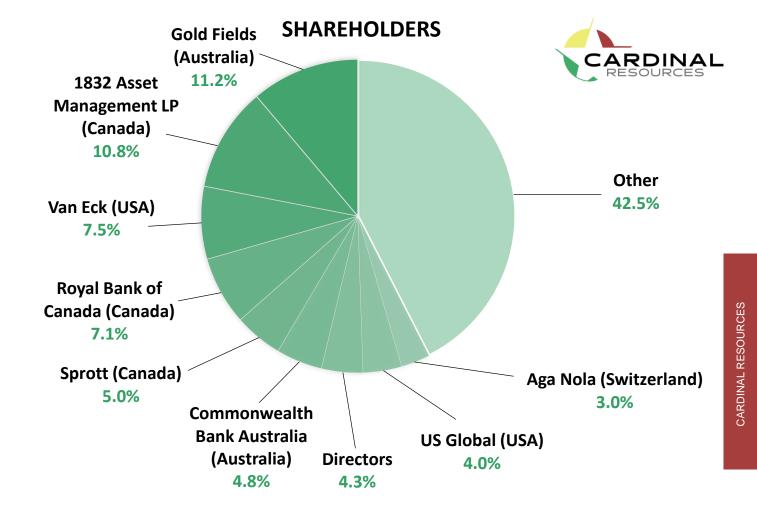


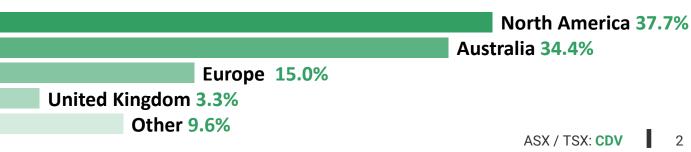
| Capital Structure                      | ASX<br>TSX |
|--|------------|
| Current Share Price <sup>1</sup>       | A\$ 0.45   |
| Shares on Issue <sup>2</sup>           | 378 M      |
| Listed Options on Issue <sup>3,4</sup> | 114 M      |
| Market Capitalisation                  | A\$ 170 M  |
| Enterprise Value                       | A\$ 162 M  |
| Cash at Bank <sup>5</sup>              | A\$ 38 M   |
| 1. As at 29 October 2018               |            |

- 2. 60 Class C Performance shares on issue. If converted, will total 6 million ordinary shares if certain milestones are achieved. Details of conversion milestones are provided in Cardinal's Annual Report
- 3. Exercise price of A\$ 0.15, Expiry date 30 Sept 2019
- 4. Additional 35,294,200 unlisted options on issue with various expiry dates and exercise prices
- 5. Cash as at 30 June 2018 includes Debt of US\$ 25M completed in August 2018.

| Exper<br>Average A         | Ave<br>157%      |   |
|----------------------------|------------------|---|
| Beacon Securities          | (Canada)         | 1 |
| <b>BMO Capital Markets</b> | (Canada)         |   |
| Clarus Securities          | (Canada)         |   |
| Cormark Securities         | (Canada)         |   |
| Hartleys                   | (Australia)      |   |
| RFC Ambrian                | (United Kingdom) |   |



#### SHAREHOLDERS BY GEOGRAPHIC LOCATION





# **BOARD &**MANAGEMENT

#### CEO - MD ARCHIE KOIMTSIDIS

**Project Developer** 

#### **Former**

- Deputy Country Manager Ghana at PMI Gold (now Asanko Gold)
- Ghanaian resident

#### **Executive Director MALIK EASAH**

Alluvial Gold Miner

#### Former

- Public Relations Officer Ghana at PMI Gold (now Asanko Gold)
- Ghanaian citizen

### Project Manager BRUCE LILFORD Metallurgist

#### Former

 Senior Study Manager at Amec Foster Wheeler (now Wood Group)

#### Non - Executive Chairman KEVIN TOMLINSON

Investment Banker & Geologist

#### **Former**

- Director Centamin plc
- Director Orbis Gold
- Chairman Medusa Mining

#### Current

- Non Exec Chair Xanadu Mines
- Non Exec Director Samco Gold
- Non Exec Chair Infinity Lithium

#### Non - Executive Director DR. KENNETH G. THOMAS

**Project Implementation** 

#### **Former**

- Senior Vice President Barrick Gold Corporation
- Past President, CIM

#### Current

Non - Exec Continental Gold

#### Non - Executive Director MICHELE MUSCILLO

Corporate Lawyer

#### **Former**

 Non - Exec Director Orbis Gold (now SEMAFO)

