

2020 ANNUAL REPORT



- I MANAGEMENT'S DISCUSSION & ANALYSIS
- **II FINANCIAL STATEMENTS**
- **III ANNUAL INFORMATION STATEMENT**



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MANAGEMENT'S DISCUSSION & ANALYSIS (I)





(the "Company" or the "Corporation" or "Cardinal")

MANAGEMENT'S DISCUSSION AND ANALYSIS For the year ended June 30, 2020

GENERAL

This Management's Discussion and Analysis ("MD&A") supplements but does not form part of the audited consolidated financial statements of the Company for the three and twelve months ended June 30, 2020. The following information, prepared as of August 31, 2020, should be read in conjunction with the Company's audited consolidated financial statements for the year ended June 30, 2020 and the audited consolidated financial statements for the year ended June 30, 2019. The Company reports its financial position, results of operations and cash flows in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). All amounts are expressed in Australian dollars unless otherwise indicated.

Additional information relevant to the Company's activities can be found on SEDAR at www.sedar.com.

Cardinal's shares are listed on the Australian Securities Exchange ("ASX") and Toronto Stock Exchange ("TSX") under the symbol "CDV", while its listed stock options (warrants) are listed on the ASX under the symbol "CDVOA"

FORWARD LOOKING INFORMATION

This MD&A may contain "forward-looking information" under applicable Canadian securities laws that reflects the Company's current expectations and projections about its future results. When used in this MD&A, words such as "will", "may", "should", "estimate", "intend", "expect", "anticipate" and similar expressions are intended to identify forward-looking information, which, by its very nature, is not a guarantee of the Company's future operational or financial performance.

Forward-looking information includes statements that are not historical facts and includes but is not limited to:

Estimates and their underlying assumptions;

- A. Statements regarding plans, objectives and expectations with respect to the effectiveness of the Company's business model, future operations, the impact of regulatory initiatives on the Company's operations and market opportunities;
- B. General industry and macroeconomic growth rates;
- C. Expectations related to possible joint or strategic ventures; and
- D. Statements regarding future performance.

Forward looking information used in this MD&A is subject to various known and unknown risks, uncertainties and other factors, most of which are difficult to predict and generally beyond the control of the Company. These risks, uncertainties and other factors may include, but are not limited to, unavailability of financing, failure to identify commercially viable mineral reserves, fluctuations in the market valuation for commodities, difficulties in obtaining required approvals for the development of a mineral project, and other factors.

With respect to forward-looking information contained in this MD&A, the Company has made assumptions.



Readers are cautioned not to place undue reliance on forward-looking information, which speaks only as of the date of this MD&A or as of the date otherwise specifically indicated herein. Due to risks, uncertainties and other factors, including the risks, uncertainties and other factors identified above and elsewhere in this MD&A, actual events may differ materially from those anticipated in such forward-looking information. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by securities law.

DESCRIPTION OF BUSINESS

The principal activity of the Company (and its subsidiaries) is gold exploration and mine development in Ghana. The Company holds tenements prospective for gold mineralisation in Ghana in two granite-greenstone belts: the Bolgatanga Project and the Namdini Gold Project ("Namdini Gold Project" or "Namdini"), which are, respectively, located within the Greenstone Belts in northeast Ghana and the Subranum Project, which is located within the Sefwi Greenstone Belt.

The main focus of activity is the Namdini Gold Project which has a gold Mineral Reserve of 5.1 Moz (138.6Mt @ 1.13g/t Au; 0.5g/t Au cut-off) inclusive of 0.4 Moz Proved (7.4 Mt @ 1.31g/t Au; 0.5 g/t Au cut-off) and 4.7 Moz Probable (131.2 Mt @ 1.12 g/t Au; 0.5g/t Au cut-off).

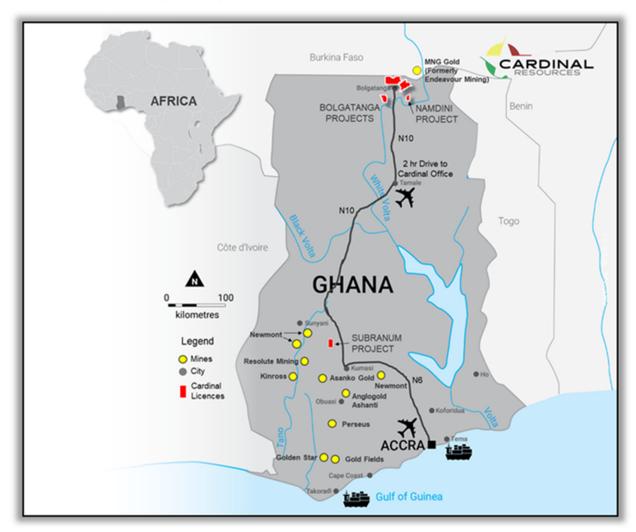


Figure 1: Cardinal Resource's Tenements in Ghana



OUTLOOK

The principal activity of the Company is gold exploration and mine development in Ghana. The Company holds tenements prospective for gold mineralisation in Ghana in two granite-greenstone belts: the Bolgatanga Project and the Namdini Gold Project ("Namdini"), which are, respectively, located within the Greenstone Belts in northeast Ghana and the Subranum Project, which is located within the Sefwi Greenstone Belt in southwest Ghana.

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In response to the COVID-19 pandemic and following advice from the World Health Organization ("WHO") as well as the Australian, Ghanaian, and Canadian Governments, Cardinal has enacted changes to its exploration programme and on-site development programme, primarily focused on the safety and well-being of our workforce.

All international travel remains suspended. On the ground in Ghana, the workforce has been reduced to key personnel only. According to WHO External Situation Report 205 (August 12, 2020), there had been 41,404 confirmed cases of COVID-19 in Ghana, including cases via local transmission. 215 deaths from COVID-19 have been recorded in Ghana at the time of this report. At the time of writing, the Northern Region of Ghana, where Cardinal's main tenements are located, have recorded 454 COVID-19 cases with three deaths. Some restrictions and lockdowns have been eased. Strict COVID-19 Operational Procedures have been introduced at the Company's site operations, Cardinal Offices in Perth and Accra.

The Company is doing everything to ensure it is well placed to resume normal business as soon as practically possible. The Project technical team and its partners are still actively working on adding value to the Namdini Gold Project.

CORPORATE HIGHLIGHTS

- On March 16, 2020 the Company advised that it had received notification from Nord Gold SE (Nordgold) that
 it had acquired a relevant interest of 19.9% of the shares in Cardinal, (having acquired 16.4% stake previously
 owned by Goldfields Limited), and further advised that Nordgold had provided a non-binding indicative and
 conditional proposal to acquire all the issued capital of Cardinal that it did not already own for AU\$0.45775
 per share in cash.
- On March 30, 2020 the Company updated its shareholders and provided commentary as to how the Company is managing the current COVID-19 pandemic.
- On May 4, 2020 the Company announced an update on permitting approvals and COVID-19 impacts on the Company's progress.
- On June 5, 2020 the Company announced that the senior secured credit facility (as amended in February 2020 and March 2020) had been assigned from Sprott Private Resource Lending, L.P. to the Ghana Infrastructure Investment Fund (GIIF), a Ghana Government owned infrastructure investment vehicle.
- On June 16, 2020 the Company responded to media speculation in Ghana and advised that the Company
 continued strategic discussions with banks, financiers and other parties which continued to show interest in
 bringing the Namdini Project into production with a view to maximising economic outcomes. Whilst
 discussions in relation to any potential transaction remain ongoing, at that time no agreement had been
 entered into in relation to any transaction.
- On June 18, 2020 the Company announced the recommended all-cash takeover offer of Cardinal Resources by Shandong Gold Mining (Hong Kong) Co, Ltd (a subsidiary of Shandong Gold Mining Co, Ltd) ("Shandong Gold"). Cardinal entered into a Bid Implementation Agreement with Shandong Gold, pursuant to which



Shandong Gold agreed to acquire 100% of the issued and outstanding ordinary shares in Cardinal at a price of AU\$0.60. Proposed implementation by way of an off-market takeover offer with a 50.1% minimum acceptance condition. The Board of Cardinal unanimously recommended acceptance of the Shandong Gold offer in the absence of a superior proposal.

Subsequent to end of Period

- On July 7, 2020 the Company announced that it had raised AU\$11,960,000 as a result of the issue of 26,000,000 fully paid ordinary shares to Shandong Gold in accordance with the terms of the Bid Implementation Agreement.
- On July 15, 2020 Cardinal received an unconditional on-market takeover offer at AU\$0.66 per share from Nordgold. Having regards to the unsolicited nature of the takeover bid and the provisions of the Bid Implementation Agreement with Shandong Gold, the Board of Cardinal recommended a 'take no action' at the time in relation to the Nordgold takeover bid.
- On July 20, 2020 the Company advised that its Namdini Mining Licence had officially received Sovereign Parliamentary Ratification in Ghana.
- On July 22, 2020 the Company advised that it had received a revised and improved proposal for an off-market takeover from Shandong Gold, pursuant to which Shandong Gold will offer to acquire all of the shares in Cardinal it does not presently own at a cash price of \$0.70 per share.
- On July 27, 2020 the Company, after careful consideration of the Revised Shandong Gold Offer and Nordgold's unconditional on-market offer for Cardinal, Cardinal's Board of Directors (in consultation with the Special Committee, its financial and legal advisors), unanimously recommended that Cardinal shareholders
 - ACCEPT the Revised Shandong Gold Offer (in the absence of a superior proposal); and
 - **REJECT** the Nordgold Bid.
- On July 30, 2020 the Company advised that it had entered into a deed with each Shandong Gold Mining (HongKong) Co., Limited and Shandong Gold Mining Co., Ltd, to amend the Bid Implementation Agreement.
- On August 11, 2020 the Company released a Target Statement recommending shareholders accept the superior offer made by Shandong Gold on July 22 2020.
- On August 11, 2020 Shandong Gold released a Bidder's Statement recommending shareholders accept its all-cash offer off market offer of \$0.70 per share made on July 22 2020.
- On August 19, 2020 the Company advised that Shandong Gold had given notice to Cardinal that the Foreign Investment Review Board (FIRB) approval condition of its off-market takeover offer to acquire all of the Shares in Cardinal it does not presently own at a cash price of \$0.70 per share had been fulfilled.
- On August 24, 2020 the Company received advice that Nordgold had extended its offer under the unconditional on-market takeover bid to acquire all the ordinary shares in Cardinal Resource to September 10, 2020.



THE NAMDINI GOLD PROJECT

Property Title / Mining Lease

A Large-Scale Mining License covering the Namdini Mining Lease was granted to Cardinal Namdini Mining Limited ("Cardinal Namdini"), a wholly owned subsidiary of Cardinal, by the Minister of Lands and Natural Resources ("the Minister") under the Ghanaian Minerals and Mining Act 2006 (Act 703) ("the Act") in December 2017.

In February 2020, the Minister - in accordance with the Act- approved the application to expand the original Mining Lease to the maximum allowable area. The expanded Large-Scale Mining Lease now totals 63km² and is valid for a renewable term of 15 years from 2020 (Figure 2).

Subsequent to the Quarter and financial year end the Company advised that its Namdini Mining Licence had officially received Sovereign Parliamentary Ratification in Ghana.

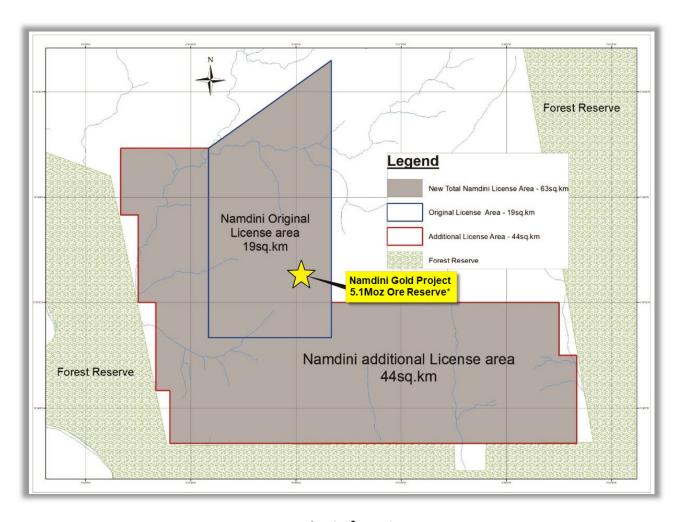


Figure 2: Location of 63 km² Namdini Mining Lease

*7.4Mt @ 1.31g/t Au for 0.4Moz Au Proved and 131.2Mt @ 1.12g/t Au for 4.7Moz Au Probable; 0.5g/t Au cut-off



Project Development Timeline

Table 1: Proposed Project development schedule (Subject to Financing and COVID-19 impact)

Milestone	Target timeline
Advance Front End Engineering and Design ("FEED") to completion	Q4 2020
Advance Resettlement Action Plan to substantial completion	Q1 2021
Target production commencement	H1 2023

Project Economic Outcomes

Following release of the Feasibility Study and accompanying NI43-101 Technical Report (ASX/TSX Press Release dated 28 October and 28 November 2019 respectively) the gold price has traded within the range of US\$1,492 to US\$1,902 per ounce on 24 July 2020. The three-year running average to 24 July 2020 is US\$1,385 per ounce.

The Feasibility Study evaluated the Namdini project outcomes at a gold price of US\$1,350 per ounce, but also presented gold price sensitivities from US\$1,150 per ounce and up to US\$1,550 per ounce which Cardinal has set out in Table 2 below.

Table 2 – Namdini Project Feasibility Study Outcomes (ASX/TSX Press Release dated 28 October and 28 November 2019 respectively)

Project Financial Model						
Gold Price	US\$ / oz	1,150	1,350	1,550		
Capital Cost (including \$42M contingency)	US\$M	390	390	390		
All in Sustaining Costs (AISC) ¹						
Starter Pit	US\$ / oz	585	585	585		
Life of Mine (15 years)	US\$ / oz	895	895	895		
Total Project Payback	months	33	21	9		
Pre-Tax NPV ^{5%}	US\$M	406	914	1,438		
Pre-Tax IRR	%	26	43	57		

¹ Cash Costs + Royalties + Levies + Life of Mine Sustaining Capital Costs (World Gold Council Standard).

Royalties calculated on sliding scale of rates based on USD gold price being 5.5% at UD\$1,350/oz and 6.0% at US\$1,550/oz and a corporate tax rate of 32.5%; both subject to negotiation.

The forecast financial information set out above in Table 2 was initially contained in Cardinal's Feasibility Study (refer Cardinal's ASX Announcement dated October 28, 2019 titled "Feasibility Study Confirms Namdini as Tier One Gold Project".) Cardinal confirms that all the material assumptions underpinning the above forecast financial information in the Feasibility Study continue to apply and have not materially changed.



Project Development Partners

Table 3: FEED Team:

COMPANY	ROLE
Lycopodium	Feasibility Study Managers. Process plant and associated infrastructure. Capital and Process Operating cost estimation.
AMC Consulting	Mine design, planning, optimization, scheduling and mining contractor tendering
Orway Minerals Consultants	Comminution data analysis, crushing and grinding option studies.
ALS Laboratory (Perth)	Metallurgical test work to support the process design criteria.
Knight Piésold Consulting	Tailings Storage Facility and selected infrastructure design.
Independent Metallurgical Operations	Metallurgical test work management and analysis
MPR Geological Consultants	Mineral Resource modelling of the Namdini Deposit.
Orefind	Geology and deposit structural genesis.
Sebbag Group International	Mine Design Management and Review.
NEMAS Consult & Geosystems Consulting	Environmental Impact Assessment Study.
Whittle Consulting	Enterprise Optimization of the Namdini Project.
Alastri Software	Tactical Scheduling, Haulage Modelling and Reserving Software.
Maelgwyn Mineral Services Africa	Aachen TM process metallurgical optimization.
BDO Advisory	Financial Model Integrity & Reviewer (PEA, PFS and FS).
MKM Social	Socio-Economic Study and Resettlement Action Plan.

Project Permits and Approval Status

- July 2018 Environmental Impact Statement ("EIS") development and documentation process initiated
- <u>December 2019</u> Cardinal submitted its Draft EIS for the development of the Namdini Project with the Ghanaian Environmental Protection Agency ("**EPA"**).
- <u>January 2020</u> The Ghanaian EPA completed its review of the Draft EIS for the development of the Namdini Project. The EIS revised as needed and re-submitted in March 2020
- <u>February 2020</u> Relocation Action Plan ("RAP") approved. The RAP was developed over an extended period, inclusive of extensive consultation with the Project Affected People ("PAP") and several levels of the Government. It was signed off by all PAP and subsequently approved by the Ghanaian Minerals Commission
- <u>February 2020</u> Water License granted. Permits the use of water for construction and mine operations purposes
- April 2020 Ghanaian EPA approves Cardinal's EIS, granting its Permit for the development of the Namdini Gold Project



 <u>July 2020</u> – The Namdini Mining Licence had officially received Sovereign Parliamentary Ratification in Ghana

The Company was granted an environmental permit for the Namdini Gold Project by EPA on April 20, 2020. The permit expires October 20, 2021. Renewal is expected on October 27, 2021 following the submission of an Environmental Management Plan ("EMP"). The EMP will be submitted six months prior to the expiry.

Developing a safe, successful, and sustainable gold mine continues to be a principal focus for Cardinal Resources. Progress on permitting initiatives are as follows:

- Application for Bulk Oil Facility permit from the Ghanaian EPA
- Registration of the proposed Environmental Impact study with the EPA
- Application for zoning letter from the Talensi District Assembly

Outlook for the third quarter is as follows:

- Application for Fire Certificate from the Ghana National Fire Service
- Rehabilitate existing access road to the project site
- Application for chemical use permit from the EPA and Narcotics Board of Ghana
- Create access to proposed water abstraction point on the White Volta
- Implement operations Health, Safety and Environmental (HSE) Management System
- Application for mine operating permit from the Minerals Commission of Ghana

Resettlement Action Plan

MinCom has approved Cardinal's RAP for its Namdini Gold Project in the Talensi District of the Upper East Region of Ghana, West Africa. The RAP report was produced in accordance with the Minerals and Mining (Compensation and Resettlement) Regulation 2012 (L.I 2175), and International Finance Corporation's ("IFC") Performance Standards on Social and Environmental Sustainability.

MinCom's approval has paved the way for construction of 275 structures including residential and public buildings for the people of Accra Site and Buing village, which is planned for the next financial year. The 270 impacted households with a total population of 1,410 people will be compensated for loss of assets and livelihood. Existing infrastructure will be improved. The communities signed the Resettlement Agreement with the Company on February 11, 2020.

FEED Update

All works for the FEED programme was wound down for Cardinal's appointed consultants following advice from the Company due to the global spread of COVID-19.

Additional land was acquired for the Namdini project area which resulted in the tailings storage facility ("TSF"), water storage facility ("WSF") and waste storage dump ("WSD") being optimised with the additional space being made available.



A summary of the FEED activities up to the point of suspension were as follows:

- Cardinal continued negotiating the separable Engineering Procurement and Construction Management contracts with Lycopodium
- The following design notices were being processed:
 - o An 11kV power supply selected for the river abstraction pumps as opposed to a diesel generator set
 - Splitting of the oxygen demand into two separable oxygen plants for redundancy
 - Specifications of the lease boundary fencing to be upgraded.
 - o A carbon-in-leach ("CIL") tower crane chosen as opposed to a gantry crane
 - o Addition of a semi-automatic Sodium Metabisulphite handling system
 - Addition of a Lime Blower for delivery to the Process Plant outside of the Plant fence
 - Haul truck crossovers for tailings and decant pipelines
 - Flat pack versus block work for the permanent accommodation camp, fly camp and construction camp
 - Reducing the size and hence cost of the primary crusher
- The site lay-out issued for final review
- The Project Execution Plan in the process of being reviewed by Cardinal
- An updated TSF dam breakage analysis completed and issued to Cardinal
- The WSF relocated and a new WSD designed.

The project execution schedule was premised on a Financial Investment Decision ("**FID**") date of May 1, 2020 and a site access date of September 1, 2020. At the time of suspension, the schedule was ready for review by Cardinal.

Specific schedule target milestones are defined as follows:

- Plant warehouse to be commissioned and handed over 12 months before first gold pour
- Incinerator to be commissioned and handed over 12 months before first gold pour
- Mining Service Area Facility to be commissioned and handed over 9 months before first gold pour
- Metallurgical laboratory to be commissioned and handed over 6 months before first gold pour

A constructability project review was completed during the FEED, to be ready for a planned Hazard Identification ("**HAZID**") analysis. The HAZID was cancelled due to the suspension.

The following procurement packages were in various stages of evaluation:

- Fly Camp Facilities, Operation and Camp Management
- Site Survey Services
- Infrastructure Bulk Earthworks
- Plant Bulk Earthworks
- Concrete Works
- Field Erected Tanks and Steel Framed Buildings



• Construction Camp Services

Mining contract tender expressions of interest were sent to thirteen (13) potential mining contractors.

Namdini Project Drilling

Namdini Infrastructure Sterilisation Drilling

During the Quarter, sterilisation drilling was suspended. Sterilisation drilling to date, as expected, has returned no significant mineralisation.

To date, approximately 37,164m of drilling has been completed, comprising of 381 reverse circulation ("RC") drillholes for approximately 36,529m and 2 diamond drillholes for approximately 635m (Figure 3).

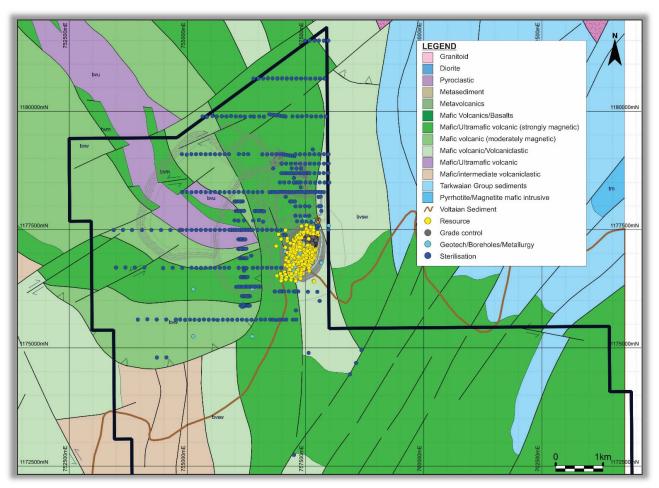


Figure 3: Namdini Project Showing Completed Drill Locations



Namdini Infrastructure Geotechnical Drilling

No Geotechnical drilling and test-pitting were undertaken for the project infrastructure during the Quarter, due to the COVID-19 restrictions. Figure 4 highlights completed Geotech investigations on the TSF and Process Plant areas.

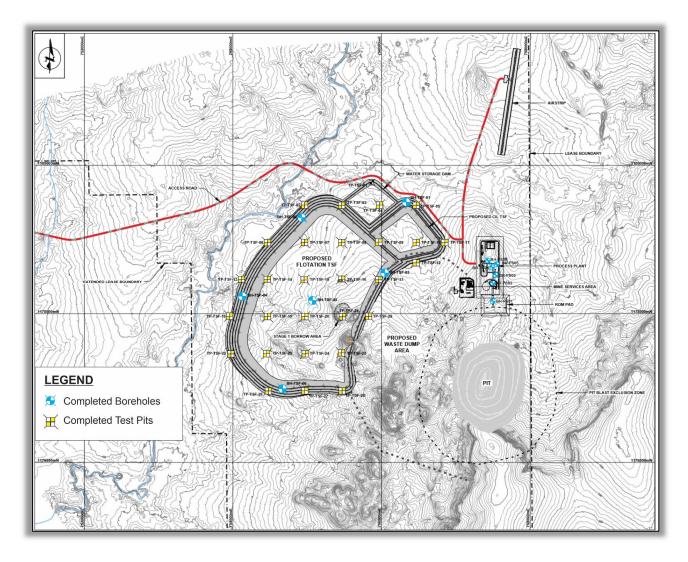


Figure 4: Completed Geotechnical Drill Locations on TSF and Process Plant Areas

REGIONAL EXPLORATION UPDATE

The Company owns exploration rights to two exploration projects: The Bolgatanga Project which includes Bongo Licence Area, Kungongo Licence and Ndongo Licence Area (Figures 1 and 5) located in the northeast of Ghana and the Subranum Project located in the southwest of Ghana (Figures 1 and 9).

The main focus of the Company's regional exploration programme during the Quarter was field mapping and ground-truthing initiated after a review of structures and targets generated from geophysical data, historical RC results and a follow up on identified geophysical targets with trenching and sampling programme at Yameriga (RL9/19) (Figure 5).

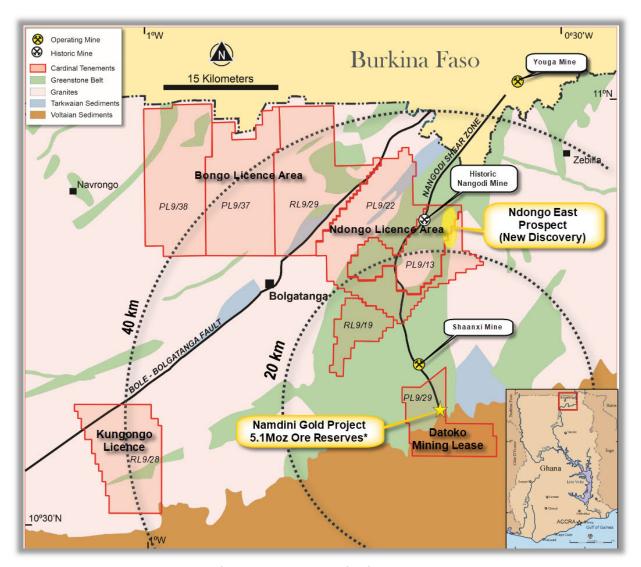


Figure 5: Namdini Mining Licence and Bolgatanga Project Tenements

*7.4Mt @ 1.31g/t Au for 0.4Moz Au Proved and 131.2Mt @ 1.12g/t Au for 4.7Moz Au Probable; 0.5g/t Au cut-off



BOLGATANGA PROJECT

Ndongo Licence Area

The Ndongo Licence Area, hosts part of the extensive regional Bole-Bolgatanga Fault in the northwest and the prospective Nangodi Shear Zone in the centre of the licence area. The licence area wraps around the southern end of the Palungu granitoid intrusive, in the south-eastern region of the licence and forms the main area of prospectivity on the tenement (Figure 5).

The Ndongo Licence Area, comprises of the combined, Nangodi Prospecting Licence (PL9/13, covering a land size of 84.7km²), Ndongo Prospecting Licence (PL9/22, covering a land area of 157km²), and Yameriga Prospecting Licence (RL9/19, covering a land size of 36.78km²), granted to Cardinal to prospect for gold in the Bolgatanga and Talensi Nabdam District in the Upper East Region in the Republic of Ghana. The combined land area of the Ndongo Licence Area is 278.48km².

The Company focused exploration activities during the Quarter at Yameriga conducting field mapping, ground truthing, trenching and some scout RC drilling after a review of geophysical targets, historical RC results and artisanal workings (Figure 6). Rock chip samples collected from veins in adits and rock dumps around adits in heavily artisanal areas returned significant gold assays. A summary of the highlighted results is shown in Table 5 and in Figure 6 below. The significant assays returned from the rock chip samples indicate the potential for discovery of high-grade economic gold mineralisation at Yameriga and warrant further detailed exploration work. Rock chips were mainly quartz veins (milky and smoky) with iron staining and occasional visible specks of gold. Primary rocks encountered were variably altered volcaniclastics with chlorite-silica alteration and specks of sulphides (Rock Chip sample pictures in Figure 7).

A total of 17 scout RC drillholes totaling 1,070m and 1 DD drillhole totaling 49.88m were also completed and dispatched to Intertek Laboratory. Assay results are still pending and will be reported next Quarter. Table 4 lists the drillhole and trenching activity undertaken within the quarter.

Table 4: Yameriga First Pass RC Drilling and Trenching

Programme	No. Holes	RC (m)	DD (m)	Total (m)	No. Samples	No. Duplicates	No. Blanks	No. Stds	Total Samples
Drilling	18	1,070	49.88	1,119.88	1,120	52	26	27	1,225
Trenching	2	-		34	49	2	1	1	53

Table 5: Yameriga Rock Chip Samples

SampleID	GridID	mEast	mNorth	mRL	Au (g/t)
YMRX047	UTM WGS84 Zone 30 North	743,390	1,185,571	223	129.2
YMRX044	UTM WGS84 Zone 30 North	743,377	1,185,567	225	13.5
YMRX041	UTM WGS84 Zone 30 North	743,388	1,185,564	223	68.4
YMRX019	UTM WGS84 Zone 30 North	743,223	1,185,872	218	28.9
YMRX017	UTM WGS84 Zone 30 North	743,222	1,185,873	218	20.0
R332468	UTM WGS84 Zone 30 North	744,687	1,183,665	119	4.7
R332454	UTM WGS84 Zone 30 North	745,364	1,185,748	179	0.7
R332447	UTM WGS84 Zone 30 North	744,946	1,184,192	232	7.2



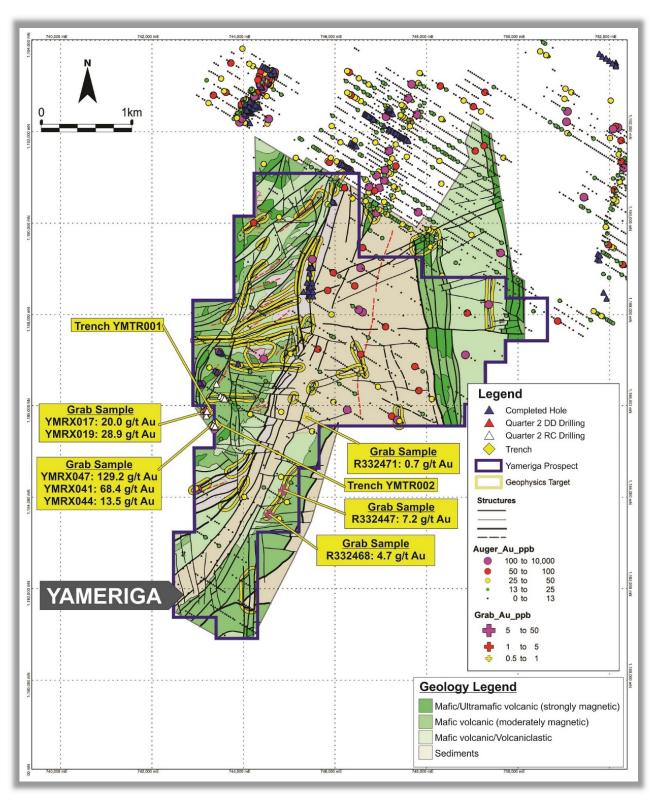


Figure 6: Yameriga Prospect with Drillholes, Trenches and Rock Chip Sample Locations.





Figure 7: Yameriga Rock Chip samples



Two follow-up trenches were also completed during the quarter for a total of 34m (Figures 6 and 8). The purpose for the trenching was to obtain a better understanding of the host rocks, styles of mineralisation, structural controls and to ultimately refine targets generated from geophysical surveys. Mapping and sampling (horizontally and vertically) were completed within the saprolite along the trench walls, targeting the two types of veins (milky and smoky) encountered (Figure 8). Trench YMTR002 returned significant gold assays summarised in Table 6.

Table 6: Summary of Individual Trench Significant Assays at Yameriga

TrenchID	Azimuth (°)	GridID	mEast	mNorth	mFrom	mTo	mWidth	Au (g/t)
YMTR002	170	UTM WGS84	743,382	1,185,562	1.0	3.0	2	33.3
		Zone 30 North						
YMTR002	170	UTM WGS84	743,380	1,185,568	7.0	12.0	5	2.5
		Zone 30 North						
YMTR002	170	UTM WGS84	743,380	1,185,568	11.0	12.0	1	1.0
		Zone 30 North						



Figure 8: Yameriga Trench YMTR002 looking South showing vein orientation types

Kungongo Licence Area

The Kungongo Prospecting Licence (RL9/28) is located approximately 40km west of Namdini Gold Project and covers a total land size of 122.4km². The licence hosts the extensive regional Bole-Bolgatanga fault over a length of 6km in the northwest corner of the tenement. The tenement is underlain by Birimian greenstones which have been extensively intruded by younger granitoids (Figure 5).

As part of the Company's precautionary measures put in place to minimize the risk of exposure of employees amid the COVID-19 pandemic, all exploration activity at Kungongo was placed on hold during the Quarter.

Bongo Licence Area

The Bongo Licence Area covers a total land area of 465km². It hosts part of the regional Bole-Bolgatanga Fault (Figure 5).

The Bongo Licence Area comprises of the combined, Bongo Prospecting Licence (PL9/29 covering a land size of 155km²) located in the Bongo area, Kandiga-Atibisi Prospecting Licence (PL9/38 covering a land size of 155km²) located in the Kandiga-Atibabisi area, and Zoko-Tarongo Prospecting Licence (PL9/37 covering a land size of 155km²) located in the Zoko-Tarongo area all in the Upper East region of Ghana.

As part of the precautionary measures put in place by the Company to minimize the risk of exposure of employees amid the COVID-19 pandemic, the Company suspended all exploration activity at the Bongo Licence Area during the Quarter.

SUBRANUM PROJECT

The Subranum Project covers an area of 71.4km² located in southwest Ghana. The licence straddles the eastern margin of the Sefwi Gold Belt which is bounded by the regional Bibiani Shear Zone ("**BSZ"**) stretching about 200km across southwestern Ghana (Figure 9).

There is 9km of the BSZ developed within the Subranum licence trending NE to SW. The BSZ forms a very prospective, sheared contact between Birimian phyllites and greywackes to the southeast and mafic to intermediate volcanics and volcaniclastics to the northwest. Granitoid stocks of the Dixcove suite intrude this shear zone.

Previous extensive exploration has outlined a 5km long gold target, extending from the SW tenement boundary towards the NE, with the remaining 4km of the 9km strike length remaining relatively unexplored.

All exploration activities were on hold during this Quarter as part of the Company's precautionary measures to minimize the risk of exposure of employees to COVID-19.



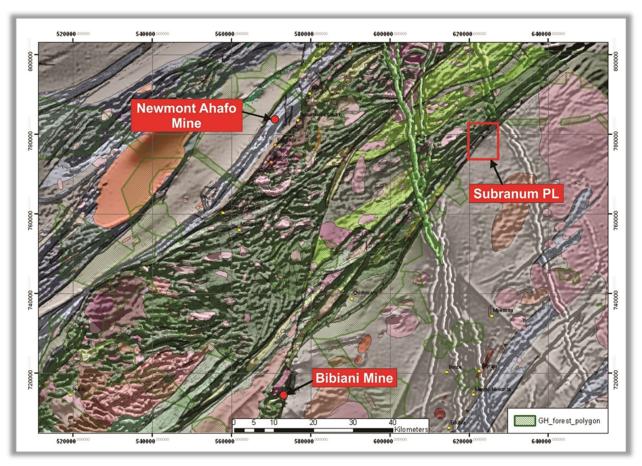


Figure 9: Subranum Project Tenement Straddling Bibiani Shear Zone

CORPORATE UPDATE

Finance Update

The Company announced that the senior secured credit facility (as amended in February 2020 and March 2020) ("Facility") had been assigned from Sprott Private Resource Lending L.P. ("Sprott") to the Ghana Infrastructure Investment Fund ("GIIF"), a Ghana Government owned infrastructure investment vehicle.

As a result of the acquisition, Cardinal's senior debt facility provider is now GIIF.

The balance of the Facility was approximately US\$23.8 million (following a US\$0.4 million repayment of the debt to Sprott prior to the transaction) and Cardinal has also been provided with further funding (from previously restricted cash) totaling an additional US\$3.1 million which now forms part of Cardinal's working capital. As part of the transaction, Cardinal agreed to amend and restate the Facility under Ghanaian law.

The material commercial terms of the Facility (below) remain unchanged or are otherwise more favourable for Cardinal, as set out below:

- 24-month repayment term (the Sprott arrangements had a maturity date of March 1, 2021)
- Interest rate of 7.75% + the greater of 3 months LIBOR or 1% per annum
- Early repayment flexibility is continued and as per the arrangements with Sprott, a 5% redemption premium applies to all future repayments of the Facility
- Secured against the assets of Cardinal and its wholly owned subsidiaries in Ghana



• Upon a change of control of Cardinal, GIIF may require repayment of the Facility (under the prior Sprott arrangements, immediate repayment was required in such circumstances)

Corporate Update

Nordgold Bid

On March 16, 2020 the Company advised that it has received notification from Nord Gold SE ("Nordgold") that it had acquired a relevant interest of 19.9% in shares of Cardinal, (having acquired the 16.4% stake previously owned by Goldfields Limited), and further advised that Nordgold had provided a non-binding indicative and conditional proposal to acquire all of the issued capital of Cardinal that it did not already own for \$A0.45775 per share in cash ("Nordgold Bid").

Shandong Offer

On June 18, 2020 the Company announced that it had entered into a Bid Implementation Agreement with Shandong Gold Mining (Hong Kong) Co, Ltd (a subsidiary of Shandong Gold Mining Co, Ltd), pursuant to which Shandong Gold had agreed to acquire 100% of the issued and outstanding ordinary shares in Cardinal at a price of A\$0.60 cash per share, by way of an off-market takeover offer.

Cardinal's Board of Directors carefully considered the Shandong Gold Offer in consultation with the Special Committee appointed in connection with the strategic process. Accordingly, Cardinal's Board of Directors unanimously recommended that all Cardinal shareholders accept the Shandong Gold Offer in the absence of a superior proposal.

Cardinal's Directors, who collectively hold approximately 6.37% of Cardinal's ordinary shares, intend to accept the Shandong Gold Offer in respect of all Cardinal shares they own or control by the later of 21 days after the offer is opened for acceptance and 5 days after dispatch of the Cardinal Target's Statement, in the absence of a superior proposal.

Cardinal's Board of Directors have been exploring a range of potential transactions to maximise value for shareholders and consider that the Shandong Gold Offer as the best option for shareholders, in the absence of a superior proposal, and will deliver several key benefits to shareholders including:

- Certain and immediate value for Cardinal shareholders ability for shareholders to realize certain and
 immediate value at a significant premium to Cardinal's trading price on the ASX and TSX markets. By
 accepting the Shandong Gold Offer, subject to the Shandong Gold Offer going unconditional, Cardinal
 shareholders will receive cash consideration of A\$0.60 for every Cardinal share they own
- No financing condition the Shandong Gold Offer is an all-cash offer and is not subject to any financing conditions
- Avoids risks associated with mine development the Shandong Gold Offer eliminates exposure to the risks inherent in any new mine development, including financing, operational and regulatory risks

Subsequent to the quarter end the Company issued 26,000,000 fully paid ordinary shares to Shandong Gold to raise AU\$11.96 million in accordance with the BIA. Shareholder approval was not required for this Placement as the Company issued the shares under its Listing Rule 7.1 placement capacity.

The funds raised by the Placement will be used to ensure Cardinal may continue advancing the Namdini Project towards development and working capital.



Revised Nordgold Bid

On July 15, 2020 the Company received an unconditional on-market takeover offer for Cardinal at AU\$0.66 cash per share from Nordgold ("Revised Nordgold Bid").

Cardinal also noted that as the Nordgold Takeover Bid was unsolicited, it will need to be considered in detail by the Board, together with the Special Purpose Committee and its financial and legal advisers.

Revised Shandong Gold Offer

On July 27, 2020 Cardinal announced that the Company had received a revised and improved proposal for an off-market takeover offer from Shandong Gold pursuant to which Shandong Gold will offer to acquire all of the shares in Cardinal it does not presently own at a cash price of A\$0.70 per Share (the "Revised Shandong Gold Offer").

After careful consideration of the Revised Shandong Gold Offer and Revised Nordgold Bid, Cardinal's Board of Directors (in consultation with the Special Committee, its financial and legal advisors), unanimously recommend that Cardinal shareholders:

- ACCEPT the Revised Shandong Gold Offer (in the absence of a superior proposal); and
- REJECT the Revised Nordgold Bid.

The recommended Revised Shandong Gold Offer of A\$0.70 cash per share values Cardinal at approximately A\$395 million on a fully diluted basis and represents an attractive premium of approximately 6.1% to the Revised Nordgold Bid of A\$0.66 cash per share announced on 15 July 2020.

The Board of Directors considered the Revised Nordgold Bid closely and in the context of the Revised Shandong Gold Offer and took into account, amongst other matters, the price and conditionality of the two offers.

Whilst the Board acknowledges that the Revised Nordgold Bid is unconditional, based on the information available to it at the date of this announcement, the Board has no reason to believe the conditions of the Revised Shandong Gold Offer (which include, amongst other conditions, 50.1% minimum acceptance by Cardinal shareholders and Foreign Investment Review Board (FIRB) approval), cannot be satisfied within a reasonable timeframe. Cardinal understands that Shandong Gold has received all necessary Chinese regulatory approvals, with the result that the Revised Shandong Gold Offer is no longer conditional on any Chinese regulatory approvals.

The Board also notes that there is the potential for certain shareholders to be aggrieved by the structure of the Revised Nordgold Bid (namely those Shareholders holding Cardinal Shares in non-Australian depositaries or on branch registers). While the Revised Nordgold Bidder's Statement alludes to a practical mechanism whereby such Cardinal Shares can be moved to an Issuer Sponsored Holding or CHESS Holding in Australia in order to accept the Revised Nordgold Bid, it is possible that the Revised Nordgold Bid could be subject to regulatory issues (particularly in Canada) which could result in it being prevented from proceeding in the absence of corrective steps taken by Nordgold.

As the Directors have determined to continue to unanimously recommend that Cardinal Shareholders accept the Shandong Gold Offer (in the absence of a Superior Proposal), the Bid Implementation Agreement requires Cardinal and Shandong Gold to use their best endeavours to agree any amendments to the Bid Implementation Agreement which are reasonably necessary or desirable to reflect the revised and improved Shandong Gold Offer. Cardinal anticipates entering into an appropriate amending agreement to give effect to such amendments imminently.

Cardinal announced on 30 July 2020 that it had entered into a deed with each of Shandong Gold Mining (HongKong) Co., Limited and Shandong Gold Mining Co., Ltd, to amend the Bid Implementation Agreement ("Deed").



In summary, the Deed amends the BIA to, amongst other matters:

- increase the Offer Price to A\$0.70 per Share;
- note that the Offer will no longer be subject to any Chinese regulatory approvals;
- make certain changes to the proposed timetable of the Offer;
- increase the ascribed value per Cardinal Option for certain Options; and
- increase the break fee so that it continues to represent approximately 1% of the deal value.

On August 19, 2020 the Company advised that Shandong Gold had given notice to Cardinal that the Foreign Investment Review Board (FIRB) approval condition of its off-market takeover offer to acquire all of the Shares in Cardinal it does not presently own at a cash price of \$0.70 per share had been fulfilled.

Cardinal's joint financial advisors are Maxit Capital LP (Nth America), Hartleys Limited (Australia), Cannacord Genuity Corp. and BMO Capital Markets and its legal advisors are HopgoodGanim Lawyers (Australia) and Bennett Jones LLP (Canada).

Timetable and Next Steps

Detailed information relating to the Revised Shandong Gold Offer will be set out in the Bidder's Statement and Target's Statement, which was dispatched to Cardinal shareholders on or about 13 August 2020. The Bidder's Statement and Target's Statement will set out important information, including how to accept the Revised Shandong Gold Offer, information about Shandong Gold and the key reasons as to why Cardinal Shareholders should accept the Revised Shandong Gold Offer (in the absence of a Superior Proposal).

Competent / Qualified Person Statement

The information in this press release that relates to Exploration Results is based on information prepared by Mr. Paul Abbott, a full-time employee of Cardinal Resources, 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 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 scientific and technical information in this announcement that relates to Exploration Results, Mineral Resources and Ore Reserves at 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.

Cardinal confirms that it is not aware of any new information or data that materially affects the information included in its announcement Ore Reserve of 03 April 2019. All material assumptions and technical parameters underpinning this estimate continue to apply and have not materially changed.

ASX Listing Rule 5.23.2

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

•	26 Mar 2020	Cardinal Expands Namdini Mining Licence Area
•	11 Mar 2020	Cardinal Receives Approval for Resettlement Action Plan
•	27 Feb 2020	Cardinal Receives Key Water Extraction Permits
•	31 Jan 2020	31 Dec 2019 Quarterly Activities and Cashflow Report
•	28 Nov 2019	Cardinal Files Feasibility Study NI 43-101 Technical Report



•	31 Oct 2019	Sep 2019 Quarterly Activities and Cashflow Report
•	28 Oct 2019	Feasibility Study Confirms Namdini as Tier One Gold Project
•	15 Oct 2019	Mineral Resource and Ore Reserve Statement
•	30 Sept 2019	Feasibility Study Update
•	16 July 2019	Cardinal's Starter Pit Infill Drilling Results
•	10 July 2019	Cardinal Reports Further Shallow High-Grade Gold
•	04 June 2019	Positive Metallurgical Update on the Namdini Project
•	18 April 2019	Addendum to Namdini Ore Reserve Press Release
•	03 April 2019	Cardinal's Namdini Ore Reserve Now 5.1 Moz
•	27 Mar 2019	Cardinal Intercepts High-Grade Shallow Gold at Ndongo East
•	23 Jan 2019	Cardinal Hits More High-Grade Shallow Gold at Ndongo East
•	28 Nov 2018	New Drill Season hits high-grade shallow gold at Ndongo East
•	29 Aug 2018	Cardinal Extends Ndongo East Discovery Strike Length
•	16 July 2018	Cardinal Makes New Gold Discovery at Ndongo East
•	28 May 2018	Encouraging First Pass Gold Results at Ndongo

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. Cardinal is not aware of any new information or data that materially affects the information included in its announcement of the Ore Reserve of October 15, 2019. All material assumptions and technical parameters underpinning this estimate continue to apply and have not materially changed.



SELECTED ANNUAL INFORMATION

The following table provides information for the year ended June 30, 2020, 2019 and 2018:

	June 30, 2020	June 30, 2019	June 30, 2018
Exploration and evaluation expenditures	\$ 17,201,67	1 \$ 14,940,74	\$ 26,747,592
Corporate general and administration	15,361,14	3 10,407,13	5,945,652
Share based payments	3,324,67	1,792,29	92 4,742,362
Amortisation	433,83	6 314,73	217,454
Net comprehensive loss	36,970,68	8 27,050,96	37,182,844
Loss per share – basic and undiluted (cents)	7.8	5 7.3	12 10.22
Total assets	6,288,73	5 20,834,14	10,241,614
Total liabilities	40,193,51	2 38,975,85	4,766,976
Total non-current financial liabilities	34,657,54	8 35,604,68	
Shareholders' equity	(33,904,777	(18,141,71	0) 5,474,638

Exploration and evaluation expenditures were all incurred in Ghana. The Company maintains a policy to expense all exploration and evaluation expenses as incurred; these costs include tenement acquisition costs.

During the year ended June 30, 2020 exploration and evaluation expenditures have increased from comparable period due to the Company continuing to advance the Namdini Project to development compared to the period ended June 30, 2019 where the focus was on completion of studies.

During the year ended June 30, 2020 the Company released its feasibility study which confirmed Namdini as a Tier One Gold Project.

The Company's focus during the year ended June 30, 2020 was completion of the feasibility study at the Namdini Project and progressing the FEED and early works for the development of the Namdini Project.

During the period ended June 30, 2020 there was reduced exploration expenditure on the Bongo, Kungongo and Subranum Projects.

During the year ended June 30, 2020, minimal expenditure was incurred on the Bolgatanga Project and Subranum Project.

The Company's corporate general and administration expenses have increased from the prior year due to an increase in the costs of the Company, which includes the Facility. Corporate and Administration expenses have also increased due to the Company receiving a take-over bid from Nordgold and Shandong Gold, which has resulted in an increase in administration expenses.

During September 2019 the Company appointed Dave Anthony as the Chief Operating Officer. During the year the Company has also appointed additional senior employees in-country as Cardinal continues project development. Other than the above there have been no significant changes to staff from the year ended June 30, 2020 and June 30, 2019 and as a result the expenses are regular.



Corporate general and administration expenses consist of corporate administration costs incurred by the corporate office in Perth. Perth office expenses include personnel, professional fees, compliance and regulatory fees, and investor relations expenses.

Share based payments represents the expensing of fair value of the award on grant date. Under the fair value-based method, compensation cost attributable to options granted is measured at fair value on the grant date and amortized over the vesting period. The amount recognized as an expense is adjusted to reflect any changes in the Company's estimate of the shares that will eventually vest and the effect of any non-market vesting conditions.

Share based payment arrangements in which the Company receives goods or services as consideration are measured at the fair value of the good or service received, unless that fair value cannot be estimated.

Share based payments have increased due to the issue of milestone options to employees and directors in December 2019 and the expensing of these milestone options.

The variances in total assets and shareholders' equity are mainly attributable to the Company reduction in cash on hand at June 30, 2020.

As the Company is in the exploration stage, it does not generate operating revenue.

SELECTED QUARTERLY INFORMATION

The following table provides information for the eight quarters:

	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019
Exploration and evaluation expenditures	\$ 3,272,316	\$ 5,112,625	\$ 5,868,970	\$ 2,947,760
Corporate general and administration	6,202,143	3,054,440	3,074,136	3,030,424
Share/Option based payments	1,623,554	799,053	663,650	238,414
Amortization	177,319	126,608	71,382	58,527
Net comprehensive loss	8,043,055	13,234,061	8,430,186	7,263,386
Loss per share – basic and undiluted (cents)	1.60	2.7	1.71	2.41
	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018
Exploration and evaluation expenditures	June 30, 2019 \$ 6,426,350	March 31, 2019 \$ 3,148,110	•	•
Exploration and evaluation expenditures Corporate general and administration	·		2018	2018
·	\$ 6,426,350	\$ 3,148,110	2018 \$ 2,677,484	2018 \$2,688,805
Corporate general and administration	\$ 6,426,350 2,065,569	\$ 3,148,110 2,793,398	2018 \$ 2,677,484 3,207,356	2018 \$2,688,805 2,340,813
Corporate general and administration Share/Option based payments	\$ 6,426,350 2,065,569 984,879	\$ 3,148,110 2,793,398 437,274	2018 \$ 2,677,484 3,207,356 (206,785)	\$2,688,805 2,340,813 576,924

Exploration and evaluation expenditures were all incurred in respect of the Company's Ghanaian mining assets. The Company maintains a policy to expense all exploration and evaluation expenditures as incurred. These costs include tenement license costs.

Since June 30, 2019 exploration and evaluation expenditure has remain consistent. In September 2019 the Company published its Feasibility Study of the Namdini Gold Project. From October 2019 the Company has continued to progress the FEED and early works at the Namdini Project.

During the year ended June 30, 2020, minimal expenditure was incurred on the Bolgatanga Project and Subranum Project.



The Company's corporate general and administration expenses have increased from the prior year due to an increase in the costs of the Company, which includes the Facility. Corporate and Administration expenses have also increased due to the Company receiving a take-over bid from Nordgold and Shandong Gold, which has resulted in an increase in administration expenses.

During September 2019 the Company appointed Dave Anthony as the Chief Operating Officer. During the year the Company has also appointed additional senior employees in-country as Cardinal continues project development. Other than the above there have been no significant changes to staff from the year ended June 30, 2020 and June 30, 2019 and as a result the expenses are regular.

Share based payments represents the expensing of fair value of the award on grant date. Under the fair value-based method, compensation cost attributable to options granted is measured at fair value on the grant date and amortized over the vesting period. The amount recognized as an expense is adjusted to reflect any changes in the Company's estimate of the shares that will eventually vest and the effect of any non-market vesting conditions.

Share based payment arrangements in which the Company receives goods or services as consideration are measured at the fair value of the good or service received, unless that fair value cannot be estimated.

Share based payments have increased due to the issue of milestone options to employees and directors in December 2019 and the expensing of these milestone options.

The movement in total assets and shareholders' equity are mainly attributable to the Company entering into the Facility and increasing the liabilities of the Company.

As the Company is in the exploration stage, it does not generate operating revenue.

The increase in total liabilities for the year ended June 30, 2020 is mainly attributable to the Facility.

RESULTS OF OPERATIONS

	Three months ended June 30,		Twelve months end	ed June 30,
	2020	2019	2020	2019
Exploration and evaluation expenditures	\$ 3,272,316	\$ 6,426,350	\$ 17,201,671	\$ 14,940,749
Corporate general and administration	6,202,143	2,065,569	15,361,143	10,407,136
Share/Option based payments	1,623,554	984,879	3,324,671	1,792,292
Amortization	177,319	101,981	433,836	314,731
Interest and other income	50,335	107,064	159,073	365,859
Foreign exchange loss (gain)	3,181,942	25,589	(808,440)	(38,087)
Net Loss for the period	8,043,055	9,497,304	36,911,923	27,050,962

- For the three months ended June 30, 2020, exploration and evaluation expenditures has decreased from comparable periods due to focus on early works and a reduction in exploration activities as a result of COVID-19. There was minimal expenditure on the Bolgatanga Project and Subranum Projects.
- For the twelve months ended June 30, 2020, exploration and evaluation expenditures increased from comparable periods due to the completion and release in September 2019 of the Feasibility study at the Namdini Gold Project. From October 2019 the Company has focused on the FEED and early works to bring the Project into production.



- The Company's corporate general and administration expenses have increased from the prior year due to an
 increase in the costs of the Company, which includes the Facility. Corporate and Administration expenses
 have also increased due to the Company receiving a take-over bid from Nord Gold and Shandong Gold, which
 has resulted in an increase in administration expenses.
 - During September 2019 the Company appointed Dave Anthony as the Chief Operating Officer. During the year the Company has also appointed additional senior employees in-country as Cardinal continues project development. Other than the above there have been no significant changes to staff from the year ended June 30, 2020 and June 30, 2019 and as a result the expenses are regular.
 - During the period costs were incurred in respect of the staffing, legal fees, office rental, professional fees and investor relations costs.
- Share based payments represents the expensing of fair value of the award on grant date. Under the fair value-based method, compensation cost attributable to options granted is measured at fair value on the grant date and amortized over the vesting period. The amount recognized as an expense is adjusted to reflect any changes in the Company's estimate of the shares that will eventually vest and the effect of any non-market vesting conditions.

For the three and twelve months ended June 30, 2020 and 2019, exploration and evaluation expenditures comprise:

	Three months ended June 30,		Twelve months end	led June 30,
	2020	2019	2020	2019
Direct exploration costs	1,663,177	4,806,918	11,380,810	10,417,041
Indirect exploration costs	1,148,581	943,975	4,717,293	2,697,315
Site general and administration costs	460,556	675,457	1,103,567	1,826,393
Exploration and evaluation expenditures	3,272,315	6,426,350	17,201,671	14,940,749

Direct and indirect exploration costs decreased for three months ended June 30, 2020, compared to the same period in 2019, mainly due to the limited exploration completed on the regional tenements.

Direct and indirect exploration costs increased for twelve months ended June 30, 2020, compared to the same period in 2019, due to the completion and release in September 2019 of the Feasibility study of the Namdini Project. From September 2019 the Company has focused on the FEED and early works to bring the Project into production.

Site general and administration costs increased for the twelve months ended June 30, 2020, compared to the same period in 2019, mainly due to an increase in salaries, office and administrative, professional fees and travel expenses associated with the decreased activities at Namdini and Ndongo.

Corporate, General and Administration Expenses

The Company's corporate general and administration expenses have increased from the prior year due to an increase in the costs of the Company, which includes the Facility.

Corporate and Administration expenses have also increased due to the Company receiving a take-over bid from Nord Gold and Shandong Gold, which has resulted in increased legal fees.

During September 2019 the Company appointed Dave Anthony as the Chief Financial Officer. During the year the Company has also appointed additional senior employees in-country as Cardinal continues project development. Other than the above there have been no significant changes to staff from the year ended June 30, 2020 and June 30, 2019 and as a result the expenses are regular.



Corporate general and administration expenses consist of corporate administration costs incurred by the corporate office in Perth. Perth office expenses include personnel, professional fees, compliance and regulatory fees, and investor relations expenses.

Share based Payments

Share based payments represents the expensing of fair value of the award on grant date. Under the fair value-based method, compensation cost attributable to options granted is measured at fair value on the grant date and amortized over the vesting period. The amount recognized as an expense is adjusted to reflect any changes in the Company's estimate of the shares that will eventually vest and the effect of any non-market vesting conditions.

Share based payment arrangements in which the Company receives goods or services as consideration are measured at the fair value of the good or service received, unless that fair value cannot be estimated.

Share based payments have increased due to the issue of milestone options to employees and directors in December 2019 and the expensing of these milestone options.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

As at June 30, 2020, the Company had cash and cash equivalents of \$3,708,705 (June 30, 2019 - \$18,735,456) and current liabilities of \$5,535,964 (June 30, 2019 - \$3,371,178).

As at June 30, 2020, the Company had a working capital balance of (\$521,329) (June 30, 2019 - \$15,620,928).

On August 22, 2018 the Company secured a credit facility with Sprott Private Resources Lending (Collector), L.P. The committed facility was for US\$25 million (AU\$34 million). On June 5, 2020 the Company announced that the senior secured credit facility (as amended in February 2020 and March 2020) ("Facility") had been assigned from Sprott Private Resource Lending L.P. ("Sprott") to the Ghana Infrastructure Investment Fund ("GIIF"), a Ghana Government owned infrastructure investment vehicle.

As a result of the acquisition, Cardinal's senior debt facility provider is now GIIF.

The balance of the Facility was approximately US\$23.8 million (following a US\$0.4 million repayment of the debt to Sprott prior to the transaction) and Cardinal has also been provided with further funding (from previously restricted cash) totaling an additional US\$3.1 million which now forms part of Cardinal's working capital. As part of the transaction, Cardinal agreed to amend and restate the Facility under Ghanaian law.

The decrease in cash and working capital from June 30, 2019 to June 2020 was \$15,026,751 and \$16,142,257, respectively and was primarily due the Company decrease in its cash and cash equivalents and the credit facility.

Funds raised from the credit facility are being used towards continued advancement and development of the Company's Projects and general working capital purposes. The Company expects its current capital resources to be sufficient to advance its planned activities.

Actual funding requirements may vary from those planned due to a number of factors, including the progress of the Company's business activities and current economic and financial market conditions. The Company will continue to pursue opportunities to raise additional capital through equity markets to fund



its future exploration, development and operating activities; however, there can be no assurance that such financing will be available on a timely basis and under terms which are acceptable to the Company.

COMMITMENTS AND CONTINGENCIES

Cardinal Resources Subranum Limited will be required to pay Newmont Ghana Gold Limited US\$50,000 per annum from the date which Cardinal Resources Subranum Limited reports a "gold resource estimate" of 1Moz of gold. Subject to the grant of a Mining Lease under the 2006 Mining Act, Cardinal Resources Subranum Limited will be required to pay Newmont Ghana Gold Limited a 2% net smelter royalty.

Cardinal Namdini Mining Limited (Cardinal Namdini), entered into a Net Smelter Royalty Deed ("Royalty Deed") in January 2018, whereby Cardinal Namdini will pay to Savannah Mining Limited ("Savannah") a net smelter return royalty ("Royalty") equal to:

- (a) 4% of the Net Smelter Return on the first 50,000 ounces of Specified Minerals (as defined in the Royalty Deed) produced within each small-scale license which was purchased by Savannah within the Large Scale Mining License (as defined in the Royalty Deed); and
- (b) A 2% Net Smelter Return, effective from production of the 50,001 ounces of Specified Minerals produced within each small-scale licence which was purchased by Savannah within the Large Scale Mining License.

Cardinal entered into a definitive agreement with Kinross Gold Group subsidiary Red Back Mining Ghana Limited (Red Back) in 2017 to acquire 100% ownership of two large scale prospecting licences located in North East Ghana. Cardinal has entered into a Royalty Agreement with Red Back, whereby Cardinal shall pay to Red Back a 1% net smelter return royalty on any minerals produced from the properties.

The Company has commitments in respect to the Ghana Infrastructure Investment Fund (GIIF) Secured Credit Facility. The key terms of the Facility are as follows:

The credit facility is secured by Ghana Infrastructure Investment Fund completed on 1 June 2020. The key terms of the credit facility are as follows:

- Committed loan facility of US\$25 million;
- 24-month repayment term, being 1 June 2022;
- Interest rate of the greater of LIBOR or 1% + 7.75%; and
- 50% of the interest is accrued and payable on loan maturity.

Cardinal Resources has complied with the financial covenants of its credit facility during the period.

(i) Under the terms of the credit facility, Cardinal's Working Capital Ratio is required to be equal to or greater than 1.10 to 1.00.

Cardinal has complied with these covenants during the period.

The credit facility is secured against assets of Cardinal and its wholly owned subsidiary, Cardinal Namdini Mining Limited.

OFF-BALANCE SHEET ARRANGEMENTS

There are no off-balance sheet arrangements to which the Company is committed.



PROPOSED TRANSACTIONS

There are no proposed transactions that have not been disclosed herein.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

In common with all other businesses, the Company is exposed to risks that arise from its use of financial instruments. This note describes the Company's objectives, policies and processes for managing those risks and the methods used to measure them. Further quantitative information in respect of these risks is presented throughout the consolidated financial statements.

The Company is exposed to the following financial risks: credit risk, liquidity risk, market risk, currency risk and interest rate risk.

The Board of Directors (the "Board") has overall responsibility for the determination of the Company's risk management objectives and policies and, whilst retaining ultimate responsibility for them, it has delegated the authority for designing and operating processes that ensure the effective implementation of the objectives and policies to the Company's management.

The overall objective of the Board is to set policies that seek to reduce risk as far as possible without unduly affecting the Company's competitiveness and flexibility.

The Company's risk exposure and the impact on the Company's financial instruments are summarized below:

Credit Risk

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its cash and cash equivalents. The Company limits exposure to credit risk by maintaining its cash and cash equivalents with large financial institutions.

	June 30, 2020	June 30, 2019
Current – cash at bank	3,690,019	4,503,464
Term deposits	18,686	14,231,992
	3,708,705	18,735,456

Liquidity Risk

Liquidity risk is the risk that the Company will encounter difficulty in satisfying financial obligations as they become due. The Company's approach to managing liquidity risk is to provide reasonable assurance that it will have sufficient funds to meet liabilities when due. The Company manages its liquidity risk by forecasting cash flows required by operations and anticipated investing and financing activities. All of the Company's financial liabilities have contractual maturities of less than 30 days and are subject to normal trade terms.

At June 30, 2020, the Company had cash and cash equivalents of \$3,708,705 (June 30, 2019 - \$18,735,456) available and current liabilities of \$4,316,398 (June 30, 2019 - \$3,371,178). All of the Company's financial liabilities have contractual maturities of less than 30 days and are subject to normal trade terms.

Market Risk

Market risk is the risk that the fair value of, or future cash flows from, the Company's financial instruments will significantly fluctuate due to changes in market prices. The value of financial instruments can be affected by changes in interest rates and foreign exchange rates. Management closely monitors commodity prices, individual equity movements and the stock market to determine the appropriate course of action to be taken by the Company.



Currency Risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in foreign exchange rates. The Company is exposed to fluctuations in foreign currencies through its operations in Ghana. The Company monitors this exposure, but has no hedge positions.

As at June 30, 2020, the Company is exposed to currency risk through the following financial assets and liabilities denominated in currencies other than the Australian dollar:

2020			Net Financial Assets/(Liabilities) In AUD				
			AUD	USD	GHS	CAD	Total AUD
Australian do	llar		(1,832,450)	(33,353,700)	(79,112)	-	(35,265,262)
GHS New Ced	ik		-	-	-	-	-
Statement position expe	of osure	financial	(1,832,450)	(33,353,700)	(79,112)	-	(35,265,262)
2019			Net Financial Assets/(Liabilities) In AUD				
			AUD	USD	GHS	CAD	Total AUD
Australian do	llar		3,935,628	(24,128,328)	85,202	(47,842)	(20,155,340)
GHS New Ced	ib		-	-	-	-	-
Statement of		cial	3,935,628	(24,128,328)	85,202	(47,842)	(20,155,340)

Based on the statement of exposure at 30 June 2020, a 1% movement in foreign exchange rates would increase/decrease the loss for the year before taxation by \$482,220 (2019: \$343,065).

