

# Up to 78.1% Gold Recovery Purely from Gravity Only Beneficiation at Edleston Main Zone

# **Key Highlights**

- SGS Lakefield Ontario conducted QUEMSCAN, heavy liquid separation and superpanning on two samples of drill core from Edleston Main to determine the potential gravity recovery of gold mineralisation
  - 78.1% of gold was recovered from 0.94g/t Au composite sample resulting in a
     11.38g/t Au gravity concentrate
  - Up to 64.1% of gold was recovered from 0.66g/t Au composite sample resulting in a 4.28g/t Au gravity concentrate
- Metallurgical testwork program being devised to test amenability of mineralisation of both Edleston Main and Sirola Zone to a combination of gravity and cyanide leach in order to determine the potential overall metallurgical recovery of gold
- Scanning electron microscope testing determined the majority of gold grains were native gold with a few petzite (Ag<sub>3</sub>AuTe<sub>2</sub>) grains

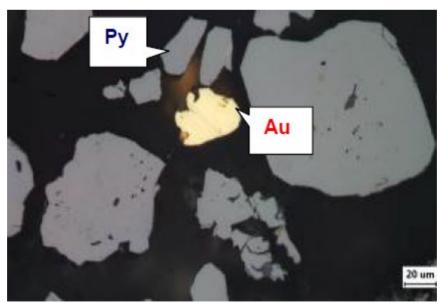


Figure 1: Photomicrograph of liberated gold from Sample E1

Aston Minerals Limited (**ASX: ASO**, '**Aston Minerals**' or 'the **Company**') is pleased to announce the results of a gravity based metallurgical beneficiation testwork that was undertaken by SGS Lakefield Ontario on gold mineralisation from Edleston Main Zone.

Managing Director, Dale Ginn commented "Through the process of going through the paper archives in relation to the Project, we found an historical metallurgical beneficiation testing report completed by SGS. To achieve such a high gravity only recovery of gold mineralisation, which is relatively similar to that of the head grade of the Edleston Main, is very encouraging. It also explains why there is so much visible grains of gold within the mineralisation.

"We look forward to conducting further metallurgical testing to determine the overall recovery possible through a combination of both gravity and cyanide leaching."

## **Testwork Summary**

SGX Resources provided two composite samples from Edleston Main Zone in 2013 to SGS Lakefield Ontario Laboratory. The samples were identified as E-1, weighing 2,940.92g and E-2 weighing 2,497.54g.

Representative sub samples were riffled out for chemical analysis, XRD and QUEMSCAN. The majority of the sample was prepared for gold deportment studies.

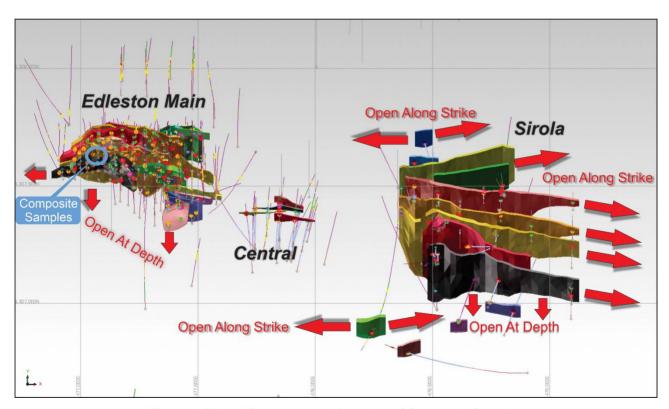


Figure 1: Mineral Resources and Location of Composite Samples



## **Sample Preparation**

Approximately 1,000g of each of E-1 and E-2 as received samples were used for pre-concentration. All samples were pre-concentrated by heavy liquid separation (HLS) at a specific gravity (SG) of 3.3 (E-1) and 3.28 (E-2) to obtain a sink fraction (consisting mainly of sulphides, oxides and heavy silicate minerals) and a float fraction (consisting of mainly silicates with disseminated sulphides or oxides).

## **Head Grade Assays**

Representative sub samples weighing 20 to 60g each were riffled from the as-received samples for testing. Sub samples were pulverized and submitted for whole rock analysis for major elements, Fe, As and S pulp assays and Au by fire assay.