#### Current

- Non Exec Director Aeris Resources
- Non Exec Director Xanadu Mines

#### Non - Executive Director ROBERT SCHAFER

Geologist / Mineral Economist

#### **Former**

- Executive, manager and field geologist - Billiton, BHP, Kinross and Hunter Dickinson
- Past President, PDAC & CIM

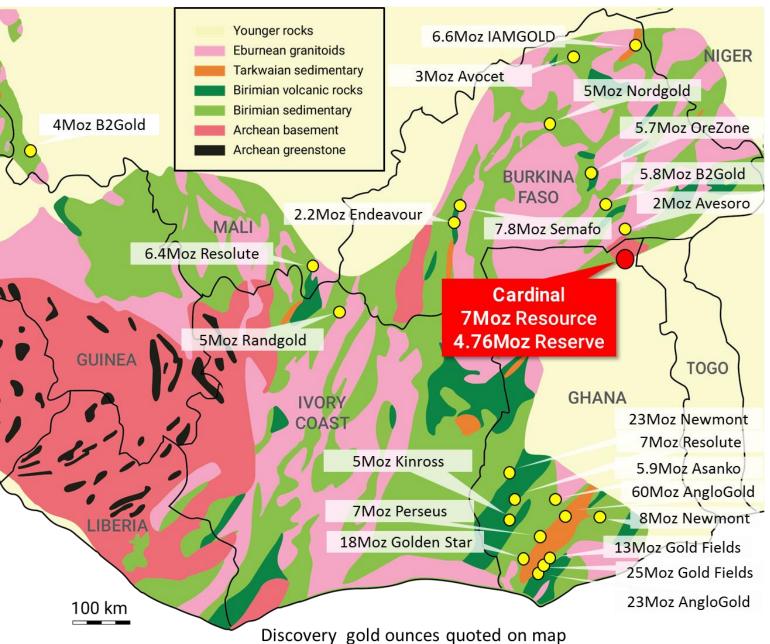
#### Current

 Director Canadian Mining Hall of Fame, Director USA National Mining Hall of Fame



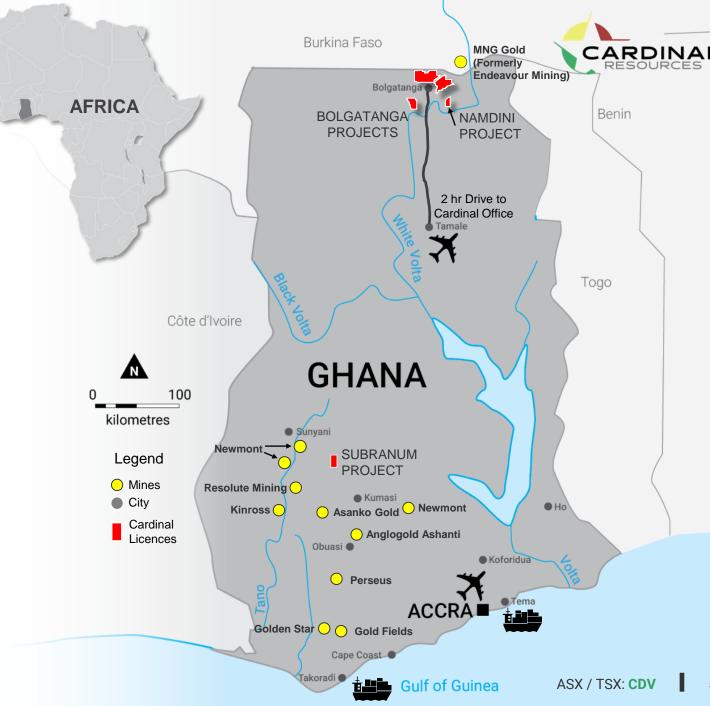
#### MINE SCALE REGIONAL GEOLOGY

- Namdini is located within the Birimian terrane of Northeastern Ghana which is 2.1-2.2 billion years old
- Unconformable Volta
   Basin sediments
   obscure the great
   majority of Birimian
   terrane in eastern and
   central Ghana



