# EKJV Exploration Report

# June 2018 Quarter

**ASX ANNOUNCEMENT**

19 July 2018

**Australian Securities Exchange Code: TBR**



Tribune Resources Ltd (ASX code: TBR) has pleasure in providing the Quarterly EKJV Exploration Report received yesterday.

The EKJV is located 25km west north west of Kalgoorlie and 47km north east of Coolgardie. The EKJV is between Rand (12.25%), Tribune Resources Ltd (36.75%) and Northern Star Resources Ltd (51%).

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EKJV MANAGEMENT PTY LTD

# EAST KUNDANA JOINT VENTURE

## June 2018 Quarterly

## EKJV Exploration Report

For distribution to JV Partners:

- Northern Star Resources Limited
- Tribune Resources Limited
- Rand Mining Limited

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**TABLES AND FIGURES**

# 1 EXECUTIVE SUMMARY

Exploration activity in the June 2018 quarter consisted of in-mine exploration at the Hornet-Rubicon-Pegasus mine and Raleigh mine. Regional exploration consisted of a single program at the Falcon Prospect.

| Project | Prospect | Tenure | RAB/AC Metres | RAB/AC Samples | RC Metres | RC Samples | DD Metres | DD Samples | ME Samples |
|---|---|---|---|---|---|---|---|---|---|
| Regional | Falcon | M16/309 | | | | | 622 | 828 | 0 |
| Hornet-Rubicon-Pegasus In-mine | Pode North | M16/309 | | | | | 1,906 | 1,943 | |
| | Pegasus K2 | M16/309 | | | | | 815 | 671 | |
| | Rubicon K2 | M16/309 | | | | | 1,606 | 1,730 | |
| Raleigh In-mine | Raleigh | M15/993 | | | | | 1,318 | 653 | |
| TOTAL | | | | | | | 3,343 | 4,095 | 0 |

*Table 1. EKJV exploration activity for the June Quarter.*

# 2 EXPLORATION ACTIVITY

Regional exploration on EKJV tenure for the June quarter consisted of two diamond drillholes at the Falcon prospect.

In mine exploration consisted of drill programs on the following prospects:

- Pode North
- Pegasus K2
- Rubicon K2
- Raleigh Main Vein – Southern Extension

## 2.1 Falcon (DT)

FLDD18001 and FLDD18002 were drilled at the Falcon prospect for the period of April-May 2018 for a total of 621.7m, shown in Table 2 below. The purpose of the drilling was to increase the strike length of the Falcon mineralised trend to the north.

| Hole ID | Tenement | Start Date | End Date | Depth | East | North | RL | Hole Type | Dip | Azimuth |
|---|---|---|---|---|---|---|---|---|---|---|
| FLDD18001 | M16/309 | 20/04/18 | 26/04/18 | 321.7m | 332411 | 6598356 | 346 | HQ | -60 | 061 |
| FLDD18002 | M16/309 | 27/04/18 | 1/05/18 | 300.0m | 332464 | 6598291 | 346 | HQ | -55 | 062 |

*Table 2. Drilling summary for the Falcon prospect June quarter 2018.*

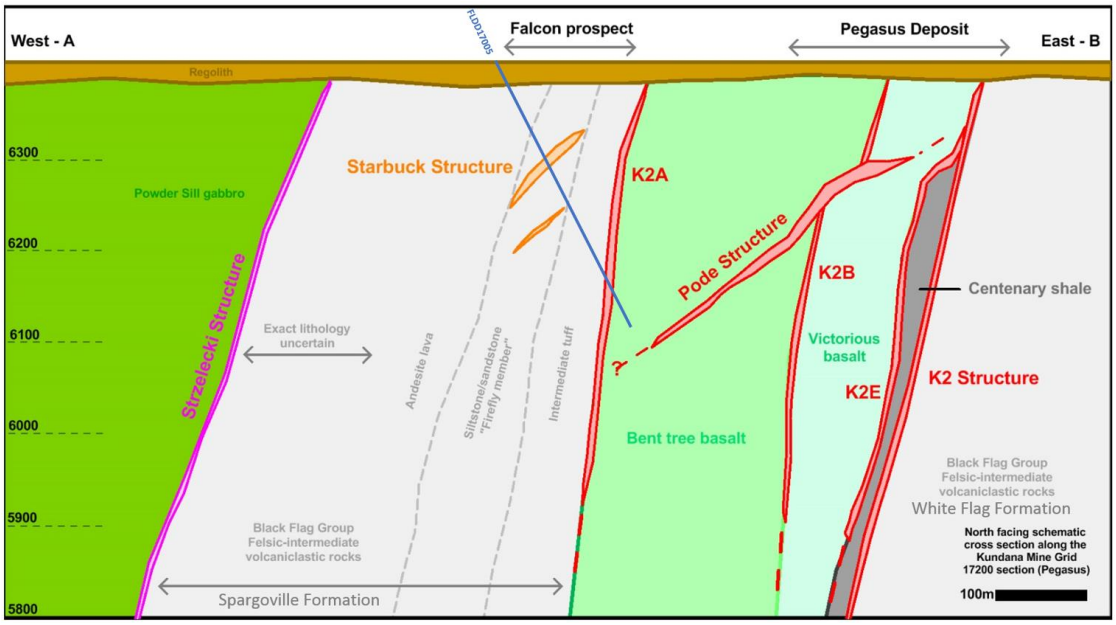


Figure 1: A stylised north-facing cross section along the Kundana Mine Grid showing the stratigraphic position (blue) of the two holes drilled for the quarter. Note that the two holes are along strike from each other and therefore in the same stratigraphic position.

