**R3D Resources Limited | ACN: 111 398 040 | ASX: R3D**
169 Blues Point Road, McMahons Point NSW 2060 Australia | Tel: +61 2 9392 8032

2 June 2022

# Silver Exploration Target Increase – Nightflower

- **Exploration Target Increase following remodelling of historical drilling and the geophysical IP trends at the Nightflower silver project**
- **Remodelling has resulted in a significant increase in the Exploration Target which ranges from 2.75 Mt @ 147 Ag Eq for 21.65 million oz Ag Eq to 5.36Mt @ 245 Ag Eq for 25.33 million oz Eq.** ***The Exploration Target is conceptual in nature only and there is no guarantee that further exploration will define a resource.***
- **The conceptual exploration target excludes any contribution from the Terrace prospect – the southern extension to the Digger Lode.**
- **Drilling is now being planned to test the target and upgrade previously identified mineralisation to JORC 2012 standards for reporting.**
- **Elsewhere, civil works are well advanced on the copper sulphate plant refurbishment.**

R3D Resources Limited (ASX: R3D) (**R3D** or the Company), a significant copper-gold explorer and developer in the Chillagoe Region in Far North Queensland, is pleased to announce that following geological modelling the Company has significantly upgraded the Nightflower Silver project exploration target on EPM 27595. The work involved remodeling wireframes defined by mineralisation in historical drilling, utilising the results of an historical IP survey and applying varying cut-off grades.

The Nightflower Silver Project is subject to the Nightflower Option Agreement with Mr Tom Saunders which expires on the 23 February 2023 (exercise price $1m in one-month VWAP priced shares, minimum spend required of 150 metres RC drilling).

The Company plans a drilling programme in second half of 2022 to upgrade the Exploration Target to JORC 2012 resource status.

**R3D Managing Director Stephen Bartrop advises:** *"The significant increase in the Exploration Target is encouraging and elevates the project status within the R3D exploration portfolio. It is also encouraging that this represents only one target (the Digger mineralisation) and excludes the prospectivity of the adjacent Terrace lode."*

**Nightflower Silver Project Background**

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

The mineralisation is in the form of an epithermal polymetallic (Ag-Pb-Zn-Cu-Au) deposit located within the Nightflower fault zone although it has also been interpreted that there may be an underlying porphyry deposit at depth. There are two prospects, the Digger Lode and Terrace, along the fault structure, itself considered to be part of the northeast-trending Mungana transfer zone, a regional lineament, which is interpreted to connect with the regional Palmerville fault zone, near the location of the Mungana and Red Dome copper-gold-silver porphyry mines (Figure 1).

Most historical work has been on the Digger Lode which has been partly defined by surface outcrop plus 19 drillholes (of which 18 of 19 are diamond), which have intersected mineralisation between 10 metres and 370 metres below surface to define a body of Ag-Pb-Zn-Cu-Au mineralisation.

