

**ASX Announcement** 

# **DECEMBER 2023 QUARTERLY ACTIVITIES REPORT**

24 January 2024

# FOR THE PERIOD ENDED 31 DECEMBER 2023

# **KEY POINTS**

- First time Mineral Resource estimates (MRE) at Silver Lake and East Trough
- Successful completion of 3D seismic survey at Long South Gap, on time and on budget
- Demonstrated high quality metallurgical performance of the Foster South high-grade MRE
- First ever diamond holes in Long South Gap yield key geochemistry and structural data
- Cash balance of approximately \$27.2 million as at 31 December 2023

Lunnon Metals Limited (**ASX:LM8**) (the **Company** or **Lunnon Metals**) is pleased to report on activities during the December 2023 quarter.

# MARCH 2024 QUARTER OUTLOOK

- The Company notes the recent news regarding Wyloo Consolidated Investments Pty Ltd's and BHP Nickel West Pty's Ltd (**BHP**) cessation of activities at various Kambalda district mines and the Kambalda Concentrator. As part of the ongoing Baker and Foster combined Pre-Feasibility Study (**PFS**), the Company will continue to review the alternatives for potential future processing of Kambalda Nickel Project (**KNP**) nickel production. This may include, among a range of options available, investigating options for collaboration with other key nickel players in the region, or traditional Ore Tolling and Concentrate Purchase Agreements (**OTCPA**s) with existing concentrator owners, such as BHP, at either Kambalda or Leinster.
- With the significant fall in the nickel price, and poor prevailing market sentiment, the Company is taking a prudent approach with respect to its capital management and is planning to reduce monthly exploration and corporate costs from approximately \$1.5M to \$1.0M per month. This approach will enable the Company to continue to test its key exploration targets, particularly the Long South Gap, while ensuring that it has sufficient working capital and funding flexibility to operate through the current downturn.
- With a cash balance of approximately \$27.2M as at 31 December 2023, Lunnon Metals remains very well positioned to continue to add value to its asset base whilst maintaining significant leverage to any improvement in the nickel price and market conditions.
- Reverse circulation (RC) drilling will follow up open trends in nickel mineralisation at Baker to the east of the current MRE and test prospective gold targets at Paringa West, Hustler and Plentiful near Foster nickel mine, which sits between the prolific Victory-Defiance and Argo-Hamlet-Athena gold camps (owned by St Ives Gold Mining Company Pty Ltd, a wholly owned subsidiary of Gold Fields Limited) (Gold Fields) to the immediate north and south of the Foster-Baker (FBA) project.
- Preparations, causeway construction and planning for diamond drilling (**DD**) in the Long South Gap area upon receipt and target ranking of the 3D seismic survey outcomes. Nickel DD activity at Baker East, Cooee Gap and Gold DD at Paringa West and Plentiful (both on the FBA).
- The Historical Core program (**HCP**) will continue to target remnant mineralisation at the Fisher mine and historical surface DD at Cooee Gap.



The following news flow and events are anticipated through the first half of calendar year 2024.

- Foster 40, 50 and 60 surfaces first-time MRE.
- Foster South MRE update with metallurgical DD holes.
- Updates on Long South Gap 3D seismic survey outcomes, targeting and discovery plan.
- Testing of prospective gold targets in the Foster belt.
- Ongoing Foster/Baker combined PFS activity updates and subject to review of Baker DD/RC drill results, finalisation of MRE and receipt of off-take parameters, final reporting (Mar/Jun quarter 2024).

Commenting on the December 2023 quarter, Managing Director, Edmund Ainscough, said:

"The December quarter was another busy one for the Lunnon Metals team but was one that saw a marked change in sentiment for the Australian nickel sector. Notwithstanding, Lunnon Metals continued to grow its Mineral Resource base, methodically de-risk its existing portfolio and take the first steps on a promising journey in a brand new, untested area adjacent to the prolific Kambalda Dome at Long South Gap. The Company is well placed to show the necessary resilience and strength in any difficult times ahead and successfully differentiate itself as the "go to" nickel stock, based on the location of its portfolio, the size and grade of its current Mineral Resource base and the unrivalled opportunity it offers by being the only ASX listed company actively exploring in one of the world's great nickel belts".

# **KAMBALDA NICKEL PROJECT (KNP)**

#### **Health, Safety and Environment**

No safety or environmental incidents were reported during the quarter.

#### **Community and Heritage**

The progress of negotiations with the Ngadju Native Title Aboriginal Corporation (**NNTAC**) slowed with organisational changes at that body being the prime driver. The parties are close to agreeing an overarching Mining Rights Agreement, which includes a Heritage Protocol. When executed, the agreement with NNTAC will cover 100% of the Foster-Baker project (**FBA**) and part of the Silver Lake-Fisher project (**SLF**) on the Lake Lefroy area.

The northern shore of Lake Lefroy is covered by the Marlinyu Ghoorlie native title claim group and during the quarter, initial discussions commenced with the relevant representatives.

Heritage surveys conducted by external archaeological consultants continued as required.

#### **Drilling Program Physicals**

Approximately 10,300 drill metres were completed in the December 2023 quarter (8,100m in September 2023 quarter), with DD accounting for 12 holes drilled (18 holes in September 2023 quarter). RC drilling in the quarter recorded 50 holes (nil activity in September 2023 quarter).

At the FBA, exploration focussed in the immediate Baker area, predominantly within the Baker MRE, infill drilling the updip portions of the Indicated Resource with RC and DD. This program was designed to both validate the current Baker MRE and by extension, de-risk the development and production profile during the start-up and early life of any potential future mining operation. Other DD holes were completed at Foster South (metallurgy and extensional holes), the gap between Foster South and the main Foster mine, and the Cooee Gap prospect.