## 2.2 Rubicon- Hornet-Pegasus (RT)

A total of 13 underground diamond holes for 4,327 metres were drilled targeting various positions in the Hornet-Rubicon-Pegasus (RHP) Mine. This included:

- 3 holes targeting Pegasus K2 North down plunge and along strike.
- 6 holes targeting Pode North testing the lower southern and northern extents of the lode.
- 4 hole targeting extensions of Rubicon K2 from the northern-most available stockpile of the Link Drill Drive.

| Hole ID | Depth | East | North | RL | Hole Type | Dip | Azimuth |
|---|---|---|---|---|---|---|---|
| PEGRT18057 | 277 | 332886 | 6598068 | -182 | DD_NQ | -61 | 74 |
| PEGRT18062 | 290 | 332886 | 6598068 | -182 | DD_NQ | -64 | 35 |
| PEGRT18077 | 239 | 332759 | 6598366 | -97 | DD_NQ | -12 | 249 |
| PEGRT18079 | 241 | 332761 | 6598364 | -98 | DD_NQ | -23 | 230 |
| PEGRT18082 | 390 | 332761 | 6598363 | -98 | DD_NQ | -26 | 213 |
| PEGRT18110 | 340 | 332707 | 6598422 | -108 | DD_NQ | 7 | 287 |
| PEGRT18118 | 363 | 332707 | 6598422 | -109 | DD_NQ | -15 | 278 |
| PEGRT18120 | 333 | 332707 | 6598422 | -110 | DD_NQ | -30 | 261 |
| PEGRT18129 | 248 | 332728 | 6598434 | -110 | DD_NQ | -48 | 358 |
| RUBRT17148 | 474 | 333221 | 6597432 | -328 | DD_NQ | -23 | 345 |
| RUBRT17149 | 501 | 333221 | 6597432 | -328 | DD_NQ | -32 | 343 |
| RUBRT17150 | 145 | 333221 | 6597432 | -328 | DD_NQ | -43 | 343 |
| RUBRT17150A | 486 | 333220 | 6597432 | -328 | DD_NQ | -43 | 343 |

*Table 3. Drilling physicals for the in-mine exploration at Hornet-Rubicon-Pegasus project.*

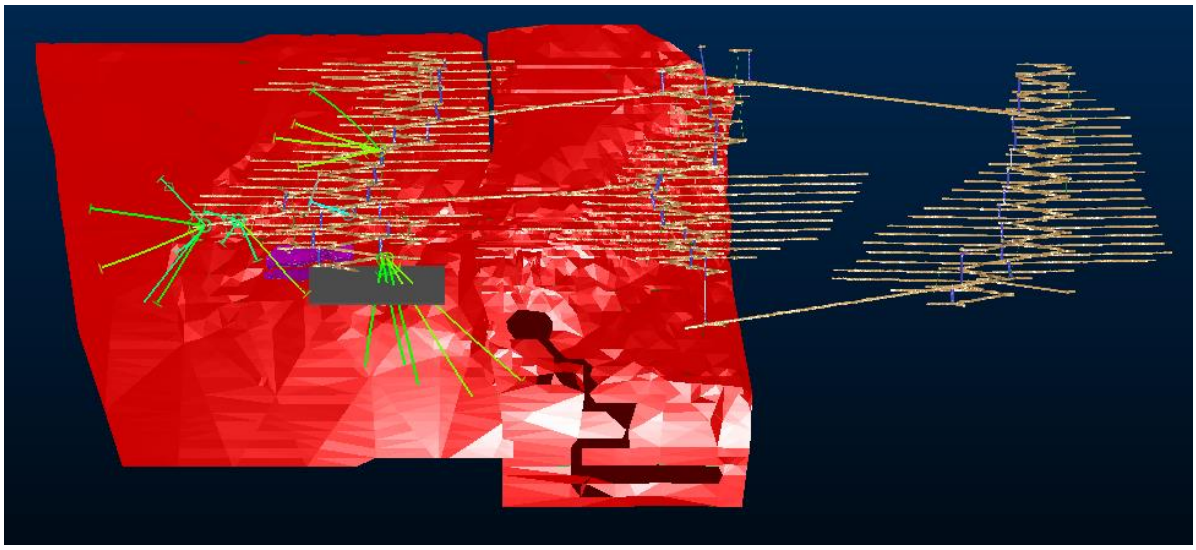

*Figure 2. Overview (looking East) of Hornet-Rubicon-Pegasus project showing in-mine drill programs targeting Hera, Pegasus K2 and Rubicon K2 during quarter.*

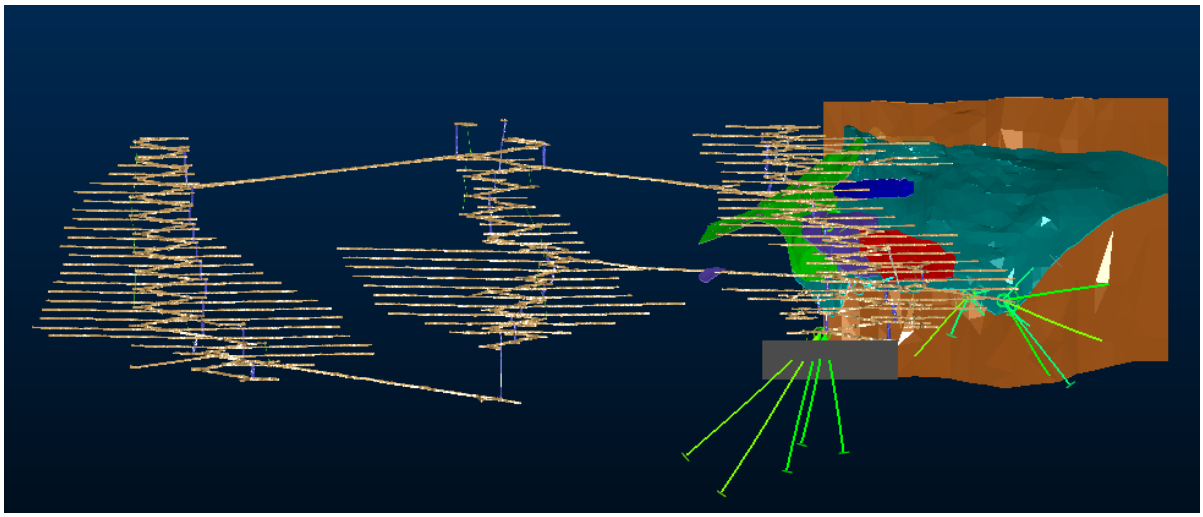

*Figure 3. Overview (looking West) of Hornet-Rubicon-Pegasus project showing in-mine drill programs targeting Hera, Pode and Falcon during the quarter.*

