# **DECEMBER 2022 QUARTERLY ACTIVITIES REPORT**

**Surefire Resources NL** ("**Surefire**", "the **Company**") is pleased to report on its exploration activities at the Company's 100% owned properties for the quarter ending 31 December 2022 (Figure 1).

During the quarter the Company has progressed across multiple projects including the drill results at **Victory Bore Vanadium** and resource modelling underway to enable Prefeasibility Studies on the project. Diamond drilling designed to improve the understanding of the controls of mineralisation was completed at Yidby. Anomalous rare earth results were discovered within the Perenjori licence area.

Highlights of the Quarter are:

#### VICTORY BORE VANADIUM

- Assay results received from the 5,188 metres (m) infill drilling program
- Results show excellent continuity of vanadium zones with wide vanadium intersections with widths of up to 92m @ 0.41% vanadium pentoxide ( $V_2O_5$ )
- Discovery of new mineralised lode system designated West Lode
- Three distinct parallel mineralised lodes now identified, greatly increasing potential for a significantly larger resource
- Infill drilling and new metallurgical testwork designed to progress project to Prefeasibility level
- Resource modelling on drill results underway

#### YIDBY GOLD PROJECT

- Five Diamond Drill (DD) holes designed to provide information on controls of mineralisation completed across Project
- CSA completed core logging and have provided initial draft Report
- Report currently being reviewed by the Company

Metallurgical tests on Reverse Circulation (**RC**) composite samples gave excellent results including:

- Gold total recoveries between 97.6% and 99.5%
- Rapid gold leach with the majority of gold extracted in 2 to 4 hours
- High gravity recoverable gold from 43.2% to 67.0%
- Low reagents consumptions

#### PERENJORI IRON ORE PROJECT

- Flora and fauna survey was completed; awaiting final detailed report; survey is required for approval of Program of Works and Native Vegetation Clearing Permit for planned 5,000m RC infill drill program
- Infill drilling planned to upgrade resource category and provide new drill samples for Prefeasibilty level metallurgical testwork

#### PERENJORI RARE EARTHS

 Anomalous rare earths mineralisation results up to 345ppm Total Rare Earth Oxides (TREO) together with rare metals including Rubidium Oxide (Rb<sub>2</sub>O) up to 1,930ppm were discovered within and around pegmatites.

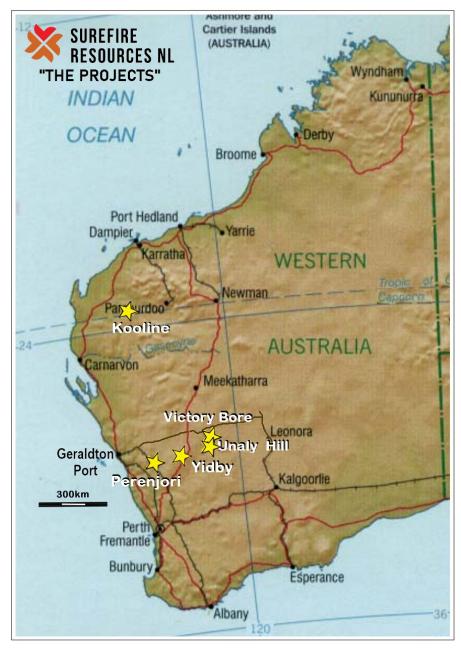


Figure 1 Surefire Resources NL 100% owned project locations.

#### **VICTORY BORE - UNALY HILL VANADIUM PROJECT**

The Victory Bore – Unaly Hill deposits lie in the Mid-West of Western Australia approximately 530km north of Perth, and consist of multiple stacked vanadium-titanium-magnetite rich layers up to 80m wide are that are contained within a layered gabbro Weathering is shallow, with fresh rock consistently logged from 10 to 25m below surface. The combined Victory Bore - Unaly Hill host gabbro has a total strike length of over 20km, which is yet to be fully tested and illustrates the Project's longer-term exploration potential.

# **In-Fill Drill Program**

During the quarter the Company continued to receive the assay results from its 5188m RC infill drilling program completed on the project area in the previous quarter

The infill-drilling program was designed to upgrade the current Inferred JORC resource category and provide samples for further metallurgical testwork both important requirements for the planned Pre-Feasibility Study on the project.

Previous drilling on 400m x 25m spacing delineated two main Vanadium lodes, Main Lode and Central Lode. The current program in filled a 1.4km portion of the current inferred resource to 100m x 25m spacing along strike with the aim to both enlarge and upgrade the resource category. Drilling was focussed on two lodes, Main Lode and Central Lode, however during the program additional Vanadium mineralisation was discovered and is designated as the West Lode.

The results of the drilling to date have provided the following:

- Excellent continuity of vanadium zones
- Wide vanadium intersections with widths of up to 92m @ 0.41% vanadium pentoxide (V₂O₅)
- Three distinct parallel mineralised lodes now identified, greatly increasing potential for a significantly larger resource:
  - $\circ$  Lode 1 Main Lode –up to 56m true width @ up to 0.45%  $V_2O_5$
  - $\circ$  Lode 2 Central Lode –up to 38m true width @ up to 0.42%  $V_2O_5$
  - $\circ$  Lode 3 West Lode –up to 60m true width @ up to 0.23%  $V_2O_5$
- 20km of strike at Victory Bore-Unaly Hill remains largely untested
- Base metal Ni-Co-Cu sulphides logged in drill samples to be studied in PFS

All significant drill intersections are detailed in Table 1.

