ASX RELEASE (6 SEPTEMBER 2024)

Nightflower Exploration Target Upgrade following Antimony Price Increase

Drill intersection grades up 3.05m @ 9.0% Sb

Highlights:

- Nightflower project is a high grade silver deposit with historically impressive intersections from past drilling including 9 m @ 506g/t Silver (>16 oz/t), 12.6% Lead, and 1.46% Zinc.[1]
- An Exploration Target range reported on 6 June 2022 has now been substantially upgraded to 2.75 Mt @ 364 g/t Ag Eq for 32 Moz Ag Eq to 5.36 Mt @ 270 g/t Ag Eq for 47 Moz Ag Eq. The Exploration Target is conceptual in nature only and there is no guarantee that further exploration will define a resource.
- Antimony has contributed to the Exploration Target, however, recent significant increases in the Antimony price due to China's export restrictions have improved the project's economics.
- Historical drilling results indicate Antimony grades up 3.05m @ 9.0% Sb, 24.0% Pb, 10.5% Zn, 14.9 oz/t Ag, and 0.38% Cu (Hole NF72DD11), although the Exploration Target is based on a 1% Sb grade.
- Drilling is now being planned to test the target and upgrade previously identified mineralisation to JORC 2012 reporting standards.

Tartana Minerals Limited (ASX: **TAT**) (the **Company**), is pleased to advise that it has upgraded its Nightflower Exploration Target after reviewing its earlier estimation in light of the recent increases in the Antimony price. Nightflower is a high grade silver – lead deposit with, previously overlooked, significant Antimony credits.

In mid-August China, the world's largest producer of Antimony – producing 83,000t in 2023 (USGS) - accounting for 48% of the world's supply, will be restricting Antimony exports from 21 September 2024. Consequently, the Antimony price has significantly increased and is currently trading at US$24,500/tonne (Argus Metals, Antimony ingot min 99.65% fob China).

The revised Exploration Target is summarised in Figure 1, incorporating the original tonnages from the 6 June 2022 announcement with revisions to the grade range, detailed later in this report.

Exploration Target Tonnage		Ag Grade (g/t)		Sb Grade (%)		Ag Eq (g/t)		Ag Eq Contained Metal	
Low	High	Low	High	Low	High	Low	High	Low (Moz)	High (Moz)
2,749,081	5,360,372	89	146	1%	1%	270	364	32.2	46.6

Figure 1. Revised Exploration Target. Note: The Exploration Target is conceptual in nature only and there is no guarantee that further exploration will define a resource.

1. Axiom Mining announcement dated 12 August 2008.

The estimated Antimony content range within the Exploration Target is summarized in Figure 2 below.

Exploration Target Tonnage		Sb Grade (%)		Sb Contained (t)	
Low	High	Low	High	Low	High
2,749,081	5,360,372	1.0%	1.0%	27,491	53,604

Figure 2. Revised Exploration Target with an estimated contained Antimony range. Note: The Exploration Target is conceptual in nature only and there is no guarantee that further exploration will define a resource.

Tartana Minerals Managing Director, Stephen Bartrop, commented:

> "Significant increases in our Exploration Target, Antimony prices, and consequently the economics of the project underpins the importance of the Nightflower project. With production at the Tartana mine site reaching steady state, this opportunity is only more significant. Further this represents only one target (The Digger Lode mineralisation) and excludes the prospectivity of the adjacent Terrace lode and a possible further discovery."

Nightflower Silver Project History

The Nightflower project is located 40 km north of Chillagoe in Far North Queensland. It covers a substantial part of the northern Featherbed Volcanic Group and the underlying and surrounding Hodgkinson Formation.

It was discovered as a high grade silver deposit in 1923 and was visited by the Queensland Premier in October 1923. On the Premier's return to Brisbane he reported that the ore at Nightflower was very rich and a truck-load treated at Chillagoe gave about 30% of lead and 40 ounces of silver to the ton (*Source: Qld Govt Mining Journal Vol XXIV, Oct 1923*).

[P. L. Goddard, Photo.

NIGHTFLOWER SILVER-LEAD LODE, MAIN OUTCROP.

