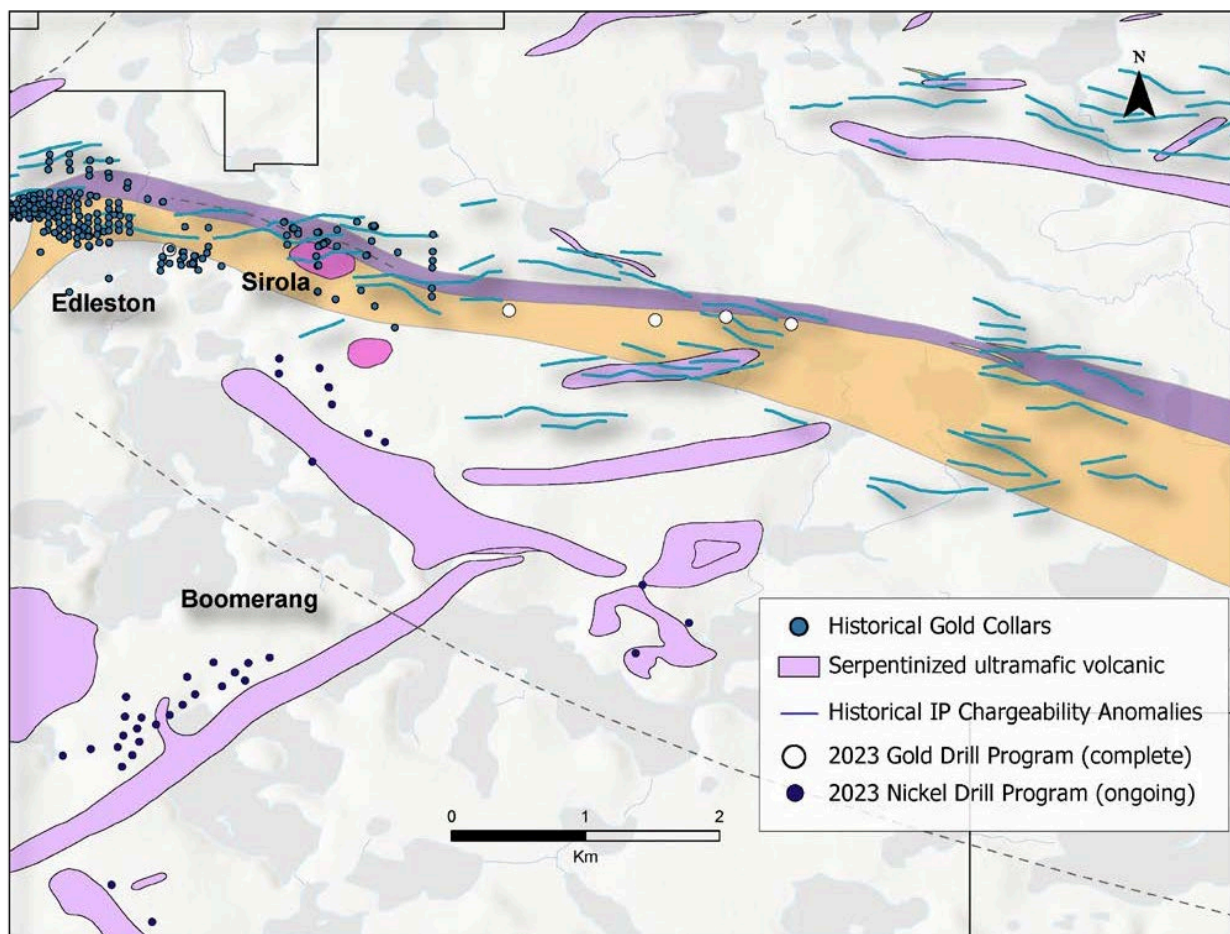


# Metallurgical Testing to Commence on Gold Samples from Edleston Main

## Key Highlights

- SGS Lakefield to run metallurgical program on core from Edleston Main gold resource<sup>1</sup>
- Program designed to confirm gravity gold and conduct ore leachability testwork
  - No leaching tests have been conducted to date on the Edleston Main gold mineralisation
  - Up to 78.1% gold recovery from previous gravity only beneficiation testing<sup>22</sup>
- Program to be overseen by Greg Lane of Ausenco
- Exploration program targeting the along strike potential of Edleston and Sirola Mineral Resources in the process of being finalised



