

## High-Grade Extensions at Penny North

Spectrum Metals Limited ('SPX' or 'the company') is pleased to announce further high-grade results from extensional RC drilling within the high-grade shoot at Penny North.

### Key Points

- Results were received from four (4) new holes. Significant intersections include:
  - SPWRC081 - **4m at 63.1 g/t gold** from 289m, including **3m at 83.7g/t** from 289m.
  - SPWRC080 - **2m at 50.5 g/t gold** from 338m.
  - SPWRC071 - **2m at 48.7 g/t gold** from 264m, including **1m at 95.5 g/t gold** from 264m.
  - SPWRC072 - **2m at 27.1 g/t gold** from 2315m, including **1m at 44.6 g/t gold** from 315m.
- Results were also received from parts of two (2) holes from Penny South. Significant results from two (2) holes include:
  - SPWRC078 - **2m at 17.1 g/t gold** from 182m.
  - SPWRC062 - **5m at 2.5 g/t gold** from 234m, including **1m at 5.7g/t** from 237m.
- The result in SPWRC078 of **2m at 17.1g/t gold** at Penny South indicates that the main lode continues to the south. Further assay results at Penny South are pending and additional holes have been planned.
- Diamond rigs are currently being mobilized to site and RC drilling is now working around the clock, 24-hours per day.

Spectrum's Managing Director, Paul Adams said *"We are very pleased to see continuing high-grade down plunge gold mineralisation at Penny North. In addition, early drilling at Penny South suggests this location may represent a new target in the short term. This is separate to hole SPWRC006 (5m at 28.9g/t from 203), that appears to represent a separate hanging wall position to the main lode."*

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ASX CODE: SPX

### CAPITAL STRUCTURE

Share Price (19/08/2019)	\$0.10
Shares On Issue	1,386m
Market Cap	\$139m
Unlisted Options	129m
Performance Rights	20m

### MAJOR SHAREHOLDERS

Patina Resources PL	9.6%
1832 Asset Mgmt	9.4%
A. Barton & Assocs	7.7%
Chalice Gold	5.2%

### 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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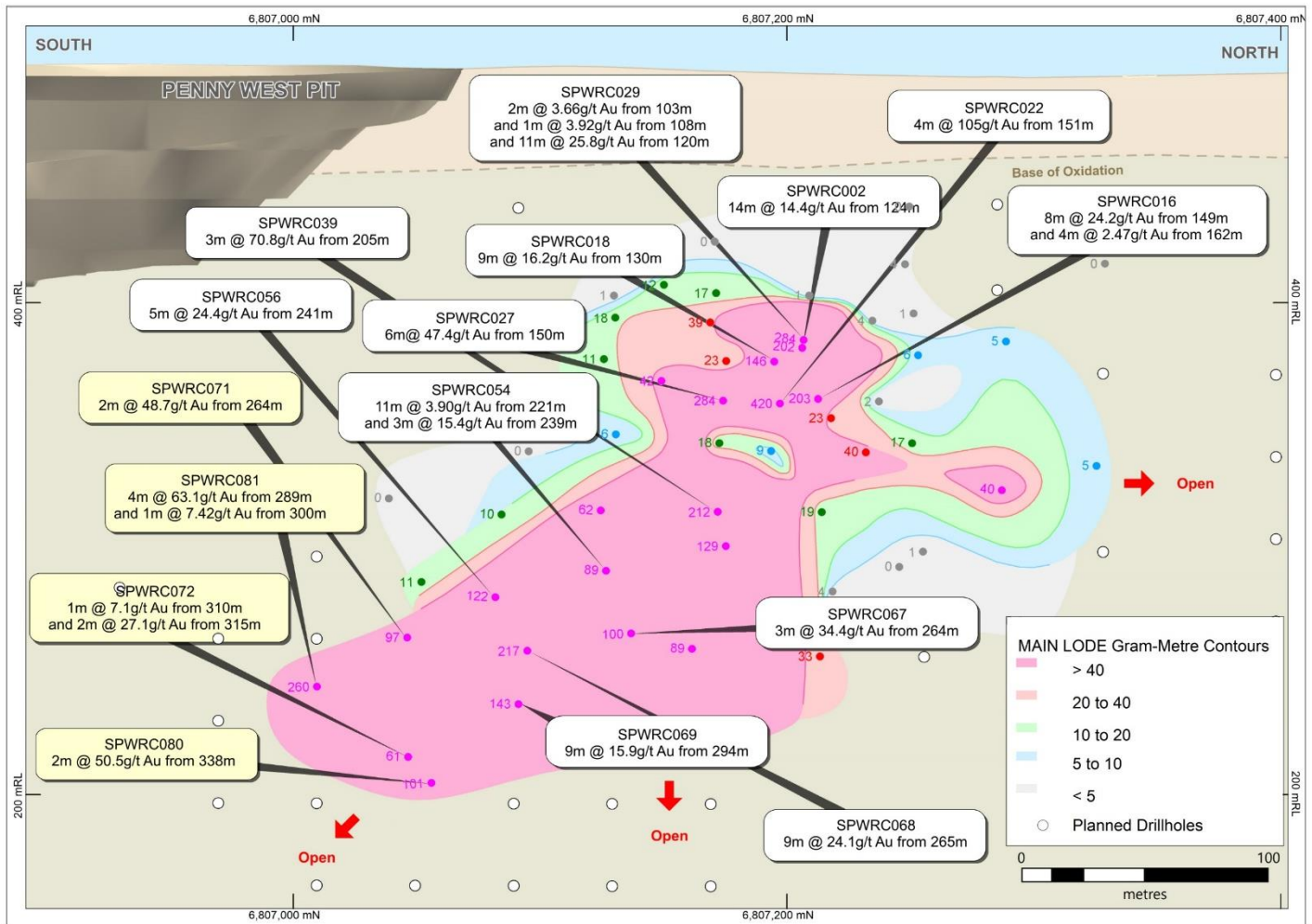


