

ASX Release

16 December 2024

Encouraging Highway-Reward Style Mineralisation in Truncheon

Highlights

- Preliminary reverse circulation (RC) drilling at the Truncheon prospect intersected gold in barite bearing rhyolite. This is encouraging as gold-bearing barite formed a shallow Resource above the Highway-Reward Mine (3.9mt @ 5.3% Cu, 1.1g/t Au¹). Furthermore, elevated copper was intersected deeper in the same drill hole. Results from Truncheon include:
 - **6m @ 0.52g/t Au** (from 14m, 24TRRC003)
 - **1m @ 1.10% Cu & 3.05% Zn** (from 153m, 24TRRC003)
- In addition, broad zinc intersections, typical of the halos to the Highway-Reward massive sulphide pipes, were also encountered at Truncheon and Highway East including:
 - **59m @ 0.56% Zn** (from 76m, 24TRRC003, Truncheon)
 - **18m @ 1.12% Zn & 0.32% Pb** (from 16m, 24TRRC001, Truncheon)
 - **Including 3m @ 3.13% Zn & 1.17% Pb** (from 16m, 24TRRC001)
 - **16m @ 0.70% Zn** (from 105m, 24HERC001, Highway East)
- Electromagnetic (EM) surveys are being designed to refine the potential position of a Highway-Reward style massive sulphide body at Truncheon and/or Highway East.

Sunshine Metals Limited (ASX:SHN, “Sunshine”) reports that the Truncheon prospect near Charters Towers has returned gold mineralisation geologically analogous to the neighbouring Highway-Reward Mine which produced 3.9Mt @ 5.3% Cu and 1.1g/t Au.

Drilling at Truncheon (3 holes, 618m) and the nearby Highway East prospect (6 holes, 1,212m) also encountered broad zinc intersections, typical of the halos to the Highway-Reward massive sulphide pipes.

Sunshine Managing Director, Dr Damien Keys, commented “*The gold mineralisation intersected at Truncheon is highly encouraging as it validates the exploration model and vectors toward a potential Highway-Reward style mineral system.*”

Electromagnetic geophysical surveys across the broader Highway East and Truncheon area will commence in early 2025 and will be efficient at discriminating chalcopyrite (copper mineralisation) from pyrite”.

¹ Beams, S.D., “Additional information to support an application for the renewal of Mining Leases ML1734 Reward and ML1739 Reward Extended, Charters Towers District, North Queensland” (2011). Thalanga Copper Mines Pty Ltd Company Report

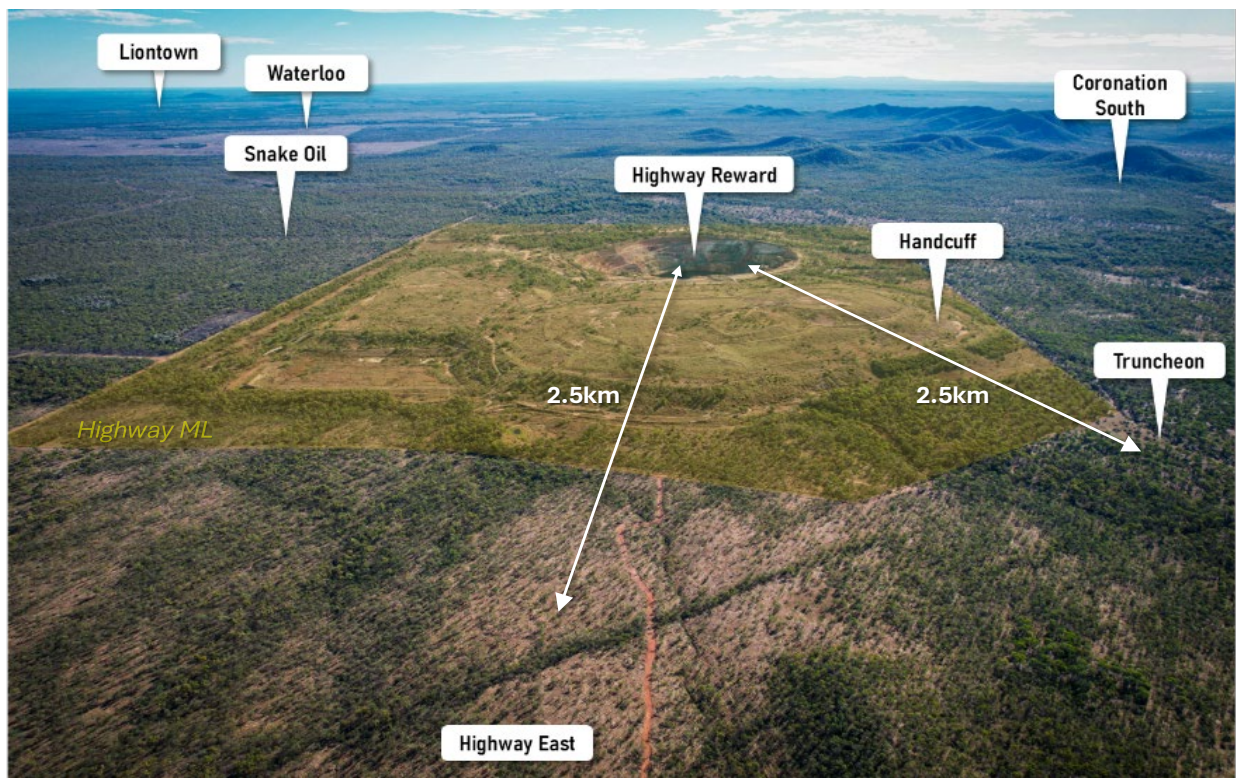


Figure 1. Aerial image of Truncheon and Highway East relative to the high-grade Highway-Reward Cu-Au Mine. Other nearby Sunshine targets/deposits are also highlighted.

