

PRESS RELEASE Monday, 18 September, 2017 ASX/TSX: CDV 2017-53

CARDINAL'S NAMDINI MINERAL RESOURCE UPDATE

Cardinal Resources Limited (ASX/TSX: CDV) ("Cardinal" or "the Company") announces an updated Mineral Resource estimate for the Namdini Gold Project ("Namdini") in Ghana, West Africa.

Namdini's Indicated Mineral Resource has increased to 120 M tonnes grading 1.1 g/t Au for **4.3 Moz Au** with an Inferred Mineral Resource of 84 M tonnes grading 1.2 g/t Au for **3.1 Moz Au** at a 0.5 g/t Au cut off. This was achieved with the deployment of 11 rigs which have drilled 33,406 m since the Company's first published NI 43-101 Mineral Resource estimate report by Roscoe Postle Associates Inc. ("RPA") on the 6th of April 2017.

Table 1 highlights Mineral Resource estimations at a series of cut-off grades. Currently the 0.5 g/t Au cut-off grade approximates an operational parameter that the Company believes to be applicable. This is in accordance with the guidelines of Reasonable Prospects for Eventual Economic Extraction ("RPEEE") per the Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014) and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code 2012). Refer to **Sections 1**, **2** and **3** of the JORC Code 2012 Edition Table 1 criteria in Appendix 1. The effective date of the mineral resource estimate is 11 September 2017.

Indicated Resources

Cut off (g/t Au)	Tonnes (Mt)	Grade (g/t Au)	Metal (Moz Au)
0.3	159	0.9	4.8
0.4	140	1.0	4.6
0.5	120	1.1	4.3
0.6	102	1.2	4.0
0.7	86	1.3	3.6
0.8	72	1.4	3.3

Inferred Resources

Cut off (g/t Au)	Tonnes (Mt)	Grade (g/t Au)	Metal (Moz Au)
0.3	111	1.0	3.5
0.4	98	1.1	3.3
0.5	84	1.2	3.1
0.6	72	1.3	2.9
0.7	61	1.4	2.7
0.8	52	1.5	2.4

Table 1: Summary of the Mineral Resources at Namdini

All figures in Table 1 have been rounded to reflect the relative accuracy of the estimates.







Since discovery in 2014, Cardinal has drilled a total of 110 HQ diamond core holes and 165 RC drill holes comprising a total of 69,291 m, which forms the basis of today's Mineral Resource Update.

From this drilling, Cardinal is encouraged that infill drilling confirms additional mineralisation throughout the deposit.

The Namdini deposit is a structurally controlled orogenic gold deposit with numerous features similar to deposits found elsewhere in late Proterozoic Birimian terranes of West Africa.

Cardinal's Chief Executive Officer / Managing Director, Archie Koimtsidis said:

"We are very pleased that our intensive drilling campaign is achieving results with the overall increase in Mineral Resources and are especially delighted that so many ounces have been upgraded into the Indicated category. This upgrade is over a four-fold increase in the Indicated category from the Mineral Resource estimate published in the April 2017 NI43-101 technical report prepared by RPA.

"With the majority of the Indicated Mineral Resource continuous from surface to approximately 350m vertical depth, we anticipate a simple, single, large scale pit, with a low strip ratio as the preferred mining method. At this point in time, the higher-grade areas towards the northern part of the resource, close to surface, may be targeted in the early years of production.

"Additional drilling is in progress to further improve Mineral Resource classification and to further expand the resource. Cardinal anticipates continued news flow and is planning another Mineral Resource update which will feed into our ongoing Preliminary Economic Assessment study."

RESOURCE ESTIMATE PARAMETERS

The following information summarizes key parameters relating to the resource estimation:

- Geological and structural modelling: Logging, interpretation and modelling were undertaken by Cardinal Resources' technical staff and specialist structural consultants Orefind Pty Ltd, (Davis and Cowan, 2016-2017) resulting in a three-dimensional model of key lithologies, structures and weathering zones.
- **Survey Control:** A detailed topographic survey was completed. Drill hole collars were surveyed using differential GPS (DGPS), with down hole surveys taken at 30m intervals using electronic 'multi-shot' equipment.
- **Bulk density data**: Bulk densities are routinely measured as part of exploration data acquisition protocols. The bulk density database for the resource estimate comprises 1,395 measurements. Statistical analysis was undertaken on the bulk density data and a matrix of bulk densities were applied based on lithology and weathering zone. The large majority of the Namdini deposit is fresh rock. Bulk densities vary from 1.80 tonnes per cubic metre (t/m³) for strongly weathered rock to 2.73 t/m³ (for granite) and 2.82-2.83 t/m³ for metavolcanics, diorite and metasediments.
- **Grade Estimation**: MPR Geological Consultants Pty Ltd ("MPR") (QP/CP Mr. Nicolas Johnson) estimated recoverable resources for Namdini using Multiple Indicator Kriging ("MIK") with block support adjustment, a method that has been demonstrated to provide reliable estimates of recoverable open pit resources in gold deposits of diverse geological styles. The mineralized domain used for the current study was interpreted by MPR and Cardinal geologists on the basis of two metre down-hole composited gold grades and captures zones of continuous mineralization with composite grades of greater than nominally 0.1 g/t Au. The domain trends north-northeast over 1.2 km and dips approximately 60° to the west with an average horizontal







width of approximately 350 m. The Mineral Resource can reasonably be expected to provide appropriately reliable estimates of potential mining outcomes at the assumed selectivity, without application of additional mining dilution or mining recovery factors. Validation of the MIK model was undertaken visually and statistically.

The Mineral Resource classification also considered the quality of the data collected (geology, survey and assaying data), the density of data, the confidence in the geological models and mineralization model and grade estimation quality.

• Variance Adjustment: MPR's Mineral Resource estimates include a variance adjustment to give estimates of recoverable resources at various gold cut off grades. The variance adjustments were applied using the direct lognormal method. The variance adjustment factors reflect comparatively large scale, open pit mining consistent with Cardinal's perception of potential mining scenarios. The variance adjustment factors were estimated from the variogram model for gold grades assuming mining selectivity of 5 by 10 by 2.5 m (across strike, strike, vertical) with high quality grade control sampling on an 8 by 12 by 1.25 m pattern.

