

## Due Diligence and Valuation Report

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 Fair share value bracket: USD 10.26 to USD 10.75<sup>i</sup>  
 Share price on date: USD 5.76<sup>ii</sup>

### Analyst Team

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Company: Caledonia Mining Corporation Plc.  
 Ticker: TSX:CAL, NYSE:CMCL, LSE-AIM:CMCL  
 Headquarters: St Helier, Jersey  
 Chief Executive Officer: Steve Curtis  
 Website: [www.caledoniamining.com](http://www.caledoniamining.com)

### Market Data

|                                    | CAL (CAD)   | CMCL (USD) |
|------------------------------------|-------------|------------|
| 52-Week Range <sup>iii</sup>       | 6.40 – 9.00 | NA         |
| Average Daily Volume <sup>iv</sup> | 3,598       | 3,380      |
| Market Cap. on date <sup>v</sup>   | 76.3        | 60.9       |

**Fiscal Year (FY)** 1st January – 31<sup>st</sup> December

### Summary

Caledonia Mining Corporation Plc. ('Caledonia' or 'the company') is primarily involved in mining, development and exploration of minerals. Currently the company is focused on mining and development at the +100 year old Blanket gold mine located in Zimbabwe. The mine consists of nine deposits within an extensively mineralized system including Sabiwa, Jethro, The Blanket, Feudal, AR South, AR Main, Sheet, Eroica and Lima ore bodies. Blanket, AR South, AR Main, Eroica and Lima are being mined currently.

In April 2006, Caledonia acquired the Blanket mine and Carbon-in-leach plant from Kinross Gold Corporation with current capacity of 3,800 tpd. At the end of 2010, the Company completed an expansion project at the Blanket mine which increased its gold production capacity from 24,000 ounces per annum to 40,000 ounces per annum.

During 2012, to comply with the Indigenisation and Economic Empowerment Act ("The Act"), Zimbabwean law, the company transferred 51% of the ownership through a vendor funding agreement to indigenous Zimbabweans. Currently, Caledonia owns 49% stake in the Blanket mine however, it is funding the purchase of 51% by indigenous Zimbabweans via a vendor funding agreement. As per the agreement, the company is entitled to 80%

of the dividend declared from the Blanket mine as part repayment of the loan to the indigenous Zimbabweans. This has resulted in current effective holding much higher than the 49% stake. The company currently anticipates repayment of the loan after which the effective holding will revert to 49% equity ownership and will also retain the management of the mine.

**Investment plan:** On November 3, 2014, the company announced the Investment Plan for further development and exploration of the Blanket mine. One of the key improvements is the construction of a 1,080m-deep Central Shaft which will allow greater production capacity. Located between the AR Main and AR South ore bodies, the Central Shaft is currently at the depth of 870m and is expected to be completed by December 2018. The estimated total capital cost of the expansion is USD 70 million which included USD 23 million for the Central Shaft and USD 47 million in sustaining capex from 2015-2021. Once it becomes operational, a linear ramp-up in production from 55,000 ounces to 80,000 ounces in 2021 is expected.

The Investment Plan also included the construction of a tramming loop and sinking of the No. 6 Winze which were completed ahead of schedule and are contributing to the company's increased production.

A new ball mill was also installed in 2016 which is fully commissioned. The new mill will increase the daily throughput by 20%, from 1,500 tpd to 1,800 tpd, and will allow Blanket to meet its planned production of 80,000 ounces by 2021.

In addition to the Investment Plan, Caledonia is involved in the exploration and development of AR South and AR Main ore bodies below 750m.

**Reserve Definition and Expansion targets:** The Company has a current Measured and Indicated Resource of 4.9Mt @ 4.23g/t (671koz) and an Inferred Resource of 3.76Mt @ 4.99g/t (604koz).

In 2016, the company completed 22,172m of Reserve definition and Resource expansion drilling from underground compared to 14,330m in 2015. The increase was due to the purchase of new drill machines in the first half of 2016. Most of the drilling in 2016 was completed at the Blanket, AR Main and Eroica ore bodies. In 2017, the company is focused on AR South where only limited drilling below 22 level has been done.

During 2Q17, the company drilled 6,359m compared to 5,652m in the 1Q17 and 6,106m in 2Q16. This was carried out at the Blanket and AR South ore bodies between 750m and 1,000m.

As is typical with underground mines like Blanket, conversion of Resources to Reserve is limited to 1-2 years ahead of the mine plan because of the need to access suitable drilling locations. Historically the conversion rate from Resource to Reserve has been close to 100% which suggests there is strong

potential to substantially extend the operation beyond the current 10 year mine life. The Company has management personnel that are highly experienced and successful in operating mines in Zimbabwe.

**Development of other properties:** Caledonia is also evaluating various other mines that will meet the investment criteria. Once the Investment Plan is delivered, the company expects to gain significant excess cash which can be utilized for the development of other properties. The greenstone terrain in Zimbabwe has many prospective and less explored projects.

Given Caledonia's focus on delivering the Investment Plan, we expect significant ramp-up in gold production once the Central Shaft is operational. The company is poised to gain excess cash generation by 2019.

Given the due diligence and valuation estimations based on discounted cash flows, we believe that Caledonia's fair share value lies between USD 10.26 and USD 10.75.

## Table of Contents

|  |           |
|--|-----------|
| <b>Company Presentation .....</b>                            | <b>4</b>  |
| <b>News .....</b>  | <b>7</b>  |
| <b>Listing Information .....</b>                             | <b>9</b>  |
| <b>Management and Governance .....</b>                       | <b>10</b> |
| <b>Assets and Projects.....</b>                              | <b>11</b> |
| <b>Technologies and Markets.....</b>                         | <b>17</b> |
| <b>Project Risk Profile Analysis.....</b>                    | <b>19</b> |
| <b>Risk Parameters – Definition.....</b>                     | <b>20</b> |
| <b>Value.....</b>  | <b>22</b> |
| <b>Analyst Certifications and Important Disclosures.....</b> | <b>25</b> |
| <b>Valuation.....</b>  | <b>26</b> |
| <b>Notes and References .....</b>                            | <b>27</b> |

## Company Presentation

Caledonia is a mining exploration and development company in Southern Africa. The company's primary asset is a 49% ownership in the Blanket gold mine in Zimbabwe. Caledonia acquired the Blanket mine from Kinross Gold Corporation on April 2006. During 2012, to comply with Zimbabwean law, Caledonia sold 51% of ownership interest to indigenous Zimbabweans. The funding for this was facilitated by Caledonia which is repaid by way of dividends from the Blanket mine to Caledonia (80% of dividend is used to repay loans). This has resulted in Caledonia's current effective ownership much higher than 49% on a temporary basis until the loan is repaid.

On November 3, 2014, the company announced the Investment Plan for the Blanket mine to improve underground infrastructure and logistics in order to facilitate sustainable and increased production. The infrastructure improvements include the development of a tramming loop, deepening the No.6 Winze and sinking a new 6-meter diameter Central Shaft of 1,080m. The tramming loop and the sinking of the No. 6 Winze were both completed before the target date and the work on the Central Shaft is proceeding according to the plan and is currently at approximately 870m depth. The company expects to complete the Central Shaft by the end of 2018. Once completed linear ramp-up in production up to 80,000 ounces of gold in 2021 is expected.

*Financial summary:* As of June 30, 2017, Caledonia had a cash and cash equivalent of USD 10.8 million. On June 26, 2017, the company completed a one for five share consolidation after which its common shares commenced trading on the NYSE American under the symbol "CMCL". The company has consistently paid dividends and a quarterly dividend policy was adopted in January 2014. The quarterly dividend was increased 22% last year, changed to reflect the share consolidation and is maintained at 6.875 US cents per quarter. Caledonia did not have any financial hedging instruments outstanding to hedge its effective sale price.

### Premiums



*Receives majority share of Blanket's dividends:* Caledonia holds 49% equity interest in the Blanket mine; however, it actually receives a higher percentage of the dividend flow from the mine until the loans are repaid. To comply with the Zimbabwe law, the company transferred 51% of the equity interest to indigenous Zimbabweans. The purchase of equity stake was funded by Caledonia by extending loans to indigenous Zimbabweans. In addition to 49% share of the dividend, the company will also receive 80% of the remaining dividend of indigenous Zimbabweans as a repayment towards the loan. Effectively, the company holds a majority of interest in the Blanket mine.

*Higher free cash flow generation:* The capital investments are funded through cash flow from operations. Once the Central Shaft is operational, Caledonia expects linear production ramp-up up to 80,000 ounces gold by 2021. This will lead to excess cash from 2019. The company has no debt outstanding and only a small USD 1 million working capital facility in Zimbabwe.