At SLF, drilling was completed at the Long South Gap with the wedge from the original parent hole completed in difficult drilling conditions.

In addition to the surface drill program at FBA and SLF, the HCP recorded over 4,400 metres of reprocessed core in 54 holes. Areas the subject of the HCP included Foster N60C at the FBA and within the SLF, areas tested by the HCP included Fisher mine, the KD208/210 trend in the Long South Gap prospect area and Ken South to the north of the Fisher mine.

The Company continues to ensure that all RC and DD holes completed which have intersected potentially economic mineralisation at Baker, Warren, Foster or Silver Lake are subject to a program of grouting from end of hole to above the nickel intercept of interest for future safety and operational control purposes.



# FOSTER / BAKER (FBA) PROJECT DISCOVERY PROGRAM

# **Foster Mineral Resource Updates**

During the quarter the Company reported updates to the following Mineral Resource estimates (**MRE**)<sup>1</sup>:

- an update to the 85H MRE to include reported metallurgical DD holes; and
- an initial MRE for East Trough, adjacent to the Baker deposit.

MREs expected to be competed in the coming period include:

- an update to the MRE for Foster South, although as previously reported, limited change is expected;
- the outcome of the MRE exercise for the Foster 40, 50 and 60 surfaces nickel surfaces; and
- an update to the Baker MRE, targeting a first-time Measured Resource for Baker.

# East Trough

A first-time, initial JORC Code (2012) nickel MRE for the East Trough deposit was lodged with the ASX on 18 December 2023.

#### **Table 1**: MRE for the East Trough Nickel Deposit reported on 18 December 2023.

East Trough	tonnes	Ni %	Cu%	Co%	Pd g/t	Pt g/t	As ppm	Ni metal
Inferred	108,000	2.7	0.20	0.06	0.43	0.22	<10	3,000
Total	108,000	2.7	0.20	0.06	0.43	0.22	<10	3,000

Note: tonnes have been rounded to 3 significant figures, grade to 2 significant figures and nickel metal has been rounded to the nearest 100t.

Key implications of this initial East Trough MRE include:

- Potentially economic mineralisation in close proximity to Baker.
- Nickel sulphide mineralisation remains open down plunge beyond 500 metres from surface.
- Complementary production source for a future Baker underground mine.

The grade of this initial MRE, its proximity to Baker and down-plunge potential makes East Trough a compelling opportunity that has the potential to enhance Baker's economics.

# **Baker and Foster PFS**

Work continued on the combined Baker and Foster PFS which involves economic and technical studies to investigate the potential to mine the Foster MRE and assess the benefits and potential improvements to the Baker PFS<sup>2</sup> of operating both Baker and Foster together. The results of this combined PFS, if positive, are likely to lead to an increase to the Company's Probable Ore Reserve. The updated PFS will enable the Company to have a better view of the KNP's nickel production potential and thereby better position the Company to continue evaluating its processing alternatives which include potential ore tolling partners.

The updated PFS will use a nickel price closer to the current three-year lows. The combined Baker and Foster Pre-Feasibility Study will also model the impact of higher nickel prices for comparative purposes.

The Company highlights that despite the recent significant decrease in the nickel price (approximately A\$24,000/t (US\$16,000/t at US\$0.66:A\$1.00)), the Baker Ore Reserve remains economic due to its high grade, low deleterious elements and low capital cost due to nearby infrastructure and its proximity to surface for an underground mine. The sensitivity modelling reported in the May 2023 Pre-Feasibility Study still remains valid and illustrates this.

The updated PFS development study will also deliver a mine schedule for both Baker and Foster, which will further enhance the Company's ability to review processing alternatives which may include detailed negotiations with potential OTCPA

<sup>&</sup>lt;sup>1</sup> Refer to ASX Announcement dated 18 December 2023

<sup>&</sup>lt;sup>2</sup> Refer to ASX Announcement dated 23 May 2023



partners in Kambalda or further afield, or assessing the opportunity for collaboration with other key nickel players in the region, both private entities and other ASX nickel explorers/developers.

In parallel, regulatory approvals have now advanced with submission of the Mining Proposal/Mine Closure Plan for Baker to the relevant Western Australian government body, with the Mining Proposal/Mine Closure Plan for Foster to follow shortly.

While the Baker Ore Reserve remains economic, the potential timing of a financial investment decision to mine Baker is subject to the Board's discretion, with particular consideration likely to be given to the prevailing nickel market sentiment. Baker is forecast to have a short timeframe to production due to its advanced regulatory status, location at shallow depth on granted mining leases and the modest pre-production capital cost<sup>3</sup>.

The Company recognises that there is significant optionality in timing its financial investment decision to maximise the potential benefit from any increase or upward momentum in the nickel price given Baker's many positive characteristics.

# **Foster South Metallurgical Testwork**

During the December 2023 quarter, the Company lodged a series of announcements to report the progress of the metallurgical DD program on the Foster South MRE (see announcements dated 9 and 17 October 2023 and 8 December 2023). The DD holes were drilled specifically for metallurgical sample collection purposes, whilst also doubling as a test and validation check on the current MRE.

The DD program recorded the following significant intercepts (>1.0% Ni cut off):

- CD2906W3: 14.05m @ 4.13% Ni, 0.25% Cu, 0.08% Co, 0.52g/t Pd, 0.32g/t Pt, 49ppm As (from 876.00m)
- FOS23DD\_006: 2.89m @ 4.73% Ni, 0.29% Cu, 0.11% Co, 0.65g/t Pd, 0.28g/t Pt, <10ppm As (from 858.32m)
- FOS23DD\_006W2: 4.62m @ 3.87% Ni, 0.30% Cu, 0.10% Co, 0.73g/t Pd, 0.35g/t Pt, <10ppm As (from 856.16m)

Two metallurgical composites were generated from CD2906W3 (between 875.30m to 890.50m downhole) and FOS23DD\_006W2 (between 856.16m to 861.50m downhole) and represented diluted intervals of the intercepts reported above to mirror expected dilution during mining. These DD holes were subject to a strict protocol whereby the core sample remaining after cutting for assay purposes, was vacuum sealed and stored refrigerated for use in the metallurgical test work.