Interest Rate Risk

position exposure

Interest rate risk consists of two components:

To the extent that payments made or received on the Company's monetary assets and liabilities are affected by changes in the prevailing market interest rates, the Company is exposed to interest rate cash flow risk.

To the extent that changes in prevailing market rates differ from the interest rate in the Company's monetary assets and liabilities, the Company is exposed to interest rate price risk.

The Company considers interest rate risk not to be significant.

Determination of Fair Value

Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

The carrying amounts for accounts payable and accrued liabilities and due to related parties' approximate fair values due to their short-term nature. Due to the use of subjective judgments and uncertainties in the determination of fair values these values should not be interpreted as being realizable in an immediate settlement of the financial instruments.

Fair Value Hierarchy

Financial instruments that are measured subsequent to initial recognition at fair value are grouped in levels 1 to 3 based on the degree to which the fair value is observable:

Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities;



Level 2 Inputs other than quoted prices included in Level 1 that are observable for the asset or

liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices); and

Level 3 Inputs for the asset or liability that are not based on observable market data (unobservable

inputs).

As at June 30, 2020 and June 30, 2019, the Company's financial instruments are comprised of cash and cash equivalents, other receivables, value added tax receivable, accounts payable and accrued liabilities. With the exception of cash and cash equivalents, all financial instruments held by the Company are measured at amortized cost.

CAPITAL MANAGEMENT

The Company's objective when managing capital is to safeguard the Company's ability to continue as a going concern in order to advance its mineral properties. The Company defines its capital as all components of equity and short-term debt. The Company manages its capital structure and makes adjustments to it to effectively support the acquisition and exploration of mineral properties. The property in which the Company currently has an interest is in the exploration stage; as such, the Company is dependent on external financing to fund its activities.

The Company will spend its existing working capital and seek to raise additional amounts as needed by way of equity financing or debt to carry out its planned corporate development and general administrative costs. The Company will continue to assess new properties and seek to acquire an interest in additional properties if it feels there is sufficient geologic or economic potential and if it has adequate financial resources to do so.

Management reviews its capital management approach on an ongoing basis and believes that this approach, given the relative size of the Company, is reasonable. The Company's investment policy is to hold cash in interest-bearing bank accounts or highly liquid short-term interest-bearing investments with maturities of one year or less and which can be liquidated at any time without penalties. The Company is not subject to externally imposed capital requirements and does not have exposure to asset-backed commercial paper or similar products. The Company expects its current capital resources to be sufficient to cover its operating costs and to carry out its exploration activities through the next twelve months. As such, the Company will seek to raise additional capital and believes it will be able to do so, but recognizes the uncertainty attached thereto. There have been no changes to the Company's approach to capital management during the three and twelve months ended June 30, 2020.

RELATED PARTY TRANSACTIONS

The Company had transactions during the three and twelve months ended June 30, 2020 with related parties consisting of directors, officers and companies with common directors and/or officers:

Namdini Gold Project

During the year ended 30 June 2020, Cardinal Resources Limited has advanced funds to Savannah, a related entity to Director Mr Malik Easah. The purpose of an advance was for the development of a mining licence in areas in respect of which Savannah had entered into agreements with holders of small scale licences. As at the date of this report, \$343,800 (2019: \$280,300) has been recorded as a prepayment in the consolidated financial statements of Cardinal Resources Limited. The difference has been applied toward the development of the mining licence and expensed during the period. The Company has recorded a provision for US\$500,000, for funds owed to Savannah in relation to legal expenses.



Consulting Agreement

Tomlinson Consultancy, of which Kevin Tomlinson is a director, provided geological consulting services to the Company. Amounts that have been paid or payable total \$206,416 (2019: \$309,624).

HopgoodGanim of which Michele Muscillo, a director, is a partner of, provided legal services to the Company. Amounts that have been paid or payable total \$558,663 (2019: \$5,028).

KEY MANAGEMENT COMPENSATION

Key management personnel are persons responsible for planning, directing and controlling the activities of an entity, and include certain directors and officers. Key management compensation comprises:

	Three months ende	Three months ended June 30,		Twelve months ended June 30,	
	2020	2019	2020	2019	
Salaries, fees and leave	\$ 430,470	\$ 280,589	\$ 1,578,755	\$ 1,175,732	
Superannuation expense	2,622	-	8,322	3,800	
Equity based payments	689,121	323,908	2,031,917	1,183,751	
Termination payments	-	-	-	67,126	
	\$ 1,122,213	\$ 623,034	\$ 3,618,994	\$ 2,520,608	

SHARE POSITION AND OUTSTANDING WARRANTS AND OPTIONS

The Company's outstanding share position as at the date hereof, is as follows:

	Number of shares
Common shares	526,024,522
Unlisted options	2,867,817
Milestone Options	36,724,285
Fully diluted share capital	565,616,624

Common Shares

The Corporation is authorised to issue an unlimited number of Ordinary Shares, subject to certain restrictions prescribed in the ASX Listing Rules, the Corporations Act and the Corporation's constitution. Under the ASX Listing Rules, subject to certain exceptions and without the approval of shareholders of the Corporation, the Corporation may not issue or agree to issue during any 12-month period equity securities (including options and other securities convertible into equity) if the number of securities issued or agreed to be issued would exceed 15% of the total equity securities on issue at the commencement of the 12-month period.

Listed Options

The Corporation has no listed options on issue.

Stock Options ("Unlisted Options")

The Company has in place a stock option plan (the "Plan"), which allows the Company to issue options to certain directors, officers, employees and consultants of the Company. The aggregate number of securities reserved for issuance will be not more than 5% of the number of ordinary shares issued and outstanding from time to time. The Plan provides that the number of stock options held by any one individual may not exceed 5% of the number



of issued and outstanding ordinary shares. Options granted under the Plan may have a maximum term of ten years. The exercise price of options granted under the Plan will not be less than the market price of the Company's shares on the day prior to the grant date. Stock options granted under the Plan may be subject to vesting terms if imposed by the Board or required by the TSX. During the year the Company issued 12,446,087 options under the plan.

The following is a summary of share purchase options activity for the three and twelve months ended June 30, 2020:

					During the perio	od		_	
Grant	Expiry	Exercise	Opening			Expired /	Closing	Vested and	
Date	Date	Price	Balance	Granted	Exercised	Cancelled	Balance	Exercisable	Unvested
03.18.16	03.18.20	\$0.220	6,000,000	nil	(6,000,000)	nil	-	-	-
04.03.17	04.12.22	\$0.500	18,500,000	nil	nil	nil	18,500,000	5,550,000	12,950,000
12.21.17	12.21.22	\$0.750	1,000,000	nil	nil	nil	1,000,000	1,000,000	-
12.21.17	12.21.22	\$0.965	2,018,100	nil	nil	nil	2,018,100	-	2,018,100
11.04.19	12.21.22	\$0.680	2,180,049	nil	nil	nil	2,180,049	-	2,180,049
11.04.19	12.21.22	\$0.590	2,180,049	nil	nil	nil	2,180,049	-	2,180,049
12.03.19	12.03.21	\$1.000	1,867,817	nil	nil	nil	1,867,817	1,867,817	-
10.12.19	10.12.24	\$0.000	-	6,369,557	nil	nil	6,369,557	-	6,369,557
10.12.19	10.12.24	\$0.000	-	6,276,530	nil	(800,000)	5,476,530	-	5,476,530

Weighted average exercise price \$0.24

Performance Shares

The conversion of Class C Performance Shares would have occurred upon satisfaction of achieving a minimum inferred resource (JORC compliant) of gold within the Ndongo Prospect by February 18, 2020, being no later than five years after the date on which the Class C Performance Shares were issued. The table below sets out the conversion of the Class C Performance Shares based on the achievement of performance hurdles.

Performance Shares	Performance Hurdles (JORC Inferred	Conversion to Ordinary
	Au Resource)	Shares
10	500,000 ounces	1,000,000
5	750,000 ounces	500,000
5	1,000,000 ounces	500,000
5	1,250,000 ounces	500,000
5	1,500,000 ounces	500,000
5	1,750,000 ounces	500,000
5	2,000,000 ounces	500,000
5	2,250,000 ounces	500,000
5	2,500,000 ounces	500,000
5	2,750,000 ounces	500,000
5	3,000,000 ounces	500,000
60		6,000,000

During the year ended June 30, 2020 the performance shares were cancelled.



OTHER DATA

Additional information related to the Company, including the Company's Annual Information Form dated August 31, 2020 is available for viewing at www.sedar.com.

ADOPTION OF NEW AND AMENDED IFRS PRONOUNCEMENTS

A number of new or amended standards became applicable for the current reporting period resulting in a change to the entity's accounting policies and disclosure adjustments being made as a result of adopting AASB 16 Leases.

The impact of the adoption of the leasing standard and the new accounting policies are disclosed below. The other standards did not have any impact on the entity's accounting policies and did not require retrospective adjustments.

(i) AASB 16 Leases

This note explains the impact of the adoption of AASB 16 Leases on the entity's financial statements and discloses the new accounting policies that have been applied from 1 July 2019.

The Group has adopted AASB 16 using the modified retrospective approach from 1 July 2019, but has not restated comparatives for the 2019 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised prospectively from 1 July 2019.

Adjustments recognised on adoption of AASB 16

On adoption of AASB 16, the entity recognised lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of AASB 117 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using an arm's length asset finance facility borrowing rate as of 1 July 2019. The weighted average incremental borrowing rate applied to the lease liabilities on 1 July 2019 was 6.85%.

The impact of the adoption of this standard is an immaterial right-of-use asset and lease liability amount that had not been recognised at 30 June 2020.

The associated right-of-use assets were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments or onerous provisions relating to that lease recognised in the balance sheet as at 1 July 2019.

RISKS AND UNCERTAINTIES

Risks Related to the Industry

Mineral Exploration, Development and Operating Risks

Mineral exploration is highly speculative in nature, generally involves a high degree of risk and frequently is non-productive. The mineral tenements of the Company are at various stages of exploration, and potential investors should understand that mineral exploration and development are high-risk undertakings. There can be no assurance that exploration of these tenements, or any other tenements that may be acquired in the future, will result in the discovery of an economic ore deposit. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically exploited or will result in a profitable commercial mining operation.

Resource acquisition, exploration, development and operation involve significant financial and other risks over an extended period of time, which even a combination of careful evaluation, experience and knowledge may not



eliminate. Significant expenses are required to locate and establish economically viable mineral deposits, to acquire equipment, and to fund construction, exploration and related operations, and few mining properties that are explored are ultimately developed into producing mines.

Success in establishing an economically viable project is the result of a number of factors, including the quantity and quality of minerals discovered, proximity to infrastructure, metal and mineral prices which are highly cyclical, costs and efficiencies of the recovery methods that can be employed, the quality of management, available technical expertise, taxes, royalties, environmental matters, government regulation (including land tenure, land use and import/export regulations) and other factors. Even in the event that mineralization is discovered on a given property, it may take several years in the initial phases of drilling until production is possible, during which time the economic feasibility of production may change as a result of such factors. The effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Company not receiving an adequate return on its invested capital, and no assurance can be given that any exploration programme of the Company will result in the establishment or expansion of resources or reserves.

The Company's operations are subject to all the hazards and risks normally encountered in the exploration, development and production of gold and other minerals, including hazards relating to the discharge of pollutants or hazardous chemicals, changes in anticipated grade and tonnage of ore, unusual or unexpected adverse geological or geotechnical formations, unusual or unexpected adverse operating conditions, slope failures, rock bursts, cave-ins, seismic activity, the failure of pit walls, pillars or dams, fire, explosions, and natural phenomena and 'acts of God' such as inclement weather conditions, floods, earthquakes or other conditions, any of which could result in damage to, or destruction of, mineral properties or production facilities, personal injury or death, damage to property, environmental damage, unexpected delays, monetary payments and possible legal liability, which could have a material adverse impact upon the Company. In addition, any future mining operations will be subject to the risks inherent in mining, including adverse fluctuations in fuel prices, commodity prices, exchange rates and metal prices, increases in the costs of constructing and operating mining and processing facilities, availability of energy and water supplies, access and transportation costs, delays and repair costs resulting from equipment failure, changes in the regulatory environment, and industrial accidents and labour actions or unrest. The occurrence of any of these risks could materially and adversely affect the development of a project or the operations of a facility, which could have a material adverse impact upon the Company.

Estimation of Mineralisation, Resources and Reserves

There is a degree of uncertainty attributable to the calculation of mineralisation, resources and reserves and corresponding grades being mined or dedicated to future production. Until reserves or mineralisation are actually mined and processed, the quantity of mineralisation and reserve grades must be considered estimates only. These estimates depend upon geological interpretation and statistical inference drawn from drilling and sampling analysis, which may prove unreliable. There can be no assurance such estimates will be accurate. In addition, the quantity of reserves and mineralisation may vary depending on commodity prices. Any material changes in quantity of reserves, mineralisation, grade or stripping ratio may affect the economic viability of a mine. In addition, there can be no assurance that recoveries from laboratory tests will be duplicated in tests under on-site conditions or during production. The inclusion of mineral resource estimates should not be regarded as a representation that these amounts can be economically exploited and no assurances can be given that such resource estimates will be converted into reserves. Different experts may provide different interpretations of resource estimates.

Environmental, Health and Safety Regulations of the Resource Industry

Environmental matters in Ghana, including those related to mining, fall primarily under the oversight of the EPA, as well as the Minerals Commission and the Mines Inspectorate Division of the Minerals Commission. The Environmental Protection Agency Act, 1994 (Act 490), and the Environmental Assessment Regulations, 1999 (L.I. 1652) govern, among other things, environmental and socio-economic impact assessments and statements,



environmental management plans, emissions into the environment, environmental auditing and review, and mine closure and reclamation, to which the Cardinal's operations are subject.

Additional provisions governing mine environmental management are provided in the Minerals and Mining Act, 2006 (Act 703), and Minerals and Mining Regulations (Health, Safety and Technical) 2012 (L.I. 2182). Cardinal believes it is in substantial compliance with these laws and regulations, however Cardinal notes a continuing trend toward substantially increased environmental requirements and evolving corporate social responsibility expectations in Ghana, including the requirement for more permits, analysis, data gathering, community hearings, and negotiations than have been required in the past for both routine operational needs and for new development projects.

Due to bureaucratic delays, there can be no assurance that all permits which Cardinal may require for construction of mining facilities and conduct of mining operations, particularly environmental permits, will be obtainable on reasonable terms or timeframes or that compliance with such laws and regulations would not have an adverse effect on the profitability of any mining project that Cardinal may undertake.

All phases of the Company's operations are subject to environmental regulations in various jurisdictions. If the Company's properties are proven to host economic reserves of metals, mining operations will be subject to national and local laws relating to the protection of the environment, including laws regulating removal of natural resources from the ground and the discharge of materials into the environment.

Mining operations will be subject to national and local laws and regulations which seek to maintain health and safety standards by regulating the design and use of mining methods and equipment. Various permits from government bodies are required for mining operations to be conducted; no assurance can be given that such permits will be received.

No assurance can be given that environmental standards imposed by national or local authorities will not be changed or that any such changes would not have material adverse effects on the Company's activities. Moreover, compliance with such laws may cause substantial delays or require capital outlays in excess of those anticipated, thus causing an adverse effect on the Company. Additionally, the Company may be subject to liability for pollution or other environmental damage, which it may not be able to insure against.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulation and, in particular, environmental laws.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.

Mining is subject to potential risks and liabilities associated with the potential pollution of the environment and the necessary disposal of mining waste products resulting from mineral exploration and production. Insurance against environmental risk (including potential liability for pollution or other hazards as a result of the disposal of waste products occurring from exploration and production) is not generally available to Cardinal (or to other companies in the minerals industry) at a reasonable price. To the extent that Cardinal becomes subject to environmental liabilities, the satisfaction of any such liabilities would reduce funds otherwise available to Cardinal and could have a material adverse effect on Cardinal. Laws and regulations intended to ensure the protection of the environment are constantly changing and are generally becoming more restrictive.



Environmental Bonds Risk

The EPA from time to time reviews the reclamation bonds that are placed on Cardinal's projects in Ghana. As part of its periodic assessment of mine reclamation and closure costs, the EPA reviews the adequacy of reclamation bonds and guarantees. In certain cases, the EPA has requested higher levels of bonding based on its findings. If the EPA were to require additional bonding at Cardinal's properties, it may be difficult, if not impossible, to provide sufficient bonding. If Cardinal is unable to meet any such increased bonding requirements or negotiate an acceptable solution with the Government of Ghana, its operations and exploration and development activities in Ghana may be materially adversely affected. Cardinal is not in a position to state whether a review in respect of any of Cardinal's projects in Ghana is imminent or whether the outcome of such a review would be detrimental to the funding needs of Cardinal.

Land Rehabilitation Risk

Although variable, depending on location and the governing authority, land rehabilitation requirements are generally imposed on mineral exploration companies, as well as companies with mining operations, in order to minimise long erm effects on land disturbance. Rehabilitation may include requirements to control dispersion of potentially deleterious effluents and to reasonably re-establish pre-disturbance land forms and vegetation. In order to carry out rehabilitation obligations imposed on Cardinal in connection with its mineral exploration and development, Cardinal must allocate financial resources that might otherwise be spent on further exploration and/or development programs.

Competitive Conditions

There is aggressive competition within the mineral exploration and mining industry for the discovery and acquisition of properties considered to have commercial potential, and for management and technical personnel. The Company's ability to acquire projects in the future is highly dependent on its ability to operate and develop its current assets and its ability to obtain or generate the necessary financial resources. The Company will compete with other parties in each of these respects, many of which have greater financial resources than the Company. Accordingly, there can be no assurance that any of the Company's future acquisition efforts will be successful, or that it will be able to attract and retain required personnel. Any such failure could have a material adverse impact upon the Company.

Increased demand for, and cost of, exploration, development and construction services and equipment.

Strength of the metal market can result in an increase in exploration, development and construction activities around the world, resulting in increased demand for, and cost of, exploration, development and construction services and equipment. The costs of such services and equipment could increase in the future, which could result in delays or materially increased costs if services or equipment cannot be obtained in a timely manner or at acceptable prices.

Feasibility Study Risk

Feasibility studies are typically used to determine the economic viability of a deposit. Many factors are involved in the determination of the economic viability of a deposit, including the achievement of satisfactory Ore Reserve estimates, the level of estimated metallurgical recoveries, capital and operating cost estimates and the estimates of future mineral prices. Capital and operating cost estimates are based upon many factors, including anticipated tonnage and grades of ore to be mined and possibly processed, the configuration of the ore body, ground and mining conditions and anticipated environmental and regulatory compliance costs.

Notwithstanding Cardinal's Feasibility Study, each of these factors involves uncertainties and, as a result, Cardinal cannot give any assurance that its exploration projects will become operating mines. In addition, even if a mine is developed, actual operating results may differ from those anticipated.



Risks Related to the Business

Operational Risks

The Company has not previously generated revenues from operations and its mineral projects are at an exploration stage. Therefore, it is subject to many risks common to comparable companies, including undercapitalisation, cash shortages and limitations with respect to personnel, financial and other resources as well as a lack of revenues. The Company has historically incurred significant losses as it has no sources of revenue (other than interest income), and has significant cash requirements to meet its exploration commitments, administrative overhead and maintain its mineral interests. The Company expects to continue to incur net losses unless or until one or more of its properties enters into commercial production and generates sufficient revenue to fund continuing operations. There can be no assurance that current exploration or development programs will result in the discovery of commercial deposits or, ultimately, in profitable mining operations. See also "Liquidity and Financing Risk" and "Funding Risk" below.

Liquidity and Financing Risk

The Company has no source of operating cash flow and may need to raise additional funding in the future through the sale of equity or debt securities or by optioning or selling its properties. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities. No assurance can be given that additional funding will be available for further exploration and development of the Company's properties when required, upon terms acceptable to the Company or at all. Failure to obtain such additional financing could result in the delay or indefinite postponement of further exploration and development of its properties, or even a loss of property interest, which would have a material adverse impact upon the Company.

Borrowing Risk

Lenders to the Company, including GIIF as primary lender under the Facility, impose covenants and obligations on the part of the Company to maintain the good standing of the agreements and security arrangements of the borrowed funds. In particular, the Facility contains certain covenants and representations and warranties, the breach of which could result in a default and the acceleration of maturity of the Facility, the lender realizing on its security, or diminished availability of refinancing alternatives or increase the associated costs thereof. Though the Company anticipates being able to remain in compliance with all positive covenants under its credit arrangements, there is no assurance that unforeseen events or circumstances may lead to the breach of the Company's obligations to its lenders, under the Facility or otherwise, which, if not waived by the lender, would have a material adverse impact on the Company.

Future Capital and Financing Risk

Cardinal has finite financial resources and no cash flow from producing assets and therefore will require additional financing in order to carry out its gold exploration and development activities. Substantial capital expenditure is required for ongoing exploration, appraisal, development and production.

The future prospects of Cardinal, including the successful development of Cardinal's assets and/or the acquisition of new assets will be influenced by the ability of Cardinal to access funding via operating cash flows or debt or equity markets on commercially acceptable terms. Operating cash flows and access to debt and equity markets is affected by a number of factors beyond the control of Cardinal including commodity prices and general economic conditions.

There is also no assurance that Cardinal will be successful in raising capital in the future as and when it is required, in order to fully finance and develop Cardinal's projects. Volatile market conditions may prevent or make it difficult for Cardinal to obtain debt financing or equity financing on commercially acceptable terms. If access to adequate funding is not maintained by Cardinal, Cardinal may not be able to take advantage of opportunities or otherwise respond to market conditions. Failure to obtain funding on a timely basis and on reasonably acceptable terms may also cause Cardinal to postpone or abandon development plans, or to relinquish or forfeit rights in relation



to the Cardinal's assets, which may delay or suspend Cardinal's business strategy and could have a material adverse effect on Cardinal's activities.

Exploration Costs

The exploration costs of the Company are based on certain cost estimates and assumptions with respect to the method and timing of exploration. By their nature, these estimates and assumptions are subject to significant uncertainties and, accordingly, the actual costs may materially differ from these estimates and assumptions. Accordingly, no assurance can be given that the cost estimates and the underlying assumptions will be realised in practice, which may materially and adversely affect the Company's viability.

Uninsurable Risks

In the course of exploration, development and production of mineral properties, risks, including, but not limited to, unexpected or unusual geological or operating conditions, natural disasters, inclement weather conditions, pollution, rock bursts, cave-ins, fires, flooding, earthquakes, civil unrest, terrorism and political violence may occur. It is not always possible to fully insure against all risks associated with Cardinal's operations and Cardinal may decide not to take out insurance against certain risks as a result of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the securities of Cardinal.

Conflicts of Interest

Certain directors of the Company are, and may continue to be, involved in the mining and mineral exploration industry through their direct and indirect participation in corporations, partnerships or joint ventures which are potential competitors of the Company. Situations may arise in connection with potential acquisitions in investments where the other interests of these directors may conflict with the interests of the Company. Any directors with conflicts of interest will be subject to and will follow the procedures set out in applicable corporate and securities legislation, regulations, rules and policies.

Foreign currency risk

Exposure to foreign currency risk may result in the fair value or future cash flows of a financial instrument fluctuating due to movement in foreign exchange rates of currencies in which the Company holds financial instruments which are other than the AUD functional currency of the Company.

With instruments being held by overseas operations, fluctuations in the US dollar and Ghanaian Cedis may impact the Company's financial results.

Interest Rate Risk

Exposure to interest rate risk arises on financial assets and financial liabilities recognised at the end of the reporting period whereby a future change in interest rates will affect future cash flows or the fair value of fixed rate financial instruments.

The financial instruments that primarily expose the Company to interest rate risk are borrowings (including the Facility), cash and cash equivalents.

Gold Price Risk

Changes in the market price of gold, which in the past have fluctuated widely, will affect the future profitability of Cardinal's operations and its financial condition. Cardinal's revenues, profitability and viability depend on the future market price of gold produced from Cardinal's mines. The price of gold is set in the world market and is affected by numerous industry factors beyond Cardinal's control including the demand for precious metals, expectations with respect to the rate of inflation, interest rates, currency exchange rates, the demand for jewellery and industrial products containing metals, gold production levels, inventories, cost of substitutes, changes in global or regional investment or consumption patterns, and sales by central banks and other holders, speculators



and procedures of gold and other metals in response to any of the above factors, and global and regional political and economic factors.

A decline in the market price of gold below Cardinal's proposed production costs for any sustained period may have a material adverse impact on the ability of Cardinal to finance the exploration and development of its existing and future mineral projects. Such a decline would also impact on the profit, cashflow and results of operations of Cardinal's anticipated future operations.

Future Profitability Risk

To date, Cardinal has experienced a negative operating cash flow and has not commenced commercial production on any of its properties. There can be no assurance that significant additional losses will not occur in the near future or that Cardinal will be profitable in the future. Cardinal expects to continue to incur losses unless and until such time as its properties enter into commercial production and generate sufficient revenues to fund its continuing operations. There can be no assurance that Cardinal will generate any revenues, operate profitably or provide a return on investment in the future.

Labour and Employment Risk

As Cardinal's business grows, it will require additional key financial, administrative, mining, marketing and public relations personnel as well additional staff for operations. In addition, given the remote location of most of Cardinal's properties, infrastructure shortcoming in the surrounding areas, and the shortage of a readily available labour force in the mining industry, Cardinal may experience difficulties obtaining and retaining requisite skilled employees in Ghana in the event one or more of its project is developed. While Cardinal believes that it will be successful in attracting and retaining qualified personnel and employees, there can be no assurance of such success.

Contractor Risk

The business activities of Cardinal rely on the engagement of experienced and qualified contractors and suppliers on commercially reasonable terms.

Cardinal's business, operations and financial performance may be materially and adversely affected if any of its proposed contractors are not available as and when required or do not perform their contractual obligations as expected by Cardinal. Where Cardinal relies on third parties to deliver goods or perform services, there can be no guarantee that the relevant third parties will deliver those goods or perform those services in the manner that delivers upon Cardinal's plans and expected outcomes which, in turn, may adversely affect the financial position, performance and prospects of Cardinal.

Insurance Risk

Cardinal maintains insurance either directly or through a joint venture for certain activities within ranges of coverage that they each believe to be consistent with industry practice. However, in certain circumstances insurance proceeds may not be adequate to cover all potential liabilities and losses. Additionally, recovery under insurances is subject to the terms and conditions of the relevant insurance policies which may include material exclusions and uninsured excess amounts (or deductibles).

Where Cardinal does not have insurances in place in respect of a relevant loss or hazard, or a relevant insurance policy does not respond as anticipated, Cardinal may be exposed to material uninsured losses which, in turn, may impact upon the financial performance of Cardinal. In addition, insurance of all risks associated with mineral exploration, development and production is not always available and, where, available this cost can be prohibitive. There is a risk that insurance premiums may increase to a level where Cardinal considers it is unreasonable or, not to a level of coverage which is in accordance with industry practice. No assurance can be given that Cardinal will be able to obtain such insurance coverage in the future at reasonable rates or that any coverage it arranges will be adequate to cover claims.



Environmental Bonds

The EPA from time to time reviews the reclamation bonds that are placed on the Company's projects in Ghana. As part of its periodic assessment of mine reclamation and closure costs, the EPA reviews the adequacy of reclamation bonds and guarantees.

In certain cases, the EPA has requested higher levels of bonding based on its findings. If the EPA were to require additional bonding at the Company's properties, it may be difficult, if not impossible, to provide sufficient bonding. If the Company is unable to meet any such increased bonding requirements or negotiate an acceptable solution with the Government of Ghana, its operations and exploration and development activities in Ghana may be materially adversely affected.

The Company is not in a position to state whether a review in respect of any of the Company's projects in Ghana is imminent or whether the outcome of such a review would be detrimental to the funding needs of the Company.

Risks of Operating in Ghana

The Company's projects in Ghana are subject to the risks of operating in foreign countries, including political and economic considerations such as civil and tribal unrest, war (including in neighbouring countries), terrorist actions, criminal activity, nationalization, invalidation of governmental orders, failure to enforce existing laws, labour disputes, corruption, sovereign risk, political instability, the failure of foreign parties, courts or governments to honour or enforce contractual relations or uphold property rights, changing government regulations with respect to mining (including royalties, environmental requirements, labour, taxation, land tenure, foreign investments, income repatriation and capital recovery), fluctuations in currency exchange and inflation rates, import and export restrictions, challenges to the title to properties or mineral rights in which the Company has interests, problems or delays renewing licenses and permits, opposition to mining from local, environmental or other nongovernmental organizations, increased financing costs, instability due to economic under-development, inadequate infrastructure, and the expropriation of property interests, as well as by laws and policies of Ghana affecting foreign trade, investment and taxation. As African governments continue to struggle with deficits and depressed economies, the strength of commodity prices has resulted in the gold mining sector being targeted as a source of revenue. Governments are continually assessing the terms for a mining company to exploit resources in their countries.

Furthermore, the Company requires consultants and employees to work in Ghana to carry out its planned exploration and development programs. It may be difficult from time to time to find or hire qualified people in the mineral exploration industry who are situated in Ghana, or to obtain all of the necessary services or expertise in Ghana, or to conduct operations on its projects at reasonable rates. If qualified people and services or expertise cannot be obtained in Ghana, the Company may need to seek and obtain those services from service providers located outside of Ghana which could result in delays and higher costs to the Company.

Ghana's Income Tax Act, 2015, Act 896 (together with its subsequent amendments, the Ghanaian Tax Act) provides for a withholding tax on payments to goods and service providers. The Ghanaian Tax Act provides for withholding tax in the range of 5-20% depending on the nature of the item or service acquired. Additionally, the Ghanaian Tax Act provides for a withholding tax of 3% on the supply or use of goods to a resident. The Company is required to make assessments as liabilities are incurred to ensure the appropriate amount is withheld and remitted to the Ghanaian Revenue Authority. Failure to withhold the applicable amounts could result in penalties and interest for late payment. Failure to comply with the Ghanaian Tax Act, as the same may be amended from time to time, could result in adverse tax consequences which may have a material adverse effect on the Company's financial condition. Further, no assurance can be given that new taxation rules or accounting policies will not be enacted by the government of Ghana or that existing rules will not be applied in a manner which could result in Cardinal



being subject to additional taxation or which could otherwise have a material adverse effect on Cardinal's profitability, results of operation, financial condition and the trading price of Cardinal's securities.

Mineral resource companies face increasing public scrutiny of their activities, and are under pressure to demonstrate that their operations have potential to generate satisfactory returns not only to their shareholders, but also to benefit local governments and the communities surrounding its properties where it operates. The potential consequences of these pressures include reputational damage, lawsuits, increasing social investment obligations and pressure to increase taxes and future royalties payable to local governments and surrounding communities. As a result of these considerations, Cardinal may incur increased costs and delays in permitting and other operational matters with respect to its property interests in Ghana.

In addition, local tribal authorities in West Africa exercise significant influence with respect to local land use, land labour and local security. From time to time, the Ghana government has intervened in the export of mineral concentrates in response to concerns about the validity of export rights and payment of duties. No assurance can be given that the co-operation of such authorities, if sought, will be obtained, and if obtained, maintained.

In the event of a dispute arising from Cardinal's activities, Cardinal may be subject to the exclusive jurisdiction of courts or arbitral proceedings outside of Australia or may not be successful in subjecting persons to the jurisdiction of courts in Australia, either of which could unexpectedly and adversely affect the outcome of a dispute.

No guarantee or assurance can be given regarding future stability in Ghana as such stability is beyond the control of Cardinal. Any of the above events could delay or prevent the Company from exploring or developing its properties even if economic quantities of minerals are found, and could have a material adverse impact upon the Company's foreign operations.

Changes in Law and Government Regulation and Policy Risk

The mineral exploration activities undertaken by the Company are subject to laws and regulations governing health and worker safety, employment standards, exports, taxation, waste disposal, management and use of toxic substances and explosives, protection of the environment, mine development and production, protection of endangered and protected species, reclamation, historic and cultural preservation and other matters. Exploration activities may also be affected in varying degrees by government regulations with respect to, but not limited to, restrictions on future exploration and production, price controls, royalties, export controls, currency availability, foreign exchange controls, income taxes, delays in obtaining or the inability to obtain necessary permits, opposition to mining from environmental and other non-governmental organizations, limitations on foreign ownership, expropriation of property, ownership of assets, environmental legislation, labour relations, limitations on repatriation of income and return of capital, limitations on mineral exports, high rates of inflation, increased financing costs, and site safety.

The Company's exploration programs with respect to the Company's projects in Ghana will, in general, be subject to approval by the Minerals Commission and other governmental agencies. Development of any of the Company's properties will be dependent upon the Namdini Project meeting environmental guidelines set by EPA and, where required, being approved by governmental authorities such as the Minerals Commission.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions which could have a material adverse impact upon Cardinal. Parties engaged in mining operations or in the exploration or development of mineral properties may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Amendments to current laws and regulations governing operations, title matters, land ownership, tenement interests or mining rights or more stringent implementation thereof could have a substantial adverse impact on



the Namdini Project and cause increases in exploration expenses, capital expenditures or productions costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.

Ownership Risks

The Constitution of Ghana vests title in every mineral in its natural state to the Government of Ghana. The exercise of any mineral right in the form of reconnaissance, exploration or exploitation of any mineral in Ghana requires an appropriate licence or mineral right to be issued by the Government of Ghana acting through the Minister. There is no assurance that title to the properties in which Cardinal has interests will not be challenged. The acquisition of title to mineral exploration properties is a very detailed and time-consuming process. Title to and the area of mineral properties may be disputed. While Cardinal has diligently investigated title to the properties in which it has an interest, it may be subject to prior unregistered agreements or transfers or indigenous land claims and title many be affected by undetected defects. Consequently, the boundaries may be disputed.

There can be no assurance that there are no prior unregistered agreements, claims or defects that may result in the title to the properties in which Cardinal has an interest being challenged. Further, Cardinal's interests in the properties are subject to the risks that counterparties will fail to honour their contractual commitments that courts will not enforce such contractual obligations and that required governmental approvals will not be obtained. A successful challenge to the precise area and location of these claims, or the failure of counterparties to honour or of courts to enforce such contractual obligations could result in Cardinal being unable to operate on its properties as anticipated or being unable to enforce its rights with respect to its properties which could have a material adverse impact upon Cardinal.

Permitting and Licensing Risks

In addition to mineral rights, Cardinal will require some or all of the following permits, licences or other regulatory approvals to be able to carry out business operations in Ghana as it advances its projects: (i) environmental permits; (ii) approved environmental management plans and environmental certificates; (iii) reclamation bonds and approved reclamation plans; (iv) water usage permits; (v) business operating permits; (vi) licences to export, sell or dispose of minerals; (vii) permits/licences to retain a specified percentage of mineral export proceeds for purposes of debt servicing, dividend payment to foreign shareholders and acquisition of plant and machinery for the mining project; (viii) permits to operate foreign exchange retention accounts with a trustee bank; and (ix) immigration quotas to employ a specified number of non-Ghanaians to work on mining projects. Cardinal believes that it will be able to obtain and maintain in the future all such necessary licences and permits to carry on the activities which it intends to conduct, and intends to comply in all material respects with the terms of such licences and permits.

There can be no guarantee, however, that Cardinal will be able to obtain and maintain, at all times, all the necessary licences and permits required to undertake the proposed exploration and development or to place its properties into commercial production and to operate mining facilities thereon. In the event of commercial production, the cost of compliance with changes in governmental regulations has the potential to reduce the profitability of operations or preclude the economic development of a particular property.

Cultural Heritage Risk

There are sites of cultural significance documented within the area of the Namdini Project. Cardinal has in place measures to help preserve local customs and cultural heritage, and works with the relevant local communities to avoid or minimise impact on sites of cultural significance from the Company's activities.

No History of Operations Risk

Cardinal has no history of producing metals from its current mineral properties. As a result, Cardinal is subject to all of the risks associated with establishing new mining operations and business enterprises including:

(1) the timing and cost, which can be considerable, of the construction of mining and any required processing facilities;



- (2) the availability and costs of skilled labour and mining equipment;
- (3) the need to obtain necessary environmental and other governmental approvals and permits, and the timing of those approvals and permits; and
- (4) the availability of funds to finance construction and development activities.

It is common in new mining operations to experience unexpected problems and delays during construction, development, and mine start-up. In addition, delays in the commencement of mineral production often occur. Accordingly, there are no assurances that Cardinal's activities will result in profitable mining operations or that Cardinal will successfully establish mining operations or profitably produce mineral product at any of its operations.

Relocation of Project Affected People Risk

Cardinal plans to develop Namdini and in so doing it will be necessary to relocate up to 200 families (Project Affected People). A detailed Relocation Action Plan (RAP) has been developed, to address the process of this initiative. The RAP has been developed in accordance with the Minerals and Mining (Compensation and Resettlement) Regulation 2012 (L.I 2175), and International Finance Corporation's (IFC) Performance Standards on Social and Environmental Sustainability for relocation, to ensure all Projected Affected People are treated fairly and consistently.

The RAP which includes 275 concrete structures, residential and public, including a healthcare facility, 2 basic schools, teacher's accommodation, 2 Churches, and a Mosque was accepted by the Project Affected People and the Talensi District Assembly in February 2020. The Minerals Commission of Ghana (MinCom) approved Cardinal's submission in respect of the RAP on the 25th of February 2020.

At the time that the RAP was approved, the Namdini Mining Lease covered approximately 19.5km2. As the Namdini Mining Lease now covers approximately 63km2 it is necessary for the RAP to be revised to incorporate the expanded area. While the expanded area of the Namdini Mining Lease does not include any additional Project Affected People, there may be additional costs and administrative delays in obtaining approval for a revised RAP.

Relinquishment of Tenement Area Risk

The mining laws of Ghana require that upon each renewal of a prospecting licence, the holder must surrender at least 50% of the area covered (subject to a minimum balance of 125 blocks).

Although Cardinal will use its best efforts to seek to ensure that, in each case, the area retained has greater exploration, development and production potential than the area relinquished there can be no assurance that the area relinquished will not ultimately have greater Mineral Resources and Ore Reserves and a more positive outlook than the area retained upon renewal.

Access to Land Risk

Land access is critical to the operations of Cardinal. Immediate and continuing access to land within Cardinal's licence and permit areas cannot in all cases be guaranteed as Cardinal may be required to obtain the consent of the owners and occupiers of the relevant land or surrounding land. Compensation may be required to be paid to the owners and occupiers by Cardinal in order for Cardinal to carry out exploration activities.

Additional to land access within Cardinal's licence and permit area, land access may be required outside these areas for purposes of vehicle access via road/s and infrastructure access such as powerlines and water pipelines. Permitting authorisation of these required access corridors cannot in all cases be guaranteed as Cardinal may be required to obtain the consent of the owners and occupiers of the relevant land and / or surrounding land. Compensation may be required to be paid to the owners and occupiers by Cardinal in order for Cardinal to carry out development. Some of these areas may be in protected forest areas which require an additional level of authorisation from the relevant government departments (for example, The Forestry Commission of Ghana).



Artisanal Miners

Cardinal's projects are held in areas of Ghana that have historically been mined by artisanal miners. As Cardinal further explores and advances its projects, it may be required to require the removal of any artisanal miners operating on its properties. There is a risk that such artisanal miners may oppose Cardinal's operations, which may result in a disruption to any planned development and/or mining and processing operations. In addition, artisanal miners have historically used chemicals that are harmful to the environment to separate the precious metals from the ore. There can be no assurance that Cardinal will not be subject to environmental liabilities resulting from such operations in the future, which could have a material adverse impact on Cardinal. In addition, artisanal work practices are often unsafe and accidents and/or incidents may occur on Cardinal's property, and there is an added reputational risk that third parties may wish to link the activities of the artisanal miners to that of Cardinal in the event of accidents or incidents, which could have a material adverse impact on Cardinal.

HIV/AIDS, Malaria and Other Disease Impact on Labour and Employment Risk

HIV/AIDS, malaria and other diseases represent a serious threat to maintaining a skilled workforce in the mining industry in Ghana. HIV/AIDS is a major healthcare challenge faced by Cardinal's operations in Ghana. There can be no assurance that Cardinal will not lose members of its workforce or workforce manhours or incur increased medical costs, which may have a material adverse effect on Cardinal's operations.

General Risks

Market Conditions

Share market conditions may affect the value of the Company's quoted securities regardless of the Company's operating performance. Share market conditions are affected by many factors such as: general economic outlook; introduction of tax reform or other new legislation or government policies; interest rates and inflation rates; changes in investor sentiment toward particular market sectors; the demand for, and supply of, capital; and terrorism or other hostilities. The market price of securities can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and resource exploration stocks in particular. The Company does not warrant the future performance of the Company or any return on an investment in the Company.

Stress in the Global Economy

Reduction in credit, combined with reduced economic activity and the fluctuations in the Australian dollar may adversely affect businesses and industries that purchase commodities, affecting commodity prices in more significant and unpredictable ways than the normal risks associated with commodity prices. The availability of services such as drilling contractors and geological service companies and/or the terms on which these services are provided may be adversely affected by the economic impact on the service providers. The adverse effects on the capital markets generally make the raising of capital by equity or debt financing much more difficult and the Company is dependent upon the capital markets to raise financing. Any of these events, or any other events causing turmoil in world financial markets, may have a material adverse effect on the Company's business, operating results and financial condition.

Current Global Financial Condition

Current global financial conditions have been subject to increased volatility. As such, the Company is subject to counterparty risk and liquidity. The Company is exposed to various counterparty risks including, but not limited to financial institutions that hold the Company's cash, and through companies that have payables to the Company. The Company is also exposed to liquidity risks in meeting its operating expenditure requirements in instances where cash positions are unable to be maintained or appropriate financing is unavailable. These factors may impact the ability of the Company to obtain loans and other credit facilities in the future and, if obtained, on terms favourable to the Company. If these increased levels of volatility and market turmoil continue, the Company's operations could be adversely impacted and the trading price of the shares could be adversely affected.



Exchange Rate and Currency Risks

Fluctuations in exchange rates between the Australian dollar, US Dollar and Ghanaian currency (GHS) and other operational currencies may result in foreign exchange gains or losses which may affect the financial performance of Cardinal.

Inflation Risk

Cardinal's Namdini Project is located in Ghana which has historically experienced relatively high rates of inflation.

Repatriation of Earnings Risk

Cardinal conducts its operations through foreign subsidiaries and holds substantially all of its assets in such subsidiaries. Accordingly, any limitation on the transfer of cash or other assets between Cardinal and its subsidiaries could restrict Cardinal's ability to fund its operations efficiently. Any such limitations, or the perception that such limitations may exist now or in the future, could have an adverse impact on Cardinal's valuation and share price. Moreover, there is no assurance that Ghana or any other foreign country in which Cardinal may operate in the future will not impose restrictions on the repatriation of earnings to foreign entities.

Commodity Prices

The price of the Ordinary Shares, and the Company's profitability, financial results and exploration activities may in the future be significantly adversely affected by declines in the price of precious metals. Precious metal prices fluctuate on a daily basis and are affected by a number of factors beyond the control of the Company, including the US dollar and other foreign currency exchange rates, central bank and financial institution lending and sales, producer hedging activities, global and regional supply and demand, production costs, confidence in the global monetary system, expectations of the future rate of inflation, the availability and attractiveness of alternative investment vehicles, interest rates, terrorism and war, and other global or regional political or economic events or conditions.

The price of gold has fluctuated widely in recent years, and future trends cannot be predicted with any degree of certainty. In addition to adversely affecting the Company's financial condition and exploration and development activities, declining commodity prices can impact operations by requiring a reassessment of the feasibility of a particular project, as well as have an impact on the perceptions of investors with respect to gold equities, and therefore, the ability of the Company to raise capital. A sustained, significant decline in the price of gold could also cause development of any properties in which the Company may hold an interest from time to time to be impracticable. Future production from the Company's future properties, if any, will be dependent upon, among other things, the price of gold being adequate to make these properties economic. There can be no assurance that the market price of gold will remain at current levels, that such price will increase or that market prices will not fall.

Reliance on Key Personnel

Cardinal relies on a number of well qualified and experienced key senior personnel. Loss of such personnel, or a failure to recruit and retain suitably qualified and experienced personnel in the future may adversely affect the financial performance of Cardinal. Such failure may also result in damage to the reputation of Cardinal which may have additional adverse consequences for the financial performance and prospects of Cardinal.

Dilution Risk

Cardinal has outstanding unlisted options. Should these securities be exercised the holders have the right to acquire additional Ordinary Shares, in accordance with the terms of such securities. During the life of these securities, the holders have the opportunity to profit from a rise in the market price of the Cardinal shares, possibly resulting in the dilution of existing securities.



General Market Risks

The economic condition of both domestic and global markets may affect the performance of companies such as Cardinal. Adverse changes in macroeconomic conditions, including global, regional and local economic growth, the costs and general availability of credit, the level of inflation, interest rates, exchange rates, government policy (including fiscal, monetary and regulatory policies), general consumption and consumer spending, sentiment and levels of employment, amongst others, are outside of the control of Cardinal and may have a material adverse effect on the financial performance of Cardinal.

Litigation Risk

Cardinal may be involved in disputes and litigation relating to the conduct of its business. The risk of litigation is a general risk of Cardinal's business and it may incur costs in making payments to settle claims or in complying with any court order (which may not be covered adequately, if at all, by insurance). Any material dispute or litigation could adversely affect the financial position and the financial performance of Cardinal.

COVID-19

Since 31 December 2019, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19" has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to businesses globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilise economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company in future periods. There is a risk that Public Health crises and pandemics such as COVID-19 could limit or prohibit the conduct of exploration activities and could have a negative impact on the ability to obtain funding.

In addition, should any Company personnel or contractors be infected, it could result in the Company's operations being suspended or otherwise disrupted for an unknown period of time, which may have an adverse impact on the Company's operations as well as an adverse impact on the financial condition of the Company.

CRITICAL ACCOUNTING ESTIMATES

The carrying amount of certain assets and liabilities are often determined based on estimates and assumptions of future events. The key estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of certain assets and liabilities within the next annual reporting period are:

Deferred taxation

The potential deferred tax asset arising from the tax losses and temporary differences have not been recognized as an asset because recovery of the tax losses is not yet considered probable.

Provisions

On an ongoing basis, the Company is subject to various claims and other legal disputes for which the outcomes cannot be assessed with a high degree of certainty. A liability is recognized where, based on the Company's legal views and advice, it is considered probable that an outflow of resources will be required to settle a present obligation that can be measured reliably.

By their nature, these provisions will only be resolved when one or more future events occur or fail to occur. The assessment of such provisions inherently involves the exercise of significant judgment of the potential outcome of future events.



MINERAL RESOURCE ESTIMATES

The Mineral Resources and Ore Reserves for the Company's properties have been estimated in accordance with the JORC Code and reconciled with the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves adopted by the CIM Council on May 10, 2014 (the "CIM Definition Standards").

JORC Code

The following definitions are reproduced from the JORC Code:

"Mineral Resource" means a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

"Inferred Mineral Resource" means that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource (as defined herein) and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

"Indicated Mineral Resource" means that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors (as defined herein) as described below in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource (as defined herein) and may only be converted to a Probable Ore Reserve (as defined herein).

"Measured Mineral Resource" means that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Ore Reserve (as defined herein) or to a Probable Ore Reserve.

"Ore Reserve" means the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at pre-feasibility or feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Ore Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

"Probable Ore Reserve" means the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proven Ore Reserve.



"Proved Ore Reserve" means the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the Modifying Factors.

For the purposes of the JORC Code and CIM Definition Standards, "Modifying Factors" are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

There can be no assurance that those portions of such Mineral Resources will ultimately be converted into Ore Reserves. Mineral Resources are not Ore Reserves and do not have demonstrated economic viability.

CAUTIONARY NOTE TO UNITED STATES SHAREHOLDERS CONCERNING ESTIMATES OF MINERAL RESERVES AND MINERAL RESOURCES

This MD&A uses the terms "Probable Ore Reserve", "Measured Mineral Resource", "Indicated Mineral Resource" and "Inferred Mineral Resource". United States Shareholders are advised that while such terms are recognized and required by Canadian and Australian standards or regulations, the SEC does not recognise them. In particular, and without limiting the generality of this cautionary note, the term "Mineral Resource" does not equate to the term "Ore Reserve". This MD&A may use the terms "Probable Ore Reserves" and "Proved Ore Reserves" as such terms are used under NI 43-101, CIM Standards and the JORC Code, which standards differ from the standards that apply under SEC Industry Guide 7. Under United States standards, mineralization may not be classified as an "Ore Reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. As such, certain information contained in this MD&A concerning descriptions of mineralization and resources and reserves under NI 43-101, CIM Standards and the JORC Code are not comparable to disclosures made by United States reporting companies. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of a Probable Ore Reserve, Measured Mineral Resource, Indicated Mineral Resource or an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian and Australian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies. United States Shareholders are cautioned not to assume that all or any part of Measured, Indicated or Inferred Mineral Resources will ever be converted into Ore Reserves. United States Shareholders are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists, or is economically or legally mineable.

INTERNAL CONTROL OVER FINANCIAL REPORTING

Internal controls have been designed to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. As at June 30, 2020, the Company's Chief Executive Officer and Chief Financial Officer evaluated or caused to be evaluated under their supervision the effectiveness of the Company's internal control over financial reporting. The Chief Executive Officer and the Chief Financial Officer concluded that, as of June 30, 2020, the Company's internal control over financial reporting was effective and no material weaknesses were identified.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management, including the Chief Executive Officer and Chief Financial Officer, does not expect that its disclosure controls and procedures or internal controls and procedures will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their



costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, control may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

The Company is required under Canadian securities laws to disclose herein any change in the Company's internal control over financial reporting that occurred during the Company's most recent interim period that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. There have been no changes in the Company's internal control over financial reporting that occurred during the Company's most recent interim period that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

DISCLOSURE CONTROLS AND PROCEDURES

Management is responsible for establishing and maintaining adequate internal controls over disclosure controls and procedures, as defined in National Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings of the Canadian Securities Administrators and Rules 13a-15(e) and Rule 15d-15(e) under the United States Exchange Act of 1934, as amended. Disclosure controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported to senior management, including the Company's Chief Executive Officer and Chief Financial Officer, on a timely basis so that appropriate decisions can be made regarding public disclosure. As at June 30, 2020 management of the Company, with the participation of the Chief Executive Officer and the Chief Financial Officer, evaluated the effectiveness of the Company's disclosure controls and procedures as required by Canadian securities laws. Based on that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that, as of June 30, 2020, the disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the publicly filed reports is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.



CONSOLIDATED FINANCIAL STATEMENTS (II)





CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2020

CORPORATE DIRECTORY



CONTENTS	PAGE
Directors' Report	3
Consolidated Statement of Profit or Loss and Other Comprehensive Income	24
Consolidated Statement of Financial Position	25
Consolidated Statement of Changes in Equity	26
Consolidated Statement of Cash Flows	27
Notes to the Consolidated Financial Statements	28
Directors' Declaration	62
Auditor's Independence Declaration	63
Independent Auditor's Report	64
Shareholder Information	70
Mineral Resource and Ore Reserve Statement	72

The Directors of Cardinal Resources Limited submit herewith the annual financial report of Cardinal Resources Limited for the period 1 July 2019 to 30 June 2020. In order to comply with the provisions of the Corporations Act 2001, the Directors' report as follows:

DIRECTORS

The names and particulars of the directors of the Company as at 30 June 2020 and at the date of this report are as follows. Directors were in office for the entire period unless otherwise stated.

Kevin Tomlinson

Special Responsibilities

Appointed Experience

Non-Executive Chairman

Member of Technical Committee and Special Committee

7 November 2016

Mr Tomlinson possess over 35 years' experience in Geology and Finance with significant experience within the Toronto, Australian and London Stock Exchanges.

Mr Tomlinson holds an MSc in Structural Geology and a Grad Dip in Finance. From 1998 Mr Tomlinson has worked in the Corporate/Finance sectors where he has been involved in raising significant equity for resource companies on the AIM, ASX, LSE and TSX Exchanges.

Kevin was previously Managing Director of Investment Banking at Westwind Partners/Stifel Nicolaus where he advised a number of resource companies including Centamin Plc, Platinum Group Metals, Trelawney Resources and Allied Gold. He was also an integral part of the Team raising finance for Osisko Mining and Semafo Inc.

Mr Tomlinson was Director of Natural Resources at Williams de Broë and head of Research for Hartleys Ltd in Australia. Recent Directorships include Bellevue Gold (developer), Centamin Plc (producer), Orbis Gold (developer) and Medusa Mining (producer).

Mr Tomlinson is a Fellow of the Institute of Directors, a Fellow of the Chartered Institute for Securities & Investment, a Fellow of the Australian Institute of Geoscientists and a Liveryman of the Worshipful Company of International Bankers.

Other current listed company

directorships

Former listed directorships in the last three years

Bellevue Gold Limited (since September 2019)

Samco Gold Limited (since January 2012)

Orbis Gold Limited (2014 to 2017) Centamin Egypt Limited (2012 to 2016) Plymouth Minerals Limited (2017 to 2019) Xanadu Mines Limited (2017 to 2019)

Archie Koimtsidis MBA

Appointed

Experience

Managing Director

27 December 2012

Mr Koimtsidis has for the last 28 years been involved in all facets of gold exploration, discovery, production and refining in West Africa and South

America.

His most recent appointment prior to joining Cardinal was as the Deputy Country Manager of Ghana for PMI Gold Limited a joint TSXV and ASX listed company. During this time he was responsible for all field operational

matters including coordination of exploration, drilling programs and human resource management in relation to the Company's projects in Ghana.

Mr Koimtsidis has been instrumental in acquiring the Ghanaian projects on behalf of Cardinal and has a unique knowledge and understanding of geopolitical and operational matters relating to resources projects in West

Africa.

Other current listed company

directorships

Former listed directorships in

the last three years

None

Malik Easah

Executive Director

Special Responsibilities

Appointed Experience Member of Health, Safety, Environment & Social Committee

27 December 2012

Mr Malik Easah is the principal of successful alluvial mining operations in the North West Adansi Gold Obotan concession and is currently developing additional payable gold permits within the Ashanti and Nangodi Gold belts of

Ghana.

Mr Easah specialises in the manufacture of alluvial gold wash plants and recovery equipment and is regarded as an authority in the development of

alluvial mining operations in Ghana.

Mr Easah is a resident in Ghana.

Other current listed company

directorships

Former listed directorships in

the last three years

None

Michele Muscillo

Special Responsibilities

Chairman of the Audit, Risk & Compliance Committee, the Remuneration &

Nomination Committee and the Special Committee.

Appointed

11 October 2017

Non-Executive Director

Experience

Mr Muscillo is a Partner with HopgoodGanim Lawyers in Australia. Michele has practised exclusively in corporate law for over 15 years and has extensive experience in capital markets transactions, including the negotiation of significant commercial contracts and agreements. As part of this role, Mr Muscillo has acted on numerous IPOs and debt and equity raisings, and advised both bidders and targets on public market control transactions. His key areas of practice include Corporate Advisory and Governance, Capital

Markets, Resources and Energy.

Other current listed company

directorships

Xanadu Mines Limited (since August 2017)

Mako Gold Limited (since April 2017)

Former listed directorships in

the last three years

Aeris Resources (since May 2013)

Orbis Gold Limited which is currently owned by TSX-Listed SEMAFO Inc.

(TSX:SMF).

Dr Kenneth G. Thomas

Non-Executive Director

Special Responsibilities

Chairman of the Technical Committee. Member of the

Member of Audit, Risk & Compliance Committee, Health, Safety, Environmental & Social Committee and Remuneration & Nomination

Committee

31 October 2018 **Appointed**

Experience

Dr. Thomas has over 45 years in the mining industry with experience in project development, construction and operations. Until July 2012 he was Senior Vice President, Projects, Kinross Gold Corporation and previously, for six years, a Global Managing Director and Board Director at Hatch Ltd, a leading international engineering and construction firm.

From 1987 to 2001 he served in progressively senior roles at Barrick Gold Corporation to Senior Vice President, Technical Services. Prior to Barrick Gold Corporation, he also worked for 10 years in Zambia and South Africa with Anglo American Corporation.

Ken has a doctorate in Technical Sciences (Project Implementation) from Delft University of Technology and in 2001 he was awarded the Selwyn G. Blaylock Medal by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) for advancements in mining internationally. In addition, he is a Fellow and Past President of the CIM. Ken is an experienced public company director, including his recent tenure as director of Continental Gold (TSX: CNL) prior to its acquisition by an indirect subsidiary of Zijin Mining Group Co., Ltd.

Other current listed company directorships

Continental Gold Inc (since June 2015)

Former listed directorships in the last three years

Avalon Advanced Minerals Inc. (from February 2014 to February 2019) Candente Gold Corp. (from December 2012 to January 2019)

Trevor Schultz

Non-Executive Director

Special Responsibilities

Chairman of the Health, Safety, Environmental & Social Committee Member of Audit, Risk & Compliance Committee, Technical Committee and

the Remuneration & Nomination Committee. 2 January 2019

Appointed Experience

Mr Schultz has over 45 years in the mining industry with experience in project development, construction and operations. Between 2008 and 2018 he was an Executive and Non-Executive Director with Centamin Egypt and was responsible for the construction of the 12Mtpa processing plant which has a similar flowsheet to Cardinal's proposed flowsheet.

Prior to this, he served as Chief Operating Officer at Ashanti Goldfields Corporation (now Anglo Gold Ashanti Ltd) and was a resident of Ghana for six years. Furthermore, he worked for BHP in Australia and America and in South Africa with Anglo American Corporation.

Trevor has an MA in Economics from Trinity College, England (1968), an MSc in Mining Engineering, from Witwatersrand University, South Africa (1972) and an Advanced Management Programme Diploma from Harvard Business School, USA (1986).

Other current listed company

Centamin Egypt (since May 2005)

directorships

Former listed directorships in No

the last three years

None

COMPANY SECRETARY

Sarah Shipway B Bus, CA Company Secretary

Appointed 27 December 2012

Experience Sarah Shipway was appointed Company Secretary of Cardinal Resources on

27 December 2012.

Sarah has a Bachelor of Commerce from Murdoch University and is a member

of the Institute of Chartered Accountants.

DIRECTORS' INTEREST

At the date of this report, unless otherwise stated, the Directors held the following interests in Cardinal Resources.

Name	Ordinary	Unlisted	
	Shares	Options	
Kevin Tomlinson	400,000	5,918,800	
Archie Koimtsidis	15,209,296	6,435,606	
Malik Easah	16,242,238	5,181,818	
Michele Muscillo	=.	2,851,433	
Dr Kenneth G. Thomas	-	2,930,049	
Trevor Schultz	-	2,930,049	

Other than detailed below, the Directors have no interest, whether directly or indirectly, in a contract or proposed contract with Cardinal Resources Limited during the financial year end.

PRINCIPAL ACTIVITIES

The principal activity of the Group is mineral exploration in Ghana.

RESULTS AND REVIEW OF OPERATIONS

The result of the consolidated entity for the financial year from 1 July 2019 to 30 June 2020 after income tax was a loss of \$36,970,688 (2019: loss of \$27,050,962).

The net liabilities of the consolidated group have increased from (\$18,141,710) at 30 June 2019 to (\$33,904,777) as at 30 June 2020. Total assets decreased in 2020 from \$20,834,148 at 30 June 2019 compared to \$6,288,735 at 30 June 2020 as a result of a reduction in cash and cash equivalents.

The directors believe the Group is in a strong and stable financial position to expand and grow its current operations.

A review of operations of the consolidated entity during the year ended 30 June 2020 is provided in the Management Discussion & Analysis immediately preceding the consolidated financial statement.

LIKELY DEVELOPMENTS AND EXPECTED RESULTS OF OPERATIONS

The Group's focus over the next financial year will be on its key projects – the Ghanaian tenements. Further commentary on planned activities at these projects over the forthcoming year is provided in the Management Discussion & Analysis.

The Board will continue to focus on creating value from the Company's existing resource assets, as well as pursuing new opportunities in resources sector to complement the Company's current projects.

SIGNIFICANT CHANGES IN STATE OF AFFAIRS

There have not been any significant changes in the state of affairs of the Group during the financial year, other than as noted in this financial report.

ENVIRONMENTAL REGULATIONS

The Group is aware of its environmental obligations with regards to its exploration activities and ensures that it complies with all applicable regulations when carrying out exploration work.

DIVIDENDS PAID OR RECOMMENDED

The directors do not recommend the payment of a dividend and no amount has been paid or declared by way of a dividend to the date of this report.

DIRECTORS' MEETINGS

The following table sets out the number of meetings of the Company's Directors held during the financial year ended 30 June 2020 and the number of meetings attended by each Director. There were five committees of Directors in existence during the financial year, these being the Audit and Risk Committee, the Remuneration and Nomination Committee, the Health and Safety Committee, the Technical Committee and the Special Committee (please see 16 March 2020 ASX/TSX Press release for further details on the Special Committee). We refer to the Company's 2020 Corporate Governance Statement for more information.

	Directors' Meeting	Audit and Risk Committee	Remuneration and Nomination Committee	Health and Safety Committee	Technical Committee	Special Committee
Number of Meetings Held	10	4	-	-	3	4
K Tomlinson	10	4*	-	-	3	4
A Koimtsidis	10	-	-	-	-	4*
M Easah	10	-	-	-	-	4*
M Muscillo	10	4	-	-	-	4
Dr K G Thomas	9	4	-	-	3	-
T Schultz	8	2	-	-	3	-

^{*}By invitation

REMUNERATION REPORT – AUDITED

1. Remuneration Report overview

The Directors' of Cardinal Resources Limited present the Remuneration Report (the Report) for the Company and its controlled entities for the year ended 30 June 2020. This report forms part of the Directors' Report and has been audited in accordance with section 300A of the *Corporations Act 2001*.

The report details the remuneration arrangements for Cardinal's key management personnel (KMP):

- Non-Executive Directors (NEDs); and
- Executive Directors and Senior Executives (collectively the Executives).

KMP's are those persons who, directly or indirectly, have authority and responsibility for planning, directing and controlling the major activities of the Company and the Group.

The table below outlines the KMP of the Group during FY 2020.

Name	Position	Term as KMP
Non-Executive Directors		
Kevin Tomlinson	Non-Executive Chairman	Full financial year
Michele Muscillo	Non-Executive Director	Full financial year
Dr Kenneth G. Thomas	Non-Executive Director	Full financial year
Trevor Schultz	Non-Executive Director	Full financial year
Executive Directors		
Archie Koimtsidis	Chief Executive Officer/Managing Director	Full financial year
Malik Easah	Executive Director	Full financial year
Senior Executives		
Dave Anthony	Chief Operating Officer	4 September 2019
Jon Grygorewicz	Chief Financial Officer	Full financial year

2. How Remuneration of Governed

Remuneration Decision Making

The below diagram represents the Group's remuneration decision making framework.

REMUNERATION CONSULTANTS

External, independent advice and information that is free from influence of management



BOARD OF DIRECTORS

Review and Approve





REMUNERATION AND NOMINATION COMMITTEE

Advise the Board on: Companywide remuneration framework and policy. Executive and NED remuneration outcomes



CEO

Recommendations of remuneration outcomes for executive team

MANAGEMENT

Implementation of remuneration policies and practices
Advising the Remuneration and Nomination Committee of changing
statutory and market conditions

Role of the Remuneration and Nomination Committee

The Remuneration and Nomination Committee (Committee) operates under a Board-approved Charter. The purpose of the Committee is to provide assistance and recommendations to the Board to ensure that it is able to fulfill its responsibilities relating to the following:

- Remuneration strategy;
- NED remuneration;
- KMP remuneration;
- Short term and long-term incentive plans;
- Annual performance review of the CEO and senior executives;
- Review remuneration reporting;
- Nomination and review of applications for Board of Directors positions;
- Diversity strategy and gender pay strategy;
- Board size and composition;
- Director induction and continuing professional development;
- Annual Board performance review; and
- Succession planning and talent management.

A copy of the Charter is available on the Company's website under the Corporate Governance section www.cardinalresources.com.au.

The composition of the Committee is set out below. The committee consists solely of NEDs. The CEO/MD and others may be invited to attend all or part of meetings by the Committee Chairman as required and appropriate, but have no vote on matters before the Committee.

Use of Remuneration Consultants

The Committee has the resources and authority appropriate to perform its duties and responsibilities, including the authority to engage external professional on terms it deems appropriate.

