

14 February 2022

Nickel Sulphide Mineralisation confirmed to end of hole at 522m. Multiple Rigs Mobilized to Bardwell Discovery.

Key Highlights

- DDED22-080, drilled to a depth of 522m, intersected 245m of disseminated to blebby and semi-massive nickel sulphide mineralisation from 277m to end of hole. This is the first hole collared from the north-west side of the Bardwell Discovery from phase two permitted drill pads.
- This confirms nickel sulphide mineralisation along more than 150m of strike at Bardwell.
 - Zone drilling at Bardwell planned to test mineralisation to a vertical depth of ~400m along a strike length of ~1,000m. Magnetics and drilling indicate mineralisation to be >350m wide.
- Second diamond drill rig has commenced drilling 150m to the south-west aiming to define mineralisation along 300m of strike within a total prospective strike of ~1,000m for the Bardwell Discovery. The Boomerang Nickel Sulphide Target has a total prospective strike length of ~6,500m.
- Third diamond drill rig is being mobilized to Bardwell in order to continue systematic drilling to the north-east at 100m spacing.
- Significant results returned to date from Bardwell include:
 - DDED21-076 intersected **282.5m at 0.43% Ni and 0.014% Co ending in mineralisation**, starting from 67.5m and including **163.5m at 0.52% Ni and 0.017% Co**
 - DDED21-059 intersected **144m at 0.38% Ni and 0.014% Co ending in mineralisation**, starting from 174m and including **53.5m at 0.49% Ni and 0.017% Co**



Figure 1: DDED22-080 clast of semi-massive pentlandite-pyrrhotite with blebby to disseminated pentlandite-pyrrhotite at 411.2m



Figure 2: DDED22-080 coarse pentlandite-pyrrhotite intergrowth at 431.4m

Aston Minerals Limited (**ASX: ASO**, 'Aston Minerals' or 'the **Company**') is pleased to provide an update on drilling results and exploration underway across the Bardwell Prospect within the Boomerang Nickel-Cobalt Target, Edlestone Project, Canada.

Managing Director, Dale Ginn, commented "*Bardwell continues to deliver nickel sulphides across considerably broad intervals. Finding further semi-massive sulphide mineralisation in hole DDED22-080 is strongly encouraging, particularly as we are only in the infancy of understanding the controls on mineralisation, and it demonstrates broad nickel intervals across 150 metres of strike so far. The Bardwell Discovery was made within the first series of holes conducted. Our newly permitted drill locations will allow us to systematically define and extend Bardwell, while looking for other potential zones along the substantial Boomerang target.*

Visual assessment of the core shows widespread disseminated mineralisation similar to that of DDED21-076 which intersected 163.5m at 0.52% Ni and 0.017% Co. DDED22-080, however, contains zones of far coarser blebby pentlandite and a zone of semi massive pentlandite mineralisation.

With our second rig moving to Bardwell, the strike we have tested will expand to 250m of a total 1,000m strike at Bardwell. The aim of the drilling is to consistently test mineralisation to a depth of ~400m. Drilling and magnetic inversion modelling has indicated the mineralisation is >350m wide. A third rig has been mobilized as well to continue the expansion program in 100m step-outs to the north-east.

We will look to conduct downhole EM with the aim of determining whether any more substantial off hole conductors exist which could represent massive nickel sulphide targets, in addition to the extensive wide disseminated mineralisation intersected to date. The petrography we have underway will be utilised to refine our geophysical approach to directly targeting mineralisation. We are expecting to receive the petrography and scanning electron microscope results in coming weeks which will also greatly assist in outlining our metallurgical testing program.

It is important to remember that the 6.5km long Boomerang Nickel Sulphide Intrusion target is entirely undercover. We have hit 730m of nickel sulphide mineralisation 3.5km to the north of Bardwell so are only really scratching the surface in terms of the potential of this system. The 93% liberation of nickel to date indicates we are dealing with a very high proportion of nickel associated with sulphides, substantially higher than that of peer deposits. We look forward to providing further updates on the progress of drilling of Bardwell as it unfolds."

