

## ASX Release

19 June 2024

# Follow Up Drilling at Liontown

### Highlights

Preparations are complete for the next phase of Resource extension and infill drilling at Liontown. Drilling is to commence on 28 June 2024 and will target gold-copper in the Gap Zone and at Liontown West.

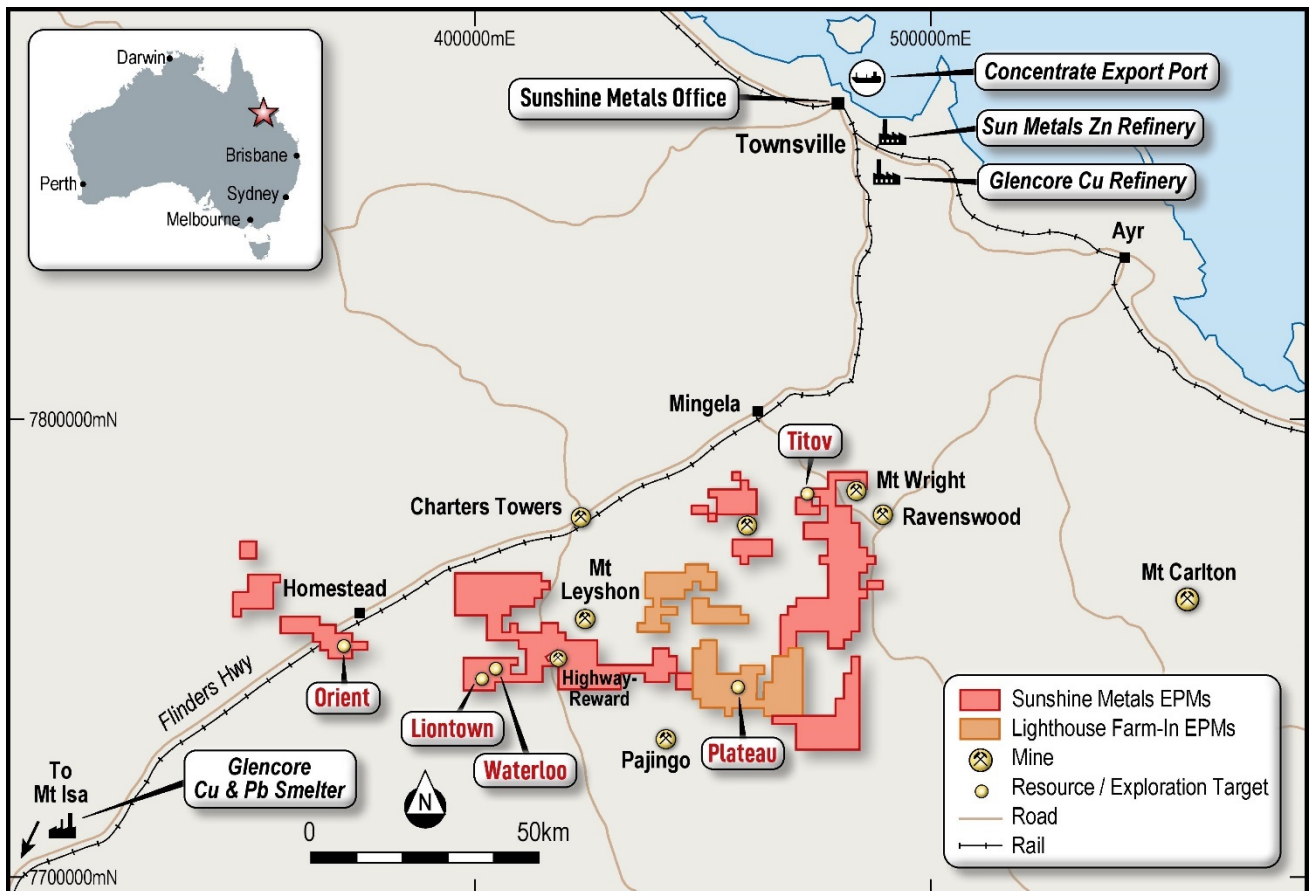
- Resource extension diamond drilling at the Gap Zone (7 holes, ~2,500m) will test along strike of recent drilling that returned thick, high-grade intersections including:
  - **16.2m @ 4.54g/t Au, 1.11% Cu** (from 319m, 24LTDD024)  
Including **6.2m @ 9.00g/t Au, 2.52% Cu** (from 329m, 24LTDD024)
  - **16.7m @ 3.73g/t Au, 0.53% Cu** (from 229m, 24LTDD011)  
Including **7.7m @ 6.43g/t Au, 0.85% Cu** (from 238m, 24LTDD011)
- Resource infill RC drilling at Liontown West (5 holes, ~800m) is targeting Resource upgrades in a gold-copper zone containing broad spaced drilling. Historic drilling has returned results including:
  - **5.0m @ 27.9g/t Au, 1.7% Cu** (from 20m, LRC018)
  - **5.7m @ 8.0g/t Au** (from 76.3m, LTDD22068)
  - **3.0m @ 13.8g/t Au** (from 89m LLRC220)
- Results from this drilling will be incorporated into a Resource update in the December 2024 quarter.
- Sampling of 28 diamond holes from the Au-rich Footwall Lode of Liontown East is underway. Sunshine has demonstrated that mineralisation in this Lode is consistent upon assaying although not easily identified in drill core. Historically, <25% of the prospective gold-copper stratigraphy has been assayed.

**Sunshine Metals Limited (ASX:SHN, "Sunshine") has completed preparations for significant Resource extension and infill drilling programs to commence at Liontown (100%), part of the Ravenswood Consolidated Project.**

**Sunshine Managing Director, Dr Damien Keys**, commented "We are looking forward to recommencing drilling in the coming week. Recent results from the Gap Zone demonstrate the potential for a significant gold-copper Resource.

