

### ASX CODE: SPX

### **CAPTAL STRUCTURE**

Share Price \$0.004
Shares On Issue 1051m
Market Cap \$4.3m
Options Unlisted 77.5m

### **MAJOR SHAREHOLDERS**

11.9%
6.8%
3.6%
2.9%
2.6%

### **DIRECTORS / MANAGEMENT**

### **Alexander Hewlett**

**Executive Chairman** 

### **Paul Adams**

**Managing Director** 

#### **James Croser**

**Technical Director** 

### **Nader El Sayed**

Non-Executive Director

### **Mark Pitts**

Company Secretary

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# **New High-Grade Discovery at Penny West**

Spectrum Metals Limited ("SPX" or "the Company") is pleased to announce the discovery of a new high-grade zone of gold mineralisation at the 100% owned Penny West gold project in WA. The new discovery is currently open in all directions and is located approximately 150m north of the historic high-grade Penny West open pit, previously mined in 1991/1992 for 85,000 ounces¹ (121,000 tonnes at 21.8g/t Au).

## **Key Points**

- The discovery hole (SPWRC002) was designed to follow up an isolated intersection of 1m @ 6.47g/t from 92m in 4PWRC0110<sup>1</sup>, located north of the historic pit.
- SPWRC002 has intersected a high-grade zone from 128m down hole

## 8 metres @ 23.3g/t gold & 6.9g/t silver

within an overall intersection of **14 metres @ 14.4g/t gold & 4.11 g/t silver** from 124m down hole, approximately 40m down dip of the previous hole.

- The intersection is currently open in all directions.
- Crucially, the high-grade portion of the intersection has the same characteristics as the mineralisation seen in the Penny West lode mined within the open pit to the south, inferring that is it part of the same mineralising event.
- SPX will immediately expand the current drill program to follow up this discovery.

The Managing Director of Spectrum Paul Adams commented "This intersection, in the first hole submitted for analysis in our maiden program at Penny West, has exceeded our highest expectations at this location, both in terms of tenor and width. The fact that the mineralisation style and grade is essentially the same as was mined previously gives us confidence that the newly discovered zone is contemporaneous with the original high-grade mineralisation that made Penny West such a famous name in WA mining history".

<sup>1</sup>reference: Spectrum ASX release 16/10/2018

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## **New discovery at Penny North**

Hole SPWRC002 has intersected a new, wide zone of gold mineralisation, now called Penny North, displaying the same geological characteristics as the original Penny West lode, located approximately 150m to the south in the Penny West open pit.

The high-grade portion of the intersection starts from 128m downhole and is characterized by abundant vein quartz with an associated pyrite-pyrrhotite-galena-sphalerite-chalcopyrite sulphide assemblage.

14m @ 14.4g/t Au, 4.11g/t Ag.

**Including:** 

8m @ 23.3g/t Au, 6.89g/t Ag from 128m in SPWRC002

\*Intersection calculated from assays greater than 0.5g/t Au.

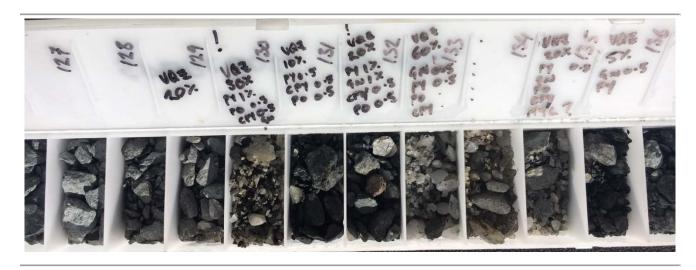


Figure 1. RC chip tray to the high-grade portion of the intersection, from 128m

The Company takes the view that the high-grade mineralization discovered at Penny North is therefore contemporaneous in origin with Penny West and therefore has the potential to exhibit a similar tenor to that mined previously. The historic reconciled production figures of the high-grade ore from the Penny West open pit are 121,000 tonnes at 21.8 g/t for 85,000 ounces, to a depth of just 82m<sup>1</sup> or over 1,000 ounces per vertical meter.