The test work once again highlighted that the Company's MRE delivers high nickel recoveries whilst producing a very clean, high-grade nickel concentrate that is low in contaminates and high in saleable nickel, copper and cobalt. Two composite samples delivered the following summary metallurgical results:

Foster South – test work results <sup>4</sup>	CD2906W3	FOS23DD_006W2
Head grade (% Ni)	4.74	3.47
Recovery (% Ni)	91.4	91.3
Concentrate grade (% Ni)	17.3	12.9
Concentrate grade (% Cu)	1.09	1.15
Concentrate grade (% Co)	0.35	0.32
Fe:MgO ratio (n:1 in concentrate)	19.1	17.4
As (ppm) (in concentrate)	198	16

Table 2: Flotation test work program results for Foster South.

Note: The above results above are indicative metallurgical performance and concentrate quality based on metallurgical flotation testwork. Actual results may vary depending on the specifications and performance of the concentrator.

<sup>&</sup>lt;sup>3</sup> Refer to ASX Announcement dated 23 May 2023

<sup>&</sup>lt;sup>4</sup> Platinum and palladium results are pending



# **Foster Historical Core Program**

The results of the HCP at Foster 40, 50 and 60 surfaces reported on 3 October 2023 were summarised in the September quarterly. Technical work is progressing seeking to estimate and report a first-time MRE for this area in the coming quarter. The HCP continues at Foster focusing on remnant material in areas left poorly closed off by WMC Resources Ltd (**WMC**) during the operational life of the mine.

#### **Baker Exploration**

Exploration activity in the Baker area was focussed on an infill DD and RC program designed to infill the drill spacing in the up-dip portions of the Indicated Resource component of the Baker MRE. Drilling totalled approximately 4,000m of RC and 700m of DD in over 40 holes, delivering a reduction in the drill spacing from a broad 40m to 30m x 20m spacing, to a regular 20m x 20m spacing across the Indicated Resource, dropping to 10m x 20m in some areas of complexity. Once the full assay results are received in the current quarter an update to the MRE will be undertaken (see ASX announcement dated 22 January 2024). Subject to ongoing positive results and reconciliation with the existing MRE, this update is expected to enable the declaration of a first-time Measured Resource which in turn may allow a Proven Ore Reserve to be reported when the Company delivers the results of the combined Baker and Foster Pre-Feasibility Study later this year.

# SILVER LAKE-FISHER (SLF) PROJECT DISCOVERY PROGRAM

#### Silver Lake Hanging Wall Exploration Target – now renamed 25H Deposit

On 4 December 2023, a first-time, initial nickel JORC Code (2012) MRE was reported for the Silver Lake Hanging Wall prospect. The deposit was renamed the 25H deposit (**25H**) to mirror the historical name for this mineralisation from the mine's operational period under WMC. The 25H is located at the south end of the Silver Lake mine. This first-time MRE follows receipt of final assays from the Company's first pass surface DD program into the deposit.

The 25H MRE stands at 824,000 tonnes at 1.7% nickel for 13,800 contained nickel tonnes, comprising:

25H	tonnes	Ni %	Cu%	Co%	Pd g/t	Pt g/t	As ppm	Ni metal
Indicated	336,000	1.6	0.10	0.03	0.29	0.14	17	5,300
Inferred	488,000	1.7	0.14	0.03	0.29	0.15	13	8,500
Total	824,000	1.7	0.12	0.03	0.29	0.14	15	13,800

**Table 3**: MRE for the 25H Deposit, Silver Lake Mine reported as on 4 December 2023.

Key implications of this initial 25H MRE include:

- Demonstration of potentially economic mineralisation on the Silver Lake Fisher project for the first time, since the deal to acquire the nickel rights from Gold Fields on these tenements settled in October 2022.
- Development of an initial Mineral Resource base immediately adjacent to the Company's high-priority Long South Gap exploration area, the site of the recently completed, extensive 3D seismic survey by UltraMag Pty Ltd.
- Potential remains for high-grade shoots to be contained within the broad 30m to 170m current surface DD hole spacing.



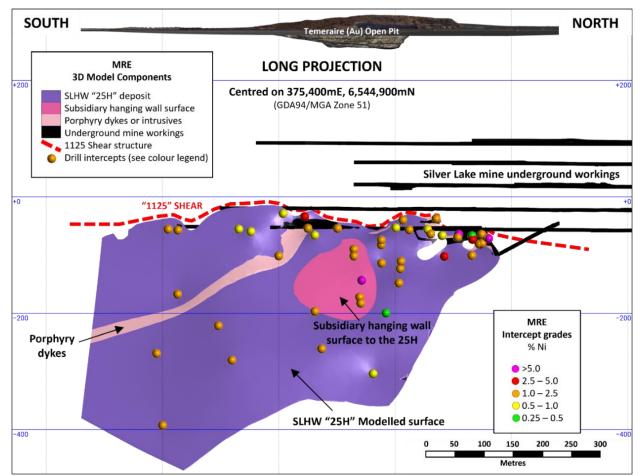


Figure 1: Long projection view of the 25H interpreted mineralised deposit looking WSW, labelled with geology and sub-domains.

