

ASX Release 19 February 2024

Au-Cu Focussed Geophysical Surveys Commence

IP surveys across three targets

Highlights

- Induced polarisation ("IP") surveys have commenced at copper-gold targets at Liontown, Truncheon and Highway East.
- At Liontown, the IP and current drilling will be collated to provide further follow up drill targets for follow up drilling, planned to commence in March 2024.
- IP Surveys at Truncheon and Highway East represent Sunshine's first detailed activities at these highly encouraging VMS targets.

Sunshine Metals Limited (ASX:SHN, Sunshine) has commenced geophysical surveys at the Liontown, Truncheon and Highway East Prospects near Charters Towers in North Queensland. The surveys aim to refine copper and gold targets within the district.

Sunshine Managing Director, Dr Damien Keys, commented:

"The geophysical surveys add another layer of supporting evidence to assist with targeting these highly prospective gold and copper targets.

The footwall of the 2.94mt Liontown VMS system is likely to be copper-and gold-rich due to its proximity to the volcanic fluid source. Any mineralisation should theoretically be susceptible to electrical geophysical methods, such as IP. The surveys will seek to delineate sulphide zones deeper into the footwall than previously explored.

Truncheon and Highway East are located ~2.5km to the east of the 3.9mt @ 5.4% Cu, 1.1g/t Au Highway Reward Mine. The two targets share many similarities with the Highway Reward Mine including strong gravity anomalies and elevated copper, lead and zinc in soils (gold not assayed for at Highway East). An historic IP survey at Highway East shows chargeable anomalism coincident with shallow gold workings. The surveys will assist with refining drill ready targets.

Results from the IP geophysical surveys will tie in with current drilling, to guide a broader 2024 drill campaign at Liontown and first pass testing at Truncheon and Highway East."



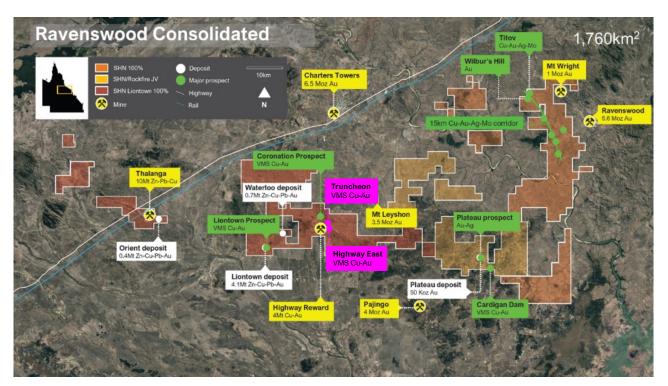


Figure 1: Ravenswood Consolidated Project with key prospects (green) and major nearby mines (yellow).

IP Surveys Commence

The program will assist in determining future drill targets at the Truncheon and Highway East VMS prospects, which are proximal to the historic Highway-Reward mine (3.9Mt @ 5.4% Cu & 1.1 g/t Au mined, see Figure 2).

The Reward and Highway deposits were discovered in 1987 and 1989 respectively. Geologically, they are comprised of massive pyrite-chalcopyrite pipes situated within the margins of rhyolitic domes. The pipes were enveloped by a halo of pyrite-sphalerite-chalcopyrite-galena-barite which exhibited a significant geochemical footprint of Cu, Pb and Zn anomalism.

IP played a significant role in the discovery of the Conviction Lode at Highway-Reward. Discovery hole RPHY816 (drilled by RGC Exploration, 1998) targeted a coincident low resistivity – moderate chargeability zone and intersected 86m @ 1.32g/t Au (CR_30836). The technique also provided the targeting for discovery at Liontown East which currently stands at an Inferred Resource of 1.47mt @ 11.0% ZnEq.