**Figure 1:** Historical and recent drill hole locations around Edleston and Sirola

<sup>1</sup> ASX Announcement 19 January 2023: Indicated 14.0Mt at 0.90 g/t Au for 400,200oz; Inferred 34.1Mt at 1.00 g/t Au for 1,099,800oz; Global 48.1Mt at 1.00 g/t Au for 1,500,100oz

<sup>2</sup> ASX Announcement 27 March 2023 "Up to 78.1% Gold Recovery Purely from Gravity Only Beneficiation at Edleston Main Zone"

Aston Minerals Limited (**ASX: ASO**, 'Aston Minerals' or 'the **Company**') is pleased to provide an update on the development of the Edlestone Gold Project, Canada.

Gold bearing core taken from previous drilling at the Edlestone Main deposit and included in the current 1.5Moz gold resource<sup>1</sup> has been selected to be used in a metallurgical test program to be conducted at SGS Lakefield, an industry leader in metallurgical and mineralogical testing based in Ontario.

Managing Director, Russell Bradford, commented: *"This standard gold metallurgical test program will be used to confirm the gravity gold recovery rate as previously reported on 27<sup>th</sup> March 2023 as well as the leachability of the gold and how the gold responds to standard bottle roll leach tests.*

*This work will inform the Company on the potential and basic operating conditions such as power input, reagent consumption, and leach time and recovery. All these points can be evaluated on these samples as a first pass using bottle roll tests at various grinds, reagent additions and time".*

The tests will start this month and go through to December 2023. Technical support will come from Greg Lane at Ausenco, and all tests will be conducted at SGS Lakefield, Ontario.

The Company also advises that the results from the final hole of the 2023 five hole step out program (DDED23-126) have now been received. As with the previous four holes<sup>3</sup> from this opportunistic program to test multiple parallel IP anomalies to the east of the resource which are under shallow transported cover and had yet to be drill tested, no significant gold assays were reported. The results of the step out program have provided valuable geological information which will be included in the modelling of the area. The team continues to review the results to identify and refine targets in the prospective area for future programs.

This announcement has been authorised for release by the Board of Aston Minerals Limited.

## Contacts

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<sup>3</sup> ASX Announcement 31 July 2023 "Market update on drill testing along strike potential of the Edlestone and Sirola 1.5Moz Gold Resource"

## Competent Person's Statements

The information in this announcement that relates to the Exploration Results for Edleston Project is based on information compiled and fairly represented by Mr Robert Jewson, who is a Member of the Australian Institute of Geoscientists and Non-Executive Director of Aston Minerals Limited. Mr Jewson has sufficient experience 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 Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jewson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The mineral resource estimate in this announcement was reported by the Company in accordance with listing rule 5.8 on 19 January 2023. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimate in the previous announcement continue to apply and have not materially changed.

## Appendix 1: Drill hole information

Hole	Size	Easting	Northing	Elevation	Azimuth	Dip	Final Depth (m)
DDED23-122*	HQ	480,209	5,306,766	372	20	-45	636
DDED23-123*	HQ	480,551	5,306,774	377	20	-45	627
DDED23-124*	HQ	480,874	5,306,771	367	20	-45	645
DDED23-125*	HQ	479,462	5,306,853	365	22	-45	594
DDED23-126	HQ	477,798	5,307,277	371	55	-60	525

Hole	From (m)	To (m)	Interval (m)	Au (g/t)
DDED23-122*			No Significant Assays	
DDED23-123*			No Significant Assays	
DDED23-124*			No Significant Assays	
DDED23-125*			No Significant Assays	
DDED23-126			No Significant Assays	

\*Previously reported on 28 July 2023

## Appendix 2: JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Comments
<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> </ul>	Half NQ/HQ diamond drill core was submitted for analysis.
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Core was cut into two equal halves with one submitted for analysis.
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report. 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>	Sample intervals was based on geological observations. Minimum core width sampled was 0.3m and maximum 1.5m. Samples were submitted to Activation Laboratories. Representative samples from mineralisation within Edleston Main were prepared and sent to SGS Lakefield for metallurgical testing using standard gravity and leaching of the tails material.
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <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>	Standard tube NQ and HQ Diamond drilling was undertaken.
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	Field geologists measure core recoveries for every drill run completed. The core recovered is physically measured by tape measure and the length is recorded for every "run". Core recovery is calculated as a percentage recovery. Core recovery is logged and recorded into the database.