Figure 1. Updated long section through Penny North with gram-metre contours with new assay results highlighted in yellow

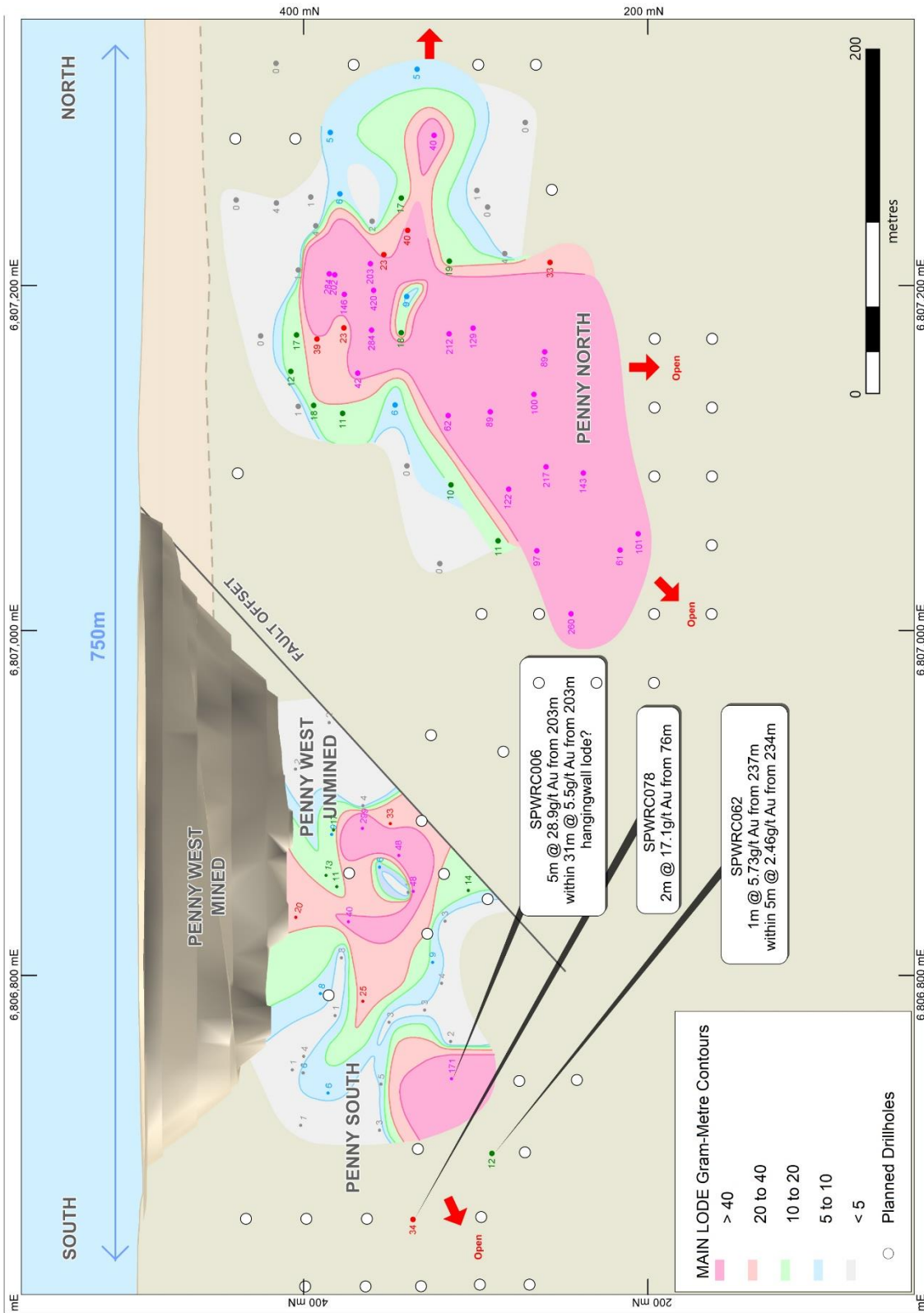


Figure 2. Long Section from Penny South through to Penny North



