

# Report of Exploration Results from Las Bambas and Rosebery

The board of directors (Board) of MMG Limited (Company or MMG) is pleased to provide the exploration update for the Las Bambas and Rosebery mines.

The report is annexed to this announcement.

By order of the Board

**MMG Limited**  
**LI Liangang**  
*Interim CEO and Executive Director*

Hong Kong, 13 July 2023

*As at the date of this announcement, the Board comprises six directors, of which one is an executive director, namely Mr Li Liangang; two are non-executive directors, namely Mr Zhang Shuqiang and Mr Xu Jiqing; and three are independent non-executive directors, namely Dr Peter William Cassidy, Mr Leung Cheuk Yan and Mr Chan Ka Keung, Peter.*

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# INTRODUCTION

MMG operates the Las Bambas copper mine in Peru and the Rosebery Mine in Tasmania, Australia. Las Bambas is a joint venture project between the operator MMG (62.5%), a wholly owned subsidiary of Guoxin International Investment Co. Ltd (22.5%) and CITIC Metal Co. Ltd (15.0%). Rosebery is 100% owned and operated by MMG Limited.

MMG wishes to provide an update to the Hong Kong Stock Exchange on progress with exploration activities on both Las Bambas and Rosebery. This report of exploration results is voluntary and is made in accordance with the JORC Code (2012). The complete report including the "Table 1 Checklist of Assessment and Reporting Criteria" required by the JORC Code (2012) can be found on the MMG website at the following address <https://www.mmg.com/wp-content/uploads/2023/07/Public-Report-of-Exploration-Results-Full-for-MMG-website-1.pdf>.

The information provided relates to multiple time periods and is in support of ongoing projects and studies at each site.

## KEY POINTS

### Ferrobamba Deeps, Las Bambas

Deep drilling below the current Ferrobamba pit has been successful at defining the depth extension and continuity of skarn and porphyry mineralisation beneath the 2022 Ore Reserve pit design. It is now recognised that potential for large tonnage 0.4% to 0.6% Cu, 200 to 500 ppm Mo, 2g/t to 4g/t Ag and 0.04g/t to 0.08g/t Au grade deposit may exist at Ferrobamba Deeps. The positive drill results received in the 2022 program are supporting ongoing studies and further drilling is planned for 2023 and 2024 to evaluate the mineralisation and determine potential mining methods including expansion of the open pit and / or an underground development.

Mineralisation at Ferrobamba occurs in semicontinuous zones which are distributed around the central porphyry stocks. The Ferrobamba Deeps mineralisation, which has been intersected up to 700m below the Ore Reserve pit, has been divided into five zones (**Figure 1**). Selected intervals from each of the five zones are listed below and details of all intersections are contained within the text and tables in the complete report.

#### Western Zone

- FEEX22-006 248.6m @ 1.09% Cu and 451ppm Mo from 775.0m  
(inc. 8.35m @ 6.1% Cu and 900ppm Mo from 805.8m)

#### Eastern Zone

- FEJ18-113 109.2m @ 1.62% Cu and 205ppm Mo from 521.4m  
12.7m @ 0.52% Cu and 495ppm Mo from 676.3m  
39.6m @ 0.41% Cu and 598ppm Mo from 705.0m  
47.0m @ 0.79% Cu and 345ppm Mo from 780.7m  
4.6m @ 0.43% Cu and 66ppm Mo from 848.3m

#### Northern Zone

- FE40675-14 8.0m @ 1.34% Cu and 197ppm Mo from 588.1m  
10.8m @ 0.87% Cu and 1298ppm Mo from 633.7m  
35.3m @ 4.40% Cu and 290ppm Mo from 662.1m  
(incl. 3.5m @ 30.5% Cu and 139ppm Mo from 669.7m)

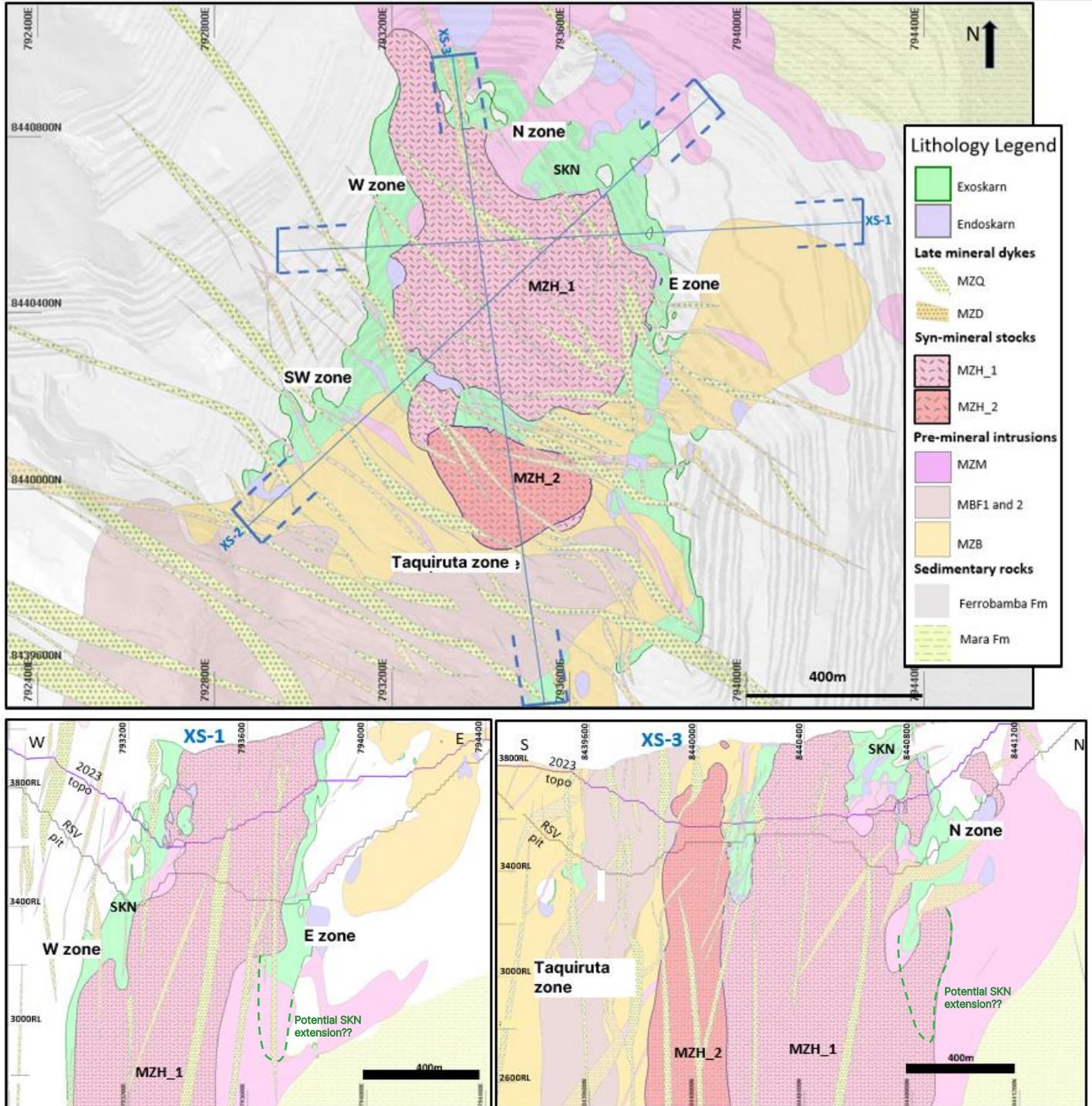
#### Southwest Zone

- FEJ18-120 121.5m @ 1.46% Cu and 148ppm Mo from 391.9m  
(incl. 11.1m @ 6.1% Cu and 341ppm Mo from 494.6m)  
25.4m @ 1.64% Cu and 754ppm Mo from 524.1m  
17.6m @ 6.19% Cu and 52ppm Mo from 570.0m  
25.1m @ 0.64% Cu and 477ppm Mo from 604.4m  
34.2m @ 0.80% Cu and 1035ppm Mo from 655.0m

33.6m @ 0.69% Cu and 186ppm Mo from 705.8m  
 15.4m @ 0.71% Cu and 980ppm Mo from 758.6m  
 57.1m @ 0.51% Cu and 70ppm Mo from 823.2m

Taquiruta

- FEJ17-119 181.6m @ 0.84% Cu and 539ppm Mo from 410.2m  
 135.7m @ 0.75% Cu and 392ppm Mo from 642.9m



**Figure 1.** Plan view (top) and two sections (bottom) of Ferrobamba deposit showing the extension of the skarn (SKN) below the 2022 Ore Reserve pit. XS-2 is shown in **Figure 5**. The geology in the plan view is sliced through 3400m RL, at the level of the base of the 2022 Ore Reserve pit.