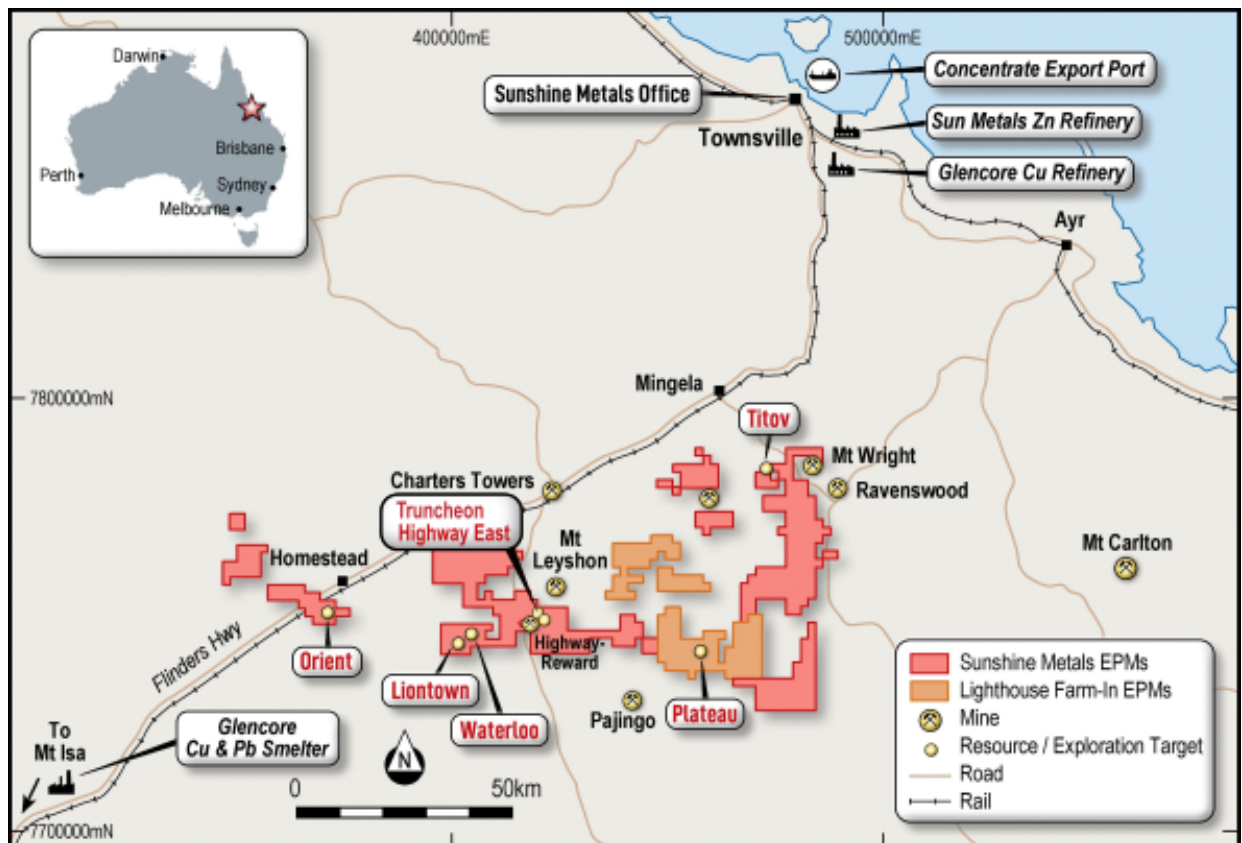


Figure 2: Sunshine's Ravenswood Consolidated Project is near infrastructure and the mining hub of Charters Towers in Queensland. This map shows the easily accessed Highway area ~30km south of Charters Towers.

Truncheon RC Program

Truncheon is located 2.5km northeast of the Highway-Reward Mine. Recent RC drilling targeted a strong gravity anomaly with coincident geochemical anomalism in soil – notably a 200m coherent zone of Au (>50ppb), Cu (>250ppm), Pb (>300ppm) and Zn (>1,000ppm).

The preliminary RC drilling at Truncheon (3 holes for 618m) is now complete. Results include:

- **6m @ 0.52g/t Au** (from 14m, 24TRRC003)
- **59m @ 0.56% Zn** (from 76m, 24TRRC003)
- **1m @ 3.05% Zn & 1.10% Cu** (from 153m, 24TRRC003)
- **18m @ 1.12% Zn & 0.32% Pb** (from 16m, 24TRRC001)
 - **Including 3m @ 3.13% Zn & 1.17% Pb** (from 16m, 24TRRC001)
- **15m @ 1.04% Zn** (from 17m, 24TRRC002)

The intersection of gold mineralisation in hole 24TRRC003, adjacent to broad zinc mineralisation, suggests 24TRRC003 is potentially indicative of a deeper (or proximal) VMS sulphide body.

Importantly, elevated barium to 0.45% Ba is associated with the gold mineralisation in 24TRRC003, a relationship also seen at the Highway-Reward Mine.