*The Liontown East footwall sampling program has also commenced. Only 25% of the gold and copper prospective footwall stratigraphy has been previously sampled. The historically sampled portion has produced some impressive results including 7.7m @ 3.45g/t Au, 1.24% Cu.*

*These activities at the Gap Zone, Liontown East and Liontown West are expected to be included in a Resource update/upgrade in the December 2024 quarter. As part of this process, it is planned to report the Au-Cu Footwall Lode portion of the current Liontown Resource in more relevant gold equivalent rather than zinc equivalent terms."*



**Figure 1:** Sunshine's Ravenswood Consolidated Project is near infrastructure and the mining hub of Charters Towers in Queensland. This map shows the easily accessed Liontown prospect ~35km south of Charters Towers.

### Resource Extension Program – Gap Zone

The Gap Zone represents ~400m of strike, located immediately east of the current Liontown Resource yet contains only limited drilling. Diamond drilling (7 holes, ~2,500m) will test along strike of, and above, thick, high-grade gold-copper that was intersected (ASX 4 June 2024) in recent drilling (Figure 2), including:

- **16.2m @ 4.54g/t Au, 1.11% Cu** (from 319m, 24LTDD024)  
Including **6.2m @ 9.00g/t Au, 2.52% Cu** (from 329m, 24LTDD024)
- **16.7m @ 3.73g/t Au, 0.53% Cu** (from 229m, 24LTDD011)  
Including **7.7m @ 6.43g/t Au, 0.85% Cu** (from 238m, 24LTDD011)

These recent Gap Zone holes were drilled ~250m east of the Liontown Resource. The intersections are spaced ~100m vertically apart and ~90m above (24LTDD024) and ~200m (24LTDD011) above a historical intercept that graded:

- **7.6m @ 3.91g/t Au, 1.82% Cu** (from 416.9m, LTDD18012)  
Including **1.75m @ 16.40g/t Au, 6.27% Cu** (from 419.05m, LTDD18012)

The planned Gap Zone holes are designed at a spacing to incorporate the results into an Inferred Resource.

### Resource Infill Program - Liontown West

Resource infill RC drilling at Liontown West (5 holes, ~800m) is targeting Resource upgrades in a gold-copper zone containing broad spaced drilling. Historic drilling has returned results including:

- **5.0m @ 27.9g/t Au, 1.7% Cu** (from 20m, LRC018)
- **5.7m @ 8.0g/t Au** (from 76.3m, LTDD22068)
- **3.0m @ 13.8g/t Au** (from 89m LLRC220)

This program will also follow up on gold intersected in 24LTRC023A (ASX 4 June 2024) which returned:

- **2m @ 6.81g/t Au** (from 12m, 24LTRC023A)

The historic shallow drilling is spaced ~80m apart and this program will tighten the spacing to ~40m.

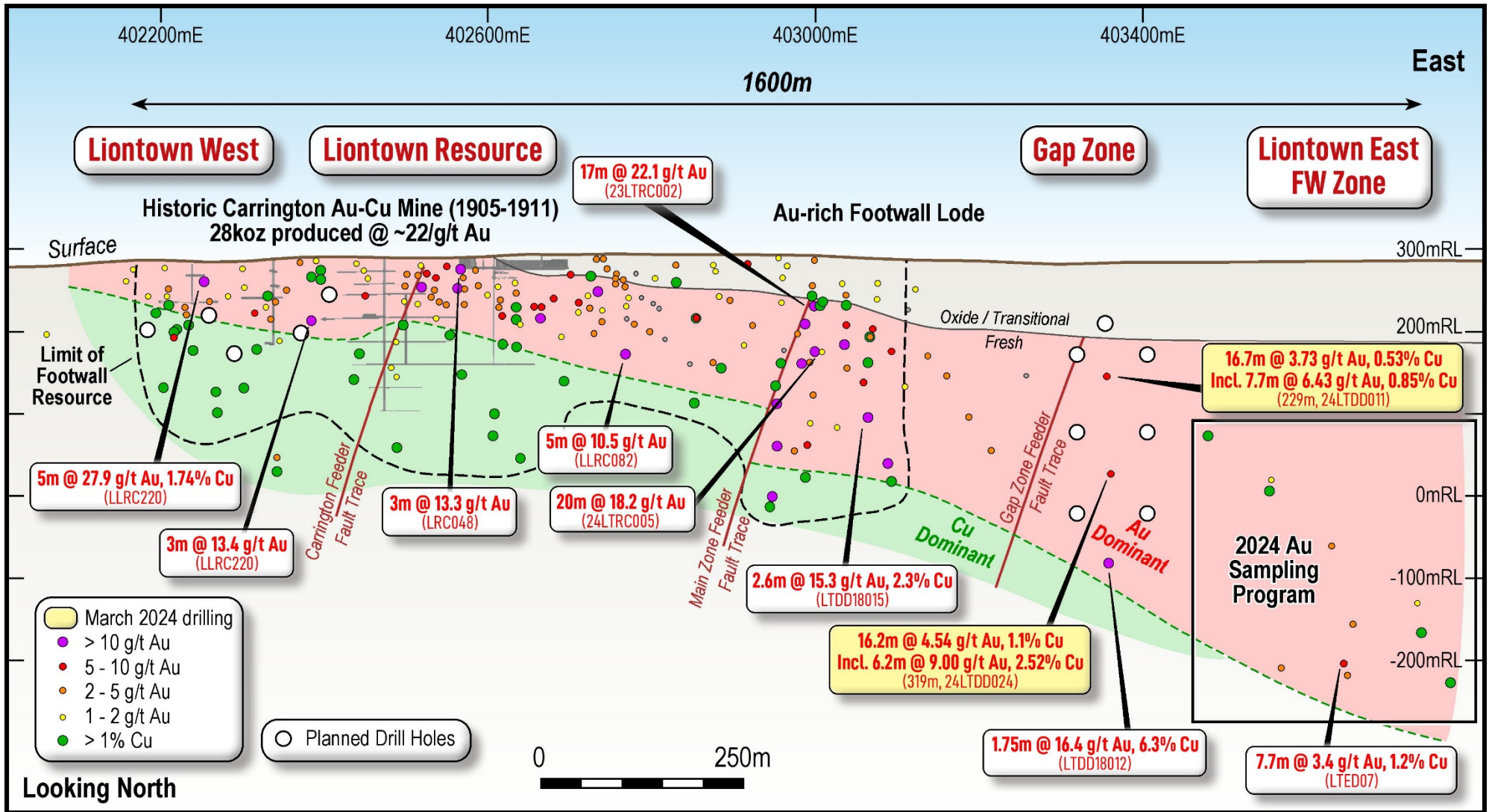
The Liontown West area contains the Carrington and New Queen deposits. The Carrington Lode was mined between 1905 and 1911, producing 28koz @ ~22g/t Au.