# **NEW FRONTIER:**NORTHERN GHANA

- Paleoproterozoic Granite-Greenstone Belt
  - Underexplored compared to Southern Ghana
- Well-Established Local Infrastructure
  - **30km** National HV hydro grid power
  - o 7km Continuous water supply White Volta River
  - 25km Sealed national highway
- Excellent Community Relationships
  - Facilitates rapid development objective
- Open Savannah Grassland
  - Low population density
- Mining License Granted for 15 years renewable



#### **MAIDEN ORE RESERVE 4.76 Moz**



# **PFS** FINANCIALS

- Study Consultants
  - o Golder Associates
  - o Lycopodium
  - o Knight Piesold
  - o ALS Laboratory
  - Oreway Mineral Consultants
  - IMO Metallurgical Consultants
  - MPR Geological Consultants
  - 9.5 Mtpa option selected on best economic return

| KEY ECONOMIC RESULTS   |                               | UNIT      | 9.5 Mtpa       |
|--|-------------------------------|-----------|----------------|
| Gold Price   | Pit Design<br>Financial Model | US\$ / oz | 1,105<br>1,250 |
| <b>Development Capital Cost</b> (including 15% contingency and owners costs) |                               | US\$ M    | 414            |
| All in Sustaining Costs (AISC) <sup>1</sup>                                  | Starter Pit<br>Life of Mine   | US\$ / oz | 599<br>769     |
| Total Project Payback  |                               | years     | 1.8            |
| Post-Tax NPV (@ 5% discount) <sup>2</sup>                                    |                               | US\$ M    | 586            |
| Post-Tax IRR   |                               | %         | 38             |

#### **Table Notes:**

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

<sup>&</sup>lt;sup>2</sup> Royalties calculated at a flat rate of 5% - subject to negotiation and corporate tax rate of 35% was used subject to negotiation



# **PFS**PRODUCTION SUMMARY

- Maiden Ore Reserve 4.76 Moz
- Starter Pit yielding ~900 koz gold with 0.5 : 1 strip ratio
- Life of mine strip ratio of 1.4:1
- Mineralisation 1.1 km long and 350m wide
- >10,000 oz ounce per vertical metre at 0.5 g/t cut-off
- New conventional gold plant inclusive of conventional flotation and regrind to CIL

| KEY ESTIMATED PRODUCTION RESULTS   | UNIT -    | 9.5 Mtpa    |              |
|--|-----------|-------------|--------------|
| RET ESTIMATED PRODUCTION RESOLTS   |           | Starter Pit | Life of Mine |
| Gold Price – Financial Model   | US\$ / oz | 1,          | 250          |
| Gold Produced (Average for full production years) <sup>1</sup>               | (oz / yr) | 361,000     | 294,000      |
| Gold Produced  | (oz)      | 907,000     | 3,975,000    |
| Gold Head Grade  | g/t Au    | 1.31        | 1.14         |
| Gold Recovery  | %         | 86          | 84           |
| Ore Mined (0.5 g/t cut-off grade)  | Tonnes    | 24,000,000  | 129,600,000  |
| Strip Ratio  | W:O       | 0.5 : 1     | 1.4 : 1      |
| Mine Life (Inc ramp-up and mine closure)                                     | years     | 2.5         | 14           |
| <b>Development Capital Cost</b> (Including 15% contingency and owners costs) | US\$ M    | 4           | 14           |

#### Table Notes:

<sup>&</sup>lt;sup>1</sup> Excludes ramp-up and for the Life of Mine scenario mine closure (Years where full production is not realised)



#### PROBABLE ORE RESERVE

#### NAMDINI MAIDEN ORE RESERVE September 2018

- 4.76 Moz Au contained in 129.6 Mt at 1.14 g/t
   Au at a cut-off of 0.5 g/t Au
   Probable Ore Reserve
- 6.5 Moz Au contained in 180 Mt at 1.13 g/t Au at a cut-off of 0.5 g/t Au Indicated Mineral Resource
- 0.5 Moz Au contained in 13 Mt at 1.2g/t Au at a cut-off of 0.5 g/t Au Inferred Mineral Resource
- Remains open along strike and down dip

| Cut off  | Tonnes | Grade    | Metal    |
|----------|--------|----------|----------|
| (g/t Au) | (Mt)   | (g/t Au) | (Moz Au) |
| 0.5      | 129.6  | 1.14     | 4.76     |

The Ore Reserve conforms with and uses JORC Code 2012 recommendations and Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014). No inferred material has been used in the Ore Reserve estimates.