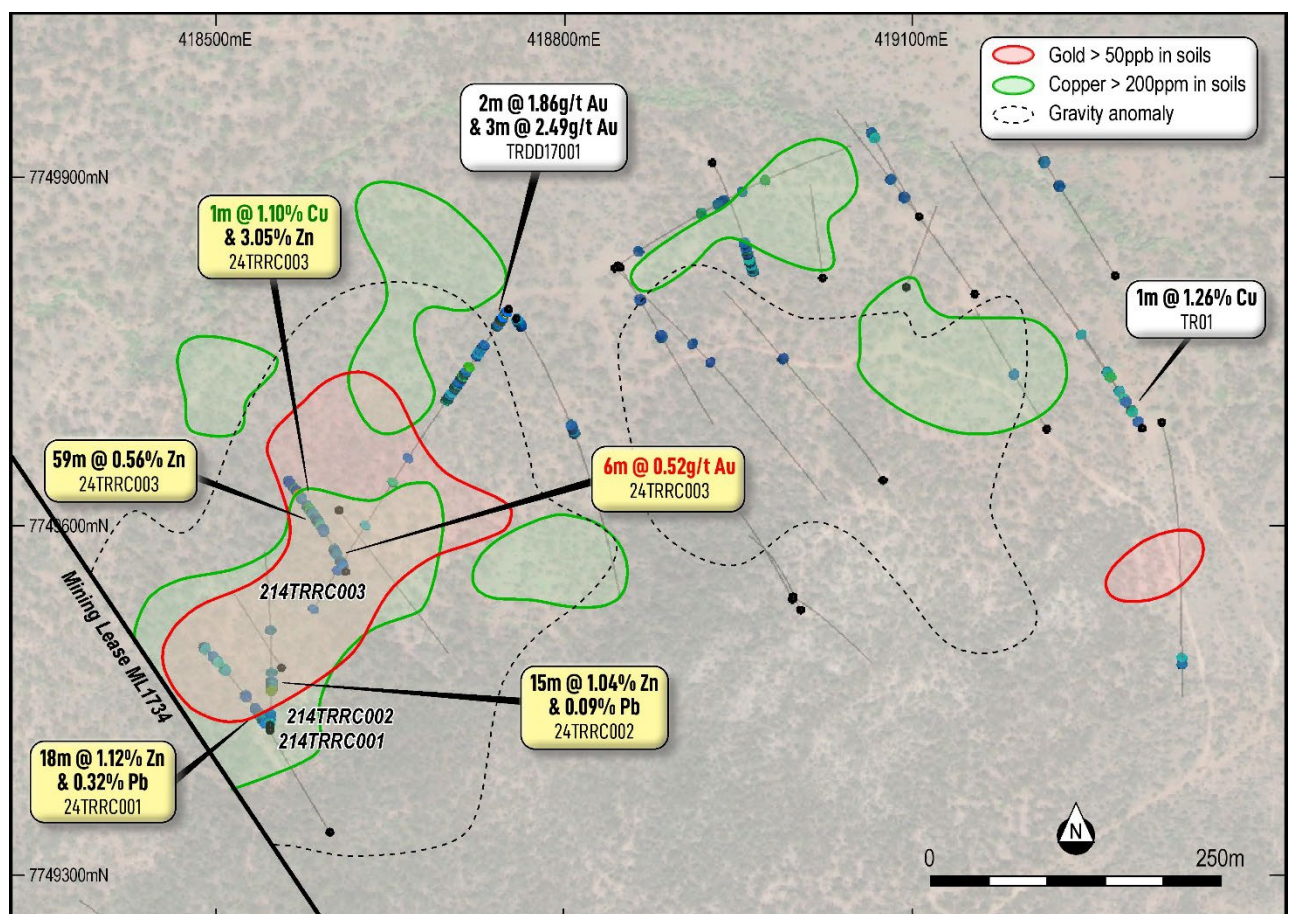


Figure 3. Plan view of Truncheon RC drilling results.

Highway East RC Program

Highway East is located 2.5km east of the Highway-Reward Mine and 1.5km south of Truncheon. Highway East is expressed as a 1km long density anomaly with coincident Pb (>200ppm) and Zn (>500ppm) in soil. In addition, a recent IP survey returned a strong chargeability zone (>30msec) coinciding with part of the density and soil anomalism.

Subsequently, a deeper RC program (6 holes, 1,212m) was drilled across ~500m of strike as a first pass test of the strongest IP anomalism. Results from the 6 holes included:

- **16m @ 0.70% Zn** (from 105m, 24HERC001)
- **14m @ 0.87% Zn** (from 40m, 24HERC002)
- **80m @ 0.29% Zn** (from 89m, 24HERC004)
- **58m @ 0.60% Zn** (from 101m, 24HERC006)
- **Including 2m @ 1.4% Zn** (from 109m, 24HERC006)

The broad zones of zinc mineralisation provide further encouragement for a nearby Highway-Reward style massive sulphide system.

