

25 July 2014

CARDINAL SIGNS STRATEGIC HEADS OF AGREEMENT WITH SAVANNAH MINING LIMITED

Cardinal Resources Limited (ASX: CDV) (“Cardinal” or “the Company”), is pleased to announce that its wholly owned subsidiary, **Cardinal Mining Services Limited** (CMS), has signed a Heads of Agreement (HOA) with Savannah Mining Ghana Limited (Savannah), a Ghanaian based unlisted mining company, to provide “Mining Support” services to Ghanaian Mining Licence holders.

HIGHLIGHTS

- **CMS signs binding HOA with Savannah.**
- **Savannah to enter separate contracts with Ghanaian Mining Licence holders and CMS to provide “Mining Support” services under the HOA to “Explore and Develop with a Royalty”.**
- **Savannah, by virtue of the HOA with CMS, has signed a strategic agreement with Ghanaian Mining licence holder Namdini Mining Limited (Namdini) on its gold bearing property within close proximity of Cardinal’s Bolgatanga Project.**
- **Significant results from recent drilling activity at Namdini include:**
 - **40m @ 1.37 g/t from 14m vertical;**
 - **18m @ 3.12 g/t from 16m vertical including 1m @ 24.00 g/t from 26m vertical;**
 - **17m @ 3.77 g/t from 30m vertical, including 1m @ 44.30 g/t from 37m vertical;**
 - **16m @ 1.29 g/t from 9m vertical; and**
 - **4m @ 2.80 g/t from 9m vertical.**

Managing Director, Archie Koimtsidis, Ghana, commented:

“The signing of the HOA with Savannah provides Cardinal a strategic opportunity to expand its Bolgatanga Project in Ghana. Through the HOA, Savannah will provide CMS contracts with residential holders of Ghanaian Mining License(s) to explore, develop, and operate the Mining Licence. Cardinal, through CMS, will provide “Mining Support” services toward the development of the Mining Licences secured by Savannah under development agreements.

“We are very pleased that, under the arrangement, Savannah has provided CMS with our first signed development agreement with Namdini. Previous RC drilling at the Namdini Mining Licence intercepted some very encouraging gold grades at shallow depths. Cardinal intends to complete a further 2,500m of RC drilling both along strike and at depth from the current gold intercepts (refer to Figures 5-8 and Table 1)”.

“Savannah has agreed to immediately pursue further “Mining Support” contracts with other Ghanaian Mining License holders in the direct vicinity of the Namdini Mining License, which will expand the potential to identify areas hosting additional gold occurrences ”.

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BINDING HOA BETWEEN CARDINAL MINING SERVICES LIMITED AND SAVANNAH MINING GHANA LIMITED

Key terms of HOA include the following:

- CMS has entered into a Heads of Agreement with Savannah on an exclusive right of first refusal basis, to provide technical and financial support towards the development of Ghanaian Mining License(s) which Savannah will secure under development agreements;
- CMS will assume the management of the Mining Licence(s) from exploration to development and operation, including the provision of mining support services as required;
- Funding for exploration and other costs to develop and operate the Mining License(s) will be provided by CMS, at its absolute discretion; CMS will be entitled to the entire gross mineral values won from the Mining License(s);
- Savannah will receive a royalty fee for each Mining License received, the terms of which will be finalised on an individual basis; and,
- Savannah has established the initial agreement for the Namdini Mining Licence located approximately 12 km SE from Cardinal's Ndongo East Prospect.

ABOUT SAVANNAH MINING GHANA LTD AND NAMDINI MINING LTD

Savannah has entered into a HOA to develop a Mining Licence held by Namdini. This Mining License is located in Bolgatanga, Upper East Region, south east of the producing Shaanxi underground Gold Mine and ~12km from Cardinal's Bolgatanga Project. The terms of this agreement are materially the same as those entered into between CMS and Savannah.

In addition Savannah, and therefore CMS through its exclusive development HOA with Savannah, agrees to pay to Namdini a royalty based on the net smelter receipts from the gross minerals won from the Mining Licence.

Malik Easah, a Director of Cardinal, controls Namdini through a shareholding and directorship. Notwithstanding this fact, Chapter 10 of the ASX Listing Rules does not apply to the transaction given the Company is not acquiring a 'substantial asset' as defined in the ASX Listing Rules.

NAMDINI MINING LIMITED

The Namdini licence is located ~12 km SE from Cardinal's Ndongo East Prospect (Figure 1).

CARDINAL MINING SERVICES LIMITED (CMS) DRILLING ACTIVITY ON NAMDINI LICENSE

Cardinal Mining Services Limited (CMS) was contracted to complete 5 RC holes at Namdini. Cardinal's Exploration Manager, Mr Paul Abbott, supervised the QA/QC for the 5 drill holes completed by Namdini.

All 5 RC drill holes intersected gold mineralisation over a 100m strike length and two deeper RC drill holes (NMRC00002 and NMRC00004) indicated that the gold mineralisation continues with depth. Two drill holes (NMRC00002 and NMRC00003) ended in mineralisation indicating that the ore body will be wider than shown on the Plan View (Figure 8).

During pit excavation by Namdini in late 2013, a shallow ore body was exposed which created a “**Gold Rush**” in the area immediately north of Namdini. Feverish mining activities are currently underway for ~1 km north along strike of Namdini with gold being extracted by these mining activities (Figure 2).

The “**Gold Rush**” strongly indicates the gold potential of this area and gives further encouragement to Savannah to conclude additional contracts with other Mining License holders in the immediate vicinity of Namdini.

