

**ASX Announcement**

30 July 2021

ASX Code: MAN

**Capital Structure**

Ordinary Shares: 443,924,843  
Unlisted Options: 114,575,077  
(3c exercise)  
Current Share Price: 8.1c  
Market Capitalisation: \$35M  
Cash: \$16M (30/6/21)  
Debt: Nil

**Directors**

Patrick Burke  
Non-Executive Chairman

James Allchurch  
Managing Director

Lloyd Flint  
Non-Executive Director/  
Company Secretary

**Contact Details**

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[mandrakeresources.com.au](http://mandrakeresources.com.au)**QUARTERLY REPORT**

For the period ended 30 June 2021

**Highlights****Jimperding Project**

- **Drilling commenced at the Newleyine Ni-Cu-PGE prospect targeting discrete late-time EM anomalies that geophysical interpretation suggests could be indicative of Julimar-style PGE-Ni-Cu mineralisation**
- **Three diamond holes completed with two holes recording zones of disseminated, semi-massive and massive sulphides associated with mafic-ultramafic rocks**
- **Assays pending for base metals and platinum group elements (PGEs)**
- **Further follow-up drilling of prospective zones planned**
- **Mandrake fully funded with over \$16.0M in cash**



**Figure 1 - Semi-massive sulphides in ultramafic – pyrrhotite and minor chalcopyrite at 141.3m in MNEWDD002**

**Exploration Activities - Jimperding Project**

Mandrake Resources Limited's (ASX: MAN) (Mandrake or the Company) Jimperding Project lies approximately 30km east of Chalice Mining Limited's (Chalice) Julimar Ni-Cu-PGE discovery in the Jimperding Metamorphic Belt 70km north east of Perth, WA.

Activities during the June 2021 quarter comprised a detailed geological mapping and sampling campaign across the entire Jimperding Project, as well as diamond drilling at the flagship Newleyine Prospect.

