

25 May 2022

ASX Announcement ASX Codes: SRN and SRNOC

## SUREFIRE RESOURCES NL (ASX SRN) WORK PROGRAM UPDATE - 24/05/2022



YIDBY GOLD PROJECT (100%) MMI GOLD ANOMALY DRILL TESTING IS PROGRESSING



VICTORY BORE VANADIUM PROJECT (100%) A STRATEGIC BATTERY METAL FOR A CLEANER GREENER FUTURE DIAMOND DRILLING RIG HAS ARRIVED ONSITE RC DRILLING SITE PREPARATION UNDERWAY



PERENJORI IRON PROJECT (100%) EXTENDED AREA POW FOR DETAILED

METALLURGY AND INFILL RC DRILLING

NEARING APPROVAL

## YIDBY GOLD PROJECT (100%)

## MMI Gold Anomaly Drill Testing Is Progressing

The initial drilling of the MMI gold anomalies at Yidby returned wide gold drilling intersections. The MMI anomalies are in the Discovery Zone, located up to 400m to the west of the Yidby Road Gold Deposit. Drilling is progressing well with the first 12 holes of the program, planned to test a) the previously untested MMI gold anomalies and b) step-out extensions to previous drilling intersections, already completed.

Drilling is continuing with Surefire expecting to expand the current gold mineralised footprint of the Yidby Road Gold Project (shown on **Figure 1**) beyond its existing boundaries to the NW and SE.



Figure 1 100% SUREFIRE RESOURCES NL - YIDBY GOLD PROJECT - Plan of Current Mineralisation and Drilling Targets

The Yidby Gold Project is a Surefire Discovery, well located on the Great Northern Highway, 40km southwest of Paynes Find. Yidby is surrounded by several significant gold deposits:

- 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 2.1 Moz Mount Gibson Gold Project 30km to the south (28 July 2021 ASX: CMM);
- and the 0.54Moz Rothsay Gold Project 30km to the west.

## VICTORY BORE/UNALY HILL PROJECT (100%)

#### **VANADIUM - A STRATEGIC METAL FOR A CLEANER GREENER FUTURE**

#### Diamond Drilling Rig Arrived Onsite RC Drilling Site Prep Underway

The diamond drilling rig has arrived onsite and is setting up to extract diamond drill core to complete geotechnical and metallurgical test work.

"The vanadium market is fast evolving as a critical element of the mass commercialisation of large-scale battery solutions in the fast-tracked renewables energy sector. With demand pressures increasing from specialty metals producers and threats to traditional pushing vanadium prices higher, Surefire's vanadium outlook is very positive"

# Diamond drilling rig for metallurgy and geotech is onsite and RC resource infill drilling site preparation underway to upgrade economic parameters for prefeasibility study.

Surefire Resources NL (ASX:SRN, SRNOC) is progressing plans to advance its Victory Bore / Unaly Hill Vanadium Project. The project currently has Inferred Resources<sup>1</sup> of **237Mt @ 0.43% vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>), 24.9% Fe, and 5.9% TiO<sub>2</sub>.** This constitutes one of the largest contained V<sub>2</sub>O<sub>5</sub> resources in WA.



The diamond drilling rig is on the property. The core data will be used to undertake

geotechnical studies, for pit design, and follow-up metallurgical tests to optimise the flowsheet.

Pre-eminent consulting firm MinRizon Projects Pty Ltd has been engaged by Surefire to update CAPEX and OPEX estimates as a prelude to initiating a prefeasibility study.