Table 1: Vanadium Pentoxide Drilling Intersections (ML Main Lode, CL Central Lode and WL West Lode)

	Easting	Northing			Azimuth			From	То	Interval	V 0 0
Hole Id	MGA	MGA	RL	Dip	(MN)	Lode	Depth (m)	(m)	(m)	(m)	V <sub>2</sub> O <sub>5</sub> %
VBRC001 Ended in Ore	694883	6871551	475	-59.94	101.74	ML	43	13	43	30	0.43
VBRC002 Ended in Ore	694794	6871554	475	-59.66	109.13	CL	41	14	40	26	0.42
VBRC003 Ended in Ore	694918	6871650	475	-60	110	ML	53	16	53	38	0.48
VBRC004	694888	6871649	475	-59.75	114.13	ML	110	54	106	52	0.47
VBRC006	694764	6871651	475	-60.49	106.64	CL	131	94	122	28	0.42
VBRC007 Ended in Ore	694946	6871750	475	-59.34	110.67	ML	71	18	71	53	0.48
VBRC008	694920	6871754	475	-59.85	112.49	ML	119	48	116	68	0.42
VBRC009	694835	6871751	475	-60	110	CL	65	36	60	24	0.41
VBRC010	694803	6871755	475	-59.81	105.66	CL	119	82	112	30	0.40
VBRC011 Ended in Ore	694979	6871850	475	-58.87	115.13	ML	65	16	65	49	0.45
VBRC012	694952	6871854	475	-57.7	118.04	ML	125	50	92	42	0.48
VBRC013	694881	6871854	475	-60.77	97.83	CL	41	26	38	12	0.50
VBRC014	694850	6871855	475	-60.51	104.43	CL	129	76	120	44	0.41
VBRC015 Ended in Ore	695013	6871956	475	-59.9	103.93	ML	74	12	74	62	0.44
VBRC016	694931	6871956	475	-59.82	106.09	CL	47	4	26	22	0.49
VBRC018	695024	6872048	475	-60.52	102.8	WL	152	12	38	26	0.42
VBRC018						ML	152	102	148	46	0.47
VBRC020	694938	6872054	475	-59.27	102.34	CL	125	96	125	29	0.43
VBRC052 Ended in Ore	694898	6871551	475	-60.94	98.26	ML	53	6	53	47	0.45
VBRC053	694804	6871551	475	-60.98	103.7	CL	53	4	44	40	0.36
VBRC054	694814	6871650	475	-60.76	99.77	CL	59	28	58	30	0.38
VBRC055	694891	6871850	475	-59.95	103.15	CL	47	8	44	36	0.38
VBRC056	695076	6872050	475	-60.12	106.9	ML	90	34	86	52	0.47
VBRC057	694987	6872050	475	-61.23	106.89	CL	72	32	66	34	0.41

VBRC058	695069	6872250	475	-60.7	95.16	CL	78	12	76	64	0.40
VBRC059	695124	6872350	475	-60.58	101.65	CL	54	2	50	48	0.41
VBRC060	695194	6872550	475	-60.56	105.67	CL	45	0	34	34	0.42
VBRC061	695231	6872650	475	-61.07	107.11	CL	54	0	46	46	0.42
VBRC062	695382	6872850	475	-69.38	103.54	ML	120	26	118	92	0.41

The Main Lode is situated on the eastern side and is massive, both along strike and down dip with wide consistent downhole intersection thicknesses rarely below 50m, and up to 92m (VBRC062), and the Vanadium Pentoxide grades are reliably in the mid  $0.45\% V_2O_5$  range.

The Central Lode is situated approximately 70m to the west of Main Lode and features mineralised thicknesses varying from 24m to an extraordinary 64m downhole intersection.

Drilling did not specifically target the West Lode and that is why the western boundary of this lode is at present open, meaning it probably continues further to the west. It is a vast zone already averaging 60m true width of Vanadium mineralisation @  $0.23\% \ V_2O_5$ .

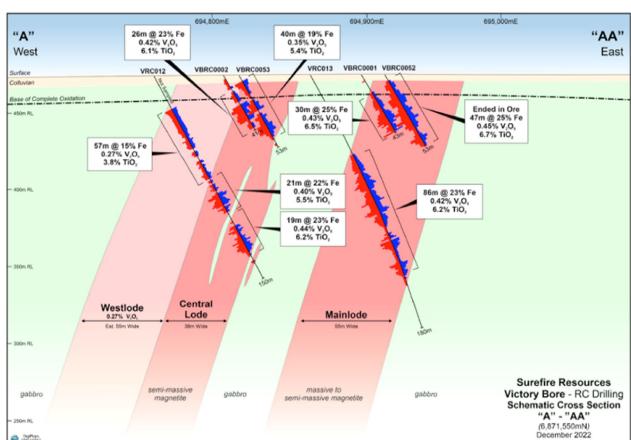


Figure 2 shows the relative positions of these three lode systems.

Figure 2 Section showing Three main Lodes systems.

#### **Current Inferred Resource**

The Victory Bore-Unaly Hill deposits contain over 2.2 billion pounds of vanadium pentoxide  $(V_2O_5)$ , making this one of the largest vanadium resources in Australia:

# 237Mt @ 0.43% vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>), 24.9% Fe, and 5.9% TiO<sub>2</sub>

Figure 3 shows the spatial and contiguous relationship between the Victory Bore and Unaly Hill deposits and resource areas.

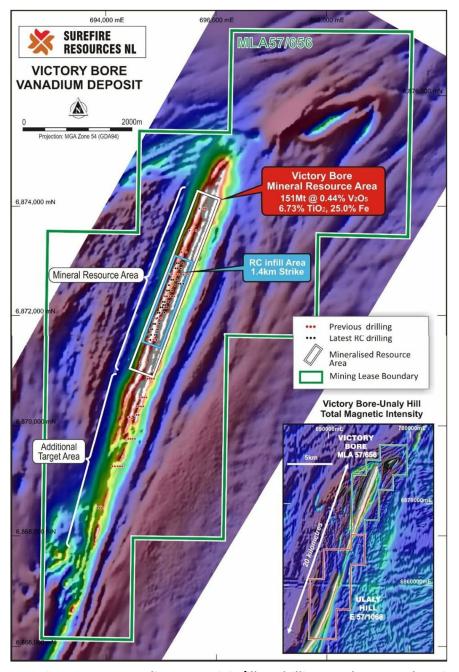


Figure 3 Victory Bore Vanadium Deposit in/ill RC drilling1 and resource location

The Mineral Resource Estimate was completed by CSA Global Pty Ltd in accordance with JORC (2012) and announced on 29 June 2017 (ASX:QNL). The estimate was prepared and authorised by Mr D Williams, a full-time employee of CSA and a Competent Person under JORC (2012). The company confirms that: all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed and that the form and context in which the Competent Person's findings are presented have not been materially modified.

