



**MANDALAY RESOURCES CORPORATION**

**ANNUAL INFORMATION FORM**

**For the year ended December 31, 2021**

March 31, 2022

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## 1. ABOUT THIS ANNUAL INFORMATION FORM

The information in this Annual Information Form (“AIF”) is presented as of December 31, 2021, unless otherwise indicated, and except for information in documents incorporated by reference that has a different date. All dollar amounts in this Annual Information Form are in US dollars, unless indicated otherwise. In this Annual Information Form, references to the “Corporation” or “Mandalay” refer to Mandalay Resources Corporation and its subsidiaries, unless the context otherwise requires or indicates.

## 2. FORWARD-LOOKING STATEMENTS

Forward-looking statements look into the future and provide an opinion as to the effect of certain events and trends on the business. Forward-looking statements may include words such as “plans”, “intends”, “anticipates”, “should”, “estimates”, “expects”, “believes”, “indicates”, “targeting”, “suggests”, “continue”, “may”, “will” and similar expressions. Forward-looking statements include, but are not limited to: statements with respect to the future price of gold (“Au”), antimony (“Sb”) and other metals as well as foreign exchange rates; the estimation of Mineral Reserves and Resources and the related results and timing of such estimates; the performance of Mineral Reserve estimates in predicting amount and quality of ore actually mined; the timing and amount of estimated future production, costs of production, capital expenditures; estimates of expected sales volumes and associated operating and capital costs for its gold and antimony production; costs and timing for the development of new deposits; success of exploration activities; environmental permitting timelines; and the potential impact of the novel coronavirus (“COVID-19”) pandemic on the Corporation’s operations, supply chain and customers. This Annual Information Form contains forward-looking statements about the Corporation’s objectives, strategies, financial condition and results, as well as statements with respect to management’s beliefs, expectations, anticipations, estimates and intentions. These forward-looking statements are based on current expectations and various factors and assumptions. Accordingly, these statements entail various risks and uncertainties.

The material factors and assumptions that were applied in making the forward-looking statements in this Annual Information Form include, among others: execution of the Corporation’s existing production, capital, and/or exploration plans for each of its properties, which may change due to changes in the views of the Corporation or if new information arises which may make it prudent to change such plans or programs; the accuracy of current interpretation of drill and other exploration results or new information or interpretation of existing information which may result in changes in the Corporation’s expectations; the Corporation’s ability to continue to obtain qualified staff and equipment in a timely and cost-efficient manner to meet demand; and that the COVID-19 pandemic will not significantly affect the Corporation’s operations, supply chain or customers.

It is important to note that:

- Unless otherwise indicated, forward-looking statements in this Annual Information Form describe management’s expectations as at the date of this Annual Information Form.
- Readers are cautioned not to place undue reliance on these statements as the Corporation’s actual results may differ materially from its expectations as unknown risks or uncertainties may affect its business or estimates or assumptions may prove to be inaccurate. Therefore, no assurance can be provided that forward-looking statements will materialize.

- The Corporation assumes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or for any other reason, except as may otherwise be required pursuant to applicable laws.

For a description of material factors that could cause actual results to differ materially from the forward-looking statements in this Annual Information Form, see “Risk Factors”.

### 3. TECHNICAL INFORMATION

Technical information provided herein for the Costerfield gold-antimony mine (“**Costerfield**”) and the Björkdal gold mine (“**Björkdal**”) is based upon information contained in the technical reports in respect of the properties, prepared pursuant to National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (“**NI 43-101**”) (each, a “**Technical Report**” and collectively, the “**Technical Reports**”).

The technical report in respect of Costerfield, entitled “Costerfield NI 43-101 Technical Report” dated March 25, 2022 (the “**Costerfield Technical Report**”), was prepared by Mining Plus, and the Mineral Resource Estimate was carried out under the supervision of Andrew Fowler, MAusIMM CP (Geo), an employee of Mining Plus and independent of Mandalay. He is a Qualified Person for the purpose of National Instrument 43-101. The Mineral Reserve Estimate was carried out under the supervision of Aaron Spong, FAusIMM CP (Min), an employee of Mining Plus and independent of Mandalay. He is a Qualified Person for the purposes of NI 43-101.

The technical report in respect of Björkdal entitled “Björkdal NI 43-101 Technical Report” dated March 25, 2022 (the “**Björkdal Technical Report**”) was prepared by Mining Plus and the Mineral Resource Estimate was carried out under the supervision of Andrew Fowler, MAusIMM CP (Geo), an employee of Mining Plus and independent of Mandalay. He is a Qualified Person for the purpose of NI 43-101. The Independent Qualified Person for Norrberget Mineral Resource estimate is Reno Pressacco, P.Geol., Principal Geologist with SLR Consulting Ltd. (“**SLR**”), who is a Qualified Person as defined by NI 43-101. The Mineral Reserve Estimate was independently verified by Aaron Spong, FAusIMM CP (Min), an employee of Mining Plus and independent of Mandalay. He is a Qualified Person for the purposes of NI 43-101. The Independent Qualified Person for the Norrberget Mineral Reserve estimate is Rick Taylor, MAusIMM (CP), Principal Mining Engineer with SLR, who is a Qualified Person as defined by NI 43-101.

The technical information contained in this Annual Information Form with respect to Björkdal and Costerfield has been summarized from the Technical Reports. All summaries and references to Technical Reports are qualified in their entirety by reference to the complete text of the applicable Technical Report, which can be found under the Corporation’s profile at [www.sedar.com](http://www.sedar.com).

### 4. CORPORATE STRUCTURE

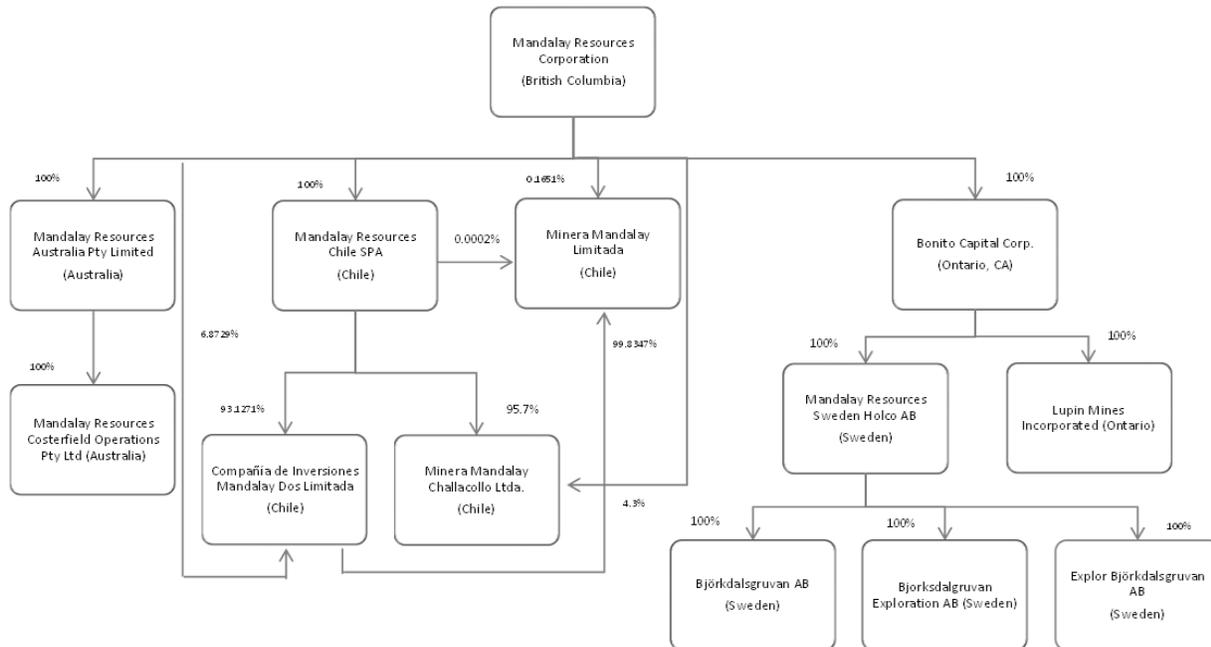
#### 4.1 Name, Address and Incorporation

The Corporation was incorporated on January 29, 1997, as Mandalay Resources Corporation under the *Business Corporations Act* (British Columbia) (“**BCBCA**”). The Corporation’s principal business is the exploration, development, and mining of natural resource properties.

The Corporation’s registered office is located at 1066 West Hastings Street, Suite 2600, Vancouver, British Columbia, Canada, V6E 3X1. The Corporation’s head office is located at 76 Richmond Street East, Suite 330, Toronto, Ontario, Canada, M5C 1P1.

## 4.2 Intercorporate Relationships

The following chart illustrates the structure of the Corporation as at the date of this Annual Information Form. The chart shows the jurisdiction of incorporation of each active subsidiary and the percentage of voting securities beneficially owned by the Corporation or over which the Corporation has control or direction.



Mandalay Resources Australia Pty (“**MRA**”), formerly Australian Gold Development (“**AGD**”), is a private Australian Corporation that operates Costerfield. All the issued and outstanding securities of its predecessor Corporation, AGD, were acquired by Mandalay from Cambrian Mining Limited, a wholly owned subsidiary of Western Coal Corp. and an arms’ length third party of the Corporation on December 1, 2009. AGD was renamed MRA in February 2013. MRA is governed by the laws of *The Corporations Act 2001* (Australia). MRA owns 100% of the voting securities of its sole subsidiary, Mandalay Resources Costerfield Operations Pty (“**Costerfield Operations**”). Costerfield Operations is governed by the laws of *The Corporations Act 2001* (Australia).

Mandalay Resources (Chile) SPA (“**Mandalay Chile**”) is a private Chilean Corporation, incorporated by Mandalay under the laws of Chile on March 15, 2010. The Corporation owns a 100% interest in Mandalay Chile and a 0.1651% interest in Minera Mandalay Limitada (“**MML**”), a private corporation, incorporated under the laws of Chile on April 12, 2010. Mandalay Chile owns a 0.0002% interest in MML with Compañía de Inversiones Mandalay Dos Limitada (“**CIM**”) owning 99.8347%. CIM is a private Chilean Corporation, incorporated under the laws of Chile on September 7, 2018, and is owned 93.1271% by Mandalay Chile with the Corporation owning the remaining 6.8729% interest. Minera Mandalay Challacollo Limitada is owned 95.70% by Mandalay Chile with the Corporation owning the remaining interest of 4.30%. On December 1, 2021, the Corporation completed the sale of Compania Minera Cerro Bayo Limitada (“**Minera Cerro Bayo**”) which owns the Cerro Bayo mine, to Equus Mining Ltd. (“**Equus**”). Minera Cerro Bayo was governed by the laws of Chile and was owned 93.1271% by Mandalay Chile with the Corporation owning the remaining 6.8729% interest prior to the sale.

Minera Mandalay Challacollo S.A. ("**Mandalay Challacollo**"), formerly Minera Silver Standard Chile S.A. ("**MSSC**"), a private Chilean Corporation that owns Challacollo, was acquired by Mandalay from Silver Standard Resources Inc. ("**SSRI**") and Silver Standard Ventures Inc. on February 7, 2014. MSSC was renamed Minera Mandalay Challacollo Ltda. on February 7, 2014. Mandalay Challacollo is governed by the laws of Chile.

Mandalay acquired all the issued and outstanding shares of Elgin Mining Inc. ("**Elgin**") on September 10, 2014, in a court-approved plan of arrangement. Elgin Mining was a public corporation listed on the Toronto Stock Exchange (the "**TSX**"). After the acquisition of Elgin Mining by Mandalay, Elgin Mining was delisted and continued as a private corporation organized under the BCBCA. In connection with the transaction, 2433119 Ontario Inc. was incorporated as a wholly owned subsidiary of Mandalay on September 8, 2014. Following the acquisition, 2433119 Ontario Inc. was continued as a BCBCA Corporation under the name Mandalay Elgin Holdings Inc. Effective March 31, 2016, Elgin Mining and Mandalay Elgin Holdings Inc. were amalgamated. Mandalay Elgin Holdings Inc. directly owned 100% of Bonito Capital Corp. Effective February 23, 2017, Mandalay Elgin Holdings Inc. and Bonito Capital Corp. were amalgamated. Bonito Capital Corp. directly owns 100% of Lupin Mines Incorporated, which owns mining interests in Nunavut, Canada. Bonito Capital Corp. also directly owns Mandalay Resources Sweden Holco AB, which was incorporated in 2015 and is governed by the laws of Sweden. Mandalay Resources Sweden Holco directly owns Björkdalsgruvan, Björkdal Exploration AB and Explor Björkdalsgruvan AB, which was formed to hold the tenements for the Norrliden Joint Venture signed May 26, 2017. These entities are governed by the laws of Sweden, and which own and operate the Björkdal mine in Sweden.

