

**ASX CODE: SPX**

### **CAPITAL STRUCTURE**

|                         |         |
|-------------------------|---------|
| Share Price (13/1/2020) | \$0.097 |
| Shares On Issue         | 1,386m  |
| Market Cap              | \$134m  |
| Unlisted Options        | 136m    |
| Performance Rights      | 20m     |

### **MAJOR SHAREHOLDERS**

|                     |      |
|---------------------|------|
| Patina Resources PL | 9.6% |
| 1832 Asset Mgmt     | 9.4% |
| A. Barton & Assocs  | 7.7% |
| Chalice Gold        | 7.0% |

### **DIRECTORS / MANAGEMENT**

**Alexander Hewlett**  
Executive Chairman

**Paul Adams**  
Managing Director

**James Croser**  
Technical Director

**Nader El Sayed**  
Non-Executive Director

**Les Davis**  
Non-Executive Director

**Mark Pitts**  
Company Secretary

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## **Exploration Update from Penny West**

Spectrum Metals Ltd (“Spectrum” or “the Company”) is pleased to release further drill results from its reverse circulation drilling program at its Penny West Project in Western Australia.

### **Highlights**

Significant extensional RC drilling results at Magenta include:

- SPWRC125 – **4m at 11.1 g/t gold** from 195m, including **1m at 41.0 g/t gold** from 198m.
- SPWRC124 – **3m at 2.28 g/t gold** from 174m.

Significant intersections from holes at the Youangarra Prospect include:

- SPWRC135 – **2m at 3.80 g/t gold** from 65m, including **1m at 6.91 g/t gold** from 66m.
- SPWRC136 – **7m at 1.57g/t gold** from 109m, including **2m at 4.79 g/t gold** from 109m.
- Spectrum has completed a ground-based Moving Loop Electromagnetic Survey (MLEM) over selected areas of the Penny West tenements and in particular, north along strike of the Penny North deposit.
- An undrilled MLEM anomaly has been identified within the Gap Zone to the south of the Magenta Prospect that will be drill tested in the coming weeks. This subtle anomaly is coincident with mapped structures at surface. Several other anomalies have also been identified that need additional interpretive work to derive drill targets.
- Commencement of RC drilling is scheduled for the week beginning 20th January 2020.
- Assay laboratories in Perth experienced a large influx of samples prior to the Christmas period and turn-around times remain extended until the backlog is cleared. Spectrum has a number of RC and diamond holes (Penny North) still awaiting assays.

Managing Director Mr Paul Adams commented:

“Spectrum is extremely pleased to see continued intersections of gold from our drilling campaign from other prospects on the Penny West tenements. Although exploration in these areas is at an early stage, we are particularly encouraged by what we are seeing, including the 41.0 g/t gold intersection at Magenta at depth. In addition, early indications of an interesting MLEM anomaly in the “Gap Zone” along the Penny West Shear indicate a high-priority target for our drilling early this year.”

## Results from the Magenta Prospect

Spectrum has completed several additional RC holes at the Magenta prospect, located 1.5km to the north of Penny North and along strike within the Penny West Shear. These holes have extended the known mineralised structure down dip to a vertical depth of circa 170m. Significant intersections include:

- SPWRC125 – **4m at 11.1 g/t gold** from 195m, including **1m at 41.0 g/t gold** from 198m.
- SPWRC124 – **3m at 2.28 g/t gold** from 174m.

It should be noted that hole SPWRC125 intersected the highest gold grade so far in Spectrum’s drilling campaign to the north of the Penny North deposit, demonstrating that a high-grade gold system with depth potential is present at the Magenta and confirms that the Penny West Shear structure continues to be an important mineralised structure well to the north of the high-grade Penny North deposit. Several RC holes at the Magenta Prospect are still awaiting assays.