The Mineral Resource is prepared in accordance with both the Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014) and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code 2012). Refer to **Sections 1, 2 and 3** of the JORC Code 2012 Edition Table 1 criteria in Appendix 1.

A technical report in support of the Mineral Resource estimate described herein and prepared in accordance with NI 43-101 will be filed on SEDAR within 45 days from the date hereof.

Figure 1 is a perspective view of the wireframe constructed to encapsulate the data used for the block model generation.

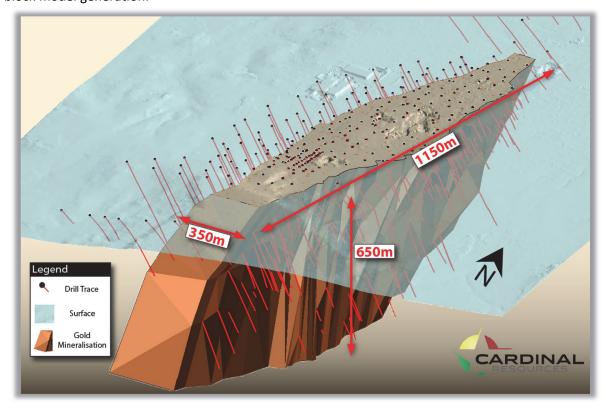


Figure 1: Perspective view of the Namdini gold mineralized envelope.







Figure 2 shows the distribution of Indicated and Inferred Mineral Resources through a longitudinal slice of the block model.

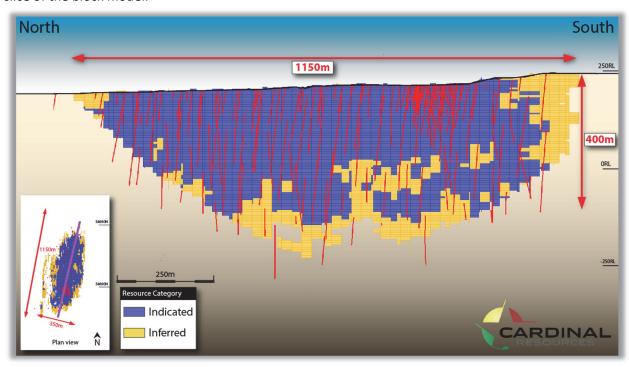


Figure 2: Typical Long section of the model showing Indicated and Inferred resource blocks.

Figure 3 shows the grade distribution and continuity through a longitudinal slice of the block model. The higher-grade areas towards the northern part of the resource, close to surface, may be targeted in the early years of production.

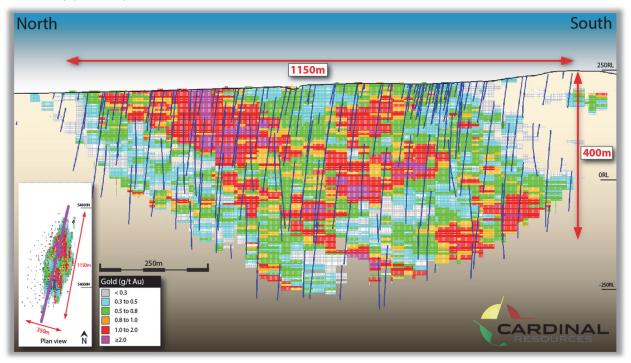


Figure 3: Typical Long section through the resource model showing gold grade distribution.







Figure 4 shows the distribution of Indicated and Inferred Mineral Resources through a cross sectional slice of the block model. Cardinal believes that further infill drilling of the Inferred zones may upgrade the Mineral Resource to Indicated.

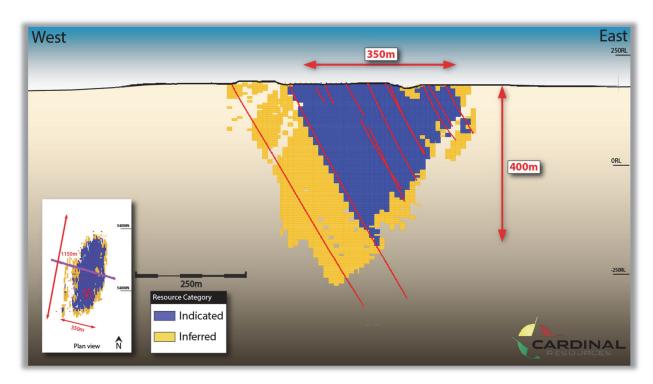


Figure 4: Typical cross section through the resource model showing Indicated and Inferred blocks.

Figure 5 shows the grade distribution and continuity through a cross sectional slice of the block model.

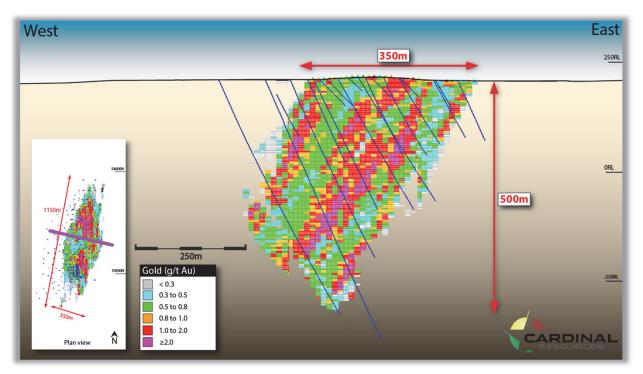


Figure 5: Typical cross section through the resource model showing gold grade distribution.







The Mineral Resource has been prepared in accordance with both the Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014) and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code 2012). Refer to *Sections 1, 2 and 3* of the JORC Code 2012 Edition Table 1 criteria in Appendix 1.