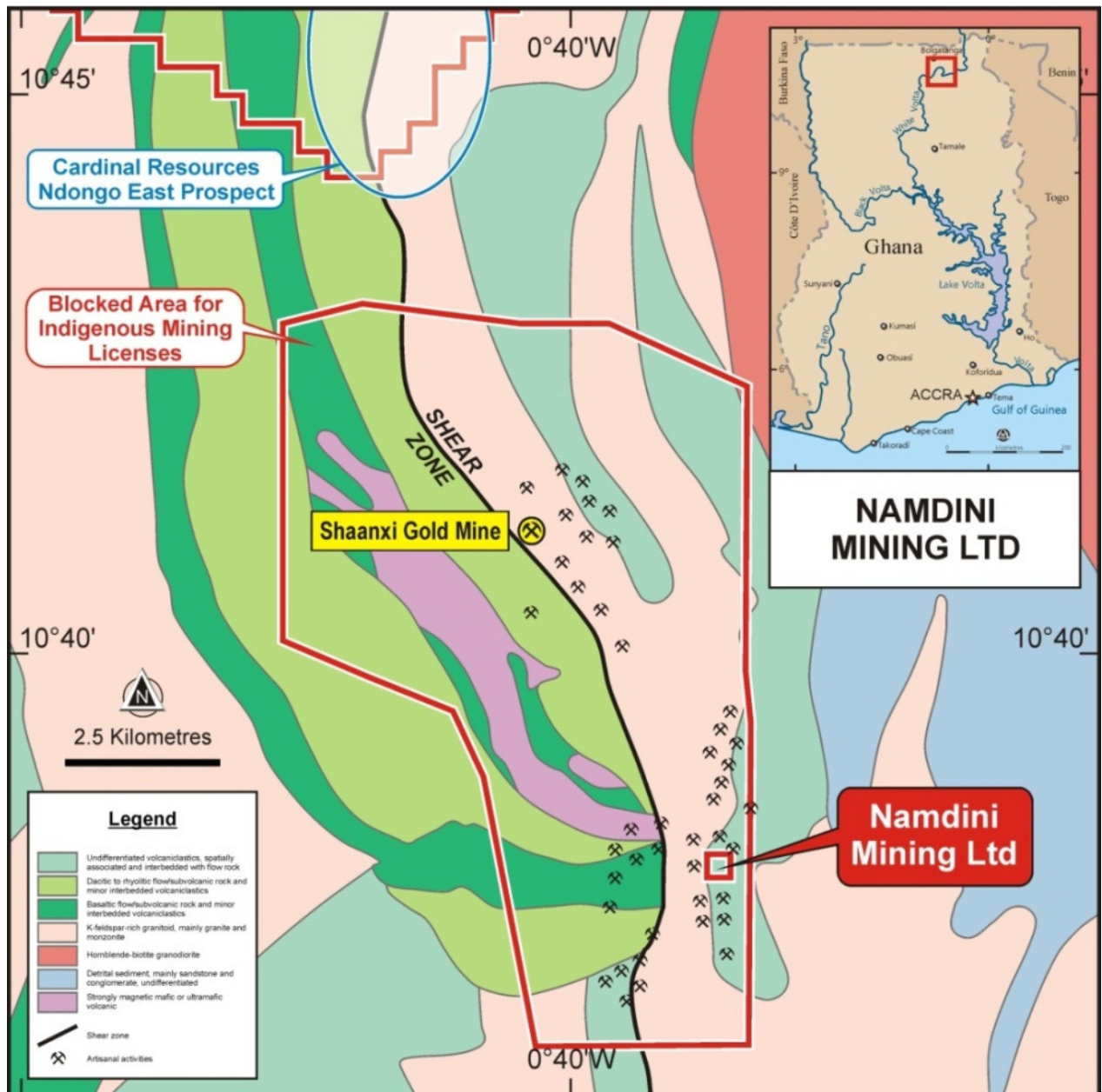


Figure 1: Namdini Proximity Map

GOLD RUSH IN PROXIMITY TO NAMDINI



Figure 2: Activities for ~1km beyond Namdini Pit

PREVIOUS EXPLORATION

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Previous exploration by Namdini comprised of excavating a shallow pit to expose the ore body (Figures 3 and 4) and the drilling of 5 inclined RC drill holes by CMS (Figures 5-8 and Table 1).