### Liontown East Sampling Program

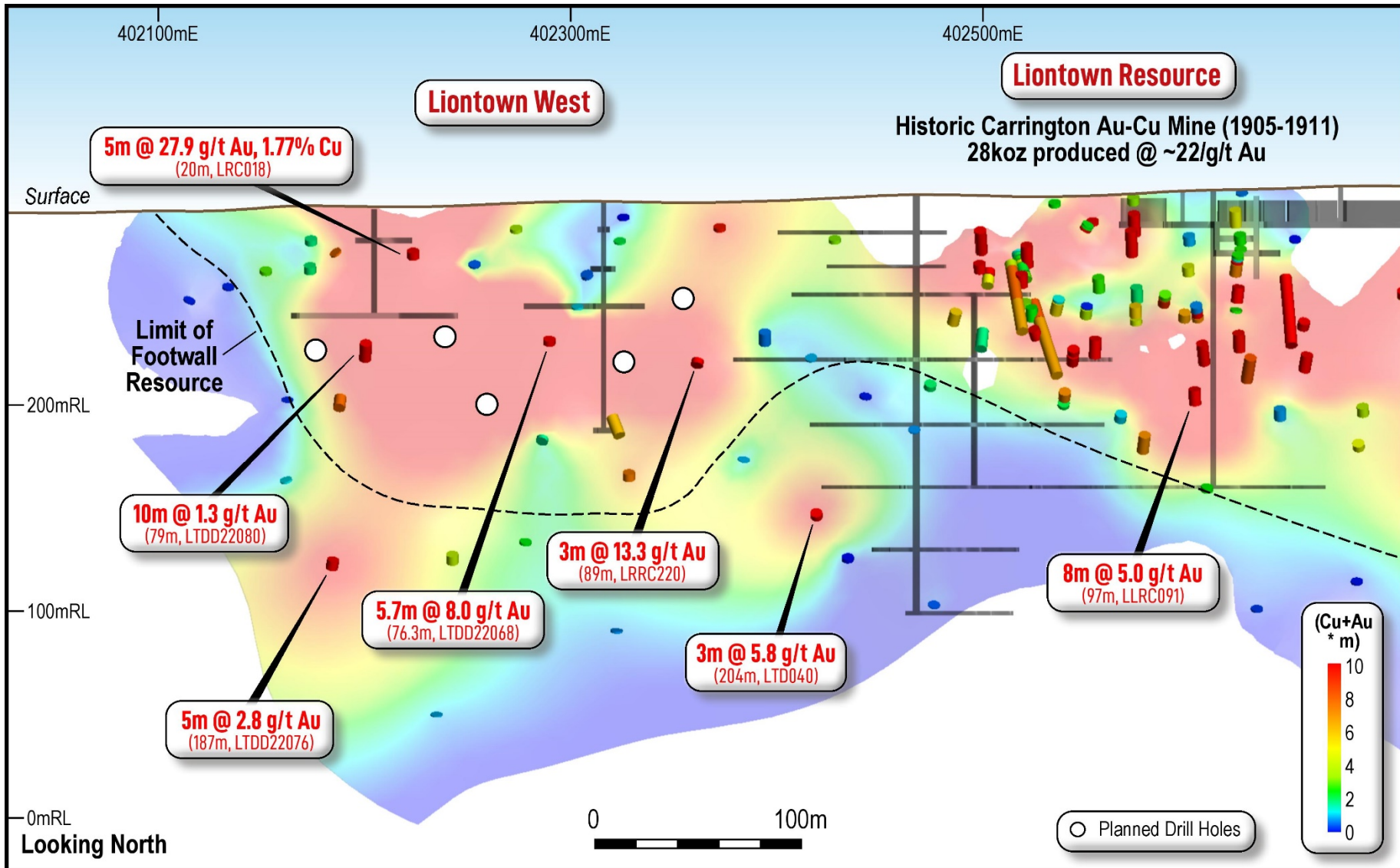
The Au-rich Footwall Lode mineralisation has proven to be consistent upon assaying but is not always easily identified in drill core. Consequently, historic drilling into this Lode is under-sampled. Of 31 holes drilled into the Lode, 28 holes are only partially sampled. In addition, only ~25% of drilling is sampled in the gold-copper prospective stratigraphy. Intersections from the limited samples include:

- **7.7m @ 3.45g/t Au, 1.24% Cu** (from 557m, LTED07)
- **3.35m @ 7.96g/t Au, 0.90% Cu** (from 554.15m, LTED07W1)