Figure 3. Early picture of the Nightflower gossan outcrop. Source: Qld Govt Mining Journal Vol XXIV, Oct 1923

Nightflower Mineralisation

The mineralisation takes the form of an epithermal polymetallic (Ag-Pb-Zn-Cu-Au-Sb) deposit located within the Nightflower fault zone. However, it has also been interpreted that an underlying porphyry deposit may be present at depth. Along the fault structure, there are two prospects, Digger Lode and Terrace. Which is part of the northeast-trending Mungana transfer zone, a regional lineament, connecting with the regional Palmerville fault zone, near the Mungana and Red Dome copper-gold-silver porphyry mines (Figure 4).

Most historical drilling at Digger Lode is exposed at surface. Nineteen drill holes (of which 18 of 19 are diamond), have intersected mineralisation between 10 metres and 370 metres below surface to define the Ag-Pb-Zn-Cu-Au mineralisation.

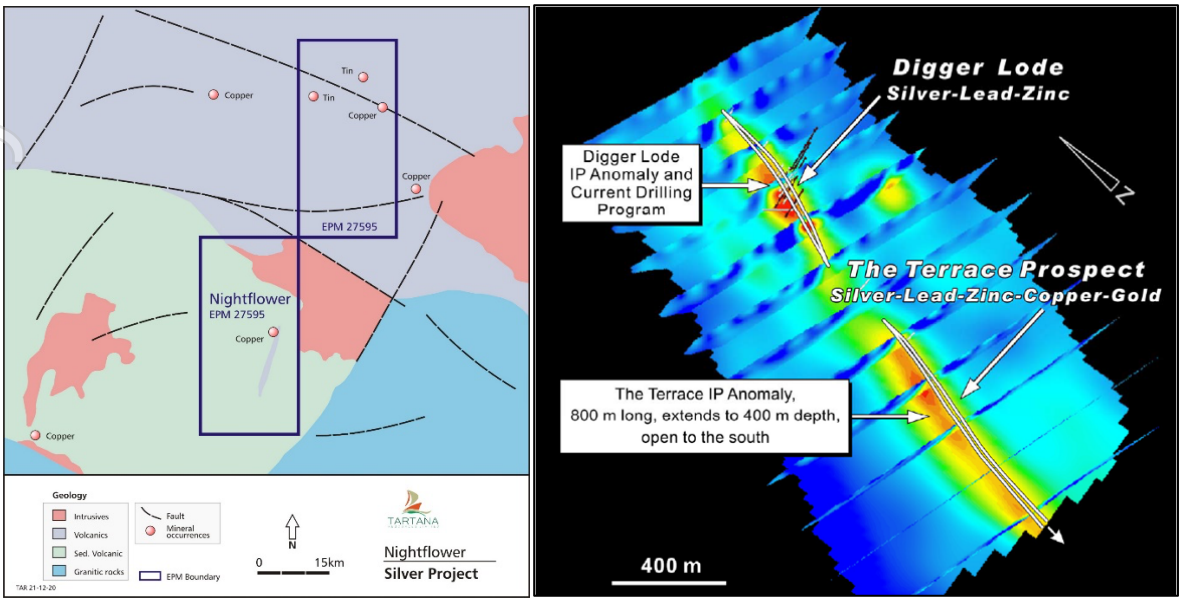

Figure 4: Nightflower project geology and IP anomalies.

Significant historical surface sampling and drilling intersections are presented in Figure 5 below.

Sample No.	Type	Location	Silver (ppm)	Gold (ppm)	Lead (%)	Zinc (%)	Copper (%)
P169950	Dump grab	N of Digger Lode	1260	0.49	37.8	0.25	0.02
P169951	Dump grab	N of Digger Lode	1930	0.44	50.7	0.24	0.05
P169936	Dump grab	Digger Lode S	63.3	2.63	1.1	Tr	Tr
P169937	Rock chip	100m N of Lode	0.5	0.02	Tr	Tr	Tr
P169938	Dump grab	Digger Lode 500m S	121	0.12	8.67	26.9	Tr
P169939	Rock chip	D9 Area	222	0.45	2.92	0.23	0.03
P169940	Rock chip	D9 Area	505	1.53	9.68	0.6	0.14
P169941	Dump grab	D9 Area	109	0.74	5.63	0.28	0.08
P169942	Dump grab	D9 Area	37.3	1.19	1.81	1.87	0.02
P169952	Rock chip	D9 Area	399	2.71	6.79	0.12	0.13
P169953	Rock chip	D9 Area	505	3	8.9	0.19	0.12
P169943	Dump grab	Terrace workings	70.6	0.05	2.43	0.27	0.05
P169944	Dump grab	Terrace workings	137	4.09	7.25	0.42	0.08
P169945	Dump grab	Terrace W lode	36.5	0.23	1.48	0.18	0.11
P169946	Rock chip	Terrace workings 50m S	10.3	1.01	0.37	0.21	0.03
P169947	Rock chip	Terrace S end of lode	15	1.17	0.36	0.32	0.05
P169948	Rock chip	Terrace S end W lode	5.7	0.04	0.06	0.35	0.01
P169949	Rock chip	Terrace IP anomaly	12.6	0.73	0.10	0.05	0.02
P169954	Rock chip	Terrace S end IP	21.4	1.01	0.49	0.05	0.01
P169955	Rock chip	Terrace W lode	494	0.12	25	0.19	0.3