# **Metallurgical Testwork**

The Mineral Engineering Technical Services (METS) metallurgical scoping study (2012) has determined that the vanadium is contained within a vanadium titaniferous magnetite. A magnetic preconcentration of the low grade (crushing and removing the gabbro waste with a magnet) will provide magnetite of the same grade as the high-grade zones. This metallurgical characteristic of the Victory Bore Vanadium mineralisation explains how the West Lode can be beneficiated to provide additional high-grade vanadium to the mill.

The project was the subject of a Scoping Study that indicated its economic viability at the prevailing prices. The scoping study, dated 3 March 2012, was completed by METS. METS provided the main conclusions as shown below:

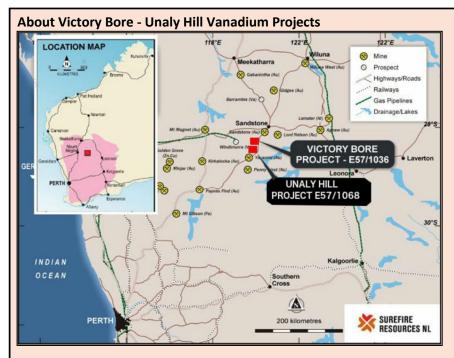
- Victory Bore ore is amenable to processing via beneficiation by magnetic separation and sodium salt roast and water leach;
- DTR (magnetic separation) testwork achieved a 93.7% recovery of the Vanadium indicating good recoveries should be possible at a larger scale; and
- Overall (post roast leach) recovery of Vanadium from the ore sample was 83.5%.

In May 2022, the Company updated its Victory Bore Metallurgical Scoping Study, confirming economic viability of the Project at prevailing vanadium prices and the suitability of conventional beneficiation equipment and processes.

#### **Critical Mineral Status**

Vanadium's classification as a "Critical Mineral" of national strategic importance in the USA, EU, Australia, India and other jurisdictions is anticipated to support the development of a vanadium mining and processing industry in Australia Vanadium market conditions remain strong, with growing demand from traditional uses in steel strengthening, and more importantly, the mass commercialisation of utility-scale vanadium redox flow battery storage systems (VRFB's).

- China and Russia account for approximately 60% of the world's vanadium production, while the USA imports almost 100% of its vanadium. Diversity of supply is sought from jurisdictions such as Australia.
- Surefire has initiated discussions with potential partners and to this end has engaged with the Australian Government's Critical Minerals Office in identifying funding sources, investors, and potential development partners as we execute the feasibility studies and advance Victory Bore-Unaly Hill towards a Feasibility Study.



The Victory Bore-Unaly Hill Vanadium Project is located in the Mid-West region of Western Australia, ~500km north-east of Perth.

The Project comprises three contiguous tenements, E57/1068, E57/1139 and E57/1036. The Northern Goldfields Interconnect gas pipeline, under construction, will connect the Project tenure with gas infrastructure.

Inferred Resources (JORC 2012) in the combined project area are:

Tenement	Million	V <sub>2</sub> O <sub>5</sub>	V <sub>2</sub> O <sub>5</sub>	Fe	TiO <sub>2</sub>	Р	SiO <sub>2</sub>
	Tonnes	(%)	(tonnes)	(%)	(%)	(%)	(%)
Victory Bore <sup>1</sup>	151	0.44	664,000	25.0	6.73	0.013	28.6
Unaly Hill <sup>2</sup>	86.2	0.42	365,000	24.8	4.5		28.6
TOTAL	237	0.43	1,030,000	24.9	5.92		28.6

<sup>1</sup>ASX release QNL 29 June 2017, <sup>2</sup>ASX release BRD 21 November 2011. SRN confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcements, and 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.

#### YIDBY GOLD PROJECT

The Yidby gold project situated in the Mid-west of Western Australia continues to develop as an area of increased gold mineralisation potential. The original Yidby deposit has been complemented with the addition of two new gold zones the "Marshall Prospect" and "Fender Prospect" discovered in the RC drill program completed in the June quarter (released to the ASX on 4 August 2022 and 28 September 2022).

These deposits are located within a north-westerly trending shear in an ultramafic lithology that has been intruded by NS trending felsic porphyries and are blind deposits, lying beneath 10m to 25m of largely barren transported overburden.

# **Diamond Drilling Program**

Drilling the quarter, the company completed its five (5)-hole diamond drill program which was commenced in the September quarter.

The program across the project area (see figure 1) was designed to provide solid drill core of the structure and lithologies at the Yidby in order to:

- Determine the structural controls on various styles of mineralisation;
- Identify alteration and rock types to aid the interpretation of mineralisation;
- Twin previously drilled RC holes to also determine the close-spaced grade variability of the gold deposits and as QAQC on the RC results;
- Provide fresh core samples for Metallurgical testing; and
- Aid future exploration drill planning.

The diamond drill cores were relocated from site to the ALS Core facility in Wangara WA where they were then structurally and lithologically logged by an independent structural expert engaged from CSA Global.

The CSA Report of this analysis and interpretation of these logs is currently being reviewed by the Company.

