

**PRESS RELEASE**

Friday, 27 April 2018

**ASX/TSX: CDV**

2018-9

## **QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 MARCH 2018**

**Cardinal Resources Limited** (ASX: CDV; TSX: CDV) ("**Cardinal**" or "**the Company**"), an African gold focused exploration company, is pleased to present to shareholders its Quarterly Activities report for the period ended 31 March 2018. Currently Cardinal holds four tenements within the Bolgatanga Project, with Subranum comprised of a single tenement in central Ghana (Figure 1).

### **HIGHLIGHTS**

- On March 15, 2018, the Company announced a technical report titled "Technical Report on Namdini Gold Project, Ghana", in respect of the Company's Preliminary Economic Assessment ("**PEA**") of the Namdini Gold Project in Ghana, West Africa. The NI43-101 Technical Report was authored by Golder Associates Pty Ltd and MPR Geological Consultants Pty Ltd, and has an effective date of February 5, 2018. The Technical Report can be viewed under the Company's issuer profile on SEDAR at [www.sedar.com](http://www.sedar.com) or the Company's web site [www.cardinalresources.com.au](http://www.cardinalresources.com.au)
- On March 5, 2018, the company announced an updated Mineral Resource estimate of Namdini. An Indicated Mineral Resource of 180 Mt grading 1.1 g/t Au for **6.5 Moz Au** and an Inferred Mineral Resource of 13 Mt grading 1.2 g/t Au for **0.5 Moz Au**, each at a 0.5 g/t Au cut off. The mineralisation remains open along strike and down dip.
- On February 22, 2018, the final tranche of Namdini infill drilling results were announced from the completed campaign to add definition to the Namdini Mineral Resource. These results, along with previously announced intercepts of infill drill results, formed the basis of the March 5, 2018 Mineral Resource upgrade.
- On February 5, 2018, the Company announced the completion and summary results of its PEA. The PEA confirmed Namdini to be a technically and financially robust low-cost mining opportunity, with the potential to generate strong positive cashflows.
- On January 22, 2018, Namdini infill drilling results were announced from the comprehensive campaign to continue to add definition to the Namdini Mineral Resource. The infill drill results continued to support strong continuity of the mineralised zones.

### **SUBSEQUENT TO QUARTER END**

- On April 4, 2018, the Company announced an activity update and results from its comprehensive campaign to continue to add value to its Bolgatanga tenement package.

## OUTLOOK

The principal activity of the Corporation (and its subsidiaries) is gold exploration in Ghana. The Corporation holds interests in five tenements prospective for gold mineralisation in Ghana in two NE-SW trending Paleo-Proterozoic granite-greenstone belts: the Bolgatanga Project and the Namdini Gold Project (“Namdini Gold Project” or “Namdini”), which are, respectively, located within the Nangodi and Bole-Bolgatanga Greenstone Belts in northeast Ghana, and the Subranum Project, which is located within the Sefwi Greenstone Belt in southwest Ghana.

The main focus of activity is the Namdini Gold Project where an Indicated Mineral Resource of **180 Mt** grading **1.1 g/t Au** for **6.5 Moz Au** and an Inferred Mineral Resource of **13 Mt** grading **1.2 g/t Au** for **0.5 Moz Au** each at a 0.5 g/t Au cutoff grade, has been established. The map below shows the location of the Namdini Gold Project and the Corporation’s other properties in Ghana.

