

# **ASX Release**

23 July 2025

# Liontown Au Study to Optimise 95Koz Au Resource

## Highlights

- An advanced scoping study over the shallow gold at Liontown ("Au Study"), will consider 95Koz Au and 652Koz Ag (712Kt @ 4.15g/t Au & 28.5g/t Ag) comprised of the following Resources:
  - Shallow Au (Inferred); 16.4Koz Au @ 2.04g/t Au (& 29.2g/t Ag) which is expected to be upgraded to Indicated following results of metallurgical test work in August 2025;
  - Carrington Fresh (Indicated): 22.1Koz Au @ 3.09g/t Au (& 46.7g/t Ag) beneath the above Shallow Au;
  - Au-Panel (Indicated): 37.8Koz Au @ 8.14g/t Au (& 9.0g/t Ag) located 200m east of the Shallow Au; and
  - Au-Panel (Inferred); 18.7koz Au @ 6.07g/t Au (& 13.6g/t Ag) which will be the subject of future drilling.
- The Shallow Au and Carrington Fresh domains are located on granted Mining Lease ML 10277, and the Au-Panel on a mining lease application. Previous drilling results from the Au-Panel include:
  - o 17m @ 22.05g/t Au from 67m (23LTRC002)
  - o 20m @ 18.21g/t Au from 114m (24LTRC015)
  - o 8m @ 11.74g/t Au from 115m (LLRC184)
- The Au Study Resources comprise only ~12% of the total Liontown Au-Cu-Zn-Ag-Pb Resource tonnes and account for ~35% of the contained gold. In addition, mining access to the gold is expected to provide future access to parts of the broader Au-Cu-Zn-Ag-Pb Resource.
- For the avoidance of doubt, gold prospects not yet to be considered in the Au Study include Plateau (50koz) and Sybil.
- The Au Study is expected to be completed in January 2026.

Sunshine Metals Limited (ASX:SHN, "Sunshine") has commenced the Liontown Au Study, part of the Ravenswood Consolidated Project in North Queensland. The Au Study will consider the extraction of up to 95,000oz of high-grade gold and 652,000oz of silver.

**Sunshine Managing Director, Dr Damien Keys**, commented "We are thrilled to expand the scope of the Au Study to incorporate additional high-grade gold sources at Liontown. The extra mineralisation comes from both the Carrington Fresh and the Au-Panel that generated some stellar Au intersections. Importantly both fresh sources are close to the shallow mineralisation which formed the basis for the Au commercialisation strategy.



Metallurgical samples have been sent, Resource work is well underway, mine design and approvals will commence shortly and we are pushing for a commercial outcome as fast as possible!"



*Figure 1:* Shallow oxide gold prospects at Ravenswood and proximity to established mines, infrastructure and the mining hub of Charters Towers in Queensland.

#### **Liontown Resource**

The Liontown Resource (including Liontown East) currently stands at 5.9Mt @ 3.7g/t AuEq and is comprised of Au, Cu, Zn, Ag and Pb. The system is strongly zoned (see Figure 2) and the Au Study will consider the Au-only and Au-dominant mineralisation which account for ~12% of the total Liontown Resource tonnes.

Liontown was first mined as the Carrington Gold Mine, from which 28Koz Au @ 22g/t Au was extracted. Carrington and its strike extensions, including the Au Panel, will be considered in the Au Study.





*Figure 2:* Schematic cross section looking west, showing the different mineralised horizons and the broad metal associations of each. The Carrington mineralised horizon (pink) will be the dominant zone considered in the Au Study. Accessing this zone will also provide "free" access to the Au-Cu-Zn-Ag-Pb Resources.

#### Background

Resources under consideration in the Au Study are:

Resource Name	Resource Classification	Cut-off Applied	Tonnes (,000)	Au Grade (g/t)	Contained Au Oz (,000)	Ag Grade (g/t)	Contained Ag Oz (,000)
Shallow Au	Inferred*	0.75g/t Au	249	2.04	16.3	29.11	233.0
Carrington Fresh	Indicated	2.0g/t Au	223	3.09	22.2	46.76	335.3
Au Panel Fresh	Indicated	2.0g/t Au	144	8.14	37.8	8.97	41.5
Au Panel Fresh	Inferred	2.0g/t Au	96	6.07	18.7	13.61	42.0
TOTAL			712	4.15	95.0	28.47	651.8

 Table 1:
 Liontown Au Study Resource areas and model cut-off grade assumptions. Drilling has been completed, & metallurgy is underway to convert Inferred to Indicated Resource in the Shallow Au domain.



### Shallow Au (Inferred)

The current oxide/transitional Resource is **16.4Koz Au & 234Koz** Ag (249Kt @ 2.04g/t Au & 29.1g/t Ag). A recent RC drilling program (29 holes, 1,834m) has tightened drill spacing to ~25m x 25m and new metallurgical test work (currently in progress) will allow upgrade to Indicated Resource. Metallurgical results are expected in August 2025.

Historical mined voids (~1-2m wide true thickness) were intersected in predicted locations in the drill program (ASX 10 Jun 2025) and have been incorporated into updated void and geology models. The final Resource upgrade will follow the metallurgical results.

#### Carrington Fresh (Indicated)

Carrington Fresh is located below the base of oxidation at the oxide/transitional zone referred to above. This Resource contains **22.1Koz Au & 335Koz Ag** (223Kt @ 3.09g/t Au & 46.8g/t Ag). The Resource is extensional to historic mining. Metallurgical results are expected in August 2025.

#### Au-Panel (Indicated & Inferred)

The Au Panel is located ~200m east of the Shallow Au and comprises **56.5Koz Au & 82Koz Ag** (240Kt @ 7.31g/t Au & 10.8g/t Ag). The high-grade Resource is comprised of:

- 144Kt @ 8.14g/t Au (& 9.0g/t Ag) 38Koz Au & 42Koz Ag in Indicated
- 96Kt @ 6.07g/t Au (& 13.6g/t Ag) 19koz Au & 42Koz Ag in Inferred

Previous metallurgical test work from the Au Panel (ASX 11 Nov 2024), considered indicative of the Au-Panel and Carrington Fresh, displayed rapid leach kinetics, with >90% of gold recovered in 2 hours using standard lime and cyanide consumptions. The test work returned 48-hour leach extractions of 99.4% and 98.4% (at 38µm grind size) and 97.4% and 95.0% (at 106µm grind size).



*Figure 3:* Proportions to the total Liontown Resource of total tonnes (left) and gold ounces (right) to be considered in the Au Study.





*Figure 4:* Long section of the Resources under consideration in the Au Study. Block model coloured by gold content showing the Shallow Au above the Carrington Fresh and the high-grade Au Panel. No remnant Resource has been assigned around the historic Carrington workings.



Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Grade (g/t) * Interval	
25LTRC009	41	51	10.0	31.91		319.1
LRC018	19	25	6.0	23.39	140.3	
25LTRC001	13	16	3.0	22.82	68.5	
LRC001	49	61	12.0	5.51	66.1	
25LTRC011	0	9	9.0	6.31	56.8	
LRC048	10	15	5.0	8.31	41.6	
LRC005	24	31	7.0	5.04	35.3	
LRC050	19	33	14.0	2.48	34.7	
LLRC068	16	18	2.0	17.05	34.1	
LRC050	39	47	8.0	4.10	32.8	
25LTRC001	38	41	3.0	10.51	31.5	
LLRC200	46	54	8.0	3.93	31.4	
LRC035	34	41	7.0	4.32	30.2	
LTDD19002	45.5	48.24	2.7	10.59	29.0	
LLRC200	40	43	3.0	8.50	25.5	
LLRC207	25	29	4.0	6.26	25.0	
LRC040	41	48	7.0	3.50	24.5	
25LTRC001	6	11	5.0	4.67	23.4	
LLRC223	22	28	6.0	3.58	21.5	
LRC048	24	32	8.0	2.56	20.5	
25LTRC003	11	19	8.0	2.39	19.1	
25LTRC010	79	82	3.0	6.35	19.1	
LTDD19012	19.5	24	4.5	3.99	18.0	
LRC035	11	19	8.0	2.04	16.3	
LRC015	29	34	5.0	3.26	16.3	
LLRC208	25	32	7.0	2.29	16.0	
LRC036	38	47	9.0	1.76	15.8	
25LTRC002	51	57	6.0	2.60	15.6	
LLRC0224	47	50	3.0	5.12	15.4	
25LTRC029	24	27	3.0	5.06	15.2	

Table 1: Shallow Au zone best intersections of >15g\*m.



Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Grade (g/t) * Interval
LTDD19013	75	92.5	17.5	4.37	76.5
LLD135	121	126	5.0	13.56	67.8
LLD105	92.8	95.8	3.0	19.30	57.9
24LTRC028	73	84	11.0	4.90	53.9
LLRC082	131	136	5.0	10.53	52.7
LL101	81	87	6.0	7.41	44.5
LTDD22068	76.3	79.1	2.8	15.64	43.8
LLD109	106.8	111.8	5.0	8.57	42.9
LRC220	89	93	4.0	10.17	40.7
LTDD19027	62.4	64.9	2.5	15.35	38.4
LTDD19015	84.15	97.8	13.7	2.76	37.7
LTDD19030	102.8	105.3	2.5	13.48	33.7
LR050	39	47	8.0	4.10	32.8
LTDD19033	52.76	56.7	3.9	7.38	29.1
LTDD19002	45.5	48.24	2.7	10.59	29.0
LTDD19023	87.4	90	2.6	10.31	26.8
LTD0006	86	90.5	4.5	5.87	26.4
LTDD19027	72.6	77.8	5.2	4.87	25.3
LRC040	41	48	7.0	3.50	24.5
LTDD19021	78.35	82.5	4.2	5.54	23.0
LTD011	104	109	5.0	4.16	20.8
LRC011	51	60	9.0	2.23	20.1
25LTRC010	76	82	6.0	3.28	19.7
24LTRC026	83	86	3.0	6.54	19.6
LTDD19018	77.45	82.5	5.1	3.29	16.6
LTDD19005	82.2	88	5.8	2.84	16.5
LLD112	90.6	92.6	2.0	8.19	16.4
LTDD19020	74.35	78.4	4.1	3.91	15.8
25LTRC002	51	57	6.0	2.60	, <mark>, , , , , , , , , , , , , , , , , , </mark>

Table 3: Carrington Fresh best intersections of >15g\*m.



Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Grade (g/t) * Interval
23LTRC002	67	84	17.0	22.05	374.9
24LTRC005	114	134	20.0	18.21	364.2
LTD0022	344	346	2.0	82.50	J 165.0
LLRC184	115	123	8.0	11.74	93.9
LTDD22055	152.2	160.3	8.1	10.65	86.3
LLD122	211	213	2.0	27.30	54.6
LTDD18015	236.3	238.9	2.6	15.29	39.8
LTDD22054	195	200.3	5.3	4.95	26.2
LLRC100	148	153	5.0	4.62	23.1
LLRC188	150	158	8.0	2.63	21.0
LLRC206	104	110	6.0	3.47	20.8
24LTRC004	186	189	3.0	6.81	20.4
LTDD22062	257.5	258.7	1.2	16.34	19.6
LTDD22070	94	96	2.0	9.09	18.2
LLRC180	131	133	2.0	8.58	17.2
LLRC083	90	92	2.0	8.17	16.3
LLRC083	90	92	2.0	8.17	16.3
23LTRC001	104	107	3.0	5.19	➡■ 15.6

Table 2:Au-Panel best intersections of >15g\*m.



### **Planned activities**

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

- July 2025 Jan 2026: Au Study at Liontown Au
- July-Aug 2025: Field work and drilling at Sybil Au
- > July 23-25, 2025: Noosa Mining Conference, Noosa
- > August 2025: Liontown Au metallurgy results and Resource upgrade
- August 2025: Fieldwork update Mt Pleasant Au target
- > Sept 17-18, 2025: Resources Rising Stars Conference, Gold Coast

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

For more information, please contact:

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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 Liontown is based on information compiled and reviewed by Mr Chris Grove who is a Member of the Australian Institute of Mining and Metallurgy (AusIMM) and is a Principal Geologist employed by Measured Group Pty Ltd. Mr Grove 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 Grove 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 Plateau is based on information compiled and reviewed by Dr Damien Keys, who is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists (AIG). Dr Keys 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. Dr Keys 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 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

#### 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:

- The newly interpreted Liontown Dome, hosting multiple gold and base metal prospects;
- a Zn-Cu-Pb-Au VMS Resource of 7.0mt @ 4.0g/t Au (904koz AuEq) or 11.1% ZnEq (42% Indicated, 58% Inferred<sup>1</sup>);
- the under-drilled Liontown Au-rich footwall with significant intersections including:
  - o 20.0m @ 18.2g/t Au (109m, 24LTRC005)
  - o **17.0m @ 22.1g/t Au** (67m, 23LTRC002)
  - o 10.0m @ 31.91g/t Au (41m, 25LTRC009)
  - o 8.0m @ 11.7g/t Au & 0.9% Cu (115m, LLRC184)
  - o 8.1m @ 10.7g/t Au (154m, LTDD22055)
  - o 5.0m @ 27.9g/t Au, 1.7% Cu (20m, LRC018)
- 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);
- recent addition of the Sybil low sulphidation epithermal gold system, located 135km west of Townsville and ~140km north of Charters Towers.
- Sybil is analogous to the nearby Pajingo epithermal system (~4Moz Au produced) and has seen little exploration for the last 20 years.
- Sybil's most advanced prospect, Francis Creek, contains best results including:
  - o 7m @ 10.6g/t Au from 7m (FCP05)
  - o 3m @ 23.2g/t Au from 6m (open at end of hole, FCP04)
  - o 6m @ 10.5g/t Au from 7m (open at end of hole, FCP46)
  - 6m @ 8.4g/t Au from 5m (FCP17)
  - 4m @ 11.6g/t Au from 4m (FCP30)
- rock chips of 907g/t Au and 262g/t Au have been returned from Francis Creek and a bulk sample mined in 1991 produced 961t @ 7.6g/t Au (235oz Au).

\**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.

<sup>&</sup>lt;sup>1</sup> 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.



\**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.



#### **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: <u>Copper-gold dominant</u> – 92.3% Cu, 86.0% Au, <u>Zinc dominant</u> 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 / 0.01) + (Cu grade t = 0.01) + (Au price / 0.01) + (Au price / 0.01) + (Au grade t = 0.01) + (Au grade

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))) + (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".



#### Sunshine Metals Mineral Resources

Prospect	Lease	Resource	Tonnage	Gold	Copper	Zinc	Silver	Lead	Zinc Eq.	Gold Eq	Gold Eq	Contained	Contained	Contained	d Contained Silver	Containec Lead (t)
Prospect	Status	Class	(kt)	(g/t)	(%)	(%)	(g/t)	(%)	(%)	(g/t)	(oz)	Gold (oz)	Copper (t)	Zinc (t)	(oz)	Lead (t)
Liontown Oxide	ML/MLA	Inferred	133	1.9	0.7	0.7	24	2.3	5.7	2.1	8,742	8,017	902	981	100,595	3,011
Liontown Transitional	ML/MLA	Inferred	228	1.8	0.9	2.7	28	2.7	6.9	2.5	18,071	13,096	2,048	6,076	206,096	6,076
	ML/MLA	Total	360	1.8	0.8	2.0	26	2.5	6.4	2.3	26,813	21,113	2,950	7,057	306,691	9,087
Liontown Fresh	ML/MLA	Indicated	2,191	1.5	0.6	5.0	37	1.8	10.5	3.8	266,288	102,148	13,366	108,680	2,581,165	38,564
	ML/MLA	Inferred	1,929	1.9	1.2	2.3	15	0.7	9.8	3.5	218,304	117,835	22,762	44,752	940,196	12,924
		Total	4,120	1.7	0.9	3.7	27	1.2	10.1	3.7	484,592	219,982	36,128	153,433	3,521,361	51,488
Liontown East	ML/MLA	Inferred	1,462	0.7	0.5	7.4	29	2.5	11.1	4.0	188,266	34,162	7,136	108,936	1,375,350	37,081
		Total	1,462	0.7	0.5	7.4	29	2.5	11.1	4.0	188,266	34,162	7,136	108,936	1,375,350	37,081
Waterloo	ML/MLA	Indicated	406	1.4	2.6	13.2	67	2.1	23.2	8.4	109,379	17,883	10,612	53,633	876,881	8,503
	ML/MLA	Inferred	284	0.4	0.7	6.6	33	0.7	9.0	3.3	29,747	3,642	2,095	18,651	301,215	2,109
		Total	690	1.0	1.8	10.5	53	1.5	17.4	6.3	139,127	21,525	12,707	72,284	1,178,095	10,613
Orient	EPM	Indicated	331	0.2	1.1	10.9	55	2.5	15.2	5.5	58,191	2,152	3,537	36,030	584,686	8,271
	EPM	Inferred	33	0.2	0.9	14.2	50	2.2	17.5	6.3	6,582	234	298	4,642	52,779	717
		Total	363	0.2	1.1	11.2	55	2.5	15.4	5.5	64,773	2,386	3,836	40,672	637,464	8,988
Total VMS Resource			6,996	1.3	0.9	5.5	31	1.7	11.1	4.0	903,571	299,168	62,756	382,382	7,018,963	117,256
Plateau <sup>#</sup>	EPM	Inferred	961	1.7	-	-	10.7	-				49,960	-	-	329,435	-
Global Resource			7,957							3.7		349,128	62,756	382,382	7,348,398	117,256

# SHN earning 75% equity in Lighthouse Farm-In tenements. Refer to SHN ASX release, 20 January 2023 "Consolidation of High-Grade Advanced Au Prospects, RW"

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 AuEg calculation is as follows: AuEg = (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 q/t / 31.103 \* Au recovery %) + (Ag grade q/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% ZnEg). For further details refer to SHN ASX Release, 11 December 2024. "904koz AuEg Resource at Ravenswood Consolidated".



## 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 bandheld XRE instruments, etc.) These examples	•	<ul> <li>No new drilling was undertaken at Liontown East, Waterloo or Orient.</li> <li>Diamond drilling (DD), reverse circulation (RC) and mud rotary (MR) techniques were used to obtain samples during 14 programmes of drilling undertaken between 1970 and 2024 for a total of 530 drill holes and 92,220 metres. The company, year, drilling method, hole count, and metres drilled count is outlined below:</li> </ul>						
	should not be taken as limiting the broad meaning of sampling.		Programme	Year	Drilling method	Hole count	Metres drilled count		
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any		Nickel Mines	1970-1973	DD	50	711		
	measurement tools or systems used. Aspects of the determination of mineralisation that are		Esso	1982-1983	DD	25	274		
	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		Great Mines Limited	1987	RC	43	623		
	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		Pancontinental	1994	DD	8	100		
	where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of		Pancontinental	1994-1996	RC	26	341		
	detailed information.		Liontown Resources	2007-2008	DD	35	269		
			Red River Resources	2017	DD	4	578		
			Red River Resources	2018	RC/DD	23	10252		
			Red River Resources	2019	DD	34	5281		



Criteria	Explanation				Commentary			
			Red River Resources	2020	MR	8	412	
			Red River Resources	2021	DD	14	4510	
			Red River Resources	2022	RC/DD	41	9008	
			Sunshine Metals	2023	RC/DD	13	1515	
			Sunshine Metals	2024	RC/DD	38	7345	
			TOTAL:			530	92,220	
		His	<ul> <li>Industry standard pr</li> <li>RC samples were ty</li> <li>Diamond core was n were then sawn long from NQ to HQ.</li> <li>The majority of the sa Absorption Spectrum OES) for the analysis charge with an AAS</li> </ul>	eparation and a pically collecte reviewed with s gitudinally in ha amples were ar m (AAS) or Ind s of base metal finish.	analysis methods of d in 1m intervals w specific zones sele lif, with the half co nalysed following a ductively Coupled s. Gold was analys	were used. with all samples sent ected for assay by t re sample sent for a three- or four- acid o Plasma Optical Em sed via Fire Assay us	for assay. he Geologist. These zone inalysis. Core sizes range digest and either via Atomi ission Spectrometry (ICF sing either 25g, 30g or 50	ss sd ic ₽- )g
			<ul> <li>Industry standard pr</li> <li>Reverse circulation mounted cone split samples were collect</li> </ul>	eparation and a drill holes were ter to create a sted in calico sa	analysis methods v sampled as indivi a 12.5% split weig ample bags	vere used. dual 1m length sam <sub>J</sub> hing approximately	ples derived through a rig 3 to 5kgs. Individual R	g- ¦C
			<ul> <li>Drill core sample int geological boundari intervals provides co sawn longitudinally i</li> </ul>	ervals were sel es with an ide omprehensive in in half (or quar	ected by company al sample length nsights into minera ters for duplicates	geologists based of of one (1) metre. I lisation characteristi ) onsite using an au	n visual mineralisation an Downhole sampling at 1 cs. Drill core samples wer tomatic core saw with ha	ıd m re alf