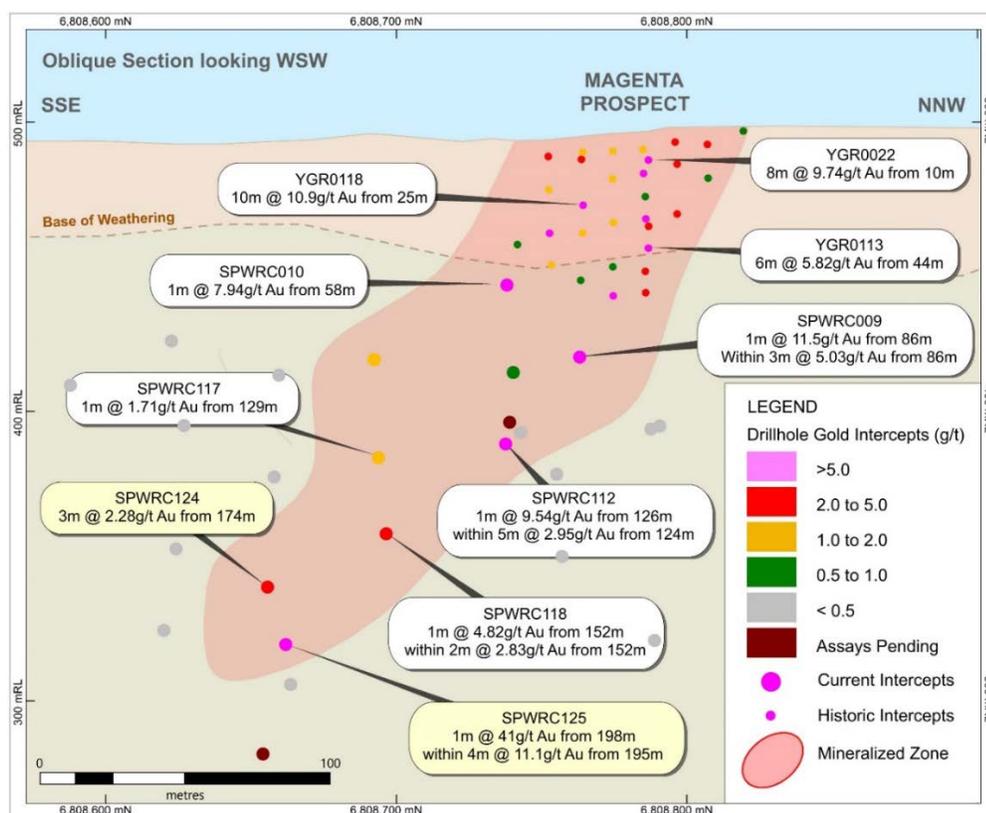


Figure 1. Long Section through the Magenta Prospect with significant intersections

## First drill hole results from Youangarra Prospect

Spectrum has completed several RC holes into the Youangarra Prospect located north and east of Magenta/Columbia. Youangarra had historic holes that identified near-surface gold mineralisation. Spectrum's drilling was aimed at ascertaining the potential for Youangarra to host a high-grade gold system at depth. Significant intersections from the initial drilling included:

- SPWRC135 – **2m at 3.80 g/t gold** from 65m, including **1m at 6.91 g/t gold** from 66m.
- SPWRC136 – **7m at 1.57g/t gold** from 109m, including **2m at 4.79 g/t gold** from 109m.
- SPWRC139 – **1m at 3.67 g/t gold** from 89m.

Further drilling is required as hole SPWRC136 intersected gold mineralisation in a footwall position which has not been adequately tested. Gold mineralisation remains open down dip.

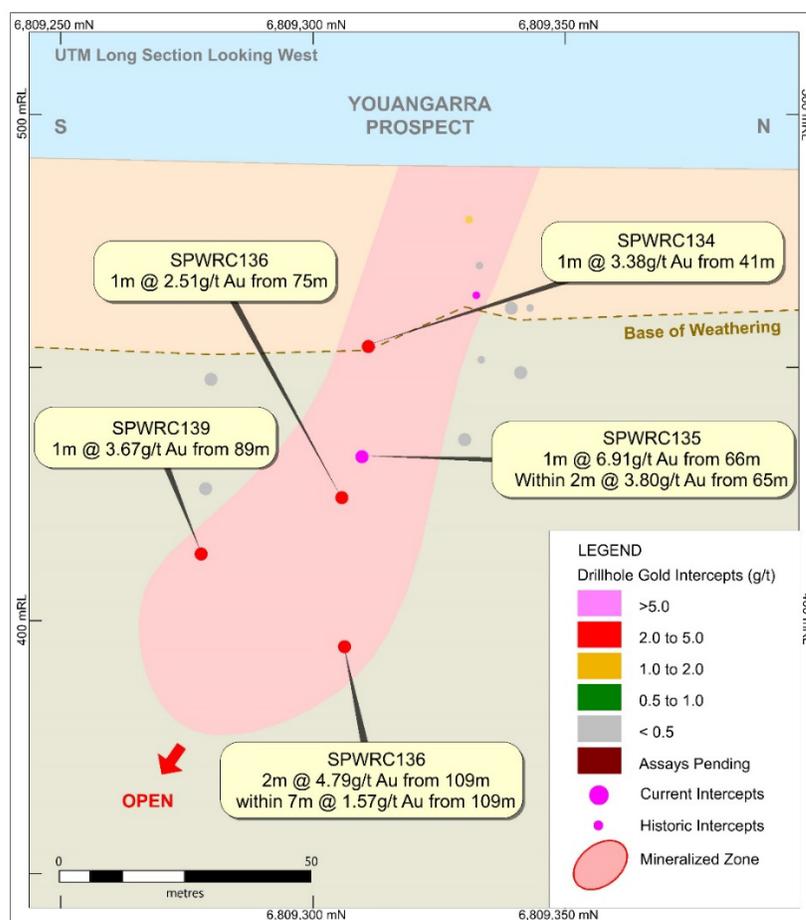


Figure 2. Long Section through the Youangarra Prospect with significant intersections

Several RC holes have also been completed at the Columbia Prospect aiming to extend the known mineral extents down plunge and down dip. Assay results from these holes are awaited.