*Higher dividends and potential for further increase:* Caledonia has been paying dividend since the beginning of 2014. It paid quarterly dividend of 1.125 US cents in January and April 2016, following which the dividend was increased to 1.375 cents. After the consolidation of the company's shares, it announced a quarterly dividend of 6.875 cents, equivalent to 1.375 cents paid earlier. The company has further scope to increase the dividend once the Investment Plan is completed in 2018.

*Opportunities to increase resources and production:* Caledonia is engaged in further development of the Blanket mine and its surrounding properties. Drill drive development has advanced to improve access to test the potential for more Resources at depth where only limited drilling has been completed. The Greenstone belt that hosts the Blanket mine is considered highly prospective and the Company is well funded to define additional Resources and develop the mine to its full potential.

*Strong and experienced management team:* Caledonia has an experienced management team with a wealth of knowledge and expertise in Zimbabwe. The management team has a diversified and relevant experience in the fields of exploration, mining operations, project development and also in corporate finance and investment banking.

| Infrastructure   | Location of mine  |
|--|---|
|  |  |

## Portfolio and Risks

*Commodity price risk:* Caledonia is primarily involved in exploration and mining of gold. The company sells all the gold production to Fidelity, a company controlled by the Zimbabwean authorities, at a spot price less than that of the early settlement discount. The company's revenues have a direct exposure to the prices of gold. Currently, Caledonia does not use any financial instruments to hedge its exposure to commodity risk.

*Credit risk:* Since January 2014, as per the regulations introduced by the Zimbabwean Ministry of Finance, all the gold produced in Zimbabwe has to be sold to Fidelity. Presently, all payments from Fidelity have been cleared in full and on time. However, the rules that restrict gold sales only to Fidelity increase the company's credit risk.

*Exploration and development risk:* Over the long-term, Caledonia is in need to identify new resources in order to replace ore depleted by mining activities and to commence the new projects on time. There is no assurance that the exploration will be successful in identifying sufficient mineral resources appropriate for further development or production. The current revenues and cash generation of the company are exposed to development of the Blanket mine. Long-term growth of the company will depend on the exploration and development of additional resources. However, the company has expertise and a competitive advantage of developing and exploring mines in Zimbabwe, which reduces the risk.

*Country and political risk:* Caledonia's operations are located in Zimbabwe, which expose the company to various political and economic risk. In 2009, the government abolished the Zimbabwe dollar and adopted US dollar as the functional currency. The company faces risk of reintroduction of Zimbabwe dollars.

**Corporate Strategy:**

*Execution of the Investment Plan:* On November 3, 2014, the company announced the Investment Plan for further development and exploration of the Blanket mine. The plan undertakes a number of initiatives to access and exploit Measured, Indicated and Inferred Resources between 750m – 1,000m below surface. It is expected that, the plan will improve Blanket’s long-term operational efficiency, flexibility and sustainability. The key objectives of the plan is to develop a 1,080m Central Shaft to improve the underground infrastructure and logistics to allow an efficient and sustainable production build-up. The other improvement includes the development of a tramming loop and the deepening the No.6 Winze, which are completed and contributing to its overall operations. The company is targeting to complete the development of Central Shaft by December 2018. Once completed a linear ramp-up in the gold production up to 80,000 ounces per year in 2021 is expected. Delivering the Investment Plan has been the key strategic focus of the company.

*Development of other mines:* The Blanket mine has numerous smaller satellite deposits or prospects in the exploration stage within the surrounding Gwanda greenstone terrain. Some of these properties have been operated historically and have shaft infrastructure facilities for rapid underground access for exploration and development of mining activity.

The company is also actively looking for acquisitions of various other mines and projects that meet its investment criteria. Once the Investment Plan is successfully delivered, the company expects significant excess cash flows from 2019; this in turn will increase the company’s scope to consider the acquisition of new properties for exploration and mine development.

The Gwanda greenstone terrain and the greater Zimbabwe region is considered highly prospective and underexplored utilizing modern exploration techniques. With the company’s operating success in Zimbabwe and along with its expertise and excellent relationship with the Zimbabwean government, the company holds a competitive edge to develop new projects.

## News

- **Record gold production in 2017:** On October 5, 2017, the company announced record gold production of approximately 14,389 ounces of gold were produced in 3Q17 a 15% increase to the previous quarter. Guidance for 2017 is between 54,000 and 56,000 ounces and the company remains on track to produce its production target of 80,000 ounces in 2021.
- **Listing of shares on NYSE:** On July 24, 2017, the company announced that it has received approval from the New York Stock Exchange (NYSE) for listing of its shares on the NYSE and trading commenced on July 27, 2017. The company remains listed on the Toronto Stock Exchange (TSX: CAL) and depositary interests in the common shares will be traded on AIM of the London Stock Exchange (CMCL). However, trading of shares on OTCQX will cease upon commencement of trading on NYSE.
- **Accident at Blanket mine:** On July 10, 2017, the company announced that a fatal accident took place in number 6 shaft area of the mine on July 7, 2017. The Ministry of Mines Inspectorate Department's investigation has been completed and there was no fault found in the company's working practices of safety procedures. The company has increased focus on safety since the accident.
- **Declares quarterly dividend of 6.875 cents per share:** On July 7, 2017, the company informed that the board of directors declared a quarterly dividend of USD 0.06875 on each common shares. This dividend represents a revised quarterly dividend policy based on the completion of one-for-five consolidation of company's common shares. The dividend is in line with the dividend paid in January and April 2017 after adjustments for consolidation effect.
- **Share consolidation:** On June 27, 2017, the company announced successful completion of one for five shares consolidation. Previously the board approved a one for five share consolidation in order to satisfy the listing requirement of the NYSE. As of June 30, 2017, the company had an issued share capital of 10,533,873, including 3,406,082 in Depositary Interests.
- **Mining resumed at Eroica Ore Body:** On May 15, 2017, the company resumed its mining operation at the Eroica Ore Body (Blanket mine in Zimbabwe) post the fatality accident that took place on May 12, 2017. The Eroica Ore Body contributed 10% of production during 1Q 2017.
- **Revised production guidance for 2017:** On May 9, 2017, the company announced a revision to its 2017 production guidance from previous estimates of 60,000 ounces to new estimates of 52,000 – 57,000 ounces of gold production. Blanket has not been able to transport the volume of material necessary to meet its previous guidance. The company, however, retained its long term target to achieve 80,000 ounce production by 2021.
- **Record gold production in 2016:** On January 11, 2017, the company announced that approximately 13,591 ounces of gold were produced during 4Q16, a new quarterly production record representing an 18% increase on the gold produced in 4Q15 of 11,515 ounces. 2016 gold production was approximately 50,351 ounces, a new annual production record representing a 17.6% increase over the 2015 of 42,804 ounces. The increase in production in 2016 was a result of company's Investment Plan at Blanket.
- **Sale of gold arrangement:** On December 01, 2016, the company confirmed that settlement system has not undergone any change after the introduction of "Bond notes" by Reserve Bank of Zimbabwe. Since January 2014, the company has sold all the gold produced to Fidelity, a subsidiary of the RBZ. Blanket has previously received all the sales proceed within 48 hours of delivery to Fidelity.
- **Installation of new ball mill:** On October 05, 2016, the company announced successful installation of a new ball mill. The new mill is expected to increase the daily throughput by 20% to 1,850 tpd from 1,500 tpd, which will allow Blanket to meet its plan to reach the gold production of 80,000 ounces by 2021. Currently, the commissioning process is proceeding according to the plan.

- **Upgrade of resource category:** On July 28, 2016, the company announced that based on the diamond core drilling done at depth below the Blanket Section over the six months, 343,000 tons have been upgraded from the Inferred to the Indicated Resource and an additional new inventory of 1,276,000 tons has been added to Inferred Resources. The quantum of reserves and indicated resources have increased by 67% from 2,934,000 tons to 4,889,000 tons.
- **Appointment of board and management:** On July 26, 2016, the company announced the appointment of John McGloin as an independent non-executive director of board. Mr. McGloin has previously worked as a geologist and a consultant geologist where he gained experience of a range of projects and multiple jurisdictions. Caledonia has also appointed Maurice Mason as Vice President, Investor Relations and Corporate Development. Previously, Mr. Mason was a director, Equity Research, for Stifel Nicolaus Europe Ltd covering mining companies listed in the UK.
- **Sale of government treasury bills:** On May 16, 2016, the company announced that Blanket mine, has sold Treasury Bills ("Bills") issued by the Government of Zimbabwe for a gross value of approximately USD 3.2 million. These bonds were issued in 2015 as part consideration for gold sales that were made by Blanket in 2008 under the terms of the sales mechanism that existed at that time for Zimbabwean gold producers.
- **Re-domicile completion:** On March 21, 2016, the company announced that it has successfully completed the re-domicile of the company into Jersey, Channel Islands after shareholder approval of the continuance and approval by Canadian and Jersey regulatory authorities. The ISIN of the Depositary Interests (DIs) in common shares will change to JE00BD35H902 and the new SEDOL of the DIs in common shares will change to BD35H90.