Hole No.	From (m)	To (m)	Interval (m)	Silver (g/t)	Gold (g/t)	Lead (%)	Zinc (%)	Copper (%)
NF08DD17	152.3	154.2	1.9	164.4	0.18	3.32	0.86	0.30
	154.2	154.9	0.7	24.8	1.41	0.56	0.23	
NF08DD18*	144	153	9	62.2	0.21	1.25	0.8	
including	151	153	2	158.7	0.34	2.79	1.15	0.33
NF08DD19	70	109	39	181	0.32	4.4	1.16	
including	93	102	9	506	0.3	12.6	1.46	0.41
including	98	102	4	769	0.61	22.4	2.23	0.5
including	105	107	2		2.5			
NF08DD20*	142	147	5	59.3		1.54	0.8	
including	142	144	2	121	0.21	3.35	1.1	
NF08DD21*	213	215	2	110.7	1.39	1.03	2.59	0.79
	218	219	1	58.8	12.8			
NF08DD22*	275	277	2	329.5	0.08	10.5	3.99	0.2
NF08DD23*	433.8	436.6	2.8	60.1	0.69	1.76	0.35	0.14
	438.8	442.8	4	49.7	1.24	1.12	0.35	
NF08DD24*	76	79	3	51.8		1.28	1.6	

* Denotes drill hole with assay results not previously reported

Figure 5: Exploration results from surface sampling and historical drilling at Digger Lode as reported by Axiom Mining (Axiom 2008).

Exploration Target Review

Bluespoint Mining Services Pty Ltd (BMS) was commissioned to remodel the mineralisation with wireframes to capture all the available data and establish an Exploration Target for future exploration.

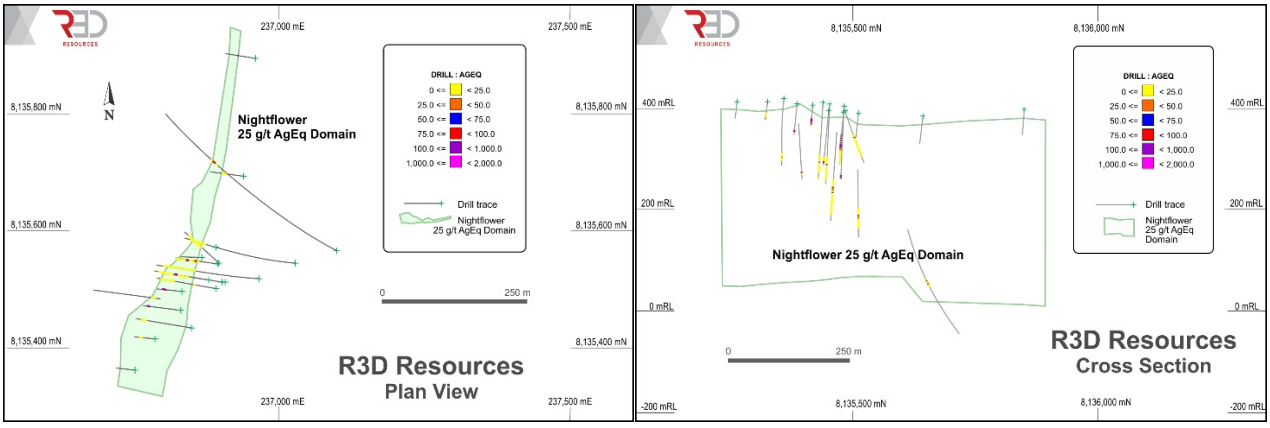

Figure 6: Outline of the 25 g/t AuEq model used to estimate the exploration target (Source: BMS).