## **5. GENERAL DEVELOPMENT OF THE BUSINESS**

### **5.1 Three Year History**

Since 2019, the Corporation has been focused on production and exploration at its Björkdal and Costerfield properties.

#### **2019**

On January 22, Mandalay announced its year-end 2018 Mineral Reserves and Resources update for Costerfield. The Proven and Probable Mineral Reserves for contained gold increased by 48% versus the year prior, while contained antimony replaced depletion in the same period. In the Measured and Indicated Resource category, contained gold increased by approximately 34%, and contained antimony increased by 13%. The Corporation's gold reserve grade increased by 46%.

On February 20, Mandalay closed an underwritten marketed public offering of subscription receipts (the "**Subscription Receipts**") at a price of CAD\$1.20 per Subscription Receipts (the "**Offering Price**"). A total of 35,940,000 Subscription Receipts were sold for gross proceeds of \$32,273,000 (CAD\$43 million) (the "**Public Offering**"), which included a partial exercise of the over-allotment option granted by the Corporation to the underwriters. At the same time, Mandalay entered into a one-year convertible bridge loan agreement for \$8,000,000 with CE Mining Fund III L.P. (the "**Bridge Loan**"), an investment fund advised by Plinian Capital Limited, which in turn is controlled by Brad Mills. The Bridge Loan bore interest at a rate of 10% and was convertible at CE Mining's option into Common Shares at a price of CAD\$1.08 per share. The Bridge Loan was unsecured and was subordinated to the HSBC Facility. The net proceeds of this financing were intended to fund working capital requirements (including capital development work at Costerfield, and tailings upgrade and capital development requirements at Björkdal), debt restructuring (including establishing a cash reserve relating to the \$24.1 million principal amount outstanding of the

Bonds); future planned exploration activities at high potential areas including at Costerfield, the Youle lode and deeper hole targets, and the emerging Aurora Zone at Björkdal; and for general corporate purposes.

On February 21, Mandalay announced its year-end 2018 Mineral Reserves and Resources update for Björkdal. The Corporation approximately replaced depletion for production at the Björkdal mine in 2018 while Measured and Indicated Mineral Resources for contained gold increased slightly. The Corporation maintained a 10-year mine life at Björkdal.

On March 29, the shareholders of the Corporation approved the conversion of the Subscription Receipts and Bridge Loan into 35,940,000 Common Shares and 9,936,296 Common Shares, respectively.

On July 2, Mandalay completed a share consolidation on a basis of ten pre-consolidation Common Shares for one post-consolidation Common Share.

On September 12, Mandalay announced commencement of on-vein development on the Youle Lode.

On October 8, Mandalay entered into a binding option agreement with Equus whereby Equus has the option to perform exploration work at and acquire the Cerro Bayo mine. Should Equus exercise its option to acquire Cerro Bayo, consideration to Mandalay will consist of the issuance to Mandalay of 19% of Equus' share capital together with a 2.25% net smelter royalty on production from Cerro Bayo once the mine has produced at least 50,000 ounces of gold equivalent. In addition, Equus will assume 50% of the approved site closure costs at Cerro Bayo and will reimburse Mandalay for any previously paid costs in this regard.

On November 12, Mandalay announced that it has entered into a definitive agreement with Aftermath in respect of the previously announced transaction in which Aftermath will acquire MMC, which owns the Challacollo silver-gold project. Pursuant to the terms of the transaction, Aftermath will purchase 100% of MMC in exchange for total consideration of up to CAD\$11 million, consisting of CAD\$7.5 million in non-contingent consideration (the "**Non-Contingent Consideration**") plus a 3% net smelter returns royalty on production at Challacollo, capped at CAD\$3.0 million. The Non-Contingent Consideration was payable as follows (i) CAD\$1.0 million in cash payable on or before December 30, 2019 (received in Q4 2019), (ii) CAD\$1.0 million in cash payable on or before December 30, 2020, and (iii) CAD\$5.5 million in cash/shares payable on or before April 21, 2021. A \$500,000 additional payment is required if Aftermath elects to have the final payment occur in two tranches, with final payment made April 30, 2022.

In addition, on November 28, 2018, Mandalay signed a binding agreement with a third party for the acquisition of certain easement properties which comprise part of the Challacollo property for consideration of \$2.0 million, which was net of payments due to the holders of royalties and other encumbrances on these concessions.

On December 24, Mandalay completed the sale of the Ulu gold property to Blue Star Gold Corporation and received CAD\$450,000 in sales proceeds. As part of the transaction, the Corporation sold its remaining 5 million shares to a third party and received CAD\$200,000 in proceeds. In addition, the Corporation transferred to Blue Star the full value of the reclamation bond security of CAD\$1.7 million in January 2020.

## 2020

On February 21, Mandalay announced its year-end 2019 Mineral Reserves and Resources update for Costerfield and Björkdal. The Proven and Probable Mineral Reserves for contained gold and contained antimony at Costerfield increased by 13% and 3% respectively versus the prior year. Costerfield maintained 3-year minimum mine life for the eighth year in a row. The Proven and Probable Mineral Reserves for contained gold at Björkdal underground increased slightly versus the prior year. Björkdal maintained a 10-year mine life.

On March 17, Mandalay announced that it entered into a credit agreement with HSBC Bank Canada (“**HSBC**”) and Macquarie Bank Limited (“**Macquarie**”) providing for (i) a senior secured revolving credit facility in an aggregate amount of up to \$25 million and (ii) a senior secured term credit facility in an aggregate amount of up to \$40 million (the “**Syndicated Facility**”). The Syndicated Facility amended and restated the Corporation’s previous senior credit facility with HSBC. The initial drawdown under the Syndicated Facility was used to repay the previous senior credit facility in full and to fund the repurchase or redemption of the outstanding senior exchangeable bonds issued by Gold Exchangeable Limited.

In conjunction with the Syndicated Facility, Mandalay entered into two separate hedging programs with HSBC and Macquarie for a total of 150,000 ounces of saleable gold over the Syndicated Facility’s three-year term commencing monthly in July 2020, or 50,000 ounces of saleable gold per year. This consists of a zero-cost U.S Dollar collar hedge for 75,000 ounces of saleable gold with a floor price of \$1,550 per ounce and a ceiling of \$1,617 per ounce; and an Australian Dollar gold forward contract for the remaining 75,000 ounces of saleable gold at AU\$2,390 per ounce.

On March 20, Mandalay reported on business continuity protocols in place to manage the ongoing risks posed by COVID-19. Management took measures to reinforce safe work procedures, and all site leadership teams remain committed to the health and wellbeing of employees, contractors and their families. The priority remains the safety of workplaces and the ability for employees to conduct their work safely.

On June 22, Mandalay announced initial encouraging results of its regional testing programs and high-grade resource extensions in both the Youle and Aurora ore bodies at Costerfield and Björkdal, respectively. In the announcement Mandalay stated that 12 active headings had advanced along the Youle veining, with strike extents between 240 – 290 metres (“**m**”) achieved in line with geological interpretation and expected grades. Additionally, 63 optimisation and extension diamond drill holes, totalling 7,667 m of oriented diamond drill core, had increased confidence in Mandalay’s mining schedule and strike extension for the area. Mandalay’s understanding of the Aurora system had been augmented by 13 extensional drill holes (3,877 m of diamond core) and 24 Development Optimisation Drill (“**DOD**”) holes (further 4,230 m of diamond core). These holes confirmed the existence of a structurally controlled, high-grade zone plunging towards the northeast.

On October 21, Mandalay announced the extension of high-grade gold mineralization into a new domain approximately 100 m below the current mining operations of the Youle deposit. During the 2020 Youle drilling program, drill hole BC142 intercepted a 0.24 m thick laminated quartz vein with significant coarse visible gold and moderate antimony mineralization close to the planned end depth of the hole. Mandalay believes this intercept represents a southern extension to the historically mined Minerva Reef, on the eastern side of the group of historic workings.

On November 24, Mandalay announced encouraging results from the Aurora extension and delineation drill programs at its Björkdal mine. These results highlighted the open nature of the plunge extensions and an emerging new high-grade domain.

## **2021**

On January 26, Mandalay announced recent drilling results for Costerfield's Youle deposit, highlighting further high-grade gold mineralization extensions at depth. Drilling above the gold domain confirmed the gold content continues with composite grades recorded of 264 g/t Au over 0.23 m (true width) in BC162 and 94.7 g/t Au over 0.05 m (true width) in BC158.

On January 29, Mandalay announced that it had intercepted 0.11 m of 460.5 g/t Au and 0.20 m of 165.1 g/t Au in the initial stepout drill hole under the Youle deposit. At approximately 90 m below the last intercept on Youle, this discovery indicated a new gold mineralized structure below and separate from the Youle deposit. This was a major milestone for the Costerfield exploration program so early in the year and reinforced the planned 2021 program of deeper drilling below several of the known deposits.

On February 17, Mandalay announced significant grades and depth extension to the lake zone veining of the Björkdal deposit. This veining sits beneath the marble unit, below and to the south of the Aurora Zone. This initial phase of drilling encompassed nine drillholes and intercepted 15 veins containing some of the best grades seen at Björkdal. Interpretation of the drilling indicated that the veining was continuous through all holes drilled.

On February 23, Mandalay announced the updated Mineral Resources and Reserves estimates for Costerfield and Björkdal. At Costerfield, the Proven and Probable Mineral Reserves for contained gold and antimony increased by 25% and 22%, respectively, net of 2020 depletion. Björkdal maintained its long reserve mine life until 2029 and underground Mineral Reserves for contained gold increased, net of 2020 depletion.

On April 26, Mandalay announced the discovery of a new gold-rich structural domain below the Youle deposit named the Shepherd Zone at its Costerfield Operation, containing coarse visible gold in two major veining horizons. This discovery marked a step change for Costerfield, which is already one of the world's highest-grade producing gold mines with a Proven and Probable Mineral Reserves grade of 12.8 g/t Au and 3.5% Sb.

On June 8, Mandalay announced the extension of the newly discovered Shepherd Zone and provided an update on the Costerfield mineral system. Mandalay's increased focus on the Shepherd Zone demonstrated great success with the Eastern and Western veining horizons extending 300 m and 400 m in strike length, respectively. Mandalay was also encouraged by the indication that the two veining horizons were tending towards merging towards the south in an area that exhibits elevated widths and grades. This southern area remains unconstrained at depth.

On June 29, Mandalay announced the extension of the Main Zone and confirmed the extension of the Eastern extension of Lake Zone at its Björkdal operation. Mandalay was encouraged by the high grades within veining to the east of the mine and by the strong indications of major extensions to two previously mined high grade skarn lenses.

On July 14, Mandalay announced that Belinda Labatte resigned from her position as Chief Development Officer.

On October 5, Mandalay announced that it continued to extend the Shepherd Zone and provided an update on the Costerfield deep drilling program. The Shepherd system remained open to the north, south and at depth with the southernmost drillhole showing persistent veining with significant gold and antimony grade. The Costerfield Deeps program progressed with another drillhole completed. Drillhole CD002 and wedge hole CD002W1 were drilled under the Cuffley and Augusta deposits and recovered quartz veining with multiple visible gold intercepts within horizons not previously encountered. The discovery of additional gold-bearing veins down-dip of the Augusta Mine built on previously reported high-grade intercepts of the Sub-King Cobra deep drilling program and lends weight to the Company's expectation of a sizeable system of significantly mineralized gold-bearing veins at depth below the current development.

On October 12, Mandalay announced that Equus exercised its option to purchase Mandalay's Cerro Bayo mine.

On October 26, Mandalay reported that the 17-hole drill program confirmed the presence of a promising gold system at the Brown's prospect, 2 km from the Shepherd discovery and Youle mine. The most recent results confirmed significant gold grades within fault hosted breccias along two mineralized trends, building on previous high-grade results seen and reported in 2020. Mineralization across the two trends has been tracked over a 200 m strike and 300 m vertical extent.

On December 2, Mandalay announced that it had completed the sale of Cerro Bayo mine to Equus. Equus acquired Cerro Bayo, including its mining properties, resources and mine infrastructure as well as a 1,500 tonnes per day processing plant, in exchange for 19% of Equus' share capital and a 2.25% net smelter royalty on production from the Cerro Bayo mining claims once the mine has produced at least 50,000 ounces of gold equivalent, subject to a re-purchase option in favour of Equus. Mandalay also retains a maximum of 50% of the approved site closure costs of Cerro Bayo as at the transaction closing date which was valued at \$5.7 million. In addition, Equus appointed Ryan Austerberry, Mandalay's Costerfield mine General Manager, to the Board of Equus as a non-executive director representing Mandalay.

