

19 December 2022

# High grade gold hangingwall mineralisation at Edleston Main & Sirola increases mineralised strike to 2km

# **Key Highlights**

Edleston Main: Infill drilling of high grade gold hangingwall target confirms continuity

- Recent drilling result:
  - o **2.38m at 39.27g/t Au** from 289.38m (DDED21-042)
- Previous results from hangingwall target<sup>1</sup>
  - o **5.3m at 42.44g/t Au** from 111m (SL-12-86)
  - o **3.3m at 57.4g/t Au** From 207.4m (SL-12-129)
  - o **1.5m at 15.74g/t Au** from 298.15m (SL-13-158)
  - o **15.58m at 2.57g/t Au** from 75.74m (DDED21-015)
    - Including 2.03m at 11.11g/t Au from 79m

Sirola: Rapidly emerging discovery - drill defined strike length of 500m

- Recent drilling results include:
  - o 19.5m at 1.4g/t Au from 232.5m (DDED21-074)
    - Including 3.05m at 8.51g/t Au from 232.5m
  - 11.06m at 1.1g/t Au from 165m (DDED21-077)
    - Including 3.12m at 2.61g/t Au from 172.94m
- Previously reported drilling by Aston<sup>1</sup>:
  - o **1.41m at 14.7g/t Au** from 233.59m (DDED21-043)
  - o **71.49m at 0.61gt Au** From 377.49m (DDED21-043)
  - o **81m at 0.69g/t Au** from 156.5m (DDED21-046)
    - Including 1.56m at 11.45g/t Au from 166.48m
  - o **2.3m at 8.6g/t** Au from 420.2m (DDED21-047)
  - o 11.5m at 0.96g/t Au from 471m (DDED21-038)

Edleston East: 1.5m at 1,356g/t Au from 362m (DDED21-003)<sup>1</sup>, structural targeting commenced

Gold mineral resource estimation and exploration targets in process of being finalised by independent consultant

<sup>&</sup>lt;sup>1</sup> For full listing of results please refer to ASX Release "Edleston Gold Exploration Update", 11 March 2022

Aston Minerals Limited (**ASX: ASO**, '**Aston Minerals**' or 'the **Company'**) is pleased to provide an update on the gold drilling results from the Edleston Project, Canada.

Managing Director, Dale Ginn commented "We are pleased to have finally received two out of the three remaining gold drill results for the extensive campaign completed across Edleston Main and Sirola by the Company. The drilling at Sirola is shaping up to be a particularly significant discovery which spans a strike length of 500m. The mineralisation is completely wide open along strike to the east and at depth. In terms of prospective stratigraphy, we have only explored 2km of a total of 10km of strike. Our belief is that we are only scratching the surface on what appears to be a very significant mineralised system.

"The drilling completed across the high grade hangingwall target at Edleston Main has increased our confidence in there being a substantial high-grade gold system within a much broader mineralised trend which extends for a strike length of over 700m. One absolute enigma which we are trying to unravel is the phenomenal intercept of DDED21-003 which intersected 1.5m at 1,356g/t Au. We have engaged a structural geologist to evaluate the exploration undertaken and provide us with guidance on likely extension targets to follow up on.

"We look forward to releasing the final drill hole from Sirola and the maiden mineral resource estimation and exploration targets for Edleston Main and Sirola as they become available to us."

# **Edleston Main Drilling**

The high grade hangingwall target was discovered by Aston's predecessor and received limited follow up exploration. Aston designed further drilling of this area to test the continuity and determine the extension potential of this mineralisation.

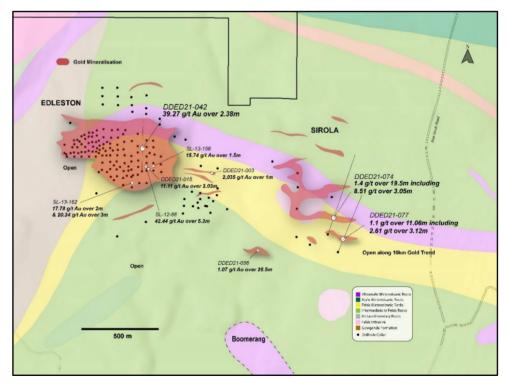


Figure 1: Edleston Deposit and Sirola Discovery Plan View

Drill hole DDED21-042 intersected 2.38m at 39.27g/t Au from 289.38m, confirming the continuity and high-grade nature of this domain.