Appropriate modifying factors have been considered, these include but are not restricted to mining, processing, metallurgical, infrastructure, economic marketing, legal, environmental, social and governmental factors.

#### INDICATED MINERAL RESOURCE

| Cut off  | Tonnes | Grade    | Metal    |
|----------|--------|----------|----------|
| (g/t Au) | (Mt)   | (g/t Au) | (Moz Au) |
| 0.5      | 180    | 1.1      | 6.5      |

#### INFERRED MINERAL RESOURCE

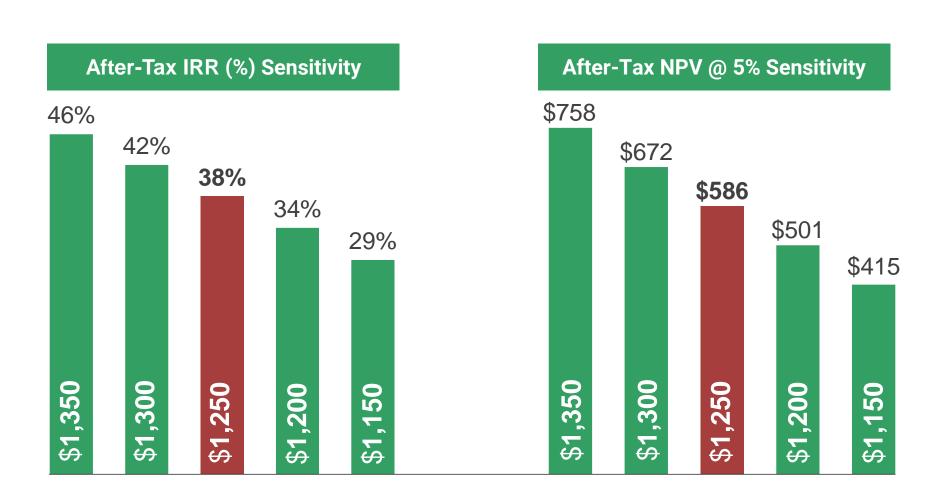
| Cut off  | Tonnes | Grade    | Metal    |
|----------|--------|----------|----------|
| (g/t Au) | (Mt)   | (g/t Au) | (Moz Au) |
| 0.5      | 13     | 1.2      | 0.5      |

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).

The Mineral Resources are inclusive of the Ore Reserve.



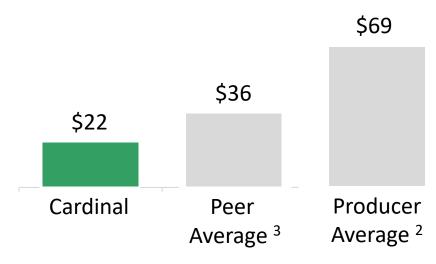
FINANCIAL SENSITIVITY 9.5 Mtpa

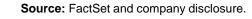




# RELATIVE VALUATION



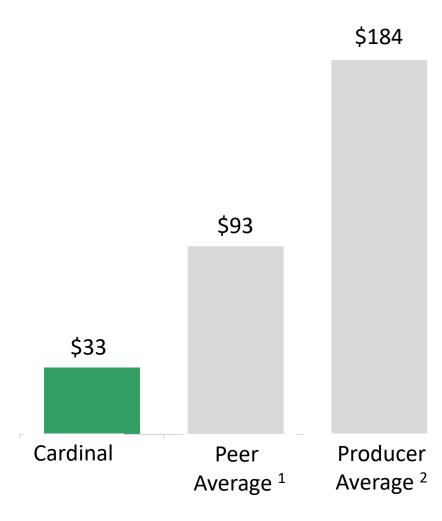




Notes: Resources shown inclusive of reserves and on attributable basis. Au Eq. based on long-term consensus metal prices.

#### <sup>3</sup> Includes 28 gold development companies with resources.

#### EV / Au Eq. Reserves (US\$/oz)



<sup>&</sup>lt;sup>1</sup> Includes 18 gold development companies with reserves.

<sup>&</sup>lt;sup>2</sup> Includes 41 junior and intermediate gold producers.