Criteria	Explanation	Commentary
		<ul> <li>used for analysis and half retained.</li> <li>Independent certified assay laboratories were used for analysis. Samples were analysed at Intertek Genalysis Laboratory in Townsville where samples were crushed to &lt;6 mm, split and pulverised to &lt;75 µm and a sub-sample was collected for analysis via four-acid digest and Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) analysis of the following elements: Ag, As, Ba, Bi, Ca, Cu, Fe, K, Mg, Mn, Na, Pb, S, Sb, Ti, Zn, &amp; Zr. Samples were assayed for Au using a 30g Fire Assay technique.</li> </ul>
		SHN
		<ul> <li>Industry standard preparation and analysis methods were used.</li> <li>Reverse circulation drill holes were sampled as individual 1m length samples derived through a rigmounted cone splitter to create a 12.5% split weighing approximately 3-5 kgs. Individual RC samples were collected in calico sample bags and approximately five were secured in each polyweave bag for sample dispatch.</li> <li>Diamond drill holes were predominantly collared with PCD drilling and changed over to HQ3 diamond drilling for completion of the hole. Drill core sample intervals were selected by company geologists based on visual mineralisation and geological boundaries with an ideal sample length of one (1) metre. Downhole sampling at 1m intervals provides comprehensive insights into mineralisation characteristics. The samples were sawn longitudinally in half (or quarters for duplicates) using a Corewise auto core saw, with half used for analysis and half retained.</li> <li>Samples are analysed at Australian Laboratory Services (ALS) in Townsville where samples were crushed to &lt;6 mm, split and pulverised to &lt;75 µm. 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 also assayed for Au using a 30 g or 50 g Fire Assay technique with AAS finish. Assays returning over 100 g/t Au from this technique were re-assayed using gravimetric analysis. Ba over 1% was re-analysed using XRF. S assays over 10% were re-assayed using induction furnace/IR.</li> </ul>
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.).	<ul> <li>Historic <ul> <li>Reverse circulation drill holes utilised a 4 ¼ to 5 ½ inch hammer bit.</li> <li>Conventional and wireline diamond drilling techniques were used through the various programmes. Core extraction utilised a conventional coring system. Historical core was not oriented.</li> </ul> </li> <li>RVR <ul> <li>Reverse circulation drill holes were between 4 ¼ and 5 ½ inch hole diameter.</li> </ul> </li> </ul>



Criteria	Explanation	Commentary
		<ul> <li>Diamond drill core sizes were NQ and HQ. Core extraction utilised a triple tube system with face-sampling bits for precise sample collection. Select holes were orientated using an industry-standard orientation tool.</li> <li>SHN</li> <li>Reverse circulation drilling utilised an 8 inch open-hole hammer for the first 10 m (pre-collar) and a 5 ½ inch RC hammer for the remainder of the drill hole.</li> <li>Diamond drill holes were predominantly collared using PCD before switching to HQ3 core size until completion of the hole. Core extraction utilised a triple tube system with face-sampling bits for precise sample collection.</li> </ul>
Drill cample	Method of recording and assessing core and chin	Historic
recovery	sample recoveries and results assessed.	No information is available on historical drilling recoveries.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Reverse circulation drill hole recoveries were not routinely recorded but intervals of no return were noted.</li> </ul>
Whether a relationship exists between sample and grade and whether sample bias may have due to preferential loss/gain of fine/coarse ma	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.	<ul> <li>Diamond drilling recoveries were measured on 50 holes. Overall recoveries were 92.7% across the holes, with most core loss occurring near surface and at a lesser extent around structures. Below 50m depth, recoveries averaged 97.2%.</li> </ul>
		<ul> <li>Reverse circulation drill hole sample recoveries of less than approximately 80% were noted in the geological/sampling log with a visual estimate of the actual recovery. Very few samples were deemed to have recoveries of less than 80%. No significant mineralised intercepts had recovery &lt;80%.</li> </ul>
		<ul> <li>Moisture categorisation was recorded. Some wet RC samples were collected during the 2024 drill campaign. The results of the wet samples were reviewed to ensure appropriate sample recovery was achieved and no smearing of grades was evident.</li> </ul>
		• Diamond drill core recoveries are recorded as part of the geological logging. All SHN diamond holes have been measured for recovery and reported an overall recovery of 99.1%.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining	<ul> <li>The following logging was completed on the drill holes:         <ul> <li>Qualitative logging includes lithology, alteration and textures.</li> <li>Quantitative logging includes visual estimate of sulphide and gangue mineral percentages.</li> </ul> </li> </ul>
	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.	The logging process, encompassing both qualitative and quantitative data collection, enables a thorough understanding of the geological features present in the drill holes. This information is critical for making informed decisions regarding exploration, resource estimation, mining and metallurgical studies.
		<ul> <li>Almost 100% logging coverage ensures a thorough dataset, supporting accurate and reliable assessments in subsequent studies.</li> </ul>



Criteria	Explanation		Commentary				
		<ul> <li>All drift hole logs are stoled in a Datastied database platform. Historic data was digitised from ong logs or scans of them. RVR logging was undertaken in Microsoft Excel then imported into the inho database. SHN personnel entered logging data directly into Geobank for Field Teams 2024 softw which has been set up and customised to SHN requirements with appropriate validation. The S Geobank data is then exported to CSV files and sent to an external database consultant, San Data Pty Ltd., for loading into the Datashed database platform.</li> <li>Reverse circulation chip samples were sieved and placed into chip trays and are logged to a deg that facilitates robust resource estimation and comprehensive study. Chip trays are stored within SHN core facility.</li> </ul>					
		<ul> <li>Drill holes were log inconsistencies in log</li> </ul>	gged to a level of detail to support this Mineral Resource Estimation. Any gging or log availability is reflected in the Mineral Resource classification.				
		All drill core from 20	07 has been photographed – this captures essential details for further analysis.				
Sub- sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split,	<ul> <li>In both reverse circ practices to ensure a the specific drilling n</li> </ul>	eulation and diamond drilling, samples were collected following industry best representativeness and quality. The sampling techniques used were tailored to nethods and to each programme:				
preparation	etc. and whether sampled wet or dry.	Programme	Sampling Method				
	For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling	Nickel Mines	Longitudinal half core, size unknown (hand split) – sampled to contacts predominately 1 or 5ft in length. Imperial lengths were subsequently converted to metric for use in the database.				
	stages to maximise representivity of samples.	Esso	Longitudinal half NQ core (core saw) – non-selective samples predominantly 1m in length.				
	representative of the in-situ material collected, including for instance results for field duplicate/second-half	Great Mines Limited	RC split (riffle splitter) using non-selective samples predominately 1m in length.				
	sampling.	Pancontinental	4 <sup>1</sup> / <sub>4</sub> to 5 <sup>1</sup> / <sub>2</sub> inch RC split (riffle splitter) using non-selective samples predominantly 1m in length.				
	of the material being sampled.		Longitudinal half NQ core (core saw) – selective samples predominantly 1m in length.				
		Liontown Resources	Longitudinal half NQ2 core (core saw) – sampled to geological contacts predominantly 1m in length.				



Criteria	Explanation		Commentary
		Red River Resources	4 $\frac{1}{2}$ to 5 $\frac{1}{2}$ inch RC split using a rig-mounted cone splitter, proportion 12.5%, on 1m intervals.
			Longitudinal half NQ2 core, half HQ3 core and quarter HQ3 core (automatic core saw) – sampled to geological contacts predominantly 0.5m to 1m in length.
		Sunshine Metals	5 ½ inch RC split using a rig-mounted cone splitter to produce a 12.5% sub-sample on 1m intervals and comprised approximately 3 to 5kg.
			Longitudinal half HQ3 core (automatic core saw) – sampled to geological contacts predominantly 0.5m to 1m length.
		<ul> <li>Sub-sampling and sar is considered approprimineralisation style. F sample accurately refited or &lt;6mm split and p analysis. Pre-2007 infigure prepared to industry set industry</li></ul>	nple preparation documentation is available for all programmes from 2007 and iate for the characteristics of the mineralisation and sufficient to represent the Rigorous care during sample collection and handling ensures the delivered lects the drilled interval. Sample preparation since 2007 comprised crushing ulverising to <75 µm in order to produce a representative sub-sample for formation is limited, however, it is considered the samples would have been standards of the time. Irill samples since 2018 were collected via a rig-mounted cone splitter to p-sample on 1 m intervals and comprised approximately 3 to 5kg. Previous drill samples were collected in 1987 by Great Mines Limited and by 24-1996. Collection data on these samples is limited but were likely collected subsequently split using a separate riffle splitter, the industry standard at the ras placed in core trays for logging and sampling. Diamond core was cut sing a core saw in all programmes except that of Nickel Mines (1970-1973) in plit by hand. mple intervals were to geological contacts except for in the Esso and Great mme. This produced a degree of smoothing in that data, as expected. nple lengths varied between 0.3m and 2m in length (98% of samples) with 78% m in length. Mean sample length is 0.94m and so 1m intervals are considered al resource estimation at the Liontown Project.