## Listing Information

Caledonia is listed on the TSX (CAL) in Canada and on NYSE (CMCL) in America. The depositary interest in shares are traded on London's AIM (CMCL). The company's headquarter is at Saint Helier, Jersey.

## Contacts

|                    |   |
|--------------------|---|
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## Major Shareholders<sup>vi</sup>

| Equity Holder                | No. of ordinary shares held<br>(MM) | Percentage<br>shareholding |
|------------------------------|-------------------------------------|----------------------------|
| ORBIS ALLAN GRAY LTD         | 1,891,240                           | 17.91%                     |
| IFM - INDEPENDENT FUND MGMT  | 140,000                             | 1.33%                      |
| CURTIS STEVEN R              | 89,300                              | 0.85%                      |
| LEARMONTH JOHN MARK          | 67,806                              | 0.64%                      |
| WILSON LEIGH ALAN            | 48,000                              | 0.45%                      |
| POLUNIN CAPITAL PARTNERS LTD | 37,700                              | 0.36%                      |

## Management and Governance


| Personnel                      | Designation  | Current and total experience  |
|--------------------------------|--|---|
| <b>Steve Curtis, C.A. (SA)</b> | <b>Chief Executive Officer (Caledonia Mining South Africa Proprietary Limited)</b> | Curtis, a Chartered Accountant, has 30 years' of expertise by holding a number of senior financial positions in the manufacturing industry. He is a member of the South African Institute of Chartered Accountants and graduated from the University of Cape Town. Previously, he served as Financial Director and then Managing Director of Jackstadt GmbH South African operation. He was also Director Finance and Supply Chain for Avery Dennison SA before joining Caledonia in March 2006. He was appointed to the Caledonia board in July 2008. He was Caledonia's Chief Financial Officer and later in November 2014, appointed as Caledonia's CEO. |
| <b>Dana Roets BSc</b>          | <b>Chief Operating Officer (Caledonia Mining South Africa Proprietary Limited)</b> | Dana Roets, a qualified Mining Engineer, holds a B.Sc. Mining Engineering degree from Pretoria University (1986) and an MBA from the University of Cape Town (1995). He has over 26 years of operational and managerial experience in the South African gold and platinum industry. He started his career with Gold Fields at the St Helena Gold mine as a graduate trainee and later went on to become Vice President and Head of Operations at Kloof Gold mine in January 1999. Lately, he was the COO at Great Basin Gold which had gold mining operations in the US and South Africa.   |
| <b>Mark Learmonth</b>          | <b>Chief Financial Officer</b>   | Learmonth holds a graduate degree from Oxford University and is a Chartered Accountant. He has over 17 years' experience in corporate finance and investment banking, predominantly in the resources sector in Africa. Previously, he held the position of a Division Director of Investment Banking at Macquarie First South in South Africa. He joined Caledonia in July 2008, and was appointed Caledonia's Chief Financial Officer in November 2014.  |
| <b>Caxton Mangezi</b>          | <b>General Manager and Director, Blanket Mine</b>                                  | Mangezi, a qualified miner and mine manager, has worked at Blanket gold mine since 1969 in a range of roles including geological technician, overseer miner and underground manager. He has been General Manager of Blanket mine since 1993.  |
| <b>Maurice Mason</b>           | <b>VP Corporate Development &amp; Investor Relations</b>                           | Maurice, an engineer, holds an MBA from Henley Reading University. He worked for six years with Anglo American in their Platinum and Coal operations based in both the Johannesburg and London offices. Prior to joining Caledonia, he was a securities analyst at Stifel, a US investment bank, where he focused on the mining sector.   |
| <b>Adam Chester</b>            | <b>General Counsel, Company Secretary and Head of Risk and Compliance</b>          | Chester, a dual qualified lawyer (England and Jersey, Channel Islands) has worked as a solicitor of the Supreme Court of England and as an advocate of the Royal Court of Jersey at an international offshore law firm in which he was a partner. He has an extensive experience in advising businesses and individuals on a variety of commercial and corporate legal issues. He was appointed General Counsel, Company Secretary and Head of Risk and Compliance in January 2017.   |

## Assets and Projects

Caledonia is primarily involved in exploration and development of mineral properties. Currently, the company is focused on exploration of Blanket mine, a gold mine located in the southern region of Zimbabwe. Caledonia acquired the Blanket mine from the Kinross Gold Corporation on April 2006. Caledonia owns 49% of Blanket with rest of the ownership being transferred to indigenous Zimbabweans. However, the company's effective holding in the Blanket mine is much higher.

On November 3, 2014, the company announced an Investment Plan with an objective to improve the underground infrastructure and logistics, along with an efficient and sustainable production build-up. The Investment Plan will improve the company's long-term operational efficiency, flexibility and sustainability. The investment includes a revised life of mine plan (LOM plan) with an aim to achieve production of resources below 750m level. Following the successful completion of the Investment Plan, the company expects to ramp-up the production capacity to approximately 80,000 ounces of gold by 2021.

## Company's Asset Portfolio

| Project locations  | Project overview   |
|--|--|
|  <p>The map displays Zimbabwe and its neighboring countries: Angola to the north, Zambia to the north-west, Botswana to the west, and South Africa to the south. The Blanket Mine is specifically marked in the southern part of Zimbabwe. A legend in the bottom left corner identifies symbols for international boundaries, provincial boundaries, national capital, provincial capitals, railroads, and roads. It also includes a scale bar and a north arrow.</p> | <div style="text-align: center; border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Blanket Mine</b> </div> <div style="text-align: right; font-weight: bold; margin-bottom: 10px;">Zimbabwe</div> <ul style="list-style-type: none"> <li>• Target Commodity: Gold</li> <li>• Area: 2,540 ha</li> <li>• 2016 production: 50,351 ounces</li> <li>• Depth: 750 meters below surface</li> <li>• Interest: 49%</li> <li>• 2016 All in Sustaining Cost: USD 912/oz</li> <li>• 2017 Q1 and Q2 All in Sustaining Cost reduced to approximately USD 850/oz</li> </ul> |
| <p>Source: Company filings</p>   | <p>Source: Company filings</p>   |

## Blanket Gold Mine

**Target commodities:** Gold

**Company's interest:** 49%

In order to comply with Zimbabwean law, which requires indigenous Zimbabweans should own at least 51% of the Blanket mine, the company entered into an agreements to transfer 51% of interest in Blanket mine to the following:

- 16% interest to the National Indigenisation and Economic Empowerment Fund ("NIEEF")

- 15% interest to Fremiro Investments (Private) Limited ("Fremiro")
- 10% interest to Blanket Employee Trust Services Limited ("BETS") for the benefit of present and future managers and employees
- 10% ownership interest to the Gwanda Community Share Ownership Trust ("Community Trust").

Caledonia has funded the above transaction by giving loans to indigenous Zimbabweans. The loans will be repaid by the dividends received from Blanket mine. Caledonia will receive 49% of the

dividend from the Blanket mine and it will also receive 80% of the remaining 51% of the dividends paid to the indigenous Zimbabweans as a repayment towards the loan. As a result of this transaction, the effective interest in the dividends from Blanket mine to Caledonia is much higher than 49% on a temporary basis.

**Asset summary:** The Blanket mine is a well-established Zimbabwean gold mine with a gold production of 50,351 ounces in 2016. Blanket also holds extensive exploration properties both on the existing mine area and on its satellite projects, including the GG and Mascot projects. Caledonia acquired the Blanket mine from Kinross Gold Corporation with effect from April 2006.

Since the acquisition, Caledonia has made considerable capital investments in the mine underground facility, its surface area and the township facilities. The Blanket Gold Plant consists of crushing, milling, Carbon-in-Leach and batch elution electrowinning circuits.

The company has installed a new ball mill which increased daily throughput by 20%, from 1,500 tpd to 1,850 tpd.

