ASX Announcement

30 JANUARY 2024

QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDING 31 DECEMBER 2023

HIGHLIGHTS

- **M3 Mining completes exploration programs at both the Edjudina Gold Project and the Victoria Bore Copper Project**

Edjudina Gold Project (100% owned)

- **Reverse Circulation (RC) drilling completed at the El Capitan Prospect was successful in delineating the orientation and geometry of the mineralised structure but intersected only minor gold mineralisation**
- ***UltraFine* soil sampling program completed over a 7km trend to the southeast along the El Capitan 'magnetic low'**
- **Trace element geochemistry from rock chips obtained from outcrops 6km south of El Capitan indicates a potential epithermal quartz zone**

Victoria Bore Copper Project (100% owned)

- **Two new areas with elevated base metals located by a recent reconnaissance portable x-ray fluorescence (pXRF) soil sampling program at regional base metal targets**
- **Follow up infill pXRF soil sampling to be completed at Prospects 2 & 6 in addition to initial testing of other regional targets**

Corporate

- **The Company is well-funded for its planned exploration activities for the calendar year with cash held as of 31 December 2023 of approximately $1.9 million**
- **Continued evaluation of multiple advanced projects in Australia and overseas in a range of commodities in the base metals and energy sectors**

M3 Mining Limited (ASX: **M3M**) (**M3 Mining**, the **Company**) is pleased to provide an update on corporate and exploration activities during the December 2023 Quarter.

EXECUTIVE DIRECTOR SIMON ELEY:

"In the last quarter M3 Mining's exploration activities progressed well at both of its projects. At Edjudina, an RC program led to minor gold mineralisation intercepts in the fresh rock beneath previous intersections, highlighting the 'nuggety' nature of the mineralisation at the El Capitan prospect. Concurrently, an extensive soil sampling program was completed 7.5km to the southeast along the El Capitan 'magnetic low' trend. This trend shows promise due to its unexplored potential, sporadic historic gold drilling intercepts, nugget occurrences and signs of an epithermal quartz zone. The Company maintains its anticipation for the broader potential of the area and is keen to commence exploration at the recently granted tenement adjacent to the Carosue Dam Mine.

At Victoria Bore, a pXRF soil sampling program was completed targeting priority geological targets that were identified by PGN Geoscience. This has led to the identification of two new prospects that contain anomalous levels of base metals and key pathfinder geochemistry. The first phase survey was reconnaissance in nature and the team expects to complete a second phase of infill soil sampling within the quarter.

M3 continues exploring assets with varying commodities in Australia and internationally. Our focus remains unwavering: to uncover a significant and economically viable deposit that will drive our Company's success and, or alternatively, deliver a value accretive acquisition."

UPCOMING M3 NEWSFLOW

1st Half, 2024

– Results of detailed 7km UltraFine soil sampling along El Capitan magnetic low trend

– Follow-up aircore drilling at soil sampling targets (if warranted)

– Infill pXRF Soil Sampling program at high-priority base metal prospects at Victoria Bore

Edjudina Gold Project

The Edjudina Project is located approximately 150km northeast of Kalgoorlie in Western Australia. It covers a section of the established mineralised trend along the Keith-Kilkenny Tectonic Zone which hosts multiple significant gold discoveries (see Figure 1). No large-scale mining has occurred within the tenement area, however, historical near surface workings can be observed throughout the region, particularly within and along strike of the previous mines in the Yilgangi Mining Field.

