**Sunshine Metals Limited**
ABN 12 063 388 821
1/23 Mackley Street,
Garbutt, Qld 4814

ASX: SHN
+61 8 6245 9828
info@shnmetals.com.au
**shnmetals.com.au**



## ASX Release

**28 January 2025**

# New interpretation near Liontown firms up targets

**Highlights –**

- A new interpretation of the Au-Cu-Zn prospective stratigraphic contact at Liontown proposes that tight folding has formed a 3.5km long dome. The folded contact is sparsely drilled to the north (stratigraphically along strike) from the 6mt @ 3.6g/t AuEq (700koz AuEq)[1] Liontown Resource.
- Beyond Liontown, a further 5 targets (being Tigertown, Cougartown, Cougartown West, Lynx, Liontown North) are situated on or immediately adjacent to the prospective domed contact. In addition, historic workings are found at Tigertown, Cougartown and Lynx.
- Only ~2km of the 8km contact has been drilled at Liontown, Liontown East, Cougartown and Cougartown West. Limited drilling has also been conducted at Tigertown. Best intersections from the limited drilling completed include:
    - 17m @ 3.05 g/t Au from 22m (LLRC003, Tigertown)
    - 33m @ 1.95 g/t Au from 12m (MWR037, Tigertown)
    - 2m @ 1.81 g/t Au, 9.54% Zn, 2.06% Pb from 54m (LCP501, Cougartown)
- Drilling is set to commence at Tigertown in February 2025.

**Sunshine Metals Limited (ASX:SHN, "Sunshine") has identified 6km of untested, Au-Cu-Zn prospective stratigraphic contact near Liontown, part of the Ravenswood Consolidated Project. Drilling is set to commence at the shallow Tigertown gold target in February 2025.**

**Sunshine Managing Director, Dr Damien Keys**, commented *"The reinterpretation of existing data to generate first class targets is an exciting development at Liontown.*

*Delineating key stratigraphic contacts is critical in VMS exploration. Our team has collated multiple datasets and propose that the Liontown contact has been intensely folded and repeats ~500m north of the current Liontown Resource. We believe the folded stratigraphy forms a dome geometry – the Liontown dome.*

*The northern margin of the Liontown dome is poorly tested, with drilling limited to four 500m spaced lines of aircore drilling and 5 RC holes. Despite the broad spacing, a best intercept of 4m @ 0.65g/t Au (24m, LLRC162) demonstrates the potential fertility of the contact at Liontown North.*

*The Liontown dome concept and targets that will be evaluated during 2025 include Tigertown, Cougartown, Cougartown West, Lynx and Liontown North. Drilling will commence in February 2025 at Tigertown."*

[1] Refer to SHN ASX release 11 December 2024, "904koz AuEq Resource at Ravenswood Consolidated". No new information or data that materially affects estimate. In relation to estimates of mineral resources, Sunshine confirms that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

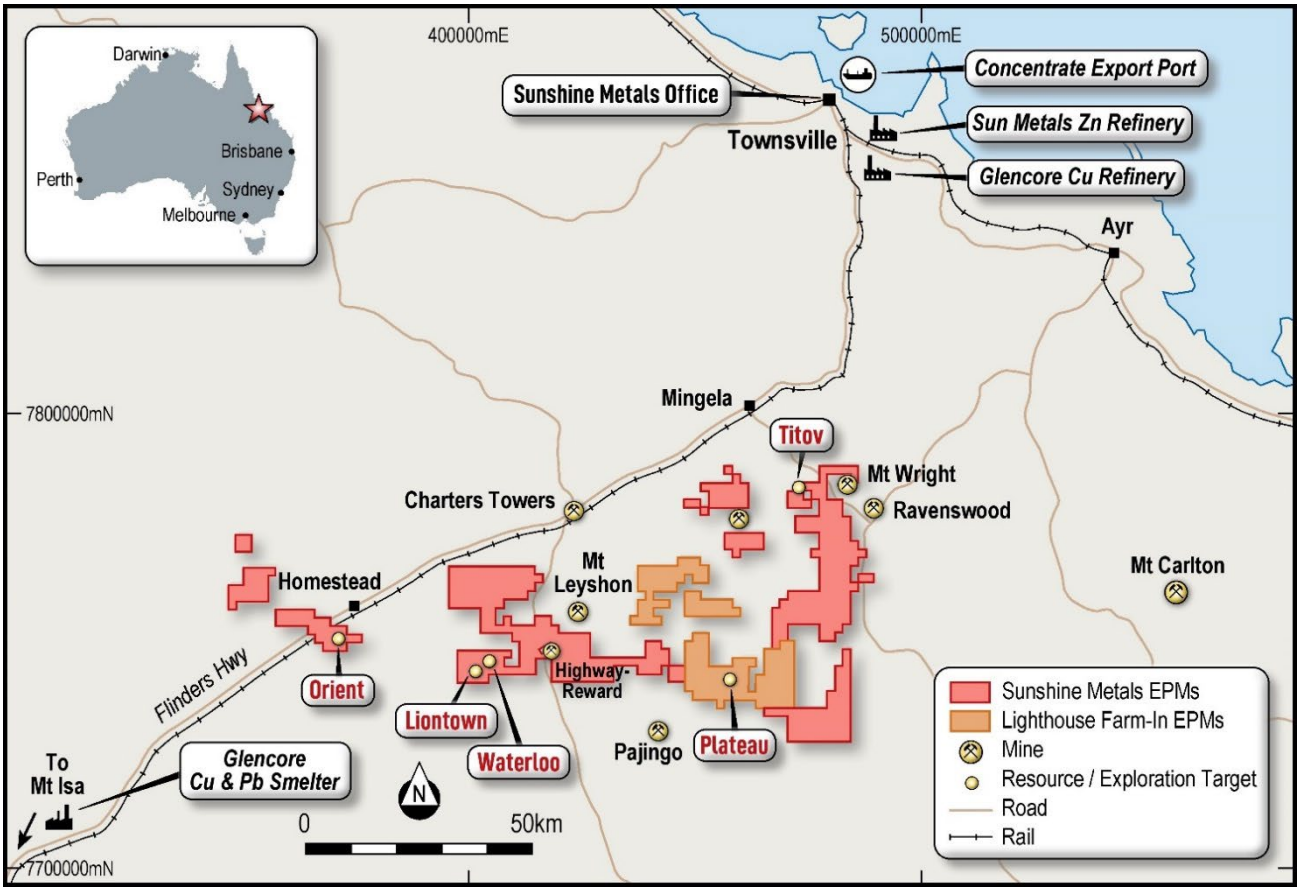



*Figure 1: Sunshine's Ravenswood Consolidated Project is near infrastructure and the mining hub of Charters Towers in Queensland. This map shows the easily accessed Liontown prospect ~35km south of Charters Towers.*