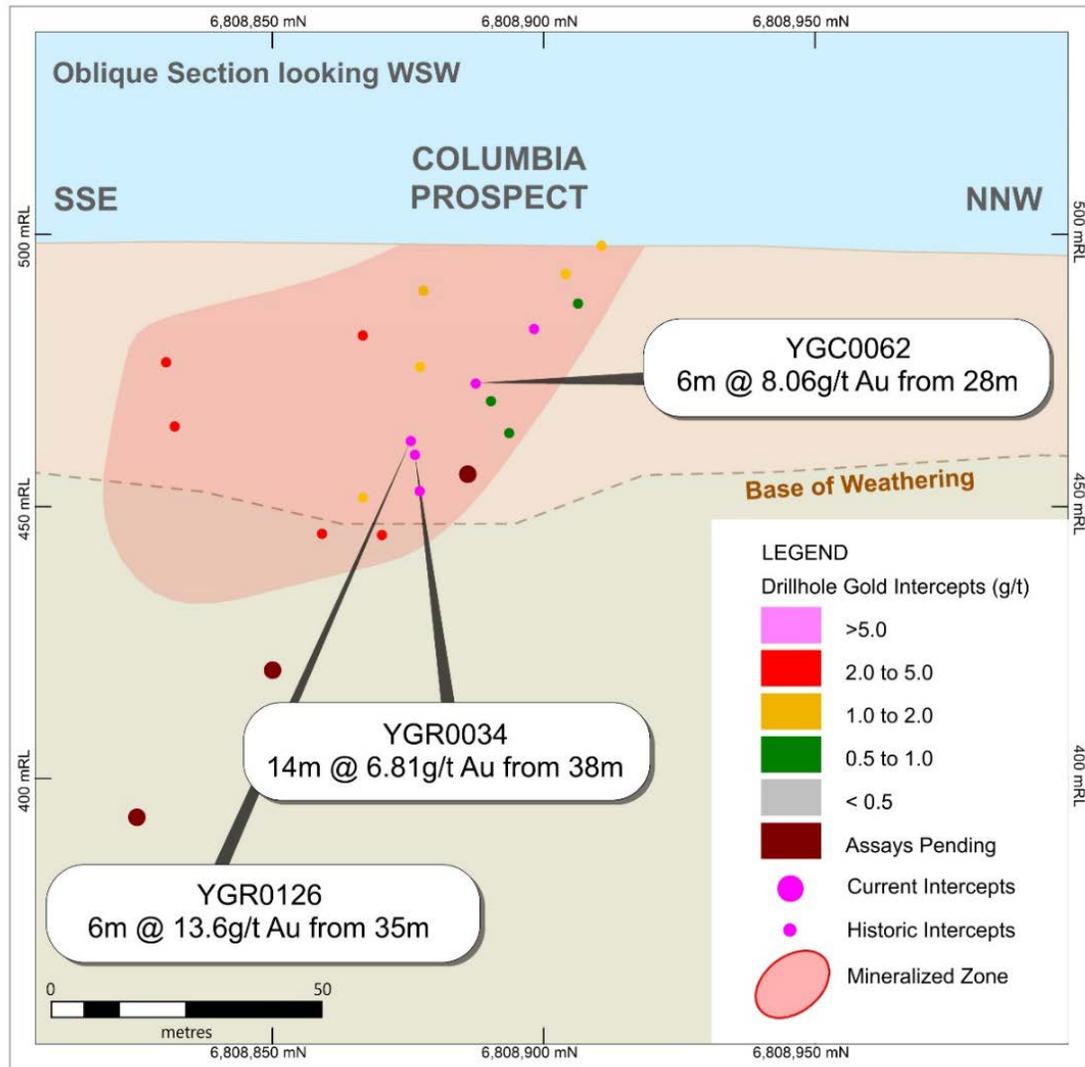


Figure 3. Long Section through the Columbia Prospect with historic significant intersections and pierce points from Spectrum holes with assays pending (Refer ASX Announcement's 30 April 2019 and 3 December 2019)