## 2.3 Raleigh (RT)

A total of 7 underground diamond holes for 1,318 metres were drilled at Raleigh targeting the southern extension of the Raleigh Main Vein.

| Hole ID | Depth | East (MGA) | North (MGA) | RL (AHD) | Hole Type | Dip | Azimuth (MGA) |
|---|---|---|---|---|---|---|---|
| RALRT18052 | 138 | 331978 | 6598377 | 6 | DD_NQ | -42 | 112 |
| RALRT18057 | 255 | 331977 | 6598377 | 6 | DD_NQ | -20 | 142 |
| RALRT18073 | 273 | 331978 | 6598379 | 5 | DD_NQ | -47 | 141 |
| RALRT18122 | 215 | 332017 | 6598212 | -17 | DD_NQ | 27 | 101 |
| RALRT18150 | 141 | 332016 | 6598212 | -20 | DD_NQ | -27 | 108 |
| RALRT18163 | 159 | 332016 | 659212 | -20 | DD_NQ | -56 | 103 |
| RALRT18176 | 201 | 332015 | 6598213 | -20 | DD_NQ | -76 | 92 |

*Table 4. Drilling physicals for the in-mine exploration at Raleigh project.*

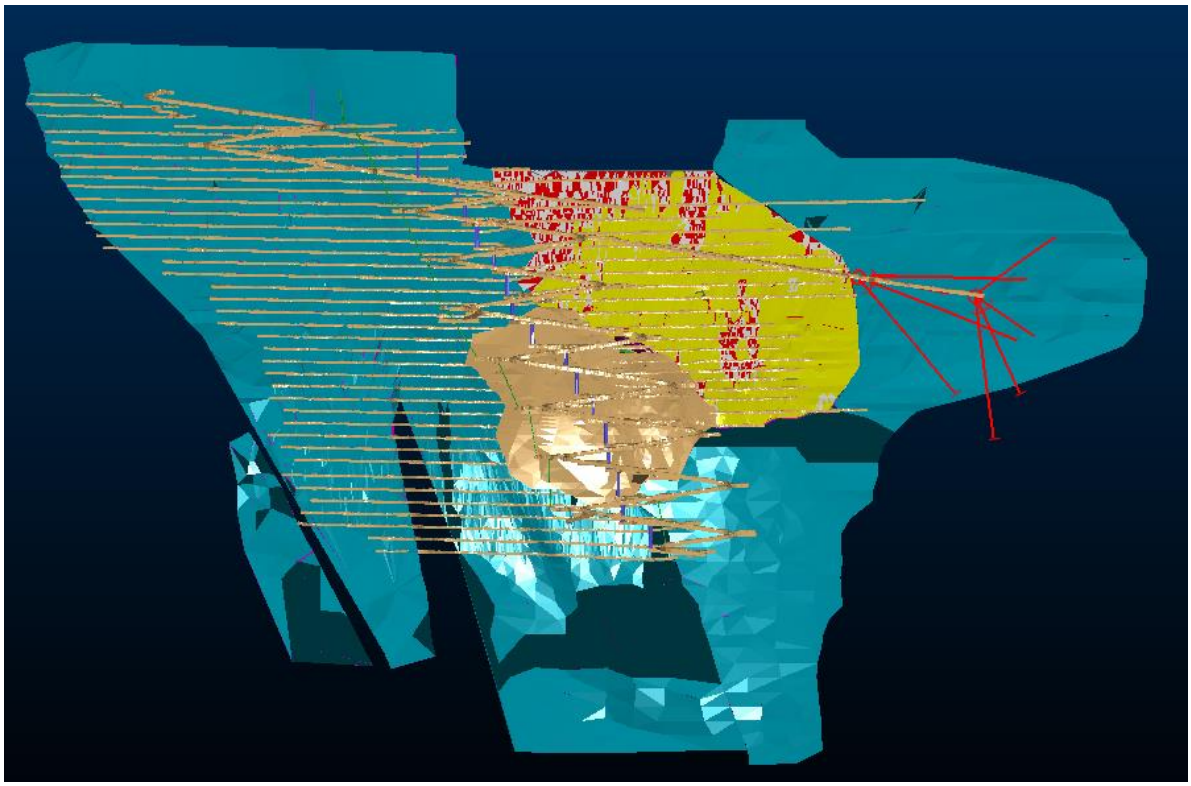

*Figure 4. Long section (looking East) of Raleigh Main Vein showing the 6058 Drill Drive and holes targeting southern extension.*

## 3 EXPLORATION RESULTS

### 3.1 Falcon (DT)

Both diamond holes drilled this quarter intersected mineralised veins which extend the known Falcon lode. The most significant intercept of the program was from FLDD18001 - 0.6m at 50.1g/t gold from 227.01m. The grade was associated with irregular to planar quartz-carbonate ± sulphide veins and some brecciation in foliated volcaniclastic sediments of the Black Flag Formation, shown in Figure 5 and Figure 6 below.