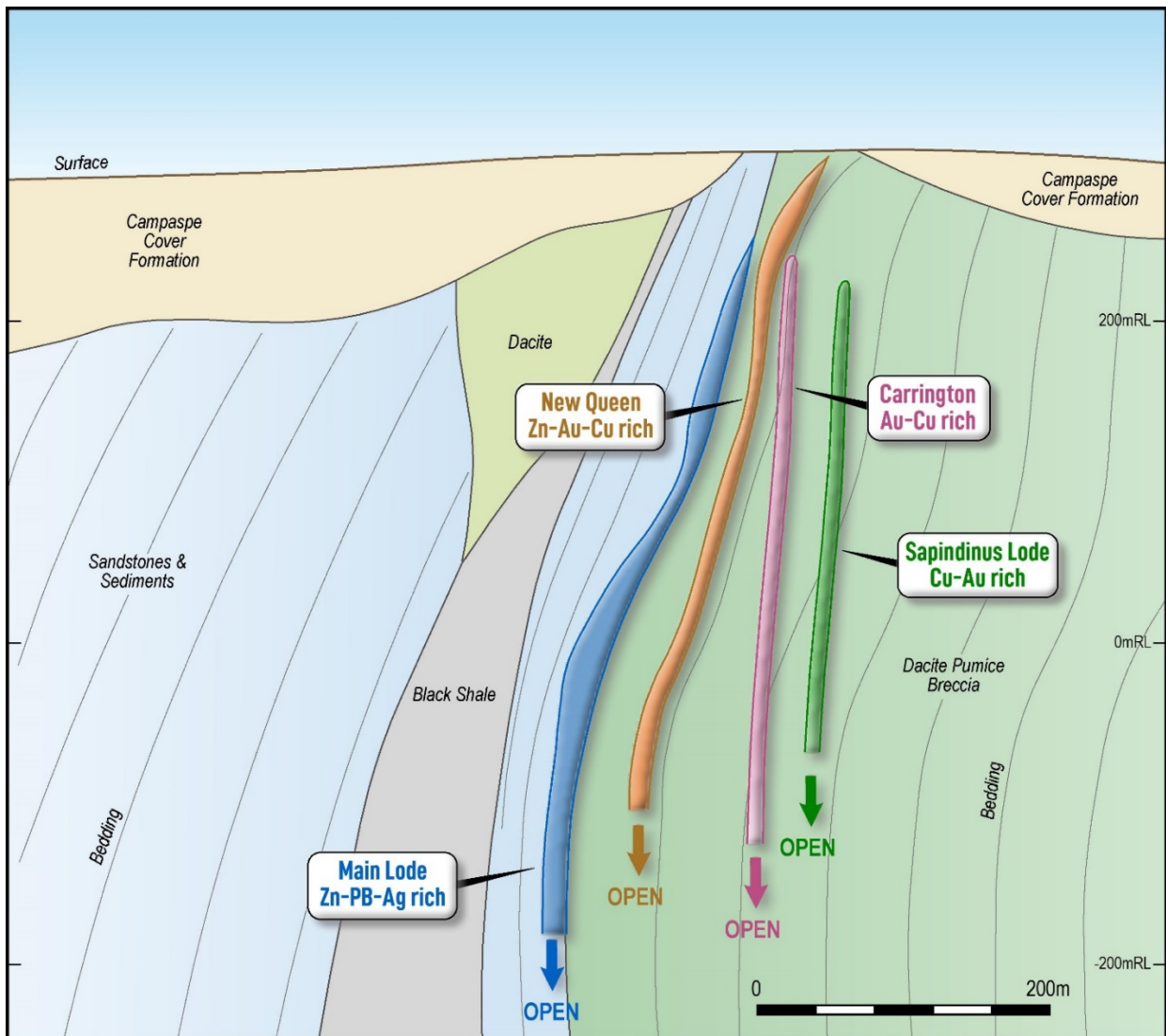
Sampling of historic core is underway.



**Figure 2:** Long section (50m thick) of the ~1,600m long Au-Cu rich footwall horizon extending from the historic Carrington Au-Cu Mine (Liontown Resource), through the recently drilled Au-rich Footwall Lode, the Gap Zone and Liontown East. Planned Resource extension diamond drill holes are shown (white dots). Previously unsampled historic drilling is being sampled in the Au-Cu prospective Liontown East footwall.



**Figure 3:** Long section (20m thick) of the Au-Cu rich footwall horizon at Liontown West, coloured by thickness. Key historic intercepts, historic workings including the Carrington Au-Cu Mine and planned infill RC holes (white dots) are displayed.



**Figure 4:** Schematic cross section (looking west) of the various lodes at Liontown West. Highlighted are the stratigraphy parallel Main (blue) and New Queen (orange) Lodes and the sub-vertical Carrington (pink) and Sapindinus (green) Lodes.

### Planned activities

The Company has a busy period ahead including the following key activities and milestones:

- June-July 2024: Extension drilling at the Gap Zone and infill drilling at Liontown West
- July 2024: Fieldwork update Highway Reward
- July 2024: AMEC presentation Noosa
- July 2024: First assay results Liontown East historic core sampling
- July 2024: Quarterly Report
- July – August 2024: Assay results for the Gap Zone and Liontown West drilling
- August 2024: Drilling commences Highway East
- August 2024: Australian Gold Conference, Sydney

**Sunshine's Board has authorised the release of this announcement to the market.**

For more information, please contact:

Dr Damien Keys  
Managing Director  
Phone: +61 428 717 466  
dkeys@shnmetals.com.au

Mr Alec Pismiris  
Director & Company Secretary  
Phone +61 402 212 532  
alec@lexconservices.com.au

### **Competent Person's Statement**

*The information in this report that relates to Exploration Results is based on, and fairly represents, information compiled by Mr Matt Price, a Competent Person who is a Member of the Australian Institute of Geoscientists (AIG) and the Australian Institute of Mining and Metallurgy (AusIMM). Mr Price has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Price consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

---

## About Sunshine Metals

### Two projects. Big System Potential.

*Ravenswood Consolidated Project (Zn-Cu-Pb-Au-Ag-Mo)*: Located in the Charters Towers-Ravenswood district which has produced over 20Moz Au and 14mt of VMS Zn-Cu-Pb-Au ore. The project comprises:

- a Zn-Cu-Pb-Au VMS Resource of 5.45mt @ 12.0% ZnEq (47% Indicated, 53% Inferred<sup>1</sup>);
- 26 drill ready VMS Zn-Cu-Pb-Au IP geophysical targets where testing of a similar target has already led to the Liontown East discovery (1.47mt @ 11.0% ZnEq, 100% Inferred);
- the under-drilled Liontown Au-rich footwall with significant intersections including:
  - **5.0m @ 27.9g/t Au, 1.7% Cu** (20m, LRC018)
  - **2.0m @ 68.6g/t Au** (24m, LRC0043)
  - **20.0m @ 18.2g/t Au** (109m, 24LTRC005)
  - **17.0m @ 22.1g/t Au** (67m, 23LTRC002)
  - **8.0m @ 11.7g/t Au & 0.9% Cu** (115m, LLRC184)
  - **8.1m @ 10.7g/t Au** (154m, LTDD22055)
  - **16.2m @ 4.54g/t Au, 1.11% Cu** (from 319m, 24LTDD024)
- advanced Au-Cu VMS targets at Coronation and Highway East, analogous to the nearby Highway-Reward Mine (4mt @ 6.2% Cu & 1.0g/t Au mined);
- overlooked orogenic, epithermal and intrusion related Au potential with numerous historic gold workings and drill ready targets; and
- a Mo-Cu Exploration Target at Titov of 5-8mt @ 0.07-0.12% Mo & 0.28-0.44% Cu<sup>2</sup>.

*\*Triumph Project (Au)*: More than 85% of Triumph's Inferred Resource of 118,000oz @ 2.03g/t Au<sup>3</sup> (100% Inferred) is <100m deep and largely located within 1.2km of strike within a 6km long trend. Recent drilling has confirmed Triumph's intrusion-related gold system is analogous to the large Ravenswood Mine (5.6Moz Au Resource).

*\*Investigator Project (Cu)*: Located 100km north of the Mt Isa, home to rich copper-lead-zinc mines that have been worked for almost a century. Investigator is hosted in the same stratigraphy and similar fault architecture as the Capricorn Copper Mine, located 12km north.

*\*Hodgkinson Project (Au-W)*: Located between the Palmer River alluvial gold field (1.35 Moz Au) and the historic Hodgkinson gold field (0.3 Moz Au) and incorporates the Elephant Creek Gold, Peninsula Gold-Copper and Campbell Creek Gold prospects.

*\*A number of parties have expressed interest in our other quality projects. These projects will be divested in an orderly manner in due course.*

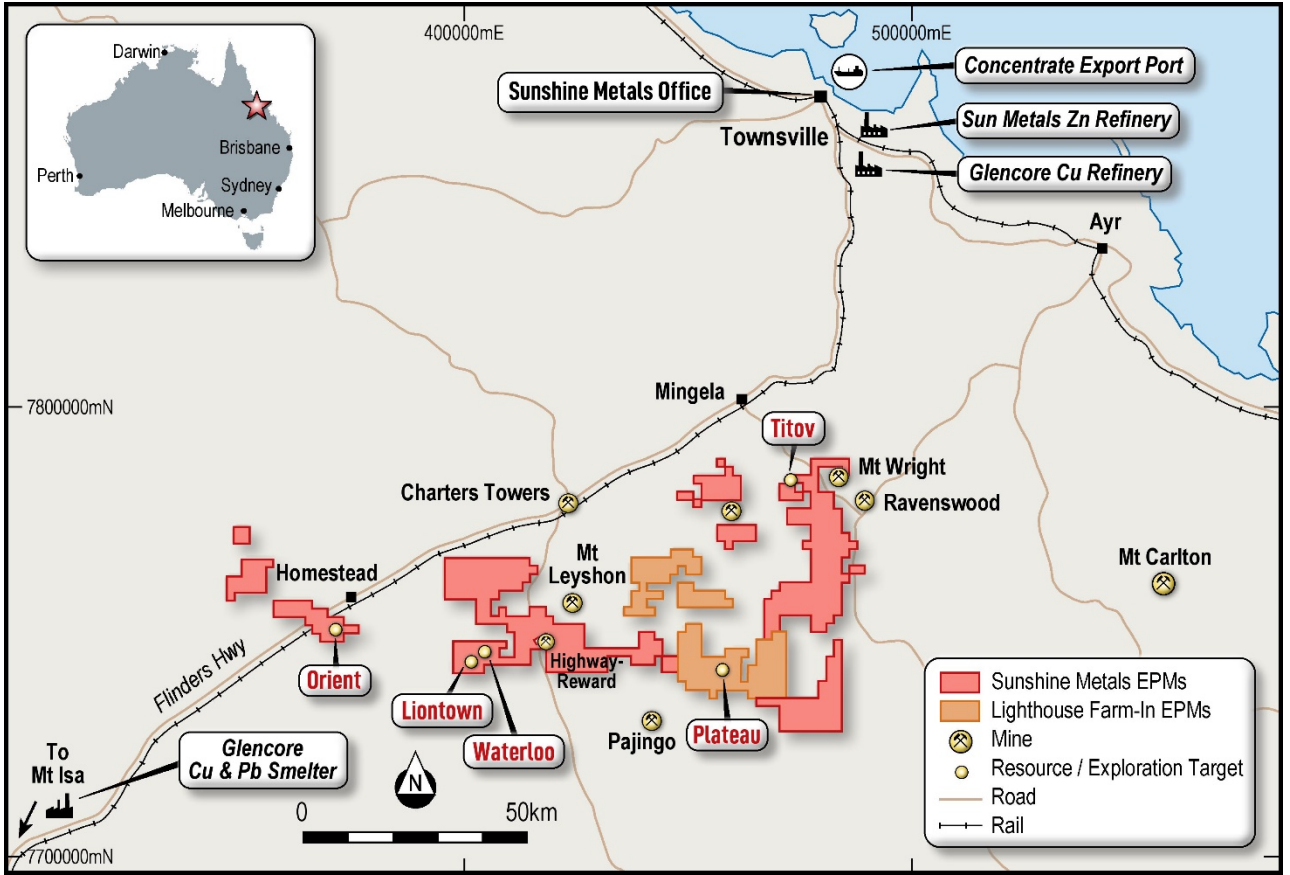
<sup>1</sup> SHN ASX Release, 7 February 2024, "Significant Increase in Liontown Resource".

