

## ASX Announcement

28 January 2021

ASX Code: MAN

### Capital Structure

Ordinary Shares: 342,924,843  
Unlisted Options: 139,425,077  
(3c exercise)  
Current Share Price: 8.5c  
Market Capitalisation: \$29.1M  
Cash: \$4.6M  
Debt: Nil

### Directors

Patrick Burke  
Non-Executive Chairman

James Allchurch  
Managing Director

Ben Phillips  
Non-Executive Director

Lloyd Flint  
Company Secretary

### Contact Details

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Australia

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## QUARTERLY REPORT

For the period ended 31 December 2020

### Highlights

#### Jimperding Project

- Drilling at the highly prospective Newleyine Ni-Cu-PGE target, located 30km from Chalice's exciting Julimar discovery, is on track to commence this quarter
- Drilling will test three discrete late-time EM bedrock anomalies that geophysical interpretation suggests could be the response of massive sulphides consistent with Julimar-style PGE-Ni-Cu mineralisation
- In late December 2020 a whole-of-permit (~142km<sup>2</sup>) airborne electromagnetic (AEM) survey was completed to generate further targets – results expected shortly
- Mandrake has purchased 100% of EL 70/5345 (the Jimperding Project) providing full exposure to Newleyine and regional targets whilst removing the burden of free-carrying a JV partner
- EL 70/5345 was granted during the quarter
- \$4.6M cash at bank

#### Berinka Pine Creek Gold Prospect

- Further drilling programme scheduled for April/May 2021 to follow up high grade copper and gold results from 2020:
  - 3m @ 1.8g/t Au, 32 g/t Ag and 2.1% Cu from 124m including;
    - 1m @ 3.7 g/t Au, 69 g/t Ag and 3.1% Cu from 124m



Plate 1 – AEM Loop at Newleyine

During the December 2020 quarter, Mandrake Resources Limited (ASX: MAN) (Mandrake or the Company) continued to advance the Jimperding Project located in the Jimperding Metamorphic Belt 70km north east of Perth, WA.

### Exploration Activities - Jimperding Project

The Jimperding Project lies approximately 30km east of Chalice Gold Mines Limited's (Chalice) Julimar Ni-Cu-PGE discovery. Activities during the quarter comprised permitting and preparation activities for drilling at Newleyine as well as a large airborne electromagnetic (AEM) survey covering the entire Jimperding Project.

#### AEM Survey

During the December 2020 quarter Mandrake commissioned an initial whole-of-permit (~142km<sup>2</sup>) AEM survey at the Jimperding Project.

The heliborne AEM survey utilized Geotech Limited's Versatile Time-Domain Electromagnetic (VTEM™ Max) geophysical system surveying approximately 700 line-kms at 200m spacing.

The objective of the survey was to generate targets prospective for 'Julimar style' mineralisation in addition to the Company's existing highly promising Newleyine prospect. Following completion of the survey a number of infill lines were flown over anomalous areas identified by the survey.

Results of the AEM survey will be released shortly.

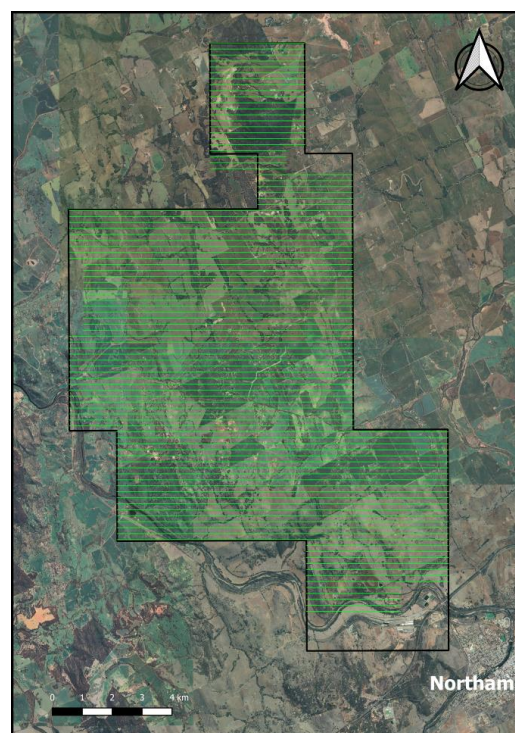


Figure 1 – Completed airborne EM flight lines (200m spacing) across the Jimperding Project

## Newleyine Ni-Cu-PGE Prospect

### Drilling

Mandrake is on track to commence drilling operations at Newleyine during the current quarter.