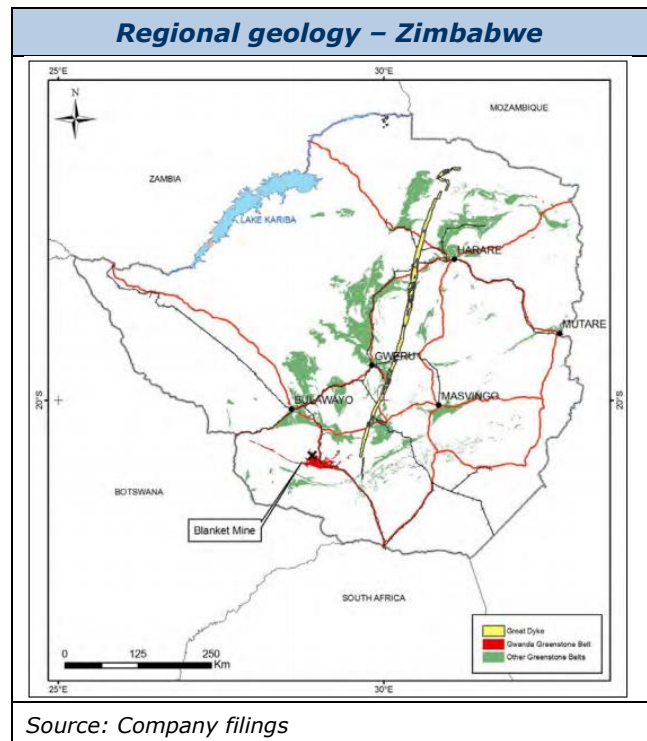
**Location:** The Blanket mine is located in the south-west of Zimbabwe, approximately 15 km west of Gwanda - the provincial capital of Matabeleland South. Gwanda is 150 km south east of Bulawayo (Zimbabwe's second largest city) and 196 km northwest of the Beit Bridge Border post with South Africa, and 560 km from Harare, capital of Zimbabwe.

Access to the mine is by a road from Gwanda, which is linked from Beit Bridge to Bulawayo and Harare by a national highway. The road is accessible in all weather. The company has also entered into an un-interrupted power supply agreement with the state-owned electricity supplier.

Availability of adequate infrastructure facility, power backups and easy accessibility to mine through roads enable effective functioning of the mine.

**Regional geology:** The Blanket mine is located on the northwest part of the Gwanda Greenstone Belt, an Archaean greenstone-hosted gold deposit. The Blanket gold deposit is the largest producing mine in the belt. The Gwanda Greenstone Belt consists predominantly of basaltic rocks - greenstones with minor felsic and ultramafic units. The gold ore in the area has vertical orientation and is the result of the basaltic rocks.

Given the long history of gold production in the current region, the company has avenues for greater exploration opportunities through modern exploration techniques.



**Property geology:** As the rock units of the Gwanda Greenstone Belt are tilted towards the side, and strikes north-south of the Blanket mine, the stratigraphic sequence is exposed to the oldest in the east to the youngest in the west.

Blanket mine is a part of the North Western Mining Camp, also referred to as the Sabiwa group of mines. These mines include Jethro in the south, Blanket, Feudal, AR South, AR Main, Sheet, Eroica and Lima in the north. Active mining occurs over a 3 km strike that includes 8 discrete vertical ore shoots along the north-south axis.

Gold mineralization takes place at ductile tensional high strain areas of the shear zone when rising hot fluids come in reaction with iron rich minerals. Gold gets transported by the fluids and becomes attached to the arsenopyrite to form gold ore.

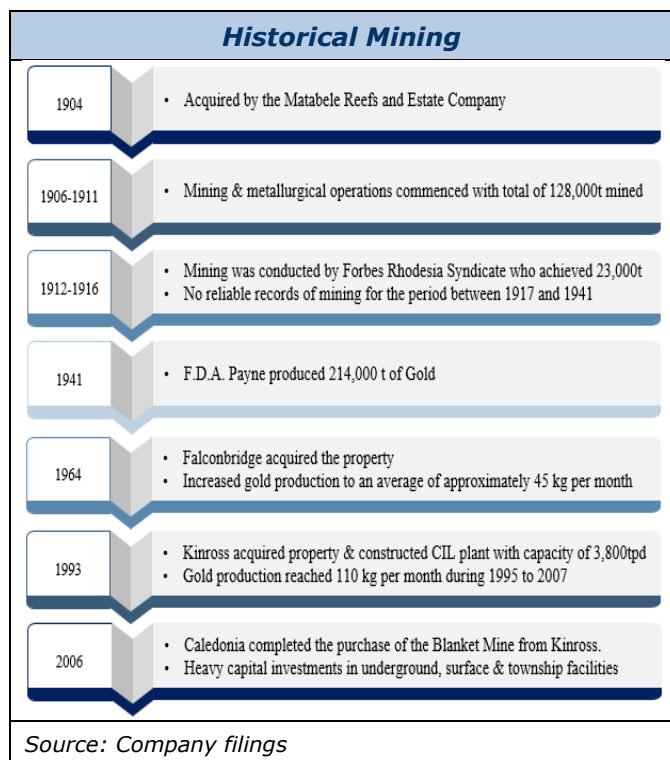
**Potential mineralization:** The project has a resource of 4,940.7kT measured and indicated resources (at average grade of 4.23g/T Au), and 3,764.0kT of inferred resources (at avg. grade of 4.99g/T Au) as of 2016.

| Resource estimate | Tons             | Grade g/T   | Gold (Ounces)  |
|-------------------|------------------|-------------|----------------|
| Measured          | 1,532,000        | 4.04        | 198,800        |
| Indicated         | 3,408,700        | 4.31        | 472,600        |
| <b>M+I</b>        | <b>4,940,700</b> | <b>4.23</b> | <b>671,400</b> |
| Inferred          | 3,764,000        | 4.99        | 604,000        |

As of 2016, the company has a reserve of 2,859.9kT, containing 0.336MM ounces gold at an average grade of 3.66g/T. The reserve estimate is expected to grow significantly once the Central Shaft is complete.

| Reserve estimate | Tons             | Ag grade g/T | Gold (Ounces)  |
|------------------|------------------|--------------|----------------|
| Proven           | 798,900          | 3.70         | 95,000         |
| Probable         | 2,061,000        | 3.64         | 241,300        |
| <b>Total</b>     | <b>2,859,900</b> | <b>3.66</b>  | <b>336,300</b> |

**Historical mining:** Below is the key highlights of historical events of Blanket mine



In late 2010, Blanket mine successfully completed an expansion project which increased the production capacity from 24,000 ounces of gold per annum to 40,000 ounces of gold per annum.

**Mining operations and explorations:** The Blanket mining area covers total eight ore shoots in the producing section of the mine. Out of this, AR Main and AR South are up to 30m wide and are the largest ore bodies, while the other Blanket ore bodies are tabular shaped ores. Due to this, AR Main and AR South are ideally suited for the long-hole open stope mining method, while the others are suited for underhand stopping methods.

The Jethro & Eroica Shafts and the No.5 & No.6 Winzes are used for transporting personnel and materials underground.

Currently, majority of the gold production is sourced from the AR Main Ore bodies. Blanket, AR Main and Eroica were the main attraction for drilling in 2016. Ahead in 2017, the company is focused towards AR South, with only limited drilling below 22 level till date.

In 2016, the company drilled 22,172m compared to 14,330m in 2015, an increase of 54.7% primarily because of purchase of new drill machines during the first half of 2016. During 2Q17, the company drilled 6,359m compared to 5,652m in the 1Q17 and 6,106m in 2Q16. Drilling was carried out in the Blanket and the AR South section between 750m and 1,000m.

**Metallurgical process:** Ore fed into the belt is crushed to minus 50 mm using Telsmith jaw crushers. Ore from stockpile conveyor having live capacity of 2,000 ton is further reduced to minus 12mm by one of the two 38H Telsmith Gyrasphere crushers.

The 12mm ore is then fed into 600 ton Mill Bin, where it is milled to 70% passing microns. Later it is passed through Knelson Concentrators where 49% of the total gold production is recovered.

The Knelson Concentrator tails are pumped into a regrind ball mill. The insoluble particles from the mill are injected into the carbon-in-leach (CIL) plant where assimilation of dissolved gold onto activated carbons takes place. The CIL plant has over capacity of 3,800 tpd.

Gold solids from steel wool cathodes are heated in an induction furnace to produce gold bullion of 90% purity. With setting up of automated liquid sodium cyanide facility and effective functioning of CIL agitators, gold recovery rates increased to 94% from 85% since the acquisition of Caledonia.

The current crushing and milling capacity of 1,850 tpd meets the requirements of the Blanket mine. There is spare Carbon-in-leach capacity up to

3,800 tpd required at the Blanket mine so there is potential to treat more ore if new supplies can be identified in the future. In 2016, the company completed a few capital development projects in the metallurgical process:

1. Commissioned the new conveyor system from the secondary crushers to the new fine ore bin;
2. A new No.8 ball mill was installed to increase the milling capacity to 90 tph, sufficient to mill the 650,000 tons per annum which will be required to produce 80,000 ounces of gold per annum by 2021
3. The refurbishment of the CIL tanks

**Investment Plan:** On November 3, 2014, the company announced the Investment Plan and the production projections for the Blanket mine. With this, the company targets to improve the underground infrastructure and logistics, while allowing an efficient and sustainable production build-up.