Figure 3: Namdini Pit looking north



Figure 4: Namdini Pit showing ore body dipping west

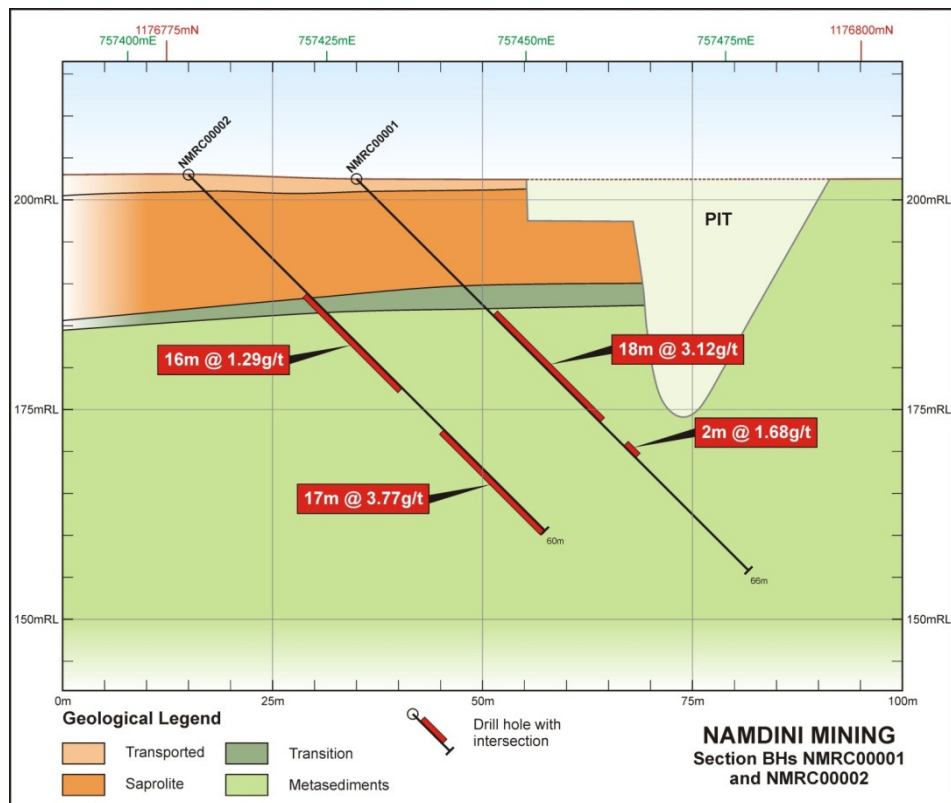


Figure 5: Namdini RC Drill Holes Section 1

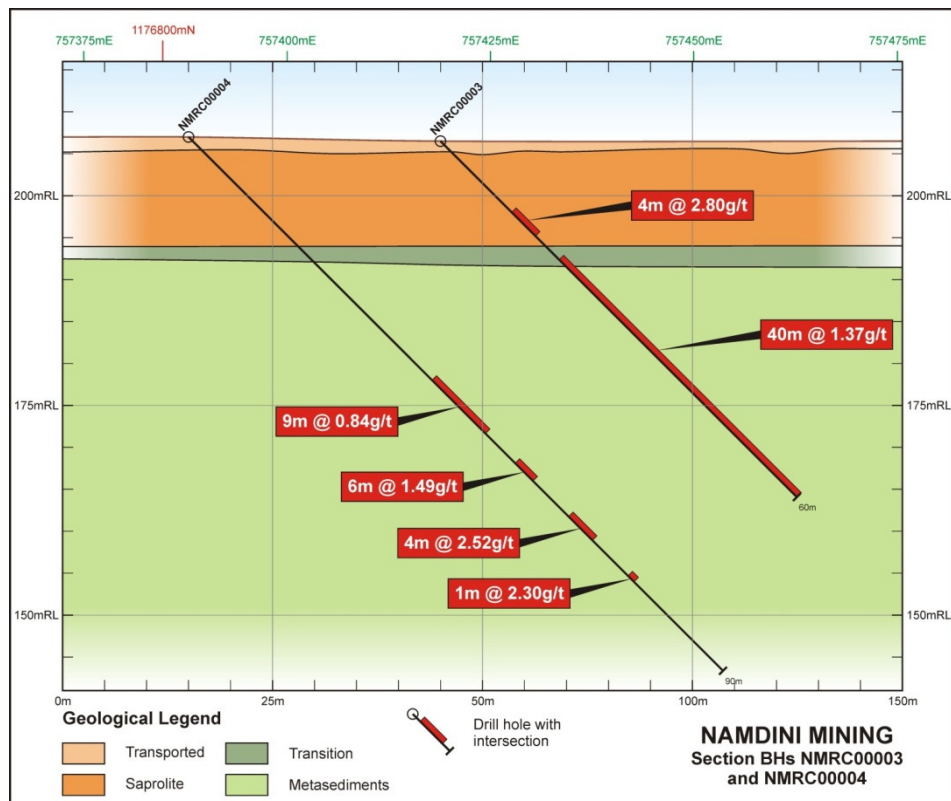


Figure 6: Namdini RC Drill Holes Section 2

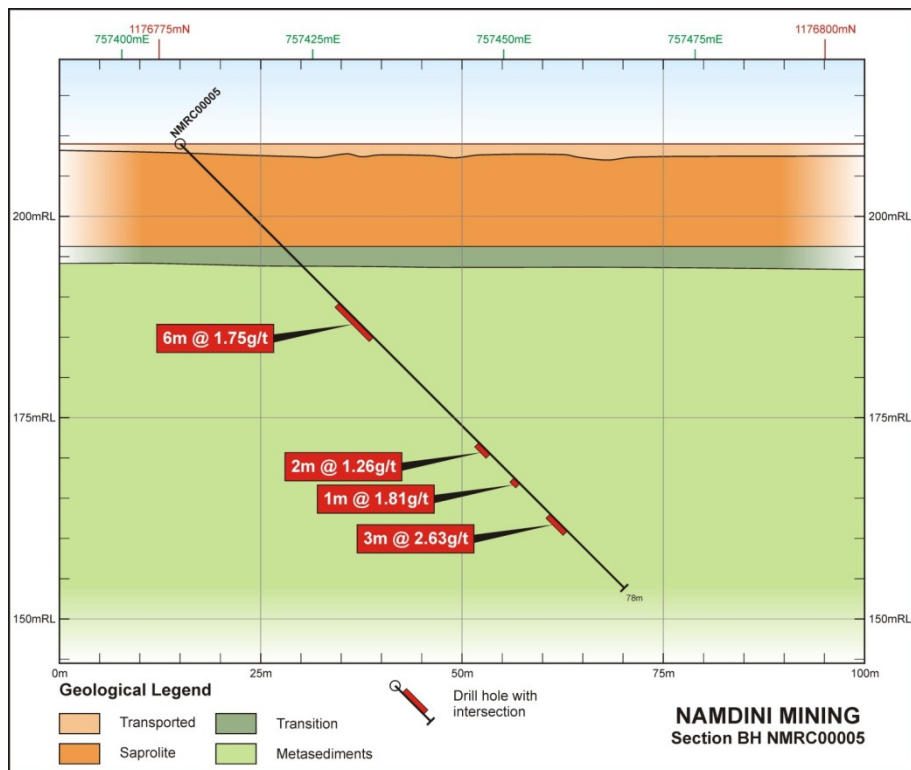


Figure 7: Namdini RC Drill Holes Section 3

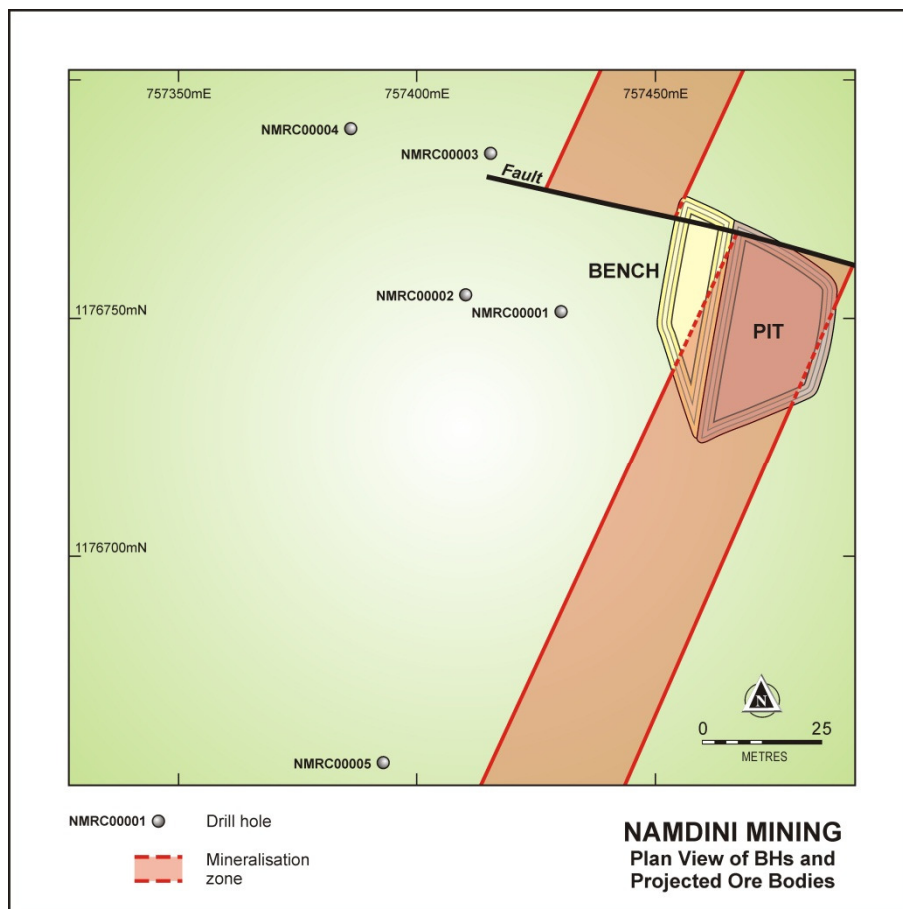


Figure 8: Namdini Plan View of pit, drill holes and projected mineralised ore body

NAMDINI RC DRILL RESULT HIGHLIGHTS

Hole ID	Easting UTM	Northing UTM	Dip (°)	Azimuth (°)	RL (m)	Length (m)	From (m)	To (m)	Width (m)	Au (g/t)
NMRC00001	757427	1176757	-45	097	202	66.00	23	41	18	3.12
Including							37	38	1	24.00
And							45	47	2	1.68
NMRC00002	757412	1176761	-45	098	203	60.00*	20	36	16	1.29
And							43	60	17	3.77
Including							53	54	1	44.30
NMRC00003	757417	1176784	-45	099	205	60.00*	12	16	4	2.80
And							20	60	40	1.37
NMRC00004	757386	1176790	-45	095	207	90.00	41	50	9	0.84
And							55	61	6	1.49
And							67	71	4	2.52
And							77	78	1	2.30
NMRC00005	757388	1176664	-45	095	209	78.00	28	34	6	1.75
And							52	54	2	1.26
And							58	59	1	1.81
And							65	68	3	2.65

* Hole ended in mineralisation

Table 1: Drill Hole Highlights - see Appendix 1 for full drill results

Geology

Namdini is located within Birimian metasediments and volcanoclastics which have been sheared and altered (Figures 9 and 10). Alteration includes silica, iron carbonate (ankerite), chlorite, sericite and minor epidote. Sulphides occur within the altered rocks and include pyrite and arsenopyrite with minor chalcopyrite (copper iron sulphide).