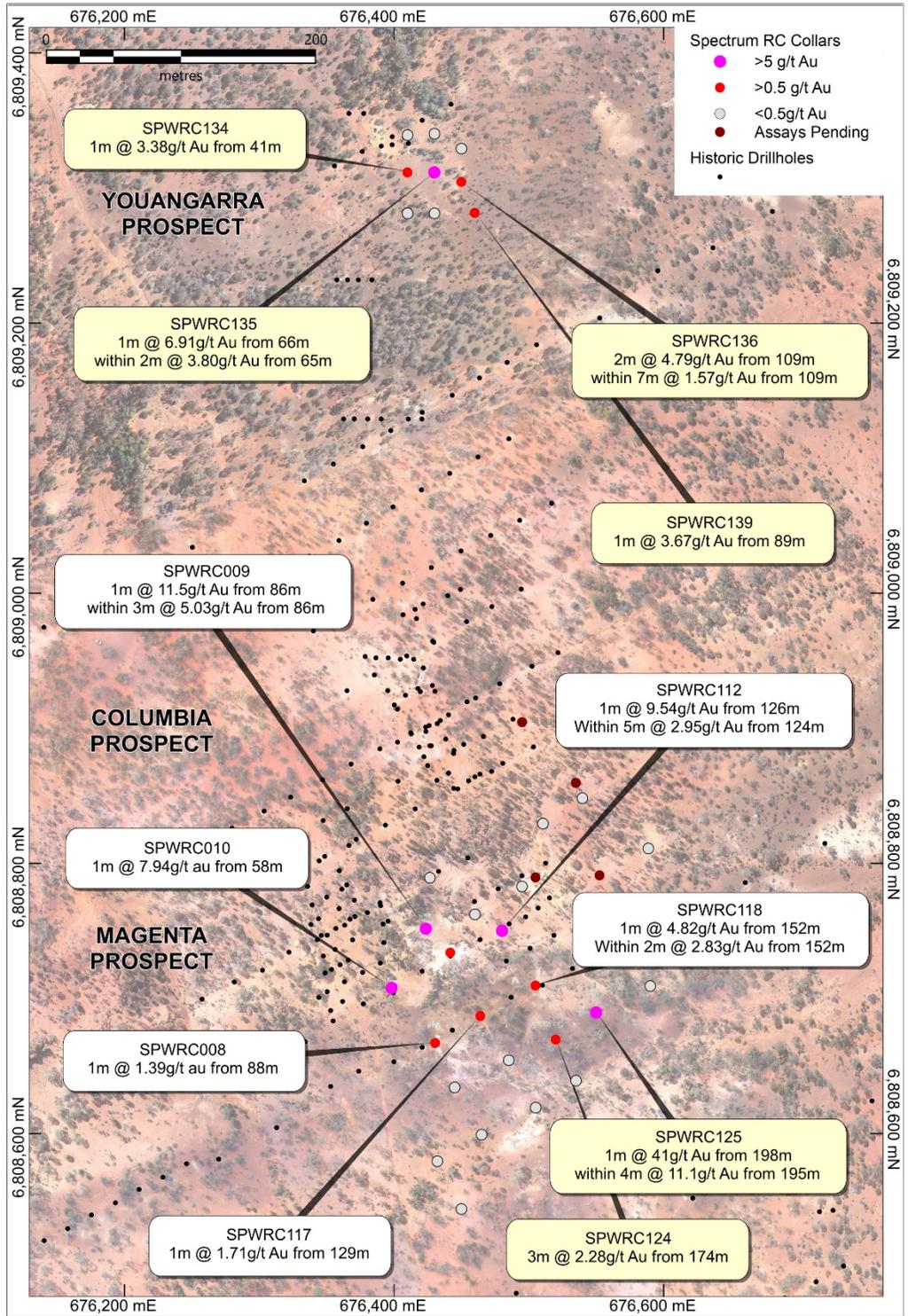


Figure 4. Plan of RC drilling at Magenta, Columbia and Youangarra Prospects with significant intersections

## Spectrum completes Moving Loop Electromagnetic Survey (MLEM)

In December 2019, Spectrum completed a ground-based moving loop electromagnetic survey over selected areas of the Penny West project. The survey extended from the Penny North, along the Penny West Shear ("Gap Zone"), incorporating the Magenta and Columbia prospects.

Of particular interest from the preliminary processed data, is an undrilled subtle conductor between Magenta and Penny North. The conductor is coincident with sub-cropping faulting recently mapped along the projected Penny West Shear position.

Spectrum anticipate final processed MLEM data and reporting to be provided in coming days. The data will be incorporated into individual prospect analysis and drill planning for 1H 2020.

For further information please contact:

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*This Announcement has been approved for release by Mr Paul Adams, Managing Director of Spectrum Metals Limited*

### **About Spectrum Metals Ltd**

Spectrum Metals Limited (ASX: SPX) is a domestic West Australian focused gold exploration and development company. Concentrating on high-grade, brown fields assets, that can leverage off existing infrastructure and add value through exploration and development. Spectrum will continue to identify and explore under explored terrain and brown fields assets through the use of modern techniques and technology to maximise success.

### **Forward Looking Statements**

Statements regarding Spectrum's plans with respect to its mineral properties and programmes are forward-looking statements. There can be no assurance that Spectrum's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that Spectrum will be able to confirm the presence of additional Mineral Resources/Ore Reserves, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of Spectrum's mineral properties. The performance of Spectrum may be influenced by a number of factors which are outside the control of the Company and its Directors, staff and contractors.

### **Competent Person's statements**

Where the Company refers to the Mineral Resource Estimate for the Penny West Gold Project it confirms that it is not aware of any new information or data that materially affects the information included in the initial announcement made on 24 October 2019 and all material assumptions and technical parameters underpinning the resource estimates within that announcement continue to apply and have not materially changed.

The information in this report that relates to Data and Exploration Results is based on information compiled and reviewed by Mr John Downing, a Competent Person who is a Member of the Australian Institute of Geoscientists (MAIG) and a consultant to Spectrum. Mr Downing, who is also a shareholder, has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. John Downing consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The inclusion of intercepts from historic drilling by Eastmet at the Magenta and Columbia prospects is designed to lend context to exploration intercepts from current drilling by Spectrum. Entries in the JORC table below describes material differences in the methodology and level of data capture for the historic drilling.

Where reference is made to previous releases of exploration results in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the exploration results included in those announcements continue to apply and have not materially changed.