The Investment Plan includes the development of a tramming loop, deepening the No.6 Winze and sinking a new 6m diameter Central Shaft of 1,080m.

- **No. 6 Winze Project** - The No. 6 Winze project has enabled the company to get access to the four Blanket resources below 750m level. The company completed this project at the end of 1Q16 and currently have access to the ore below 750m.

The company plans to get further access, deepening down to 980m and expects to commence the operations after the completion of Central Shaft.

- **Tramming Loop** -The development of Tramming loop has resulted in better underground logistics along with increase in mine production. Loop work commenced during October 2014 and was completed in the second half of 2015. Since the completion, the company has consistently increased mine production.
- **Central Shaft** - Central Shaft is the key to the Investment Plan. It is the only component that is currently under pending status, but is estimated to be completed by the end of 2018.

The project comprises a new 6m diameter, 4 compartment shaft from surface to 1,080m below the surface that will transport men, equipment and materials with a capacity of

3,000 tpd. The shaft will be located between the AR Main and AR South ore bodies, in the middle of the Blanket's mining area.

Permanent sinking of the Central Shaft started in May 2016 and is currently 870m deep with 202m of sinking achieved during 2Q17 compared to a budget of 124m. Currently, a horizontal development is being done on 26 level with the station being cut and 70m of level development up to the tipping area.

The company expects the first production from the Central Shaft in 2018. The total capital cost of the expansion project is expected to be approximately USD 70 million. The figure includes the Central Shaft, horizontal development, the new ball mill and additional surface and underground infrastructure.

After the development of Central Shaft and the deepening of No 6 winze, the company will have access to the inferred mineral resources below 750m. This will also provide further exploration and development of mines in other ore sections.

The Investment Plan is expected to increase the resource production to 80,000 ounces by 2021. This will also have positive impact on the company's operational efficiency and sustainability.

**AR South Decline:** In addition to the Investment Plan, Caledonia is involved in the development of AR South Ore body below 750m. Currently the company is extending the exploration of AR South to 870m to have access to further mineral deposits below 750m.

During 2Q17, a conveyor was commissioned below 750m. The company also completed, the extraction haulage on 780m level.

**AR Main Decline:** During 2Q17, the company commenced the development of AR Main ore body below 750m and plans to extract the resources from 750m to 780m.

**Development of Non-Producing Claims:** In the area surrounding existing mines, the company has 18 other brownfields projects, many of which were mined commercially from the early 1900s until the 1960s. Although historical operations, these mines have shaft infrastructure facilities for rapid underground access for exploration and development of mining activity.

Out of these projects, the company has commenced exploration of GG and Mascot

properties to assess their potential. If successful, the extracted ore will be processed at the Blanket plant.

**GG project:** GG project is located 7km south east of Blanket mine. 4,751m of drilling has been carried out which includes 17 diamond-cored holes. Two economic gold mineralization zones at a depth of 200m each having a strike length of 150m have been established.

An existing shaft is present to a depth of 120m and mineralization below 60m of the surface has returned an average grade of 6.0g/t gold. The sulphide intensity has reduced between 60m and 90m levels with shear structure remaining intact.

Horizontal development has commenced at 60m, 90m and 120m levels to allow for diamond drilling of the identified zones. Four holes totaling 400m have been drilled to investigate the North Main Shear and three holes have intersected mineralization with grades and thickness of 4g/t over about 2m.

Below is the Mineral Resource estimates for the GG property:

| Resource estimate | Tons           | Grade g/T   | Gold (Ounces) |
|-------------------|----------------|-------------|---------------|
| Measured          | 127,178        | 3.79        | 15,486        |
| Indicated         | 55,123         | 5.86        | 10,386        |
| <b>M + I</b>      | <b>182,301</b> | <b>4.41</b> | <b>25,872</b> |
| Inferred          | 110,242        | 2.87        | 10,173        |

### GG Project



Source: Company filings

**Mascot Project:** The Mascot project area has three existing shafts - Mascot, Penzance and Eagle Vulture extending to 450m depth. Production ceased due to political issues and limited technology, and hence requires extensive

rehabilitation. The company has prioritized Mascot and work at Penzance and Eagle Vulture will commence after completion of underground development at Mascot.

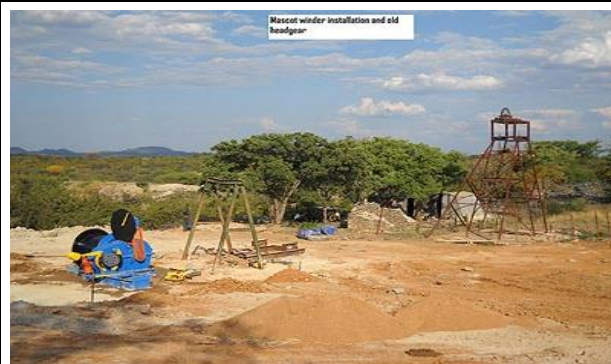
Management believes that the application of modern exploration and processing techniques may allow some or all of these shafts to operate profitably for a period of time. Post installation of ZESA electricity, the shaft was re-accessed to 120m below the surface.

Below is the Mineral Resource estimates for the Mascot property:

| Resource estimate | Tons           | Grade g/T   | Gold (Ounces) |
|-------------------|----------------|-------------|---------------|
| Measured          | 66,532         | 2.60        | 5,571         |
| Indicated         | 69,006         | 4.83        | 10,716        |
| <b>M + I</b>      | <b>135,538</b> | <b>3.74</b> | <b>16,288</b> |
| Inferred          | 69,587         | 8.23        | 18,416        |

Due to high capital investment, works at GG and Mascot were suspended in 2016 and resources were diverted towards Blanket at the AR South. The company believes that there will be better returns on the capital investment in the Blanket. Work is expected to re-commence on the GG and Mascot prospects when Blanket has excess capital.

### Mascot Project Area



Source: Company filings

### Financial Summary:

**2Q17 vs. 2Q16:** In 2Q17, revenues were flat and declined by 1.3% YoY to USD 15.5 million. The company sold 11 ounces more gold in 2Q17 compared to 2Q16. The average realized gold price in the Quarter was USD 1,235, 1% lower than the comparable quarter. The royalty rate payable to the Zimbabwean government was unchanged at 5%.

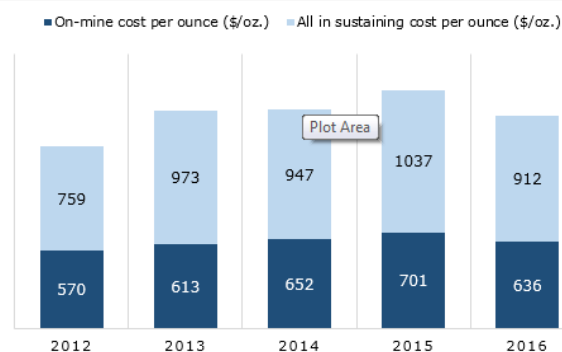
| <i>in USD '000</i>         | 2Q17   | 2Q16   | Δ      |
|----------------------------|--------|--------|--------|
| Gold sales (oz)            | 12,521 | 12,510 | 0.1%   |
| Average gold price (\$/oz) | 1,235  | 1,252  | -1.4%  |
| Revenues                   | 15,484 | 15,681 | -1.3%  |
| Operating Profit           | 3,223  | 6,970  | -53.8% |
| Adjusted Profit            | 1,989  | 3,203  | -37.9% |
| Basic Adjusted EPS (cents) | 18.9   | 30.5   | -38.0% |
| Cash and cash equivalents  | 10,878 | 10,581 | 2.8%   |

**1H17 vs. 1H16:** During the 6 months ended June 2017, revenues increased by 9.7% YoY to 31.9 million. The increase was a result of 8.6% increase in gold sales to 26,069 ounces compared to 24,008 ounces in 1H16. The average realized gold price during 1H17 was USD 1,224, 1% higher than the comparable period.

| <i>in USD '000</i>         | 1H17   | 1H16   | Δ       |
|----------------------------|--------|--------|---------|
| Gold sales (oz)            | 26,069 | 24,008 | 8.58%   |
| Average gold price (\$/oz) | 1,224  | 1,211  | 1.07%   |
| Revenues                   | 31,933 | 29,104 | 9.72%   |
| Operating Profit           | 7,598  | 8,980  | -15.39% |
| Adjusted Profit            | 4,758  | 4,480  | 6.21%   |
| Basic Adjusted EPS (cents) | 45.7   | 43.0   | 6.28%   |
| Cash and cash equivalents  | 10,878 | 10,581 | 2.81%   |

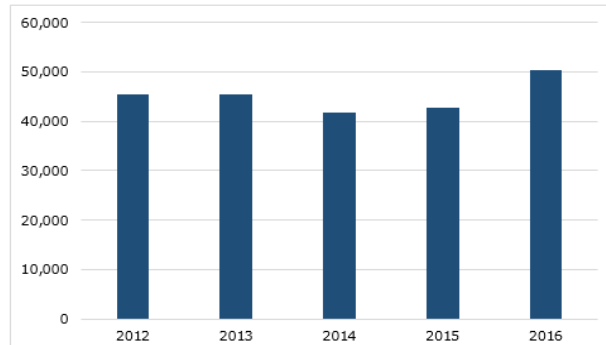
The all-in sustaining cost decreased in 2016 compared to the previous two years due to lower on-mine costs per ounce, the reduced royalty cost per ounce due to the effect of the export incentive credit for incremental production which was recognized in the 2016 year, lower general and administrative costs per ounce and lower sustaining capital expenditure per ounce.