Figure 9: Highly altered (silica-carbonate-chlorite-sericite) volcaniclastic with sulphides (pyrite & arsenopyrite) from Namdini Pit

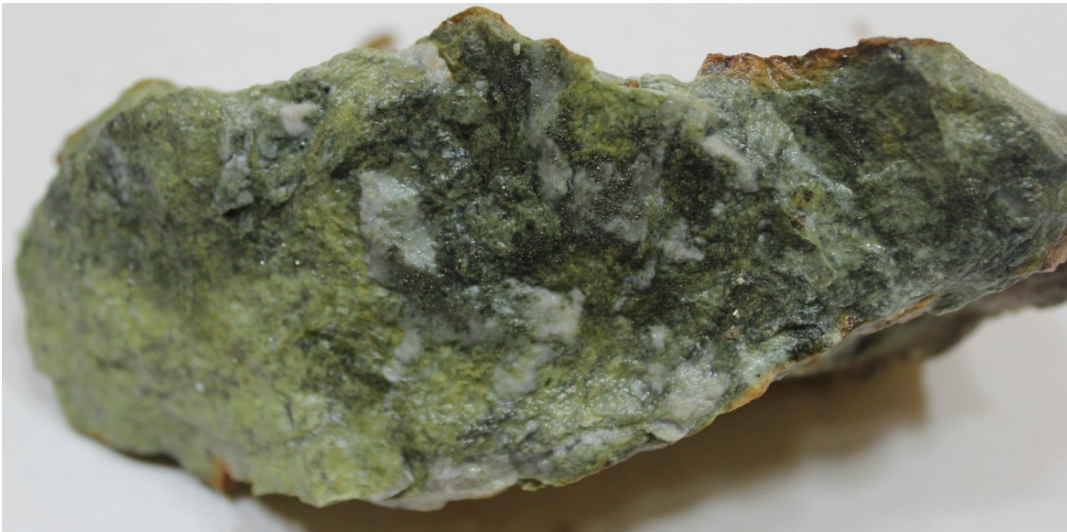


Figure 10: Sheared and highly altered (silica-carbonate-chlorite-sericite) volcaniclastic with sulphides (pyrite and arsenopyrite) from Namdini Pit

Gold mineralisation generally occurs where the rocks are sheared and altered to various shades of green, and where sulphides (pyrite and/or arsenopyrite) are developed. The unaltered, unmineralised RC rock chips are generally grey in colour and can usually be distinguished from the altered, mineralised light green coloured rock chips.

Managing Director, Archie Koimtsidis, Ghana, further commented:

“The Company is very pleased with this opportunity to drill and develop an existing mining license and potentially further adjoining mining licenses along strike. Ghanaian stakeholders in the surrounding communities share a common view of entering into commercial arrangements with CMS to provide technical development and mining support with a view to future gold production”.

For further information contact:

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Competent Person's Statement

Information in this report that relates to the Namdini Project is based on information compiled by **Mr Paul Abbott**, a full time employee of Cardinal Resources Limited, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Geological Society of South Africa. Mr Abbott has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr Abbott consents to the inclusion in this report of the statements based on his information in the form and context in which it appears.

Disclaimer

This ASX announcement (Announcement) has been prepared by Cardinal Resources Limited (ABN: 56 147 325 620) ("Cardinal" or "the Company"). It should not be considered as an offer or invitation to subscribe for or purchase any securities in the Company or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in the Company will be entered into on the basis of this Announcement.

This Announcement contains summary information about Cardinal, its subsidiaries and their activities which is current as at the date of this Announcement. The information in this Announcement 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.

Certain statements contained in this announcement, including information as to the future financial or operating performance of Cardinal Resources and its projects, are forward-looking statements that:

- may include, among other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and 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;
- are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Cardinal Resources, 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 Resources disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. 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 announcement 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.

No verification: Although all reasonable care has been undertaken to ensure that the facts and opinions given in this Announcement are accurate, the information provided in this Announcement has not been independently verified.

APPENDIX 1

NAMDINI MINING LIMITED RESULTS

Hole ID	East (UTM)	North (UTM)	Dip (°)	Azim (°)	RL (m)	Frm (m)	To (m)	Au g/t	
NMRC00001	757433	1176767	-45	097	202	0	6		
						6	12		
						12	13	0.01	
						13	14	0.15	
						14	15	0.69	
						15	16	0.44	
						16	17	0.24	
						17	18	0.54	
						18	19	0.06	
						19	20	0.04	
						20	21	0.14	
						21	22	0.24	
						22	23	0.40	
						23	24	0.80)
						24	25	1.68)
						25	26	2.56)
						26	27	1.54)
						27	28	1.32)
						28	29	2.25)
						29	30	1.66)
						30	31	3.27)
						31	32	2.58)
						32	33	0.46	) 18m @ 3.12 g/t
						33	34	2.19)
						34	35	0.73)
						35	36	1.64)
						36	37	1.17)
						37	38	24.00)
						38	39	2.38)
						39	40	0.72)
						40	41	5.28)
						41	42	0.07	
						42	43	0.07	
						43	44	0.29	
						44	45	0.09	
						45	46	2.52	) 2m @ 1.68 g/t
						46	47	0.84)
						47	48	0.24	
						48	49	0.01	
						49	50	0.06	
						50	51	0.02	
						51	52	0.26	
						52	53	0.12	