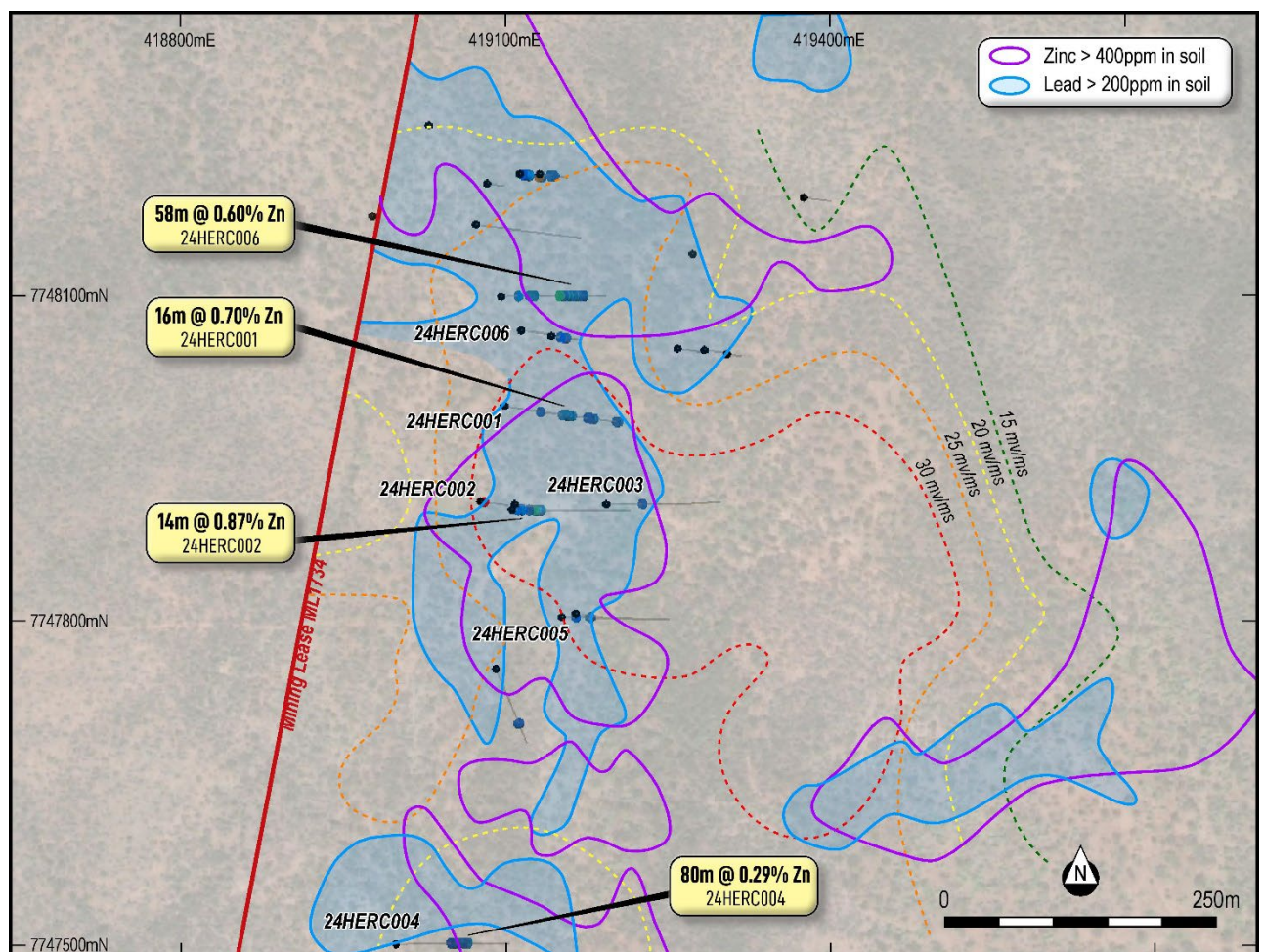


Figure 4. Plan view of Highway East RC drilling results.

Highway-Reward Mine – Analogue

Sunshine’s exploration model at Highway East and Truncheon is based on Highway-Reward as an analogue. Highway-Reward is considered to be a pipe-style volcanogenic massive sulphide (“VMS”) deposit.

Gold associated with outcropping barite veining was first discovered at Highway, 35km south of Charters Towers, in 1953. A small open pit was developed on the initial gold oxide deposit.

The first massive sulphide pipe, Reward, was discovered in 1987. A second pipe, Highway, was discovered 150m to the northwest in 1989 under ~100m of weathered and Au-barite-bearing gossanous rhyolite.

The mineralisation typically comprised massive pyrite-chalcopyrite in subvertical pipe-like bodies. The massive pyrite-chalcopyrite pipes are enveloped by a halo of sphalerite (low-moderate grade zinc). Doyle and Huston (1999)² refer to the zinc halo at Highway-Reward:

*“Sphalerite-rich halo: The pyrite-chalcopyrite pipes are surrounded by a Zn-Pb-Ba-rich halo up to 500m wide in an east-west direction and around 225m long from north to south. Within this halo there are four subtypes of Zn ± Pb ± Ba ore: (1) veins and veinlets of sphalerite ± galena ± barite; (2) **disseminated, patchy, and spotty sphalerite within sericite-chlorite ± quartz-altered rocks at the tops of the pipes**; (3) strata-bound massive pyrite-sphalerite-chalcopyrite-galena-barite ore hosted by volcanoclastic mass-flow units in the hanging wall to the Reward pipe; (4) **discordant zones of massive to semi-massive pyrite-sphalerite ± chalcopyrite ± quartz ± barite at the margins of the main pyrite pipes.**”*

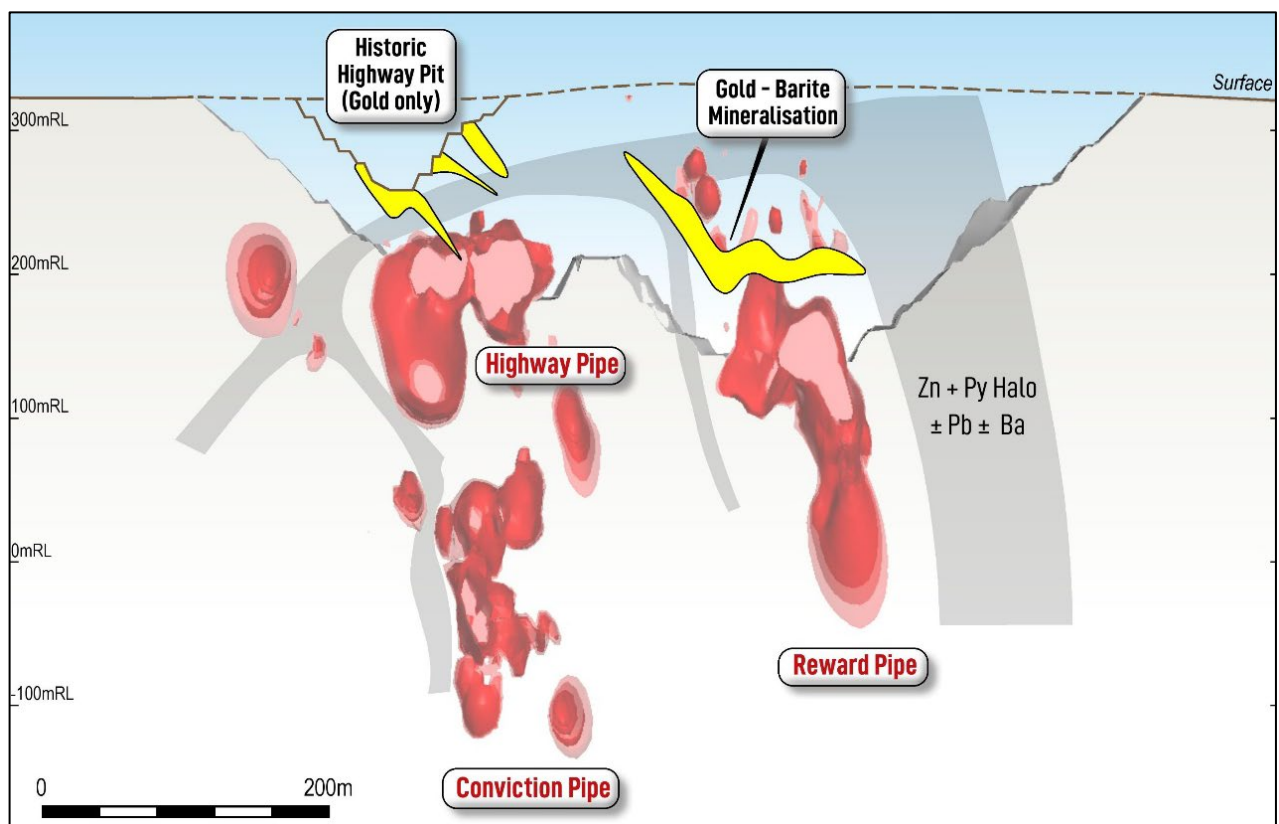


Figure 5. Cross section through Highway-Reward, showing modelled chalcopyrite-pyrite pipes, the halo of sphalerite mineralisation and zinc in drill results.