<sup>2</sup> Cautionary statement: The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code. The potential quantity and grade of the Exploration target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a Mineral Resource. Exploration Target for Titov based on several factors discussed in the corresponding Table 1 which can be found with the original ASX release 21 March 2023 "Shallow High Grade Titov Cu-Mo Exploration Target".

<sup>3</sup> SHN ASX Release, 31 March 2022, "Robust Maiden Resource at Triumph Gold Project".

No new information has been collected and all material assumptions remain unchanged.





**Table 1, Section 1 - Sampling Techniques and Data**

Criteria	Explanation	Commentary
Sampling techniques	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘in industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> – RC drill holes were sampled as individual, 1 m length samples from the rig split. Individual metre samples were collected as a 12.5% split collected from the drill rig. Individual RC samples were collected in calico sample bags and grouped into green plastic bags for dispatch (approximately five per plastic bag).</p> <p>Diamond holes were pre-collared as open-hole 8” PCD through the cover sequence before casing off and drilling as HQ3 for completion of the hole. The hole was sampled in full as half core, with sample intervals selected by the SHN Geologist. The samples were sawn longitudinally in half using the onsite core saw.</p> <p>SHN samples are analysed at Australian Laboratory Services (ALS) in Townsville (Prep &amp; Au) and Brisbane (ME) where samples were crushed to sub 6mm, split and pulverised to sub 75µm. A sub sample was collected for a four-acid digest and ICP-OES/MS analysis of 48 elements, including Ag, Cu, Pb and Zn. Samples were assayed for Au using a 30g or 50g Fire Assay technique. Assays over 100g Au using this technique were re-assayed using gravimetric analysis. Ba over 1% was re-analysed using XRF.</p> <p><b>Historic</b> – Diamond core holes were sampled as half core. The sample intervals were selected by the company geologists based on visual mineralisation and geological boundaries and could range from 0.20m to 1.50m. Samples were sawn longitudinally in half using an onsite core saw and dispatched to Intertek Townsville for analysis. Samples were crushed to sub-6mm, split and pulverised to sub-75µm to produce a representative sub-sample for analysis. Analysis consisted of 30g fire assay with AAS finish for Au and 4-acid digest with ICP-OES analysis all other elements.</p> <p>RC samples were split using a rig-mounted cone splitter on 1m intervals to obtain a sample for assay. Samples were pulverised to sub-75µm to produce a representative sub-sample for analysis. Analysis consisted of 30g fire assay with AAS finish for Au and 4-acid digest with ICP-OES analysis all other elements.</p>
Drilling techniques	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> – Reverse circulation drilling utilising an 8inch open-hole hammer for first 10m (pre-collar) and a 5.5inch RC hammer for the remainder of the drill hole. Diamond holes were pre-collared as open-hole 8” PCD through the cover sequence before casing off and drilling as HQ3 for completion of the hole.</p> <p><b>Historic</b> – Diamond drilling typically comprised of using a PCD bit through the cover sequence (open hole, no recovery), HQ diameter core for parent hole drilling and NQ2 diameter core for daughter holes. Reverse circulation drilling was completed using a 5.5” bit. Hole diameters for RC prior to RVR are unknown.</p>

Criteria	Explanation	Commentary
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> - RC sample recoveries of less than approximately 80% are noted in the geological/sampling log with a visual estimate of the actual recovery. No such samples were reported within the significant intercept zones. Moisture categorisation was also recorded. No wet samples were noted during the program. Diamond drilling recoveries were complete (100%) across the reported significant intercepts.</p> <p><b>Historic</b> – Diamond core sample recovery is measured and recorded by RVR Field Technicians. Negligible sample loss was reported. In RC drilling, moisture content and sample recovery were reportedly recorded for each sample, with no significant sample loss recorded. Significantly wet samples were recorded in drill hole LLRC187 and as such has not been previously reported by SHN.</p>
Logging	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature.</i></p> <p><i>Core (or costean, channel, etc.) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> – The drill core and chip samples from SHN exploration drilling has been geologically and geotechnically logged to a level to support appropriate mineral resource estimation, mining studies and metallurgical studies. Core is logged both qualitatively and quantitatively. Core and chip tray photography is available.</p> <p><b>Historic</b> – Qualitative logging included lithology, alteration and textures; and Quantitative logging includes sulphide and gangue mineral percentages. All drill core was reportedly fully logged and photographed, although each hole has not yet been individually validated by SHN.</p>
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p><b>DRILLING</b></p> <p><b>SHN &amp; Historic</b> – RC samples were split using a rig-mounted cone splitter on 1m intervals to obtain a sample for assay, of approximate weight 3 – 5kg. Samples were pulverised to sub-75µm to produce a representative sub-sample for analysis. Core samples were sawn longitudinally in half using an automated core saw and dispatched to the laboratory for analysis. Samples were crushed to sub-6mm, split and pulverised to sub-75µm to produce a representative sub-sample for analysis.</p>