## **2022**

On January 24, Mandalay announced continuation of excellent results from its Björkdal eastward mine extension drilling programs. Since the success of the Lake and Main Zone extension projects, Mandalay drilled a further 17 holes and 7,253 m into the eastern extension of the Björkdal veining in three programs. These are the Central Zone Extension, Central Zone Conversion and Central to Lake Zone. Currently, these results have been connected to the continuation of 21 existing veins and 16 new veins have been discovered. Significant grade also sits outside of currently modelled veining, and it is expected that additional drilling will improve confidence in structural connections leading to further vein definition.

On February 16, Mandalay announced updated Mineral Resources and Reserves estimates for Costerfield and Björkdal. At Costerfield, Proven and Probable Mineral Reserves for contained gold increased by 24%, net of depletion for 2021 production and extended mine life by two years to 2027, net of depletion for 2021 production. Björkdal maintained strong mine life until 2030, improved geological understanding allowed for upgrades to higher confidence Measured Resources and Proven Reserves and an increase to Measured and Indicated gold Resources of 59,000 oz net of yearly depletion.

### **5.2 Significant Acquisitions**

The Corporation made no significant acquisitions during the year ended December 31, 2021.

## **6. DESCRIPTION OF THE BUSINESS**

### **6.1 General Description**

Mandalay Resources is a Canadian-based natural resource company with producing assets in Australia (Costerfield gold-antimony mine) and Sweden (Björkdal gold mine). The Corporation is focused on growing its production and reducing costs to generate significant positive cashflow. Mandalay is committed to operating safely and in an environmentally responsible manner, while developing a high level of community and employee engagement.

Mandalay's mission is to create shareholder value through profitable operations and continued regional exploration at both its Costerfield and Björkdal mines. Currently, the Corporation's main objectives are to continue mining the high-grade Youle vein at Costerfield, bring online the deeper Shepherd veins, both of which will continue to supply high-grade ore to the processing plant, and to extend Youle Mineral Reserves. At Björkdal, the Corporation will aim to increase production from the Aurora zone and other higher-grade areas in the coming years, in order to maximize profit margins from the mine. On December 1, 2021, Mandalay announced that it completed the sale of its Cerro Bayo mine in region XI, southern Chile to Equus.

The Corporation is focused on commodities in which management has extensive experience, such as Au, silver ("Ag"), Sb, and other base metals. The Corporation operates and has interests in countries that have a long-standing tradition of mining, low political risk and clear legal frameworks for tenure and taxation. Today, these jurisdictions include Australia, Sweden and Chile.

### **6.2 Material Properties**

Mandalay currently owns 100% interests in two material producing assets – Costerfield, Australia (producing Au and Sb) and Björkdal, Sweden (producing Au).

Costerfield, acquired as a shut-down operation, was initiating the restart of production in the third quarter of 2009 shortly before Mandalay acquired ownership on December 1, 2009. Björkdal was acquired as an operating mine by the Corporation in September 2014.

### **6.3 Risk Management Systems**

Risk is a combination of external and internal factors that constantly change and evolve. Mandalay's current risk management approach is designed to create visibility on the key material risks at the sites that could adversely impact the Corporation and prevent it from achieving its key operational and strategic priorities.

The General Manager of each property is responsible for identification and mitigation of the risks associated with that property and has identified team leaders to manage and update risks on a quarterly basis. The CEO and CFO are responsible for corporate risk identification and mitigation and to ensure all site level risks are identified and managed and communicated to the Board of Directors (the "Board"). The Board is responsible for risk oversight and requiring that the CEO and CFO prioritize risk management so that management policies and procedures around risk are consistent with the Corporation's strategy and risk appetite.

#### **6.4 Products, Customers, and Distribution**

As of the date of this Annual Information Form, the Corporation has over twelve years of production and sales history at Costerfield. Costerfield produces two different concentrates: an Au-Sb concentrate and a gravity Au concentrate. The Au-Sb concentrate is currently sold to three customers. The Au gravity concentrate is sold to a single customer in Australia.

As of the date of this Annual Information Form, the Corporation has over seven years of production and sales history at Björkdal. Björkdal produces four different products: a gravity Au concentrate, a Knelson Au concentrate, a middling Au concentrate, and an Au flotation concentrate. The concentrates are sold to two customers in Germany and Sweden.

#### **6.5 Revenues**

Revenue for the financial year ended December 31, 2019, was \$107.8 million. The decrease in revenue was a result of lower ounces sold and lower antimony prices partly offset by and increase in Au prices.

Revenue for the financial year ended December 31, 2020, was \$179.0 million. The increase in revenue as compared to 2019 was a result of 30% more ounces sold supported by higher realized gold prices.

Revenue for the financial year ended December 31, 2021, was \$229.4 million. The increase in revenue is a result of 26% more ounces sold and supported by higher realized metal prices.

#### **6.6 Competitive Conditions**

The mineral exploration and mining industry is extremely competitive. The Corporation competes globally with mining companies for the acquisition and development of mineral concessions, claims, leases and other interests. The Corporation also competes for smelter capacity for its concentrates and the recruitment and retention of qualified employees and consultants. The prices for the Corporation's products are set in large highly competitive global markets where Mandalay is a small producer. See "*Risk Factors – Competition*" for further discussion.

#### **6.7 Cyclicity and Seasonality**

The Corporation's business and operations are not seasonal, as demand for and pricing of the Corporation's mineral commodities fluctuate throughout the year. All of the Corporation's properties can be and are operated year-round.

Demand for and the pricing of mineral commodities the Corporation produces are volatile and affected by numerous social, political, economic, and event-driven factors beyond the Corporation's control. These factors impact different commodities in different ways. For example, Au, as a traditional store of value, is affected differently than an industrial metal such as Sb. The interaction of supply and demand for mineral commodities leads to periods of high and low metal prices related to high and low metal inventories. Varied interpretations of "price cycles" are common, with the tops and bottoms of cycles often only apparent in hindsight. See "*Risk Factors – Fluctuations in the Market Price of Mineral Commodities*" for more discussion.

## 6.8 Employees and Contractors

As at January 1, 2022, the Corporation had a total of 466 employees and 128 contractors, as further described in the chart below.

	Employees	Contractors	Total
Corporate	6	0	6
Björkdal	242	90	332
Costerfield	217	37	254
Others <sup>(1)</sup>	1	1	2
<b>Total</b>	<b>466</b>	<b>128</b>	<b>594</b>

1. Includes employees and contractors at Lupin Mines Incorporated.

## 6.9 Stages of Development

### 6.9.1 Producing Stage – Björkdal

From September 10, 2014 (the date on which the Corporation acquired Björkdal), to the date of this Annual Information Form, the Corporation has been engaged in the following activities with respect to Björkdal:

- 1) accelerating wide-spaced and infill drilling while reducing the previous practice of expensive exploration by large-scale drifting across and on veins;
- 2) implementing a more detailed block modeling method involving triangulation of all the veins to allow for more detailed resource and reserve tonnes, grade estimation, and subsequent improved mine design and scheduling;
- 3) implementing grade control measures in the underground mine including production optimization, infill diamond drilling, and channel sampling of all ore development headings with the primary objective to increase the underground feed grade by more selective mining;
- 4) implementing blast movement monitoring technology into the open pit for improved open pit grade control. Mining of the open pit was paused in July 2019 to focus on the higher-grade underground mine;
- 5) implementing the first phase trial of low-grade ore sorting program (crushing and screening);
- 6) completing the flotation expansion project in 2017 on time and on budget;
- 7) pausing the open pit operations in 2019 and upgrading underground production tonnage to maintain nameplate processing capacity;
- 8) exploration drilling of the Aurora zone and higher-grade vein structure in the most northern extent of the known underground operations;
- 9) commencing production from Aurora and surrounding veining; and
- 10) exploring the eastern extension of the Central Zone veining.

The following table summarizes 2021 production, sales, capital, and costs at Björkdal:

	Unit	Year ended December 31, 2021	Quarter ended December 31, 2021	Quarter ended September 30, 2021	Quarter ended June 30, 2021	Quarter ended March 31, 2021
<b>Mining Production and Mining Cost</b>						
Operating development	m	5,988	1,602	1,333	1,563	1,490
Mined ore	t	1,071,212	275,632	255,865	270,954	268,761
Mined ore Au grade	g/t	1.41	1.40	1.43	1.36	1.52
Mined contained Au	oz	48,436	12,407	11,761	11,822	12,446
Mining cost per tonne ore	\$/t	25.97	24.64	28.10	25.25	26.02
<b>Processing and Processing Cost</b>						
Processed ore	t	1,259,949	308,104	325,048	317,505	309,292
Processed ore mill head grade Au	g/t	1.32	1.32	1.26	1.26	1.38
Recovery Au	%	86.76	87.55	87.53	87.09	88.83
Saleable Au produced	oz	45,236	11,190	11,250	10,941	11,855
Processing cost per tonne ore	\$/t	9.85	10.08	8.58	10.54	10.22
<b>Sales</b>						
Au sold	oz	46,254	10,749	11,297	12,132	12,076
<b>Capital Spending</b>						
Capital development (Underground)	m	3,076	813	633	854	776
Capital development cost per metre	\$/m	2,980	3,064	2,890	2,969	2,976
<b>Benchmark Unit Cost</b>						
Cash operating cost per tonne ore processed <sup>(1,2)</sup>	\$/t	44.27	44.57	41.04	46.09	45.48
Adjusted EBITDA per tonne ore processed <sup>(1,2)</sup>	\$/t	22.16	28.81	20.86	20.48	18.64
Cash cost per oz Au produced <sup>(1,2)</sup>	\$/oz	1,233	1,227	1,186	1,338	1,187
Site all-in sustaining cost per oz Au produced <sup>(1,2)</sup>	\$/oz	1,609	1,700	1,440	1,766	1,533

1. Does not include intercompany transfer pricing recharge costs.

2. Adjusted EBITDA, cash and site all-in sustaining costs are non-IFRS performance measures. Refer to Section 1.14 "Non-IFRS measures" of MD&A for further information.