#### FLAGSHIP NAMDINI PROJECT



#### **DEVELOPING A TIER-ONE ASSET**



#### 4.76 Moz Au Probable Ore Reserve at 1.14 g/t

Cut-off grade - 0.5 g/t Au

#### Large scale single open pit

- Strip ratios:
  - o Starter Pit 0.5:1
  - Life of Mine 1.4: 1

#### Reserve

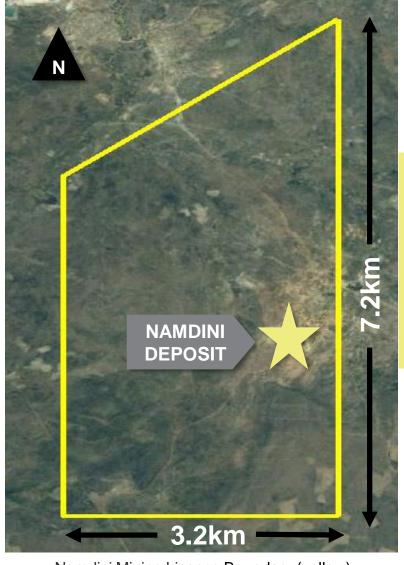
 Mineral Resource to Ore Reserve conversion – 73%

#### Metallurgy

- 86% in Starter Pit and 84% overall LOM recovery with optimisation ongoing
- Conventional crush-grind-float-regrind-CIL circuit

#### Mining License granted

- 15 years renewable
- Environmental permitting in progress
  - EIA Scoping Report submitted to EPA



Namdini Mining Licence Boundary (yellow)





#### **Long Section – Grade Distribution**

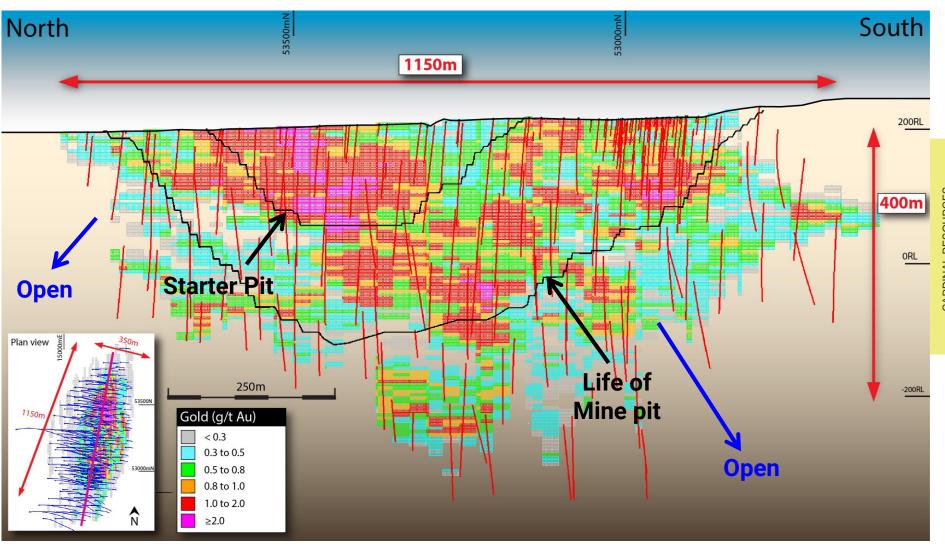
#### **PFS** PIT DESIGNS US\$ 1,105 / oz

#### **Starter Pit**

- Low strip ratio (0.5 : 1)
- Contains 1.06 Moz @ 1.31 g/t
- Concentration of higher grade gold from surface
- Capex payback 1.8 years