**Table 1. Collar Table**

| <b>COLLAR ID</b> | <b>EAST<br/>(GDA94_z50)</b> | <b>NORTH<br/>(GDA94_z50)</b> | <b>RL<br/>(AHD71)</b> | <b>LOCATION<br/>METHOD</b> | <b>EOH<br/>DEPTH</b> | <b>COLLAR<br/>DIP</b> | <b>COLLAR<br/>AZIMUTH</b> |
|------------------|-----------------------------|------------------------------|-----------------------|----------------------------|----------------------|-----------------------|---------------------------|
| SPWDD004         | 676806                      | 6807022                      | 492                   | DGPS                       | 348.55               | -60.33                | 267.52                    |
| SPWDD006         | 676869                      | 6807049                      | 490                   | DGPS                       | 450.6                | -60.56                | 269.61                    |
| SPWDD008         | 676968                      | 6806956                      | 489                   | DGPS                       | 500                  | -59.95                | 266.87                    |
| SPWDD010         | 676966                      | 6807035                      | 489                   | DGPS                       | 550                  | -60.48                | 267.28                    |
| SPWDD011         | 676967                      | 6806874                      | 491                   | DGPS                       | 537.5                | -60                   | 270                       |
| SPWDD012         | 676923                      | 6807010                      | 490                   | DGPS                       | 471                  | -60.23                | 269.53                    |
| SPWDD014         | 676923                      | 6806927                      | 490                   | DGPS                       | 453.7                | -59.31                | 268.12                    |
| SPWDD015         | 676840                      | 6806724                      | 492                   | Design                     | 214                  | -60                   | 270                       |
| SPWDD016         | 676841                      | 6806684                      | 492                   | DGPS                       | 356                  | -60                   | 270                       |
| SPWDD017         | 676870                      | 6806930                      | 491                   | DGPS                       | 409                  | -60                   | 270                       |
| SPWRC106         | 676460                      | 6808763                      | 494                   | DGPS                       | 151                  | -60                   | 240                       |
| SPWRC109         | 676553                      | 6808792                      | 494                   | DGPS                       | 143                  | -60                   | 240                       |
| SPWRC113         | 676830                      | 6806850                      | 492                   | Design                     | 316                  | -60                   | 270                       |
| SPWRC115         | 676510                      | 6808830                      | 496                   | DGPS                       | 216                  | -61.55                | 241                       |
| SPWRC116         | 676540                      | 6808849                      | 494                   | DGPS                       | 136                  | -59.91                | 239.31                    |
| SPWRC119         | 676549                      | 6807447                      | 493                   | DGPS                       | 136                  | -61.25                | 270.51                    |
| SPWRC120         | 676549                      | 6807409                      | 492                   | DGPS                       | 148                  | -61.25                | 268.96                    |
| SPWRC121         | 676432                      | 6808580                      | 493                   | DGPS                       | 118                  | -61.6                 | 239.1                     |
| SPWRC122         | 676445                      | 6808635                      | 493                   | Design                     | 118                  | -60.12                | 239.27                    |
| SPWRC123         | 676485                      | 6808655                      | 493                   | Design                     | 166                  | -60.73                | 239.7                     |
| SPWRC124         | 676520                      | 6808670                      | 493                   | Design                     | 202                  | -60                   | 240                       |
| SPWRC125         | 676550                      | 6808690                      | 492                   | Design                     | 244                  | -60.48                | 241.69                    |
| SPWRC126         | 676465                      | 6808600                      | 493                   | Design                     | 142                  | -60.56                | 240.69                    |
| SPWRC127         | 676505                      | 6808620                      | 493                   | Design                     | 196                  | -60.01                | 239.86                    |
| SPWRC128         | 676535                      | 6808640                      | 492                   | Design                     | 226                  | -60.79                | 240.08                    |
| SPWRC129         | 676450                      | 6808545                      | 493                   | Design                     | 142                  | -60.41                | 239.09                    |
| SPWRC130         | 676590                      | 6808710                      | 491                   | Design                     | 288                  | -61.13                | 239.3                     |
| SPWRC131         | 676410                      | 6809340                      | 490                   | Design                     | 102                  | -60.97                | 267.83                    |
| SPWRC132         | 676430                      | 6809341                      | 490                   | Design                     | 102                  | -61.22                | 270.15                    |
| SPWRC133         | 676450                      | 6809330                      | 490                   | Design                     | 130                  | -61.35                | 270.2                     |
| SPWRC134         | 676410                      | 6809312                      | 490                   | Design                     | 78                   | -60.89                | 265.76                    |
| SPWRC135         | 676430                      | 6809312                      | 490                   | Design                     | 102                  | -61.3                 | 267.41                    |
| SPWRC136         | 676450                      | 6809305                      | 490                   | Design                     | 168                  | -61.32                | 268.9                     |
| SPWRC137         | 676410                      | 6809282                      | 491                   | Design                     | 111                  | -60.76                | 265.79                    |
| SPWRC138         | 676430                      | 6809282                      | 491                   | Design                     | 84                   | -60.31                | 265.42                    |
| SPWRC139         | 676460                      | 6809282                      | 491                   | Design                     | 130                  | -61.17                | 266.08                    |
| SPWRC140         | 676650                      | 6807410                      | 492                   | Design                     | 318                  | -60.77                | 269.54                    |
| SPWRC141         | 676284                      | 6808774                      | 493                   | Design                     | 384                  | -60                   | 240                       |
| SPWRC142         | 676535                      | 6808860                      | 493                   | Design                     | 154                  | -60                   | 340                       |
| SPWRC143         | 676505                      | 6808790                      | 493                   | Design                     | 166                  | -60                   | 340                       |
| SPWRC144         | 676495                      | 6808905                      | 493                   | Design                     | 118                  | -60                   | 340                       |