# **Long South Gap**

Geophysical contractor, UltraMag Geophysics Pty Ltd, under the supervision of Southern Geoscience Consultants Pty Ltd (**SGC**) completed the planned 3D seismic survey of the 5.8km2 Long South Gap prospect area, on time and budget. The survey was successful and early indications are that the data captured is clean and successfully profiled to the depth planned by SGC. Data analysis is underway and is expected to be fully complete by the June 2024 quarter. However, it is hoped that preliminary findings can guide causeway design, placement, and construction during the coming March quarter.

The surface DD holes were also completed on the high-priority target generated during the original 2D seismic survey trial (see ASX announcement dated 21 April 2023). This was the first ever DD program in this part of the prolific Kambalda Dome (see ASX announcements dated 31 August 2023 and 9 October 2023). Drilling wrapped up at 1,083m depth in a wedge hole from the original parent hole, which itself was stopped at 928m due to difficult drilling conditions.



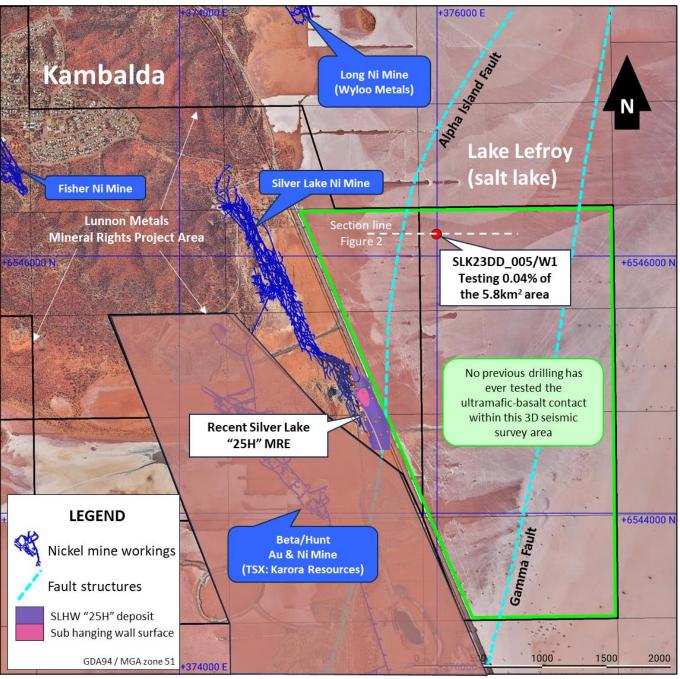


Figure 2: Plan view of the Silver Lake Fisher area at Kambalda showing location of DD program relative to the entire 5.8km<sup>2</sup> Long South Gap prospect.



The Company reported the following important outcomes of the DD program to the ASX during the quarter:

- Confirmed a thick succession of high MgO komatiite, a pre-requisite for the ideal hosting environment for nickel sulphides;
- Intersection of a significant structure/fault zone, that has potential implications for nickel prospectivity and based on initial incomplete assaying is variably mineralised with gold. The Company noted it does not have rights to gold mineralisation at the SLF, these remain with Gold Fields;
- Intersection of an initial komatiite-mafic contact, with a notable anomalous zone of elevated geochemistry above this contact, indicative of a potential nickel channel environment; and
- Enabled the collection of "time-velocity" and density data over more than 1km length of DD core, which will assist in optimising the calibration of the 3D seismic data.

It was emphasised during the quarter, and was confirmed upon receipt of the final assays post quarter end, that no significant or potentially economic mineralisation was identified in the DD program, either by the pXRF readings (reported 20 November 2023 as averaging 0.15% Ni over 43m from 875m down hole in SLK23DD\_005W1) or in the final laboratory assayed nickel grades, which averaged 0.12% Ni over the same interval of drill core (see announcement dated 22 January 2024). As noted, post quarter end the full multi-element laboratory analyses were received and reported, supporting the previous observations in regard zones of elevated geochemistry and their potential implications for discerning potential nickel channel settings within the prospect area.

Notwithstanding the low levels of nickel, these zones of elevated geochemistry are important for guiding future exploration and determining where the focus should be directed within the komatiitic flow environment. The multi-element assays are the subject of ongoing detailed analysis seeking to identify all potential geochemical vectors to assist drill targeting. These include the Kambalda Ratio already reported, Komatiite Facies analysis (Ni/Cr versus Ni/Ti), and MgO content which have been applied successfully in the past, including by WMC during more than 30 years of previous nickel exploration at Kambalda.

During the quarter (in the same 20 November 2023 announcement), the Company also reported partial gold assays for a significant, >50m wide, quartz-breccia structure. The Company again notes it does not have rights to gold mineralisation at the SLF, these remain with Gold Fields. The presence of, and proximity to, significant structures or faults has been shown to have a strong correlation in this part of Kambalda with the location of potentially mineralised nickel troughs due to an associated and shared structural history. Post quarter end, full assays for gold were also received and confirmed that the logged structure is gold bearing over significant portions of its drilled width and as such is related to the gold event which postdates the nickel mineralisation in age. At the stated cut-offs below, gold intercepts were:

# SLK23DD\_005W1:

- 4.80m @ 0.82g/t Au (from 950.20m down hole >0.50g/t cut-off) including:
  - 0.90m @ 1.37g/t Au (from 954.10m > 1.0g/t cut-off)
- 10.75m @ 1.23g/t Au (from 972.05m >0.50g/t cut-off) including:
  - 3.80m @ 2.36g/t Au (from 979.00m >1.0g/t cut-off)
- 8.10m @ 0.88g/t Au (from 986.00m >0.50g/t cut-off) including:
  - 3.10m @ 1.17g/t Au (from 991.00m > 1.0g/t cut-off partially previously reported)
- 4.00m @ 2.68g/t Au (from 1,020.00m >0.50g/t cut-off) including:
  - 2.00m @ 4.81g/t Au (from 1,020.00m > 1.0g/t cut-off both previously reported)

The confirmation of the relative timing (related to the gold event) of this structure to the nickel mineralising event is a key and vitally important targeting parameter for future DD planning for nickel exploration.