**Table 1: Head Grade Analysis** 

Analyte	E-1	E-2
SiO <sub>2</sub> %	49.5	50.9
Al <sub>2</sub> O <sub>3</sub> %	9.76	9.06
Fe <sub>2</sub> O <sub>3</sub> %	17.0	19.2
MgO%	6.80	6.03
CaO%	10.9	9.17
K2O%	0.97	0.3
TiO <sub>2</sub> %	0.475	0.448
MnO%	0.643	0.711
Cr <sub>2</sub> O <sub>3</sub> %	0.457	0.439
V <sub>2</sub> O <sub>5</sub> %	0.038	0.034
Na <sub>2</sub> O%	1.21	0.4
P <sub>2</sub> O <sub>5</sub> %	0.021	0.021
Cu%	0.01	0.02
C(t)%	0.73	0.56
As%	<0.001	0.002
Au g/t	0.94	0.63
Ag g/t	<10	<10
S%	1.55	1.93

#### **Heavy Liquid Separation Testwork**

For sample E-1, 78.1% of the gold grade was distributed in the HLS sink fraction (SG 3.3) which accounts for 6.45% of the total, mass, 21.9% of the gold grade remained in the HLS float, accounting for the balance of the remaining mass.



For sample E-2, 64.1% of the gold grade was distributed in the HLS sink fraction (SG 3.28), which accounts for 9.43% of the total mass, 35.9% remained in the HLS float, accounting for the balance of the remaining mass.

### **Gold Deportment**

A total of 60 gold mineral grains were analyzed by SEM-EDS for sample E-1. These values were determined using standardless SEM-EDS semi-quantitative analysis. Most of the grains are native gold (Au >75%, Ag <25%) with few petzite (Ag3AuTe2) grains. The average chemical composition was 85.9% Au and 12.3% Ag as native gold and 16.5% Au and 46.5% Ag as petzite.

A total of 59 gold mineral grains were analysed by SEM-EDS for sample E-2. These values were determined using standardless SEM-EDS semi-quantitative analysis. Most of the grains are native gold (Au >75%, Ag <25%), with an average chemical composition of 83.9% Au and 14.3% Ag.

# **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.

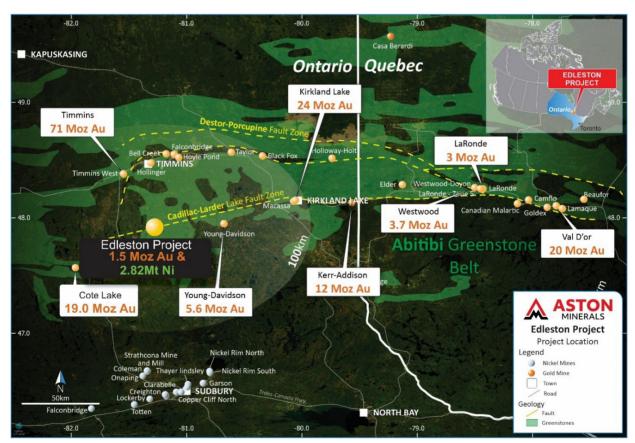


Figure 2: Edleston Project Location Plan

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.

## **Contacts**

### For more information, please contact:

Dale Ginn Rob Jewson

Managing Director Corporate Director

dale@astonminerals.com rob@astonminerals.com

#### **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. The Company confirms there has been no new information that materially effects the results as they were first reported.





Appendix 1: 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 to SGS Lakefield
techniques	or specific specialised industry standard measurement tools	Laboratory Ontario for metallurgical testing.
	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	1/4 core was submitted as a composite sample for analysis.
	representivity and the appropriate calibration of any measurement	
	tools or systems used.	
	· Aspects of the determination of mineralisation that are Material	A composite sample was utilised to prepare a ~3kg sample for
	to the Public Report. In cases where 'industry standard' work has	metallurgical testing. The activities are historical in nature and as
	been done this would be relatively simple (eg 'reverse circulation	such the exact composite holes and intervals weren't documented
	drilling was used to obtain 1 m samples from which 3 kg was	in the SGS report. Material was selected on basis it represented the
	pulverised to produce a 30 g charge for fire assay'). In other cases	low grade and average grade mineralisation at Edleston Main.
	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,	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.



