ASX: ITM

## **BOARD &** MANAGEMENT

MINERAL

Glenn Davis - Chair Michael Schwarz - MD Gary Ferris - NED Jarek Kopias - Co Sec

## CAPITAL **STRUCTURE**

**Ordinary Shares** Issued 96.1M

Options **Issued 3.0M** 

## CONTACT

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#### Location – Eyre Peninsula Project, South **Australia**

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# **QUARTERLY ACTIVITIES REPORT FOR THREE** MONTHS ENDED 31 DECEMBER 2021



REE bearing high purity kaolin samples from the Ethiopia Prospect – Eyre Peninsula Project, South Australia

- Established kaolin-IAC REE prospects at Ethiopia, 2) IAC REE prospects at Burtons, and kaolin prospects at Caralue Bluff
  - Completed preliminary kaolin-REE beneficiation test work on historical drill holes at Ethiopia with best results of 0
    - ETH-029 32m @ 1633 ppm TREO (-45µm) from 0m
      - including 24m @ 1966 ppm TREO (-45µm) from 4m
- Identified a new IAC REE Prospect at Burtons with best results of SRC11-016 - 23m @ 1065 ppm TREO from 12m 0
  - including 4m @ 3019 ppm TREO from 20m
  - and 4m @ 1090ppm TREO from 28m
- Commenced metallurgical and spherical graphite test work on the Campoona Graphite project

iTech Minerals Ltd (ASX: ITM, iTech or Company) is pleased to present its inaugural Quarterly Activities Report for the period ended 31 December 2021.

During the December Quarter iTech was admitted to the official list and commenced trading on the ASX, established several prospects prospective for REE ion adsorption clay (IAC) mineralisation, kaolin mineralisation and commenced beneficiation test work on the Campoona Graphite Project.

### Ethiopia Kaolin – IAC REE Prospect

iTech sent samples from 23 historical drill holes for kaolin beneficiation test work and REE analysis. The beneficiated samples show thick and extensive REE mineralisation, in the weathered clay horizon, across the prospect. In particular, the results from drill hole ETH-029 demonstrated thick, high-grade rare earth elements (REE) at the end of a line of drilling. The rare earths display enrichment of neodymium and praseodymium (~24% Nd+Pr), which are critical in the production of permanent magnets for electric vehicles and renewable energy. Significantly, the results also demonstrate enrichment of high value heavy rare earths (~34%). The beneficiation process of sieving the bulk sample, to obtain the -45 µm clay fraction, increases the REE grades between 153% - 311%. Having identified extensive enrichment of REE's in kaolinitic clays, across an area in excess of 1.3 km x 1 km, at the Ethiopia Prospect, iTech plans to drill approximately 65 additional holes (Fig. 2). The program is designed to infill and extend the mineralisation to an area of approximately 2.5 km x 1.5 km with a focus on extending high grade mineralisation at the end of historical drilling in ETH-029 which intersected 32m @ 1633 ppm TREO (<45µm).

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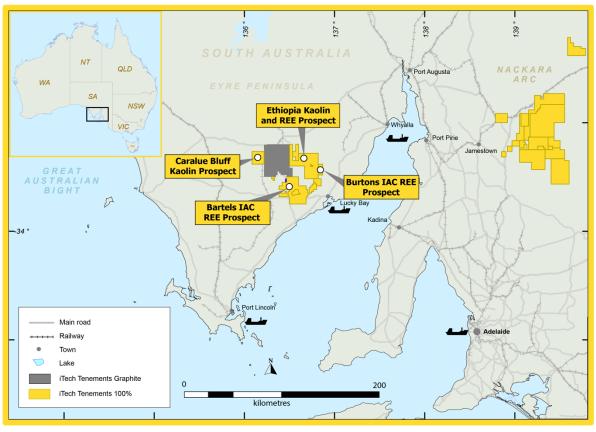


Figure 1. Location of the Prospects on the Eyre Peninsula, South Australia

#### **Characteristics of REE IAC Deposits**

Ion-adsorption clay deposits have the potential to be highly profitable due to easier mining, lower processing costs, and the very low content of radioactive elements. These deposits are generally mined by open-pit methods and little beneficiation is required. A simple leach process using monovalent sulphate or chloride salt solutions at ambient temperature can produce a high-grade REE product.