Criteria	Explanation	Commentary
		samples.
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.	<ul> <li>Various assay methods were employed at the Liontown Project in the different drill programmes. Assay methods are considered appropriate for mineral resource estimation of the style and type of mineralisation.</li> <li>Various degrees of Quality Assurance and Quality Control (QAQC) procedures were implemented in the different drill programmes. Records are available from 2007. Since 2007 it is considered that acceptable levels of accuracy and precision have been established. Given that reputable licensed laboratories were utilised pre-2007 it is considered that acceptable levels of accuracy and precision were established for the purposes of mineral resource estimation.</li> </ul>
	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.	<ul> <li>The majority of the samples were analysed following a three- or four- acid digest and either via Atomic Absorption Spectrum (AAS) or Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) for the analysis of base metals. Gold was analysed via Fire Assay using either 25g, 30g or 50g charge with an AAS finish. No information regarding QAQC data is available.</li> <li>Historic (post-2007)</li> </ul>
		<ul> <li>The majority of the samples were analysed following a three- or four- acid digest and either via Atomic Absorption Spectrum (AAS) or Inductively Coupled Plasma Optical Emission Spectrometry (ICP- OES) for the analysis of base metals. Gold was analysed via Fire Assay using either 25g, 30g or 50g charge with an AAS finish.</li> </ul>
		<ul> <li>Commencing on drillhole LTD0014, blanks were inserted on either side of observed mineralised intersections and standards were inserted at the rate of about 1 in 30. In 2015 RVR conducted a review into the QAQC procedures and concluded that there were enough results to meet the JORC 2012 requirements for verification of source data. QAQC for blanks was typically good, with two samples analysing slightly high for Au and review of the CRMs suggested that Cu showed a general slight elevation in reporting and Pb showed a slight underreporting (deemed within acceptable limits), and zinc reporting was considered accurate.</li> </ul>
		RVR
		<ul> <li>Independent certified assay laboratories were used for analysis. Samples were analysed at Intertek Genalysis Laboratory in Townsville where samples were crushed to &lt;6 mm, split and pulverised to &lt;75 µm and a sub-sample was collected for analysis via four-acid digest and Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) analysis of the following elements: Ag, As, Ba, Bi, Ca, Cu, Fe, K, Mg, Mn, Na, Pb, S, Sb, Ti, Zn, &amp; Zr. Samples were assayed for Au using a 30g Fire Assay technique.</li> </ul>



Criteria	Explanation	Commentary
		The QAQC procedures involved insertion of blanks at a rate of 1 in 40 and Certified Reference Materials (CRMs) inserted at a rate of 1 in 20, before moving to 1 in 25 after Feb 2022. Banks and CRMs returned results within an acceptable range. No field duplicates were submitted for reverse circulation or diamond drilling.
		<ul> <li>Samples are analysed at Australian Laboratory Services (ALS) in Townsville where samples were crushed to &lt;6 mm, split and pulverised to &lt;75 µm. 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 also assayed for Au using a 30 g or 50 g Fire Assay technique with AAS finish. Assays returning over 100 g/t Au from this technique were re-assayed using gravimetric analysis. Ba over 1% was re-analysed using XRF. S assays over 10% were re-assayed using induction furnace/IR.</li> <li>The QAQC procedures involved Blanks, Field Duplicates and CRMs inserted at a rate of 1 in 10 and it is considered that acceptable levels of accuracy and precision were established for the purposes of mineral resource estimation.</li> </ul>
		<ul> <li>Blank material comprised of "play sand" sourced from a local hardware store. Approximately 0.5kg was inserted into a numbered bag and entered into the sample stream. No significant contamination was reported from blank material.</li> <li>All CRMs were sourced from the reputable industry suppliers OREAS and Geostats Pty Ltd. A 2024 review of CRMs concluded that data quality was "good throughout the programme", however, a limited number of zones were re-assayed due to CRMs returning results outside of three (3) standard deviations. The re-assaying of these outliers showed original assays were within acceptable levels of accuracy and precision, however, some Au-bearing zones may illustrate localised variability.</li> <li>Field duplicates were collected as a second split direct from the drill rig for reverse circulation drilling</li> </ul>
		and as longitudinally cut quarter drill core to be compared with the half core original drill core sample. Duplicates were found to be repeatable within acceptable limits.
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	• Company geologists conduct meticulous reviews of mineralised intercepts observed in reverse circulation chip trays and diamond core, ensuring a thorough examination of geological features.
assaying	The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data	<ul> <li>Historic</li> <li>Documentation and information regarding data entry procedures, data verification, and data storage (physical and electronic) protocols is very limited. Available geological logging sheets comprise originals and scanned copies were digitised into RVR's database and subsequently into SHN's Datashed database. A series of twin holes were carried out by Esso of original Nickel Mines holes. On that basis the original drill holes were considered as "likely erroneous" and excluded by Esso and future operators.</li> </ul>



Criteria	Explanation	Commentary
		RVR
		<ul> <li>RVR data entry procedures, data verification and data storage (physical and electronic) comprised of Microsoft Excel logs and database exports and which have been incorporated into SHN's Datashed database. RVR reportedly twinned several historical drill holes, however it is unclear which holes were specifically designed as twins.</li> </ul>
		SHN
		• SHN twinned one (1) historic RC drill hole also with RC drilling (LLRC187). The replication of mineralised width and grade were considered reasonable.
		• SHN on-site Geologist's logged directly into Geobank for Field Teams 2024 software, which has been set up and customised to SHN requirements. The Geobank data is then exported to CSV files and sent to an external database consultant for loading into the Datashed database platform. The Sunshine Metals Ravenswood Consolidated Project drillhole assay database is managed by Sample Data Pty Ltd and each sample records the laboratory analysis method ensuring that suitable methods are utilised.
		<ul> <li>Additional data validation procedures take place within the Datashed database platform and Leapfrog software. Within Datashed, this entails a meticulous process of querying and integrating multiple tables to identify any missing samples and assay results. Simultaneously, Leapfrog, upon importing the assays into the software, employs algorithms to detect and highlight any errors, overlaps, or duplications in intervals, ensuring an accurate dataset.</li> </ul>
		• Assay files are received electronically from the laboratory and securely filed on the company's server. These files are then provided to the database manager who loads the data into the company's database. Rigorous validation checks are performed at this stage, ensuring that the integrity and accuracy of the assay data are maintained throughout the entire process. SHN high-grade assays are routinely re-analysed: assays returning over 100 g/t Au from Fire Assay were routinely re-assayed using gravimetric analysis, Ba over 1% was re-analysed using XRF and S assays over 10% were re-assayed using induction furnace/IR.
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.	<ul> <li>Historic</li> <li>Historic drill collar locations were determined by a variety of methods in different programmes and included DGPS pickup of all 105 historical collars by Liontown Resources in 2007.</li> <li>Historic down hole surveys were taken using Eastman single shot cameras.</li> </ul>
	Specification of the grid system used. Quality and adequacy of topographic control.	RVR



Criteria	Explanation	Commentary
		<ul> <li>All survey activities were executed by an in-house certified surveyor using RTKGPS with &lt;30mm horizontal and vertical accuracy.</li> <li>Down hole surveys used an industry-standard Reflex singleshot/multishot tool.</li> <li>All survey activities have been executed by a certified surveyor, Burton Exploration Services, using PPKGPS with &lt;30mm horizontal and vertical accuracy. This included all new and available historical drill collars. Any historical collars collected superseded previous collar pickups.</li> <li>Downhole surveys employed an industry-standard Reflex Sprint-IQ gyroscopic survey tool under the management and calibration procedures of Eagle Drilling NQ Pty Ltd.</li> <li>The grid system applied is UTM MGA 1994 Zone 55.</li> <li>A 20m sterilization buffer zone was generated around the digitised workings of the historic Carrington Mine. The digitised workings were generated from historic level plans and survey pick ups of surface shaft locations in the 2020 resource estimate and provided for use as sterilization for the current Mineral Resource Estimate.</li> </ul>
Data spacing and distribution	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.	<ul> <li>Historic <ul> <li>Drill hole spacing ranges from 15 to approximately 30.</li> <li>Most holes were angled and drilled roughly due north. Most historic holes have drilled within a 1 m east-west trend.</li> </ul> </li> <li>RVR &amp; SHN <ul> <li>Drill hole spacing ranges from 5m to approximately 25m.</li> <li>Most holes were angled and drilled roughly due north.</li> <li>Mean length of recorded samples is approximately 0.99 metres across all samples.</li> <li>The choice of designating 1 metre as the composite length is based on the data's distribution and practicality, given the prevalence of one (1) metre samples.</li> <li>The drill spacing provides evidence of mineralised zone continuity for the purposes of resource estimation and is reflected in the classification level.</li> <li>Samples were composited within the mineralisation interpretation. See Section 3.</li> </ul> </li> </ul>
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	<ul> <li>Where possible, holes were orientated to ensure drill intersections were approximately perpendicular to the strike of the ore lenses and overall geological sequence. Dip intersections to the plane of mineralisation generally occur between 45° and 80°.</li> <li>Objective of drilling was directly to intercept mineralised lenses and structures.</li> </ul>



Criteria	Explanation	Commentary
	considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Drill spacing is considered regular although as expected the most well-defined zones are shallower and central to the orebody.</li> </ul>
		<ul> <li>No potential sampling bias is expected. The drilling pattern and orientation is deemed to have appropriately intercepted the ore lenses and stratigraphy.</li> </ul>
Sample	The measures taken to ensure sample security.	Historic
security		Sample security for historic programmes lack information and cannot be validated.
		RVR
		<ul> <li>Samples were acquired on-site by competent geologists, each labelled with a unique sample ID, with five (5) samples grouped into a labelled polyweave big and transported securely to Intertek Genalysis Laboratory in Townsville establishing a rigorous chain of custody in accordance with industry standards.</li> </ul>
		SHN
		• Samples were acquired on-site by competent geologists, each labelled with a unique sample ID, with five (5) samples grouped into a labelled polyweave big and transported securely to ALS Townsville establishing a rigorous chain of custody in accordance with industry standards.
Audits or	The results of any audits or reviews of sampling	Historic
reviews	techniques and data.	<ul> <li>Pre-2008 reviews were carried out and documented by the various previous owners of the project including:</li> </ul>
		<ul> <li>A review of the assay data was completed by McDonald Speijers Consultants in 2008.</li> <li>Data review for resource estimation was completed by Mining One Consultants in November 2015.</li> </ul>
		RVR
		• Data review and due diligence reviews for previous resource estimations by RVR were completed by Mining One Consultants in November 2015.
		SHN
		<ul> <li>Sampling techniques and data processes of SHN have been reviewed by AHD Resources (2023) and Measured Group Pty Ltd (Measured Group) in 2024.</li> </ul>



#### **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.	<ul> <li>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 1,326km<sup>2</sup>. 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.</li> </ul>
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence	• The Liontown Resource is located in its entirety on ML 10277 and EPM 14161 and under Mining Lease Applications MLA 100290 and MLA 100302.
	to operate in the area.	• 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.
		<ul> <li>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.</li> </ul>
Exploration	Acknowledgment and appraisal of exploration by other parties.	• The Liontown deposit was discovered in 1905 by William Fredrick Carrington, whilst searching for his horses "Lion and Noble".
other parties		• The Cu-Au enriched zone was mined using underground development from 1905 to 1911, producing 28,000 ounces of gold at an average grade of 22g/t Au (Levingston, 1972).
		<ul> <li>A second phase of mining occurred from 1951 to 1954 after Parsons and Jansen discovered the Pb-Zn-Ag enriched stratiform sulphide lenses, producing 54,000 ounces of silver and 9 tonnes of lead (Levingston, 1972).</li> <li>1952 – 1953: Broken Hill South Limited drilled 3 diamond drill holes at Liontown, intersecting high-grade Pb-Zn-Ag (total of 292m drilling).</li> </ul>
		<ul> <li>1957 - 1961: Queensland Mines Department completed 21 diamond drill holes at Liontown (1034m). In 1952 &amp; 1959 EM surveys were carried out. 1960-1961 8 DD holes (896m) were drilled to test the EM anomalies but poor results were encountered.</li> </ul>
		• 1967 - 1968: Carpentaria Exploration Company conducted geochemical and geophysical surveys.