The Committee has established protocols to ensure that if remuneration recommendations, as defined by the *Corporations Act 2001*, are made by independent remuneration consultants they are free from bias and undue influence by members of the KMP to whom the recommendations relate. The Committee engages the remuneration consultant and receive all reports directly from the remuneration consultant.

The Committee considers independent advice, where circumstances require, on the appropriateness of remuneration to ensure the Group attracts, motivates and retains high quality people. An advisor was engaged for the year ended 30 June 2019 and recommendations will be implemented through 30 June 2019/2020.

The Committee engaged the services of BDO (WA) Pty Ltd (BDO). The Committee is satisfied with the advice received from BDO is free from bias and undue influence. The remuneration review provided to the Committee as input into decision making only. The Committee will consider the review, along with other factors, in making its remuneration decisions.

The fees paid to BDO for the remuneration review in 2018/2019 was \$17,550. During 2019/2020 BDO provided other advisory services and was paid a total of \$86,041 for these services. BDO also provides audit services to the Company and was paid a total of \$67,884 for these audit services.

BDO has confirmed that any remuneration reviews have been made free from undue influence by members of the group's key management personnel.

The following arrangements were made to ensure that the remuneration review results were free from undue influence:

- BDO was engaged by, and reported directly to, the chair and secretary of the remuneration committee. The
 agreement for the provision of remuneration consulting services was executed by the chair of the remuneration
 committee under delegated authority on behalf of the Board;
- The report containing the remuneration review results was provided by BDO directly to the chair and secretary of the remuneration committee; and
- BDO was permitted to speak to management throughout the engagement to understand company processes, practices and other business issues and obtain management perspectives.

As a consequence, the Board is satisfied that the recommendations were made free from undue influence from any members of the key management personnel.

Securities Trading Policy

Cardinal's Securities Trading Policy (Policy) provides clear guidance on how company securities, including shares and options, may be dealt with and applies to NED's, Executives and all other personnel of the Company including employees and contractors.

The Securities Trading Policy details acceptable and unacceptable periods for trading in Company Securities including the consequences of beaching the Policy.

The Policy also sets out specific governance approval of how the Chairman, Directors, officers and staff can deal in Company Securities. The Company's Policy can be accessed from the Corporate section at www.cardinalresources.com.au.

Remuneration Report approval at FY2019 Annual General Meeting (AGM)

The remuneration report for the FY2019 received positive shareholder support at the FY2019 AGM.

3. Executive Remuneration Policy and Practices

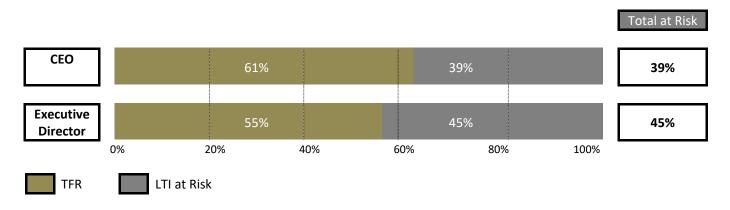
Cardinal's Board is committed to delivering remuneration strategy outcomes that:

- Align the interests of Executives with shareholders and further the Company's key business drivers;
- Attract, motivate and retain high performing Executives;
- Transparent and easily understood; and
- Acceptable to shareholders.

The remuneration strategy as the Company moves into development will be to identify and reward high performers and recognises the contribution of each employee in the continued growth and success of the Group.

2020 Executive Remuneration Mix

The mix of fixed and at-risk remuneration various depending on the role of the Executives. More senior positions have a greater proportion of at-risk remuneration.



Total Fixed Remuneration (TFR) and market positioning of TFR

Cardinal has adopted a market positioning strategy designed to attract and retain talented employees, and to reward them for delivering strong performance. The market positioning strategy also supports fair and equitable outcomes between employees.

TFR acts as a base-level reward and includes cash, compulsory superannuation and any salary-sacrificed items and is reviewed annually. Cardinal has set the baseline TFR for executives at the 75th percentile of the defined market. The Board considers variations to the benchmark based on:

- The size and complexity of the role;
- The criticality of the role to successful execution of the business strategy;
- Role accountabilities;
- Skills and experience of the individual;
- Period of service; and
- Market pay levels for comparable roles.

When determining the relevant market for each role, Cardinal considers the companies from which it sources talent, and to who it could potentially lose talent. During the year ended 30 June 2019 the Company engaged BDO, an independent remuneration advisor, to provide remuneration benchmarking data as input into setting remuneration for Executive KMP.

Given the stage of the Company it has been determined that short-term incentives paid in cash are not applicable. As a result, the Company has not initiated a short-term incentive plan.

Table 1 – LTI Plan: Key Questions and Answers

Long Term Incentive (LTI) Pla	n: Key Questions and Answers on how it works
Why does the Board consider an LTI Plan to be appropriate?	 The Board believes that an LTI Plan can: Focus and motivate Executives to achieve outcomes that are aligned to optimising shareholder value; Ensure that business decisions and strategic planning have regard to the Company and Group's long-term performance; Be consistent with remuneration governance guidelines; Be consistent and competitive with current practices of comparable companies; and Create an immediate ownership mindset among the executive participants, linking a substantial portion of the potential reward to Cardinal's on-going share price and returns to shareholders.
How is the award delivered?	Awards are in the form of performance options (Options) over ordinary shares in the Company for no consideration. The Options carry neither a right to dividends or voting.
How often are grants made and was a grant made in 2020?	Grants were made in Q4 2019 and were issued to directors and employees of the Company. Options were granted to Non-Executive Directors upon receipt of shareholder approval during the year.
What is the quantum of the award and what allocation methodology is used?	The quantum of Options granted in 2020 to an directors and employees was determined using a methodology contemplated in the remuneration review report. The reports contemplated a percentage of equity to be issued in addition to cash salary. The percentage applied was determined using market statistics.
What are the performance conditions?	 Service Condition – The service condition is met if employment with Cardinal is continuous for the period commencing on or around the grant date until the Rights vest; and Performance Condition – Upon meeting the milestone hurdle attached to each right.
Why are the performance conditions selected?	The Board reviews the performance conditions to determine the appropriate hurdles based on Cardinal's strategy. Service based conditions are used to encourage retention. Setting long term incentive targets appropriate for different stages of the Company's cycle is complex and challenging. Whilst the Board holds long term incentives, the incentives should not change during different phases of the Group's cycle and remain more stable over time (unlike short term incentives that should reflect the current operational environment and macroeconomic setting) it is also acknowledged a more nuanced approach may be required in the future.
What is the performance period? When is the LTI Plan schedule to be reviewed by the Board?	The performance period is for approximately4 years and expire on 21 December 2024. The LTI Plan is reviewed annually by the Board.
What happens to Options granted under the LTI Plan	If the Executive's employment is terminated for cause, or due to resignation, all unvested performance options will lapse.

when an Executive ceases employment?	If and when the performance options vest, shares will be allocated in accordance with the plan rules and other condition of the grant.
Can Cardinal clawback LTI awards?	 In the event of serious misconduct or material misstatement in the Company's financial statements, the Board may: Reset the vesting condition and/or alter the performance period applying to the award; Deem all awards which have not vested to have lapsed or been forfeited; and/or Deem all or any shares following vesting of an award to have lapsed or been forfeited.
What happens in the event of a change of control?	In the event of a change in control the Options will vest and become exercisable in accordance with the term and conditions of the options.

4. Executive Remuneration outcomes in FY 2020

Company Performance

A summary of Cardinal's business performance as measured by a range of financial and other indicators, including disclosure required by the *Corporations Act 2001*, is outline below.

Table 2 - Company Performance for five years

	2020	2019	2018	2017	2016
Total Comprehensive Loss Attributable to Member of the Company	36,911,923	27,814,227	37,690,470	21,724,298	9,243,909
Cash and cash equivalents at year end	3,708,705	18,735,456	7,303,807	28,592,718	4,864,822
Basic Loss Per Share (cents)	7.85	7.12	10.22	7.12	5.55
ASX share price at the end of the year (\$)	\$0.62	\$0.34	\$0.43	\$0.53	\$0.30
Increase/(decrease) in share price (%)	1.82	(1.26)	(1.23)	+1.76	+6.00

STI Performance and outcomes for FY2020

The Company during the year ended 30 June 2020 had no STI's in place. The Company has undertaken a review of STI for the financial year ended 30 June 2019.

LTI Plan Vesting Outcomes for FY2020

Long term incentive (LTI) benefits received in the form of milestone options are currently in place. LTI benefits are provided in the form of equity allocations.

The equity vest in the future subject to milestones being achieved. The objective of issuing the LTI's to all KMP's, including non-executive directors, is to align the interests of executives with those of shareholders. If shareholders do well, executives are rewarded. Conversely, where shareholders do not do well, neither does the executive.

Univested equity is forfeited if the executive resigns before the end of the performance period.

During the FY2020 the below milestones had not vested:

- The beginning of earthworks for gold production at the Ghanaian Assets;
- The first pouring of gold at the Ghanaian Assets;
- First Gold Pour to be completed or planned within 60 days of the Project Control Budget;
- The advancement of the project development in a maximum of 10% above the board approved and final Project control Budget and Schedule;
- Development of the Mine Operations Team, to ensure sustained operation;
- Completion of 36 months, with less than zero lost time injury ("LTI") and zero fatalities; and
- Commencement of process plant commissioning, in accordance with the approved schedule.

The Company has undertaken a review of the Company LTI's for the financial year ended 30 June 2020.

Executive KMP Contracts

The Remuneration Committee reviews and agrees Executive Service and Employment Agreements for Key Management Personnel on a periodic basis. The Remuneration Committee is also assisted, where appropriate, by external consultants specialising in remuneration reviews and other employment issues.

The following employment agreements where in place as at 30 June 2020 and as at the date of this report, unless otherwise noted, based upon the following terms;

Table 3 - Executive KMP Contracts

Name	Term on Contract	Notice Period (Company)	Notice Period (KMP)	STI and LTI treatment on termination ¹
A Koimtsidis	On-going employment agreement	12 months	12 months	Vested LTI's the executive has 30 days to exercise. Unvested automatically lapse.
M Easah	On-going employment agreement	6 months	6 months	Vested LTI's the executive has 30 days to exercise. Unvested automatically lapse.
D Anthony	On-going consultancy agreement	9 months	9 months	Vested LTI's the executive has 30 days to exercise. Unvested automatically lapse.
Jon Grygorewicz	On-going services agreement	2 months	2 months	Not Applicable

^{1.} Subject to statutory limitations

Termination Payments

No termination payments have been made by the Company.

Executive KMP Remuneration Tables

The actual remuneration earned by Executive KMP in FY2020 is set out below. The information is considered relevant as it provides shareholders with a view of the remuneration actually paid to Executives for performance in FY2020. The value of remuneration includes equity grants where the Executive received control of the shares in FY2020 and different from the remuneration disclosures in Table 5, which disclosures the value of LTI grants which may or may not vest in future years. The table disclosure the value of LTI grants from previous years which have vested in FY2020.

Table 4 – Executive KMP Actual Remuneration Earned in FY2020

Name	Salary and Fees ¹ \$	Benefits and Allowances \$	Short-Term Incentive \$	LTI Plan Rights \$	Total Actual Remuneration \$
A Koimtsidis	300,000	-	-	-	300,000
M Easah	303,614	-	-	-	303,614
D Anthony	327,710	-	-	-	327,710
J Grygorewicz	274,996	-	-	-	274,996

^{1.} Salary and fees comprise base salary, superannuation and leave entitlements. It reflects the total of "salary and fees" and "superannuation" in the statutory remuneration table.

^{2.} D Anthony was appointed Chief Operating Officer on 4 September 2019

Statutory Executive KMP Remuneration

Table 5 sets out Executive KMP remuneration calculated in accordance with statutory accounting requirements.

Table 5 - Statutory Executive KMP Remuneration

	Short-term benefits	Long-term benefits	Post- employment	Share-based payments		
	Salary, Fees and Leave	Long Service Leave	Super- annuation	LTI Plan Rights (i)	Termination Payments	Total
Name	\$	\$	\$	\$	\$	\$
A Koimtsidis						
2020	300,000	47,197	-	475,347	-	822,544
2019	300,000	-	-	303,433	-	603,433
M Easah						
2020	303,614	48,096	-	367,360	-	719,070
2019	298,780	-	-	269,719	-	568,499
D Anthony (iv)						
2020	327,710	-	-	106,468	-	434,178
2019	-	-	-	-	-	-
J Grygorcewicz (iii)						
2020	274,996	-	-	-	-	274,996
2019	56,500	-	-	-	-	56,500
D Weyrauch (ii)						
2020	-	-	-	-	-	-
2019	151,076	-	-	-	67,126	218,202
Total						
2020	1,206,320	95,293	-	949,175	-	2,250,788
2019	806,356	-	-	573,152	67,126	1,446,634

⁽i) Unlisted options were granted as part of remuneration. No cash benefit is received by the key management personnel of the Group, until the sale of the resultant shares, which cannot be done unless and until the rights have vested and the shares issued.

- (ii) D Weyrauch retired on 31 October 2018.
- (iii) J Grygorcewicz was appointed on 31 October 2018.
- (iv) D Anthony was appointed on 3 September 2019.

7. Non-Executive Director Remuneration

NED Remuneration Policy and Fee Structure

Cardinal's NED remuneration policy is designed to attract and retain suitably skilled Director who can discharge the roles and responsibilities required in terms of good governance, oversight, independence and objectivity. The Board seeks to attract Directors with different skills, experience, expertise and diversity.

Under the ASX Listing Rules, the total annual fee pool for NED's is determined by shareholders. The current maximum aggregate NED fee pool is \$573,000 per annum and was approved by Shareholders at the 2017 Annual General Meeting.

Within the aggregate amount, NED's fees are reviewed annually by the Remuneration and Nomination Committee (Committee), and set by the Board. The Committee considered the advice from external consultants when undertaking the annual review process.

Structure

The remuneration of NEDs consists of directors' fee, there was no committee fees paid to NEDs for serving on sub-committees during the year.

The Board has approved the payment of \$20,000 per month (or part thereof) to each Michele Muscillo and Kevin Tomlinson (who form the Special Committee) having regard to their exertion in participating in the activities of the Special Committee. The fee is payable whilst the relevant Director remains appointed to the Special Committee and for the period commencing 14 March 2020 and until such time as the Special Committee is dissolved by the Board.

Further development of the fee structure for NEDs is proposed for 2020/2019 as part of the revised remuneration strategy designed to attract and retain talent on the Cardinal Board.

Statutory NED Remuneration

The following table sets out the NED fees calculated in accordance with statutory accounting requirements and which reflects the actual remuneration received.

Statutory NED Fee Disclosure

Table 6 - NED fees for the year ended 30 June 2020 and 30 June 2019

	Short-Term Benefits	Long-Term Benefits	Post- Employment		
Name	Base Fee \$	LTI \$	Superannuation \$	Total \$	
K Tomlinson	·				
2020	110,375	402,008	-	512,383	
2019	110,376	337,148	-	447,524	
M Muscillo					
2020	87,600	293,325	-	380,925	
2019	87,600	225,889	-	313,489	
Dr K G. Thomas (i)					
2020	87,600	184,739	-	272,339	
2019	58,400	21,957	-	80,357	
T Schultz (ii)					
2020	87,600	202,669	8,322	298,591	
2019	40,000	25,605	3,800	69,405	
R Schafer (ii)					
2020	-	-	-	-	
2019	43,800	-	-	43,800	
J McMullen (i)					
2020	-	-	-	-	
2019	29,200	-	-	29,200	
Total Remuneration		<u>.</u>	<u></u>		
2020	373,175	1,082,741	8,322	1,464,238	
2019	369,376	610,599	3,800	983,775	

⁽i) Dr K G. Thomas was appointed on 31 October 2018 and J McMullen retired on 31 October 2018.

⁽ii) T Schultz was appointed on 2 January 2019 and R Schafer retired on 2 January 2019.

8. Equity Instrument Reporting

Rights Holdings of KMP

The following table sets out details of movements in performance rights held by Executive KMP, issued as part of LTI explained in section 3.

Table 7 – Executive KMP Milestone Options – LTI

Name	Balance at 1 July 2019	Granted (B)	Vested	Lapsed	Balance at 30 June 2020	Unvested	Value of unvested Rights
Archie Koimtsidis	4,500,000 ^A	1,935,606 ^B	-	-	6,435,606	5,085,606	1,973,882
Malik Easah	4,000,000 ^A	1,181,818 ^B	-	-	5,181,818	3,981,818	1,552,541
KMP's							
D Anthony	-	1,545,455°	-	-	1,545,455	1,545,455	448,182
J Grygorewicz	-	-	-	-	-	-	=

- A. This relates to the FY2017 and were granted on the approval from shareholders at the Company's shareholder meeting held on 3 April 2017. If vesting conditions are achieved these rights will vest on or before 12 April 2022.
- B. This relates to the FY2020 and were granted approval from the shareholders at the Company shareholder meeting held on 4 November 2019. If vesting conditions are achieved these rights will vest on or before 10 December 2024.
- C. This relates to the FY2020 and were granted under the Company employee share plan. If vesting conditions are achieved these rights will vest on or before 10 December 2024.

The Rights on foot, including those granted as part of the FY2020 LTI award are detailed in the table below. Should the Rights not vest, the award will expire at vesting date.

Rights Holdings of NED

The following table sets out details of movements in performance rights held by NED's, issued as part of LTI explained in section 3.

Table 8 – NED Milestone Options – LTI

Name	Balance at 1 July 2019	Granted	Vested	Lapsed ^D	Balance at 30 June 2020	Unvested	Value of unvested Rights
Kevin Tomlinson	5,000,000 ^A	918,800 ^D	-	-	5,918,800	4,418,800	1,731,250
Michele Muscillo	2,018,100 ^B	833,333 ^D	-	-	2,851,433	2,851,433	1,064,695
Dr Kenneth G. Thomas	2,180,049 ^c	750,000 ^D	-	-	2,930,049	2,930,049	488,668
Trevor Schultz	2,180,049 ^c	750,000 ^D	-	-	2,930,049	2,930,049	523,125

- A. This relates to the FY2017 and were granted on the approval from shareholders at the Company's shareholder meeting held on 3 April 2017. If vesting conditions are achieved these rights will vest on or before 12 April 2022.
- B. This relates to the FY2018 and were granted on approval from shareholders at the Company's Annual General Meeting held on 22 November 2017. If vesting conditions are achieved these rights will vest on or before 21 December 2022.
- C. This relates to the FY2019 and were granted on approval from shareholders at the Company's shareholder meeting held on 11 April 2019. If vesting conditions are achieved these rights will vest on or before 21 December 2022.
- D. This relates to the FY2020 and were granted approval from the shareholders at the Company shareholder meeting held on 4 November 2019. If vesting conditions are achieved these rights will vest on or before 10 December 2024.

The Rights on foot, including those granted as part of the FY2020 LTI award are detailed in the table below. Should the Rights not vest, the award will expire at vesting date.

Table 9 - Rights - Director LTI

Name	Grant	Grant Date	Unlisted Options ^J	Number of Rights ^A			Fair Value of Rights ^H	Expense for the Year (\$)	Performance and Service Period	
				Milestone 1 ^B	Milestone 2 ^c	Milestone 3 ^c	Milestone ^H			
Arabia	FY2020	10.12.19	-	-	-	-	1,935,606	725,851	259,284	-
Archie	FY2017 ^D	27.02.17	-	1,350,000	1,350,000	1,800,000	-	1,782,900	277,123	
Koimtsidis	FY2016	18.03.16	3,000,000	-	-	-	-	-	-	-
Malik	FY2020	10.12.19	-	-	-	-	1,181,818	443,181	158,311	-
	FY2017 ^D	27.02.17	-	1,200,000	1,200,000	1,600,000	-	1,584,800	246,331	-
Easah	FY2016	18.03.16	2,000,000	-	-	-	-	-	-	-
Kevin	FY2020	10.12.19	-	-	-	-	981,800	344,549	123,078	-
Tomlinson	FY2017 ^D	27.02.17	-	1,500,000	1,500,000	2,000,000	-	1,981,000	307,914	-
Michele	FY2020	10.12.19	-	-	-	-	833,333	312,499	111,629	-
Muscillo	FY2018 ^E	22.11.18	-	-	864,900	1,153,200	-	752,195	207,984	-
Dr Kenneth	FY2020	10.12.19	-	-	-	-	750,000	281,249	100,466	-
G. Thomas	FY2019 ^F	11.04.19	-	-	934,307	1,245,742	-	207,417	107,932	-
Trevor	FY2020	10.12.19	-	-	-	-	750,000	281,249	100,466	-
Schultz	FY2019 ^G	11.04.19	-	-	934,307	1,245,742	-	241,875	125,863	-

- A. The Milestone Options shall vest and are exercisable at any time on and from:
 - (i) Milestone 1 the earlier of:
 - (A) the completion of a scoping study; or
 - (B) the completion of a preliminary economic assessment, of the Ghanaian Assets;
 - (ii) Milestone 2 on the beginning of earthworks for gold production at the Ghanaian Assets; and
 - (iii) Milestone 3 on the first pouring of gold at the Ghanaian Assets, until 12 April 2022.

A probability of 100% has been applied to the milestones occurring for the milestone options on issue.

- B. During the year ended 30 June 2018 Milestone 1 vested.
- C. The expected accounting vesting date for Milestone 2 and 3 have been determined to be 21 September 2020.
- D. The milestone options were issued with an exercise price of \$0.50.
- E. The milestone options were issued with an exercise price of \$0.965.
- F. The milestone options were issued with an exercise price of \$0.679.
- G. The milestone options were issued with an exercise price of \$0.59.
- H. The Milestone Options shall vest and we exercisable at any time on and from:
 - a. The first pouring of gold at the Ghanaian Assets

A probability of 100% has been applied to the milestones occurring for the milestone options on issue.

- I. The value of the rights included in remuneration for the year is calculated in accordance with Australian Accounting Standards for further details please see note 13.
- J. Unlisted options exercisable at \$0.22 on or before 18 March 2020, during the year the unlisted options were exercised.

On satisfaction of certain milestone events, each Class C Performance Share converts into 500,000 ordinary shares (refer to note 13) in which case each key management personnel holding the Class C Performance Shares would become entitled to a further 500,000 ordinary shares. During the year the Class C Performance Rights expired.

Table 10 - Class C Performance Shareholdings of key management personnel

Key Management Personnel	Balance at 1 July 2019 (ii)	Granted as remuneration	Net other change (iii)	Balance at 30 June 2020 (i)
A Koimtsidis	-	-	-	-
M Easah (iv)	60	-	(60)	-
J Grygorcewicz	-	-	-	-
Former KMP's				
D Weyrauch	-	-	-	-
Total	60	-	(60)	-

⁽i) Balance at the end of the financial year or at date of retirement, for key management personnel who retired before financial year end.

Share and Option Holdings of KMP

The following table sets out the movements in the number of ordinary shares in the Company held, directly, by each KMP, including their related parties.

Table 11: Shareholdings of Key Management Personnel - 2020

	Balance 01.07.19 (i)	Granted as Remuneration	Listed Options Exercised	Unlisted Options Exercised (iii)	Net Change Other (ii)	Balance 30.06.20
Directors						
A Koimtsidis	8,017,565	-	4,191,731	3,000,000	-	15,209,296
M Easah	7,681,815	-	6,560,423	2,000,000	-	16,242,238
KMP						
D Anthony	20,000	-	-	-	50,000	70,000
J Grygorewicz	-	-	20,000	-	-	20,000

⁽i) Date of appointment, if applicable

Table 12: Listed Options holdings of Key Management Personnel - 2020

								Vested at 30 June 2020	
	Balance 01.07.19 (ii)	Granted as Remuneration	Options Exercised	Performance Rights Vested	Net Change Other (i)	Balance 30.06.20	Total	Exercisable	
Listed Options									
Directors									
A Koimtsidis	4,191,731	-	(4,191,731)	-	-	-	-	-	
M Easah	6,560,423	-	(6,560,423)	-	-	-	-	-	
KMP									
D Anthony	-	-	-	-	-	-	-	-	
J Grygorewicz	20,000	-	(20,000)	-	-	-	-	-	

⁽i) Purchased on market

⁽ii) Balance at the beginning of the financial year or at date of appointment, for those key management personnel who were appointed during the financial year.

⁽iii) Expired during the year.

⁽iv) Mr. Easah is the sole shareholder of Savannah Mining Ghana Limited, which holds the 60 outstanding Class C Performance Shares.

⁽ii) On-market purchase

⁽iii) Unlisted options exercisable at \$0.20 on or before 18 March 2020

⁽ii) Date of appointment, if applicable

Share and Option Holdings of NED's

The following table sets out the movements in the number of ordinary shares in the Company held, directly, by each NED's, including their related parties.

Table 13: Shareholdings of NED Personnel - 2020

	Balance 01.07.19	Granted as Remuneration	Options Exercised	Net Change Other	Balance 30.06.20
Directors					
K Tomlinson	-	-	400,000	-	400,000
M Muscillo	-	-	-	-	-
K G Thomas	-	-	-	-	-
T Schultz	-	-	-	-	-

Table 12: Listed Options holdings of NED Personnel - 2020

							Vested at	30 June 2020
	Balance 01.07.19	Granted as Remuneration	Options Exercised	Performance Rights Vested	Net Change Other	Balance 30.06.20	Total	Exercisable
Listed Options								
Directors								
K Tomlinson	400,000	-	(400,000)	-	-	-	-	-
M Muscillo	-	-	-	-	-	-	-	-
K G Thomas	-	-	-	-	-	-	-	-
T Schultz	-	-	-	-	-	-	-	-

9. Other Transactions and balance with KMP and NED's and their related parties

Other Equity-related Key Management Personnel and NED's Transactions

There have been no other transactions involving equity instruments apart from those described in the tables above relating to options and shareholdings.

Other Transactions with Key Management Personnel and NED's and/or their Related Parties

Tomlinson Consultancy, of which Kevin Tomlinson is a director, provided geological consulting services to the Company. Amounts that have been paid or payable total \$206,416 (2019: \$309,624).

HopgoodGanim of which Michele Muscillo, a director, is a partner of, provided legal services to the Company. Amounts that have been paid or payable total \$558,663 (2019: \$5,028).

During the year ended 30 June 2020, Cardinal Resources Limited has advanced funds to Savannah, a related entity to Director Mr Malik Easah. The purpose of an advance was for the development of a mining licence in areas in respect of which Savannah had entered into agreements with holders of small scale licences. As at the date of this report, \$343,800 (2019: \$280,300) has been recorded as a prepayment in the consolidated financial statements of Cardinal Resources Limited. The difference has been applied toward the development of the mining licence and expensed during the period. The Company has recorded a provision for US\$500,000, for funds owed to Savannah in relation to legal expenses.

Other than the above there were no other transactions conducted between the Group and Key Management Personnel or their related parties, apart from those disclosed above relating to equity and compensation, that were conducted other than in accordance with normal employee, customer or supplier relationships on terms no more favourable than those reasonably expected under arm's length dealings with unrelated persons.

END OF AUDITED REMUNERATION REPORT

INDEMNIFICATION AND INSURANCE OF DIRECTORS AND OFFICERS

In accordance with the constitution, except as may be prohibited by the Corporations Act 2001, every Officer or agent of the Company shall be indemnified out of the property of the entity against any liability incurred by him in his capacity as Officer or agent of the Company or any related corporation in respect of any act or omission whatsoever and howsoever occurring or in defending any proceedings, whether civil or criminal.

During the year the Company agreed to pay an annual insurance premium in respect of directors' and officers' liability and legal expenses' insurance contracts, for directors, officers and employees of the Company. The insurance premium relates to:

- Costs and expenses incurred by the relevant officers in defending proceedings, whether civil or criminal and whatever the outcome.
- Other liabilities that may arise from their position, with the exception of conduct involving a willful breach of duty.

SHARES OPTIONS

Unissued shares

At the date of this report the Company had no Listed Options on issue. During the financial year 110,183,854 of these listed options were converted into fully paid shares. During the year 6,000,000 unlisted options exercisable at \$0.22 on or before 18 March 2020 were converted into fully paid ordinary shares.

As at the date of this report the Company had on issue the below options:

- 18,500,000 unlisted milestone options exercisable at \$0.50 on or before 12 April 2022,
- 2,018,100 unlisted milestone options exercisable at \$0.965 on or before 21 December 2022;
- 1,000,000 unlisted options, exercisable at \$0.75 on or before 21 December 2022;
- 2,180,049 unlisted milestone options, exercisable at \$0.679 on or before 21 December 2022;
- 2,180,049 unlisted milestone options, exercisable at \$0.59 on or before 21 December 2022;
- 1,867,817 unlisted options exercisable at \$1.00 per share;
- 6,369,557 unlisted milestone options exercisable at \$0.00 per share on or before 10 December 2024; and
- 5,476,530 unlisted milestone options exercisable at \$0.00 per share on or before 10 December 2024.

The milestone options vest on the Company achieving certain milestones. During the financial year none of these unlisted options were converted into fully paid shares. Subsequent to the year end the unlisted options have vested.

Option holders do not have any rights to participate in any issues of shares of other interests in the Company or any other entity.

There have been no options granted over unissued shares or interests of any controlled entity within the Group during or since the end of the reporting period.

For details of options issued to directors and executives, refer to the remuneration report.

CORPORATE GOVERNANCE STATEMENT

Cardinal Resources is committed to ensuring that its policies and practices reflect a high standard of corporate governance. The Board has adopted a comprehensive framework of Corporate Governance Guidelines.

Throughout the 2020 financial year the Company's governance was consistent with the Corporate Governance Principles and Recommendations (4th edition) published by the ASX Corporate Governance Council.

The Group's Corporate Governance Statement can be viewed at the Company's Corporate Governance page at http://cardinalresources.com.au.

EVENTS SUBSEQUENT TO REPORTING DATE

On July 7, 2020 the Company announced that it had raised AU\$11,960,000 as a result of the issue of 26,000,000 fully paid ordinary shares to Shandong Gold in accordance with the terms of the Bid Implementation Agreement.

On July 15, 2020 Cardinal received an unconditional on-market takeover offer at AU\$0.66 per share from Nordgold. Having regards to the unsolicited nature of the takeover bid and the provisions of the Bid Implementation Agreement with Shandong Gold, the Board of Cardinal recommended a 'take no action' at the time in relation to the Nordgold takeover bid.

On July 20, 2020 the Company advised that its Namdini Mining Licence had officially received Sovereign Parliamentary Ratification in Ghana.

On July 22, 2020 the Company advised that it had received a revised and improved proposal for an off-market takeover from Shandong Gold, pursuant to which Shandong Gold will offer to acquire all of the shares in Cardinal it does not presently own at a cash price of \$0.70 per share.

On July 27, 2020 the Company, after careful consideration of the Revised Shandong Gold Offer and Nordgold's unconditional on-market offer for Cardinal, Cardinal's Board of Directors (in consultation with the Special Committee, its financial and legal advisors), unanimously recommended that Cardinal shareholders

- ACCEPT the Revised Shandong Gold Offer (in the absence of a superior proposal); and
- REJECT the Nordgold Bid.

On July 30, 2020 the Company advised that it had entered into a deed with each Shandong Gold Mining (HongKong) Co., Limited and Shandong Gold Mining Co., Ltd, to amend the Bid Implementation Agreement.

On August 19, 2020 the Company advised that Shandong Gold had given notice to Cardinal that the Foreign Investment Review Board (FIRB) approval condition of its off-market takeover offer to acquire all of the Shares in Cardinal it does not presently own at a cash price of \$0.70 per share had been fulfilled.

On August 24, 2020 the Company received advice that Nordgold had extended its offer under the unconditional onmarket takeover bid to acquire all the ordinary shares in Cardinal Resource to September 10, 2020.

The impact of the Coronavirus (COVID-19) pandemic is ongoing and while it has not significantly impacted the entity up to 30 June 2020, it is not practicable to estimate the potential impact, positive or negative, after the reporting date. The situation is rapidly developing and is dependent on measures imposed by the Australian Government and other countries, such as maintaining social distancing requirements, quarantine, travel restrictions and any economic stimulus that may be provided.

No other matter or circumstance has arisen since 30 June 2020 that has significantly affected, or may significantly affect the entity's operations, the results of those operations, or the entity's state of affairs in future financial years.

Non Audit Services

The Company may decide to employ the auditor on assignments additional to their statutory audit duties where the auditor's expertise and experience with the company and/or the group are important.

Details of the amounts paid or payable to the BDO (WA) Pty Ltd (BDO) for audit and non-audit services provided during the year are set out below.

The Board of Directors has considered the position and, in accordance with advice received from the audit committee, is satisfied that the provision of the non-audit services is compatible with the general standard of independence for auditors imposed by the *Corporations Act 2001*. The Directors are satisfied that the provision of non-audit services by

the auditor, as set out below, did not compromise the auditor independence requirements of the Corporations Act 2001 for the following reasons:

- all non-audit services have been reviewed by the audit committee to ensure they do not impact the impartiality and objectivity of the auditor
- none of the services undermine the general principles relating to auditor independence as set out in APES 110 Code of Ethics for Professional Accountants.

During the year the following fees were paid or payable for non-audit services provided by BDO, its related practices and non-related audit firms:

	2020 \$	2019 \$
Remuneration for non-audit services	Y	•
Remuneration advice	-	17,550
Taxation advice	16,105	5,660
Advisory services	63,436	-
Review of financial model	6,500	18,500
Total remuneration for non-audit services	86,041	41,710

AUDITOR'S INDEPENDENCE DECLARATION

The auditor's independence declaration for the year ended 30 June 2020 has been received and can be found on page 64 of the financial report.

Signed in accordance with a resolution of the directors made pursuant to s 298(2) of the Corporations Act 2001.

On behalf of the directors

ARCHIE KOIMTSIDIS

CEO/MD

Dated this 31 August 2020

FINANCIAL REPORT FOR THE THREE AND TWELVE MONTHS ENDED 30 JUNE 2020

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE THREE AND TWELVE MONTHS ENDED 30 JUNE 2020

		Unaudited Three I	Months Ended	Audited Twelve N	Nonths Ended
For the period ended	Note	June 30,	June 30,	June 30,	June 30,
		2020	2019	2020	2019
Revenue	4	\$ 50,335	107,064	159,073	365,859
Operating expenses					
Corporate administration expenses	5	(7,825,697)	(3,050,448)	(18,685,814)	(12,199,428)
Depreciation expense	9	(177,319)	(101,981)	(433,836)	(314,731)
Exploration and evaluation expenses		(3,272,316)	(6,426,350)	(17,201,671)	(14,940,749)
Foreign exchange gain/(loss)		3,181,942	(25,589)	(808,440)	38,087
Net Loss for the period		\$ (8,043,055)	(9,497,304)	(36,970,688)	(27,050,962)
Income tax	6(a)	-	-	-	-
Loss after income tax		\$ (8,043,055)	(9,497,304)	(36,970,688)	(27,050,962)
Other comprehensive gain (loss)					
Items that may be reclassified to profit or loss:					
Unrealized foreign exchange on translation		(150,137)	(98,171)	58,765	(763,265)
Comprehensive loss for the period		\$ (8,193,192)	(9,595,475)	(36,911,923)	(27,814,227)
Loss per share, basic and diluted (cents)	15	\$ (1.60)	(2.48)	(7.85)	(7.12)
Weighted average number of common shares					
outstanding	15	 500,024,522	382,864,991	470,722,115	379,752,526

The above consolidated statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes

FINANCIAL REPORT AS AT 30 JUNE 2020

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2020

As at	Note	June 30, 2020	June 30, 2019
ASSETS			
Current Assets			
Cash and cash equivalents	16(a)	3,708,705	18,735,456
Trade and other receivables	8(a)	86,364	256,650
Other assets	8(b)	1,005,560	847,392
		4,800,629	19,839,498
Non-Current Assets			
Plant and equipment	9	1,343,652	994,650
Other assets		144,454	-
		1,488,106	994,650
TOTAL ASSETS		6,288,735	20,834,148
Current Liabilities Trade and other payables	10	4,316,398	3,286,116
Other liabilities		216,529	05.063
Provisions		1,003,037 5,535,964	85,062 3,371,178
Non-Current Liabilities			
Borrowings	11	34,657,548	35,604,680
		34,657,548	35,604,680
TOTAL LIABILITIES		40,193,512	38,975,858
Shareholders' Deficit			
Issued capital	12	102,675,718	84,460,427
Reserves	13	7,653,304	5,681,581
Accumulated losses	14	(144,233,799)	(108,283,718)
		(33,904,777)	(18,141,710)
TOTAL LIABILITIES AND SHAREHOLDERS' DEFICIT		6,288,735	20,834,148

The above consolidated statement of financial position should be read in conjunction with the accompanying notes

FINANCIAL REPORT FOR THE TWELVE MONTHS ENDED 30 JUNE 2020

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY FOR THE TWELVE MONTHS ENDED 30 JUNE 2020

Australian (\$)	SHARE CAPITAL	OPTIONS RESERVE	FOREIGN EXCHANGE RESERVE	ACCUMULATED LOSSES	TOTAL EQUITY
	\$	\$	\$	\$	\$
Balance at 1 July 2019	84,460,427	7,185,073	(1,503,492)	(108,283,718)	(18,141,710)
Loss for the year	-	-	-	(36,970,688)	(36,970,688)
Other comprehensive loss		=	58,765	-	58,765
Total comprehensive loss	-	-	58,765	(36,970,688)	(36,911,923)
Shares issued during the year	-	-	-	-	-
Exercise/expiry of options	17,847,578	(1,020,607)	-	1,020,607	17,847,578
Share/Option based payments	391,106	2,933,565	-	=	3,324,671
Share issue expenses	(23,393)	=	-	-	(23,393)
Balance at 30 June 2020	102,675,718	9,098,031	(1,444,727)	(144,233,799)	(33,904,777)
Balance at 1 July 2018	81,369,056	6,744,105	(740,227)	(81,898,296)	5,474,638
Loss for the year	-	-	-	(27,050,962)	(27,050,962)
Other comprehensive loss	-	-	(763,265)	· · · · · · -	(763,265)
Total comprehensive loss	-	-	(763,265)	(27,050,962)	(27,814,227)
Shares issued during the year	-	-	-	-	-
Exercise/expiry of options	563,696	(1,351,324)	-	665,540	(122,088)
Share/Option based payments	2,535,378	1,792,292	-	-	4,327,670
Shares issue expenses	(7,703)	-	-	-	(7,703)
Balance at 30 June 2019	84,460,427	7,185,073	(1,503,492)	(108,283,718)	(18,141,710)

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes

FINANCIAL REPORT FOR THE THREE AND TWELVE MONTHS ENDED 30 JUNE 2020

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE THREE AND TWELVE MONTHS ENDED 30 JUNE 2020

		Unaudited Three mo	onths ended	Audited Twelve r	nonths ended
For the period ended	Note	June 30,	June 30,	30 June,	30 June,
		2020	2019	2020	2019
Operating activities					
Expenditure on mineral interests		(5,926,388)	(4,270,510)	(19,435,543)	(14,171,472)
Payments to suppliers and employees		(3,435,351)	(1,606,463)	(7,890,917)	(5,995,737)
Interest received		1,123	113,801	156,815	322,733
Government rebates		50,000	-	50,000	-
Net cash inflow/(outflow) used in operating activities	16(b)	(9,310,616)	(5,763,172)	(27,119,645)	(19,844,476)
Investing activities					
Cash held in trust		1,498,430	-	(127,000)	-
Purchase of plant and equipment		(57,208)	(308,895)	(922,165)	(749,258)
Net cash outflow used in investing activities		1,441,222	(308,895)	(1,049,165)	(749,258)
Financing activities					
Issue of shares and options net of capital raising costs		-	39,891	17,835,187	555,993
Interest paid		(3,729,662)	(479,819)	(6,073,001)	(1,790,033)
Proceeds from borrowings net of costs		9,248,791	-	13,312,366	33,921,932
Repayment of borrowings		-	-	(12,141,195)	
Net cash inflow/(outflow) from financing activities		5,519,129	(439,928)	12,933,357	32,687,892
Net increase/(decrease) in cash and cash equivalents		(2,350,266)	(6,511,995)	(15,235,453)	12,094,158
Cash and cash equivalents at the beginning of the			.,,,,		, ,
period		6,214,894	24,985,941	18,735,456	7,303,807
Effect of changes in exchange rates on cash		(155,923)	261,510	208,702	(662,509)
Cash and cash equivalents at the end of the financial					,
year	16(a)	3,708,705	18,735,456	3,708,705	18,735,456

The above consolidated statement of cash flows should be read in conjunction with the accompanying notes

1. CORPORATE INFORMATION

The financial report of Cardinal Resources Limited ("Cardinal Resources" or "the Company") and its controlled entities ("the Group") for the three and twelve months ended 30 June 2020 was authorised for issue in accordance with a resolution of the directors on 31 August 2020.

Cardinal Resources Limited is a company limited by shares, incorporated in Australia whose shares are publicly traded on the Australian Securities Exchange ("ASX") and Toronto Stock Exchange ("TSX"). The consolidated financial statements of the Company for the year ended 30 June 2020 is comprised of the Company and its subsidiaries, together referred to as the Group or consolidated entity. The Company's registered office is Suite 1, 28 Ord Street, West Perth, Western Australia 6005, Australia.

The nature of the operations and principal activity of the Group is described in the directors' report.

2. BASIS OF PRESENTATION

(a) Statement of compliance

The financial report is a general-purpose financial report, which has been prepared in accordance with the requirements of the *Corporations Act 2001*, Accounting Standards and Interpretations, and complies with other requirements of the law. The financial report also complies with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

Going Concern

The financial report has been prepared on a going concern basis, which contemplates the continuity of normal business activity and the realisation of assets and settlement of liabilities in the normal course of business.

On the 18 June 2020, the Group received an all-cash takeover offer from Shandong Gold, which was recommended by the Board of Directors. The offer was revised subsequent to the year end on the 22 July 2020 and was recommended by the Board of Directors on the 27 July 2020.

As a result of the potential change in control event and the transaction, the Group's loan facility with the Ghana Infrastructure Investment Fund ('GIIF') may be subject to refinancing arrangements.

This condition indicates a material uncertainty that may cast significant doubt to the group's ability to continue as a going concern and therefore, whether it will be able to pay its debts as and when they fall due and realise its assets and extinguish its liabilities in the normal course of business at the amounts stated in the financial report.

The financial statements have been prepared on the basis that the Group is a going concern, which contemplates the continuity of normal business activity, realisation of assets and settlement of liabilities in the normal course of business for the following reason:

- On 7 July 2020 the Company raised \$11.96 million as a result of the issue of 26,000,000 fully paid ordinary shares to Shandong Gold; and
- The Company has sufficient funds to meet its creditors as and when they fall due.

The Directors are of the opinion that refinancing arrangements will be successfully secured in the event that a change of control occurs and accordingly, no asset is likely to be realised or liability to be discharged at amounts that differ from those stated in the financial statements as at 30 June 2020.

Should the Group not be able to continue as a going concern, it may be required to realise its assets and discharge its liabilities other than in the ordinary course of business, and at amounts that differ from those stated in the

financial statements, and that the financial report does not include any adjustments relating to the recoverability and classification of recorded asset amounts or liabilities that might be necessary should the Group not continue as a going concern

(b) Basis of preparation of the financial report

The financial report has been prepared on a historical cost basis.

The parent entity, Cardinal Resources Limited, has 100% interest in the below subsidiaries. Cardinal Resources Limited is required to make all the financial and operating policy decisions of these subsidiaries.

Subsidiaries of Cardinal Resources Limited	Country of incorporation	Percentage owned	
		2020	2019
Cardinal Resources (Australia) Pty Ltd	Australia	100%	100%
Cardinal Resources Ghana Limited	Ghana	100%	100%
Cardinal Resources Subranum Limited	Ghana	100%	100%
Cardinal Mining Services Limited	Ghana	100%	100%
Cardinal Namdini Mining Limited	Ghana	100%	100%

All inter-company balances have been eliminated in the consolidated financial statements.

(c) Functional and presentation currency

The functional currency of each of the Group's entities is measured using the currency of the primary economic environment in which that entity operates. The consolidated financial statements are presented in Australian dollars, which is the Cardinal Resources' functional currency. Cardinal Resources' Ghanaian subsidiaries', as detailed in note 2(b), functional currency is Ghana Cedis.

(d) Principles of consolidation

Subsidiaries

Subsidiaries are all entities (including structured entities) over which the group has control. The group controls an entity when the group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the group. They are deconsolidated from the date that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of profit or loss and other comprehensive income, statement of changes in equity and statement of financial position respectively.

When controlled entities have entered or left the Group during the year, the financial performance of those entities are included only for the period of year that they were controlled. A list of controlled entities is contained in note 2(b) to the financial statements.

In preparing the consolidated financial statements, all inter-group balances and transactions between entities in the consolidated group have been eliminated on consolidation. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with those adopted by the parent entity.

Non-controlling interests, being the equity in a subsidiary not attributable, directly or indirectly, to a parent, are shown separately within the equity section of the consolidated Statement of Financial Position and Statement of Profit or Loss and Other Comprehensive Income. The non-controlling interests in the net assets comprise their interests at the date of the original business combination and their share of changes in equity since that date.

(e) Significant accounting estimates and judgements

The carrying amount of certain assets and liabilities are often determined based on estimates and assumptions of future events. The key estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of certain assets and liabilities within the next annual reporting period are:

Determination of functional currency

The functional currency of the Company has been assessed by management based on consideration of the currency and economic factors that mainly influence the Company's operations. Changes to these factors may have an impact on the judgment applied in the determination of the Company's functional currency.

Deferred taxation

The potential deferred tax asset arising from the tax losses and temporary differences have not been recognised as an asset because recovery of the tax losses is not yet considered probable (refer to note 6).

Provisions

On an ongoing basis, the Company is subject to various claims and other legal disputes for which the outcomes cannot be assessed with a high degree of certainty. A liability is recognised where, based on the Company's legal views and advice, it is considered probable that an outflow of resources will be required to settle a present obligation that can be measured reliably.

By their nature, these provisions will only be resolved when one or more future events occur or fail to occur. The assessment of such provisions inherently involves the exercise of significant judgment of the potential outcome of future events.

Share-based payment transactions

The Group measures the cost of equity-settled transactions by reference to the fair value of the equity instrument at the date at which they are granted. The fair value of options granted is measured using the Black-Scholes option pricing model. The model uses assumptions and estimates as inputs (refer to note 17).

Milestone options which have been issued in the prior accounting periods have had a 100% probability applied to them. Milestone 1 options vested during the 2018 financial year. The expected accounting vesting date for Milestone 2 and 3 have been determined to be 21 September 2020.

Director and employee options issued during the current year have had a 100% probability applied to them. The expected accounting vesting date for these options is 21 September 2020.

During the year C Performance Shares were cancelled (see Note 13 for details on the Class C Performance Shares).

Impairment of non-financial assets

The Group assesses impairment at the end of each reporting period by evaluating conditions and events specific to the Group that may be indicative of impairment triggers. Recoverable amounts of relevant assets are reassessed using various key assumptions.

There are no impairment indicators for the year.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Exploration and evaluation expenditure

The Group expenses all exploration and evaluation expenditure incurred.

An area of interest is established where a discovery of economically recoverable resource is made. The area of interest will be established as a mineral project. All activity relating to the area of interest would then be subsequently capitalised. When development is anticipated, costs will be carried forward until the decision to develop is made.

(b) Revenue

Under IFRS 15 Revenue, revenue is recognised when a performance obligation is satisfied, being when control of the goods or services underlying the performance obligations is transferred to the customer.

(c) Employee benefits

Provision is made for the Group's liability for employee benefits arising from services rendered by employees to the statement of financial position date. Employee benefits expected to be settled within one year together with entitlements arising from wages and salaries and annual leave which will be settled after one year, are measured at the amounts expected to be paid when the liability is settled, plus related on-costs. Other employee benefits payable later than one year are measured at the present value of the estimated cash outflows to be made to those benefits.

Contributions are made by the Group to employee superannuation funds and are charged as expenses when incurred

(d) Share based payment transactions

The Company accounts for all equity-settled stock-based payments based on the fair value of the award on grant date. Under the fair value-based method, compensation cost attributable to options granted is measured at fair value at the grant date and amortised over the vesting period. The amount recognised as an expense is adjusted to reflect any changes in the Company's estimate of the shares that will eventually vest and the effect of any non-market vesting conditions.

Share-based payment arrangements in which the Company receives goods or services as consideration are measured at the fair value of the good or service received, unless that fair value cannot be reliably estimated.

Note 13 details the vesting periods for each share-based payment.

(e) Foreign currency translation

The Australian dollar is considered to be the functional currency of the Company. Monetary assets and liabilities of the Company's operations are translated into Australian dollars at the rate of exchange in effect at the statement

of financial position date, and non-monetary assets and liabilities are translated at the historical rate of exchange. Transactions in foreign currencies are translated at the actual rates of exchange. Foreign currency gains and losses are recognised in profit or loss.

(f) Income tax

Current income tax refunded/(expensed) charged to profit or loss is tax refundable/(payable). Those amounts recognised are expected to be recovered from/(paid to) the relevant taxation authority.

Deferred income tax is provided on all temporary differences at the statement of financial position date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred income tax liabilities are recognised for all taxable temporary differences:

- except where the deferred income tax liability arises from the initial recognition of goodwill or of an asset
 or liability in a transaction that is not a business combination and, at the time of the transaction, affects
 neither that accounting profit nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, except where the timing of the reversal of the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognised for all deductible temporary differences, carry-forward of unused tax assets and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forward of unused tax assets and unused tax losses can be utilised:

- except where the deferred income tax asset relating to the deductible temporary difference arises from the
 initial recognition of an asset or liability in a transaction that is not a business combination and, at the time
 of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- in respect of deductible temporary differences with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred income tax is reviewed at each statement of financial position date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the statement of financial position date.

Income taxes relating to items recognised directly in equity are not in the statement of profit or loss and other comprehensive income. Deferred income tax assets and deferred tax liabilities are offset only if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred income tax assets relate to the same taxable entity and the same taxation authority.

(g) Earnings per share

Basic earnings/(loss) per share is calculated as profit or loss attributable to members of the Company, adjusted to exclude any costs of servicing equity (other than dividends) and preference share dividends, divided by the weighted average number of ordinary shares outstanding in the year, adjusted for any bonus element.

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account the after income tax effect of interest and other financing costs associated with dilutive potential shares

and the weighted average number of additional shares that would have been outstanding assuming the conversion of all dilutive potential shares.

(h) Cash and cash equivalents

Cash and short-term deposits in the Consolidated Statement of Financial Position comprise cash in bank and in hand and short-term deposits with an original maturity of three months or less.

For the purposes of the Consolidated Statement of Cash Flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

(i) Plant and equipment

The Company's plant and equipment are measured at cost less accumulated depreciation and impairment losses. The cost of an item of plant and equipment includes expenditures that are directly attributable to the acquisition or construction of the asset. The cost includes the cost of materials and direct labour, site preparation costs, installation and assembly costs, and any other costs directly attributable to bringing the assets to the location and conditions necessary for the assets to be capable of operating in the manner intended by management.

Depreciation is recorded over the estimated useful lives as outlined below:

Plant and Equipment - First year depreciation percentage is between 25% and 37.50%. Subsequent years

depreciation percentage is between 18.75 and 25%.

Motor Vehicles – 25% per year.

Significant components of plant and equipment that are identified as having different useful lives are depreciated separately over their respective useful lives. Depreciation methods, useful lives and residual values, if applicable, are reviewed and adjusted, if appropriate, at the end of each reporting period.

Gains and losses on disposal of plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of the plant and equipment and are recognised in profit or loss.

(j) Impairment of non-financial assets

The Group assesses impairment at the end of each reporting period by evaluating conditions and events specific to the Group that may be indicative of impairment triggers. Recoverable amount of relevant assets is the higher of value in use and using fair value less cost to sell. In such cases the asset is tested for impairment as part of the cash-generating unit to which it belongs. When the carrying amount of an asset or cash-generating unit exceeds its recoverable amount, the asset or cash-generating unit is considered impaired and it is written down to its recoverable amount.

In assessing the value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Impairment losses relating to continuing operations are recognised in those expense categories consistent with the function of the impaired asset unless the asset is carried at revalued amount (in which case the impairment loss is treated as a revaluation decrease).

Fair value less cost of disposal is the amount obtainable from the sale of an asset or cash-generating unit in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal. Costs of disposal are incremental costs directly attributable to the disposal of an asset or cash-generating unit, excluding finance costs and income tax expense.

An assessment is also made at each reporting date as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the recoverable amount is estimated. A previously recognised impairment loss is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. If that is the case, the carrying amount of the asset is increased to its recoverable amount. That increased amount cannot exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in profit or loss unless the asset is carried at the revalued amount, in which case the reversal is treated as a revaluation increase. After such a reversal, the depreciation charge is adjusted in future periods to allocate the asset's revised carrying amount, less any residual value, on a systemic basis over its remaining useful life.

(k) Contributed equity

Ordinary shares and options are classified as contributed equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

(I) Financial instruments

Financial assets

The Company initially recognises financial assets at fair value on the date that they originated. All financial assets are recognised initially on the date at which the Company becomes a party to the contractual provisions of the instrument. The Company derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Company is recognised as a separate asset or liability.

The Company classifies its financial assets, being cash and cash equivalents and trade and other receivables, as loans and receivables. Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial recognition, loans and receivables are measured at amortised cost using the effective interest rate method, less any impairment losses.

Financial liabilities

The Company initially recognises financial liabilities at fair value on the date that they originate. All financial liabilities are recognised initially on the date at which the Company becomes a party to the contractual provisions of the instrument. The Company derecognises a financial liability when its contractual obligations are discharged or cancelled or expire.

The Company classifies its financial liabilities, being trade and other payables, as other liabilities. Subsequent to initial recognition, other liabilities are measured at amortised cost using the effective interest rate method.

Effective interest rate method

The effective interest rate method is a method of calculating the amortised cost of a financial instrument and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Transaction costs

Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition.

Impairment of financial assets

Financial assets are assessed for indicators of impairment at the end of the reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

(m) Fair value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In assessing the fair value of a particular contract, the market participant would consider the credit risk of the counterparty to the contract. Consequently, when it is appropriate to do so, the Group adjusts its valuation models to incorporate a measure of credit risk.

In measuring fair value, the Group uses valuation techniques that would maximise the use of observable inputs and minimise the use of unobservable inputs.

For assets and liabilities for which fair value is measured or disclosed in the financial report, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorsation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

Level 1 – quoted prices (unadjusted) of identical instruments in active markets that the reporting entity has the ability to access at the measurement date.

Level 2 – inputs are quoted prices of similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; inputs other than quoted prices used in a valuation model that are observable for that instrument; and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 – one or more significant inputs used in a valuation technique that are unobservable for the instruments.

Determination of fair value and the resulting hierarchy requires the use of observable market data whenever available. The classification of a financial instrument in the hierarchy is based upon the lowest level of input that is significant to the measurement of fair value.

(n) Goods and services tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the relevant taxation authority. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the consolidated Statement of Financial Position are shown inclusive of GST.

The net amount of GST recoverable from, or payable to, the relevant taxation authority is included as a current asset or liability in the Consolidated Statement of Financial Position.

Cash Flows are included in the Consolidated Statement of Cash Flows on a net basis. The GST components of cash flows arising from investing and financial activities which are recoverable from, or payable to, the relevant taxation authority are classified as operating cash flows.

(o) Provisions

Provisions are recognised when it is probable that the Company is required to settle an obligation, as a result of a past event, and the obligation can be reliably estimated. The provision represents the Company's best estimate of the amounts required to settle the obligation at the end of the reporting period. When a provision is determined using the expected cash flow method, its carrying amount is the present value of those cash flows (when the effect of the time value of money is material). When some or all of the amounts required to settle a provision are expected to be recoverable from a third party, a receivable is recognised when it is virtually certain reimbursement is receivable and the expected reimbursement can be reliably measured.

(p) Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board of Directors.

(q) Adoption of new and revised standards

New accounting standards and interpretations adopted

A number of new or amended standards became applicable for the current reporting period resulting in a change to the entity's accounting policies and disclosure adjustments being made as a result of adopting AASB 16 Leases.

The impact of the adoption of the leasing standard and the new accounting policies are disclosed below. The other standards did not have any impact on the entity's accounting policies and did not require retrospective adjustments.

(i) IFRS 16 Leases

This note explains the impact of the adoption of IFRS 16 Leases on the entity's financial statements and discloses the new accounting policies that have been applied from 1 July 2019.

The Group has adopted IFRS 16 using the modified retrospective approach from 1 July 2019, but has not restated comparatives for the 2019 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised prospectively from 1 July 2019.

Adjustments recognised on adoption of IFRS 16

On adoption of AASB 16, the entity recognised lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IFRS 117 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using an arm's length asset finance facility borrowing rate as of 1 July 2019. The weighted average incremental borrowing rate applied to the lease liabilities on 1 July 2019 was 6.85%.

The impact of the adoption of this standard is an immaterial right-of-use asset and lease liability amount that had not been recognised at 30 June 2020.

The associated right-of-use assets were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments or onerous provisions relating to that lease recognised in the balance sheet as at 1 July 2019.

Practical expedients applied

In applying IFRS 16 for the first time, the entity has used the following practical expedients permitted by the standard:

- The use of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- Reliance on previous assessments on whether leases are onerous;
- The accounting for operating leases with a remaining lease term of less than 12 months as at 1 July 2019 as short-term leases;
- The exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application; and
- The use of hindsight in determining the leases term where the contract contains options to extend or terminate the lease. The Group has also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date the Group relied on its assessment made applying IFRS 117 and IFRIC 4 Determining whether an Arrangement contains a Lease.

4. REVENUE

	June 30, 2020	June 30, 2019
Other income		
Interest from financial institutions	109,073	364,445
Insurance proceeds	-	1,414
Government rebates	50,000	-
	159,073	365,859

5. EXPENSES

(i) Corporate general and administration expenses include the following expenses:

	June 30,	June 30,
	2020	2019
Employee benefit expense		
Salaries, fees and leave	1,451,634	1,329,580
Equity based payments (note 17)	3,324,671	1,158,705
Defined contribution superannuation expense	118,058	101,384
Other corporate general and administration expenses		
Accounting, legal and consulting fees	2,675,992	1,976,212
Audit fees (note 5(ii))	67,884	71,668
Borrowing expenses	3,317,395	919,554
Regulatory fees	119,740	154,839
Information technology expenses	78,776	104,188
Insurance expenses	122,860	86,954
Interest expense	4,602,897	3,204,817
Office expenses	70,643	249,504
Promotional and conference expenses	243,872	795,700
Travel expenses	1,037,848	717,751
Other administration expenses	1,453,544	1,328,572
Total	18,685,814	12,199,428

(ii) Auditors' Remuneration

	June, 30	June, 30
	2020	2019
Auditing and review of the Company's consolidated final	ancial statements:	
BDO (WA) Pty Ltd	67,884	71,668
	67,884	71,668

The Company engaged BDO (WA) Pty Ltd for non-audit services, which included but not limited to tax advice and review of financial model to the Company for \$86,041 (2019: \$41,710).

6. INCOME TAX

(a) Prima facie income tax benefit at 27.5% on loss from ordinary activities is reconciled to the income tax provided in the consolidated financial statements.

	30 JUNE 2020 \$	30 JUNE 2019 \$
Loss before income tax	(36,970,688)	(27,050,962)
Income tax calculated at 27.5%	(10,166,939)	(7,439,014)
Tax effect of:		
Expenses not allowed	-	1,310
Sundry – temporary differences	4,490,507	4,210,082
Section 40-880 deduction	(23,391)	(16,489)
Future income tax benefit not brought to account	5,699,823	3,244,111
Income tax refund (payable) attributable to operating losses		-

(b) Deferred tax assets

The potential deferred tax asset arising from the tax losses and temporary differences have not been recognised as an asset because recovery of tax losses is not yet probable.

The benefits will only be obtained if:

- (i) The Group derives future assessable income of a nature and of an amount sufficient to enable the benefit from the deduction for the losses to be realised;
- (ii) The Group continues to comply with the conditions in deductibility imposed by the Law; and
- (iii) No change in tax legislation adversely affects the Group in realising the benefits from the deductions or the losses.

(c) Tax losses

As at June 30, 2020, the Company's Australian tax losses that can be applied against future taxable profit in the amount of \$91,807,823.

The Company's also has Ghanaian tax losses that can be applied against future taxable profit.

7. KEY MANAGEMENT PERSONNEL

(a) Details of key management personnel

Executive KMP

Archie Koimtsidis – Managing Director

Malik Easah – Executive Director

Dave Anthony – Chief Operating Officer – Appointed on 4 September 2019

Jon Grygorcewicz – Chief Financial Officer

Non-Executive Directors

Kevin Tomlinson – Non-Executive Chairman Michele Muscillo - Non-Executive Director Dr Kenneth G. Thomas – Non-Executive Director Trevor Schultz – Non-Executive Director

(b) Compensation of executive key management personnel and non-executive directors

	30 JUNE 2020	30 JUNE 2019
	\$	\$
Salaries, fees and leave	1,578,755	1,175,732
Post employment benefits – superannuation	8,322	3,800
Equity based payments – Note 17	2,031,917	1,183,751
Long service leave	95,293	-
Termination Payments		67,126
	3,714,287	2,430,409

Refer to the remuneration report contained in the directors' report for details of the remuneration paid/payable and share and option holdings in relation to each of Group's key management personnel for the year ended 30 June 2020.

(c) Other transactions with key management personnel

Tomlinson Consultancy, of which Kevin Tomlinson is a director, provided geological consulting services to the Company. Amounts that have been paid or payable total \$206,416 (2019: \$309,624).

HopgoodGanim of which Michele Muscillo, a director, is a partner of, provided legal services to the Company. Amounts that have been paid or payable total \$558,663 (2019: \$5,028).

During the year ended 30 June 2020, Cardinal Resources Limited has advanced funds to Savannah, a related entity to Director Mr Malik Easah. The purpose of an advance was for the development of a mining licence in areas in respect of which Savannah had entered into agreements with holders of small scale licences. As at the date of this report, \$343,800 (2019: \$280,300) has been recorded as a prepayment in the consolidated financial statements of Cardinal Resources Limited. The difference has been applied toward the development of the mining licence and expensed during the period. The Company has recorded a provision for US\$500,000, for funds owed to Savannah in relation to legal expenses.

Other than the above there were no other transactions conducted between the Group and Key Management Personnel or their related parties, apart from those disclosed above relating to equity and compensation, that were conducted other than in accordance with normal employee, customer or supplier relationships on terms no more favourable than those reasonably expected under arm's length dealings with unrelated persons.

8. CURRENT ASSETS

(a) Trade and other receivables

	June 30,	June 30,
	2020	2019
Government taxes receivable	86,103	186,992
Interest receivable	198	48,003
Other	63	21,655
	86,364	256,650

GST and income tax amounts are non-interest bearing and have repayment terms applicable under the relevant government authorities. No trade and other receivables are impaired or past due.

(b) Other assets

	June 30,	June 30,
	2020	2019
Prepayments (i)	799,208	839,824
Cash deposits	5,568	7,568
Other	200,784	=
	1,005,560	847,392

(i) Prepayments include an advance of \$343,800 to Savannah Mining Ghana Limited ("Savannah"), a related entity to Director Mr Malik Easah. The purpose of the advance was development of a mining licence in areas in respect of which Savannah had entered into agreements with holders of small-scale licences. During the year ended 30 June 2018, Cardinal Resources Limited advanced \$4,000,674 to Savannah. As at the date of this report, \$343,800 has been recorded as a prepayment in the consolidated financial statements of Cardinal Resources Limited. The difference has been applied toward the development of the mining licence and expensed during the period.