#### **Life of Mine Pit**

- Low strip ratio (1.4:1)
- Probable Ore Reserve of 4.76 Moz @ 1.14 g/t Au

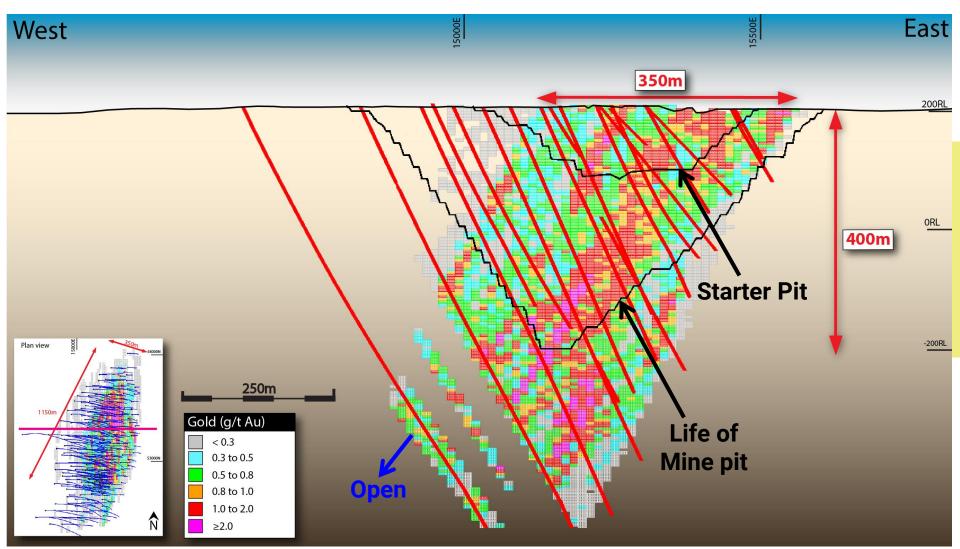




#### **Cross Section – Grade Distribution**

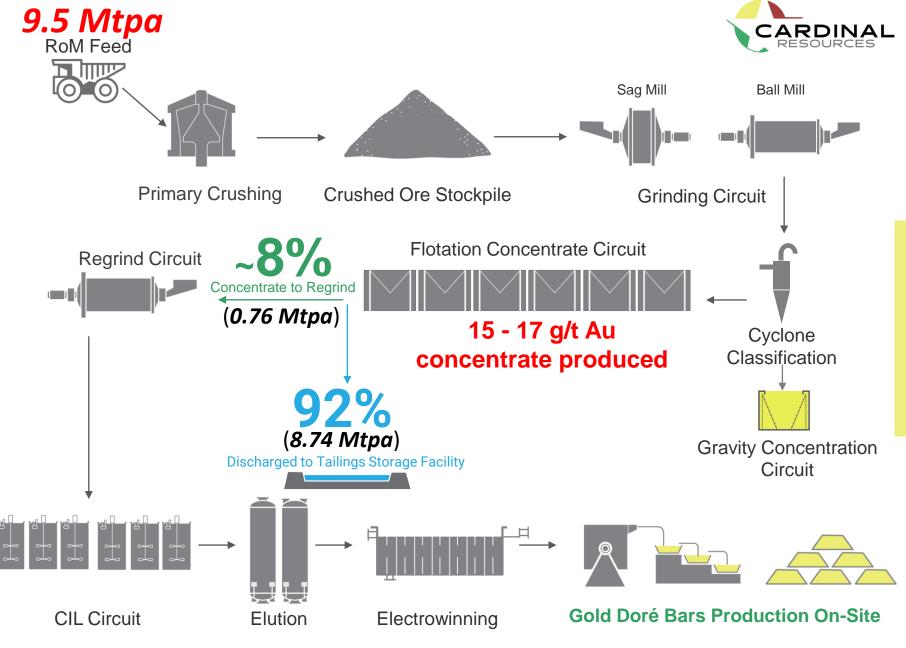
# **PFS** PIT DRILLING

- 118,864 metres drilled since first discovery hole
- 64,423mDD HQ diameter
- 41,170m
   RC 5.5 inch bit
- 13,271m RC Grade Control
- Mineralisation 350 metres wide
- Deposit open and continues at depth



#### PFS 9.5 Mtpa PROCESS FLOWSHEET

- Conventional crushgrind-float-regrind-CIL circuit
- Gravity gold circuit designed for free gold
- 15 17 g/t Au concentrate produced
- Processing 8% of the RoM feed beyond flotation
- Discharging 92% of the RoM feed to tailings
- Gold doré bars produced on-site