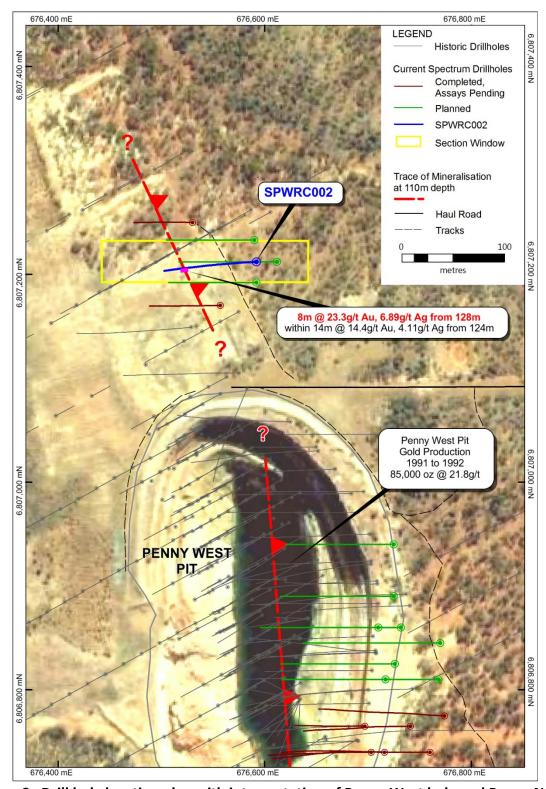


Figure 2. Drill hole location plan with interpretation of Penny West lode and Penny North

SPWRC002 was designed to follow up isolated intersections of 1m at 6.47g/t and 1m at 5.94g/t gold in an historic hole (4PWRC0110) located north of the open pit. A structural re-interpretation of the area to the north of the Penny West open pit conducted by Damien Keys, Spectrums' structural geology consultant, postulated that the historic isolated intercepts to the north may be a manifestation of a faulted off-set of the Penny West lode.

Three holes were designed (SPWRC001 to SPWRC003) by SPX to test this hypothesis. Holes SPWRC001 and SPWRC003 tested the projected shallower parts of this potential off-set position, whilst hole SPWRC002 tested the down dip/plunge position of the originally identified mineralisation. Assays from the two shallow holes are pending (see Figure 2 above).

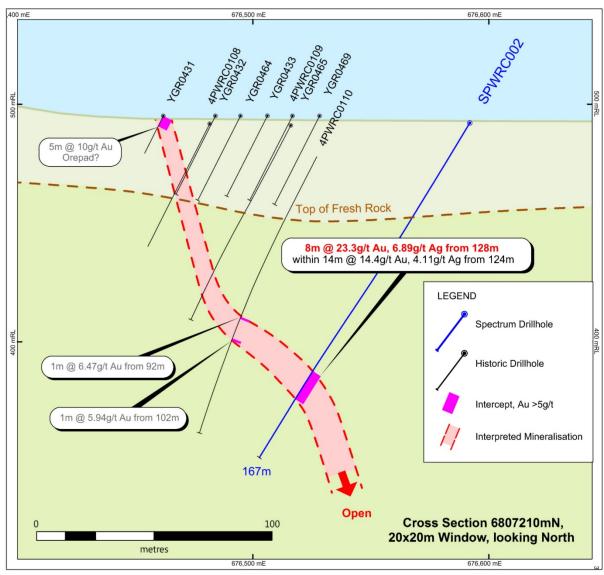


Figure 3. Interpreted cross section showing position of SPWRC002

SPX immediately expands the current drill program

SPX have immediately expanded the current drill program to gain more information from the Penny North discovery. Two additional holes have already been planned down dip and to the north of this

intersection to triangulate the orientation of the mineralised structure.

This information will then be used to design a more comprehensive drilling program to expand the

mineralisation in all directions, with a view to defining a Mineral Resource Estimate as soon as

practically possible.

Original program continues with assays pending

Meanwhile, the original 4,500m RC drilling program continues. The program comprises 24 holes for

circa 4,500m with 18 holes designed to intersect the Penny West lode structure beneath the Penny

West open pit; 3 holes designed to expand previously identified mineralization at Magenta, and the

original 3 holes planned to test the northern fault off-set as described above.

Further samples are expected to arrive at the assay laboratory early next week with results anticipated

two to three weeks later.