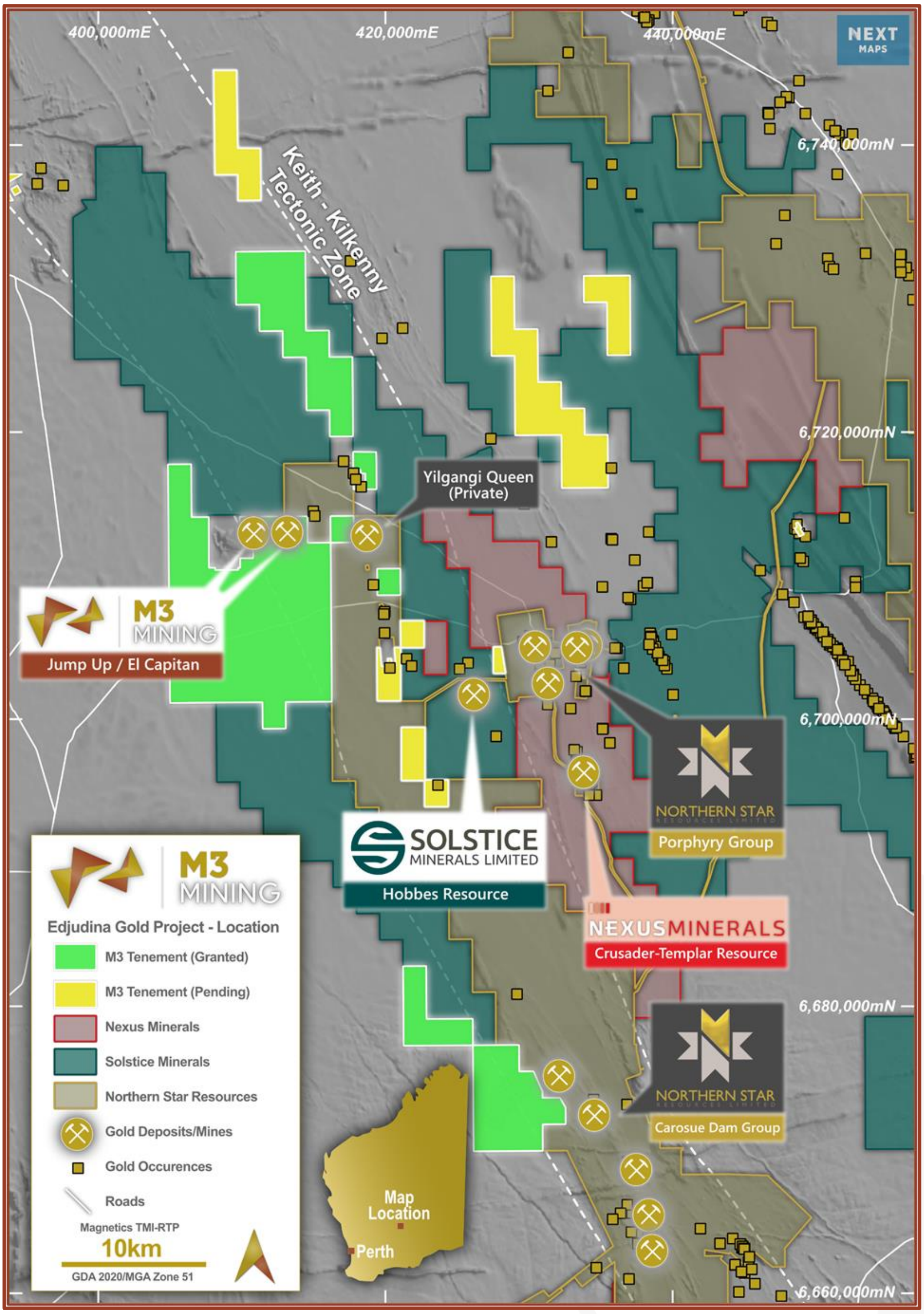

Figure 1 – Edjudina Gold Project Overview

El Capitan Prospect

El Capitan is believed to be situated on a splay structure to the major regional Keith-Kilkenny fault which hosts operating gold mines; Carosue Dam and Thunderbox, as well as the advanced gold projects; Lake Roe and Apollo Hill. As outlined in prior announcements, El Capitan is a coarsely mineralised prospect with widespread anomalous gold.

Initial scout drilling program indicated mineralisation as follows[1];

- **10m at 241.2 g/t Au from 27m (EDJAC164)**
  - **Bonanza grades from 27 – 28m (2,303.53 g/t Au) (see Figure 2)**

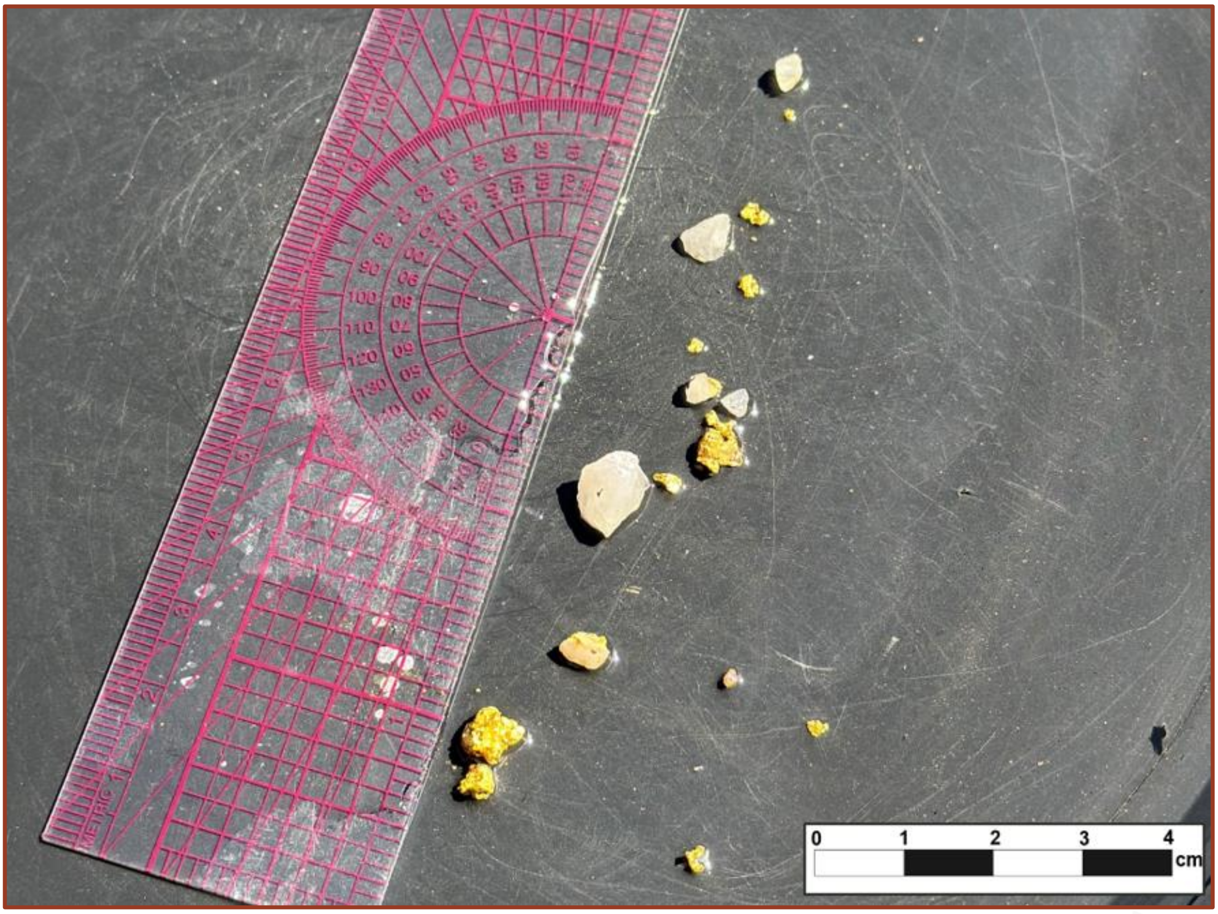

Figure 2 – Coarse Gold Panned from EDJAC164 (27 – 28m)

Subsequent aircore drilling successfully defined gold mineralisation 200m to the north and south of prior drilling bringing the total outlined strike length of the prospect to 400m.

In the December quarter, M3 Mining completed two drillholes for 426m of RC drilling at the El Capitan prospect (see Figure 3). The drilling was designed to test the depth extent of mineralisation beneath the high-grade gold intercepts previously drilled[2].