# **Sirola Drilling**

The Sirola Prospect is located 800m to the east of Edleston Main and previously had only been drilled to depths of up to 200m. Broad spaced drilling has been completed by Aston and the most recent hole completed returned 19.5m at 1.4g/t Au from 232.5m and included 3.05m at 8.51g/t Au.

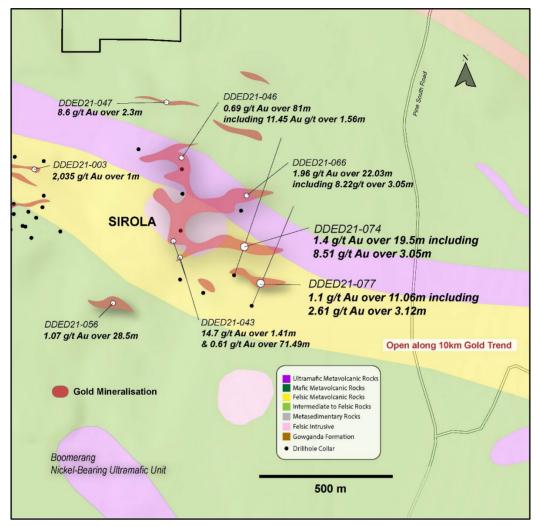


Figure 2: Sirola Discovery Plan View

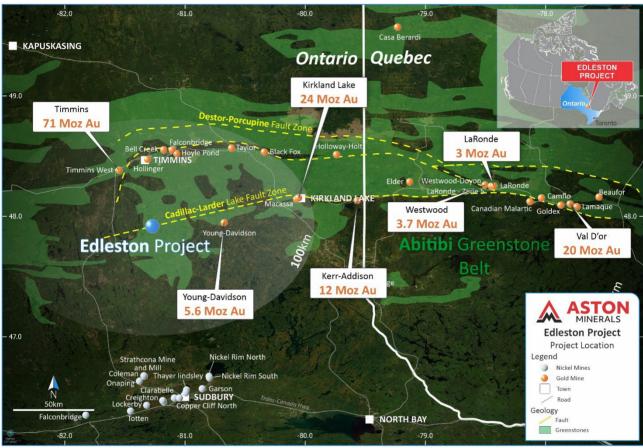
Significant previously reported results from the Sirola Prospect by Aston include:

- 11.5m at 0.96g/t Au from 471m (DDED21-038)
- 1.41m at 14.7 g/t Au from 233.59m (DDED21-043)
- 71.49m at 0.61gt Au From 377.49m (DDED21-043)
- 81m at 0.69g/t Au from 156.5m (DDED21-046)
  - o Including 1.56m at 11.45g/t Au from 166.48m
- 2.3m at 8.6g/t Au from 420.2m (DDED21-047)



# **Edleston Project Overview, Ontario, Canada (100% ASO)**

The Edleston Project is located approximately 60km via road to the south of Timmins, Ontario, Canada. The towns of Timmins and Kirkland Lake are located close by and host significant former and current producers, with required services and skilled labour available to support exploration and development of the Project.



**Figure 3: Edleston Project Location Plan** 

The Project is located within the Abitibi Greenstone Belt of Archean metavolcanic and medisedimentary units that have been steeply folded with axes trending in general east-west orientation.

The Boomerang Target is interpreted to be a Dunite/Peridotite unit which has undergone extensive serpentinisation. This process of is responsible for the reaction of olivine to produce magnetite and brucite, resulting in a strongly reducing environment whereby nickel is released from decomposition of olivine. The nickel which has been released is typically partitioned into low sulphur nickel sulphide minerals. Due to the magnetite association with mineralisation, a 3D inversion model of magnetics has been generated and has been utilised to assist with targeting. Extensive drilling undertaken has confirmed the presence of extensive nickel sulphide mineralisation.

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



### **Contacts**

### For more information, please contact:

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### **Competent Person's Statement**

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 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. Previous results have been reported in accordance with Listing Rule 5.7. The Company confirms there has been no new information that materially effects the results as they were first reported.