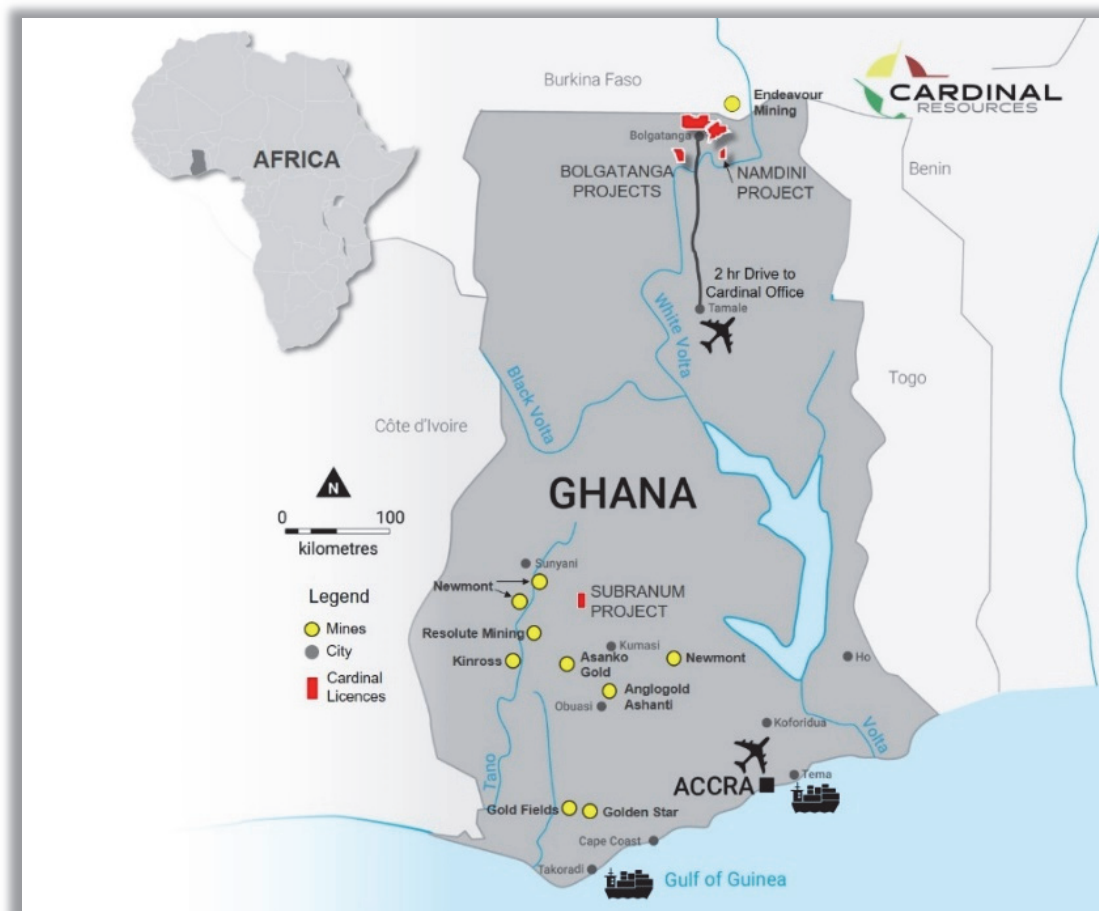


Figure 1: Cardinal Resource’s Tenements in Ghana

The Company expects to continue to generate positive news flow from its ongoing metallurgical optimization work, greenfield exploration assets and Preliminary Feasibility Study activities, (“PFS”) due for release in H1 2018.

## THE NAMDINI GOLD PROJECT

### Property Title / Mining Lease

During the December 2017 quarter, a Large-Scale Mining Licence covering the Namdini Mining Lease was assigned to Cardinal Namdini Mining Limited (“**Cardinal Namdini**”), a wholly owned subsidiary of Cardinal, by the Minister of Lands and Natural Resources under the Ghanaian Minerals and Mining Act 2006 (Act 703). The Large-Scale Mining Licence, which covers 19.54 km<sup>2</sup> in the Dakoto area of the Talensi District Assembly in Upper East Region of Ghana evidenced by a Mining Lease, is for an initial period of 15 years and is renewable for up to a further thirty (30) years.

Savannah Mining Ghana Limited (“**Savannah**”) has completed an EIS for Namdini and has filed the EIS with the Environmental Protection Agency (“**EPA**”). In accordance with EPA Regulations 15(1b) and (1c) of the Environmental Assessment Regulations, 1999 (LI 1652) and Ghana’s Environmental Impact Assessment (EIA) Procedures, the Environmental Protection Agency (EPA) issued a public notification on the proposed Namdini Gold Mining Project. Cardinal will submit to the Minerals Commission an updated EIS and an application for an Operating Permit for the project scale envisioned in the PEA.

### Mineral Resources

In March 2018, Cardinal released an updated Mineral Resource estimate for its Namdini Gold Project in Ghana, West Africa. This Mineral Resource update incorporates the results from the latest infill drilling program which was completed in Q4 of 2017 totalling approximately 15,684m in 35 drill holes. The primary aim of the drilling program was to infill the deposit within the conceptual pit to focus on converting the remaining Inferred Mineral Resource to the Indicated category.

Lower cut-off grade (Au g/t)	Million Tonnes (Mt)	Average Grade (Au g/t)	Million Ounces (Au Moz)
<b>Indicated Mineral Resources</b>			
<b>0.4</b>	210	1.0	6.9
<b>0.5</b>	180	1.1	6.5
<b>0.6</b>	152	1.2	6.0
<b>Inferred Mineral Resources</b>			
<b>0.4</b>	15	1.1	0.6
<b>0.5</b>	13	1.2	0.5
<b>0.6</b>	11	1.4	0.5

**Table 1: March 2018 MPR MIK NI43-101 and JORC 2012 compliant Mineral Resource estimate**

#### Notes

- JORC (2012) Code was followed for the Mineral Resources. MPR has reconciled the Mineral Resources to CIM Definition Standards (2014) and there are no material differences.
- Mineral Resources are estimated at a cut-off grade of 0.5 g/t Au constrained by a preliminary pit shell.
- Incorporates drill holes completed as of February 2018.
- Numbers may not add due to rounding.

The table above (Table 1) highlights Mineral Resource estimations at a series of cut-off grades. Currently, the 0.5 g/t Au cut-off grade approximates to 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).

## Preliminary Economic Assessment

The February 2018 PEA confirms Namdini to be a technically and financially robust low-cost mining opportunity, with potential to generate strong positive cashflows. Development is based upon a large, single, open pit with a phase 1 smaller and higher-grade starter pit of circa 1 Moz produced through a conventional SAG mill, Flotation and CIL circuit.

The PEA evaluated three production throughput rates, 4.5, 7.0 and 9.5Mtpa; all resulted in strong returns. The preferred scale of development is to be selected following completion of Feasibility Studies. In addition, consideration is being given to a phased approach to the development of Namdini, commencing with a 4.5Mtpa throughput that would be designed for expansion to a higher throughput.