The drilling encountered minor gold mineralisation[3] within the fresh rock as follows:

— 4m at 0.43 g/t Au from 140 – 144m (EDJRC001)

[1] See M3M announcement 10/07/2023 "Spectacular gold mineralisation confirmed at Edjudina" for further details.
[2] See M3M announcement 07/06/2023 "High Grade Gold Intersection from Scout Drilling at Edjudina"
[3] See M3M announcement 04/01/2024 "RC drilling assays received for Edjudina Gold Project"

This was intercepted beneath the high-grade gold intercept from EDJAC164, and it is interpreted to be on the same mineralised structure. EDJRC001 was drilled in the opposite direction of all previously drilled aircore holes with an azimuth of 270° to delineate the dip direction of mineralisation. The variation of grade between the two intercepts is interpreted to highlight the 'nuggety' nature of the mineralisation.

Although the grade of the mineralisation does not show high continuity, the program was successful in intersecting the host structure providing the Company with important structural information about the nature of the gold at El Capitan. This will assist in future drilling programs to the south-east along the 'magnetic-low' trend where the Company aims to drill test all future gold anomalous zones which potentially can be identified from the recently completed soil sampling program (results pending).

EDJRC002 was drilled perpendicular to the drilling direction of previous holes (azimuth of 180°) in order to test whether the mineralisation was associated with east-west oriented veining. The results support that this is not the case and the minor mineralised interval intercepted in EDJRC002 of 4m at 0.20 g/t Au from 20 – 24m is interpreted to be a supergene accumulation of gold within the upper saprolite clays which has been a common occurrence from previous aircore programs.

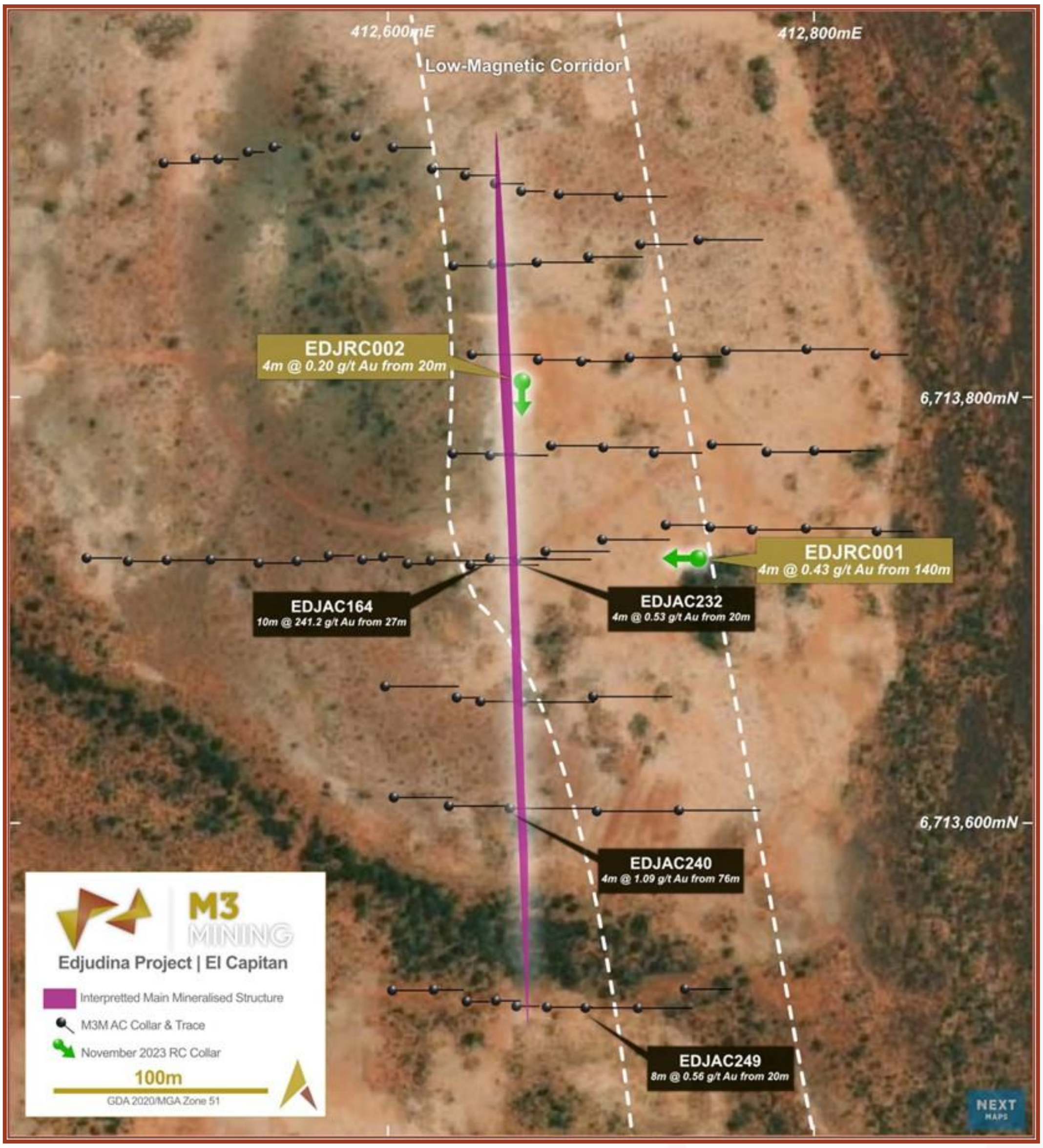

Figure 3 – Plan View of Drill line at The El Capitan Prospect

Rock Chip Sampling

The Company conducted rock chip sampling across the Edjudina Gold Project, particularly focusing on the El Capitan trend.[4] Twenty-one samples were gathered from various localities, and all underwent comprehensive multi-element geochemical composition analysis. Four rocks that were sampled exhibit textures reminiscent of epithermal formations, and preliminary geochemical results show minor anomalism for gold and base metals (see Appendix 2). While indicative of a potential epithermal zone, these findings remain under further assessment. The zone prompted an extension of soil sampling lines to assess the geochemical extent of this area. These initial observations present promising signs but require additional investigation to confirm their significance. Other samples collected have assisted in delineating geology over the prospect area.