# Appendix 1: Diamond Drill Collar Details, Intercept Intervals

Hole	Easting	Northing	Elevation	Depth	Azimuth	Dip	Prospect	Results Returned
DDED21-028	477,278	5,307,939	361	291	0	-50	Edleston North	Yes
DDED21-030	477,177	5,307,946	356	231	0	-50	Edleston North	No
DDED21-042	477,449	5,307,425	360	642.3	0	-54	Edleston Main	Yes
DDED21-045	477,501	5,307,550	359	366.3	0	-50	Edleston Main	Yes
DDED21-051	477,124	5,307,527	378	537	0	-50	Edleston Main	Yes
DDED21-053	477,079	5,307,523	359	495.3	0	-70	Edleston Main	Yes
DDED21-058	478,905	5,306,705	367	741	270	-70	Sirola	Yes
DDED21-074	478,736	5,306,982	367	822	25	-50	Sirola	Yes
DDED21-077	478,805	5,306,864	369	636.3	25	-50	Sirola	Yes

Hole	From	Length	Au g/t
DDED21-028		No Significant	Intercepts
DDED21-030		Assays Pe	ending
DDED21-042	289.38	2.38	39.27
DDED21-045	230	7.96	0.43
DDED21-051	123.5	64.78	0.58
Including	123.5	8.01	1.53
DDED21-053	121	100.5	0.38
Including	129.01	5.66	1.54
DDED21-053	207.5	14	1.2
DDED21-058	621	9	0.7
DDED21-074	232.5	19.5	1.4
Including	232.5	3.05	8.51
DDED21-077	165	11.06	1.1
Including	172.94	3.12	2.61





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
Sampling	· Nature and quality of sampling (eg cut channels, random chips,	Half NQ/HQ diamond drill core was submitted for analysis.
techniques	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.	
	· Include reference to measures taken to ensure sample	Core was cut into two equal halves with one submitted for analysis.
	representivity and the appropriate calibration of any measurement	
	tools or systems used.	
	· Aspects of the determination of mineralisation that are Material	Sample intervals was based on geological observations. Minimum
	to the Public Report. In cases where 'industry standard' work has	core width sampled was 0.3m and maximum 1.5m. Samples were
	been done this would be relatively simple (eg 'reverse circulation	submitted to Activation Laboratories.
	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	

Criteria	JORC Code explanation	Comments
	mineralisation types (eg submarine nodules) may warrant disclosure	
	of detailed information.	
Drilling	· Drill type (eg core, reverse circulation, open-hole hammer,	Standard tube NQ and HQ Diamond drilling was undertaken.
techniques	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).	
Drill sample	· Method of recording and assessing core and chip sample	Field geologists measure core recoveries for every drill run
recovery	recoveries and results assessed.	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.
	· Measures taken to maximise sample recovery and ensure	Diamond drilling by nature collects relatively uncontaminated core
	representative nature of the samples.	samples. These are cleaned at the drill site to remove drilling fluids
		and cuttings to present clean core for logging and sampling.
	· Whether a relationship exists between sample recovery and	There is no significant loss of material reported in the mineralised
	grade and whether sample bias may have occurred due to	parts of the diamond core to date.
	preferential loss/gain of fine/coarse material.	
Logging	· Whether core and chip samples have been geologically and	Drill holes were logged for lithology, alteration, mineralisation,
	geotechnically logged to a level of detail to support appropriate	structure and weathering by a geologist. Data is then captured in a
		database appropriate for mineral resource estimation.



ORC Code explanation	Comments
Mineral Resource estimation, mining studies and metallurgical	
studies.	
Whether logging is qualitative or quantitative in nature. Core (or	All cores are photographed in the core tray, with individual
costean, channel, etc) photography.	photographs taken of each tray both dry and wet. Logging conducted
	is both qualitative and quantitative.
The total length and percentage of the relevant intersections	All drill holes were logged in full.
ogged.	
If core, whether cut or sawn and whether quarter, half or all core	Diamond drill core was cut in half. Half the core was submitted for
aken.	analysis and the remaining half was stored securely for future
	reference and potentially further analysis if ever required.
If non-core, whether riffled, tube sampled, rotary split, etc and	Only diamond core drilling completed.
whether sampled wet or dry.	
For all sample types, the nature, quality and appropriateness of	Sample preparation by Activation Laboratories in Timmins used their
he sample preparation technique.	standard preparation method. Samples were crushed to 80%
	passing 2mm, riffle split and pulverized to 95% passing 105μm.
Quality control procedures adopted for all sub-sampling stages	Standard preparation procedure inclusive of internal laboratory
to maximise representivity of samples.	internal crushing and pulverizing tests were utilised by Activation
	Laboratories Timmins.
Measures taken to ensure that the sampling is representative of	Field duplicate samples were taken at the rate of 1:25 samples.
the in situ material collected, including for instance results for field	Standard reference materials and blanks were similarly inserted at
duplicate/second-half sampling.	the rate of 1:25 before and after predicted high grade intervals
C C C C C C C C C C C C C C C C C C C	Mineral Resource estimation, mining studies and metallurgical studies.  Whether logging is qualitative or quantitative in nature. Core (or ostean, channel, etc) photography.  The total length and percentage of the relevant intersections orged.  If core, whether cut or sawn and whether quarter, half or all core asken.  If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.  For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all sub-sampling stages or maximise representivity of samples.  Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field