Dependent upon the eventual production scenario chosen;

- Average annual gold production ranges from 159,000 ozpa up to 330,000 ozpa
- All-in sustaining costs range from US\$ 701/oz to US\$ 794/oz
- Development capital costs range from US\$ 275M to US\$ 426M
- Strip ratio for all scenarios at 1.2:1 waste to ore
- Potential life of mine for 9.5 Mtpa option of 14 years, 7.0 Mtpa of 19 years and 4.5 Mtpa of 27 years

Value enhancement opportunities have been identified and will be considered by the technical team as part of the Pre-Feasibility Study that has now commenced. These include:

- Detailed metallurgical drilling of large diameter core to obtain specific metallurgical samples of oxide, transition and fresh zones within the proposed open pit
- Definition of a shallow and higher-grade, potential starter open pit
- Update detailed design and costings of the proposed processing plant
- Update detailed mining and processing costs based on new metallurgical data as it becomes available

KEY ECONOMIC RESULTS	UNIT	4.5 Mtpa	7.0 Mtpa	9.5 Mtpa
Development Capital Cost	US\$ M	275	349	426
All in Sustaining Costs (AISC) <sup>1</sup>	US\$ / oz	794	736	701
Total Project Payback	Years	4.0	3.5	3.3
Pre-Tax NPV USD (@ 5% discount) <sup>2</sup>	US\$ M	706	913	1,036
Post-Tax NPV USD (@ 5% discount) <sup>3</sup>	US\$ M	445	574	649
Pre-Tax IRR	%	42%	54%	62%
Post-Tax IRR	%	31%	39%	44%

**Table 2: Key Economic Results**

**Table 2 Notes:**

<sup>1</sup> Cash Costs + Royalties + Levies + Life of Mine Sustaining Capital Costs (World Gold Council Standard)

<sup>2</sup> Royalties calculated at flat rate of 5%; subject to negotiation

<sup>3</sup> Royalties calculated at flat rate of 5% & corporate tax rate of 35% used; both subject to negotiation

RESOURCE DATA USED – SEPTEMBER 2017					
Indicated Mineral Resource	91 Mt @ 1.1 g/t for 3.3 Moz (81%) within Life of Mine Pit at 0.5 g/t cut off				
Inferred Mineral Resource	22 Mt @ 1.1 g/t for 0.8 Moz (19%) within Life of Mine Pit at 0.5 g/t cut off				
KEY ESTIMATED PRODUCTION RESULTS		UNIT	4.5 Mtpa	7.0 Mtpa	9.5 Mtpa
Gold Price	US\$ / oz	1,300			
Average Annual Production – Gold	(oz / yr)	159,000	211,000	333,000	
Life of Mine Production - Gold	(oz)	3,524,000	3,506,000	3,521,000	
Average Mine Head Grade	g/t Au	1.1			
Metallurgical Recovery (Oxide / Fresh)	%	90 / 86			
Resource Mined at 0.5 g/t cut-off grade	Tonnes	113,000,000			
Life of Mine Strip Ratio	W:O	1.2 : 1			
Mine Life	years	27	19	14	
Development Capital Cost (including owners cost and 15% contingency)	US\$ M	275	349	426	
Life of Mine Sustaining Capital Cost (including reclamation)	US\$ M	172	160	154	
All in Sustaining Costs (AISC) <sup>1</sup>	US\$ / oz	794	736	701	

**Table 3: Key Estimated Production Results**

Table 3 Notes:

<sup>1</sup> Cash Costs + Royalties + Levies + Life of Mine Sustaining Capital Costs (World Gold Council Standard)

(Assumes flat gold price of US\$1,300/oz over mine production)

Key PEA Study Outputs Include:

- Dependent upon the eventual production scenario chosen;
  - Average annual gold production ranges from 159,000 ozpa at 4.5 Mtpa up to 330,000 ozpa at 9.5 Mtpa
  - NPV ranges from US\$ 706M up to US\$ 1,036M pre-tax and US\$ 445M up to US\$ 649M post-tax
  - IRR ranges from 42% to 62% pre-tax and 31% to 44% post-tax
  - Payback ranges from 4.0 to 3.3 years and
  - All-in sustaining costs range from US\$ 701/oz to US\$ 794/oz
- The target Life of Mine pit includes 91Mt @ 1.1 g/t for **3.3 Moz** (81%) of Indicated Mineral Resource and 22 Mt @ 1.1 g/t for **0.8 Moz** (19%) of Inferred Mineral Resources at a 0.5 g/t cut off, using the September 2017 Mineral Resource Estimate data
- Identification of a higher-grade starter pit yielding >1 Moz gold with a <0.9 strip ratio for which further optimisation will be performed in the next study phase
- Mineral Resource categories of **81% Indicated** and **only 19% Inferred** within the potential LOM pit
- A new conventional gold plant inclusive of flotation and regrind - CIL of the flotation concentrate

Given that the PEA results in a strongly positive cashflow outcome for all three throughput scenarios considered, further evaluation and trade-offs for improved economies of scale, mine scheduling, plant design and costings which are anticipated to further enhance project economics will be performed under the Pre-Feasibility Study which has commenced.

### **Mineral Processing and Metallurgical Testing**

In October 2017, the Company contracted ALS Laboratories (“ALS”) in Perth to execute Phase Three of their metallurgical programme. A detailed metallurgical testwork programme was developed by Cardinal’s technical management team with ALS. Marc Levier was contracted by Cardinal to develop and review the Phase Three testwork programme with the objective to manage and ensure the integrity of the programme.