Criteria	JORC 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.
	logged.	
Sub-sampling	· If core, whether cut or sawn and whether quarter, half or all core	1/4 of core was prepared as a composite sample and was submitted
techniques	taken.	for analysis metallurgical testwork.
and sample	· If non-core, whether riffled, tube sampled, rotary split, etc and	Only diamond core drilling completed.
preparation	whether sampled wet or dry.	
	· For all sample types, the nature, quality and appropriateness of	Two composite samples from the Edleston Deposit in Timmins were
	the sample preparation technique.	received and prepared for bulk mineralogy and gold deportment
		study. The samples were identified as E-1, weighing 2940.92 g and
		E-2, weighing 2497.54 g.
		Approximately 1000 g, each of the E-1 and E-2 as-received samples
		were used for pre-concentration. All samples were pre-concentrated
		by heavy liquid separation (HLS) at a specific gravity (SG) of 3.3 (E-1)
		and 3.28 (E-2) to obtain a Sink fraction (consisting mainly of
		sulphides, oxides and heavy silicate minerals) and a Float fraction



Criteria	JORC Code explanation	Comments
		(consisting mainly of silicates or silicates with disseminated
		sulphides or oxides).
	· 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 SGS Lakefield
		Laboratories.
	· Measures taken to ensure that the sampling is representative of	Multiple head grade analysis were completed and reconciled against
	the in situ material collected, including for instance results for field	the beneficiated material and tailings material to confirm the
	duplicate/second-half sampling.	integrity of each of the subsequent processes.
	· 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	Representative sub samples, weighing 20 to 60 g each were riffled
assay data	laboratory procedures used and whether the technique is	from the as received samples for testing. Sub samples were
and	considered partial or total.	pulverized and submitted for whole rock analysis of major elements.
laboratory		Fe, As and S were analysed using pulp assays. Au was analysed by
tests		fire assay. These methods are deemed industry standard and
		appropriate for each of the respective elements.
	· For geophysical tools, spectrometers, handheld XRF	No geophysical instruments were utilised for this metallurgical
	instruments, etc, the parameters used in determining the analysis	beneficiation testing.
	including instrument make and model, reading times, calibrations	
	factors applied and their derivation, etc.	



Criteria	JORC Code explanation	Comments
	· Nature of quality control procedures adopted (eg standards,	SGS laboratory standards were applied to the analysis. Comparison
	blanks, duplicates, external laboratory checks) and whether	of the head grade versus the back calculated grade from each of the
	acceptable levels of accuracy (ie lack of bias) and precision have	beneficiation steps was also utilised to ensure the integrity of the
	been established.	testing undertaken.
Verification	· The verification of significant intersections by either	Results were reviewed by the chief geologist, managing director and
of sampling	independent or alternative company personnel.	competent person.
and assaying	· The use of twinned holes.	None of the current holes being drilled are considered to be twin
		holes.
	· Documentation of primary data, data entry procedures, data	All data was recorded in field logging sheets, digitised then imported
	verification, data storage (physical and electronic) protocols.	into a validated database.
	· Discuss any adjustment to assay data.	No adjustments were performed to assay data.
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 drilling has been completed with sufficient spacing,
	establish the degree of geological and grade continuity appropriate	understanding of the geological and grade continuity to be included



Criteria	JORC Code explanation	Comments
	for the Mineral Resource and Ore Reserve estimation procedure(s)	in a mineral resource. Edleston Main contains both Indicated and
	and classifications applied.	Inferred Mineral Resources.
	· 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.
geological	$\cdot$ $\;$ 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.
	· 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



Criteria	JORC Code explanation	Commentary
		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
		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