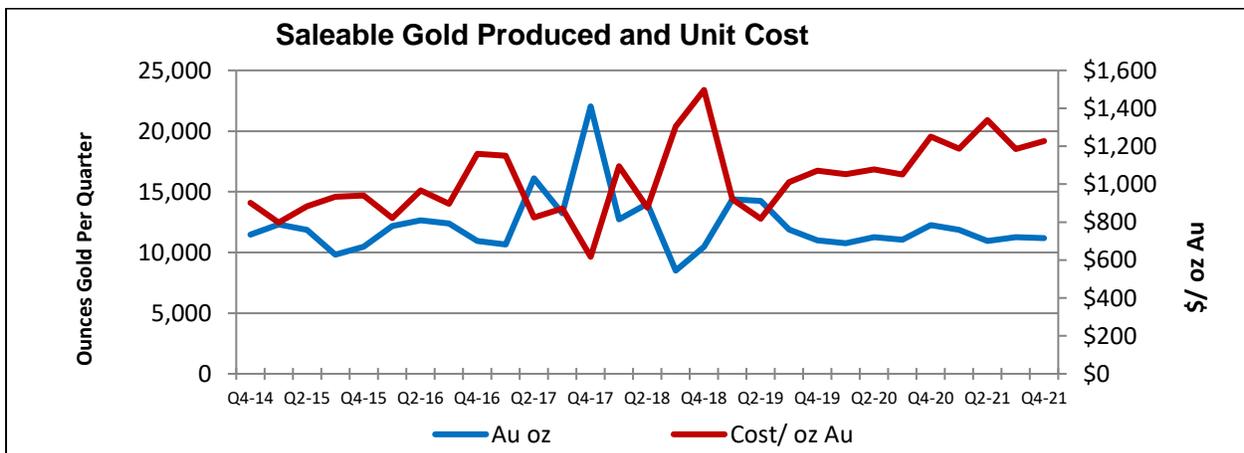
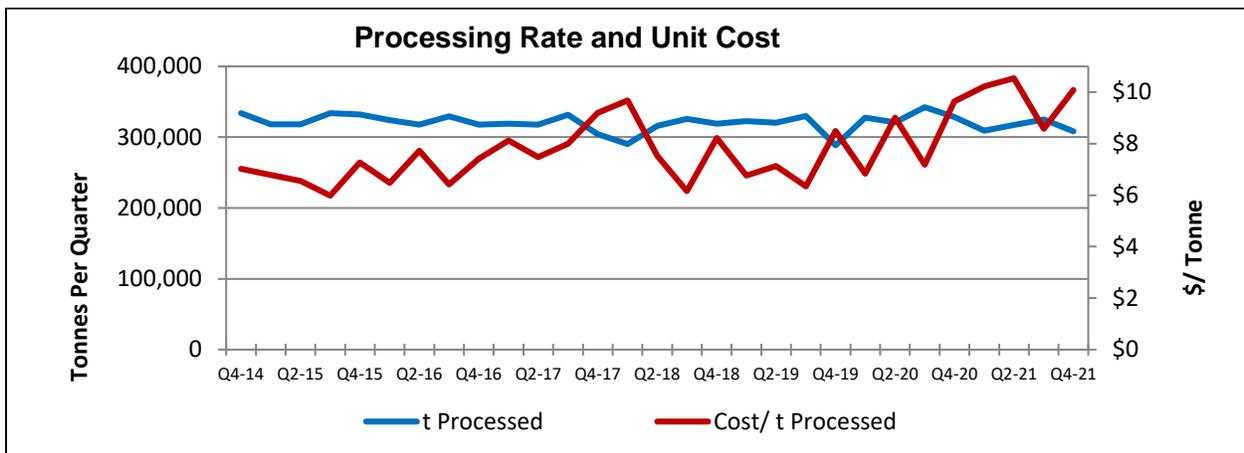
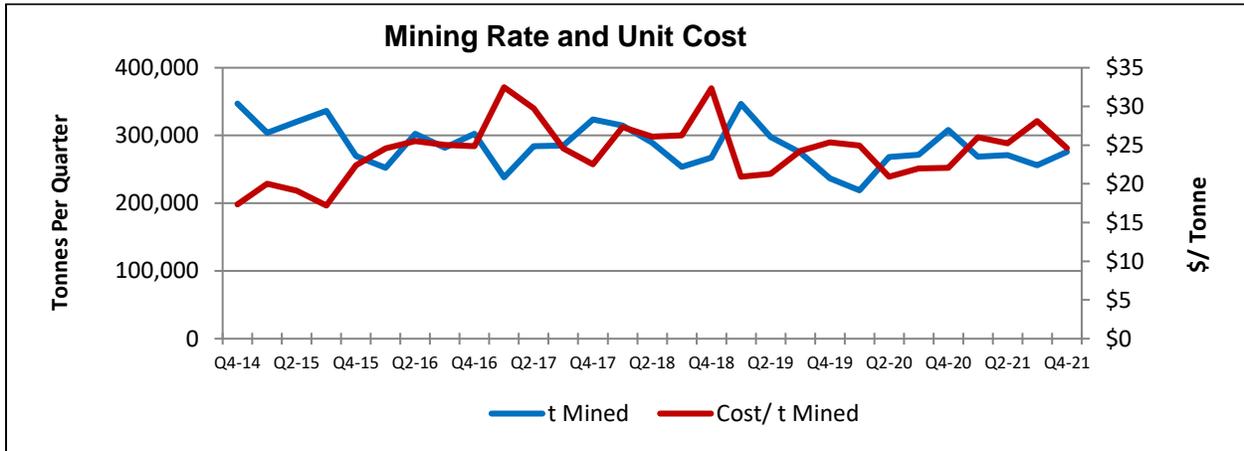
During the year ended December 31, 2021, Björkdal completed 5,988 m of operating development and produced 1,071,212 t of ore. Throughout the year, mined ore averaged 1.41 g/t Au and mining costs averaged \$25.97/t.

During the year ended December 31, 2021, the Björkdal plant processed 1,259,949 t of ore, producing 45,236 oz of saleable Au. The cost of processing ore was \$9.85/t in 2021. Sales in 2021 were 46,254 oz Au. Cost of sales excluding depletion and amortization at Björkdal was \$57.4 million in 2021, higher than \$49.6 million during 2020. The increase in operating costs was mainly due to an increase in underground tonnes and plant costs.

Capital expenditures at Björkdal in 2021 totaled \$28.5 million (\$10.0 million in mine development costs, \$2.4 million for exploration, and \$16.1 million in property, plant and equipment) compared with \$23.3 million (\$9.3 million in mine development costs, \$1.9 million for exploration, and \$12.0 million for property, plant and equipment) during 2020. The increase in capital expenditures was due to more spent on mining equipment and tailings.

Saleable gold production at Björkdal for 2021, was 45,236 ounces, a slight decrease from the 45,296 ounces produced during 2020. This was predominately due to lower tons processed and a slight drop in recoveries partly offset by higher grades in 2021 as compared to 2020.

The Corporation's production and costs at Björkdal since it was acquired by the Corporation in 2014 are summarized in the charts below:



For more information on Björkdal, refer to section 6.12 of this Annual Information Form.

### 6.9.2 Producing Stage – Costerfield Mine

From December 1, 2009, to the date of this Annual Information Form, the Corporation has been engaged in the following primary activities with respect to Costerfield:

- 1) mining ore remaining on the upper levels of the Augusta veins, left over from an earlier episode of mining that ended under previous ownership in the fourth quarter of 2009;
- 2) driving primary development to access deeper levels of the Augusta mine;
- 3) implementing a new, more efficient mining method incorporating cemented rock fill, allowing significantly improved mining recoveries;
- 4) ramping up production and sales as the new faces accessed by the decline are developed;
- 5) drilling exploration holes to delineate new resources below existing workings in the Augusta veins, the Brunswick vein, and to discover new veins nearby as well as discovery of the Cuffley and N-Lode veins;
- 6) driving primary development to access the Cuffley vein and carrying out production in the deposit;
- 7) commencing capital development to the Brunswick vein and carrying out production in the deposit;
- 8) exploring of the Youle vein beneath the old Costerfield workings ending in a reserve estimate and inclusion into the mine plan;
- 9) completing capital development to the Youle vein and commencing development on ore;
- 10) completed improved ramp access from the Brunswick Processing Mill site to support Brunswick, Youle and Sheppard area mining.
- 11) transitioning production from Brunswick to Youle vein and ramping up of stoping;
- 12) exploring depth and strike extensions on the Youle vein, resulting in increased Reserve estimate and extended mine life;
- 13) adding an additional tailings lift to support the extended mine life;
- 14) drilling on satellite targets and intercepting multiple high-grade intercepts at the Brown's prospect; and
- 15) discovering the Shepherd veining underneath Deposit and creating Mineral Resource and Reserve estimates.

The following table summarizes 2021 production, sales, capital, and costs at Costerfield:

	Unit	Year ended December 31, 2021	Quarter ended December 31, 2021	Quarter ended September 30, 2021	Quarter ended June 30, 2021	Quarter ended March 31, 2021
<b>Mining Production and Mining Cost</b>						
Operating development	m	4,660	1,026	1,150	1,203	1,281
Mined ore	t	173,727	49,171	39,554	40,524	44,478
Mined ore Au grade	g/t	10.98	11.57	11.87	9.43	10.94
Mined ore Sb grade	%	3.50	3.05	3.05	3.98	3.98
Mined contained Au	oz	61,305	18,284	15,090	12,291	15,640
Mined contained Sb	t	6,087	1,501	1,205	1,613	1,768
Mining cost per tonne ore	\$/t	142	128	158	145	139
<b>Processing and Processing Cost</b>						
Processed ore	t	145,480	36,164	35,707	37,548	36,061
Processed mill head grade Au	g/t	11.84	13.49	13.04	9.91	11.00
Processed mill head grade Sb	%	3.96	3.99	4.06	3.96	3.85
Recovery Au <sup>(1)</sup>	%	93.12	93.94	92.98	92.30	93.07
Recovery Sb	%	94.58	94.37	94.64	93.77	95.59
Saleable Au produced	oz	47,753	13,397	13,315	9,959	11,082
Saleable Sb produced	t	3,380	830	860	858	832
Saleable Au equivalent produced	oz	68,729	19,507	18,946	14,818	15,458
Processing cost per tonne ore	\$/t	48.01	54.17	53.38	42.08	42.73
<b>Sales</b>						
Au sold in gravity concentrate	oz	27,982	8,221	7,028	5,686	7,047
Au sold in floatation concentrate	oz	21,603	8,836	3,689	3,601	5,477
Au sold (total)	oz	49,585	17,057	10,717	9,287	12,524
Sb sold	t	3,627	1,334	677	644	972
<b>Capital Spending</b>						
Capital development metres	m	2,038	284	502	562	690
Capital development cost per metre	\$/m	5,115	4,981	5,822	5,527	4,316
<b>Benchmark Unit Cost</b>						
Cash cost per tonne ore processed <sup>(2,3)</sup>	\$/t	280	300	290	257	274
Adjusted EBITDA per tonne ore processed <sup>(2,3)</sup>	\$/t	611	914	519	420	596
Cash cost per oz Au equivalent produced <sup>(1,2)</sup>	\$/oz	593	557	546	652	640
Site all-in sustaining cost per oz Au eq. produced <sup>(1,2)</sup>	\$/oz	866	731	837	1,009	937

1. Recovery Au has been updated since the filing of the Q4 2021 and year-end 2021 MD&A.

2. Does not include intercompany transfer pricing recharge costs.

3. Adjusted EBITDA, cash and site all-in sustaining costs are non-IFRS performance measures. Refer to Section 1.14 "Non-IFRS measures" of MD&A for further information.

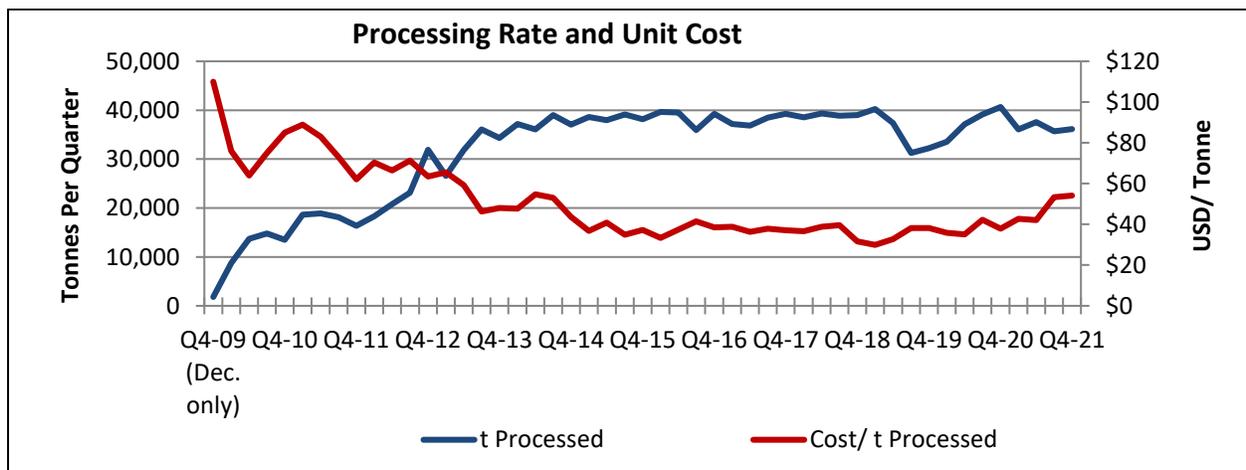
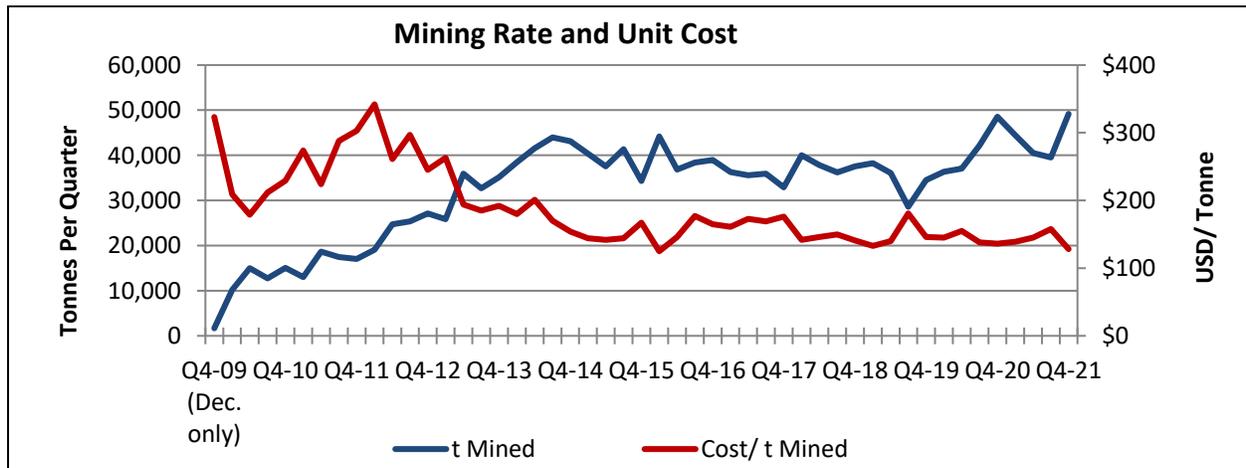
During the year ended December 31, 2021, Costerfield completed 4,660 m of operating development and produced 173,727 t of ore. Throughout the year, mined ore averaged 10.98 g/t Au and 3.50% Sb. Mining costs averaged \$142/t.