The modelling is presented in Figure 3 using a 25 g/t Ag Eq cut-off grade and Figure 4 outlines the exploration target tonnage and grades at various cut off grades to estimate the overall exploration target.

Cutoff Ag (g/t)	Tonnage (t)	Ag grade (g/t)	Au grade (g/t)	Cu %	Pb %	Zn %	Sb %
0	7,332,131	67	0.34	0.1%	1.8%	0.9%	1.0%
25	**5,360,372**	89	0.42	0.1%	2.3%	1.1%	1.0%
50	3,243,848	130	0.37	0.2%	3.5%	1.4%	1.0%
75	2,873,043	142	0.36	0.2%	3.8%	1.5%	1.0%
100	**2,749,081**	146	0.35	0.2%	3.9%	1.5%	1.0%

Figure 7. Grade -Tonnage estimates at various cut-off grades for estimating the Exploration Target (Source: BMS). Note that the potential quantity and grade is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Recovery Assumption

Figure 8 outlines the recovery assumptions presented in Askew Report on Stage 2 Reserves (1991), commissioned by Risla Enterprises Pty Ltd. These recoveries have been used by the Company in estimating the recovery factors used in the Ag Eq estimations.

Expected Recoveries as reported by Askew 1991

Recoveries	Pb to Pb concentrate	91%
	Ag to Pb concentrate	90%
	Au to Pb concentrate	70%
	Zn to Pb concentrate	30%
	Sb to Pb concentreate	80%
	Pb Concentrate grade	42% Pb

Based on run of mine ore with the following head grades:

Pb	5.30%
Ag	183 g/t
Au	0.7 g/t
Zn	3.0%
Sb	1.0%

Figure 8. Metal recoveries. Source: Askew 1991 in Surestone Pty Ltd's First Annual Report on EPM 6899 by Brett Duck in 1991.

The Pb concentrate is expected to be a saleable product and will the contained metals listed above being payable.

Silver Equivalents Estimation

Figure 9 provides the silver equivalents (Ag Eq) calculation using 2024 metal prices to-date (an approximation for Sb), the recoveries cited above and the upper and lower grade range estimations from BMS for the Exploration Target.

Metal	Average Metal Prices 2024 (to-date)		Recovery (Source: Askew 1991)	Lower Grade Range Estimate (g/t or %)	Recovered Value (US$)	Upper Grade Range Estimate (g/t or %)	Recovered Value (US$)
Ag	27	US$/oz	90%	89	70	146	114
Au	2265	US$/oz	70%	0.42	21	0.35	18
Cu	9241	US$/t	80%	0.13%	10	0.23%	17
Zn	2710	US$/t	30%	1.09%	9	1.50%	12
Pb	2135	US$/t	90%	2.33%	45	3.89%	75
Sb	10000	US$/t	80%	1.00%	80	1.00%	80
Total Recovered Value (US$/t)					234		316
Silver Equivalents (Ag Eq)					270		364

Figure 9. Silver Equivalent Calculation using 2024 year-to-date metal prices, recoveries from Askew 1991 and lower and upper grade range estimates. Source: BMS, Breakaway Research. Note that the potential quantity and grade is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target derived from the parameters is outlined in Figure 10.

Exploration Target Tonnage		Ag Grade (g/t)		Sb Grade (%)		Ag Eq (g/t)		Ag Eq Contained Metal	
Low	High	Low	High	Low	High	Low	High	Low (Moz)	High (Moz)
2,749,081	5,360,372	89	146	1%	1%	270	364	32.2	46.6

Figure 10. Exploration Target estimated from the parameters outlined above. Note that the potential quantity and grade is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Interestingly, in applying the current Antimony price of US$24.500/t, the Exploration Target size is significantly increased and further increases the attractiveness of the project.