**Figure 3**: Portion of a broad, gold-bearing structure encountered in SLK23DD\_005W1; close to the interpreted prospective nickel contact in the Company's first ever diamond hole at Long South Gap – trays shown 999m to 1,022m downhole depth.

The extensive width of this gold bearing structure is indicative that it may be related to potentially significant displacement and as such has a direct bearing on the Company's subsequent nickel targeting once the full 3D seismic survey data is analysed.

#### **Fisher**

Post the end of the December 2023 quarter, the Company reported a first-time, initial MRE at the historical Fisher mine, located to the immediate west of Kambalda township. This new Fisher MRE resulted from execution of the signature HCP on mineralised shoots and surfaces at Fisher termed the F Zone deposit.

This first MRE for Fisher mine stands at 251,000 tonnes at 1.9% nickel for 4,700 contained nickel tonnes, comprising:

Fisher F Zone	tonnes	Ni %	Cu%	Co%	Ni metal
Indicated	56,000	2.7	0.17	0.07	1,500
Inferred	195,000	1.7	0.11	0.04	3,200
Total	251,000	1.9	0.12	0.05	4,700

#### **Table 4**: MRE for the Fisher F Zone Nickel Deposit as reported on 15 January 2024.

Key implications of this initial Fisher MRE include:

- Modest sized, but high-grade Indicated Resource component
- F Zone was poorly drilled and only partially mined and provides an excellent focus point for the Company's own surface exploration program
- Significant further nickel mineralisation remains on multiple other surfaces / shoots where HCP diamond core is available to re-access and re-assay
- Complements the recent initial additions at the 25H surface at Silver Lake and the ongoing discovery effort at the nearby Long South Gap prospect



# **Lunnon Metals Mineral Resource Status**

Following the first time MRE additions at East Trough, 25H (Silver Lake) and Fisher and the update to the Foster 85H Deposit, the Company's MRE now totals:

#### • 4.06 million tonnes @ 2.7% nickel for 109,100 contained nickel tonnes<sup>5</sup>

This represents an increase of 2.8 million tonnes at 2.5% Ni and 70,100 tonnes of contained nickel metal since the Company's June 2021 listing on the ASX.

# FINANCIAL AND CORPORATE

#### **Financial Update**

As at 31 December 2023, Lunnon Metals held approximately \$27.2 million (30 September 2023: \$31.9 million) in cash. The Company received \$1.0 million (before costs) in relation to the Tranche 2 Placement completed in November 2023 (see below).

Net payments for exploration, evaluation and development during the December 2023 quarter totalled \$4.69 million (30 September 2023 quarter: \$4.08 million), as detailed in the Company's accompanying Appendix 5B statement (exclusive of salaries), with \$3.32 million classified under operating activities and \$1.36 million classified as investing activities.

The exploration and evaluation expenditure was primarily attributable to drilling (\$1.70 million), 3D seismic survey (\$0.89 million), sampling and assaying (\$0.49 million), exploration overheads (\$0.43 million), and technical studies (\$0.24 million). Exploration and evaluation expenditure was higher than usual during the December 2023 quarter due to more DD and RC drilling, more expensive DD per metre with the deeper Long South Gap hole located on Lake Lefroy, and the 3D seismic survey over the full 5.8km<sup>2</sup> of the Long South Gap prospect.

With the significant fall in the nickel price, and poor prevailing market sentiment, the Company is taking a prudent approach with respect to its capital management and is planning to reduce monthly exploration and corporate costs from approximately \$1.5M to \$1.0M per month. Expenditure will naturally fluctuate month to month dependent on drilling type and activity.

This approach will enable the Company to continue to test its key exploration targets, particularly the Long South Gap, whilst ensuring that it has sufficient working capital and funding flexibility to operate through the current downturn. With a cash balance of approximately \$27.2M as at 31 December 2023, Lunnon Metals remains very well positioned to continue to add value to its asset base while maintaining significant leverage to any improvement in the nickel price and market conditions.

In executing this plan, the Company is confident it can continue to test its key exploration targets, in particular the Long South Gap, grow its existing nickel resource, particularly by applying its HCP and leveraging off the information contained within the historical WMC DD core, and methodically de-risk the path to production with necessary permits and technical analysis, both low cost activities which deliver significant value enhancement to the portfolio.

#### **Tranche 2 of the Placement**

On 17 August 2023, the Company announced it had received firm commitments to raise \$18 million (before costs) at \$0.90 per share via a two-tranche placement, with \$1.0 million of this amount to major shareholder Gold Fields, subject to shareholder approval (**Tranche 2 Placement**).

Shareholder approval was obtained on 3 November 2023, and 1.1 million shares were issued to Gold Fields on 13 November 2023, raising \$1.0 million (before costs).

Gold Fields undiluted voting power changed from 33.70% before the Placement to 31.03% at completion of the Placement.

<sup>&</sup>lt;sup>5</sup> A full breakdown of the Company's MRE is attached on page 14 of this report



#### **Related Party Payments**

Payments to related parties or associates of Lunnon Metals during the quarter totalled \$164,410. The payments were in respect of salaries, fees and superannuation to directors.

#### **Share Capital**

During the December 2023 quarter, the Company issued 1,172,612 fully paid ordinary shares following the Tranche 2 Placement and exercise of 61,500 employee options for nil consideration. The Company also issued 266,938 Performance Rights to new employees as part of its Short-Term Incentive and Long-Term Incentive schemes.

On 4 October 2023, 21,505,376 fully paid ordinary shares were released from escrow. The escrow arrangements were in connection with the acquisition by the Company of the Silver Lake / Fisher nickel mineral rights from Gold Fields<sup>6</sup>.