**Table 2. Assay Table**

| COLLAR ID | FROM   | TO     | INCL | INTERVAL (m) | AU (g/t) | COMMENT |
|-----------|--------|--------|------|--------------|----------|---------|
| SPWDD004  | 303.12 | 304.94 |      | 1.82         | 13.4     | REVISED |
| SPWRC106  | 133    | 135    |      | 2            | NSI      |         |
| SPWRC115  | 200    | 201    |      | 2            | NSI      |         |
| SPWRC116  | 115    | 117    |      | 2            | NSI      |         |
| SPWRC121  | 78     | 80     |      | 2            | NSI      |         |
| SPWRC122  | 96     | 97     |      | 2            | NSI      |         |
| SPWRC123  | 136    | 137    |      | 2            | NSI      |         |
| SPWRC124  | 174    | 177    |      | 3            | 2.28     |         |
| SPWRC125  | 123    | 129    |      | 6            | 0.87     |         |
| SPWRC125  | 195    | 199    |      | 4            | 11.1     |         |
| SPWRC125  | 198    | 199    | Incl | 1            | 41.0     |         |
| SPWRC126  | 118    | 120    |      | 2            | NSI      |         |
| SPWRC127  | 158    | 159    |      | 2            | NSI      |         |
| SPWRC128  | 198    | 199    |      | 2            | NSI      |         |
| SPWRC129  | 101    | 102    |      | 1            | NSI      |         |
| SPWRC130  | 220    | 221    |      | 1            | NSI      |         |
| SPWRC131  | 30     | 34     |      | 1            | NSI      |         |
| SPWRC132  | 46     | 48     |      | 1            | NSI      |         |
| SPWRC133  | 60     | 64     |      | 1            | NSI      |         |
| SPWRC134  | 41     | 42     |      | 1            | 3.38     |         |
| SPWRC134  | 70     | 71     |      | 1            | 0.51     |         |
| SPWRC135  | 65     | 67     |      | 2            | 3.80     |         |
| SPWRC135  | 66     | 67     | Incl | 1            | 6.91     |         |
| SPWRC135  | 71     | 72     |      | 1            | 0.53     |         |
| SPWRC136  | 75     | 76     |      | 1            | 2.51     |         |
| SPWRC136  | 109    | 116    |      | 7            | 1.57     |         |
| SPWRC136  | 109    | 111    | Incl | 2            | 4.79     |         |
| SPWRC137  | 48     | 52     |      | 1            | NSI      |         |
| SPWRC138  | 76     | 77     |      | 1            | NSI      |         |
| SPWRC139  | 89     | 90     |      | 1            | 3.67     |         |

**Table 3: Penny West Gold Deposit October 2019 Mineral Resource Estimate**

| Lode         | Indicated      |             |                | Inferred       |            |               | Total          |             |                |
|--------------|----------------|-------------|----------------|----------------|------------|---------------|----------------|-------------|----------------|
|              | Tonnes t       | Au g/t      | Au Ounces      | Tonnes t       | Au g/t     | Au Ounces     | Tonnes t       | Au g/t      | Au Ounces      |
| Penny North  | 414,000        | 18.6        | 247,000        | 155,000        | 12         | 59,800        | 569,000        | 16.8        | 306,800        |
| Penny West   | 54,000         | 12.1        | 21,100         | 93,000         | 5.1        | 15,400        | 147,000        | 7.7         | 36,400         |
| Minor Zones  |                |             |                | 82,000         | 4.6        | 12,300        | 82,000         | 4.6         | 12,300         |
| <b>Total</b> | <b>468,000</b> | <b>17.8</b> | <b>268,000</b> | <b>331,000</b> | <b>8.2</b> | <b>87,500</b> | <b>799,000</b> | <b>13.8</b> | <b>355,500</b> |

(2.0g/t Au cut-off)

## Appendix 1 - JORC Table 1 Checklist of Assessment and Reporting Criteria

### Section 1 Sampling Techniques and Data

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

| Criteria                   | JORC Code explanation   | Commentary   |
|----------------------------|---|--|
| <b>Sampling techniques</b> | <ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul style="list-style-type: none"> <li>Reverse circulation (RC) drilling using standard drilling equipment and rig mounted sampling system. No electronic measurement tools used in this program.</li> <li>Diamond drilling sampling techniques in the usual manner, based on one-meter sample intervals outside the mineralised zones but on geological/mineralogical contacts for the mineralised zones</li> <li>A pilot study has been completed on a northing section line using portable XRF techniques. P-XRF appears to be a suitable technique to constrain broad geological zones within the stratigraphy.</li> <li>Emphasis placed on sample mass (approximately 3kg) and quality from the RC drilling. A lot of effort was put into ensuring that the splitter was level and clean during the drilling, particularly on entering an anticipated mineralised zone.</li> <li>Logging identifies mineralisation in the RC drill chips and diamond core. In addition, panning of RC chips is used to gain qualitative insights into the tenor of gold mineralisation within the main lode.</li> <li>Industry standard RC drilling with 1 metre samples collected from a rig mounted sampling system. Sample intervals determined by anticipated intersection of lode. Four (4) meter composite samples taken from zones not expected to contain mineralisation. Geological logging used as the final determinant as to whether to under-take 1m splits on 4m composites. Standard 50 g sample for assay by fire assay method for gold after pulverisation at a Perth certified laboratory.</li> <li>Historic Eastmet drill samples were pulverized and analyzed for gold at Metana Minerals Perth Laboratory, primarily by 25g charge Aqua Regia digest with AAS finish.</li> </ul> |
| <b>Drilling techniques</b> | <ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast,</li> </ul>   | <ul style="list-style-type: none"> <li>RC drilling using downhole hammer and face sampling button bit</li> </ul>   |