#### **Metallurgical Studies**

During the quarter, the Company received the results of Metallurgical testwork undertaken on three bulk composite samples created from a variety of RC holes previously drilled across the Yidby deposit.

These composites weighing approximately 20kg each encompassed a range of depths, grades, lithologies and oxide, and fresh material types (see drill hole details in Table 2).

The test program was conducted by ALS in Perth and was designed to provide an initial assessment of the following key parameter:

- Gravity recoverable gold content;
- Cyanide extraction recovery gold content;

- Overall gold recovery;
- Gold leach kinetics; and
- Reagent consumption rates.

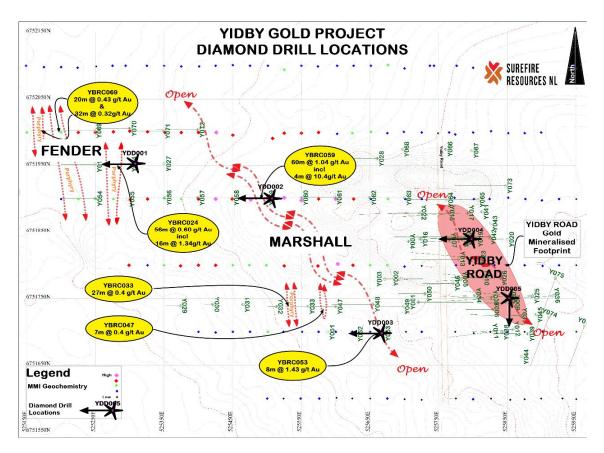


Figure 4 Yidby Diamond Drillhole Locations

**Table 2: Yidby Drillhole Composite Data** 

Composite	Hole ID	East	North	RL	From	То	Grade	Weathering	Lithology
	YBRC037	525869	6751724	297	29	32			
1	YBRC045	525891	6751726	297	35	40	1.06	oxide	oxide
	YBRC016	525724	6751839	297	24	29			
	YBRC006	525828	6751734	297	41	51			nombun.
	YBRC045	525891	6751726	297	49	56		transitional	porphyry / ultramafic
2	YBRC037	525869	6751724	297	58	64	2.45	& fresh	
	YBRC007	525766	6751837	297	75	75 79	]		/ quartz vein
	YBRC010	525814	6751781	297	71	79			vein
	YBRC006	525828	6751734	297	55	59			nombun.
	YBRC005	525782	6751778	297	57	61			porphyry /
3	YBRC037	525869	6751724	297	64	67	12.5	fresh	ultramafic
	YBRC007	525766	6751837	297	69	73	]		/ quartz
	YBRC019	525804	6751839	297	150	153			vein

# **Summary of Results**

**The** three bulk composites tested composed of:

- 1. Low grade (1.06g/tAu) Oxide material;
- 2. Medium grade (2.45g/tAu) Transitional/Fresh material; and
- 3. High grade (12.5g/tAu) Fresh material.

The testwork was undertaken on material crushed to P80 75um and returned excellent results (Table 3) for all the composites providing the following data:

- Gold total recoveries between 97.6% and 99.5%;
- Rapid gold leach with the majority of gold extracted in 2 to 4 hours;
- High gravity recoverable gold ranges from 43.2% to 67.0%; and
- Low cyanide and lime consumption in the leachable gold component.

Table 3: Yidby Gold Test results at P80 75um and NaCN 1000ppm

COMPOSITE	Head Au (	Grade (g/t)			Au Extra	ction (%	)		Tail Au Grade	Reagen	ts (kg/t)
COMPOSITE	Assay	Calc.	Gravity	2-hr	4-hr	8-hr	24-hr	48-hr	(g/t)	NaCN	Lime
1	0.87	1.06	50.91	91.93	95.40	97.45	97.45	98.11	0.02	0.37	260
2	2.58	2.45	43.26	92.23	94.33	95.81	97.27	97.55	0.06	0.51	0.63
3	14.2	12.5	66.97	96.46	96.81	97.98	98.55	99.56	0.06	0.40	0.50

The Company's ASX announcement dated 16 November 2022 provides a more detailed summary of the test results and further work is planned including with column leach tests to assess potential of vat leaching material of a larger crush size.

# **Gold Mineralisation**

The gold mineralisation at the Yidby Project area currently occurs in three separate mineralised zones, covering a width of almost 500m across strike trending slightly WNW from the Yidby deposit Each mineralised zone appears to display similar yet unique lithological and structural characteristics and exhibits both:

- 1. wide gold widths /intersects; and
- 2. very high local grades

Significant drillhole intersects from each prospect clearly illustrate these characteristics and are detailed below.

# **Yidby Road Prospect**

All the intersects in Table 4 exhibit the miner-alised trend of wide intersects coupled to local high grade typically within a distinct quartz lode. Drillhole YBRC019 exemplifies this with an overall mineralised intersect of 44m @ 2.77 g/t Au from 149m, that includes. 3m @ 26.5 g/t Au from 150m (ASX: 14 June 2021).

Table 4: Yidby Significant intersections (ASX: 14 June 2021 and 26 January 2022)

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Hole Type	Northing MGA	RL	Dip	Azimuth (mag)	Depth (m)
YIDBY										
YBRC019	149	193	44	2.77	RC	6751840	297	-60	270	198
Incl.	150	153	3	26.5						
Incl.	150	151	1	57.1						
YBRC037	28	67	39	1.16	RC	6751725	297	-60	270	194
Incl.	64	65	1	10.5						
YBRC 045	32	84	52	1.4	RC	6751725	297	-60	270	100
Including	78	79	1	39.1						

# **Marshall Prospect**

The Marshall Prospect lies parallel to, and approximately 150m to the west of the Yidby Gold deposit. The gold mineralisation within the discovery hole, YBRC059, is of the same type as the gold intersections from within the Yidby deposit. Similarly hole YBRC059 displays a typically wide gold mineralised zone, 60m @ 1.04 g/t Au, with a localised patch of high gold grade, 4m @ 10.40 g/t Au within a quartz lode (ASX: 3 August 2022).