-ENDS-

For further information please contact:

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SPECTRUM METALS LIMITED

# **Drill Hole Table**

PROSPECT	COLLAR ID	DRILL TYPE	MAX DEPTH (m)	EAST (GDA94_Z50)	NORTH (GDA94_Z50)	RL	COLLAR DIP	COLLAR AZIMUTH (GDA)
PennyWest	SPWRC001	RC	143	676558	6807170	503	-60	269
PennyWest	SPWRC002	RC	167	676593	6807213	488	-60	269
PennyWest	SPWRC003	RC	113	676533	6807248	487	-60	270
PennyWest	SPWRC004	RC	161	676689	6806736	495	-55	270
PennyWest	SPWRC005	RC	192	676718	6806736	507	-60	271
PennyWest	SPWRC006	RC	269	676779	6806742	479	-60	270
PennyWest	SPWRC007	RC	268	676774	6806775	490	-62	272
Magenta	SPWRC008	RC	113	676433	6808667	499	-60	242
Magenta	SPWRC009	RC	113	676425	6808753	489	-60	242
Magenta	SPWRC010	RC	83	676401	6808707	493	-60	242
PennyWest	SPWRC011	RC	118	676698	6806765	491	-60	270
PennyWest	SPWRC012	RC	238	676738	6806766	492	-62	270
PennyWest	SPWRC013	RC	176	676701	6806781	505	-50	270
PennyWest	SPWRC014	RC	209	676727	6806779	489	-60	270
PennyWest	SPWRC015	RC	173	676702	6806810	493	-50	270

### **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.

### **Competent Person Statement**

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 contractor to Spectrum. Mr Downing 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.

Where the Company refers to the ASX release dated 16 October 2018 in respect to the Penny West Mine including historic mining and exploration carried out by prior owners it confirms it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters continue to apply and have not materially changed.

### **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/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.

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

JORC Table 1 – Relating to the drilling program underway at the Company's Penny West Project and specifically hole SPWRC002.

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling	<ul> <li>Nature and quality of sampling (eg cut channels, random chips,</li> </ul>	<ul> <li>Reverse circulation (RC) drilling using standard drilling equipment and rig mounted</li> </ul>
techniques	or specific specialised industry	sampling system. No electronic
	standard measurement tools	measurement tools used in this program.
	appropriate to the minerals	measurement tools used in this program.
	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.	
	<ul> <li>Include reference to measures</li> </ul>	Emphasis placed on sample mass
	taken to ensure sample	(approximately 3kg) and quality from the RC
	representivity and the	drilling. A lot of effort was put into ensuring
	appropriate calibration of any	that the splitter was level and clean during
	measurement tools or systems	the drilling, particularly on entering an
	used.	anticipated mineralised zone
	<ul> <li>Aspects of the determination of</li> </ul>	
	mineralisation that are Material	<ul> <li>Logging identifies mineralisation in the RC</li> </ul>
	to the Public Report.	drill chips
	<ul> <li>In cases where 'industry</li> </ul>	·
	standard' work has been done	<ul> <li>Industry standard RC drilling with 1 m</li> </ul>
	this would be relatively simple	samples collected from a rig mounted
	(eg 'reverse circulation drilling	sampling system. Sample intervals
	was used to obtain 1 m samples	determined by anticipated intersection of
	from which 3 kg was pulverised	lode. Four (4) metre composite samples
	to produce a 30 g charge for fire	taken from zones not expected to contain
	assay'). In other cases more	mineralisation. Geological logging and initial
	explanation may be required,	assay results used as the final determinant as
	such as where there is coarse	to whether to under-take 1m splits on 4m
	gold that has inherent sampling	composites. Standard 50 g sample for assay