## Liontown Dome Geology

Gold was first discovered at Liontown in 1905. Geological interpretation dates back to 1952[2] and displays stratigraphy trending broadly east-west through the Liontown area.

Sunshine's new concept is that the stratigraphy is tightly folded, with a fold closure located on the eastern edge of the Liontown East Resource. The location of the fold closure is under shallow cover and is most prominent in IP resistivity, where deeper weathering on the volcanic-sediment contact expresses as a zone of low resistivity (see Figure 2). The fold can also be seen in magnetic data.

A second fold closure is thought to be located 2km west of the Liontown Resource. This closure is inferred from geometry of the contact and associated workings and from magnetic data. No modern IP data has been collected that would validate this western closure.

The two folds form a dome like geometry, with ~8km of prospective contact along the margin. The dome is ~3.5km in length and ~500m in width across the fold axis (Figure 3 & 4). Soil anomalism is particularly effective in areas lacking young cover, with base metal anomalism seen in exposed sequences at Cougartown and Lynx (Figure 5).

[2] Broken Hill South Ltd Mines Exploration Pty Ltd. Liontown Investigation, 1952 (CR105).

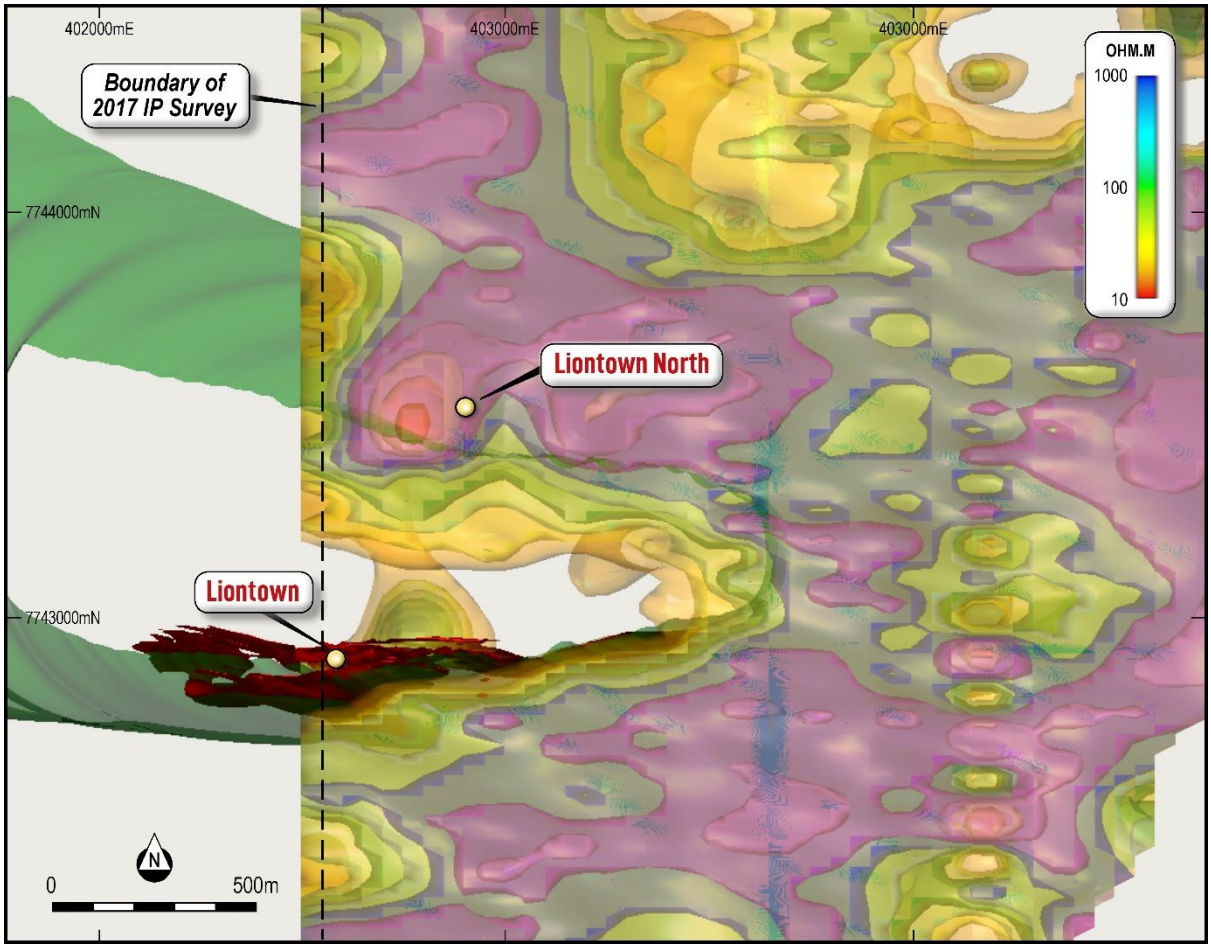



***Figure 2:*** *The Liontown Resource (red) is located within 100m of the volcanic – sediment contact (green surface). Contours display show a zone of low IP resistivity, interpreted to be deeper weathering on the contact. The zone of low resistivity appears folded immediately east of the Liontown Resource, an interpretation supported by magnetics and geological information from aircore drilling.*