Criteria	JORC Code explanation	Comments
		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.
	· Whether sample sizes are appropriate to the grain size of the	Sample sizes are considered appropriate to the mineralisation style
	material being sampled.	and grain size of the material.
Quality of	· The nature, quality and appropriateness of the assaying and	Samples were routinely submitted for gold assay by fire assay and
assay data	laboratory procedures used and whether the technique is	ICP (atomic absorption) of a 50g pulverized sample. If gold grains of
and	considered partial or total.	a size larger than the grind size are present, the method can be
laboratory		considered partial digestion.
tests		
		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
		>100 mesh and 2 splits of the -100 mesh fraction. A final assay is
		calculated based on the weight of each fraction.
	· For geophysical tools, spectrometers, handheld XRF	Pole-dipole Array IP geophysics was conducted by SGX Resources
	instruments, etc, the parameters used in determining the analysis	Inc, the former operator of the Project. The surveys were
	including instrument make and model, reading times, calibrations	implemented and interpreted by R J Meikle and Associates in 2010-
	factors applied and their derivation, etc.	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.



Criteria	JORC Code explanation	Comments
		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.
		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.
	· 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.	Standard reference materials and blanks were inserted routinely at the rate of 1:25 samples.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	Results were reviewed by the chief geologist, managing director and competent person.  None of the current holes being drilled are considered to be twin
	<ul> <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>	holes.  All data was recorded in field logging sheets, digitsed then imported into a validated database.  No adjustments were performed to assay data.



Criteria	JORC Code explanation	Comments
Location of	· Accuracy and quality of surveys used to locate drill holes (collar	Drill collar locations were surveyed using a differential GPS.
data points	and down-hole surveys), trenches, mine workings and other	
	locations used in Mineral Resource estimation.	
	· Specification of the grid system used.	All collar locations are reported in NAD83- 17N grid system.
	· Quality and adequacy of topographic control.	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.
Data spacing	· Data spacing for reporting of Exploration Results.	Diamond drill holes are drilled selectively directly targeting
and		mineralisation based on regional orientations known along strike.
distribution	· Whether the data spacing and distribution is sufficient to	The spacing across Edleston Main is sufficient to establish geological
	establish the degree of geological and grade continuity appropriate	and grade continuity appropriate for estimation of a Mineral
	for the Mineral Resource and Ore Reserve estimation procedure(s)	Resource. Upon receipt of remaining results from Edleston Main,
	and classifications applied.	Mineral Resource Estimation will be conducted.
		The remaining prospects drilled by the Company are on too broad of
		a spacing to define a mineral resource at present.
	· Whether sample compositing has been applied.	Sample compositing has been applied. Results reported are length
		weighted averages.
Orientation	· Whether the orientation of sampling achieves unbiased	Based on the logging of the drilling and interpretation of the geology
of data in	sampling of possible structures and the extent to which this is	the drilling completed is interpreted to be perpendicular to the trend
relation to	known, considering the deposit type.	of mineralisation.



Criteria	JORC Code explanation	Comments
geological	· If the relationship between the drilling orientation and the	The drilling intercept reported is downhole. Further drilling is
structure	orientation of key mineralised structures is considered to have	required to confirm the geometry of mineralisation.
	introduced a sampling bias, this should be assessed and reported if	
	material.	
Sample	· The measures taken to ensure sample security.	Diamond drill core is transported from site by contractors to a
security		secured core processing facility for logging and sampling. Samples
		are subsequently sent by a contractor to the assay laboratory.
Audits or	· The results of any audits or reviews of sampling techniques and	No audits are documented to have occurred in relation to sampling
reviews	data.	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
Mineral	· Type, reference name/number, location and ownership including	The Edleston Project is 100% owned by a wholly owned subsidiary
tenement and	agreements or material issues with third parties such as joint	of Aston Minerals Ltd.
land tenure	ventures, partnerships, overriding royalties, native title interests,	
status	historical sites, wilderness or national park and environmental	A 2% net smelter return royalty applies across the Project. 1% of the
	settings.	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.