Criteria	Explanation	Commentary
		<ul> <li>1970 - 1972: Jododex Australia held ground surrounding the Nickel Mines Lease with Shelley (1973) recognising that mineralisation is conformable with stratigraphy and exhibits features seen in volcanic ore deposits.</li> <li>1970 - 1971: Nickel Mines drilled 59 diamond drill holes for 7669m in total at Liontown. The programme was poorly documented and is now considered to be unreliable. As such, they have not been used within the current resource update.</li> <li>1982 - 1984: Esso Minerals carried out an extensive exploration programme across the region, under a JV agreement with Great Mines. The programme consisted of extensive RAB drilling, soil sampling, geophysics, RC drilling and diamond drilling holes at Liontown. A total of 30 lines of IP and 2.1 km2 of EM were also completed over the Liontown area.</li> </ul>
		<ul> <li>1987: Great Mines Limited drilled 50 shallow RC drill holes</li> <li>1994 -1996: Pancontinental drilled 124 holes for 14,316m. Most of the drilling was conducted at Liontown and along the Liontown horizon looking for repeat lenses.</li> <li>2004-2009: the project was acquired by Bullion Minerals Ltd, subsequently, Uranium Equities Limited and then Liontown Resources Ltd, Uranium Equities undertook a programme of 580 soil samples and a VTEM survey within the broader Liontown area before following up with RC and Diamond Drilling at Liontown, which was continued by Liontown Resources. A JORC 2004 compliant Mineral Resource Estimate (MRE) was reported in 2008 of; 1.64Mt @ 7.4% Zn, 0.49% Cu, 2.3% Pb, 0.5g/t Au &amp; 28g/t Ag (sulphide) &amp; 0.2Mt 7.4 % Zn, 1.12% Cu, 3.1% Pb, 0.96g/t Au &amp; 31g/t Ag (oxide).</li> </ul>
		<ul> <li>Limited work was conducted following this period and the project was subsequently joint ventured to Ramelius Resources (2010 – 2013) and Kagara Ltd (2013 -2014) both of which conducted desktop reviews.</li> <li>The tenure was acquired by Red River Resources in 2015 who subsequently reported a JORC 2012 compliant MRE update of; 2.04Mt @ 4.60% Zn, 0.50% Cu, 1.6% Pb, 0.8g/t Au &amp; 26g/t Ag (sulphide) &amp; 0.22mt 4.65 % Zn, 0.95% Cu, 1.33% Pb, 0.95g/t Au &amp; 15g/t Ag (oxide). IP reprocessing of historical data and followed up with 9-lines of dipole-dipole IP within the tenure area. The reprocessing of the historical data aided follow-up targeting at Liontown East at which mineralisation was successfully drilled in 2017. Further drilling occurred at Liontown in 2018 through to 2020 and included a second Red River Resources JORC 2012 compliant MRE update for Liontown and Liontown East combined of; 4.1Mt @ 5.9% Zn, 0.6% Cu, 1.9% Pb, 1.1g/t Au &amp; 29g/t Ag (sulphide) &amp; 0.1Mt @1.9g/tAu &amp; 24g/t Ag (oxide) in 2020.</li> <li>The tenure was acquired by Sunshine Metals Ltd in 2023. Sunshine reported a JORC 2012 compliant MRE update Liontown East combined using different metal price assumptions to report; 3.9Mt @ 6.1% Zn, 0.65% Cu, 1.99% Pb, 1.2g/t Au &amp; 31g/t Ag (sulphide) &amp; 0.15Mt @2.1g/t Au &amp; 30g/t Ag (oxide) in February 2024.</li> </ul>



Criteria	Explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li><u>Regional Geology and Setting:</u> <ul> <li>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 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, volcaniclastics (including mass flow deposits), minor felsic rocks 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, Liontown and Highway-Reward.</li> <li>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.</li> <li>Local Geology:</li> <li>The Liontown deposit mineralisation is hosted within Cambro-Ordovician marine volcanic and volcanosedimentary sequences of the Mt Windsor Volcanic sub-province. The Liontown ad</li></ul></li></ul>
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> </ul>	<ul> <li>Raw interval length varies from 0.5 m to 2m.</li> <li>Drill intersections from 294 drill holes were used in the estimation 49 of which were drilled by Sunshine Metals Ltd.</li> <li>Tables with drill hole collar and survey are in Appendix A containing Hole IDs, location, elevation (m), hole type, etc.</li> </ul>



Criteria	Explanation	Commentary
Data aggregation methods	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> 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 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 shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated	<ul> <li>No reported exploration results. For all previous exploration results refer to ASX releases.</li> <li>The dominant composite length is 1m.</li> <li>The gold and zinc equivalent grades for Greater Liontown (g/t AuEq, % ZnEq) are based on the following prices:</li> <li>US\$2,900t Zn, US\$9,500t Cu, US\$2,000t Pb, US\$2,500oz Au, US\$30oz Ag.</li> <li>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: <u>Copper-gold dominant</u> – 92.3% Cu, 86.0% Au, <u>Zinc dominant</u> 88.8% Zn, 80% Cu, 70% Pb, 65% Au, 65% Ag.</li> <li>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 %) + (An grade g/t / 31.103 / (Au price \$/oz / 31.103)))</li> </ul>
		<ul> <li>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)))</li> <li>No top-cut or capping was applied. Instead, a clamping method at specific search distances and value thresholds was employed to reduce statistical bias.</li> </ul>
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').	<ul> <li>The stratiform mineralisation is interpreted to be dipping at approximately 70 degrees towards a bearing of 180 degrees.</li> <li>A variety of drill hole angles have been drilled with the majority intercepting the strike of mineralisation perpendicular and the plane of mineralisation at angles between 90 and 45 degrees. Interpreted feeder structures are interpreted to dip more steeply between at 80 to 90 degrees at a similar bearing of approximately 180 degrees.</li> <li>True widths of intercepts are likely to be between 40% and 80% of down hole widths.</li> <li>Lode mineralisation widths are generally between 0.1m and 12m true width and averaging 1.7m.</li> </ul>



Criteria	Explanation	Commentary
		• Sample lengths are most commonly 1m of downhole length. Note some smaller true widths are observes to assist in controlling mineralisation interpretation. These areas are considered in the classification.
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.	<ul> <li>Maps and sections showing drill hole intercepts are contained within the body of the release and the Appendices.</li> </ul>
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.	<ul> <li>The Sunshine Metals Liontown Project 2024 MRE was produced by Measured Group based on information provided by Sunshine Metals. The resource report contains summary information for all historic drilling and sampling campaigns within the Project area and provides a representative range of grades intersected in the relevant drill holes.</li> <li>No new exploration results are reported here. The application of estimation reduces anomalous grade bias in the representation of mineralisation interpretation of Liontown.</li> </ul>
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.	<ul> <li>Geological observations: Historical mapping has validated the stratigraphy in the area, although limited outcrop is present. Historical shafts have been located and sighted by SHN confirming the presence of the historical mining activities and validating the location of the workings.</li> <li>Geophysical survey results: Induced Polarisation has been shown to be an effective exploration tool at Liontown and was used in targeting for the discovery of the Liontown East deposit.</li> <li>Geochemical survey results: Historical mining has affected the reliability of soil sampling in the immediate Liontown area, however base metal (Cu, Pb, Zn) and Au anomalism in soil is deemed to be a useful exploration technique for VMS deposits within the region.</li> <li>Bulk density: Samples were collected by SHN during its core drilling programme at a rate of 1 in 10m for unmineralised rock and 1 in 2m to 5m for mineralised rock. Future drill programmes will also collect additional bulk density data.</li> </ul>
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.	Further drilling will be required to test geological interpretation and targeting of additional lenses and increase resource confidence.



## **Section 3 - Estimation and Reporting of Mineral Resources**

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrityMeasures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection	LIONTOWN RESOURCE	
	integrity been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Measures to ensure data integrity in the Mineral Resource Estimation (MRE) for the Liontown Project in Sunshine Metals (SHN):
		• Data supply and compilation: Sunshine Metals initiated the MRE project in September 2024, providing raw drill data in various computerised formats, including MS Access, CSV, Excel, and PDF.
		<ul> <li>Legacy data, including topography in DXF format, was also supplied.</li> </ul>
		<ul> <li>All data, including updates and legacy information, were compiled into the Access database from September to early October 2024.</li> </ul>
	<ul> <li>Initial database management was outsourced, revealing critical errors, and prompting the transition of data management to MG in mid-October 2024.</li> </ul>	
		• Data management transition: SHN's database used in the MRE contains:
		<ul> <li>All standard samples from the recent drilling and their assay results</li> </ul>
		<ul> <li>All available historical and assay results obtained from the recent drilling campaign</li> </ul>
		<ul> <li>Available Geological logging data</li> </ul>
		<ul> <li>Historical drilling data and assays</li> </ul>
		<ul> <li>Other pertinent data essential for the MRE process</li> </ul>
		Data processing: MG imported all data into Leapfrog (LF) software, including historical and recent data. DXF topo data underwent pre-processing and was loaded into LF in DXF format.
		• Data integrity and validation: MG relied on the basic integrity of the supplied data, particularly on the legacy data. MG conducted comprehensive data checking and validation of the drilling data collected from the recent drilling campaign to ensure its integrity.
		• Surveys: MG plotted the holes in LF and validated their locations by comparison with various historical collar plots.
		Assays: Assay values were checked for downhole interval integrity and statistical errors.