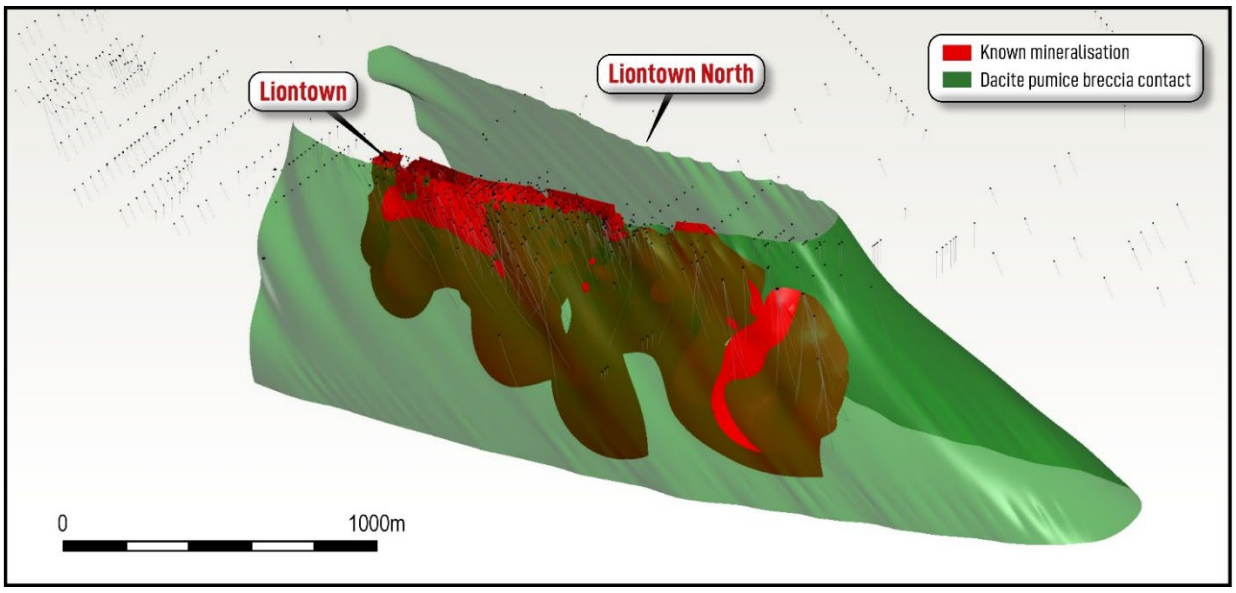



***Figure 3:*** *3D model of the eastern end of the Liontown Dome, showing the prospective contact (green) and the Liontown Resource (red).*

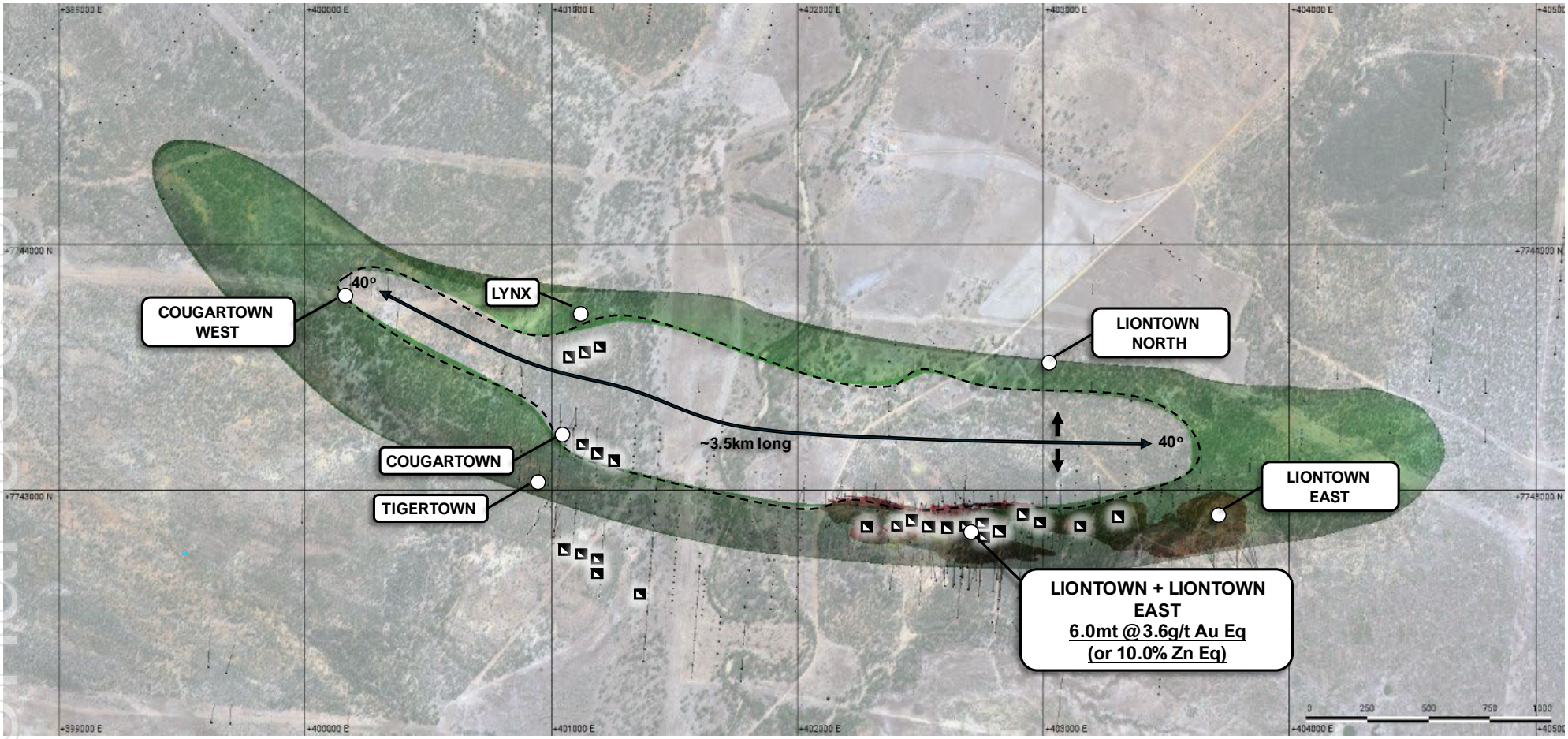



*Figure 4: Plan view of the Liontown dome (green surface) showing key prospects and historic workings (black/white squares).*