Bardwell Drilling

Drilling of hole DDED22-080 has extended the mineralised strike of Bardwell to 150m within a total prospective strike of ~1,000m defined by magnetics. The drilling has intersected disseminated to blebby and semi-massive pyrrhotite-pentlandite mineralisation across an interval of 251m from a depth of 277m. Drilling terminated in mineralisation due to a fault zone significantly impeding drilling advancement.

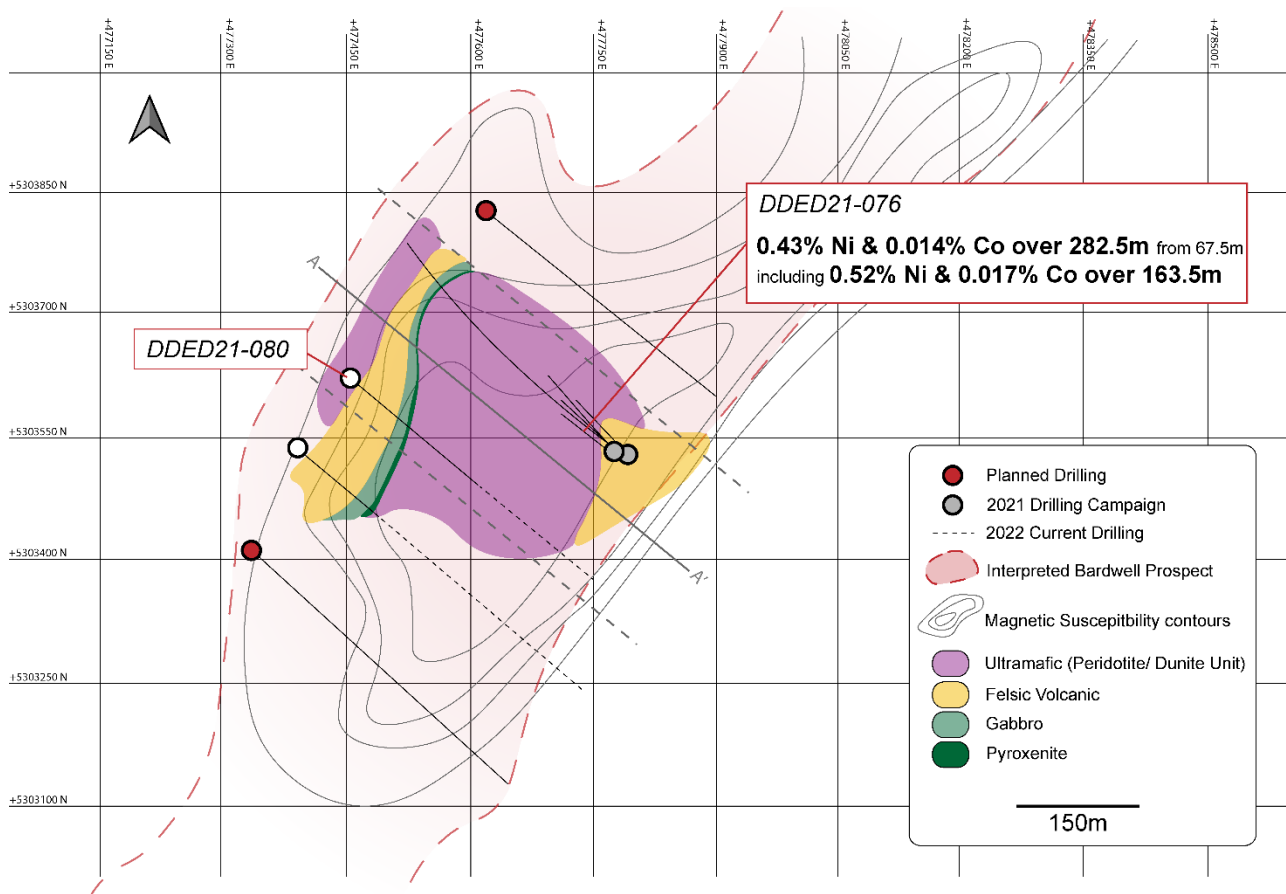


Figure 3: Plan view of Bardwell with interpreted geology, current drilling and planned drilling