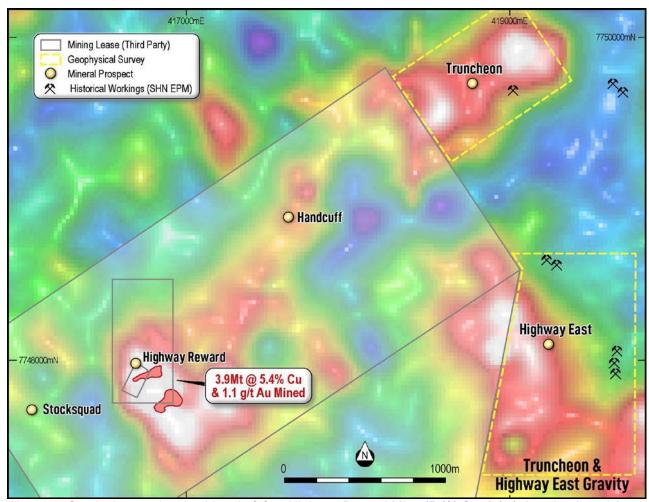


Figure 2: Gravity image showing historic 3.9mt Highway Reward Mine (5.4% Cu, 1.1g/t Au mined grade) and key prospects Truncheon and Highway East. Mines and targets are all coincident with strong gravity responses, inferred to be response from massive sulphide.

Truncheon

The Truncheon prospect is located 2.5km northeast of the Highway-Reward mine. It exhibits several encouraging characteristics for potential Volcanogenic Massive Sulphide (VMS) mineralisation, including:

- Anomalous, coincident soil geochemistry for Au (>50ppb), Cu (>200ppm), Pb (>300ppm) and Zn (>500ppm) which extends for 300m (*Figure 3*).
- Coincident high gravity anomaly (1998 survey, reprocessed 2014)
- Prospective stratigraphy of the Trooper Creek Formation, known host of the Liontown, Thalanga, Waterloo and Highway-Reward deposits.
- Limited drilling within the geochemical anomaly, with one historical hole in 1981 (MWHT119) reporting 5m @ 2.18% Zn, 0.21% Pb and 0.13% Cu from 18m. Gold was not assayed.
- To the immediate southeast, an area of intensive silicification with elevated Au in soil (>10ppb) has previously been interpreted by some as an Advanced Argillic alteration zone.



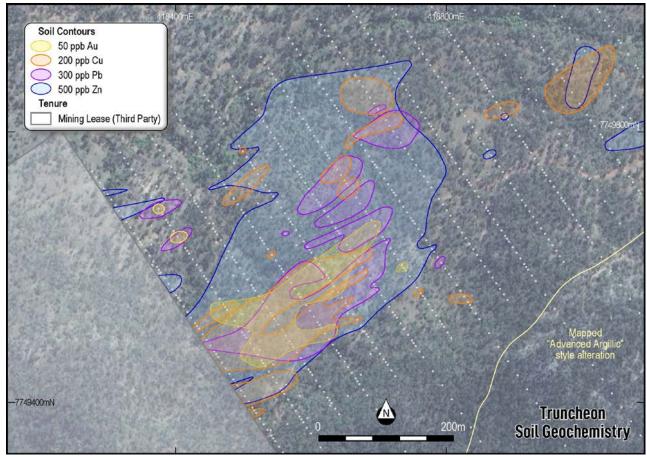


Figure 3: Strong Au-Cu soil anomalism over the Truncheon prospect. White dots represent the IP survey underway.

Highway East

Highway East is a second VMS target located 2.5km east of the Highway-Reward mine and 1.4km SSE of Truncheon. Highway East also shows significant encouragement for potential mineralisation including:

- Anomalous, coincident soil geochemistry for Cu (>50ppm), Pb (>200ppm) and Zn (>500ppm) which extends for over 500m (Figure 4). Gold was not assayed during the historical soil sampling.
- High gravity anomaly along which the geochemistry elevations trend (1998 survey, reprocessed 2014).
- Untested historical gold workings in the east of the prospect close to a historical IP chargeability anomaly.
- Prospective stratigraphy of the Trooper Creek Formation, close to the contact with the Mt Windsor Volcanics.
- Limited drilling within the geochemical anomaly, with only three historical holes >60m depth and no drilling since 1982 (prior to the discovery of Highway-Reward).
- Historical drilling intercepted broad elevated base metals, including 51m @ 0.30% Zn (from surface to end of hole, MWHE916, 1975).