## Liontown Dome – Exploration Implications

The interpretation of the dome geometry, and particularly a fold closure at Liontown East, has significant implications for targeting deposits and extensions to the Liontown Resource. The entire northern contact of the Liontown dome has seen limited drilling, confined to 17 aircore holes and 5 RC holes. The aircore holes are drilled 200m apart on four 400m spaced lines.

Despite the sparsity of the drilling, one intersection from Liontown North (Figure 5) returned:

- 4m @ 0.65 g/t Au from 24m (LLRC162, Liontown North)

The intersection occurs in the footwall of the volcanic contact, in a similar stratigraphic position to the Au-rich Carrington horizon at Liontown. An historic VTEM anomaly is also located at Liontown North making it a high priority drill target for 2025.

Lynx is located on the northern margin of the dome (Figure 4). The Lynx target is comprised of a base metal soil anomaly and is adjacent to 3 historic shafts (Figure 4 & 5). Lynx remains undrilled. Sunshine will complete first pass reconnaissance mapping and sampling at Lynx in February 2025.

Further historic workings are present at Cougartown and Tigertown (Figure 4), on the southern dome margin and ~1.2km west of Liontown. Limited drilling to date has returned intersections including:

- 17m @ 3.05 g/t Au from 22m (LLRC003, Tigertown)
- 33m @ 1.95 g/t Au from 12m (MWR037, Tigertown)
- 2m @ 1.81 g/t Au, 9.54% Zn, 2.06% Pb from 54m (LCP501, Cougartown)

Elevated Ag in drilling has been historically intersected, ~800m southeast along the Tigertown trend. Intersections include:

- 3m @ 301 g/t Ag from 18m (LLRC032, Tigertown trend)
  & 3m @ 796 g/t Ag, from 33m (LLRC032, Tigertown trend)
- 2m @ 440 g/t Ag, from 96m (LLRC040, Tigertown trend)

The 1km of contact between Cougartown and Liontown is under drilled and presents an opportunity for Liontown Resource growth. A recent fixed loop electromagnetic survey[3] has highlighted the potential for copper-rich mineralisation to the west of the Liontown Resource.

Cougartown West is a target on the far western end of the dome, 1km northwest of Cougartown and 2.2km northwest of Liontown. The target is a centred on a base metal soil anomaly and to date has been tested with only 8 RC holes. The best intersection was:

- 32m @ 3.05% Zn, from 69m (CWRC002, Cougartown West)

A 2017 IP survey does not cover the western portion of the dome. The survey generated 30 anomalies and was pivotal in the Liontown East discovery (now 1.5mt @ 4.0g/t AuEq Resource). Further IP surveys are planned for 2025, to cover the dome and to refine drill targets.

[3] Refer to SHN ASX release 26 November 2024, "Gap Zone grows, EM delineates next growth target - Liontown"