REE's are found in soils deposited after weathering of granitic and/or REE enriched source rocks

- Occur primarily in China, but now being recognised globally.
- Sometimes called laterite deposits
- REE's are adsorbed to kaolinite, halloysite and other clay minerals
- Ore is relatively low-grade, generally only 0.05% to 0.5% REO (rare earth element oxides)
- Heavy REE enriched, which are more valuable
- Easily extractable REE can be highly profitable due to low extraction costs
- REE's leachable from clays with simple ammonium sulphate at room temperature

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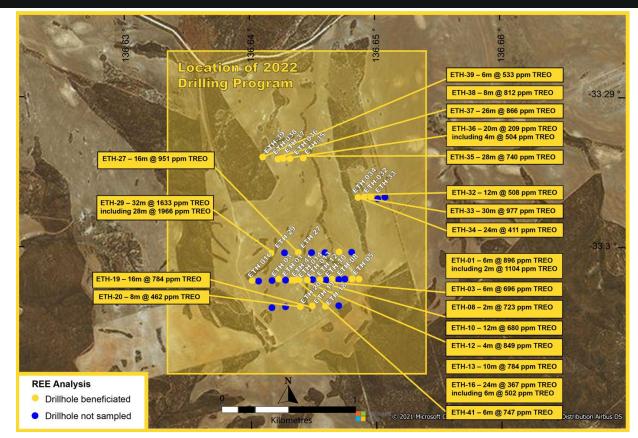


Figure 2. Location of the Ethiopia Kaolin IAC-REE Prospect and proposed drilling area – Eyre Peninsula, South Australia

#### **Burtons IAC REE Prospect**

iTech has identified significant rare earth element mineralisation in the clay rich, weathering profile at the Burtons Prospect on the Eyre Peninsula (Fig. 1). The rare earths display significant enrichment of neodymium and praseodymium (~23% Nd+Pr) and also display significant enrichment in desirable heavy rare earth element oxides (~39% HREO) which command a premium price. Historical data, from drilling undertaken by Archer Materials Ltd in 2011, identified thick intervals of up to 32m of REE rich, clay dominant material, over an area extending over 1 km in a north-south direction (Fig. 3). Of the 19 drill holes drilled, 15 holes had high levels of REE mineralisation consistent with ion adsorption clay (IAC) style mineralisation. The historical drilling had best results of

- SRC11-016 23m @ 1065 ppm TREO from 12m
  - including 4m @ 3019 ppm TREO from 20m
  - o and 4m @ 1090ppm TREO from 28m