### Newleyine Ni-Cu-PGE Prospect

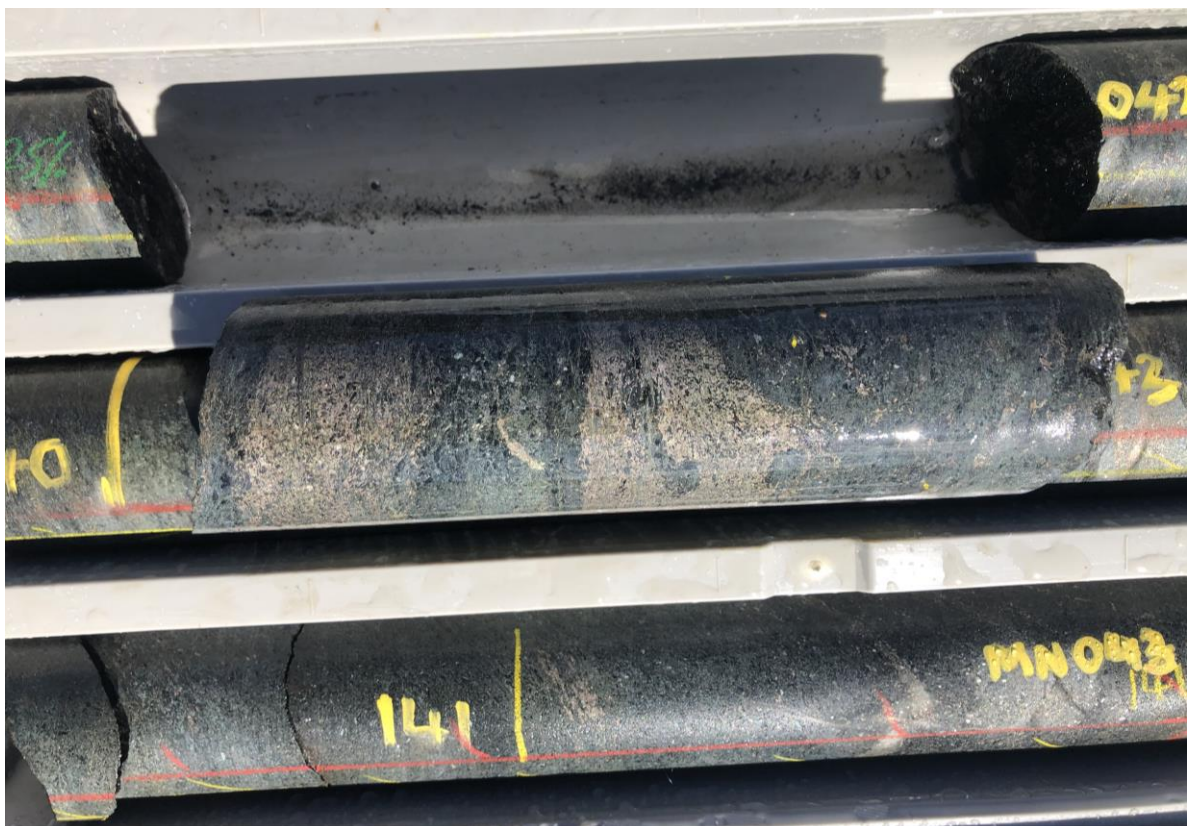
#### Drilling

Drilling commenced at the Newleyine Prospect in June 2021 and was designed to test three discrete, late-time electromagnetic (EM) bedrock anomalies that geophysical interpretation indicated could be the response of massive sulphides consistent with Julimar-style PGE-Ni-Cu mineralisation.

#### MNEWDD001

MNEWDD001, targeting eastern-most fixed loop electromagnetic (FLEM) conductor plate B, encountered almost exclusively ultramafic rock (serpentine) with regular zones of disseminated and vein-filled sulphides (primarily pyrite and pyrrhotite) up to 4% by volume sulphides.

The down-hole electromagnetic (DHEM) survey at MNEWDD001 identified a very strong, late-time off-hole conductor plate with ~7,000 Siemens conductance. This conductor was subsequently tested by MNEWDD003.



**Figure 2 - Sulphide rich zone including bands of pyrrhotite with minor chalcopyrite - MNEWDD002 139.2m (60% sulphide content in bands)**



### MNEWDD002

MNEWDD002, which targeted FLEM conductor plate A, recorded several zones of disseminated and semi-massive sulphides in mafic-ultramafic rocks.

MNEWDD002 included a broad serpentinite zone with consistent disseminated sulphides (primarily pyrite) up to 2% by volume from 43m to 119m followed by another serpentinite intersection from 121 – 130.5m containing 1-3% sulphides.