² Doyle, M.G., Huston, D.L., 1999, The Subsea-Floor Replacement of the Ordovician Highway-Reward Volcanic-Associated Massive Sulfide Deposit, Mount Windsor Subprovince Australia, *Economic Geology*, Vol 94, pp 825-844.

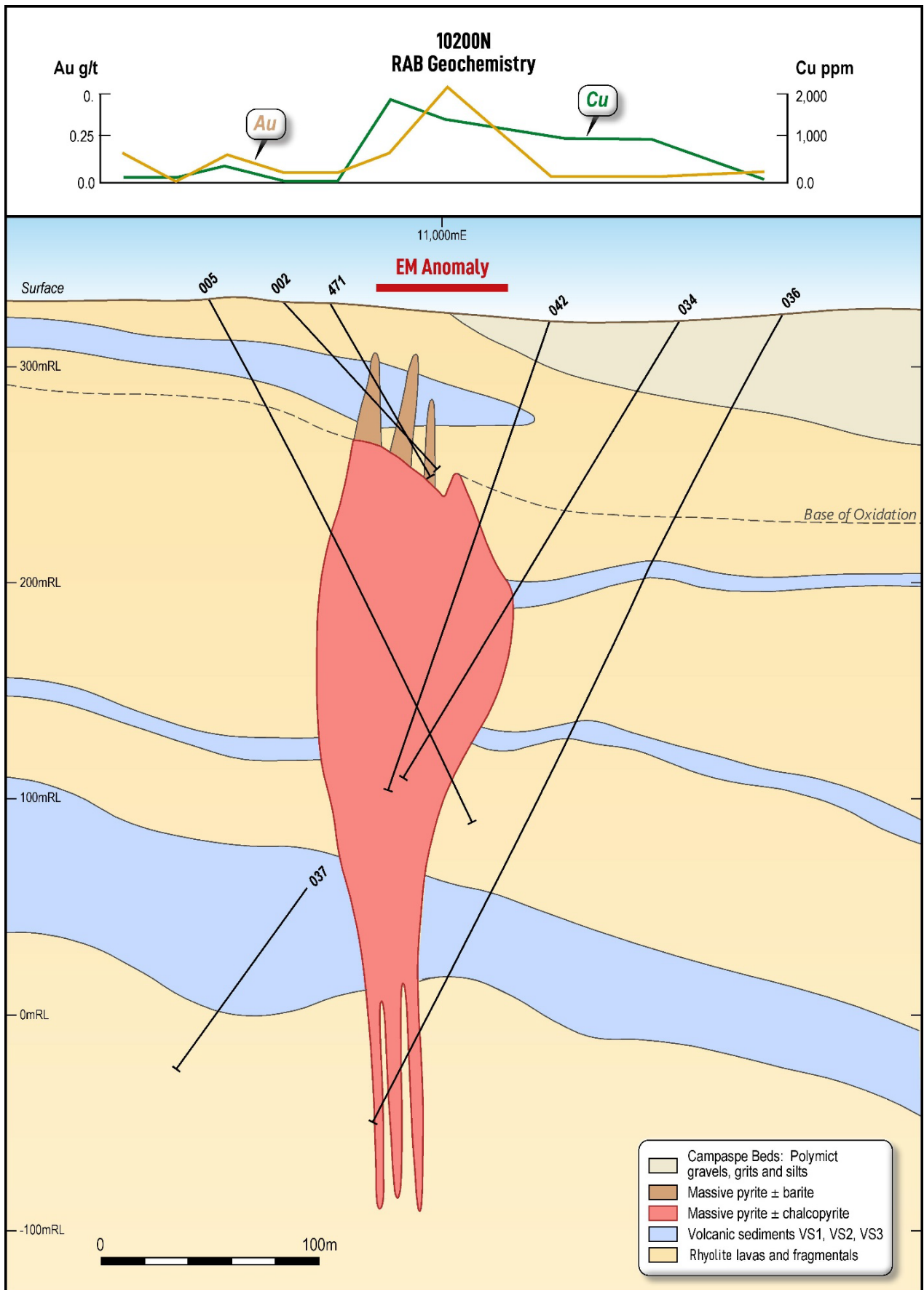


Figure 6. Early cross-section of the Reward pipe showing its position in relation to EM response and geochemical anomalism (adapted from Beams et al., 1989).

Planned activities

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

- January 2025: Fieldwork update, Mt Windsor & Coronation South
- January 2025: Results from geophysical surveys, Coronation
- January 2025: Quarterly Report
- Feb - March 2025: Drilling recommencing, Lione town
- Feb - March 2025: EM surveys commence Truncheon & Highway East

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.

Appendix 1: Completed Truncheon & Highway East RC drill collar, orientation and depth

Hole ID	East	North	RL	Dip	Azi_Grid	Max Depth
24HERC001	419,099	7,747,998	376	-60	100	202
24HERC002	419,106	7,747,902	371	-60	090	202
24HERC003	419,193	7,747,907	377	-60	090	202
24HERC004	418,999	7,747,501	364	-60	090	202
24HERC005	419,152	7,747,803	374	-60	090	202
24HERC006	419,096	7,748,099	381	-60	090	202
24TRRC001	418,547	7,749,428	376	-52	005	232
24TRRC002	418,547	7,749,424	379	-60	325	202
24TRRC003	418,612	7,749,560	360	-60	333	184