9. PLANT AND EQUIPMENT

	Plant and Equipment	Vehicles	Total
Cost			
Balance as at July 1, 2019	\$1,317,086	\$756,188	\$2,073,274
Additions	781,898	397,026	1,178,924
Disposals	(46,970)	(25,703)	(72,673)
Foreign exchange movement	(266,277)	(264,823)	(531,100)
Balance as at June 30, 2020	\$1,785,737	\$862,688	\$2,648,425
Balance as at July 1, 2018	\$1,031,395	\$384,299	\$1,415,694
Additions	317,392	397,026	714,418
Disposals	(4,024)	(1,122)	(5,146)
Foreign exchange movement	(27,677)	(24,015)	(51,692)
Balance as at June 30, 2019	\$1,317,086	\$756,188	\$2,073,274

	Plant and Equipment	Vehicles	Total
Accumulated depreciation			
Balance as at July 1, 2019	\$831,246	\$247,378	\$1,078,624
Depreciation for the period	253,605	86,691	340,296
Disposals	(20,804)	-	(20,804)
Foreign exchange movement	(79,456)	(13,888)	(93,344)
Balance as at June 30, 2020	\$984,591	\$320,181	\$1,304,772
Accumulated depreciation			
Balance as at July 1, 2018	\$613,835	\$237,710	\$851,545
Depreciation for the period	299,168	15,563	314,731
Disposals	-	-	-
Foreign exchange movement	(81,757)	(5,895)	(87,652)
Balance as at June 30, 2019	\$831,246	\$247,378	\$1,078,624
Carrying amounts			
As at 30 June 2020	\$801,145	\$542,507	\$1,343,652
As at 30 June 2019	\$485,840	\$508,810	\$994,650
10. TRADE AND OTHER PAYABLES			
		June 30,	June 30,
		2020	2019
Trade and other payables (i)	3	,049,047	2,689,016
Other accrued expenses	1	,267,351	597,100
	4	,316,398	3,286,116

⁽i) Trade payables are unsecured and are usually paid within 30 days of recognition. The carrying amounts of trade and other payables are considered to be the same as their fair values due to their short-term nature.

11. BORROWINGS

	June 30,	June 30,
	2020	2019
Secured credit facility	\$ 37,080,740	\$ 36,134,808
Foreign exchange on credit facility	(553,440)	1,308,979
Transaction costs	(1,869,752)	(1,839,107)
	\$ 34,657,548	\$ 35,604,680

(i) Ghana Infrastructure Investment Fund (GIIF) Secured Credit Facility

The credit facility is secured by Ghana Infrastructure Investment Fund completed on 1 June 2020. The key terms of the credit facility are as follows:

- Committed loan facility of US\$25 million;
- 24-month repayment term, being 1 June 2022;
- Interest rate of the greater of LIBOR or 1% + 7.75%; and
- 50% of the interest is accrued and payable on loan maturity.

The credit facility is secured against assets of Cardinal and its wholly owned subsidiary, Cardinal Namdini Mining Limited.

(ii) Ghana Infrastructure Investment Fund (GIIF) Loan Covenants

Cardinal Resources has complied with the financial covenants of its credit facility during the period.

(i) Under the terms of the credit facility, Cardinal's Working Capital Ratio is required to be equal to or greater than 1.10 to 1.00.

Cardinal has complied with these covenants during the period.

(iii) Sprott Secured Credit Facility

The credit facility was secured by Sprott Private Resources Lending (Collector), L.P completed on August 22, 2018. The key terms of the credit facility were as follows:

- Committed loan facility of US\$25 million;
- 30-month repayment term, being 28 February 2021;
- Interest rate of the greater of LIBOR or 1% + 7.75%; and
- 50% of the interest is accrued and payable on loan maturity.

The credit facility was secured against assets of Cardinal and its wholly owned subsidiary, Cardinal Namdini Mining Limited.

The Sprott credit facility was repaid on 1 June 2020.

(iv) Sprott Loan Covenants

Cardinal Resources had complied with the financial covenants of its credit facility until repayment date, being 1 June 2020.

- (ii) Under the terms of the credit facility, Cardinal's Working Capital Ratio was required to be equal to or greater than 1.20 to 1.00; and
- (iii) The amount of Cardinal's Unrestricted Cash was required to be greater than US\$2,500,000 or if, denominated in AU\$ equivalent to US\$2,500,000.

Cardinal had complied with these covenants until repayment date, being 1 June 2020.

12. ISSUED CAPITAL

(a) Ordinary shares

The Company is authorised to issue an unlimited number of ordinary shares. All issued shares are fully paid and have no par value. Changes in ordinary shares for the year ended 30 June 2019 and 2020 are as follows:

	Number of Shares	Amount \$
As at July 1, 2019	382,864,991	\$84,460,427
Transactions during the year		
Shares issued	-	-
Share based payments (iv)	975,677	391,106
Options exercised (i), (ii)	116,183,854	17,847,578
Less: transaction costs (v)	-	(23,393)
As at June 30, 2020	500,024,522	102,675,718

	Number of Shares	Amount \$
As at July 1, 2018	373,563,580	\$81,369,056
Transactions during the year		
Shares issued	-	-
Share based payments (iii)	5,543,440	2,535,378
Options exercised (i)	3,757,971	563,696
Less: transaction costs (v)	-	(7,703)
As at June 30, 2019	382,864,991	84,460,427

- (i) Exercise of Listed Options
- (ii) Exercise of unlisted options, exercise price \$0.22 per share.
- (iii) Share based payments (refer to note 17) for the year ended 30 June 2019

A total of 357,952 shares were issued to employees of the Company for consideration for services provided to the Company.

- (a) On 1 October 2018, 177,001 shares at \$0.46 per share issued for services provided;
- (b) On 19 November 2018, 116,848 shares at \$0.41 per share issued for services provided; and
- (c) On 12 June 2018, 64,103 shares at \$0.39 per share issued for services provided.

On 28 August 2018 the Company issued 4,250,000 shares at \$0.47 per shares to Sprott in relation to the Facility.

On 19 November 2018 the Company issued 935,488 shares at \$0.41 per share to a consultant in relation to services rendered to the Company.

(iv) Share based payments (refer to note 17) for the year ended 30 June 2020

A total of 276,303 shares were issued to employees of the Company for consideration for services provided to the Company.

- (a) On 17 July 2019, 73,530 shares at \$0.34 per share issued for services provided;
- (b) On 29 October 2019, 119,202 shares at \$0.378 per share issued for services provided; and
- (c) On 10 December 2019, 83,571 shares at \$0.299 per share issued for services provided.

On 17 July 2019, the Company issued 635,161 shares at \$0.336 per share for services rendered to the Company.

On 29 October 2019, the Company issued 64,213 shares at \$0.389 per share to a consultant in relation to services rendered to the Company.

(v) Transactions costs represent the costs of issuing the shares.

13. RESERVES

(a) Movement in options reserve

	June 30, 2020	June 30,
		2020
	\$	\$
As at the beginning of the year	7,185,073	6,744,105
Options issued during the year	2,933,565	1,792,292
Expiry of options	(1,020,607)	(1,351,324)
As at reporting date	9,098,031	7,185,073

(i) The below options were on issue as at 30 June 2020.

Grant Date		2020 Number of Options Balance at 30 June 2020	2020 Expense During the Year	2019 Number of Options Balance at 30 June 2019	2019 Expense During the Year
-	Listed Options	-	-	110,371,935	-
18 March 2016	Unlisted Options Ex. \$0.22	-	-	6,000,000	-
12 April 2017	Milestone Options Ex. \$0.50	18,500,000	1,139,284	18,500,000	1,247,595
21 December 2017	Milestone Options Ex. \$0.825	-	-	-	185,911
21 December 2017	Milestone Options Ex. \$0.965	2,018,100	207,984	2,018,100	285,823
21 December 2017	Unlisted Options Ex.\$0.75	1,000,000	-	1,000,000	-
30 April 2019	Milestone Options Ex. \$0.679	2,180,049	107,932	2,180,049	21,957
30 April 2019	Milestone Options Ex. \$0.59	2,180,049	125,862	2,180,049	25,605
12 March 2019	Unlisted Options Ex. \$1.00	1,867,817	-	1,867,817	25,401
10 December 2019	Unlisted Milestone Options Ex. \$0.00	6,369,557	853,235	-	-
10 December 2019	Unlisted Milestone Options Ex. \$0.00	5,476,530	499,268	-	-
Total	-	39,592,102	2,933,565	144,117,950	1,792,292

(b) Movement in options exercisable at \$0.15 on or before 30 September 2019

	Number of	
	Options	\$
As at 1 July 2019	110,371,935	468,607
Transactions during the year		
Exercise of options	(110,183,854)	(468,607)
Expiry of options	(188,081)	-
As at 30 June 2020	-	-
As at 1 July 2018	114,129,906	468,607
Transactions during the year		
Exercise of options	(3,757,971)	-
As at 30 June 2019	110,371,935	468,607

(c) Movement in unlisted options exercisable at \$0.22 on or before 18 March 2020

	Number of	
	Options	\$
As at 1 July 2019	6,000,000	552,000
Transactions during the year		
Exercise of options	(6,000,000)	(552,000)
Expiry of options	-	-
As at 30 June 2020	-	-
	Number of	
	Options	\$
As at 1 July 2018	6,000,000	552,000
Transactions during the year		
Exercise of options	-	-
Expiry of options	-	-
As at 30 June 2019	6,000,000	552,000

(d) Movement in unlisted milestones options exercisable at \$0.50 on or before 12 April 2022

	Number of	
	Options	\$
As at 1 July 2019	18,500,000	5,210,306
Transactions during the year		
Options issued	-	-
Options expense during the period	-	1,139,284
Cancelled or forfeited during the year	-	-
As at 30 June 2020	18,500,000	\$6,349,590
As at 1 July 2018	18,500,000	3,962,711
Transactions during the year		
Options issued	-	-
Options expense during the period	-	1,247,595
Cancelled or forfeited during the year	-	-
As at 30 June 2019	18,500,000	\$5,210,306

(e) Movement in unlisted milestones options exercisable at \$0.965 on or before 21 December 2022

	Number of	
	Options	\$
As at 1 July 2019	2,018,100	369,448
Transactions during the year		
Options expense	-	207,984
Cancelled or forfeited during the year	-	=
As at 30 June 2020	2,018,100	577,432

	Number of	
	Options	\$
As at 1 July 2018	4,036,200	287,117
Transactions during the year		
Options expense	-	285,823
Cancelled or forfeited during the year	(2,018,100)	(203,349)
As at 30 June 2019	2,018,100	369,448

(f) Movement in unlisted options exercisable at \$0.75 on or before 21 December 2022

	Number of	
	Options	\$
As at 1 July 2019	1,000,000	511,748
Transactions during the year		
Options issued	-	-
Cancelled or forfeited during the year	-	-
As at 30 June 2020	1,000,000	511,748
	Number of	
	Options	\$
As at 1 July 2018	1,000,000	511,748
Transactions during the year		
Options issued	-	-
Cancelled or forfeited during the year	-	-
As at 30 June 2019	1,000,000	511,748

(g) Movement in unlisted milestones options exercisable at \$0.679 on or before 21 December 2022

	Number of	
	Options	\$
As at 1 July 2019	2,180,049	21,957
Transactions during the year		
Options issued	-	107,932
Cancelled or forfeited during the year	-	=
As at 30 June 2020	2,180,049	129,889
	Number of	
	Options	\$
As at 1 July 2018	-	-
Transactions during the year		
Options issued	2,180,049	21,957
Cancelled or forfeited during the year	-	-
As at 30 June 2019	2,180,049	21,957

(h) Movement in unlisted milestones options exercisable at \$0.59 on or before 21 December 2022

	Number of	
	Options	\$
As at 1 July 2019	2,180,049	25,605
Transactions during the year		
Options issued	-	125,862
Cancelled or forfeited during the year	-	-
As at 30 June 2020	2,180,049	151,467
	Number of	
	Options	\$
As at 1 July 2018	-	-
Transactions during the year		
Options issued	2,180,049	25,605
Cancelled or forfeited during the year	-	-
As at 30 June 2019	2,180,049	25,605
i) Movement in unlisted options exercisable at \$	1.00 on or before 12 March 2021	
	Number of	

	Number of	
	Options	\$
As at 1 July 2019	1,867,817	25,401
Transactions during the year		
Options issued	-	-
Cancelled or forfeited during the year	-	-
As at 30 June 2020	1,867,817	25,401
	Number of	
	Options	\$
As at 1 July 2018	-	-
Transactions during the year		
Options issued	1,867,817	25,401
Cancelled or forfeited during the year	-	-
As at 30 June 2019	1,867,817	25,401

(j) Movement in unlisted milestones options exercisable at \$0.00 on or before 10 December 2024

Options	\$
-	-
6,369,557	853,235
-	-
6,369,557	853,235
	- 6,369,557 -

(k) Movement in unlisted milestones options exercisable at \$0.00 on or before 10 December 2024

	Number of			
	Options	\$		
As at 1 July 2019	-	-		
Transactions during the year				
Options issued	6,276,430	499,268		
Cancelled or forfeited during the year	(800,000)	-		
As at 30 June 2020	5,476,430	499,268		

The following table shows the movement of listed and unlisted options for the years ended 30 June 2020 and 2019:

	Number of Options	Weighted Average Exercise Price \$
Balance as at 1 July 2019	144,177,950	\$0.25
Options granted (note 13 (k),(I))	11,846,087	\$0.00
Options forfeited/exercised (note 13 (b),(c))	(116,371,935)	(\$0.15)
Balance as at 30 June 2020	39,652,102	\$0.42
Balance as at 1 July 2018	149,424,106	\$0.25
Options granted (note 13 (h),(i),(j))	6,227,915	\$0.77
Options forfeited/exercised (note 13 (b), (c) (f))	(13,534,071)	(\$0.63)
Balance as at 30 June 2019	144,177,950	\$0.24

The table below shows the outstanding options as at 30 June 2020 and 2019:

		Outsta	Outstanding Ve		ted
30 June	Exercise Price	Number of	Remaining Number of		Weighted
	\$	Options	Contractual	Options	Average
			life (days)		Remaining Contractual life (days)
2020	0.500	18,500,000	651	5,550,000	604
2020	0.965	2,018,100	904	-	-
2020	0.750	1,000,000	904	1,000,000	49
2020	0.679	2,180,049	904	-	=
2020	0.590	2,180,049	904	-	-
2020	1.000	1,867,817	255	1,867,817	12
2020	0.000	6,369,557	1,623	-	=
2020	0.000	5,476,530	1,623	-	=
2019	0.150	110,371,935	92	110,371,935	70
2019	0.220	6,000,000	262	6,000,000	11
2019	0.500	18,500,000	1,017	5,550,000	39
2019	0.965	2,018,100	1,270	-	-
2019	0.750	1,000,000	1,270	1,000,000	9
2019	0.679	2,180,049	1,270	-	-
2019	0.590	2,180,049	1,270	-	-
2019	1.000	1,867,817	619	1,867,817	8

(I) Movement in Performance Shares

Class C Performance Shares

	Number of				
	Performance				
	Shares				
As at 1 July 2019	60	-			
Transactions during the year					
Performance shares expired	(60)	=			
As at 30 June 2020	-	-			
	Number of				
	Performance				
	Shares				
As at 1 July 2018	60	-			
Transactions during the year					
Performance shares issued	-	-			
As at 30 June 2019	60	-			

The following Class C Performance Shares were issued during the financial year ended 30 June 2015

On 17 February 2015, 60 performance shares were issued pursuant to the Asset Sale Agreement with Savannah to purchase the highly prospective Ndongo North concession adjacent to the exiting Ndongo area within the Bolgatanga project area in North-East Ghana.

There are 60 Performance Shares (convertible into a maximum of 6,000,000 shares) on issue at 30 June 2019, there are no Performance Shares on issue as at 30 June 2020.

General terms attaching to the Performance Shares are set out below.

During the year the performance rights were cancelled.

The issue of 60 Performance Shares in the capital of the Company, each of which would have converted to 100,000 shares ranking equally with the existing shares in the proportions set out below upon satisfaction of achieving a minimum JORC Inferred Resource of gold ounces within the Ndongo North Concession ("Performance Hurdles").

Performance Shares	Performance Hurdles (JORC	Conversion to Ordinary
	Inferred Au Resource)	Shares
10	500,000 ounces	1,000,000
5	750,000 ounces	500,000
5	1,000,000 ounces	500,000
5	1,250,000 ounces	500,000
5	1,500,000 ounces	500,000
5	1,750,000 ounces	500,000
5	2,000,000 ounces	500,000
5	2,250,000 ounces	500,000
5	2,500,000 ounces	500,000
5	2,750,000 ounces	500,000
5	3,000,000 ounces	500,000
60		6,000,000

In the event that the Company sells, transfers or otherwise disposes of all or part of the Ndongo North Concession to a third party prior to the issuing of any shares upon conversion of any Performance Shares, Savannah would have been entitled to an amount equal to 49% of the sale proceeds less any related selling costs, exploration and mining costs (plus a fixed 30% overhead amount), purchase costs in connection with the acquisition of the Ndongo North Concession, and any other costs incurred with respect to the sale.

14. ACCUMULATED LOSSES

	June 30,	June 30,
	2020	2019
Opening balance	108,283,718	81,898,296
Loss for the year	36,970,688	27,050,962
Expiry of options	(1,020,607)	(665,540)
	144,233,799	108,283,718

15. LOSS PER SHARE

Una	udited Three months ended June 30,		Audited Twelve months ended June 30,	
	2020	2019	2020	2019
Net loss	\$ (8,043,055)	\$ (9,497,304)	(\$36,970,688)	(27,050,962)
Weighted average number of shares outstanding	500,024,522	382,864,991	470,722,115	379,752,526
Basic and undiluted loss per share (cents)	\$ (1.60)c	\$ (2.48)c	\$ (7.85)c	\$ (7.12)c

16. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Reconciliation of cash and cash equivalents

For the purposes of the Consolidated Statement of Cash Flows, cash and cash equivalents consist of cash at bank and in hand and short-term deposits with an original maturity of three months or less, net of outstanding bank overdrafts.

	June 30, 2020	June 30, 2019
Current – cash at bank	3,690,019	4,503,464
Term deposits (i)	18,686	14,231,992
	3,708,705	18,735,456

(i) Terms of term deposits

Term	Interest Rate
30 days	0.54%
60 days	-%

(b) Reconciliation of loss after tax to net cash flows from operations

	June 30, 2020	June 30, 2019
Loss after income tax	(36,970,688)	(27,050,962)
Non-cash flows in profit		
Depreciation expense	433,836	314,731
Equity based payments	3,324,671	1,158,705
Borrowing costs	1,669,613	1,558,320
Capitalised interest on borrowings	1,602,409	1,883,196
Foreign exchange movement	661,345	(373,881)
Changes in assets and liabilities		
Increase in trade and other receivables	170,286	723,574
Increase in prepayments	40,616	546,042
Increase/(decrease) in trade and other payables	1,030,282	1,420,902
Increase/(decrease) in provisions	917,975	(25,103)
	(27,119,645)	(19,844,476)

(c) Reconciliation of cash and non-cash movements in liabilities arising from financing activities

	Non-Cash Changes					
	June 30, 2019	Cashflows	Transaction Costs	Foreign Exchange Movement	Interest	June 30, 2020
	\$	\$	\$	\$	\$	\$
Borrowings	35,604,680	1,171,171	(281,432)	(234,462)	(1,602,409)	34,657,548
Total liabilities from						
financing liabilities	35,604,680	1,171,171	(281,432)	(234,462)	(1,602,409)	34,657,548

17. SHARE BASED PAYMENTS

(i) The Company agreed and approved at the Company's General Meeting held on 3 April 2017 to allot and issue a total of 26,000,000 Milestone Options to key management personnel and employees of the Company. As at 30 June 2020, the Company had 18,500,000 milestone options on issue of which 13,500,000 milestone options relate to key management personnel.

The terms and conditions of the options are detailed in the Notice of General Meeting dated 1 March 2017.

The Milestone Options shall vest and are exercisable at any time on and from:

- (i) Milestone 1 the earlier of:
 - (A) the completion of a scoping study; or
 - (B) the completion of a preliminary economic assessment, of the Ghanaian Assets;
- (ii) Milestone 2 on the beginning of earthworks for gold production at the Ghanaian Assets; and
- (iii) Milestone 3 on the first pouring of gold at the Ghanaian Assets, until 12 April 2022.

The expected accounting vesting date determined at 30 June 2020 for Milestones 2 and 3 was 21 September 2020, as a result of the Nord Gold and Shandong Gold takeover offers.

Using the Black-Scholes option model and based on the assumption below, the Options were ascribed the following value:

Class of Options	Number of Options	Valuation Date	Market Price of Shares	Exercise Price	Expiry Date	Risk Free Interest Rate	Volatility (discount)	Indicative Value per Option	Total Value (\$)	Expense for the year (\$)
Milestone 1	5,550,000	27.02.17	\$0.525	\$0.50	18.04.22	2.17%	99.50%	\$0.39	2,198,910	-
Milestone 2	5,550,000	27.02.17	\$0.525	\$0.50	18.04.22	2.17%	99.50%	\$0.39	2,198,910	443,078
Milestone 3	7,400,000	27.02.17	\$0.525	\$0.50	18.04.22	2.17%	99.50%	\$0.39	2,931,880	696,204
Total	18,500,000	·	\$0.525	\$0.50	·	2.17%	99.50%	\$0.39	7,329,700	1,139,282

A probability of 100% has been applied to the milestones occurring.

During the year no milestone options issued to key management were forfeited or exercised.

(iii) During the year ended 30 June 2018 the Company 4,036,200 options to key management personnel of the Company, which have an exercise price of \$0.965. 2,018,100 milestone options were cancelled during the year ended 30 June 2019. As at 30 June 2020, the Company had 2,018,100 milestone options on issue.

The terms and conditions of the options are detailed in the Notice of General Meeting dated 18 October 2017.

The Milestone Options shall vest and are exercisable at any time on and from:

- (i) Milestone 2 on the beginning of earthworks for gold production at the Ghanaian Assets; and
- (ii) Milestone 3 on the first pouring of gold at the Ghanaian Assets, until 21 December 2022.

The expected accounting vesting date determined at 30 June 2020 for Milestones 2 and 3 was 21 September 2020, as a result of the Nord Gold and Shandong Gold takeover offers.

Using the Black & Scholes option model and based on the assumption below, the Options were ascribed the following value:

Class of Options	Number Options	Valuation Date	Market Price of Shares	Exercise Price	Expiry Date	Risk Free Interest Rate	Volatility (discount)	Indicative Value per Option	Total Value (\$)	Expense for the year (\$)
Milestone 2	864,900	22.11.17	\$0.555	\$0.965	21.12.22	1.50%	99.50%	\$0.37	210,101	89,167
Milestone 3	1,153,200	22.11.17	\$0.555	\$0.965	21.12.22	1.50%	99.50%	\$0.37	159,347	118,817
Total	2,018,100	_	\$0.555	\$0.965	_	1.50%	99.50%	\$0.37	369,448	207,984

A probability of 100% has been applied to the milestones occurring.

(iv) During the year ended 30 June 2019, 2,180,049 milestone options were issued to a Director of the Company, which have an exercise price of \$0.679.

The terms and conditions of the options are detailed in the Notice of General Meeting dated 5 March 2019.

The Milestone Options shall vest and are exercisable at any time on and from:

- (i) Milestone 2 on the beginning of earthworks for gold production at the Ghanaian Assets; and
- (ii) Milestone 3 on the first pouring of gold at the Ghanaian Assets, until 21 December 2022.

The expected accounting vesting date determined at 30 June 2020 for Milestones 2 and 3 was 21 September 2020, as a result of the Nord Gold and Shandong Gold takeover offers.

Using the Black & Scholes option model and based on the assumption below, the Options were ascribed the following value:

Class of Options	Number Options	Valuation Date	Market Price of Shares	Exercise Price	Expiry Date	Risk Free Interest Rate	Volatility (discount)	Indicative Value per Option	Total Value (\$)	Expense for the year (\$)
Milestone 2	934,307	11.04.19	\$0.405	\$0.679	21.12.22	1.65%	50%	\$0.095	88,893	60,103
Milestone 3	1,245,742	11.04.19	\$0.405	\$0.679	21.12.22	1.65%	50%	\$0.095	118,524	47,828
Total	2,180,049	_	\$0.405	\$0.679	_	1.65%	50%	\$0.095	207,417	107,931

A probability of 100% has been applied to the milestones occurring.

(v) During the year ended 30 June 2019, 2,180,049 milestone options were issued to a Director of the Company, which have an exercise price of \$0.590.

The terms and conditions of the options are detailed in the Notice of General Meeting dated 5 March 2019.

The Milestone Options shall vest and are exercisable at any time on and from:

- (i) Milestone 2 on the beginning of earthworks for gold production at the Ghanaian Assets; and
- (ii) Milestone 3 on the first pouring of gold at the Ghanaian Assets, until 21 December 2022.

The expected accounting vesting date determined at 30 June 2020 for Milestones 2 and 3 was 21 September 2020, as a result of the Nord Gold and Shandong Gold takeover offers.

Using the Black & Scholes option model and based on the assumption below, the Options were ascribed the following value:

Class of Options	Number Options	Valuation Date	Market Price of Shares	Exercise Price	Expiry Date	Risk Free Interest Rate	Volatility (discount)	Indicative Value per Option	Total Value (\$)	Expense for the year (\$)
Milestone 2	934,307	11.04.19	\$0.405	\$0.590	21.12.22	1.65%	50%	\$0.111	103,660	70,088
Milestone 3	1,245,742	11.04.19	\$0.405	\$0.590	21.12.22	1.65%	50%	\$0.111	138,214	55,774
Total	2,180,049		\$0.405	\$0.590		1.65%	50%	\$0.111	241,874	125,862

A probability of 100% has been applied to the milestones occurring.

(vi) During the year 6,369,557 milestone options were issued to Directors of the Company, which have an exercise price of \$0.000.

The terms and conditions of the options are detailed in the Notice of General Meeting dated 20 September 2019.

The Milestone Options shall vest and are exercisable at any time on and from the first pouring of gold at the Ghanaian Assets.

The expected accounting vesting date determined at 30 June 2020 was 21 September 2020, as a result of the Nord Gold and Shandong Gold takeover offers.

Using the Black & Scholes option model and based on the assumption below, the Options were ascribed the following value:

Class of Options	Number Options	Valuation Date	Market Price of Shares	Exercise Price	Expiry Date	Risk Free Interest Rate	Volatility (discount)	Indicative Value per Option	Total Value (\$)	Expense for the year (\$)
Milestone	6,369,557	04.11.2019	\$0.375	\$0.000	10.12.2024	0.90%	50%	\$0.375	2,388,583	853,235
Total	6,369,557		\$0.375	\$0.000		0.90%	50%	\$0.375	2,388,583	853,235

A probability of 100% has been applied to the milestones occurring.

(vii) During the year 6,276,530 milestone options were issued to employees of the Company, which have an exercise price of \$0.000. During the year 800,000 milestone options were cancelled, as at 30 June 2020 the Company had 5,476,530 milestone options on issue.

The terms and conditions of the options are detailed below:

The Unlisted Option will be issued to the employees in five (5) tranches comprising of:

- 1,255,306 Unlisted Options vesting upon the First Gold Pour to be completed or planned within 60 days of the Project Control Budget;
- 1,255,306 Unlisted Options vesting upon the advancement of the project development in a maximum of 10% above the board approved and final Project control Budget and Schedule;
- 1,255,306 Unlisted Options vesting upon development of the Mine Operations Team, to ensure sustained operation;
- 1,255,306 Unlisted Options vesting upon completion of 36 months, with less than zero lost time injury ("LTI") and zero fatalities; and
- 1,255,306 Unlisted Options vesting upon commencement of process plant commissioning, in accordance with the approved schedule.

The expected accounting vesting date determined at 30 June 2020 was 21 September 2020

Using the Black & Scholes option model and based on the assumption below, the Options were ascribed the following value:

Class of Options	Number Options	Valuation Date	Market Price of Shares	Exercise Price	Expiry Date	Risk Free Interest Rate	Volatility (discount)	Indicative Value per Option	Total Value (\$)	Expense for the year (\$)
Milestone	5,476,530	10.12.2019	\$0.29	\$0.000	10.12.2024	0.90%	50%	\$0.29	1,588,193	377,284
Total	5,476,530		\$0.29	\$0.000		0.90%	50%	\$0.29	1,588,193	377.284

A probability of 100% has been applied to the milestones occurring.

(viii) During the year, 699,374 fully paid ordinary shares were issued for services rendered; the shares were ascribed the following value:

Date of Issue	Number of Shares	Price of Shares (a)	Total Value (\$)	June Expense for the year (\$)
17.07.2019	635,161	\$0.336	213,414	213,414
29.10.2019	64,213	\$0.389	25,000	25,000

- (a) The value of the shares was determined at the date it was agreed to issue the shares for services
- (ix) During the year, 276,303 fully paid ordinary shares to employees of the Company for services rendered to the Company; the shares were ascribed the following value:

Date of Issue	Number of Shares	Price of Shares (a)	Total Value (\$)	Expense for the year(\$)
17.07.2019	73,530	\$0.340	25,000	25,000
29.10.2019	119,202	\$0.378	45,000	45,000
10.12.2019	83,571	\$0.299	25,000	25,000

⁽a) The value of the shares was determined at the date it was agreed to issue the shares for services.

18. CONTINGENT ASSETS

A subsidiary, Cardinal Resources Ghana Limited, has lodged a claim to refund Value Added Tax (VAT) paid in Ghana during the course of business. The refund is expected to be received once the Company has moved into production. However, the contingent asset has not been recognised as a receivable as at 30 June 2020, as receipt of the funds is contingent on the Company being in production.

There are no other contingent assets as at 30 June 2020.

19. COMMITMENTS AND CONTINGENCIES

(a) Commitment

Mineral exploration commitment

In order to maintain the current rights of tenure to exploration tenements, the Group has the following discretionary exploration expenditure requirements.

	2020	2019
Not later than one year	1,832,529	499,814
Later than one year but not later than two years	1,326,868	488,018
	3,159,397	987,832

(b) Contingent liabilities and commitments

The Group fully owns five subsidiaries, the main activities of which are exploration. The effect of these subsidiaries is to make the Cardinal Resources owned subsidiaries contractually responsible for any transactions undertaken by the subsidiary. The parent entity has provided certain guarantees to third parties whereby certain liabilities of the subsidiary are guaranteed.

Cardinal Resources Subranum Limited will be required to pay Newmont Ghana Gold Limited US\$50,000 per annum from the date which Cardinal Resources Subranum Limited reports a "gold resource estimate" of 1Moz of gold. Subject to the grant of a Mining Lease under the 2006 Mining Act, Cardinal Resources Subranum Limited will be required to pay Newmont Ghana Gold Limited a 2% net smelter royalty.

Cardinal Namdini Mining Limited (Cardinal Namdini), entered into a Net Smelter Royalty Deed ("Royalty Deed") in January 2018, whereby Cardinal Namdini will pay to Savannah Mining Limited ("Savannah") a net smelter return royalty ("Royalty") equal to:

- (a) 4% of the Net Smelter Return on the first 50,000 ounces of Specified Minerals (as defined in the Royalty Deed) produced within each small-scale license which was purchased by Savannah within the Large Scale Mining License (as defined in the Royalty Deed); and
- (b) A 2% Net Smelter Return, effective from production of the 50,001 ounces of Specified Minerals produced within each small-scale licence which was purchased by Savannah within the Large Scale Mining License.

Cardinal entered into a definitive agreement with Kinross Gold Group subsidiary Red Back Mining Ghana Limited (Red Back) in 2017 to acquire 100% ownership of two large scale prospecting licences located in North East Ghana. Cardinal has entered into a Royalty Agreement with Red Back, whereby Cardinal shall pay to Red back a 1% net smelter return royalty on any minerals produced from the properties.

20. FINANCIAL INSTRUMENTS

(a) Interest rate risk

The Group's exposure to interest rate risk, which is the risk that the financial instrument's value will fluctuate as a result of changes in market interest rates and the effective weighted average interest rates on those financial assets and financial liabilities, is as follows:

2020	Note	Floating interest rate	Fixed interest	Non- interest	Total	Weighted average
			rate	bearing		interest rate
Financial assets						
Cash and cash equivalents	16	358,304	18,686	3,331,715	3,708,705	1.36%
Trade and other receivables	8(a)	-	-	86,364	86,364	-
Cash deposits	8(b)	-	-	5,569	5,569	-
		358,304	18,686	3,423,648	3,800,638	
Financial liabilities						
Trade and other payables	10	-	-	4,316,398	4,316,397	-
Borrowings	11	34,657,548	-	-	34,657,548	12.60%
Lease liability		216,529	=	-	216,529	6.85%
		34,874,077	-	4,316,398	39,190,475	
2019	Note	Floating	Fixed	Non-	Total	Weighted
		interest	interest	interest		average
		rate	rate	bearing		interest rate
Financial assets						
Cash and cash equivalents	16	1,615,539	14,213,306	2,906,611	18,735,456	1.95%
Trade and other receivables	8(a)	-	-	256,650	256,650	-
Cash deposits	8(b)	=	=	7,568	7,568	-
		1,615,539	14,213,306	3,170,829	18,999,674	
Financial liabilities						
Trade and other payables	10	-	-	3,286,116	3,286,116	-
Borrowings	11	35,604,680	-	-	35,604,680	11.11%
		35,604,680	-	3,286,116	38,890,796	

Based on the balances as at 30 June 2020, a 1% movement in interest rates would increase/decrease the loss for the year before taxation by \$29,360 (2019: \$4,829).

(b) Credit risk

The maximum exposure to credit risk, excluding the value of any collateral or other security, at the statement of financial position date to recognised financial assets is the carrying amount of those assets, net of any allowance for doubtful debts, as disclosed in the statement of financial position and notes to the financial report.

The Group does not have any material credit risk exposure to any single debtor or group of debtors under financial instruments entered into by the Group.

To manage credit risk from cash and cash equivalents, it is the Group's policy to only deposit with banks maintaining a minimum independent rating of 'AA'.

(c) Net fair values

The carrying amount of financial assets and financial liabilities recorded in the consolidated financial statements represents their respective net fair value and is determined in accordance with the accounting policies disclosed in note 3 to the financial statements.

(d) Financial risk management

The Group's financial instruments consist mainly of deposits with recognised banks, investment in term deposits up to 90 days, accounts receivable, accounts payable and borrowings. Liquidity is managed, when sufficient funds are available, by holding sufficient funds in a current account to service current obligations and surplus funds invested in term deposits. The directors analyse interest rate exposure and evaluate treasury management strategies in the context of the most recent economic conditions and forecasts. The main risks the Group is exposed to through its financial instruments are the depository banking institution itself, holding the funds, and interest rates. The Group's credit risk is minimal as being an exploration Company, it has no significant financial assets other than cash and term deposits.

(e) Foreign currency risk

Exposure to foreign exchange risk may result in the fair value or future cashflows of a financial instrument to fluctuate due to movements in foreign exchange rates of currencies, in which the Group holds financial instruments, which are other than the AUD functional currency of the Group.

The following table shows the foreign currency risk on the financial assets and liabilities of the Group's operations, denominated in currencies other than the functional currency of the operations. The foreign currency risk of the parent entity is considered immaterial and is therefore not shown.

2020			Net Financial Assets/(Liabilities) In AUD				
		AUD	USD	GHS	CAD	Total AUD	
Australian dollar		(1,832,450)	(33,353,700)	(79,112)	-	(35,265,262)	
GHS New Cedi		=	-	-	-	=	
Statement of position exposure	financial	(1,832,450)	(33,353,700)	(79,112)	-	(35,265,262)	

2019			Net Financial Assets/(Liabilities) In AUD				
		AUD	USD	GHS	CAD	Total AUD	
Australian dollar		3,935,628	(24,128,328)	85,202	(47,842)	(20,155,340)	
GHS New Cedi		-	-	-	-	-	
Statement of position exposure	financial	3,935,628	(24,128,328)	85,202	(47,842)	(20,155,340)	

Based on the statement of exposure at 30 June 2020, a 1% movement in foreign exchange rates would increase/decrease the loss for the year before taxation by \$482,220 (2019: \$343,065).

(f) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity risk is to ensure, as far as possible, that it will maintain cash or credit terms with its suppliers to meet the operating requirements of the business and invest excess funds in highly liquid short term cash deposits, Maintaining surplus working capital in highly liquid short term deposits allows the Group to meet its primary objectives by being able to fund new development and acquisition opportunities at short notice.

The responsibility for liquidity risk rests with the Board of Directors. The Group's liquidity needs can likely be met through cash on hand, short and long term borrowings subject to the current forecast operating parameters being met.

(g) Borrowings

Loans and borrowings are initially recognised at the fair value of the consideration received, net of transaction costs. They are subsequently measured at amortised costs using the effective interest method.

Where there is an unconditional right to defer settlement of the liability for at least 12 months after the reporting date, the loans or borrowings are classified as non-current.

The contractual maturities of the Group's financial liabilities are as follows:

	June 30,	June 30,
	2020	2019
Within one month:		
Trade and other payables	\$ 4,316,398	\$ 3,286,116
Later than one month and no later than one year:		
Trade and other payables	-	-
	\$ 4,316,398	\$ 3,286,116

Contractual maturities of financial liabilities As at June 30, 2020	Less than 6 months	6 – 12 months	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total contractual cash flows	Carrying amount (assets)/liabilities
Non-derivatives							
Trade payables	4,316,398	-	=	-	-	4,316,398	4,316,398
Borrowings	704,000	719,000	35,977,548		-	37,400,548	34,657,548
Total non-derivatives	5,020,398	719,000	35,977,548	-	-	41,716,946	38,973,946

Contractual maturities	Less than	6 – 12	Between 1 and	Between	Over	Total	Carrying amount
of financial liabilities	6 months	months	2 years	2 and 5	5	contractual	(assets)/liabilities
As at June 30, 2019				years	years	cash flows	
Non-derivatives							
Trade payables	-	-	-	-	-	-	-
Borrowings	881,092	910,556	38,495,085		-	40,286,733	35,604,680
Total non-derivatives	881,092	910,556	38,495,085	-	-	40,286,733	35,604,680

21. RELATED PARTY TRANSACTIONS

Tomlinson Consultancy, of which Kevin Tomlinson is a director, provided geological consulting services to the Company. Amounts that have been paid or payable total \$206,416 (2019: \$309,624).

HopgoodGanim of which Michele Muscillo, a director, is a partner of, provided legal services to the Company. Amounts that have been paid or payable total \$558,663 (2019: \$5,028).

During the year ended 30 June 2020, Cardinal Resources Limited has advanced funds to Savannah, a related entity to Director Mr Malik Easah. The purpose of an advance was for the development of a mining licence in areas in respect of which Savannah had entered into agreements with holders of small scale licences. As at the date of this report, \$343,800 (2019: \$280,300) has been recorded as a prepayment in the consolidated financial statements of Cardinal Resources Limited. The difference has been applied toward the development of the mining licence and expensed during the period. The Company has recorded a provision for US\$500,000, for funds owed to Savannah in relation to legal expenses.

Other than the above there were no other transactions conducted between the Group and Key Management Personnel or their related parties, apart from those disclosed above relating to equity and compensation, that were conducted other than in accordance with normal employee, customer or supplier relationships on terms no more favourable than those reasonably expected under arm's length dealings with unrelated persons.

22. SEGMENT REPORTING

For management purposes, the Group is organised into one main operating segment, which involves the exploration of minerals in Ghana. All of the Group's activities are interrelated, and discrete financial information is reported to the Board as a single segment. Accordingly, all significant operating decisions are based upon analysis of the Group as one segment.

The financial results from this segment are equivalent to the financial statements of the Group as a whole.

The accounting policies applied for internal reporting purposes are consistent with those applied in the preparation of these consolidated financial statements.

23. UNCONSOLIDATED PARENT COMPANY DISCLOSURE

(a) Financial position for the year ended 30 June 2020

As at	June 30 ,2020	June 30, 2019	
Assets			
Current assets	3,724,838	18,808,888	
Non-current assets	139,544	170,000	
Total assets	3,864,382	18,978,888	
Liabilities			
Current liabilities	3,917,306	1,975,005	
Non-current liabilities	34,657,547	35,604,680	
Total liabilities	38,574,853	37,579,685	
Equity			
Issued capital	102,797,618	84,582,327	
Reserves	9,098,030	7,185,072	
Accumulated losses	(146,606,119)	(110,368,196)	
Total equity/(deficiency) in equity	(34,710,471)	(18,600,797)	

(b) Financial performance for the year ended 30 June 2020

	30 JUNE 2020 \$	30 JUNE 2019 \$
Loss for the year	(27,007,186)	(26,115,681)
Other comprehensive income	-	-
Total comprehensive loss	(27,007,186)	(26,115,681)

24. EVENTS SUBSEQUENT TO STATEMENT OF FINANCIAL POSITION DATE

On July 7, 2020 the Company announced that it had raised AU\$11,960,000 as a result of the issue of 26,000,000 fully paid ordinary shares to Shandong Gold in accordance with the terms of the Bid Implementation Agreement.

On July 15, 2020 Cardinal received an unconditional on-market takeover offer at AU\$0.66 per share from Nordgold. Having regards to the unsolicited nature of the takeover bid and the provisions of the Bid Implementation Agreement with Shandong Gold, the Board of Cardinal recommended a 'take no action' at the time in relation to the Nordgold takeover bid.

On July 20, 2020 the Company advised that its Namdini Mining Licence had officially received Sovereign Parliamentary Ratification in Ghana.

On July 22, 2020 the Company advised that it had received a revised and improved proposal for an off-market takeover from Shandong Gold, pursuant to which Shandong Gold will offer to acquire all of the shares in Cardinal it does not presently own at a cash price of \$0.70 per share.

On July 27, 2020 the Company, after careful consideration of the Revised Shandong Gold Offer and Nordgold's unconditional on-market offer for Cardinal, Cardinal's Board of Directors (in consultation with the Special Committee, its financial and legal advisors), unanimously recommended that Cardinal shareholders

- ACCEPT the Revised Shandong Gold Offer (in the absence of a superior proposal); and
- **REJECT** the Nordgold Bid.

On July 30, 2020 the Company advised that it had entered into a deed with each Shandong Gold Mining (HongKong) Co., Limited and Shandong Gold Mining Co., Ltd, to amend the Bid Implementation Agreement.

On August 19, 2020 the Company advised that Shandong Gold had given notice to Cardinal that the Foreign Investment Review Board (FIRB) approval condition of its off-market takeover offer to acquire all of the Shares in Cardinal it does not presently own at a cash price of \$0.70 per share had been fulfilled.

On August 24, 2020 the Company received advice that Nordgold had extended its offer under the unconditional onmarket takeover bid to acquire all the ordinary shares in Cardinal Resource to September 10, 2020.

The impact of the Coronavirus (COVID-19) pandemic is ongoing and while it has not significantly impacted the entity up to 30 June 2020, it is not practicable to estimate the potential impact, positive or negative, after the reporting date. The situation is rapidly developing and is dependent on measures imposed by the Australian Government and other countries, such as maintaining social distancing requirements, quarantine, travel restrictions and any economic stimulus that may be provided.

No other matter or circumstance has arisen since 30 June 2020 that has significantly affected, or may significantly affect the entity's operations, the results of those operations, or the entity's state of affairs in future financial years.

DIRECTOR'S DECLARATION

In the opinion of the Directors of Cardinal Resources Limited ("the Company")

- (a) The financial statements and the notes and the additional disclosures included in the directors' report designated as audited of the Group are in accordance with the Corporations Act 2001, including:
 - (i) Giving a true and fair view of the Group's financial position as at 30 June 2020 and of its performance for the year ended that date; and
 - (ii) Complying with Accounting Standards and Corporations Regulations 2001, and other mandatory professional reporting requirements:
- (b) There are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.
- (c) The financial statements and notes comply with International Financial Reporting Standards as disclosed in note 2.

This declaration has been made after receiving the declarations required to be made to the directors in accordance with section 295A of the Corporations Act 2001 for the financial year ended 30 June 2020.

Signed in accordance with a resolution of the Directors made pursuant to section 295(5) of the Corporations Act 2001.

On behalf of the Board

Archie Koimtsidis

CEO/MD

Dated this 31 August 2020 Perth, Western Australia



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DECLARATION OF INDEPENDENCE BY JARRAD PRUE TO THE DIRECTORS OF CARDINAL RESOURCES LIMITED

As lead auditor of Cardinal Resources Limited for the year ended 30 June 2020, I declare that, to the best of my knowledge and belief, there have been:

- 1. No contraventions of the auditor independence requirements of the Corporations Act 2001 in relation to the audit; and
- 2. No contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of Cardinal Resources Limited and the entities it controlled during the period.

Jarrad Prue

Director

BDO Audit (WA) Pty Ltd

Perth, 31 August 2020



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INDEPENDENT AUDITOR'S REPORT

To the members of Cardinal Resources Limited

Report on the Audit of the Financial Report

Opinion

We have audited the financial report of Cardinal Resources Limited (the Company) and its subsidiaries (the Group), which comprises the consolidated statement of financial position as at 30 June 2020 and 2019, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the years then ended, and notes to the financial report, including a summary of significant accounting policies and the directors' declaration.

In our opinion the accompanying financial report of the Group, is in accordance with the Corporations Act 2001, including:

- (i) Giving a true and fair view of the Group's financial position as at 30 June 2020 and 2019, and of its financial performance for the years ended on that date; and
- (ii) Complying with International Financial Reporting Standards and the Corporations Regulations 2001.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the Financial Report section of our report. We are independent of the Group in accordance with the Corporations Act 2001 and the ethical requirements of the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the IESBA Code.

We confirm that the independence declaration required by the Corporations Act 2001, which has been given to the directors of the Company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Material uncertainty related to going concern

We draw attention to Note 2 in the financial report which describes the events and/or conditions which give rise to the existence of a material uncertainty that may cast significant doubt about the group's ability to continue as a going concern and therefore the group may be unable to realise its assets and discharge its liabilities in the normal course of business. Our opinion is not modified in respect of this matter.



Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matter described in the Material uncertainty related to going concern section, we have determined the matters described below to be the key audit matters to be communicated in our report.

Accounting for Share-based Payments

Key audit matter

During the financial year ended 30 June 2020, the Group issued options and shares to key management personnel, consultants and employees, which have been accounted for as share-based payments.

Refer to Note 2(e) and 3(d) of the financial report for a description of the accounting policy and significant estimates and judgements applied to these arrangements and Notes 12, 13 and 17 of the financial report for disclosure of the arrangements.

Share-based payments are a complex accounting area and due to the complex and judgemental estimates used in determining the fair value of the share-based payments in accordance with IFRS 2: Share Based Payments, we consider the Group's calculation of the share-based payment expense to be a key audit matter.

How the matter was addressed in our audit

Our procedures included, but were not limited to:

- Reviewing market announcements and board minutes to identify new share-based payments granted during the year have been accounted for;
- Assess the impact of takeover offers on the expected vesting periods;
- Reviewing relevant supporting documentation to obtain an understanding of the contractual nature and terms and conditions of the share-based payment arrangements;
- Evaluating management's methodology for calculating the fair value of the share-based payments, including assessing the valuation inputs using internal specialists where required;
- Recalculating estimated fair value of the share based payments using relevant valuation methodologies;
- Assessing the allocation of the share-based payment expense over management's expected vesting period;
- Assessing management's determination of achieving milestones; and
- Assessing the adequacy of the related disclosures in Notes 2(e), 3(d), 12, 13 and 17 to the financial report.



Other information

The directors are responsible for the other information. The other information comprises the information in the Group's annual report for the year ended 30 June 2020, but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the directors for the Financial Report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with International Financial Reporting Standards and the Corporations Act 2001 and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the International Financial Reporting Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located in Appendix 1 to this report.

This description forms part of our auditor's report.



Report on the Remuneration Report

Opinion on the Remuneration Report

We have audited the Remuneration Report included in pages 8 to 20 of the directors' report for the year ended 30 June 2020.

In our opinion, the Remuneration Report of Cardinal Resources Limited, for the year ended 30 June 2020, complies with section 300A of the Corporations Act 2001.

Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the Corporations Act 2001. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with International Standards on Auditing.

BDO Audit (WA) Pty Ltd

Jarrad Prue

Director

Perth, 31 August 2020



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APPENDIX 1

As part of an audit in accordance with International Standards on Auditing, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of expressing an
 opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities
 or business activities within the Group to express an opinion on the consolidated financial
 statements. We are responsible for the direction, supervision and performance of the group
 audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.



From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

SHAREHOLDER INFORMATION

1 Distribution of holders

As at 31 August 2020 the distribution of shareholders was as follows:

Ordinary shares

Size of holding	Number of holders
1 – 1,000	116
1,001 -5,000	216
5,001 – 10,000	172
10,001 – 100,000	408
100,001 and over	181
Total	1,093

2 Voting rights

There are no restrictions to voting rights attached to the ordinary shares. On a show of hands every member present in person will have one vote and upon a poll, every member present or by proxy will have one vote each share held.

3 Substantial shareholders

The names of the substantial shareholders who have notified the Company in accordance with Section 671B of the Corporation Act 2001 are;

Shareholder	Shares held	Percentage interest %
Mr. Alexey Mordashov, Mr. Kirill Mordashov and Mr Nikita Mordashov and their controlled entities including Nord Gold S.E. and its subsidiaries	98,433,593	18.71%
MM Asset Management Inc.	48,415,566	9.68%
Bank of Nova Scotia and each of its associates/affiliates	32,000,000	6.40%

4 Top 20 shareholders

The names of the 20 largest shareholders on the share register as at 31 August 2020, who hold 78.41% of the ordinary shares of the Company, were as follows;

Shareholder	Number
Nord Gold SE	98,443,593
JP Morgan Nominees Australia Pty Ltd	56,553,462
Citicorp Nominees Pty Ltd	33,962,505
Canadian Register Control/C	31,349,037
HSBC Custody Nominees (Australia) Limited	30,580,916
HSBC Custody Nominees (Australia) Limited – A/C 2	26,251,860
Shangdong Gold Mining (HongKong) Co. Limited	26,000,000
Oceanic Capital Pty Ltd	19,000,000
Buttonwood Nominees Pty Ltd	16,083,866
CS Fourth Nominees Pty Limited < HSBC Cust Nom AU Ltd 11 A/C>	15,352,947
Mr Malik Mohammed Easah	14,242,238
Arredo Pty Ltd	9,250,000

SHAREHOLDER INFORMATION

Invia Custodian Pty Ltd <mark a="" c="" family="" thomas=""></mark>	5,683,334
Notre Dame Investment Limited	5,400,000
Yarandi Investments Pty Ltd <griffith 1="" a="" c="" family="" no=""></griffith>	4,601,673
Brispot Nominees Pty Ltd <house a="" c="" head="" nominees=""></house>	4,044,238
BNP Pariba's Nominees Pty Ltd <ib au="" drp="" noms="" retailclient=""></ib>	3,995,657
Panga Pty Ltd	3,920,000
Payzone Pty Ltd <st a="" barnabas="" c="" super=""></st>	3,881,716
St Barnabas Investments Pty Ltd	3,865,625

5 Consistency with business objectives

The Company has used its cash and assets in a form readily convertible to cash that it had at the time of listing in a way the consistent with its stated objectives.

Cardinal announces its summary of the results of the Company's annual review of its Mineral Resource and Ore Reserve statement as at 30 June, 2020 as part of the Company's annual filing under ASX Listing Rules.

Since the Company's announcements released to the ASX and TSX on 15 October and 28 October 2019, the Company has not made any changes to the categories or the size of the Mineral Resources and Ore Reserves, as no mining has occurred.

Cardinal presents the following summary, prepared in accordance with the requirements of ASX LR 5.20 to 5.24.

Tenements summary - Cardinal Resources

Table 1 summaries the leases held by Cardinal, as required by ASX LR 5.20.

Project	Licence	Tenement	Tenement	Licence	Interest Held at
	Area	Name	Number	Туре	End of Year
		Bongo	RL9/29	Prospecting	100%
	Bongo	Kandiga-Atibabisi	PL9/38	Prospecting	100%
		Zoko-Tarongo	Zoko-Tarongo PL9/37 Prospecting		100%
Bolgatanga	Igatanga Ndongo	Nangodi	PL9/13	Prospecting	100%
		Ndongo	PL9/22	Prospecting	100%
		Yameriga	RL9/19	Prospecting	100%
	Kungongo	Kungongo	RL9/28	Prospecting	100%
Namdini	Namdini	Datoko	PL9/29	Mining Lease	100%
Subranum	Subranum	Subin-Kaso	PL9/309	Prospecting	100%

Table 1: Cardinal leases and Percentage held

Mineral Resource and Mineral Reserves Statement – Namdini Gold Project

In accordance with ASX LR 5.21.1 the Company has reviewed its Mineral Resources and Ore Reserves in its 100% owned Namdini Project, which can be summarised as Measured and Indicated Mineral Resources of 182 million tonnes @ 1.12g/t Au, and Inferred Mineral Resources of 12 million tonnes @ 1.2 g/t Au, which include the Proved and Probable Ore Reserves of 138.6 million tonnes @1.13 g/t Au. Since the Company's press release dated 28 October 2019, the Company has not made any changes to the categories or size of the of its Mineral Resource.

Tables 2, 3, and 4 present the tabulated breakdowns, as per ASX LR 5.21.2.

	Mineral	Resources a	s at 30 June 2019	Mineral Resources as at 30 June 2020		
Mineral Resource Category	Tonnes (Mt)	Gold Grade (g/t Au)	Contained Gold (Moz)	Tonnes (Mt)	Gold Grade (g/t Au)	Contained Gold (Moz)
Measured Resource	7.5	1.31	0.32	7.5	1.31	0.32
Indicated Resource	174	1.11	6.21	174	1.11	6.21
Measured and Indicated	182	1.12	6.53	182	1.12	6.53

Table 2: Namdini Measured and Indicated Mineral Resource Statements as at June 30, 2019 and June 30, 2020.

	Minera	Resources a	s at 30 June 2019	Mineral Res	sources as at	30 June 2020
Mineral Resource Category		Gold Grade (g/t Au)	Contained Gold (Moz)	Tonnes (Mt)	Gold Grade (g/t Au)	Contained Gold (Moz)
Inferred Resource	12	1.2	0.46	12	1.2	0.46

Table 3: Namdini Inferred Mineral Resource Statements as at June 30, 2019 and June 30, 2020. Notes on Table 2 and Table 3:

- 1. Mineral Resource estimates are reported inclusive of those Mineral Resources converted to Ore Reserves (Refer to the announcement released to the ASX and TSX on 15 October and 28 October 2019).
- 2. The Mineral Resource was evaluated using an average cut-off grade of 0.5 g/t Au.
- 3. The Mineral Resources and Ore Reserves are reported in accordance with JORC Code (2012) guidelines and Canadian Institute of Mining, Metallurgy and Petroleum Standards (CIM, 2014).
- 4. Mineral Resource estimates updates were disclosed in accordance with ASX Listing Rule LR 5.8.1.
- 5. Numbers may not add due to rounding to appropriate numbers of significant figures.

	Ore Reserves as at 30 June 2019					erves as at 3	0 June 2020
Ore Reserve Category	Туре	Tonnes (Mt)	Gold Grade (g/t)	Contained Gold (Moz)	Tonnes (Mt)	Gold Grade (g/t)	Contained Gold (Moz)
Dravad	Oxide	1	1.21	0.1	1	1.21	0.1
Proved	Fresh	6.4	1.33	0.3	6.4	1.33	0.3
Total Proved		7.4	1.31	0.4	7.4	1.31	0.4
Probable	Oxide	3	1.08	0.1	3	1.08	0.1
Probable	Fresh	128.2	1.13	4.6	128.2	1.13	4.6
Total Probable		131.2	1.12	4.7	131.2	1.12	4.7
Drayad and Drahahla	Oxide	4.1	1.11	0.2	4.1	1.11	0.2
Proved and Probable	Fresh	134.5	1.13	4.9	134.5	1.13	4.9
Total Ore Reserves		138.6	1.13	5.1	138.6	1.13	5.1

Table 4: Namdini Proved and Probable Ore Reserves as at June 30, 2019 and June 30, 2020

Notes to Table 4:

- 1. The Ore Reserve is reported in accordance with JORC Code 2012 guidelines and Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014).
- 2. The Ore Reserve was evaluated using a gold price of USD \$1,300 / oz with a USD \$1,225 / oz optimised pit chosen for Ore Reserve pit design to maximize cash flow.
- 3. The Ore Reserve was evaluated using an average cut-off grade of 0.5 g/t Au.
- 4. Ore block grade and tonnage dilution was incorporated through the use of an MIK recoverable resource estimation model which was demonstrated to incorporate an expected level of equivalent ore loss and dilution for the scale of mining envisaged.
- 5. All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

Since the Company's press releases dated 15 October and 28 October 2019, the Company has not made any changes to the categories or size of the 5.1Moz Ore Reserves (138.6Mt @ 1.13 g/t Au; 0.5 g/t cut-off), inclusive of 0.4Moz Proved (7.4 Mt @ 1.31g/t) as no mining has occurred.

As per JORC Code Clause 15 and ASX LR 5.21.3, the Company's annual reporting date for Mineral Resources and Ore Reserves is 30 June 2020, and any changes or updates to the Mineral Resources since 30 June 2019 are compared and summarised in Tables 2 and 3. The current Mineral Resources have an effective date of 28 October 2019 and were previously announced on the ASX platform on 28 October 2019 as "Feasibility Study Confirms Cardinal's Namdini as a Tier One Gold Project". A maiden Ore Reserve was announced on 18 September 2018

"Cardinal Namdini Pre-Feasibility Study 4.76Moz Ore Reserve" and updated on 28 October 2019 "Cardinal's Namdini Ore Reserve Now 5.1Moz", "Addendum to Namdini Ore Reserve Press Release" and "Feasibility Study Confirms Cardinal's Namdini as a Tier One Gold Project".

Mineral Resources

In accordance with ASX LR 5.21.4, the following discussion relating to the comparison of the 30 June 2019 and 30 June 2020 Mineral Resources summary is applicable.

The Mineral Resource incorporates the results from all resource drilling to February 5, 2019 comprising 175 HQ diamond core holes and 151 RC drill holes totalling 87,140 metres. (ASX / TSX Press Release April 3, April 18 and 28 October 2019). Tables 2 and 3 presents a summary of the Mineral Resources on a 100% Project basis.

The resource drilling comprises east-west trending traverses of easterly inclined holes. Hole spacing varied from around 12.5 by 25 metres in shallow portions of the southern part of the deposit to around 50 by 50 metres and broader in the north and at depth. The additional drilling up to February 5 2019, has resulted in no material change in overall Mineral Resources from 2018 to 2019 however, approximately 4% of the total Indicated Mineral Resource was converted to Measured Mineral Resource through addition infill drilling, and a small amount of Inferred Mineral Resource converted to Indicated.

Tables 2 and 3 highlight the Mineral Resource estimation reported at a 0.5 g/t Au cut-off grade. Currently, the 0.5 g/t Au cut-off grade approximates an operational parameter that the Company believes to be applicable. This is in accordance with the guidelines of Reasonable Prospects for Eventual Economic Extraction ("RPEEE") per the Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014) and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code 2012). The effective date of the Mineral Resource estimate is the 28 October 2019.

All figures in Tables 2, 3 and 4 have been rounded to reflect the relative precision of the estimates and to include rounding errors. Mineral Resources are inclusive of Ore Reserves.

Ore Reserves

In accordance with ASX LR 5.21.4, the following discussion relating to the 30 June 2019 Ore Reserves summary is applicable. Table 4 presents a summary of the Ore Reserves on a 100% Project basis.

The Ore Reserve is based upon the following key input parameters:

- A Mineral Resource as outlined in Table 2.
- A Proved and Probable Ore Reserve and detailed monthly mining and processing schedules, derived
 entirely from the Ore Reserve, after the application of mining parameters, ore haulage costs based on
 in-country contractor miner supplier inputs and owner mining cost models, processing inputs and
 geotechnical pit design considerations.
- The cut-off grade parameters remain the same as of the ASX/TSX announcement of the 28 October 2019, Cardinal Namdini Project Feasibility Study ("FS").
- Geotechnical inputs and parameters for Life of Mine pit design, as of the ASX/TSX announcement 28 October 2019, Cardinal Namdini Project FS.
- Process engineering design, capital and operating costs remain as of the FS on 28 October 2019.
- Metallurgical recovery inputs are based on testwork by ALS Global (Perth) and recent testwork results from Maelgwyn Mineral Services Africa (Johannesburg, South Africa).
- Process infrastructure design including and not limited to, waste, residue, tailings storage and water management design as of ASX/TSX announcement 28 October 2019 "Feasibility Study Confirms Cardinal's Namdini as a Tier One Gold Project".
- Other cost inputs e.g. supporting infrastructure, HV power, administration and accommodation by owner's team and external consultants' inputs as of ASX/TSX announcement 28 October 2019 "Feasibility Study Confirms Cardinal's Namdini as a Tier One Gold Project".

• The status of the social and environmental approvals, mining tenements, other government factors and other infrastructure requirements for selected the mining method remains the same as per the ASX/TSX announcement 28 October 2019 "Feasibility Study Confirms Cardinal's Namdini as a Tier One Gold Project".

The Mineral Resource estimate was reported in accordance with the JORC Code (2012) as shown in Appendix 1 – JORC Table 1. The Mineral Resource estimate, summarized in the above tables (Table 2 and Table 3), reports the Mineral Resources by category above a 0.5 g/t gold cut-off grade. The classification categories of Measured, Indicated and Inferred Mineral Resources under the JORC Code (2012) are equivalent to the CIM categories of the same name (CIM, 2014). Ore Reserves were estimated for the Namdini Gold Project by Golder Associates, which is summarised in Table 4. The total Proved and Probable Ore Reserve is estimated at 138.6Mt at 1.13g/t Au with a contained gold content of 5.1Moz at 0.5 g/t Au cut off.

The mine design and Ore Reserve (CIM Mineral Reserve) estimate is based on the Mineral Resource model of 28 October 2019.

Trial open pit optimisations were run in Whittle 4XTM software to define the base of potentially economic material. Four cut back pits were then selected and full mine designs applied.

The Measured and Indicated Mineral Resource are inclusive of those Mineral Resources modified to produce the Ore Reserves.

In accordance with ASX LR 5.21.5, the Company's governance arrangements and internal controls that are in place with respect to its estimates of Mineral Resource and Ore Reserves are guided by the principles of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, JORC Code 2012 and Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014). These include detailed internal company procedures such as for, but not restricted to:

- Supervision of drilling,
- Sampling,
- Logging
- Surveying
- Quality Control / Quality assurance
- Internal model validation and peer review
- External and independent peer review
- Internal and external review of assumptions and inputs (Modifying Factors) to the Ore Reserve process.

The Ore Reserve for the Project is reported according to the JORC Code (and CIM definitions 2014). The Mineral Resource estimate was converted after applying appropriate Modifying Factors. The Proved and Probable Ore Reserve estimate are based on the Mineral Resource classified as Measured and Indicated only. The accompanying JORC Table 1, sections 1, 2, 3, and 4 are provided in Appendix 1, and meet the full requirements of the Company's annual reporting obligations, in accordance with Clause 14 of the JORC Code.

Competent / Qualified Person Statement

All production targets for the Namdini Gold Mine referred to in this announcement are underpinned by estimated Mineral Resources which were prepared by competent persons and qualified persons in accordance with the requirements of the JORC Code and National Instrument 43-101- Standards of Disclosure for Mineral Projects ("NI43-101"), respectively.

The information in this announcement that relates to Namdini Mineral Resources is based on, and fairly represents, information compiled and reviewed by **Mr Nicolas 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 announcement of the matters based on his information, as a whole to the form and context in which it appears in this annual report.

The information in this announcement that relates to Namdini Ore Reserves and mining studies is based on, and fairly represents, information compiled and reviewed by **Mr Glenn Turnbull**, a Competent Person who is a Chartered Engineer and Member of the Australasian Institute of Mining and Metallurgy and a full-time employee of Golder. 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 and consents to the inclusion in this announcement of the matters based on his information, as a whole to the form and context in which it appears in this annual report.

The scientific and technical information in this announcement that relates to the Exploration Results, Mineral Resources and Ore Reserves at 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 mineralization 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 and consent to the inclusion in this announcement of the matters based on their information, as a whole to the form and context in which it appears in this annual report.

APPENDIX - TABLE 1 (JORC, 2012)

Section 1 - Sampling Technique and Data

Criteria Sampling

techniques

JORC Code Explanation

Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.

Commentary

Mineral Resource drilling comprises 175 diamond core holes and 151 reverse circulation (RC) drill holes totalling 87,140 m.

Diamond core sampling includes half-core and quarter-core samples of HQ core size. RC drilling utilised face-sampling hammers of nominally 127 to 140 mm diameter, with samples collected by riffle splitting.

Additional drilling including exploration and sterilisation drilling outside the resource area, and 10 by 15 m spaced trial RC grade control drilling was not included in the Mineral Resource estimation dataset.

Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Field sampling followed Cardinal Namdini protocols including industry standard quality control procedures.

Sample representativity is ensured by: RC samples: Collecting 1 m samples from a cyclone, passing them through a 3-tier riffle splitter, and taking duplicate samples every 20th sample.

Diamond Core: For drilling prior to approximately April 2016 core was halved for sub-sampling with a diamond saw. From approximately April 2016 to June 2017 core was quartered for assaying. For drilling after June 2017 diamond core was halved for sub-sampling. Sample intervals range from 0.2 to 1.8 m in length, with the majority of samples assayed over 1 m intervals.

Aspects of the determination of mineralisation that are Material to the Public Report.

In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent

After oven drying diamond core samples were crushed using a jaw crusher, with core and RC samples crushed to a -2 mm size using an RSD Boyd crusher. Riffle split sub-samples were pulverised to nominally 85% passing 75 μ m.

Pulverised samples were analysed for gold using fire assay technique with a 50 g charge, with an AAS finish, with a detection limit of 0.01 g/t Au. Assays of greater than 100 g/t Au were re-analysed with a gravimetric finish.

Criteria	JORC Code Explanation	Commentary
	sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
	Selection of Composites for Aachen metallurgical test work.	A selection of representative 1 m samples from 47 drill holes were sent to Maelgwyn Laboratories South Africa for Aachen Metallurgical testwork. The drill hole samples selected were from different representative lithologies within the planned Starter Pit and Life of Mine pit. The samples were sent as competent HQ quarter core and crushed material rejects from SGS assay laboratories.
Drilling techniques	Drill type (e.g. core, reverse circulation, open - hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-	Diamond core drilling is completed with core size of HQ with triple tube drilling through surficial saprolite and standard tubes for deeper drilling. Core was orientated using a digital Reflex ACT II RD orientation tool.
	sampling bit or other type, whether core is oriented and if so, by what method, etc.).	RC drilling utilised face sampling hammers of nominal 127 to 140 mm diameter.
	, ,	The Mineral Resource drilling comprises east-west trending traverses of holes inclined towards the east at generally 45° to 65° approximately perpendicular to mineralisation.
		Most drill collars are surveyed using a differential GPS with most diamond holes and deeper RC holes down-hole surveyed at intervals of generally around 30 m using electronic multi-shot and gyroscopic equipment.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Recovered core lengths were measured for 98% of the diamond resource drilling, showing generally very high recoveries, which average 99.8% for mineralised domain samples.
		RC sample recoveries were assessed by weighing recovered sample weights for 1 m intervals. For the combined dataset estimated recoveries average 85% which is considered acceptable.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	All drilling activities were supervised by company geologists.
	, ,	Measures taken to maximise diamond core recovery included use of HQ core size with triple tube drilling

Criteria	JORC Code Explanation	Commentary
		through the saprolite zone, and having a geologist onsite to examine core and core metres marked and
		orientated to check against the driller's blocks and
		ensuring that all core loss is considered.
		RC sample recovery was maximised by utilising drilling rigs with sufficient compressor capacity, including auxiliary compressors to provide dry, high recovery samples. In cases where the RC rig was unable to maintain dry samples the hole was continued by diamond core drilling.
		RC sample condition was routinely logged by field geologists with less than 0.2% of resource RC samples logged as moist or wet.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship is seen to exist between sample recovery and grade, and no sample bias is due to preferential loss/gain of any fine/coarse material due to the generally high sample recoveries obtained by both drilling methods employed.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All drill holes were geologically logged, and selected diamond core was geotechnically logged. The lithology, alteration and geotechnical characteristics of core are logged directly to a digital format on a Field Toughbook laptop logging system following procedures and using Cardinal geologic codes. Data is imported into Cardinal's central database after validation in Maxwell LogChief™ software.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	The geological and geotechnical logging is of appropriate detail to support the Mineral Resource estimation, and mining and metallurgical studies. Logging was both qualitative and quantitative depending on the field being logged.
		RC chips in trays and HQ core were photographed both in dry and wet form.
	The total length and percentage of the relevant intersections logged.	Geological logs are available for 86,728 m (99.5%) of the resource drilling
Sub- sampling techniques and sample	If core, whether cut or sawn and whether quarter, half or all core taken.	For sampling, diamond core was either quartered or halved with these sample types providing 36% and 64% of mineralised domain core samples, respectively.
preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and	RC samples were split using a three-tier riffle splitter. Rare wet samples were air dried prior to riffle

Criteria	JORC Code Explanation	Commentary
	whether sampled wet or dry.	splitting.
	For all sample types, the nature,	Sample preparation and gold assaying were
	quality and appropriateness of the	undertaken by independent commercial laboratories.
	sample preparation technique.	Most primary samples were submitted to SGS
		Ouagadougou or SGS Tarkwa for analysis by fire-
		assay with assays from these laboratories
		contributing around one third and two thirds of the
		estimation dataset respectively. Samples analysed by
		Intertek Tarkwa provide around 0.5% of the
		estimation dataset.
		After oven drying diamond core samples were
		crushed using a jaw crusher, with core and RC
		samples crushed to minus 2 mm using an RSD Boyd
		crusher. Riffle split sub-samples were pulverised to
		nominally 85% passing 75 μm in an LM2 pulveriser.
		The sample preparation is of appropriately high
		quality for Mineral Resource estimation.
	Quality control procedures adopted	Procedures adopted to maximise representivity of
	for all sub-sampling stages to	samples include crushing and pulverising of samples
	maximise representivity of samples.	prior to further sub-sampling by appropriate splitting
		techniques. Sample preparation equipment was
		routinely cleaned with crushers and pulveriser
		flushed with barren material at the start of every batch.
	Measures taken to ensure that the	Measures taken to ensure sample representivity
	sampling is representative of the in-	include the use of appropriate sub-sampling
	situ material collected, including for	methods, including riffle splitting for RC samples and
	instance results for field	halving, or quartering diamond core with a diamond
	duplicate/second - half sampling.	saw. RC field duplicates were routinely collected, and
		selected samples were resubmitted for inter-
	M/h ath ar agree pla sizes are	laboratory check assaying.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are appropriate for the grain size of the sampled material.
Quality of	The nature, quality and	Samples were analysed for gold by fire assay with a
Assay data	appropriateness of the assaying and	50 g charge with AAS finish; the assay charge was
and	laboratory procedures used and	fused with the litharge-based flux, cupelled and prill
laboratory	whether the technique is considered	dissolved in aqua regia and gold tenor determined by
tests	partial or total.	flame AAS with a detection limit of 0.01 g/t Au.
		Assays of greater than 100 g/t Au were re-analysed
		with a gravimetric finish.
		The quality of the fire assay and laboratory
		procedures are considered to be appropriate for this
		deposit type. The analytical method is considered

Criteria	JORC Code Explanation	Commentary
		appropriate for this mineralisation style and is of industry standard.
	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.	The fire assay analytical method represents total analysis and is considered appropriate for the style of mineralisation. No hand-held geophysical tools were used.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Monitoring of sample preparation and analysis included industry standard methods comprising routine submission of certified reference standards, coarse and fine blanks, umpire checks, check samples and check assays.
		These procedures have confirmed the reliability and accuracy of the sample preparation and analysis with sufficient confidence for the Mineral Resource estimation. Acceptable levels of accuracy and precision have been established.
	Aachen metallurgical test work	Each metallurgical composite sample received at the Maelgwyn Laboratory was staged crushed by jaw and cone crusher to 100% passing 1.7 mm. The material was then split into 20 kg portions using cone and quartering. Each of the 20 kg samples was split into 1 kg portions using a rotary splitter, for purposes of chemical head assays, grind establishment and bench scale testwork. The Aachen testwork was performed in accordance with South African National Accreditation System (SANAS) industry standards.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	No individual drill hole results are reported in this announcement. Several small phases of independent core-sampling and assaying have been conducted. None of the drill holes in this report are twinned. Primary data were captured on field tough book laptops using LogChief™ software. The software has validation routines and data was then imported onto a secured central SQL database. No adjustments were made to assays.
Location of	Accuracy and quality of surveys used	Most drill collars are surveyed using a differential

Criteria	JORC Code Explanation	Commentary
data points	to locate drill holes (collar and	GPS (±10 mm of accuracy) with most diamond holes
-	down - hole surveys), trenches, mine	and deeper RC holes down-hole surveyed at intervals
	workings and other locations used in	of generally around 30 m using electronic multi-shot
	Mineral Resource estimation.	and gyroscopic equipment.
	Specification of the grid system used.	Coordinates and azimuths are reported in UTM WGS84 Zone 30 North.
	Quality and adequacy of topographic control.	Topographic control was established from aerial
		photography using 12 surveyed control points. A 1 m ground resolution DTM was produced by Sahara
		Mining Services from a UAV survey using a DJI Inspire
		1 UAV at an altitude of 100 m. Topographic control is
		adequate for estimation of Mineral Resources and
		Ore Reserve.
Data	Data spacing for reporting of	Hole spacing varies from around 12.5 by 25 m in
spacing and	Exploration Results.	shallow portions of the southern part of the deposit
distribution		to around 50 by 50 m and broader in the north and at depth.
	Whether the data spacing and	Drill data spacing and distribution are sufficient to
	distribution is sufficient to establish	establish geological and grade continuity for the
	the degree of geological and grade	Mineral Resource and Ore Reserve classifications
	continuity appropriate for the	were applied utilising this information.
	Mineral Resource and Ore Reserve	
	estimation procedure(s) and	Mineralisation tested by generally 50 by 50 m and
	classifications applied.	closer spaced drilling is assigned to the Indicated
		category, with estimates for zones with more closely
		spaced drilling classified as Measured. Estimates for
		panels not informed consistently 50 by 50 m drilling
Ouisustantiaus	14/6	are assigned to the Inferred category.
Orientation of data in	Whether sample compositing has been applied.	Drill hole assays were composited to 2 m down-hole intervals for resource estimation.
relation to	Whether the orientation of sampling	Most resource drilling was inclined at around 45° to
geological	achieves unbiased sampling of	60° to the east, providing un-biased sampling of the
structure	possible structures and the extent to	mineralisation.
	which this is known, considering the	
	deposit type.	
	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.	
Sample	The measures taken to ensure	Diamond core and RC samples were transported
security	sample security.	from the drill site by Cardinal vehicle to a secure
		storage at the Bolgatanga field exploration office.
		Core yard technicians, field technicians and

Criteria	JORC Code Explanation	Commentary
		geologists ensured samples were logged, prepared
		and securely stored until collected for transportation
		to the assay laboratories by personnel employed by
		the assay laboratory.
		All samples submitted for assaying were retained in a
		locked secure shed until collected by laboratory
		personnel for transport to the assay laboratory.
		Retained drill core and RC chips were securely stored
		in the core storage compound, and pulps were
		securely stored in the core shed
		A sign-off process between Cardinal and the
		laboratory truck driver ensured samples and
		paperwork correspond. Samples were then
		transported to the laboratory where they were
		receipted against dispatch documents. The assay
		laboratories are responsible for samples from the
		time of collection from the exploration office.
Audits or	The results of any audits or reviews	The sampling techniques and data collection
reviews	of sampling techniques and data.	processes are of industry standard and have been
		subjected to multiple internal and external reviews.
		The most recent audit of the SQL database was
		completed by Maxwell Geoservices (Perth) and
		found the database to be consistent with industry standards.

Section 2 – Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
Mineral	Type, name/reference number,	The Mining Licence PL9/29 covering Cardinal's
Tenement and	location and ownership including	Namdini Project over an area of approximately 63
Land Status	agreements or material issues with third parties including joint ventures,	km ² is located in the Northeast region of Ghana.
	partnerships, overriding royalties,	The previous holder of the Mining Licence,
	native title interests, historical sites,	Savannah Mining Ghana Limited (Savanah)
	wilderness or national park and	completed an initial Environmental Impact
	environmental settings.	Statement (EIS) and lodged the EIS with the
		Environmental Protection Agency of Ghana.
		A Large - Scale Mining Licence covering the
		Namdini Mining Lease was granted to Cardinal
		Namdini Mining Limited ("Cardinal Namdini"), a
		wholly owned subsidiary of Cardinal, by the
		Minister of Lands and Natural Resources ("the
		Minister") under the Ghanaian Minerals and
		Mining Act 2006 (Act 703) ("the Act") in
		December 2017. The Large-Scale Mining Licence
		originally covered 19km² in the Dakota area of the

Criteria	JORC Code Explanation	Commentary
		Talensi District in the Upper East Region of Ghana.
		In February 2020, the Minister - in accordance with the Act- approved the application to expand the original Mining Lease to the maximum allowable area. The expanded Large-Scale Mining Lease now totals 63km2 and is valid for a renewable term of 15 years from 2020.
		In July 2020 the Namdini Mining Licence was officially granted Sovereign Parliamentary Ratification in Ghana.
Exploration Done by Other Parties Geology	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area. Acknowledgment and appraisal of exploration by other parties. Deposit type, geological setting and style of mineralisation	Aside from Cardinal there has been no recent systematic exploration undertaken on the Namdini Project. The deposit type comprises gold mineralisation within sheared and highly altered rocks containing sulphides; mainly pyrite with minor arsenopyrite. The geological setting is a Paleoproterozoic Greenstone Belt comprising Birimian metavolcanics, volcaniclastics and metasediments located in close proximity to a major 30 km ~N-S regional shear zone with splays. The style of mineralisation is hydrothermal alteration containing disseminated gold-bearing sulphides.
Drill hole information	A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes: • Easting and northing of the drill	No individual drill hole results are reported in this announcement.
	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	

Criteria	JORC Code Explanation	Commentary
	<u>depth</u>	There has been no exclusion of information.
	• <u>Hole length</u>	
	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.	
Data	In reporting Exploration Results,	No individual drill hole results are reported in this
aggregation	weighting averaging techniques,	announcement.
methods	maximum and/or minimum grade	
	truncations (e.g. cutting of high	
	grades) and cut - off grades are	
	usually Material and should be	
	stated.	
	Where aggregated intercepts	
	incorporate short lengths of high	
	grade results and longer lengths of	
	low grade results, the procedure	
	used for such aggregation should be	No individual drill hole results are reported in this
	stated and some typical examples of	announcement.
	such aggregations should be shown	
	in detail. The assumptions used for any	
	reporting of metal equivalent values	
	should be clearly stated.	
Relationship	These relationships are particularly	The resource drilling comprises east-west trending
between	important in the reporting of	traverses of holes inclined towards the east at
mineralisation	exploration results.	generally 45° to 65° approximately perpendicular to
widths and	If the geometry of the mineralisation	
intercept	with respect to the drill hole angle is	
lengths	known, its nature should be	
	reported.	
	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').	
Diagrams	Appropriate maps and sections (with	Appropriate maps with scale are included within
	scales) and tabulations of intercepts	the body of the announcement
	should be included for any	
	significant discovery being reported.	
	These should include, but not be	
	limited to a plan view of drill hole	
	collar locations and appropriate	
Dalamas	sectional views.	No individual drill halo recults are reported in this
Balanced	Where comprehensive reporting of	No individual drill hole results are reported in this

	all Exploration Results is not practical, representative reporting of both low and high grades and/or	announcement.
	widths should be practiced to avoid misleading reporting of Exploration Results.	
Other	Other exploration data, if	Other exploration data collected is not considered
	meaningful and material, should be	material to this document at this stage.
•	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.	Fundamentian deilling will continue to towart against a
	The nature and scale of planned further work (e.g. tests for lateral	Exploration drilling will continue to target projected lateral and depth extensions of the mineralisation
	extensions or depth extensions or	along with infill drilling designed to increase
	large – scale step – out drilling).	confidence in Mineral Resource estimates.
	Diagrams clearly highlighting the	
	areas of possible extensions,	
	including the main geological	
	interpretations and future drilling	
	areas, provided this information is	
	not commercially sensitive.	

Section 3 – Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Cardinal has an SQL central data storage system using Maxwell Geoservices' DataShed TM drill hole management software. Validation checks were conducted using SQL relational database standards. All geological and field data is entered using data-loggers and Maxwell GeoServices' LogChief TM software, that includes lookup tables, fixed formatting, and the Cardinal geological code system. Data is then loaded to the SQL database.
		Cardinal technical personnel validated the database using Micromine software. The DataShed database is then reviewed against the original logging spreadsheets and the assay data checked against the supplied assay certificates.

Criteria	JORC Code Explanation	Commentary
		Independent checks of database validity included checking for internal consistency between, and within database tables and comparison of database entries with original source files. These checks, which included 99% of primary assays, 53% of down-hole surveys, and all collar surveys for the resource drilling showed no significant inconsistencies. The checks were conducted on the database compiled for resource estimation and in addition to checking Cardinal's master database also checked for data-compilation errors.
	Data validation procedures used.	Following importation, the data goes through a series of digital checks for duplication and non-conformity, followed by manual validation by the relevant project geologist who manually checks the collar, survey, assay and geology for errors against the original field data and final paper copies of the assays. The process is documented, including the recording of holes checked, errors found, corrections made and the date of database update.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	Mr. Nicolas Johnson of MPR Geological Consultants Pty Ltd (MPR) visited the Namdini Gold Project in January 2017. Mr Johnson inspected drill core, mineralisation exposures and drilling and sampling activities and had detailed discussions with Cardinal geologists gaining an improved understanding of the geological setting and mineralisation controls, and the resource sampling activities.
		Both Mr. Richard Bray and Mr. Ekow Taylor are full-time employees of Cardinal and undertake regular site visits.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Gold mineralisation is widespread within the metavolcanic, granite and dioritic units which can be interpreted and modelled with a high degree of confidence. There is a sharp mineralisation boundary with the metasediments in the footwall while the hanging wall contact exhibits a more diffuse mineralisation boundary. Higher-grade mineralisation (>0.5 g/t Au) can be traced along structural corridors related to a pervasive NW-SE foliation which has been warped around the more competent granite. There is abundant structural information from oriented core which confirms this interpretation.
	Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation.	The deposit's geological setting has been confidently established from drill hole logging and surface mapping. Geological setting of the Namdini mineralisation has been confidently established.
	The use of geology in guiding and controlling Mineral Resource estimation.	Logging, interpretation and modelling is undertaken by Cardinal's technical staff and specialist structural

Criteria	JORC Code Explanation	Commentary
		consultants Orefind Pty Ltd who produced a three-dimensional model of key rock types, structures and oxidation zones. These wire-frames were used for flagging of the resource composites into Oxide, Transition and Fresh subdomains, and assigning rock types and oxidation zones to the block model for density assignment and partitioning final resources by oxidation type.
		Depth to the interpreted base of complete oxidation ranges averages approximately 10 m. Interpreted depth to Fresh rock averages approximately 18 m.
		Resource modelling included a broad mineralised domain capturing drill hole intercepts of greater than 0.1 g/t Au. Domain interpretation included reference to geological logging, and is consistent with geological understanding. The mineralised domain trends north-northeast over approximately 1.3 km with horizontal widths ranging from around 90 to 400 m and averaging approximately 250 m. The domain dips to the west at around 60° and is interpreted to around 860 m depth, well below the base of drilling.
	The factors affecting continuity both of grade and geology.	The continuity of grade is associated with a pervasive foliation, alteration, sulphides and the spatial distribution of lithologies including the interaction between structure and lithological competency contrasts. A broad zone of anomalous mineralisation is interpreted. Geological setting and mineralisation controls have been established with sufficient confidence for the current estimates.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The mineralised domain trends extend over 1.3 km of strike with an average horizontal width of approximately 250 m. Mineral Resources are constrained within an optimal pit and extend from natural surface to the bit base at around 580 m depth.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation	Mineral Resources were estimated by Multiple Indicator Kriging (MIK) with block support adjustment. The modelling included a broad mineralised domain capturing drill hole intercepts of greater than 0.1 g/t Au, and oxidation domains outlining Oxide, Transition and Fresh zones.
	method was chosen include a description of computer software and parameters used.	Grade continuity characterised by indicator variograms modelled at 14 indicator thresholds. All class grades were derived from class mean grades, with the exception of

Criteria	JORC Code Explanation	Commentary
		upper bin grades, which were generally derived from bin medians, or for the case of Fresh mineralised domain bin
		means inclusive of a 50 g/t Au upper cut. The modelling
		used a three-pass octant-based search strategy giving
		estimates extrapolated to a maximum of 92.5 m from
		composite locations.
		Estimated resources include a variance adjustment to give estimates of recoverable resources for selective mining unit dimensions of 5 m east by 10 m north by 2.5 m in elevation. The variance adjustments were applied using the direct lognormal method. Data viewing, compositing and wire-framing was performed using Micromine TM software. Exploratory data analysis, variogram analysis and modelling, and Mineral
		Resource estimation utilised GS3M [™] software from FSSI
		Consultants (Australia) Pty Ltd.
		The modelling technique is considered appropriate for the
		mineralisation style, and potential mining method.
	The availability of check estimates,	Independent reviews were conducted by Golder Associates
	previous estimates and/or mine	Pty Ltd.
	production records and whether the Mineral Resource estimate takes	
	appropriate account of such data.	
	The assumptions made regarding	There is no assumption made regarding the recovery of
	recovery of by-products.	any by-product.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Block modelling included estimation of sulphur and arsenic. These attributes are not reported in the Mineral Resource and have no bearing on the cut-off grade or economics of the Project.
	In the case of block model interpolation,	Block dimensions used were 12.5 mE by 25 mN by 5 mRL
	the block size in relation to the average sample spacing and the search employed.	and chosen due to this dimension approximating the average resource drill spacing in the areas of tightest resource drilling.
		The modelling includes a three-pass octant search strategy with search ellipsoids aligned with the average domain orientations. Search radii and minimum data requirements are: Search 1: 65 by 65 by 15 m (16 data), Search 2: 97.5 by 97.5 by 22.5 m (16 data), Search 3: 97.5 by 97.5 by 22.5 (8 data).
	Any assumptions behind modelling of selective mining units.	Estimated resources include a variance adjustment to give estimates of recoverable resources for selective mining
		unit dimensions of 5 m east by 10 m north by 2.5 m in
		elevation with grade control sampling on an 8 by 12 by 1.25 m pattern. The variance adjustments were applied
		1.23 iii patterii. The variance aujustinents were appiled

Criteria	JORC Code Explanation	Commentary
		using the direct lognormal method.
	Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates.	The modelling did not include any specific assumptions about correlation between variables. Interpretation of the mineralised domain used for resource modelling included reference to geological logging, and the domain is consistent with geological understanding. A three-dimensional model of key rock types and oxidation zones was used for density assignment and partitioning final resources by oxidation type.
	Discussion of basis for using or not using grade cutting or capping.	Statistical analysis showed the gold population in the mineralised domains to be highly skewed and generally having moderate to high coefficient of variation. All class grades were derived from class mean grades, with the exception of upper bin grades, which were generally derived from bin medians, or for the case of Fresh mineralised domain bin means inclusive of a 50 g/t Au upper cut.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Model validation included visual comparison of model estimates and composite grades, and review of swath plots. Additional checking included comparison of model estimates with independent conditional simulation grade control models produced from the trial GC drill data, which showed close agreement.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The cut-off grade of 0.5 g/t Au used for Mineral Resource reporting reflects Cardinal's interpretation of the potential range of gold prices and process plant recoveries and operating costs for a potential operation.
Mining factors	Assumptions made regarding possible	
or assumptions	mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an	Estimated resources include a variance adjustment to give estimates of recoverable resources for selective mining unit dimensions of 5 m east by 10 m north by 2.5 m in elevation with grade control sampling on an 8 by 12 by 1.25 m pattern. The variance adjustments were applied using the direct lognormal method. The Mineral Resource is constrained within an optimal pit shell based on a long-term gold price of US\$1,950 /oz using factors relevant to location and proposed processing and mining method, comprising conventional drill, blast, load and haul unit operations.

Criteria **JORC Code Explanation** Commentary explanation of the basis of the mining assumptions made. Metallurgical The basis for assumptions or predictions Gold mineralisation is mainly associated with pyrite in all factors or regarding metallurgical amenability. It is three main rock types being metavolcanic, granite and assumptions always necessary as part of the process diorite. Metallurgical testwork has proved that due to the gold being associated with sulphides, the ore is highly of determining reasonable prospects for eventual economic extraction to consider amenable to efficient flotation techniques. Metallurgical testwork has also confirmed that the ore is amenable to potential metallurgical methods, but the assumptions regarding metallurgical conventional milling and flotation, followed by regrinding treatment processes and parameters and cyanide leaching of the flotation concentrate in a made when reporting Mineral Resources carbon-in-leach process. may not always be rigorous. Where this is the case, this should be reported with Metallurgical testwork has been completed indicating that an explanation of the basis of the a non-flotation conventional gold process can be applied to metallurgical assumptions made. the Oxide material (less than 3% of the Ore Reserve as both tonnes and contained gold). Bulk samples have been taken for bench-scale and pilotscale metallurgical testwork for the key areas of the flowsheet. Sample selection and therefore metallurgical testwork has included high-grade, low-grade, ore body variability and sulphur variability for all ore lithologies. Metallurgical testing using industry standard gold techniques has demonstrated an average LOM gold recovery rate of 83%. A conventional grind - flotation - regrind - CIL flowsheet continues to be the preferred process option. No deleterious elements have been identified in the testwork that could affect the saleability or price of the gold doré produced. **Environmental** Assumptions made regarding possible Cardinal's exploration activities are undertaken such that factors or waste and process residue disposal any potential emissions and effects associated with assumptions options. It is always necessary as part of exploration activities, which could include habitat the process of determining reasonable modification and associated visual effects, are kept to a prospects for eventual economic minimum. extraction to consider the potential NEMAS Consult Ltd (NEMAS), of Accra, Ghana, has been environmental impacts of the mining and contracted by Cardinal to undertake the Environmental processing operation. While at this stage Impact Assessment (EIA) study for the Project. NEMAS has the determination of potential undertaken a site reconnaissance visit and completed the environmental impacts, particularly for a Scoping stage of the process in accordance with the greenfields project, may not always be Ghanaian Environmental Protection Agency (EPA) well advanced, the status of early procedures for the EIA.

consideration of these potential

Criteria

JORC Code Explanation

environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.

Commentary

The Environmental Impact Statement (EIS) has recently been completed and filed with the EPA in accordance with Regulations 15(1b) and (1c) of the Environmental Assessment Regulations, 1999 (LI 1652) and Ghana's Environmental Impact Assessment Procedures. The EPA has issued a public notification on the proposed Namdini Gold Mining Project. Further detailed environmental studies are continuing including development of an Environmental Management Plan (EMP).

Cardinal believes that there are unlikely to be any specific environmental issues that would preclude eventual economic extraction.

Bulk density

Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.

Resource data acquisition included routine immersion measurements of bulk densities for samples of diamond core. The bulk density database for the Mineral Resource estimate comprises 11,047 measurements.

Oxidised and porous samples were wax-coated prior to density measurement. Lengths specified for these samples range from 0.01 to 1.4 m and average 0.3 m.

Bulk densities were assigned to the estimate by rock type and weathering zone. The assigned values were derived from the average of the available measurements for each zone. Assigned densities vary from 2.00 for strongly weathered metavolcanic to 2.82 t/m³ for Fresh diorite and metasediments.

Classification

The basis for the classification of the Mineral Resources into varying confidence categories.

Resource model blocks were classified as Measured, Indicated or Inferred on the basis of search pass and three wire-frames outlining more closely drilled portions of the mineralisation.

The classification approach assigns estimates of mineralisation tested by generally 50 by 50 m and closer spaced drilling to the Indicated category, with estimates for more zones with closely spaced drilling classified as Measured. Estimates for panels not informed consistently 50 by 50 m drilling are assigned to the Inferred category. Classification of the area of Grade Control sampling as Measured is warranted by the close agreement between resource and Grade Control estimates.

Criteria	JORC Code Explanation	Commentary
	Whether appropriate account has been taken of all relevant factors (ie., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.	The resource classification accounts for all relevant factors and reflect the competent person's views of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Mineral Resource reviews including comparative modelling have previously been undertaken by independent external consultants.
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	Confidence in the accuracy of the estimates is reflected by their classification as Measured, Indicated and Inferred.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include	The Mineral Resource has been classified as Measured, Indicated and Inferred with the Measured and Indicated Resource considered to be of sufficient confidence to allow mine planning studies to be completed.
	assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The geostatistical techniques applied to estimate the Namdini deposit are deemed appropriate for the anticipated bulk mining method proposed.

Section 4 - Estimation and Reporting of Ore Reserves

Golder Associates Pty Ltd estimated the Ore Reserve in accordance with the JORC Code (2012). The term 'Ore Reserve' is synonymous with the term 'Mineral Reserve' as used by Canadian National Instrument 43-101 'Standards of Disclosure for Mineral Projects' (NI 43-101, 2014) and conforms with CIM (2014). The JORC Code (2012) is defined as an 'acceptable foreign code' under NI 43-101.

Criteria	JORC Code Explanation	Commentary
Mineral	Description of the Mineral Resource	The Mineral Resource model used as input to the mining
Resource	estimate used as a basis for the	model was the MIK model supplied by MPR (February

Criteria	JORC Code Explanation	Commentary			
estimate for	conversion to an Ore Reserve.	· · · · · · · · · · · · · · · · · · ·	rent cell sizes	of 12.5x25x5 n	n (X Y 7)
conversion to	Clear statement as to whether the			des the Ore Res	
Ore Reserves	Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	Namdini Gold I	·	acs the ore nes	erve for the
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Project site in (Ghana on 14 a	and 15 Decemb	
	If no site visits have been undertaken indicate why this is the case.			ructure require	ssible for power, ments.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least	•	-	dy has been co for the TSX was	•
	Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically	based upon a r technically ach viability using i	nine plan and ievable and h nput costs, m	or the Namdini I mine designs t nave been teste netallurgical rec ce, after due all	that are deemed d for economic overy and
	viable, and that material Modifying		Ore	Contained	One de
	Factors have been considered.	Class	tonnes (Mt)	ounces (Moz)	Grade (Au g/t)
		Proved Oxide	1.0	0.1	1.21
		Probable Oxide	3.0	0.1	1.08
		Proved Fresh	6.4	0.3	1.33
		Probable Fresh	131.2	4.6	1.13
		Total Proved and Probable	138.6	5.1	1.13
Cut-off	The basis of the cut-off grade(s) or		·	ccur due to rou DG) was estimat	_
parameters	quality parameters applied.	using a gross lo processing cos- using an estima	ong-term gold ts of \$14.30/t ated 82% me	l price of US\$1, t plus \$1.50/t st	300/oz. Input ockpile reclaim very. A marginal
		process recove i.e. COG = (\$14 (to one signific	.30 + \$1.50)	/ (\$39.67 * 82%) giving 0.5 g/t
		Using this marg	ginal COG, the	e proportion of were defined in e + waste) bloc	the mining

Criteria	JORC Code Explanation	Commentary
	•	exported for open pit optimisation.
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by	The Namdini Gold Project will be mined by medium scale conventional open pit mining equipment. The mining process will include drill and blast, and conventional load and haul operations. There is a minimal amount of free-dig material with most material requiring drilling and blasting.
	optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as prestrip, access, etc.	Mining will be carried out using cut-backs with five identified Phases being incorporated into the LOM Final Pit. Oxide ore will be stockpiled temporarily and treated separately within the process plant as a batch process at the end of life of mine. Waste rock will be dumped separately with the waste rock piles on the western side of the pit.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and preproduction drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used.	The pit slopes have been assessed from a detailed geotechnical investigation by Golder with the Oxide (upper material) requiring an estimated overall slope angle of 40°, Slope angles in the fresh rock have been determined in accordance to the lithology type, and zone within the pit in accordance with the prescribed geotechnical parameters.
	The mining anation factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods.	Grade control drilling will precede ore identification and ore mark-out on a bench basis. The mining model has assumed that sufficient account for estimated ore loss and dilution was incorporated into the Mineral Resource model through the resource estimation technique (MIK with post-processing of variance adjustment and change of support). Moderate bulk mining (minimal selectivity) will be used with 400 t excavators loading Cat 785 (134 t) class rigid body haul trucks. The ore will be mined in a series of three flitches within a 10 m bench and the waste rock will be mined in 10 m benches where practicable. A minimum mining width of 80 m was assumed. Inferred Mineral Resources have been considered as waste material. There is minimal Inferred Resource material within the Final Pit design. Mining infrastructure requirements will be provided by the selected mining contractor with the mining performed on an outsourced basis.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in	Metallurgical process recoveries have been defined on various samples for Oxide and Fresh ore. Metallurgical testwork was carried out by ALS Laboratories Perth, Australia and Maelgwyn Mineral Service Laboratory, Johannesburg, South Africa. An average estimated 90% for

JORC Code Explanation Criteria Commentary the Oxide ore and 82% recovery for the Fresh ore was nature. The nature, amount and applied in the LOM plan and the pit optimisation process. representativeness of metallurgical test Testwork is ongoing. work undertaken, the nature of the metallurgical domaining applied and the The process plant will be a conventional crush, grind, corresponding metallurgical recovery flotation, regrind (of flotation concentrate), Carbon-In-Leach with elution circuit, electrowinning and gold smelting factors applied. Any assumptions or allowances made for to recover the gold from the loaded carbon to produce deleterious elements. doré. The existence of any bulk sample or pilot Aachen shear reactor technology was tested at their scale test work and the degree to which laboratory testing facility in South Africa. These results such samples are considered have been incorporated into the recovery figures used in representative of the orebody as a the updated Ore Reserve estimates. whole. For minerals that are defined by a The regrind size has been selected as a P_{90} of 9 μ m. specification, has the ore reserve estimation been based on the No deleterious elements have been identified in the appropriate mineralogy to meet the testwork that could affect the saleability or price of the specifications? gold doré produced. Testwork carried out to date indicates that the Namdini Gold Project can use a conventional gold recovery process plant with fine regrind circuit and existing proven process. Namdini will produce a readily saleable gold doré which will be exported for refining. **Environmental** The status of studies of potential NEMAS on behalf of Cardinal submitted its Environmental Impact Statement (EIS) report in October 2018 to the environmental impacts of the mining and processing operation. Details of waste Environmental Protection Agency (EPA) for approval. The rock characterisation and the report covers all regulatory requirements for consideration of potential sites, status of environmental impacts, mitigation plans and monitoring design options considered and, where programmes. The EPA has issued a public notification on the proposed Namdini Gold Mining Project and the applicable, the status of approvals for process residue storage and waste approval process is nearing completion. A provisional dumps should be reported. Environmental Management Plan (EMP) has also been developed for the Project The existence of appropriate Lycopodium completed FS level study of the infrastructure Infrastructure infrastructure: availability of land for requirements including power, water, road access, and plant development, power, water, waste management. transportation (particularly for bulk The site will be accessed by a new ~25 km gravel road commodities), labour, accommodation; linking the site to the existing national road N10 between or the ease with which the infrastructure Pwalagu and Shia. The N10 provides good access to the

Costs

The derivation of, or assumptions made,

can be provided, or accessed.

Costs were provided by Lycopodium to a FS level. Capital

north of Pwalagu.

major cities and ports in southern Ghana and no upgrades of the N10 will be undertaken. The site access road will follow a similar route to the proposed new power line

Criteria JORC Code Explanation Commentary	
regarding projected capital costs in the and operating costs were estimated for t	he proposed
study. 9.5 Mtpa processing operation.	
The methodology used to estimate Operating costs were compiled from quo	tations, database
operating costs. and a variety of sources and compared a	gainst existing and
Allowances made for the content of planned gold mining operations elsewhere	re in Ghana.
deleterious elements.	
The derivation of assumptions made of Mining costs built up from first principles	by Golder using
metal or commodity price(s), for the vendor quotations and current databases	to derive
principal minerals and co- products. contractor equivalent rates. These rates	were to previous
The source of exchange rates used in the fully quoted submissions from the two la study. fully quoted submissions from the two la	
Derivation of transportation charges. operations in Africa. The estimated base	
The basis for forecasting or source of an incremental cost increase with depth	
treatment and refining charges, increased haulage costs. penalties for failure to meet	
specification, etc. All costs were determined on a US dollar	(US\$) basis.
The allowances made for royalties	, ,
payable, both Government and private.	
Revenue The derivation of, or assumptions made An allowance for 5% royalties was used in	n the pit
factors regarding revenue factors including head optimisations and financial modelling ass	ociated with the
grade, metal or commodity price(s) LOM planning assessment. An additional	\$1.10 per ounce
exchange rates, transportation and of doré bar has been allowed for as TC/R	C costs.
treatment charges, penalties, net Gold will be the single product commodit	y from the
smelter returns, etc. Namdini Gold Project with the gold produ	act being exported
The derivation of assumptions made of as doré.	
metal or commodity price(s), for the	
principal metals, minerals and co-	
products.	
Market The demand, supply and stock situation Gold is a readily traded commodity and r	•
assessment for the particular commodity, study has been carried out. Advice regard	
consumption trends and factors likely to looking gold price was provided by Cardin	nal Resources.
affect supply and demand into the	
future.	
A customer and competitor analysis No projected or oversupply of gold is env	isaged which
along with the identification of likely could affect the product market pricing.	
market windows for the product.	umand to be
Price and volume forecasts and the basis The long-term price of gold has been assing for these forecasts. US\$1,350 for the financial model evaluat	
For industrial minerals the customer	ion metrics
specification, testing and acceptance The gold will be sold as doré.	
requirements prior to a supply contract.	
Economic The inputs to the economic analysis to A detailed economic evaluation as part o	f the FS indicates
produce the net present value (NPV) in that the Project is economically viable us	
the study, the source and confidence of of 5%. The Project's sensitivity has been to	-
these economic inputs including value drivers of gold price, discount rate,	
estimated inflation, discount rate, etc. process recovery and head grade.	
NPV ranges and sensitivity to variations	
in the significant assumptions and	

Criteria	JORC Code Explanation	Commentary
-GITTELING	inputs.	
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	A feasibility level social study and relocation action plan is currently being carried out by NEMAS and MKM Social Limited respectively, including active engagement of local and state regulatory bodies.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements.	There are no known current impediments to the progression of the Project or foreseen encumbrances to the granting of a licence to operate. Continued discussions with the regulatory authorities and submission of the mine plan and closure plan to the Ghanaian authorities are continuing as part of the Feasibility study.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	Under the supervision of Ghana Government Ministries, EPA and The Minerals Commission, Cardinal has conducted public hearings for the Namdini Gold project in relation to the current and future support of the Namdini Project proceeding into mine development. There are no objections or obstructions to the Namdini Project proceeding.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	Probable and Proved Ore Reserves are declared for the Namdini Gold Project. Measured and Indicated Resources within the Final Pit design that have been scheduled for processing have been converted to Ore Reserves after application of the Modifying Factors.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The Feasibility and Prefeasibility Study outputs have been the subject of internal review by the contributing parties and external review by other consultants. No fatal flaws were identified by external consultants
Discussion of relative accuracy/confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify	Ore Reserves have been classified as Proved by conversion of Measured Resource material above the 0.5 g/t Au cutoff grade within the Final Pit design. While Probable Ore Reserves have been estimated by the conversion of Indicated Resource material above the 0.5 g/t Au cut-off grade within the Final Pit design.

Criteria JORC Code Explanation

the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.

The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.

Documentation should include assumptions made and the procedures used.

Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.

It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.

Commentary

The Ore Reserve was estimated from the Mineral Resource after consideration of the level of confidence in the Mineral Resource and taking account of material and relevant modifying factors including mining, processing, infrastructure, environmental, legal, social and commercial factors. The Probable Ore Reserve estimate is based on Indicated Mineral Resources. No Inferred Mineral Resource was included in the Ore Reserve. The Ore Reserve represents the economically mineable part of the Measured and Indicated Mineral Resources.

The key to the accuracy of the Ore Reserve is the underpinning Mineral Resource that is considered to be of sufficient confidence to allow mine planning studies to be completed.

The proposed mine plan is technically achievable. All technical proposals made for the operational phase involve the application of conventional process that is widely utilised in the gold industry.

The key factors that are likely to affect the accuracy and confidence in the Ore Reserves are:

- Changes in gold prices and sales agreements
- Accuracy of the underlying Resource Block Models
- Changes in metallurgical recovery
- Mining loss and dilution

ANNUAL INFORMATION FORM (III)





ANNUAL INFORMATION FORM

For the year ended June 30, 2020

Dated August 31, 2020

Table of Contents

1 - INTRO	ODUCTORY NOTES	1
1.1	Financial Statements	1
1.2	Cautionary Statement Regarding Forward-Looking Information	1
1.3	Technical Information	3
1.4	Mineral Resource Estimates	4
1.5	JORC Code	4
1.6	Cautionary note to US Shareholders Concerning Estimates of Mineral Reserves and Mineral F	Resources5
1.7	Glossary	
2 - CORP	PORATE STRUCTURE	12
3 - DESC	RIPTION OF THE BUSINESS	12
3.1	The Corporation	
3.2	Employees	
3.3	Three Year History	
/ TUE (GHANAIAN MINING INDUSTRY	21
4 - THE C	Mining in Ghana	
4.1 (a)	Ghana	
	Mining Rights	
(b)		
(c)	Ghanaian Royalties and Taxes Environmental and Other Laws and Regulations	
(d)	Environmental and Other Laws and Regulations	24
5 - NAM	DINI PROJECT FEASIBILITY STUDY TECHNICAL REPORT SUMMARY	
5.1	Introduction	
5.2	FS parameters and material assumptions	
5.3	Mining Licence	29
5.4	Namdini Mineral Resources	30
5.5	Geology	32
5.6	Drilling techniques	
5.7	Sample Preparation and Assaying	33
5.8	Estimation methodology	34
5.9	Classification	34
5.10	Mining	35
5.11	Mining factors	35
5.12	Geotechnical parameters	36
5.13	Pit optimizations	37
5.14	Mine scheduling	37
5.15	Mine design criteria	38
5.16	Mining cost	
5.17	Cut-off grade	
5.18	Ore Reserve	
5.19	Mineral processing and metallurgical testing	
(a)	Introduction	
(b)	Results	
(c)	Mineralogy:	
(d)	Comminution:	
(e)	Flotation:	
(f)	Leach:	
5.20	Expected Metallurgical Recovery	
5.21	Process Plant	
5.22	Flowsheet	
	Infrastructure	

5.24	Hydrogeology and Hydrology	47
5.25	Water and Air services	48
5.26	Tailings Storage Facilities	48
(a)	Tailings testing	48
(b)	Tailings Storage Facility design	49
5.27	Operating costs	
5.28	Capital costs	
5.29	Environmental	51
5.30	Social	52
5.31	Economic evaluation	
5.32	Namdini Gold Project Permits and Approval Status	54
5.33	Resettlement Action Plan	55
5.34	Front End Engineering and Design	55
5.35	Namdini Project Drilling (Sterilisation and Infrastructure Geotechnical Drilling)	56
5.36	Project Development Timeline	58
6 - OTH	ER PROPERTIES AND ASSETS	59
6.1	Bolgatanga Project	
6.2	Ndongo Licence Area	
6.3	Kungongo Licence Area	
6.4	Bongo Licence Area	
6.5	Subranum Project	
	,	
7 - CARE	DINAL'S OPERATIONS IN GHANA	64
8 - RISK	FACTORS	66
8.1	Risks Related to the Industry	
(a)	COVID-19 Conditions	
(b)	Mineral Exploration, Development and Operating Risks	
(c)	Estimation of Mineralization, Mineral Resources and Ore Reserves	
(d)	Environmental, Health and Safety Regulations of the Resource Industry	
(e)	Competitive Conditions	
8.2	Risks Related to the Business	
(a)	Take-Over Bid Risks	
(b)	Operational Risks	
(c)	Liquidity and Financing Risk	
(d)	Funding Risk	
(e)	Exploration Costs	
(f)	Uninsurable Risks	
	Conflicts of Interest	
(g) 8.3	Risks Related to Operating in Ghana	
o.s (a)	Environmental Bonds	
	Risks of Operating in Ghana	
(b)		
(c)	Government Policy Changes	
(d)	Ownership Risks	
(e)	Permitting and Licensing Risks	
(f)	Artisanal Miners	
(g)	Difficulty in Enforcement of Judgements	
8.4	General Risks	
(a)	Market Conditions	
(b)	Stress in the Global Economy	
(c)	Current Global Financial Condition	
(d)	Exchange Rate and Currency Risks	75



(e)	Commodity Prices	75
<i>(f)</i>	Reliance on Key Personnel	75
(g)	Dilution Risk	76
9 - DIVI	DENDS	76
10 - DES	SCRIPTION OF CAPITAL STRUCTURE	76
10.1	Ordinary Shares	
10.2	Unlisted Options	
11 - MA	ARKET FOR SECURITIES	77
11.1	Trading Price and Volume	77
(a)	Ordinary Shares	77
(b)	Prior Sales of Unlisted Securities	78
12 - DIF	RECTORS AND OFFICERS	78
12.1	Kevin Tomlinson – Director, Non-Executive Chairman	80
12.2	Arthur (Archie) Koimtsidis – Co-founder, Managing Director	81
12.3	Malik Easah – Co-founder, Executive Director	81
12.4	Michele Muscillo – Non-Executive Director	81
12.5	Dr Kenneth G. Thomas – Non-Executive Director	82
12.6	Trevor Schultz – Non-Executive Director	82
(a)	Jon Grygorcewicz – CFO	82
(b)	David (Dave) Anthony – COO	83
(c)	Sarah Shipway – Company Secretary	83
12.7	Cease Trade Orders, Bankruptcies, Penalties or Sanctions	83
12.8	Conflicts of Interest	85
13 - LEG	GAL PROCEEDINGS AND REGULATORY ACTIONS	85
14 - INT	EREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS	85
15 - TR/	ANSFER AGENT AND REGISTRAR	86
16 111	DIT COMMITTEE AND RELATED INFORMATION	96
16.1	The Audit and Risk Committee's Charter	
16.2	Composition of the Audit and Risk Committee	
16.3	Reliance on Certain Exemptions	
16.4	Audit Committee Oversight	
16.5	Pre-Approval Policies and Procedures	
16.6	External Auditor Service Fees.	
17 - MA	ATERIAL CONTRACTS	89
18 - INT	TERESTS OF EXPERTS	89
19 - AD	DITIONAL INFORMATION	89
20 - AP	PENDIX A - AUDIT AND RISK COMMITTEE CHARTER	90
	INEXURE A – DEFINITION OF INDEPENDENCE	
0	Material relationships	96
0	Examples of interests, positions, associations or relationships affecting independence	97



TABLES

Table 1: Gold Price Assumptions	29
Table 2: Measured and Indicated Mineral Resources at 0.5 g/t Au cut-off as at June 30, 2019	31
Table 3: Namdini Inferred Mineral Resource estimate at 0.5 g/t Au cut-off 15 as at June 30, 201	9 .31
Table 4: Key estimated production results	39
Table 5: LOM Ore Reserve estimate as at June 30, 2019	41
Table 6: Capital estimate summary (US\$, 1Q19, +15/-5%)	50
Table 7 – Namdini Project Feasibility Study Outcomes	53
FIGURES	
Figure 1: Cardinal Resource's Tenements in Ghana	13
Figure 2: Location of 63 km² Namdini Mining Lease	30
Figure 3: Mining vertical advance rate	38
Figure 4: Namdini Project Showing Completed Sterilisation Drill Locations	57
Figure 5: Namdini Project Geotechnical Drill Locations on Relocated TSF Area	58
Figure 6: Datoko Mining Lease and Bolgatanga Project Tenements	60
Figure 7: Regional Geology with Subranum Project Tenement straddling Bibiani Shear Zone	63



1 - INTRODUCTORY NOTES

In this Annual Information Form (the "AIF"), Cardinal Resources Limited is referred to as "Cardinal" or the "Corporation". Unless otherwise indicated, all information contained herein is current as at August 31, 2020. Unless otherwise indicated, in this AIF all references to (i) "\$" or "AUD" are to Australian dollars; (ii) "US\$" and "USD" are to United States dollars; (iii) "C\$" or "CAD" are to Canadian dollars; and (iv) "GHS" are to Ghanaian cedi.

The Canadian dollar rates of exchange on August 31, 2020 were:

United States dollar ⁽¹⁾	Australian dollar ⁽¹⁾
C\$1. 00=\$0.76	C\$1. 00 = \$1.04

Note:

(1) Bank of Canada average exchange rate for August 31, 2020, as reported on the Bank of Canada website.

1.1 Financial Statements

This AIF should be read in conjunction with the Corporation's consolidated financial statements and management's discussion and analysis for the 12 months ended June 30, 2020. The consolidated financial statements and management's discussion and analysis are available on the Corporation's website at www.cardinalresources.com.au and under the Corporation's profile on the SEDAR website at www.sedar.com. All financial statements are prepared in accordance with International Financial Reporting Standards and are reported in Australian dollars.

1.2 Cautionary Statement Regarding Forward-Looking Information

Certain statements contained in this AIF constitute forward-looking information under applicable Canadian securities laws. These statements relate to future events or future performance. All statements other than statements of historical fact may be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "plan", "continue", "objectives", "strategies", "estimate", "expect", "may", "will", "project", "predict", "potential", "targeting", "intend", "could", "might", "should", "believe" and similar expressions. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. The Corporation believes the expectations reflected in those forward-looking statements are reasonable but no assurance can be given that these expectations will prove to be correct and such forward-looking statements included in its AIF should not be unduly relied upon.

In particular, this AIF contains forward-looking statements pertaining to the following:

- Mineral Resource and Ore Reserve estimates;
- targeting additional Mineral Resources and or Ore Reserves and expansion of deposits;
- the Corporation's expectations, strategies and plans for the Ghanaian Projects, including the Corporation's planned exploration activities;



- the results of future exploration and drilling and estimated completion dates for certain milestones;
- successfully adding or upgrading Mineral Resources and or Ore Reserves and successfully developing new deposits;
- the timing, receipt and maintenance of approvals, licences and permits from the Ghanaian government and from any other applicable government, regulator or administrative body;
- future financial or operating performance and condition of the Corporation and its business, operations and properties
- possible market takeover offers; and
- any other statement that may predict, forecast, indicate or imply future plans, intentions, levels of activity, results, performance or achievements.

The actual results could differ materially from those anticipated in these forward-looking statements or information as a result of the risk factors set forth below and elsewhere in this AIF:

- mineral exploration, development and operating risks;
- estimation of mineralization, Mineral Resources and Ore Reserves;
- environmental, health and safety regulations of the resource industry;
- competitive conditions;
- COVID-19 conditions;
- operational risks;
- liquidity and financing risks;
- funding risk;
- exploration costs;
- uninsurable risks;
- conflicts of interest;
- environmental bonds;
- risks of operating in Ghana;
- government policy changes;
- ownership risks;
- permitting and licencing risks;
- artisanal miners;
- difficulty in enforcement of judgments;
- market conditions;
- stress in the global economy;
- current global financial condition;
- exchange rate and currency risks;
- commodity prices;
- reliance on key personnel;
- dilution risk;
- other factors discussed under "Risk Factors"; and
- other risks and uncertainties described elsewhere in this AIF.

Although the forward-looking statements contained in this AIF are based upon assumptions which the Corporation believes to be reasonable, there can be no assurance that actual results will be consistent with these forward-looking statements. With respect to forward-looking statements contained in this AIF, the



Corporation has made assumptions regarding: future commodity prices and royalty regimes; availability of skilled labour; timing and amount of capital expenditures; future currency exchange and interest rates; the impact of increasing competition; general conditions in economic and financial markets; availability of drilling and related equipment; effects of regulation by governmental agencies; royalty rates; future tax rates; future operating costs; availability of future sources of funding; ability to obtain financing and assumptions underlying estimates related to adjusted funds from operations. The Corporation has included the above summary of assumptions and risks related to forward-looking information provided in this AIF in order to provide readers with a more complete perspective on the Corporation's future operations and such information may not be appropriate for other purposes. The Corporation's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what benefits the Corporation will derive therefrom. These forward-looking statements are made as of the date of this AIF and the Corporation 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, other than as required by applicable securities laws.

1.3 Technical Information

Except where indicated, the disclosure contained in this AIF that is of an economic, scientific or technical nature has been summarized or extracted from the technical report titled "Namdini Gold Project Feasibility Study NI 43-101 Technical Report Ghana, West Africa", dated effective October 28, 2019 (the "Technical Report"). The Technical Report was prepared by (i) Mr. Glenn Turnbull, Principal Mining Engineer of Golder Associates Pty Ltd ("Golder"); (ii) Mr. Nicolas Johnson, Consulting Geologist with MPR Geological Consultants Pty Ltd ("MPR Geological"); and (iii) Mr. Daryl Evans, Consulting Metallurgist with Independent Metallurgical Operations Pty Ltd, (iv) Mr. David Gordon, who is a Fellow of the AusIMM and a full-time employee of Lycopodium Minerals Pty Ltd ("Lycopodium"). Each of Mr. Glenn Turnbull, Mr. Nicolas Johnson, Mr. Daryl Evans and Mr. David Gordon is an independent "qualified person" as such term is defined in NI 43-101 and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he is undertaking to qualify as a "Competent Person" as such term is defined in the JORC Code 12th Edition (the "JORC Code"). Each of Mr. Glenn Turnbull, Mr. Nicolas Johnson, Mr. Daryl Evans and Mr. David Gordon consents to the inclusion in this AIF of such scientific and technical information in the form and context in which it appears and confirms that such information is based on and fairly represents the Technical Report. Readers should consult the Technical Report to obtain further particulars regarding the Namdini Gold Project. The Technical Report, which constitutes the current technical report for the Namdini Gold Project, was filed on SEDAR on November 27, 2019 and, other than the extract of the Executive Summary thereof, which is included in this AIF, is incorporated by reference in its entirety in this AIF.

The Technical Report is subject to certain assumptions, qualifications and procedures described therein. Reference should be made to the full text of the Technical Report, which has been filed with Canadian securities regulatory authorities pursuant to NI 43-101 and is available for review under the Corporation's profile on SEDAR at www.sedar.com.

The scientific and technical information in this AIF that relates to exploration results at the Bolgatanga Project and Subranum Project is based on information prepared by **Mr. Paul Abbott**, a full-time employee of the Corporation, who is a Member of the Geological Society of South Africa. Mr. Abbott has sufficient experience which is relevant to the style of mineralization 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 scientific and technical information in this AIF that relates to the Namdini Gold Project and relates to exploration results at the Bolgatanga Project and Subranum 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 mineralization 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 Corporation.

1.4 Mineral Resource Estimates

The Mineral Resources and Ore Reserves for the Corporation's properties have been estimated in accordance with the JORC Code and reconciled with the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards for Mineral Resources and Mineral Reserves adopted by the CIM Council on May 10, 2014 (the "CIM Definition Standards").

1.5 JORC Code

The following definitions are reproduced from the JORC Code:

"Mineral Resource" means a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

"Inferred Mineral Resource" means that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource (as defined herein) and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

"Indicated Mineral Resource" means that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors (as defined herein) as described below in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation where data and samples are gathered. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource (as defined herein) and may only be converted to a Probable Ore Reserve (as defined herein).



"Measured Mineral Resource" means that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve (as defined herein) or to a Probable Ore Reserve.

"Ore Reserve" means the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Ore Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

"Probable Ore Reserve" means the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

"Proved Ore Reserve" means the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

For the purposes of the JORC Code and CIM Definition Standards, "**Modifying Factors**" are considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

There can be no assurance that those portions of such Mineral Resources will ultimately be converted into Ore Reserves. Mineral Resources are not Ore Reserves and do not have demonstrated economic viability.

1.6 Cautionary note to US Shareholders Concerning Estimates of Mineral Reserves and Mineral Resources

This AIF uses the terms "Measured Mineral Resource", "Indicated Mineral Resource" and "Inferred Mineral Resource". United States Shareholders are advised that while such terms are recognized and required by Canadian and Australian standards or regulations, the United States Securities Exchange Commission (the "SEC") does not recognize them. In particular, and without limiting the generality of this cautionary note, the term "Mineral Resource" does not equate to the term "Ore Reserve". This AIF also uses the terms "Probable Ore Reserves" and "Proved Ore Reserves" as such terms are used under NI 43-101, CIM Definition Standards and the JORC Code, which standards differ from the standards that apply under SEC Industry Guide 7. Under United States standards, mineralization may not be classified as an "Ore Reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the Ore Reserve determination is made. As such, certain information contained in this AIF concerning descriptions of mineralization and Mineral Resources and Ore Reserves under NI 43-101, CIM Definition



Standards and the JORC Code are not comparable to disclosures made by United States reporting companies. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of a Probable Ore Reserve, Measured Mineral Resource, Indicated Mineral Resource or an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian and Australian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies. United States Shareholders are cautioned not to assume that all or any part of Measured, Indicated or Inferred Mineral Resources will ever be converted into Ore Reserves. United States Shareholders are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists, or is economically or legally mineable.

1.7 Glossary

In this AIF, unless otherwise indicated or the context otherwise requires, the following terms shall have the meaning set forth below:

"2006 Mining Act" means the Minerals and Mining Act 2006 (Act 703) (Ghana);

"Aachen TM" means Maelgwyn shear reactor technology;

"affiliate" has the meaning ascribed thereto in National Instrument 62-104 — Take-Over Bids and Issuer Bids;

"AIF" means this Annual Information Form;

"Amended Proposal" has the meaning ascribed thereto in the section "Directors and Officers – Cease Trade Orders, Bankruptcies, Penalties or Sanctions" of this AIF;

"ASX" means ASX Limited (ABN 98 008 624 691) or the Australian Securities Exchange operated by ASX Limited (as the context requires);

"ASX Listing Rules" means the official listing rules of the ASX, as amended from time to time;

"Au" means gold;

"Audit and Risk Committee" means the audit and risk committee of the Board;

"Besra" means Besra Gold Inc.;

"Besra Cease Trade Order" has the meaning ascribed thereto in the section "Directors and Officers – Cease Trade Orders, Bankruptcies, Penalties or Sanctions" of this AIF;

"BIA" means the Bankruptcy and Insolvency Act, R.S.C. 1985, c. B-3;

"Bid Implementation Letter" has the meaning ascribed thereto in the section "Three Year History" of this AIF;

"Bidder's Statement" has the meaning ascribed thereto in the section "Three Year History" of this AIF;

"Board" means the board of directors of the Corporation;

"Bolgatanga Project" or "Bolgatanga" means, collectively, the Ndongo Licence Area, the Kungongo Licence Area and the Bongo Licence Area in the upper east region of Ghana;

"Bongo Licence Area" means the combined, Bongo Prospecting Licence (PL9/29) located in the Bongo area,



Kandiga-Atibisi Prospecting Licence (PL9/38) located in the Kandiga-Atibabisi area, and Zoko-Tarongo Prospecting Licence (PL9/37) located in the Zoko-Tarongo area, all in the Upper East region of Ghana issued by the Government of Ghana through the Minister responsible for Lands and Natural Resources of Ghana (the **Minister"**) and of which an application for renewal has been granted by the Minerals Commission of Ghana. The Bongo Licence Area covers a total land size of 465km².

"Cardinal" or the "Corporation" means Cardinal Resources Limited, a corporation incorporated under the laws of Australia, and unless otherwise stated or the context otherwise requires, references to the Corporation mean the Corporation and its current and proposed subsidiaries on a consolidated basis;

"Cardinal Subranum" means Cardinal Resources Subranum Limited, a subsidiary of the Corporation;

"CCAA" means the Companies' Creditors Arrangement Act, R.S.C. 1985, c. C-36;

"CEO" means Chief Executive Officer

"CFO" means Chief Financial Officer;

"Charter" means the charter of the Audit and Risk Committee;

"CIL" means carbon-in-leach;

"CIM Definition Standards" means the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves;

"Class C Performance Shares" means the Class C performance shares of the Corporation, each of which is convertible into 100,000 Ordinary Shares;

"cm" means centimeter;

"COG" means cut-off grade (in g/t Au);

"Computershare (Australia)" means Computershare Investor Services Pty Ltd.;

"Computershare (Canada)" means Computershare Investor Services Inc.;

"COO" means Chief Operating Officer;

"Corporations Act" means the *Corporations Act, 2001* (Commonwealth of Australia), as amended, including the regulations promulgated thereunder;

"Credit Facility" means the credit agreement entered into on August 22, 2018 by the Corporation (together with its wholly owned subsidiaries) with Sprott Private Resource Lending (Collector), LP with respect to a US\$25 million senior secured credit facility in favour of the Corporation, as borrower;

"Court" means the Superior Court of the Province of Quebec;

"Deed" has the meaning ascribed thereto in the section "Three Year History" of this AIF;

"DCF" means discounted cash flow;



"Director" means a director of the Corporation;

"EIA" means Environmental Impact Assessment;

"EIS" means Environmental Impact Statement;

"EPA" means the Ghana Environmental Protection Agency;

"FS" means Feasibility Study;

"Geosystems" means Geosystems Consulting Limited;

"g" means grams;

"g/t" means grams per tonne;

"Ghanaian Projects" means the Namdini Gold Project, the Bolgatanga Project and the Subranum Project;

"Ghanaian Subsidiaries" means, collectively, Cardinal Subranum, Cardinal Mining Services Limited, Cardinal Resources Ghana Limited and Cardinal Namdini Mining Limited;

"GIIF" means the Ghana Infrastructure Investment Fund, a Ghana Government owned infrastructure investment vehicle;

"Golder" means Golder Associates Pty Ltd.;

"HIGmill" means the Outotec high intensity grinding mill;

"IFRS" means International Financial Reporting Standards as adopted by the International Accounting Standards Board;

"JK Drop Weight" means the Julius Kruttschnitt drop weight test;

"JORC" means the Australasian Joint Ore Reserves Committee;

"JORC Code" means the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves;

"kg" means kilogram;

"km" means kilometre;

"km²" means square kilometre;

"Kungongo Prospect" or "Kungongo Prospect Licencing" means the property located in the Upper East region of the town of Bolgatanga covered by Prospecting Licence number RL9/28 issued by the Government of Ghana through the Minister. The Kungongo Prospect Licence Area covers a land size of 122.4km²;

"kV" means kilovolt;

"Listed Option" means a listed option (warrant) to purchase Ordinary Shares;

"LOM" means life of mine;

"Lycopodium" means Lycopodium Minerals Pty Ltd;



"m" means metre;

"Maudore" means Maudore Minerals Ltd.;

"Meeting" has the meaning ascribed thereto in the section "Directors and Officers – Cease Trade Orders, Bankruptcies, Penalties or Sanctions" of this AIF;

"MIK" means multiple indicator kriging;

"Milestone Options" means unlisted options issued under the Notice of General Meeting dated March 5, 2019.

"Minerals Commission" means the Minerals Commission of the Government of Ghana;

"Minister" means the Minster responsible for Lands and Natural Resources of Ghana;

"Mining Licence" means a license granted by the Government agency in charge of mineral resources to an entity pursuant to which such entity is authorized to exclusively develop a mine and to conduct Mining Operations in connection with the Property as specified in such Mining License;

"mm" means millimetre;

"MPR Geological" means MPR Geological Consultants Pty Ltd.;

"Mt" means million tonnes;

"Mtpa" means million tonnes a year;

"Namdini Gold Project" or "Namdini" means the large-scale mining licence covering the Namdini mining lease.