Follow up drilling is planned for the next quarter.

| Hole ID | East (MGA) | North (MGA) | RL (AHD) | Dip | Azi (MGA) | Hole Depth | From | To | Width | Grade g/t Au |
|---|---|---|---|---|---|---|---|---|---|---|
| FLDD18001 | 332411 | 6598356 | 346 | -60 | 61 | 321.7 | 227.01 | 227.60 | 0.59 | 50.1 |
| | | | | | | | 227.60 | 228.50 | 0.90 | 1.2 |
| | | | | | | | 230.00 | 232.20 | 2.20 | 1.4 |
| | | | | | | | 234.72 | 235.70 | 0.98 | 1.9 |
| | | | | | | | 243.62 | 245.93 | 2.31 | 1.3 |
| | | | | | | | 245.93 | 246.93 | 1.00 | 10.1 |
| FLDD18002 | 332464 | 6598291 | 346 | -55 | 62 | 300 | 227.60 | 228.13 | 0.53 | 1.3 |

*Table 5. Significant Intercepts returned during the June quarter at the Falcon prospect.*

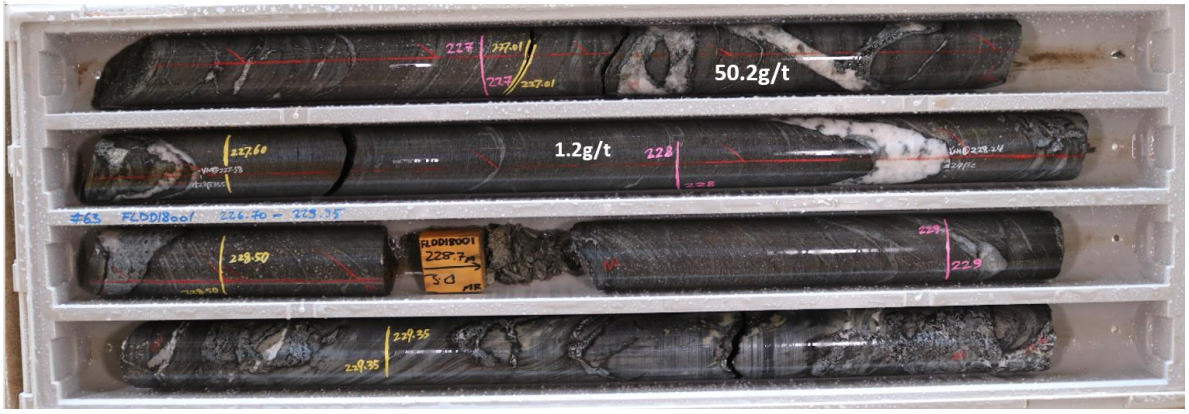


*Figure 5: Core photo of FLDD18001 significant intercepts between 227.01-228.5m*


*Figure 6: Core photo of FLDD18001 significant intercepts between 243.63-246.93m.*

## 3.2 Hornet-Rubicon Pegasus

### 3.5.1 Rubicon K2

Two diamond holes targeting the northern down dip plunge of Rubicon K2 and a footwall target towards the intermediate volcaniclastics (IVT) and Star trek Dolerite contact returned assay results for the quarter. The intersection shown below is RUBRT17148, targeting the down plunge northern extent of Rubicon K2.

The hole intersected a well laminated vein with brecciated immediate hanging wall and footwall veins. Disseminated arsenopyrite and pyrite are associated with the laminations in the vein and adjacent footwall. Mineralisation continues into the footwall with biotite altered IVT with strong foliation and associated pyrrhotite. There are still outstanding assays for this drill program.


*Figure 7 Core photos of significant results in hole RUBRT17148.*

| Hole ID | East (MGA) | North (MGA) | RL (AHD) | Dip | Azi (MGA) | Hole Depth | From | To | DH Width | Grade g/t Au | True Width |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RUBRT17148 | 333221 | 6597432 | -328 | -23 | 346 | 474.4 | 438.7 | 439.6 | 0.88 | 2.83 | 0.6 |
| | | | | | | | 441.6 | 446.1 | 4.53 | 5.62 | 2.8 |
| | | | | | | | 459.7 | 460.4 | 0.63 | 4.31 | 0.4 |
| RUBRT17209 | 333292 | 6597736 | -121 | -26 | 39 | 164.9 | 32.0 | 33.0 | 1.00 | 3.00 | - |
| | | | | | | | 50.7 | 51.4 | 0.65 | 7.40 | - |
| | | | | | | | 54.4 | 57.6 | 3.15 | 3.30 | - |

*Table 6. Summary of significant assay results for Nugget.*

### 3.5.2 Pegasus K2

Several significant results were returned this quarter for Pegasus K2 drilling focussed on extensions of K2 to the north and down dip. The intersection highlighted below is PEGRT18044, which target the Pegasus K2 to the south in filling the gap to Rubicon K2.

The hole intersects a brecciated and irregular vein with strong biotite alteration, disseminated arsenopyrite and flakes of visible gold. Irregularity of intercept is most likely due to the proximity to the Poseidon fault.


*Figure 8. Hornet K2 in drill hole PEGRT18044.*

Figure 8 shows another successful intersection down dip on the K2. PEGRT18054 intersected a well laminated vein with irregular distribution of scheelite and visible gold. Arsenopyrite is present along laminations through the hanging wall and footwall, as well as strong biotite alteration in the adjacent footwall. Interpretation is ongoing with further drilling to be completed in the new quarter.


*Figure 9. E-W cross section view of Hornet K2 showing results for PEGRT18054.*

| Hole ID | East (MGA) | North (MGA) | RL (AHD) | Dip | Azi (MGA) | Hole Depth | From | To | DH Width | Grade g/t Au | True Width |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PEGRT18040A | 332707 | 6598422 | -107 | 32 | 275 | 200.3 | 87.8 | 89.1 | 1.33 | 9.84 | - |
| | | | | | | | 156.3 | 157.0 | 0.70 | 3.19 | - |
| | | | | | | | 175.6 | 176.2 | 0.58 | 4.7 | - |
| PEGRT18044 | 332885 | 6598057 | -181 | -40 | 124 | 420 | 85.4 | 87.0 | 1.56 | 11.39 | - |
| | | | | | | | 407.0 | 412.0 | 5.00 | 27.26 | 2.4 |
| PEGRT18048 | 332885 | 6598057 | -182 | -52 | 114 | 434 | 77.2 | 75.6 | 1.35 | 4.74 | 1.0 |
| | | | | | | | 81.0 | 81.8 | 0.83 | 9.1 | 0.6 |
| | | | | | | | 369.2 | 370.0 | 0.75 | 32.12 | 0.4 |
| PEGRT18054 | 332885 | 659057 | -182 | -63 | 93 | 336 | 64.8 | 67.4 | 2.59 | 85.56 | 2.3 |
| | | | | | | | 283.0 | 283.4 | 0.40 | 16.1 | - |
| | | | | | | | 317.7 | 320.8 | 3.11 | 43.4 | 1.8 |
| PEGRT18057 | 332886 | 6598068 | -182 | -61 | 74 | 2076.5 | 52.5 | 53.8 | 1.26 | 16.6 | 1.0 |
| | | | | | | | 262.8 | 264.5 | 1.66 | 6.9 | 1.0 |
| PEGRT18062 | 332886 | 6598068 | -182 | -64 | 37 | 289.8 | 56.5 | 57.2 | 0.70 | 6.78 | - |
| | | | | | | | 261.8 | 263 | 1.16 | 28.48 | 0.7 |