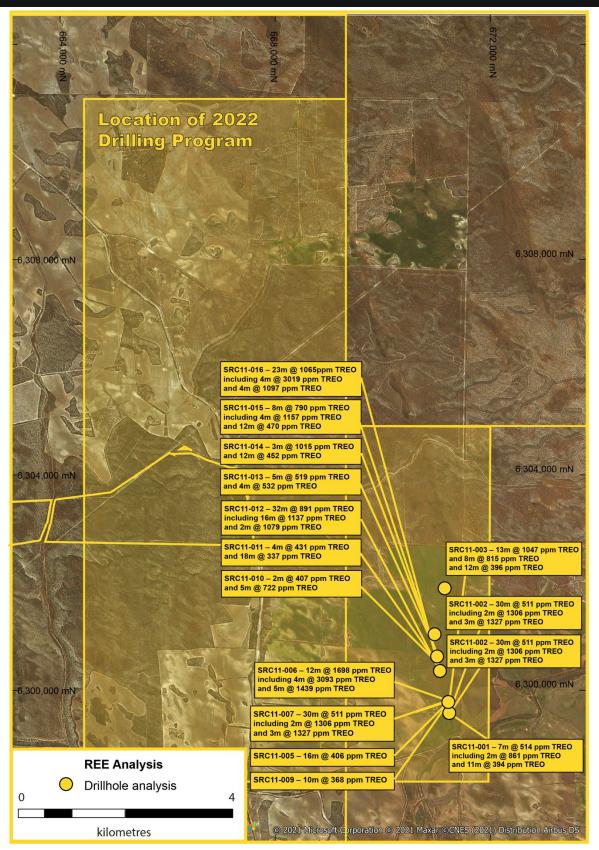


Figure 3. Location of the Burtons (Salt Creek) Prospect and proposed drilling area – Eyre Peninsula, South Australia

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#### Caralue Bluff Kaolin Prospect

The Caralue Bluff Prospect has bright white kaolin confirmed in drilling at <10m depth, up to 17m thick, in two drill holes over 5 km apart. Historical partial chemical and mineralogical analyses of the bulk raw clay from one drill hole recorded relative high kaolinite content (~70%) with total Fe<sub>2</sub>O<sub>3</sub> of 0.55% and raw brightness of 87% according to the TAPPI 646m-54 standard. The high purity and brightness of this material makes it well suited to high purity alumina feedstock, paper coating and filler applications (*ASX Release, Replacement Prospectus, 19 October 2021*). The Company has an extensive drilling program planned to cover an area of 12km x 12km for a total of approximately 194 holes (Fig. 4). In addition to the two drill holes that intersect bright white kaolin, numerous dams and council rubble pits in the region reveal white kaolin exposed at surface.

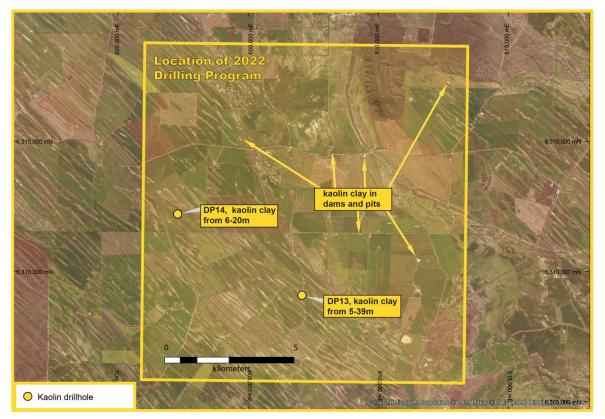


Figure 4. Location of the Caralue Bluff Kaolin Prospect and proposed drilling area – Eyre Peninsula, South Australia

#### Campoona Graphite Project – Metallurgical and Spherical Graphite Test Work

iTech continues to build its portfolio of critical minerals projects with delivery of a bulk sample (600 kg) of run-of-mine (ROM) graphite ore to ANZAPLAN in Germany. ANZAPLAN has commenced test work on producing spherical graphite for use in the anodes of Lithium-Ion (Li-ion) batteries using a low-cost, eco-friendly processing route with a smaller environmental footprint. This collaboration will build on the test work completed by Archer Materials between 2015-2019, where they successfully produced battery-grade graphite using a traditional hydrofluoric-acid process.

The Campoona Graphite Project contains a JORC 2012 graphite Mineral Resource of 8.55 Mt @ 9.0% Total Graphitic Carbon (TGC), a granted mining lease and approved multipurpose licences for processing infrastructure and groundwater extraction. iTech is currently investigating the most effective pathway to produce "green" graphite, including the use of abundant renewable energy available in South Australia.

ANZAPLAN is undertaking a bench scale metallurgical test work program for the development of a beneficiation process capable of upgrading iTech Minerals' bulk graphite mineral sample(s) into high value saleable products including graphite concentrate and purified spherical graphite for use in anodes of Lithium-Ion Batteries.