Table 5: Marshall Significant Intersections (ASX: 27 August 2022)

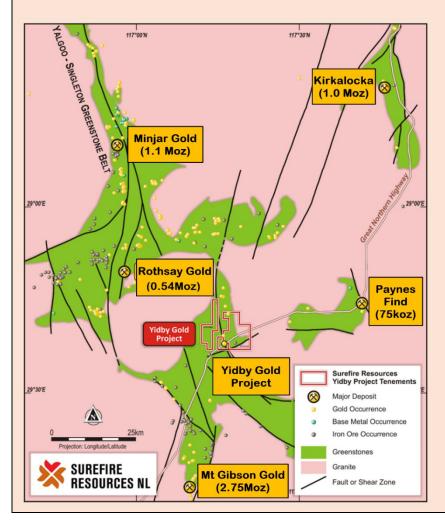
Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Hole Type	Northing MGA	RL	Dip	Azimuth (mag)	Depth (m)
MARSHALL										
YBRC059	32	92	60	1.04	RC	6751902	291	-60	270	100
including	72	76	4	10.4						
YBRC053	18	25	8	1.43	RC	6751698	300	-60	270	76

#### **Fender Prospect**

#### **About Yidby**

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

The Project comprises three granted exploration licences with a total area of 114 km<sup>2</sup> and includes three prospects where significant gold mineralisation has been identified. They are associated with historical workings at Delaney Well and Cashens Find, and at Surefire's Yidby Gold discovery.



The Yidby gold mineralisation is a 'blind discovery;' the area is covered by up to 20 metres of barren transported overburden that overlies and masks the gold mineralisation. Surefire has drilled over 80 RC and DD holes for over 9,000m to date.

The Project is surrounded by several significant gold deposits, 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 2.75Moz Mount Gibson Gold Project 30km to the south, and the 0.54Moz Rothsay Gold Project 30km to the west.

The Fender Prospect to date features wide continuous gold mineralisation associated with arsenopyrite on the chilled margin of multiple, wide NS striking sub vertical quartzose feldspathic intrusives similar to those intersected in the Yidby Road deposit.

The Fender discovery hole, YBRC069 intersected a 90m wide zone of abundant, (up to 10%), pyrite & arsenopyrite and intersections of 20m @ 0.40g/t Au and 32m @ 0.32 g/t Au (ASX: 3 August 2022), YBRC055 drilled parallel to the YBRC069 intersected 36m @ 0.36 g/t Au, whilst 30 metres north of this hole, RC drill hole YBRC024 intersected 48m @ 0.71 g/t Au including 19m @ 1.38 g/t Au.

#### PERENJORI PROJECT AREA

#### PREMIUM IRON ORE PROJECT

Perenjori is ideally located in the infrastructure-rich Mid-West mining district of Western Australia, with rail links within 14km and a high voltage transmission line nearby the Project (Figure 5). The Project is significantly closer to the coast than other Western Australian magnetite projects, with rail distance to the port of Geraldton at 219km.

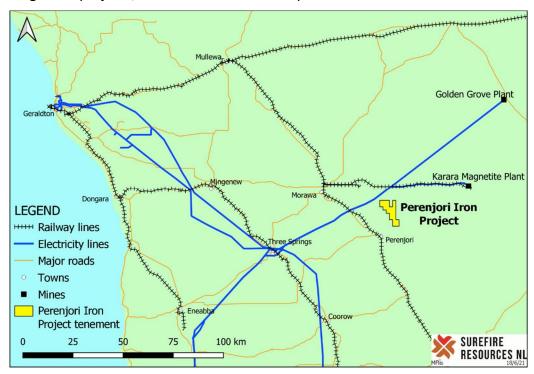


Figure 5 Perenjori Premium Iron Project location and main Infrastructure

# **Pre-Feasibility Study Work Progress**

A comprehensive flora and fauna survey is nearing completion over the iron ore project area, this is designed to support the application for the Program of Works and Native Vegetation Clearing Permit approvals that are required for future drilling.

Once approval is granted a 5,000m RC drilling program is planned for the Perenjori Premium Iron Project to infill the current 200m spaced drilling lines to 100m spacing. This infill drilling is designed to upgrade the resource category, and to provide samples for metallurgical testwork as part of the upcoming Prefeasibility Study.

# Mineral Resource Estimate

The Perenjori Iron Project Mineral Resource is relatively high grade compared to other Western Australian magnetite projects and as outlined above, can be upgraded to circa 70% Fe concentrate grade.

Table 6: Inferred Resources o/ the Perenjori Iron Ore Project (ASX: QNL 27 September 2013).

Zone	Category	Tonnage Mt	Fe%	Al2O3%	SiO2%	S%
Core BIF Zone	Inferred	93.3	37.22	1.67	41.59	0.05
Eastern Belt (excluding CBZ)	Inferred	78.7	37.64	1.45	41.66	0.03
Western Belt	Inferred	19.7	29.77	3.39	47.04	0.32
Total	Inferred	191.7	36.61	1.75	42.18	0.07

In addition, Perenjori Premium Iron Project has an Exploration Target of **870 million to 1,240 million tonnes (Mt) at a grade of 29% to 41% iron (Fe)** exclusive of the Inferred Resource (ASX release 3 February 2022).

The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource aver the entire area of the Exploration Target, and it is uncertain if further exploration will result in the estimation of an increased Mineral Resource.

# Metallurgy

Perenjori is well positioned to deliver high-grade iron concentrates into next-generation zero-carbon steel plants.