*Figure 9. Summary of significant assay results for Pegasus K2.*

Drilling targeting down plunge K2 from the 5817 Drill Drive during the quarter intersected a "Pode like" structure through the first 50m – 90m of the holes. Hosted in the Bent Tree Basalt, the

vein shows similar characteristics to the Pode North and Pode South mineralisation. Vein shows strong biotite alteration as well as brecciated and laminated sections. Moderate occurrences of disseminated arsenopyrite and flecks of visible gold can be found within the vein. Interpretation of this lode is ongoing with drilling to continue through the next quarter.


*Figure 10. Core section of PEGRT18040A showing new Pode like structure found in drilling for Pegasus K2.*


*Figure 11. Core section of PEGRT18044 showing new Pode like structure found in drilling for Pegasus K2. Visible gold present in this intersection*

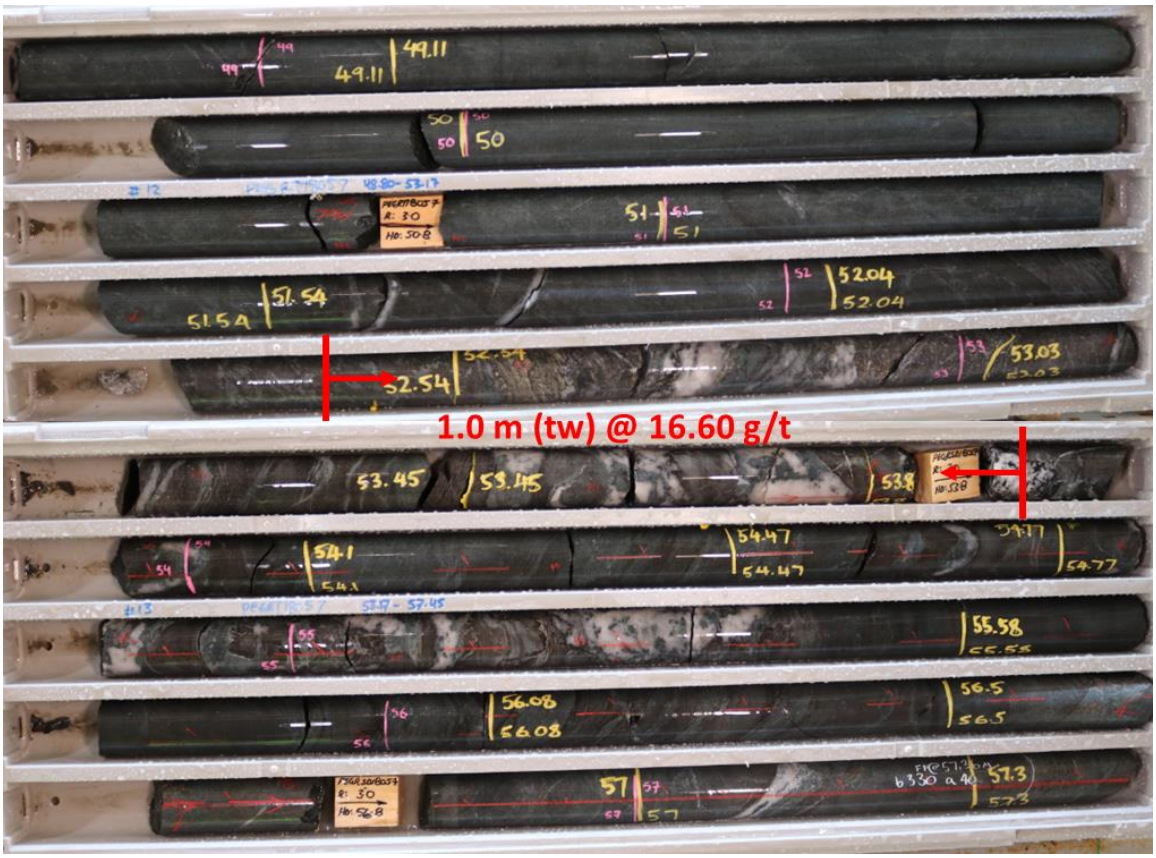


*Figure 12. Core section of PEGRT18057 showing new Pode like structure found in drilling for Pegasus K2.*

### 3.5.3 Pegasus Pode

Significant results were returned this quarter for Pegasus Pode drilling. The intersection below is PEGRT18110, targeting the lower extension of Pode North. The hole intersected an irregular vein with strong biotite alteration and disseminated sulphides. Weak mineralisation continues through veins adjacent to main vein.


*Figure 13. Drill core from Pode North for PEGRT18110.*

Numerous drill holes targeting Pode were extended due to prospective veining and alteration near the planned end of the holes. These holes intersected veining in foliated intermediate volcaniclastic rocks with strong biotite alteration and disseminated arsenopyrite and alteration. Shown below, PEGRT18077 highlights these characteristics. Interpretation of these programs is ongoing.