## Rosebery

Drilling over the past 2 years at Rosebery has focused on in-mine resource extension and delineation of the Rosebery orebody. From the beginning of 2022 to end of April 2023, 165 exploration holes for 63,585m were drilled across the mine lease (28M/1993) within the mine footprint and on exploration licence (EL41/2010). An accelerated drilling program was planned in 2022 and commenced in January 2023 with the strategy to discover new mineralisation, both as extensions to the Rosebery lenses within the mining lease and within the exploration licence. Concurrent with studies on finding a sustainable long-term tailings storage solution, the overall objective is to extend the life of the Rosebery mine.

Exploration drilling has been completed at 18 prospects both within the immediate mine environs and on surrounding surface leases within the report period through a mix of underground and surface drilling. This work has resulted in several intersections including mine lens extensions (e.g. Z- lens and T- lens) and discovery of new mineralised zones (e.g. Oak and Bastyan). Current orebody knowledge demonstrates that the Rosebery orebody remains open to the north and south while prospectivity still exists within the mine footprint.

Significant intersections from the following targets have been received:

### T- lens

- R13750 21.2m @ 9.5% Zn, 0.8% Pb, 23.1g/t Ag, 0.2g/t Au from 760m  
Inc. 10.2m @ 15% Zn, 1.5% Pb, 42g/t Ag, 0.2g/t Au from 771m

### Z- lens

- R13670 7.2m @ 14.2% Zn, 8.9% Pb, 0.4% Cu, 152g/t Ag, 1.6g/t Au from 208m
- R13671 14m @ 3.7% Zn, 2.2% Pb, 0.1% Cu, 9.9g/t Ag, 0.1g/t Au from 218m

### V- lens

- R13626 24m @ 9.3% Zn, 0.3% Pb, 0.2% Cu, 7g/t Ag, 1.1g/t Au from 72m
- R13653 1.7m @ 22.9% Zn, 6.7% Pb, 0.5% Cu, 581g/t Ag, 3.3g/t Au from 48.4m  
25.4m @ 6.6% Zn, 2.8% Pb, 0.1% Cu, 111g/t Ag, 1.1g/t Au from 61.6m  
7.5m @ 10% Zn, 4.6% Pb, 0.2% Cu, 210g/t Ag, 0.9g/t Au from 104.5m

### H- lens

- R13817 8m @ 5.3% Zn, 1.4% Pb, 0.1% Cu, 13.3g/t Ag, 0.1g/t Au from 221m

### AB North

- 519R 5m @ 10.3% Zn, 4.7% Pb, 0.1% Cu, 136g/t Ag, 2.0g/t Au from 542m

### Oak

- R13652 4.56m @ 4.5 % Zn, 2.4 % Pb, 0.1 % Cu, 69.4 g/t Ag, 0.9 g/t Au from 630.4m  
Inc. 2m @ 6.7 % Zn, 3.6 % Pb, 0.1 % Cu, 92.5 g/t Ag, 1.3 g/t Au from 632m  
0.5m @ 4.6 % Zn, 1.9 % Pb, 0.2 % Cu, 100 g/t Ag, 0.83 g/t Au from 660.3m

### Bastyan

- 513R 7m @ 10.1% Zn, 3.5% Pb, 0.02% Cu, 52.6g/t Ag, 0.04g/t Au from 2273.5m  
Inc. 2.5m @ 7.1% Pb, 96.3g/t Ag, 1.1% Zn from 2273.5m  
Inc. 2.0m @ 37.7% Zn, 0.5% Pb, 11g/t Ag from 2277.8m

# DISCUSSION - FERROBAMBA DEEPS

## Geology Summary

Las Bambas is located in a belt of Cu (Mo-Au-Ag) skarn deposits associated with porphyry type systems situated in south-eastern Peru. This metallogenic belt is controlled by the Andahuaylas-Yauri Batholith of Eocene- Oligocene age, which is emplaced in strongly folded and faulted Mesozoic sedimentary units, with the Ferrobamba Formation (Lower to Upper Cretaceous) being of greatest mineralising importance.

The Ferrobamba deposit consists of high-grade skarns (garnet-pyroxene dominant, with chalcopyrite, bornite, chalcocite and molybdenite) replacing limestones of the Ferrobamba Formation, and lower grade porphyry stockwork (quartz, chalcopyrite, bornite and molybdenite) mineralisation hosted by a series of intrusions that have pre-mineral, syn-mineral and late-mineral timing. Both porphyry and skarn mineralisation are broadly localised and zoned around two syn-mineral Hornblende Monzodiorite (MZH) stocks in the centre of the deposit (**Figure 1**). Gold and silver grades in both skarn and porphyry mineralisation have a direct correlation with Cu grades.

The southern portion of the deposit, known as the Taquiruta zone, is composed predominantly of the porphyry stockwork type of mineralisation within the large mass of pre-mineral intrusive stocks (**Figure 1**). In the other parts of the deposit (Eastern, Northern, Western and Southwestern zones), mineralisation is a combination of higher grade skarns, lower grade peripheral altered marble mineralisation outboard from the skarns, and porphyry stockwork and endoskarn mineralisation in the syn-mineral and pre-mineral intrusions. The skarn mineralisation is focussed in the limestones closest to the MZH stocks, and can also extend along the pre-mineral intrusive contacts. Skarn mineralisation is influenced at the local scale by the geometry of the pre-existing intrusions, late dykes, localised stockwork development, limestone stratigraphy, and structural controls. The south-east dipping Mara Formation lies 300-1400m below the surface in the deposit area, and limits the depth of skarn formation due to its siliciclastic nature. Understanding of the first and second order controls on mineralisation, especially the geometry of the pre-mineral intrusions, has been a crucial ingredient in projecting and modelling mineralisation at depth.

## Exploration History

Since the early 2000's there have been multiple deep drilling campaigns at Ferrobamba. These have been both exploratory holes specifically targeting depth extensions and resource infill holes that were extended. Most of the drillholes historically have been drilled on sections striking 035°, oblique to the structural trend of late mineral dykes (**Figure. 1**). As a result, some of the drillholes are oriented oblique to mineralisation, whereas in other parts they are subparallel to the trend of the ore zones.

The Ferrobamba Deeps project originated in 2019 when a concerted effort was made to project, interpret, and model the mineralisation below the final pit design, which has a maximum depth of approximately 600m below surface. In 2020 a single drillhole (FEEX20-001-01, 864.8m) was completed which targeted the down dip extension of high-grade skarns along the steep W-dipping MZH contact within the final pit. This hole was significant in that it proved the continuity of skarns at depth in this zone, albeit at only low-moderate grade. Since then, the Ferrobamba Deeps project has progressively gained momentum, and drilling programs have increased (Table 1) as understanding and continuity of the modelled mineralisation in all areas of the deposit have improved. **Figure 2** shows all the Ferrobamba Deeps drill intercepts from before 2022, with the text boxes highlighting select intervals. The drilling results from 2022 were particularly positive and so are noted separately below and are shown in **Figure 3**.

Drilling inside the pit is difficult due to interaction with mining operations, so most drillholes in 2022 and 2023 are drilled from outside of the pit, using directional drilling to access areas where conventional holes are not possible. Directional drillholes are denoted by a -0X suffix, for example FEEX20-001 is the mother hole and FEEX20-001-01 is the first directional daughter hole.

**Table 1 - Summary of Ferrobamba Deeps drilling programs since 2020.**

A summary list of all the Ferrobamba drill programs from 2008 to 2022 is included in Section 2 of the Appendix 2 in the complete report.

Year	No. holes	Total metres	Comments
2020	1	864.8	FEEX20-001-01 targeting deep extension of W zone
2021	10	3,622.8	Conventional Holes drilled inside pit, targeting N and E zones
2022	27	16,841	Holes drilled outside pit. Mix of conventional and directional drilling. Multiple targets.
2023 budgeted	Approximately 50	35,000	Holes mostly outside the pit. Mix of conventional and directional drilling. Multiple targets, including porphyry stockwork mineralisation.

**Western Zone**

The Western Zone consists of the down-dip extension of known high-grade skarn mineralisation within the pit along the western contact of the MZH. This part of the deposit has no pre-mineral intrusions to interrupt the mineralisation but does have late-mineral dykes that dilute the skarn. Mo contents are generally low. There is 1000m of potential depth extension before the Mara Formation is encountered. Prior to 2022 there were very few drillholes in this part of the deposit due to the lack of possible platform locations on the Western pit wall (Figure 2). Best pre-2022 drill intercepts include:

- FEEX20-001-01: 9.0m @ 0.56% Cu and 93ppm Mo from 463m  
9.8m @ 0.59% Cu and 117ppm Mo from 528.6m  
61.5m @ 0.31% Cu and 286ppm Mo from 581.5m  
15.2m @ 0.76% Cu and 340ppm Mo from 675.8m  
81.0m @ 0.64% Cu and 165ppm Mo from 715.0m
- FE40050-13 64.1m @ 1.85% Cu and 54ppm Mo from 550.6m  
12.0m @ 0.22% Cu and 128ppm Mo from 636.0m