## Historic unit costs for Blanket Mine



Source: Company filings

## Historic Gold Production (oz.)



Source: Company filings

**Recent developments:** The company has installed and commissioned a new ball mill. The new mill has increased daily throughput by 20%, from 1,500 tpd to 1,850 tpd, and will allow Blanket to meet its plan to double 2015 production to 80,000 ounces by 2021.

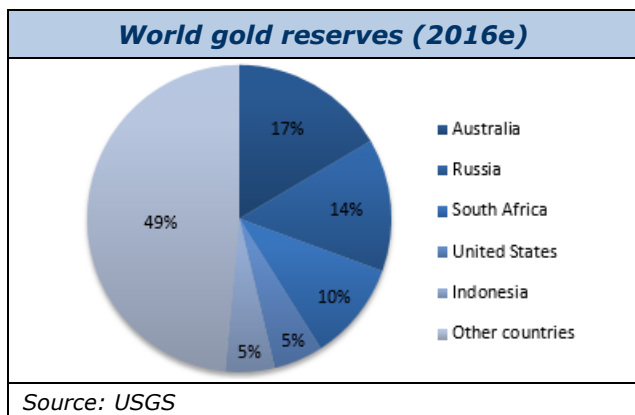


## Technologies and Markets

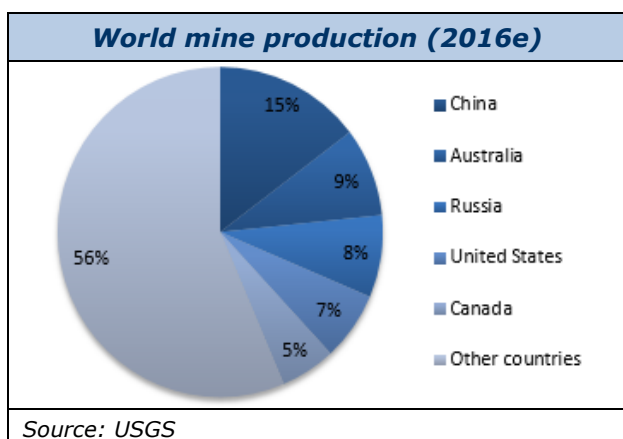
### Gold

**Chemistry and Properties:** Gold (Au) with an atomic number of 79 is a dense, soft & shiny metal. It is the most malleable and ductile of all metals; it is bright yellow in color & luster. It is a transition metal and can form trivalent and univalent cations in solutions. Pure gold is chemically least reactive & is solid under standard conditions.

**Sources**<sup>vii</sup>: Mostly, Gold occurs in native forms as nuggets or grains in rocks, veins, and alluvial deposits. According to an USGS report, the global gold reserves stood at 57,000MMT in 2015.



**Supply and Production**<sup>viii</sup>: Gold production involves comparatively long lead times, with new mines taking up to 10 years to come on stream. As a result, its output is relatively inelastic to change in price outlook. The global mine production in 2016 remained constant at 3.10MT when compared with that in 2015.



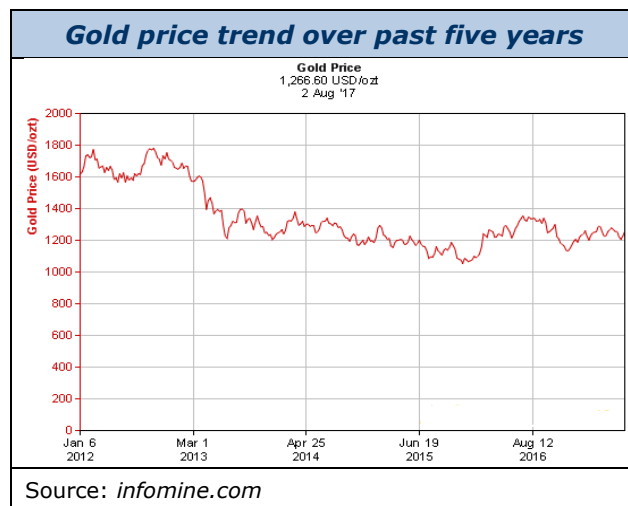
**Applications:** Gold is a precious metal used as coins or bars, as an investment, jewelry and technological purposes. It also has industrial uses, including medicine, food and beverages and electronics due to its good resistance to oxidative corrosion and excellent quality as a conductor of electricity.

**Demand:** Gold demand is mainly driven by the need for preservation of value. The bullion's modest price recovery as compared with other commodities has resulted in a reduction in spending on exploration to less than USD 4bn from almost USD 10bn in 2012.

Such a scenario has left many companies in the gold industry forecasting a supply shortage by the end of the decade. Across the world, miners have instead spent their cash in expanding existing deposits, improving efficiency or cautiously looking at acquisitions.

**Commodity Pricing**<sup>ix</sup>: Gold prices have been rising since 2001, when price was around USD 250/oz, and reached record levels in Sept 2011 driven by an increase in money supply in the US.

However, during 2015, the average gold price declined by 7% y-o-y due to the Fed tightening and consequent strengthening of the USD, low global inflationary pressure, and lower demand from India and China. Currently, gold prices are at USD 1,266.60/oz.



**Zimbabwe's Mineral Scenario**<sup>x</sup>: A leading gold producer, Zimbabwe's gold production reached a peak of 29.7 tons in 1999. Though in 2008, the production fell drastically to just 3.5 tons as all gold mines in Zimbabwe were shut down due to the Reserve Bank of Zimbabwe's ("RBZ") inability to pay for gold (as per the prior to February 2009 regulations, RBZ was the sole buyer of gold produced in Zimbabwe). Post liberalization, most of the Zimbabwean gold mines reopened, leading

to an increase in gold production to 13 tons in 2013.

After realizing the contribution of the mining industry to the economy, particularly gold mining, the Zimbabwean government relaxed restrictions over foreign payments in February 2009. Recently currency exchange controls have been reintroduced with restrictions on the payment of foreign currency out of the country.

## Project Risk Profile Analysis

Based on our analysis of the project stage, resource characteristics and management expertise, we believe that the Blanket mine has a LOW Risk Profile.

### Blanket Mine Project – LOW

#### Project Stage Risk – LOW

- Caledonia acquired the Blanket mine in April, 2006 and since then made significant development in the mine. The mine is currently fully operational and have produced 50,351 ounces of gold with a revenue of USD 61.9 million in 2016
- On November 4, 2014, the company announced 'the Investment Plan' to further improve the underground infrastructure and logistics thereby allowing sustainable gold production below 750m level. The company is currently on track to complete the development of Central Shaft by 2018. This will further increase the production to 80,000 ounces by 2021.
- As of December 31, 2016, the mine had a proven and probable reserve estimate of 2,859,900 metric tons of ore, containing 336,300 ounces of gold.
- Based on the above factors, we consider the Blanket mine to have a LOW project risk.

#### Financing/Capex Risk – LOW

- Post its acquisition in 2006, the company has invested significant capital to increase the mine's production capacity.
- As per the current Investment Plan, the company is currently focused on the development of Central Shaft to gain further access to resources below 750m. The total estimated capital expenditure for the expansion is expected to be approximately USD 70 million and is expected to be funded from its projected cash flow.
- Since the implementation of the Investment Plan, the company has successfully funded the required capital expenditure from the internally generated cash flows.

- Once the development of Central Shaft is completed in 2018, the company expects significant excess cash flow, which can be used to fund any further mine developments.
- Based on the above factors, we consider Blanket mine to have a LOW financing risk profile.