A heritage survey has been conducted, land access negotiations are well advanced and driller availability has been confirmed. Drilling will test three discrete late-time EM bedrock anomalies (Figure 2) that geophysical interpretation suggests could be the response of massive sulphides consistent with Julimar-style PGE-Ni-Cu mineralisation.

**Table 1. Comparison between Newleyine and the Julimar discovery (CHN)**

Attributes	Julimar Discovery (CHN)	Newleyine Prospect (MAN)	Comments
i. Jimperding Metamorphic Belt			<ul style="list-style-type: none"> <li>Newleyine 30km east of Julimar</li> </ul>
ii. Serpentinite ultramafic interlayered with gabbro sub-units with BIF	✓	✓	<ul style="list-style-type: none"> <li>Newleyine pegged prior to Julimar discovery</li> </ul>
Distinct high intensity ovoid magnetic anomaly in airborne and ground magnetics	✓	✓	<ul style="list-style-type: none"> <li>Magnetic bullseye feature</li> <li>Distinct internal complexity/character of ground mag at Newleyine</li> </ul>
Surface rock chips highly anomalous for PGEs, Ni and Cu	✓	✓	<ul style="list-style-type: none"> <li>186 rock chip samples collected at Newleyine up to 0.36g/t Pd, 0.27g/t Pt, 0.65% Ni and 0.19% Cu<sup>1</sup></li> </ul>
Broad drilling intersections carrying Ni grades above 1,000ppm	✓	✓	<ul style="list-style-type: none"> <li>Historical drilling at Newleyine not assayed for PGEs</li> <li>Historical Newleyine drilling to 1.18% Ni and 1,200 ppm Cu</li> <li>Broad mineralised intersections at Newleyine: <ul style="list-style-type: none"> <li>240m at 2,400 ppm Ni and 300ppm Cu<sup>2</sup></li> </ul> </li> </ul>
Multiple discrete moderately to highly conductive ground EM anomalies	✓	✓	<ul style="list-style-type: none"> <li>Newleyine EM anomalies yet to be drilled</li> </ul>
Significant PGE discovery	✓	?	<ul style="list-style-type: none"> <li>Drilling March 2021 quarter</li> </ul>

### Geophysics

Mandrake recently completed a Fixed Loop Electromagnetic (FLEM) survey at the Newleyine Prospect which successfully identified three confined late-time bedrock

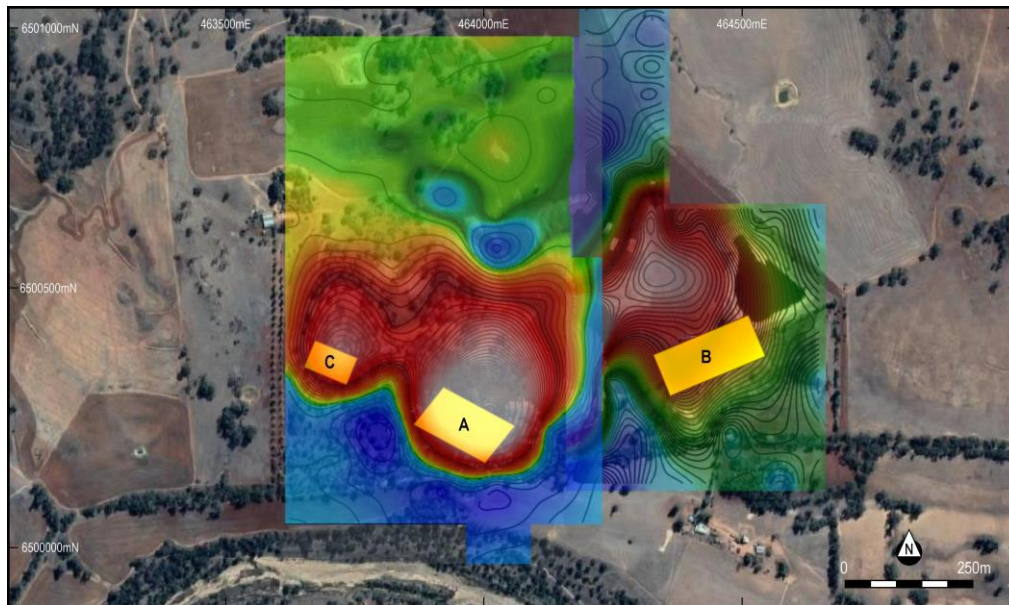
<sup>1</sup> See ASX releases dated 6 July 2020 and 28 July 2020