Criteria	Explanation	Commentary
Quality of assay data and Laboratory tests	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> – Samples are assayed using a 30g or 50g fire assay for gold with AAS finish, which is considered appropriate for this style of mineralisation. Fire assay is considered total assay for gold. Assays reporting over 100g/t Au were re-assayed using gravimetric methods to report a final assay. All other elements are assayed using an ICP-MS/OES, with overrange Ba reported by XRF.</p> <p>Initial QAQC review indicates that all CRMs in and around the major mineralised intersections returned results within acceptable limits. No blanks or duplicates reported results outside of acceptable limits however a review is ongoing.</p> <p><b>Historic</b> – Only certified reference material (CRMs) were used in the QAQC program during the RVR diamond drilling. All reportedly returned results within an acceptable range. SHN has not validated this statement to date. There is no report of Blanks material or field duplicates used in the program. RC drilling used CRMs which reportedly returned results within an acceptable range. Field duplicates were taken as 1 in 40 samples. No sample method or review of these duplicates is reported. No information has been provided or located on historical QAQC programs.</p>
Verification of sampling and assaying	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> – No new drill holes reported within this document have been twinned or were designed as twinned holes. Verification of significant intercepts has been undertaken internally by alternative company personnel.</p> <p><b>Historic</b> – Laboratory results were reviewed by RVR Geologists. Raw assay files were stored on the Company Server and no adjustments were made to assay data.</p>
Location of data points	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> – Drilled holes (excluding 24LTDD024) have been accurately surveyed using GNSS surveying with PPK processing to centimetre-scale accuracy. Hole 24LTDD024 was surveyed using a handheld GPS. Coordinates are displayed within GDA94, Zone 55 format. Downhole surveys were conducted with an industry-standard gyroscopic survey tool.</p> <p><b>Historic</b> – Drill hole collar coordinates were captured using RTK GPS in GDA94, Zone 55 format. Downhole surveys were conducted with a digital magnetic multi-shot camera, typically every 20 – 40m. Topographic control was based on a detailed 3d Digital Elevation Model. The basis of this model is not currently known.</p>

Criteria	Explanation	Commentary
Data spacing and distribution	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p><b>DRILLING</b></p> <p>24LTDD011 and 024 were spaced approximately 100m apart vertically, with 24LTDD024 approximately 90m vertically above historical hole LTDD18012. Drill holes 24LTRC007, 009 and 011 were spaced laterally (E-W) approximately 100m apart.</p> <p>No samples compositing has been applied to the intersections reported.</p>
Orientation of data in relation to geological structure	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> – Drill holes have been designed predominantly to intersect the approximate east-west trend of the known lenses at Liontown at an optimal angle as possible (i.e. perpendicular).</p> <p><b>Historic</b> – Drill holes were oriented perpendicular to the perceived strike of the host lithologies. Drill holes were drilled at a dip based on the logistics and dip of target to be tested. Orientation of drilling was designed to not bias sampling. Orientation of drill core was determined using a digital orientation tool.</p>
Sample security	<p><i>The measures taken to ensure sample security.</i></p>	<p><b>DRILLING</b></p> <p><b>SHN</b> – RC drill samples were collected by the Drill Contractor and then collected on site by the SHN Field Technician. The sample was then validated against a pre-prepared sample sheet to ensure the sample matched the correct interval. Samples were then collected into groups of five and placed in a labelled polyweave bag. The samples were then dispatched from site directly to the lab by SHN field personnel. Diamond core samples are collected at the time of cutting by the SHN Field Technician and validated against a pre-prepared sample sheet. In both cases, samples were then collected into groups of five and placed in a labelled polyweave bag. The samples were then dispatched from site directly to the lab by SHN field personnel.</p> <p><b>Historic</b> - Drill samples were reportedly overseen by RVR staff during transport from site to the laboratory.</p>
Audits or reviews	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p><b>DRILLING</b></p> <p>No audits have been carried out on the newly reported drill results herein.</p>

## Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	<p><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <p><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></p>	<p>Greater Lione town Exploration Permits are: EPMs 10582, 12766, 14161, 16929, 26718, 27168, 27221, 27223, 27357, 27520 and 27731 and Mining Lease Applications 100221, 100290 and 100302 (previously Cromarty) for a total of 463km<sup>2</sup>; and EPMs 18470, 18471, 18713, 25815 and 25895 (previously Hebrides) for a total of 221km<sup>2</sup>. The tenements are in believed to be in good standing and no known impediments exist. These leases are now held in their entirety by Sunshine (Ravenswood) Pty Ltd, a 100% owned subsidiary of Sunshine Metals Ltd.</p> <p>The Thalanga mill and mining operation was abandoned by administrators to Red River Resources. A restricted area has been placed over the mill, dumps and tailings facilities. The Queensland Department of Environment is now responsible for the rehabilitation of the aforementioned facilities. There are no known other Restricted Areas located within the tenure.</p> <p>Five third-party Mining Leases are present exist on these Exploration Permits – named MLs 1571, 1734, 1739 and 10028 (Thalanga Copper Mines Pty Ltd) and 100021 (Clyde Ian Doxford).</p> <p>Lione town, Waterloo and the majority of tenure exist on the native land of the Jangga People #2 claim, with northwestern tenure located on the native land of the Gudjala People.</p> <p>A 0.8% Net Smelter Return (NSR) royalty is payable to Osisko Ventures Ltd and a 0.7% NSR royalty payable to the Guandong Guangxin Mine Resources Group Co Ltd (GMRG) on sale proceeds of product extracted form EPM 14161.</p> <p>The Ravenswood West area consists of EPMs 26041, 26152, 26303, 26404, 27824 and 27825, owned by wholly owned subsidiaries of Sunshine Metals Limited. The tenements are in good standing and no known impediments exist.</p> <p>Two current, third party Mining Leases exist on EPM 26041 – named ML 10243 (Delour) and ML 10315 (Podosky). One further current, third party Mining Lease exists partially on EPM 26152 – named ML 1529 (Waterloo).</p> <p>All of EPM 26303 and part of EPM 26041 are situated within the Burdekin Falls Dam catchment area.</p> <p>The Lighthouse Project consists of EPMs 25617 and 26705. All EPMs are owned 100% by BGM Investments Pty Ltd, a wholly owned subsidiary of Rockfire Resources Limited. No current Mining Leases exist on the tenure. South-eastern blocks on EPM 26705 are situated within the Burdekin Falls Dam catchment area. Sunshine Metals has the option to earn 75% of the project.</p>
Exploration done by other parties	<p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p>Exploration activities have been carried out by Nickel Mines (1970-1973), Esso (1982-1983), Great Mines (1987), Pancontinental (1994-1995), and Lione town Resources (2007). Work programs included surface mapping, and sampling, costeans, drilling and geophysics.</p> <p>Historic exploration was carried out by Esso Exploration and Pancontinental Mining. This included drilling and geophysics. Historic drilling over the Lione town East area is shallow and did not intercept the current Mineral Resource mineralisation.</p>
Geology	<p><i>Deposit type, geological setting and style of mineralisation.</i></p>	<p><b>LIONTOWN AND LIONTOWN EAST RESOURCE</b></p> <p>The Lione town and Lione town East deposits are hosted within Cambro-Ordovician marine volcanic and volcano-sedimentary sequences of the Mt Windsor Volcanic sub-province. The Lione town and Lione town East deposits are volcanogenic massive</p>