Figure 2 – Outcrop at Potential Epithermal Zone 6km to the south of El Capitan [1&2: Outcrops showing possible epithermal textures. 3&4: 23EDR011]

[4] See M3M announcement 04/01/2024 "RC drilling assays received for Edjudina Gold Project"

Soil Sampling Program – Assays Pending

In November 2023[5], the Company completed a soil sampling program covering the entire 7.5km magnetic-low trend within M3 Mining's Edjudina tenements. This trend includes the El Capitan prospect to the north (which has been the focus of all prior drilling). The trend has a number of gold nugget occurrences and sporadic historical gold drilling intercepts (refer to Figure 4). Extension of soil sampling lines was conducted over a potential epithermal zone recently identified through rock chip sampling.

A total of 939 soil samples were collected and dispatched for *UltraFine* analysis at LabWest in Perth. The forthcoming results will aid in identifying future drill targets within the Edjudina Gold Project, these results are expected in Q1 CY2024.

All prior drilling efforts have been solely focussed on El Capitan and the lines drilled thus far only represent a mere six percent coverage of the entire trend.

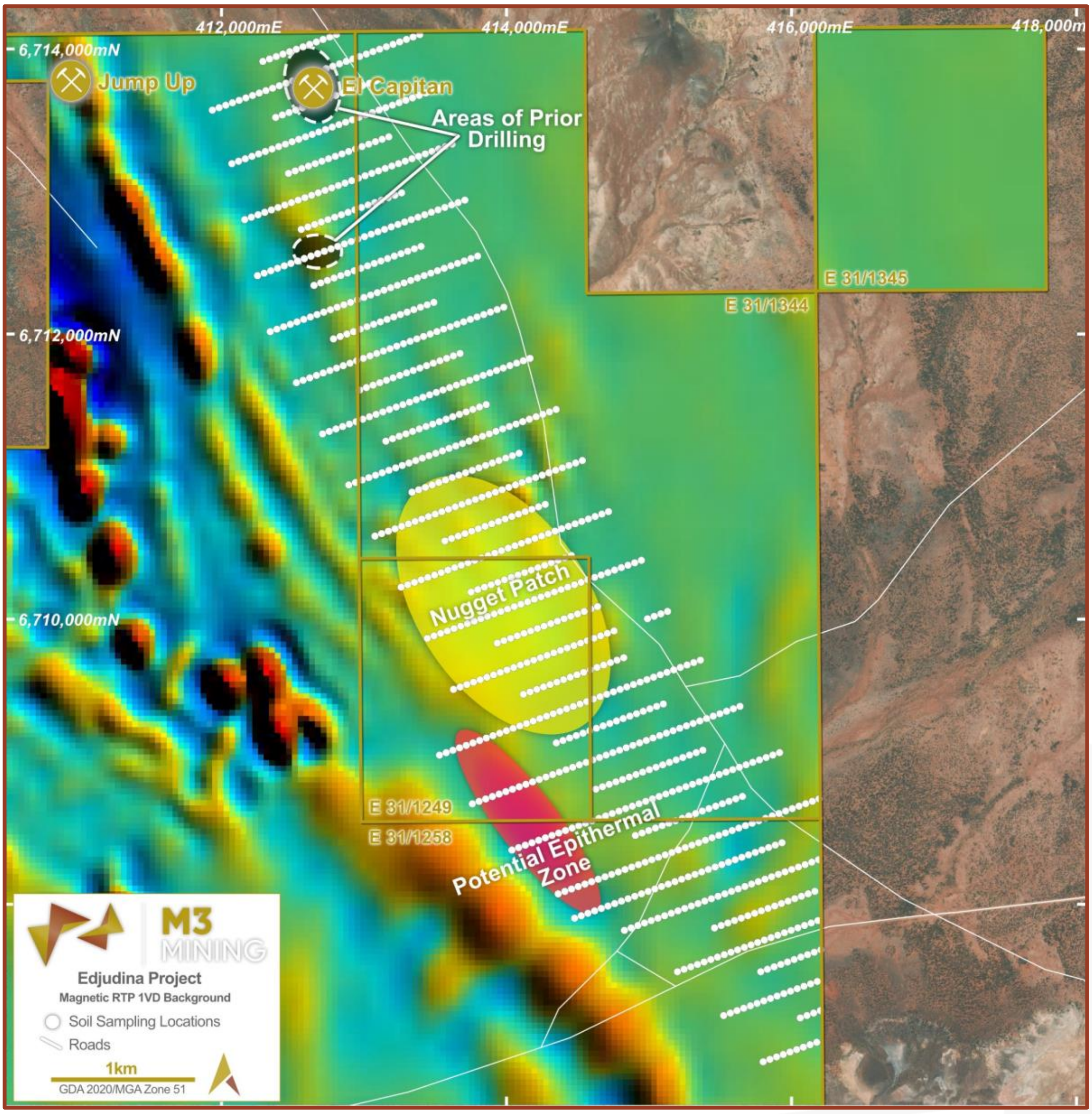

Figure 4 – Soil Sampling Completed at The Edjudina Gold Project

[5] See M3M announcement 30/11/2023 "Completion of RC drilling program at Edjudina Gold Project"

Victoria Bore Copper Project

The Victoria Bore Copper Project is centred on the historic Victoria Copper Mine which produced high grade copper averaging circa 32.7% Cu for 62.5t of copper from near surface in the 1950's[6]. The Victoria Bore Project is located approximately 120km south of the town of Onslow and 130km southeast of Exmouth in Western Australia. The tenements lie adjacent to the Northwest Coastal Highway and are readily accessible (see Figure 5).