<sup>&</sup>lt;sup>1</sup> ASX release 29 June 2017 (QNL), Surefire confirms that it is not aware of any new information or data that materially affects the information included previous market announcements and, in the case of Mineral Resources, which all material assumptions and technical parameters underpinning the estimates in the relevant 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 materially changed from the original market announcement

## **PERENJORI PREMIUM IRON PROJECT (100%)**

#### Extended Area Pow for Metallurgy & Resource Infill Nearing Approval

Diamond drilling is planned to obtain samples to reconfirm and expand upon the previous metallurgical test work completed at Perenjori. Mineral Consult Pty Ltd. Previous test work results indicate a quality concentrate of 66-70% Fe with Al2O3 + CaO less than 5%, can be achieved by conventional magnetic separation with a relatively coarse grind of 75µm.

Additional planned metallurgical test work comprises:

- UCS and Bond CWi
- Bond RWi
- Dry Mag Sep potential
- DTR and Bond Ball Wi

As announced recently (ASX, 2 February 2022), the SUREFIRE (100%) Perenjori Iron Project has an exploration target of **870 to 1,240 million tonnes** (Mt) at a grade of **29% to 41% iron** (Fe) that may add to its existing Inferred Resource **191.7Mt @ 36.6% Fe** (JORC 2004) (ASX, 25 February 2021). RC drilling will be commencing to infill the currently defined resource.

#### Infrastructure - the key to an economic bulk commodity

The Perenjori Iron Project is located in an infrastructure-rich location. Existing rail and power



are within 15km of the project (Figure 1). Geraldton Port is a terminus to the rail. To facilitate the planning for an expanded magnetite concentrate production profile (ASX, 22 June 2021) Surefire is in continuing discussion with a third-party infrastructure provider to build, own, and operate a slurry pipeline and transshipment facility independent of Geraldton Port.

Authorised for ASX release by: Vladimir Nikolaenko Managing Director

#### Competent Person Statement:

The information in this report that relates to exploration results has been reviewed, compiled and fairly represented by Mr Edd Prumm, a Member of the Australian Institute of Mining and Metallurgy ('AusIMM') and a fulltime employee of X2M Exploration to Mining and Mr Marcus Flis, a Fellow of the Australian Institute of Mining and Metallurgy ('AusIMM') and a fulltime employee of Rountree Pty Ltd. Mr Prumm and Mr Flis have sufficient experience relevant to the style of mineralisation and type of deposits under consideration 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, Minerals Resources and Ore Reserves. Mr Prumm and Mr Flis consent 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', 'schould', '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.

The following announcements have been made by the Company in relation to the Yidby Gold project:

12/05/2022	Drilling Starts at the Yidby Road Gold Project
21/03/2022	Yidby Road Gold Project – Drilling Rig Booked
19/01/2022	Yidby Recent Drilling Intersects Wide Gold Mineralisation
25/10/2021	Exploration Update - Yidby Gold 100% WA
<i>06/09/2021</i>	Large Au MMI Soil Anomaly Defined at Yidby Gold Project
30/08/2021	Drilling to Re-commence at Yidby Gold Deposit
02/06/2021	Yidby Gold Project Further Massive Gold Intersections
05/05/2021	Yidby Gold Project Massive Gold Intersects
28/04/2021	Exploration Update
01/04/2021	Yidby Gold Project Second Rig On Site
11/03/2021	Yidby Gold Project Drilling Program Commenced
22/02/2021	Yidby Gold Project Exploration Update
11/01/2021	New Drilling Program to Commence at Yidby Gold Project
15/12/2020	Further Exceptional Gold Results from Yidby Gold Project
30/11/2020	Spectacular Results from Yidby Gold Project WA
05/11/2020	Yidby Gold Project Maiden Drilling Program Completed
14/10/2020	Update Yidby Gold Project Drill Program 3
21/09/2020	Drilling to Commence
18/08/2020	Drilling Program Yidby Gold Project WA
06/08/2020	Gold Project Acquisitions

#### JORC Code, 2012 Edition:

#### Section 1: Sampling Techniques and Data Yidby Gold Project

(Criteria in this section apply to all succeeding sections for the Yidby Gold Project.)