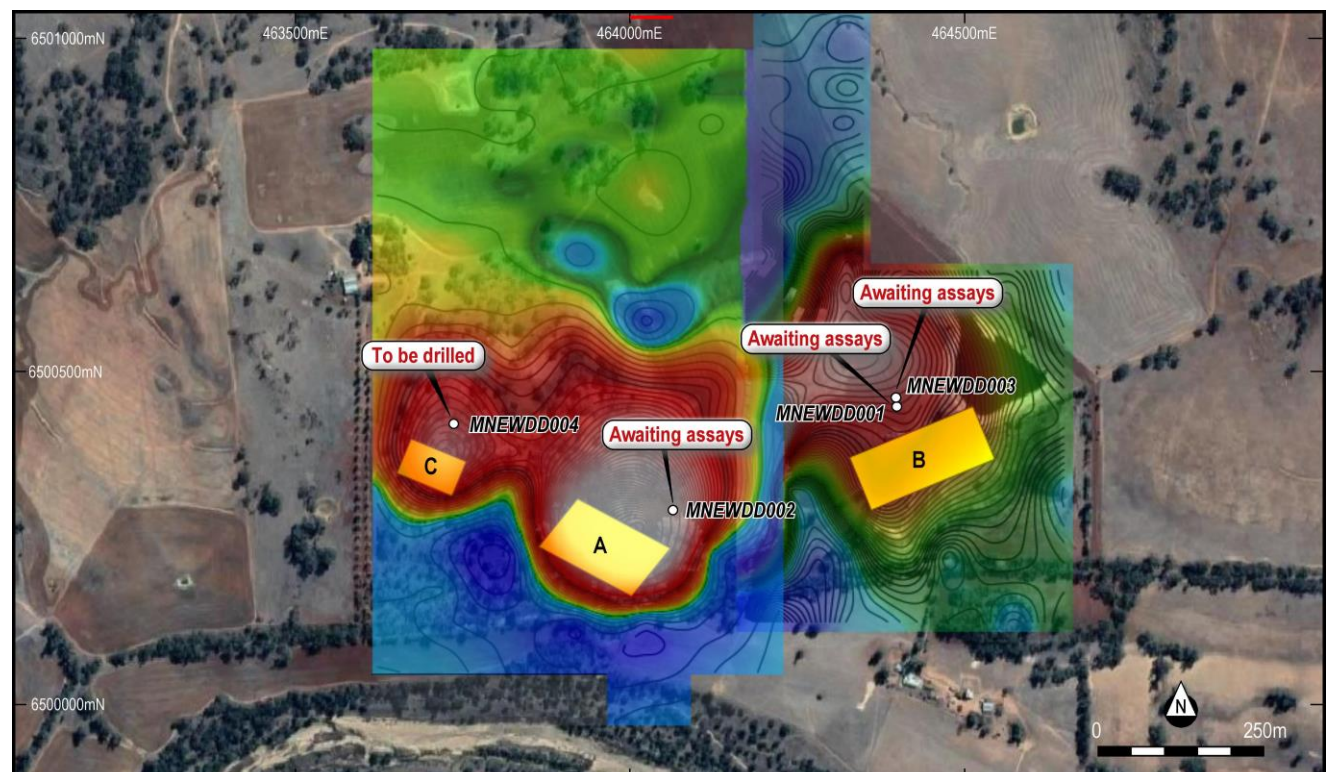
At 130.5m a 4.5m zone comprising amphibolite with 5-10% disseminated sulphides (primarily pyrrhotite) was followed by a further 2.9m wide zone from 138.4m containing 15% sulphides by volume (including minor chalcopyrite) as well as several semi-massive sulphide bands (60% sulphides) up to 10cm in thickness.

A banded magnetite iron formation, containing bands of near massive sulphide was intersected immediately below the sulphide ultramafic unit at 143.6m.

A DHEM was then conducted on MNEWDD002 which identified a very strong, late-time off-hole conductor plate with ~5,000 Siemens conductance. The conductor is strongly confined and measures approximately of 40 x 30m and is yet to be drill tested.

### MNEWDD003

MNEWDD003 tested the very strong, late-time off-hole conductor plate (~7,000 Siemens conductance) identified in the DHEM survey at MNEWDD001.



**Figure 3 – Newleyne prospect showing FLEM EM conductors (A, B and C) and drill holes**

MNEWDD003 primarily comprised mafic-ultramafic rocks serpentinite and amphibolite with zones of disseminated and vein-filled sulphides (primarily pyrite and pyrrhotite) up to 2% sulphides by volume.

Semi massive and massive sulphide zones were observed from 286.2m downhole depth associated primarily with banded iron formation with minor ultramafic rocks and mafic metasediments. The sulphide zones appear proximal to the overlying ultramafic contact (with some ultramafic zones within the sulphidic zone) and are composed primarily of pyrrhotite and minor chalcopyrite.

### Newleyine Ni-Cu-PGE Prospect – Next Steps

As at the time of writing, drilling has ceased at the Newleyine prospect as a function of incessant rain in the Northam area restricting access to drill pads. Drilling will resume as soon as ground conditions permit, with MNEWDD004 (testing conductor plate C) the next hole to be drilled.