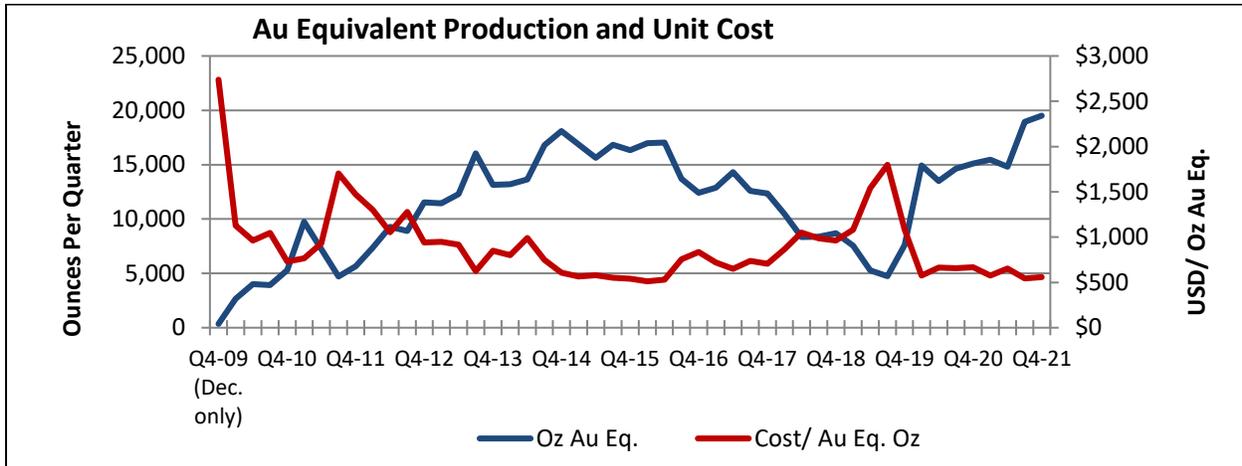
During the year ended December 31, 2021, Costerfield processed 145,480 t of ore, producing 47,753 oz of saleable Au and 3,380 t of saleable Sb. These numbers were higher than 2020 due to significantly higher overall grades processed from Youle as the deposit became the primary ore source throughout 2021. Cost of processing ore was \$48.01/t in 2021, compared to \$37.9/t in 2020. Costerfield sales for 2021 were 49,585 oz Au and 3,627 t Sb.

Capital expenditures at Costerfield in 2021 totaled at \$20.7 million (\$10.5 million in capital development, \$5.9 million in exploration and \$4.3 million in property, plant and equipment) compared to \$23.4 million (\$14.2 million in capital development, \$4.2 million in exploration and \$5.0 million in property, plant and equipment) during 2020. The decrease in capital expenditures was due to a decrease in capital development activities during Q4 2021.

The Corporation expects to see a continuation of high-gold grades as Costerfield mines deeper into Youle and Shepherd veins.

The performance of the Costerfield mine since its acquisition and restart in 2009 is summarized in the charts below:





For more information on Costerfield, refer to section 6.13 of this Annual Information Form.

### 6.10 Knowledge and Expertise

All aspects of the Corporation’s business require specialized skills and knowledge. Such skills and knowledge include the disciplines of geology, geophysics, geochemistry, drilling, mineral resource estimation, mining engineering, mine planning, metallurgy and mineral processing, metal and concentrate sales, field operations, tax, and accounting. To date, the Corporation has successfully identified and recruited employees and consultants with the requisite skills to advance the Corporation’s strategy and the Corporation believes it will be able to continue to do so.

### 6.11 Business Outlook for Fiscal 2022

The following section contains forward-looking statements. Reference should be made to “Forward-Looking Statements” herein. For a description of material factors that could cause the Corporation’s actual results to differ materially from the forward-looking statements, see “Risk Factors” in this Annual Information Form, including in particular with respect to the potential impact of the COVID-19 on the Corporation’s operations.

The COVID-19 pandemic is present in all countries in which the Company operates, with cases being reported in Canada, Australia and Sweden. At this time, the Company has activated business continuity practices across all sites. Management will continue to monitor developments across all jurisdictions and will adjust its planning as necessary.

The Company is not able to estimate the duration of the pandemic and potential impact on its business if disruptions or delays in our operations occur or our ability to transfer our products to market. In addition, a severe prolonged economic downturn could result in a variety of risks to the business, including a decreased ability to raise additional capital when needed on acceptable terms, if at all. As the situation continues to evolve, the Company will continue to closely monitor operating conditions in the countries we operate and respond accordingly. The Company has recently been affected by global shipping delays that have been caused, in part, by the pandemic, which have impacted the timing of shipments of its flotation concentrate at Costerfield which is sent overseas from Australia. While Mandalay expects that these delays will be temporary and that they will not affect overall sales volumes, they have and may in the future impact the Company’s sales on a quarterly basis. As compared to its 2021 guidance, the Corporation exceeded its full-year 2021 production guidance (105,000 – 117,000 ounces) with a

consolidated saleable gold equivalent production of 123,002 ounces – the highest total since 2017. All cost metrics were well within guidance and capital expenditures finished at \$50.3 million vs. guidance of \$48 – \$56 million.

Mandalay expects to see continued improvements in production and costs from Costerfield and Björkdal in 2022. At Costerfield, the Corporation anticipates an incremental improvement to the production profile during 2022 as development continues at Youle and with the initiation of production from the high-grade Shepherd deposit. Mandalay also expects production and cost improvements at Björkdal in 2022. The Corporation anticipates stoping rates within the lower, higher-grade levels of Aurora zone to lift and is maintaining its goal of achieving 1.2 million tonnes of underground ore production per annum. Björkdal also anticipates higher grades from stoping production as dilution control measures continue to be implemented.

Mandalay’s 2022 production and cost guidance are below (please see press release dated January 13, 2022). Given the successfully completed sale of Cerro Bayo in December 2021, the Corporation’s 2022 production guidance does not include any production from Cerro Bayo.

	<b>Björkdal</b>	<b>Costerfield</b>	<b>Consolidated <sup>(1)</sup></b>
	<b>2022E</b>		
Gold production (oz)	51,000 – 56,000	50,000 – 55,000	101,000 – 111,000
Antimony production (t)	-	2,100 – 2,700	2,100 – 2,700
Gold eq. production (oz) <sup>(1)</sup>	51,000 – 56,000	67,000 – 74,000	118,000 – 130,000
Cash cost, \$/oz gold eq. <sup>(2)</sup>	980 – 1,130	560 – 710	700 – 900
All-in sustaining \$/oz gold eq. <sup>(3)</sup>	1,400 – 1,550	830 – 980	1,100 – 1,300
Capex, \$/million	29 – 33	21 – 25	50 – 58

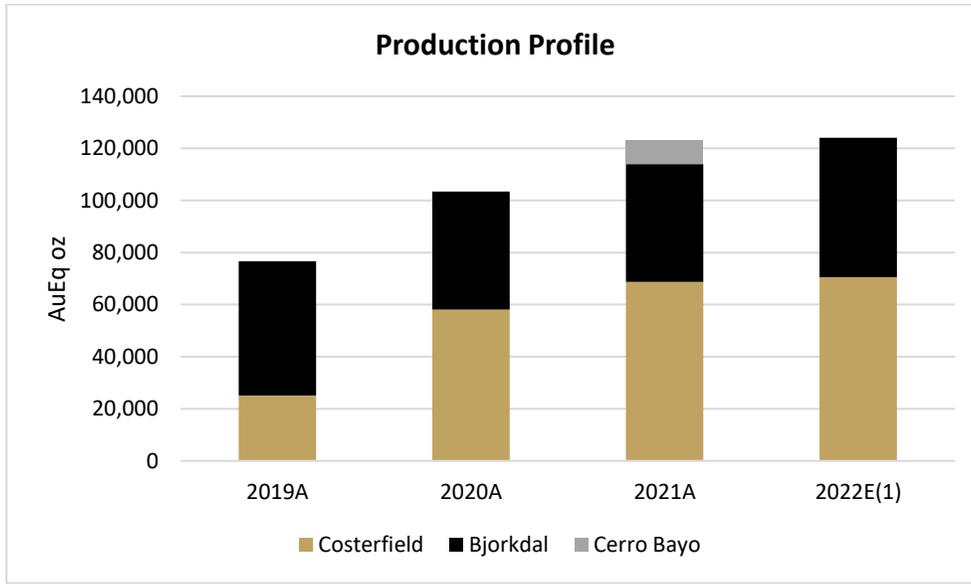
1. Assumes average metal prices of: Au \$1,750/oz, Sb \$13,000/t

2. Cash cost and all-in sustaining costs are non-IFRS measures. Refer to Section 1.14 “Non-IFRS measures” of MD&A for further information.

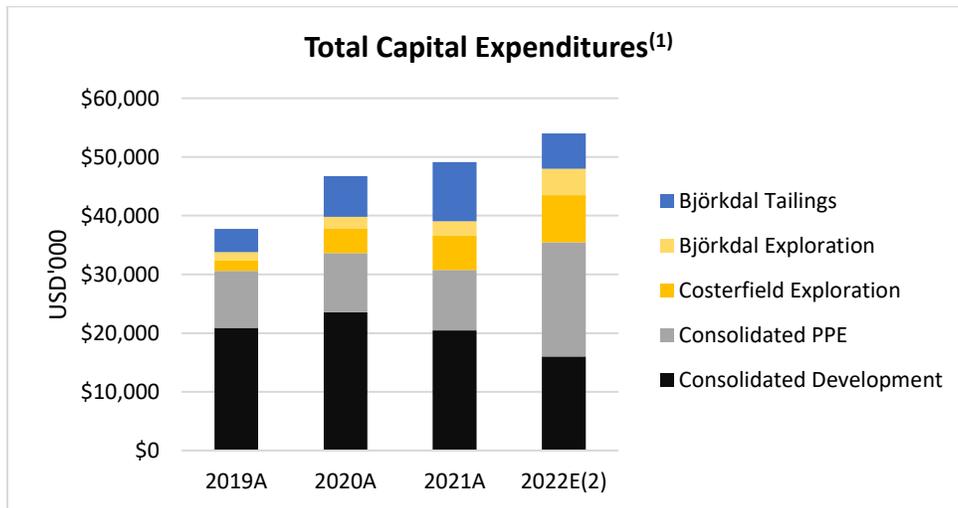
3. Consolidated costs per Au Eq. oz includes corporate overhead spending.

Mandalay’s 2022 cost guidance takes into account the following factors and assumptions:

- The value of the Australian dollar and Swedish krona relative to the US dollar and overall country cost inflation has impacted 2022 guidance relative to 2021. A comparison of actual and assumed rates is shown below:
  - Average 2021 rates: AUD/USD 0.751 and USD/SEK 8.58
  - Guidance 2022 rates: AUD/USD 0.73 and USD/SEK 8.79
- Significant capital spends at Björkdal, including continued work on the tailings storage facility expansion project. This project will allow for tailings capacity through the current life of mine. Björkdal will also be increasing exploration capital spending in 2022.
- Capital exploration spending is as follows:
  - Björkdal: \$4 – 5 million
  - Costerfield: \$7 – 9 million



1. 2022E average production graphed.



1. Excludes Cerro Bayo capital expenditures spending.

2. 2022E average CAPEX graphed.

## 6.12 Mineral Project – Björkdal

Information referenced in this section referring to the Björkdal Property is based on the Björkdal Technical Report.

### Property Location

The Björkdal Property, containing both the Björkdal mine and the Norrberget deposit, is located in Västerbotten County in northern Sweden, at approximately 20°35'26" E longitude and 64°56'7" N latitude (WGS84). Björkdal is located approximately 28 kilometres ("km") northwest of the municipality of Skellefteå and approximately 750 km north of Stockholm. The Björkdal Property is accessible via Swedish national road 95 or European highway route E4 followed by all-weather paved roads.

The Norrberget deposit is located approximately four km east of the Björkdal mine and is currently accessible via a forest road.

### Ownership

Mandalay holds 100% of Björkdal through the Swedish registered companies Björkdalsgruvan AB and Björkdal Exploration AB.

### Granted Tenement Details

The Björkdal Property consists of twelve mining concessions, owned by Björkdalsgruvan AB, and eighteen exploration concessions, owned by Björkdalsgruvan AB and one owned by Björkdal Exploration AB. The mining concession Norrliden K nr 1 and exploration permits Malånäset nr 100 and Malånäset nr 101 are held by Explor Björkdalsgruvan AB. The following tables show the exploitation concession and exploration permit status as of January 27, 2022.