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ABOUT CARDINAL

Cardinal Resources Limited (ASX/TSX: CDV) is a gold-focused exploration and development Company which holds interests in tenements within Ghana, West Africa. The Company is focused on the development of the Namdini Project through a resource expansion drilling programme, which will form the basis of a Preliminary Economic Assessment ("PEA") which is in progress.

Exploration programmes are also underway at the Company's Bolgatanga (Northern Ghana) and Subranum (Southern Ghana) Projects.

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Competent Person / Qualified Person Statement

Mr Richard Bray, RPGeo AIG, has compiled and reviewed the information in this press release and is a Registered Professional Geologist with the Australian Institute of Geoscientists. Mr. Bray has more than five years' experience relevant to the styles of mineralisation and type of deposits under consideration and to the activity which is being undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" and as a Qualified Person as defined by the NI43-101 instrument. Mr. Bray is a full-time employee of Cardinal and holds equity securities in the Company. Mr. Bray has consented to the inclusion of the matters in this report based on the information in the form and context in which it appears.

Mr Nicolas Johnson, MAIG, who is an employee of MPR Geological Consultants Pty Ltd, has compiled the information relating to the Mineral Resource in Resource Summary Table (Table 1) and the attachment in Appendix 1, Section 3 of JORC Code 2012 Edition Table 1 which relate to Mineral Resources of the Namdini Project. Mr Johnson has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person, as defined in the JORC Code and Qualified Person as defined by the NI43-101 instrument. Mr Johnson has no economic, financial or pecuniary interest in the company and consents to the inclusion in this report of the matters based on this information in the form and context in which it appears and has reviewed and approved the inclusion of technical and scientific information in this report.







Disclaimer

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This press release contains summary information about Cardinal, its subsidiaries and their activities, which is current as at the date of this press release. The information in this press release is of a general nature and does not purport to be complete nor does it contain all the information, which a prospective investor may require in evaluating a possible investment in Cardinal.

By its very nature exploration for minerals is a high-risk business and is not suitable for certain investors. Cardinal's securities are speculative. Potential investors should consult their stockbroker or financial advisor. There are a number of risks, both specific to Cardinal and of a general nature which may affect the future operating and financial performance of Cardinal and the value of an investment in Cardinal including but not limited to economic conditions, stock market fluctuations, gold price movements, regional infrastructure constraints, timing of approvals from relevant authorities, regulatory risks, operational risks and reliance on key personnel and foreign currency fluctuations.

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Forward-looking statements

Certain statements contained in this press release, including information as to the future financial or operating performance of Cardinal and its projects may also include statements which are 'forward-looking statements' that may include, amongst other things, statements regarding targets, estimates and assumptions in respect of mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These 'forward – looking statements' are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Cardinal, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

Cardinal disclaims any intent or obligation to update publicly or release any revisions to any forward-looking statements, whether as a result of new information, future events, circumstances or results or otherwise after today's date or to reflect the occurrence of unanticipated events, other than required by the Corporations Act and ASX and TSX Listing Rules. The words 'believe', 'expect', 'anticipate', 'indicate', 'contemplate', 'target', 'plan', 'intends', 'continue', 'budget', 'estimate', 'may', 'will', 'schedule' and similar expressions identify forward-looking statements.







All forward-looking statements made in this press release are qualified by the foregoing cautionary statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.







APPENDIX 1 JORC CODE 2012 EDITION – TABLE 1

Section 1 – Samplin	ection 1 – Sampling Technique and Data		
Criteria	JORC Code Explanation	Commentary	
Sampling techniques	Nature and quality of sampling (e.g. 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.	Sampling is by a combination of diamond drill and reverse circulation holes. Nature and quality of sampling is carried out under QAQC procedures as per industry standards. Diamond sampling include both half-core and quarter-core samples of HQ core size and RC samples are collected by a three-tier riffle splitter using downhole sampling hammers with nominal 127 to 140mm holes. HQ core and RC sampling quality is ensured through inserting CRM standards and blanks every 22 samples.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sampling is guided by Cardinal Namdini protocols and Quality Control procedures as per industry standard. Sample representivity is ensured for: RC samples by collecting 1m samples from a cyclone, passing them through a 3-tier riffle splitter, and taking duplicate samplers every 22nd sample. HQ core through sampling the various lithological units at 1m intervals. The original system used was to sample each unit separately, but after statistical analyses of the results found there was no material grade variation between the units, the quarter core was sampled at 1m intervals throughout the drill hole. Recent HQ core sampling has been conducted by half core.	
	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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	Diamond drill samples are firstly crushed using Jaw Crusher and thereafter crushed to -2mm using a RSD Boyd crusher. A less than 1kg split sample is then pulverised via LM2 to a nominal 85% passing -75µm. Reverse circulation drill samples are only crushed through a RSD Boyd crusher to -2mm and pulverised via LM2 to a nominal 85% passing-75µm. A 200g sub-sample is taken for analysis. A 50g charge weight is fused with litharge based flux, cupelled and the prill dissolved in aqua regia and Gold is determined by AAS.	
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer,	Diamond core drilling is completed with core size of HQ with a standard tube. Triple tube is used in saprolite at	
	in this open note named,	The state of the s	