Criteria	Explanation	Commentary
		Additional verification processes performed on the database include:
		<ul> <li>Loading error-checking identified depth errors, nonnumerics, and missing intervals, resolving minor discrepancies attributed to typographic errors.</li> </ul>
		<ul> <li>Simple statistics revealed some errors, which were easily fixed.</li> </ul>
		<ul> <li>Verification included reporting, visual inspection, plan and section plotting, and comparisons with historical plans and sections.</li> </ul>
		<ul> <li>Continuous checks during geological interpretation confirmed broad data integrity, particularly in continuity in assay patterns.</li> </ul>
		<ul> <li>Topographic data underwent thorough validation through comparison with ground observations and limited GPS checks, with MG consultants verifying its adequacy.</li> </ul>
		• The measures undertaken by MG encompass comprehensive data validation, systematic error-checking, and thorough verification processes, ensuring the integrity of the data throughout its journey from initial collection to use in the Mineral Resource Estimation project.
		LIONTOWN EAST RESOURCE
		<ul> <li>The survey, sampling and logging data was electronically imported into the resource database. Checks were made of the original lab sample sheets and the database to ensure that transcription errors were not present. A visual check was made of the drill traces, assay and logging data in the 3D environment of Datamine to ensure that results correlated between drill holes and were in line with the geological interpretation.</li> <li>Exclusion of Au and Ag assays from the first drill programme by Nickel Mines was carried out due to uncertainty of their recorded values. Three other drill holes were excluded from the resource estimate due to suspect location and/or assay records.</li> </ul>
		WATERLOO RESOURCE
		<ul> <li>The survey, sampling and logging data was electronically imported into the resource database. Checks were also made of the original lab sample sheets and the database to ensure that transcription errors were not present. A visual check was also made of the drill traces, assay and logging data in the 3D environment of Surpac to ensure that results correlated between drill holes and were in line with the geological interpretation and mineralisation continuity.</li> </ul>
		ORIENT RESOURCE
		• The survey, sampling and logging data was electronically imported into the resource database. Checks were also made of the original lab sample sheets and the database to ensure that transcription errors were not present. A



Criteria	Explanation	Commentary
		visual check was also made of the drill traces, assay and logging data in the 3D environment of Surpac to ensure that results correlated between drill holes and were in line with the geological interpretation and mineralisation continuity.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	<ul> <li>LIONTOWN RESOURCE</li> <li>A site visit was undertaken by the Competent Person Chris Grove. The purpose of this visit was to ensure that his exploration procedures were conducted in the correct scientific method. This included all aspects of the exploration process from initial drill hole planning to database consolidations. The outcomes of this visit proved highly valuable and operations on site were deemed by Chris to have been conducted in the professional nature required.</li> <li>LIONTOWN EAST RESOURCE         <ul> <li>Site visits to Liontown, Liontown East and Thalanga Mine Site Core Facility were undertaken by the competent person in April and June 2018.</li> <li>A review of the data collection processes was undertaken</li> <li>No material issues were identified.</li> </ul> </li> <li>WATERLOO RESOURCE         <ul> <li>A site visit was completed by Stuart Hutchin during 2013 where the Waterloo prospect and core samples were inspected.</li> </ul> </li> <li>ORIENT RESOURCE         <ul> <li>A site visit was completed by Stuart Hutchin on 16/10/2013 where Orient core samples were inspected.</li> </ul> </li> </ul>
Geological interpretation	Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology	<ul> <li>LIONTOWN RESOURCE</li> <li>Mineralised boundaries for the current resource estimate have been determined on mineral grades from both RC and DD holes. Exploratory data analysis was carried out to ensure that the observed grade-derived mineralisation was reflective of the lithology, alteration and mineralogy.</li> <li>A First-pass interpretation of Zn + Pb dominate zones was completed and followed up by Cu + Au zones. These were then compared and combined appropriately to reflect the interpretation of stacked mineralised lodes. A final check on boundary domains was completed on the Zn Eq value, calculated on the drilling samples (Zn Eq outlined below). This was to ensure that no excessive waste was included internally in the wireframes.</li> <li>Mineralised intercepts from drill holes were spatially correlated, considering the stratigraphic sequence and the structural characteristics of the deposit. 3D solid wireframes (lodes) were created from selected intervals using the Geological Model tool in Seequent Leapfrog Geo (Leapfrog). Wireframes were snapped into the boundaries of the mineralised intercepts.</li> <li>Factors affecting the continuity of grade and mineralisation are related to the pinching nature of the VMS lenses. In some cases, the continuity of structures can be observed in the drilling, but is not supported by assay results,</li> </ul>



Criteria	Explanation	Commentary
		leading to the termination of one lode and the development of another along strike, in line with results in the assay database
		LIONTOWN EAST RESOURCE
		<ul> <li>Confidence in the geological interpretation of the mineral deposit as a VMS is high based on its characteristics and their affinities with other well-known deposits within the Seventy Mile Range Group</li> <li>Consistency of the host sequence between holes through and around the Mineral Resource is high. The sequence continues along strike and is well drilled in both Liontown and Liontown East where mineralisation is located within the same horizons. This repetition is a function of contemporaneous deposition.</li> <li>The assumption that mineralisation is continuous between holes within the resource area is fair considering the consistency of host and mineralisation and the drill hole spacing defining them.</li> <li>There is moderate potential for local discontinuities of the mineralised system from depositional facies variations, faulting and dykes interruptions. There is a low potential for these to have a major impact on the global Mineral Resource.</li> <li>The main lens of mineralisation is contained between a fine-grained siltstone and a thick package of rhyodacite pumice breccia.</li> <li>A mineralised envelope containing massive, banded and network stringer sulphide mineralisation (sphalerite, galena, chalcopyrite and pyrite) was used to constrain the resource estimate.</li> <li>At Liontown East, within the immediate footwall lesser Zn Pb Cu stringer sulphide mineralisation within the footwall pumice breccia below the defined resource has not been included in the estimate. This Cu-Au mineralisation has similarities to the Carrington Lode mined at the Liontown deposit. Further drilling at closer spacing may prove the continuity of these areas.</li> <li>Little recent data has been collected in the Oxide domain and the Western Footwall domain of the Resource and as such a lower confidence in the interpretation of these areas exists.</li> </ul>
		WATERLOO RESOURCE
		• The confidence in the overall geological interpretation is high given the continuity of the mineralised zone defined at the 40m x 40m drill spacing.
		<ul> <li>The dacite, quartz-eye volcaniclastics and rhyolite geological units have been modelled to define general areas of rock types within the deposit. The mineralised zones typically occur within the quartz eye volcaniclastics.</li> <li>The mineralised lenses occur within the quartz-eye volcaniclastic package, they are discrete pods of massive</li> </ul>



Criteria	Explanation			Com	imentary		
		sulphide and s	stringer minerali	sation.			
		<ul> <li>The confidence at the 40m x 4</li> <li>The dacite, que general areas volcaniclastics</li> <li>The mineralis sulphide and set</li> </ul>	ce in the overall ( 40m drill spacing Juartz-eye volcan s of rock types s. sed lenses occur stringer mineralis	geological interpreta i. iclastics and rhyolit within the deposit. • within the quartz e sation.	ation is high given the e geological units ha The mineralised zo eye volcaniclastic pa	e continuity of the minera ave been modelled and a ones typically occur with ackage, they are discrete	lised zone defined are used to define hin the quartz-eye pods of massive
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	<ul> <li>LIONTOWN RESOURCE</li> <li>An East-West lodes.</li> <li>The Zn-Pb-Ag HW02, HW03,</li> <li>The Zn-Au do entirely within (~70° to 180°) as subvertical feeder structure FW 13, FW 15</li> <li>Dimensions for</li> </ul>	CE t striking and mo g dominant miner b, LTE HW01) hos ominant mineralis n the pumice bre ). The remaining al, quartz-sulphid ures to the stratifi 5, FW 17, FW 18, or the interpreted	oderately (70°) south ralisation consists of sted within sediment sation consists of 2 ccia unit but display 13 wireframes repro e veins/lodes, cuttir orm mineralisation ( FW 19 & FW 22).	h dipping mineralise f 3 individual stacked ts, comfortably overly individual sulphide le ving a geometry com esent Cu-Au and or ng across the stratig domains FW 02, FW outlined in the table	d sequence is interprete I narrow sulphide lenses ying a pumice breccia un enses (domains FW 04 & forming to the overall dip Au-only dominant minera yraphy at a high angle, in 03, FW 05, FW 07, FW 1 below:	d as 18 separate (domains HW 01, it. & FW 14) situated o of the sequence disation occurring nterpreted as the 0, FW 11, FW 12,
		FW FW FW FW FW FW FW FW FW FW	de / 02 / 03 / 05 / 04 / 07 / 10 / 11 / 12 / 13	Length (m) 600 350 510 440 250 390 260 410 190	Width (m) 310 240 270 170 100 250 140 250 140	Average (m)         Thickness           1.30	



Criteria	Explanation			Con	nmentary		
			FW 14	300	120	1.90	
			FW 15	160	150	2.30	
			FW 17	260	350	0.65	
			FW 18	240	230	2.50	
			FW 19	540	330	2.65	
			FW 22	310	280	1.00	
			HW 01	170	120	1.90	
			HW 02	220	35	2.10	
			HW 03	160	60	0.75	J
		<ul> <li>The definit degrees</li> <li>The extended</li> <li>The Minor of 5.1m.</li> <li>The Minor The Resonance</li> </ul>	ned Mineral Resource to the southeast. ent of the Mineral Res eral Resource range eral Resource is defin ource is open at dep	e has dimensions o source span 250m in s from 0.5m to 14m ned between 170m a th.	f a narrow lens that strike and 480m do in true thickness wit and 570m below surf	strikes at a bearing of 07 wn plunge h an area-weighted avera	75 and dips at 60
		The strik     resource     surface.	e length of the overa	II mineralised zone is d from 50m below th	s 600m, the thickness e surface topograph	s of the zones ranges fron y and extend to a depth o	n 5m to 10m. The f 200m below the
		ORIENT RESOUR • The strik resource the surfa	RCE e length of the overa e domains are locate ice.	ll mineralised zone is d from 150m below	s 340m, the thickness the surface topogra	s of the zones ranges fron phy and extend to a dep	n 5m to 10m. The th of 500m below