						53	54	0.01	
						54	55	0.04	
						55	56	0.03	
						56	57	0.03	
						57	58	0.18	
						58	59	0.20	
						59	60	0.24	
						60	61	0.06	
						61	62	0.25	
						62	63	0.20	
						63	64	0.11	
						64	65	0.03	
						65	66	0.17	
NMRC00002	757412	1176761	-45	098	203	0	6		
						6	12		
						12	13	0.21	
						13	14	0.16	
						14	15	0.06	
						15	16	0.24	
						16	17	0.30	
						17	18	0.17	
						18	19	0.40	
						19	20	0.07	
						20	21	2.26)
						21	22	1.31)
						22	23	0.23)
						23	24	0.99)
						24	25	0.31)
						25	26	0.99)
						26	27	0.26	) 16m @ 1.29 g/t
						27	28	0.35)
						28	29	1.27)
						29	30	0.21)
						30	31	1.41)
						31	32	1.15)
						32	33	4.97)
						33	34	2.14)
						34	35	1.75)
						35	36	1.05)
						36	37	0.32	
						37	38	0.38	
						38	39	0.29	
						39	40	0.43	
						40	41	0.20	
						41	42	0.29	
						42	43	0.25	
						43	44	0.93)
						44	45	0.13)

						45	46	0.24)
						46	47	1.16)
						47	48	0.74)
						48	49	0.65)
						49	50	4.22)
						50	51	7.57	) 17m @ 3.77 g/t
						51	52	0.98)
						52	53	0.18)
						53	54	44.30)
						54	55	0.40)
						55	56	0.59)
						56	57	0.16)
						57	58	0.14)
						58	59	0.51)
						59	60	1.27)
NMRC00003	757417	1176784	-45	099	205	0	6		
						6	12		
						12	13	3.45)
						13	14	4.37	) 4m @ 2.80 g/t
						14	15	1.77)
						15	16	1.60)
						16	17	0.08)
						17	18	0.10)
						18	19	0.25)
						19	20	0.25)
						20	21	0.85)
						21	22	0.54)
						22	23	0.99)
						23	24	2.31)
						24	25	1.43)
						25	26	9.27)
						26	27	2.50)
						27	28	2.89)
						28	29	1.30)
						29	30	0.75)
						30	31	0.27)
						31	32	0.63)
						32	33	0.29)
						33	34	1.34)
						34	35	0.54)
						35	36	0.43)
						36	37	3.14	) 40m @ 1.37 g/t
						37	38	3.73)
						38	39	1.84)
						39	40	1.05)
						40	41	0.42)
						41	42	0.38)
						42	43	2.84)

						43	44	0.66)
						44	45	0.46)
						45	46	0.19)
						46	47	1.57)
						47	48	0.27)
						48	49	0.58)
						49	50	3.46)
						50	51	1.88)
						51	52	2.06)
						52	53	0.03)
						53	54	0.83)
						54	55	0.04)
						55	56	0.29)
						56	57	0.55)
						57	58	0.71)
						58	59	0.19)
						59	60	1.11)
NMRC00004	757417	1176784	-45	099	205	18	19	0.01	
						19	20	0.04	
						20	21	0.01	
						21	22	0.01	
						22	23	0.28	
						23	24	0.21	
						24	25	0.01	
						25	26	0.01	
						26	27	0.23	
						27	28	0.18	
						28	29	0.02	
						29	30	0.01	
						30	31	0.02	
						31	32	0.06	
						32	33	0.02	
						33	34	0.13	
						34	35	0.29	
						35	36	0.47	
						36	37	0.06	
						37	38	0.17	
						38	39	0.18	
						39	40	0.16	
						40	41	0.26	
						41	42	2.31)
						42	43	0.36)
						43	44	0.23)
						44	45	0.54)
						45	46	0.46	) 9m @ 0.84 g/t
						46	47	0.36)
						47	48	1.31)
						48	49	0.17)
						49	50	1.85)

						50	51	0.14	
						51	52	0.19	
						52	53	0.22	
						53	54	0.30	
						54	55	0.37	
						55	56	2.53)
						56	57	4.00)
						57	58	0.55	) 6m @1.49 g/t
						58	59	0.11)
						59	60	0.12)
						60	61	1.60)
						61	62	0.06	
						62	63	0.05	
						63	64	0.03	
						64	65	0.11	
						65	66	0.04	
						66	67	0.41	
						67	68	5.95)
						68	69	2.28	) 4m @ 2.52 g/t
						69	70	1.18)
						70	71	0.65)
						71	72	0.21	
						72	73	0.31	
						73	74	0.17	
						74	75	0.16	
						75	76	0.45	
						76	77	0.26	
						77	78	2.30	) 1m @ 2.30 g/t
						78	79	0.03	
						79	80	0.02	
						80	81	0.18	
						81	82	0.18	
						82	83	0.21	
						83	84	0.08	
						84	85	0.10	
						85	86	0.12	
						86	87	0.06	
						87	88	0.04	
						88	89	0.10	
						89	90	0.04	
NMRC00005						6	7	0.37	
						7	8	0.15	
						8	9	0.02	
						9	10	0.02	
						10	11	0.02	
						11	12	0.08	
						12	13	0.04	
						13	14	0.02	

						14	15	0.02	
						15	16	0.01	
						16	17	0.04	
						17	18	0.01	
						18	19	0.01	
						19	20	0.01	
						20	21	0.32	
						21	22	0.06	
						22	23	0.01	
						23	24	0.01	
						24	25	0.02	
						25	26	0.04	
						26	27	0.01	
						27	28	0.02	
						28	29	3.64)
						29	30	3.92)
						30	31	0.94	) 6m @ 1.75 g/t
						31	32	0.07)
						32	33	1.13)
						33	34	0.79)
						34	35	0.01	
						35	36	0.07	
						36	37	0.01	
						37	38	0.02	
						38	39	0.01	
						39	40	0.01	
						40	41	0.67	
						41	42	0.04	
						42	43	0.01	
						43	44	0.00	
						44	45	0.01	
						45	46	0.01	
						46	47	0.01	
						47	48	0.01	
						48	49	0.04	
						49	50	0.07	
						50	51	0.15	
						51	52	0.07	
						52	53	1.21	) 2m @ 1.26 g/t
						53	54	1.30)
						54	55	0.09	
						55	56	0.11	
						56	57	0.16	
						57	58	0.30	
						58	59	1.81	) 1m @ 1.81 g/t
						59	60	0.16	
						60	61	0.02	
						61	62	0.01	
						62	63	0.01	