Exploration Target Tonnage		Ag Grade (g/t)		Sb Grade (%)		Ag Eq (g/t)		Ag Eq Contained Metal	
Low	High	Low	High	Low	High	Low	High	Low (Moz)	High (Moz)
2,749,081	5,360,372	89	146	1%	1%	404	498	44.0	69.6

Figure 11. Exploration Target estimated from the parameters outlined above but using higher Antimony prices (US$24.500/t).. Note that the potential quantity and grade is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target has an estimated 27kt – 53kt contained Antimony (See Figure 12) which supports increasing the project ranking within the Tartana Minerals exploration portfolio.

Exploration Target Tonnage		Sb Grade (%)		Sb Contained (t)	
Low	High	Low	High	Low	High
2,749,081	5,360,372	1.0%	1.0%	27,491	53,604

Figure 12. Antimony content ranges estimated in the Exploration Target. Note that the potential quantity and grade is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The surface expression of the Digger lode and the general terrain is depicted in Figure 13.

Figure 13. Surface of the Digger Lode and a grab sample (May 2022).

ENDS

This announcement has been approved by the Disclosure Committee of Tartana Minerals Limited (ASX:TAT).

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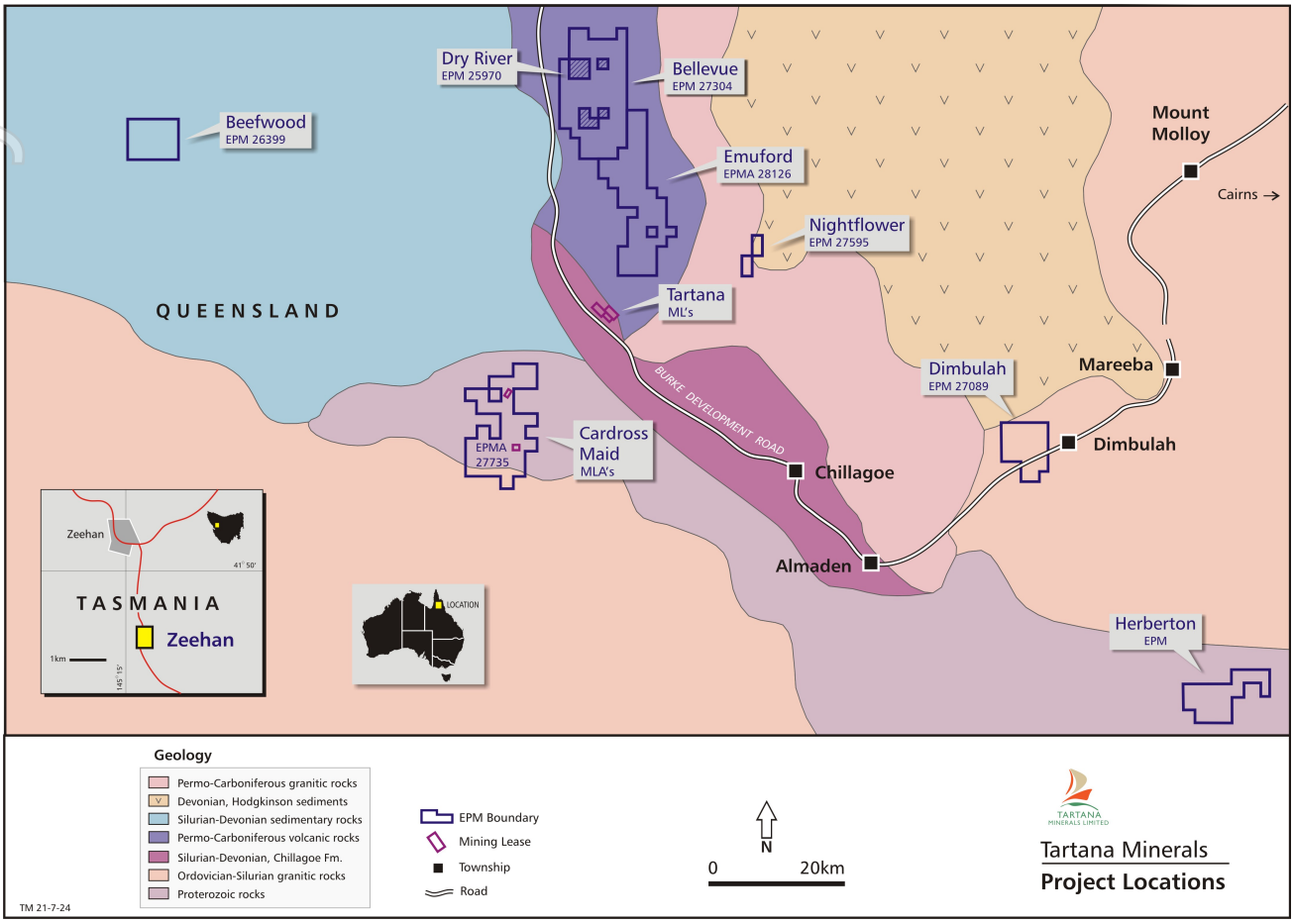
About Tartana Minerals Limited (**ASX:TAT**)