Appendix 2: Truncheon & Highway East RC significant intercepts

Cut off	HoleID	From	To	Interval	Au	Ag	Cu %	Pb %	Zn %	ZnEq%
0.5 Zn	24HERC001	66	67	1	0.01	0.55	0.00	0.14	0.52	0.57
0.5 Zn	24HERC001	105	121	16	0.00	0.39	0.02	0.01	0.70	0.68
1 Zn	including	112	113	1	0.00	0.84	0.03	0.01	1.41	1.33
1 Zn	and	119	120	1	0.00	0.22	0.03	0.00	1.03	0.98
0.5 Zn	24HERC001	146	147	1	0.00	0.68	0.01	0.04	0.53	0.53
0.5 Zn	24HERC001	151	159	8	0.01	0.42	0.01	0.01	0.65	0.63
0.5 Zn	24HERC001	193	197	4	0.01	0.09	0.02	0.00	0.74	0.72
0.5 Zn	24HERC002	11	13	2	0.01	1.52	0.02	0.28	0.57	0.73
0.5 Zn	24HERC002	17	18	1	0.00	0.65	0.02	0.24	0.57	0.69
0.5 Zn	24HERC002	40	54	14	0.00	1.24	0.01	0.14	0.87	0.90
1 Zn	including	40	41	1	0.00	1.98	0.02	0.81	1.24	1.63
1 Zn	including	44	45	1	0.00	2.91	0.02	0.07	1.30	1.29
1 Zn	and	52	54	2	0.00	0.59	0.00	0.01	1.26	1.13
0.5 Zn	24HERC003	66	67	1	0.01	1.06	0.02	0.03	0.56	0.59
0.1 Zn	24HERC004	89	169	80	0.00	0.31	0.01	0.01	0.29	0.30
0.5 Zn	24HERC004	100	106	6	0.00	0.18	0.02	0.01	0.59	0.58
0.5 Zn	24HERC004	113	114	1	0.00	0.38	0.02	0.01	0.70	0.68

Cut off	HoleID	From	To	Interval	Au	Ag	Cu %	Pb %	Zn %	ZnEq%
0.5 Zn	24HERC004	123	124	1	0.00	0.76	0.02	0.03	0.59	0.60
0.5 Zn	24HERC004	128	132	4	0.00	0.89	0.02	0.03	0.56	0.57
0.5 Zn	24HERC005	52	54	2	0.01	0.33	0.01	0.01	0.62	0.61
0.5 Zn	24HERC006	52	53	1	0.01	2.15	0.02	0.44	0.59	0.80
0.5 Zn	24HERC006	61	62	1	0.01	2.15	0.01	0.14	0.79	0.89
0.1 Zn	24HERC006	101	159	58	0.01	0.40	0.01	0.02	0.60	0.60
0.5 Zn	24HERC006	109	111	2	0.01	3.15	0.01	0.13	1.41	1.40
1 Zn	Including	109	110	1	0.00	4.06	0.01	0.17	1.91	1.86
0.5 Zn	24HERC006	113	114	1	0.00	0.95	0.01	0.03	0.56	0.56
0.5 Zn	24HERC006	116	128	12	0.00	0.22	0.01	0.00	0.83	0.78
1 Zn	Including	120	121	1	0.01	0.36	0.02	0.00	1.30	1.21
1 Zn	And	125	127	2	0.01	0.28	0.01	0.00	1.47	1.34
0.5 Zn	24HERC006	133	143	10	0.01	0.20	0.01	0.01	0.85	0.78
1 Zn	Including	136	139	3	0.01	0.31	0.01	0.01	1.30	1.18
0.5 Zn	24HERC006	146	147	1	0.01	0.77	0.02	0.03	0.61	0.63
0.5 Zn	24HERC006	149	157	8	0.01	0.21	0.01	0.00	0.69	0.66
0.5 Zn	24TRRC001	16	34	18	0.02	0.86	0.06	0.32	1.15	1.39
1 Zn	Including	17	19	2	0.04	1.30	0.04	0.01	1.53	1.55
1 Zn	And	26	29	3	0.02	2.29	0.19	1.17	3.13	3.99
1 Zn	And	32	33	1	0.01	0.84	0.07	0.54	1.55	1.89
0.5 Zn	24TRRC001	44	47	3	0.02	0.20	0.04	0.00	0.72	0.78
0.1 Au	24TRRC001	69	76	7	0.27	5.62	0.02	0.00	0.01	0.59
0.1 Au	24TRRC001	82	85	3	0.18	5.29	0.00	0.00	0.01	0.39
0.1 Au	24TRRC001	128	132	4	0.26	1.42	0.04	0.01	0.02	0.56
0.5 Cu	24TRRC001	134	135	1	0.06	1.40	0.54	0.00	0.01	1.59
0.1 Au	24TRRC001	185	187	2	0.24	14.04	0.03	0.01	0.19	0.87
0.5 Zn	24TRRC001	188	190	2	0.02	0.73	0.04	0.01	0.73	0.79
0.1 Au	24TRRC001	205	206	1	0.13	2.02	0.32	0.01	0.04	1.15
0.1 Au	24TRRC001	212	219	7	0.12	2.13	0.06	0.01	0.04	0.41
0.5 Zn	24TRRC002	17	32	15	0.03	0.43	0.03	0.09	1.04	1.11
1 Zn	Including	17	21	4	0.04	0.63	0.05	0.03	1.95	1.93
2 Zn	Including	17	19	2	0.05	0.57	0.05	0.00	3.00	2.85
1 Zn	Also	24	25	1	0.02	0.50	0.09	0.08	2.19	2.25
0.1 Au	24TRRC003	4	22	18	0.30	3.13	0.01	0.01	0.02	0.58
0.4 Au	24TRRC003	14	20	6	0.52	5.86	0.00	0.01	0.02	4.64
0.5 Au	Including	17	19	2	0.67	6.42	0.00	0.01	0.01	1.18
0.1 Au	24TRRC003	38	39	1	0.13	1.30	0.02	0.07	0.23	0.53
0.5 Zn	24TRRC003	41	44	3	0.08	0.88	0.04	0.05	0.99	1.15
1 Zn	Including	42	43	1	0.10	1.04	0.05	0.07	1.48	1.66
0.1 Zn	24TRRC003	76	135	59	0.01	0.53	0.03	0.05	0.56	0.63