<sup>2</sup> Second Quarter Report - North Flinders Mines Limited Joint Venture Prospecting Programme (Fehlberg, 1978).



conductors located within a distinct bullseye magnetic complex that contains layered ultramafic intrusion units and banded iron formation (see Figures 2 and 3).

The conductors are of moderate to high conductance, moderately dip north (consistent with mapped outcrop) and are located between 125 – 210m below surface. Conductors A, B and C are summarised in Table 2.



**Figure 2 – Newleyine Plan View - FLEM data (channel 23 Z component images) showing conductor plates A, B and C**

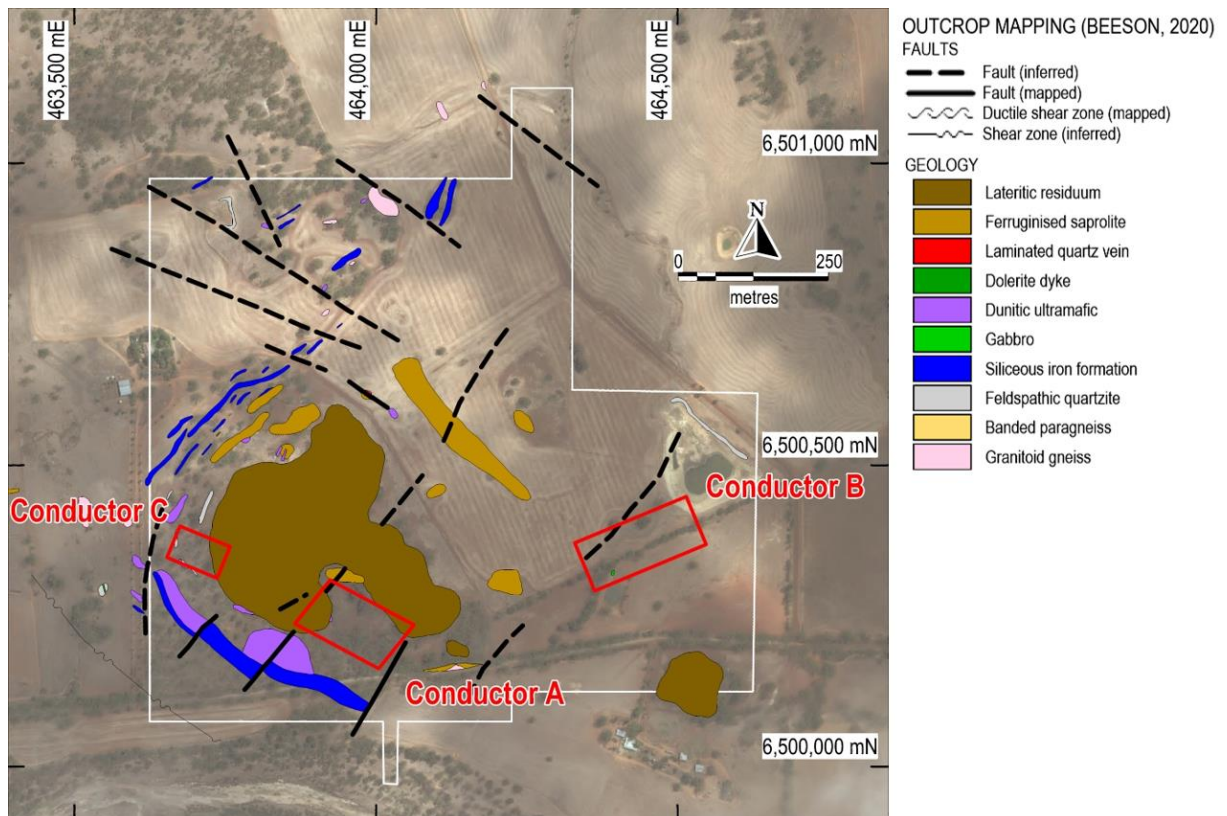
**Table 2. Conductor Plate Dimensions**

	Conductor A	Conductor B	Conductor C
Depth below surface (m)	125	210	130
Dip (°)	50	55	55
Dip direction (°)	20	337.5	22.5
Strike length (m)	160	200	90
Depth extent (m)	140	150	98.3

Mandrake notes that the projected up-dip (southern) edge of conductor plates A and C sit approximately within the mapped dunitic ultramafic unit with the plates also consistent with nearby structural dip and strike observations collected during recent mapping. Both Conductors A and C sit within non-magnetic zones of the broader magnetic complex.

Conductor A, considered the most compelling and highest priority target, is bound by two mapped NNE trending faults (Figure 3).

Conductor B is located in the eastern half (paddock) of the survey area where no outcrop has been observed.



**Figure 3: Newleyine 1:5,000 outcrop mapping (John Beeson, 2020). FLEM survey outline in white and FLEM modelled conductor plates (red)**

## Geochemistry

Concentrations of platinum and palladium in rock chip samples collected from two field mapping events have exceeded expectations with rock chip samples up to 0.36g/t Pd and 0.27g/t Pt confirming the ultramafic intrusive at Newleyine is highly fertile for PGEs.

## Purchase of 100% of the Jimperding Project

During the December 2020 quarter Mandrake executed a Binding Agreement (BA) with Andean Energy Resources Pty Ltd (AER) to purchase 100% of ELA 70/5345. The consideration for the purchase included:

- Issue of 4.5 million ordinary shares to AER upon execution of the BA; and
- Issue of a further 4.5 million ordinary shares to AER upon grant of ELA 70/5345 (subject to 6 months escrow from the date of issue).

Both parties agreed to terminate the farm-in Heads of Agreement governing the previous farm-in arrangement which required Mandrake to spend \$300,000 to earn 80% of ELA 70/5345 and then free carry AER to completion of a bankable feasibility study.

ELA 70/5345 was granted on 8 December 2020. An application has been lodged for the transfer of EL 70/5345 to Mandrake (Ministerial consent required).

### Exploration Activities - Berinka Pine Creek Gold Project

During the December 2020 quarter, Mandrake designed a soil sampling and drilling programme as a follow-up to the August 2020 drilling work that targeted gold and copper mineralisation at its 100%-owned 289km<sup>2</sup> Berinka Pine Creek gold project in the Northern Territory.

The August 2020 drilling investigated two greenfield prospects, Vegetation Anomaly and Terry's Gap, identified from aeromagnetics and historic gold results derived from costeans.

RC hole FBRC005 at Vegetation Anomaly returned the following high grade gold-silver-copper intercept:

- 3m @ 1.8g/t Au, 32 g/t Ag and 2.1% Cu from 124m including;
  - 1m @ 3.7 g/t Au, 69 g/t Ag and 3.1% Cu from 124m

Gold appears to be hosted in a series of veins in close proximity to a faulted contact between a gabbro and granite and is associated with sulphides, particularly pyrite and chalcopyrite (copper). The presence of high concentrations of silver and copper is particularly noteworthy in that previous drilling work at Berinka, primarily at Terry's Prospect in the mid-80s, identified gold with significantly lower copper and silver concentrations. This suggests that the mineralisation at the Vegetation Anomaly may represent a different mineralised system/event.