Historical Davis Tube Recovery test-work, completed by previous owners Quest Minerals Ltd (see ASX release 26 February 2013), recovered 66 to 70 % Fe concentrate grades from the relatively coarse and favourable grind size of 75  $\mu$ m, with SiO<sub>2</sub> averaging 4.9% and less than 0.2% Al<sub>2</sub>O<sub>3</sub>. It is expected such a premium grade feed will be suitable for blast furnace pellet production or as a Direct Reduction Iron (DRI) feed.

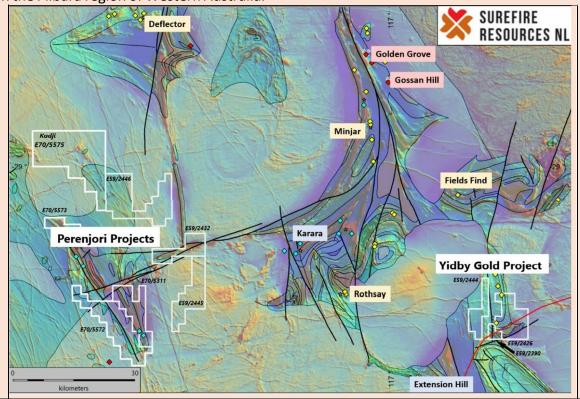
# **About Perenjori Premium Iron Project**

The Perenjori tenements are located over the Koolanooka Greenstone Belt, a typical granite- greenstone terrain of the southern Murchison Geological Province of the Archaean Yilgarn Craton.

The Perenjori tenements are under-explored and highly prospective, with numerous gold, base metals and iron-ore deposits on the Company's tenure and in the wider region. Nearby significant mines include the Deflector Gold Mine 30km to the north, Karara Iron Ore Mine 30km to the east, and the Golden Grove base metals deposits 50km to the northeast.

**Resource:** Perenjori Premium Iron Project is centred on a magnetite-rich banded iron formation (BIF). The Mineral Resource is defined with more than 120 holes drilled along the two limbs of a large-scale folded BIF structure. Data from the eastern limb forms the basis of an Inferred Resource (JORC 2004) of: **191.7Mt @ 36.6% Fe**<sup>1</sup>.

**Metallurgy**: Initial Davis Tube Recovery test-work recovered 66 to 70% Fe product at a favourable coarse grind size of 75  $\mu$ m with low impurities. The premium grade feed would be suited to blast furnace pellet production or as a Direct Reduction Iron feed and command a price premium over the benchmark 62% Fe hematite products typically mined in the Pilbara region of Western Australia.



### Perenjori Rare Earth Discovery

During the quarter, a reconnaissance survey/site visit was undertaken by the Company on its Perenjori exploration lease E70/5311. The survey was peripheral to the current existing Perenjori Iron resource project and was concentrated on other interesting lithologies noted within the exploration licence. Of particular interest were newly discovered pegmatites on the property and sampling was undertaken on around these features,

A total of 17 samples were taken for analysis and assays from these samples returned anomalous rare earths mineralisation results up to 345ppm Total Rare Earth Oxides (TREO) in sample PI Peg001 with rare metals including Rubidium Oxide (Rb $_2$ O) up to 1,930ppm in sample P1 005-1. Samples in the vicinity of the pegmatite, and elsewhere on the tenement, also returned anomalous TREO values (See Table 7 ).

**Table 7: Reconnaissance Survey Sample Results** 

SAMPLE ID	Easting	Northing	TREO	Li <sub>2</sub> O	Rb2O	Cs2O	Nb2O5
			ppm	ppm	ppm	ppm	ppm
PI Peg001	439680	6751267	345.8	na	na	na	0.0
PI Peg002	439680	6751268	181.8	107.6	240.6	5.3	64.4
PI Peg003	439680	6751268	14.2	150.7	27.3	4.2	bd
PI Peg004	439671	6751266	25.9	43.1	87.5	3.2	14.3
PI 001-1	439610	6751192	2.6	43.1	bd	bd	bd
PI 002-1	439656	6751183	14.7	21.5	21.9	bd	7.2
PI 003-1	439812	6750988	139.3	86.1	27.3	bd	21.5
PI 004-1	439741	6751019	1.5	43.1	bd	bd	bd
PI 005-1	439741	6751275	267.2	107.6	1930.2	111.3	207.4
PI 006-1	439944	6751651	25.6	bd	27.3	bd	7.2
PI 006-2	439944	6751651	218.7	86.1	98.4	2.1	14.3
PI 007-1	439950	6752497	235.4	bd	87.5	1.1	21.5
PI 008-1	439696	6752385	224.6	bd	65.6	bd	21.5
PI 008-2	439696	6752385	235.9	86.1	120.3	2.1	21.5
PI 3	435492	6757555	62.9	na	na	na	na
PI 4	435365	6757932	64.0	na	na	na	na
PI 5	435278	6758135	49.1	na	na	na	na

The pegmatites were found on the eastern periphery of a kaolinised sheared granite contact between the sediments, hosting the Perenjori Iron deposit, and an intruded granite stock to the east. The results indicate either the pegmatites within the granitoid, the sheared kaolinised granite/sediment contact zone, or all the above contain rare earth elements.

An initial recent review of aeromagnetic data for the area suggests the pegmatites are structurally controlled and that additional similar trending repetitions could occur within the current EL and the new EL in application.

In light of these results the Company plans to undertake a new review of the aeromagnetic data whose historical interpretation was largely focused on the Perenjori Iron BIF unit, and will include detailed geological mapping and local geochemistry, and look to follow up with shallow drill testing to explore the Perenjori pegmatites and kaolin occurrences.

#### **KOOLINE SIVER-LEAD PROJECT**

The Kooline Base Metals Project in the Ashburton region of Western Australia covers 240km2 and 50km of strike of prospective lead-silver and copper mineralisation. Sampling results recently announced ((ASX release 14 September 2022) confirm the high-grade tenor of the lead (14-16,2%) and silver (up to 55g/t) mineralisation.