A set of comminution samples were selected from site and transported to ALS in Perth for testing. These comprise of quarter core diamond samples from twelve different drillholes, located across the orebody which fall inside the predicted mine pitshell. Four samples per lithology (metavolcanics, granite and diorite) totaling 326kg were selected at different depths.

Samples from the Company’s Phase Two programme were transported to ALS comprising 775kg of starter pit samples and 370kg of life of mine samples.

Two master composite (MC) samples were compiled, one for the starter pit and the second for life-of-mine across the orebody. The starter pit MC sample comprises 100kg in a 50:50 ratio of granite and metavolcanics which is representative of the starter pit ore ratio. The life of mine MC comprises 100kg in a 60:30:10 ratio of metavolcanics, granite and diorite respectively which is representative of the lithology ratios for the life of mine.

As previously selected, the geostatistical Mineral Resource model was used to target the average grade of the combined samples for each lithology, based on a notional cut-off grade of 0.4 g/t Au (“grams per tonne gold”). The intervals were selected to ensure that the following criteria were met:

- Representative spatial distribution within the overall Namdini deposit,
- A range of gold grades, predicted to be encountered during normal mining operations, and
- Average gold grades matching the overall Namdini geostatistical Mineral Resource model above a 0.4 g/t Au cut-off

The Company is preparing additional samples to continue their variability, ore profiling and mapping testwork. A PQ drillhole has been drilled and transported to ALS in Perth. The location of this PQ hole intercepts all 3 key rock types. The intent is to perform a full Julius Kruttschnitt (JK) drop weight test (DWT) for each rock type. This test will provide Cardinal a reference calibration for the Semi Autogenous Grinding (SAG) Mill Comminution (SMC) test which will be applied to the SMC database and support the detailed sizing of the SAG Mill. Other supplemental metallurgical testing is still in progress with additional samples being identified for further testing and metallurgical optimisation.

The process flowsheet and process design criteria continue to be optimised as part of the prefeasibility study.

## Project Development Activities

Cardinal is progressing with their prefeasibility study programme to further advance the Namdini Gold Project. This consists of continuing with previously selected and newly selected consultants to assist with the phased development of the Namdini Gold Project. The consultants and their roles are tabulated below:

Consultant	Responsibility	Phase
<b>Lycopodium &amp; Knight Piesold</b>	Process, Tailings and Infrastructure Design	Scoping Study / Prefeasibility Study
<b>Golder Associates</b>	Mine Design	Scoping Study / Prefeasibility Study
<b>ALS Laboratory</b>	Fresh Rock Metallurgical Testwork	Phase 3 metallurgical testwork
<b>OMC</b>	Comminution Design	Scoping Study / Prefeasibility Study
<b>Nemas Consult</b>	ESIA	Full Permit and Licencing Phases
<b>Intermine Engineering Consultants</b>	Mine Schedule Optimisation	Prefeasibility Study

The Company also re-engaged Lycopodium Minerals Pty Ltd. ("**Lycopodium**") and Golder Associates Pty Ltd. ("**Golder**") to continue the evaluation of processing and mining options, respectively, for the Namdini Gold Project.

Lycopodium's mandate continues to comprise the process plant, associated infrastructure and tailings facilities, while being supported by Knight Piesold Ltd with respect to tailings management.

Golder's mandate continues to comprise geology, hydrology, hydrogeology, mining, geotechnical and environmental services.

ALS are globally recognised as being leaders in metallurgical laboratory testwork with state of the art facilities. ALS provide additional integrity to the Company's metallurgical testwork programme which will support the prefeasibility and feasibility study development phases.

Oreway Mineral Consultants Pty Ltd ("**OMC**") continue to be responsible for the comminution circuit design and interface directly with the process designers in finalising the comminution circuit requirements of the process.

Nemas Consult are continuing with ESIA permit and licence requirements. They have initiated field baseline data investigations ahead of the EIA. Investigations are continuing on the ecological front and as well socio-cultural assessments in the area.

Intermine Engineering Consultants continue to assist in Whittle optimisations and pushback analysis.

Three project size options continue to be evaluated; they include a 4.5 million tonne per annum ("**Mtpa**"), 7 Mtpa and 9.5 Mtpa throughput.

## Drilling and Sampling Summary

**Diamond drilling** comprised of geotechnical test holes of expected infrastructure areas and a PQ size metallurgical drill hole (Figure 2). A total of 5 drill holes comprising 304.5m (Table 4).

Drill Method	No. Holes	Total (m)
<b>Infrastructure Geotechnical Test Drilling</b>		
DD	4	103.50
<b>Comminution Test Drilling</b>		
DD	1	200.92
<b>Grand Total</b>	<b>5</b>	<b>304.42</b>

Table 4: Namdini Drilling (Q1 2018)