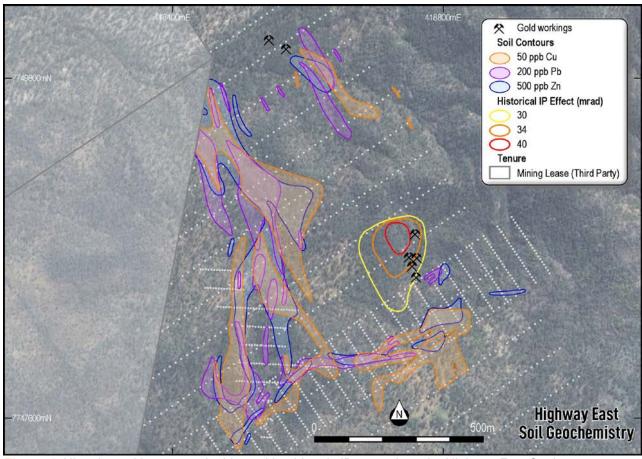


Figure 4: Historic workings are coincident with a historic IP anomaly at the Highway East Cu-Au target. Soil samples are elevated in Cu, Zn and Pb (Au not assayed).

Next Steps

Drilling of 3 footwall/feeder fault targets is complete. Results are expected in late February - early March.

Results from the IP geophysical survey and the drilling will be used to inform a broader drill program at Liontown to commence in March 2024.

Further mapping and sampling will be completed at Truncheon and Highway East. The mapping and IP geophysics will be used to refine first pass drill programs at both targets.

Planned activities

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

Feb-March 2024: Results from IP surveys, Liontown, Highway East & Truncheon

o Feb-March 2024: Results from drilling, Liontown Au-Cu

March 2024: Next Phase Liontown Drilling

o March 2024: Brisbane Mining Investor Conference



Gold, the forgotten commodity

The Charters Towers area is a prolific minerals production centre with an endowment of over 20Moz Au and 14Mt of Zn-Au-Cu-Pb-Ag VMS ore.

Mining at Carrington was initially commenced in 1905 and was of sufficient scale that its owner, Carrington United was listed on the Charters Towers Stock Exchange. While production records are unclear, the Au-Cu mine involved the 3 shafts (Main, Carrington No 1 and East), two mills and two smelters. The Main Lode extended to ~190m while the other shafts went to ~150m. These activities supported four hotels, two stores, a school and a post office.

Mining ceased in 1911 and was later re-opened in 1936 as a Ag-Pb mine. Between 1936-61, the Liontown No 3 and 4 shafts were sunk and produced some 3,000oz Au, 54,000oz Ag and 520t Pb.

Public access historical company reports for Liontown and immediate surrounds, date back to the mid 1960's. The Carpentaria Exploration Company (Company Report 2567, 1968) completed extensive stream sediment and rock chip sampling in the Mt Windsor Volcanics from Liontown to Highway Reward. The extensive sampling campaign was only assayed for copper, zinc and lead.

Subsequent explorers followed suit. Jododex, Pennaroya and Esso Australia Ltd have been arguably the most productive explorers across the Mt Windsor Volcanics having held leases between 1972 and 1986. None of the ~6,600 stream samples collected across the Mt Windsor area during the period were assayed for Au. Esso Australia collected ~26,500 soil samples during and assayed only 640 (2.4%) for gold. Furthermore, Esso Australia drilled in excess of 2,100 holes (1,905 RAB/AC, 119 RC, 74 DD), sampled 19,022 intervals and only assayed 8,951 for Au.