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The proposed test work program comprises the following processes:

- Review of historical test work data
- Development of a beneficiation process (flake graphite)
- Flake graphite sample production (50 kg)
- Screening of alternative (non-HF acid) chemical purification routes
- Optimisation of chemical purification
- Spherical graphite sample production (2 kg)
- Confirmation of purification of spherical graphite

#### Results announced after the end of the Quarter:

#### **Bartels IAC REE Prospect**

iTech has identified a new zone of REE mineralisation in a weathered, clay rich horizon at the Bartels Prospect, in the southernmost part of the Eyre Peninsula tenement package (Fig. 1). In 2012, Archer Materials drilled 3 reverse circulation (RC) drill holes targeting gold mineralisation in epithermal systems. One drill hole, EPIRC12\_003, intersected significant rare earth elements in what is described as kaolinised coarse grained felsic. This hole was drilled to identify strike extensions to gold mineralisation.

- EPIRC12\_003 intersected 21m @ 2298 ppm TREO from 55-76m
  - including 9 m @ 3054 ppm TREO from 55-56m
  - and 7 m @ 2626 ppm TREO from 69-76m

EPIRC12\_001 and EPIRC12\_002 intersected alteration and significant gold mineralisation but didn't intersect the kaolinitic felsic unit identified in EPIRC12\_003.

Due to the depth of the mineralisation, there is some question as to whether it could be ionic in nature. The mineralised interval appears to be a preferentially weathered zone of felsic intrusive within layered metasediments of the Hutchison Group Metasediments. A review of the chip trays from the drilling does suggest that the influence of lateritic weathering extends well below the mineralised horizon, potentially preferentially weathering certain units. More importantly weathered equivalents of the felsic outcrop extensively in the vicinity of the drill hole and provide a significant IAC REE target in the upcoming drilling program.

iTech intends to drill approximately 50 drill holes across an area of approximately 4km x 2km (Fig. 5) to test this target.





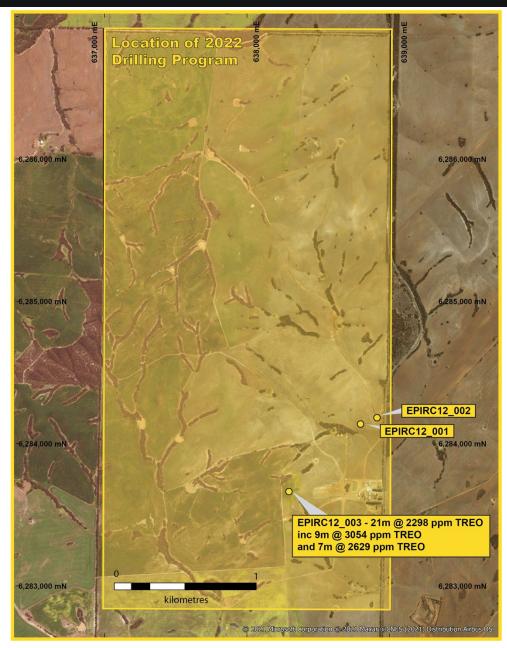


Figure 5. Location of the Bartels IAC REE Prospect and proposed drilling area – Eyre Peninsula, South Australia

Prospect	Target	Best Results	Drillholes
Ethiopia	Kaolin - IAC REE	32m @ 1038 ppm TREO	65
Burtons (Salt Creek)	IAC REE	12m @ 1698 ppm TREO	64
Caralue Bluff	Kaolin	Bright white kaolin in historical holes over 5 km	194
Bartels	IAC REE	21m @ 2298 ppm TREO	49
		Total (approx)	372

Table 1. Eyre Peninsula Kaolin-REE Prospect summary with proposed drilling programs



#### Corporate

Attached to this report is the Company's Appendix 5B setting out iTech's cash flow statement for the quarter. The significant cash outflows during the quarter include:

- \$684,000 spent in relation to expenses associated with the IPO.
- \$364,000 spent in relation to exploration activities; and
- \$84,000 in payments to related parties. These payments relate to payment of director fees to executive and non-executive directors.