Cut off	HoleID	From	To	Interval	Au	Ag	Cu %	Pb %	Zn %	ZnEq%
0.5 Zn	24TRRC003	78	79	1	0.02	0.22	0.01	0.00	0.72	0.70
0.5 Zn	24TRRC003	82	84	2	0.02	0.19	0.02	0.01	0.59	0.61
0.5 Zn	24TRRC003	91	107	16	0.01	0.74	0.04	0.08	0.70	0.81
1 Zn	Including	91	92	1	0.01	0.21	0.09	0.01	1.44	1.54
1 Zn	And	100	101	1	0.02	0.36	0.11	0.01	1.61	1.75
1 Zn	And	104	105	1	0.01	2.28	0.04	0.17	1.06	1.18
1 Zn	And	106	107	1	0.01	1.07	0.07	0.05	1.12	1.23
0.5 Zn	24TRRC003	114	128	14	0.02	0.75	0.04	0.04	0.99	1.05
1 Zn	including	115	116	1	0.04	0.81	0.03	0.02	1.13	1.17
1 Zn	And	118	119	1	0.02	0.47	0.12	0.01	2.16	2.26
1 Zn	And	122	128	6	0.02	1.00	0.05	0.06	1.30	1.37
2 Zn	Including	123	124	1	0.05	0.75	0.09	0.01	2.26	2.34
0.5 Zn	24TRRC003	153	154	1	0.05	2.65	1.10	0.00	3.05	5.79
0.5 Cu	24TRRC003	163	164	1	0.04	1.54	0.57	0.01	0.03	1.68

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:

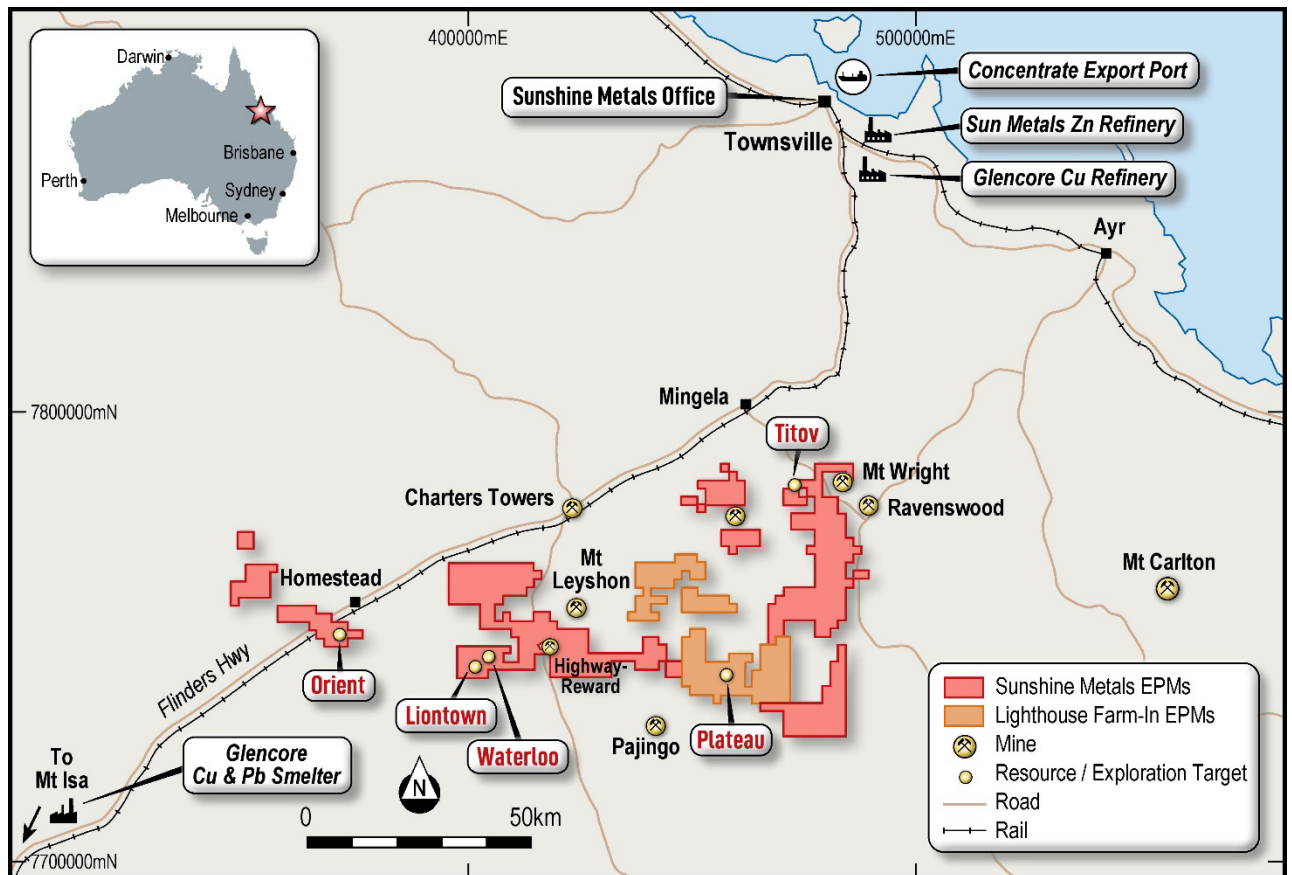
- a Zn-Cu-Pb-Au VMS Resource of 7.0mt @ 4.0g/t Au (904koz AuEq) or 11.1% ZnEq (42% Indicated, 58% Inferred³);
- 26 drill ready VMS Zn-Cu-Pb-Au IP geophysical targets where testing of a similar target has already led to the Liontown East discovery (1.47mt @ 11.0% ZnEq, 100% Inferred¹);
- the under-drilled 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.*

³ 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 Lontown (g/t AuEq, % ZnEq) are based on the following prices: US\$2,900/t Zn, US\$9,500/t Cu, US\$2,000/t Pb, US\$2,500/oz Au, US\$30/oz 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:
$$\text{AuEq} = (\text{Zn grade\%} * \text{Zn recovery} * (\text{Zn price } \$/\text{t} * 0.01 / (\text{Au price } \$/\text{oz} / 31.103))) + (\text{Cu grade \%} * \text{Cu recovery \%} * (\text{Cu price } \$/\text{t} / (\text{Au price } \$/\text{oz} / 31.103))) + (\text{Pb grade \%} * \text{Pb recovery \%} * (\text{Pb price } \$/\text{t} / (\text{Au price } \$/\text{oz} / 31.103))) + (\text{Au grade g/t} / 31.103 * \text{Au recovery \%}) + (\text{Ag grade g/t} / 31.103 * \text{Ag recovery \%} * ((\text{Ag price } \$/\text{oz} / 31.103 / (\text{Au price } \$/\text{oz} / 31.103)))$$

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

For Waterloo transition material, recoveries of 76% Zn, 58% Cu and 0% Pb have been substituted into the ZnEq formula. For Lontown 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 Lontown 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".