#### Exploitation Concessions

Permit Name	Area (ha)	Expiry Date
Häbbersfors K nr 1	98.69	January 1, 2031
Häbbersfors K nr 2	34.88	February 2, 2025
Häbbersfors K nr 3	18.89	April 29, 2027
Häbbersfors K nr 4	5.00	November 21, 2025
Häbbersfors K nr 5	21.83	March 6, 2034
Häbbersfors K nr 6	23.49	April 24, 2038
Häbbersfors K nr 7	32.11	January 17, 2042
Norrberget K nr 1	25.28	January 25, 2044
Nylund K nr 1	73.47	January 30, 2043
Storheden K nr 1	61.27	November 8, 2043
Norrliden K nr 1*	18.51	January 1, 2032
Kvarnforsliden K nr 1	6.74	March 9, 2046
<b>Total</b>	<b>420.43</b>	

\* Permit held by Explor Björkdalsgruvan AB

#### Exploration Concessions

Permit Name	Area (ha)	Expiry Date	Status
Björkdal nr 28	39.53	October 14, 2024	
Björkdal nr 29	1,073.89	November 30, 2026	
Björkdal nr 30	64.03	February 23, 2022	
Björkdal nr 31	449.1	November 7, 2025	
Björkdal nr 32	2,219.60	November 27, 2022	Application for Extension
Björkdal nr 33	1,409.35	October 19, 2024	
Björkdal nr 34	2,520.16	November 9, 2024	
Björkdal nr 35	135.43	October 17, 2022	Application for Extension
Björkdal nr 36	670.4	April 10, 2023	

Björkdal nr 37	378.45	August 28, 2023	
Björkdal nr 39	978.45	November 5, 2023	
Björkdal nr 40	967.36	September 1, 2024	
Lillträsket nr 3	246.59	October 17, 2022	Application for Extension
Malånäset nr 100 <sup>1</sup>	591.84	March 20, 2024	
Malånäset nr 101 <sup>1</sup>	687.77	March 28, 2022	
Olofsberg nr 102	42.79	June 4, 2024	
Sandfors nr 101	3,267.82	June 9, 2022	Application for Extension
Vidmyran nr 100 <sup>2</sup>	1,197.50	March 10, 2024	
Vorsberget nr 1	804.73	May 25, 2022	Application for Extension
<b>Total</b>	<b>17,744.76</b>		

1. Permit held by Explor Björkdalsgruvan AB

2. Permit held by Björkdal Exploration

## Permitting

The Björkdal Property has been fully permitted in accordance with Swedish environmental, health and safety legislation.

The prevailing Environmental Permit (M 771-17) was granted in December 2018 and remains valid for a period of ten years for the TMF (dam and related water discharge) and until 5 October 2067 for all other aspects of the operations. The Environmental Permit includes an expansion of the TMF to meet a mill throughput rate of 1.7 Mtpa.

Building Permit M 2945-19 for TMF Dam K1 was granted in May 2020. A Change Permit submitted in October 2019 was approved and gained legal force in July 2021. The Change Permit effectively replaces the Building Permit as the prevailing permit document. The approved Change Permit included an extension of the underground mine. The application submitted in November 2019 for designated land associated with the construction of Dam K1 received approval on 4 February 2021.

Under the existing long-term water-use permit, the Björkdal Property has been permitted to use the Kåge River as a water source for the processing plant, with the permitted limit being 50 L/s (180 m<sup>3</sup>/h). The plant uses approximately 150 m<sup>3</sup>/h of which half of the water is recycled from the TMF. Water used at the mine site for purposes other than the processing plant has been sourced from a drillhole. A list of current permits is presented in the table below.

## Mandalay Resources – Björkdal Gold Mine Permits

Permits	Valid from Date	Valid to Date	Type
M 2945-19	July 15, 2021	October 5, 2067	Change Permit
M 771-17	December 3, 2018	October 5, 2028 for TSF October 5, 2067 for other operations	Environmental Permit
VD DVA 9/87	May 26, 1987	No expiry date	Water-use Permit

## Royalties

The holder of an exploitation concession must pay an annual minerals fee to the landowners of the concession area and to the State. The fee is 0.2% of the average value of the minerals mined from the

concession, 0.15% of which is paid to the landowners in proportion to their ownership interest in the concession area. The remaining 0.05% is paid to the State for research and development in the field of sustainable development of mineral resources. The fee is estimated after consideration of the amount of mined ore, the amount of minerals in the ore, and the average price of the mineral during the year or by use of an equivalent value.

### **Environmental Liabilities**

Mine closure and reclamation plans have been submitted and approved as an annex to the Environmental Permit. The approved closure plan provides an overview of reclamation requirements that follow the July 2004 European Commission guidelines for Best Available Practice for the management of tailings and waste rock in mining activities.

Mandalay has indicated that the Change Permit approval received during 2021 required an additional payment of SEK 350,000 into the secured reclamation account. Pending regulatory approval, Mandalay has submitted an update of its closure and reclamation plan during autumn 2021. Thereafter an update needs to be submitted every five years or earlier if necessary. A final detailed remediation and closure plan must be submitted to the authority in good time before the activity ceases.

The 2018 environmental permit includes an updated closure and reclamation plan. Mandalay presently has \$4.8 million (SEK 43.35 million) in a secured reclamation account held by the Swedish authorities.

### **Local Resources and Infrastructure**

#### *Power*

The power supply for the site is provided by Skellefteå Kraft AB. The electricity is sourced from low-cost hydro power and is delivered to Björkdal via the Swedish power grid.

#### *Water*

Water for the process plant is supplied from two sources. Two submersible pumps located at the Kåge River supply approximately 700,000 m<sup>3</sup> of raw water annually to plant water tanks via two pipelines. Existing water permits allow the Björkdal Property to withdraw up to 50 L/s, equivalent to 180 m<sup>3</sup>/h and 1.58 million m<sup>3</sup>/yr. A second pump station located at the TMF recycles cleared water to the processing plant. Approximately 59% of the process water is recycled from the tailings system and the remaining 41% is drawn from the Kåge River.

At present, the mine is diverting approximately 800,000 m<sup>3</sup> per year of water from the underground and open pit mines to the TMF and this allows a 59:41 ratio to prevail throughout the year. The result is that less water is discharged from the tailings system and less fresh make-up water is required. During 2021, a total of 1,478,499 m<sup>3</sup> of water was pumped from the underground and open pit mines.

#### *Buildings and Facilities*

The Björkdal Mine site hosts extensive surface and underground infrastructure, including the following:

- Gravel site access roads
- An administrative building including office space, conference rooms and kitchen facilities.

- Modular style office space for contractors, changing rooms and mine dry mess.
- An open pit that includes ramp access to the underground operations
- Raw ore stockpile facility containing a number of 5,000 tonne to 12,000 tonne capacity raw ore stockpiles.
- Primary jaw crushing facility with 400 tonne coarse ore stockpile
- Secondary crushing facility
- 5,000 tonne fine ore stockpile and reclaim facility
- 3,700 tpd mill, gravity gold plant, and flotation plant
- An internal metallurgical assay laboratory
- Company and contractor maintenance facilities
- A core logging facility with covered storage, sample preparation laboratory, and grade control assay laboratory.
- 250 ha TMF
- Fresh water supply and storage
- Water treatment plant
- Explosive storage magazine and mixing facilities
- Storage facilities for chemical reagents and bulk supplies
- An off-site covered core storage facility
- Swedish grid electrical power.

#### *Tailings and Waste Rock Storage Are*

The waste rock from open pit mining and low-grade ore stockpiles currently amount to more than 60 Mt. An additional moraine stockpile amounts to more than one million tonnes.

Previous characterization studies conducted have shown that waste rock contains very low levels of heavy metals and sulphur and concluded that the waste should be considered inert.

There are currently two active waste dump areas: the North and South waste dumps. Under the new operating permit application, the capacity of the waste rock dumps has been expanded to over 53 Mt. This capacity is sufficient to cover the needs of the current mine life.

The Tailings Management Facility (TMF) is located in an area of gently undulating relief approximately 1.5 km north of the processing plant.

The current TMF will reach full capacity in the winter of 2022/2023. Expansion of the TMF has been approved under the latest environmental operating permit that was received on 3 December 2018 and will remain valid for a period of ten years.

TMF expansions have been designed by independent consultants, Tailings Consultants Scandinavia (TCS).

During 2019 the Western Barrier Dam was raised by 2.5 m. During 2021 the northern part was raised, and during 2022 the southern part will be raised to meet production requirements. This planned expansion will provide sufficient tailings capacity to the end of 2023.

Raising of Dam K1 will be carried out in two stages with the Stage 1 raise, initiated during 2020, planned to be completed by the end of 2023. Stage 2 is scheduled to be completed during 2025. At the planned plant throughput of 1.3 Mtpa, this will provide sufficient tailings storage capacity for eight more years of mine life up to and including year 2031.

### **Accessibility**

The Björkdal Property is located approximately 40 km by road northwest of the municipality of Skellefteå (population of 72,000) and is accessible via Swedish National Route 95 or European highway route E4, followed by all-weather paved roads. The Norrberget deposit is located approximately four km east of the Björkdal mine and is accessible via a forest road. On the Björkdal Property, gravel roads link the main site gate entrance to the surface infrastructure. Gravity concentrate is trucked from the mine to Skellefteå where it is loaded on ships for delivery to smelting customers in Europe. Sulphide flotation concentrates are trucked to nearby processing facilities. The nearest airport, located in Skellefteå, has daily service to the capital Stockholm.

### **Climate**

This area of Sweden has a subarctic climate with mild summers and cold snowy winters. The climate is, however, moderated by its proximity to the Gulf Stream, so that while winters are cold, they are much less so than winters at similar latitudes in other parts of the world. The average low temperature for January is -14°C. The short summers are also reasonably warm for latitudes near the Arctic Circle. The average daily high temperature in July is 19°C, although, in recent years, temperatures above 30°C have been recorded.

Yearly precipitation is low at less than 600 mm, with August being the wettest month at over 71 mm. Precipitation is quite low near the coast, but snow may lie on the ground for up to five months. Due to its high latitude, July is typified by an average of 21 hours of daylight while the average for December is four. Björkdal's exploration activities and mining and processing operations function year-round.

### **Topography and Vegetation**

The mine is located at an average elevation of 140 m above sea level. The terrain around Björkdal is relatively subdued with low hills and numerous shallow lakes. Glacial till forms the main soil cover over the area. The vegetation around Björkdal consists predominantly of managed forests of spruce and birch with some areas of cultivated land.

## **Geology and Mineralization**

### *Regional Geology*

The Skellefteå region consists of Paleoproterozoic-aged rocks that host several world-class volcanogenic massive sulphide copper, zinc, and lead deposits that have been worked on for nearly a century. The Skellefteå district lies within a large and ancient cratonic block named the Fennoscandian shield. The Fennoscandian shield spans much of Finland and northwestern Russia, extending further westward throughout Sweden and Norway.

Mineralization in the Skellefteå region is focused within and around a regionally extensive, west- to northwest-trending structural feature named the Skellefteå belt. The Skellefteå belt is 120 km long and 30 km wide and consists of deformed and metamorphosed volcanic, sedimentary, and igneous rocks that are all Paleoproterozoic in age. Deformation and metamorphism are attributed to the Paleoproterozoic-aged Svecokarelian orogeny that occurred around 1.88-1.8 Ga. Metamorphism associated with the Svecokarelian orogeny and ranges in intensity from greenschist to amphibolite facies.

The stratigraphy of the Skellefteå area consists of Paleoproterozoic-aged volcanic, volcanoclastic, and sedimentary rocks. The stratigraphy is divided into two large litho-stratigraphic groupings that are named the Skellefte Group (lower division) and the Vargfors Group (upper division). The Skellefte Group is dominated by extrusive volcanic successions that are interbedded/intercalated on a large scale with clastic sediments containing volcanic rock-types within the Skellefte Group classified as rhyolite, dacite, andesite, and basalt. Sedimentary lithologies consist of pyritic mudstones and shales, volcanoclastic rocks, breccia conglomerates, and minor carbonates. The overlying Vargfors Group is dominated by clastic sedimentary rocks with lesser mudstone and carbonates, sporadically interbedded with thin volcanic successions. The lower portions of the Vargfors Group consist of abundant conglomerate and sedimentary breccia. Locally, rare carbonate beds are observed interbedded within these conglomerates, while the finer-grained siliciclastics may contain a carbonate-rich matrix.