Criteria	Commentary
Sampling techniques	<ul> <li>Reverse Circulation drilling was used to obtain 1m samples weighing approximately 3kg from the splitter on the cyclone and submitted to the laboratory (Nagrom laboratories).</li> <li>The entire sample was crushed to -2mm then either riffle-split then pulverised to 95% passing 75 micron to produce a 50g charge for Fire Assay gold (Au) analysis.</li> <li>Selected samples in zones of lower prospectivity were composited to 4m after the crushing stage at the lab before 50g charge Fire Assay analysis. Where grades of &gt;0.1 g/t Au are returned for the composite the individual 1m samples are assaved for that zone.</li> </ul>
Drilling techniques	Reverse Circulation drilling was completed using a face sampling hammer.
Drill sample recovery	<ul> <li>RC drilling was bagged on 1m intervals and an estimate of sample recovery has been made on the size of each sample.</li> <li>The cyclone is shut off when collecting the sample and released to the sample bags at the completion of each metre to ensure no cross contamination. If necessary, the cyclone is flushed out if sticky clays are encountered.</li> <li>Samples were weighed at the laboratory to allow comparative analysis</li> </ul>
Logging	<ul> <li>Geological logging was conducted per 1m sample with lithologies and weathering zones being documented throughout.</li> <li>Representative samples from the "green bags" are sieved and in fresh rock, washed, and placed in chip trays for each hole.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>Not applicable to this announcement</li> <li>Every 1m RC interval was sampled as a dry primary sample in a calico bag off the cyclone/splitter.</li> <li>Drill sample preparation and analysis carried out at registered laboratory (Nagrom Laboratories). Sample preparation is dry pulverisation to 95% passing 75 microns.</li> <li>Field sample procedures involve the insertion of registered Standards and duplicates generally every 25m and offset.</li> <li>Sampling is carried out using standard protocols as per industry practice.</li> <li>Sample sizes range typically from 2 to 3kg and are deemed appropriate to provide an accurate indication of gold mineralisation.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>Gold assays at Nagrom Laboratories in Perth, WA, using a 50g charge for Fire Assay gold (Au) total analysis.</li> <li>Selected samples in zones of lower prospectivity were composited to 4m after the crushing stage at the lab before 50g charge Fire Assay analysis. Where grades of &gt;0.1 g/t Au are returned for the composite the individual 1m samples are assayed for that zone.</li> <li>Field sample procedures involve the insertion of registered Standards and duplicates generally every 25m and offset. Standards and duplicate assays are also completed at the Lab.</li> </ul>
Verification of sampling and assaying	<ul> <li>Selected intersections have been calculated at various cut-off grades, including a 0.1g/t minimum cut-off for the "mineralised envelope" and including "economic" cut-off grades applicable to the significant intersections (e.g. 0.3 g/t Au, 1.0 g/t Au). Where internal waste is included the included zone must average above the stated cut-off grade to be across</li> </ul>

Criteria	Commentary
	<ul> <li>the added interval.</li> <li>Geological and sample data was entered into spreadsheets on site and stored on the Company's database.</li> </ul>
Location of data points	<ul> <li>Siting of planned drillholes was completed using a DGPS and adjusted with hand-held GPS where necessary. Final collar locations will be surveyed using DGPS, which will also provide topographic data.</li> <li>Grid system MGA 2020, Zone 50.</li> <li>Downhole surveys have been completed while drilling on recent deeper holes using a REFLEX Gyro Tool. Open hole surveys will be completed on all previous and current holes not yet surveyed, subject to blockages downhole.</li> </ul>
Data spacing and distribution	<ul> <li>Sample data down hole is at no more than 1m intervals (with selected intervals composited at the lab).</li> <li>Data spacing in terms of pierce points varies from 25m to 100m from previous intersections. Assessment as to whether sufficient data has been generated to establish the degree of geological and grade continuity appropriate for (JORC 2012) Mineral Resource estimation procedure(s) is underway and, if necessary, additional drilling will be carried out to establish continuity.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Drilling orientation is designed to test the mineralisation at as close as possible to orthogonal to the mineralisation, therefore not biasing the sampling or intersection lengths.</li> <li>All intersections are downhole widths with the true widths not determined at this early stage of exploration.</li> </ul>
Sample security	<ul> <li>Samples transported by Company personnel direct to the Laboratory as soon as possible after drilling.</li> </ul>
Audits or reviews	A full review of QAQC data will be completed once all results received.