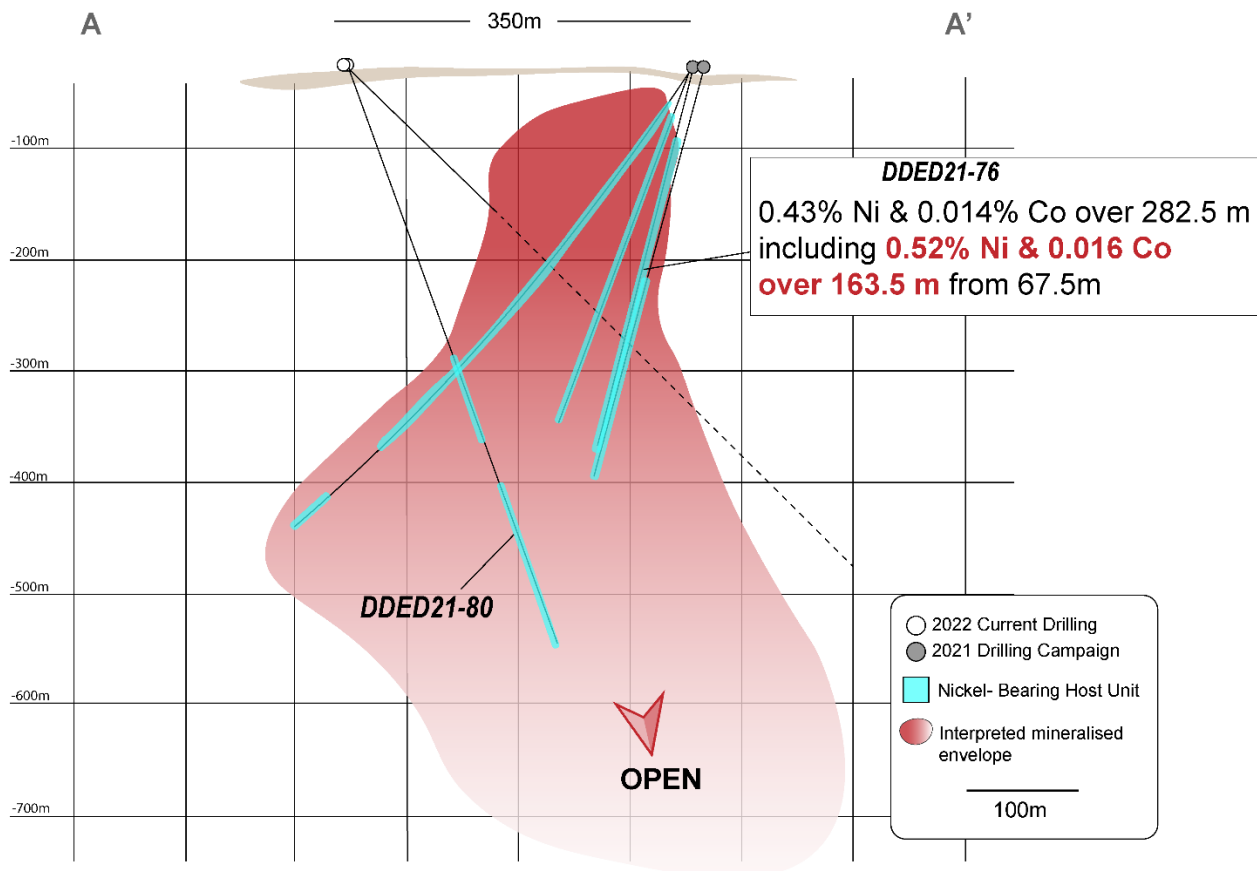


Figure 4: Cross Section of Bardwell- Current and Planned Drilling



Figure 5: DDED22-080 coarse disseminated to blebby pentlandite-pyrrhotite mineralisation at 302.85m