The large-scale mining licence covers 63km² in the Datoko area of the Talensi District Assembly in the Upper East region of Ghana;

"NAPP" means net acid producing potential;

"Ndongo East" means the property on the Ndongo Licence Area located approximately 15km North of the Corporation's flagship Namdini Gold Project that had 6.5Moz indicated Mineral Resource;

"Ndongo Licence Area" means the property covered by the combined Nangodi Prospecting Licence number RL9/13, Ndongo Prospecting Licence number RL9/22 and Yameriga Prospecting Licence number RL9/19 located in the Upper East region of the town of Bolgatanga issued by the Government of Ghana through the Minister. The Ndongo Licence Area covers a total land size of 278.78km²;

"NEMAS" means NEMAS Consult Ltd;

"NI 43-101" means National Instrument 43-101 – *Standards of Disclosure for Mineral Projects*, as amended from time to time;

"NI 52-110" means National Instrument 52-110 – Audit Committees, as amended from time to time;

"Nordgold" means Nord Gold SE;

"Nordgold Bid" has the meaning ascribed thereto in the section "Three Year History" of this AIF;



"Notice of Intention" has the meaning ascribed thereto in the section "Directors and Officers – Cease Trade Orders, Bankruptcies, Penalties or Sanctions" of this AIF;

"October 2016 Order" has the meaning ascribed thereto in the section "Directors and Officers – Cease Trade Orders, Bankruptcies, Penalties or Sanctions" of this AIF;

"OMC" means Orway Mineral Consultants;

"Ordinary Shares" means ordinary shares in the capital of the Corporation;

"Orefind" means Orefind Pty Ltd;

"oz" means Troy ounces (31.1035 g);

"PEA" means preliminary economic assessment;

"PFS" means Preliminary Feasibility Study;

"Proposal" has the meaning ascribed thereto in the section "Directors and Officers – Cease Trade Orders, Bankruptcies, Penalties or Sanctions" of this AIF;

"Prospecting Licence" has the meaning ascribed thereto in the section "The Ghanaian Mining Industry" of this AIF;

"QAQC" means assurance control and quality control;

"Revised Shandong Offer" has the meaning ascribed thereto in the section "Three Year History" of this AIF;

"RAP" means the Resettlement Action Plan;

"Reconnaissance Licence" has the meaning ascribed thereto in the section "The Ghanaian Mining Industry" of this AIF;

"RC" means reverse circulation;

"Remuneration and Nomination Committee" means the remuneration and nomination committee of the Board;

"Ridge" means Ridge Resources Limited;

"ROM" means run of mine;

"RPEEE" reasonable prospect of eventual economic extraction;

"SABC" means SAG mill followed by closed circuit ball mill and recycle pebble crushing;

"SAG" means semi-autogenous grinding (mill);

"SEC" means the United States Securities and Exchange Commission;

"Shareholders" means the holders of Ordinary Shares of the Corporation;

"Shandong Gold" means Shandong Gold Mining (HongKong) Co, Ltd (a subsidiary of Shandong Gold Mining Co, Ltd.);



"sq km" means square kilometre;

"Subin Kasu Prospecting Licence" means Prospecting Licence number PL6/309 issued by the Government of Ghana through the Minister;

"Subranum Project" or "Subranum" means the Subranum project, consisting of the Subin Kasu Prospecting Licence covering a total land size of 71.4km² in southwest Ghana;

"t" means metric tonne;

"Target's Statement" has the meaning ascribed thereto in the section "Three Year History" of this AIF;

"Technical Report" means the technical report titled "Namdini Gold Project Feasibility Study National Instrument 43-101 Technical Report Ghana, West Africa", dated effective October 28, 2019;

"TSX" means the Toronto Stock Exchange;

"μm" means micron (millionth of mm);

"Unlisted Option" means an unlisted option to purchase Ordinary Shares;

"US" means the United States of America; and

"w/w" means weight for weight (e.g. for slurry density).



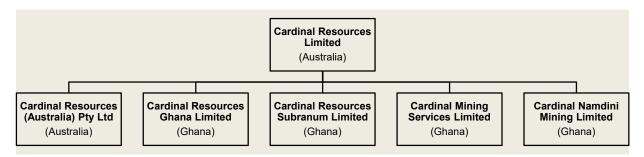
2 - CORPORATE STRUCTURE

Cardinal Resources Limited was incorporated as Heguy Resources Limited under the Corporations Act on November 11, 2010 and changed its name to Ridge Resources Limited ("Ridge") on May 9, 2011 and then to Cardinal Resources Limited on December 27, 2012. The Corporation's head and registered office is at Suite 1, 28 Ord Street, West Perth, Australia, 6005. The Corporation maintains offices outside of Australia.

On August 27, 2012, Ridge announced that it had entered into an implementation agreement with Cardinal, whereby Ridge would acquire 100% of the share capital of Cardinal. Ridge completed the acquisition of Cardinal on December 27, 2012 and subsequently changed its name to Cardinal Resources Limited.

The Corporation's business under Ridge was operating as a Western Australian mineral exploration company. The Corporation's business since December 27, 2012 has been to explore and develop its Ghanaian Projects, which consist of the Namdini Gold Project, the Bolgatanga Project and the Subranum Project.

The corporate structure is shown in the chart below. All of Cardinal's subsidiaries are 100% owned.



The Corporation is a reporting issuer in the province of Ontario, Canada. The Corporation's Ordinary Shares are listed and posted for trading on the Toronto Stock Exchange in Canada (the "TSX") and on the Australian Securities Exchange (the "ASX") in Australia, in each case under the symbol "CDV" (the "Ordinary Shares").

3 - DESCRIPTION OF THE BUSINESS

3.1 The Corporation

The principal activity of the Corporation is gold exploration and mine development in Ghana. The Corporation holds tenements prospective for gold mineralization in Ghana in two granite-greenstone belts: the Bolgatanga Project and the Namdini Gold Project ("Namdini"), which are, respectively, located within the 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 which has a gold Ore Reserve of 5.1Moz (138.6Mt @ 1.13g/t Au; 0.5g/t Au cut-off) inclusive of 0.4Moz Proved (7.4Mt @ 1.31g/t Au; 0.5 g/t Au cut-off) and 4.7Moz Probable (131.2Mt @ 1.12 g/t Au; 0.5g/t Au cut-off).





Figure 1: Cardinal Resource's Tenements in Ghana

In response to the COVID-19 pandemic and following advice from the World Health Organization as well as the Australian, Ghanaian, and Canadian Governments, Cardinal has enacted changes to its exploration and on-site development programmes, primarily focused on the safety and well-being of our workforce.



3.2 Employees

The Corporation employed 58 full-time employees as of June 30, 2020 and continued to employ 57 full-time employees as of the date of this AIF.

3.3 Three Year History

The following summary sets out the notable events in the Corporation's history since the beginning of the financial year ended June 30, 2018:

On July 10, 2017, the Corporation's Ordinary Shares commenced trading on the TSX.

On July 10, 2017, Robert Schafer was appointed non-executive Director of the Corporation and Derrick Weyrauch was appointed as CFO of the Corporation.

On July 12, 2017, the Corporation announced that it had been granted a large-scale mining licence over an area of approximately 19.54 sq km covering the Corporation's Namdini Gold Project and that an initial Environmental Impact Statement ("EIS") was lodged with the Ghana Environmental Protection Agency (the "EPA").

On July 26, 2017, the Corporation announced that interim results for phase two of its metallurgical test programme for the Namdini Gold Project had demonstrated an overall increased gold recovery rate of 86% utilizing standard gold recovery techniques.

On August 14, 2017, the Corporation announced two auger gold-in-soil anomalies (4.2 km long x 300 m wide and 800 m x 250 m) were discovered with +100ppb gold anomaly along the entire strike of both anomalies from exploration activities on its Kungongo Prospect.

On August 15, 2017, the Corporation announced that it had entered into a definitive agreement with Red Back Mining Ghana Limited, a wholly-owned subsidiary of Kinross Gold Corp., to acquire two large-scale Prospecting Licences that encompassed the prospective Nangodi regional shear and which contained the historic producing "Nangodi" gold mine and that combined with the Corporation's existing Ndongo holdings, increases the land area to 278.48 km².

On September 18, 2017, the Corporation announced an updated Mineral Resource estimate for its Namdini Gold Project, including an Indicated Mineral Resource of 120 M tonnes grading 1.1 g/t Au for 4.3 Moz Au and an Inferred Mineral Resource of 84 M tonnes grading 1.2 g/t Au for 3.1 Moz Au at 0.5 g/t Au cut-off. The effective date of the Mineral Resource Estimate is September 11, 2017.

On October 12, 2017, the Corporation announced the appointment of two new Non-Executive Directors, namely Jacques McMullen and Michele Muscillo. The Corporation also advised that Mark Connelly and Simon Jackson had resigned from the board of directors (the "Board").

On October 20, 2017, the Corporation filed on SEDAR an updated technical report titled "Technical Report Mineral Resource Estimation for the Namdini Gold Project, Ghana", in respect of the Corporation's Namdini Gold Project in Ghana, West Africa.



On October 20, 2017, 1,000,000 fully paid Ordinary Shares were issued on exercise of Unlisted Options to purchase ordinary shares ("Unlisted Options") and 5,000,000 Unlisted Options expired, unexercised.

On October 23, 2017, the Corporation announced that it had entered into an agreement with Clarus Securities Inc., on behalf of a syndicate of underwriters, pursuant to which the underwriters have agreed to purchase, on a "bought deal" basis, 18,461,600 Ordinary Shares of the Corporation at a price of C\$0.65 per Ordinary Share for aggregate proceeds to the Corporation of C\$12,000,040. On November 22, 2017 the bought deal was closed.

On November 10, 2017, 1,000,000 Unlisted Options were exercised.

On November 22, 2017, 5,758,000 Unlisted Options exercisable at \$0.825 on or before 21 December 2022, 4,036,200 Unlisted Options exercisable at \$0.965 on or before December 21, 2022, 1,000,000 Unlisted Options exercisable at \$0.75 on or before December 21, 2022 and 379,390 fully paid Ordinary Shares were issued.

On December 21, 2017, the Corporation issued 379,390 shares for services, 190,000 at a deemed value of \$0.50 and 189,390 at a deemed value of \$0.58.

On January 3, 2018, 50 Class A Performance Shares expired.

On February 5, 2018, the Corporation released the results of its preliminary economic assessment ("PEA")/scoping study for the Namdini Gold Project in Ghana, West Africa.

On March 1, 2018, 160,500 fully paid Ordinary Shares were issued on exercise of Listed Options.

On March 5, 2018, the Corporation advised that it had completed an update to the Mineral Resource estimate for its Namdini Gold Project in Ghana, West Africa. As a result of an additional 15,684m of HQ diamond drilling within 35 holes since the last Mineral Resource estimate in September 2017, the infill drill program was successful in delivering a substantial conversion of the Inferred category ounces into the Indicated Mineral Resource category increasing it to 6.5Moz of Indicated Mineral Resource and 0.5Moz of Inferred Mineral Resources.

On March 12, 2018, 189,500 fully paid Ordinary Shares were issued on exercise of Listed Options.

On March 14, 2018, the Corporation announced that it had filed a National Instrument 43-101 Technical Report in respect of the PEA announced on February 5, 2018.

On March 28, 2018, 403,500 fully paid Ordinary Shares were issued on exercise of Listed Options.

On April 10, 2018, 100,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On April 18, 2018, the Corporation announced that it had filed a National Instrument 43-101 Technical Report in respect of the Mineral Resource Estimation announced on March 5, 2018.

On April 19, 2018, 500,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On May 2, 2018, 150,000 fully paid Ordinary Shares were issued on exercise of Listed Options. 300,000 fully paid Ordinary Shares were issued for services rendered to the Corporation.



On May 29, 2018, 49,507 fully paid Ordinary Shares were issued on exercise of Listed Options.

On June 12, 2018, 24 ordinary fully paid shares were issued on exercise of Listed Options. 340,000 fully paid Ordinary Shares were issued for services rendered to the Corporation.

On July 16, 2018, the Corporation announced that it had intersected further gold at a new discovery named Ndongo East on its 100% owned Ndongo Licence Area, located approximately 15km north of the Corporation's flagship Namdini Gold Project that had a 6.5Moz indicated Mineral Resource ("Ndongo East").

On July 31, 2018, the Corporation announced that it had executed a term sheet with Sprott Private Resource Lending (Collector), L.P. for a US\$25 million senior secured Credit Facility. The Corporation announced on August 22, 2018 that the facility had been finalized.

On July 31, 2018, 385,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On August 28, 2018, 4,250,000 fully paid Ordinary Shares were issued to Sprott Private Resource Lending (Collector), L.P. as part of the senior secured Credit Facility.

On September 18, 2018, the Corporation announced the results of its Pre-Feasibility study on the Namdini Gold Project, highlighted by a 4.76Moz maiden Probable Ore Reserve from 129.6Mt grading 1.14g/t Au at a cut-off of 0.5g/t Au.

On September 19, 2018, 125,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On October 25 2018, the Corporation filed a technical report titled "National Instrument 43-101 Preliminary Feasibility Study Technical Report Namdini Gold Project Ghana West Africa".

On October 31, 2018, Derrick Weyrauch resigned from the Corporation. Mr. Weyrauch's position as CFO was concurrently filled by the appointment of Mr. Jon Grygorcewicz. Also, on October 31, 2018, Mr. Jacques McMullen resigned as a Director of the Corporation and Dr. Kenneth G. Thomas was appointed as a Director.

On November 2, 2018, 224,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On November 19, 2018, 130,000 fully paid Ordinary Shares were issued on exercise of Listed Options and 47,801, 20,877, 48,170 and 935,488 fully paid Ordinary Shares were issued at a deemed issue price of \$0.523, \$0.479, \$0.519 and \$0.45 per share respectively to employees and consultants of the Corporation in consideration for services rendered to the Corporation.

On November 28, 2018 the Corporation released first tranche drilling results, encountering further high-grade and shallow gold mineralization at the Ndongo East prospect.

On November 30, 2018 the Corporation filed an amended annual information form, which amended and replaced the annual information form filed on September 28, 2018. The amended annual information form was updated to include current technical disclosure, as required by s 5.4 of the National Instrument 51-102F2, on the basis of the pre-feasibility study entitled "Namdini Gold Project Preliminary Feasibility Study National Instrument 43-101 Technical Report, Ghana, West Africa" dated October 25, 2018.

On December 6, 2018, 145,000 fully paid Ordinary Shares were issued on exercise of Listed Options.



On January 2, 2019 the Corporation announced the appointment of Mr. Trevor Schultz as Non-Executive Director. Mr. Robert Schafer retired from the Board on January 2, 2019.

On January 2, 2019, 243,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On January 23, 2019 the Corporation announced first drilling results from the Ndongo Prospecting License.

On January 30, 2019, 690,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On February 2, 2019 a change in substantial holder notice was lodged, Bank of Nova Scotia and each of its associates/affiliates voting power decreased from 9.77% undiluted to 8.65% undiluted.

On February 8, 2019, 900,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On February 22, 2019, 150,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On March 11, 2019, the Corporation issued a notice of meeting to approve the issue of milestone options to Dr. Kenneth G. Thomas and Mr. Trevor Schultz.

On March 12, 2019, 116,571 fully paid Ordinary Shares were issued on exercise of Listed Options. 1,867,571 Unlisted Options exercisable at \$1.00 on or before March 12, 2021 were issued to a consultant of the Corporation in consideration for services rendered to the Corporation. The Corporation also cancelled 2,018,100 milestone options exercisable at \$0.965 on or before December, 21 2022 and 5,758,000 milestone options exercisable at \$0.825 on or before December, 21 2022.

On March 22, 2019, 185,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On March 27, 2019, the Corporation announced further intersections of high-grade, shallow gold mineralization at the Ndongo East deposit.

On April 3, 2019, the Corporation announced an optimized Ore Reserve estimate for the Namdini Gold Project. 5.1 million ounces Proved and Probable Ore Reserve estimate from 138.6 Mt @ 1.13 g/t Au (0.5 g/t Au cut-off).

On April 10, 2019, the Corporation announced an update to its Feasibility Study ("FS") and project finance activities in respect to the Corporation's Ore Reserve at the Namdini Gold Project.

On April 11, 2019, the Corporation received shareholder approval to issue milestone options to Dr. Kenneth G. Thomas and Mr. Trevor Schultz, Directors of the Corporation.

On April 18, 2019, 112,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On April 30, 2019, 2,180,049 milestone options exercisable at \$0.697 on or before December, 21 2022 and 2,180,049 milestone options exercisable at \$0.590 on or before December, 21 2022 where issued, the milestone options were approved at the shareholder meeting held on April 11, 2019.

On May 7, 2019, 18,500 fully paid Ordinary Shares were issued on exercise of Listed Options.

On May 10, 2019, a ceasing to be substantial holder in the Corporation was provided the Corporation. Royal



Bank of Canada and its related bodies corporate advised that their shareholder has fallen below 5%.

On June 4, 2019, Cardinal advised that positive leach results had been received which are expected to enhance the Namdini project economics and further test work had been initiated.

On June 4, 2019, 148,000 fully paid Ordinary Shares were issued on exercise of Listed Options. A further 64,103 fully paid Ordinary Shares at a deemed issue price of \$0.39 were issued to an employee of the Corporation for services rendered to the Corporation.

On July 4, 2019, 59,975 fully paid Ordinary Shares were issued on exercise of Listed Options.

On July 10, 2019 the Corporation announced further intersections of shallow, high-grade gold mineralization from a 15-hole, 883m diamond drill programme at the Ndongo East prospect.

On July 11, 2019, 280,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On July 16, 2019, the Corporation announced positive results from a selected area within the proposed started pit that encompasses the first 2 to 3 years of production at the Namdini Gold Project.

On July 17, 2019, 600,000 fully paid Ordinary Shares were issued on exercise of Listed Options. 73,530 and 635,161 fully paid Ordinary Shares at a deemed issue price of \$0.34 and \$0.336 per share respectively were issued to an employee and consultant of the Corporation in consideration for services rendered to the Corporation.

On July 23, 2019, 130,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On July 26, 2019, 126,000 fully paid Ordinary Shares were issued on exercise of Listed Options.

On July 31, 2019, 341,955 fully paid Ordinary Shares were issued on exercise of Listed Options.

On August 7, 2019, 252,500 fully paid Ordinary Shares were issued on exercise of Listed Options.

On August 14, 2019, 220,261 fully paid Ordinary Shares were issued on exercise of Listed Options.

On August 19, 2019, 617,500 fully paid Ordinary Shares were issued on exercise of Listed Options.

On August 21, 2019, 827,048 fully paid Ordinary Shares were issued on exercise of Listed Options.

On September 4, 2019, the Corporation appointed Mr. David (Dave) Anthony to the position of Chief Operating Officer ("COO").

On September 9, 2019, 9,280,841 fully paid Ordinary Shares were issued on exercise of Listed Options.

On September 17, 2019, 14,088,014 fully paid Ordinary Shares were issued on exercise of Listed Options.

On October 2, 2019, 83,359,760 fully paid Ordinary Shares were issued on exercise of Listed Options, 188,081 Listed Options expired unexercised.



On October 15, 2019, the Corporation announced its Mineral Resource and Ore Reserve statement as at June 30, 2019 as part of its annual filing under ASX Listing Rules.

On October 28, 2019, the Corporation released the results of the FS for the Namdini Gold Project.

On November 27, 2019, the Corporation announced that it had filed a National Instrument 43-101 Technical Report in respect to the FS for the Namdini Gold Project.

On December 10, 2019, the Corporation issued 6,276,530 Unlisted Options to staff under the terms and conditions of Cardinal's Employee Stock Option plan. The Corporation also issued 6,369,557 Unlisted Options to directors of the Corporation; these were approved at the Corporation's Annual General Meeting held on 4 November 2019. The Corporation issued 83,571 fully paid Ordinary Shares for services rendered to the Corporation.

On February 27, 2020 ,the Corporation announced that Water Extraction Permits for its Corporation Namdini Project in Ghana had been granted by the Ghanaian Water Resources Commission. The Corporation further advised that a repayment of US\$8.0 million was made to Sprott Private Resource Lending (Collector) L.P.

On March 11, 2020, the Corporation announced that the Resettlement Action Plan ("RAP") for the Corporation's Namdini Project in Ghana had been approved by the Minerals Commission of the Government of Ghana (the "Minerals Commission").

On March 6, 2020, the Corporation announced that 1,000,000 Unlisted Options exercisable at \$0.22 per share had been exercised.

On March 16, 2020, the Corporation advised that it had received notification from Nord Gold SE ("Nordgold") that it had acquired a relevant interest of 19.9% of the shares in Cardinal, (having acquired 16.4% stake previously owned by Goldfields Limited), and further advised that Nordgold had provided a non-binding indicative and conditional proposal to acquire all the issued capital of Cardinal that it did not already own for AU\$0.45775 per share in cash (the "Nordgold Bid").

On March 19, 2020, the Corporation announced that 5,000,000 Unlisted Options exercisable at \$0.22 per share had been exercised.

On March 26, 2020, the Corporation announced that it had received approval for the expansion of the Mining Licence from 19 km² to a maximum allowable area of 63 km², more than tripling the size of the Mining Licence for the Namdini Gold Project. On July 20, 2020 the Corporation advised that its Namdini Mining Licence had officially received Sovereign Parliamentary Ratification in Ghana.

On March 30, 2020, the Corporation advised that it had executed an agreement with Sprott Private Resource Lending (Collector) L.P. to redraw US\$5.0 million from Sprott.

On April 30, 2020, the Corporation announced that 60 Class C Performance Shares in the Corporation were cancelled and 800,000 Unlisted Options exercisable on or before December 10, 2024 were cancelled.

On June 5, 2020, the Corporation announced that the senior secured Credit Facility (as amended in February 2020 and March 2020) had been assigned from Sprott Private Resource Lending, L.P. to the Ghana Infrastructure Investment Fund ("GIIF"), a Ghana Government owned infrastructure investment vehicle.



On June 18, 2020, the Corporation announced the recommended all-cash takeover offer of Cardinal by Shandong Gold Mining (Hong Kong) Co, Ltd (a subsidiary of Shandong Gold Mining Co., Ltd.) ("Shandong Gold"). Cardinal entered into a Bid Implementation Agreement with Shandong Gold, pursuant to which Shandong Gold agreed to acquire 100% of the issued and outstanding Ordinary Shares in Cardinal at a price of AU\$0.60. There was a proposed implementation by way of an off-market takeover offer with a 50.1% minimum acceptance condition (the "Bid Implementation Letter"). The Board of Cardinal unanimously recommended acceptance of the Shandong Gold offer in the absence of a superior proposal.

On July 22, 2020, the Corporation advised that it had received a revised and improved proposal for an off-market takeover from Shandong Gold, pursuant to which Shandong Gold will offer to acquire all of the shares in Cardinal it does not presently own at a cash price of \$0.70 per share (the "**Revised Shandong Offer**").

On July 27, 2020 the Corporation, after careful consideration of the Revised Shandong Offer and Nordgold's unconditional on-market offer for Cardinal, the Board (in consultation with the Special Committee, its financial and legal advisors), unanimously recommended that Cardinal Shareholders

- ACCEPT the Revised Shandong Gold Offer (in the absence of a superior proposal); and
- REJECT the Nordgold Bid.

On July 30, 2020, the Corporation advised that it had entered into a deed with Shandong Gold and Shandong Gold Mining Co., Ltd, to amend the Bid Implementation Agreement (the "**Deed**").

In summary, the Deed amends the Bid Implementation Letter to, amongst other matters:

- increase the offer price to A\$0.70 per share;
- note that the takeover offer will no longer be subject to any Chinese regulatory approvals;
- make certain changes to the proposed timetable of the takeover offer;
- increase the ascribed value per Cardinal Option for certain Options; and-increase the break fee so that it continues to represent approximately 1% of the deal value.

On August 5, 2020, the Corporation provided its quarterly activities for the period ended June 30, 2020.

On August 11, 2020, Shandong Gold and Shandong Gold Mining Co. Ltd. filed its bidder's statement (the "Bidder's Statement") with respect to the Revised Shandong Offer. The Bidder's Statement, among other things, provides details of the Revised Shandong Offer and instructions on how Cardinal shareholders may accept the Revised Shandong Offer.

On August 11, 2020, the Corporation announced that it had lodged its target's statement (the "Target's Statement") with respect to the Revised Shandong Offer. The Target's Statement sets out the key reasons the Board believes shareholders of the Corporation should accept the Revised Shandong Offer, including:

1. the offer price of A\$0.70 per share is the highest offer available to Cardinal shareholders and represents a premium of 6.1% to the Nordgold Bid of A\$0.66 per share, and is a compelling premium to Cardinal's trading values prior to the announcement date;



- 2. the conditions (as defined in the Target's Statement) of the Revised Shandong Offer are considered achievable (based on the information available to the Cardinal Board as at the date of the Target's Statement, the Cardinal Board has no reason to believe the conditions cannot be satisfied within a reasonable timeframe);
- 3. the Revised Shandong Offer is an all-cash offer and provides certain and immediate value for your Cardinal shares (subject to the satisfaction or waiver of the conditions);
- 4. no superior proposal (as defined in the Target's Statement) has emerged as at the date of the Target's Statement;
- 5. shareholders will avoid the risks that remain ahead of Cardinal, and generally associated with starting a new mine, including financial, permitting, commissioning and operating risks;
- 6. Cardinal's share price may fall if the Revised Shandong Offer is unsuccessful (in the absence of the Nordgold Bid) or in the absence of a superior proposal emerging;
- 7. shareholders will avoid the future funding requirements with respect to Cardinal's Namdini Project and associated equity dilution; and
- 8. there are certain risks to not accepting the Revised Shandong Offer (as more particularly described in the Target's Statement.

The Revised Shandong Offer is open for Cardinal shareholder acceptance until 7:00 pm (Sydney time) on October 13, 2020.

On August 19, 2020 the Company advised that Shandong Gold had given notice to Cardinal that the Foreign Investment Review Board (FIRB) approval condition of its off-market takeover offer to acquire all of the Shares in Cardinal it does not presently own at a cash price of \$0.70 per share had been fulfilled.

4 - THE GHANAIAN MINING INDUSTRY

4.1 Mining in Ghana

(a) Ghana

Ghana is situated on the west coast of Africa, approximately 600 km north of the Equator on the Gulf of Guinea. Accra, the capital city of Ghana, is located almost exactly on the Prime Meridian. The former British colony changed its name from the Gold Coast to Ghana on achieving independence on March 6, 1957. Ghana is now a republic with a population of approximately 25 million people and a democratically elected government. English remains the official and commercial language.

The total land area of the country is approximately 238,000 km² and the topography is relatively flat. Ghana has a tropical climate with two rainy seasons and two dry seasons in the southern sector each year. The climate condition in the upper east region of Ghana, where the Namdini Gold Project and the Bolgatanga Project are located, is tropical with a rainy season from May to October and a long dry season with virtually no rainfall



from October to April. Temperatures range between a maximum of 40°C in March/April and a minimum of 12°C in December. The natural vegetation in the western region, where the Subranum Project is located, is moist tropical forest with a majority of the land converted to agricultural pursuits. The physiography of the Namdini Gold Project area is primarily savannah grassland characterized by short scattered drought-resistant trees, scattered scrub, and grass that gets burnt by bushfire or scorched by the sun during the long dry season. The climate is very dry. The most common trees are the Sheanut, Dawadawa, and Baobab.

The Ghanaian legal system is generally modelled after and based on British common law. The laws of Ghana include the Constitution, national laws passed by Parliament (or under authority granted by Parliament) and the common law of Ghana. The common law of Ghana includes customary rules which apply to particular communities in Ghana.

The Corporation has found Ghana to be stable (politically and economically) over the time in which it has engaged in operations in Ghana.

(b) Mining Rights

The Constitution of Ghana vests title in every mineral in its natural state to the President of Ghana on behalf of, and in trust for, the people of Ghana. The exercise of any mineral right in the form of reconnaissance, exploration or exploitation of any mineral in Ghana requires an appropriate mineral right to be issued by the Government of Ghana acting through the Minister. The Minister administers, promotes and regulates Ghana's mineral wealth through the Minerals Commission, a governmental organization established in accordance with the Minerals Commission Act 1993 (Act 450) and the Minerals and Mining Act 2006 (Act 703) (the "2006 Mining Act").

Pursuant to the 2006 Mining Act, a number of regulations were passed in 2012 to clarify and implement provisions of the 2006 Mining Act. These regulations relate to matters such as licensing, local content, technical issues, mineral right holding costs, mine support services and resettlement and payment of compensation to persons impacted by mining operations.

The 2006 Mining Act provides for a number of categories of licences.

A Reconnaissance Licence confers on the holder the right to search for a specific mineral or commodity within the licence area by geochemical and photo-geological surveys or other remote sensing techniques. Except as otherwise provided in the licence, it does not permit drilling, excavation or other sub-surface techniques ("Reconnaissance Licence"). A Reconnaissance Licence is normally granted for up to one year and may be renewed by the Minister from time to time for periods up to one year at a time upon application by the holder. The size of the area over which a reconnaissance licence may be granted is limited to 5,000 contiguous blocks or 1,050 km².

A Prospecting Licence confers on the holder the right to search for a specific mineral or commodity in respect of which the licence is granted within the licence area to drill and excavate as necessary for prospecting purposes, erect camps and put up temporary buildings as necessary for the prospecting operations and conduct other activities ancillary or incidental to the prospecting ("**Prospecting Licence**"). The Minister may, on an application duly made by a qualified person and on the recommendation of the Minerals Commission, grant a Prospecting Licence in respect of all or any of the minerals specified in the application. A Prospecting Licence is normally granted for an initial period not exceeding three years. The holder of a Prospecting Licence



may, at any time but not later than three months before the expiration of the initial term of the licence, apply in the form that may be prescribed to the Minister for an extension of the term of the Prospecting Licence for a further period not more than three years in respect of all or any number of blocks the subject of the Prospecting Licence. The size of the area over which a Prospecting Licence may be granted is limited to 750 contiguous blocks.

When exploration has successfully delineated An Ore Reserve, an application may be made to the Minerals Commission for conversion to a mining lease, granting a Corporation the right to produce a specific product from the concession area, normally for a period of 30 years or a lesser period that may be agreed upon with the applicant.

Once a mineral right is issued to an entity by the Government of Ghana, Ghanaian mining laws prevent that mineral right from being transferred, assigned or mortgaged by the licensee or mineral right holder without the prior written approval of the Minister. The Ghana Minerals Commission is also required to maintain a public register of all applications, grants, variations, transfers, suspensions and cancellations of such licences or mineral rights. Official searches may be conducted in the public register to obtain information regarding any mineral right granted by the Government of Ghana.

The 2006 Mining Act requires that any person who intends to acquire a controlling share of the equity of any mining company that has been granted a mineral right must first give notice of its intent to the Minister and also obtain the no objection of the Minister prior to acquiring a controlling share.

Under the 2006 Mining Act, the Government of Ghana is entitled to a 10% free carried interest in all companies that hold mining leases. The 10% free carried interest entitles the Government of Ghana to a pro-rata share of future dividends. The Government of Ghana has no obligation to contribute development capital or to operating expenses.

The Government of Ghana also has the right to acquire an additional interest in such companies for a price fixed by agreement.

Under the 2006 Mining Act, the Government of Ghana is empowered to acquire a special or "golden" share in any mining company. The special share would constitute a separate class of shares with such rights as the Government of Ghana and the mining company might agree. Though deemed a preference share, it could be redeemed without any consideration or for a consideration determined by the mining company and payable to the holder on behalf of the Government of Ghana.

In the absence of any such agreement, the special share would have the following rights:

- it would carry no voting rights but the holder would be entitled to receive notice of, and to attend and speak at, any general meeting of the members or any separate meeting of the holders of any class of shares;
- it could only be issued to, held by, or transferred to the Government of Ghana or a person acting on behalf of the Government of Ghana;
- the written consent of the holder would be required for all amendments to the organizational documents
 of the Corporation, the voluntary winding-up or liquidation of the Corporation, or the disposal of any
 mining lease, or the whole or any material part of the assets of the Corporation;



- it would not confer a right to participate in the dividends, profits or assets of the Corporation or a return of assets in a winding-up or liquidation of the Corporation; and
- the holder of a special share may require the Corporation to redeem the special share at any time for no consideration or for a consideration determined by the Corporation.

To the Corporation's knowledge, for as long as it has been operating in Ghana, no mining company has been requested to issue a special share.

The Government of Ghana has a pre-emptive right to purchase all gold and other minerals produced by mines in Ghana. The purchase price would be agreed by the Government of Ghana and the mining company, or the price established by any gold hedging arrangement between the Corporation and any third party approved by the Government of Ghana, or the publicly quoted market price prevailing for the minerals or products as delivered at the mine or plant where the right of pre-emption was exercised. The Corporation understands that the Government of Ghana has indicated it does not intend to take pre-emptive action pursuant to its right to purchase gold or other minerals so long as mining companies sell gold in accordance with certain procedures approved by the Bank of Ghana.

(c) Ghanaian Royalties and Taxes

Ghanaian law sets mineral royalties at a flat rate of 5% of mineral revenues. The corporate income tax rate is 35% of taxable income for mining companies. Capital expenditures (tax depreciation) are deductible at a flat rate of 20% per year over a five-year period.

The tax regulations disallow expenditures from one mining area as a deduction from revenues in a separate mining area belonging to the same company in determining the Corporation's taxable income for tax purposes.

Under the 2006 Mining Act, the Government of Ghana may enter into a stability agreement with the holder of a mining lease, to ensure that the holder of the mining lease will not, for a period not exceeding 15 years from the date of the agreement,

- 1. be adversely affected by a new enactment, order, instrument or other action made under a new enactment or changes to an enactment, order, instrument that existed at the time of the stability agreement, or other action taken under these that have the effect or purport to have the effect of imposing obligations upon the holder or applicant of the mining lease, and
- 2. be adversely affected by subsequent changes to:
 - the level of and payment of customs or other duties relating to the entry of materials, goods, equipment and any other inputs necessary to the mining operations or project,
 - (b) the level of and payment of royalties, taxes, fees and other fiscal imports, and
 - (c) laws relating to exchange control, transfer of capital and dividend remittance.

A stability agreement entered into is subject to ratification by the Parliament of Ghana.

In 2011, the Government of Ghana established a tax stability renegotiation team to review the existing tax stability agreements of some major mining companies operating in Ghana.

(d) Environmental and Other Laws and Regulations

All phases of mineral exploration, project development, and operations are subject to environmental laws and



regulations. These laws and regulations may define, among other things, air and water quality standards, waste management requirements, and closure and rehabilitation obligations. In general, environmental legislation is evolving to require stricter operating standards, more detailed socio-economic and environmental impact assessments ("EIA") for proposed projects, and a heightened degree of accountability of companies and their officers, directors, and employees for corporate social responsibility, and health and safety. Changes in environmental regulations, and the way they are interpreted by the regulatory authorities, could affect the way the Corporation operates, resulting in higher environmental and social operating costs that may affect the viability of operations.

Environmental matters in Ghana, including those related to mining, fall primarily under the oversight of the EPA, as well as the Minerals Commission and the Inspectorate Division of the Minerals Commission. The EPA has laws and regulations that govern, among other things, environmental and socio-economic impact assessments and statements, environmental management plans, emissions into the environment, environmental auditing and review, and mine closure and reclamation, to which the Corporation's operations are subject. Additional provisions governing mine environmental management are provided in the 2006 Mining Act and the various Minerals and Mining Regulations which came into force in 2012.

The Corporation notes a continuing trend toward substantially increased environmental requirements and evolving corporate social responsibility expectations in Ghana, including the requirement for more permits, analysis, data gathering, community hearings, and negotiations than have been required in the past for both routine operational needs and for new development projects. There has been a trend to longer lead times in obtaining environmental permits.

The Corporation's mineral exploration activities and anticipated development, mining and processing operations will also be subject to various laws governing prospecting, development, production, taxes, labor standards, occupational health and safety, land rights of local people and other matters. New rules and regulations may be enacted or existing rules and regulations may be modified and applied in a manner that could have an adverse effect on the Corporation's financial position and results of operations.

The Corporation established objectives to achieve regulatory requirements in its exploration, development, operation, closure, and post-closure activities so that its employees, the local environment, and its stakeholder communities are protected and that the next land use contributes to the sustainability of the local economy. In order to meet its objectives, the Corporation:

- educates its managers so that they are committed to creating a culture that makes social and environmental matters an integral part of short-term and long-term operations and performance management systems;
- works with its employees so they understand and accept environmental and social policies and procedures as a fundamental part of the business;
- established, and continues to improve, operating standards and procedures that aim to meet or exceed
 requirements in relevant laws and regulations, the commitments made in its EIS, environmental and
 socio-economic management plans, rehabilitation and closure plans, and any international protocols to
 which the Corporation is a signatory;
- incorporated environmental and human rights performance requirements into relevant contracts;
- provides training to employees and contractors in environmental matters;
- regularly prepares, reviews, updates, and implements site-specific environmental management and rehabilitation and closure plans;



- works to progressively rehabilitate disturbed areas in conformance with site-specific environmental plans;
- consults with local communities and regulators to communicate its environmental management policies and procedures;
- regularly reviews its environmental performance;
- intends to complete resettlement projects in accordance with the International Finance Corporation Performance Standard 5 on land acquisition and involuntary resettlement when required; and
- publicly reports social, health, safety and environmental performance.



5 - NAMDINI PROJECT FEASIBILITY STUDY TECHNICAL REPORT SUMMARY

The following is an extract of Section 1 – Summary of the Technical Report prepared by Lycopodium and Golder. See also "Technical Information". The balance of the Technical Report is incorporated herein by reference and can be accessed under the Company's issuer profile on SEDAR at www.sedar.com.

5.1 Introduction

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

The main focus of activity is the Namdini Gold Project where a Measured and Indicated Mineral Resource of 182Mt grading 1.1g/t Au for 6.5Moz Au and an Inferred Mineral Resource of 12Mt grading 1.2g/t Au for 0.5Moz Au, reported at a 0.5g/t Au cut-off grade, have been established as announced to the ASX and TSX on April 3, 2019.

Contained within this, the Ore Reserve estimate forming the basis of the Namdini Gold Project FS (the "2019 Namdini FS") is 7.4Mt at 1.31g/t Au for 0.4Moz Au of Proved Ore Reserve and 131Mt at 1.12g/t Au for 4.7Moz of Probable Ore Reserve, as previously announced to the ASX and TSX on April 3, 2019 and April 18, 2019.

This Technical Summary presents the result of the FS carried out by Cardinal on the Namdini Gold Project. This FS updates and supersedes the Pre-feasibility Study released to the TSX and ASX on September 18, 2018.

5.2 FS parameters and material assumptions

The capital cost estimates were completed to an accuracy of +15% to -5% for the planned process plant run of mine ("ROM") throughput of 9.5Mtpa and based on open pit mining of the April 3, 2019 Measured and Indicated Mineral Resource as announced to the ASX and TSX on April 3, 2019 (Cardinal, 2019b).

Metallurgical test work carried out to date indicates that gold can be satisfactorily recovered from Namdini ore using conventional process routes comprising crushing, grinding, gravity, flotation, regrind and CIL treatment of the flotation concentrate. The test work was considered sufficient to determine that the Namdini Mineral Resource represents a deposit with a reasonable prospect of eventual economic extraction ("RPEEE"), for which the Modifying Factors and economic parameters have been applied to declare an Ore Reserve. Estimates of capital costs for the process plant and associated infrastructure were prepared by Lycopodium Minerals Pty Ltd ("Lycopodium").

Namdini Mineral Resource represents a deposit within a RPEEE pit shell, for which the Modifying Factors and economic parameters have been applied to declare an Ore Reserve. Estimates of capital costs for the process plant and associated infrastructure were prepared by Lycopodium.



The proposed process plant incorporates primary crushing, grinding, gravity, flotation, concentrate regrind, high shear oxidation ("AachenTM") and CIL gold extraction. Planned production throughput is 9.5Mtpa of ROM ore.

Golder provided open pit mine engineering services. The work comprised collation of input parameters, open pit optimisation studies, pit designs and detailed NPV optimised mine schedules. A series of shells from the open pit optimisation was selected and used to generate engineering pit designs that included a Starter Pit and Phases for the Life of Mine production schedule.

Golder estimated the Ore Reserve in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves or JORC Code (2012). The term 'Ore Reserve' is synonymous with the term 'Mineral Reserve' as used by Canadian National Instrument 43-101 'Standards of Disclosure for Mineral Projects' (NI 43-101, 2014) and conforms with the Canadian Institute of Mining, Metallurgy and Petroleum 'CIM Definition Standards for Mineral Resources and Mineral Reserves' (CIM, 2014). The JORC Code (2012) is defined as an 'acceptable foreign code' under NI 43-101.

The Ore Reserve estimate is based on the revised Mineral Resource estimate announced on April 3, 2019 (Cardinal, 2019a). The Ore Reserve was derived from the Mineral Resource after consideration of the level of confidence in the Mineral Resource and application of relevant modifying factors including mining, processing, infrastructure, environmental, legal, social and commercial factors under the guidelines of ASX Listing Rule LR 5.9.1. The Ore Reserve announced to the ASX and TSX on April 3, and April 18, 2019 (Cardinal, 2019b) represents the economically mineable part of the Measured and Indicated Mineral Resources.

The Proved and Probable Ore Reserve estimate is based on Measured and Indicated Mineral Resources. No Inferred Mineral Resource was included in the Ore Reserve. The Ore Reserve represents the economically mineable part of the Measured plus Indicated Mineral Resources. Mineral Resource estimates are reported inclusive of those Mineral Resources converted to Ore Reserves.

The proposed mine plan is technically achievable. All technical proposals made for the operational phase involve the application of conventional technology that is widely used in the gold industry. The financial modelling completed as part of the FS demonstrates that the Project is economically viable under current assumptions. Modifying Factors (mining, processing, infrastructure, environmental, legal, social and commercial) were considered during the Ore Reserve estimation process. The FS incorporates a number of factors and assumptions as outlined in the various sections within this Technical Summary.

Golder provided an estimate of mining costs, including drill and blast, haulage, rehabilitation and administration costs. Lycopodium provided process plant design and cost estimates.

The financial model was completed as a real discounted model. A Life of Mine ("**LOM**") financial analysis was performed using the DCF method at varying real discount rates. The financial analysis was used to determine the potential economic return of the Project over the LOM.

The gold price assumptions used for this FS and the financial analysis are described in **Table 1**.



Table 1: Gold Price Assumptions

Selection case	Gold price
Trial open pit optimisations were run in Whittle 4X at a US\$1,300/oz gold price to define the base of potentially economic material. Five cut-back pits (Phases) were then selected and full mine designs applied.	US\$1,300/oz
Mine scheduling was used to maximise value through deferring of larger strip-ratio cutbacks until later in the mine life. The maximum value pit was selected using a discounted average Net Present Value and determined to align with a revenue factor shell of approximately \$1,235/oz using estimated LOM input prices and costs. Pit shells were converted into engineering designs.	US\$1,235/oz

The Financial Model Input gold price was based on a long-term average of US\$1,350/oz. US\$1,350/oz

The FS has been evaluated at a gold price of USD\$1,350 per ounce. Following release of the FS and accompanying NI43-101 Technical Report (ASX/TSX Press Release dated October 28, and November 28, 2019 respectively) the gold price has traded within the range of US\$1,492 to US\$2,066 per ounce on 28 August 2020. The three-year running average to 28 August 2020 is US\$1,393 per ounce.

5.3 Mining Licence

A Large-Scale Mining License covering the Namdini Mining Lease was granted to Cardinal Namdini Mining Limited ("Cardinal Namdini"), a wholly owned subsidiary of Cardinal, by the Minister of Lands and Natural Resources (the "Minister") under the Ghanaian Minerals and Mining Act 2006 (Act 703) (the "Act") in December 2017.

In February 2020, the Minister - in accordance with the Act- approved the application to expand the original Mining Lease to the maximum allowable area. The expanded Large-Scale Mining Lease now totals 63km² and is valid for a renewable term of 15 years from 2020 (Figure 2).

The Corporation subsequently advised on July 20, 2020 that its Namdini Mining Licence had officially received Sovereign Parliamentary Ratification in Ghana.



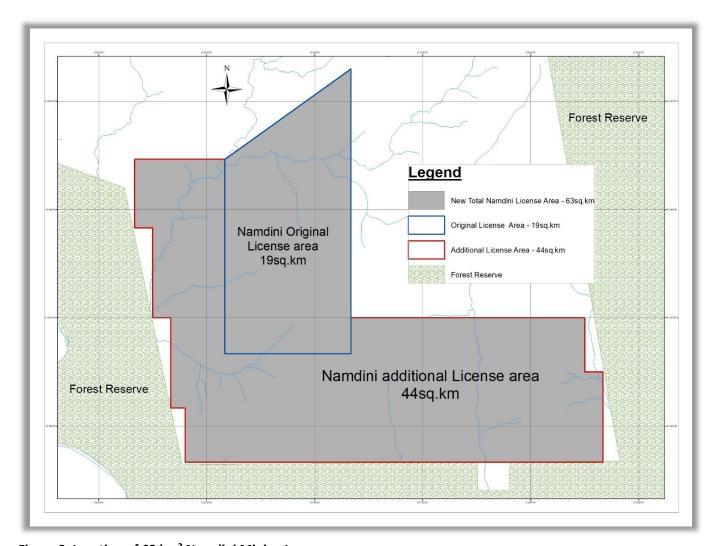


Figure 2: Location of 63 km² Namdini Mining Lease

*7.4Mt @ 1.31g/t Au for 0.4Moz Au Proved and 131.2Mt @ 1.12g/t Au for 4.7Moz Au Probable; 0.5g/t Au cut-off

5.4 Namdini Mineral Resources

Independent mining industry consultant, MPR Geological was commissioned by Cardinal to estimate the Mineral Resources of the Namdini deposit. To satisfy the RPEEE guidelines under the JORC Code and CIM standards, the Mineral Resources were reported within an optimised pit shell produced by Golder. The optimisation parameters reflect a large scale conventional open pit operation at a gold price of US\$1,950/oz.

The Mineral Resource estimate was reported in accordance with the JORC Code (2012) to the ASX and TSX on October 15, 2019. The Mineral Resource estimate, summarized in Table 2 and Table 3, on a 100% Project basis shows the Mineral Resources by category and material type (oxidation) at 0.5g/t Au cut-off. The classification



categories of Measured, Indicated and Inferred Mineral Resources under the JORC Code (2012) are equivalent to the CIM categories of the same name (CIM, 2014).

Table 2: Measured and Indicated Mineral Resources at 0.5 g/t Au cut-off as at June 30, 2019

Mineral Resource category	Туре	Tonnes (Mt)	Gold grade (g/t Au)	Contained gold (Moz)
Measured	Oxide	1.1	1.23	0.04
Measured	Fresh	6.4	1.33	0.27
Measured Resource	Total	7.5	1.31	0.32
Indicated	Oxide	3.3	1.08	0.11
Indicated	Fresh	171	1.11	6.10
Indicated Resource	Total	174	1.11	6.21
Measured and Indicated	Oxide	4.40	1.12	0.16
Measured and Indicated	Fresh	177	1.12	6.38
Measured and Indicated	Total	182	1.12	6.53

Table 3: Namdini Inferred Mineral Resource estimate at 0.5 g/t Au cut-off 15 as at June 30, 2019

Mineral Resource category	Туре	Tonnes (Mt)	Gold grade (g/t Au)	Contained gold (Moz)
Inferred	Oxide	0.04	1.0	0.001
Inferred	Fresh	12	1.2	0.46
Inferred Resource	Total	12	1.2	0.46

Notes on Table 2 and Table 3:

- Mineral Resource estimates are reported inclusive of those Mineral Resources converted to Ore Reserves (Refer to the announcement released to the ASX and TSX on 3 April 2019, 18 April 2019 and 15 October 2019).
- The Mineral Resources and Ore Reserves are reported in accordance with JORC Code (2012) guidelines and Canadian Institute of Mining, Metallurgy and Petroleum Standards (CIM, 2014).
- Mineral Resource estimates follow the ASX Listing Rule LR 5.8.1.
- Numbers may not add due to rounding to appropriate significant figures.



5.5 Geology

The Namdini gold deposit is a large, structurally controlled, orogenic gold deposit within the Nangodi Greenstone Belt, with numerous features similar to deposits found elsewhere in late Proterozoic Birimian terranes of West Africa. The Namdini gold deposit has so far been delineated over a strike length of 1,150m, up to 350m wide and 700m deep.

In 2016 geological consultants from Orefind Pty Ltd ("Orefind") conducted an on-site study and developed a structural framework with controls on, and geometry of, the gold mineralization in the Namdini deposit.

Orefind concluded that the rock types include a steeply west-dipping Birimian sequence of interbedded, foliated, metasedimentary and metavolcanic units which have been intruded by a medium-grained granitoid and a diorite. The southern part of the Project is covered by flat-lying Voltaian Basin clastic sedimentary rocks that have been deposited unconformably on the Birimian sequence and postdate mineralization and the host sequence.

Underneath the weathering profile, the Birimian units include metasedimentary, metavolcanic, granitoid (tonalite) and diorite. The host metasedimentary and volcaniclastic lithologies have been intensely altered with a resulting pyrite-carbonate-muscovite-chlorite-quartz assemblage. Alteration is most prevalent in the volcaniclastic units. Similarly, the granitoid (tonalite) is extensively altered and has been overprinted by silica-sericite-carbonate assemblages.

In all rock types, the gold mineralization is accompanied by visible disseminated sulphides, mainly pyrite and very minor arsenopyrite, in both the veins and wall rocks. In diamond drill core, the mineralized zones are visually distinctive due to the presence of millimetre to centimetre wide quartz-carbonate veins that are commonly folded and display yellow-brown sericite-carbonate selvages. Rare visible gold occurs in strongly altered granite and is associated with sub-millimetre wide silica-sericite shears.

5.6 Drilling techniques

The Namdini Mineral Resource estimate is based on reverse circulation ("RC") and diamond resource drilling information available for Namdini on the 4 February 2019, totalling 326 holes for 87,140m of drilling. RC and diamond drilling provide around one quarter and three quarters of the estimation dataset respectively.

The resource drilling comprises east-west trending traverses of easterly inclined holes. Hole spacing varies from around 12.5m by 25m in shallow portions of southern part of the deposit to around 50m by 50m and broader in the north and at depth.

The RC percussion drilling was either 130mm (nominally 5½ inch) or 125mm in diameter, and drilled to 200m or less in depth. RC samples were collected over 1m down-hole intervals using a cyclone, with sub-sampling using a three tier-riffle splitter. Rare un-mineralized intervals were composited over 4m intervals for analysis.

For drilling prior to approximately April 2016, diamond core was halved for sub-sampling with a diamond saw. From approximately April 2016 to June 2017 core was quartered for assaying. For drilling after June 2017 diamond core was halved for sub-sampling. Sample intervals range from 0.2 to 1.8m long, with the majority of samples assayed over 1m intervals.



Collar locations of most resource holes were accurately surveyed by differential GPS techniques. The drilling at Namdini is considered to have been surveyed with sufficient accuracy for Mineral Resource estimation. Most diamond holes and deeper RC holes were down-hole surveyed at generally 30m intervals. Hole paths have been located with sufficient accuracy for the current estimate.

Geological logging, was undertaken by Cardinal Resources' technical staff and captured on field Toughbook laptops using Maxwell Geoservices (Perth) proprietary LogchiefTM software. Structural interpretation and modelling were completed by specialist consultants Orefind, resulting in a three-dimensional model of key lithologies, structures and weathering zones.

5.7 Sample Preparation and Assaying

Quality Assurance and Quality Control ("QAQC") of the data used for Mineral Resource estimation is described in this Section.

All sample preparation and gold assaying of primary samples from Namdini resource drilling were undertaken by independent commercial laboratories. Analyses by Cardinal were limited to around 87% of the density samples. No employee, officer, director, or associate of Cardinal carried out any sample preparation work on gold-assay samples from the Namdini Gold Project exploration programme.

As part of Cardinal's QAQC programme, a suite of internationally accredited and certified reference materials ('standards') and locally sourced blanks were included in the sample submission sequence. The standards covered gold grade ranges expected at Namdini. Interlaboratory umpire analyses were also conducted. The sampling, sample preparation and analysis processes were found to be appropriate and acceptable for Mineral Resource estimation.

Most primary samples were submitted to SGS Ouagadougou or SGS Tarkwa for analysis by fire-assay with assays from these laboratories contributing around one third and two thirds of the estimation dataset respectively. Samples from several peripheral resource holes analysed by Intertek Tarkwa provide around 0.5% of the estimation dataset.

SGS Tarkwa and Ouagadougou, and Intertek Tarkwa have been accredited by the South African National Accreditation System for meeting the requirements of the ISO/IEC 17025 standard for specific registered tests for the minerals industry.

The assay laboratories employed consistent sample preparation and analytical procedures. After sorting and weighing samples oven dried before and crushed to 75% passing 2 mm. A 1.5 kg riffle split sub sample was pulverized to nominally 85% at 75 microns (μ m). Samples were fire assayed for gold using a 50g charge with an AAS finish, with a detection limit of 0.01g/t Au. Assays of greater than 100g/t Au were re-analysed with a gravimetric finish.

Certified reference material (blanks and standards) were submitted into the sample stream at a frequency rate of 5% of the samples. Duplicate samples of RC chips were taken at a rate of 5%.

Average assay results of certified reference standards reasonably reflect expected values supporting the general accuracy of assaying. Several sets of inter-laboratory repeat analyses provide additional support for the primary analyses.



Assays of coarse blanks included in assay batches from before May 2015 and after September 2017 show no indication of significant contamination or sample misallocation. Sample batches submitted between May 2015 and September 2017 included fine blanks of pulverized material. These fine blanks showed no significant sample misallocation.

Diamond core and RC samples were transported from the drill site by a Cardinal vehicle to the secure core yard facility at the Bolgatanga Field Exploration Office.

All samples submitted for assaying were retained in a locked secure shed until collected by laboratory personnel. Retained drill core and RC chips are securely stored in the core storage compound, and pulps are securely stored in the core shed.

5.8 Estimation methodology

MPR Geological (2019) used the same methods described in the PFS report to estimate recoverable resources for Namdini using Multiple Indicator Kriging ("MIK") with block support adjustment, a method that has been demonstrated to provide reliable estimates of recoverable open pit resources in gold deposits of diverse geological styles. The MIK modelling used GS3MTM resource modelling software developed by FSSI Consultants (Australia) Pty Ltd.

The MIK modelling was based on 2m down-hole composited gold assay grades from RC and diamond resource drilling. It incorporated a mineralized domain interpreted on the basis of the 2m down-hole composited gold grades. The mineralized domain captures zones of continuous mineralization with composite grades of greater than nominally 0.1g/t Au. This domain trends north-northeast over a strike length of approximately 1,330m with horizontal widths ranging from around 90 to 400 m and averaging approximately 240m. The domain dips to the west at around 70°.

The modelling incorporated panels of dimensions 12.5mE by 25mN by 5m elevation reflecting drill hole spacing in the areas of tightest resource drilling. The resource estimates include a variance adjustment to give estimates of recoverable resources at various gold cut off grades. The variance adjustments were applied using the direct lognormal method. The variance adjustment factors are considered by MPR Geological and Cardinal to reflect comparatively large scale, open pit mining consistent with Cardinal's perception of potential mining scenarios. The variance adjustment factors were estimated from the variogram model for gold grades assuming mining selectivity of 5m by 10m by 2.5m (across strike, along strike, vertical) consistent with high quality grade control sampling on an 8m by 12m by 1.25m pattern. The variance adjustments can reasonably be expected to provide appropriately reliable estimates of potential mining outcomes at the assumed selectivity, without application of additional mining dilution or mining recovery factors.

Validation of the MIK model was undertaken visually and statistically and reviewed independently by Golder and Roscoe Postle Associates.

5.9 Classification

The Namdini Mineral Resource has been classified as Measured, Indicated and Inferred in accordance with the JORC Code (2012) and the CIM Standards (CIM, 2014). A range of criteria were considered in determining this classification including geological and grade continuity, data quality and drill hole spacing. The classification



used the search passes and wire-frames outlining more closely drilled portions of the mineralization. The classification approach assigns mineralization tested by generally 50 by 50 m drilling to the Indicated category, with estimates for zones with more closely spaced drilling classified as Measured. Estimates for panels not informed consistently by at least 50m by 50m drilling are assigned to the Inferred category.

MPR Geological considers the estimation technique and parameters appropriate for this style of mineralization.

Based on the information presented in the FS, the Ore Reserve estimation process has converted 83% of the Measured and Indicated Mineral Resources to Proved and Probable Ore Reserves.

5.10 Mining

Cardinal commissioned Golder to carry out mine optimisation and design studies and an economic evaluation that led to declaration of the Ore Reserve based on technical work reported by Golder.

Mining of the Namdini Gold deposit has been planned to be medium-scale using conventional open pit mining equipment. The mining process will include drill and blast as well as conventional load and haul operations. There is expected to be a limited amount of free-dig material with the majority of material assumed to require drilling and blasting.

Mining will comprise a conventional hydraulic shovel operation typically using 400t class excavators in backhoe configuration for mining ore and face-shovel configuration for mining waste. Rigid body Cat 785 (134t) class dump trucks will be used for hauling ore and waste on designed access roads. An auxiliary mining fleet of dozers, graders, water carts and utility vehicles will support the mining operation.

Mining will be carried out using staged cut-backs with five identified Phases incorporated within the LOM Final Pit. The mining schedule defines movement of ore and waste on 10m mining benches, by year, for each of the Phases. It is proposed to mine three flitches in the ore (allowing for blast heave), within 10m benches.

The Mineral Resource model is the basis for the mining model used for the LOM Pit planning and assessment reporting. The Mineral Resource model has cell dimensions of 12.5m (east) by 25m (north) by 5m (elevation). The MIK variance adjustment allows for a selective mining unit of 5m by 10m by 2.5m, which has been applied to Namdini's large-tonnage, disseminated deposit.

A gold cut-off grade of 0.5g/t Au was applied to the mineralized material. Process costs and mining costs were supplied by independent mining contractors and compared with similar gold projects. Gold grades were supplied with the model as estimated proportional grades using the MIK recoverable resource estimation technique.

Oxide ore will be stockpiled temporarily and batch-fed into the process plant when suitable volumes are available, at the end of the mine life. Waste rock will be stockpiled separately on the western side of the pit.

5.11 Mining factors

Trial open pit optimisations were run in Whittle 4X at a US\$1,300/oz gold price, the appropriate gold price at the time of the optimisation runs, to define the base of potentially economic material. Five cut-backs (or Phases) were then selected and full mine designs applied to them.



For selecting the optimum Whittle pit for mine design Golder estimated a mining base surface cost of US\$2.86/t of rock mined based on experience with similar mining operations in the region, which includes grade control sampling, laboratory assay analysis and supervision costs. The input process and general and administration cost were estimated at US\$14.30/t milled plus an additional US\$1.50/t allowance for stockpile reclaim. All costs are based on dry tonnes.

Once the optimum Whittle pit was selected and mine design completed, a detailed mining movement schedule was supplied to five prospective mining contract companies to assist with the provision of a detailed mining cost estimate. Further discussions and negotiations will continue with suitable mining contractors prior to any award of the mining contract.

Metallurgical test work as reported in the Pre-feasibility Study, was used to estimate the recoverable fraction from the Oxide, Transition and Fresh ore components, with gold grade and proportion of the block at varying MIK cut-off points coded in the block model.

Using the identified marginal cut-off grade, the proportion of ore in each parcel and the gold grade above the cut-off grade were included within the mining model to allow export of the parcelled (ore + waste) blocks for open pit optimisation.

A minimum mining width of 80m was assumed. Mining dilution and recovery are addressed in the modelling method (MIK with variance adjustment) and the utilisation of flitch mining. No Inferred Mineral Resources have been included within the LOM planning. Mining infrastructure requirements were planned to be provided by the selected mining contractor with the mining performed on an outsourced basis.

Grade control will be based on sampling from RC drilling spaced at approximately 10m by 15m with samples taken at 1.5m intervals down-hole (i.e. 1.25m vertically). All grade control sampling will be fire assayed at the mine site.

No consideration has been made for underground extensions of the operation in this FS.

5.12 Geotechnical parameters

For the mine design, Golder Ghana carried out a study of existing geotechnical information, reviewed information on mineral resource estimates, conducted a detailed pit geotechnical drilling campaign, and gathered detailed rotary core logging data from selected drill locations within the Project area.

The Life of Mine pit design considers slope performance based on models developed from laboratory results of sampled drill core. The results present feasibility level slope designs based on data collected in the field and data and reports made available by Cardinal.

Based on geotechnical and hydrogeological considerations from site investigations at the Project area, the design sectors were defined around the Namdini Pit.

For the final wall, bench stacks will consist of four double-benches (i.e. 80m high) in Fresh material. These will be separated by either 25m wide catch-berms or ramps. Some flexibility in height is used where a ramp is close to a catch berm.



5.13 Pit optimizations

Pit optimisations were completed using the Lerchs-Grossman (LG) algorithm in Whittle $4X^{TM}$ software to calculate the optimal pit at the specified input parameters. A wire-frame pit shell for each gold price considered was the resultant output. One of these was selected as the base for the final LOM Pit design. A pit of approximately 1.2Moz was chosen as the Starter Pit (Phases 1 and 2) to maximise DCF and minimise capital payback time.

5.14 Mine scheduling

Mine scheduling was used to maximise value by deferring larger strip-ratio cut-backs until later in the mine life. The maximum value pit was selected using a discounted average Net Present Value and determined to align with a revenue factor targeted shell at around 0.975RF of US\$1,235/oz to maximise cash flow, using estimated LOM input prices and costs. Pit shells were converted into engineering designs prior to export of the contained resource model for scheduling purposes.

The mine scheduling was completed using the MinemaxTM Scheduler software in quarterly ("Qtr") periods. The mining sequence has been designed to incorporate five mining Phases. The initial mining Phase targets a relatively small initial pit of higher-grade ore with minimal waste stripping requirements (Starter Pit). The overall mining schedule is targeted towards the early generation of cashflow to assist in repayment of the Project capital and to maximise Project discounted value. The Minemax schedule was then used to back-flag the mining model to the quarterly periods mined. Subsequent to the flagging of the period mining sequence in the block model, the model was then used in the AlastriTM Tactical Scheduler to identify bottlenecks and to allocate resources for detailed down-stream cost modelling.

The process plant will accommodate an annual feed rate of 9.5Mtpa as advised by Cardinal over the 15-year life (13 years of direct feed and 2 years of reclaimed stockpiles) including ramp-up. The ramp-up has been assumed to cover a three-month period within the first year. It is planned to treat 90% of annual throughput during that first year of plant operation. An initial pre-strip period has been incorporated within the schedule to allow access to the Fresh ore within the Starter Pit and the stockpiling of the overlying Oxide portion in the Starter Pit.

The schedule was constrained to a generally maximum vertical sink rate (or Vertical Advance Rate, "VAR") of 80m per year, with the mining Phases set to honour a minimum bench advance lead of three benches during any period.

The schedule targets the ore above the marginal cut-off grade, but uses the maximum recoverable value as a determination of process plant feed. Lower grade material is stockpiled as long as the mill feed requirements for deliverable ore can be met.

The scheduler was set up to maximise net present value (NPV) whilst maintaining a reasonable smoothing of tonnage movement per year. The peak tonnage requirement over the period 2026 to 2033 is maintained at 36 Mtpa to allow mainly medium- and high-grade ore to be directly fed to the process plant, with the low-grade ore being stockpiled for treatment after primary mining has completed.



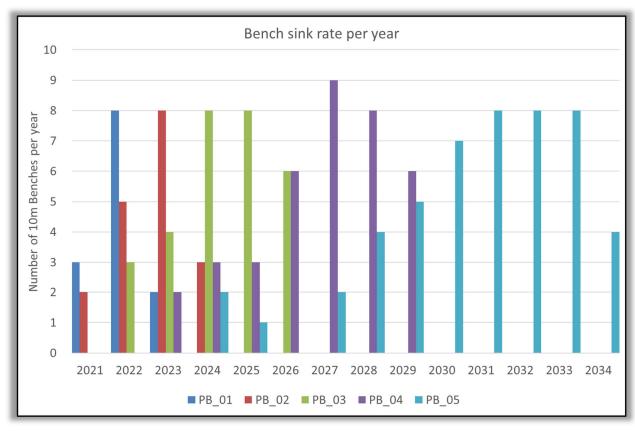


Figure 3: Mining vertical advance rate

5.15 Mine design criteria

The mine design criteria were developed to provide a plant feed rate of 9.5 Mtpa.

The mining sequence at Namdini consists of a relatively short period of higher-grade low strip ratio mining in the Phase 1 and Phase 2 pits. The Oxide ore is removed from most of the mining Phases during the early part of the schedule as this material is stockpiled for processing at the end of the LOM following process plant modifications. The maximum mining movement has allowed for a strip ratio of up to 3:1 so that the initial optimizations are not 'mining-limited'. The final Life of Mine strip ratio is 1.9:1.

The pit design considered the geotechnical requirements for berms, face angle batter and catch-berms for the lithology within the block model to establish the engineered pit design in which the Ore Reserve is contained.



The pit was designed with five Phases, the first one (the Starter Pit) having two sub-phases with a single common ramp, allowing early access to the higher-grade ore near the surface. The second Phase is largely an expansion of the initial Phase targeting the ore to a greater depth. The Phase designs were created for optimal ore delivery from the first two Phases due to their low strip ratio and waste rock movement. The subsequent Phases contain a greater proportion of waste rock. A minimum mining width of 80 m was established between the Phases.