Criteria	JORC Code explanation	Comments
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	Diamond drilling by nature collects relatively uncontaminated core samples. These are cleaned at the drill site to remove drilling fluids and cuttings to present clean core for logging and sampling.
	<ul style="list-style-type: none"> <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>	There is no significant loss of material reported in the mineralised parts of the diamond core to date.
<b>Logging</b>	<ul style="list-style-type: none"> <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> </ul>	<p>Drill holes were logged for lithology, alteration, mineralisation, structure and weathering by a geologist. Data is then captured in a database appropriate for mineral resource estimation.</p> <p>Metallurgical testing has commenced on the Edleston Main drill core and results will be published when available.</p>
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	All cores are photographed in the core tray, with individual photographs taken of each tray both dry and wet. Logging conducted is both qualitative and quantitative.
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	All drill holes were logged in full.
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> </ul>	Diamond drill core was cut in half. Half the core was submitted for analysis and the remaining half was stored securely for future reference and potentially further analysis if ever required.
	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	Only diamond core drilling completed.
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	Sample preparation by Activation Laboratories in Timmins used their standard preparation method. Samples were crushed to 80% passing 2mm, riffle split and pulverized to 95% passing 105µm.
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	Standard preparation procedure inclusive of internal laboratory internal crushing and pulverizing tests were utilised by Activation Laboratories Timmins.

Criteria	JORC Code explanation	Comments
	<ul style="list-style-type: none"> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>Field duplicate samples were taken at the rate of 1:25 samples. Standard reference materials and blanks were similarly inserted at the rate of 1:25 before and after predicted high grade intervals multiple blanks were inserted to ensure that there was no cross sample contamination. QAQC verified that the blank material reported below detection and thus no cross contamination between samples.</p> <p>Sample sizes are considered appropriate to the mineralisation style and grain size of the material.</p>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> </ul>	<p>Samples were routinely submitted for gold assay by fire assay and ICP (atomic absorption) of a 50g pulverized sample. If gold grains of a size larger than the grind size are present, the method can be considered partial digestion.</p> <p>Samples with logged visible gold or reporting over 10g/t Au were analysed by fire assay metallic screen. A representative 500g split is sieved at 100 mesh with assays with assays performed on the entire &gt;100 mesh and 2 splits of the -100 mesh fraction. A final assay is calculated based on the weight of each fraction.</p> <p>Pole-dipole Array IP geophysics was conducted by SGX Resources Inc, the former operator of the Project. The surveys were implemented and interpreted by R J Meikle and Associates in 2010-12. The survey was completed in a north south orientation at a spacing of 100m along a baseline of 2.2km. The survey lines varied in length between 800 and 3000m.</p> <p>The dipole 'a' spacing was 25m and increasing separations of n=1, n=2, n=3, n=4 and n=5, the dipole spacing was measured in order to map the response at depth.</p>

Criteria	JORC Code explanation	Comments
		IP Survey equipment consisted of a Pheonix IPT-1 3000w transmitter operating in the time domain powered by a 2kw motor generator. The chargeability (measured in mV/V) between the transmitted current and the received voltage is recorded by a Iris Elrec IP Pro receiver which records the chargeability and the apparent resistivity for each set of dipoles.
	<ul style="list-style-type: none"> <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> </ul>	Standard reference materials and blanks were inserted routinely at the rate of 1:25 samples.
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	Results were reviewed by the chief geologist, managing director and competent person.
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	None of the current holes being drilled are considered to be twin holes.
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	All data was recorded in field logging sheets, digitised then imported into a validated database.
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	No adjustments were performed to assay data.
<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> </ul>	Drill collar locations were surveyed using a differential GPS.
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>	All collar locations are reported in NAD83- 17N grid system.
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	Topographic control on collars was derived from a LIDAR survey completed across the Project. LIDAR is considered to be industry best practice for this stage of exploration.
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	Diamond drill holes are drilled selectively directly targeting mineralisation based on regional orientations known along strike.
	<ul style="list-style-type: none"> <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>	The spacing across Edlestone Main is sufficient to establish geological and grade continuity appropriate for estimation of a Mineral Resource.