#### Operational Risk – LOW

- Blanket has been in operational since it was acquired by the company in 2006. It is well connected to the road from Gwanda, which is linked from Beit Bridge to Bulawayo and Harare by a national highway.
- The company is well positioned to complete the development of Central Shaft as per the Investment Plan. Once operational, it will lead to linear ramp-up in the gold production from current level of 55,000 to 80,000 ounces by 2021.
- All the gold production is currently sold to Fidelity, a subsidiary of the Zimbabwean reserve bank, at spot price less an early settlement discount of 1.25%. The company is always paid within 24 hours of the delivery of the gold and never experienced a late payment.
- Furthermore, the project has no known regulatory or environmental interferences which will hamper the development.
- Considering the above factors, we believe that the project has attractive operational characteristics. As such, we believe the project to have a LOW operational risk profile.

#### Key Personnel Risk – LOW

- The current management has operational and managerial experience in exploration, mining operations, project development, and also in finance and investment banking functions.
- A member of the management team is also involved in development of Blanket gold mine since 1969 with experience in geological technician, overseer miner and underground manager.
- Considering the diversified experience of the management, we consider the project to have a LOW Key Personnel Risk profile.

## Risk Parameters – Definition

### Project Stage Risk

The following are the various stages of a project:

- **Early stage exploration:** In this stage, the exploration location is decided using a combination of various techniques such as samplings, drilling, geophysics, and other extensive geological and exploration services.
- **Pre-feasibility study:** A preferred base-case option is identified from the possible options available to the company. The preferred base-case option provides some level of confidence in the production capacity, ore grades, metal recovery, capital and operating costs, project schedule, and project risks/opportunities. A financial analysis is also carried out to assess the economic viability of the project.
- **Feasibility study:** This includes a collection of more detailed information, additional designs, and project-specific cost information to refine the project cost and schedule. It also addresses information gaps, issues of concern, risks, and opportunities identified in the advanced exploration stage.
- **Detailed engineering:** Detailed designs based on the project scope, concept designs, and the purchase of key plant equipment are completed.
- **Site construction:** Site construction starts as per the field engineering designs and is expected to confirm adherence to appropriate quality-control practices.
- **Commissioning and start of operations:** After the completion of construction, operability testing, and acceptance, the owner is asked to confirm if the project construction and performance are as per the design and meet the required plant performance and safety requirements. The final operating control programs are then completed, installed, and tested for functional efficiencies.

*High risk:* We consider a project to have high-risk when it is in the initial stages of development and is yet to report a resource estimate on the prospect.

*Medium risk:* On the completion of a pre-feasibility report having initial evaluations of mine characteristics and other operational estimates like

capex and opex, project stage risk is reduced from high to medium.

*Low risk:* As the project advances site construction and commissioning, the project stage risk is reduced further to the low risk category.

### Project Financing Risk

Initial stages of project development, including exploration and resource estimation, require higher levels of capital investment. Investments in the exploration stage can be riskier as the economic viability of deposit is not established. The risk level of the capital reduces as it advances through various exploration stages.

Initial stages of exploration and development of the project attract high-risk-capital investors. As the project stages proceed, the company has varied options such as equity (IPO) and debt financing, among others.

*High risk:* Companies in the initial stages of project development without proper estimates on fund requirement and clear view on financing options are considered to have high financing risk.

*Medium risk:* When a company has established reasonable estimates on fund requirement and has visibility on early funding for planned project milestones, it is estimated to have medium financing risk.

*Low risk:* When the company's fund requirements are clearly stated and has already secured adequate funding, the company has low financing risk.

### Operational Risk

Following are the various parameters considered to measure operational risk:

- **Geopolitical and Regulatory factors:** The location of projects and their regulatory environment are key factors in acquiring licence and the subsequent development of the project. Obtaining necessary approvals can be time consuming, the delay of which could result in monetary losses, and operational delay.
- **Environmental factors:** The potential for environmental damage caused by mining activity and the likely cost to be covered by the company contribute to the economic viability of the project.

- **Mining technique:** The development plan for the mines, including the extraction methodology and the corresponding capex estimates, together define the operational efficiency of the project. The high quality of ore reserves (grade) and the ease for extraction provide higher return on investment and reduce the operational risk involved.
- **Geotechnical and other factors:** Mining machinery transportation, implementation of new technology for operations, and availability of power supply in areas with complicated geological and climatic conditions determine operational risks. Other risks include chances of flooding, pit slope, rim slide and accidents caused by the use of mining transport equipment in adverse weather conditions.

We consider a project based on all the above parameters and assign high/medium/low risk profiles in comparison with their peers. Also, as the company moves to advanced stages, operational risk is reduced considerably.

*High risk:* The Company has a high operational risk profile with assets that are in an early stage of

development and located in countries with regulatory uncertainties.

*Medium risk:* As the company progresses toward the acquisition of necessary licenses and environmental clearances, regulatory risks are reduced. Also, depending on the resource grade and the possible methodologies of extraction, an operational risk profile is assigned in comparison with peers.

*Low risk:* A company that is in the advanced stages of development has attractive project characteristics such as ore grade, capex, opex. NPV and IRR too have low operational risk profile.

### Key Personnel Risk

We consider a project to be of a lower risk profile if the management team is highly qualified, has a good experience in the resource sector and has lower dependability on a few people. It is desirable that the company has independent directors on its Board and does not rely heavily on a few individuals.

## Value

The Fair Market Value of Caledonia shares stands between USD 108.51MM and USD 113.65MM.

The Fair Market Value for one Caledonia's publicly traded share stands between USD 10.26 and USD 10.75.

### Caledonia Mining Corporation Plc. Balance Sheet Forecast

**CONSOLIDATED  
BALANCE SHEET**

*all figures in  
'000 USD,  
unless stated  
differently*

*Low bracket estimates*

| <i>year ending Dec 31</i>               | <b>2017E</b>   | <b>2018E</b>   | <b>2019E</b>   | <b>2020E</b>   | <b>2021E</b>   | <b>2022E</b>   | <b>2023E</b>   |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Total Current Assets                    | 29,914         | 45,612         | 66,178         | 87,624         | 110,867        | 124,938        | 137,132        |
| Total Non-Current Assets                | 73,833         | 75,836         | 76,187         | 76,518         | 76,829         | 77,122         | 77,397         |
| <b>TOTAL ASSETS</b>                     | <b>103,747</b> | <b>121,448</b> | <b>142,365</b> | <b>164,142</b> | <b>187,696</b> | <b>202,060</b> | <b>214,529</b> |
| Total Current Liabilities               | 9,111          | 9,333          | 10,331         | 10,111         | 9,931          | 9,405          | 9,405          |
| Total Non-current Liabilities           | 21,560         | 21,560         | 21,034         | 20,509         | 19,983         | 19,983         | 19,983         |
| <b>TOTAL LIABILITIES</b>                | <b>30,671</b>  | <b>30,893</b>  | <b>31,365</b>  | <b>30,620</b>  | <b>29,914</b>  | <b>29,388</b>  | <b>29,388</b>  |
| Total Shareholders' Equity              | 73,076         | 90,555         | 111,000        | 133,522        | 157,782        | 172,672        | 185,140        |
| <b>TOTAL LIABILITIES<br/>and EQUITY</b> | <b>103,747</b> | <b>121,448</b> | <b>142,365</b> | <b>164,142</b> | <b>187,696</b> | <b>202,060</b> | <b>214,529</b> |

### Important information on Arrowhead methodology

The principles of the valuation methodology employed by Arrowhead BID are variable to a certain extent, depending on the sub-sectors in which the research is conducted. However, all Arrowhead valuation researches possess an underlying set of common principles and a generally common quantitative process. With Arrowhead commercial and technical due diligence, the company researches the fundamentals, assets and liabilities of a company, and builds estimates for revenue and expenditure over a coherently determined forecast period.

Elements of past performance such as price/earnings ratios, indicated as applicable, are mainly for reference. Still, elements of real-world past performance enter the valuation through their impact on the commercial and technical due diligence.

### Arrowhead BID Fair Market Value Bracket

The Arrowhead Fair Market Value is given as a bracket. This is based on quantitative key variable analyses such as key price analysis for revenue and cost drivers or analysis and discounts on revenue estimates for projects, especially relevant to projects estimated to provide revenue near the end of the chosen forecast period. Low and high estimates for key variables are produced as a valuation tool.

In principle, an investor comfortable with high brackets of our key variable analysis will align with the high bracket in the Arrowhead Fair Value Bracket, and, likewise, in terms of low estimates. The investor will also note the company's intangibles to analyze the strengths and weaknesses, and other essential company information. These intangibles serve as supplementary decision factors for adding or subtracting a premium in investor's own analysis.