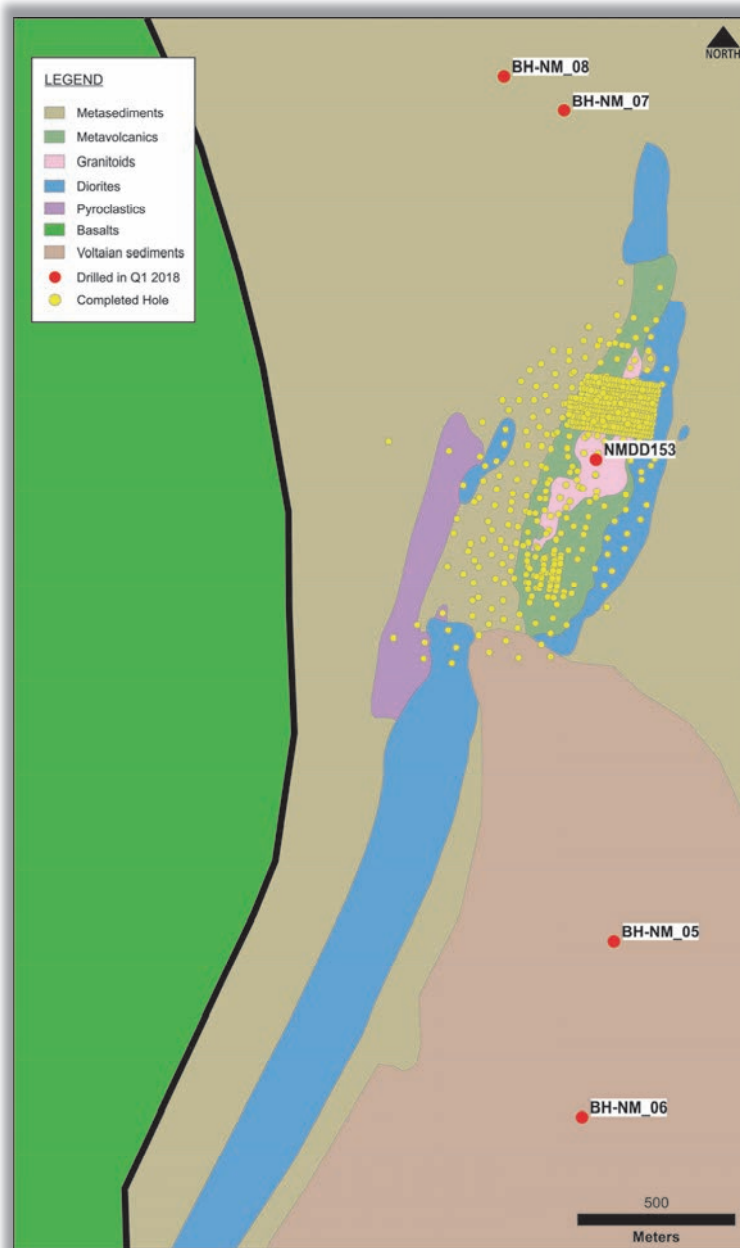
*Metallurgical Diamond Drilling*

The PQ size diamond drill hole for Comminution test work was aligned at -65° dip drilling east which allows for the shallowing of the drill hole with depth. The azimuth was set at 095° instead of 100° (normal to the strike of the formations) as the borehole trace usually deflects to the right with depth due to the clockwise rotation of the drill rods.

The PQ core was photographed and sent to the ALS Laboratories in Perth Western Australia for comminution test work.

*Geotechnical Drilling*

Four HQ size Diamond drill holes within the floatation Tails Storage Facility footprint were completed this quarter in order to assess the in-situ permeability characteristics of the sub-surface horizons. The core was logged and photographed and the in-situ tests supervised by Knight Piesold site representatives. The HQ size geotechnical diamond drill holes were drilled vertically.



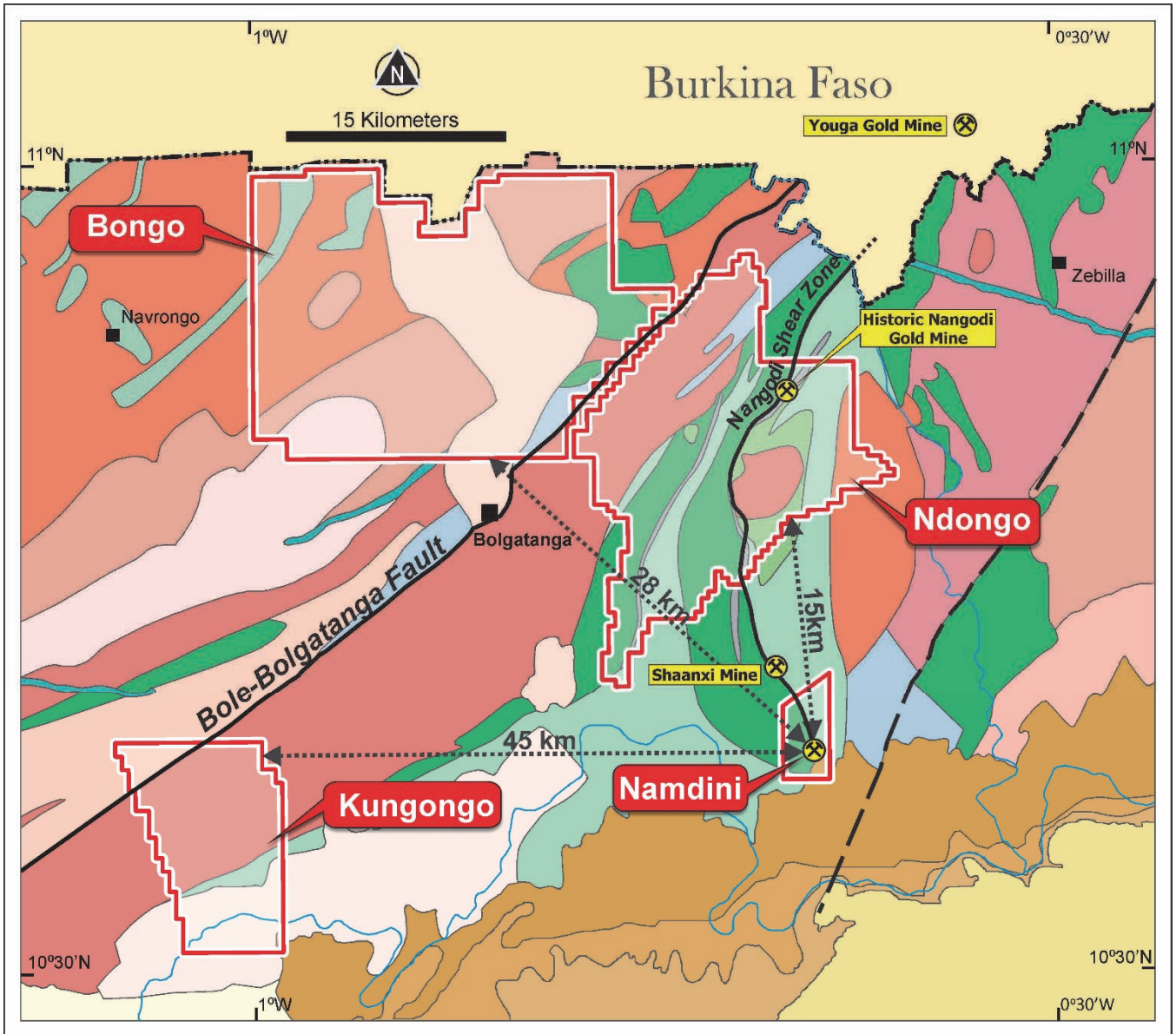
**Figure 2: Namdini Project Q1 2018 Geotechnical and Communion Diamond Drill Hole Collars**