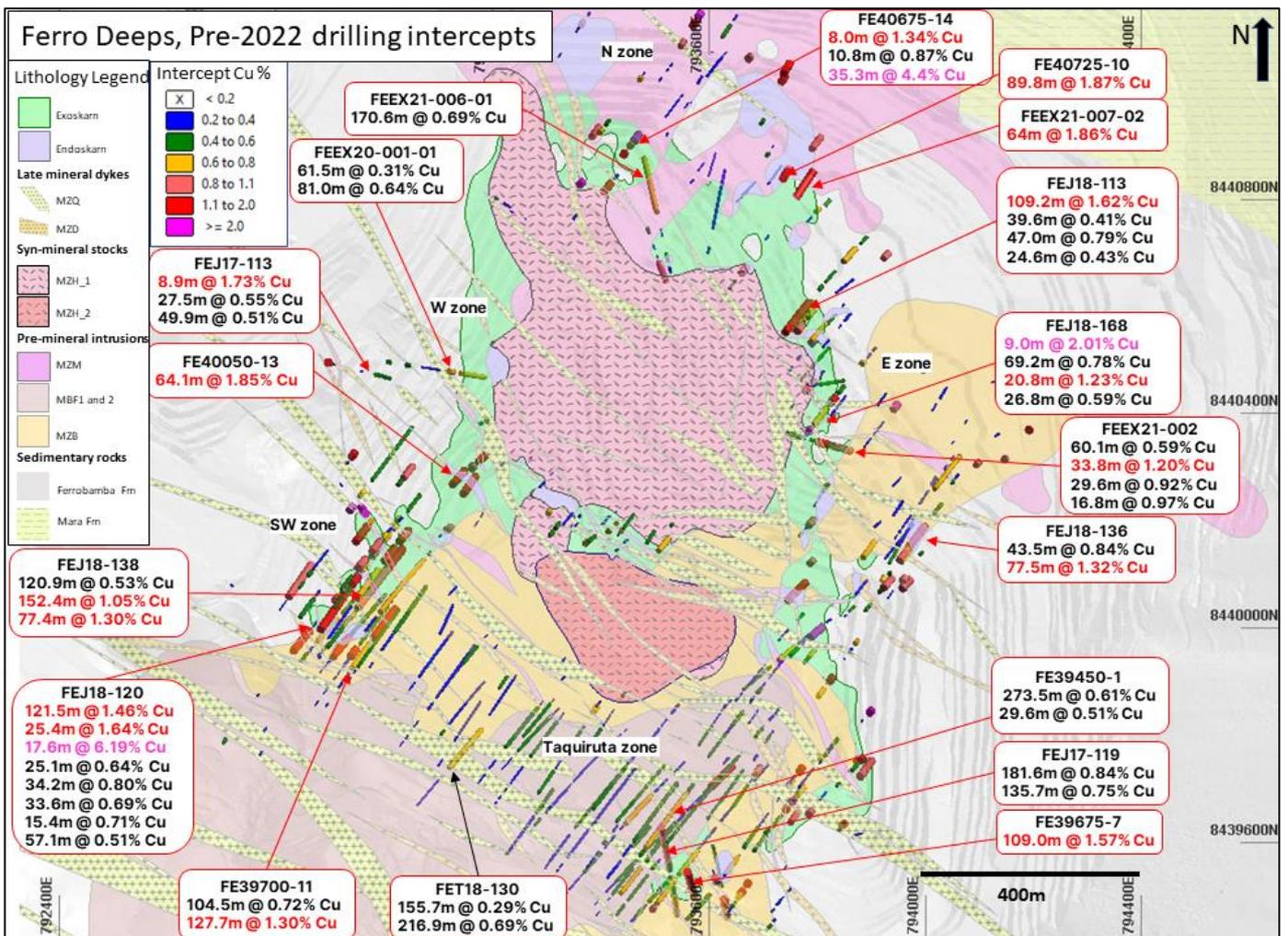
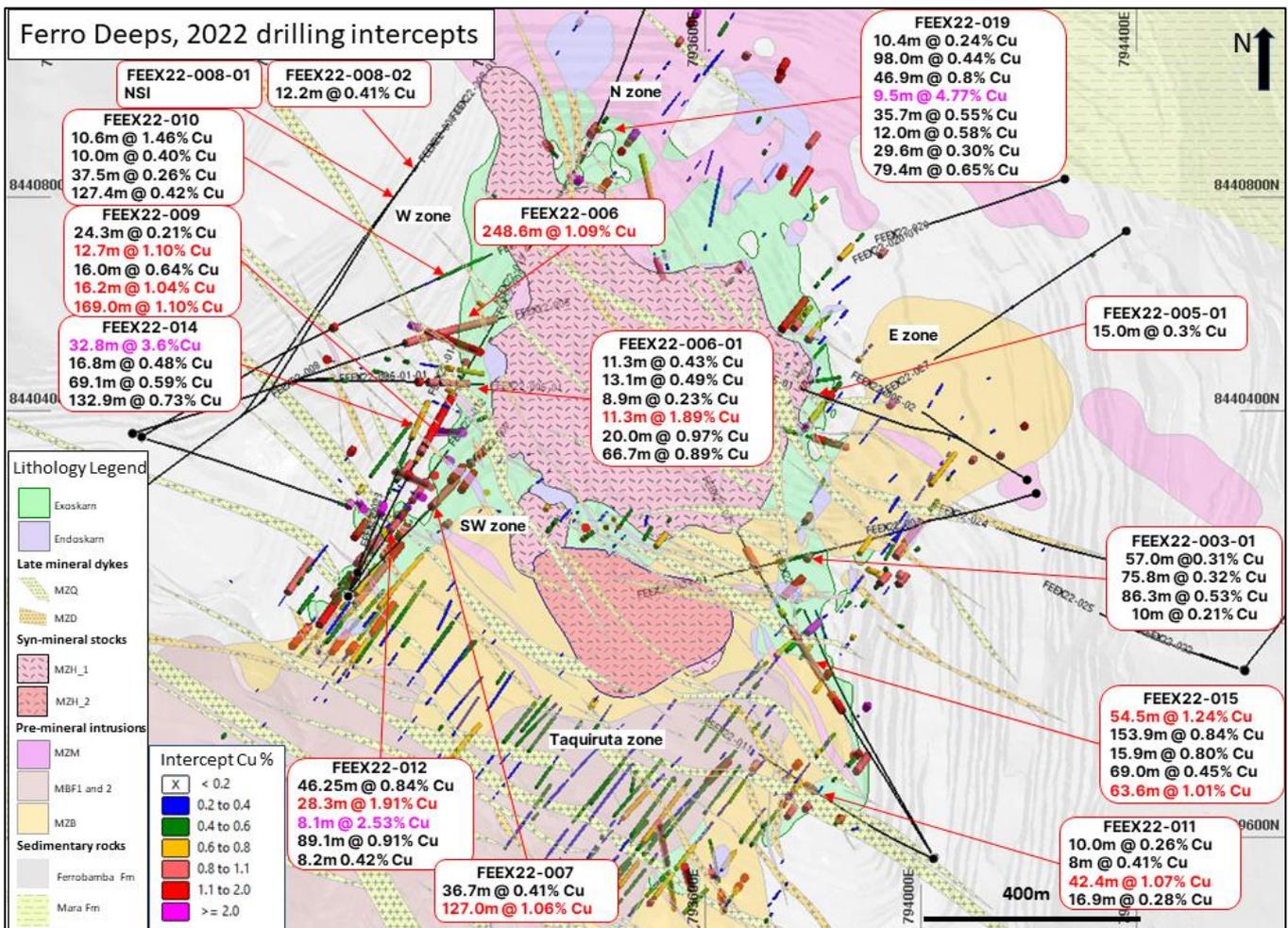


Figure 2. Plan view showing Geology slice through 3400m RL. The coloured traces show all intercepts > 0.2% Cu and > 8m length below the planned Reserve Pit from all holes drilled before 2022. Select intervals are highlighted in the text boxes.



**Figure 3.** Plan view showing Geology slice through 3400m RL. The text boxes indicate all the 2022 drillhole intercepts > 0.2% Cu and > 8m length below the planned Reserve Pit. Some holes have not been completed.

The Western zone area was a focus for 2022 drilling, which was achieved by means of directional and conventional drillholes oriented at a shallow angle to the overall trend of mineralisation (**Figure 3** and **Figure 4**). The 2022 program was successful at defining continuation of high-grade mineralisation up to several hundred metres below the final pit. Best 2022 drillhole intercepts include:

- FEEX22-006 248.6m @ 1.09% Cu and 451ppm Mo from 775.0m (inc. 8.35m @ 6.1% Cu and 900ppm Mo from 805.8m)
- FEEX22-007 36.7m @ 0.41% Cu and 97ppm Mo from 367.7m  
127.0m @ 1.07% Cu and 140ppm Mo from 428.0m
- FEEX22-009 24.3m @ 0.21% Cu and 42ppm Mo from 336.2m  
12.7m @ 1.1% Cu, and 56ppm Mo from 374.9m  
16.0m @ 0.64% Cu and 161ppm Mo from, 425.0m  
16.2m @ 1.04% Cu, and 39ppm Mo from 452.2m  
169.0m @ 1.1% Cu, and 178ppm Mo from 478.0m (inc. 12m @ 4.74% Cu and 373ppm Mo from 512.0m)

Several holes were drilled targeting the northern end of the Western zone. The results of FEEX22-010 indicate that mineralisation does continue, however the grades are decreasing in this area.