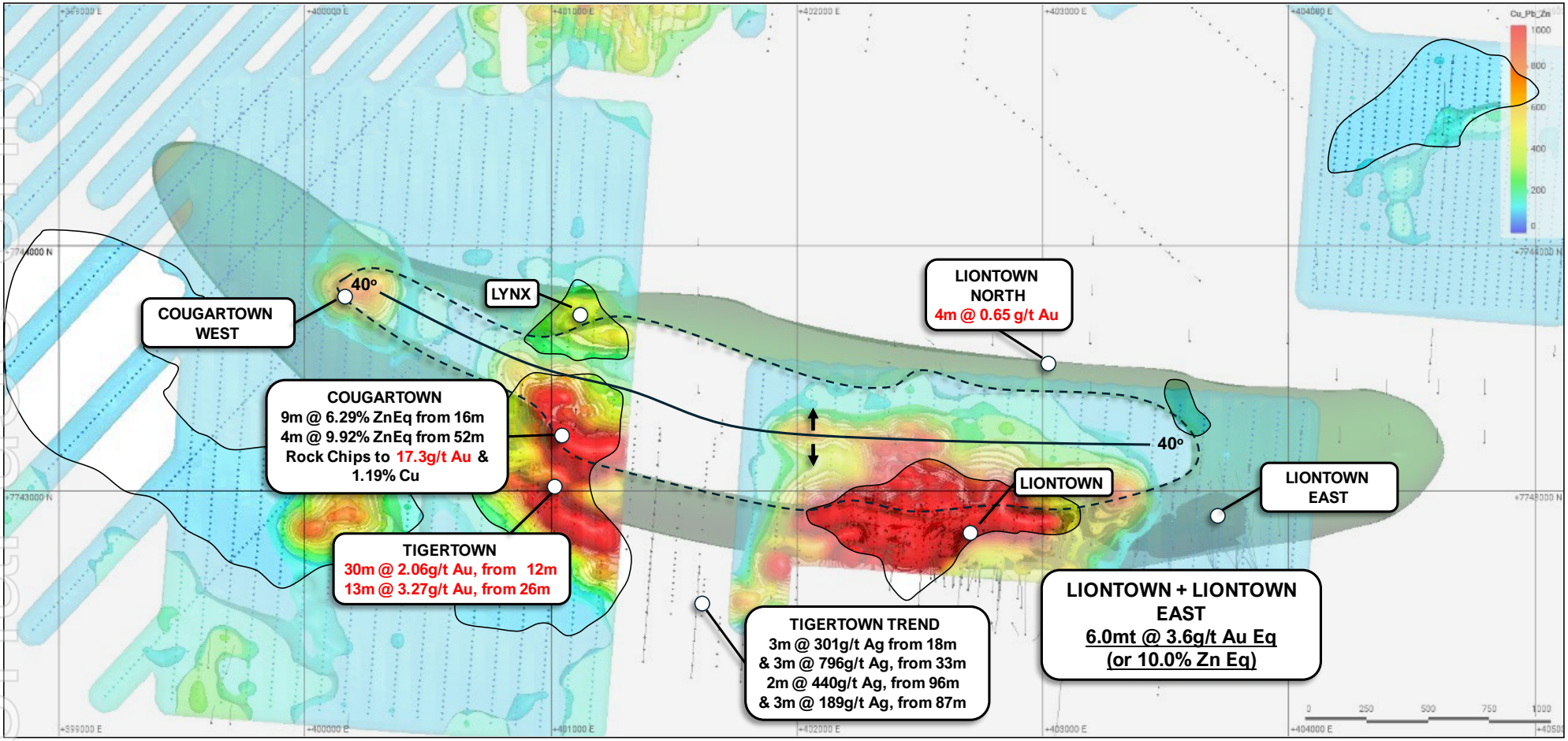



***Figure 5:*** *Plan view of the Liontown dome, showing contoured soil anomalism (Cu ppm + Zn ppm + Pb ppm in soils) with key prospects and historic drilling results annotated. Areas of outcrop or subcrop (effective soil sampling) are highlighted within the black outlined shapes.*

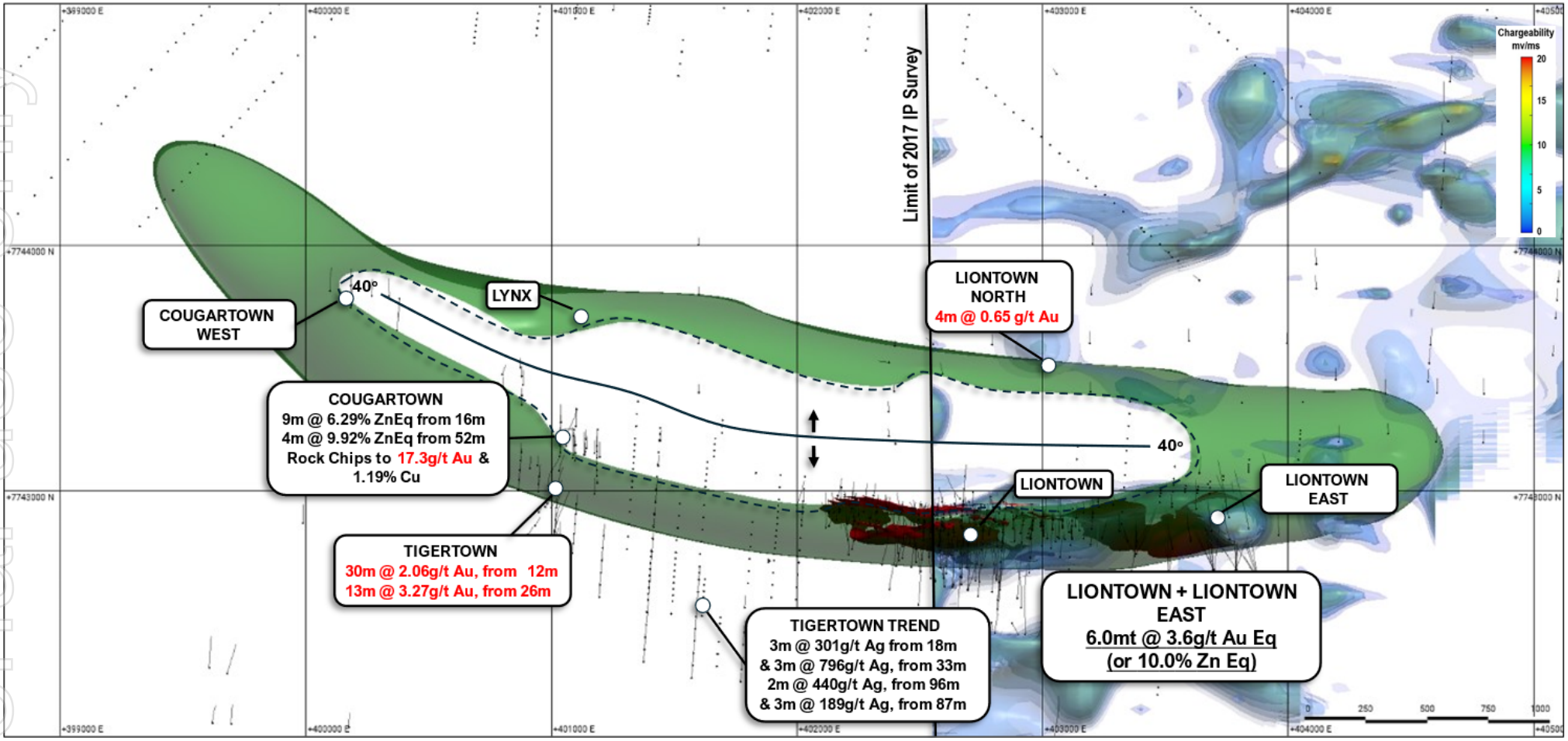



*Figure 6: Plan view of the Liontown dome (green surface) showing the extents of a modern IP survey completed in 2017. An extension of the IP survey to encompass the western dome, is planned for 2025.*

## Planned activities

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

- January 2025: Quarterly Activities Report and Financials
- February 2025: Early 25 exploration plan
- February 2025: Geophysical survey results from Coronation/Coronation South
- February 2025: Drilling commences Tigertown
- March 2025: Liontown dome mapping update
- March 2025: Drilling results Tigertown

**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 Shaun Menezes
Company Secretary
Phone +61 8 6245 9828
smenezes@shnmetals.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