To assist in understanding the structural controls on mineralisation Mandrake engaged specialist downhole logging consultants to run an optical probe in two holes. This information has greatly assisted in determining the orientation of structures/veins of interest and has been invaluable in assisting with the generation of a follow-up drilling programme.

**Mandrake has secured the services of a driller for a ~2,000m RC programme targeting Vegetation Anomaly and a number of other targets. A short soil sampling programme will be undertaken prior to drilling to inform precise drill hole siting. Work is expected to commence in April/May 2021 (wet season dependent).**

### Brief Exploration History – Berinka Gold Project

Carpentaria Exploration (CEC) first explored the area in 1975 when a reconnaissance visit found quartz veining assaying 5.5g/t Au at what is now known as the Terry's Prospect.

Over the next six years CEC conducted soil sampling, mapping, gridding, rock chip sampling and ground magnetics. Most of these activities were focused on the Terry's Prospect area which is situated approximately 2km south-east of Vegetation Anomaly. Importantly, Vegetation Anomaly and Terry's Prospect appear 'connected' by a distinct NW-SE lineament as interpreted from magnetic imagery.

In the mid-1980s CEC drilled 36 RC drill holes totalling 3,014m at Terry's prospect. Best intersections include\*:

- 4m @ 6.6g/t from 32m
- 6m @ 3.1g/t from 18m
- 5m @ 2.6g/t from 30m

\*A complete list of all historic drill intercepts is contained in the Mandrake Resources prospectus lodged with the ASX on 24 May 2019.

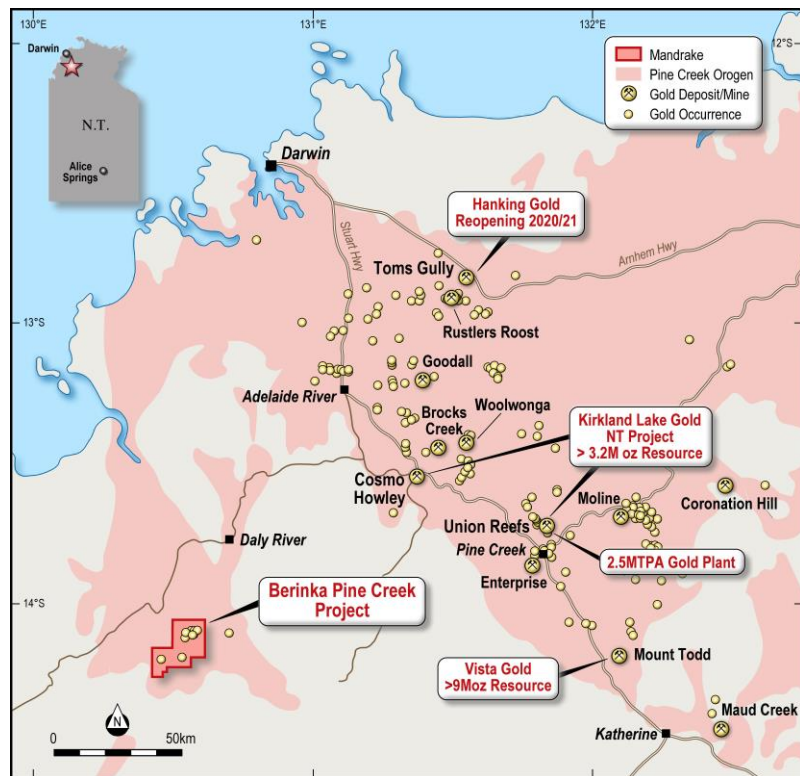


Figure 4 - Location of Berinka Pine Creek Project



## Additional ASX Disclosure Information

**ASX Listing Rule 5.3.2:** There were no substantive mining production and development activities during the quarter.

### ASX Listing Rule 5.3.3 - Schedule of Mineral Tenements as at 31 December 2020

Location	Project	Status	Tenement	Interest - start of quarter	Interest – end of quarter
NT, Australia	Berinka	Granted	EL31710	100%	100%
WA, Australia	Jimperding	Granted	EL70/5345*	51%	100%