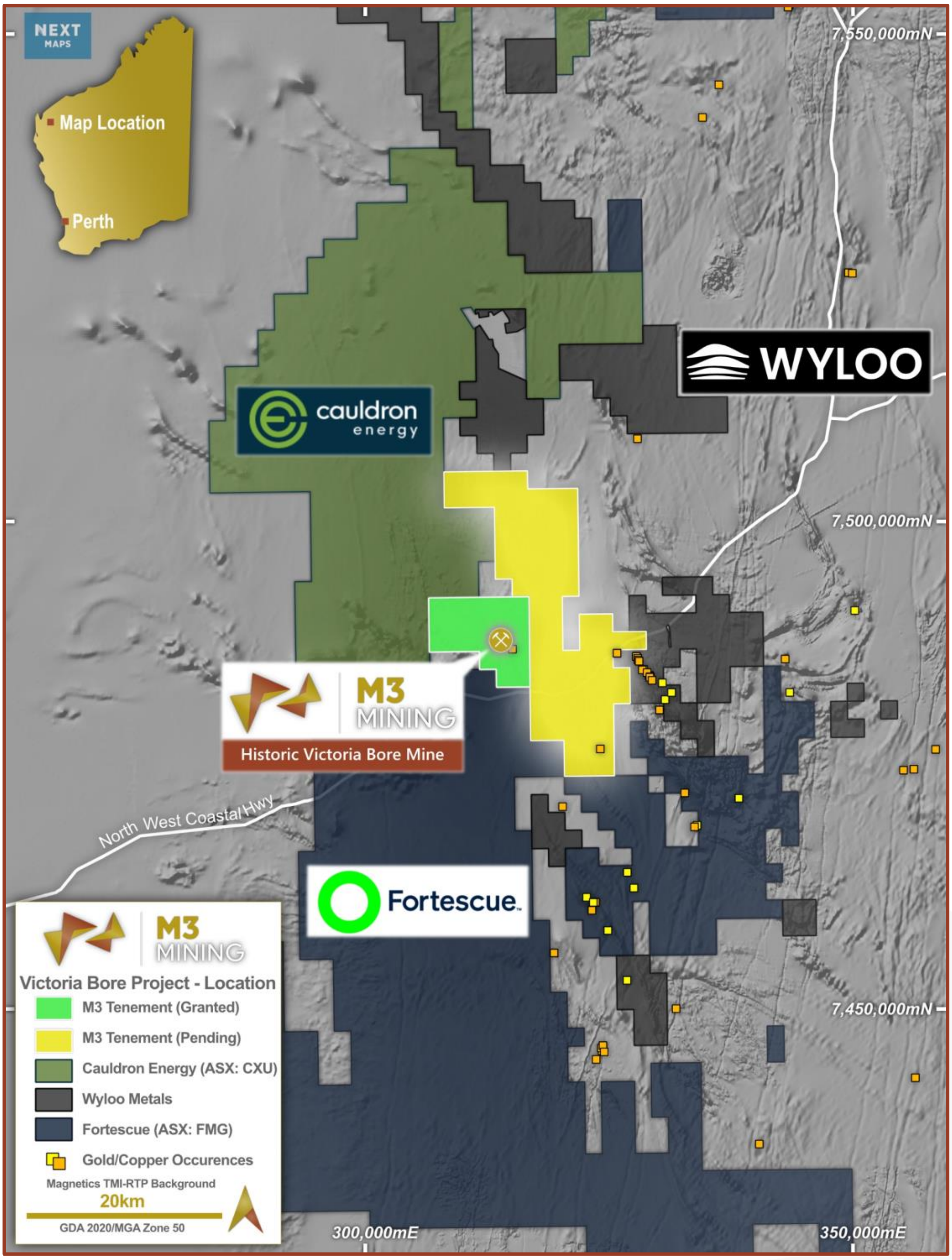

Figure 5 – Victoria Bore Copper Project Overview

6 See M3M announcement 27/07/2021 "Prospectus" for further details

pXRF Soil Sampling Program

In the December quarter, M3 completed a pXRF soil sampling program which consisted of 245 soil sampling stations located across seven prospects (see Figure 6). The majority of prospects were surveyed along single scout lines that were sampled on 50m spacing. At prospects 1 and 2, multiple lines were surveyed utilising a 400m line spacing. The targets were chosen due to favourable interpreted geology and their structural setting. Prospects 3 and 5 were chosen due to favourable radiometric signatures and prior anomalous rock chips.

The program was successful in detecting areas of anomalous copper that have not been the focus of prior exploration. These areas will be revisited with infill sampling to take place in the next quarter.

Prospect 1 surrounded the immediate vicinity of the historic Victoria Bore copper mine to explore possible strike extensions of copper mineralisation. As anticipated, sample VBS7, located less than ten metres from the historic mine recorded a relatively high copper reading of 20x background. However, the broader prospect only delivered one additional copper reading above 2x background[7].