Tartana Minerals Limited (ASX:TAT) is a significant copper producer and a copper, gold, silver and zinc explorer and developer in the Chillagoe Region of Far North Queensland. TAT owns several projects of varying maturity, with the most advanced being the Tartana mining leases, which contain an existing heap leach – solvent extraction – crystallisation plant nestled between its Tartana, Queen Grade, and Mountain Maid projects.



Disclaimer Regarding Forward-Looking Statements

This ASX announcement contains various forward-looking statements. All statements, other than statements of historical fact, are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors that could cause actual values or results, and performance or achievements to differ materially from the expectations described in such forward-looking statements. Tartana Minerals Limted does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.

Competent Person's Statement

The information in this announcement that relates to Exploration Results is based on information compiled by Dr Stephen Bartrop who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and a Fellow of the Australian Institute of Geoscientists. Dr Bartrop has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity that is being undertaking to qualify as a Competent Person, as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Dr Bartrop is an employee of Tartana Minerals Limited, and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	2008 drilling - core diamond sawn by experienced technician. Drill core cut consistently and systematically adjacent to orientation line one sample at a time to ensure representivity. Historic drill core also sawn, but no details.
Drilling techniques	Historic holes used for exploration target purposes are drill core, predominantly BQ. Downhole (acid) surveys uncertain reliability, but holes short. Drill holes from 2008 drill programme comprise one hole drilled entirely in HQ, with the remainder collared in HQ until reasonable ground conditions encountered, then NQ2 to EOH. Core was oriented using ACE core orientation tool. Downhole camera surveys were completed at 30m and/or 50m intervals.
Drill sample recovery	Historic holes sample recovery for core sections assayed generally 95 - 100% with few exceptions (e.g. part DHNF6 Hastings 1972 report). 2008 drilling in Ozmin database, generally 100% recovery - rare exceptions. No concerns in regard to representivity or sample bias.
Logging	Historic drillhole data has been re-assessed and recoded in detail. 2008 drilling has also been logged in detail for the mineralised zones. Logging units for old and new holes match. New holes have been logged for structure to enhance the geological model used for resource modelling. New holes have been photographed by core tray + detailed photography of mineralisation units as mapped.
Sub-sampling techniques and sample preparation	**2008 holes - Sawn half core sampled at either 1m intervals or by discrete geological units where required (niche representivity). Samples analysed by appropriate methods at a commercial laboratory. Assays were checked against geology log on return. Historic holes - sampling techniques considered acceptable.**
Quality of assay data and laboratory tests	The methodology, nature, and quality of the assay data is considered representative (i.e. all metals released from host rock are reporting to the assay). Apart from routine laboratory quality controls, no in-house QA/QC (standards, duplicates) has been done for 2008 drilling. No quality control is known for the historical drilling. Pulps have been retained for check assaying purposes, and standards have been acquired to assist with quality control. Precision and accuracy have not been established for 2008 drilling.
Verification of sampling and assaying	Verification of significant intersections has been conducted by in-house personnel and independent consultant. Twinned holes have not be completed, and at this early stage not considered necessary.