Historic mining of gold-copper lodes, together with high-grade results (5m @ 13.56g/t Au (LLD135); 8m @ 4.24g/t Au (LLRC003)) indicated the potential for Au mineralisation not associated with base metals in massive sulphides. Notwithstanding this potential, gold has not previously been a prime focus of exploration. This is seen as an opportunity to use fresh thinking and modern exploration techniques to define targets and to explore specifically for gold mineralisation.



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

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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.

The information in this report that relates to Mineral Resources at Waterloo and Orient is based on information compiled and reviewed by Mr Stuart Hutchin, who is a Member of the Australian Institute of Geoscientists (AIG) and is a Principal Geologist employed by Mining One Pty Ltd. Mr Stuart Hutchin 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 'Australasian Code for Reporting of Mineral Resources. Mr Stuart Hutchin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Mineral Resources at Liontown and Liontown East is based on information compiled and reviewed by Mr Peter Carolan, who is a Member of the Australasian Institute of Mining and Metallurgy and was a Principal Geologist employed by Red River Resources Ltd. Mr Peter Carolan 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 'Australasian Code for Reporting of Mineral Resources. Mr Peter Carolan 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:

- o a Zn-Cu-Pb-Au VMS Resource of 4.94mt @ 12.0% ZnEq (32% Indicated, 68% Inferred);
- 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 which hosts a current Resource of 1.47mt
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- the under-drilled Carrington Au Lode in the footwall of the Liontown VMS deposits with significant intersections including **3m** @ **46.2g/t Au from 20m** (LRC0018) and **2m** @ **68.6g/t Au from 24m** (LRC0043);
- o advanced Au-Cu VMS targets at Coronation analogous to the nearby Highway-Reward Mine (4mt @ 6.2% Cu & 1.0g/t Au mined);
- o overlooked orogenic, epithermal and intrusion related Au potential with numerous historic gold workings and drill ready targets; and
- o a Mo-Cu Exploration Target at Titov of 5-8mt @ 0.07-0.12% Mo & 0.28-0.44% Cu¹.

Triumph Project (Au): More than 85% of Triumph's Inferred Resource of 118,000oz @ 2.03g/t Au² (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.

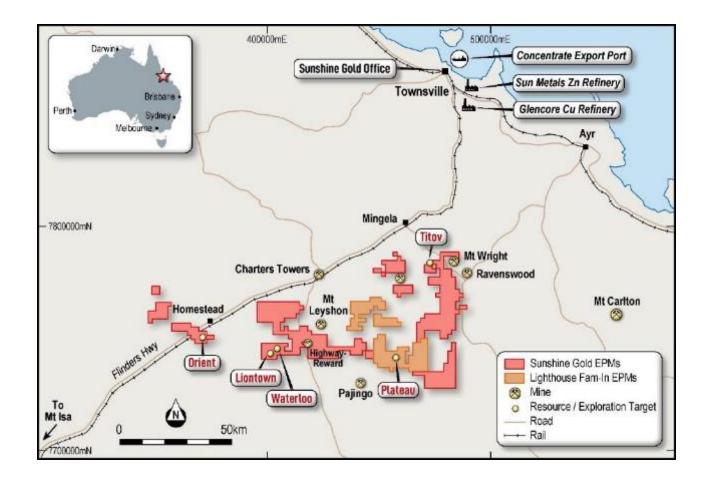
*Hodgkinson Project (Au-W): Located between the Palmer River alluvial gold field (1.35 Moz Au) and the historic Hodgkinson gold field (0.3 Moz Au) and incorporates the Elephant Creek Gold, Peninsula Gold-Copper and Campbell Creek Gold prospects.

*A number of parties have expressed interest in our other quality projects (Investigator Cu and Hodgkinson Au-W). These projects will be divested in an orderly manner in due course.

¹ 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".

² 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.