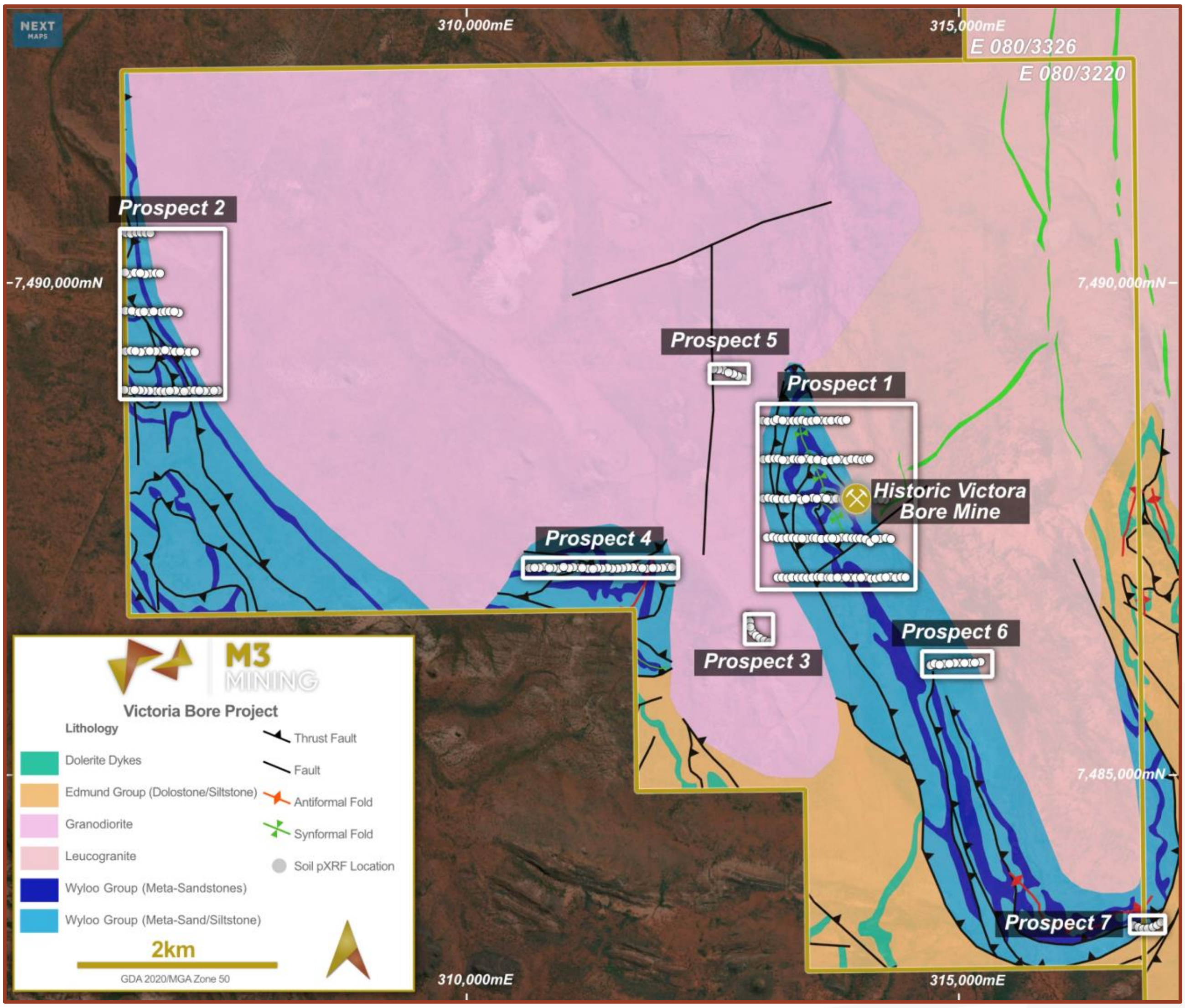

Figure 6 – pXRF sampling at The Victoria Bore Project

[7] See M3M announcement 29/01/2024 "Regional Base Metal Anomalism at Victoria Bore" for further details

Prospect 2

This prospect is located on the western side of the Project approximately 7.5km northwest of the historic Victoria Bore Copper Mine. It is interpreted to be situated along a limb consisting of Wyloo group metasediments which is in close contact with a leucocratic monzogranite batholith. The prospect consists of moderate relief silica-rich ridges which are surrounded by sheetwash plains common to the local area.

Sampling consisted of five lines oriented in an east-west direction, lines varied from 950m to 250m in length due to local geology and were spaced 400m apart (see Figure 7).

Six samples delivered copper readings in excess of 2x background with highlight sample (VBS161) having a copper reading 5.7x background. The two samples with the highest copper readings (VBS161 and VBS172) are located on separate lines approximately 400m apart and align with the local NNW geological fabric. It is currently interpreted that these samples belong to the same system and further infill sampling will be undertaken to explore this possibility.

It is also worth noting other geochemical associations within Prospect 2;

- VBS159 that measured 2.7x the copper background level also had a reading of 4.4x the lead background
- VBS166 that measured 2.5x the copper background level also had a reading of 3.0x the arsenic background

Prospect 6

This prospect is located approximately 1.9km southeast along strike of the historic Victoria Bore Copper Mine. It is interpreted to be situated on the same limb of Wyloo group metasediments which hosts the historic copper mine. The prospect consists of exposed meta-sedimentary schists which outcrop at surface.

Sampling consisted of a single 500m line oriented in an east-west direction, samples were collected at 50m spacing (see Figure 8).

Two samples delivered copper readings in excess of 2x background with highlight sample (VBS243) having a copper reading 2.5x background. It is currently interpreted that Prospect 6 may represent a buried copper occurrence similar to the historic Victoria Bore copper mine. This is due to the geological similarities and paired copper anomalism. Infill sampling will be undertaken to further evaluate this anomaly.

Geochemical associations within Prospect 6;

- VBS243 that measured 2.5x the copper background level also had a reading of 2.2x the lead background and 4.9x the arsenic background
- VBS241 that measured 2.2x the copper background level also had a reading of 11.7x the arsenic background

Of the 11 samples collected on this line, eight returned arsenic readings in excess of 2x the arsenic background. Arsenic can be a key geochemical indicator for mineralisation and as such will be followed up later in the quarter to explore the extent of the copper/arsenic anomaly at Prospect 6.