- FEEX22-010 10.6m @ 1.46% Cu and 179ppm Mo from 571.3m  
10.0m @ 0.40% Cu and 123ppm Mo from 798.0m  
37.5m @ 0.26% Cu and 73ppm Mo from 827.4m  
127.4m @ 0.42% Cu and 259ppm Mo from 873.6m
- FEEX22-008-01 No significant intersection (did not reach MZH target)
- FEEX22-008-02 12.2m @ 0.41% Cu and 55ppm Mo from 1422.0m (did not reach MZH target)

### Northern Zone

This area has skarn mineralisation adjacent to the MZH stock and in between irregular shaped Mafic Monzonite (MZM) bodies that can host significant volumes of stockwork and endoskarn mineralisation (**Figure 2** and **Figure 5**). Skarn in the Northern zone is not continuously mineralised. There are second order geological and structural controls that result in variable Cu and Mo grades in the skarn. The skarn mineralisation is limited at depth by the Mara Formation contact at around 300-600m below the pit design. Best pre-2022 drillhole intercepts include.

- FE40675-14 8.0m @ 1.34% Cu and 197ppm Mo from 588.1m  
10.8m @ 0.87% Cu and 1298ppm Mo from 633.7m  
35.3m @ 4.4% Cu and 290ppm Mo from 662.1m  
(incl. 3.5m @ 30.5% Cu and 139ppm Mo from 669.7m)
- FE40725-10 89.8m @ 1.87% Cu and 214ppm Mo from 549.8m
- FEEX21-005-01 95.7m @ 0.81% Cu and 102ppm Mo from 383.3m  
20.0m @ 0.23% Cu and 512ppm Mo from 494.0m  
22.0m @ 0.24% Cu and 68ppm Mo from 546.0m  
22.0m @ 0.49% Cu and 56ppm Mo from 631.0m
- FEEX21-006-01 14.0m @ 0.37% Cu and 69ppm Mo from 320.0m  
25.3m @ 0.45% Cu and 44ppm Mo from 357.0m  
22.0m @ 0.22% Cu and 114ppm Mo from 441.0m  
170.6m @ 0.69% Cu and 76ppm Mo from 521.0m
- FEEX21-007-02 64.0m @ 1.86% Cu and 823ppm Mo from 419.0m

Only one hole was drilled in 2022 in the Northern zone (**Figure 3**). FEEX22-019 intersected a zone of variably mineralised skarn much thicker than anticipated (**Figure 6**) that increases the potential of this area.

- FEEX22-019 10.4m @ 0.24% Cu and 149ppm Mo from 534.6m  
98.0m @ 0.44% Cu and 454ppm Mo from 593.0m  
46.9m @ 0.80% Cu and 394ppm Mo from 704.7m  
9.5m @ 4.77% Cu and 330ppm Mo from 805.5m  
35.7m @ 0.55% Cu and 159ppm Mo from 830.3m  
12.0m @ 0.58% Cu and 225ppm Mo from 882.0m  
29.6m @ 0.30% Cu and 144ppm Mo from 925.0m  
79.4m @ 0.65 Cu and 98ppm Mo from 1060.0m

### Eastern Zone

The skarn mineralisation continues down the Eastern contact of the MZH which dips steeply to the W (**Figure 2** and **Figure 4**). Several pre-mineral intrusions disrupt and dilute the mineralisation at depth but can also enhance skarn mineralisation at their contacts. Mo values in the Eastern zone tend to be low in the skarns, and are highest in zones of pre-mineral intrusion endoskarn. Best pre-2022 intercepts include:

- FEJ18-113 109.2m @ 1.62% Cu and 205ppm Mo from 521.4m  
12.7m @ 0.52% Cu and 495ppm Mo from 676.3m  
39.6m @ 0.41% Cu and 598ppm Mo from 705.0m  
47.0m @ 0.79% Cu and 345ppm Mo from 780.7m  
24.6m @ 0.43% Cu and 66ppm Mo from 848.3m
- FEJ18-136 43.5m @ 0.84% Cu and 301ppm Mo from 360.4m  
77.5m @ 1.32% Cu and 555ppm Mo from 412.7m  
13.2m @ 0.53% Cu and 46ppm Mo from 536.8m  
15.4m @ 0.54% Cu and 168ppm Mo from 558.8m
- FEJ18-168 9.0m @ 2.01% Cu and 649ppm Mo from 417.2m  
69.2m @ 0.78% Cu and 126ppm Mo from 443.4m  
20.8m @ 1.23% Cu and 146ppm Mo from 530.3m  
26.8m @ 0.59% Cu and 157ppm Mo from 568.2m  
8.7m @ 0.79% Cu and 419ppm Mo from 685.4m  
22.1m @ 0.33% Cu and 222ppm Mo from 707.5m  
10.3m @ 0.38% Cu and 124ppm Mo from 741.1m

- FEEX21-001 152m @ 0.69% Cu and 277ppm Mo from 449.0m  
79m @ 0.35% Cu and 220ppm Mo from 711.0m
- FEEX21-002 60.1m @ 0.59 % Cu and 22ppm Mo from 339.0m  
16.7m @ 0.45% Cu and 98ppm Mo from 423.4m  
33.8m @ 1.20 % Cu and 94ppm Mo from 451.2m  
29.65 @ 0.92% Cu and 60ppm Mo from 500.3m  
16.8m @ 0.97% Cu and 73ppm Mo from 545.2m

Five holes were drilled in the Eastern zone in 2022 (**Figure 3**). FEEX22-011 drilled almost entirely through a late mineral dyke, however where the hole left the dyke at 687.1m, 42.45m of >1% Cu was intersected. Best 2022 drilling intercepts include:

- FEEX22-003-01 57.0m @ 0.31% Cu and 181ppm Mo from 520.0m  
75.8m @ 0.32% Cu and 100ppm Mo from 590.2m  
86.3m @ 0.53% Cu and 54ppm Mo from 740.7m  
10.0m @ 0.21% Cu and 30ppm Mo from 836.0m
- FEEX22-011 10.0m @ 0.26% Cu and 1057ppm Mo from 638.0m  
8.0m @ 0.32% Cu and 100ppm Mo from 664.0m  
42.45m @ 1.07% Cu and 719ppm Mo from 687.1m  
16.9m @ 0.28% Cu and 173ppm Mo from 868.0m
- FEEX22-015 54.5m @ 1.24% Cu and 1343ppm Mo from 457.0m  
(incl. 1.2m @ 25.46% Cu and 824ppm Mo from 506.7m)  
153.9m @ 0.84% Cu and 611ppm Mo from 555.5m  
(incl. 1.2m @ 37.7% Cu and 353ppm Mo from 634.6m)  
15.9m @ 0.80% Cu and 43ppm Mo from 742.0m  
69.0m @ 0.45% Cu and 61ppm Mo from 767.0m  
63.6m @ 1.01% Cu and 51ppm Mo from 869.0m

### Taquiruta Zone

The Taquiruta zone is in the south of the deposit and consists predominantly of continuous quartz-sulphide stockwork mineralisation hosted in the pre-mineral intrusions (**Figure 2** and **Figure 6**). Grades are enhanced by the presence of limestone blocks up to 100m wide which are altered to mineralised skarn. Deep holes (up to 1500m) indicate continuity of the mineralisation > 1000m below surface. Mo grades in general increase with depth and are also higher closer to the intrusive contacts with limestone. Holes are planned to followup in 2023 and 2024. Best intercepts include:

- FEJ17-119 181.6m @ 0.84% Cu and 539ppm Mo from 410.2m  
135.7m @ 0.75% Cu and 392ppm Mo from 642.9m
- FE39450-1 21.7m @ 0.51% Cu and 117ppm Mo from 377.7m  
273.5m @ 0.61% Cu and 445ppm Mo from 415.5m  
29.6m @ 0.51% Cu and 178ppm Mo from 701.0m
- FE39675-7 109.0m @ 1.57% Cu and 200ppm Mo from 348.0m
- FET18-130 155.7m @ 0.29% Cu and 261ppm Mo from 799.4m  
216.9m @ 0.69% Cu and 507ppm Mo from 1031.0m

### Southwest Zone

The Southwest zone includes mineralised skarn at the intersection of the MZH and the pre-mineral intrusions, and endoskarn and stockwork mineralisation in the intrusions which continue into the Taquiruta zone to the east (**Figure 2** and **Figure 5**). At depth mineralisation appears to diminish based on several deep drillholes returning lower grades. Southwest zone drillholes are subparallel to the general trend of mineralisation, resulting in long intercepts. Mo grades tend to be high, especially in and around the endoskarn. Holes drilled in 2022 were successful in defining mineralisation in the link between the Southwest zone and the Western zone (**Figure 3** and **Figure 5**). These are detailed above in the Western zone section. Further drilling is planned in 2023 and 2024. Best Southwest zone intercepts include:

- FEJ18-120 121.5m @ 1.46% Cu and 148ppm Mo from 391.9m  
(incl. 11.1m @ 6.1% Cu and 341ppm Mo from 494.6m)  
25.4m @ 1.64% Cu and 754ppm Mo from 524.1m  
17.6m @ 6.19% Cu and 52ppm Mo from 570.0m  
25.1m @ 0.64% Cu and 477ppm Mo from 604.4m

- 34.2m @ 0.80% Cu and 1035ppm Mo from 655.0m
- 33.6m @ 0.69% Cu and 186ppm Mo from 705.8m
- 15.4m @ 0.71% Cu and 980ppm Mo from 758.6m
- 57.1m @ 0.51% Cu and 70ppm Mo from 823.2m
- FEJ18-138:
  - 15.4m @ 0.26% Cu and 4ppm Mo from 30.9m
  - 10.8m @ 0.22% Cu and 52ppm Mo from 347.2m
  - 120.9m @ 0.53% Cu, and 393ppm Mo from 393.8m
  - 152.4m @ 1.05% Cu and 748ppm Mo from 554.6m
  - 77.4m @ 1.30% Cu and 261ppm Mo from 715.9m
- FE39700-11:
  - 12.0m @ 0.27% Cu and 20ppm Mo from 352.0m
  - 19.0m @ 0.34% Cu and 51ppm Mo from 440.0m
  - 26.0m @ 0.36% Cu and 84ppm Mo from 473.0m
  - 104.5m @ 0.72% Cu and 195ppm Mo from 525.3m
  - 127.7m @ 1.30% Cu and 669ppm Mo from 658.3m

The following 3 figures display cross sections (XS) through the Ferrobamba deposit highlighting significant intersections below the Reserve Pit.

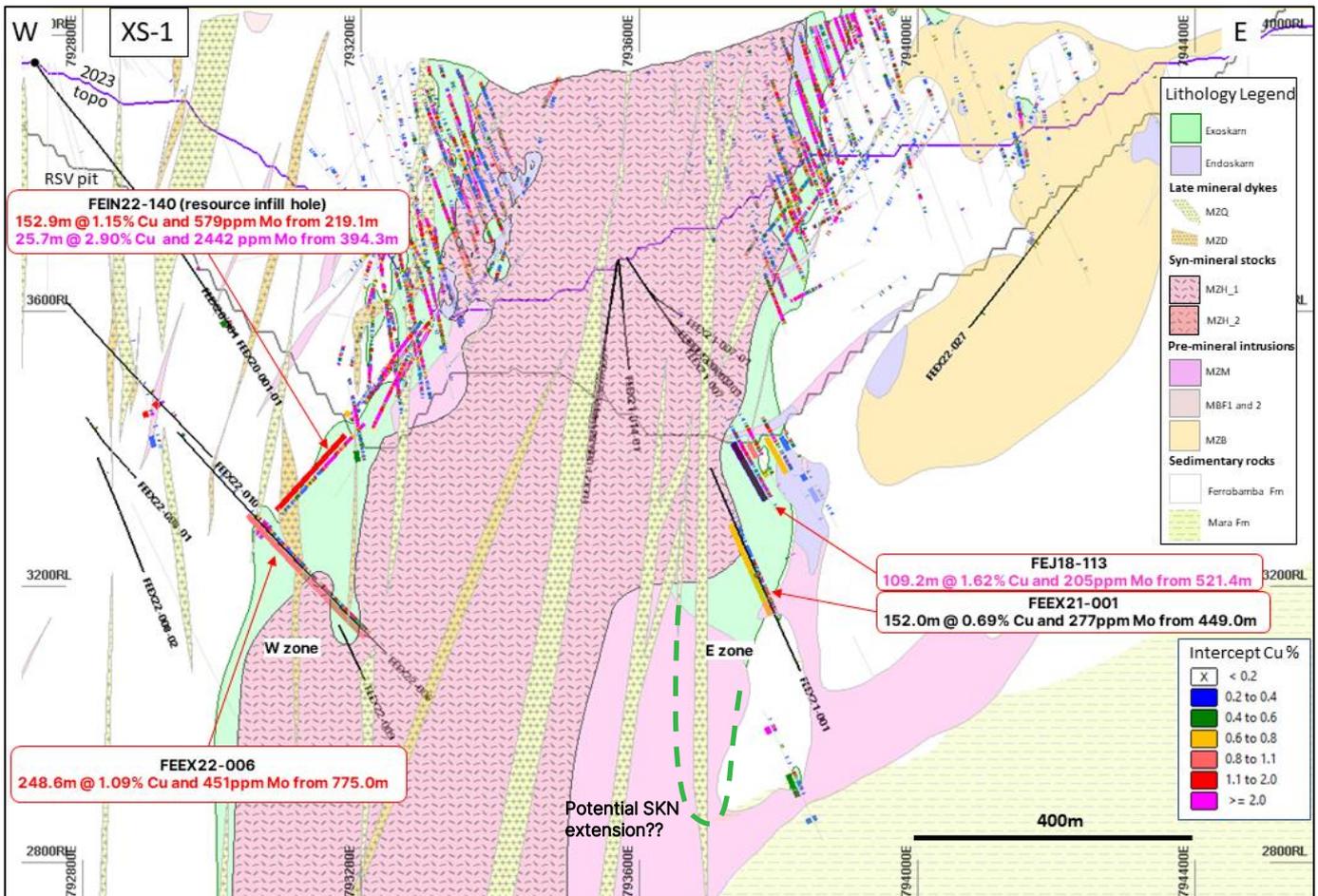


Figure 4. XS-1 (see Figure 1 for location), showing the extension of skarn mineralisation down the MZH contacts in the Eastern and Western zones, and select intercepts. ±50m window.

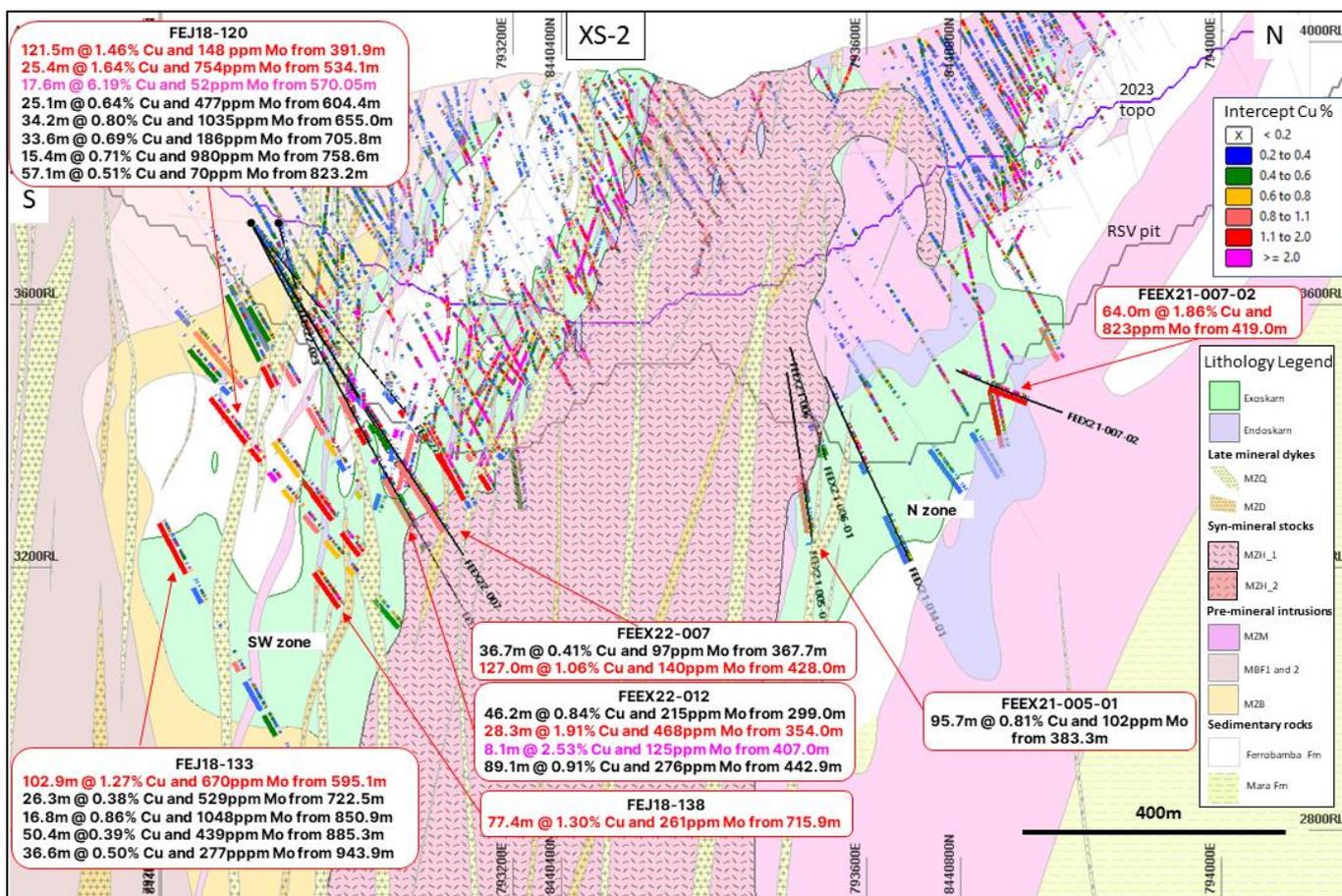


Figure 5. XS-2 (see Figure 1 for location), showing the SW and N zone targets, and select intercepts. ±50m window.