**REGIONAL EXPLORATION UPDATE**

**Bolgatanga Project**

The Bolgatanga Project includes the Ndongo, Kungongo and Bongo Prospects (Figure 3). Diamond (DD) and Reverse Circulation (RC) drilling were in various stages of progress over these tenements during this quarter. Detailed ground geophysical surveys were also in progress over the Ndongo and Kungongo tenements.



**Figure 3: Bolgatanga Project Tenements**

**Subranum Project**

The Subranum Project is located in south west Ghana (Figure 1). DD and Auger drilling are planned for this project.

## BOLGATANGA PROJECT

### Exploration Drilling

A total of 63 RC holes were drilled on the enlarged Ndongo tenement and Kungongo Prospect during this quarter with 10,918 samples, including QAQC controls, submitted to Ghana based laboratories for fire assay (Table 5).

Prospect	Drill Method	No. Holes	Total (m)	No. Samples	Duplicates	Blanks	Stds	Total Samples
<b>Ndongo</b>	RC Drilling	31	3,743.00	3,743	197	98	96	4,352
<b>Kungongo</b>	RC Drilling	32	6,169.00	6,169	307	154	154	6,784
<b>Total</b>		<b>63</b>	<b>9,912.00</b>	<b>9,912</b>	<b>504</b>	<b>252</b>	<b>250</b>	<b>10,918</b>

**Table 5: Exploration Drilling for Q1 2018**

### Ndongo Tenement

The Ndongo License covers an area of 295km<sup>2</sup>, having been recently expanded by the purchase of two exploration licence areas from Kinross Gold in August 2017 (Figure 3). Exploration has defined six prospects totalling 70km in strike length only 15km north of the Namdini Gold Project.

The Company considers the license area to be highly prospective for the discovery of economic gold mineralisation associated with the prolific Nangodi Shear Zone, a splay fault off the main regional-scale Bole-Bolgatanga Shear. Elsewhere, the Nangodi Shear Zone is spatially related to no fewer than four major gold discoveries, including the Company's Namdini Gold Project, the Shaanxi Mine, the historic Nangodi Gold Mine and the Youga Gold Mine in Burkina Faso, adjacent to the Ghana border (Figure 3). In addition, there are numerous historic shallow artisanal workings along many parts of this shear zone.

Six large scale targets which are considered highly prospective for gold mineralisation, have been defined from coincident historical drill data, auger soil anomalies and geophysical surveys.

Exploration will continue over the tenements with field confirmation and exploration drilling required to test the targets that have been generated.

### Kungongo Tenement

The Kungongo License is located in northeast Ghana some 45km west of the Company's Namdini Gold Project. The license covers an area of 122 km<sup>2</sup> and is a renewable Exploration License (Figure 4).

Kungongo is located over the regional Bole-Bolgatanga Shear that can be traced for a length of 6km within the northwest corner of the license. The Shear extends northeast through Burkina Faso and into Niger as well as to the southwest to the Ghana-Cote d'Ivoire border beyond which it is difficult to trace. This shear zone is considered to be highly prospective as it hosts major gold discoveries including Youga Gold Mine and Ouare Project in Burkina Faso (both owned by Avesoro Resources) and the Samira Hill Gold Mine (owned by SOPAMIN) in Niger.

The extensive regional Bole-Bolgatanga shear zone occurs over a length of 6 km across the northwest corner of the tenement. The tenement is underlain by Birimian greenstones, which strike north-east across the tenement, which have been extensively intruded by younger granitoids.