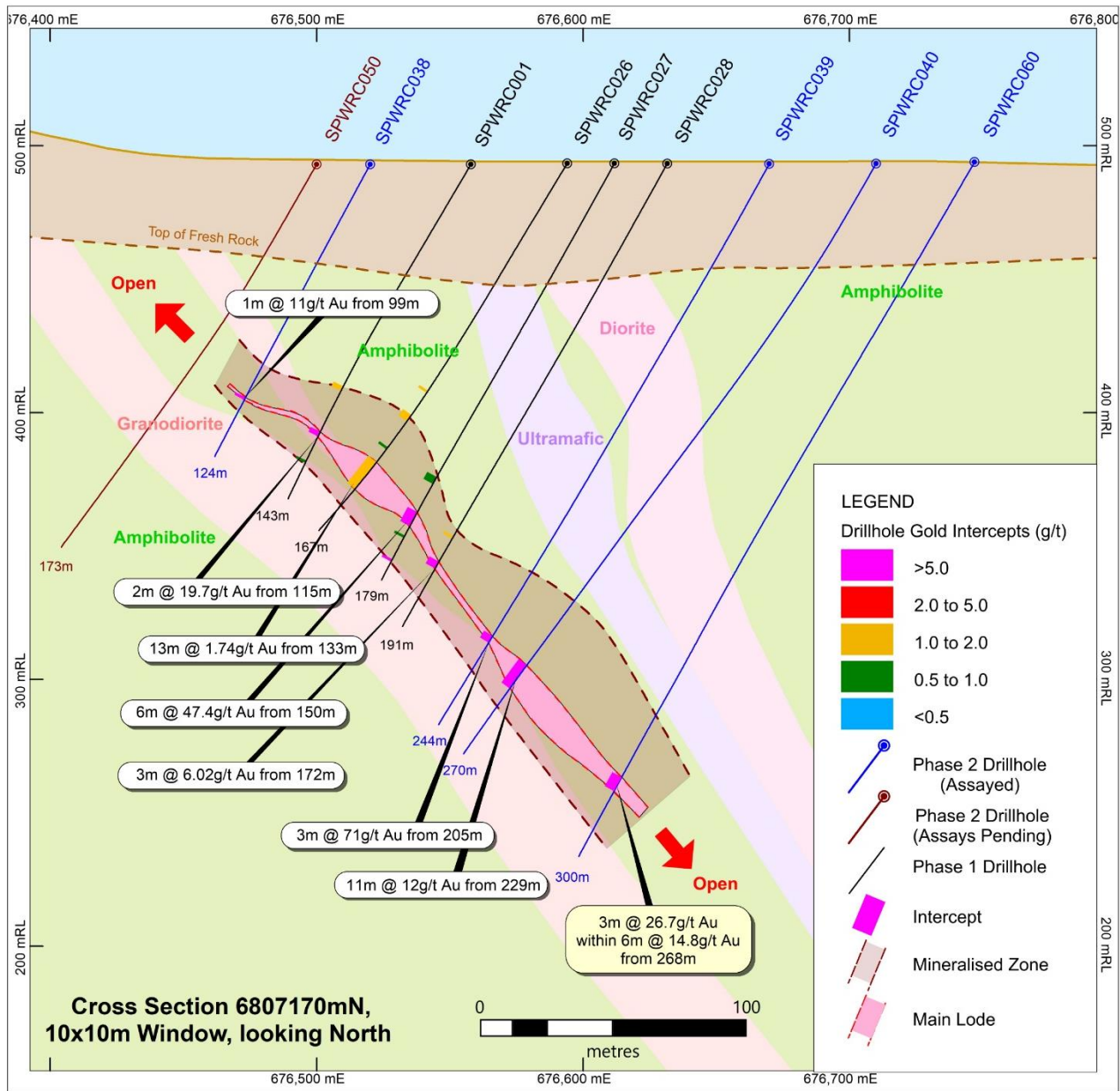


Figure 3. Cross Section through 6807170mN at Penny North

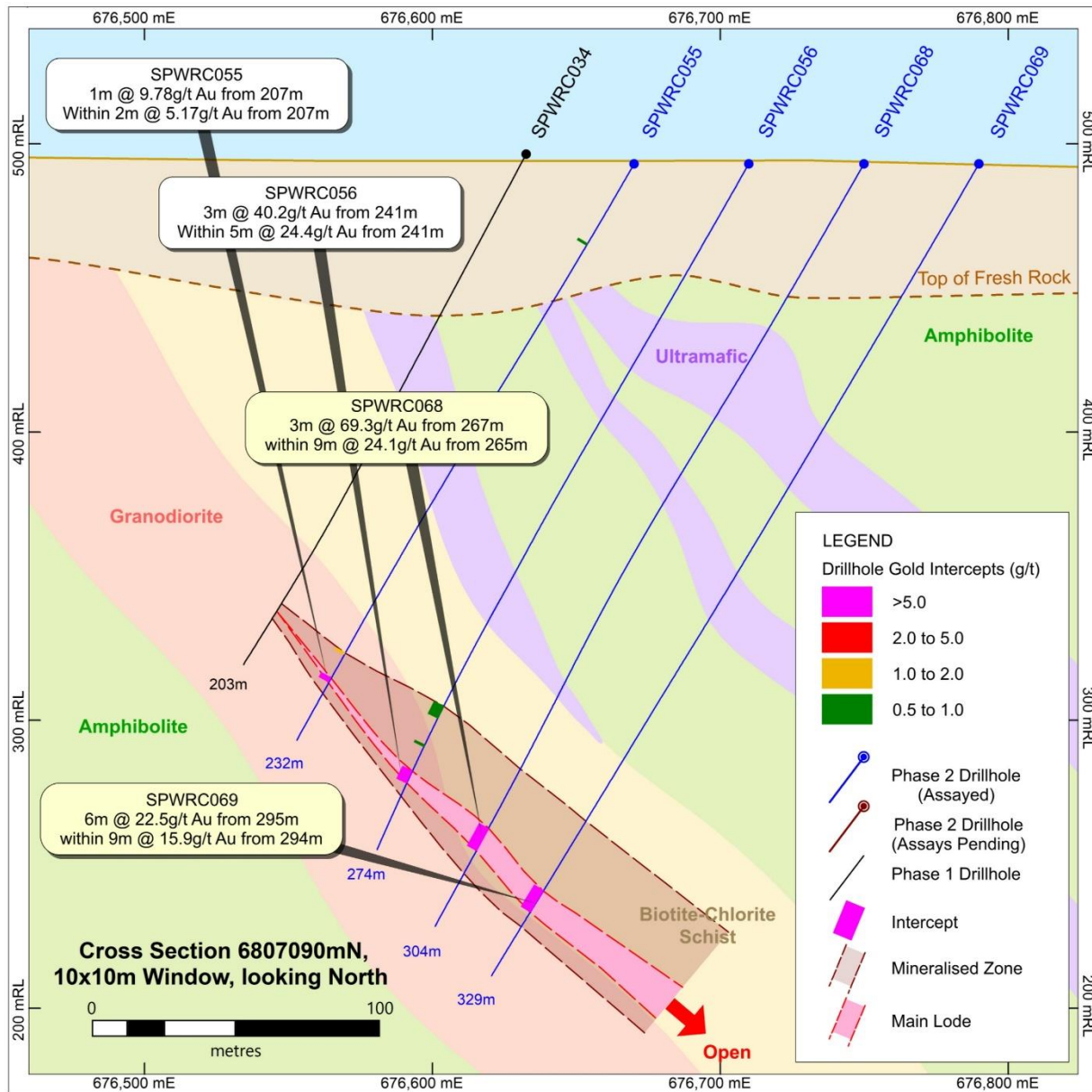


Figure 4. Cross Section through 6807090mN at Penny North