Location of data points	Accuracy of drillhole collars for 2008 programme is +/-5m. A measure of accuracy is provided by a DGPS surveyed baseline in the vicinity of the drillholes. Errors still occur for historical holes which could be out by as much as 10m. Topographic control is likely to be +/-5m. It is considered there is enough data point control for our purposes.
Data spacing and distribution	Data spacing considered sufficient for an exploration target. Geology model well constrained.
Orientation of data in relation to geological structure	Drilling (past and present) has taken the orientation of the mineralised structure into careful consideration and drilled appropriately. The orientation of mineralised intersections is well controlled, understood, and taken into account for later true width measurements.
Sample security	Security protocols were in place in both Nightflower site and Axiom office Townsville. Axiom staff delivered all samples to the Townsville laboratory.
Audits or reviews	Nil

Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	Option to Purchase with Mr Tom Saunders. Tenement is EPM 27595, located 30km N of Chillagoe NQ. Good landholder relations.
Exploration done by other parties	The main players are: - Hastings Exploration NL 1972 - report on drilling; Surestone Pty Ltd 1990 - Preliminary Feasibility Report by Bremar Minerals; James Askew Ass 1991 - Preliminary Report on Resource Estimate for Surestone Pty Ltd; Metallurgical testwork for Surestone by Risla;
Geology	Structurally controlled Ag-Pb-Zn-Sb Lode deposit in the Nightflower Caldera; refer Laing Permo-Carboniferous zoned polymetallic pipe Model.
Drill hole Information	RC Percussion Collaring. HQ and NQ Diamond Coring with high recoveries.
Data aggregation methods	Exploration results are reported within the Aqeq cutoff wireframes. The grades are compiled using length weighting with no top cutting.
Relationship between mineralisation widths and intercept lengths	The orientation of the mineralised structure is well controlled. The angle of intercept between drill hole and structure has been calculated for each hole where assay data used (Table available), this has been used to calculate true widths to apply to resource model and weighting of assays for grade estimates.
Diagrams	See ASX 2008 Axiom press releases.
Balanced reporting	Report is a balanced report combining the geology and metallurgical testing.
Other substantive exploration data	IP; Bremar bulk sample for Surestone and Robertson Research metallurgical studies; deleterious elements may include As Sb;
Further work	RC Drilling - lateral and depth extension, and large scale step-out drilling.

APPENDIX 1 – DRILL HOLE TABLE

PROJECT	Hole_ID	Collar_E	Collar_N	Collar_RL	Final Depth	Dip	Azi_True	Hole_Type	Grid Datum	Year
NightFlower	NF72DD01	236880	8135517	397	99.7	-45	270	DD	GDA94	1972
NightFlower	NF72DD02	236941	8135695	385	81.1	-45	271	DD	GDA94	1972
NightFlower	NF72DD03	236961	8135897	400	75.3	-45	271	DD	GDA94	1972
NightFlower	NF72DD04	236714	8134995	400	90.8	-45	271	DD	GDA94	1972
NightFlower	NF72DD05	236834	8135497	407	57.0	-45	270	DD	GDA94	1972
NightFlower	NF72DD06	236868	8135553	397	41.9	-47	270	DD	GDA94	1972
NightFlower	NF72DD07	236755	8135361	415	47.9	-45	271	DD	GDA94	1972
NightFlower	NF72DD08	236790	8135414	415	53.6	-45	271	DD	GDA94	1972
NightFlower	NF72DD09	236646	8134728	415	47.1	-45	271	DD	GDA94	1972
NightFlower	NF72DD10	236903	8135512	398	152.4	-50	270	DD	GDA94	1972
NightFlower	NF72DD11	236832	8135465	410	90.5	-45	270	DD	GDA94	1972
NightFlower	NF72DD12	236894	8135575	391	72.2	-45	270	DD	GDA94	1972
NightFlower	NF72DD14	236680	8135500	420	197.2	-54	90.5	DD	GDA94	1972
NightFlower	NF72DD16	236895	8135544	394	161.5	-60	270.5	DD	GDA94	1972
NightFlower	NF08DD17	236893	8135503	412	186.2	-55	277	DD	GDA94	2008
NightFlower	NF08DD18	236911	8135513	410	206.7	-55	277	DD	GDA94	2008
NightFlower	NF08DD19	236900	8135544	406	137.6	-55	277	DD	GDA94	2008
NightFlower	NF08DD20	236850	8135434	421	164.4	-55	277	DD	GDA94	2008
NightFlower	NF08DD21	236968	8135518	410	294.1	-55	277	DD	GDA94	2008
NightFlower	NF08DD22	237029	8135546	409	329.7	-55	277	DD	GDA94	2008
NightFlower	NF08DD23	237100	8135567	408	595.4	-55	301	DD	GDA94	2008
NightFlower	NF08DD24	236900	8135544	406	140.6	-55	308	DD	GDA94	2008