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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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.	Esso – 1975 & 1981 – Soils were taken over a 1km trend at HWE, with eleven 100m spaced lines of various lengths between 30m and 600m, with 15m sample spacings. Soils were reportedly collected from bedrock with the -80-mesh fraction assayed for Cu, Pb and Zn. In 1981, a broad grid of 1.5km by 1.5km was sampled over HWE using 20m sample spacings. At TR, the survey comprised of a 500m x 750m grid with 50m spaced lines and 10m sample spacings. The samples are believed to have been sampled as -80-mesh fractions. The survey was part of a broader survey over the Highway, Handcuff and Truncheon trends. GEOPHYSICS Esso – 1975 & 1981 – Six lines of dipole-dipole IP were surveyed at HWE using 120m dipole spacings in 1975. Three lines were subsequently resurveyed using 60m dipole spacings. In 1981, a further six lines of 50m spacing dipole-dipole IP were completed at both HWE and TR. No details are provided on the measuring or reporting of the IP effect (phase shift) tenor and as such should be used as an indicator of anomalism only. RGC – 1997 – Approximately 23 sq. km were surveyed on a 100m x 100m grid using real time kinematic GPS and a Scintrex CG-3 automatic gravimeter. Some stations were infilled to 50m. Some data was reportedly used from a 1987 survey undertaken by City Resources. SHN – 2024 – IP geophysics at Truncheon will consist of a Pole-Dipole array comprising five receiver lines each of 750m length using 50m spaced potential electrodes and spaced 200m apart. The array will use a transmitter line offset 100m from the receiver line with current electrodes spaced at 100m. At Highway East and Liontown, a pole-dipole array will comprise of 50m spaced potential electrodes on lines up to 700m long, with current electrodes spaced at 100m along the same lines. DRILLING Esso – Utilised both percussion and diamond coring at Highway East although no distinction is made between the two. Drill holes were sampled in 5ft intervals and assayed for Cu, Pb, Zn and Ag. No details on analytical methods have been located.
Drilling techniques	Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails,	DRILLING Historic – No details on drilling techniques have been located, other than that Esso drilled both percussion and diamond holes at Highway East in 1975 (MWHE916) and percussion at Truncheon in 1982 (MWHT119). RGC undertook RC drilling at Conviction in 1996 (RPHY816). No further details on the techniques have been located.



Criteria	Explanation	Commentary
	face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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 Historic – No records on sample recovery have been located for the historic drilling.
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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.	GEOCHEMISTRY & GEOPHYSICS Historic – No known geological records of samples are believed to have been taken. DRILLING Historic – Esso holes were logged in their entirety for lithology, alteration and mineralisation, largely qualitatively. The RGC hole referred to in this release was likely logged in its entirety (based on other holes drilled at similar times) but no report has yet been located to confirm this.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	GEOCHEMISTRY Historic – No sub-sampling or QC procedures are reported within the historical reports. DRILLING Esso – Drill holes from the 1975 program were sampled in 5ft intervals, with later holes (e.g. 1982 program) assayed metre by metre. It is not known how diamond core was sampled. RGC – Drill holes from the period by RGC were typically assayed in 2 – 4m composites, although it has not been verified on how drill hole RPHY816 was sampled.



Criteria	Explanation	Commentary
	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.	
	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. 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.	GEOCHEMISTRY Historic – No reporting of the quality of data is available and as such all results should be considered as approximations. GEOPHYSICS Esso – No reporting of the data collection, quality or processing has been located as such all results should be considered as approximations. RGC – Data was collected using real time kinematic GPS and a Scintrex CG-3 automatic gravimeter. Data was then processed in four stages: 1) reprocessing of historical (1987) data was undertaken, including conversion of coordinates from local to AMG grid; 2) Digital terrain data was obtained and used to produce four DTM models, with one used for the 1987 survey and one for the 1997
	their derivation, etc. 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.	survey; 3) the survey area was divided into nine tiles to compute the complete Bouguer Anomaly; 4) cover thickness was obtained using a map supplied by Aberfoyle Resources (which showed logged depths from historic RAB, RC and DD holes); 5) model of the Campaspe Fm overburden was developed using the data; and 6) gravity field of the Campaspe model was computed using block modelling. SHN – IP surveying will utilise a GGD TX4 transmitter and 16 channel receiver. Data will be reviewed for QAQC and processed by Southern Geoscience Consultants.
		DRILLING Historic – No reporting on assaying or laboratory procedures have been located for Esso or RGC drilling.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	GEOCHEMISTRY Historic – Historical reports have been reviewed and utilised in the development of the geochemical anomalies. No on-ground sampling has been utilised by SHN to verify historical assay results.
	The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	GEOPHYSICS Historic – Geophysical anomalism is considered approximate and has been located through review of historical reporting. Geophysical surveying by SHN will validate historical IP anomalism.
	Discuss any adjustment to assay data	DRILLING