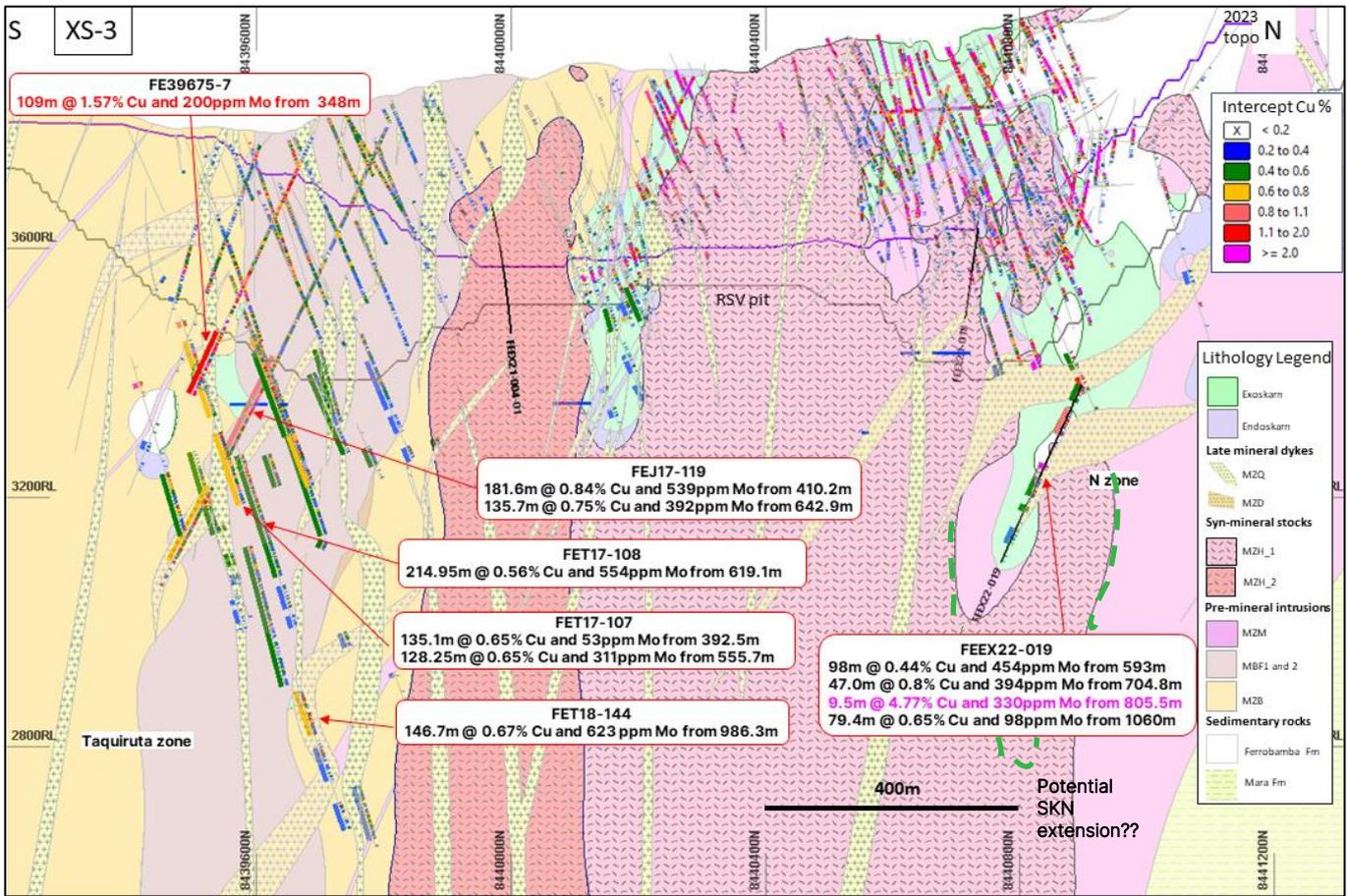


Figure 6. XS-3 (see Figure 1 for location), showing the Taquiruta and N zone targets and select intercepts. ±50m window.

## Forward Program

Drilling programs in 2023 are underway and planned for 2024 to infill and identify areas with proximal extensions to known mineralisation, and to target new areas that have not been drilled. Previous drilling programs were focussed on targeting high grade skarn mineralisation. It has now been recognised that there is economic potential for large tonnage, low-medium grade targets encompassing the lower grade halos surrounding the skarns and the extensive zones of intrusive-hosted stockwork mineralisation such as the Taquiruta zone in the south of the Ferrobamba deposit (Figures 3 and Figure 6). Studies have commenced to evaluate the mineralisation and determine potential mining methods, including the potential for expansion of the open pit and / or an underground development.

# DISCUSSION - ROSEBERY

## Geology Summary

The Rosebery deposit is hosted by the upper Central Volcanic Complex (CVC) of the 250 km long, middle to late Cambrian Mt Read Volcanic Arc on the west coast of Tasmania. The host to the major Zn-Pb-Cu-Ag-Au mineralisation at Rosebery and Hercules are stratified, felsic sandstones that are derived from reworking of the voluminous footwall pumice breccia unit that is extensive throughout the Rosebery-Hercules area of the Mt Read Volcanics (Large et al., 1991). The host horizon is unconformably overlain by black shale and quartz-rich, rhyolitic pumiceous mass flow units of the White Spur Formation (Large et al., 2001). During the Devonian, shallow level post-tectonic granitoids intruded the mine area resulting in metamorphism and recrystallisation of the southern ore lenses (Zaw et al., 1999).

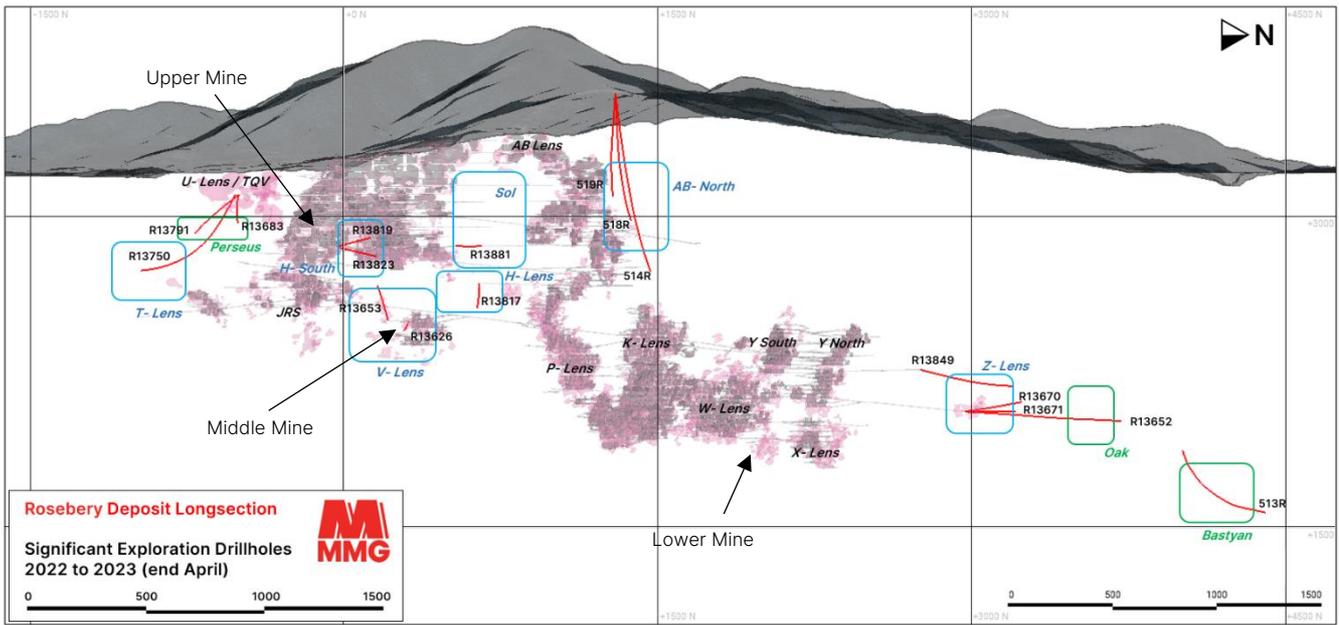
Exploration and resource drilling at Rosebery, carried out over the past 30 years, has led to the segregation of the Rosebery orebodies into numerous lenses that are broadly grouped into the Upper, Middle and Lower Mine areas. The Lower Mine hosts the high-grade P- and K- lenses and commonly contains barite-rich zones, black slate and quartz-feldspar porphyry. In contrast, these features are largely absent in the high-grade areas of the Middle Mine where certain lenses are characterised by more abundant chalcopyrite-magnetite-pyrrhotite (+tourmaline-fluorite). This is interpreted to represent a metasomatic overprint of the massive sulphide lenses by later Devonian granitoids (Zaw et al., 1999).