| Criteria                           | JORC Code explanation   | Commentary   |
|------------------------------------|---|--|
|                                    | <i>auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>  | <ul style="list-style-type: none"> <li>Stabiliser rods used above the hammer to provide directional control</li> <li>Diamond drilling undertaken with standard diamond drilling equipment including a UDR650 multi-purpose diamond rig utilizing a 3 meter chrome barrel in HQ core size. All core is orientated with a standard DDH1 orientation tool and diamond tails range in length from 100m to over 200m</li> </ul>   |
| <b>Drill sample recovery</b>       | <ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>                           | <ul style="list-style-type: none"> <li>RC Sample recovery estimated by mass of sample in the calico sample bag and from the plastic residue bag under the rig mounted sample system</li> <li>Diamond drill core sample recovery estimated during logging by comparing length of intact core to depth gauge on the rig. Core recovery is very high and the core is extremely competent, even within the mineralised zones.</li> <li>A lot of emphasis has been placed on correct levelling of the sample system to ensure optimal sample representivity. Differences in sample weight between original sample and duplicates can provide a quantitative estimate of representative sampling</li> <li>It is unknown at this stage whether there is any relationship between sample recovery and grade in RC drilling</li> <li>Historic Eastmet drill samples were consistently dry, with only three wet samples from a 42 hole program. Wet samples were left to dry before riffle splitting.</li> </ul> |
| <b>Logging</b>                     | <ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul> | <ul style="list-style-type: none"> <li>All of the logging to a very high standard by an experienced and well qualified geologist and would be appropriate for later inclusion in a mineral resource estimate</li> <li>Logging is qualitative in RC chips and qualitative and quantitative in diamond drill core.</li> <li>The whole of hole has been logged to the same standard.</li> </ul>   |
| <b>Sub-sampling techniques and</b> | <ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> </ul>  | <ul style="list-style-type: none"> <li>RC samples collected by on-board rotary cyclone. In some case composite samples collected by spear sampling in the case of 4m composites. However, if</li> </ul>  |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
| <b>sample preparation</b>                         | <ul style="list-style-type: none"> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul> | <ul style="list-style-type: none"> <li>• composite display elevated mineralisation, 1m splits are immediately available from existing 1m samples collected directly from the cyclone</li> <li>• Diamond drill core is subsampled based on geology / mineralisation</li> <li>• Historic Eastmet samples were collected in total at one metre intervals from the rig cyclone and then split to 2 to 3kg using an 8:1 riffle splitter.</li> <li>• The QA/QC program has been appropriate in terms of numbers of blanks, standards and duplicates. Two standard grades have been used in addition to blanks. This is applied to both RC chips and diamond drill core.</li> <li>• Field duplicate sampling has been conducted for the RC drilling program</li> <li>• Sample sizes and techniques were appropriate for homogenous distribution and for grain size. Mass estimates for the samples from the cyclone are appropriate for the diameter of the drill rods employed</li> <li>• Historic Eastmet sample QAQC protocols and data are not available to the author at this time.</li> </ul> |
| <b>Quality of assay data and laboratory tests</b> | <ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>            | <ul style="list-style-type: none"> <li>• Assays have been conducted on a 50 g fire assay charge for both drilling methods</li> <li>• Historic Eastmet drill samples were analyzed for gold primarily by 25g charge Aqua Regia digest with AAS finish. This is considered an incomplete digestion method in this context, likely to slightly under-estimate gold content.</li> <li>• No geophysical tools have yet been applied to the RC chips or diamond holes</li> <li>• Blanks, standards, duplicates and laboratory quality control have all been monitored and are acceptable.</li> </ul>   |
| <b>Verification of sampling and assaying</b>      | <ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> </ul>   | <ul style="list-style-type: none"> <li>• All logging and sample preparation in the field has been conducted by qualified company geologists, independent consulting geologists and field personnel.</li> </ul>   |

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
|  | <ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>  | <ul style="list-style-type: none"> <li>No twinned holes. This drilling is located in a new zone of mineralisation following up a small, but high-grade intersection.</li> <li>All drilling data is extremely well documented. Primary data for current exploration work is available electronically from the laboratory reports.</li> <li>There has been no adjustment to the data.</li> </ul>   |
| <b>Location of data points</b>                                 | <ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>  | <ul style="list-style-type: none"> <li>Drill-hole collar, locations located by survey +/- 1m. Holes have down-hole surveys every 30m using a gyroscopic downhole tool</li> <li>Location data is set out on GDA94 Zone 50 grid and location set out performed by DGPS</li> <li>Topographic control adequate with an accuracy of around 1m vertical. Digital topographic data provided by DTM from Landgate supported by DGPS survey.</li> <li>A new survey has been flown over the entire Penny West lease and has been tied in to known survey markers by an independent consulting survey firm.</li> <li>Historic Eastmet drillholes were located by tape and compass relative to a local grid established by qualified surveyors.</li> </ul> |
| <b>Data spacing and distribution</b>                           | <ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul> | <ul style="list-style-type: none"> <li>The intersections described in this announcement are from Penny North and Magenta prospects. More drilling will be required in order to determine a resource estimate, however continuity of the geological structure appears reasonable at this stage</li> <li>Sampling on 1 m increments has been used above, within and below the high-grade intersections. Compositing has only been applied to the hanging wall part of the sequence in RC holes.</li> <li>Diamond hole pre-collars have not been sampled at this point where diamond holes are designed within the known parts of the Penny North mineral envelope.</li> </ul>  |
| <b>Orientation of data in relation to geological structure</b> | <ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>   | <ul style="list-style-type: none"> <li>Drill intercepts at Penny West have historically been orthogonal to the plane of the mineralisation. Holes into the Penny North Structure appear to be orthogonal also to the strike of the structure.</li> </ul>   |