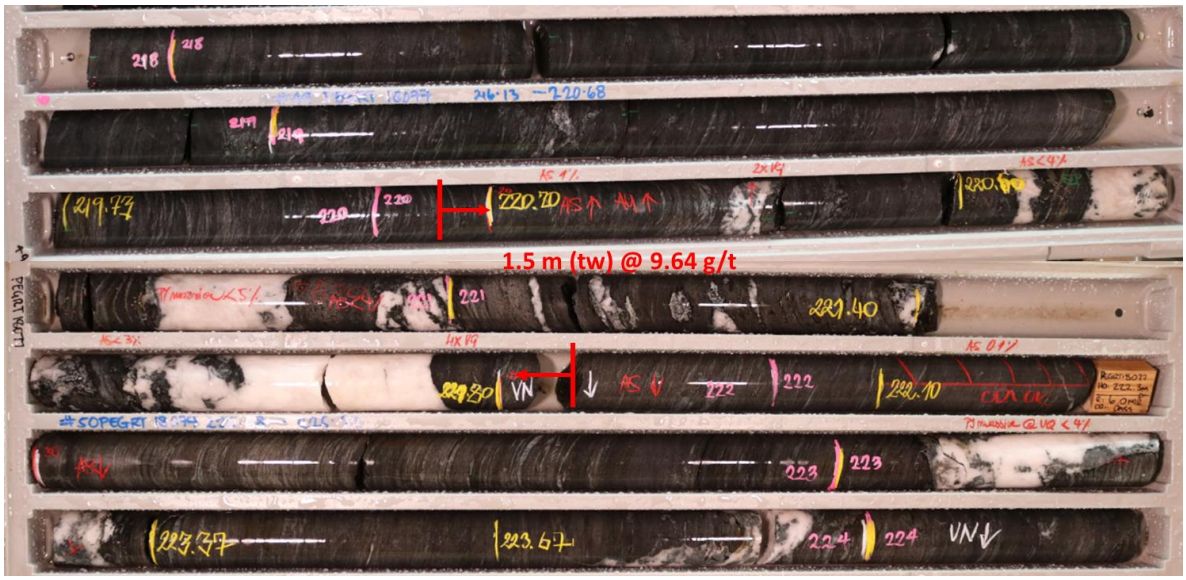


*Figure 14. E-W cross section view of Pode North showing results for PEGRT18077.*

| Hole ID | East (MGA) | North (MGA) | RL (AHD) | Dip | Azi (MGA) | Hole Depth | From | To | DH Width | Grade g/t Au | True Width |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PEGRT17039 | 332925 | 6598103 | 57 | -38 | 283 | 290.8 | 13.7 | 16.3 | 2.59 | 5.23 | - |
| PEGRT17039 | 332925 | 6598103 | 57 | -38 | 283 | 290.8 | 52.7 | 53.2 | 0.57 | 11.00 | - |
| PEGRT18077 | 332759 | 6598366 | -97 | -12 | 249 | 239.2 | 220.2 | 221.8 | 1.60 | 9.64 | 1.5 |
| PEGRT18077 | 332759 | 6598366 | -97 | -12 | 249 | 239.2 | 223 | 223.4 | 0.37 | 8.34 | 0.3 |
| PEGRT18082 | 332761 | 6598363 | -98 | -26 | 213 | 390.2 | 296.3 | 297 | 0.74 | 102 | 0.5 |
| PEGRT18082 | 332761 | 6598363 | -98 | -26 | 213 | 390.2 | 311.3 | 313 | 1.66 | 6.20 | 1.1 |
| PEGRT18082 | 332761 | 6598363 | -98 | -26 | 213 | 390.2 | 343 | 344.2 | 1.27 | 13.46 | 0.9 |
| PEGRT18110 | 332707 | 6598422 | -108 | 7 | 287 | 339.9 | 72.1 | 73 | 0.86 | 3.15 | 0.5 |
| PEGRT18110 | 332707 | 6598422 | -108 | 7 | 287 | 339.9 | 111.14 | 112.2 | 0.73 | 19.50 | 0.7 |
| PEGRT18110 | 332707 | 6598422 | -108 | 7 | 287 | 339.9 | 313.5 | 314.6 | 1.15 | 36.72 | 0.8 |
| PEGRT18112 | 332707 | 6598421 | -109 | -15 | 254 | 246.3 | 42.7 | 43.2 | 0.44 | 7.55 | - |
| PEGRT18112 | 332707 | 6598421 | -109 | -15 | 254 | 246.3 | 65.5 | 66 | 0.48 | 25.70 | - |
| PEGRT18112 | 332707 | 6598421 | -109 | -15 | 254 | 246.3 | 224.5 | 224.9 | 0.36 | 4.38 | - |
| PEGRT18118 | 332707 | 6598422 | -109 | -15 | 278 | 363.3 | 71.3 | 71.6 | 0.30 | 19.80 | 0.3 |
| PEGRT18118 | 332707 | 6598422 | -109 | -15 | 278 | 363.3 | 344.3 | 344.6 | 0.30 | 6.18 | 0.2 |

*Table 7. Summary of significant assay results for Pegasus Pode.*

## 3.3 Raleigh

Assays for three diamond drill holes were returned for the quarter. The intersection highlighted is RALRT18035 in the centre of the Raleigh South extension. The hole intersects the Raleigh Main Vein (RMV) with mineralisation adjacent to vein in silica flooded andesite. There are further results pending for these programs with drilling continuing to target RMV next quarter.


*Figure 15. Drill core photograph showing results for RALRT18035.*

| Hole ID | East (MGA) | North (MGA) | RL (AHD) | Dip | Azi (MGA) | Hole Depth | From | To | DH Width | Grade g/t Au | True Width |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RALRT18025 | 331979 | 6598378 | 7 | 2 | 91 | 122.9 | 77.7 | 78 | 0.3 | 2.09 | 0.01 |

| Hole ID | East (MGA) | North (MGA) | RL (AHD) | Dip | Azi (MGA) | Hole Depth | From | To | DH Width | Grade g/t Au | True Width |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RALRT18025 | 331979 | 6598378 | 7 | 2 | 91 | 122.9 | 102.7 | 103 | 0.3 | 2.28 | 0.24 |
| RALRT18035 | 331979 | 6598378 | 7 | -9 | 123 | 167.8 | 143.8 | 144.2 | 0.4 | 4.13 | 0.19 |
| RALRT18052 | 331978 | 6598377 | 6 | -43 | 112 | 137.6 | 113.8 | 114.3 | 0.5 | 2.11 | 0.32 |

*Table 8. Summary of significant assay results for Raleigh.*

# 4 Future Work

## 4.1 In-mine Exploration

Drilling will continue to test the extents of K2 between 5500 and 5300 RL's from the Pegasus 5817 Drill Drive. The 5920 drill drive is expected to become available mid next quarter where drilling will target the northern and down dip extension of K2.