Criteria	JORC Code Explanation	Commentary
	rotary air blast, auger, Bangka,	the tops of the hole. Core is orientated using digital
	sonic, etc.) and details (e.g. core	Reflex ACT II RD orientation tool.
	diameter, triple or standard tube,	Reverse circulation drilling uses sampling hammer of
	depth of diamond tails, face-	nominal 127 to 140mm holes.
	sampling bit or other type, whether	All holes are inclined at varying angles for optimal zone
	core is oriented and if so, by what	intersection.
	method, etc.).	All drill collars are surveyed using RTK GPS with
		downhole surveying every 30m.
Drill sample	Method of recording and assessing	Diamond core recovery is logged and captured into the
recovery	core and chip sample recoveries and results assessed.	database. Method of recording chip and core sample recoveries was to enter the relevant data on a handheld Motion F5te Tablet PC using a set of standard templates supplied by Maxwell Geoservices, Perth (Maxwell). Reverse circulation sampling is good. Chips are logged and weighed and captured to the database. RC sample recoveries are assessed by weighing 1m samples from the cyclone on a scale in the field and comparing with the theoretical volume contained in a 1m x 140mm diameter hole to calculate an estimated
		percentage sample recovery. For RC drilling, average recoveries are in the order of 76% and considered acceptable. Core recovered from each drill run is measured and compared with the drill run length drilled to calculate an estimated percentage core recovery. For core drilling overall recoveries are excellent, weighted average recovery greater than 98%.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Measures taken include the use of bigger HQ core size diamond drilling to maximise recovery, having a geologist onsite to examine core and core metres marked and orientated to check against the driller's blocks and ensuring that all core loss is taken into account. At the reverse circulation rig, sampling systems are routinely cleaned to minimise the opportunity for contamination and drilling methods are focused on sample quality. The measures taken to maximize RC sample recovery are through a cyclone and a 3-tier riffle splitter. Each 1m sample is passed twice through the splitter before sampling to ensure maximum homogenisation of each sample and to collect an unbiased representative sample to be assayed Most of the reverse circulation rigs have auxiliary compressors and boosters to help maintain dry samples. Where wet samples are encountered, the reverse circulation drilling is discontinued and is progressed with diamond core drilling.







Criteria	JORC Code Explanation	Commentary
	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.	No relationship is seen to exist between sample recovery and grade, and no sample bias due to preferential loss/gain of any fine/coarse material due to the acceptable sample recoveries obtained by both drilling methods employed.
Logging	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.	All drill holes are fully logged. The lithology, alteration and geotechnical characteristics of core are logged directly to a digital format on a Field Toughbook laptop logging system following procedures and using Cardinal geologic codes. Data is imported into Cardinal's central database after validation in LogChief™. All geological logging is to a level of detail to support Mineral Resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is both qualitative and quantitative depending on field being logged. Both RC chips in trays and HQ core are photographed both in dry and wet form.
	The total length and percentage of the relevant intersections logged.	All holes are logged in full and to the total length of each drill hole. 100% of each relevant intersection is logged in detail.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Core orientation is completed for all diamond holes and all are marked prior to sampling. Longitudinally cut half core samples are produced using a Core Saw. Samples are weighed and recorded.
		Some quarter core samples have been used and statistical test-work has shown them to be as equally representative as quarter core.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC samples are split using a three-tier riffle splitter. The majority of RC samples are dry. On occasions that wet samples are encountered, they are dried prior to splitting with a riffle splitter.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Drill core samples are sorted, dried at 105°C for 4 hours and weighed. Samples are firstly Jaw Crushed and a second stage crushing is through RSD Jaques crusher to a nominal -2mm and then split to <1.0kg. The reject sample is retained in the original bag and stored. The split is pulverised in a LM2 to a nominal 85% passing 75%µm and approximately 200g sub-sample of the pulverised material is used for assay. Chip samples are sorted and dried in an oven for 8 hours and weighed. They are then crushed to -2mm using a RSD Boyd crusher and a <1.0kg split is taken. The reject sample is retained in the original bag and stored. The split is pulverised in a LM2 to a nominal 85% passing 75µm and a 200g sub-sample is used for analysis. All preparation equipment is flushed with barren material prior to commencement of the job.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	1:50 sample is screened to confirm percentage passing 2mm (crushed) and 75μm (pulverised). Crusher and pulveriser are flushed with barren material







Criteria	JORC Code Explanation	Commentary
		at the start of every batch.
	Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling.	Sampling is carried out in accordance with Cardinal protocols as per industry best practice. Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples is to insert commercial certified reference material (CRM) for standards and in-house blanks every 22 samples. SGS Laboratory assays duplicate samples of each sample batch (20%) so that representivity of the samples can be checked Field duplicates have been taken and analysis of results
	Whether sample sizes are appropriate to the grain size of the material being sampled.	have shown the sampling to be representative. Measures taken to ensure that the RC sampling is representative of the in-situ material collected are to take field duplicate samples every 22nd sample. Approximately 3kg samples from the splitter are retained from each sample and stored on the company's premises for possible re-assay. Measures taken to ensure that the core sampling is representative is to sample quarter core at 1m intervals irrespective of lithologies due to the similarities in grade of the main lithologies. Results of field duplicates, standards and blanks are all plotted graphically to ensure that the results of each assay batch are acceptable.
Quality of Assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools,	Samples are analysed for Au by lead collection fire assay of a 50g charge with ASS finish; the assay charge is fused with the litharge based flux, cupelled and prill dissolved in aqua regia and gold determined by flame AAS. The quality of the Fire Assaying and laboratory procedures are considered to be entirely appropriate for this deposit type. The analytical method is considered appropriate for this mineralisation style and of industry standards. No hand held geophysical tools are used.
	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. Nature of quality control procedures adopted (o.g.	Sample preparation checks for pulp fineness are carried
	procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	out by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75µm is being attained. Laboratory QAQC involves the use of internal lab standards using certified reference material and blanks. Cardinal's QAQC protocol is considered industry standard with standard reference material (SRM) submitted on a regular basis with routine samples. The