At the end of the December 2021 quarter the Company had cash at bank of \$5.95 million.

Pursuant to ASX listing rule 5.3.4, the Company advises the proposed use of funds contained in section 2.4 of iTech's Replacement Prospectus in comparison to the actual use of funds following admission to the official list of the ASX.

Use of funds	Prospectus use of funds (\$'000)	Actual (\$'000) to 31 Dec-21	Remaining balance (\$'000)
Funds raised (incl cash reserves)	7,651	7,651	-
Cash movement from prospectus pro-forma (31 May 2021) to 30 June 2021	-	71	(71)
Lead manager	580	596	(16)
Expenses of the offer	354	328	26
Exploration	5,002	365	4,637
Corporate overheads, remuneration and other management expenses	1,301	284	1,017
Plant and equipment	30	61	(31)
Reserve	384	-	384
Total	7,651	1,704	5,947
Cash as at 31 December 2021			5,947

## Tenement table

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Tenement Number	Project Area	% Interest Held at end of quarter
South Australia		
EL 6363	Eyre Peninsula	100%
EL 6478	Eyre Peninsula	100%
EL 5870	Eyre Peninsula	100%
EL 5791	Eyre Peninsula	100%
EL 6647	Eyre Peninsula	100%
EL 6634	Eyre Peninsula	100% Graphite Rights
EL 5794	Nackara Arc	100%
EL 6000	Nackara Arc	100%
EL 6029	Nackara Arc	100%
EL 6160	Nackara Arc	100%
EL 6351	Nackara Arc	100%
EL 5935	Nackara Arc	100%
EL 6354	Nackara Arc	100%
EL 6287	Nackara Arc	100%
EL 6637	Nackara Arc	100%
EL 6605	Nackara Arc	100%
EL 6616	Nackara Arc	100%
EL 6676	Nackara Arc	100%
EL 6609	Billa Kalina	100%
ML6470	Campoona Graphite	100%
MPL150	Campoona Graphite	100%
MPL151	Campoona Graphite	100%
New South Wales		
EPM8871	Crowie Creek	100%
EPM8894	Stanthorpe	100%

There have been no changes to tenements during the quarter.

### Mineral Resource table

Area	Resource Category	Tonnes (Mt)	Graphitic Carbon %	Contained Graphite (t)
Campoona Shaft	Measured	0.32	12.7	40,600
	Indicated	0.78	8.2	64,000
	Inferred	0.55	8.5	46,800
Central	Indicated	0.22	12.3	27,100
Campoona	Inferred	0.30	10.3	30,900
Wilclo South	Inferred	6.38	8.8	561,400
Combined	Measured	0.32	12.7	40,600
	Indicated	1.00	9.1	91,100
	Inferred 7	7.23	8.8	639,100
Combined	Total Resource	8.55	9.0	770,800

For further information please contact the authorising officer Michael Schwarz:

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Or

Gavan H Farley Director - Corporate Advisory Novus Capital Mob: +61 420 520 300 Main: +61 2 9375 0114 E: gavan.farley@novuscapital.com.au



#### ABOUT ITECH MINERALS LTD

iTech Minerals Ltd is a newly listed mineral exploration company exploring for and developing battery materials and critical minerals within its 100% owned Australian projects. The company is exploring for kaolinite-halloysite, ion adsorption clay rare earth element mineralisation and developing the Campoona Graphite Deposit in South Australia. The company also has extensive exploration tenure prospective for Cu-Au porphyry mineralisation, IOCG mineralisation and gold mineralisation in South Australia and tin, Tungsten, and polymetallic Cobar style mineralisation in New South Wales.