Criteria	Explanation	Commentary			
		Historic – No drill hole assays reported in this document have been verified by SHN and are quoted as per the containing report or using the assays provided by the report.			
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. Specification of the grid system used.	GEOCHEMISTRY, GEOPHYSICS & DRILLING Historic – All survey anomalies, points and drill collars within are from historical sources are considered approximate only. No onground validation of collar or other points has been undertaken by SHN.			
Data spacing and distribution	Quality and adequacy of topographic control. Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied.	GEOCHEMISTRY Esso – Soil samples collected between 1975 & 1981 were subject to 15m and 20m spaced samples on 100m spaced lines at HWE respectively, and by 10m spaced samples and 50m spaced lines at TR. GEOPHYSICS Esso – Undertook DDIP using 120m dipole spacings on six lines in 1975 and a further six lines of DDIP using 50m spacings in 1981. RGC – Gravity was surveyed using 100m x 100m station spacings in an area covering 23 sq km. Some infill to 50m was undertaken. SHN – Truncheon uses an offset PDIP array comprising 50m spaced receivers on 200m spaced lines with transmitter lines offset 100m and spaced 100m along the line. HWE and LT uses a PDIP array comprising of 50m spaced receivers with transmitters spaced at 100m along the same lines. DRILLING Historic – All drilling referred to within this report is of exploratory nature and as such no consistent spacing applied at Truncheon or Highway East. Liontown drilling is considered at Resource stage and comprises of drill holes spaced typically between 20 – 80m.			
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. 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.	GEOCHEMISTRY & GEOPHYSICS Historic & SHN – Geochemical and geophysical surveys were designed to be perpendicular to known/interpreted geology, such as major stratigraphy and structures. DRILLING Historic – It is understood that drill holes were oriented perpendicular to the perceived strike of the target. Drill holes were drilled at a dip based on the logistics and dip of target to be tested.			
Sample security	The measures taken to ensure sample security.	GEOCHEMISTRY & DRILLING Historic – No sample security measures were reported during the historic campaigns.			



Criteria	Explanation	Commentary			
		GEOPHYSICS SHN – Data is collected on site by the geophysical contractor and is reviewed on site for data quality. The collected data is then sent digitally to SHN and the geophysical consultant who will undertake further data review and processing.			
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits were carried out by SHN or on behalf of SHN on historical geochemical, geophysical or drilling campaigns mentioned within this report.			

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.	Greater Liontown 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 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. 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.
	reporting along with any known impediments to obtaining a licence to operate in the area.	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). Liontown, Waterloo and the majority of tenure exist on the native Iand of the Jangga People #2 claim, with northwestern tenure located on the native Iand of the Gudjala People.
		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.
		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.
		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). All of EPM 26303 and part of EPM 26041 are situated within the Burdekin Falls Dam catchment area.