| Criteria                 | JORC Code explanation  | Commentary  |
|--------------------------|--|---|
|                          | <ul style="list-style-type: none"> <li>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.</li> </ul> | <ul style="list-style-type: none"> <li>There is no obvious sampling bias from the information gathered so far</li> </ul>  |
| <b>Sample security</b>   | <ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>  | <ul style="list-style-type: none"> <li>Samples collected from the rig and organised by independent geologists and field personnel. Samples collected from site and driven directly to accredited laboratory in Perth</li> </ul> |
| <b>Audits or reviews</b> | <ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>  | <ul style="list-style-type: none"> <li>Reviews are regularly undertaken at the rig to ensure no sample bias between the primary and secondary samples from the dust collector</li> </ul>  |

## Section 2 Reporting of Exploration Results

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

| Criteria                                       | JORC Code explanation  | Commentary   |
|--|--|--|
| <b>Mineral tenement and land tenure status</b> | <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul> | <ul style="list-style-type: none"> <li>Mining leases M57/180 and 196 originally held by Plateaux Resources Pty Ltd and Patina Resources Pty Ltd in a 30/70 Joint venture. Tenement acquisition agreement between Plateaux, Patina, and Spectrum Metals Limited provides 100% ownership to Spectrum through a 100% owned subsidiary Zebra Minerals Pty Ltd. Royalty provisions are 0.5% NSR after the first 7,500 ozs of production, which can be bought out at any time at SPX's election for \$750,000. No native title or environmental issues.</li> <li>Tenements are in good standing with no known impediments</li> </ul> |
| <b>Exploration done by other parties</b>       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>  | <ul style="list-style-type: none"> <li>The project area has been explored and mined by previous parties. The results of this work including past production is described in Spectrum's ASX Announcement dated 16 October 2018. Appraisal of this previous exploration occurred during the due diligence period and continues</li> </ul>  |
| <b>Geology</b>                                 | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>  | <ul style="list-style-type: none"> <li>The Penny West deposit is typical structurally controlled gold-quartz vein in a brittle-ductile shear zone associated with a sulphide complex containing pyrite, pyrrhotite, galena, sphalerite and chalcopyrite.</li> </ul>  |

| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
| <b>Drill hole Information</b>   | <ul style="list-style-type: none"> <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: <ul style="list-style-type: none"> <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> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• 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.</li> </ul> | <ul style="list-style-type: none"> <li>• See Table 1 and Table 2 in the ASX announcements</li> </ul>   |
| <b>Data aggregation methods</b>   | <ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>   | <ul style="list-style-type: none"> <li>• A gold upper cut-off grade of 170 g/t has been used historically. These intersections calculated using a lower cut-off of 0.5 g/t but no top cut has been used</li> <li>• Internal high-grade intercepts are based on grades above 5.0 g/t</li> <li>• No metal equivalent values used.</li> </ul> |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should</li> </ul>  | <ul style="list-style-type: none"> <li>• Down hole lengths have been used. True width not yet known</li> <li>• The Penny West lode dips to the east at 65° to 80°. The geometry of the Penny North lode dips variably between 45 and 65°.</li> </ul>   |

| Criteria                                  | JORC Code explanation  | Commentary  |
|---|--|---|
|   | <i>be a clear statement to this effect (eg 'down hole length, true width not known').</i>  |   |
| <b>Diagrams</b>                           | <ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>  | <ul style="list-style-type: none"> <li>Maps and sections are contained within announcement, with an interpreted trace of the extensional mineralisation with respect to the known Penny North lode located within the historic Penny West Pit, at the same RL</li> </ul>  |
| <b>Balanced reporting</b>                 | <ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>   | <ul style="list-style-type: none"> <li>All data has been reported.</li> </ul>   |
| <b>Other substantive exploration data</b> | <ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul> | <ul style="list-style-type: none"> <li>A Sub-Audio Magnetic survey has been completed over the interpreted Penny West Shear zone over a strike length of approximately 4km.</li> <li>Several geophysical anomalies have been generated by this work.</li> <li>Sighter metallurgical test work has been performed on selected composite samples from the upper parts of the Penny North Lode. Those composite show excellent bench-scale test work recoveries, in the order of 99%, via standard crush-grind-gravity-leach flow sheet by an independent metallurgical laboratory, based in Perth.</li> </ul> |
| <b>Further work</b>                       | <ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>                                | <ul style="list-style-type: none"> <li>Further drilling will be necessary to establish the potential for this area to host additional high-grade mineralisation.</li> <li>More work needs to be performed to define high priority targets for this additional drilling.</li> </ul>  |