During the quarter ended 31 March 2018, 32 shallow RC drill holes were drilled over portions of the Kungongo Prospect with a total of 6,169 samples, including QAQC controls, submitted for fire assay.

Recent RC drilling has focused primarily on shallow auger soil gold anomalies and ground magnetics. Drilling has confirmed a sequence of mixed sediments and mafic volcanics. The initial RC drilling was completed on a series of fences between 400m and 1,600m apart. Hole spacing on lines was at 50m to 100m centres, with the drilling covering approximately 3.6km of strike length along the target. Gold intersections returned were encouraging with some

significant grades and multiple zones encountered. (ASX Announcement April 4, 2018 - First Pass Regional Exploration Drilling Underway).

The results of a Gradient Array Induced Polarisation survey, show good lithological and structural detail with multiple high chargeability zones in the northwest half of the area. Gravity surveys completed this quarter also highlight useful bedrock, shears, faults and stratigraphy. This information when combined with magnetic and induced polarisation data, will be useful in mapping lithology and structure, as well as direct targeting. Interpretation of this data integrated with other information will be done in the second quarter.

5,000m of RC and diamond drilling is set to commence by the end of second quarter of 2018 and is designed to follow up the widely-spaced anomalous first pass results.

### **Bongo Prospect**

The Bongo License covers an area of 453 km<sup>2</sup> adjacent to the regional Bole-Bolgatanga Shear and is dominated by three major intrusive complexes, predominantly granitoids of intermediate to foliated felsic basin types intercalated with mafic volcanic flows (Figure 3).

The Bongo License area is related to the northeast trending regional gold rich Markoye Fault Corridor on which some major gold discoveries in Burkina Faso are located including, B2Gold's Kiaka Gold Mine, West Africa Resources' Tanlouka Gold Project, Orezone Resources' Bombore Gold Mine and IAMGOLD's Essakane Gold Mine. Bongo is approximately 28km northwest of the Company's 7Moz Namdini Gold deposit (Figure 3).

Six target areas were initially identified from the airborne geophysical survey. Three of these target areas totaling 26km in strike length within the northwestern, northeastern and southeastern parts of the Bongo License were generated from auger soil anomalies, previous air magnetic interpretation, mapping and ground truthing over the license (Figure 4).

Reconnaissance RC drilling is expected to commence Q2 – 2018 across all anomalous targets.

### **SUBRANUM PROJECT**

The Subranum Project covers an area of 69km<sup>2</sup> located in southwest Ghana. The license straddles the eastern margin of the Sefwi Gold Belt. There is 9km of prospective sheared contact between Birimian phyllites and greywackes to the east and mafic to intermediate volcanics and volcanoclastics to the west. Granitoid stocks of the Dixcove suite intrude this shear zone. The Sefwi Belt is highly prospective and is spatially related to major discoveries including the 7Moz Bibiani Gold Mine (approximately 70km southwest), Newmont's Ahafo 23Moz Gold Mine (approximately 53km west), Kinross' Chirano 5Moz Gold Mine (approximately 110km southwest).

Previous exploration by Newmont (soil sampling, trenching and drilling) discovered a gold mineralised zone over 5 km to a depth of only 50m. As the drilling was on irregular, widely spaced drill fences, Cardinal plans to systematically drill this initial target area to better define and extend gold mineralisation along strike and at depth.

Cardinal has planned a systematic diamond drilling programme to cover this 5.2 km anomalous strike length to properly evaluate the gold mineralisation contained within this anomalous zone.

Clearing of the previous drill access tracks continued during this quarter with diamond (DD) drilling planned to start during Q2 2018.

A soil auger programme planned for the remaining 3.8 km strike length in the NE portion of the tenement to initially cover a ~400m width across the strike of the Bibiani Shear Zone will commence in Q2 2018.

**TENEMENT SCHEDULE - ASX LISTING RULE 5.3.3**

The following mining tenement information is provided pursuant to ASX Listing Rule 5.3.3. No tenements in part or whole, were relinquished, surrendered or otherwise divested during the quarter ended 31 March 2018.

Tenement	Licence Status	Ref	Note	Interest Acquired During Quarter	Interest Divested During Quarter	Interest Held at End of Quarter
<b>Ghana</b>						
<b><i>Bolgatanga Project</i></b>						
Ndongo	Prospecting	PL9/22	-	-	-	100%
Kungongo	Reconnaissance	RL9/28	-	-	-	100%
Bongo	Reconnaissance	RL9/29	-	-	-	100%
Nangodi	Prospecting	PL9/13	-	-	-	100%
Yamergia	Prospecting	PL9/19	-	-	-	100%
<b><i>Namdini Project</i></b>						
Namdini	Mining Licence	PL9/29	-	-	-	100%
<b><i>Subranum Project</i></b>						
Subranum	Prospecting	PL/309	-	-	-	100%

**CAPITAL STRUCTURE**

As at 31 March 2018 the Company had following capital structure;

Capital Structure	Listed	Unlisted	Total
Fully Paid Ordinary Shares (CDV)	372,124,049	-	372,124,049
Options Ex. \$0.15 on or before 30 September 2019	114,929,437	-	114,929,437
Options Ex. \$0.22 on or before 18 March 2020	-	6,000,000	6,000,000
Options Ex. \$0.75 on or before 21 December 2022	-	1,000,000	1,000,000
Milestone Options Ex. \$0.50 on or before 12 April 2022	-	18,500,000	18,500,000
Milestone Options Ex. \$0.825 on or before 21 December 2022	-	5,758,000	5,758,000
Milestone Options Ex. \$0.965 on or before 21 December 2022	-	4,036,200	4,036,200
- Class C Performance Shares	-	60	60

**Cash Balance**

The Company's cash balance at 31 March 2018 was approximately \$13.3 million.