Criteria	JORC Code Explanation	Commentary
		SRMs having a range of values and blanks are inserted in the ratio of 1:22. Duplicates are taken at the riffle splitter at a ratio of 1:20 samples. No duplicate samples are taken from core samples. Pulps are submitted to an external laboratory for checks on accuracy and precision.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have been verified by alternative company personnel.
	The use of twinned holes.	None of the drill holes in this report are twinned.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data are captured on field tough book laptops using LogChief™ Software. The software has validation routines and data is then imported onto a secure central database.
	Discuss any adjustment to assay data.	The primary data is always kept and is never replaced by adjusted or interpreted data.
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.	Planned drill hole collar coordinates are surveyed using handheld Garmin GPSmap 62s GPS within ±3m accuracy. All drill collars are accurately surveyed using Tremble R8 RTK GPS system within ±10mm of accuracy (X, Y, Z). Coordinates are based on 12 control stations established on the Namdini site by Sahara Mining Services. Downhole survey is completed by using Reflex Ez-Shot survey instrument at regular intervals.
	Specification of the grid system used.	Coordinate and azimuth are reported in UTM WGS84 Zone 30 North.
	Quality and adequacy of topographic control.	Topographic control was established from aerial photography using a series of 12 surveyed control points. A 1m ground resolution DTM was produced by Sahara Mining Services from the survey completed in 24 flights using the DJI Inspire 1 UAV at an altitude of 100m with an overlap of 70%.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill spacing is at 50m x 100m line spacing with infill to 50m x 50m and 10m x 15m in areas to establish mineralisation continuity and upgrade the Mineral Resource.
	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.	Drill data spacing and distribution are sufficient to establish the geological and grade continuity appropriate for reporting Mineral Resource and Ore Reserve and classifications applied.
Orientation of	Whether sample compositing has	No sample compositing has been applied.
data in relation	been applied.	
to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The majority of the drill holes are orientated to achieve intersection angles as close to perpendicular to the mineralisation as practicable. This achieves unbiased sampling of possible structures as drilling is orientated normal to the dip and foliation of the deposit. Structural







Criteria	JORC Code Explanation	Commentary
		measurements confirm that the foliation of the entire deposit dips -60°W so that the sampling achieves unbiased sampling of the lithologies
	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.	No significant orientation based sampling bias is known at this time.
Sample security	The measures taken to ensure sample security.	An independent Ghanaian security contractor is used to ensure sample security. The drilling contractor is accountable for drill core and RC chips production at the drill site. Final delivery from the drill site to the laydown within the core yard is managed by Cardinal. The core yard technicians, field technicians and Geologists ensure the core and chips are logged, prepared and stored under security until collected by SGS for delivery to the laboratories. At the time of sample collection, a sign-off process between Cardinal and the SGS delivery truck driver ensures the samples and paper work corresponds. The samples are then transported to the SGS Tarkwa (Ghana) or SGS Ouagadougou (Burkina Faso) laboratory where they are receipted against the dispatch documents. The assay laboratories are responsible for the samples from the time of collection from Namdini Project site until final results are returned and checked by Cardinal Geologists. Sample pulps and coarse rejects are retained by the laboratories and are shipped back to Namdini after final results are returned where they are stored under security.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques are of industry standards. Data is audited by Maxwell Geoservices (Perth), who have not made any other recommendations.







Section 2 – Reporting of Exploration Results

(Criteria listed in section 1 will also apply to this section where relevant)

Criteria	JORC Code Explanation	Commentary
Mineral	Type, name/reference number,	The Mining Licence covering Cardinal's Namdini Project
Tenement and	location and ownership including	over an area of approximately 19.54 sq. Km is located
Land Status	agreements or material issues with	in the North-East region of Ghana.
	third parties including joint	The previous holder of the Mining Licence, Savannah
	ventures, partnerships, overriding	Mining Ghana Limited (Savanah) completed an initial
	royalties, native title interests, historical sites, wilderness or	Environmental Impact Statement (EIS) and lodged the
	historical sites, wilderness or national park and environmental	EIS with the Environmental Protection Agency of Ghana.
	settings.	Cardinal and Savannah have both signed the necessary
	Sectings.	documents to assign the Namdini Mining Licence to
		Cardinal Namdini Mining Limited (Cardinal Namdini), a
		wholly owned subsidiary of Cardinal Resources, for
		US\$1.00 as per the Savannah agreement. After the
		completion of the upcoming Preliminary Economic
		Assessment, Cardinal Namdini will submit to the
		Minerals Commission an updated EIS and an application for an Operating Permit, bringing all permitting for the
		Namdini Project on track for development.
	The security of the tenure held at	All tenements are current and in good standing.
	the time of reporting along with any	g
	known impediments to obtaining a	
	license to operate in the area.	
Exploration	Acknowledgment and appraisal of	Aside from Cardinal there has been no recent
Done by Other	exploration by other parties.	systematic exploration undertaken on the Namdini
Parties	Danasit tuma analasi adan attina and	Project.
Geology	Deposit type, geological setting and style of mineralisation	The deposit type comprises gold mineralisation within sheared and highly altered rocks containing sulphides;
	style of filliferalisation	mainly pyrite with minor arsenopyrite.
		The geological setting is a Paleoproterozoic Greenstone
		Belt comprising Birimian metavolcanics, volcaniclastics
		and metasediments located in close proximity to a
		major 30 km ~N-S regional shear zone with splays.
		The style of mineralisation is hydrothermal alteration
Duill hal-	A	containing disseminated gold-bearing sulphides.
Drill hole information	A summary of all information material to the understanding of	A compilation of all drill hole information used in the resource estimate can be downloaded from the
	the exploration results including	Cardinal Resources website.
	tabulation of the following	http://www.cardinalresources.com.au/technical-
	information for all Material drill	reports/
	holes:	
	Easting and northing of the	
	drill hole collar	
	Elevation or RL (Reduced	
	Level – elevation above sea	
	level in meters) of the drill	
	hole collar	
	Dip and azimuth of the holeDown hole length and	
	- Down hole length and	







Criteria	JORC Code Explanation	Commentary
	interception depth	
	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	There has been no exclusion of information.
	explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	No weighting averaging techniques nor cutting of high grades have yet been undertaken.
	Where aggregated 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.	Aggregated intercepts incorporating short lengths of high grade results within the lithological units are calculated to include no more than intervals of 3m below grades of <0.5 g/t Au when assay results are reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents are used in the intersection calculation.
Relationship between mineralisation	These relationships are particularly important in the reporting of exploration results.	The relationship between mineralisation widths and intercept length is not yet known.
widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The geometry of the mineralisation with respect to the drill hole angle is not yet known.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The geometry of the mineralisation is unknown; only downhole length is reported (no true width of mineralisation is reported).
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plane view of drill hole collar locations and appropriate sectional views.	Appropriate maps and cross-sections with scale are included within the body of the accompanying document.
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practical, representative reporting	The accompanying document is considered to represent a balanced report.