**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:

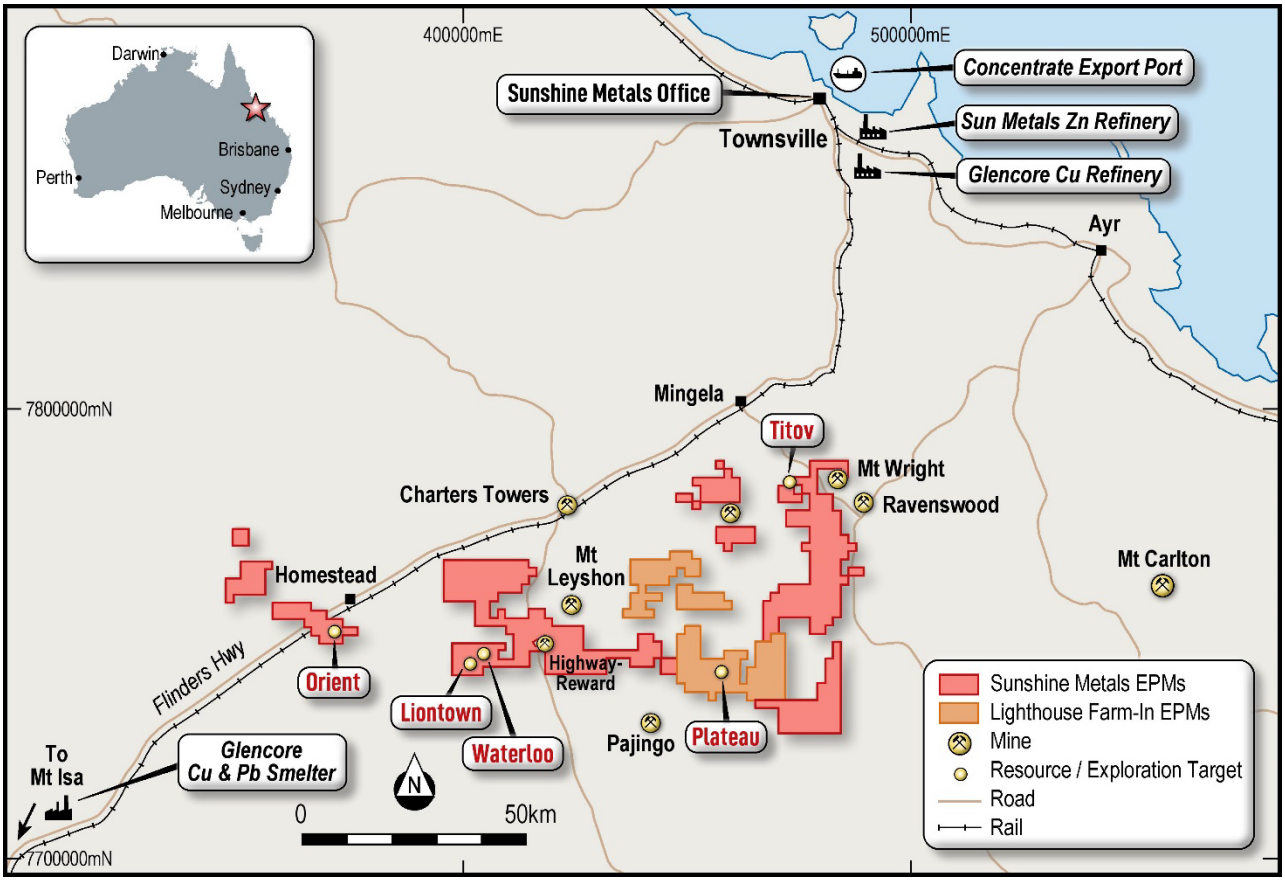
- a Zn-Cu-Pb-Au VMS Resource of 7.0mt @ 4.0g/t Au (904koz AuEq) or 11.1% ZnEq (42% Indicated, 58% Inferred[4]);
- 26 drill ready VMS Zn-Cu-Pb-Au IP geophysical targets where testing of a similar target has already led to the Liontown East discovery (1.47mt @ 11.0% ZnEq, 100% Inferred[4]);
- the under-drilled Liontown Au-rich footwall with significant intersections including:
  - **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)
  - **5.0m @ 27.9g/t Au, 1.7% Cu** (20m, LRC018)
  - **2.0m @ 68.6g/t Au** (24m, LRC0043)
- advanced Au-Cu VMS targets at Coronation and Highway East, analogous to the nearby Highway-Reward Mine (3.9mt @ 5.3% Cu & 1.1g/t Au mined);
- overlooked orogenic, epithermal and intrusion related Au potential with numerous historic gold workings and drill ready targets; and

**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 (Investigator Cu and Hodgkinson Au-W). These projects will be divested in an orderly manner in due course.*

[4] This announcement contains references to exploration results and estimates of mineral resources that were first reported in Sunshine's ASX announcement dated 11 December 2024. Sunshine confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement. In relation to estimates of mineral resources, Sunshine confirms that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Metal equivalent calculation on next page.




## *Recoverable Gold & Zinc Equivalent calculations*

*The gold and zinc equivalent grades for Greater Liontown (g/t AuEq, % ZnEq) are based on the following prices: US$2,900t Zn, US$9,500t Cu, US$2,000t Pb, US$2,500oz Au, US$30oz Ag.*
*Metallurgical metal recoveries are broken into two domains: copper-gold dominant and zinc dominant. Each domain and associated recoveries are supported by metallurgical test work and are: Copper-gold dominant – 92.3% Cu, 86.0% Au, Zinc dominant 88.8% Zn, 80% Cu, 70% Pb, 65% Au, 65% Ag.*

*The AuEq calculation is as follows: AuEq = (Zn grade% * Zn recovery * (Zn price $/t * 0.01/ (Au price $/oz / 31.103))) + (Cu grade % * Cu recovery % * (Cu price $/t/ (Au price $/oz / 31.103))) + (Pb grade % * Pb recovery % * (Pb price $/t/ (Au price $/oz / 31.103))) + (Au grade g/t / 31.103 * Au recovery %) + (Ag grade g/t / 31.103 * Ag recovery % * ((Ag price $/oz / 31.103 / (Au price $/oz / 31.103)))*

