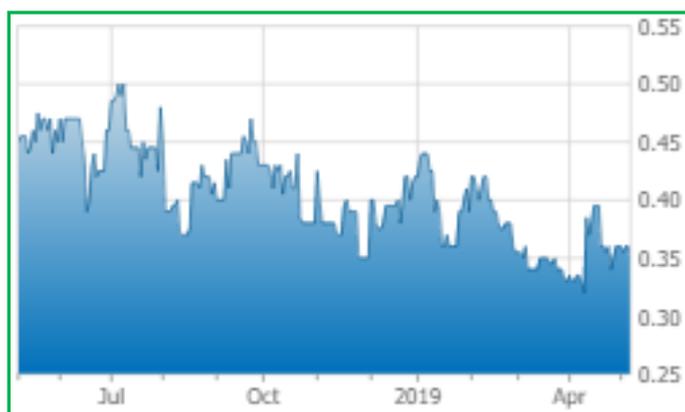


Goldletter INTERNATIONAL

the international independent information and advice bulletin for gold and related investments

INVESTMENT ALERT – June 4, 2019

www.cardinalresources.com.au



Cardinal Resources Ltd.(A\$ 0.34)

ASX	: CDV
TSX	: CDV
H + L prices (12 months)	: A\$ 0.52 – 0.32
Net shares issued	: 382.9 million
Fully diluted shares	: 493.1 million
Market Capitalization	: A\$ 128.2 million (US\$ 89.2 million)

2019 price target: A\$ 0.90

INVESTMENT ALERT

Positive metallurgical update on **Namdini Gold Project in Ghana**

On June 4, 2019, **Cardinal Resources** (“**Cardinal**”) announced a positive development with respect to its metallurgical optimisation testwork activities. As a result of positive leach results which are expected to enhance the **Namdini Project** economics, further laboratory testwork has been initiated.

Highlights are:

- Positive leach recovery results reported from **Aachen™ pilot scale testwork**, which is relatively simple, proven process being used by a number of successful gold producers globally and specifically in Africa. These operations have consistently demonstrated an uplift in gold recoveries with **Aachen™**.
- **Aachen™** results on **Namdini** flotation concentrate indicates the following potential improvements:
 - increased gold recovery
 - coarser regrind size with the current flow sheet reduced power consumption (ie lower installed power requirements and Opex)
 - expected reduction of both Capex and in particular, Opex

Cardinal has already tested 4,47 kg (>4 tonnes) comprising 7 pilot scale composites from 47 drill holes (see table 2) across the entire deposit. The Company is finalising the testwork programme with a further 2,310 kg (>2 tonnes) of samples from an additional 24 drill holes.

Final Aachen™ testwork is in progress to further support the results received to date for potential inclusion into the Namdini Feasibility Study.

Cardinal's Aachen™ process has seen an increase in gold recoveries between 2% and 19% in gold producing operations. Former Randgold Resources (now Barrick), a major client of Maelgwyn Mineral Services, is using Aachen™ equipment at its Loulo and Morila mines in Mali, at its Tongon operation in Côte d'Ivoire and at the Kibali gold mine in the Democratic Republic of Congo.

Table 1: Namdini Aachen™ Leach Testwork Results – Life of Mine (LOM) Samples¹

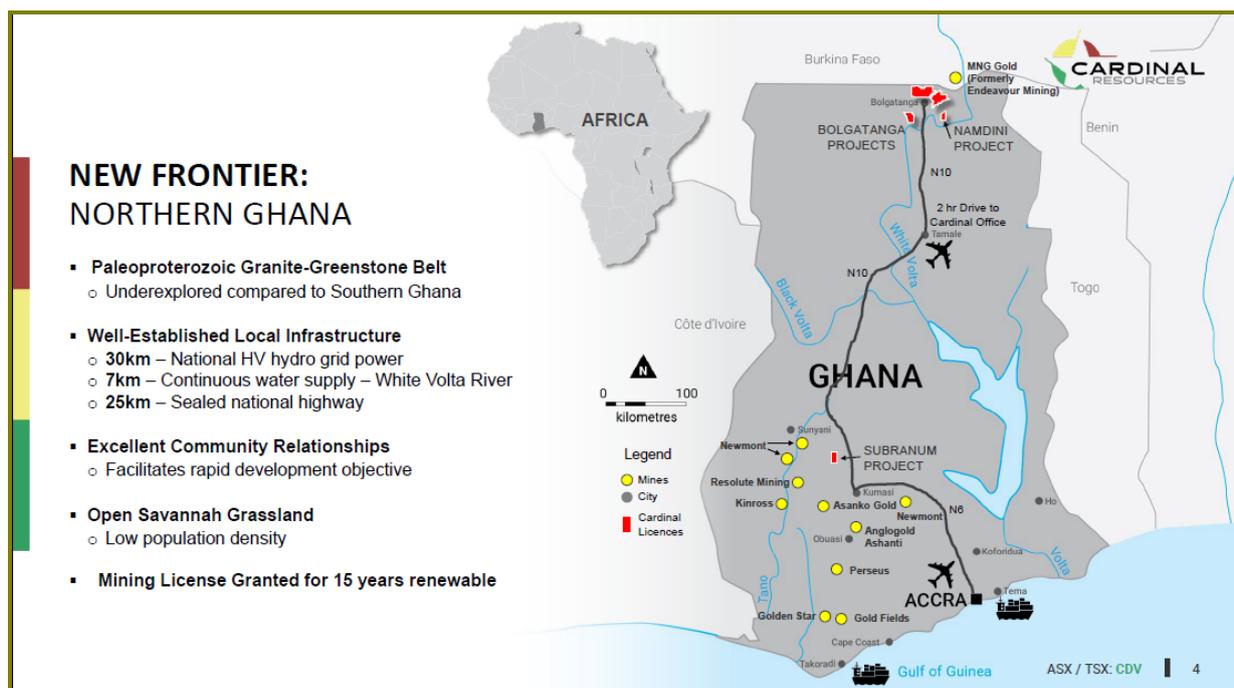
Regrind Size (P90 µm)	Metavolcanics (MVO)		Granite (GRA)		Diorite (DIO)	
	Aachen™ Leach Recovery ² %	Range of possible overall Recovery ³ %	Aachen™ Leach Recovery ² %	Range of possible overall Recovery ³ %	Aachen™ Leach Recovery ² %	Range of possible overall Recovery ³ %
5 µm	91 - 95	84 - 90	92 - 96	84 - 91	90 - 96	83 - 91
9 µm	90 - 96	82 - 91	88 - 96	81 - 91	90 - 94	82 - 89
45 µm	84 - 88	77 - 84	95 - 97	87 - 92	93 - 95	86 - 90
75 µm	73 - 75	67 - 71	76 - 82	70 - 78	75 - 86	69 - 82