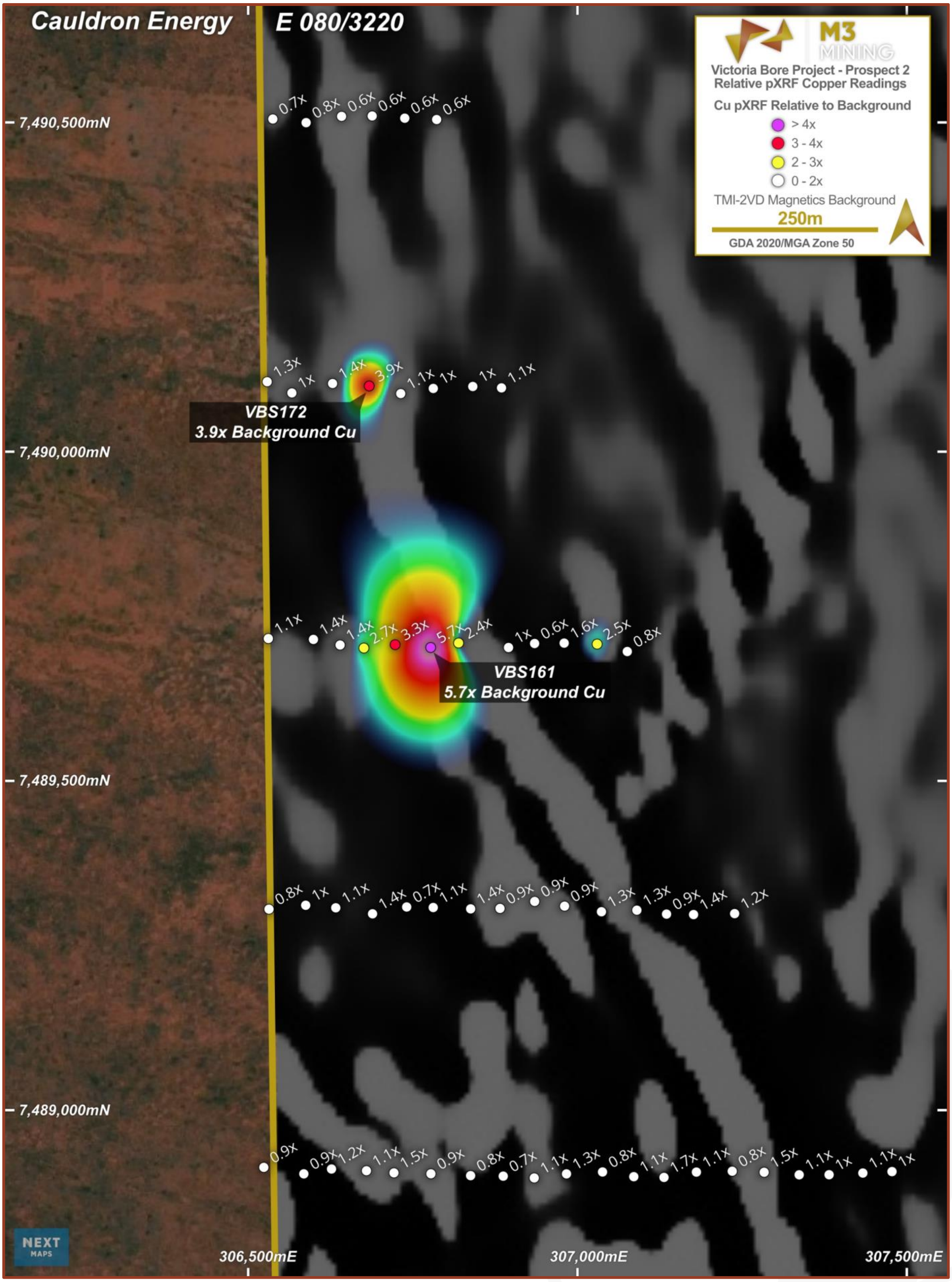

Figure 7 – Prospect 2 – Relative pXRF Copper Readings

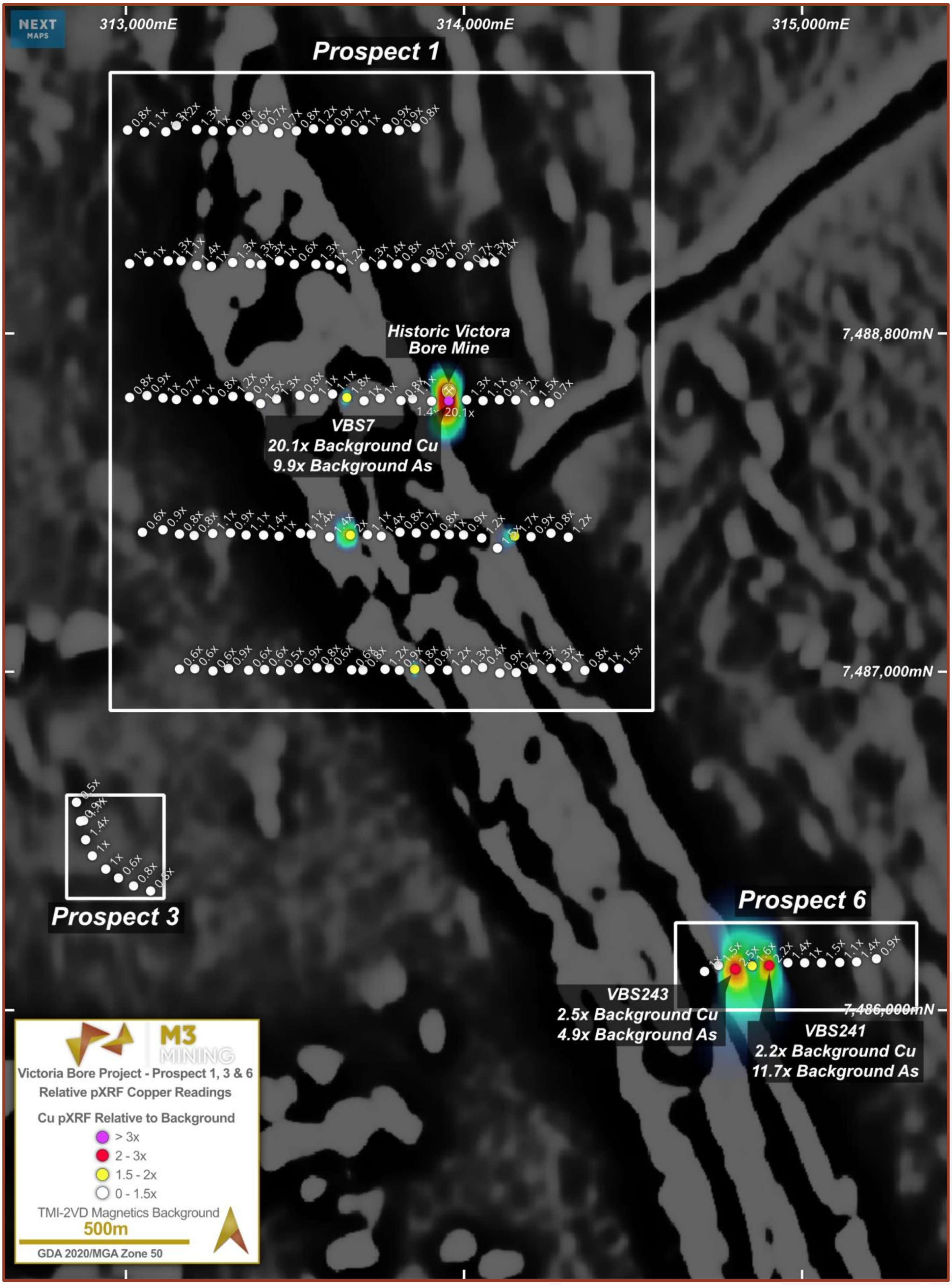

Figure 8 – Prospect 1, 3 & 6 – Relative pXRF Copper Readings

Corporate

Cash held as of 31 December 2023 was approximately $1.9m. The Company remains well funded for its planned exploration activities for the 2024 calendar year.