Table 1, Section 1 - Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	<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> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where '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>	DRILLING 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). 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. 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.
Drilling techniques	<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>	DRILLING 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.

Criteria	Explanation	Commentary
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <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>	DRILLING 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.
Logging	<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> <i>Whether logging is qualitative or quantitative in nature.</i> <i>Core (or costean, channel, etc.) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i>	DRILLING 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.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <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> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	DRILLING SHN – 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.

Criteria	Explanation	Commentary
Quality of assay data and Laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <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>	DRILLING 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. Sulphur over 10% was re-assayed using Induction furnace/IR. 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.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data</i>	DRILLING 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.
Location of data points	<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> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	DRILLING 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.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and</i>	DRILLING No samples compositing has been applied to the intersections reported.

Criteria	Explanation	Commentary
	<i>Ore Reserve estimation procedure(s) and classifications applied.</i> <i>Whether sample compositing has been applied.</i>	
Orientation of data in relation to geological structure	<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> <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>	DRILLING SHN – Drill holes have been designed predominantly to intersect the approximate east-west trend of the known lenses at an optimal angle as possible (i.e. perpendicular).
Sample security	<i>The measures taken to ensure sample security.</i>	DRILLING 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. 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.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	DRILLING No audits have been carried out on the newly reported drill 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	<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> <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>	Ravenswood Consolidated Exploration Permits are: EPMs 10582, 12766, 14161, 16929, 18470, 18471, 18713, 25815, 25895, 26041, 26152, 26303, 26304, 26718, 27537, 27520, 27824, 27825, 28237, 28240, Mining Lease 10277 and Mining Lease Applications 100221, 100290 and 100302 for a total of 1326km². The tenements are in good standing and no known impediments exist. These leases are held in their entirety by Sunshine (Ravenswood) Pty Ltd and Sunshine (Triumph) Pty Ltd, 100% owned subsidiaries of Sunshine Metals Ltd. The Lontown Resource is located in its entirety on ML 10277 and EPM 14161 and under Mining Lease Applications MLA 100290 and MLA 100302. 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. Liontown exists on the recognised native land of the Jangga People #2 claim. 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 from EPM 14161. 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. 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	<i>Acknowledgment and appraisal of exploration by other parties.</i>	The Mt Windsor Sub province was recognised as a favourable host for VMS mineralisation after reinterpretation of Pb-Zn massive sulphides at Liontown by Jododex in 1974, and the subsequent discovery of the Thalanga deposit in 1975. This was the start of a major increase in exploration across the region. Since 1972, several companies, most notably Jododex (1972-1974) and Esso Australia (1974 – 1986) have carried out comprehensive regional exploration programs over the Seventy Mile Range Group in the Highway-Reward area. More recently, RGC Exploration (1990s) and Red River Resources (2010s) explored the area for its base metal potential, including drilling of several targets within the Highway district.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	The Project area is located within the Charters Towers Province which extends inland from the coast at Townsville to 150km west of Charters Towers. The rocks are typically Neoproterozoic to Palaeozoic age. It is bound in the southeast by the New England Orogen and to the north by the Broken River Province of the Mossman Orogen. The known VMS deposits, including Liontown, are hosted within the stratigraphy of the Mt Windsor Sub-province, which encompasses the dismembered remnants of a thick volcanic and sedimentary

Criteria	Explanation	Commentary
		succession predominantly of Late Cambrian and Early Ordovician age located within the northern part of the Tasman Orogenic Zone (Henderson, 1986). The succession comprises of four identified formations collectively known as the Seventy Mile Range Group, which outcrop discontinuously in an east-west belt south of the Ravenswood Batholith. The Seventy Mile Range Group (499 – 479 Ma) ranges from Late Cambrian to Early Ordovician and is represented by the Puddler Creek Formation at the base, followed by the Mt Windsor Volcanics, the Trooper Creek Formation and the Rollston Range Formation at the top. The Trooper Creek Formation consists of intermediate lavas, volcanoclastics (including mass flow deposits), minor felsics and marine sediments (Henderson, 1986). The facies assemblage has been interpreted as being deposited proximal to submarine volcanic centres and is known to host VMS deposits, such as Thalanga, Lione town and Highway-Reward. The Group is variably overlain by Tertiary and Quaternary cover sequences, including the Campaspe Formation which comprises immature and pebbly sandstone and minor siltstone interbeds and is interpreted to represent erosive channel fill and fluvial sheet deposition.
Drill hole Information	<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> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. <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>	All new drill data presented in this release is compiled in Appendix 1.
Data aggregation methods	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of</i>	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.

Criteria	Explanation	Commentary
	<i>high grades) and cut-off grades are usually Material and should be stated.</i> <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> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	
Relationship between mineralisation widths and intercept length	<i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>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>	The drill holes have been designed to intercept the interpreted mineralisation and stratigraphy as close to perpendicular as possible. The typical drill sample interval is 1m in length. At Highway East the stratigraphy and hence any stratabound mineralisation is interpreted to be dipping to the west and striking north-south. At Truncheon, the stratigraphy is believed to be folded and is uncertain of true orientation, although drill holes were designed with a southeasterly dip of stratigraphy proposed. As such, only downhole lengths are reported in this document as true widths are not yet known. Geological and structural understanding is an ongoing process and observations and interpretations within may be modified over time. The drill holes have been designed to intercept the interpreted mineralisation and stratigraphy as close to perpendicular as possible. The typical drill sample interval is 1m in length.
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

Criteria	Explanation	Commentary
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; potential deleterious or contaminating substances.</i>	All meaningful and material data is reported within the body of the report. For the previous releases relating to these prospects, please refer to: • ASX: SHN, 13th November 2024, Significant sulphides intersect at Highway East • ASX: SHN, 11th October 2024, Drilling Commences at Truncheon & Highway East • ASX: SHN, 6th May 2024, Seven Exciting Geophysical Targets near Highway-Reward
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).</i> <i>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 review will be undertaken on these drill results, with possible geophysical surveys commencing in 2025 to further assist in target delineation in the Truncheon and Highway East areas.