Assaying of ultramafic and sulphide zones of all holes drilled to date for base metals as well as platinum group elements (PGEs) is now underway. Assay results will inform interpretation and modelling of the Newleyine intrusive where initial drilling has proven the presence of ultramafic host rocks and a relative abundance of sulphide material.

### Additional Ni-rich Ultramafic Prospects - Jimperding Project

During the June 2021 quarter Mandrake completed detailed geological mapping and sampling across the entire ~142km<sup>2</sup> Jimperding Project, located in the Jimperding Metamorphic Belt, 70km north east of Perth, Western Australia.

The regional geological field assessment was informed by the Versatile Time-Domain Electromagnetic (VTEM™ Max) airborne electromagnetic (AEM) survey recently conducted by Mandrake as well as Geological Survey of Western Australia (GSWA) geological mapping and historical datasets.

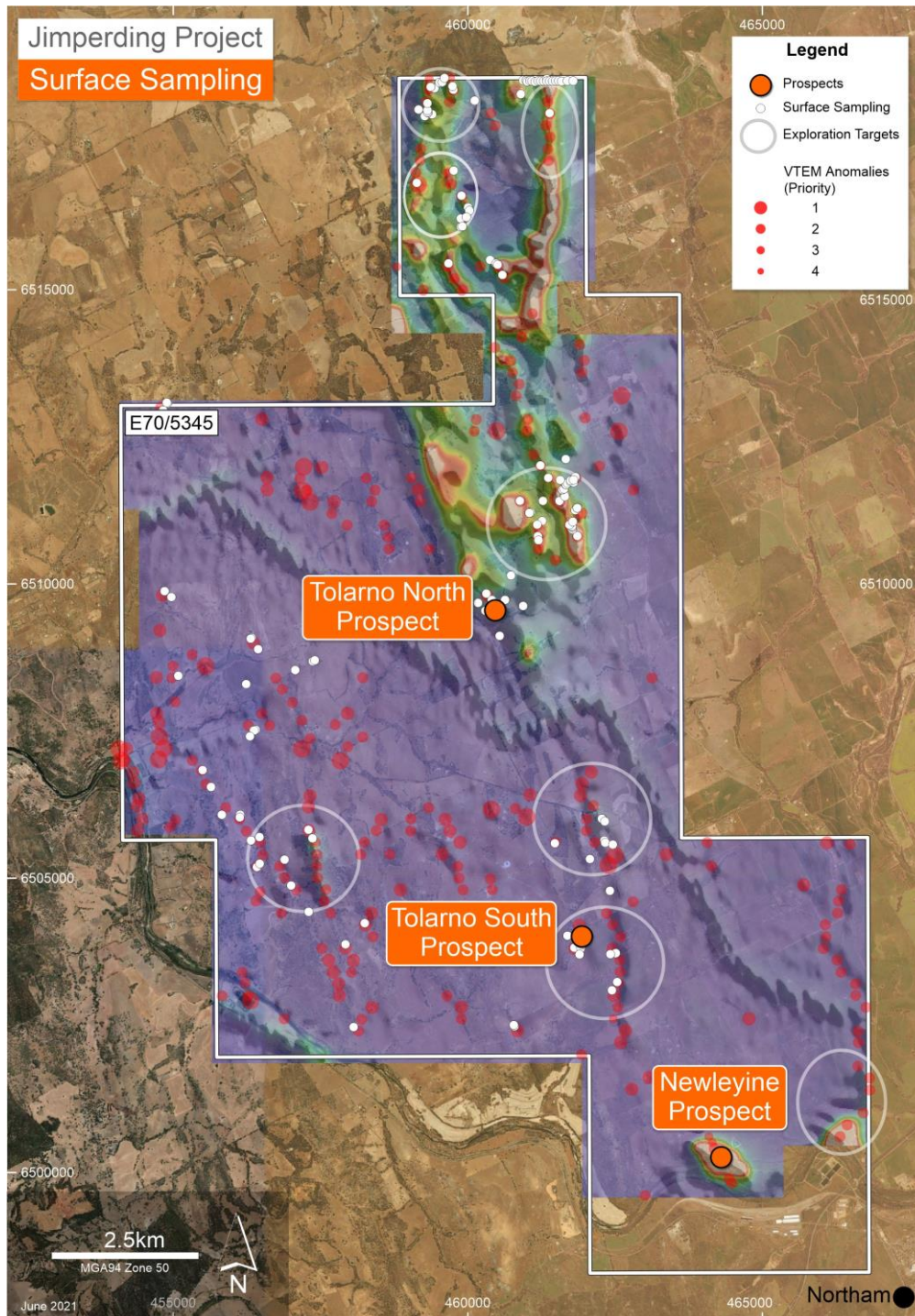
Two stand-out prospects, Tolarno North and Tolarno South, were identified with both prospects having received no previous exploration.