#### Issued Shares (as at 31 December 2023)

ASX Code	Description	Total Number
LM8	Listed Ordinary Fully Paid Shares	217,056,241
Total		217,056,241

#### Other Securities (as at 31 December 2023)

ASX Code	Description	Total Number
LM8AE	Unlisted Options (Expiring 22 Mar 2026, Ex \$0.05)	2,175,000
LM8AF	Unlisted Options (Expiring 22 Mar 2026, Ex \$0.05)	1,700,000
LM8AG	Unlisted Options (Expiring 25 Oct 2026, Ex Nil)	216,965
LM8AI	Unlisted Options (Expiring 28 Mar 2027, Ex Nil)	21,396
LM8AJ	Unlisted Options (Expiring 11 Feb 2026, Ex \$1.18)	950,000
LM8AL	Performance Rights	4,081,999
	Onboarding Performance Rights (vesting 31 Dec 2023, expiring 31 Dec 2024)	80,899
	Onboarding Performance Rights (vesting 31 Dec 2024, expiring 31 Dec 2025)	42,459
	2023-24 STI Performance Rights (vesting 30 June 2024, expiring 31 Dec 2029)	2,019,044
	2023-26 LTI Performance Rights (vesting 30 June 2026, expiring 31 Dec 2029)	1,939,597
Total		9,145,360

#### Γotal

#### **ASX Lodgements**

An active news flow was maintained throughout the period with the following announcements lodged on the ASX.

- 3 October 2023 Historical Core Program Delivers Opportunities at Foster
- 9 October 2023 High Grades Confirmed in Foster Metallurgical Drill Program
- 17 October 2023 Foster South Delivers 14.05m @ 4.13% Nickel
- 26 October 2023 3D Seismic Survey of Long South Gap Kicks Off
- 20 November 2023 Potential Nickel Channel Setting at Long South Gap
- Silver Lake Hanging Wall (25H) Initial Mineral Resource 4 December 2023

<sup>&</sup>lt;sup>6</sup> Refer to ASX Announcement dated 12 April 2022



- 8 December 2023 Foster South Delivers Premium Concentrate
- 18 December 2023 East Trough First-Time Mineral Resource

#### **Compliance lodgements made to the ASX were as follows:**

- 2 October 2023 Notice of Annual General Meeting and Proxy Form
- 4 October 2023 Investor Presentation Australian Nickel Conference
- 4 October 2023 Application for quotation of securities LM8
- 25 October 2023 Quarterly Cash Flow Report September 2023
- 25 October 2023 Quarterly Activities Report September 2023
- 3 November 2023 2023 AGM Chairman's Address and Managing Director's Pres
- 3 November 2023 Results of Annual General Meeting
- 13 November 2023 Application for quotation of securities LM8
- 13 November 2023 Application for quotation of securities LM8
- 13 November 2023 Cleansing Notice s708A(5)(e) of Corporations Act
- 21 November 2023 Investor Roadshow Presentation

Subsequent to the quarter's end, and up to the date of this Quarterly Report, the Company lodged the following announcements on the ASX.

- 8 January 2024 Notification regarding unquoted securities LM8
- 8 January 2024 Application for quotation of securities LM8
- 15 January 2024 Fisher First-time Mineral Resource
- 22 January 2024 Long South Gap Update
- 22 January 2024 Baker Drill-Out Delivers Multiple High Grade Hits

For further information regarding the Company's activities please visit the website www.lunnonmetals.com.au or contact the Company, details below.

This Quarterly Report has been approved and authorised for release by the Board.

Edmund Ainscough Managing Director Phone: +61 8 6424 8848 Email: info@lunnonmetals.com.au



# **COMPETENT PERSON'S STATEMENT & COMPLIANCE**

Any information in this report that relates to nickel and gold geology, nickel Mineral Resources, Exploration Targets and Exploration Results, is based on, and fairly represents, information and supporting documentation prepared by Mr. Aaron Wehrle, who is a Member of the Australasian Institute of Mining and Metallurgy (**AusIMM**). Mr. Wehrle is a full-time employee of Lunnon Metals Ltd, a shareholder and holder of employee options/performance rights; he has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Wehrle consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Any information in this report that relates to prior reporting of nickel metallurgy, was based on, and fairly represents, information and supporting documentation prepared by Mr. Barry Cloutt, who is a Member of the AusIMM. Mr. Cloutt is an external and independent consultant to Lunnon Metals Ltd and has sufficient experience that is relevant to the activity that he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Cloutt consented to the inclusion in those announcements of the matters based on his information in the form and context in which it appears.

Any information in this report that relates to the mining, metallurgical and environmental modifying factors or assumptions as they may apply to the Company's MREs is based on, and fairly represents, information and supporting documentation prepared by Mr. Max Sheppard, Mr. Wehrle and Mr. Edmund Ainscough, who are Competent Persons and Members of the AusIMM and full time employees of Lunnon Metals Ltd. Mr. Wehrle and Mr. Ainscough are shareholders and all three are holders of employee options/performance rights. All three employees have sufficient experience that is relevant to the style of mineralisation, the types of deposit under consideration, the activity that they are undertaking and the relevant factors in the particular location of the prospect area, the historical Foster mine and the KNP generally, to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Sheppard, Mr. Wehrle and Mr. Ainscough consent to the inclusion in this announcement of the matters based on their information in the form and context in which it appears.