Criteria	Explanation	Commentary
Estimation	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions about correlation between variables.	<ul> <li>LIONTOWN RESOURCE</li> <li>The mode of the original sampling interval for the geochemistry assaying corresponds to 1m (77.3% of the samples). Thus, compositing was carried out at 1 m interval considering mineralised model boundary breaks.</li> <li>To increase the coverage of the specific gravity (SG) dataset, a regression model using the multielement geochemistry plus the spatial coordinates was fitted to predict SG in the absence of experimental data. A gradient boosting model was used, considering a 5-fold cross validation to prevent overfitting and to calculate the performance of the model on a test dataset. The performance of this model was measured by the root mean squared error (RMSE=0.18) and the coefficient of determination (R2 = 0.65). Considering the different sample support between the two datasets (1m interval for geochemistry and ~0.3m for SG), the performance of the model was considered appropriate.</li> <li>Declustering scenarios by varying the cell size were calculated using the cell method, oriented accordingly to the global geometry of the mineralised system. The optimal declustering mesh size was obtained at 86 m x 86 m x 4m. These declustered weights were used to calculate the experimental distribution of the grades. Subsequently, to evaluate outliers, declustered probability plots were examined per analyte/domain to determine population breaks around the 98<sup>th</sup> percentile, in cases where no clear break was observed the value of the 98<sup>th</sup> percentile was used.</li> <li>Interpolation was performed using ordinary kriging for the following analytes; Au, Ag, Cu, Pb, Zn and specific gravity. Due to the large number of domains (18) and the narrow width (~2m) of the mineralised structures, some domains lacked a sufficient number of samples (&lt;50) to produce robust variogram estimates. To address this, the lenses were grouped into five clusters based on their geochemical signatures and their structural orientation. Directional variograms were then calculated for each group, and subsequently,</li></ul>
	Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data	<ul> <li>LIONTOWN EAST RESOURCE</li> <li>The resource model was constructed using Datamine Studio RM software.</li> <li>A mineralised envelope containing continuity of massive, banded and network stringer sulphide mineralisation (sphalerite galena chalcopyrite and pyrite) was used to constrain the resource estimate. This envelope equates to ~ 5% ZnEq cut-off.</li> <li>Extrapolation of mineralised envelope beyond the extent of the drill hole confirmed mineralisation was ~1/3 of drill spacing.</li> <li>Top capping of high-grade Cu, Pb, Ag and Au samples was applied to raw assay data. 9 Cu samples (&gt;2% Cu), 7</li> </ul>



Criteria	Explanation	Commentary
	to drill hole data, and use of reconciliation data if available.	<ul> <li>Pb composites (&gt;10% Pb), 5 Ag samples (&gt;140ppm Ag) and 5 Au samples (&gt;4ppm Au) were top capped to their population means.</li> <li>The sample data was composited to a length of ~1m.</li> <li>An inverse distance squared estimate was carried out using a multiple pass method with sample limitations and octant requirements and increasing search distances. A block size 1/3 of the sample spacing was used.</li> <li>This method is suitable for an Inferred Resource estimation at Liontown East given the style and orientation of the mineralisation and the current drill spacing.</li> <li>The estimation process was validated by comparing global block grades with the average composite grades, visual checks comparing block grades with raw assay data, volume checks of the ore domain wireframe vs the block model volume and comparison of composites and block grades by RL.</li> <li>The validation steps taken indicated that the block estimates are a realistic representation of the source assay data and that the block model volumes are valid in comparison to the modelled interpretation.</li> </ul>
		WATERLOO RESOURCE
		<ul> <li>The resource model was constructed using Surpac software. Mineralised domain wireframes were constructed by modelling the geological cut-off seen in the logging for both the massive sulphide zone and the stringer zone. A minimum domain thickness of 2m was used, this corresponds to the minimum practical mining width within an underground operation.</li> <li>High-grade Zn, Cu, Pb, Ag and Au were top cuts were applied using the 95th percentile method. For the Central massive sulphide zone, a total of 8 copper assay values were cut and 7 for lead and zinc.</li> <li>A composite file was created using an average composite length of 1m. The average sample length within the assay dataset is also 1m.</li> <li>Variograms were not created due insufficient quantity of sample pairs within the relatively small dataset, meaningful variograms were not created.</li> <li>An inverse distance estimate was run given the lack of variograms. This method is however deemed to be suitable given the style and orientation of the mineralization.</li> <li>A 12.5m x 12.5m x 2.5m (RL) parent block size was used with sub-blocking to 0.78125m x 0.78125m x 0.15625m (RL) used.</li> </ul>
		ORIENT RESOURCE
		<ul> <li>The resource model was constructed using Surpac software. Mineralised domain wireframes were constructed by modelling the geological cut-off seen in the logging for both the massive sulphide zone and the stringer zone. A minimum domain thickness of 2m was used, this corresponds to the minimum practical mining width within an underground operation.</li> <li>High-grade Zn, Cu, Pb, Ag and Au were applied using the 95th percentile method. For the massive sulphide zone, a total of 8 assay values were cut for all metals except zinc where 7 were cut. For the stringer zone, a total of eight samples were cut for all metals.</li> </ul>



Criteria	Explanation	Commentary
		<ul> <li>A composite file was created using an average composite length of 1m. The average sample length within the assay dataset is also 1m.</li> <li>Variograms were not created due insufficient quantity of sample pairs within the relatively small dataset, meaningful variograms were not created.</li> <li>An inverse distance estimate was run given the lack of variograms. This method is however deemed to be suitable given the style and orientation of the mineralization.</li> <li>A 10m x 10m x 5m (RL) parent block size was used with sub blocking to 1.25m x 1.25m x 0.625m (RL) used. This is deemed appropriate in relation to the style of mineralization, ore zone geometry and potential future mining methods</li> </ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>LIONTOWN RESOURCE</li> <li>The resource tonnages have been estimated on a dry basis.</li> <li>LIONTOWN EAST RESOURCE</li> <li>The resource tonnages have been estimated on a dry basis</li> </ul>
		WATERLOO RESOURCE
		The resource tonnages have been estimated on a dry basis
		ORIENT RESOURCE
		The resource tonnages have been estimated on a dry basis
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>ALL RESOURCES</li> <li>The sulphide ("fresh") Resource has been reported above a 5% ZnEq cut-off into Inferred and Indicated categories. The basis for cut-off grade is that a 5% ZnEq grade was assessed as the lower cut-off for definition of potential economic mineralisation using a proposed underground mining methodology. The 5% ZnEq cut-off grade was used as the economic cut-off at the underground Thalanga Mine (operated by Red River Resources).</li> <li>The oxide Inferred Resource has been reported above a 0.5g/t Au cut off as this is assessed as appropriate for the mineralisation style and the likelihood of providing a potentially economic, shallow open pit. The oxide Inferred Resource is shallow and located above the sulphide lodes and further drilling may allow conversion of this material to an Indicated Resource.</li> <li>The gold and zinc equivalent grades for Greater Liontown (g/t AuEq, % ZnEq) are based on the following prices: US\$2.900t Zn, US\$2.000t Pb, US\$2.500cz Au, US\$30oz Ag.</li> </ul>



Criteria	Explanation	Commentary
		<ul> <li>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: <u>Copper-gold dominant</u> – 92.3% Cu, 86.0% Au, <u>Zinc dominant</u> 88.8% Zn, 80% Cu, 70% Pb, 65% Au, 65% Ag.</li> </ul>
		<ul> <li>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)))</li> </ul>
		<ul> <li>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))</li> </ul>
Mining factors	Assumptions made regarding possible mining	LIONTOWN RESOURCE
or assumptions	methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods	<ul> <li>The anticipated Liontown mining method for extraction of the majority of the Mineral Resource is via underground long hole stoping techniques on 20m level spacing. Potential for an initial Open cut, mining the Oxide Au and shallow parts of the sulphide Resource to a limited depth is also an option.</li> </ul>
		• The minimum mining width is approximately 2m and while some lodes present thin interpretations, they are considered a potential for extraction with their proximity to adjacent lodes reducing development costs to access potential ore.
	and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions.	• The mining process would involve level development at which time, geological mapping, face sampling and underground drilling would be required for grade control. This data would be used to refine the mineralised domains and to create a grade control/short term mining model from which final stope designs could be generated.
		LIONTOWN EAST RESOURCE
		• The Resource has been estimated with the intent of being mined by selective mining methods such as underground drive development and long hole stoping techniques. A minimum mining extraction thickness of 2m would be likely.
		<ul> <li>For conversion to Reserve, material that is sub-2m thick will require a higher cutoff to accommodate the additional minimum mining width dilution.</li> <li>~5% of the reported resource is of sub-2m thickness and no exclusion of this material has been made.</li> <li>Potential for an initial open cut mining the Oxide Au and shallow parts of the sulphide Resource to a limited depth exists.</li> </ul>



Criteria	Explanation	Commentary
		<ul> <li>WATERLOO RESOURCE</li> <li>The resources have been estimated using a minimum thickness of 2m for each of the domain shapes, this minimum thickness therefore accounts for any dilution in zones that are less than this thickness. The proposed mining method is via underground long hole stoping techniques, the model parameters are therefore deemed to be suitable for this type of potential mining operation.</li> </ul>
		ORIENT RESOURCE
		• The resources have been estimated using a minimum thickness of 2m for each of the domain shapes, this minimum thickness therefore accounts for any dilution in zones that are less than this thickness. The proposed mining method is via underground long hole stoping techniques, the model parameters are therefore deemed to be suitable for this type of potential mining operation.
Metallurgical	The basis for assumptions or predictions	LIONTOWN RESOURCE
factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	<ul> <li>The assumed processing is via crushing and milling and conventional flotation for base metals to produce a Znrich or Cu-rich concentrate, and gravity and leaching of oxide ore and fresh "gold-only" domains.</li> <li>Previous production has shown that a saleable concentrate can be produced from the Greater Liontown style ores.</li> <li>Metallurgical Recoveries are derived from test work on Liontown samples and the known metallurgical recoveries of ores in the area. Recent metallurgical test work recoveries by Independent Metallurgical Operations for SHN on Cu-Au and Au-only domains have been incorporated into this resource and its recoverable metal equivalencies.</li> <li>Further metallurgical test work will be required on Zn-dominant domains and to confirm the processing metrics of the ore material.</li> </ul>
		<ul> <li>LIONTOWN EAST RESOURCE</li> <li>The assumed processing is via crushing and milling and conventional flotation to produce concentrates containing Zn, Pb, Cu, Au and Ag.</li> <li>Further metallurgical test work will be required to confirm the processing metrics of the ore material.</li> <li>Ore sorting may be applicable</li> </ul> WATERLOO RESOURCE
		The ore is planned to be crushed and a concentrate containing Zn, Pb, Ag and Cu produced.