Infill resource drilling will commence from the Hornet 5776 link drive after the recent Hornet model release. Interpretive work on results returned for Rubicon K2 will continue next quarter.

## 4.2 Regional Exploration

Follow up drilling is planned at the Falcon prospect to further define the newly extended Falcon mineralisation. Aircore drilling is planned over the Black Flag Formation east of the K2 at the Papa Bear prospect.

***Competency statement***

*The information in this report relating to Exploration Results is based on information compiled by Dr Rick Gordon who is a Member of the Australian Institute of Geoscientists and has sufficient exploration experience which is relevant to the style of mineralisation under consideration 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 Gordon is a full-time employee of Northern Star Resource Limited and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

# 5 APPENDIX 1

## JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| **Sampling techniques** | ▪ Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.<br>▪ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.<br>▪ Aspects of the determination of mineralisation that are Material to the Public Report.<br>▪ In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. | ▪ Sampling was completed using Diamond (DD) drilling.<br>▪ Diamond core was transferred to core trays for logging and sampling. Full core samples were nominated by the geologist from HQ or NQ diamond core, with a minimum sample width of 20cm and a maximum width of 120cm.<br>▪ Samples were transported to various analysis laboratories in Kalgoorlie for preparation by drying, crushing to <3mm, and pulverizing the entire sample to <75µm.<br>▪ 300g Pulp splits were analysed in laboratories in both Kalgoorlie and Perth for 50g Fire assay charge and AAS analysis for gold. |
| **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.). | ▪ Diamond drilling was used from surface. HQ (63.5mm) diameter core was used where practical for surface diamond holes. For underground drilling and where HQ drilling was impractical from surface, NQ2 (50.6mm) diameter core was used.<br>▪ Core was orientated using and electronic 'back-end tool' core orientation system. |
| **Drill sample recovery** | ▪ Method of recording and assessing core and chip sample recoveries and results assessed.<br>▪ Measures taken to maximise sample recovery and ensure representative nature of the samples.<br>▪ 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. | ▪ For diamond drilling the contractors adjust their rate of drilling and method if recovery issues arise. All recovery is recorded by the drillers on core blocks. This is checked and compared to the measurements of the core by the geological team. Any issues are communicated back to the drilling contractor.<br>▪ Recovery was excellent for diamond core and no relationship between grade and recovery was observed. |
| **Logging** | ▪ Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.<br>▪ Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.<br>▪ The total length and percentage of the relevant intersections logged. | ▪ All diamond core is logged for regolith, lithology, veining, alteration, mineralisation and structure. Structural measurements of specific features are taken through oriented zones. All logging is quantitative where possible and qualitative elsewhere. A photograph is taken of every core tray.<br>▪ All logging data was recorded digitally. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| **Sub-sampling techniques and sample preparation** | ▪ If core, whether cut or sawn and whether quarter, half or all core taken.<br>▪ If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.<br>▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique.<br>▪ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.<br>▪ Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.<br>▪ Whether sample sizes are appropriate to the grain size of the material being sampled. | ▪ All diamond core was half-core sampled after cutting longitudinally with an automated core saw.<br>▪ Sample preparation was conducted at various laboratories in Kalgoorlie, commencing with sorting, checking and drying at less than 110°C to prevent sulphide breakdown. Samples are jaw crushed to a nominal -6mm particle size. The entire crushed sample is then pulverized to 90% passing 75µm, using a Labtechnics LM5 bowl pulveriser. 300g Pulp subsamples are then taken with an aluminium scoop and stored in labelled pulp packets.<br>▪ Grind checks are performed at both the crushing stage (3mm) and pulverising stage (75µm), requiring 90% of material to pass through the relevant size to ensure consistent sample preparation. |
| **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.<br>▪ 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.<br>▪ 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. | ▪ A 50g fire assay charge is used with a lead flux, dissolved in the furnace. The prill is totally digested in HCl and $HNO_3$ acids before Atomic Absorption Spectroscopy (AAS) determination for gold analysis. This method ensures total gold is reported appropriately.<br>▪ No geophysical tools were used to determine any element concentrations<br>▪ Certified Reference Materials (CRMs) are inserted into the sample sequence randomly at a rate of 1 per 20 composite samples to ensure correct calibration. Any values outside of 3 standard deviations are scrutinised and re-assayed with a new CRM if the failure is deemed genuine.<br>▪ Blanks are inserted into the sample sequence at a rate of 1 per 20 composite samples. Failures above 0.2g/t are scrutinised, and re-assayed if required. New pulps are prepared if failures remain.<br>▪ All sample QAQC results are assessed by geologists to ensure the appropriate level of accuracy and precision when the results have been returned from the laboratory. |
| **Verification of sampling and assaying** | ▪ The verification of significant intersections by either independent or alternative company personnel.<br>▪ The use of twinned holes.<br>▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.<br>▪ Discuss any adjustment to assay data. | ▪ All significant intersections are verified by the project geologist and senior geologist during the drill hole validation process.<br>▪ No holes were twinned as part of the programmes in this report.<br>▪ Geological logging was captured using Acquire database software. Both a hardcopy and electronic copy of these are stored. Assay files are received in csv format and loaded directly into the database by the supervising geologist who then checks that the results have inserted correctly. Hardcopy and electronic copies of these are also kept. No adjustments are made to this assay data. |
| **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.<br>▪ Specification of the grid system used.<br>▪ Quality and adequacy of topographic control. | ▪ A planned hole is pegged using a GPS by the field assistants for RC holes and a differential GPS for diamond holes.<br>▪ During diamond hole drilling single-shot surveys are every 30m to ensure the hole remains close to design. This is performed using the Reflex Ez-Trac system. For surface drillholes, a gyroscopic survey is conducted by a specialist downhole survey contractor, taking readings every 5m for improved accuracy. This is done in true north.<br>▪ The final hole collar for each diamond hole is picked up after drillhole completion by DGPS in the MGA 94_51 grid.<br>▪ Good quality topographic control has been achieved through regional topographic maps (±2.5m) based on photogrammetry data. |