High-grade mineralisation in the project area is associated with an airborne electromagnetic conductor (AEM) with the strongest AEM targets at Mt Conspicuous, Phar Lap and Northerly prospects (see Figure 6). The Mt Conspicuous AEM target is over 600m in strike length and lies within a structural corridor that contains the historic Mt Conspicuous Mine.

The conductor is interpreted to commence close to surface and persists to 400m in depth, which suggests the interpreted sulphide mineralisation is of significant scale.

Follow-up systematic geochemical sampling, ground-based EM surveying and drilling is planned to test the Mt Conspicuous AEM conductor, and other targets in the Kooline Project for concealed high-grade Pb-Ag-Cu-Au mineralization.

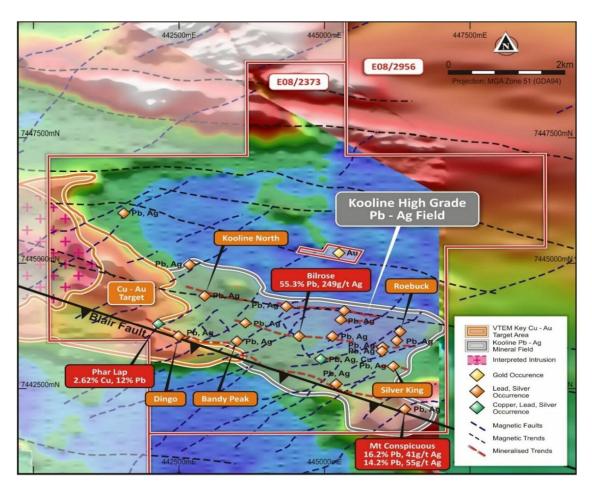


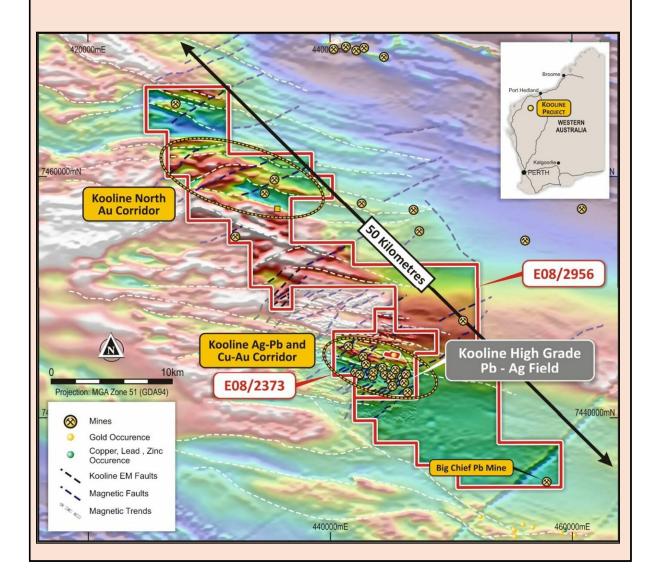
Figure 6 AEM Slice over the Kooline Project Area

# **About Kooline Base Metals Project**

The Kooline Base Metals Project covers 240km<sup>2</sup> and 50km of strike of prospective Ashburton Formation in Western Australia. The tenements include over thirty historically mined high-grade occurrences of lead (Pb), silver (Ag) and copper (Cu).

- ► High grades in rock chips up to 55.3% Pb, 249 g/t Ag, 2.62% Cu, 38 g/t Au
- ▶ Only limited drilling of the veins e.g. 3m @ 6.48 g/t Au, 5m @ 2.08% Pb

Prominent crustal-scale structures in the region and within the Project tenure may have facilitated fluid flow and ore formation. A large granitic intrusive body is interpreted within the AEM imagery and is inferred to be the source of the hydrothermal vein style of mineralisation, which shows a classic zoned pattern of Cu-Au veins close the intrusive and Pb-Ag veins radiating further away.



#### **CORPORATE ACTIVITIES**

#### **Cash Reserves**

The Company's end of quarter cash position was \$3.148M.

#### **ASX Additional Information – Guidance Note 23 Disclosures**

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

- ASX Listing Rule 5.3.1 Exploration and Evaluation Expenditure during the quarter was \$462K.
   Full details of exploration activities during the 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 Payments to related parties of the Company and their associates during the quarter: \$102K. The Company advises that this relates to remuneration of Directors for managing director consultancy and directorial services, all paid to director related entities.

#### **Acuity Capital Facility**

As previously announced, Surefire entered into an At-the-Market Subscription Agreement (ATM) (also referred to as a Controlled Placement Agreement or CPA) in October 2018 with Acuity Capital. The ATM provides Surefire with up to \$2 million of standby equity capital and is due to expire on 31 January 2023 (see announcements on 26 October 2018 and 1 February 2021). Surefire and Acuity Capital have agreed to extend the ATM expiry date by an additional three years to 31 January 2026.

There are no requirements on the Surefire to utilise the ATM and the Company may terminate the ATM at any time without cost or penalty.

Acuity Capital currently holds 20 million fully paid ordinary SRN shares as security against the ATM (Collateral Shares). The Company may at any time cancel the ATM, including buying back (and cancelling) the Collateral Shares for nil consideration (subject to shareholder approval).

Please note there were no fees or costs associated with the extension of the ATM.