#### Section 2: Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Mineral tenement and land tenure status	<ul> <li>Located 320km northeast of Perth in the mid-west region of Western Australia.</li> <li>E 52/2390 and E52 /2426 are granted tenements with a 100% interest acquired by Surefire Resources NL under a sale agreement from the tenement holder Beau Resources Pty Ltd.</li> <li>A 2% Royalty on Gold production is payable to Beau Resources Pty Ltd.</li> </ul>
Exploration done by other parties	<ul> <li>Previous exploration work has been completed by Normandy and Monarch Gold. Normandy work included aircore drilling and limited RC drilling, including at the Yidby Gold Prospect. Drilling intersections in easterly oriented drilling were followed up by Surefire using westerly oriented holes and the Normandy drilling was shown to be drilled in the wrong orientation for the easterly dipping mineralised structures.</li> </ul>
Geology	<ul> <li>Gold mineralisation at the project is orogenic, hosted within quartz veining with minor sulphides in ultramafic/mafic lithologies and felsic porphyry intrusions.</li> </ul>
Drill hole Information	<ul> <li>Northing and easting data generally within 5m accuracy using a GPS – with DGPS location planned.</li> </ul>

Criteria	Commentary
	RL data +/-2m
	<ul> <li>Location of new drillholes based on surveyed sites, and DGPS.</li> </ul>
	• Location of previous Drillholes based on historical reports and data, originally
	located on surveyed sites, and DGPS.
	• Final Northing and Easting data of the Company's drillholes determined using
	DGPS generally within 0.1m accuracy. RL data +/- 0.2m. Down hole length +/-
	0.1 m.
	<ul> <li>Location of new drillholes are tabulated in the body of the release.</li> </ul>
	Coordinates are estimated based on planned positions and will be updated when DGPS data available.
	northing and easting data generally within 5m accuracy using a GPS – with DGPS
	location planned down hole length =+- 0.2m.previous drillhole locations.
Data aggregation methods	Selected intersections have been calculated at various cut-off grades as shown
	in Table 1, including a 0.1g/t minimum cut-off for the "mineralised envelope"
	and including "economic" cut-off grades applicable to the significant
	intersections (e.g. 0.3 g/t Au, 1.0 g/t Au). Where internal waste is included the
	included zone must average above the stated cut-off grade to be across the
	added interval.
	No cutting of high-grades has been carried out.
Relationship between	<ul> <li>Orientation of mineralised zones are still to be determined in detail. All</li> </ul>
mineralisation widths and	intercepts reported are downhole depths.
Intercept lengths	
Diagrams	<ul> <li>Drillinole locations and interpreted mineralisation outline are snown in Figures in the health of the release.</li> </ul>
	In the body of the release.
	<ul> <li>Appropriate cross sections are shown in the body of the release.</li> <li>Tabulations of hole statistics are shown in the body of the release.</li> </ul>
Dalanced reporting	Tabulations of hole statistics are shown in the body of the release.
	Tabulations of noie statistics are snown in the body of the release
data	<ul> <li>Gold mineralisation interpretations are included in plans in the body of the report</li> </ul>
	No new evaluation data has been generated apart from the drilling
	<ul> <li>wo new exploration uata has been generated apart from the drining geochemical and geophysical information included in this report</li> </ul>
Further work	geochemical and geophysical mornation included in this report.
	<ul> <li>Follow up utiling will be planned once all results are received.</li> </ul>