Figure 6: DDED22-080 disseminated pentlandite-pyrrhotite mineralisation at 412m



Figure 7: DDED22-080 disseminated pentlandite-pyrrhotite mineralisation at 420m



Figure 8: DDED22-080 blebby pentlandite-pyrrhotite mineralisation at 455.7m



Figure 9: DDED22-080 blebby pentlandite-pyrrhotite mineralisation at 488m

The mineralisation observed in hole DDED22-80 is generally similar to hole DDED21-76 in terms of sulphide type and distribution except that hole 80 contains greater amounts of coarse pentlandite-pyrrhotite.

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.

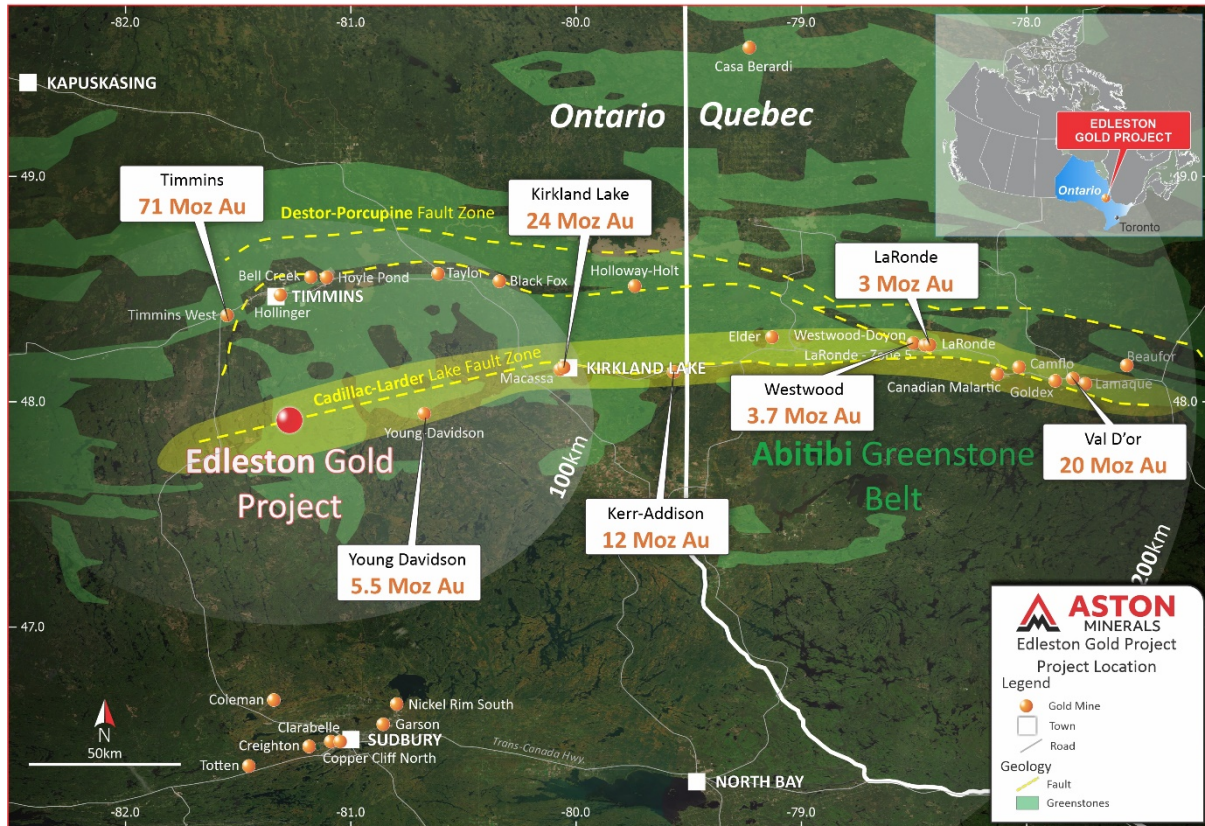


Figure 10: Edleston Project Location Plan

The Project is located within the Abitibi Greenstone Belt of Archean metavolcanic and metasedimentary 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 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
Managing Director
dale@astonminerals.com