*The ZnEq calculation is as follows: ZnEq = (Zn grade% * Zn recovery) + (Cu grade % * Cu recovery % * (Cu price $/t/ Zn price $/t * 0.01))) + (Pb grade % * Pb recovery % * (Pb price $/t/ Zn price $/t * 0.01)) + (Au grade g/t / 31.103 * Au recovery % * ((Au price $/oz / 31.103) / Zn price $/t * 0.01))) + (Ag grade g/t /31.103 * Ag recovery % * ((Ag price $/oz / 31.103) / Zn price $/t * 0.01)).*

*For Waterloo transition material, recoveries of 76% Zn, 58% Cu and 0% Pb have been substituted into the ZnEq formula. For Liontown oxide material, recoveries of 44% Zn, 40% Cu and 35% Pb have been substituted into the ZnEq formula. Further metallurgical test work is required on the Liontown oxide domain. It is the opinion of Sunshine and the Competent Person that the metals included in the ZnEq formula have reasonable potential to be recovered and sold.*

*The Ravenswood Consolidated VMS Resource is comprised of 7.0mt @ 1.3g/t Au, 0.9% Cu, 5.5% Zn, 1.7% Pb and 31g/t Ag (11.1% ZnEq). For further details refer to SHN ASX Release, 11 December 2024, "904koz AuEq Resource at Ravenswood Consolidated".*

## APPENDIX 1 – DRILL HOLES REFERENCED

| Hole ID | East | North | RL | Depth (m) | Dip | Azimuth (Grid) |
|---|---|---|---|---|---|---|
| **CWRC002** | 400,182 | 7,743,745 | 293 | 136.0 | -60 | 000 |
| **LCP501** | 401,093 | 7,743,186 | 293 | 102.0 | -61 | 000 |
| **LLRC003** | 401,024 | 7,742,983 | 289 | 94.0 | -60 | 013 |
| **LLRC004** | 401,021 | 7,742,933 | 290 | 100.0 | -60 | 016 |
| **LLRC032** | 401,593 | 7,742,539 | 286 | 100.0 | -60 | 005 |
| **LLRC034** | 400,912 | 7,743,092 | 292 | 100.0 | -60 | 005 |
| **LLRC040** | 401,589 | 7,742,489 | 287 | 98.0 | -60 | 005 |
| **LLRC162** | 402,593 | 7,743,477 | 295 | 90.0 | -60 | 348 |
| **MWR037** | 401,006 | 7,742,990 | 290 | 50.0 | -60 | 033 |

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

| Criteria | Explanation | Commentary |
|---|---|---|
| Sampling techniques | *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.*<br><br>*Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br><br>*Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'in dustry 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.* | **DRILLING**<br>**SHN** – 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 polyweave bags for dispatch (approximately five per bag).<br>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.<br>SHN samples are analysed at Australian Laboratory Services (ALS) in Townsville (Prep & 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 Fire Assay technique. Assays over 100g Au using this technique were re-assayed using gravimetric analysis. Ba over 1% was re-analysed using XRF.<br><br>**Historic** – 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.<br>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.<br><br>**GEOPHYSICS**<br>**Historic IP** – Induced polarisation (IP) surveys conducted between December and March 2017. Surveys were conducted by Fender Geophysics Pty Ltd and supervised by Red River and Montana GIS Pty Ltd personnel. The surveys targeted known mineralisation, interpreted mineralised lenses and areas of no known mineralisation. |
| Drilling techniques | *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.).* | **DRILLING**<br>**SHN –** 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. |

| Criteria | Explanation | Commentary |
|---|---|---|
| | | **Historic** – 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 and aircore prior to RVR are unknown. |
| Drill sample recovery | *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>*Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>*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.* | **DRILLING**<br>**SHN** - 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.<br><br>**Historic** – 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. |
| Logging | *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.*<br>*Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*<br>*The total length and percentage of the relevant intersections logged.* | **DRILLING**<br>**SHN** – 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.<br><br>**Historic** – 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. |
| Sub-sampling techniques and sample preparation | *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>*If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*<br>*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>*Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>*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.* | **DRILLING**<br>**SHN & Historic** – 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.<br><br>**GEOPHYSICS**<br>**Historic IP –** The technical equipment used in the survey was: Configuration: Transmitter (Tx) Dipole (200m ) – Receiver (Rx) Dipole (100m), Station Interval: 100 & 200m, Number of receiver dipoles: 32 ("n" levels), Base frequency: 0.125 Hertz, Duty Cycle: 50%, Receiver: Search Exploration Full Time Series Unit SSIP32, Chargeability Integration: 590msec to 1450msec, Transmitter: Search Exploration WB50 – 50 KVa, Sensor: Porous Pots |

| Criteria | Explanation | Commentary |
|---|---|---|
| | *Whether sample sizes are appropriate to the grain size of the material being sampled.* | |
| Quality of assay data and Laboratory tests | *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br><br>*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.*<br><br>*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.* | **DRILLING**<br><br>**SHN** – Samples are assayed using a 30g 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.<br><br>An internal QAQC review indicated that three zones should be re-assayed due to potential under-reporting of Au and Cu identified from SHN's CRM program. The zones re-reported within acceptable limits. One sample from 24LTDD033 returned an Au assay returning significantly lower the original sample, which may indicate some minor nugget effect. Screen fire testing of some Au samples is recommended.<br><br>**Historic** – 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.<br><br>**GEOPHYSICS**<br><br>**Historic IP –** Acquired IP data was of high quality – QAQC conducted by David McInnes of Montana GIS, Geophysics Consultant. |
| Verification of sampling and assaying | *The verification of significant intersections by either independent or alternative company personnel.*<br><br>*The use of twinned holes.*<br>*Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br><br>*Discuss any adjustment to assay data* | **DRILLING**<br><br>**SHN** – 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.<br><br>**Historic** – Laboratory results were reviewed by RVR Geologists. Raw assay files were stored on the Company Server and no adjustments were made to assay data. |
| Location of data points | *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.*<br><br>*Specification of the grid system used.* | **DRILLING**<br><br>**SHN** – Drilled holes have been surveyed using a handheld GPS. Coordinates are displayed within GDA94, Zone 55 format. Downhole surveys were conducted with an industry-standard gyroscopic survey tool. |