# DISTRICT EXPLORATION



# **DISTRICT**INITIATIVES

#### Bongo

 Auger soil drilling planned and geophysics targets being evaluated

#### Kungongo

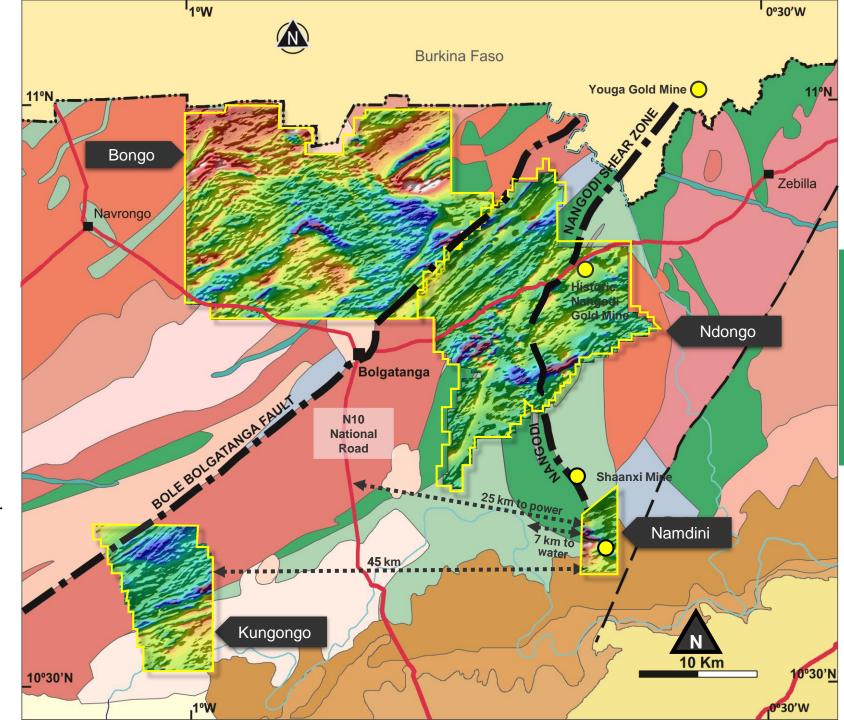
- o 4.5 km strike length being evaluated
- Positive assay results returned from first pass drilling
- 3,000 metre drill plan to commence Q4 2018

#### Ndongo

- 6 large scale targets identified with initial focus near major regional shear
- Recent exploration identified a discovery at Ndongo East

#### Drill targets being generated

 Gravity, magnetics and IP being used to identify and refine targets





2018

2019

#### **TIMELINE**

#### Resource Update

- Completed

#### Metallurgical Optimisation

- Ongoing

#### Permitting & Approvals

- Ongoing

#### Preliminary Economic Assessment (PEA)

- Completed

#### Preliminary Feasibility Study (PFS)

- Completed

#### Definitive Feasibility Study (DFS)

- To Commence (Anticipated Delivery Q3 - 2019)

#### **District Exploration**

Resuming post Wet Season (Oct / Nov 2018)







### **THANK YOU**

ASX / TSX: CDV

Contact Us:

CEO / MD

ARCHIE KOIMTSIDIS

archie@cardinalresources.com.au

Cannings Purple

ANDREW ROWELL

arowell@canningspurple.com

IR / CORP DEV
ALEC ROWLANDS
alec@cardinalresources.com.au

Renmark Financial Communications Inc **BETTINA FILIPPONE** bfilippone@renmarkfinancial.com



# APPENDIX: Competent Person's Statement & Disclaimer

#### **QUALIFIED PERSON - COMPETENT PERSON'S STATEMENT**

Mr. Daryl Evans, who is a full time employee of Independent Metallurgical Operations Pty Ltd, is a Qualified Person as defined by National Instrument 43-101- Standards of Disclosure for Mineral Projects ("NI43-101"). Mr. Evans holds a Qualified Professional status being a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM). Mr. Evans is an independent consultant appointed by Cardinal. Mr Evans has no economic, financial or pecuniary interest in the company

Mr Nicolas Johnson, a member of the Australian Institute of Geoscientists, who is an employee of MPR Geological Consultants Pty Ltd, has compiled the information relating to the Mineral Resources in the Resource Summary 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 a Qualified Person as defined by the NI43-101 instrument. Mr Johnson has no economic, financial or pecuniary interest in the company.

Mr. Richard Bray is a Registered Professional Geologist with the Australian Institute of Geoscientists. Mr Bray has compiled the information in this presentation that relates to the Exploration Results and Mineral Resources. Mr. Bray has more than 5 years' experience relevant to the styles of mineralisation and type of deposit 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 fulltime employee of Cardinal Resources Limited and holds equity securities in the Company.

Mr. Ekow Taylor is a Chartered Professional Geologist with the Australasian Institute of Mining and Metallurgy. Mr Taylor has compiled the information in this presentation that relates to the Exploration Results and Mineral Resources. Mr. Taylor has more than 5 years' experience relevant to the styles of mineralisation and type of deposit 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. Taylor is a fulltime employee of Cardinal Resources Limited and holds equity securities in the Company.