- Notes**
1. Results represent pilot scale composites for each lithology (MVO, GRA, DIO)
 2. Range of leach recoveries at incremental passes through the Aachen process
 3. Range of possible overall recovery, calculated by multiplying Aachen leach recovery range by typical flotation recovery range (92-95%), which are results indicated in Cardinal's PFS NI 43-101 (25 October 2018)

Table 2: Namdini Aachen™ Leach Testwork – Summary Total of Samples Submitted by Cardinal

	Samples Mass (kg)	Number of Drill Holes	Number of Intervals (1m)	Number of Final Leach Data Points ¹
TOTAL	4,447	47	2,048	84

Note 1: Leach data points are related to various regrind sizes for the total 7 Starter Pit and Life of Mine pilot scale composites



Company profile

Cardinal Resources' ("Cardinal") principal activity and its subsidiaries is **gold exploration** in **Ghana**. The Company holds interests in 5 tenements prospective for gold mineralization in Ghana in two NE-SW trending Paleo-Proterozoic granite-greenstone belts.

Cardinal's Ndongo Prospect Licence covers an area of 298 km², having been recently expanded by the purchase of two exploration licence areas from Kinross Gold in August 2017. The licence area is considered highly prospective for the discovery of economic gold mineralization associated with the prolific Nangodi Shear Zone located in northern Ghana, a splay fault off the main regional-scale Bole-Bolgatanga Shear.

Elsewhere, the Nangodi Shear Zone is spatially related to no fewer than four gold discoveries, including **Cardinal's** flagship **Namdini Gold Project**, the Shaanxi Mine, the historic Nangodi Gold Mine and the Youga Gold Mine in Burkina Faso, adjacent to the Ghana border.

In addition, there are numerous historic shallow artisanal workings along many parts of this shear zone approximately 15 kilometres north of the **Namdini Gold Project**.

Cardinal's main focus is the flagship **Namdini Gold Project**. On April 3, 2019, the Company announced the results of its Preliminary Feasibility Study (PFS) which delivered a **Maiden Probable Ore Reserve estimation of 5.1 million ounces gold billion** (up from 4.76 million ounces) from **138.6 Mt @ 1.13 g/t gold at a 0.5 g/t cut-off**.

The resource could generate US\$ 1.4 free cash flow (pre-tax) utilising a business case 9.5 million tonnes per annum throughput processing facility model.

A **Feasibility Study (FS)** is fully funded by a finalised secured credit facility of US\$ 25 million with Spratt Private Resource. **Completion is anticipated in Q3 2019.**

On March 27, 2019, **Cardinal** announced further intersections of high-grade shallow gold mineralisation at the **Ndongo East prospect**.

Importantly, the Ndongo Prospecting Licence is located only 24 kilometres north of the Company's **Namdini Gold Project** for which **Cardinal** declared a **Maiden Probable Ore Reserve of 476 million ounces gold** on September 18, 2018.

Investment comments:

Cardinal's main focus is the flagship **Namdini Gold Project** with the recently completed PFS having delivered an upgraded **Maiden Probable Ore Reserve estimate of 5.1million ounces of gold from 138.6 Mt @ 1.13 g/t gold at a 0.05 g/t cut-off**. **The resource could generate US\$ 1.4 billion free cash flow (pre-tax) utilising a business case 9.5 million tonnes per annum throughput processing facility model.**

The PFS study confirms the **Namdini Project** as one of Ghana's and Africa's most promising undeveloped, large gold assets. The financial modelling of the project shows it to be technically sound and financially viable.

A **Feasibility Study (FS)** is fully funded by a second credit facility of US\$ 25 million and will form the basis for the development of **Cardinal's Namdini Gold Project, with completion anticipated in Q3 2019.**

With **Ghana** is to be considered Africa's highest ranked destination for investing in gold mining, based upon its low peer comparison valuation, in my view, **Cardinal Resources**, at its current market valuation of approximately US\$ 89 million, offers a highly attractive investment opportunity.

I maintain my 2019 price target of A\$ 0.90.