Criteria	JORC Code explanation	Commentary
	· The security of the tenure held at the time of reporting along	Open file verification has been conducted to confirm licenses are in
	with any known impediments to obtaining a licence to operate in the	full force.
	area.	
Exploration	· Acknowledgment and appraisal of exploration by other parties.	Exploration reported was completed by 55 North Mining Inc
done by other		(Formerly SGX Resources Inc.). Activities completed include
parties		magnetic surveys, VLF/IP surveys, extensive diamond drilling.
Geology	· Deposit type, geological setting and style of mineralisation.	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.
		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



Criteria	JORC Code explanation	Commentary
		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
		>1,500m wide and extends to depths of well over 500m.
		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
		>90% olivine). 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.
Drill hole	· A summary of all information material to the understanding of	Drill hole locations are described in the body of the text, in the
Information	the exploration results including a tabulation of the following	appendix and on related Figures.
	information for all Material drill holes:	
	o easting and northing of the drill hole collar	
	o elevation or RL (Reduced Level – elevation above sea level in	
	metres) of the drill hole collar	



Criteria	JORC Code explanation	Commentary
	o dip and azimuth of the hole	
	o down hole length and interception depth	
	o hole length.	
	· If the exclusion of this information is justified on the basis that	All information has been reported. At present no sampling or
	the information is not Material and this exclusion does not detract	analysis has been completed.
	from the understanding of the report, the Competent Person should	
	clearly explain why this is the case.	
Data	· In reporting Exploration Results, weighting averaging	Length weighted averages are reported in the highlights and body
aggregation	techniques, maximum and/or minimum grade truncations (eg	of the announcement. A full listing of the individual intervals is
methods	cutting of high grades) and cut-off grades are usually Material and	reported in the body of the release above.
	should be stated.	
	· Where aggregate intercepts incorporate short lengths of high	Length weighted averages have been applied where necessary to
	grade results and longer lengths of low grade results, the procedure	calculate composite intervals. Calculations were performed in excel
	used for such aggregation should be stated and some typical	using the sumproduct function to calculate the length weighted
	examples of such aggregations should be shown in detail.	average grades.
	· The assumptions used for any reporting of metal equivalent	No metal equivalence are reported.
	values should be clearly stated.	
Relationship	· These relationships are particularly important in the reporting of	Intervals of alteration and mineralisation reported are apparent
between	Exploration Results. · If the geometry of the mineralisation with	widths. Further drilling is required to understand the geometry of
mineralisation	respect to the drill hole angle is known, its nature should be reported.	mineralisation and thus the true width of mineralisation.
widths and		



Criteria	JORC Code explanation	Commentary
intercept	· If it is not known and only the down hole lengths are reported,	
lengths	there should be a clear statement to this effect (eg 'down hole	
	length, true width not known').	
Diagrams	· Appropriate maps and sections (with scales) and tabulations of	Maps and plans have been included in body of the announcement.
	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.	
Balanced	· Where comprehensive reporting of all Exploration Results is not	All information has been reported.
reporting	practicable, representative reporting of both low and high grades	
	and/or widths should be practiced to avoid misleading reporting of	
	Exploration Results.	
Other	· Other exploration data, if meaningful and material, should be	No other exploration data is considered meaningful and material to
substantive	reported including (but not limited to): geological observations;	this announcement.
exploration	geophysical survey results; geochemical survey results; bulk samples	
data	<ul> <li>size and method of treatment; metallurgical test results; bulk</li> </ul>	
	density, groundwater, geotechnical and rock characteristics;	
	potential deleterious or contaminating substances.	
Further work	· The nature and scale of planned further work (eg tests for lateral	Upon receipt of remainder of drill results from gold drilling program,
	extensions or depth extensions or large-scale step-out drilling).	further exploration will be planned.
	· Diagrams clearly highlighting the areas of possible extensions,	Maps including the location of samples and prospects are included
	including the main geological interpretations and future drilling	in the body of this release.
	areas, provided this information is not commercially sensitive.	