Criteria	Explanation	Commentary								
		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 within the target areas by Carpentaria Exploration (1967 – 1969, 1978), Jododex (1974), Esso (1972 – 1986), City Resources (1987 – 1988), Barrack Mine Management (1988 – 1991), Aberfoyle (1991 – 1996) Exploration (1996 – 1998), Thalanga Copper (1998 – 2010), Natural Resources Exploration (2013 – 2014) and Red River Reso (2015 – 2023).							(1991 – 1996), RGC	
		Data per	tinent to this re	elease has be	en referenced in t	the text and in	the JORC Table	1.		
Geology	Deposit type, geological setting and style of mineralisation.	TRUNCHEON AND HIGHWAY EAST The Truncheon and Highway East prospects are located within the Cambro-Ordovician marine volcanic and volcano-sedimentary sequences of the Mt Windsor Volcanic sub-province, namely the Trooper Creek Formation. The prospects are considered volcanogenic massive sulphide (VMS) base metal style targets, either exhibited as lens-like massive sulphides and stringers (e.g. Liontown, Thalanga) or as pipe-like massive pyrite-chalcopyrite bodies (e.g. Highway-Reward). The two prospects are considered to share similar stratigraphy as part of the general Highway syncline geology in which Trooper Creek sediments fold from a northeast-southwest trend at Truncheon to a north-south trend at Highway East. Alteration on the southeastern flank of Truncheon has historically been described as Advanced Argillic style, indicating potential for high-sulphidation epithermal mineralisation, although no such mineralisation has yet been identified. LIONTOWN AND LIONTOWN EAST RESOURCE 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 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	understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the	All drill h			this release is as	-		Die	Grid Azi	Assa
			Hole_ID MWHE916	Hole_Type PC/DD	Max_Depth (m) 51.8	NAT_East 419131	NAT_North 7748212	-60	90	Area Highway East
			MWHT119	PC/DD	150	418556	7749477	-60	320	Truncheon
			RPHY816	RC	.55		nknown – located at Co			Conviction
	drill hole collardip and azimuth of the holedown hole length and interception depth		ne historic natu as yet occurre		ars, all coordinate	s below are co	onsidered approxi	mations only	as no ground	verification of these



Criteria	Explanation	Commentary
	• hole length. 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	
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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	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. 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. 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/ 2n price \$/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)). 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. 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').	Mineralisation orientations and Truncheon and Highway East are not yet understood and as such no true widths can be reported. At Liontown, the mineralisation is largely stratabound and interpreted to be dipping at ~70 degrees south within the main Liontown area and steepening to the east. The exact orientation of any feeder structures to the VMS lenses remain under interpretation, but are proposed to originate north of the main lenses and potentially strike NNE-SSW. Geological and structural understanding is an ongoing process and observations and interpretations within may be modified over time.
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



Criteria	Explanation	Commentary
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 recorded within the body of this report are as historically reported unless stated otherwise
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; potential deleterious or contaminating substances.	 CR_5601 – Esso, 1975 – AtoP 1352M, 1402M, 1403M, Annual Report for period ending Dec 31, 1975 CR_9859 – Esso, 1981 – AtoP 1352M, Project 348, Mt Windsor, Annual Report for period ending Dec 31, 1981 CR_11661 – Esso, 1982 – AtoP 1352M, Project 348, Mt Windsor, Annual and Conditional Surrender Report for period ending 16th December 1982 CR_30385 – RGC Exploration, 1998, Annual Report, EPM 3380, 17 Dec 1996 to 16 Dec 1997 CR_30836 – RGC Exploration, 1999, Annual Report, EPM 3380, 17 Dec 1997 to 16 Dec 1998 Doyle, M & Huston, D., 1999, Subsea Floor Replacement Origin of the Ordovician Highway-Reward Volcanic-Associated Massive Sulphide Deposit, Mount Windsor Sub-province, Australia, Economic Geology, vol. 94, pp. 825-844
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Data collected within the geophysical surveys will be reviewed by the geophysical contractors and consultant as the surveys progress. Upon completion of the surveys, the data will be fully processed and analysed by the consultant and subsequently interpreted by SHN. Any areas considered of interest will be followed up on ground through field visits and potential drill targeting.