# **ASX ANNOUNCEMENTS DURING THE QUARTER**

Date	Title
3 October 2022	Annual Report, Appendix 4G and Corporate Governance Statement
10 October 2022	Victory Bore–Unaly Hill Vanadium Project
21 October 2022	Notice of AGM, pro-forma proxy and covering letter
31 October 2022	September Quarterly Reports
14 November 2022	Yidby Gold, Diamond Drilling Update
16 November 2022	Yidby Gold Outstanding Metallurgical Results
16 November 2022	Shareholder ceasing to be a substantial holder
21 November 2022	Results of AGM
15 December 2022	Massive, Wide and Continuous Vanadium Intersections

#### **QUALIFYING STATEMENTS**

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

The information in this report that relates to Mineral Resource is based on information compiled by Mr Michael Povey who is a Member of the Australian Institute of Mining And Metallurgy. Mr Povey is an independent Consultant at and a Non-executive Director of the Company. Mr Povey has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Cade far Reporting of Exploration Results, Mineral Resources and Ore Reserves' and consents to the inclusion in this report of the matters based on their information in the form and context in which they appear.

# **Cautionary Statement:**

The Exploration Target referred to in this announcement, being conceptual in nature, takes no account of geological complexity, possible mining method or metallurgical recovery factors. The Exploration Target was estimated in order to provide an assessment of the potential scale of the exploration and the Perenjori Iron Project and to inform the Company prior to a decision to proceed with additional resource definition work and mare advanced and definitive studies.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or Reserves.

#### No New Information or Data:

SRN 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 farm and context in which the Competent Person's findings are presented have not materially changed from the original market announcement.

### 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 flaw, 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 December 2022

Project Area	Lease	Name	Locality	Lease Status
<b>Yidby Gold Project</b>	E59/2426	Nynghan	WA	Granted
	E59/2390	Yalgoo	WA	Granted
	E59/2444	Yidby Hill	WA	Granted
North Perenjori	E70/5575	Kadji	WA	Granted
	E59/2446	Perenjori 2	WA	Granted
	E70/5573	Pinjarrah Hill	WA	Granted
South Perenjori	E70/5311	Southwest	WA	Granted
	E70/5572	Fitzroy	WA	Granted
Unaly Hill	E57/1068	Unaly Hill	WA	Granted
Victory Bore	E57/1036	Victory Bore	WA	M
				Application
Kooline	E08/2373	Kooline-Wyloo	WA	Granted
	E08/2956	Kooline	WA	Granted

Tenements acquired in the quarter: Nil

Tenements surrendered in the quarter:

Project	Lease	Name	Locality	Lease Status
Victory Bore	E57/1139	Atley	WA	Surrendered
Victory Bore	E57/1036	Victory Bore	WA	Compulsory
				Partial
				Surrender

Authorised for ASX release by: Vladimir Nikolaenko

**Managing Director** 

# Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

SUREFIRE RESOURCES NL	
ABN:	Quarter ended ("Current Quarter")
48 083 274 024	31 December 2022

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(462)	(1,177)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(251)	(513)
	(e) administration and corporate costs	(196)	(238)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	7	11
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(902)	(1,917)

2.	Cash flows from inves	sting activities		
2.1	Payments to acquire or fo	r:		
	(a) entities		-	-
	(b) tenements		-	(5)
	(c) property, plant and e	quipment	-	(7)
	(d) exploration & evaluat	ion	-	-
	(e) investments		-	-
	(f) other non-current ass	ets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	-	(12)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options and conversion of partly paid shares into fully paid shared	-	7
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	7

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	4,050	5,070
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(902)	(1,917)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	(12)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	7

Page 2

Con	colidated statement of cash flows \$A'000 Current quarter \$A'000 (6 months) \$A'000		(6 months)
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	3,148	3,148

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	70	54
5.2	Call deposits	3,060	3,978
5.3	Bank overdrafts	-	-
5.4	Other (provide details) Office rental bond	18	18
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,148	4,050

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	102
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	f any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include ation for, such payments.	e a description of, and an

7.	Financing facilities  Note: the term "facility" includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	arter end	-
7.6	Include in the box below a description of each rate, maturity date and whether it is secured facilities have been entered into or are proposinclude a note providing details of those facilities.	or unsecured. If any add sed to be entered into af	itional financing

	sh from / (used in) operating activities (item 1.9)	(902)
(Payme	· · · · · · · · · · · · · · · · · · ·	, ,
activitie	ents for exploration & evaluation classified as investing es) (item 2.1(d))	-
Total re	elevant outgoings (item 8.1 + item 8.2)	(902)
Cash a	nd cash equivalents at quarter end (item 4.6)	3,148
Unuse	d finance facilities available at quarter end (item 7.5)	-
Total a	vailable funding (item 8.4 + item 8.5)	3,148
		3.49
Note: if to Otherwis	he entity has reported positive relevant outgoings (ie a net cash inflow) in item 8. ee, a figure for the estimated quarters of funding available must be included in it	3, answer item 8.7 as "N/A". em 8.7.
If item 8.7 is less than 2 quarters, please provide answers to the following questions:		
8.8.1	Does the entity expect that it will continue to have the current leash flows for the time being and, if not, why not?	evel of net operating
Answe	r: <b>N/A</b>	
8.8.2		
Answe	r: <b>N/A</b>	
8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?		
Answe	r: N/A	
	Cash a Unused Total a  Estima item 8. Note: if ti Otherwis If item 8.8.1  Answe 8.8.2  Answe 8.8.3	Cash and cash equivalents at quarter end (item 4.6) Unused finance facilities available at quarter end (item 7.5) Total available funding (item 8.4 + item 8.5)  Estimated quarters of funding available (item 8.6 divided by item 8.3)  Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8. Otherwise, a figure for the estimated quarters of funding available must be included in it. If item 8.7 is less than 2 quarters, please provide answers to the follow 8.8.1 Does the entity expect that it will continue to have the current I cash flows for the time being and, if not, why not?  Answer: N/A  8.8.2 Has the entity taken any steps, or does it propose to take any cash to fund its operations and, if so, what are those steps and believe that they will be successful?  Answer: N/A

# **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2023

Authorised by: Rudolf Tieleman - Company Secretary

(Name of body or officer authorising release – see note 4)

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.