For further information contact:

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### Competent / Qualified Person Statement

The scientific and technical information in this Quarterly report that relates to the Namdini Gold Project has been reviewed and approved by Mr. Richard Bray, a Registered Professional Geologist with the Australian Institute of Geoscientists and Mr. Ekow Taylor, a Chartered Professional Geologist with the Australasian Institute of Mining and Metallurgy. Mr. Bray and Mr. Taylor have 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 for the purposes of NI43-101. Mr. Bray and Mr. Taylor are full-time employees of Cardinal and hold equity securities in the Company.

The scientific and technical information in this Quarterly report that relates to Exploration Results, Mineral Resources or Ore Reserves at the Bolgatanga Project and Subranum Project is based on information prepared by Mr. Paul Abbott, a full-time employee of Cardinal Resources Limited, who is 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".

The information in this report that relates to Namdini Mineral Resources is based on information compiled and reviewed by Mr Nicholas Johnson, a Competent Person who is a Member of the Australian Institute of Geoscientists and a full-time employee of MPR Geological Consultants Pty Ltd. Mr Johnson has sufficient experience which is relevant to the style of mineralization 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 2012 and is a qualified person for the purposes of NI43-101. 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 his information in the form and context in which it appears.

### JORC 2012

This report contains information extracted from the following reports which are available for viewing on the Company's website [www.cardinalresources.com.au](http://www.cardinalresources.com.au):

- 4 April 2018 First Pass Regional Exploration Drilling Underway
- 15 Mar 2018 Technical Report on Namdini Gold Project Filed on SEDAR
- 5 Mar 2018 Cardinal Updates Indicated Mineral Resource to 6.5 Moz
- 22 Feb 2018 Cardinal Infill Drilling Results Returned
- 5 Feb 2018 Namdini Gold Project Preliminary Economic Assessment Announcement
- 18 Sep 2017 Namdini Infill Drilling Results Returned

The Company confirms it is not aware of any new information or data that materially affects the information included in this report relating to exploration activities and all material assumptions and technical parameters underpinning the exploration activities in those market announcements continue to apply and have not been changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

## Appendix 5B

### Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

**Name of entity**

Cardinal Resources Limited

**ABN**

56 147 325 620

**Quarter ended ("current quarter")**

31 March 2018

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(3,523)	(19,156)
(b) development	-	-
(c) production	-	-
(d) staff costs	(343)	(1,286)
(e) administration and corporate costs	(1,039)	(3,019)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	47	144
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	-
1.8 Other (provide details if material) – VAT/GST/Foreign Exchange	(522)	(495)
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(5,380)</b>	<b>(23,812)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	(55)	(214)
(b) tenements (see item 10)	-	(2,901)

## Mining exploration entity and oil and gas exploration entity quarterly report

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (9 months) \$A'000</b>
(c) investments	-	-
(d) other non-current assets	-	-
<b>2.2 Proceeds from the disposal of:</b>		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-
<b>2.3 Cash flows from loans to other entities</b>	-	-
<b>2.4 Dividends received (see note 3)</b>	-	-
<b>2.5 Other (provide details if material)</b>	-	-
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(55)</b>	<b>(3,115)</b>
<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of shares	-	12,397
3.2 Proceeds from issue of convertible notes	-	-
3.3 Proceeds from exercise of share options	113	623
3.4 Transaction costs related to issues of shares, convertible notes or options	-	(919)
3.5 Proceeds from borrowings	-	-
3.6 Repayment of borrowings	-	-
3.7 Transaction costs related to loans and borrowings	-	-
3.8 Dividends paid	-	-
3.9 Other (provide details if material)	-	-
<b>3.10 Net cash from / (used in) financing activities</b>	<b>113</b>	<b>12,101</b>
<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	18,715	28,544
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(5,380)	(23,812)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(55)	(3,115)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	113	12,101

## Mining exploration entity and oil and gas exploration entity quarterly report

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (9 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	(89)	(414)
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>13,304</b>	<b>13,304</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	266	2,469
5.2	Call deposits	13,038	16,246
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>13,304</b>	<b>18,715</b>

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

<b>Current quarter \$A'000</b>
312
-

N/A

**7. Payments to related entities of the entity and their associates**

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

<b>Current quarter \$A'000</b>
-
-

N/A



## Mining exploration entity and oil and gas exploration entity quarterly report

<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities	-	-
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

N/A

<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	1,850
9.2 Development	-
9.3 Production	-
9.4 Staff costs	350
9.5 Administration and corporate costs	970
9.6 Other (provide details if material)	-
<b>9.7 Total estimated cash outflows</b>	<b>3,170</b>

<b>10. Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	-	-	-
10.2 Interests in mining tenements and petroleum tenements acquired or increased	-	-	-	-

**Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: Sarah Shipway  
Company Secretary

Date: 27 April 2018

Print name: Sarah Shipway

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.