Criteria	Explanation	Commentary
		Metallurgical test work has shown that a saleable concentrate can be produced from the Waterloo ore.
		<ul> <li>ORIENT RESOURCE</li> <li>The ore is planned to be crushed and a concentrate containing Zn, Pb, Ag and Cu produced.</li> <li>Metallurgical test work has shown that a saleable concentrate can be produced from the Orient ore.</li> </ul>
Environmental	Assumptions made regarding possible waste	LIONTOWN RESOURCE
factors or assumptions	always necessary as part of the process of determining reasonable prospects for	<ul> <li>Government approvals would need to be obtained for mining at Liontown. Department of Environment approvals will also need to be sort for tailings storage and mine waste rock storage.</li> </ul>
	eventual economic extraction to consider the	Waste rock would likely be required as stope fill following ore extraction.
	and processing operation. While at this stage the determination of potential environmental	<ul> <li>Mining Lease applications have been submitted over the Liontown deposits and a Mining Lease renewal has been lodged for ML 10277.</li> </ul>
	impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported	• Note that this is a previously disturbed site with contemporary mining of the Liontown deposits by previous operators and as such provides a precedent to mining over the existing disturbance footprint.
	Where these aspects have not been	LIONTOWN EAST RESOURCE
	considered this should be reported with an explanation of the environmental assumptions made.	<ul> <li>Government approvals would need to be obtained for mining at Liontown and Liontown East.</li> <li>Department of Environment approvals will also need to be sought for tailings storage and mine waste rock storage. Waste rock would likely be required as stope fill following ore extraction.</li> <li>Mining Lease applications have been submitted over the Liontown and Liontown East deposits.</li> </ul>
		WATERLOO RESOURCE
		<ul> <li>Government approvals would need to be obtained for mining at Waterloo.</li> <li>Department of Environment approvals will also need to be sort for tailings storage and mine waste rock storage. Waste rock would likely be required as stope fill following ore extraction.</li> <li>A Mining Lease application has been submitted over the Waterloo deposit.</li> </ul>
		ORIENT RESOURCE
		<ul> <li>Government approvals would need to be obtained for mining at Orient.</li> <li>Department of Environment approvals will also need to be sort for tailings storage and mine waste rock storage.</li> </ul>



Criteria	Explanation	Commentary
		Waste rock would likely be required as stope fill following ore extraction
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	<ul> <li>LIONTOWN RESOURCE <ul> <li>The bulk densities of samples representative of the ore and waste rock types were measured using the Archimedes method, that is (Dry Weight / (Dry Weight – Wet Weight)).</li> <li>Samples were selected on average at a rate of 1 in 10m for unmineralised samples, 1 in 5m for low grade samples and 1 in 2m for well-mineralised samples.</li> <li>A review was conducted on historic bulk density measurements and samples were omitted if deemed erroneous.</li> </ul> </li> <li>LIONTOWN EAST RESOURCE <ul> <li>The bulk density of the Mineral Resource was calculated from content estimates of dense minerals based on modelled block grades of Zn, Pb, Cu, Fe and Ba and measured gangue densities. The density calculation incorporates void and porosity influences through an assigned (and validated) gangue density.</li> <li>The density calculation was validated by empirical test work on the Liontown East core following the Archimedes principle. 16% of samples within the resource area were tested.</li> <li>Oxide Resource blocks were allocated a density of 2.3 as supported by limited sampling.</li> <li>The densities are reported on a dry basis.</li> </ul> </li> </ul>
		The bulk densities for the ore and waste rock types were estimated using the Archimedes method, that is (Dry Weight / (Dry Weight – Wet Weight). Bulk density measurements were obtained for all sample intervals within the diamond drill holes with a total 1,174 samples collected.
		<ul> <li>ORIENT RESOURCE</li> <li>The bulk densities for the ore and waste rock types were estimated using the Archimedes method, that is (Dry Weight / (Dry Weight – Wet Weight). Bulk density measurements were obtained for all sample intervals submitted for assays within the diamond drill holes.</li> </ul>



Criteria	Explanation	Commentary
Classification	The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.	<ul> <li>LIONTOWN RESOURCE</li> <li>The resources have been classified according to the sample spacing and confidence in the modelled continuity of both the thickness and grade of the mineralised. Both Indicated and Inferred blocks have been reported. No Measured is classified within this resource. There is additional unclassified inventory that can be upgraded with additional drilling.</li> <li>The resource classification is deemed appropriate in relation to the drill spacing and geological continuity of the mineralised domains. Each of the lodes was assessed for drill hole spacing, and the Competent Person delineated the boundary of sufficient geological continuity (confidence) to classify blocks as Indicated.</li> <li>Typically, the drill hole spacing for the classification of Indicated is 50m across the lodes but was reviewed on a lode by lode basis.</li> <li>Classification is applied to the ore blocks only. No waste is classified.</li> <li>The classification appropriately reflects the Competent Persons confidence of the estimate of the ore body, that being that there is sufficient geological evidence to support and verify tonnes and grade for Indicated classification. And that there is sufficient geological evidence to imply grade and tonnes for Inferred classification.</li> </ul>
		<ul> <li>LIONTOWN EAST RESOURCE         <ul> <li>The resources have been classified according to the drill density and the modelled continuity of both the thickness and grade of the mineralised zones in the view of the competent geologist.</li> <li>The Liontown East Resource classification of Inferred is deemed appropriate in relation to the drill spacing, likely geological continuity of the mineralised domains and the reliability of supporting data. With the reliability being demonstrated through quality assessment processes.</li> </ul> </li> <li>WATERLOO RESOURCE         <ul> <li>The resources have been classified according to the drill density and the modelled continuity of both the thickness and grade of the mineralised zones in the view of the resource geologist. Only indicated and inferred blocks have reported for the resource, no measured blocks are reported.</li> <li>The resource classification is deemed appropriate in relation to the drill spacing and geological continuity of the mineralised domains.</li> </ul> </li></ul>
		ORIENT RESOURCE     The resources have been classified according to the drill density and the modelled continuity of both the thickness



Criteria	Explanation	Commentary
		<ul> <li>and grade of the mineralised zones in the view of the resource geologist. Only indicated and inferred blocks have reported for the resource, no measured blocks are reported.</li> <li>The resource classification is deemed appropriate in relation to the drill spacing and geological continuity of the mineralised domains.</li> </ul>
Audits or	The results of any audits or reviews of Mineral	LIONTOWN RESOURCE
reviews	Resource estimates.	• The Liontown Resource is an updated Resource, previously estimated by various parties. Recently collected additional data has been incorporated into the estimate which has increased the area of definition, Resource size and refined the accuracy of the estimate.
		• The estimate includes new drill hole data and a revised geological interpretation but has not drastically changed the fundamentals (e.g. orientation, mineralisation type) of the deposit. A cross check of this updated interpretation and grade estimate basis was completed against the previous estimate and deemed to be comparable. There is a material change (>10%) in tonnes and grade between this current and previous resources which is related to new drilling and is expected.
		• The Mineral Resource Estimation process has been overseen by Measured Group, however no further external reviews or audits have been carried out on this MRE. However, previous Mineral Resources were subject to review.
		LIONTOWN EAST RESOURCE
		<ul> <li>The Liontown Resource is an updated Resource, previously estimated by various parties.</li> <li>The Liontown East Resource has not been externally reviewed or audited.</li> </ul>
		WATERLOO RESOURCE
		• Mining One consultants completed a review of the Waterloo resource as part of a due diligence programme. No critical flaws were highlighted with the source data set or the modelling methodology.
		ORIENT RESOURCE
		• Mining One consultants completed a review of the Orient resource as part of a due diligence programme. No critical flaws were highlighted with the source data set or the modelling methodology.



Criteria	Explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to the should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	LIONTOWN RESOURCE  The estimates included in this report are global estimates. Predicted toppages and grades made from such block
		estimates are useful for feasibility studies, and long-, medium- and short-term mine planning.
		<ul> <li>Variography was completed for all elements. Directional anisotropies for variable and domain were identified on variogram maps. Variogram maps showing the directional anisotropies on the horizontal plane are included.</li> </ul>
		• Validation checks have been completed on raw data, composited data, model data and Resource estimates.
		The model is checked to ensure it honours the validated data and no obvious anomalies exist which are not geologically sound.
		• The mineralised zones are based on actual intersections. These intersections are checked against the drill hole data. The competent person has independently checked laboratory sample data. The picks are sound and suitable to be used in the modelling and estimation process.
		• The global resource estimate is deemed to be an accurate reflection, to the precision allowable via the current data spacing of both the geological interpretation and the deposits' potential economic tonnage and grade distribution at a reported cut-off grade of 5% ZnEq.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Within the Resource model, local smoothing of grade occurs with the estimation process. Comparison between the input composites and resultant blocks was reviewed as part of the modelling process and deemed appropriate.
		• Selective infill drilling from surface and updated geological interpretation and modelling in 3D will add further confidence to the local scale geometry of the mineralisation and grade distributions in the resource model.
		• The detail captured in this mineral resource estimate maximises the data available currently on the project and the Competent Person is satisfied that the model is representative of the drilling data available to date.
		LIONTOWN EAST RESOURCE
		<ul> <li>The Resource estimate is deemed to be an accurate reflection, to the precision allowable via the current data spacing of both the geological interpretation and the deposits potentially economic tonnage and grade distribution.</li> <li>The Resource is reported at a 5% ZnEq cutoff.</li> <li>Within the Resource model local smoothing of grade occurs</li> <li>The Resource area is open at depth and footwall mineralisation has been excluded from the Liontown East Resource estimate. Further drilling will allow inclusion of Resources from these areas.</li> <li>No production history occurs at Liontown East.</li> </ul>



Criteria	Explanation	Commentary
		WATERLOO RESOURCE
		The resource estimate is deemed to be an accurate reflection of both the geological interpretation and tenure of mineralization within the deposit.
		ORIENT RESOURCE
		• The resource estimate is deemed to be an accurate reflection of both the geological interpretation and tenure of mineralization within the deposit.