The stratigraphic successions are locally intruded by igneous rocks thought to belong to the Jörn Granitoid suite. The relative ages of these intrusive bodies are constrained through radiometric dating and field relationships indicating a contemporaneous emplacement age with the volcanic rocks belonging to the Skellefte Group. Compositions of these intrusive rocks of the Jörn Granitoid suite range from felsic to mafic with end-member compositions respectively represented by gabbros and granites.

The rocks of the Skellefteå belt are observed to have undergone two major shortening events and metamorphism during the Svecokarelian orogeny. The first of the major shortening events resulted in folding and shearing: folding consisting of vertical to upright isoclinal folds with east- to northeast-striking axial planes, while shear zones are oriented sub-parallel to the axial planes of the folds. The later shortening event produced structures mainly dominated by shearing, with only minor folding coaxially overprinting the earlier generation of folding. These late-stage shears appear to play a crucial role in the formation of the deposit.

### *Local Geology – Björkdal*

Litho-stratigraphic mapping, petrological observations and geochemical analysis undertaken by Mandalay's Björkdalsgruvan geologists have indicated that host-rock geology, metamorphism and alteration styles are far more complex and variable than previously documented. Instead of a large, massive plutonic-type intermediate intrusion occupying the domal structure observed within the Björkdal

area, a variable and complex alteration signature overprints many different rock-types including; pyroclastic, volcano-sedimentary, tuffaceous, extrusive-volcanic (andesitic to basaltic compositions), sub-volcanic intrusive (andesitic compositions) and sedimentary (silici-clastics, shales and carbonates) lithologies. Common alteration and metasomatic styles include silicification, carbonatization, calc-silicate (actinolite) alteration, albitization, chloritization, potassic (biotite and K-feldspar), epidotization, pyritization, tourmalinization, with various skarn-type alteration assemblages common in areas where calcareous host-rock is present (including actinolite, tremolite, pyroxene, and minor garnet). Alteration and metasomatic zonation of these various styles is present however, the spatial distribution has not clearly been defined. Major control on the alteration zonation appears to be host-rock lithology (protolith composition), and proximity to major fluid-driven heat sources (i.e., hydrothermal systems).

### *Stratigraphy*

The deepest succession found at the mine and in the surrounding area consists of a unit of volcanoclastic sandstones and conglomerates, interbedded with lavas, ignimbrites, tuffs, bedded sandstone, and mudstone/shales. A large sub-volcanic intrusion (interpreted as an andesitic laccolith) locally intrudes this volcanic succession in the south and southwestern margins of the current open pit but has not yet been encountered elsewhere within the mine area. A massive unit of crystalline marble sharply overlies these lower volcanic and clastic units. Overlying the crystalline marble is a thin pyroclastic unit (characterized by abundant “fiamme” clasts), which is then abruptly overlain by a basaltic lava containing abundant amygdaloids (defined by actinolite and carbonate in-fill). Above this basalt, the stratigraphy appears to become increasingly marine in genesis, with the overlying units consisting of laminated and interbedded tuffs and mudstone (basaltic geochemical composition), finely laminated mudstones and siltstone, and poorly sorted sandstone. Gradationally overlying these clastic sediments is a monotonous series of graphitic and pyritic shale (pyrite is often altered to pyrrhotite), interbedded with poorly sorted siltstone and sandstone with minor coarse-sand/grit beds. Partial Bouma sequences are observed within the more clastic intervals of this upper shale succession. The local stratigraphy at the mine is related with the upper and lower portions of the Skellefte and Vargfors groups, respectively the units present below the upper contact of the crystalline marble are interpreted to correlate with the upper portions of the Skellefte Group.

### *Structural Controls*

The local structure of the Björkdal deposit is dominated by a number of shallow, north to north east-dipping brittle-ductile faults and shears. The dominant structure, which can be traced along the full length of the mine is referred to as the Björkdal Shear. The majority of the kinematic indicators identified along these structures appear to be dominantly oblique strike slip. The brittle structures consist of fault-gouge that has undergone sporadic re-healing and ‘cementation’ by carbonate, silica and sericite. Brittle-ductile structures consist of highly sheared fabrics and/or rotated and boudinaged quartz veins that may include masses of very mildly-foliated biotite. Interestingly, this latter set of structures are sometimes significantly mineralized in Au. The relationship between mineralized quartz veins and the structures appears to be complex, with a number of cross cutting relationships, suggesting multiple phases of deformation throughout the emplacement of the mineralization.

## Mineralization

### *Björkdal*

The Björkdal gold deposit is a lode-style, sheeted vein deposit that is hosted within the upper-portions of the Skellefte Group lithologies as they are found at Björkdal (as described above). Gold is found within quartz-veins that range in thickness from less than a few centimetres in width, to over several decimetres in width. These veins are usually observed as vertical to sub-vertical dipping veins that strike between 000° and 090°, with the majority of veins occurring with a strike between 030° and 060°. The veining is locally structurally complex, with many cross-cutting features as well as thin quartz veinlets which introduce mineralization into the wall rocks proximal to the main quartz veins.

Gold-rich quartz veins are most often associated with the presence of minor quantities of sulphide minerals such as pyrite, pyrrhotite, marcasite, and chalcopyrite alongside more common non-sulphide minerals such as actinolite, tourmaline and biotite. Scheelite and bismuth-telluride compounds (i.e., tellurobismuthite and tsumoite) are also commonly found within the gold-rich quartz veins and are both excellent indicators of gold mineralization.

Gold occurs dominantly as free gold, however gold mineralization is also associated with bismuth-telluride minerals, electrum and pyroxenes. Silver is seen as a minor by-product of the Björkdal processing plant, however, very little is known about its deportment within the deposit, although it is assumed to be associated with electrum.

### *Norrberget*

The primary mineralization at Norrberget is observed to be associated with amphibole alteration bands and veinlets, and where mafic tuffs and volcanoclastic rocks are interbedded, contrary to what is observed at Björkdal. The mineralization is preferentially emplaced where there is a structural change to the rock such as at lithological contacts, altered bands and where shearing interacts with the interbedded sequences, due to the changing in the rheological characteristics of the unit. Zones where pyrrhotite and pyrite occur and are absent appear to be lithologically controlled within the volcanoclastic package which can indicate a differing redox based upon temperature change and fluid evolution.

The mineralization at Norrberget is limited spatially to 50 m stratigraphically below the lower marble contact, which is believed to be a result of the cooling and redox changes of the fluid as it passes through the units.

The gold is very fine grained and rarely visible. Where gold grains have been observed, they are found to be on the boundary or in the interstitial material between grains. High grade gold is mostly found in areas with low to no pyrite.

## History

The Björkdal deposit was originally discovered in 1983 by Terra Mining AB ("**Terra Mining**") by a till sampling program which returned anomalous gold values. Anomalous bedrock values were obtained in 1985 and definition drilling began in early 1986.

Definition drilling was coincident with metallurgical testwork and positive feasibility studies were completed in May 1987. Terra Mining commenced mining operations at Björkdal in July 1988. In 1996, Terra Mining was purchased by William Resource Ltd. ("**William**"). William continued to operate the mine

until the end of June 1999, when it was petitioned into bankruptcy. The assets were bought through public auction in June 2001 by International Gold Exploration, which operated the mine from September 2001 until 2003, when it was acquired by Minmet plc (“**Minmet**”).

In 2006, Gold-Ore Resources Ltd. (“**Gold-Ore**”) acquired an option from Minmet to purchase the holding corporation for the mine. On December 31, 2007, Gold-Ore exercised its option and acquired all the shares of Björkdalsgruvan AB. During exploration and development of Björkdal, Gold-Ore generated cash flow from gold sales which commenced on a full scale in mid-2008. In January 2009, Gold-Ore’s management concluded that there were sufficient mineral reserves and resources at Björkdal for at least a five-year mine life and declared commercial production.

In May 2012, Elgin acquired all of the issued and outstanding common shares of Gold-Ore. Gold-Ore’s common shares were delisted from the TSX and Elgin graduated from a TSX Venture listed Corporation to a TSX listed Corporation.

On June 4, 2014, Mandalay announced that it had entered into an arrangement agreement pursuant to which Mandalay would acquire all the outstanding common shares of Elgin. The transaction was completed on September 10, 2014.

## **Exploration**

For the period of January 2015 to September 2021, Mandalay completed a total of approximately 213,223 m of diamond-core drilling from underground stations at the mine. Prior to the discovery of the Aurora Zone, the drilling focussed mainly on outlining the strike and dip extensions of known mineralized vein systems (mostly in the Main, Central, and Lake zones).

In 2021, the drilling continued to focus on searching for the strike and dip limits of the Aurora Zone discovered in 2017, as well as defining the limits of the high-grade skarn-hosted mineralization discovered in 2018. The drilling also focussed on the eastern depth extension of the mineralized veins in the Main, Central and Lake Zone areas of the underground mine. These drilling programs have been successful in achieving their goals.

For the period of January 2015 to September 2021, Mandalay has drilled a total of approximately 23,270 m of exploration diamond-core drilling and 102,200 m of exploration RC drilling from surface-based setups at the Mine. Similar to the underground exploration strategy, the surface drilling was prioritized around the margins of the current open pit mine in order to estimate Inferred and Indicated Mineral Resources in the near-mine environment and for grade control purposes. The majority of this drilling took place in the vicinity of the Quartz-Mountain, East Pit, and Nylund areas. In 2019 and 2020 surface drilling was focused on the extension of the West Pit Skarn and the up-dip extension of Aurora.

There is high likelihood of further discoveries in the Björkdal area, as deposit models currently being formulated and tested by Mandalay geologists are proving successful and much of the held ground remains either unexplored or under-explored.

The Norrberget area was extensively drilled from 1994 to 1996 by COGEMA before interest in the prospect declined under subsequent owners. After the area was purchased by Gold-Ore in 2007 some sporadic drilling campaigns were undertaken without significant discovery being made.

After Mandalay acquired Elgin, a program of re-logging and reassaying the existing core from the prospect was undertaken. This resulted in renewed interest in the area and in 2016 a 2,542 m diamond-core drilling

program confirmed the historical results and extended the limits of mineralization. A 1,400 m RC drill program in-filled and further extended the resource down-dip in 2017. This drilling resulted in a mining concession granted in 2019. No further exploration drilling has since been completed at the Norrberget deposit.

Target generation completed in 2015 and 2016 consisted of geophysical surveys and reinterpretation of existing geophysical magnetic and electric surveys. These surveys ranged from regional scale airborne surveys to high resolution downhole electric logging and had the objective to establish some geophysical characteristics indicative of mineralized rock systems in the greater Björkdal exploration land package. It has been established that areas of significant mineralization have detectable effects on both magnetic (ground magnetics) and electrical (chargeability) properties of the host geology. As such, these surveys are being incorporated with geochemical and structural geological data with the objective to identify highly prospective ground. The targets that have been generated will be prioritized and then systematically tested in the immediate future.

In 2016, ground magnetic surveys and till sampling programs were expanded across high potential areas within the tenement package. Detailed-scale outcrop mapping and sampling was also carried out to further develop the macro-scale understanding of the Björkdal Property's gold bearing potential. A total of 75 till samples, spaced roughly 50-100 m apart and 65 outcrop samples were taken.

In 2017, two small scale (~5 km<sup>2</sup>) ground magnetic surveys were carried out in highly prospective areas within the tenement package. Outcrop mapping and sampling was also carried out in the northern region of the tenement package in order to build upon the continuously growing regional geological model. A total of 40 till samples, spaced roughly 50-100 m apart and 71 outcrop samples were taken.

During summer 2019, an airborne magnetic survey was completed by Thomson Aviation over the full tenement package in collaboration with Boliden AB. Björkdalsgruvan received the raw data from the fly over and Geovista AB processed the results. Raw data consisted of a digital terrain model, levelled radiometric data and levelled magnetic data. The survey used flight lines oriented in an east-west direction with a 50 m line spacing with tie lines at 500 m.

In 2020, a total of 1,160 m was diamond drilled approximately two km west of the mine. The target for this drilling was identified from airborne magnetic data

No diamond drilling was completed during 2021 with exploration activity comprising Base of Till drilling.

During 2020 an extensive campaign of outcrop mapping and sampling was carried out across the entire tenement package, along with a small till sampling program towards the east. Complementary to the mapping and sampling campaign, a regional Base of Till ("**BOT**") drilling campaign was carried out in 2021. BOT drilling is a technique widely used in areas that have undergone extensive glaciation. A small, mobile drill machine is used to drill through the surficial till cover, into the bedrock and three samples are taken:

1. ~1-2 m downhole in the C-horizon.
2. ~1 m above the till-bedrock boundary.
3. ~3 m into the bedrock.

A total of 103 holes were drilled totalling 1,415 m across three prospective targets within the tenement package. The holes were spaced between 100-200 m apart.