| Criteria | Explanation | Commentary |
|---|---|---|
| | *Quality and adequacy of topographic control.* | **Historic** – 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.<br><br>**GEOPHYSICS**<br>**Historic IP** – All transmitter and receiver locations were accurately surveyed using DGPS. |
| Data spacing and distribution | *Data spacing for reporting of Exploration Results.*<br><br>*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.*<br><br>*Whether sample compositing has been applied.* | **DRILLING**<br>No samples compositing has been applied to the intersections reported.<br><br>**GEOPHYSICS**<br>**Historic IP** – The survey consisted of 100m - 200m dipole spacing, 150m - 400m line spacing. |
| Orientation of data in relation to geological structure | *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br><br>*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.* | **DRILLING**<br>**SHN** – 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). One drill hole, 24LTRC025, was drilled from north to south due to logistics of the drill pad placement.<br>**Historic** – 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.<br><br>**GEOPHYSICS**<br>**Historic IP** – Survey lines were oriented north-south in order to transect the known local mineralisation and stratigraphy as perpendicular as possible. |
| Sample security | *The measures taken to ensure sample security.* | **DRILLING**<br>**SHN** – 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. |

| Criteria | Explanation | Commentary |
|---|---|---|
| | | **Historic** - Drill samples were reportedly overseen by RVR staff during transport from site to the laboratory.<br><br>**GEOPHYSICS**<br>**Historic IP** – Data was collected on site by the geophysical contractor and is reviewed on site for data quality. The collected data is then sent digitally to the Geophysical Consultant reviewed, quality control and processing daily. |
| Audits or reviews | *The results of any audits or reviews of sampling techniques and data.* | **DRILLING**<br>No audits have been carried out on the newly reported drill or geophysics results herein. |

## 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 | *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.*<br><br>*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.* | Greater Liontown Exploration Permits are: EPMs 10582, 12766, 14161, 16929, 26718, 27168, 27221, 27223, 27357, 27520 and 27731, Mining Lease 10277 and Mining Lease Applications 100221, 100290 and 100302 (previously Cromarty) for a total of 463km2; and EPMs 18470, 18471, 18713, 25815 and 25895 (previously Hebrides) for a total of 221km2. 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.<br><br>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.<br><br>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).<br><br>Liontown, 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.<br><br>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.<br><br>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.<br>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).<br>All of EPM 26303 and part of EPM 26041 are situated within the Burdekin Falls Dam catchment area.<br><br>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. |
| Exploration done by other parties | *Acknowledgment and appraisal of exploration by other parties.* | Exploration activities have been carried out by Nickel Mines (1970-1973), Esso (1982-1983), Great Mines (1987), Pancontinental (1994-1995), and Liontown Resources (2007). Work programs included surface mapping, and sampling, costeans, drilling and geophysics.<br>Historic exploration was carried out by Esso Exploration and Pancontinental Mining. This included drilling and geophysics. Historic drilling over the Liontown East area is shallow and did not intercept the current Mineral Resource mineralisation. |
| Geology | *Deposit type, geological setting and style of mineralisation.* | **LIONTOWN AND LIONTOWN EAST RESOURCE**<br><br>The Liontown and Liontown East deposits are hosted within Cambro-Ordovician marine volcanic and volcano-sedimentary sequences of the Mt Windsor Volcanic sub-province. The Liontown and Liontown East deposits are volcanogenic massive |

| Criteria | Explanation | Commentary |
|---|---|---|
| | | 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. |
| Drill hole Information | *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:*<br>• *easting and northing of the drill hole collar*<br>• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>• *dip and azimuth of the hole*<br>• *down hole length and interception depth*<br>• *hole length.*<br><br>*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* | All new drill data presented in this release is compiled in Appendix 1. |
| Data aggregation methods | *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.*<br>*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.* | 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.<br><br>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.<br><br>The zinc equivalent calculation is as follows: 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)). |

| Criteria | Explanation | Commentary |
|---|---|---|
| | *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | 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 | *These relationships are particularly important in the reporting of Exploration Results.*<br>*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').* | At Liontown, 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.<br>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 Liontown East the average downhole thickness of the mineralised zone is 8.2m. |
| Diagrams | *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.* | All diagrams are located within the body of this report |
| Balanced reporting | *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.* | All drill intercepts are recorded within the body of this report |
| Other substantive exploration data | *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;* | All meaningful and material data is reported within the body of the report.<br><br>For the latest resource update at the Liontown deposit, please refer to:<br>• ASX: SHN, 7th February 2024, Significant Increase in Liontown Resource<br>For the most recent previous releases outlining SHN drill assay results please refer to:<br>• ASX: SHN, 24th November 2023, 17m @ 22.1g/t Au Confirms Liontown Feeder Zone<br>• ASX: SHN, 13th March 2024, 20m @ 18.21g/t Au Extends Au-Cu Rich Footwall at Liontown<br>• ASX: SHN, 27th May 2024, New, High Grade Copper Lode - Liontown<br>• ASX: SHN, 4th June 2024, Step Out Holes Hit Thick High-Grade Gold-Copper Liontown<br>For a detailed summary on the historical Liontown and Liontown East Mineral Resource Estimates, please refer to:<br>• ASX: SHN, 8th May 2023, Fully Funded Acquisition of Greater Liontown |

| Criteria | Explanation | Commentary |
|---|---|---|
| | *potential deleterious or contaminating substances.* | |
| Further work | *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | Further drilling will be required to test geological interpretation of the proposed Liontown Dome and its associated targets. |