Criteria	JORC Code explanation	Commentary
	problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	by fire assay method for gold after pulverisation at a Perth certified laboratory.
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, 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).</li> </ul>	<ul> <li>RC drilling using downhole hammer and face-sampling button bit</li> <li>Stabiliser rods used above the hammer to provide directional control</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>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>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> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	<ul> <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 quantitative and qualitative</li> <li>The whole of hole has been logged to the same standard</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected,</li> </ul>	<ul> <li>RC samples collected by on-board cyclone and rotary splitter. Samples collected by spear sampling in the case of 4m composites. However, if composite display elevated mineralisation, 1m splits are immediately available from existing 1m samples collected directly from the cyclone</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.</li> <li>Field duplicate sampling has been conducted for the drilling program</li> </ul>
	<ul> <li>including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <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> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	<ul> <li>Assays have been conducted on a 50 g fire assay charge</li> </ul>
	<ul> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and</li> </ul>	<ul> <li>No geophysical tools have yet been applied to the RC chips or downhole</li> </ul>
	model, reading times, calibrations factors applied and their derivation, etc.	<ul> <li>Blanks, standards, duplicates and laboratory quality control have all been monitored and are acceptable.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of	<ul> <li>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.</li> <li>The verification of significant</li> </ul>	<ul> <li>All logging and sample preparation in the</li> </ul>
sampling and assaying	<ul> <li>intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <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>	field has been conducted by independent consulting geologists and field personnel.  No twinned hole for this particular intersection. This intersection is located in a new zone of mineralisation following up a small, but high grade intersection up dip  All drilling data is extremely well documented. Primary data for current exploration work is available electronically from the laboratory reports.  There has been no adjustment to the data.
Location of data points	<ul> <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> <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> </ul>
Data spacing and distribution	<ul> <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> </ul>	<ul> <li>The intersection described in this announcement is from a new zone. There are high grade intersections above this intersection but more drilling will be required in order to determine a resource estimate</li> <li>Sampling on 1 m increments has been used above, within and below the high grade</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>Whether sample compositing has been applied.</li> </ul>	intersection. Compositing has only been applied to the hanging wall part of the sequence
Orientation of data in relation to geological structure	<ul> <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> <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> <li>Drill intercepts at Penny West have historically been orthogonal to the interpreted plane of the mineralisation. SPWRC002 and its two sister holes were drilled 20 degrees oblique in azimuth to the old holes. Both old and new holes were drilled approximately perpendicular to the interpreted dip of the mineralised structure. More holes into this new zone are required to better determine the orientation of the mineralised structure.</li> <li>There is no significant sampling bias from the information gathered so far</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <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>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	Not for this hole

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	<ul> <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> <li>Mining leases M57/180 and 196 originally held by Plateaux 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>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	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
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <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, pyrrhrotite, galena, sphalerite and chalcopyrite.</li> </ul>

Criteria	JORC Code explanation	Commentary
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:	See Table 1 in ASX announcement dated 16 October 2018 for a summary table of all the drilling conducted at Penny West
	<ul> <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> <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> <li>Information for SPWRC002:</li> <li>Easting: 676593.22</li> <li>Northing: 6807213.45</li> <li>Collar RL: 488</li> <li>Dip: -60</li> <li>Azimuth: 270</li> <li>Final Depth: 167</li> <li>Intersection length: 14m</li> <li>Intersection depth: 124m</li> </ul>
Data aggregation methods	<ul> <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</li> </ul>	<ul> <li>A gold upper cut-off grade of 170 g/t has been used historically. This intersection calculated using simple arithmetic mean of grades above a lower cut-off of 0.5 g/t</li> <li>An internal high-grade intercept is based on grades above 5.0 g/t. The grade of intercept is calculated using an arithmetic mean method</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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>	No metal equivalent values used.
Relationship between mineralisation widths	These relationships are     particularly important in the	<ul> <li>Down hole lengths have been used.</li> <li>True width not yet known</li> </ul>
and intercept lengths	reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	The Penny West lode dips to the east at 65° to 80°. The geometry of the new discovery is not yet established
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Maps and sections are contained within announcement, with an interpreted trace of the extensional mineralisation with respect to the known Penny Est lode located within the historic Penny West Pit, at the same RL</li> </ul>
Balanced reporting	<ul> <li>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</li> </ul>	All data has been reported.

Criteria	JORC Code explanation	Commentary
	reporting of Exploration Results.	
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.	All available information has been reported
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale stepout drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further drilling will be necessary to establish the importance of this intersection and the potential for this undrilled area to host additional high-grade mineralisation. Further drill holes are currently being planned</li> <li>Plans showing proposed drilling for the current program have been included.</li> </ul>