						63	64	0.01	
						64	65	0.01	
						65	66	6.98)
						66	67	0.37	) 3m @ 2.65 g/t
						67	68	0.60)
						68	69	0.07	
						69	70	0.48	
						70	71	0.12	
						71	72	0.10	
						72	73	0.02	
						73	74	0.01	
						74	75	0.01	
						75	76	0.03	
						76	77	0.02	
						77	78	0.25	

Gold values are uncut, cut off is grade 0.5 g/t Au. Up to 2m of "Internal Waste" (<0.5 g/t) can be included within mineralised intersection

JORC Code, 2012 Edition – Table 1
CARDINAL SIGNS STRATEGIC HEADS OF AGREEMENT WITH SAVANNAH MINING LIMITED
Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	<i>Nature and quality of sampling is carried out under QAQC procedures as per industry standards, with duplicates taken every 22nd sample, while standards and blanks are inserted in the ratio of 1:44</i>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<i>Sample representivity is ensured through a 3 tier riffle splitter, as it provides an unbiased sample.</i>
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	<i>The determination of mineralisation is not yet known</i>
	<i>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.</i>	<i>Industry standard reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 50 g charge for fire assay.</i>

Criteria	JORC Code explanation	Commentary
Drilling techniques	<i>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).</i>	<i>Reverse Circulation drilling with a standard tube, Remet 5 ½ inch Hard Face (face-sampling) button drilling bit</i>
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<i>Method of recording and assessing chip samples was on a hand held Motion F5te Tablet PC using a set of standard templates supplied by Maxwell Geoservices, Perth (Maxwell).</i>
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<i>The measures taken to maximize sample recovery are through a cyclone and a 3 tier riffle splitter. This method ensures maximum sample recovery and an unbiased representative sample to be assayed</i>
	<i>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.</i>	<i>No relationship is known to exist between sample recovery and grade, and no sample bias may have occurred due to preferential loss/gain of any fine/coarse material</i>
Logging	<i>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.</i>	<i>Chip samples have been geologically logged to a level of detail to support appropriate future Mineral Resource estimations.</i>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	<i>Logging is quantitative. Chip samples are photographed in dry form</i>
	<i>The total length and percentage of the relevant intersections logged.</i>	<i>All holes are logged in full</i>

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<i>No core has been drilled</i>
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	<i>The sub-sampling technique is with a 3 tier riffle splitter, and sampled dry</i>
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<i>Sample preparation is completed at SGS Laboratories, Ouagadougou, Burkina Faso. All preparation equipment is flushed with barren material prior to the commencement of sample preparation. The entire sample is dried, crushed to a nominal 2mm using a Jaw Crusher, and pulverised (85-90% passing 75 micron size fraction) using LM5 grinding mills. A 250 gram split is retained for fire assay with AAS finish to 10 ppb detection limit. The remainder is returned and stored at Cardinal's Bolgatanga premises</i>
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	<i>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples uses commercial certified reference material (CRM) for standards</i>
	<i>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.</i>	<i>Measures taken to ensure that the sampling is representative of the in situ material collected are to insert duplicates at 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</i>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	<i>The sample sizes are considered appropriate to give an accurate indication of gold mineralisation</i>

Criteria	JORC Code explanation	Commentary
Quality of Assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p><i>The pulverized rock sample is weighed and mixed with flux and fused using lead oxide at 1100°C, followed by cupellation of the resulting lead button (Dore bead). The bead is digested using 1:1 HNO₃ and HCl and the resulting solution is submitted for analysis.</i></p> <p><i>The digested sample solution is aspirated into the Flame Atomic Absorption Spectrometer (AAS), aerosolised, and mixed with the combustible gas, acetylene and air. The mixture is ignited in a flame whose temperature ranges from 2,100 to 2,800°C. During combustion, atoms of the gold in the sample are reduced to free, unexcited ground state atoms, which absorb light. Light of the appropriate wavelength is supplied and the amount of light absorbed can be measured against a standard curve.</i></p> <p><i>Results have a lower gold detection limit of 10 ppb. The AAS equipment is calibrated with each job.</i></p> <p><i>The analytical technique is industry standard fire assay which is considered to be a total digest of gold.</i></p>
	<i>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.</i>	<i>No hand held geophysical tools are used</i>

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	<p><i>Sample preparation checks for fineness are carried out by the laboratory as part of their internal procedures to ensure the grind size of 85-90% passing 75 micron is being attained. Each batch of 100 samples has 5 checks (20%), with the grind size varying between 87-99% passing 75 micron, which is acceptable. Laboratory QAQC involves the use of internal lab standards using certified reference material and blanks</i></p> <p><i>Certified reference materials, having a range of values, and in-house blanks are inserted in the ratio of 1:44. Duplicate samples are taken every 22nd sample.</i></p> <p><i>External laboratory checks are done on a three monthly basis through Laboratories Quality Services International (LQSI). Recent LQSI checks of Fire Assay analyses on Low Grade Oxide Material produced acceptable levels of accuracy and precision</i></p>
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	<i>The verification of significant intersections by either independent or alternative company personnel has not occurred</i>
	<i>The use of twinned holes.</i>	<i>There has been no use of twinned holes</i>
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	<i>Primary data was collected on a hand held Motion F5te Tablet PC using a set of standard templates supplied by Maxwell Geoservices, Perth (Maxwell). Daily data was synchronised and digitally captured by Maxwell for validation and compilation into Excel and Access spreadsheets and stored on the Cardinal servers located in Bolgatanga, Ghana, West Africa</i>
	<i>Discuss any adjustment to assay data.</i>	<i>No adjustments were made to the assay data</i>