#### Tolarno North Prospect

Field inspection of a VTEM anomaly located in a paddock revealed the existence of a roughly 900m-long by 200m-wide soil-covered zone with intermittent outcropping, subcropping and float ultramafic rock. Strongly ferruginised weathered schist adjacent to the EM anomaly was submitted for assay and recorded 0.31% Ni, 503ppm Cu and 20ppb Pt.

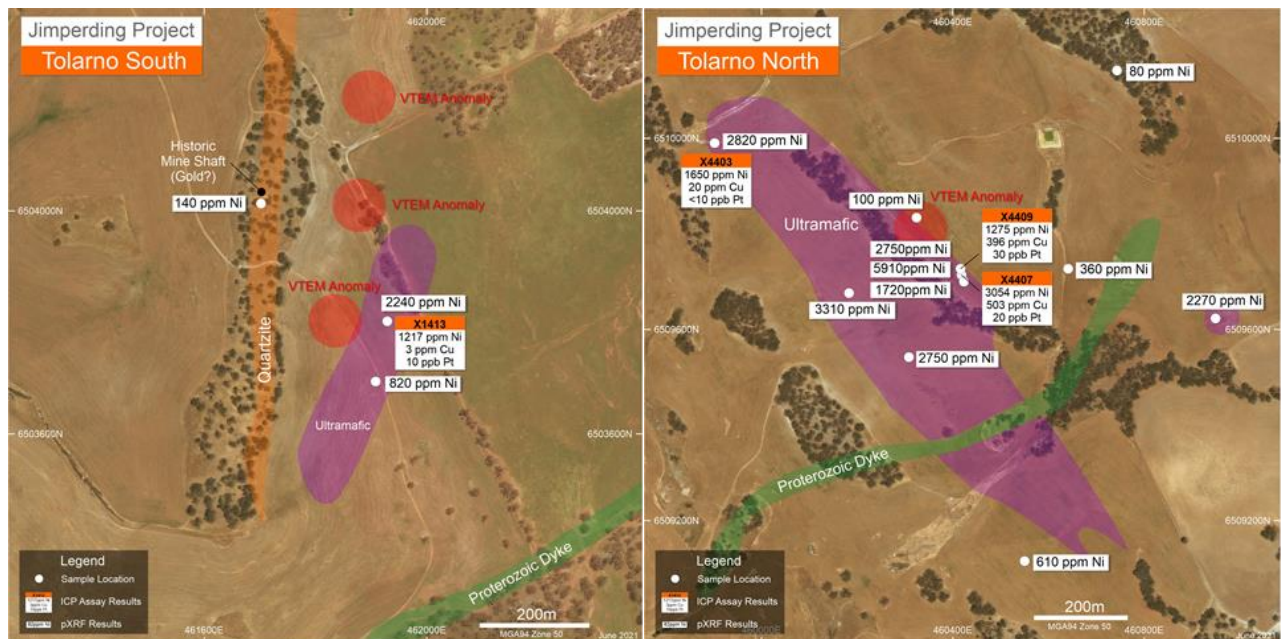
The serpentinised peridotites comprising the majority of the ultramafic rock typically returned values of 0.1% - 0.3% Ni. Ultramafic rock chip sample X4409 was submitted to the laboratory for analysis and returned 0.13% Ni, 396ppm Cu and 30 ppb Pt.