The information in this report that relates to nickel Ore Reserves at Baker is based on information compiled by Mr. Sheppard, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Sheppard is a full-time employee of the Company and is the holder of employee options/performance rights. Mr. Sheppard has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Sheppard consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

# DISCLAIMER

References in this announcement may have been made to certain previous ASX announcements, which in turn may have included Exploration Results, Exploration Targets, Mineral Resources, Ore Reserves and the results of Pre-Feasibility Studies. For full details, please refer to the said announcement on the said date. The Company is not aware of any new information or data that materially affects this information. Other than as specified in this announcement and mentioned announcements, the Company confirms it is not aware of any new information or data that materially affects the information included in the original market announcement(s), and in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.

This announcement may contain certain "forward-looking statements" and comments about future matters. Forward-looking statements can generally, but not always, be identified by the use of forward-looking words such as, "expect", "anticipate", "likely", "intend", "should", "could", "may", "predict", "plan", "propose", "will", "believe", "forecast", "estimate", "target" "outlook", "guidance" and other similar expressions. Indications of, and guidance or outlook on, future expected Exploration Results or technical outcomes, production, earnings or financial position or performance are also forward-looking statements. You are cautioned not to place undue reliance on forward-looking statements. Any forward-looking statements in this announcement are based on current interpretations, expectations, estimates, assumptions, forecasts and projections about the Company, its projects and assets and the market and industry in which it operates, as well as other factors that the Company's management believes to be relevant and reasonable in the circumstances at the date that such statements are made.



# **MINERAL RESOURCES**

	Cut-off	Ind	icated N	i	Inferred Ni		li	Т	otal Ni	
	(Ni %)	Tonnes	%	Ni Tonnes	Tonnes	%	Ni Tonnes	Tonnes	%	Ni Tonnes
FOSTER MINE										
Warren	1.0	345,000	2.6	8,800	100,000	2.4	2,400	445,000	2.5	11,200
Foster Central										
85H	1.0	395,000	3.2	12,800	294,000	1.2	3,600	689,000	2.4	16,400
N75C	1.0	271,000	2.6	6,900	142,000	1.9	2,600	413,000	2.3	9,500
S16C / N14C	1.0	3.7	-	3 <del></del>	64,000	5.7	3,700	64,000	5.7	3,700
South	1.0	223,000	4.7	10,500	116,000	4.8	5,500	340,000	4.7	16,000
Sub total		1,234,000	3.2	39,000	716,000	2.5	17,800	1,951,000	2.9	56,800
BAKER AREA										
Baker	1.0	638,000	3.8	24,000	291,000	2.3	6,800	929,000	3.3	30,800
East Trough	1.0	-	-	-	108,000	2.7	3,000	108,000	2.7	3,000
Sub total		638,000	3.8	24,000	399,000	2.5	9,800	1,037,000	3.3	33,800
SILVER LAKE	20 D									
25H	1.0	336,000	1.6	5,300	488,000	1.7	8,500	824,000	1.7	13,800
Sub total		336,000	1.6	5,300	488,000	1.7	8,500	824,000	1.7	13,800
FISHER										
F Zone	1.0	56,000	2.7	1,500	196,000	1.6	3,200	252,000	1.9	4,700
Sub total		56,000	2.7	1,500	196,000	1.6	3,200	252,000	1.9	4,700
TOTAL		2,264,000	3.1	69,800	1,798,000	2.2	39,300	4,063,000	2.7	109,100

The detailed breakdown of the Company's Mineral Resources as updated 15 January 2024, is as follows:

Note: Figures have been rounded and hence may not add up exactly to the given totals. The Mineral Resource is inclusive of any reported Ore Reserves.

# **ORE RESERVES**

The detailed breakdown of the Company's Baker Ore Reserve as at 31 December 2023, is as follows:

Baker	tonnes	Ni %	Cu%	Co%	Pd g/t	Pt g/t	As ppm	Ni metal
Proved	-	-	-	-	-	-	-	-
Probable	612,000	2.86	0.24	0.052	0.49	0.20	110	17,500
Total	612,000	2.86	0.24	0.052	0.49	0.20	110	17,500

Note: All figures have been rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

The Ore Reserve is reported using the December 2022 Mineral Resource. The Ore Reserve is evaluated using a cut-off grade of 1.5% Ni, except for an incremental cut-off grade of 1.0% Ni for low grade development necessary for access to mining zones. The inputs used for the NPV in the Ore Reserve study were a A\$35,294/t nickel price (US\$24,000/t at US\$0.68:A\$1.00) and 8% discount rate.

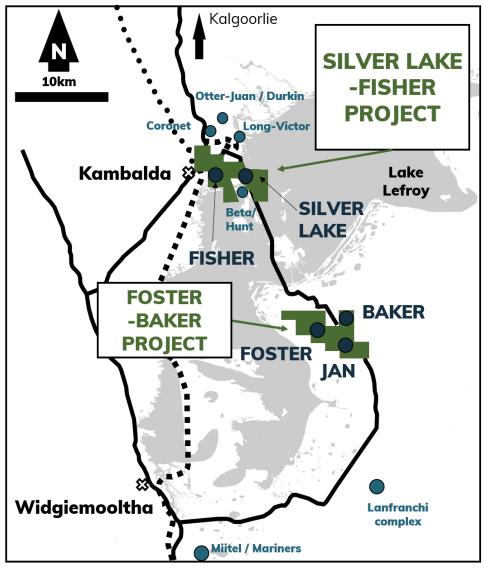


# ABOUT THE KAMBALDA NICKEL PROJECT (KNP)

The Kambalda Nickel Project (**KNP**) (shown in **Figure 4**) features approximately 47km<sup>2</sup> of tenements in the Kambalda Nickel District. KNP is located approximately 570km east of Perth and 50-70km south-southeast of Kalgoorlie, in the Eastern Goldfields of Western Australia. KNP comprises two project areas, Foster and Baker\* (19 contiguous mining leases) and Silver Lake and Fisher+ (20 contiguous mining leases).