## Drilling Programs

The drilling program in 2022 focussed on the extension around known lenses and applying new orebody knowledge in the drilling of high-ranking targets within the mine footprint from available underground development. Drilling has defined and extended several lenses including U-, V-, P- and Z- lens. Portions of these lenses were subsequently infill drilled. Other drilling aimed to test the connection between J- and T- lens, to the north of AB- lens, K- Hangingwall and H- lens. Most of the programs were successful, however the most significant intercepts have been generated outbound of the deposit such as south of T- lens, north of Z- lens and to the south of P- lens in the centre of the deposit (**Figure 7**).

To support the Life Extension Project currently underway at Rosebery, a budget of A\$25M was approved for drilling in 2023. The project aims to extend the Rosebery orebody with 5 underground diamond drill rigs and explore new opportunities on MMG land holdings with 3 surface rigs, for a total of 129,000m; the largest drill program to be completed at Rosebery.

The underground drilling is targeting extensions to the south and north of the deposit as discussed above but also at U- and AB- lenses. Additionally, in-mine hangingwall opportunities are being tested that are situated around the established K- and P- lenses. Surface drilling in 2023 is focused on testing new orebody knowledge concepts across the mining lease and exploration licence particularly adjacent the historical Hercules and Jupiter mines but also advanced prospects such as South Hercules and Snake Gully (**Figure 8**).



**Figure 7.** Longsection of Rosebery deposit (viewing west – Rosebery Mine Grid) showing >6% Zn lenses (pink polygons) dipping to the east under Mt Black, all mine voids (grey polygons) and significant exploration drillholes. The major targets are determined as either Rosebery extensions (blue) or those located west of the Rosebery Fault in the Dundas Group (green).

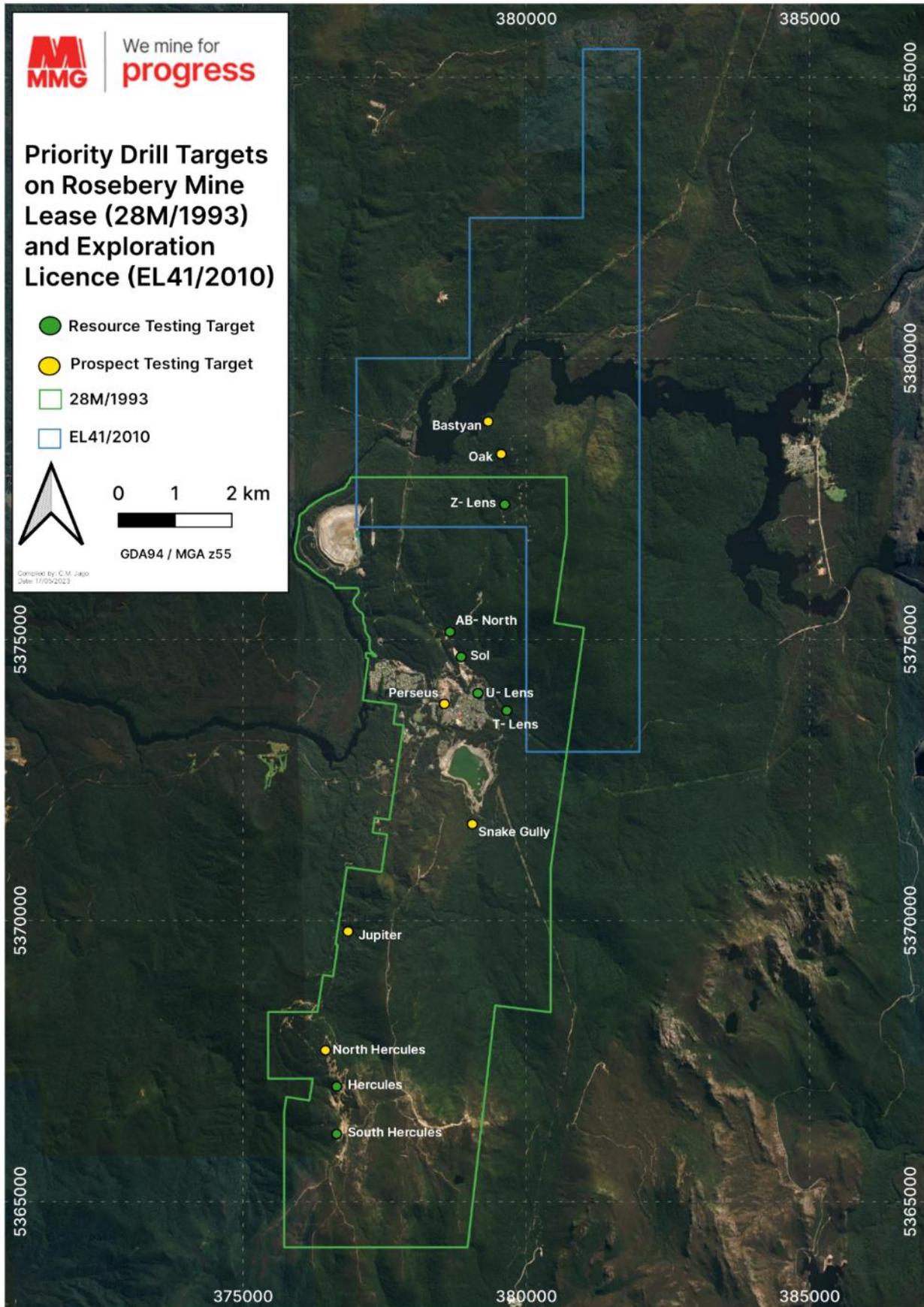


Figure 8. Location map of priority targets across 28M/1993 and EL41/2010.

### Z- lens

Underground drilling of the northern most massive sulphide occurrence, Z- lens, commenced in 2021 from the 52Y exploration drive (EXD). Drilling focused around historical surface drilling which returned significant results that are captured within the 2022 Mineral Resource and Ore Reserve. The Z-lens Mineral Resource was increased by 440kt at grades of 5.7% Zn, 2.8% Pb, 0.13% Cu, 120g/t Ag and 1.4g/t Au. During 2022, the 200m 52Y EXD extension was approved to the north, but prior to exiting the EXD, three holes were drilled to the north of Z- lens to determine mineralisation continuity. Two of the three holes intersected varying mineralisation intensity around 125m north of the currently modelled extents of Z- lens. Intercept highlights include:

- R13670 7.2m @ 14.2% Zn, 8.9% Pb, 0.4% Cu, 152g/t Ag, 1.6g/t Au from 208m (2.5m true width)
- R13671 14m @ 3.7% Zn, 2.2% Pb, 0.1% Cu, 9.9g/t Ag, 0.1g/t Au from 218m (2.7m true width)

Drilling has taken place in Q1 2023 from 44Y EXD testing the up-dip extensions of Z- lens. A wide interval of stringer to semi-massive sulphide was intersected in R13849, 130m up-dip of the currently modelled Z- lens. Sphalerite and galena are visible from 448-473m with pink manganooan carbonates which is indicative of the mineralisation currently mined at Y- North, Y- South and X- lens. Assays are pending and drilling from the 44Y EXD will continue through 2023.

### T- lens

In late 2022, R13750 was drilled from the 11L EXD to test the downdip extensions of U- lens. It was determined that by extending the hole, T- lens could be intersected based on the stacked nature of the Rosebery massive sulphide ore lenses. The hole intersected variable sulphide with replacement magnetite-pyrrhotite-pyrite and hematite. At 760m, R13750 intersected a zone of semi-massive to massive sphalerite-galena-pyrite which returned:

- R13750 21.2m @ 9.5% Zn, 0.8% Pb, 0.2g/t Au, 23.1g/t Ag from 760m (11.5m true width)  
Inc. 10.2m @ 15% Zn, 1.5% Pb, 0.2g/t Au, 42g/t Ag from 771m

The lower precious metal tenor is unlike typical Rosebery-style mineralisation but can be attributed to the Devonian granitoid overprint and subsequent remobilisation at the south end of the Rosebery deposit (Zaw et al., 1999).

A follow up hole was drilled 100m south of R13750 which intersected 12m of massive magnetite with banded to stringer pyrite and minor chalcopyrite from 768m. Assays are pending but orebody knowledge studies continue to understand the extensions of T- lens and additional resources to the south of the Rosebery deposit.