#### **COMPETENT PERSON STATEMENT**

The information which relates to exploration results is based on and fairly represents information and supporting documentation compiled by Michael Schwarz. Mr Schwarz has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the JORC Code). Mr Schwarz is a full-time employee of iTech Minerals Ltd and is a member of the Australian Institute of Geoscientists and the Australian Institute of Mining and Metallurgy. Mr Schwarz consents to the inclusion of the information in this report in the form and context in which it appears.

This announcement contains results that have previously released as "Replacement Prospectus" on 19 October 2021, "Rare Earth Potential Identified at Kaolin Project" on 21 October 2021, "Rare Earth Potential Confirmed at Kaolin Project" on 12 November 2021, "Campoona Graphite Battery Anode Test Work Underway" on 22 November 2021", "New Rare Earth Prospect on the Eyre Peninsula" on 29 November 2021, "Positive Results Grow Rare Earth Potential at Kaolin Project" on 13 December 2021 and "More Positive Rare Earth Results - Ethiopia Kaolin Project" on 12 January 2022. iTech confirms that the Company is not aware of any new information or data that materially affects the information included in the announcement.

The Company confirms that it is not aware of any new information or data that materially affects the estimates of Mineral Resources in this release and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not changed.

#### GLOSSARY

CREO = Critical Rare Earth Element Oxide HREO = Heavy Rare Earth Element Oxide IAC = Ion Adsorption Clay LREO = Light Rare Earth Element Oxide REE = Rare Earth Element REO = Rare Earth Element Oxide TREO = Total Rare Earth Element Oxides %NdPr = Percentage amount of neodymium and praseodymium as a proportion of the total amount of rare earth elements

# Appendix 5B

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

Name of entity		
iTech Minerals Ltd		
ABN Quarter ended ("current quarter")		
41 648 219 050	31 December 2021	

Con	solidated 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	(1)	(2)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(53)	(75)
	(e) administration and corporate costs	(128)	(209)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	1
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	(181)	(285)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(61)	(61)
	(d) exploration & evaluation	(363)	(363)
	(e) investments	-	-
	(f) other non-current assets	-	-

Con	solidated 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	(424)	(424)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	7,000	7,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(684)	(924)
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	6,316	6,076

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	236	580
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(181)	(285)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(424)	(424)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	6,316	6,076

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	5,947	5,947

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	5,907	236
5.2	Call deposits	40	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	5,947	236

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	56
6.2	Aggregate amount of payments to related parties and their associates included in item 2	28
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includ nation for, such payments.	le a description of, and an

7.	<b>Financing facilities</b> 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 quarter end			
7.6	7.6 Include in the box below a description of each facility above, including the lender, in rate, maturity date and whether it is secured or unsecured. If any additional financir facilities have been entered into or are proposed to be entered into after quarter entered include a note providing details of those facilities as well.			

NI-1			
Net ca	sh from / (used in) operating activities (item 1.9)	(181)	
· ·	· · ·	(363)	
Total r	elevant outgoings (item 8.1 + item 8.2)	(544)	
Cash a	and cash equivalents at quarter end (item 4.6)	5,947	
Unuse	d finance facilities available at quarter end (item 7.5)	-	
Total a	available funding (item 8.4 + item 8.5)	5,947	
		10.9	
Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 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 le cash flows for the time being and, if not, why not?	evel of net operating	
Answer: N/A			
8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?			
Answer: N/A			
	activiti Total r Cash a Unuse Total a <b>Estima</b> <b>item 8</b> <i>Note: if</i> <i>Otherwi</i> If item 8.8.1 Answe	<ul> <li>Otherwise, a figure for the estimated quarters of funding available must be included in it</li> <li>If item 8.7 is less than 2 quarters, please provide answers to the follow</li> <li>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?</li> <li>Answer: N/A</li> <li>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?</li> </ul>	

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?	

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

### **Compliance statement**

- 1 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: 25 January 2022

Authorised by: By the board (Name of body or officer authorising release – see note 4)

#### Notes

- 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.