Criteria	Explanation	Commentary
		<p>sulphide (VMS) base metal style deposits, which typically are exhibited as lense-like massive to stringer sulphides comprised of sphalerite, galena, chalcopyrite and pyrite. The main lenses are in and around the contact a sequence of marine sediments and a rhyodacite pumice breccia. SHN is currently focussing on the zonation of the deposit, with aim of identifying potential Cu-Au rich zones which could represent feeder zones to the overlying stratiform sulphide lenses.</p>
<p>Drill hole Information</p>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drill hole collar</i></li> <li>• <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>• <i>dip and azimuth of the hole</i></li> <li>• <i>down hole length and interception depth</i></li> <li>• <i>hole length.</i></li> </ul> <p><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case</i></p>	<p>No new drill hole information in this release.</p>
<p>Data aggregation methods</p>	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p>	<p>All grades and intercepts referred to in this document are as reported in their associated historical documents. No further adjustments or assumptions have been made.</p> <p>The zinc equivalent grades for Greater Liontown (Zn Eq) are based on zinc, copper, lead, gold and silver prices of US\$2500/t Zinc, US\$8500/t Copper, US\$2000/t Lead, US\$1900/oz Gold and US\$20/oz Silver with metallurgical metal recoveries of 88.8% Zn, 80% Cu, 70% Pb, 65% Au and 65% Ag and are supported by metallurgical test work undertaken.</p> <p>The zinc equivalent calculation is as follows: <math>Zn\ Eq = Zn\ grade\% * Zn\ recovery + (Cu\ grade\% * Cu\ recovery\% * (Cu\ price\ \\$/t / Zn\ price\ \\$/t)) + (Pb\ grade\% * Pb\ recovery\% * (Pb\ price\ \\$/t / Zn\ price\ \\$/t)) + (Au\ grade\ g/t / 31.103 * Au\ recovery\% * (Au\ price\ \\$/oz / Zn\ price\ \\$/t * 0.01)) + (Ag\ grade\ g/t / 31.103 * Ag\ recovery\% * (Ag\ price\ \\$/oz / Zn\ price\ \\$/t * 0.01))</math>.</p>

Criteria	Explanation	Commentary
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	It is the opinion of Sunshine Metals and the Competent Person that all elements and products included in the metal equivalent formula have a reasonable potential to be recovered and sold.
Relationship between mineralisation widths and intercept length	<i>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	At Liantown, the mineralisation is typically east-west and either stratabound and interpreted to be dipping at ~70 degrees roughly south or potentially related to feeder structures exhibiting a sub-vertical dip.. The exact orientation of any feeder structures to the VMS lenses remain under interpretation. Geological and structural understanding is an ongoing process and observations and interpretations within may be modified over time.  Drill holes have been designed to intercept the mineralisation as close to perpendicular as possible and where down hole intercepts are reported, true widths are likely to be ~75%. The typical drill sample interval is 1m in length. At Liantown East the average downhole thickness of the mineralised zone is 8.2m.
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	All diagrams are located within the body of this report
Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	All drill intercepts are recorded within the body of this report
Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics;</i>	All meaningful and material data is reported within the body of the report.  For the latest resource update at the Liantown deposit, please refer to: <ul style="list-style-type: none"> <li>ASX: SHN, 7<sup>th</sup> February 2024, Significant Increase in Liantown Resource</li> </ul> For the most recent previous releases outlining SHN drill assay results please refer to: <ul style="list-style-type: none"> <li>ASX:SHN, 4<sup>th</sup> June 2024, Step Out Holes Hit Thick High-Grade Gold-Copper Liantown</li> <li>ASX: SHN, 24<sup>th</sup> November 2023, 17m @ 22.1g/t Au Confirms Liantown Feeder Zone</li> <li>ASX: SHN, 13<sup>th</sup> March 2024, 20m @ 18.21g/t Au Extends Au-Cu Rich Footwall at Liantown</li> </ul>



Criteria	Explanation	Commentary
	<i>potential deleterious or contaminating substances.</i>	For a detailed summary on the historical Lontown and Lontown East Mineral Resource Estimates, please refer to: <ul style="list-style-type: none"> <li>ASX: SHN, 8<sup>th</sup> May 2023, Fully Funded Acquisition of Greater Lontown</li> </ul>
Further work	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Further drilling will be required to test geological interpretation and targeting of potential Au-rich feeder structures and to provide more data within the Gap Zone and Sapidinus Lode for future resource definition.