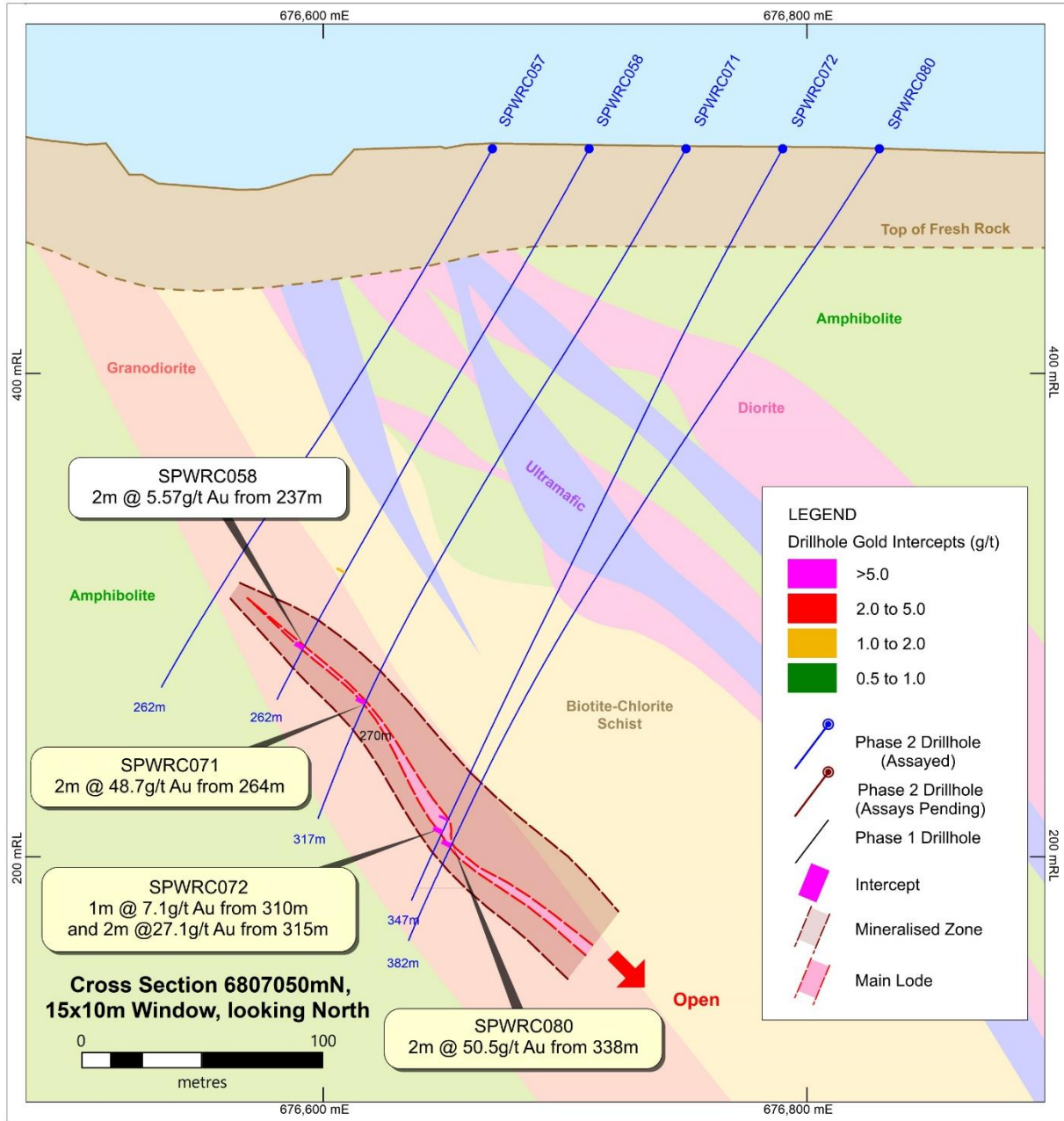


Figure 5. Cross Section through 6807050mN at Penny North





Figure 6. RC Chips from Hole SPWRC081 at Penny North (289 to 294m downhole)

For further information please contact:

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### **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 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.