Criteria	JORC Code Explanation	Commentary
	of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; 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.	Other exploration data collected is not considered material to this document at this stage. The interpretation of the geological observations shown in the cross and long sections are subject to possible change as new information is gathered. Further data collection will be reviewed and reported when considered material.
Further Work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Exploration drilling will continue to target projected lateral and depth extensions of the mineralisation and infill drilling to increase the confidence in the Mineral Resource.







Section 3 – Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
Database	Measures taken to ensure that data	The Data is managed using DataShed© drill hole
integrity	has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	management software (Maxwell Geoservices) using SQL database techniques. Validation checks were conducted using SQL and DataShed relational database standards. All geological and field data is entered using data-loggers and software developed by Maxwell GeoServices, that includes lookup tables and fixed formatting (and protected from modification) thus only allowing data to be entered using the Cardinal geological code system and sample protocol. Data is then loaded to the DataShed database, which was managed by consultants Maxwell GeoServices. Cardinal technical personnel validated the database using Micromine software. The DataShed database is then reviewed against the original logging spreadsheets and the assay data checked against the supplied assay certificates. The Competent Person's independent checks of database validity included checking for internal consistency between, and within database tables and comparing 97% of database assay entries with laboratory source files supplied by Cardinal. These checks showed no significant discrepancies in the database used for resource estimation.
	Data validation procedures used.	Following importation, the data goes through a series of digital checks for duplication and non-conformity, followed by manual validation by the relevant project geologist who manually checks the collar, survey, assay and geology for errors against the original field data and final paper copies of the assays. The process is documented, including the recording of holes checked, errors found, corrections made and the date of database update. Basic validation checks were carried out to confirm the data is valid and acceptable to support resource estimation work. MPR Geological Consultants Pty Ltd ("MPR") reviewed the QA/QC results.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	Nicolas Johnson of MPR Geological Consultants Pty Ltd (MPR) has visited the Namdini Gold Project in January 2017 to review the operation as part of the 2017 Mineral Resource update. N/A







Criteria	JORC Code Explanation	Commentary
Geological	Confidence in (or conversely, the	Gold mineralization above the cut-off of grade is
interpretation	uncertainty of) the geological	widespread within the meta-volcanic, granite and diorite
	interpretation of the mineral	rocks which can be interpreted and modelled with a high
	deposit.	degree of confidence. There is a sharp mineralization
		boundary with the meta-sediments in the footwall while
		the hanging wall contact exhibits a more diffuse mineralization boundary. Higher grade mineralization
		(>0.5 g/t Au) can be traced along structural corridors
		related to a pervasive NW-SE foliation which has been
		warped around the more competent granite. There is
		abundant structural information from oriented core
		which confirms this assumption.
		Based on these observations, and geological
		interpretations, a broad (0.1gt Au) low grade
		mineralisation package was developed. The
		mineralisation constraint was traceable at low grades for
		overall 1300m and is up to 300m wide. The mineralisation dips approximately 55° to 60° towards
		the west.
	Nature of the data used and of any	The drill hole database used for resource estimation
	assumptions made.	consists of DD core and RC samples. Numerous
		validation steps have been taken by MPR and Cardinal
		Competent persons and various consultants. MPR is of
		the opinion that the drill hole database is of sufficient
		quality to support the estimation of Mineral Resources. The geological data used to construct the geological
		model includes regional and surface mapping and
		logging of RC and diamond core drilling. A nominal
		0.1g/t Au lower cut-off grade was applied to the
		mineralisation model.
		Oxidation codes and densities were assigned to model
		estimates from triangulated surfaces representing the
		base of oxidation, and base of transitional material (top
		of fresh rock) respectively which were interpreted from geological logging.
	The effect, if any, of alternative	The geology of the deposit is relatively simple, and the
	interpretations on Mineral	interpretation is considered robust. There is no
	Resource estimation.	apparent alternative to the interpretation in the
		company's opinion at this point.
		As the project advances towards the declaration of
		Mineral Reserves, the characterization and treatment of
		higher grade mineralization and the application of a litho-structural model including mineralization
		wireframes may become necessary.
	The use of geology in guiding and	The Mineral Resource Estimate uses, lithological and
	controlling Mineral Resource	structural information collected to guide the
	estimation.	interpretation.
		The mineralisation geometry has a strong relationship
		with the interpreted alteration and structure. The







Criteria	JORC Code Explanation	Commentary
		lithology contacts and the weathering changes do not appear to materially control the mineralisation although the metavolcanics and the tonalite (granite) mineralisation is on average higher grade than the diorite and metasediment mineralisation. Little grade variation is noted between the different weathering groupings. The grade estimate is based on a gold grades and the mineralisation package defined above a 0.1gt Au lower cut-off grade.
	The factors affecting continuity both of grade and geology.	The continuity of grade is associated with a pervasive foliation, alteration, sulphides and the spatial distribution of lithologies including the interaction between structure and lithological competency contrasts. A broad zone of anomalous mineralisation is interpreted. The grade continuity at lower cut-off grades is good, however this grade continuity is materially reduced at higher cut-off grades as expected in a gold deposit. Geological setting and mineralisation controls have been established with sufficient confidence for the current estimates.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The Mineral Resource is widespread extending over and area 350 m wide (horizontal thickness), 1.2 km along strike and to a depth of 600 m below surface. Mineralization generally dips at 55° towards the NW with local changes in dip corresponding to lithological contacts and foliation directions.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	MPR used the method of Multiple Indicator Kriging (MIK) with block support adjustment to estimate gold resources into blocks with dimensions of 12.5 m (east) by 25 m (north) by 5m (elevation). MIK of gold grades used indicator variography based on the two metre resource composite sample grades. Gold grade continuity was characterised by indicator variograms at 14 indicator thresholds spanning the global range of grades. A block support adjustment was used to estimate the gold resources at Namdini. The shape of the local block gold grade distribution has been assumed lognormal and an additional adjustment for the "Information Effect" has been applied to arrive at the final Mineral Resource. MIK was used as the preferred method for estimation of gold resources at Namdini as the approach has been demonstrated to work well in a large number of deposits of diverse geological styles. The gold mineralisation seen at Namdini is typical of that seen in most