Rob Jewson
Corporate Director
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: Diamond Drill Collar Details, Intercept Intervals & Individual Sample Intervals

Hole	Size	Easting	Northing	Elevation	Azimuth	Dip	Final Depth (m)
DDED21-057	NQ	477,784	5,303,529	354	311	-57	552
DDED21-059	NQ	477,784	5,303,529	354	311	-70	267
DDED21-060	NQ	477,785	5,303,532	355	316	-70	345
DDED21-061	NQ	477,798	5,303,524	354	316	-75	385
DDED21-063	HQ	477,783	5,303,525	355	316	-70	204
DDED21-065	HQ	479,209	5,305,726	365	0	-90	540
DDED21-067	HQ	478,791	5,304,010	362	320	-70	507
DDED21-069	HQ	479,209	5,305,727	365	20	-70	320
DDED21-070	HQ	478,791	5,304,010	362	320	-55	588
DDED21-072	HQ	479,209	5,305,727	365	200	-70	579
DDED21-073	HQ	478,791	5,304,010	362	320	-45	578
DDED21-075	HQ	479,209	5,305,727	365	200	-45	744
DDED21-076	HQ/NQ	477,782	5,303,527	355	310	-75	350
DDED21-078	NQ	479,744	5,305,129	364	270	-65	363
DDED21-079	HQ	479,209	5,305,727	365	245	-45	537 (in progress)
DDED21-080	HQ	477,452	5,303,624	357	130	-70	522
DDED21-081	HQ	477,392	5,303,535	352	130	-45	162 (in progress)
DDED21-082	HQ	477,452	5,303,624	357	130	-45	24 (in progress)

Hole	From (m)	To (m)	Interval (m)	Sulphide % (Visual Estimate)	Host Lithology
DDED22-080	277	353	76	Finely disseminated & vein replacement (pyrrhotite-pentlandite) 2-8%	fine grained peridotite
	400	450	50	Coarsely disseminated to blebby (pyrrhotite-pentlandite) 4-10%	Fine grained serpentinised peridotite
	450	475	25	Finely disseminated (pyrrhotite-pentlandite) 1-2%	Fine grained serpentinised peridotite
	475	490	15	Finely disseminated to blebby (pyrrhotite-pentlandite) 1-10%	Fine to medium grained serpentinised peridotite
	490	522	32	Finely disseminated (pyrrhotite-pentlandite) 1%	Fine grained serpentinised peridotite

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 techniques	<ul style="list-style-type: none"> 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. 	No sampling reported. pXRF was utilised only to confirm field observations from logging completed.
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	No sampling reported
	<ul style="list-style-type: none"> 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. 	No sampling reported

Criteria	JORC Code explanation	Comments
Drilling techniques	<ul style="list-style-type: none"> 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). 	NQ Diamond drilling. Drill holes are angled and core is being orientated for structural interpretation.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	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.
	<ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. 	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"> 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. 	There is no significant loss of material reported in the mineralised parts of the diamond core to date.
Logging	<ul style="list-style-type: none"> 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. 	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.

Criteria	JORC Code explanation	Comments
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	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"> The total length and percentage of the relevant intersections logged. 	All drill holes were logged in full.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. 	No sampling reported.
	<ul style="list-style-type: none"> If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. 	Only diamond core drilling completed.
	<ul style="list-style-type: none"> For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	No sample preparation reported.
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	No sampling reported.
	<ul style="list-style-type: none"> 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. 	No sampling reported.
	<ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	No sampling reported.
Quality of assay data and	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	No assay information reported.