The Namdini deposit has been described as a largely diffuse orebody with limited pockets of higher-grade zones. An analysis of the grade-tonnage curve for the LOM Pit (Phase 5), indicates that there is a relatively low proportion of higher-grade material above 1.5g/t Au. This type of grade-tonnage curve with a very flat curve for grades higher than 1.5g/t Au shows that the ore attainable from selective mining would be minimal compared to the total available ore within the pit. The grade-tonnage profile for the Ore Reserve within the Final Pit design shows that some 86% of the Ore Reserve sits within a gold grade range of 0.5 to 1.5g/t Au.

Of the 138 Mt of ore within the Final Pit design, only 20 Mt of the total is above a gold grade of 1.5 g/t. The nature of the ore lends itself to bulk mining, with minimal edge dilution and ore loss expected at the edges of the demarcated ore zones during mining.

The design work targeted the maximum discounted value pit shell at a US\$1,235/oz gold price. The pit optimization using the Whittle 4X software was used to identify the optimum pit shell with the Inferred Resource material considered as waste rock. The identified pit was then considered for practical staging in order to minimise waste movement and improve the cashflow for the Project. The analysis allowed the selection of five Phases with the initial two Phases targeting a relatively higher-grade area of ore near surface. Access was allowed to the four Phases by a ramp from the northern edge of the pit as the volume of waste rock in the first four Phases is considered modest. The final fifth Phase has a main access ramp on the western side of the pit to provide a shorter haul to the waste rock dump given that the final Phase has a higher strip ratio than the preceding four Phases. Having the primary access on the western side of the pit reduces waste rock haulage costs and thus improves the overall value.

Design of the pit Phases was largely focused on targeting maximum value change-points within practical mining constraint limits, such as the minimum mining width of 80m between the Phases.

Table 4 shows the key estimated production results.

Table 4: Key estimated production results

Key Estimated Production Results	Unit	9.5 Mtpa
Gold produced (average for full production years)	(koz/yr)	287
Life of Mine production – gold	(koz)	4,177
Average mine head grade	g/t Au	1.13
Ore Reserve mined at 0.5 g/t Au cut-off grade	Tonnes (Mt)	138.6
Life of Mine strip ratio	W:O	1.9:1
Mine life	years	15



5.16 Mining cost

The FS assumed the mining contractor will bear the total mining capital cost under an outsourced mining arrangement with the costs recovered by the mining contractor on a cost per tonne mined basis.

Golder approached five leading mining contractor service providers in Ghana and received budget estimates for the provision and supply of mining operations at the Namdini Project. The budget estimates were used to provide project cost estimates for the mining operation over the life of the operation. Ghana currently has a very active mining contractor supply base. Specialist skills and core competencies in the mining contractor companies will be key considerations in the final selection criteria.

In addition to the mining contractor budget estimates, mining costs were also developed from first principles and a profit factor applied to estimate contract mining cost. The estimated base mining cost applied an incremental cost with depth, to account for increased haulage costs and the depth of mining increases in line with standard mining cost principles. All costs were determined on a US dollar basis.

5.17 Cut-off grade

An estimated marginal cut-off grade was established at 0.5g/t Au using an assumed long-term gold price of US\$1,300/oz. The provided Mineral Resource model was validated and used to develop a mining model, as the basis for a LOM plan and economic assessment.

Gold royalties were assumed at 5% of gold price, with payable gold estimated at 99.8% of doré exported. The net gold price was thus \$39.67/g (US\$1,234/oz). The input processing cost provided in the ASX and TSX announcement of April 18, 2019 was \$14.30/t plus an additional \$1.50/t allowed for stockpile reclaim giving a total of \$15.80/t of mill feed (as dry tonnes). Thus, the marginal cut-off grade ("COG") was estimated as: process cost/(net gold price * process recovery) giving 0.5g/t Au (to one significant figure).

Using this marginal COG, the proportion of ore and the gold grade above the COG were defined in the mining model and the parcelled proportions of ore above cut-off within the blocks were exported for open pit optimisation. The 0.5g/t Au cut-off grade approximates an operational parameter that the Corporation believes to be applicable. This is in accordance with the guidelines of Reasonable Prospects for Eventual Economic Extraction in CIM (2014) and the JORC Code (2012).

5.18 Ore Reserve

The mine design and Ore Reserve estimate are based on the revised Mineral Resource model announced to the ASX and TSX on April 3, 2019.

The Namdini Ore Reserve reported in the FS is a subset of the Measured and Indicated Mineral Resource, which forms the basis of the technically and economically viable Namdini Gold Project.

The Ore Reserve estimation process converted 83% of the Measured and Indicated Mineral Resources to Proved and Probable Ore Reserves.



The Ore Reserve was estimated for the Namdini Gold Project as part of the FS by Golder, which is summarised in Table 5. The total Proved and Probable Ore Reserve is estimated at 138.6Mt at 1.13g/t Au with a contained gold content of 5.1Moz. Of this total, 92% of the contained gold is within the Probable Ore Reserve category.

The Ore Reserve for the Project is reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012) and Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014). The Mineral Resource was converted after applying Modifying Factors. All the Proved Ore Reserve is based on the Measured Mineral Resource and all the Probable Ore Reserve estimate is based on the Indicated Mineral Resource. Table 5 presents a summary of the Ore Reserves on a 100% Project basis at a US\$1,300/oz gold price.

All Measured Resources within the final pit design were converted to Proved Ore Reserves with the Indicated Mineral Resources within the pit shell converted to Probable Ore Reserves.

Table 5: LOM Ore Reserve estimate as at June 30, 2019

Ore Reserve Category	Туре	Tonnes (Mt)	Gold Grade (g/t)	Contained Gold (Moz)
Proved	Oxide	1.0	1.21	0.1
Proved	Fresh	6.4	1.33	0.3
Proved Reserve	Total	7.4	1.31	0.4
Probable	Oxide	3.0	1.08	0.1
Probable	Fresh	128.2	1.13	4.6
Probable Ore Reserve	Total	131.2	1.12	4.7
Proved and Probable	Oxide	4.1	1.11	0.2
Proved and Probable	Fresh	134.5	1.13	4.9
Proved and Probable	Total	138.6	1.13	5.1

Notes on Table 5:

- The Ore Reserve reported in accordance with JORC Code 2012 guidelines and Canadian Institute of Mining, Metallurgy and Petroleum "CIM Definition Standards for Mineral Resources and Mineral Reserves" (CIM, 2014).
- The Ore Reserve was evaluated using a gold price of USD \$1,300/ oz with USD \$1,235/ oz optimised pit chosen for Ore Reserve pit design to maximise cash flow.
- $\bullet \qquad \textit{The Ore Reserve was evaluated using an average cut-off grade of 0. g/t Au.}\\$
- Ore block grade and tonnage dilution was incorporated through the use of an MIK recoverable resource estimation
 model which was demonstrated to incorporate an expected level of equivalent ore loss and dilution for the scale of
 mining envisaged.
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

Since the Corporation's press release dated October 15, 2019, the Corporation has not made any changes to the categories or size of the 5.1Moz Ore Reserve, as no mining has occurred.



5.19 Mineral processing and metallurgical testing

(a) Introduction

Metallurgical testwork continued to focus on the same flowsheet as presented in Cardinal's PFS.

Gold is recovered using crushing, SABC milling, gravity, flotation, concentrate regrind, high-shear oxidative pre-treatment, and CIL cyanidation of the flotation concentrate. The milling circuit comprises a semi-autogenous grinding mill ("SAG"), ball mill and pebble crushing ("SABC").

The metallurgical testwork on Fresh material was carried out by ALS Laboratory in Perth, Australia and at the Maelgwyn Mineral Services Africa ("MMSA") Laboratory in Johannesburg, South Africa.

(b) Results

Key findings from the testwork were:

(c) Mineralogy:

- Native gold is the predominant gold bearing mineral with very low silver content (<2 ppm Ag).
- Pyrite is the dominant sulphide mineral where the majority of the gold is associated within the
 three main lithologies referred to as Transition and Fresh material. The main Transition and Fresh
 ore lithology types are Metavolcanics (MVO), Granite (GRA) and Diorite (DIO). The small portion of
 Metasediments (MSE) in the ore behaves similarly to MVO metallurgically, therefore its results are
 deemed to conform to those of MVO.
- A small portion of gold resides in Oxide material at surface accounting for approximately 3% of the
 total ounces in the Ore Reserve. No detailed mineralogy was necessary on the Oxide material since
 previous metallurgical testwork established its consistent metallurgical behaviour and high gold
 recovery.
- The pyrite particle size of 80% passing (" P_{80} ") ranges from 82 μ m to 93 μ m.
- Pyrite is classified as 'well-liberated' from the host rock minerals with close to 85% liberation.
- Free gold particles were detected during a thorough optical search using a binocular stereomicroscope of the unmounted gravity concentrates. These gold grains are approximately 200 µm in diameter and rounded in appearance. Gravity gold recovery is supported based on the testwork.
- Mineralogy and laboratory testwork results do not indicate the presence of preg-robbing carbonaceous matter. Organic carbon varied from 0.03% to 0.09%; leach kinetic response did not indicate preg-robbing behaviour which was verified by a preg-robbing index ("PRI") test ranging from 0.03 to 0.06 PRI.



(d) Comminution:

- Comminution design was based on the competencies and behaviour of the Transition and Fresh material only. The Oxide material from previous studies did not affect comminution design outcomes.
- Average Bond Ball Mill Work index ("BBWi") values for MVO, GRA and DIO ranged from 12.6 to 18.6 kWh/t with Diorite (DIO) reporting the highest work index. Gyratory crusher design has been based on the 85th percentile values, initially 19.8 kWh/t (Starter Pit) reducing to 19.0 kWh/t (LOM).
- JK Drop Weight calibration was performed on PQ drill core samples, supported by SAG mill
 comminution variability testing applied to HQ samples. Analysis of the distribution of separate
 lithology results supports Comminution circuit design based initially on an A*b value of 31.3
 reducing to 28.8 (LOM).
- The BBWi data indicated a range between 14.7 and 19.7 with an average of 16.9 kWh/t. Ball mill circuit design has been based on 85th percentile values, initially 17.3 kWh/t increasing to 18.9 kWh/t (LOM).
- Bond Abrasion Index ranged between 0.03 and 0.29 with Granite (GRA) reporting the highest value.
 Circuit design is based on a value of 0.285 with an average (blended) value of 0.139 used for the operating cost estimates.
- Pilot plant testing of the Outotec high intensity grinding mill ("**HIGmill**") to establish grind energy signature plots, proved that a regrind (P₉₀) size of 9 μm was the most economical for the purpose of design.

(e) Flotation:

- Oxide material will bypass the flotation process as it does not contain floatable sulphide material.
 No flotation testwork on Oxide material was performed.
- Fast flotation kinetics of Transition and Fresh ore was observed with most of the gold recovered in sulphides in less than 8 minutes.
- Gold recovery averaged 95% to concentrate for the majority of composites.
- Gravity recovery improved total gold recovery and mostly eliminated variability in the flotation tails grade.
- Gravity and flotation separation resulted in an average flotation tail grade of 0.08 g/t Au over a total of 72 tests and across all lithologies.
- Flotation mass recovery averaged 7.3% w/w; concentrate grade based on the Starter Pit composite
 averaged approximately 30 g/t without gravity recovery and approximately 15 g/t Au with prior
 gravity recovery.



(f) Leach:

- No leach testwork was deemed necessary on the Oxide material during the FS. Previous Oxide testwork results by Gekko dated 28 August 2017 were carried forward into the FS. Leach extractions averaging 90% at a grind size P₈₀ of 75μm were consistently observed.
- Concentrate leach feed grades based on Starter Pit and separate Life of Mine lithology composites ranged between 6g/t and 37g/t Au, reporting an average at 15.6g/t Au.
- Leach residues based on standard direct cyanidation leach tests without high shear oxidative pretreatment averaged 0.21g/t Au based on an average flotation concentrate mass recovery of 7.6% and a concentrate regrind P₉₀ size of 9 μm.
- Maelgwyn AachenTM shear reactor technology was tested at the MMSA laboratory facility in South Africa with encouraging results, supporting improved leach extraction relative to standard direct cyanidation. At a regrind P₉₀ size of 9 μm, total extraction increased by 4.0% relative to the Baseline direct cyanidation via 10-Pass Leachox treatment. The testwork results have been incorporated into the circuit design based on 10-Pass treatment; extraction improvement has also been incorporated into recovery values based on a concentrate regrind P₉₀ size of 9 μm.
- Prior Leachox treatment also acted to oxidize cyanide-consuming species, indicating potential for reduced leach cyanide consumption and improved operating cost.

5.20 Expected Metallurgical Recovery

Early testwork established that Namdini Oxide ore is free milling with an average recovery of 90% at a grind size P_{80} of $75\mu m$. Previous testwork has shown that a non-flotation conventional gold process can be applied to all Oxide material (less than 3% of the Ore Reserve in terms of tonnes and contained gold) which will be stockpiled and processed at the end of the mine life. The metallurgical work carried out to date indicates that gold can be satisfactorily recovered from Namdini Transition and Fresh ore feed using conventional flotation, regrind and CIL cyanidation techniques, and from Oxide ore feed using conventional CIL cyanidation techniques.

All gravity gold, flotation, regrind and leach results were analysed to produce three regression recovery curves, one for each of the key Namdini lithologies. These curves were then applied to the varying head grades of the mine schedule to derive overall recovery.

The metallurgical testwork has also provided variability information characterising the comminution, gravity, flotation and leach response of the main three Namdini lithologies.

Gold mineralization is mainly associated with pyrite in all three main rock types: Metavolcanic, Granite and Diorite. Bulk samples were collected for bench-scale and pilot-scale metallurgical testwork for the key areas of the process plant flowsheet. Sample selection and therefore metallurgical testwork has included high-grade, low-grade, ore body variability and sulphur variability for all ore lithologies.

Metallurgical testwork has proved that the ore is amenable to conventional flotation techniques due to the gold being associated with sulphides. Metallurgical testwork has also confirmed that the ore is amenable to



conventional milling and flotation, followed by regrinding, high-shear oxidation and cyanide leaching of the flotation concentrate in a carbon-in-leach process.

The selected processing route for Namdini ore is crush, primary grind, sulphide flotation followed by regrind, high-shear oxidative treatment, and CIL cyanidation of the flotation concentrate.

AachenTM is a relatively simple, proven process already being used at gold producing mines globally and specifically in Africa. These operations have consistently demonstrated an uplift in gold recovery with AachenTM. The premise of the process is that high shearing of slurry particles and increased oxygen mass transfer to the slurry results in improved kinetics by scouring the particle surfaces and accelerating the oxidation of the sulphide species. This allows for less residence time and less reagent requirements within the leaching circuit. In addition to a potential increase in gold recovery (and therefore a potential uplift to annual gold production rates), there are typically power and reagent (Opex) savings and power requirements (Capex) savings that can be realised.

Cardinal has tested 4,447kg of material from 47 drill holes (2,048 one metre intervals), comprising 7 pilot scale composites across the entire deposit. A further detailed testwork programme was then completed comprising 2,310kg from 24 drill holes (805 m) as part of an optimization program.

AachenTM testwork on Namdini flotation concentrate indicated the following improvements:

- Increased gold recovery (+4.0% over Baseline, without Leachox treatment)
- Coarser regrind size compared with the PFS flowsheet for certain lithologies
- Reduced power consumption (i.e. lower operating power requirements and Opex)
- Improved mass transfer of oxygen, leach kinetics and reactivity of reagents
- Reduced reagent consumption leading to reduced operating costs.

Orway Mineral Consultants Pty Ltd ("OMC") used the comminution testwork results for comminution circuit selection and mill sizing. A primary crushing and then open circuit SABC was selected by OMC using available comminution parameters.

- The process design based on the metallurgical testwork is as follows:
- A primary grind size of 80% passing 106 µm was selected for the primary grinding circuit design.
- Incorporation of a gravity concentration circuit given the presence of gravity recoverable gold.
- Flotation testwork indicated fast sulphide flotation kinetics; the circuit comprises six 300 m³ rougher flotation cells based on kinetic response and recovery.
- The flotation concentrate is reground and subjected to a high-shear reactor and pre-aeration before CIL cyanidation.
- Gold recovery will be via a conventional CIL cyanidation
- Gold is recovered using crushing, SABC milling, gravity, flotation, concentrate regrind, high-shear
 oxidative pre-treatment, and CIL cyanidation of the flotation concentrate, with an elution circuit,
 electrowinning and gold smelting to recover the gold from the loaded carbon to produce doré.



- The Oxide results reported in the PFS were retained. The previous Oxide metallurgical testwork was performed on a whole-of-ore-leach recovery testwork regimen, which yielded an average 90% recovery at a grind size P_{80} of 75 μ m.
- Average recovery is dependent on head grade and the ratio of the different lithologies.
- Recovery was calculated by adding the gold recovered by gravity, flotation and leaching gold and allowing for gravity gold loss at scale and CIL carbon and solution loss. This is effectively gravity recovery plus flotation recovery multiplied by leach recovery.
- The Transition material at Namdini is approximately 3% of the ore feed. It is only partially weathered (oxidized) and behaves in metallurgical test work similar to the Fresh material, with similar recoveries.
- Metallurgical testwork carried out to date indicates that the Namdini Gold Project can deliver a standard gold recovery process plant design with no unproven technology required.
- The metallurgical process includes well-tested technology for all unit operations.
- No deleterious elements were identified in the testwork that could affect the saleability or price of the gold doré produced.
- Namdini will produce readily saleable gold doré that will be exported for refining.

The Transition material at Namdini is only partially weathered (oxidized) and behaves in metallurgical test work similar to the Fresh material, with similar recoveries. The Transition material is to be processed with the Fresh material as part of the mill feed and thus these are combined in all the mine and mill schedules.

The metallurgical work carried out to date indicates that gold can be recovered from Namdini Transition and Fresh ore feed using conventional flotation, regrind and CIL cyanidation techniques, and from Oxide ore feed using conventional CIL cyanidation techniques. The work is considered sufficient to define a technically and economically viable gold mining project.

5.21 Process Plant

The process plant design was based on a nominal capacity of 9.5 Mtpa. The feed will comprise blended ore from the pit consisting predominantly of three rock types being approximately 56% Metavolcanics, 29% Granite and 15% Diorite over the LOM. Oxide material will be fed at the end of the LOM once all Fresh + Transition material is depleted.

5.22 Flowsheet

The information presented in this Section is derived from Lycopodium and Knight Piésold.

A nominal throughput processing rate of 9.5 Mtpa was selected as part of the FS.

The assessment of the comminution circuit identified that 9.5 Mtpa is the largest throughput that can be achieved with dual pinion mill drives.

The process plant design incorporated the following unit process operations:



- Single stage primary crushing with a gyratory crusher.
- Crushed ore feeding a stockpile with ore reclaim by two apron feeders.
- A SAG mill and ball mill in closed circuit with cyclones with recycle crushing of pebbles from the SAG mill.
- A gravity recovery circuit consisting of centrifugal concentrators and an intensive cyanidation leach system.
- Rougher flotation to produce a gold-rich sulphide concentrate.
- Thickening of the flotation tails for water recovery prior to disposal in a separate non-cyanide Tailings Storage Facility ("TSF").
- Thickening of flotation concentrate followed by regrind utilizing Outotec HIGmillTM technology.
- Maelgwyn's Aachen high-shear oxidation process on the regrind product before CIL.
- A concentrate CIL facility incorporating one pre-leach aeration tank and seven CIL tanks.
- A split AARL elution circuit, electrowinning and smelting to recover gold and silver and produce doré bullion.
- CIL tailings treatment incorporating cyanide destruction.
- Concentrate CIL tailings disposal in a lined tailings storage facility.
- The plant is designed to comply with the International Cyanide Management Code (ICMI, 2016) for the manufacture, transport, and use of cyanide in the production of gold.

5.23 Infrastructure

The site is located approximately 50km outside Bolgatanga and 180km from Tamale. Serviced camp style accommodation will also be integrated in the proximity of the operation. A shuttle bus service will operate to and from site as required.

The site will be accessed by road from the west with a new, approximately 25km, gravel road linking the site to the existing national road N10 between Pwalugu and Winkogo. The N10 provides good access to the major cities and ports in southern Ghana and no upgrades of the N10 will be required. The site access road will follow a similar route to the proposed new power line for the existing substation north of Pwalugu.

Cardinal has sufficient area available on its leases to cater for all its planned infrastructure requirements.

Lycopodium and Knight Piésold completed FS level analyses covering all related aspects of the infrastructure requirement including power, water, road access and waste management.

5.24 Hydrogeology and Hydrology

A hydrogeological fieldwork programme was undertaken comprising a hydro-census of surrounding properties to identify groundwater users. Groundwater exploration drilling of five pairs of boreholes converted to deep and shallow monitoring wells was completed. Characterization of groundwater quality by sampling and laboratory analysis, groundwater monitoring and hydraulic testing was completed. Development of a



conceptual model for assessment of pit inflows, potential impacts on mine dewatering on local, plus regional groundwater and surface water systems, has been completed in support of the mine design.

A hydrology programme including the development of a stormwater plan and overall site water balance was also completed. Hydrological design criteria are being developed, largely based on International Finance Corporation requirements.

5.25 Water and Air services

- Three water systems will be used:
- Process water recovered from the flotation tails thickener and tailings storage facility will be recycled in the grinding and flotation areas.
- Cyanide water recovered from the cyanide tailings storage facility will be used in the CIL circuit.
- Raw water sourced from the White Volta River via a raw water storage dam will be used for reagent
 mixing, cooling water make-up, pump gland seal water and will feed a water treatment plant for
 elution water and potable water plant feed.

Three air systems will be used:

- Low pressure air will be used in the flotation cells.
- Oxygen will be used in the CIL circuit and cyanide destruction and arsenic precipitation areas.
- Compressed air will be used for instruments and plant services.

5.26 Tailings Storage Facilities

(a) Tailings testing

Tailings were subject to physical testing. Results indicate that flotation tails will have a rapid rate of supernatant release of 46% of contained water excluding rainfall. CIL tails would be similar in terms of percent water release, but at a slower rate. Ultimate settled density (air dried) was 1.47 t/m³ for CIL tails and 1.67 t/m³ for flotation tails.

Geochemical testing indicated the following:

- The flotation tailings samples recorded negative net acid producing potential ("NAPP") values and weakly alkaline net acid generating pH values. Therefore, the Diorite and Metavolcanics flotation tailings are classified as acid consuming ("AC") and the Granite rougher tailings as non-acid forming ("NAF") following the AMIRA (2002) classification.
- The CIL tailings sample recorded a positive NAPP and a low net acid generation pH, resulting in a classification of potentially acid forming.
- On the basis of the multi-element results, both the flotation and CIL TSFs are designed to prevent the loss of solids. The flotation TSF will require a basic cover system on closure. The cover system for the



CIL TSF will be driven by the need to control acid generation by precluding oxygen and water ingress to limit ongoing oxidation of the tailings and seepage.

 Based on supernatant analysis, the flotation tailings facility will require a compacted soil liner to limit seepage. In addition, the facility should have an underdrainage system to limit the hydraulic head acting on the soil liner. The CIL tailings facility will require a robust engineered liner system, likely comprising a compacted soil liner with overlying HDPE liner and underdrainage system.

(b) Tailings Storage Facility design

The flotation TSF will be constructed as a side valley-type storage facility to the southwest of the open pit. The facility will be constructed as two cells with zoned earth fill perimeter embankments and will be lined with a low permeability compacted soil liner. The total basin area will be 474 Ha and is designed to accommodate 139 Mt of tailings. The TSF embankments will be constructed in stages to suit storage requirements with Stage 1 constructed initially to provide capacity for the first 12 months of operation and subsequent stages constructed using downstream raise construction methods (Knight Piésold, 2019b).

The TSF basin area will be cleared, grubbed and stripped of topsoil. A 300 mm depth compacted soil liner will be constructed over the entire TSF basin area as either reworked *in situ* material (assumed 70%) or imported Zone A (30%) material.

The TSF design incorporates an under-drainage system comprising a network of branch and collector drains in each cell. The system will drain by gravity to a collection sump located at the lowest point in each cell.

Supernatant water will be removed from the TSF via a submersible pump mounted in a decant tower. Temporary decants will be provided to suit the tailings deposition schedule in each cell. The final decants will be located along the divider embankment between the two cells.

5.27 Operating costs

The operating costs ("Opex") have been developed by:

- Lycopodium Processing and General and Administration costs
- Golder Mining costs
- Cardinal Owner's costs.

Operating costs have been determined for a throughput rate of 9.5 Mtpa operating 24 hours per day, 365 days per year at a primary grind size of P_{80} 130 μ m and a flotation concentrate regrind size of P_{90} 9 μ m.

The operating costs have been compiled from a variety of sources, including the following:

- OMC modelling for crushing and grinding energy and consumables, based on comminution testwork
- The LOM expected mass recovery of gold to flotation concentrate is 7.5% based on testwork managed by Cardinal.
- Flotation reagent consumption based on testwork managed by Cardinal.
- CIL reagent consumption based on based on testwork managed by Cardinal.



- Calculated reagent usage for cyanide destruction and arsenic precipitation prior to testwork
- Typical industry data from equipment vendors.
- Budget pricing from Vendors or Lycopodium's database of unit prices for consumables.
- Lycopodium's database of costs for similar sized operations.
- Mining costs were solicited from five of the largest in-country mining contractors. The estimated base
 mining cost has an applied incremental cost with depth, to account for increased haulage costs and
 increases in the depth of mining in line with standard mining cost principles.

5.28 Capital costs

The capital cost ("Capex") estimate for the Namdini Gold Project has been compiled by Lycopodium with input from Knight Piésold on water infrastructure and tailings storage.

The FS capital cost estimate was completed to an accuracy of +15% to -5% for both Plant and Infrastructure Capital Costs, based on open pit mining of the Ore Reserve.

The proposed plant comprises crushing, SABC milling, gravity, flotation, concentrate regrind, high-shear oxidative pre-treatment, and CIL cyanidation of the flotation concentrate.

Cardinal compiled the Mining and Owner's costs. The mining establishment cost was based on information provided by in-country mining contractors. The capital costs include Owner's costs and contingency as calculated by Lycopodium.

The capital cost estimate is summarised in

Table 6 for which the detail is available separately to Cardinal.

Table 6: Capital estimate summary (US\$, 1Q19, +15/-5%)

Main area	US\$'000
Construction distributable costs	41,699
Treatment plant costs	149,727
Reagents and Plant services	28,562
Infrastructure	60,138
Mining Services	6,253
Management costs	36,313
Owner's Project costs	25,207
Subtotal – Process Facility & Infrastructure	347,911
Contingency	42,196
Taxes & duties	*
Escalation	Excl.
TOTAL PLANT DEVELOPMENT	390,107



Note: * Taxes of \$37M are excluded and are subject to negotiation and/or deferment under a Development Agreement.

Overall plant layout and equipment sizing was prepared with sufficient detail to permit an assessment of the engineering quantities for the majority of the facilities including earthworks, concrete, steelwork and mechanical items. The layouts enabled preliminary estimates of quantities to be taken for all areas and for interconnecting items such as pipe racks.

Unit rates for labour and materials were derived from responses to requests sent to fabricators and contractors experienced in the scale and type of work in the region.

Budget pricing for equipment was obtained from reputable suppliers with the exception of low value items which were costed from Lycopodium's database of recent project costs.

For the accommodation camp, offices, workshops and similar items, appropriate budget pricing was obtained from reputable suppliers of similar prefabricated designs.

Knight Piésold provided the design and quantities of infrastructure items that were subsequently costed by Lycopodium.

The Capex estimate includes:

- Direct costs of the Project development including infrastructure.
- Indirect costs associated with the design, construction and commissioning of the new facilities.
- Owner's cost associated with the management of the Project from design, engineering and construction up to the handover to operations and Project close-out.
- Insurance and operating spares, first fills.
- Costs associated with operational readiness and pre-production operations.
- Growth allowance on quantity, pricing and unit rates variance.
- Contingency on project scope definition and risks.
- HV Powerline to the process facility and switchyard.
- Taxes and duties (subject to Development Agreement).

The material quantities and unit cost estimates were developed from engineering drawings, estimates and calculations at the level required for FS and validated against estimates from similar sized projects.

5.29 Environmental

Cardinal engaged NEMAS Consult Ltd ("NEMAS") as an independent consultant to undertake the EIA study for the Project (NEMAS, 2017). This culminated in preparation and submission of an EIS report (NEMAS, 2018) to the Ghanaian Environmental Protection Agency ("EPA") on October 26, 2018 to satisfy the Environmental Protection Agency Act 1994 (EPA Act 490) and the Environmental Assessment Regulations 1999 (LI 1652). The EIS Report is still in Draft form pending approval from the EPA.



Cardinal has also registered the TSF portion of the Project with the EPA as a standalone project. This enables a TSF-specific EIA to be conducted to ultimately obtain an environmental permit for the construction, operation and closure of the TSF. Therefore, Cardinal engaged Geosystems Consulting Limited ("Geosystems") to prepare a Draft TSF Scoping Report (Geosystems, 2019), which precedes the EIA specifically for the TSF. The Draft TSF Scoping Report sets out the scope and extent of the EIAs to be carried out and includes the draft terms of reference to be addressed in the EIS during the EIA process.

This Report provides a high-level summary of the environmental and social baseline conditions with a focus on key findings from the baseline studies conducted to date for the Project. Numerous desktop and field studies and assessments were undertaken to support the EIA Study and EIS, including examination of stakeholder engagement, flora, fauna, aquatic biology, hydrology, soils, environmental quality, archaeology and culture.

There are four main sub-basins within the Volta catchment, consisting of the Black Volta River, White Volta River, Oti-Pendjari River and the Lower Volta River. The sub-basins, excluding the Lower Volta system, flow to the Volta Lake which was created by the construction of Aksombo Dam in 1964.

The White Volta River first flows south on entering Ghana, turns west to be joined by the Red Volta River, continues westwards through the Upper East Region and then turns south, where it is joined by several tributaries, including the Kulpawn/Sissili and Nasia Rivers. The Project area is located approximately 7 km north of the White Volta River.

A small ephemeral stream, the Zoan Buliga, is the only visible source of surface water that traverses the Project area and passes through the northern boundary before joining the White Volta. The Zoan Buliga stream flows from a few days to weeks during the months of heavy rainfall, typically between May and October.

Stagnant ponds of water are a result of rainfall collecting in pits left by illegal mining.

5.30 Social

A social baseline study was conducted as part of the EIA Study to outline the socio-economic and cultural settings of the host communities for a reference against which to measure impacts (positive and negative) of the Project on the host communities.

The host communities affected by Cardinal's 19.5km² Project area are the Biung (Bingo) and Datoko which also captures Wankala and Zangore.

The dominant tribe is the Talensi which forms about 90% of the local population with some migrants from Southern Ghana and neighbouring countries. The area is under the Nabdam Traditional Council and is male dominated, both in terms of demography and cultural practices. The people are mostly traditionalist and/or Christians with Muslims forming the minority.

Fifteen heritage resources, two archaeological settlement sites and 13 shrines were identified and documented at Biung. Three shrines and 14 archaeological settlement sites were identified and documented at Datoko.

Most residents either have no formal education or are without any employable skills. The local economy is based on subsistence farming. Illegal artisanal gold mining has dominated economic activity particularly within



the Project area over the past 20 years. Concerns regarding loss of access to land and therefore loss of this economic activity due to Project development is a key concern for these communities.

As part of the EIA Study and to support the EIS, Cardinal identified approximately 29 key stakeholders for the Project, including Government regulatory agencies, Government institutions, traditional and political authorities, Project communities and leaders, and non-Government authorities.

Extensive social consultations and stakeholder engagements have been held with key stakeholders.

All key stakeholders consulted expressed their support for the Project. Key concerns raised related to security, Social Corporate Responsibility, payment of royalties, and protection of juveniles from engaging in artisanal mining activities. Stakeholders advised Cardinal to operate an 'open door' policy based on mutual respect

5.31 Economic evaluation

The economic assessment was carried out Pre-Tax and has assumed a total allowance for royalties of 5% of the gross gold price.

The Project has been evaluated using a DCF analysis. Cash inflows consist of quarterly and annual revenue projections. Cash outflows consist of capital expenditures, operating costs, taxes and royalties. These are subtracted from the inflows to arrive at the annual cash flow projections.

To reflect the time value of money, annual net cash flow ("NCF") projections are discounted back to the Project valuation date using selected discount rates. The 5% discount rate applied is appropriate to the specific project and depends on many factors, including the type of commodity and the level of project risks (market risk, technical risk and political risk). The discounted, present values of the annual cash flows are summed to arrive at the Project's net present value ("NPV").

In addition to the NPV, the internal rate of return ("IRR") and the payback period are also calculated. The IRR is defined as the discount rate that results in an NPV equal to zero. The payback period is calculated as the time required to achieve positive cumulative cash flow for the Project.

The Free Cash Flow calculation is the total revenue generated, minus total costs. The calculation therefore is total recovered ounces (4.196 Moz), multiplied by the gold price selected (US\$1,350/oz), minus the total cost per ounce (US\$/oz). The Pre-Tax cash flow is before tax is deducted, while the Post-Tax cash flow is after tax is deducted.

Table 7 below sets out the Namdini Gold Project FS outcomes at a base gold price of USD\$1,350 per ounce, but also with gold price sensitivities from USD\$1,150 per ounce and up to USD\$1,550 per ounce.

Table 7 – Namdini Project Feasibility Study Outcomes

(ASX/TSX Press Release dated October 28, and November 28 2019 respectively)

Project Financial Model							
Gold Price	Gold Price US\$ / oz 1,150 1,350 1,550						



Capital Cost (including \$42M contingency)	US\$ M	390	390	390
All in Sustaining Costs (AISC) ¹				
Starter Pit	US\$ / oz	585	585	585
Life of Mine (15 years)	US\$ / oz	895	895	895
Total Project Payback	months	33	21	9
Pre-Tax NPV ^{5%}	US\$ M	406	914	1,438
Pre-Tax IRR	%	26	43	57

¹ Cash Costs + Royalties + Levies + Life of Mine Sustaining Capital Costs (World Gold Council Standard).

Royalties calculated at a rate of 5.5% at USD\$1,350/oz and 6.0% at USD\$1,550/oz and a corporate tax rate of 32.5%; both subject to negotiation.

Following release of the FS and accompanying NI43-101 Technical Report (ASX/TSX Press Release dated 28 October and 28 November 2019 respectively) the gold price has traded within the range of US\$1,452 to US\$1,757 per ounce, with a three-year running average of US\$1,374 per ounce.

5.32 Namdini Gold Project Permits and Approval Status

Cardinal have set out below the status of various approvals and permits related to the Namdini Gold Project:

- July 2018 EIS development and documentation process initiated.
- December 2019 Cardinal submitted its Draft EIS for development of the Namdini Project with Ghanaian EPA.
- January 2020 EPA completed its review of the Draft EIS for the development of the Namdini Project. The EIS was revised as needed and re-submitted in March 2020.
- February 2020 RAP was approved. The RAP was developed over an extended period, inclusive of
 extensive consultation with the Project Affected People ("PAP") and several levels of the
 Government. It was signed off by all PAP and subsequently approved by the Minerals Commission.
- February 2020 Water License was granted. Permits the use of water for construction and mine operations purposes.
- April 2020 Ghanaian EPA approves Cardinal's EIS, granting its Permit for the development of the Namdini Gold Project.
- July 2020 Namdini Mining Licence officially received Sovereign Parliamentary Ratification in Ghana.



5.33 Resettlement Action Plan

The Minerals Commission has approved Cardinal's RAP for its Namdini Gold Project in the Talensi District of the Upper East Region of Ghana, West Africa. The RAP report was produced in accordance with the Minerals and Mining (Compensation and Resettlement) Regulation 2012 (L.I 2175), and International Finance Corporation's ("IFC") Performance Standards on Social and Environmental Sustainability.

The Minerals Commission's approval paves the way for construction of 275 structures including residential and public buildings for the people of Accra Site and Buing village. The 270 impacted households with a total population of 1,410 people will be compensated for loss of assets and livelihood. To improve the existing infrastructure, the communities signed the Resettlement Agreement with the Corporation on 11 February 2020.

5.34 Front End Engineering and Design

Subsequent to completion of the FS, the Board unanimously supported the progression of the Namdini Gold Project into the next phase of development. The Front-End Engineering and Design ("FEED") programme of works was progressing in accordance with the Project execution schedule and with all principal design and procurement activities, up until suspension as a result of COVID-19 at the end of March 2020.

The FEED programme is focused on further de-risking the Project, while also looking for opportunities to reduce upfront capital costs and ensure achievement of the project execution schedule. The programme continues to define the technical requirements of the Namdini Gold Project and deliver an optimised mine design and process treatment plant. This work is also designed to refine capital estimates and operating costs.

Additional land was acquired for the Namdini project area which resulted in the tailings storage facility ("TSF"), water storage facility ("WSF") and waste storage dump ("WSD") being optimised with the additional space being made available.

A summary of the FEED activities up to the point of suspension were as follows:

- Cardinal continued negotiating the separable Engineering Procurement and Construction Management contracts with Lycopodium
- The following design notices were being processed:
 - An 11kV power supply selected for the river abstraction pumps as opposed to a diesel generator set.
 - Splitting of the oxygen demand into two separable oxygen plants for redundancy.
 - Specifications of the lease boundary fencing to be upgraded.
 - o A carbon-in-leach ("CIL") tower crane chosen as opposed to a gantry crane.
 - o Addition of a semi-automatic Sodium Metabisulphite handling system.
 - o Addition of a Lime Blower for delivery to the Process Plant outside of the Plant security fence.
 - Haul truck crossovers for tailings and decant pipelines.



- Flat pack versus block work for the permanent accommodation camp, fly camp and construction camp.
- o Reducing the size and hence cost of the primary crusher.
- The site lay-out issued for final review.
- The Project Execution Plan upgraded and in the process of being reviewed by Cardinal.
- An updated TSF dam breakage analysis completed and issued to Cardinal.
- The WSF relocated and a new WSD designed.

The project execution schedule was premised on a Financial Investment Decision ("**FID**") date of May 1, 2020 and a site access date of September 1, 2020. At the time of suspension, the schedule was ready for review by Cardinal.

Specific schedule target milestones are defined as follows:

- Plant warehouse to be commissioned and handed over 12 months before first gold pour.
- Incinerator to be commissioned and handed over 12 months before first gold pour.
- Mining Service Area Facility to be commissioned and handed over 9 months before first gold pour.
- Metallurgical laboratory to be commissioned and handed over 6 months before first gold pour.

A constructability project review was completed during the FEED, to be ready for a planned Hazard. Identification ("**HAZID**") analysis. The HAZID was postponed due to suspension of the FEED programme.

The following procurement packages were in various stages of evaluation:

- Fly Camp Facilities, Operation and Camp Management.
- Site Survey Services.
- Infrastructure Bulk Earthworks.
- Plant Bulk Earthworks.
- Concrete Works.
- Field Erected Tanks and Steel Framed Buildings.
- Construction Camp Services.

Mining contract tender expressions of interest were sent to 13 potential mining contractors.

5.35 Namdini Project Drilling (Sterilisation and Infrastructure Geotechnical Drilling)

Cardinal has undertaken sterilisation drilling of the proposed infrastructure area within the Namdini Mining License.



To date, approximately 37,164m of drilling has been completed, comprised of 381 RC holes for approximately 36,529m and two diamond drill holes for approximately 635m (Figure 4). This sterilisation drilling is ongoing and is aimed at ensuring that no major infrastructure developments are sited on areas of potential economic mineralization. Sterilisation drilling to date has returned no significant mineralization.

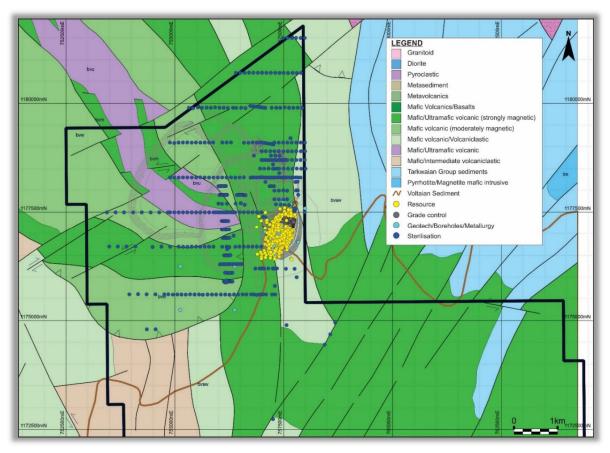


Figure 4: Namdini Project Showing Completed Sterilisation Drill Locations

Cardinal has also completed an extensive Geotechnical drilling and test-pit programme over areas proposed for infrastructure (Figure 5).

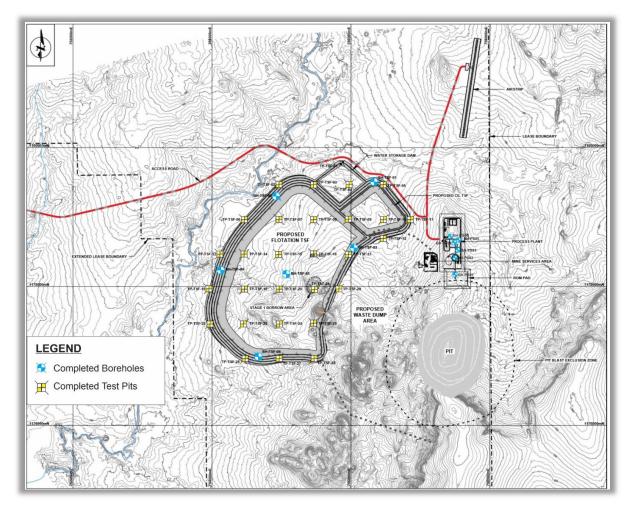


Figure 5: Namdini Project Geotechnical Drill Locations on Relocated TSF Area

5.36 Project Development Timeline

Table 8: Proposed Project development schedule (Subject to Financing and COVID-19 impact).

Milestone	Target timeline
Advance Front End Engineering and Design ("FEED") to completion	Q4 2020
Advance Resettlement Action Plan to substantial completion	Q1 2021
Target production commencement	H1 2023



6 - OTHER PROPERTIES AND ASSETS

In addition to the Namdini Gold Project, Cardinal owns exploration rights to two other projects: The Bolgatanga Project which includes Bongo Licence Area, Kungongo Licence and Ndongo Licence Area (Figures 6) located in the northeast of Ghana and the Subranum Project located in the southwest of Ghana (Figures 7).

Exploration activities have included varying levels of airborne magnetic and radiometric surveying, regional and prospect-scale ground magnetic, gravity, chargeability, resistivity and radiometric geophysical surveys, regional and detailed geological mapping, rock chip and auger soil sampling and RC and diamond drilling programmes.

Cardinal has initiated a scout drilling programme on one of the newly identified targets within the Ndongo Licence Area (Figure 6). This follows the recent completion of multielement analysis and assessment of geochemical data and building on the initial structural review based upon detailed geophysical and gold-only geochemical data.

Cardinal does not consider the other properties to be material. No resources have as yet been established on the Corporation's other properties.

6.1 Bolgatanga Project

The Bolgatanga Project consists of the Ndongo Licence Area, the Kungongo Licence Area and the Bongo Licence Area.

Cardinal owns approximately 865.88km² of exploration rights in the northeast Ghana. The Bolgatanga Project comprises of the Bongo Licence Area, Kungongo Licence and Ndongo Licence Area. The main areas of interest are the regional Bole-Bolgatanga Fault and the Nangodi Shear, which is interpreted to be a splay off the regional Bole-Bolgatanga Fault (Figure 6).

Cardinal has completed varying levels of geochemical and geophysical surveys and a number of RC and diamond drilling in the area. As evidenced by the widespread artisanal mining activities in the area, gold mineralization is widespread and mainly focused around these structures.



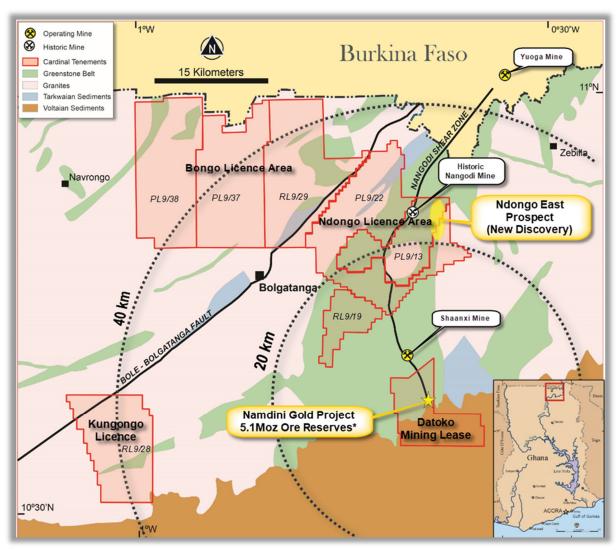


Figure 6: Datoko Mining Lease and Bolgatanga Project Tenements

*7.4Mt @ 1.3g/t Au for 0.4Moz Au Proved and 131.2 @ 1.1g/t Au for 4.7Moz Au Probable; 0.5g/t Au cut-off.

6.2 Ndongo Licence Area

The Ndongo Licence Area, hosts part of the extensive regional Bole-Bolgatanga Fault in the northwest and the prospective Nangodi Shear Zone in the centre of the licence area. The licence area wraps around the southern end of the Palungu granitoid intrusive, in the south-eastern region of the licence and forms the main area of prospectivity on the tenement (Figure 6).

The Ndongo Licence Area, comprises of the combined, **Nangodi Prospecting Licence** (RL9/13, covering a land size of 84.7km²), **Ndongo Prospecting Licence** (RL9/22, covering a land area of 157km²), and **Yameriga Prospecting Licence** (RL9/19, covering a land size of 36.78km²), granted to Cardinal to prospect for gold in the



Bolgatanga and Telensi Nabdam District in the Upper East Region in the Republic of Ghana. The combined land area of the Ndongo Licence Area is 278.48km².

The Ndongo Prospecting Licence number RL9/22 was granted to Cardinal on 7 July 2014 for a period of two years ending 6 July 2016. On 31 October 2016, the Minerals Commission extended the Ndongo Prospecting Licence until 31 October 2017. On 27 February 2017, the Minerals Commission confirmed that Cardinal Resources Ghana Limited is the holder and owner of the Ndongo Prospecting Licence.

In August 2017, Cardinal entered into a definitive agreement with Red Back Mining Ghana Limited to acquire 100% ownership of Nangodi and Yameriga Prospecting Licences located adjacent to the Ndongo Prospecting Licence. The Nangodi and Yameriga Prospecting Licences are each subject to a 1% NSR royalty payable to Kinross Gold Limited (via its acquisition of Red Back Mining) on all minerals mined, removed and sold.

All tenements within the Ndongo Licence Area are current and in good standing at the Minerals Commission and are eligible for renewal on 31 December 2020.

The Corporation's initial exploration on the original Ndongo Prospecting Licence included soil sampling at Ndongo West, Ndongo Central, Ndongo East and Ndongo Far East. The acquisition of Nangodi and Yameriga Licences provided increased exposure to the prospective Nangodi Shear Zone, including areas around the historical Nangodi underground gold mine (Figure 6). The ground acquired has been the subject of previous drilling, particularly along the Nangodi Shear Zone. The acquisition of this ground also included the results of some 120 historic RC and diamond drillholes.

Recent work including ground geophysical surveys, detailed geological mapping, auger soil sampling, RC drilling, led to the delineation of six high-priority coincident gold-in-soil and geophysical targets. First-pass shallow RC drilling to test one of the targets in 2018 led to the discovery at Ndongo East (Figure 6).

Most recently, the Corporation undertook additional review of drill targets through a detailed assessment of auger geochemical data, using auger soil samples analysed for gold and multielement pathfinders. The aim was to identify multielement signatures in the data related to orogenic gold mineralization to further enhance targeting at Ndongo. The results from the processing of geophysical data and geochemical data, continue to encourage further carefully measured investment into establishing viable shallow high-grade mineralized zones, which could develop into possible satellite pits for the Namdini Gold Project located approximately 24km south. The Corporation has initiated a scout drilling programme on one of the newly refined targets.

6.3 Kungongo Licence Area

The Kungongo Prospecting Licence is located approximately 40km west of Namdini Gold Project. The licence hosts the extensive regional Bole-Bolgatanga fault over a length of 6km in the northwest corner of the tenement. The tenement is underlain by Birimian greenstones which have been extensively intruded by younger granitoids (Figure 6).

The Kungongo Prospecting Licence (RL9/28) covers a total land size of 122.4km² and was originally granted to Cardinal on 21 January 2011 as a Reconnaissance Licence for one year ending 20 January 2012. After the expiration of the Reconnaissance Licence, the Minerals Commission on its own upgraded the Kungongo Reconnaissance Licence to a Prospecting Licence.



The Kungongo Prospecting Licence is current and in good standing at the Minerals Commission and is eligible for renewal on 31 December 2020.

Exploration work prior to Cardinal's involvement was limited. Historical work undertaken by the Corporation includes auger-based soil sampling in the north and south of the licence area, with the northern area, along the main Bole-Bolgatanga Fault, showing the most promise. The northern area has also been the subject of gradient array IP and ground magnetic surveys.

In August 2017 Cardinal announced that the auger drilling programme had identified two large-scale gold-in-soil anomalies (+100ppb Au) along the shear zone, the largest of which measured 4.2km by 300m and the smaller 800m by 250m. The Corporation recently completed a RC drill programme comprising three drill fences of ten holes each at spacings of 1,600m along the shear. In late 2017, Cardinal also undertook a programme of 12 diamond drill holes. The stratigraphic and structural information provided by these diamond drill holes, as well as assay data, is being evaluated. The drill core showed folded characteristics similar to that observed in the surface data. The dips were found to be variable down each drill hole, varying between NW and SE directions, confirming that the strata are strongly folded, and the stratigraphy complex. This geological setting compares favourably with observations in the early stage drilling at Namdini where higher grade gold mineralization was observed along the fold axes.

6.4 Bongo Licence Area

The Bongo Licence Area covers a total land area of 465km². It hosts part of the regional Bole-Bolgatanga Fault (Figure 6).

The Bongo Licence Area comprises of the combined, **Bongo Prospecting Licence** (PL9/29 covering a land size of 155km²) located in the Bongo area, **Kandiga-Atibisi Prospecting Licence** (PL9/38 covering a land size of 155km²) located in the Kandiga-Atibabisi area, and **Zoko-Tarongo Prospecting Licence** (PL9/37 covering a land size of 155km²) located in the Zoko-Tarongo area all in the Upper East region of Ghana.

The Bongo Licence area was originally granted to Cardinal Resources Ghana Limited on 21 January 2011 as a Reconnaissance Licence for a period of one year ending 20 January 2012. Cardinal Resources Ghana Limited applied for a renewal of the Bongo Reconnaissance Licence which was granted by the Minerals Commission. After the expiration of the Reconnaissance licence, the Minerals Commission on its own upgraded the larger Bongo Licence Area to a Prospecting Licence comprising of the three adjoining Prospecting Licences.

All the Bongo Licence Area, Prospecting Licences are in good standing at the Ghanaian Minerals Commission and are due for renewal on 31 December 2020.

No formal exploration had been undertaken prior to Cardinal's involvement. Cardinal initially completed an airborne geophysical survey over the area, which delineated six large-scale target areas that were followed up by soil auger programmes. The resulting soil anomalies were in turn followed up by gradient array Inverse Polarisation (IP) and ground magnetic geophysical surveys. The results of these are currently being interpreted ahead of further follow-up.

6.5 Subranum Project

The Subranum Project comprises of the Subin Kasu Prospecting Licence covering a total land size of 71.4km²



located in the Offinso and Ahafo-Ano South district of the Ashanti Region in the Republic of Ghana (Figures 2 and 7). The licence straddles the eastern margin of the Sefwi Gold Belt which is bounded by the regional Bibiani Shear Zone stretching about 200km across southwestern Ghana. There is 9km of the Bibiani Shear Zone developed within the Subin-Kasu license trending NE to SW. The Bibiani Shear Zone forms a very prospective, sheared contact between Birimian phyllites and greywackes to the southeast and mafic to intermediate volcanics and volcaniclastics to the northwest. Granitoid stocks of the Dixcove suite intrude this shear zone.

The Subin-Kasu Mineral Rights expire on 31 December 2020, and is eligible for renewal and is subject to a 2% NSR royalty payable to Newmont Ghana Gold Limited on all minerals mined, removed and sold.

The Subin-Kasu Prospecting Licence was originally granted to Newmont Ghana Gold Limited. On 6 April 2012, Newmont Ghana Gold Limited entered into a Purchase and Sale Agreement with Cardinal and assigned the Subin-Kasu Prospecting Licence to Cardinal in consideration for certain cash payments and Cardinal's agreement to incur certain exploration expenses.

On 24 November 2015, the Minister approved the Purchase and Sale Agreement and Cardinal became the title holder of Subin-Kasu Prospecting Licence. The Subin-Kasu Prospecting Licence is current and in good standing at the Minerals Commission.

Prior to Cardinal, Newmont had undertaken exploration work on the project, including geochemical, geophysical and RC drilling. Results of this work were included with the acquisition.

This work established a 5km long north-east trending anomalous zone across the licence area. This had been followed up by RC drilling on a number of wide-spaced fences. Cardinal followed up this work with radiometric and aeromagnetic surveys in late 2013. Only a very small portion of this 5km long gold target was diamond drilled during drilling programmes in 2018.



Figure 7: Regional Geology with Subranum Project Tenement straddling Bibiani Shear Zone



7 - CARDINAL'S OPERATIONS IN GHANA

The Corporation holds its material assets and carries on its business in Ghana largely though separate, whollyowned, operating subsidiaries. As discussed above, Cardinal Subranum, Cardinal Mining Services Limited, Cardinal Resources Ghana Limited and Cardinal Namdini Mining Limited (collectively, the "Ghanaian Subsidiaries") are incorporated under the laws of the Republic of Ghana. The Ghanaian Subsidiaries are indirectly wholly owned by the Corporation.

The Corporation has established systems of corporate governance, internal controls over financial reporting and disclosure controls and procedures that apply at all levels of the Corporation's corporate structure. Such systems are overseen by the Board and implemented by senior management of the Corporation. Certain significant features of these systems are described below:

Control over Subsidiaries — The Corporation's corporate structure has been designed to ensure that the Corporation is able to direct the operations of its subsidiaries. All of the Corporation's subsidiaries, including the Ghanaian Subsidiaries, are wholly-owned. Accordingly, the Corporation controls the appointments of the directors of the Corporation's subsidiaries and the directors of such subsidiaries are ultimately accountable to the Board and senior management. Mr. Koimtsidis and Mr. Easah, both of whom are directors of the Corporation, are the only directors of the Ghanaian Subsidiaries. The corporate records, including minute books, of the Ghanaian Subsidiaries are kept at the Corporation's head office.

Under Ghanaian law, the shareholders of a corporation are entitled to remove directors at a duly convened general meeting of a corporation. In the event that the Corporation wished to remove a director of a Ghanaian Subsidiary, the Corporation would cause the shares in such Ghanaian Subsidiary to be voted for the removal of such director. Removal would take place at a meeting duly convened for the purpose of such removal and held at least 35 days after the notice of the meeting has been served on such director and any other directors of such Ghanaian Subsidiary who are entitled to attend the general meeting.

The only directors of Ghanaian Subsidiaries also serve as directors of the Corporation. In the event that the Corporation wished to remove an officer of a Ghanaian Subsidiary, the directors of such Ghanaian Subsidiary would take the requisite corporate action to remove such officer.

Risk Assessment – The Board is responsible for the management of the Corporation and, as such, supervises the management of the business and affairs of the Corporation. The Board is responsible for approving any capital expenditures and other transactions and matters that are considered material to the Corporation, including matters of the Corporation's subsidiaries that are considered material to the Corporation. In addition, the Board has delegated certain risk-management functions to the Audit and Risk Committee. The Audit and Risk Committee is responsible for overseeing the Corporation's risk management systems, practices and procedures, for identifying and managing business, economic, environmental and social sustainability risks and for reviewing the Corporation's risk management framework at least annually.

Internal Control over Financial Reporting – The Corporation prepares its consolidated financial statements and MD&A on a quarterly and annual basis, using International Financial Reporting Standards ("IFRS"), which require financial information and disclosures from the Corporation's subsidiaries. The Corporation implements internal controls over the preparation of its financial statements and other financial disclosures to provide reasonable assurance that its financial reporting is reliable and that the quarterly and annual financial statements and MD&A are being prepared in accordance with IFRS. These internal controls include the



following:

- Management of the Corporation has direct access to relevant financial management of the Corporation's subsidiaries in order to verify and clarify all information required.
- All public documents and statements relating to the Corporation and its subsidiaries containing material
 information (including financial information) are reviewed by senior management (including the CEO and
 Managing Director) before such material information is disclosed, to make sure that all material
 information has been considered by management of the Corporation and properly disclosed.
- The Audit and Risk Committee will review and approve the Corporation's quarterly financial statements and MD&A and will recommend to the Board for the Board's approval the Corporation's annual financial statements and MD&A, and any other financial information requiring Board approval, prior to their publication or release.
- The Audit and Risk Committee assesses and evaluates the adequacy of the procedures in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements, other than annual and quarterly financial disclosure.

In addition, the Corporation engages its external auditor to perform an audit of the annual consolidated financial statements in accordance with IFRS.

Disclosure Controls and Procedures – The responsibilities of the Audit and Risk Committee include oversight of the Corporation's internal control systems including identifying, monitoring and mitigating business risks as well as compliance with legal, ethical and regulatory requirements.

CEO and CFO Certifications – In order for the Corporation's Managing Director and CEO and its CFO to be in a position to attest to the matters addressed in the quarterly and annual certifications required by National Instrument 52-109 – Certification of Disclosure in Issuers' Annual and Interim Filings, the Corporation has developed internal procedures and responsibilities throughout the organization for its regular periodic and special situation reporting, in order to provide assurances that information that may constitute material information will reach the appropriate individuals who review public documents and statements relating to the Corporation and its subsidiaries containing material information, is prepared with input from the responsible officers and employees, and is available for review by the Managing Director and CEO and CFO in a timely manner.

These systems of corporate governance, internal control over financial reporting and disclosure controls and procedures are designed to ensure that, among other things, the Corporation has access to all material information about its subsidiaries, including the books and records of its subsidiaries.

The Corporation provides funds to the Ghanaian Subsidiaries for exploration activities. As part of its corporate governance practices, Cardinal has developed a Delegation of Authority Manual. The Delegation of Authority Manual contains guidelines for delegated authorities that help in maintaining adequate controls within the organization, including the flow of funds between Australia and Ghana.



8 - RISK FACTORS

Prospective investors should carefully consider the following risk factors in addition to the other information contained in this AIF. The risks and uncertainties described below are not the only ones facing the Corporation. Additional risks and uncertainties not presently known to the Corporation or that the Corporation currently considers immaterial may also impair the business and operations of the Corporation and cause the price of the Ordinary Shares to decline. If any of the following risks actually occur, the Corporation's business may be harmed and the financial condition and results of operations may suffer significantly. In that event, the trading price of the Ordinary Shares could decline and holders of the Ordinary Shares may lose all or part of their investment.

8.1 Risks Related to the Industry

(a) COVID-19 Conditions

Since 31 December 2019, the outbreak of the novel strain of coronavirus, specifically identified as COVID-19 has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to businesses globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Corporation in future periods. There is a risk that Public Health crises and pandemics such as COVID-19 could limit or prohibit the conduct of exploration activities and could have a negative impact on the ability to obtain funding.

In addition, should any Corporation personnel or contractors be infected, it could result in the Corporation's operations being suspended or otherwise disrupted for an unknown period of time, which may have an adverse impact on the Corporation's operations as well as an adverse impact on the financial condition of the Corporation.

(b) Mineral Exploration, Development and Operating Risks

Mineral exploration is highly speculative in nature, generally involves a high degree of risk and frequently is non-productive. The mineral tenements of the Corporation are at various stages of exploration, and potential investors should understand that mineral exploration and development are high-risk undertakings. There can be no assurance that exploration of these tenements, or any other tenements that may be acquired in the future, will result in the discovery of an economic ore deposit. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically exploited or will result in a profitable commercial mining operation.

Resource acquisition, exploration, development and operation involve significant financial and other risks over an extended period of time, which even a combination of careful evaluation, experience and knowledge may not eliminate. Significant expenses are required to locate and establish economically viable mineral deposits, to acquire equipment, and to fund construction, exploration and related operations, and few mining properties that are explored are ultimately developed into producing mines.



Success in establishing an economically viable project is the result of a number of factors, including the quantity and quality of minerals discovered, proximity to infrastructure, metal and mineral prices which are highly cyclical, costs and efficiencies of the recovery methods that can be employed, the quality of management, available technical expertise, taxes, royalties, environmental matters, government regulation (including land tenure, land use and import/export regulations) and other factors. Even in the event that mineralization is discovered on a given property, it may take several years in the initial phases of drilling until production is possible, during which time the economic feasibility of production may change as a result of such factors. The effect of these factors cannot be accurately predicted, but the combination of these factors may result in the Corporation not receiving an adequate return on its invested capital, and no assurance can be given that any exploration program of the Corporation will result in the establishment or expansion of resources or reserves.

The Corporation's operations are subject to all the hazards and risks normally encountered in the exploration, development and production of gold and other minerals, including hazards relating to the discharge of pollutants or hazardous chemicals, changes in anticipated grade and tonnage of ore, unusual or unexpected adverse geological or geotechnical formations, unusual or unexpected adverse operating conditions, slope failures, rock bursts, cave-ins, seismic activity, the failure of pit walls, pillars or dams, fire, explosions, and natural phenomena and 'acts of God' such as inclement weather conditions, floods, earthquakes or other conditions, any of which could result in damage to, or destruction of, mineral properties or production facilities, personal injury or death, damage to property, environmental damage, unexpected delays, monetary payments and possible legal liability, which could have a material adverse impact upon the Corporation. In addition, any future mining operations will be subject to the risks inherent in mining, including adverse fluctuations in fuel prices, commodity prices, exchange rates and metal prices, increases in the costs of constructing and operating mining and processing facilities, availability of energy and water supplies, access and transportation costs, delays and repair costs resulting from equipment failure, changes in the regulatory environment, and industrial accidents and labour actions or unrest. The occurrence of any of these risks could materially and adversely affect the development of a project or the operations of a facility, which could have a material adverse impact upon the Corporation.

(c) Estimation of Mineralization, Mineral Resources and Ore Reserves

There is a degree of uncertainty attributable to the calculation of mineralization, Mineral Resources and Ore Reserves and corresponding grades being mined or dedicated to future production. Until Ore Reserves or mineralization are actually mined and processed, the quantity of mineralization and Ore Reserve grades must be considered estimates only. These estimates depend upon geological interpretation and statistical inference drawn from drilling and sampling analysis, which may prove unreliable. There can be no assurance such estimates will be accurate. In addition, the quantity of Ore Reserves and mineralization may vary depending on commodity prices. Any material changes in quantity of Ore Reserves, mineralization, grade or stripping ratio may affect the economic viability of a mine. In addition, there can be no assurance that recoveries from laboratory tests will be duplicated in tests under on-site conditions or during production. The inclusion of Mineral Resource estimates should not be regarded as a representation that these amounts can be economically exploited and no assurances can be given that such Mineral Resources estimate will be converted into Ore Reserves. Different experts may provide different interpretations of Mineral Resource estimates.

(d) Environmental, Health and Safety Regulations of the Resource Industry

Environmental matters in Ghana, including those related to mining, fall primarily under the oversight of the EPA, as well as the Minerals Commission and the Mines Inspectorate Division of the Minerals Commission. The



Environmental Protection Agency Act, 1994 (Act 490), and the Environmental Assessment Regulations, 1999 (L.I. 1652) govern, among other things, environmental and socio-economic impact assessments and statements, environmental management plans, emissions into the environment, environmental auditing and review, and mine closure and reclamation, to which the Corporation's operations are subject.