Criteria	JORC Code Explanation	Commentary
		structurally controlled gold deposits where the MIK method has been found to be of most benefit. In the MPR study data viewing, compositing and wireframing have been performed using Micromine software. Exploratory data analysis, variogram calculation and modelling, and resource estimation have been performed using FSSI Consultants (Australia) Pty Ltd (FSSI) GS3M software. GS3M is designed specifically for estimation of recoverable resources using MIK. The sample data set containing all available assaying were composited to two metre intervals each located by their mid-point co-ordinates and assigned a length weighted average gold grade. The composite length of two metres was chosen because it is a multiple of the most common sampling interval (1.0 metre) and is also an appropriate choice for the kriging of gold into the model blocks where open pit mining is undertaken on
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	2.5 metre benches. Resulting estimates were compared with the previous estimate performed by RPA. For the same area covered by RPA, the MPR estimate statistics and results are within 5% for grade, tonnes and ounces at the cut-off grade. MPR's estimate has the benefit of additional drilling and covers a larger area accounting for the global variances.
	The assumptions made regarding recovery of by-products.	There is no assumption made regarding the recovery of any by-product.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	No block models for potentially deleterious or other non-grade variables have been built.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Block dimensions used were 12.5 mE by 25mN by 5 mRL and chosen due to this dimension approximates the average drill spacing in the modelled resource areas and is consistent with the north-northwest mineralized strike. A three-pass octant search strategy was used to define the local neighborhood data used in the kriging to produce the three modelled resource confidence categories. The highest confidence blocks are estimated using search radii of 65 mE by 65 mN by 15mRL and a minimum of 16 data coming from a minimum of 4 octants. The second and third pass estimates were estimated using an expanded search of 50% with 8 and 4 minimum data and 4 and 2 minimum octants, respectively. All estimation passes use a maximum of 48 data







Criteria	JORC Code Explanation	Commentary
Criteria	Any assumptions behind modelling	The selective mining unit at Namdini is expected to be in
	of selective mining units.	the order of 5 mE by 10 mN by 2.5 mRL
	Any assumptions about correlation	The modelling did not include any specific assumptions
	between variables.	about correlation between attributes.
	Description of how the geological	about correlation between attributes.
	interpretation was used to control	
	the resource estimates.	
	Discussion of basis for using or not	Statistical analysis showed the gold population in the
	using grade cutting or capping.	mineralized domains to be highly skewed and generally
	danis stade catting of capping.	having moderate to high coefficient of variation.
		A disproportionate amount of metal is located within
		the upper tails of the gold distributions. Histograms, log
		probability plots and decile analyses were used to
		evaluate the proportions of metal at risk and to establish
		appropriate capping levels.
		All indicator class grades were determined from class
		mean grades, with the exception of upper bin, which
		were derived either after exclusion of a few extreme
		grades or by selecting the class median as the average
		grade of the highest indicator bin.
	The process of validation, the	Standard validation procedures were performed on the
	checking process used, the	block model including: visual inspection of composite
	comparison of model data to drill	versus block grades on plan and vertical sections.
	hole data, and use of reconciliation	Geological elements coded to the block model include
	data if available.	the weathering surfaces, geology model for the granite,
		metavolcanics, diorite and the metasediments.
Moisture	Whether the tonnages are	Tonnages are estimated on a dry basis.
	estimated on a dry basis or with natural moisture, and the method	
	of determination of the moisture	
	content.	
Cut-off	The basis of the adopted cut-off	The cut-off grades used for resource reporting reflect
parameters	grade(s) or quality parameters	Cardinal's interpretation of the potential project range
[applied.	of gold prices, and process plant recoveries and
		operating costs for a potential operation. The resource
		estimate was reported using a 0.5 g/t Au cut-off grade is
		constrained by an optimal pit shell based on a long-term
		gold price of US\$1,500 /oz using factors relevant to
		location and proposed mining method.
Mining factors or	Assumptions made regarding	Conventional open pit operation with drill, blast, load
assumptions	possible mining methods, minimum	and haul unit operations.
	mining dimensions and internal (or,	It is anticipated that large scale open pit mining methods
	if applicable, external) mining	will be applied for the Namdini Project resources.
	dilution. It is always necessary as	Grade control of ore blocking will be based on sampling
	part of the process of determining	from high quality reverse circulation drilling spaced at
	reasonable prospects for eventual economic extraction to consider	approximately 10mE by 12mN with samples taken at 1.25 metre intervals down-hole.
	potential mining methods, but the	1.25 metre miervais down-noie.
	assumptions made regarding	
	assumptions made regarding	