The bracket should be taken as a tool by Arrowhead BID for the reader of this report and the reader should not solely rely on this information to make his decision on any particular security. The reader must also understand that while on the one hand global capital markets contain inefficiencies, especially in terms of information, on the other, corporations and their commercial and technical positions evolve rapidly. This present edition of the Arrowhead valuation is for a short-to medium-term alignment analysis (one to twelve months). The reader should refer to important disclosures on page 25 of this report.

### **Information on the Caledonia Mining Corporation Plc. valuation**

**Caledonia mining valuation methodology:** The Arrowhead fair valuation of Caledonia is based on the discounted cash flow (DCF) valuation method of Blanket mine.

**Time horizon:** The Arrowhead fair valuation for Caledonia is based on a DCF method. The time period chosen for the valuation is as per the Blanket mine's life of mine. We expect revenues and cash flow from operations to ramp up significantly after 2018 as it is expected that the company would successfully deliver the investment plan.

**Underlying business plan:** Caledonia is currently focused on exploration and development of its flagship project Blanket mine.

**Terminal value:** The terminal value is estimated to depend on a terminal growth rate of 0%, representing the maturity, technology change, and prospective competitiveness in the business.

**Prudential nature of valuation:** This Arrowhead Fair Value Bracket estimate is a relatively prudential estimate, as it is based on the company's current flagship projects – Blanket mine, and excludes the value of other projects – GG and Mascot.

## Key variables in Caledonia revenue estimations

### Variable 1 – Hypothesis for production

We believe company would be able to achieve the production as per the life of mine (LOM) plan. Grade and recovery rate are based on the company's estimates.

| Tonnes Milled in '000 Tonnes | 2017E | 2018E | 2019E | 2020E | 2021E |
|------------------------------|-------|-------|-------|-------|-------|
| Low                          | 585.0 | 590.0 | 610.0 | 640.0 | 640.0 |
| High                         | 590.0 | 595.0 | 620.0 | 650.0 | 650.0 |

| Gold Head (Feed) Grade (g/t Au) | Average<br>2017 -2026 |
|---------------------------------|-----------------------|
| Low                             | 3.7                   |
| High                            | 3.8                   |

| Gold Recovery (%) | Average<br>2017 -2026 |
|-------------------|-----------------------|
| Low               | 92.5 %                |
| High              | 93.0 %                |

| Resource Estimate - Measured + Indicated<br>Ounces |         |
|--|---------|
| Low  | 665,000 |
| High   | 671,400 |

### Variable 2 – Metal prices

Forecasted prices are based on the estimates from Bloomberg

| Average realized gold price<br>USD/ounce | 2017E   | 2018E   | 2019E   | 2020E   | 2021E-<br>2026E |
|--|---------|---------|---------|---------|-----------------|
| Low                                      | 1,250.0 | 1,290.0 | 1,315.0 | 1,320.0 | 1,330.0         |
| High                                     | 1,255.0 | 1,300.0 | 1,325.0 | 1,330.0 | 1,340.0         |



## **Analyst Certifications and Important Disclosures**

### **Analyst Certifications**

I, Jay Thakkar, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security and the subject company.

I, Lorry Hughes, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security and the subject company.

### **Important disclosures**

Arrowhead Business and Investment Decisions, LLC received will receive fees in 2017 from Caledonia Mining Corporation Plc. for researching and drafting this report and for a series of other services to Caledonia Mining Corporation Plc., including distribution of this report, investor relations and networking services.

Aside from certain reports published on a periodic basis, the large majority of reports are published by Arrowhead BID at irregular intervals as appropriate in the analyst's judgment.

Any opinions expressed in this report are statements of our judgment to this date and are subject to change without notice.

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## Valuation

### WACC

|                      |      |      |
|----------------------|------|------|
| Risk-free rate       | 8.5% | xi   |
| Beta                 | 0.7  | xii  |
| Risk premium         | 1.1% | xiii |
| WACC                 | 9.3% |      |
| Terminal Growth Rate | 0.0% |      |

|           |  |                 |               |
|-----------|--|-----------------|---------------|
|           | Production capacity                      | Commodity price | Exchange rate |
| Max value | Please refer to the Key Variable Section |                 |               |
| Min value |  |                 |               |

## Cumulative Cash Flows and Valuation

### FCFE (High) Time Period ->

|                               | 2017E        | 2018E         | 2019E         | 2020E         | 2021E         | 2022E         | 2023E         |
|-------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| EBITDA                        | 28,147       | 34,749        | 44,131        | 48,927        | 53,379        | 43,379        | 43,379        |
| Tax                           | (6,312)      | (7,973)       | (10,449)      | (11,723)      | (12,907)      | (10,252)      | (10,248)      |
| Capital Expenditure           | (13,158)     | (6,579)       | (5,000)       | (5,000)       | (5,000)       | (5,000)       | (5,000)       |
| <b>Free Cash Flow</b>         | <b>8,677</b> | <b>20,197</b> | <b>28,682</b> | <b>32,203</b> | <b>35,472</b> | <b>28,127</b> | <b>28,132</b> |
| <b>Caledonia Share of FCF</b> | <b>7,271</b> | <b>16,925</b> | <b>24,035</b> | <b>26,986</b> | <b>29,726</b> | <b>23,570</b> | <b>23,574</b> |
| <b>PV of FCF</b>              | <b>6,956</b> | <b>14,821</b> | <b>19,265</b> | <b>19,798</b> | <b>19,961</b> | <b>17,288</b> | <b>15,827</b> |

### FCFE (Low) Time Period ->

|                               | 2017E        | 2018E         | 2019E         | 2020E         | 2021E         | 2022E         | 2023E         |
|-------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| EBITDA                        | 26,997       | 33,183        | 41,997        | 46,705        | 51,331        | 41,331        | 41,331        |
| Tax                           | (6,007)      | (7,558)       | (9,884)       | (11,135)      | (12,364)      | (9,710)       | (9,705)       |
| Capital Expenditure           | (13,158)     | (6,579)       | (5,000)       | (5,000)       | (5,000)       | (5,000)       | (5,000)       |
| <b>Free Cash Flow</b>         | <b>7,831</b> | <b>19,046</b> | <b>27,113</b> | <b>30,570</b> | <b>33,967</b> | <b>26,622</b> | <b>26,626</b> |
| <b>Caledonia Share of FCF</b> | <b>6,563</b> | <b>15,960</b> | <b>22,721</b> | <b>25,618</b> | <b>28,464</b> | <b>22,309</b> | <b>22,313</b> |
| <b>PV of FCF</b>              | <b>6,279</b> | <b>13,976</b> | <b>18,212</b> | <b>18,795</b> | <b>19,114</b> | <b>16,363</b> | <b>14,980</b> |

In the model, the valuation is continued till FY2026.

## Arrowhead Fair Value Bracket

| <i>in USD '000</i>                         | High             | Low              |
|--|------------------|------------------|
| Implied Enterprise Value                   | <b>102,773</b>   | <b>97,631</b>    |
| + Cash <sup>xiv</sup>                      | 10,878           | 10,878           |
| <b>Equity Value Bracket</b>                | <b>113,651</b>   | <b>108,509</b>   |
| Shares Outstanding (in '000) <sup>xv</sup> | 10,576.1         | 10,576.1         |
| <b>Fair Value Bracket (USD)</b>            | <b>10.75</b>     | <b>10.26</b>     |
| Current Market Price (USD)                 | 5.76             | 5.76             |
| Current Market Capital                     | 60,918.2         | 60,918.2         |
| <b>Target Market Capital</b>               | <b>113,651.2</b> | <b>108,509.2</b> |

## Notes and References

- i Arrowhead Business and Investment Decisions (ABID) Fair Value Bracket. See information on valuation on pages 22-26 of this report and important disclosures on page 25 of this report*
- ii Bloomberg as on 10-Oct-2017*
- iii Bloomberg as on 10-Oct-2017*
- iv 1 months average volume from Bloomberg as on 10-Oct-2017*
- v Bloomberg as on 10-Oct-2017*
- vi Bloomberg as on 10-Oct-2017*
- vii <https://minerals.usgs.gov/minerals/pubs/commodity/gold/mcs-2017-gold.pdf>*
- viii <https://minerals.usgs.gov/minerals/pubs/commodity/gold/mcs-2017-gold.pdf>*
- ix <http://www.infomine.com/investment/metal-prices/gold/5-year/>*
- x <http://www.caledoniamining.com/index.php/operations/blanket-gold-mine?limitstart=0>*
- xi Bloomberg as on 10-Oct-2017*
- xii Arrowhead Estimate*
- xiii Bloomberg as on 10-Oct-2017*
- xiv Company's cash and cash equivalents as on June 30, 2017*
- xv Bloomberg as on 10-Oct-2017*