\* - awaiting transfer to Mandrake (subject to Ministerial consent)

**ASX Listing Rule 5.3.4:** Actual expenditure, since admission to the ASX, versus estimated expenditure on items within the use of funds statement in the Prospectus:

Funds Available	Use of Funds Statement \$000's	Actual Receipts August 2019 to December 2020 \$000's	Variance \$000,s Favourable/ (Unfavourable)
Existing cash reserves	222	84	(138)
Funds raised from the Offer	4,500	4,794	294
<b>Sub Total</b>	<b>4,722</b>	<b>4,878</b>	<b>156</b>
Exercise of options (net of costs)	-	1,998	1,998
<b>Total</b>	<b>4,722</b>	<b>6,876</b>	<b>2,154</b>
Allocation of Funds	For Two Year Period commencing August 2019	Actual Expenditure August 2019 to December 2020	Variance
Land access and mapping	(225)	(180)	45
Geochemistry and geophysics	(550)	(589)	(39)
Drilling	(1,200)	(138)	1,062
Corporate administration costs	(800)	(462)	338
Costs of the Offer	(417)	(267)	150
Working Capital	(1,530)	(696)	834
<b>Total expenditure</b>	<b>(4,722)</b>	<b>(2,332)</b>	<b>2,390</b>
Interest received	-	51	51
<b>Closing cash on hand</b>	<b>-</b>	<b>4,595</b>	<b>4,595</b>

**ASX Listing Rule 5.3.5:** Payments to related parties of the Company and their associates during the quarter per Section 6.1 of the Appendix 5B total \$91,000. This is comprised of Directors' fees (excl. GST) and salaries of \$91,000.



This announcement has been authorised by the board of directors of Mandrake.

### **About Mandrake Resources**

Mandrake is a junior exploration company established with the purpose of exploring and developing gold, nickel, copper and PGE opportunities. The Company controls 100% of a 140km<sup>2</sup> exploration licence prospective for Ni/Cu/PGEs in the exciting Jimperding Metamorphic Belt, 70km NE of Perth.

Mandrake also owns a mineral exploration project located in the prolific Pine Creek Orogen of the Northern Territory prospective for gold, silver and base metals.

For further information visit [www.mandrakeresources.com.au](http://www.mandrakeresources.com.au)

### **Competent Persons Statement**

The technical information in this announcement complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled and assessed under the supervision of Mr James Allchurch, Managing Director of Mandrake Resources. Mr Allchurch is a Member of the Australian Institute of Geoscientists. He has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Allchurch consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

## Appendix 5B

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

Name of entity

MANDRAKE RESOURCES LIMITED

ABN

60 006 569 124

Quarter ended ("current quarter")

31 December 2020

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (..6....months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(255)	(504)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	-
	(e) administration and corporate costs	(83)	(216)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	5	12
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)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(333)</b>	<b>(708)</b>

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

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (..6....months) \$A'000</b>
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)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>-</b>	<b>-</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
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	684	2,025
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(14)	(27)
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)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>670</b>	<b>1,998</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	4,259	3,306
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(333)	(708)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	670	1,998

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

Consolidated 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	<b>Cash and cash equivalents at end of period</b>	<b>4,596</b>	<b>4,596</b>

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	2,096	1,759
5.2	Call deposits	2,500	2,500
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>4,596</b>	<b>4,259</b>

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	91
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		



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

<b>7.</b>	<b>Financing facilities</b> <i>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.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

<b>8.</b>	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(333)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(333)
8.4	Cash and cash equivalents at quarter end (item 4.6)	4,596
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	4,596
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	13.8
<i>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.</i>		
8.8	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 level of net operating 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 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		
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		
<i>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.</i>		

## 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: .....28 January 2021 .....

Authorised by: .....Board of Directors.....  
(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.