Criteria	JORC Code Explanation	Commentary
	mining methods and parameters	
	when estimating Mineral Resources	
	may not always be rigorous.	
	Where this is the case, this should	
	be reported with an explanation of	
	the basis of the mining	
	assumptions made.	
Metallurgical	The basis for assumptions or	Conventional milling of mineralized material, followed
factors or	predictions regarding metallurgical	by flotation, regrind and cyanide leaching of the
assumptions	amenability. It is always necessary	concentrate.
	as part of the process of	Utilizing standard gold recovery techniques has
	determining reasonable prospects	demonstrated an overall gold recovery rate of 86%.
	for eventual economic extraction	A conventional grind-flotation-regrind-CIL flowsheet
	to consider potential metallurgical	continues to be the preferred process option.
	methods, but the assumptions	Recovery appears to be dependent upon the ratio of the
	regarding metallurgical treatment	different lithologies, which change as the resource
	processes and parameters made	model is updated and depending upon the cut-off grade.
	when reporting Mineral Resources	
	may not always be rigorous.	
	Where this is the case, this should	
	be reported with an explanation of	
	the basis of the metallurgical	
	assumptions made.	
Environmental	Assumptions made regarding	Cardinal's exploration activities are undertaken such
factors or	possible waste and process residue	that any potential emissions and effects associated
assumptions	disposal options. It is always	exploration activities, which could include habitat
	necessary as part of the process of	modification and associated visual effects, are kept to a
	determining reasonable prospects	minimum.
	for eventual economic extraction	NEMAS Consult Ltd (NEMAS), of Accra, Ghana, has been
	to consider the potential	contracted by Cardinal to undertake the Environmental
	environmental impacts of the	Impact Assessment study for the Project.
	mining and processing operation.	NEMAS has undertaken a site reconnaissance visit and
	While at this stage the	completed the Scoping stage of the process in
	determination of potential	accordance with the Ghanaian Environmental Protection
	environmental impacts, particularly	Agency procedures for the EIA.
	for a greenfields project, may not	The scoping study has been submitted to commence the
	always be well advanced, the status	process of Environmental Impact Statement (EIS) in
	of early consideration of these	accordance with Regulations 15(1b) and (1c) of the
	potential environmental impacts	Environmental Assessment Regulations, 1999 (LI 1652) and Ghana's Environmental Impact Assessment (EIA)
	should be reported. Where these	Procedures, the Environmental Protection Agency (EPA).
	aspects have not been considered this should be reported with an	Cardinal believes that there are unlikely to be any
	explanation of the environmental	
	assumptions made.	specific environmental issues that would preclude potential eventual economic extraction.
	assumptions made.	potential eventual economic extraction.
Bulk density	Whether assumed or determined.	A substantial body of rock density (SG) measurements
Duik delisity	If assumed, the basis for the	for the Namdini deposits were collected.
	assumptions. If determined, the	Bulk density is determined using Archimedes principal
	method used, whether wet or dry,	on DD core samples.
	method asca, whether wet or dry,	on DD core samples.







Criteria	JORC Code Explanation	Commentary
	the frequency of the measurements, the nature, size and representativeness of the samples.	 Oxide – 2.06 Transition Meta Volcanics – 2.54 Transition Granite – 2.54 Transition Diorite – 2.58 Transition Meta Sediments – 2.58 Fresh Meta Volcanics – 2.81 Fresh Granite – 2.73 Fresh Diorite – 2.82 Fresh Meta Sediments - 2.82
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Weathered samples are wrapped in foil and dried out before being wax coated.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Assigned bulk density values were determined for lithological and weathering domains. Density outliers were removed using Rosner outlier detections applying a 95% confidence interval. A density of 1.8 t/m³ was assigned to the strongly oxidised horizon since the average measured density appears too high.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	Mineral resources were classified on the basis of estimation search passes. A progressively less stringent three pass search strategy produces the three categories of confidence. The highest confident estimate uses a search ellipse of approximately the same dimension of the dominant drill spacing and a significant number of resource composites selected from within an octant constraint. The search radii are expanded and sample criteria relaxed for the second and third categories The current drill hole spacing does not support Measured Mineral Resources, only Indicated (search pass 1) and Inferred (combined search pass 2 and 3) is reported. The resource classification accounts for all relevant factors and reflect the competent person's views of the deposit.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	There is a relatively low risk for tonnes above the cut-off grade due to the pervasive gold mineralization exceeding the cut-off grade. The average grade of the deposit above the cut-off grade is sensitive to the treatment and volumes applied to high grades. The majority of the resources require additional drilling to facilitate conversion to Measured category and the current classification designation support this.







Criteria	JORC Code Explanation	Commentary
	Whether the result appropriately	The resulting classification reflects the Competent
	reflects the Competent Person's	Person's view of the deposit.
Audits or reviews	view of the deposit. The results of any audits or reviews	Mineral resources have been previously undertaken by
Addits of Teviews	of Mineral Resource estimates.	independent external consultants.
Discussion of	Where appropriate a statement of	MPR's model has an overall increase in tonnages and
relative	the relative accuracy and	contained metal from previous resource estimates by
accuracy/	confidence level in the Mineral	RPA. The difference can be attributed to:
confidence	Resource estimate using an	Additional 86 drill holes totalling 33,406.15 metres
	approach or procedure deemed	Changes to the classification criteria.
	appropriate by the Competent	Changes to the Mineral Resource Estimation
	Person. For example, the	Methodology.
	application of statistical or geostatistical procedures to	Changes to cut-off grade.Mineral Resource constrained by a Optimised pit
	quantify the relative accuracy of	shell.
	the resource within stated	For the assessment of reasonable prospects of
	confidence limits, or, if such an	economic extraction, mineral resources have been
	approach is not deemed	assessed using pit optimisation, based on a gold
	appropriate, a qualitative	price of US\$1,500/oz, and the following key input
	discussion of the factors that could	parameters: mill-flotation-concentrate regrind-CIL
	affect the relative accuracy and	process route with metallurgical recovery of 90%
	confidence of the estimate.	for oxidized mineralisation, 86% for transitional
		mineralisation, 86% for fresh mineralisation; assuming a bulk mining, low to moderate mining
		selectivity open pit operation with operating costs
		appropriate for Ghana, dependent on key
		parameters, such as gold price, annual throughput,
		process plant recoveries and operating costs.
	The statement should specify	The resource has been classified as Indicated and
	whether it relates to global or local	Inferred and is a global estimate. Additional drilling will
	estimates, and, if local, state the relevant tonnages, which should be	be undertaken to improve on the resource classification. The relative accuracy of the Mineral Resource is
	relevant to mages, which should be relevant to technical and economic	reflected in the reporting of Indicated and Inferred.
	evaluation. Documentation should	The resource's relative accuracy is based on data quality,
	include assumptions made and the	data quantity, geological confidence and the estimation
	procedures used.	accuracy.
	These statements of relative	The precision of the estimation is globally acceptable
	accuracy and confidence of the	with the assumption that at a mining level more detailed
	estimate should be compared with	grade control drilling will be undertaken.
	production data, where available.	The geostatistical techniques applied to estimate the
		Namdini deposit are deemed appropriate for the anticipated bulk mining method proposed.
		anticipated bulk mining method proposed.