Drill hole Information  - A summary of all information material to the understanding of the exploration results including a tabulation of the following information of easting and northing of the 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  - o dip and azimuth of the hole  - o down hole length.  - 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.  - In reporting Exploration Results, weighting averaging  A map illustrating the location of the holes utilised to create the composite sample is included in the body of the release. The architecture in intervals weren't documented in the SGS report  - historical in nature and as such the exact composite holes and intervals weren't documented in the SGS report  - historical in nature and as such the exact composite holes and intervals weren't documented in the SGS report  - historical in nature and as such the exact composite holes and intervals weren't documented in the SGS report  - historical in nature and as such the exact composite holes and intervals weren't documented in the SGS report  - historical in nature and as such the exact composite holes and intervals weren't documented in the SGS report  - historical in nature and as such the exact composite holes and intervals weren't documented in the SGS report  - historical in nature and as such the exact composite holes and intervals weren't documented in the SGS report  - historical in nature and as such the exact composite holes and intervals weren't documented in the such composite holes and intervals weren't documented in the such composite holes and intervals weren't documented in the such composite holes and intervals weren't documented in the such composite holes and intervals weren't documented in the s	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:  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  o dip and azimuth of the hole  o down hole length.  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.  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg outting of high grades) and cut-off grades are usually Material and a minimum grade truncations (eg or report			nickel is liberated from olivine within a strongly reducing
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:  • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length. • 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.  • 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 report			environment and the liberated nickel is partitioned into low sulphur
the exploration results including a tabulation of the following 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  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 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.  Data  aggregation  nethods  the exploration results included in the body of the release. The architact in nature and as such the exact composite holes and intervals weren't documented in the SGS report  intervals weren't documented in the SGS report  intervals weren't documented in the SGS report  All information has been reported.			nickel sulphide minerals.
the exploration results including a tabulation of the following 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  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 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.  Data  aggregation  nethods  the exploration results included in the body of the release. The architact in nature and as such the exact composite holes and intervals weren't documented in the SGS report  intervals weren't documented in the SGS report  intervals weren't documented in the SGS report  All information has been reported.			
the exploration results including a tabulation of the following 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  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 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.  Data  aggregation  nethods  the exploration results included in the body of the release. The architact in nature and as such the exact composite holes and intervals weren't documented in the SGS report  intervals weren't documented in the SGS report  intervals weren't documented in the SGS report  All information has been reported.			
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  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 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.  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG report  historical in nature and as such the exact composite holes and intervals weren't documented in the SGs report  All information has been reported.  The activities are historical in nature and as such the exact composite holes and intervals weren't documented in the SG composite holes and intervals weren't documented in the SG report	Drill hole	· A summary of all information material to the understanding of	A map illustrating the location of the holes utilised to create the
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 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 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.  Data  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 report	Information	the exploration results including a tabulation of the following	composite sample is included in the body of the release. The are
o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 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 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.  Data In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG methods  cutting of high grades) and cut-off grades are usually Material and report		information for all Material drill holes:	historical in nature and as such the exact composite holes and
metres) of the drill hole collar 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 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.  Data In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG cutting of high grades) and cut-off grades are usually Material and report		o easting and northing of the drill hole collar	intervals weren't documented in the SGS report
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 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.  Data  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG methods  cutting of high grades) and cut-off grades are usually Material and report		o elevation or RL (Reduced Level – elevation above sea level in	
o down hole length and interception depth o hole length.  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.  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 report		metres) of the drill hole collar	
o hole length.  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.  Data  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG cutting of high grades) and cut-off grades are usually Material and report		o dip and azimuth of the hole	
<ul> <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> <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 report</li> </ul>		o down hole length and interception depth	
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.  Data  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG cutting of high grades) and cut-off grades are usually Material and report		o hole length.	
from the understanding of the report, the Competent Person should clearly explain why this is the case.  Data  In reporting Exploration Results, weighting averaging The activities are historical in nature and as such the exact techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG cutting of high grades) and cut-off grades are usually Material and report		· If the exclusion of this information is justified on the basis that	All information has been reported.
clearly explain why this is the case.  Data  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG cutting of high grades) and cut-off grades are usually Material and report		the information is not Material and this exclusion does not detract	
Data  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG cutting of high grades) and cut-off grades are usually Material and report  The activities are historical in nature and as such the exact composite holes and intervals weren't documented in the SG cutting of high grades) and cut-off grades are usually Material and report		from the understanding of the report, the Competent Person should	
aggregation techniques, maximum and/or minimum grade truncations (eg composite holes and intervals weren't documented in the SG cutting of high grades) and cut-off grades are usually Material and report		clearly explain why this is the case.	
methods cutting of high grades) and cut-off grades are usually Material and report	Data	· In reporting Exploration Results, weighting averaging	The activities are historical in nature and as such the exact
	aggregation	techniques, maximum and/or minimum grade truncations (eg	composite holes and intervals weren't documented in the SGS
should be stated.	methods	cutting of high grades) and cut-off grades are usually Material and	report
		should be stated.	



Criteria	JORC Code explanation	Commentary
	· Where aggregate intercepts incorporate short lengths of high	The composites were generated on the basis of approximating the
	grade results and longer lengths of low grade results, the procedure	low grade and average grade mineralisation of the Edleston Main
	used for such aggregation should be stated and some typical	deposit.
	examples of such aggregations should be shown in detail.	
	· The assumptions used for any reporting of metal equivalent	No metal equivalence has been 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	· If it is not known and only the down hole lengths are reported,	
intercept	there should be a clear statement to this effect (eg 'down hole	
lengths	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.	



Criteria	JORC Code explanation	Commentary
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	– size and method of treatment; metallurgical test results; bulk	
	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	Further metallurgical testwork programs are currently being
	extensions or depth extensions or large-scale step-out drilling).	devised.
	· 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.	