Criteria	JORC Code explanation	Comments
laboratory tests	<ul style="list-style-type: none"> 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. 	An Olympus Vanta VMR pXRF in Geochem 3 Beam Au mode was utilized to verify drill core mineralogy. Readings were collected over 40 second intervals for all 3 beams. The instrument is calibrated according to the manufacturer's specifications and a calibration check is performed daily to confirm the unit is operating within expected parameters as well as a performance test against a certified reference material. The manufacturer's most recent certificate of calibration is dated July 28, 2021 with nickel performance calibrated from OREAS 74a and GBM 398-4 certified reference materials.
	<ul style="list-style-type: none"> 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. 	No sampling reported.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. 	No sampling reported.
	<ul style="list-style-type: none"> The use of twinned holes. 	None of the current holes being drilled are considered to be twin holes.
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	All data was recorded in field logging sheets, digitised then imported into a validated database.
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	No assay data reported.

Criteria	JORC Code explanation	Comments
Location of data points	· 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.	Drill collar locations were surveyed using a differential GPS.
	· 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 and distribution	· Data spacing for reporting of Exploration Results.	Diamond drill holes are drilled selectively directly targeting mineralisation based on regional orientations known along strike.
	· 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.	The spacing of the area being targeted by drilling underway at present is too broad for being able to estimate a mineral resource.
Orientation of data in relation to geological structure	· Whether sample compositing has been applied.	No sampling reported
	· Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	No sampling reported.
	· 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.	The extent, geometry and plunge of the various structural “domains” and how they interact is still being resolved. Further detailed drilling is needed to confidently quantify the degree of sample bias arising from drill orientation (positive or negative).

Criteria	JORC Code explanation	Comments
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	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.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	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
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> 	<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>
	<ul style="list-style-type: none"> <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> 	Open file verification has been conducted to confirm licenses are in full force.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	Exploration reported was completed by 55 North Mining Inc (Formerly SGX Resources Inc.). Activities completed include magnetic surveys, VLF/IP surveys, extensive diamond drilling.

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> · <i>Deposit type, geological setting and style of mineralisation.</i> 	<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 >1,500m wide and extends to depths of well over 500m.</p>

Criteria	JORC Code explanation	Commentary
		<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 >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.</p>
<p>Drill hole Information</p>	<ul style="list-style-type: none"> · <i>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:</i> <ul style="list-style-type: none"> o <i>easting and northing of the drill hole collar</i> o <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> o <i>dip and azimuth of the hole</i> o <i>down hole length and interception depth</i> o <i>hole length.</i> · <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract</i> 	<p>Drill hole locations are described in the body of the text, in the appendix and on related Figures.</p> <p>All information has been reported. At present no sampling or analysis has been completed.</p>

Criteria	JORC Code explanation	Commentary
	<i>from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	
Data aggregation methods	· <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	All exploration results have been reported. No analytical results reported.
	· <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	No drilling results have been reported.
	· <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalence are reported.
Relationship between mineralisation widths and intercept lengths	· <i>These relationships are particularly important in the reporting of Exploration Results.</i> · <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> · <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>	Intervals of alteration and mineralisation reported are apparent widths. True widths of mineralisation are not yet known. At this stage the main primary mineralised structural orientation(s) are still being ascertained and are inconclusive. The orientation of the drilling may introduce some sampling bias (positive or negative).
Diagrams	· <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being</i>	Maps and plans have been included in body of the announcement.

Criteria	JORC Code explanation	Commentary
	<i>reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	
Balanced reporting	<ul style="list-style-type: none"> 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. 	All information has been reported.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	No other exploration data is considered meaningful and material to this announcement.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). 	Further refinement of subsequent drilling will be completed upon receipt of assay results and interpretation.
	<ul style="list-style-type: none"> Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Maps including the location of samples and prospects are included in the body of this release.