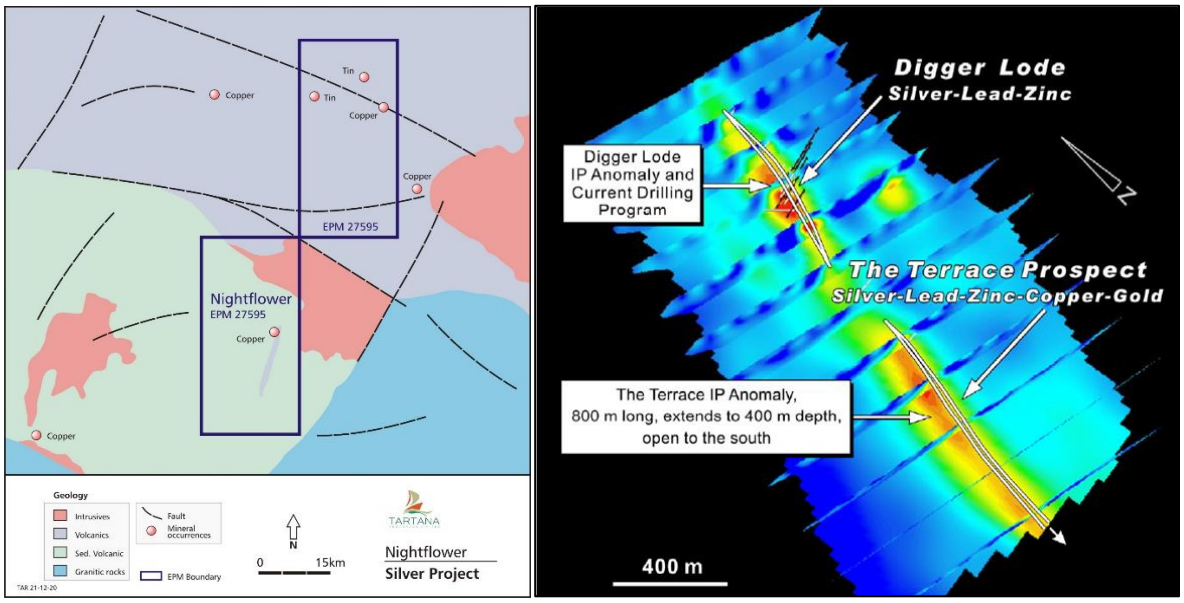



*Figure 1: Nightflower project geology and IP anomalies*

Significant historical surface sampling and drilling intersections are presented in Figure 2 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 2: Exploration results from surface sampling and historical drilling at Digger Lode as reported by Axiom Mining (Axiom 2008).*

**Exploration Target Increase**

R3D's recent work involved commissioning Bluespoint Mining Services Pty Ltd (BMS) to remodel the mineralisation with wireframes to capture all the available data and establish an Exploration Target for future exploration.

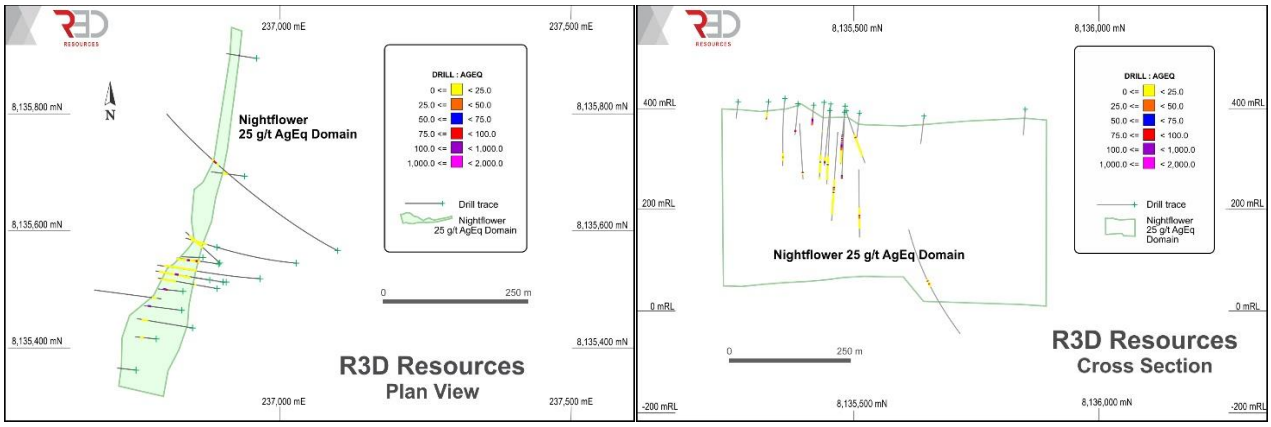



*Figure 3: Outline of the 25 g/t AuEq model used to estimate the exploration target (Source: BMS).*

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. Silver Equivalents (Ag Eq) are estimated with the following formula: Ag Eq = Ag + (Au/2086) + (Cu/31) + (Pb/2145) + (Zn/2380).