Mr Glenn Turnbull, a Competent Person who is a Chartered Engineer and a Member of the Australasian Institute of Mining and Metallurgy and a full-time employee of Golder Associates Pty Ltd has compiled the information relating to the Ore Reserves in the Ore Reserve Summary. Mr Turnbull 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 Turnbull has no economic, financial or pecuniary interest in the company

#### NO NEW INFORMATION

This Presentation contains information extracted from ASX and TSX market announcements reported in accordance with the JORC Code (2012) and NI 43-101 and available for viewing at www.cardinalresources.com.au

Cardinal Resources Limited ("Cardinal" or the "Company") confirms that it is not aware of any new information or data that materially affects the information included in any original ASX market announcements carried out at the Company's projects and that all material assumptions and technical parameters underpinning the exploration activities and estimates of Mineral Resources in the relevant market announcements continue to apply and have not been materially 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.

Please also refer to the Company's Annual and Quarterly Reports for further background information which are available on the Company's website.



# APPENDIX DISCLAIMER & FORWARD LOOKING STATMENTS

#### FORWARD LOOKING STATEMENTS

This presentation contains "forward-looking statements", within the meaning of Section 27A of the United States Securities Act of 1933, as amended and Section 21E of the United States Exchange Act of 1934, as amended and forward-looking information as defined under applicable Canadian securities legislation (collectively, "forward-looking statements"). These forward-looking statements relate to, among other things, the objectives, goals, strategies, beliefs, intentions, plans, estimates and outlook of Cardinal Resources. Ltd ("Cardinal Resources" or the "Company"). Forward-looking statements can generally be identified by the use of words such as "believe," "anticipate," "expect," "intend," "plan," "goal," "will," "may," "target," "potential" and other similar expressions. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. Forward-looking statements are based on estimates and assumptions made by Cardinal Resources in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors Cardinal Resources believes are appropriate in the circumstances. These estimates and assumptions are inherently subject to significant business, economic, competitive and other uncertainties and contingencies, many of which, with respect to future events, are subject to change. Although Cardinal Resources believes that the expectations reflected in such forward-looking statements are reasonable, undue reliance should not be placed on such statements.

In making the forward-looking statements in this presentation, Cardinal Resources has made several assumptions, including, but not limited to assumptions concerning: production costs; statements with respect to the future price of gold, the estimation of mineral reserves and resources, the realization of mineral reserve estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, currency exchange rate fluctuations, requirements of additional capital, government regulation of mining operations, environmental risks, costs of closure of various operations and changes to the political stability or government regulation in the country in which Cardinal Resources operates.

Actual results may differ materially from those expressed or implied in the forward-looking statements contained in this presentation. Important factors that could cause actual results to differ materially from these expectations are discussed in greater detail under the heading "Risk Factors" in Cardinal Resource's annual information form for the current year available on <a href="https://www.sedar.com">www.sedar.com</a>. When relying on forward-looking statements to make decisions with respect to Cardinal Resources, carefully consider these risk factors and other uncertainties and potential events. Cardinal Resources undertakes no obligation to update or revise any forward-looking statement, except as required by law.

Although Cardinal Resources has carefully prepared and verified the Mineral Resource and Ore Reserve figures presented herein, such figures are estimates, which are, in part, based on forward-looking information and no assurance can be given that the indicated level of gold will be produced. Estimated Mineral Resources and Ore Reserves may have to be recalculated based on actual production experience. Market price fluctuations of gold as well as increased production costs or reduced recovery rates and other factors may render the present Probable Ore Reserves unprofitable to develop at a particular site or sites for periods of time.

#### PRE-FEASIBILITY STUDY - CAUTIONARY STATEMENT (REFER PRESS RELEASE DATED 18 SEPTEMBER 2018)

The PFS is based upon a Probable Ore Reserve derived from Indicated Mineral Resources. No Inferred Mineral Resources have been included in the estimation of Ore Reserves. The Company advises that the Probable Ore Reserve provides 100% of the total tonnage and 100% of the total gold metal underpinning the forecast production target and financial projections. No Inferred Mineral Resource material is included in the Life of Mine plan. The PFS is based on material assumptions outlined in the PFS Report. The Company has concluded it has a reasonable basis for providing the forward-looking statements in this document.