Additional provisions governing mine environmental management are provided in the Minerals and Mining Act, 2006 (Act 703), and Minerals and Mining Regulations (Health, Safety and Technical) 2012 (L.I. 2182). The Corporation believes it is in substantial compliance with these laws and regulations; however, the Corporation notes a continuing trend toward substantially increased environmental requirements and evolving corporate social responsibility expectations in Ghana, including the requirement for more permits, analysis, data gathering, community hearings, and negotiations than have been required in the past for both routine operational needs and for new development projects.

Due to bureaucratic delays, there can be no assurance that all permits which the Corporation may require for construction of mining facilities and conduct of mining operations, particularly environmental permits, will be obtainable on reasonable terms or timeframes or that compliance with such laws and regulations would not have an adverse effect on the profitability of any mining project that the Corporation might undertake.

All phases of the Corporation's operations are subject to environmental regulations in various jurisdictions. If the Corporation's properties are proven to host economic reserves of metals, mining operations will be subject to national and local laws relating to the protection of the environment, including laws regulating removal of natural resources from the ground and the discharge of materials into the environment.

Mining operations will be subject to national and local laws and regulations which seek to maintain health and safety standards by regulating the design and use of mining methods and equipment. Various permits from government bodies are required for mining operations to be conducted; no assurance can be given that such permits will be received.

No assurance can be given that environmental standards imposed by national or local authorities will not be changed or that any such changes would not have material adverse effects on the Corporation's activities. Moreover, compliance with such laws may cause substantial delays or require capital outlays in excess of those anticipated, thus causing an adverse effect on the Corporation. Additionally, the Corporation may be subject to liability for pollution or other environmental damage, which it may not be able to insure against.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Parties engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulation and, in particular, environmental laws.

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on the Corporation and cause increases in capital expenditures or production costs or reduction in levels of production at producing properties or require abandonment or delays in development of new mining properties.



(e) Competitive Conditions

There is aggressive competition within the mineral exploration and mining industry for the discovery and acquisition of properties considered to have commercial potential, and for management and technical personnel. The Corporation's ability to acquire projects in the future is highly dependent on its ability to operate and develop its current assets and its ability to obtain or generate the necessary financial resources. The Corporation will compete with other parties in each of these respects, many of which have greater financial resources than the Corporation. Accordingly, there can be no assurance that any of the Corporation's future acquisition efforts will be successful, or that it will be able to attract and retain required personnel. Any such failure could have a material adverse impact upon the Corporation.

8.2 Risks Related to the Business

(a) Take-Over Bid Risks

The Corporation is currently the subject of the Revised Shandong Offer. If the Revised Shandong Offer is successful or an alternative transaction occurs, there may be significant changes to the business, operation and management of the Corporation. If the Revised Shandong Offer fails, there may also be unforeseeable developments which could have a material adverse impact upon the Corporation.

(b) Operational Risks

The Corporation has not previously generated revenues from operations and its mineral projects are at an exploration stage. Therefore, it is subject to many risks common to comparable companies, including undercapitalization, cash shortages and limitations with respect to personnel, financial and other resources as well as a lack of revenues. The Corporation has historically incurred significant losses as it has no sources of revenue (other than interest income), and has significant cash requirements to meet its exploration commitments, administrative overhead and maintain its mineral interests. The Corporation expects to continue to incur net losses unless or until one or more of its properties enters into commercial production and generates sufficient revenue to fund continuing operations. There can be no assurance that current exploration or development programs will result in the discovery of commercial deposits or, ultimately, in profitable mining operations. See also "Liquidity and Financing Risk" and "Funding Risk" below.

(c) Liquidity and Financing Risk

The Corporation has no source of operating cash flow and may need to raise additional funding in the future through the sale of equity or debt securities or by optioning or selling its properties. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities. No assurance can be given that additional funding will be available for further exploration and development of the Corporation's properties when required, upon terms acceptable to the Corporation or at all. Failure to obtain such additional financing could result in the delay or indefinite postponement of further exploration and development of its properties, or even a loss of property interest, which would have a material adverse impact upon the Corporation.

(d) Funding Risk

At the date of this AIF, the Corporation has no income producing assets and will generate losses for the



foreseeable future. Until it is able to develop a project and generate appropriate cash flow, it is dependent upon being able to obtain future equity or debt funding to support long term exploration. Neither the Corporation nor any of the Directors nor any other party can provide any guarantee or assurance that if further funding is required, such funding can be raised on terms favourable to the Corporation (or at all). Any additional equity funding will dilute existing Shareholders. Also, no guarantee or assurance can be given as to when a project can be developed to the stage where it will generate cash flow. As such, a project would be dependent on many factors, for example exploration success, subsequent development, commissioning and operational performance.

(e) Exploration Costs

The exploration costs of the Corporation are based on certain assumptions with respect to the method and timing of exploration. By their nature, these estimates and assumptions are subject to significant uncertainties and, accordingly, the actual costs may materially differ from these estimates and assumptions. Accordingly, no assurance can be given that the cost estimates and the underlying assumptions will be realized in practice, which may materially and adversely affect the Corporation's viability.

(f) Uninsurable Risks

In the course of exploration, development and production of mineral properties, risks, including, but not limited to, unexpected or unusual geological or operating conditions, natural disasters, inclement weather conditions, pollution, rock bursts, cave-ins, fires, flooding, earthquakes, civil unrest, terrorism and political violence may occur. It is not always possible to fully insure against all risks associated with Cardinal's operations and Cardinal may decide not to take out insurance against certain risks as a result of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the securities of Cardinal.

(g) Conflicts of Interest

Certain directors of the Corporation are, and may continue to be, involved in the mining and mineral exploration industry through their direct and indirect participation in corporations, partnerships or joint ventures which are potential competitors of the Corporation. Situations may arise in connection with potential acquisitions in investments where the other interests of these directors may conflict with the interests of the Corporation. Any Directors with conflicts of interest will be subject to and will follow the procedures set out in applicable corporate and securities legislation, regulations, rules and policies.

8.3 Risks Related to Operating in Ghana

(a) Environmental Bonds

The EPA from time to time reviews the reclamation bonds that are placed on the Corporation's projects in Ghana. As part of its periodic assessment of mine reclamation and closure costs, the EPA reviews the adequacy of reclamation bonds and guarantees.

In certain cases, the EPA has requested higher levels of bonding based on its findings. If the EPA were to require additional bonding at the Corporation's properties, it may be difficult, if not impossible, to provide sufficient bonding. If the Corporation is unable to meet any such increased bonding requirements or negotiate an



acceptable solution with the Government of Ghana, its operations and exploration and development activities in Ghana may be materially adversely affected.

The Corporation is not in a position to state whether a review in respect of any of the Corporation's projects in Ghana is imminent or whether the outcome of such a review would be detrimental to the funding needs of the Corporation.

(b) Risks of Operating in Ghana

The Corporation's projects in Ghana are subject to the risks of operating in foreign countries, including political and economic considerations such as civil and tribal unrest, war (including in neighbouring countries), terrorist actions, criminal activity, nationalization, invalidation of governmental orders, failure to enforce existing laws, labour disputes, corruption, sovereign risk, political instability, the failure of foreign parties, courts or governments to honour or enforce contractual relations or uphold property rights, changing government regulations with respect to mining (including royalties, environmental requirements, labour, taxation, land tenure, foreign investments, income repatriation and capital recovery), fluctuations in currency exchange and inflation rates, import and export restrictions, challenges to the title to properties or mineral rights in which the Corporation has interests, problems or delays renewing licences and permits, opposition to mining from local, environmental or other non-governmental organizations, increased financing costs, instability due to economic under-development, inadequate infrastructure, and the expropriation of property interests, as well as by laws and policies of Canada affecting foreign trade, investment and taxation. As African governments continue to struggle with deficits and depressed economies, the strength of commodity prices has resulted in the gold mining sector being targeted as a source of revenue. Governments are continually assessing the terms for a mining Corporation to exploit resources in their country.

Furthermore, the Corporation requires consultants and employees to work in Ghana to carry out its planned exploration and development programs. It may be difficult from time to time to find or hire qualified people in the mineral exploration industry who are situated in Ghana, or to obtain all of the necessary services or expertise in Ghana, or to conduct operations on its projects at reasonable rates. If qualified people and services or expertise cannot be obtained in Ghana, the Corporation may need to seek and obtain those services from service providers located outside of Ghana which could result in delays and higher costs to the Corporation.

Mineral Resource companies face increasing public scrutiny of their activities, and are under pressure to demonstrate that their operations have potential to generate satisfactory returns not only to their shareholders, but also to benefit local governments and the communities surrounding its properties where it operates. The potential consequences of these pressures include reputational damage, lawsuits, increasing social investment obligations and pressure to increase taxes and future royalties payable to local governments and surrounding communities. As a result of these considerations, the Corporation may incur increased costs and delays in permitting and other operational matters with respect to its property interests in Ghana.

Any of the above events could delay or prevent the Corporation from exploring or developing its properties even if economic quantities of minerals are found, and could have a material adverse impact upon the Corporation's foreign operations.

(c) Government Policy Changes

The mineral exploration activities undertaken by the Corporation are subject to laws and regulations governing



health and worker safety, employment standards, exports, taxation, waste disposal, management and use of toxic substances and explosives, protection of the environment, mine development and production, protection of endangered and protected species, reclamation, historic and cultural preservation and other matters. Exploration activities may also be affected in varying degrees by government regulations with respect to, but not limited to, restrictions on future exploration and production, price controls, royalties, export controls, currency availability, foreign exchange controls, income taxes, delays in obtaining or the inability to obtain necessary permits, opposition to mining from environmental and other non-governmental organizations, limitations on foreign ownership, expropriation of property, ownership of assets, environmental legislation, labour relations, limitations on repatriation of income and return of capital, limitations on mineral exports, high rates of inflation, increased financing costs, and site safety.

The Corporation's exploration programs with respect to the Corporation's projects in Ghana will, in general, be subject to approval by the Minerals Commission and other governmental agencies. Development of any of the Corporation's properties will be dependent on the Namdini Gold Project meeting environmental guidelines set by EPA and, where required, being approved by governmental authorities such as the Minerals Commission.

Failure to comply with applicable laws, regulations and permits, even if inadvertent, may result in enforcement actions thereunder, including the forfeiture of claims, orders by regulatory or judicial authorities requiring operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or costly remedial actions, which could have a material adverse impact upon the Corporation. The Corporation may be required to compensate those claiming to suffer loss or damage by reason of its activities and may have civil or criminal fines or penalties imposed for violations of such laws, regulations and permits, which could have a material adverse impact upon the Corporation.

In addition, no assurance can be given that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner which could limit or curtail development or future potential production. Adverse changes in government policies or legislation may affect ownership of mineral interests, taxation, royalties, land access, labour relations, and mining and exploration activities of the Corporation. It is possible that the current system of exploration and mine permitting in Ghana may change, resulting in impairment of rights and possibly expropriation of the Corporation's properties without adequate compensation.

(d) Ownership Risks

The Corporation holds its interests in the Namdini Gold Project through a large-scale mining licence. For more information, please see "Namdini Project Feasibility Study Technical Report Summary".

The Constitution of Ghana vests title in every mineral in its natural state to the Government of Ghana. The exercise of any mineral right in the form of reconnaissance, exploration or exploitation of any mineral in Ghana requires an appropriate licence or mineral right to be issued by the Government of Ghana acting through the Minister. There is no assurance that title to the properties in which the Corporation has interests will not be challenged. The acquisition of title to mineral exploration properties is a very detailed and time-consuming process. Title to and the area of mineral properties may be disputed. While the Corporation has diligently investigated title to the properties in which it has an interest, it may be subject to prior unregistered agreements or transfers or indigenous land claims and title may be affected by undetected defects. Consequently, the boundaries may be disputed.



There can be no assurance that there are no prior unregistered agreements, claims or defects that may result in the title to the properties in which the Corporation has an interest being challenged. Further, the Corporation's interests in the properties are subject to the risks that counterparties will fail to honour their contractual commitments, that courts will not enforce such contractual obligations and that required governmental approvals will not be obtained. A successful challenge to the precise area and location of these claims, or the failure of counterparties to honour or of courts to enforce such contractual obligations could result in the Corporation being unable to operate on its properties as anticipated or being unable to enforce its rights with respect to its properties which could have a material adverse impact upon the Corporation.

(e) Permitting and Licensing Risks

In addition to mineral rights, the Corporation will require some or all of the following permits, licences or other regulatory approvals to be able to carry out business operations in Ghana as it advances its projects: (i) environmental permits; (ii) approved environmental management plans and environmental certificates; (iii) reclamation bonds and approved reclamation plans; (iv) water usage permits; (v) business operating permits; (vi) licences to export, sell or dispose of minerals; (vii) permits/licences to retain a specified percentage of mineral export proceeds for purposes of debt servicing, dividend payment to foreign Shareholders and acquisition of plant and machinery for the mining project; (viii) permits to operate foreign exchange retention accounts with a trustee bank; and (ix) immigration quotas to employ a specified number of non-Ghanaians to work on mining projects. The Corporation believes that it will be able to obtain and maintain in the future all such necessary licences and permits to carry on the activities which it intends to conduct, and intends to comply in all material respects with the terms of such licences and permits.

There can be no guarantee, however, that the Corporation will be able to obtain and maintain, at all times, all the necessary licences and permits required to undertake the proposed exploration and development or to place its properties into commercial production and to operate mining facilities thereon. In the event of commercial production, the cost of compliance with changes in governmental regulations has the potential to reduce the profitability of operations or preclude the economic development of a particular property.

(f) Artisanal Miners

The Corporation's property interests are held in areas of Ghana that have historically been mined by artisanal miners. As the Corporation further explores and advances its projects, it may be required to require the removal of any artisanal miners operating on its properties. There is a risk that such artisanal miners may oppose the Corporation's operations, which may result in a disruption to any planned development and/or mining and processing operations. In addition, artisanal miners have historically used chemicals that are harmful to the environment to separate the precious metals from the ore. There can be no assurance that the Corporation will not be subject to environmental liabilities resulting from such operations in the future, which could have a material adverse impact on the Corporation. In addition, artisanal work practices are often unsafe and accidents and/or incidents may occur on the Corporation's property, and there is an added reputational risk that third parties may wish to link the activities of the artisanal miners to that of the Corporation in the event of accidents or incidents, which could have a material adverse impact on the Corporation.

(g) Difficulty in Enforcement of Judgements

All of the subsidiaries of the Corporation and the majority of its assets are located outside of Canada. Accordingly, it may be difficult for investors to enforce within Canada any judgments obtained against the



Corporation, including judgments predicated upon the civil liability provisions of applicable Canadian securities laws. Consequently, investors may be effectively prevented from pursuing remedies against the Corporation under Canadian securities laws or otherwise.

The Corporation has subsidiaries incorporated in Australia and Ghana. Many of the directors and officers of the Corporation reside outside of Canada, and substantially all of the assets of these persons are located outside of Canada. It may not be possible for Shareholders to effect service of process against the Corporation's directors and officers who are not resident in Canada. In the event a judgment is obtained in a Canadian court against one or more of the Corporation's directors or officers for violations of Canadian securities laws, it may not be possible to enforce such judgment against those directors and officers. Additionally, it may be difficult for an investor, or any other person or entity, to assert Canadian securities law claims in original actions instituted in Australia or Ghana. Courts in these jurisdictions may refuse to hear a claim based on a violation of Canadian securities laws on the grounds that such jurisdiction is not the most appropriate forum to bring such a claim. Even if a foreign court agrees to hear a claim, it may determine that the local law, and not Canadian law, is applicable to the claim. If Canadian law is found to be applicable, the content of applicable Canadian law must be proven as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by foreign law.

8.4 General Risks

(a) Market Conditions

Share market conditions may affect the value of the Corporation's quoted securities regardless of the Corporation's operating performance. Share market conditions are affected by many factors such as: general economic outlook; introduction of tax reform or other new legislation; interest rates and inflation rates; changes in investor sentiment toward particular market sectors; the demand for, and supply of, capital; and terrorism or other hostilities. The market price of securities can fall as well as rise and may be subject to varied and unpredictable influences on the market for equities in general and resource exploration stocks in particular. The Corporation does not warrant the future performance of the Corporation or any return on an investment in the Corporation.

(b) Stress in the Global Economy

Reduction in credit, combined with reduced economic activity and the fluctuations in the Australian dollar may adversely affect businesses and industries that purchase commodities, affecting commodity prices in more significant and unpredictable ways than the normal risks associated with commodity prices. The availability of services such as drilling contractors and geological service companies and/or the terms on which these services are provided may be adversely affected by the economic impact on the service providers. The adverse effects on the capital markets generally make the raising of capital by equity or debt financing much more difficult and the Corporation is dependent upon the capital markets to raise financing. Any of these events, or any other events causing turmoil in world financial markets, may have a material adverse effect on the Corporation's business, operating results and financial condition.

(c) Current Global Financial Condition

Current global financial conditions have been subject to increased volatility. As such, the Corporation is subject to counterparty risk and liquidity. The Corporation is exposed to various counterparty risks including, but not



limited to, financial institutions that hold the Corporation's cash, and through companies that have payables to the Corporation. The Corporation is also exposed to liquidity risks in meeting its operating expenditure requirements in instances where cash positions are unable to be maintained or appropriate financing is unavailable. These factors may impact the ability of the Corporation to obtain loans and other credit facilities in the future and, if obtained, on terms favourable to the Corporation. If these increased levels of volatility and market turmoil continue, the Corporation's operations could be adversely impacted and the trading price of the shares could be adversely affected.

(d) Exchange Rate and Currency Risks

The Corporation undertakes certain transactions denominated in foreign currencies, hence exposures to exchange rate fluctuations arise. The Corporation does not hedge this exposure. The Corporation manages its foreign exchange risk by constantly reviewing its exposure and ensuring that there are appropriate cash balances in order to meet its commitments.

Currency fluctuations may affect the cash flow which the Corporation may realize from its operations, since most mineral commodities are sold in a world market in USD. The Corporation's costs are incurred in AUD, GHS, USD and CAD.

(e) Commodity Prices

The price of the Ordinary Shares, and the Corporation's profitability, financial results and exploration activities may in the future be significantly adversely affected by declines in the price of precious metals. Precious metal prices fluctuate on a daily basis and are affected by a number of factors beyond the control of the Corporation, including the US dollar and other foreign currency exchange rates, central bank and financial institution lending and sales, producer hedging activities, global and regional supply and demand, production costs, confidence in the global monetary system, expectations of the future rate of inflation, the availability and attractiveness of alternative investment vehicles, interest rates, terrorism and war, and other global or regional political or economic events or conditions.

The price of gold has fluctuated widely in recent years, and future trends cannot be predicted with any degree of certainty. In addition to adversely affecting the Corporation's financial condition and exploration and development activities, declining commodity prices can impact operations by requiring a reassessment of the feasibility of a particular project, as well as have an impact on the perceptions of investors with respect to gold equities, and therefore, the ability of the Corporation to raise capital. A sustained, significant decline in the price of gold could also cause development of any properties in which the Corporation may hold an interest from time to time to be impracticable. Future production from the Corporation's future properties, if any, will be dependent upon, among other things, the price of gold being adequate to make these properties economic. There can be no assurance that the market price of gold will remain at current levels, that such price will increase or that market prices will not fall.

(f) Reliance on Key Personnel

The responsibility of overseeing the day-to-day operations and the strategic management of the Corporation depends substantially on its senior management and its key personnel. There can be no assurance that there will be no detrimental impact on the Corporation if one or more of these employees cease their employment.



(g) Dilution Risk

Cardinal has outstanding options and Class C Performance Shares, as detailed in the most recent financial statements for the year ended June 30, 2019 and elsewhere in this AIF. Should these securities be exercised or converted (as applicable), the holders have the right to acquire additional Ordinary Shares, in accordance with the terms of such securities. During the life of these securities, the holders have the opportunity to profit from a rise in the market price of the Cardinal shares, possibly resulting in the dilution of existing securities.

9 - DIVIDENDS

To date, the Corporation has not paid any dividends on its Ordinary Shares and anticipates that it will retain all future earnings and other cash resources for the future operation and development of its business. The Corporation does not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends will be at the discretion of the Board after taking into account many factors, including the Corporation's operating results, financial condition and current and anticipated cash needs.

10 - DESCRIPTION OF CAPITAL STRUCTURE

10.1 Ordinary Shares

The Corporation's authorized capital stock consists of an unlimited number of Ordinary Shares, of which 526,024,522 Ordinary Shares are issued and outstanding as of the date of this AIF.

All Ordinary Shares rank equally as to dividends, voting powers and participation in the distribution of assets. All holders of Ordinary Shares are entitled to receive notice of any meetings of Shareholders of the Corporation, and to attend and cast one vote per Ordinary Share at all such meetings. Holders of Ordinary Shares do not have cumulative voting rights with respect to the election of directors. Holders of Ordinary Shares are entitled to receive on a pro rata basis such dividends, if any, as and when declared by the Board at its discretion from funds legally available therefor, and upon the liquidation, dissolution or winding up of the Corporation are entitled to receive on a pro rata basis the net assets of the Corporation after payment of liabilities, in each case subject to the rights, privileges, restrictions and conditions attaching to any other series or class of shares ranking senior in priority to or on a pro rata basis with the holders of Ordinary Shares with respect to dividends or liquidation. The Ordinary Shares do not carry any pre-emptive, subscription, redemption or conversion rights, nor do they contain any sinking or purchase fund provisions.

The Corporation is authorized to issue an unlimited number of Ordinary Shares, subject to certain restrictions prescribed in the ASX Listing Rules, the Corporations Act and the Corporation's constitution. Under the ASX Listing Rules, subject to certain exceptions and without the approval of Shareholders, the Corporation may not issue or agree to issue during any 12-month period equity securities (including options and other securities convertible into equity) if the number of securities issued or agreed to be issued would exceed 15% of the total equity securities on issue at the commencement of the 12-month period.

10.2 Unlisted Options

The Corporation's share option plan permits the Board to grant to directors, officers, consultants and employees of the Corporation Unlisted Options to purchase Ordinary Shares from the Corporation. As at the date of this AIF, the Corporation has issued 12,855,139 Unlisted Options under the share option plan.



As at the date of this AIF, there were 39,592,102 Unlisted Options to acquire Ordinary Shares outstanding.

11 - MARKET FOR SECURITIES

11.1 Trading Price and Volume

(a) Ordinary Shares

The Ordinary Shares are listed on the ASX and TSX and trade under the symbol "CDV". The following table sets forth the price range and trading volume of the Ordinary Shares on the ASX for each month during the most recently completed financial year. The Ordinary Shares commenced trading on the TSX on July 10, 2017.

, ,		ASX Trading			TSX Trading		
Month	Price Per Ordinary Share		Trading Volume	Price Per Ordinary Share		Trading Volume	
	High (\$)	Low (\$)	volulile	High (CA\$)	Low (CA\$)		
2019							
July	0.38	0.325	15,812,717	0.36	0.285	2,308,994	
August	0.53	0.355	18,429,221	0.46	0.325	1,849,521	
September	0.545	0.425	13,975,554	0.50	0.37	3,711,081	
October	0.43	0.35	13,176,568	0.40	0.33	2,038,646	
November	0.39	0.277	8,831,132	0.37	0.26	3,485,515	
December	0.33	0.28	5,741,428	0.31	0.27	2,877,715	
2020							
January	0.42	0.30	14,625,791	0.36	0.28	3,862,206	
February	0.395	0.33	19,868,990	0.35	0.30	2,684,920	
March	0.38	0.23	103,620,383	0.33	0.20	3,814,696	
April	0.325	0.40	14,550,575	0.37	0.28	1,919,337	
May	0.47	0.355	17,495,336	0.47	0.34	13,614,438	
June	0.635	0.405	26,678,284	0.63	0.37	19,804,865	
July	0.745	0.560	67,495,780	0.72	0.54	11,543,201	
August	0.733	0.710	26,647,442	0.70	0.67	2,139,748	

Source: Bloomberg



(b) Prior Sales of Unlisted Securities

As at the date of this AIF, the only securities of the Corporation that are outstanding but not listed or quoted on a marketplace are the Unlisted Options which total 39,592,102. The following table sets forth information with respect to Unlisted Options issued during the financial year ended June 30, 2020.

Unlisted Options

During the financial year ended June 30, 2020, the Corporation issued the following Unlisted Options to acquire Ordinary Shares.

Date of Issuance	Number of Securities Exercise Price per Issued Ordinary Share		Expiry Date
December 10, 2019	6,369,557 ¹⁾	\$0.00	December 10, 2024
December 10, 2019	5,476,530 ⁽²⁾	\$0.00	December 10, 2024

Notes:

- (1) The vesting provisions of the 6,369,557 Unlisted Options are as follows:
 - The first pouring of gold at the Ghanaian Assets.
- (2) The vesting provisions of the 5,476,530 Unlisted Options are as follows:
 - 1,095,306 Unlisted Options vesting upon the First Gold Pour to be completed or planned within 60 days of the Project Control Budget;
 - 1,095,306 Unlisted Options vesting upon the advancement of the project development in a maximum of 10% above the Board approved and final Project control Budget and Schedule;
 - 1,095,306 Unlisted Options vesting upon development of the Mine Operations Team, to ensure sustained operation;
 - 1,095,306 Unlisted Options vesting upon completion of 36 months, with less than zero lost time injury and zero fatalities; and
 - 1,095,306 Unlisted Options vesting upon commencement of process plant commissioning, in accordance with the approved schedule.

12 - DIRECTORS AND OFFICERS

The following table sets forth the name and residence of each director and executive officer of the Corporation as well as such individual's positions and offices held with the Corporation, period of service as a Director (if applicable), and principal occupation(s) during the five preceding years. The term of office of each of the Directors (other than the Corporation's Managing Director) expires at the end of the third annual general meeting of Shareholders of the Corporation after such Director's last election or appointment, provided that one-third of the Directors (other than the Managing Director) must retire at each annual general meeting. Retiring Directors are eligible for re-election. The term of office of the Corporation's Managing Director expires at the discretion of the Corporation's Directors, in accordance with his employment contract.



Name, Province or State, and Country of Residence	Positions and Offices Held and Date of Appointment	Number and Class of Securities Beneficially Owned or Controlled	Principal Occupation(s) During Past Five Years
Kevin Tomlinson(3)(4)(5) London, United Kingdom	Director, Non- Executive Chairman November 7, 2016	Shares: 400,000 Unlisted Options: 5,918,800	Non-executive Chairman of the Corporation since November 2016; Samco Gold Limited since January 2012 and Bellevue Gold Limited since September 2019. Former Director, Plymouth Minerals Limited (2017 to 2019), Xanadu Mines Limited (2017 to 2019), Centamin plc (2012 to 2016); Orbis Gold Ltd (2015 to 2017); Besra Gold Inc. (2012 to 2015).
Arthur (Archie) Koimtsidis Western Australia, Australia	Managing Director December 27, 2012	Shares: 15,209,296 Unlisted Options: 6,450,606	Co-founder and Managing Director of the Corporation since December 2012
Malik Easah Accra, Ghana	Executive Director December 27, 2012	Shares: 16,242,238 Unlisted Options: 5,181,818	Co-founder and Executive Director of the Corporation since December 2012
Michele Muscillo ⁽¹⁾⁽²⁾⁽⁵⁾ Queensland, Australia	Non-Executive Director October 11, 2017	Shares: 0 Listed Options: 0 Unlisted Options: 2,851,433	Partner, Hopgood Ganim Lawyers since 2008; Director Aeris Resources Limited, since 2013, Xanadu Mines Limited, since 2017 and Mako Gold Limited, since 2017. Formerly, Director of Orbis Gold Limited which is currently owned by TSX- Listed SEMAFO Inc.
Dr. Kenneth G. Thomas ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾ Canada	Non-Executive Director October 31, 2018	Shares: 0 Listed Options: 0 Unlisted Options: 2,930,049	Director, Continental Gold Inc, since 2015. Former Director Avalon Advanced Minerals Inc., from 2014 to 2019 and Candente Gold Corp., from 2012 to 2019.



Name, Province or State, and Country of Residence	Positions and Offices Held and Date of Appointment	Number and Class of Securities Beneficially Owned or Controlled	Principal Occupation(s) During Past Five Years
Trevor Schultz ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	Non-Executive Director January 2, 2019	Shares: 0 Listed Options: 0 Unlisted Options: 2,930,049	Former Director, Centamin Egypt, from 2008 to 2018.
Jon Grygorcewicz	CFO	Shares: 40,000 Unlisted Options: 0	CFO, Latin Resources Ltd since 2017 and Oakdale Resources Ltd since May 2019. Former CFO Venture Minerals Ltd from 2012 to 2014 and Politis Central Services Group from 2017 to 2018.
David (Dave) Anthony ⁽⁶⁾	COO	Shares: 70,000 Unlisted Options: 1,545,455	

Notes:

- (1) Member of the Audit and Risk Committee.
- (2) Member of the Remuneration and Nomination Committee.
- (3) Member of the Health, Safety and Environmental Committee.
- (4) Member of the Technical Committee
- (5) Member of the Special Committee
- (6) On September 4, 2019, Dave Anthony was appointed as the COO.

Based on the disclosure available on the System for Electronic Disclosure by Insiders ("**SEDI**"), as of the date of this AIF, the directors and executive officers of the Corporation, as a group, beneficially owned, or controlled or directed, directly or indirectly, a total of 31,941,534 Ordinary Shares, representing approximately 6.07% of the total number of Ordinary Shares outstanding.

Set forth below is a brief description of the background of the directors and executive officers of the Corporation, including a description of each individual's principal occupation(s) during the past five years.

12.1 Kevin Tomlinson – Director, Non-Executive Chairman

Kevin Tomlinson – Non-Executive Chairman (appointed 7 November 2016)

Mr Tomlinson possess over 35 years' experience in Geology and Finance with significant experience within the Toronto, Australian and London Stock Exchanges.

Mr Tomlinson holds an MSc in Structural Geology and a Grad Dip in Finance. From 1998 Mr Tomlinson has worked in the Corporate/Finance sectors where he has been involved in raising significant equity for resource companies on the AIM, ASX, LSE and TSX Exchanges.



Kevin was previously Managing Director of Investment Banking at Westwind Partners/Stifel Nicolaus where he advised a number of resource companies including Centamin Plc, Platinum Group Metals, Trelawney Resources and Allied Gold. He was also an integral part of the Team raising finance for Osisko Mining and Semafo Inc.

Mr Tomlinson was Director of Natural Resources at Williams de Broë and head of Research for Hartleys Ltd in Australia. Recent Directorships include Bellevue Gold (developer), Centamin Plc (producer), Orbis Gold (developer) and Medusa Mining (producer).

Mr Tomlinson is a Fellow of the Institute of Directors, a Fellow of the Chartered Institute for Securities & Investment, a Fellow of the Australian Institute of Geoscientists and a Liveryman of the Worshipful Company of International Bankers.

12.2 Arthur (Archie) Koimtsidis - Co-founder, Managing Director

Archie Koimtsidis – Managing Director (appointed 27 December 2012)

Mr Koimtsidis has for the last 28 years been involved in all facets of gold exploration, discovery, production and refining in West Africa and South America.

His most recent appointment prior to joining Cardinal was as the Deputy Country Manager of Ghana for PMI Gold Limited a joint TSXV and ASX listed company. During this time he was responsible for all field operational matters including coordination of exploration, drilling programs and human resource management in relation to the Company's projects in Ghana.

Mr Koimtsidis has been instrumental in acquiring the Ghanaian Projects on behalf of Cardinal and has a unique knowledge and understanding of geopolitical and operational matters relating to resources projects in West Africa.

12.3 Malik Easah – Co-founder, Executive Director

Malik Easah – Executive Director (appointed 27 December 2012)

Mr Malik Easah is the principal of successful alluvial mining operations in the North West Adansi Gold Obotan concession and is currently developing additional payable gold permits within the Ashanti and Nangodi Gold belts of Ghana.

Mr Easah specialises in the manufacture of alluvial gold wash plants and recovery equipment and is regarded as an authority in the development of alluvial mining operations in Ghana.

Mr Easah is a resident in Ghana.

12.4 Michele Muscillo – Non-Executive Director

Michele Muscillo - Non-Executive Director (appointed 11 October 2017)

Mr. Muscillo is a Partner with HopgoodGanim Lawyers in Australia. Michele has practised exclusively in corporate law for over 15 years and has extensive experience in capital markets transactions, including the negotiation of significant commercial contracts and agreements. As part of this role, Mr. Muscillo has acted



on numerous initial public offerings and debt and equity raisings, and advised both bidders and targets on public market control transactions. His key areas of practice include Corporate Advisory and Governance, Capital Markets, Resources and Energy.

12.5 Dr Kenneth G. Thomas – Non-Executive Director

Dr Kenneth G. Thomas - Non-Executive Director (appointed 23 October 2018)

Dr. Thomas has over 45 years in the mining industry with experience in project development, construction and operations. Until July 2012 he was Senior Vice President, Projects, Kinross Gold Corporation and previously, for six years, a Global Managing Director and Board Director at Hatch Ltd, a leading international engineering and construction firm.

From 1987 to 2001, he served in progressively senior roles at Barrick Gold Corporation to Senior Vice President, Technical Services. Prior to Barrick Gold Corporation, he also worked for 10 years in Zambia and South Africa with Anglo American Corporation.

Ken has a doctorate in Technical Sciences (Project Implementation) from Delft University of Technology and in 2001 he was awarded the Selwyn G. Blaylock Medal by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) for advancements in mining internationally. In addition, he is a Fellow and Past President of the CIM. Ken is an experienced public company director, including his recent tenure as director of Continental Gold (TSX: CNL) prior to its acquisition by an indirect subsidiary of Zijin Mining Group Co., Ltd.

12.6 Trevor Schultz – Non-Executive Director

Trevor Schultz – Non-Executive Director (appointed 2 January 2019)

Mr. Schultz has over 45 years in the mining industry with experience in project development, construction and operations. Between 2008 and 2018, he was an Executive and Non-Executive Director with Centamin Egypt and was responsible for the construction of the 12Mtpa processing plant which has a similar flowsheet to Cardinal's proposed flowsheet.

Prior to this, he served as COO at Ashanti Goldfields Corporation (now Anglo Gold Ashanti Ltd) and was a resident of Ghana for six years. Furthermore, he worked for BHP in Australia and America and in South Africa with Anglo American Corporation.

Trevor has an MA in Economics from Trinity College, England (1968), an MSc in Mining Engineering, from Witwatersrand University, South Africa (1972) and an Advanced Management Programme Diploma from Harvard Business School, USA (1986).

(a) Jon Grygorcewicz – CFO

Mr. Grygorcewicz has 30 years financial management experience, gained in senior financial management positions on the ASX and Singapore Exchange Limited (SGX).

Mr. Grygorcewicz has significant experience in implementing new debt facilities with Australian and international banks for developing gold and iron ore resource projects particularly to de-risk projects in the



early start-up development phase.

In prior CFO roles he gained extensive financial and commercial experience within the heavy engineering services and manufacturing industries across operations spanning Australia and South East Asia.

In his position at Venture Minerals Limited he was an integral part of the development team in bringing the Riley Iron Ore Project to the brink of production and previously successfully transitioned Focus Minerals Limited's Coolgardie Gold Projects through the respective open pit and underground mining development phases to become, at the time, a substantial Australian gold producer.

(b) David (Dave) Anthony – COO

Dave is a qualified Mining Engineer from Queens University in Canada. He has more than 30 years' experience in mining and mineral processing and has worked at senior management and executive levels in the design, construction and operation of gold processing plants and mines globally. Dave was responsible for the design and delivery of mines with capital costs of up to USD\$3.8 Billion and with total material movements of up to 40 million tonnes per annum.

Dave's extensive global experience includes the design, construction, optimization and operation of 12 mines of which six gold mining projects were with Barrick Gold, including four in Africa. Dave was appointed COO of Barrick Africa in 2009 which was listed on the London Stock Exchange in March 2010 with a market capitalization of \$3.8 Billion and was ranked in the FTSE 100 within two months of listing.

Dave is well recognized as a resourceful Team Leader with a track record of delivering high quality production assets on time, on budget and with exemplary safety and environmental performance. His global experience and industry contacts will be highly valuable assets to Cardinal in the construction of the proposed 9.5mtpa mine for the 5.1 Moz* Mineral Ore Reserve within the Namdini open pit gold deposit.

(c) Sarah Shipway – Company Secretary

Sarah Shipway has been involved with the Corporation since inception. Prior to joining Cardinal, Ms. Shipway was an accountant. Ms. Shipway holds a Bachelor of Commerce from Murdoch University and is a member of the Institute of Chartered Accountants. Ms. Shipway is also Company Secretary and non-executive director for Beacon Minerals Limited and St George Mining Limited.

12.7 Cease Trade Orders, Bankruptcies, Penalties or Sanctions

No director or executive officer of the Corporation, nor any personal holding company of any director or executive officer of the Corporation, is, as at the date hereof, or was, within 10 years before the date hereof, a director, CEO or CFO of any company (including the Corporation) that:

- (a) was subject to a cease trade order, an order similar to a cease trade order, or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued while the director or executive officer was acting in the capacity as director, CEO or CFO; or
- (b) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the



relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, CEO or CFO, and which resulted from an event that occurred while that person was acting in the capacity as director, CEO or CFO.

Other than as set out below, no director or executive officer of the Corporation or shareholder holding a sufficient number of securities of the Corporation to affect materially the control of the Corporation, nor any personal holding company of any such individual:

- (i) is, as at of the date hereof, or has been within 10 years before the date hereof, a director or executive officer of any company (including the Corporation) that, while that person was acting in that capacity, or within a year of such individual ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- (ii) has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of such individual; or
- (iii) has been subject to (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority, or has entered into a settlement agreement with a securities regulatory authority, or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Kevin Tomlinson served as a director of Maudore Minerals Ltd. ("Maudore") until May 22, 2014, and of Besra Gold Inc. ("Besra") until April 10, 2015. On September 8, 2014, Maudore announced that it had filed a notice of intention to make a proposal under the Bankruptcy and Insolvency Act (the "BIA"). On March 2, 2015, Maudore announced that the Superior Court of the Province of Quebec (the "Court") had granted an order whereby Maudore's proposal to creditors, which had initially been filed under the BIA, had been continued under the CCAA and that the Court had granted an initial stay of proceedings under the CCAA. Maudore made further announcements on March 27, 2015, June 19, 2015, September 22, 2015 and February 29, 2016 that the Court had granted extensions of the stay of proceedings under the CCAA. On May 16, 2016, Maudore announced that Maudore had, under the BIA, made an assignment of its property to a trustee for the benefit of its creditors generally. On October 19, 2015, Besra announced that its board of directors had decided to file a notice of intention to make a proposal (the "Notice of Intention") under the BIA. On January 29, 2016, Besra announced that, through its appointed proposal trustee, it had submitted a proposal (the "Proposal") to its creditors in accordance with the Notice of Intention to make a proposal. The Proposal was subsequently amended on March 13, 2016 (the "Amended Proposal"). A meeting of creditors (the "Meeting") was initially called for March 17, 2016 and was adjourned until April 7, 2016 in order to permit creditors to consider the Amended Proposal. On April 7, 2016, Besra announced that at the Meeting, the Amended Proposal had been approved by a majority of unsecured creditors holding in excess of two-thirds of the value of proven unsecured creditor claims. The Amended Proposal was approved by the Ontario Superior Court of Justice (Commercial List) on May 17, 2016. On December 17, 2014, the OSC issued a temporary cease trade order for the securities of Besra, and on December 29, 2014, the OSC issued a further cease trade order directing that trading in the securities of Besra cease until further order by the Director (together, the "Besra Cease Trade Order"). The



British Columbia Securities Commission issued a cease trade order on December 17, 2014; the Autorité des marchés financiers issued a cease trade order on January 5, 2015; and the Alberta Securities Commission issued a cease trade order on March 30, 2015. The OSC partially revoked the Besra Cease Trade Order on March 4, 2015 to permit trades and acts in furtherance of trades in connection with a proposed private placement financing by Besra for proceeds of up to C\$15 million. On April 7, 2015, the first tranche of such financing, with gross proceeds of C\$2 million, was completed. Besra received no further proceeds from such financing. On October 14, 2016, the OSC issued an order (the "October 2016 Order") partially revoking the Besra Cease Trade Order to permit trades and acts in furtherance of trades that are necessary for and are in connection with the Amended Proposal and a \$10 million tranche of an exit financing. The October 2016 Order was subsequently varied by the OSC on November 18, 2016, and Besra announced on November 18, 2016 that it had closed a C\$10 million "exit financing" and intended to deliver to the Proposal trustee the consideration necessary to satisfy the elections made by creditors under the Proposal. Besra expects that once all requirements of the Proposal have been satisfied, the Proposal trustee will issue a certificate of full performance. In October 2014 trading in the common shares of Besra on the ASX was suspended and Besra's common shares were delisted from the TSX because of Besra's failure to file its financial statements for the year ended June 30, 2014.

12.8 Conflicts of Interest

To the best of the Corporation's knowledge, and other than as disclosed in this AIF, there are no known existing or potential material conflicts of interest between the Corporation or a subsidiary of the Corporation and any director or officer of the Corporation or a subsidiary of the Corporation, except that certain of the directors and officers serve as directors and officers of other public companies, and therefore it is possible that a conflict may arise between their duties as a director or officer of the Corporation and their duties as a director or officer of such other companies. See "Risk Factors – Risks Related to the Business – Conflicts of Interest".

13 - LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The Corporation is not a party to, and its property is not the subject of, any material legal proceedings, and the Corporation was not a party to, and its property was not the subject of, any material legal proceedings during the Corporation's most recently completed financial year. The Corporation is not aware of any contemplated legal proceedings.

During the most recently completed financial year, no penalties or sanctions were imposed against the Corporation by a court relating to securities legislation or by a securities regulatory authority, no penalties or sanctions were imposed by a court or regulatory body against the Corporation that would likely be considered important to a reasonable investor in making an investment decision, and no settlement agreements were entered into by the Corporation before a court relating to securities legislation or with a securities regulatory authority.

14 - INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as disclosed in this AIF, the Corporation is not aware of any material interest, direct or indirect, of any director or officer of the Corporation, any person or company that beneficially owns, or controls or directs, directly or indirectly, more than 10% of the Corporation's voting securities, or any associate or affiliate of any such persons or companies in any transaction within the three most recently completed financial years or



during the current financial year that has materially affected or is reasonably expected to materially affect the Corporation.

15 - TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Ordinary Shares and the Listed Options of the Corporation in Australia is Computershare Investor Services Pty Ltd ("Computershare (Australia)"), and the Ordinary Shares and Listed Options are transferable at the offices of Computershare (Australia) in Perth.

The transfer agent and registrar for the Ordinary Shares of the Corporation in Canada is Computershare Investor Services Inc. ("Computershare (Canada)"), and the Ordinary Shares are transferable at the offices of Computershare (Canada) in Toronto.

16 - AUDIT COMMITTEE AND RELATED INFORMATION

16.1 The Audit and Risk Committee's Charter

The responsibilities and duties of the audit and risk committee (the "Audit and Risk Committee") of the Board are set out in the Audit and Risk Committee's Charter (the "Charter"), the text of which is set forth in Appendix A to this AIF.

16.2 Composition of the Audit and Risk Committee

The Audit and Risk Committee is comprised of Michele Muscillo (Chair), Dr. Kenneth G. Thomas and Trevor Schultz. The following chart sets out the Corporation's assessment of the independence, financial literacy and relevant educational background and experience supporting such financial literacy of each member of the Audit and Risk Committee. Additional information about relevant experience of each member of the Audit and Risk Committee can be found in such member's biography under the heading "Directors and Executive Officers" above.



Name	Independent ⁽¹⁾	Financially Literate ⁽²⁾	Relevant Education and Experience
Michele Muscillo	Yes	Yes	Bachelor of Laws Chair of audit committee of Aeris Resources Limited and Xanadu Mines Limited.
Dr. Kenneth G. Thomas	Yes	Yes	Over 45 years' experience in the mining industry in project development, construction and operations. Dr. Thomas has held numerous senior roles during his career and has been involved in compensation matters throughout this time.
Trevor Schultz	Yes	Yes	Over 45 years' experience in the mining industry. He has experience in project development, construction and operations. Mr. Schultz has experience in numerous senior roles with involvement in a number of compensation matters.

Notes:

- (1) To be considered independent, a member of the Audit and Risk Committee must not have any direct or indirect "material relationship" with the Corporation. A "material relationship" is a relationship which could, in the view of the Board, be reasonably expected to interfere with the exercise of a member's independent judgment.
- (2) To be considered financially literate, a member of the Audit and Risk Committee must have the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Corporation's financial statements.

16.3 Reliance on Certain Exemptions

At no time since the commencement of the Corporation's most recently completed financial year, has the Corporation relied on the exemption in section 2.4 of NI 52-110 (*De Minimis Non-audit Services*), the exemption



in section 3.2 of NI 52-110 (*Initial Public Offerings*), the exemption in subsection 3.3(2) of NI 52-110 (*Controlled Companies*), the exemption in section 3.4 of NI 52-110 (*Events Outside Control of Member*), the exemption in section 3.5 of NI 52-110 (*Death, Disability or Resignation of Audit Committee Member*), the exemption in section 3.6 of NI 52-110 (*Temporary Exemption for Limited and Exceptional Circumstances*) or an exemption from NI 52-110, in whole or in part, granted under Part 8 of NI 52-110 (Exemptions).

16.4 Audit Committee Oversight

At no time since the commencement of the Corporation's most recently completed financial year has a recommendation of the Audit and Risk Committee to nominate or compensate an external auditor not been adopted by the Board.

16.5 Pre-Approval Policies and Procedures

The Corporation has adopted policies and procedures with respect to the pre-approval of audit and permitted non-audit services to be provided by its external auditor as set forth in the Charter. It is expected that the Audit and Risk Committee will approve the provision of a specified list of audit and permitted non-audit services that the Audit and Risk Committee believes to be typical, reoccurring or otherwise likely to be provided by the Corporation's external auditor during the current fiscal year.

16.6 External Auditor Service Fees

The following table provides detail in respect of audit, audit related, tax and other fees paid by the Corporation to the external auditors for professional services:

Reporting Period	Audit Fees ⁽¹⁾	Audited-Related Fees ⁽²⁾	Tax Fees ⁽³⁾	All Other Fees ⁽⁴⁾
June 30, 2020	\$67,844	Nil	\$16,105	\$69,936
June 30, 2019	\$71,668	Nil	\$5,660	\$36,050

Notes:

- (1) "Audit Fees" include the aggregate fees billed by the Corporation's external auditor for the audit of the annual financial statements and other regulatory audits and filings.
- (2) "Audit-Related Fees" include the aggregate fees billed for assurance and related services by the Corporation's external auditor that are reasonably related to the performance of the audit or review of the Corporation's financial statements but not included in "Audit Fees".
- "Tax Fees" include the aggregate fees billed for professional services rendered by the Corporation's external auditor for tax compliance, tax advice and tax planning.
- "All Other Fees" include the aggregate fees billed for products and services provided by the Corporation's external auditor, other than as set out under the headings "Audit Fees", "Audit Related Fees" and "Tax Fees".



17 - MATERIAL CONTRACTS

During the financial year ended June 30, 2020, the Corporation (together with its wholly owned subsidiaries) assigned from Sprott Private Resource Lending (Collector), LP to the GIIF the senior Credit Facility (as amended in February 2020 and March 2020).

The Credit Facility bears interest at a floating rate equal to 7.75% per annum plus the greater of (i) LIBOR and (ii) 1.00%, per annum, calculated and compounded monthly on the last day of every month, and be payable on the last business Day of each month. The Credit Facility matures on June 1, 2022. The Credit Facility is secured by: (i) a first priority encumbrance granted by the Corporation and each of its wholly-owned subsidiaries, being Cardinal Mining Services Limited, Cardinal Namdini Mining Limited, Cardinal Resources Ghana Limited and Cardinal Resources Subranum Limited (the "Subsidiaries") in favour of GIIF; (ii) a guarantee of the obligations of the Corporation as borrower by each of the Subsidiaries; and (iii) a pledge by the Corporation of the shares of each of the Subsidiaries via a share charge agreement under the laws of Ghana to GIIF.

18 - INTERESTS OF EXPERTS

The following persons or companies are named as having prepared or certified a report, valuation, statement or opinion described or included in a filing, or referred to in a filing, made by the Corporation under National Instrument 51-102 — *Continuous Disclosure Obligations* of the Canadian Securities Administrators during, or relating to, the financial year ended June 30, 2020, and whose profession or business gives authority to the report, valuation, statement or opinion made by the person or company:

- Glenn Turnbull, MAusIMM (CP) of Golder Associates Pty Ltd.;
- Daryl Evans, FAusIMM of Independent Metallurgical Operations Pty Ltd.;
- David Gordon, FAusIMM of Lycopodium Minerals Pty Ltd.;
- Nicolas Johnson, MAIG of MPR Geological Consultants Pty Ltd.; and
- BDO (WA) Pty Ltd.

To the best knowledge of the Corporation, the persons and companies referenced above each hold less than 1% of any outstanding securities of the Corporation, or of any associate or affiliate of the Corporation.

None of the persons referenced above or directors, officers or employees of a person or company referenced above is or is expected to be elected, appointed or employed as a director, officer or employee of the Corporation or of any associate or affiliate of the Corporation.

19 - ADDITIONAL INFORMATION

Additional information relating to the Corporation can be found under the Corporation's profile on the SEDAR website at www.sedar.com. Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Corporation's securities and securities authorized for issuance under equity compensation plans, if applicable, is contained in the Corporation's information circular for its most recent annual meeting of Shareholders. Additional financial information is provided in the Corporation's audited consolidated financial statements and management's discussion and analysis for its most recently completed financial year.



20 - APPENDIX A - AUDIT AND RISK COMMITTEE CHARTER

This Audit and Risk Committee charter (the "Charter") sets forth the composition, purpose, responsibilities, powers and authority of the Audit and Risk Committee (the "Committee") of the Board of Directors (the "Board") of Cardinal Resources Limited ("Cardinal").

1. ROLE

The role of the Audit and Risk Committee is to assist the Board in monitoring and reviewing any matters of significance affecting financial reporting and compliance. This Charter defines the Audit and Risk Committee's function, composition, mode of operation, authority and responsibilities.

2. COMPOSITION

The Board will adhere to the following composition requirements for the Committee.

- (a) The Committee must comprise at least three members that are Directors of Cardinal.
- (b) All members of the Committee must be non-executive Directors.
- (c) Except as permitted by NI 52-110, all members of the Committee must be independent in accordance with the criteria set out in Annexure A. Additionally, each Committee member should be free of any relationship which could, in the view of the Board, reasonably interfere with the exercise of a member's independent judgement.
- (d) The Board will appoint members of the Committee. Members of the Committee will be appointed as new directors join the Board. The Board may remove and replace members of the Committee by resolution.
- (e) Composition of the Committee will be reviewed annually.
- (f) Except as permitted by NI 52-110, all members of the Committee must be financially literate. This means the members must be able to read and understand financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and level of complexity of the issues reasonably expected to be raised by the Company's financial statements.
- (g) The chairman of the Committee (the "Chairman") shall have leadership experience and a strong finance, accounting or business background and will not be the Chair of the Board.
- (h) The external auditors, the other Directors, the Managing Director, Chief Financial Officer, Company Secretary and other senior executives may be invited to Committee meetings at the discretion of the Committee.

3. PURPOSE

The primary purpose of the Committee is to assist the Board in fulfilling its statutory and fiduciary responsibilities relating to:

- (a) the quality and integrity of the Company's financial statements, accounting policies and financial reporting and public disclosure practices;
- (b) compliance with all applicable laws, regulations and company policy;
- (c) the effectiveness and adequacy of internal control processes;
- (d) the performance of the Company's external auditors and their appointment and removal;



- (e) the independence of the external auditor and the rotation of the lead engagement partner;
- (f) the scope and adequacy of the external audit;
- (g) pre-approve any proposal for the external auditor to provide non-audit services to Cardinal or any of its subsidiaries and whether it might compromise the independence of the external auditor;
- (h) the identification and management of business, economic, environmental and social sustainability risks; and
- (i) the review of the Company's risk management framework at least annually to satisfy itself that it continues to be sound and to determine whether there have been any changes in the material business risks the Company faces and to ensure that they remain within the risk appetite set by the Board.

A secondary function of the Committee is to perform such special reviews or investigations as the Board may consider necessary.

4. DUTIES AND RESPONSIBILITIES OF THE COMMITTEE

4.1 Review of Financial Reports and Disclosure

- (a) Review the appropriateness of the accounting principles adopted by Cardinal, in addition to all financial-related disclosure approved by management in the financial reports in order to ensure the integrity of the Company's financial reporting and disclosure.
- (b) Prior to public disclosure, review and recommend to the Board for approval the audited annual financial statements, auditor reports, quarterly financial statements, interim profit or loss press releases management discussion and analysis, financial reports and any other publicly disclosed financial information through press release or otherwise.
- (c) Review and recommend to the Board for approval, any appropriate financial information that is included in any prospectus, annual information form, annual report to shareholders, management proxy circular, material change disclosure of a financial nature and any related documents that are publicly disclosed.
- (d) Directly oversee the work of the external auditor engaged to prepare or issue an auditor's report and the results of the external audits of those reports.
- (e) Assess whether external reporting is adequate for shareholder needs.
- (f) Assess management processes supporting external reporting.
- (g) Establish procedures for receipt, retention and treatment of accounting complaints and confidential, anonymous submission by employees of the Company of complaints regarding questionable accounting or auditing matters.
- (h) Directly oversee the resolution of disagreements between management and the external auditor regarding financial reporting.
- (i) Review the impact of any proposed changes in accounting policies on the financial statements.
- (j) Ensure that, before the Board approves the Company's financial statements for a financial period, the Chief Executive Officer and Chief Financial Officer (or, if none, the person(s) fulfilling those functions) have declared that, in their opinion, the financial records of the Company have been properly maintained and that the financial statements comply with the appropriate accounting standards and give true and fair view of the financial position and performance of the Company and that the opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.



(k) Ensure that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from its financial statements and periodically assess the adequacy of those procedures.

4.2 Relationship with External Auditors

- (a) Recommend to the Board (i) the external auditor to be nominated for the purpose of preparing or issuing an auditor's report or performing another audit, review or attestation services for the Company and (ii) the compensation of the external auditor.
- (b) Review performance, succession plans and rotation of lead engagement partner.
- (c) Approve the external audit plan and fees proposed for audit work to be performed by the external auditor.
- (d) Discuss any necessary recommendations to the Board for the approval of quarterly, half yearly or annual reports.
- (e) Review the adequacy of accounting and financial controls together with the implementation of any recommendations of the external auditor in relation thereto.
- (f) Meet with the external auditors at least twice in each financial year and at any other time the Committee considers appropriate.
- (g) Provide pre-approval of audit and non-audit services that are to be undertaken by the external auditor.
- (h) Ensure adequate disclosure as may be required by law of the Committee's approval of all non-audit services provided by the external auditor.
- (i) Review the Company's public disclosure required by applicable securities laws concerning the audit committee and its members to ensure it is accurate and complete.
- (j) Review the independence of the external auditors and ensure that the external auditor prepares and delivers an annual statement as to their independence which includes details of all relationships with the Company.
- (k) Receive from the external auditor their report on, among other things, critical accounting policies and alternative accounting treatment, prior to the filing of their audit report in compliance with applicable securities law requirements and/or the Corporations Act.
- (I) Ensure that the external auditor attends the Company's Annual General Meeting and is available to answer questions from security holders relevant to the audit.
- (m) Review and assess the work and performance of the external auditors who are accountable to the Committee and Board as representatives of the shareholders, including the lead partner of the independent auditor's team.

4.3 Internal Audit Function

- (a) Monitor the need for a formal internal audit function and its scope.
- (b) Review and monitor the appointment or removal of the head of internal audit.
- (c) Assess the performance and objectivity of any internal audit procedures that may be in place.



- (d) Review and assess the adequacy and effectiveness of Cardinal's internal control and management information systems and ensure that Cardinal maintains the necessary books, records, and accounts in enough detail to accurately reflect Cardinal's transactions.
- (e) Review risk management and internal compliance procedures.
- (f) Monitor the quality of the accounting function.
- (g) Review the internal controls of the Company via consideration of any comments from the Company's internal and/or external auditors and/or commissioning an independent report on the Company's internal controls.
- (h) Review the adequacy of internal controls, systems and procedures in order to ensure compliance with regulatory compliance and recommendations.

4.4 Risk Management

- (a) Oversee the Company's risk management systems, practices and procedures to ensure effective risk identification and management and compliance with the Company's Risk Management Policy, internal guidelines and external requirements.
- (b) Assist in identifying and managing potential or apparent business, economic, environmental and social sustainability risks (if appropriate) that could adversely affect the Company's prospects currently and for future financial years.
- (c) Assess whether the Company is required to publish an integrated report or a sustainability report in accordance with a recognised international standard.
- (d) Consider whether the Company has a material exposure to climate change risk.
- (e) Review the Company's Risk Management Policy at least annually to satisfy itself that the framework:
 - (i) continues to be sound;
 - (ii) ensures that the Company is operating with due regard to the risk appetite set by the Board; and
 - (iii) deals adequately with contemporary and emerging risks such as conduct risk, digital disruption, cyber-security, privacy and data breaches, sustainability and climate change.
- (f) Review reports by management on the efficiency and effectiveness of the Company's Risk Management Policy and associated internal compliance and control procedures.

4.5 Other

- (a) The Committee will oversee the Company's environmental risk management, insurance and occupational health and safety processes.
- (b) The Committee will oversee procedures for whistleblower protection.
- (c) As contemplated by the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, and to the extent that such deviation or waiver does not result in any breach of the



law, the Committee may approve any deviation or waiver from the "Corporate Code of Conduct". Any such waiver or deviation will be promptly disclosed where required by applicable law.

- (d) The Committee will monitor related party transactions.
- (e) The Committee will review and approve the Company's hiring policy regarding partners, employees and former partners and employees of the present and former external auditor of the Company.

5. MEETINGS

- (a) The Committee will meet at least twice in each financial year and additionally as circumstances may require for it to undertake its role effectively
- (b) Meetings are called by the Secretary as directed by the Board or at the request of the Chairman, the Chief Executive Officer, Chief Financial Officer or the Company's external auditors.
- (c) Seventy-two (72) hours advance notice of each meeting will be given to each member orally, by telephone, by facsimile or email, unless all members are present and waive notice, or if those absent waive notice before or after a meeting.
- (d) Where deemed appropriate by the Chairman, meetings and subsequent approvals and recommendations can be implemented by a circular written resolution or conference call.
- (a) A quorum shall consist of two members of the Committee. In the absence of the Chairman of the Committee or their nominees, the members shall elect one of their members as Chairman of that meeting.
- (b) Each Committee member will have one vote, including the Chairman, and decisions of the Committee will be made by an affirmative vote of the majority.
- (C) The Chairman, through the Secretary, will prepare a report of the actions of the Committee to be included in the Board papers for the next meeting.
- (d) Minutes of each meeting are included in the papers for the next full Board meeting after each Committee meeting.

6. SECRETARY

- (a) The Company Secretary or their nominee shall be the Secretary of the Committee and shall attend meetings of the Committee as required.
- (b) The Secretary will be responsible for keeping the minutes of meetings of the Committee and circulating them to Committee members and to the other members of the Board.
- (c) The Secretary shall distribute supporting papers, agenda and materials for each meeting of the Committee as far in advance as possible.

7. RELIANCE ON INFORMATION OR PROFESSIONAL OR EXPERT ADVICE

Each member of the Committee is entitled to rely on information, or professional or expert advice, to the extent permitted by law, given or prepared by:

(a) an employee of the Group whom the member believes on reasonable grounds to be reliable and competent in relation to the matters concerned;



- (b) a professional adviser or expert in relation to matters that the member believes on reasonable grounds to be within the person's professional or expert competence; or
- (c) another Director or officer of the Group in relation to matters within the Director's or officer's authority.

8. ACCESS TO ADVICE

- (a) Members of the Committee have rights of access to management and to the books and records of the Company to enable them to discharge their duties as Committee members, except where the Board determines that such access would be adverse to the Company's interests.
- (b) Members of the Committee may meet with the auditors, both internal and external, without management being present.
- (c) Members of the Committee may engage independent legal counsel or other advisers they consider necessary to assist them in carrying out their duties and responsibilities and set and pay the compensation for any advisors employed by the Committee. Any costs incurred as a result of the Committee consulting an independent expert will be borne by the Company.

9. REVIEW OF CHARTER

- (a) The Board will conduct an annual review of the membership to ensure that the Committee has carried out its functions in an effective manner, and will update the Charter and Risk Management Policy as required or as a result of new laws or regulations.
- (b) The Charter and Risk Management Policy shall be made available to members on request, to senior management, to the external auditor and to other parties as deemed appropriate, will be posted to the Company's website and will be included, where required, in the Company's public disclosure documents.

10. REPORT TO THE BOARD

- (a) The Committee must report to the Board formally at the next Board meeting following from the last Committee meeting on matters relevant to the Committee's role and responsibilities.
- (b) The Committee will annually review and approve the Committee's report for inclusion in the management information circular.
- (c) The Committee must brief the Board promptly on all urgent and significant matters.

ANNEXURE A – DEFINITION OF INDEPENDENCE

An audit committee member is independent if he or she:

- (a) has no direct or indirect material relationship with the Corporation, being a relationship which could, in the view of the Corporation's board of directors, be reasonably expected to interfere with the exercise of a member's independent judgement; and
- (b) is free of any interest, position, association or relationship that might influence, or reasonably be perceived to influence, in a material respect his or her capacity to bring an independent judgement to bear on issues before the board and to act in the best interests of the entity and its security holders generally.



Material relationships

Subject to certain exemptions and further clarification set out in Canadian securities laws applicable to the Corporation, the following individuals are considered to have a material relationship with the Corporation:

- (a) an individual who (i) accepts, directly or indirectly, any consulting, advisory or other compensatory fee from the Corporation or any subsidiary entity of the Corporation, other than as remuneration for acting in his or her capacity as a member of the board of directors or any board committee, or as a part-time chair or vice-chair of the board or any board committee; or (ii) is an affiliated entity of the Corporation or any of its subsidiary entities,
- (b) an individual who is, or has been within the last three years, an employee or executive officer of the Corporation;
- (c) an individual whose immediate family member is, or has been within the last three years, an executive officer of the Corporation;
- (d) an individual who:
 - i. is a partner of a firm that is the Corporation's internal or external auditor,
 - ii. is an employee of that firm, or
 - iii. was within the last three years a partner or employee of that firm and personally worked on the Corporation's audit within that time;
- (e) an individual whose spouse, minor child or stepchild, or child or stepchild who shares a home with the individual:
 - i. is a partner of a firm that is the Corporation's internal or external auditor,
 - ii. is an employee of that firm and participates in its audit, assurance or tax compliance (but not tax planning) practice, or
 - iii. was within the last three years a partner or employee of that firm and personally worked on the Corporation's audit within that time;
- (f) an individual who, or whose immediate family member, is or has been within the last three years, an executive officer of an entity if any of the Corporation's current executive officers serves or served at that same time on the entity's compensation committee; and
- (g) an individual who received, or whose immediate family member who is employed as an executive officer of the Corporation received, more than \$75,000 in direct compensation from the Corporation during any 12 month period within the last three years.



Examples of interests, positions, associations or relationships affecting independence

Examples of interests, positions, associations and relationships that might cause doubts about the independence of a director include if the director:

- (a) is, or has been, employed in an executive capacity by the Corporation or any of its child entities and there has not been a period of at least three years between ceasing such employment and serving on the board;
- (b) is, or has within the last three years been, a partner, director or senior employee of a provider of material professional services or a material consultant to the Corporation or any of its child entities;
- (c) is, or has been within the last three years, in a material business relationship (e.g. as a supplier or customer) with the Corporation or any of its child entities, or an officer of, or otherwise associated with, someone with such a relationship;
- (d) is a substantial security holder of the Corporation or an officer of, or otherwise associated with, a substantial security holder of the Corporation;
- (e) has a material contractual relationship with the Corporation or its child entities other than as a director;
- (f) has close family ties with any person who falls within any of the categories described above; or
- (g) has been a director of the Corporation for such a period that his or her independence may have been compromised.

In each case, the materiality of the interest, position, association or relationship needs to be assessed to determine whether it might interfere, or might reasonably be seen to interfere, with the director's capacity to bring an independent judgment to bear on issues before the Board and to act in the best interests of the Corporation and its security holders generally.