**Figure 4 - Jimperding Project Surface pXRF Sampling Locations**

Whilst the true extent of the ultramafic intrusive is unclear, the initial geochemical signature and coincident EM anomalism indicates the potential prospectivity of Tolarno North for PGE-Ni-Cu mineralisation.



**Figure 5 – Tolarno North and South Prospects – Inferred Ultramafic Extent and Surface Sampling Results**

### Tolarno South Prospect

In the course of investigating three distinct VTEM anomalies and a historic mine shaft believed to have been worked for gold, Mandrake identified an area of approximately 700m x 200m where ultramafic and amphibolite float were found.

No source of the EM anomalies were found and no outcrop located. It is noted that colluvium across the area is derived from a quartzite ridge hosting the historic shaft which will likely obscure any outcrop or meaningful soil geochemistry.

One sample of ultramafic float was sent to the lab for assay and returned 0.12% Ni and 10ppb Pt.

### **Exploration Activities - Berinka Pine Creek Gold Project**

Mandrake conducted a small soil sampling programme of two soil lines for 35 samples in May 2021 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

Mandrake has received the requisite drilling permit and intends to conduct further drilling at Berinka in the near term.

## Corporate

During the June 2021 quarter Mandrake completed a placement of AUD\$12 million from institutional and sophisticated investors through the issue of 60,000,000 new shares at an issue price of \$0.20 per share.

The Placement provides Mandrake with the resources to continue exploration at the Jimperding PGE-Ni-Cu Project, located 30km from Chalice's exciting Julimar discovery.

## Additional ASX Disclosure Information

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

### ASX Listing Rule 5.3.3 - Schedule of Mineral Tenements as at 30 June 2020

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

**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 dated 21 May 2019:

Funds Available	Use of Funds Statement \$000's	Actual Receipts August 2019 to June 2021 \$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>
Placement/Exercise of options (net of costs)	-	14,297	14,297
<b>Total</b>	<b>4,722</b>	<b>19,175</b>	<b>14,453</b>
Allocation of Funds	For Two Year Period commencing August 2019	Actual Expenditure August 2019 to June 2021	Variance
Land access and mapping	(225)	(465)	(240)

Geochemistry and geophysics	(550)	(620)	(70)
Drilling/preparation	(1,200)	(378)	822
Corporate administration costs	(800)	(643)	157
Costs of the Offer	(417)	(267)	150
Working Capital	(1,530)	(796)	734
<b>Total expenditure</b>	<b>(4,722)</b>	<b>(3,169)</b>	<b>1,553</b>
Interest received	-	56	56
<b>Closing cash on hand</b>	<b>-</b>	<b>16,062</b>	<b>16,062</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 \$117,000, comprised of Directors' fees, salaries and secretarial and accounting services performed by directors.

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")

30 June 2021

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (..12....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	(172)	(1,115)
	(b) development		-
	(c) production		-
	(d) staff costs		-
	(e) administration and corporate costs	(118)	(443)
1.3	Dividends received (see note 3)		-
1.4	Interest received	2	17
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>(288)</b>	<b>(1,541)</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 (..12....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)	12,000	12,000
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	400	3,089
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(753)	(792)
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>11,647</b>	<b>14,297</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	4,703	3,306
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(288)	(1,541)
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)	11,647	14,297

## 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 (..12....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>16,062</b>	<b>16,062</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	13,562	2,203
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>16,062</b>	<b>4,703</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	117
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.</i> <i>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)	(288)
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)	(288)
8.4	Cash and cash equivalents at quarter end (item 4.6)	16,062
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	16,062
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	55.7
<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: .....30 July 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.