| Criteria | JORC Code Explanation | Commentary |
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| **Data spacing and distribution** | ▪ Data spacing for reporting of Exploration Results.<br>▪ 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.<br>▪ Whether sample compositing has been applied. | ▪ Early stage diamond and RC drilling is variably spaced to effectively test the desired target. Spacings of the regional drilling programmes range from 80m apart through to several hundred metres apart through to isolated single drillholes in some cases. These variable spacings are considered appropriate for early-stage testing of exploration targets.<br>▪ In-mine diamond drillholes spacings are also variable from 80m apart through to isolated single drillholes. Closer spaced drilling is considered operational drilling, beyond the scope of this report.<br>▪ No compositing has been applied to these exploration results, although composite intersections are reported. |
| **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.<br>▪ If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. | ▪ All drilling both underground and surface is oriented as close as practical to perpendicular to the target structures. The orientation of all in-mine target structures is well known and drill holes are only designed where meaningful intercept angles can be achieved.<br>▪ No sampling bias is considered to have been introduced by the drilling orientation. |
| **Sample security** | ▪ The measures taken to ensure sample security. | ▪ Prior to laboratory submission samples are stored by Northern Star in a secure yard. Once submitted to the laboratories they are stored in a secure fenced compound, and tracked through their chain of custody via audit trails. |
| **Audits or reviews** | ▪ The results of any audits or reviews of sampling techniques and data. | ▪ No audits or reviews have recently been conducted on sampling techniques, however lab audits are conducted on a regular basis. |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code 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.<br>▪ The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | ▪ All diamond holes mentioned in this report are located within the M16/309 and M15/993 Mining leases held by The East Kundana Joint Venture (EKJV). The EKJV is majority owned and managed by Northern Star Resources Ltd (51%). The minority holding in the EKJV is held by Tribune Resources Ltd (36.75%) and Rand Mining Ltd (12.25%).<br>▪ The tenement on which the Falcon and Hornet-Rubicon-Pegasus prospects are hosted (M16/309) is subject to two royalty agreements; however, neither of these is applicable to the Prospects described in this report. The agreements concerned are the Kundana- Hornet Central Royalty and the Kundana Pope John Agreement No. 2602-13. No known impediments exist and the tenement is in good standing |
| **Exploration done by other parties** | ▪ Acknowledgment and appraisal of exploration by other parties. | ▪ Underground drilling on the Raleigh and Hornet-Rubicon-Pegasus mines extends the mineralised trends from older drilling including that of previous operators of those mines including Barrick Gold, Placer Dome Asia-Pacific, Aurion Gold and other predecessors. |
| **Geology** | ▪ Deposit type, geological setting and style of mineralisation. | ▪ The Kundana camp is situated within the Norseman-Wiluna Greenstone Belt, in an area dominated by the Zuleika Shear Zone, which separates the Coolgardie domain from the Ora Banda domain. The Zuleika Shear Zone in the Kundana area comprises multiple anastomosing shears the most important of which are the K2, the K2A and Strzelecki Shears.<br>▪ Raleigh mineralisation is hosted on the Strzelecki Structure. Strzelecki mineralisation consists of very narrow, very high grade mineralisation on a laminated vein hosted in the camp-scale Strzelecki Shear which abuts a differentiated mafic intrusive, the Powder Sill Gabbro against intermediate volcanoclastic rocks (Black Flag Group). A thin 'skin' of volcanogenic lithic siltstone-sandstone lies between the gabbro and the Strzelecki shear. Being bound by an intrusive contact on one side and a sheared contact on the other, the thickness of the sedimentary package is highly variable from absent to about forty metres true width.<br>▪ The Hornet-Rubicon-Pegasus mineralisation consists primarily of high-grade laminated vein hosted gold on the K2 plane of the Zuleika shear with additional mineralisation on associated lower order structures. The Falcon target is a related mineralised zone in the hangingwall to Pegasus and between the two main Zuleika structures, the K2 and Strzelecki structures. |
| **Drill hole Information** | ▪ 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:<br>  ▪ easting and northing of the drill hole collar<br>  ▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar<br>  ▪ dip and azimuth of the hole<br>  ▪ down hole length and interception depth<br>  ▪ hole length.<br>▪ 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. | ▪ Refer to the various tables in the body of this report.<br>▪ Exploration results that are not material to this report are excluded for some drill programmes, however the drill physicals are all detailed for all drilling regardless of the outcome. |

| Criteria | JORC Code Explanation | Commentary |
|---|---|---|
| **Data aggregation methods** | ▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.<br>▪ Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.<br>▪ The assumptions used for any reporting of metal equivalent values should be clearly stated. | ▪ Diamond drill and RC results are reported as aggregates across the target zone. |
| **Relationship between mineralisation widths and intercept lengths** | ▪ These relationships are particularly important in the reporting of Exploration Results.<br>▪ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br>▪ 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'). | ▪ The orientation of target structures is well known for all in-mine exploration targets and true widths can be accurately calculated and are reported accordingly.<br>▪ Both the downhole width and true width have been clearly specified when used.<br>▪ Results for regional drilling are reported as downhole width. Location and orientation of structures/mineralisation is not known, therefore the true width of intercepts is not known. |
| **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. | ▪ Refer to the figures the body of this report for the spatial context of all holes planned and drilled to date. |
| **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. | ▪ Exploration results that are not material to this report are excluded for some drill programmes, however the drill physicals are all detailed for all drilling regardless of the outcome.<br>▪ Only anomalous results are reported for aircore results. The drilling physicals of all aircore holes are individually listed, those without corresponding results reported had no significant intercepts. |
| **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. | ▪ No other material exploration data has been collected for this drill program. |
| **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).<br>▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | ▪ Planned future work is outlined in the body of this report. |