The world-renowned Kambalda Nickel District has produced in excess of 1.4 million tonnes of nickel metal since its discovery in 1966 by WMC Resources Ltd (**WMC**). In addition, close to 15Moz of gold in total has been mined, making the Kambalda/St Ives district a globally significant gold camp in its own right.

The KNP is assessed via public roads, well-established mine road infrastructure and the main St Ives causeway over Lake Lefroy. The KNP is broadly surrounded by tenements held by St Ives Gold Mining Co. Pty Ltd (**SIGM**), a wholly owned subsidiary of Gold Fields Limited (**JSE:GFI**) and the Company's major shareholder.



\*SIGM retains rights to explore for and mine gold in the "Excluded Areas", as defined in the subsisting agreements between Lunnon Metals and St Ives, and on the remaining area of the tenements, has select rights to gold in limited circumstances.

<sup>+</sup>The Company has the exclusive rights to nickel on 19 mining leases and related access rights on one additional tenure. Gold Fields retains the rights to the other minerals (except to the extent minerals occur in conjunction with nickel mineralisation or nickel bearing ore but excluding gold).

Figure 4: Regional Location of the Kambalda Nickel Project and other nearby nickel deposits



# **TENEMENT SUMMARY**

# Current Foster/Baker components of the Kambalda Nickel Project (All tenements are in location about 20km south from Kambalda).

Tenement	Location	Nature of Interest*	Interest at beginning of quarter	Interest at end of quarter
M15/1546	Kambalda district, Western Australia	Granted, all mineral rights excepting rights to gold in the "Excluded Areas"	100% legal & beneficial interest	100% legal & beneficial interest
M15/1548	Kambalda district, Western Australia	Granted, all mineral rights excepting rights to gold in the "Excluded Areas"	100% legal & beneficial interest	100% legal & beneficial interest
M15/1549	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1550	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1551	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1553	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1556	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1557	Kambalda district, Western Australia	Granted, all mineral rights excepting rights to gold in the "Excluded Areas"	100% legal & beneficial interest	100% legal & beneficial interest
M15/1559	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1568	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest



Tenement	Location	Nature of Interest*	Interest at beginning of quarter	Interest at end of quarter
M15/1570	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1571	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1572	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1573	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1575	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1576	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1577	Kambalda district, Western Australia	Granted, all mineral rights excepting select rights to gold held by St Ives Gold Mining Co. Pty Ltd	100% legal & beneficial interest	100% legal & beneficial interest
M15/1590	Kambalda district, Western Australia	Granted, all mineral rights excepting rights to gold in the "Excluded Areas"	100% legal & beneficial interest	100% legal & beneficial interest
M15/1592	Kambalda district, Western Australia	Granted, all mineral rights excepting rights to gold in the "Excluded Areas"	100% legal & beneficial interest	100% legal & beneficial interest

\*St Ives Gold Mining Co. Pty Ltd (St Ives) retains rights to explore for and mine gold in the "Excluded Areas" on the Tenements as defined in the subsisting agreements between Lunnon Metals and St Ives. This right extends to gold mineralisation which extends from the Excluded Area to other parts of the Tenements with select restrictions which serve to prevent interference with, or intrusion on, Lunnon Metals' existing or planned activities and those parts of the Tenements containing the historical nickel mines. St Ives has select rights to gold in the remaining areas of the Tenements in certain limited circumstances as described in detail in the Company's Solicitor Report attached to the Prospectus submitted to the ASX dated 22 April 2021 and lodged with the ASX on 11 June 2021.



Tenement	Location	Nature of Interest*	Interest at beginning of quarter+	Interest at end of quarter+
ML15/0142	Kambalda district, Western Australia	Rights of access subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: Fisher mine portal. Access rights only – nickel rights held by BHP Nickel West Pty Ltd.	Beneficial: Fisher mine portal. Access rights only – nickel rights held by BHP Nickel West Pty Ltd.
M15/1497	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1498	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1499	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from 100 m ASL.	Beneficial: 100% of nickel rights from 100 m ASL.
M15/1505	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1506	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1507	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from 150 m ASL.	Beneficial: 100% of nickel rights from 150 m ASL.
M15/1511	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1512*	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from sea level.	Beneficial: 100% of nickel rights from sea level.
M15/1513*	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from -150 m ASL (~425 m depth).	Beneficial: 100% of nickel rights from -150 m ASL (~425 m depth).
M15/1515*	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1516*	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.

# Mineral Rights Agreement - Silver Lake/Fisher (All tenements are in location in the immediate vicinity and/or directly south from Kambalda).



Tenement	Location	Nature of Interest*	Interest at beginning of quarter+	Interest at end of quarter+
M15/1523	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from -250 m ASL (~540 m depth).	Beneficial: 100% of nickel rights from -250 m ASL (~540 m depth).
M15/1524	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from -250 m ASL (~540 m depth).	Beneficial: 100% of nickel rights from -250 m ASL (~540 m depth).
M15/1525	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from -250 m ASL (~540 m depth).	Beneficial: 100% of nickel rights from -250 m ASL (~540 m depth).
M15/1526*	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from -250 m ASL (~540 m depth).	Beneficial: 100% of nickel rights from -250 m ASL (~540 m depth).
M15/1528	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1529*	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1530	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022– tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.
M15/1531*	Kambalda district, Western Australia	Mineral rights to nickel subject to deal announced 12 April 2022 – tenement held 100% by St Ives Gold Mining Co. Pty Ltd	Beneficial: 100% of nickel rights from surface.	Beneficial: 100% of nickel rights from surface.

\* Denotes portion of tenement excluded from Mineral Rights Agreement

<sup>+</sup> Mineral Rights Agreement completed on 4 October 2022.

ASL – denotes above sea level. Surface elevations generally range from 290 m ASL to 300 m ASL for the tenements where the rights are from surface.