### V- lens

Extension drilling at V- lens has been ongoing since 2020. New areas have been defined and are reported in previous Public Reports of Mineral Resource Estimates. The V-lens Mineral Resource was increased by 570kt at grades of 3.4% Zn, 1.6% Pb, 0.36% Cu, 47g/t Ag and 1.4g/t Au. Drilling from 2022 has focussed on testing two stacked mineralised zones at V- lens. Intercepts are generally "Rosebery-polymetallic" but instances of overprinted sulphide like T- lens is apparent. Significant results from 2022 include:

- R13626 24m @ 9.3% Zn, 0.3% Pb, 0.2% Cu, 7g/t Ag, 1.1g/t Au from 72m (16.6m true width)
- R13653 1.7m @ 22.9% Zn, 6.7% Pb, 0.5% Cu, 581g/t Ag, 3.3g/t Au from 48.4m (1.2m true width)  
25.4m @ 6.6% Zn, 2.8% Pb, 0.1% Cu, 111g/t Ag, 1.1g/t Au from 61.6m (18.3m true width)  
7.5m @ 10% Zn, 4.6% Pb, 0.2% Cu, 210g/t Ag, 0.9g/t Au from 104.5m (5.5m true width)

### H- lens

Drilling from 2021 into 2022 determined that high-grade extensions to the south of P- lens were present along with a hangingwall target of H- lens. From the 24B EXD drill drive, delineation drilling tested the south extension of P- lens and the hangingwall H- lens with holes extended to intersect both targets. Drilling to the south of the 24B EXD continues in 2023 with extensions to mineralisation evident. Significant assay results include:

- R13817 8m @ 5.3% Zn, 1.4% Pb, 0.1% Cu, 13.3g/t Ag, 0.1g/t Au from 221m (4.3 true width)

### H- South

During Q1 2023, drilling commenced in the 17L Pump Station to test a gap in the high-grade wireframe in the south of H- lens. Initial drilling returned significant results of:

- R13819 intersected 3m of massive sulphide, predominantly pyrite with orange to pale-yellow sphalerite from 203m. Brecciated and quartz stockwork veined zones with chalcopyrite, pyrite and sphalerite infill occurs from 206 to EOH of 221m. Assays Pending.

- R13823 intersected pyrite stringer mineralisation from 161m to 227m with sphalerite visible from 223m. Chalcopyrite stringers occur from 177.1m to 189.3m, with semi-massive chalcopyrite from 188.1m to 189m. Assays Pending.
- Drilling in the 17L will recommence later in 2023.
- Please refer to the photographs in the complete report located on the MMG website.

### Sol

Sol is the name given to the area between the Upper Mine lenses and AB- lens (**Figure 7**). High-grade historical intercepts are observed around the margins of the high-grade wireframe but there is limited information to incorporate these intercepts into an Inferred Resource. Due to the age of mining in the Upper Mine, any new drilling needs to be carried out from surface which is expected to occur in 2023 and 2024.

However, drilling the lower portion of Sol could be achieved from underground, and this commenced in April 2023. Drillhole R13881 intersected 1.9m of massive barite with pale-yellow, low-Fe sphalerite, galena and pyrite from 170.1m which occurs 50m north of the known orebody (historical H- lens stoping). Due to the presence of the low-Fe sphalerite and galena, it is expected that the assays will return with high precious metal contents. A second zone of barite-hematite-pyrite occurs 6m prior occurs at 163.9m extending 2.1m. Assays are pending for R13881.

A further phase of underground drilling is planned for later in Q2 2023 which will complement the surface drilling also due to commence during this time.

### AB North

Surface drilling has focussed on the area immediately north of AB- lens with the first drillhole, 514R, intersecting host 150m north of the known orebody. The hole intersected a 20m wide zone of weak disseminated sphalerite mineralisation, with areas of stringer mineralisation within silica-white mica-chlorite altered volcanoclastic sandstone (Rosebery host rock). A follow-up hole, 518R intersected 0.5m of massive sulphide 120m north of known mineralisation which prompted the design of 519R.

Located 60m north of known mineralisation, between 541.4m and 546.3m downhole, 519R intersected semi-massive to massive sulphide resembling typical Rosebery polymetallic mineralisation. Significant assay results include:

- 519R                      5m @ 10.3% Zn, 4.7% Pb, 0.1% Cu, 136g/t Ag, 2.0g/t Au from 542m (4.9m true width)

### Jupiter

From Q3-2022, two surface holes were drilled underneath the Jupiter mine, where massive sulphide was mined historically. The first hole, JP389, targeted 300m below previous drilling and intersected a 70m wide zone of pyrite stringer mineralisation with trace chalcopyrite from 711m. The daughter hole, JP389-D1 drilled above the parent hole and intersected weakly disseminated sphalerite mineralisation was intersected over 18m from 721m within a chlorite altered host-like volcanoclastic sandstone unit. Assays are pending.

Shallow drilling around the previous stoping areas and massive sulphide will be drilled later in 2023. Further gossan targets 150m northeast and Cu targets to the south of Jupiter are being reviewed for drilling in 2024.

A research project commenced in mid-2022 using hyperspectral scanning technologies (HyLogger), low-detection multi-element geochemistry (ME-MS61), scanning electron microscopy (SEM) and graphical logging to understand the stratigraphy, alteration and mineralisation characteristics of the Jupiter mineral system. Orebody knowledge outcomes from the research will have a direct influence on the drilling in subsequent years.

### TQV

During the Devonian, the massive sulphide lenses at Rosebery become increasingly overprinted by the granitoid south of the deposit. Evidence of the influence of the granitoid include variable replacement by magnetite-pyrrhotite-pyrite with gangue fluorite-chlorite-tourmaline-garnet (Zaw et al., 1999). In 2022, it was recognised that high-grade Au mineralisation occurs within tourmaline-quartz-pyrite veins and breccias in the hangingwall of U- lens. The name of this target is drawn from this association with tourmaline quartz veins (TQV). Generally, the thickness of the mineralised interval is less than 1m, but R13488 remains the thickest of the intercepts to date:

- 15.8m @ 6.2g/t Au, 0.3% Cu, 9.3g/t Ag from 168m

Since this recognition, holes that are drilled into U- lens are extended to the TQV horizon. Ongoing orebody knowledge studies are underway to determine the significance of the mineralisation style particularly in the shallow part of the mine.

## Oak

The Oak prospect is located 500m north of Z- lens on EL41/2010 and was discovered in 2011 with subsequent exploration to 2013. In 2022, R13652 was the first hole designed to test the Oak prospect from underground. Whilst R13652 was not drilled at an optimal angle, it was deemed the hole would provide valuable information ahead of the 200m extension to the 52Y EXD later in 2022. The hole was drilled to 753.1m and intersected the now-prospective Dundas Group to the west of the Rosebery Fault from 268.9m. The true thickness of the intervals is currently unknown.

R13652 has returned two intervals of mineralisation:

- 4.56m @ 4.5 % Zn, 2.4 % Pb, 0.1 % Cu, 69.4 g/t Ag, 0.9 g/t Au from 630.44m  
Inc. 2m @ 6.7 % Zn, 3.6 % Pb, 0.1 % Cu, 92.5 g/t Ag, 1.3 g/t Au from 632m
- 0.5m @ 4.6 % Zn, 1.9 % Pb, 0.2 % Cu, 100 g/t Ag, 0.83 g/t Au from 660.3m

Overall, a broad zone of elevated mineralisation is observed around the intercept above:

- 32.8m @ 1.2 % Zn, 0.5 % Pb, 0.05 % Cu, 19.2 g/t Ag, 0.3 g/t Au from 628m

The northern extensions of Oak are currently being drilled from surface while the southern extents will be drilled from the 52Y EXD in Q2 2023. The Oak Prospect represents a significant exploration target for further mineralisation with the Dundas Group to the west of the Rosebery Fault.

## Perseus

A stratigraphic hole was drilled to the west of the Rosebery Fault from the 11L EXD in Q3 2022 to a depth of 971.8m. The aim for R13638 was to gain an understanding of the Dundas Group geology to the west of the mine 4.5km south of the Oak prospect. Minor chalcopyrite was intersected with tourmaline-quartz-fluorite veining in the Rosebery Fault. A thin 40cm band of sphalerite and galena was intersected at 446m within a pumiceous rhyolitic unit while irregular sulphide clasts (to 2 cm) are hosted in a volcanoclastic mass flow unit directly above this band. Three holes were drilled around this intercept with pyrite observed at the same horizon.

A second stratigraphic hole (R13791) was drilled further south to understand the Dundas Group in more detail. Abundant pyrite was seen in volcanoclastic sandstone and breccia units intercalated with black shales and is an indication of hydrothermal processes taking place. Detailed geological interpretation of the Perseus target is continuing.

## Bastyan

During 2021, 513R was drilled to test the northern extensions of the Oak prospect. The hole intersected massive sulphide in the Dundas Group on EL41/2010 600m north of Oak. Results returned:

- 7m @ 10.1% Zn, 3.5% Pb, 0.02% Cu, 52.6g/t Ag, 0.04g/t Au from 2273.5m  
Inc. 2.5m @ 7.1% Pb, 96.3g/t Ag, 1.1% Zn from 2273.5m  
Inc. 2.0m @ 37.7% Zn, 0.5% Pb, 11g/t Ag from 2277.8m

Follow up drilling of Bastyan is scheduled for late-2023.

## Forward Program

Underground diamond drilling is continually active in several areas of the mine with the intent to better define known mineralised areas (Mineral Resource to Ore Reserve conversion) as well as to further extend the Mineral Resource into areas potentially hosting additional economic mineralisation.

Surface Drilling is planned for the following targets in 2023 and 2024:

- North Hercules
- Hercules
- South Hercules
- Jupiter
- Sol
- Snake Gully
- AB- North
- Oak
- Bastyan