| CutOff Grade g/t AgEq | Tonnage tonnes | Ag Grade g/t | Au Grade g/t | AgEq g/t |
|---|---|---|---|---|
| 0 | 7,332,131 | 67 | 0.34 | 111 |
| 25 | 5,360,372 | 89 | 0.42 | 147 |
| 50 | 3,243,848 | 130 | 0.37 | 219 |
| 75 | 2,873,043 | 142 | 0.36 | 239 |
| 100 | 2,749,081 | 146 | 0.35 | 245 |

*Figure 4. 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. Tables 1 & 2 JORC 2012 are available on our website and in the Prospectus. Comp Person: BMS – Geoff Reed, R3D – Tom Saunders. Ag Eq = Ag + (Au/2086) + (Cu/31) + (Pb/2145) + (Zn/2380).*

The Exploration Target has been defined using the 25 g/t Ag Equivalent and 100 g/t Ag Equivalent cut-off grades and is presented in Figure 5.

| Exploration Target Tonnage | | Ag Grade | | Au Grade | | Ag Eqivalents | | Ag Equivalents Contained Metal | |
|---|---|---|---|---|---|---|---|---|---|
| Low | High | Low (g/t) | High (g/t) | Low (g/t) | High (g/t) | Low (g/t) | High (g/t) | Low (Moz) | High (Moz) |
| 2,749,081 | 5,360,372 | 89 | 146 | 0.35 | 0.42 | 147 | 245 | 21.65 | 25.33 |

*Figure 5. Exploration Target for the Digger Lode. 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. Tables 1 & 2 JORC 2012 are available on our website and in the Prospectus. Comp Person: BMS – Geoff Reed, R3D – Tom Saunders. Ag Eq = Ag + (Au/2086) + (Cu/31) + (Pb/2145) + (Zn/2380)*

The surface expression of the Digger lode and the general terrain is depicted in Figure 6.

*Figure 6. Surface of the Digger Lode and a grab sample (May 2022).*

**Copper Sulphate Plant Refurbishment**

Civil works on the refurbishment of the copper sulphate plant has commenced with repair work on the safety bunds and pad which will host a new sulphuric acid tank for acid storage. This work along with the refurbishment of a second-hand electrical control panel (currently being conducted in Cairns) and the acquisition of a back-up generator represents key elements of the Stage 1 programme which is designed to enable the commencement of copper leaching.

*Figure 7: Civil works associated with the Sulphur acid tanks bund and pad, 27 May 2022.*

In addition, the Company has secured the original rotating drum dryer which will save on the fabrication of a new one and reduce the lead time for this key item.

As noted earlier, the Company has completed a 1,800 metre RC drilling programme to further define oxide and supergene copper mineralisation in the open pit floor. Samples have been submitted to SGS with an approximate 3-week turnaround time for assay results to be issued.

This announcement has been approved by the Board of R3D Resources Limited.

Further Information:

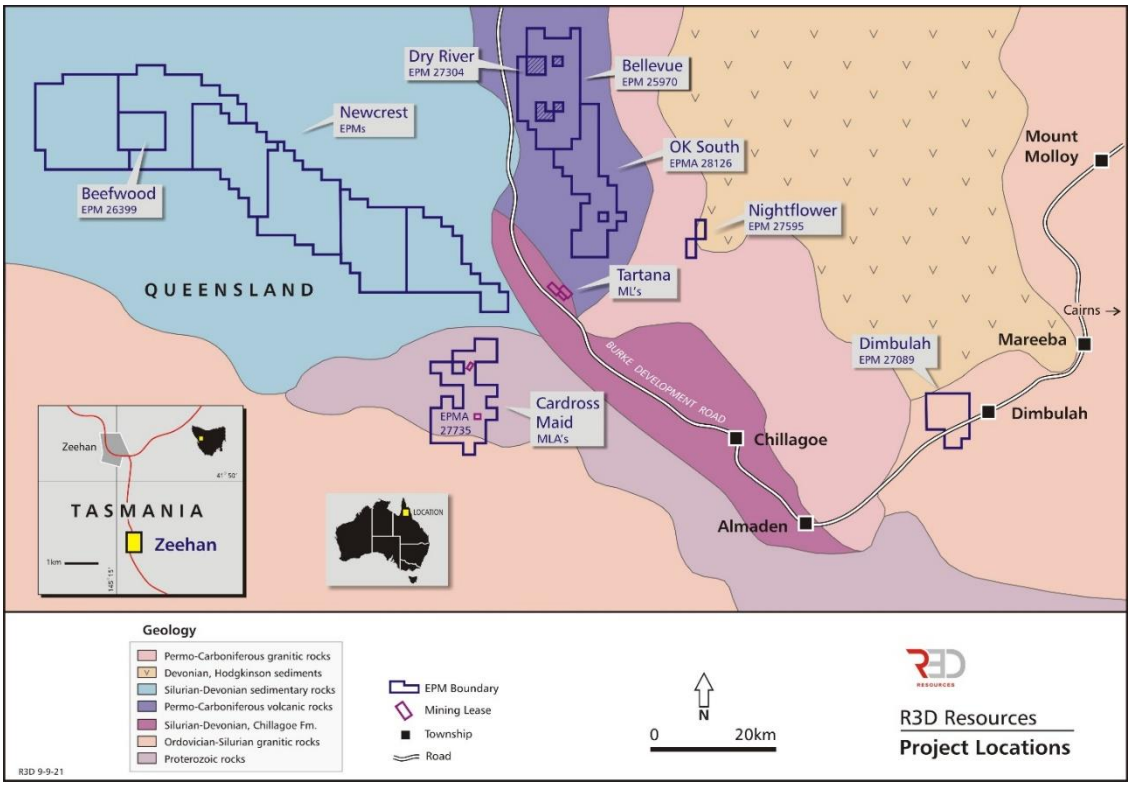
**Stephen Bartrop**
Managing Director

**R3D Resources Limited**
M: + 61 408 486 163
P: + 61 2 9392 8032

**About R3D Resources Limited**

In July 2021 R3D Resources Limited acquired Tartana Resources Limited, a significant copper-gold explorer and developer in the Chillagoe Region in Far North Queensland. R3D 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. Work has commenced to restart this plant to provide future cash flow through the sale of copper sulphate. In Tasmania, Tartana has secured permitting to excavate and screen for export low-grade zinc furnace slag/matte from its Zeehan stockpiles in Western Tasmania and has been shipping zinc slag to South Korea. The next stage in this project requires Stage 2 permitting to crush the slag and access the northern stockpile.

These two projects have the potential to generate a cash flow to underpin the R3D's extensive exploration activities in the Chillagoe region.




***Competent Person's Statement***

The information in this announcement that relates to Exploration Results is based on information compiled by Mr Wayne (Tom) Saunders and Mr Geoff Reed. Mr Sanders is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), and a Member of the Australian Institute of Geologists (AIG). Mr Reed is Member of the Australian Institute of mining and Metallurgy (AusIMM (CP)), and a Member of the Australian Institute of Geologists (AIG). Both Mr Saunders and Mr Reed have 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.' Mr Saunders is an employee of R3D Resources 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. Mr Reed is a consultant to R3D Resources 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.

### *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. R3D does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.

# 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.<br><br>Downhole (acid) surveys uncertain reliability, but holes short.<br>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).<br>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.<br>2008 drilling has also been logged in detail for the mineralised zones.<br>Logging units for old and new holes match.<br><br>New holes have been logged for structure to enhance the geological model used for resource modelling.<br>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. |

| Criteria | Commentary |
|---|---|
| *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.<br>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 Deptl | Dip | Azi_True | Hole_Type | Grid Datun | 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 |