Criteria	JORC Code explanation	Commentary
Location of data points	<i>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.</i>	<i>Accuracy of drill hole collar surveys is +/- 3m using a hand held Garmin GPSmap 62s GPS No down hole surveys were performed</i>
	<i>Specification of the grid system used.</i>	<i>WGS84 Sector 30N, with local grid baseline at 010° True North and lines at 20m to 25m intervals and stations at 25m along lines.</i>
	<i>Quality and adequacy of topographic control.</i>	<i>The quality and adequacy of topographic control is +/- 3m using a hand held Garmin GPSmap 62s GPS</i>
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	<i>Data spacing is 25m (northing) and 20-25m (easting)</i>
	<i>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.</i>	<i>The data spacing and distribution is considered to be sufficient to establish a degree of geological continuity for this reverse circulation drilling program</i>
	<i>Whether sample compositing has been applied.</i>	<i>No sample compositing has been applied</i>
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	<i>The orientation of sampling achieves unbiased sampling of possible structures as drilling is orientated normal to the dip and foliation of the deposit</i>
	<i>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.</i>	<i>No orientation based sampling bias has been identified in the data to date</i>

Criteria	JORC Code explanation	Commentary
Sample security	<i>The measures taken to ensure sample security.</i>	<i>The measures taken to ensure sample security are through an independent Ghanaian security contractor. Samples are stored at Cardinal's base camp located at Bolgatanga, Ghana, West Africa under security until collected by SGS Laboratories and transported to their Ouagadougou laboratory in Burkina Faso</i>
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	<i>Sampling techniques are of industry standards. Data is audited by Maxwell Geoservices (Perth), who have not made any other recommendations</i>

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 Tenement and Land Status	<i>Type, name/reference number, location and ownership including agreements or material issues with third parties including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	<i>The Namdini Mining Licence is located in NE Ghana. Namdini Mining Limited (NML) holds the mining licence. NML signed a Heads of Agreement with Savannah Mining Ltd (Savannah) to provide "Mining Support" services to NML. Savannah has also signed a Heads of Agreement with Cardinal Mining Services Ltd (CMS) to provide "Mining Support"</i>
	<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>	<i>There are no known impediments to offer "Mining Support" services to Namdini Mining Limited within the Namdini Mining licence area</i>

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Criteria	JORC Code explanation	Commentary
Exploration Done by Other Parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<i>No previous systematic exploration has been undertaken.</i>
Geology	<i>Deposit type, geological setting and style of mineralisation</i>	<i>The geological setting is a Paleoproterozoic Greenstone Belt comprising Birimian metavolcanics, volcanoclastics & metasediments located in close proximity to a major 30 km ~N-S regional shear zone with splays. The gold mineralisation occurs within sheared and highly altered rocks containing sulphides (pyrite & arsenopyrite)</i>
Drill hole information	<i>A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> • 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 hole • Down hole length and interception depth • Hole length 	<i>A summary of all results is contained within this announcement</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 from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	<i>There has been no exclusion of information</i>
Data aggregation methods	<i>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.</i>	<i>No weighting averaging techniques nor cutting of high grades have yet been undertaken</i>
	<i>Where aggregated intercepts incorporate short lengths of high grade</i>	<i>Aggregated intercepts incorporating short lengths of high grade were calculated with no more than 2m below cut-off grade of 0.5 g/t Au.</i> <i>An example of such aggregations is in APPENDIX 1 - Hole NIMRC00001 From 23m to 41m including high grade from 37m to 38m.</i>

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Criteria	JORC Code explanation	Commentary
	<i>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>	
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	<i>No metal equivalent values were used for this report</i>
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of exploration results.</i>	<i>The relationship between mineralisation widths and intercept lengths is not yet known</i>
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	<i>The geometry of the mineralisation with respect to the drill hole angle is not yet known</i>
	<i>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').</i>	<i>Only down hole lengths are reported and true widths of mineralisation are not yet known</i>
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plane view of drill hole collar locations and appropriate sectional views.</i>	<i>Appropriate maps and sections are included in this announcement</i>
Balanced Reporting	<i>Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<i>A summary of all assay results is reported in this announcement</i>
Other substantive exploration data	<i>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.</i>	<i>Geophysical results are included as an image (Figure 1). The interpretation shown is subject to possible change as new information is gathered. Interpretation of geophysical data is by its nature, subject to ambiguity.</i>
		<i>No geochemical surveys, bulk sampling, metallurgical, mineralogical or geotechnical assessments were undertaken</i>

Further Work	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling).</i>	<i>A combination of reverse circulation and diamond drilling is planned, followed by possible additional ground geophysical surveys depending on the results of the drilling.</i>
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	<i>The plan included shows the possible extent of mineralisation based on geological observations and assay results. Future drilling is planned west of the pit to obtain down dip extensions to the ore body.</i>

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