Criteria	JORC Code explanation	Comments
		The remaining prospects drilled by the Company are on too broad of a spacing to define a mineral resource at present.
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	Sample compositing has been applied. Results reported are length weighted averages.
<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>	<p>Based on the logging of the drilling and interpretation of the geology the drilling completed is interpreted to be perpendicular to the trend of mineralisation.</p> <p>The drilling intercept reported is downhole. Further drilling is required to confirm the geometry of mineralisation.</p>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	Diamond drill core is transported from site by contractors to a secured core processing facility for logging and sampling. Samples are subsequently sent by a contractor to the assay laboratory.
<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>	No audits are documented to have occurred in relation to sampling techniques or data.

## 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> </ul>	<p>The Edleston Project is 100% owned by a wholly owned subsidiary of Aston Minerals Ltd.</p> <p>A 2% net smelter return royalty applies across the Project. 1% of the net smelter return royalty can be purchased for \$1,000,000 across the mining claims and 1% of the net smelter return royalty can be purchased for \$1,000,000 across the Leased Claim.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	Open file verification has been conducted to confirm licenses are in full force.
<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>	Exploration reported was completed by 55 North Mining Inc (Formerly SGX Resources Inc.). Activities completed include magnetic surveys, VLF/IP surveys, extensive diamond drilling.
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>Regionally, Edleston appears to lie along the potential western extension of the Cadillac-Larder fault zone along which a number of major gold deposits are located. Geophysical and geological work has demonstrated that the Edleston Zone sits within the north limb of the host unit/horizon that stretches over 10 km to the east. This unit is broadly folded back toward the south and east immediately to the west of the deposit continuing under and near the contact with shallow sedimentary cover. The host rock is an altered and sheared ultramafic that exhibits extensive silicification and contains quartz-carbonate in veins, veinlets and fracture fill.</p> <p>A revised geological interpretation based on the information obtained from recent drilling and reprocessed magnetics coverages was undertaken. Through this process the extent and intense magnetic response of the Boomerang Target was recognised. Magnetic inversion modelling of the Boomerang Target was undertaken to further constrain the geometry and extent of the dunite/peridotite complex. It is interpreted that this dunite/peridotite body extends for a strike of 5km, is 500 to &gt;1,500m wide and extends to depths of well over 500m.</p> <p>The exploration model applied to conduct targeting of this body is analogous to Dumont and Crawford Nickel-PGE-Cobalt Deposits. Nickel sulphide mineralisation at these deposits was formed through the serpentinisation of a dunite unit (rock composed of &gt;90% olivine).</p>

Criteria	JORC Code explanation	Commentary
		Through the reaction of olivine with water, extensive magnetite is developed hence providing such a strong magnetic response and potentially allowing for a direct exploration targeting method to be applied. Through this process of serpentinisation nickel is liberated from olivine within a strongly reducing environment and the liberated nickel is partitioned into low sulphur nickel sulphide minerals.
<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>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length.</li> </ul> </li> </ul>	The drill hole location information is set out in the appendix.
	<ul style="list-style-type: none"> <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>	All information has been reported.
<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> </ul>	Length weighted averages are reported in the highlights and body of the announcement. A full listing of the individual intervals is reported in the body of the release above.
	<ul style="list-style-type: none"> <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> </ul>	Length weighted averages have been applied where necessary to calculate composite intervals. Calculations were performed in excel using the sumproduct function to calculate the length weighted average grades.
	<ul style="list-style-type: none"> <li>· The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No metal equivalence are reported.

Criteria	JORC Code explanation	Commentary
<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. · 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>	Intervals of alteration and mineralisation reported are apparent widths. Further drilling is required to understand the geometry of mineralisation and thus the true width of mineralisation.
<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>	There is no significant discovery being reported in this announcement.
<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>	All information has been reported.
<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>	No other exploration data is considered meaningful and material to this announcement.
<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>	<p>Further exploration will be planned by the Company in due course. Metallurgical testing has began and updates will be provided upon completion of the testwork.</p> <p>A map including the location of all gold collars drilled on the project are included in the body of this release.</p>