The Company's recently granted Mt Magnet tenement, E58/559, is located immediately northeast of the major Mt Magnet Gold Field (see Figure 3).

The tenement is located within the north-south striking Meekatharra-Mt Magnet greenstone belt and is prospective for gold hosted by the intensely deformed mafic and ultramafic extrusive and intrusive rocks, felsic volcanics and banded iron formations (BIF) that are the dominant host rock for gold mineralisation in the area.

Exploration work on this tenement was not advanced during the Quarter.

#### **CORPORATE ACTIVITIES**

#### **Issues of Securities**

During the quarter, the Company made the following issues of securities for cash:

- 1. Exercise of 64,472,531 quoted options into fully paid ordinary shares at \$0.006 each, raising \$386,835;
- 2. Conversion of 8,677,085 partly-paid shares into fully paid shares at \$0.027 each, raising \$234,281; and
- 3. Exercise of 55,000,000 unlisted broker options into fully paid shares at \$0.018 each, raising \$990,000.

#### **ASX Additional Information**

Surefire provides the following information pursuant to ASX Listing Rule requirements:

- 1. ASX Listing Rule 5.3.1 Exploration and Evaluation Expenditure during the quarter was \$288k. Full details of exploration activities during the March quarter are set out in this report;
- 2. ASX Listing Rule 5.3.2 There was no substantive mining production and development activities during the quarter;
- 3. ASX Listing Rule 5.3.3 Details of mining tenements acquired or disposed of during the quarter, and held at the end of the quarter are set out in this report; and

4. ASX Listing Rule 5.3.5 - Payment to related parties of the Company and their associates during the quarter: \$102k cash. The Company advises that this relates to remuneration of Directors for managing director consultancy and directorial services, all paid to director related entities.

#### **ASX RELEASE AUTHORISED BY:**

Vladimir Nikolaenko Managing Director

#### **QUALIFYING STATEMENTS**

#### **Competent Person Statement:**

The information in this report that relates to exploration results has been reviewed, compiled and fairly represented by Mr Jonathon Dugdale, a Fellow of the Australian Institute of Mining and Metallurgy ('FAusIMM') and a full time employee of Discover Resource Services Pty Ltd. Mr Dugdale has sufficient experience, including over 34 years' experience in exploration, resource evaluation, mine geology and finance, relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Dugdale consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

#### Forward Looking Statements:

This announcement contains 'forward-looking information' that is 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, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement 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.

# APPENDIX 1 TENEMENT HOLDINGS AT 31 MARCH 2021

Tenement ID	Туре	Description/Status
Kooline:		
E08/2373	Exploration	Kooline-Wyloo - SRN 100% - Granted
E08/2956	Exploration	Kooline – SRN 100% - Granted
Yidby Gold Project:		
E59/2390	Exploration	Yalgoo – Beau Resources attributable to SRN 100% - Granted
E59/2426	Exploration	Nynghan – Beau Resources attributable to SRN 100% - Granted
E59/2444	Exploration	Yidby Hill – SRN 100% - Granted
Perenjori:		
E59/2432	Exploration	Maniws Gossan - Beau Resources attributable to SRN 100%- Application
E59/5311	Exploration	Southwest - Beau Resources attributable to SRN 100% - Granted
E59/2445	Exploration	Perenjori 1 – SRN 100% - Application
E59/2446	Exploration	Perenjori 2 – SRN 100% - Granted
E70/5572	Exploration	Fitzroy – SRN 100% - Application
E70/5573	Exploration	Pinjarra Hill – SRN 100% - Granted
E70/5575	Exploration	Kadji – SRN 100% - Granted
Unaly Hill and Victory Bore:		
E57/1068	Exploration	Unaly Hill – SRN 100% - Granted
E57/1112	Exploration	Unaly Hill – SRN 100% - Granted
E57/1036	Exploration	Atley – SRN 100% - Granted
E57/1139	Exploration	Victory Bore – SRN 100% - Granted
Mount Magnet:		
E58/559	Exploration	Mt Magnet – SRN 100% - Granted