M3 Mining remains focused on acquisition opportunities in precious and base metals as well as energy sectors particularly given current market conditions. During the December quarter, several projects in Australia and overseas have been assessed and the Company is continuing discussions with parties in this regard. These discussions remain incomplete, and no terms have been agreed however the Company will update the market as required.

Financial

For the purpose of Section 6 of the Appendix 5B, all payments made to related parties have been paid in relation to director fees.

Tenement Schedule

Tenement	Project	District	Status	Date of Grant
E08/3220	Victoria Bore	Ashburton	Granted	4 June 2020
E08/3326	Victoria Bore	Ashburton	Pending	-
E08/3427	Victoria Bore	Ashburton	Pending	-
E08/3428	Victoria Bore	Ashburton	Pending	-
E08/3429	Victoria Bore	Ashburton	Pending	-
E08/3430	Victoria Bore	Ashburton	Pending	-
E08/3431	Victoria Bore	Ashburton	Pending	-
E08/3440	Victoria Bore	Ashburton	Pending	-
E 31/1140	Edjudina	Yerilla	Granted	11 July 2017
E 31/1141	Edjudina	Yerilla	Granted	11 July 2017
E 31/1168	Edjudina	Yerilla	Granted	5 July 2018
P 31/2113	Edjudina	Yerilla	Granted	21 December 2017
E 31/1249	Edjudina	Yerilla	Granted	6 May 2020
E 31/1258	Edjudina	Yerilla	Granted	26 June 2020
E 31/1265	Edjudina	Yerilla	Granted	11 August 2023
E 31/1344	Edjudina	Yerilla	Granted	22 September 2023
E 31/1345	Edjudina	Yerilla	Granted	22 September 2023
P 31/2131	Edjudina	Yerilla	Granted	4 December 2020
E 31/1331	Edjudina	Yerilla	Pending	-
E 31/1321	Edjudina	Yerilla	Pending	-
E 31/1318	Edjudina	Yerilla	Pending	-
E 31/1363	Edjudina	Yerilla	Pending	-
E 31/1364	Edjudina	Yerilla	Pending	-
E 31/1365	Edjudina	Yerilla	Pending	-
E 31/1366	Edjudina	Yerilla	Pending	-
E 31/1367	Edjudina	Yerilla	Pending	-
E 39/2435	Edjudina	Mt Morgans	Pending	-

Table 2 – M3 Mining Tenement Schedule

Announcement References

Date	Title
27 Jul 2021	Prospectus
3 Nov 2021	High Grade Copper at Victoria Bore and drilling commences
1 Dec 2021	High priority gold targets identified at Edjudina
10 Feb 2022	Copper Intercepted in maiden drilling campaign
5 Jul 2022	Robust drill targets identified at Edjudina gold project
27 Jul 2022	M3 Mining discovers strong EM conductor at Victoria Bore
28 Sep 2022	M3 Mining expands strategic footprint at Edjudina
12 Oct 2022	M3 Mining Victoria Bore Update
22 Nov 2022	Victoria Bore magnetic and radiometric survey data received
21 Dec 2022	Primary Gold Intercepted in Maiden Edjudina Aircore Program
20 Jan 2023	Victoria Bore Copper Project Exploration Update
17 May 2023	Regional Targets uncovered at Victoria Bore
7 Jun 2023	High Grade Gold Intersection from Scout Drilling at Edjudina
10 Jul 2023	Spectacular gold mineralisation confirmed at Edjudina
27 Jul 2023	DroneMag Survey Completed at El Capitan
7 Aug 2023	Bolsters Edjudina Gold Project with New Applications
8 Sep 2023	Mineralisation at El Capitan extended over 400m
4 Jan 2024	RC Drilling Assays Received At Edjudina Gold Project
29 Jan 2024	Regional Base Metal Anomalism at Victoria Bore

Table 3 – ASX announcements referred to within report

-END-

This announcement has been authorised for issue by the Board of M3 Mining Limited in accordance with ASX Listing Rule 15.5.

Investors should refer to previously stated announcements for additional details on exploration results and associated competent person statement.

For further information please contact:

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About M3 Mining

M3 Mining Limited (ASX:M3M) is a Perth-based mineral exploration company focused on creating value for shareholders through exploration and development of a high-quality base metal and gold exploration portfolio. M3 Mining's projects are strategically located in regions surrounded by majors and has experienced minimal modern, systematic exploration across both projects. The Company's strategy is to apply a systematic approach to the assessment and prioritisation of its projects, all of which have the potential to produce material discoveries.

Appendix 5B

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

Name of entity

M3 MINING LMITED

ABN	Quarter ended ("current quarter")
98 644 548 434	31 DECEMBER 2023

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	(180)	(469)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(84)	(177)
	(e) administration and corporate costs	(144)	(301)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	23	42
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**	**(385)**	**(905)**

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

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**	**-**	**-**

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	-	-
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**	**-**	**-**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	2,317	2,837
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(385)	(905)
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)	-	-

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	**Cash and cash equivalents at end of period**	**1,932**	**1,932**

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	435	317
5.2	Call deposits	1,500	2,000
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)**	**1,932**	**2,317**

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	74
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

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.

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 quarter end**	
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.	

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(385)
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)	(385)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,932
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,932
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	5.02

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.

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

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: ......30 January 2024..

Authorised by: ...BY THE BOARD..
(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.