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.

### **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.



**Table 1. Collar Table**

COLLAR ID	EAST (MGA94 z50)	NORTH (MGA94 z50)	RL (Ausgeoid09)	LOCATION METHOD	EOH DEPTH	COLLAR DIP	COLLAR AZIMUTH
SPWRC071	676750	6807050	493	Design	317	-60	270
SPWRC072	676790	6807050	493	Design	347	-60	270
SPWRC076	676660	6806660	493	Design	184	-60	270
SPWRC078	676740	6806660	493	Design	220	-60	270
SPWRC079	676780	6806660	493	Design	280	-60	270
SPWRC080	676830	6807050	493	Design	382	-60	270
SPWRC081	676790	6807010	493	Design	328	-60	270

**Table 2. Assay Table**

COLLAR ID	FROM	TO	INTERVAL	INCL	AU (ppm)	AU THRESHOLD (ppm)
SPWRC071	264	266	2		48.7	0.50
SPWRC071	264	265	1	incl	95.5	5.00
SPWRC072	310	311	1		7.1	0.50
SPWRC072	315	317	2		27.1	0.50
SPWRC072	315	316	1	Incl	44.6	5.00
SPWRC076	67	68	1		1.2	0.50
SPWRC076	76	78	2		0.65	0.50
SPWRC078	182	184	2		17.1	0.50
SPWRC079	238	239	1		1.2	0.50
SPWRC080	338	340	2		50.5	0.50
SPWRC081	278	279	1		0.6	0.50
SPWRC081	289	293	4		63.1	0.50
SPWRC081	289	292	3	incl	83.7	5.00
SPWRC081	300	301	1		7.4	0.50
SPWRC081	306	307	1		0.6	0.50

## 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><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>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</i></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>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</li> <li>Industry standard RC drilling with 1 m 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> </ul>

Criteria	JORC Code explanation	Commentary
	<i>disclosure of detailed information.</i>	
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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).</i></li> </ul>	<ul style="list-style-type: none"> <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>
<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>• 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>
<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</li> <li>• The whole of hole has been logged to the same standard</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</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> <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>• 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 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> <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>
<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,</i></li> </ul>	<ul style="list-style-type: none"> <li>• Assays have been conducted on a 50 g fire assay charge</li> <li>• No geophysical tools have yet been applied to the RC chips or downhole</li> <li>• Blanks, standards, duplicates and laboratory quality control have all been monitored and are acceptable.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	
<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> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All logging and sample preparation in the field has been conducted by independent consulting geologists and field personnel.</li> <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>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></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> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The intersections described in this announcement are from Penny North and Penny South 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</li> </ul>

Criteria	JORC Code explanation	Commentary
		applied to the hanging wall part of the sequence
<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> <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>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> <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>• <i>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.</i></li> <li>• <i>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.</i></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>• <i>Acknowledgment and appraisal of exploration by other parties.</i></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>• <i>Deposit type, geological setting and style of mineralisation.</i></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>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding</i></li> </ul>	<ul style="list-style-type: none"> <li>• See Table 1 and Table 2 in the ASX announcements</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> <ul style="list-style-type: none"> <li>● <i>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.</i></li> </ul>	
<p><b>Data aggregation methods</b></p>	<ul style="list-style-type: none"> <li>● <i>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.</i></li> <li>● <i>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</i></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>

Criteria	JORC Code explanation	Commentary
	<p><i>such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></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>
<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 the announcement, with an interpreted trace of the extensional mineralisation with respect to the known Penny North lode located north of the historic Penny West Pit. A long section including the area at Penny South is also provided.</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>



Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out 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 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>Plans showing proposed drilling for the current program have been included.</li> </ul>