The data obtained during these campaigns has been incorporated into the regional geological model.

### Drilling – Björkdal

The cut-off date for the year-end 2021 Mineral Resources and Reserves estimate was September 30, 2021, and incorporated drill hole and channel sampling information collected by Mandalay. The following table summarizes the drilling carried out by Mandalay between 2014 and 2021:

#### Summary of Drilling at Björkdal Completed by Mandalay Resources from 2014 to 2021

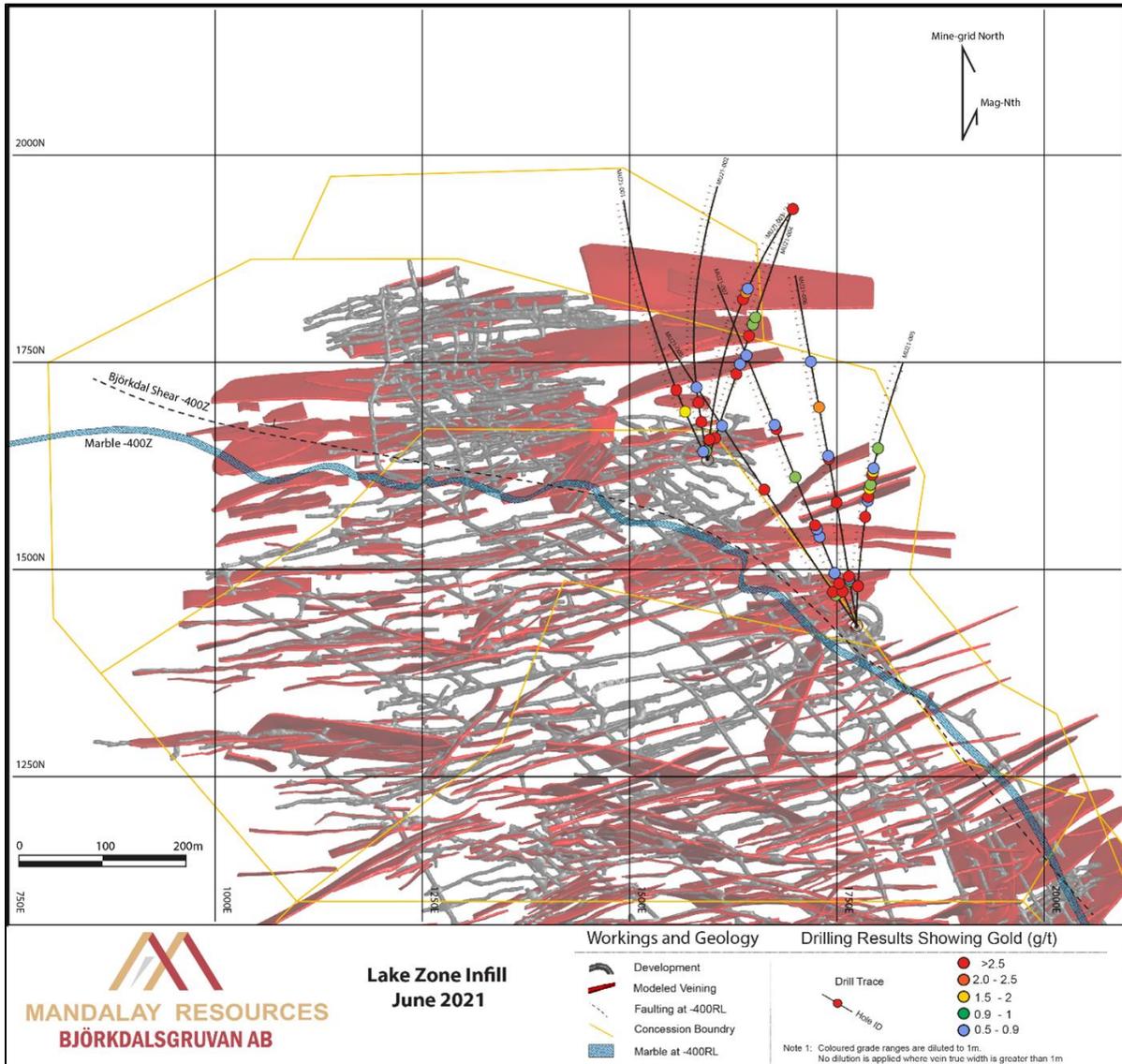
Year	Drillhole Type	Underground		Open Pit	
		No. of Drillholes	Metres (m)	No. of Drillholes	Metres (m)
2014	Core (In-fill)	19	1,614		
	RC			65	2,103
	Core	12	3,302	5	632
2015	Core (In-fill)	150	11,880		
	RC			439	13,959
	Core	58	14,151	56	9,145
2016	Core (In-fill)	280	32,252		
	Core			14	4,087
2017	Core (In-fill)	211	23,839		
	RC			596	24,924
	Core			13	2,377
2018	Core (In-fill)	211	24,309		
	RC			621	22,138
	Core	43	9,995	36	5,904
	Core (In-fill)	143	17,823		
2019	RC			194	10,649
	Core	36	9,089	7	1,125
2020 <sup>1</sup>	Core (In-fill)	223	26,263		
	Core	41	14,156	8	1,243
2021 <sup>2</sup>	Core (In-fill)	159	17,926		
	Core	43	15,293		
<b>Total</b>		<b>1,629</b>	<b>221,892</b>	<b>2,054</b>	<b>98,286</b>

1. 2020 drilling adjusted to December 31, 2020.

2. 2021 drilling includes drillholes completed to September 30, 2021.

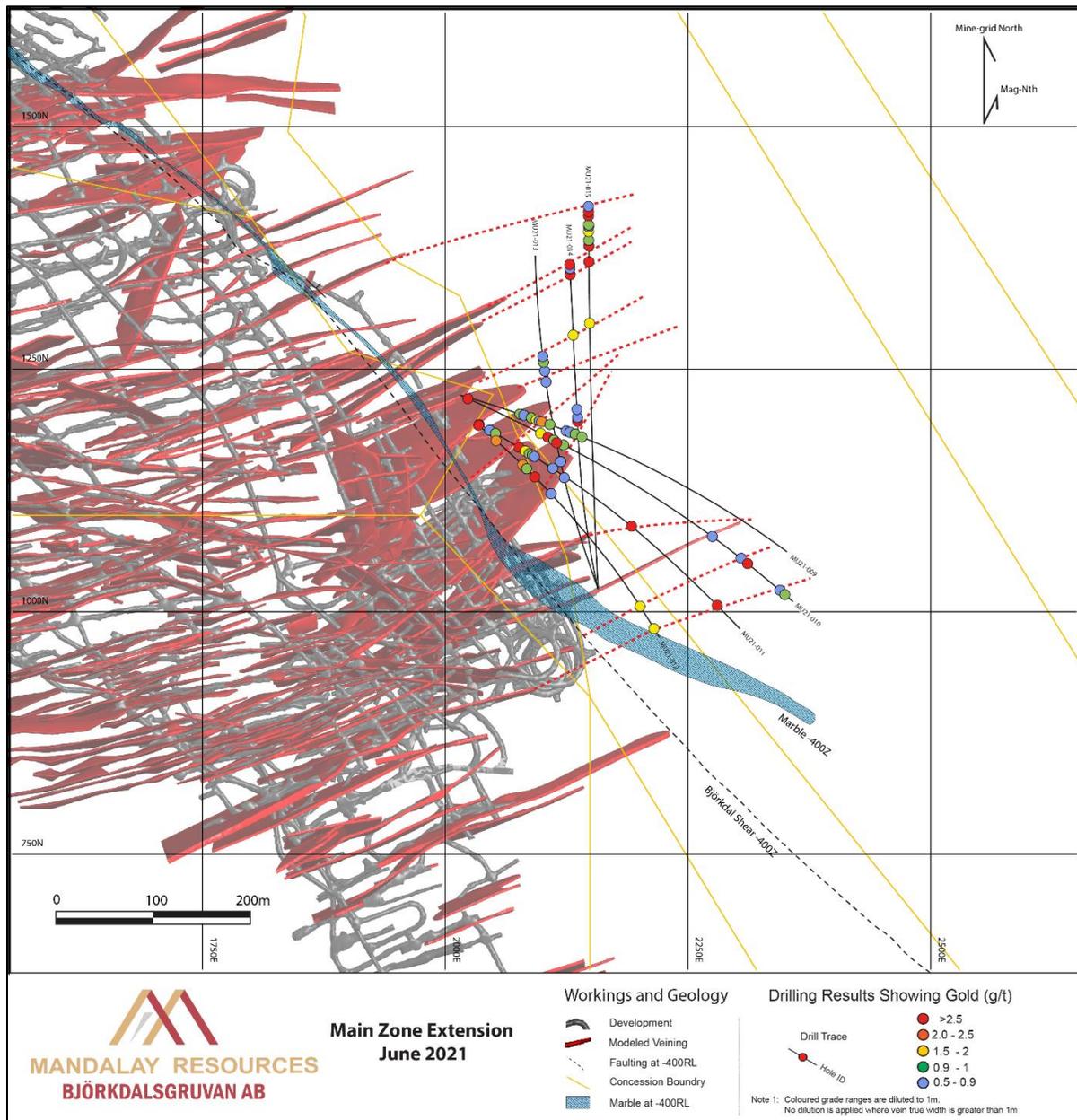
The main focus of drilling completed in 2021 was to extend known auriferous veining towards the east and at depth of the current underground operations.

In late 2020, a program consisting of 9 holes, totalling 3,859 m was completed. The drilling revealed the presence of auriferous quartz veins extending at depth in the Lake Zone area of the mine. As a follow up to this drilling program, along the mine's North eastern flank, a program consisting of 8 holes, totalling 3,605 m was drilled in Q1 2021. This program confirmed the significant grades and vein continuity shown in the original program. Some highlights of this program were; 226 g/t gold over a true width of 0.21m within MU21-003 and 25.3 g/t gold over true width of 1.03 m within MU21-005. Along with the initial intercepts from 2020, the strike extent of some of the veining is interpreted to be approximately 300 m, while the vertical extent below the marble horizon is expected to be approximately 50 m. Veining within the Lake Zone remains unbound to the east and at depth.



An additional program focused on the eastern, depth extension of the Main Zone. Seven holes and a total of 2,720 m have been drilled from underground development to the east in order to explore the area underneath the marble and identify vein extensions. Direct extensions to ten veins have been interpreted from the program with 63 significant intercepts within the drilling. An intercept grading 174.0 g/t gold over true width of 0.49 m within MU21-010 extends veining approximately 200m to the east. To the north, more vein extensions are revealed with an intercept of 0.21 m grading 105.0 g/t gold. With significant

mineralization extending through to the eastern most reaches of the program, Mandalay is confident that the veining remains open at depth and to the east.



Significant intercepts are set out in Schedule “A” to this Annual Information Form.

## Drilling Procedure

### *Diamond Drilling*

All underground exploration drilling since September 2014 has been conducted with wireline diamond-core drilling methods by experienced Swedish drilling contractors Protek Norr AB, Styrod Arctic AB and Drillcon Scandinavia AB. Drilling has been carried out with dedicated underground exploration drill rigs in the Hagby series WL66 and WL76 sizes (50.5 mm and 57.5 mm diameter core, respectively). All drill holes

are surveyed with modern computerized gyroscopic tools at hole completion, while also being regularly check-surveyed for unexpected deviation as the drilling progresses using modern multi-shot “camera” downhole tools. Core orientation tools are used on all holes for geologists to measure the orientation of all geological structures identified. Contractors work two shifts per day (ten-hour shift), seven days per week and average approximately 1,000 m per month.

Surface exploration since September 2014 has been carried out with wireline diamond-core drilling methods by experienced Swedish and Finnish drilling contractors Styruð Arctic AB, Protek Norr AB, Kati OY, and Arctic Drilling Company OY and experienced international drilling operator Mason & St John; based in the UK. Various drilling equipment sizes have been used depending on project needs and are as follows: WL66 (50.5 mm core diameter), NQ2 (50.7 mm core diameter), and WL76 (57.5 mm core diameter). All drill holes are surveyed with modern computerized gyroscopic tools at hole completion, while also being regularly check-surveyed for unexpected deviation as the drilling progresses using modern multi-shot “camera” downhole tools. Core orientation tools are used on all holes for geologists to measure the orientation of all geological structures identified. Contractors work two shifts per day (12-hour shift), seven days per week and average approximately 1,200 m per month. Drill holes that are collared in unconsolidated materials (i.e., soil and till) are cased with traditional methods with either Boart Longyear, or Hagby series casing rods and bits.

Due to the degree of silicification and alteration of the deposit and regional geology, rock quality is generally excellent, reflected in core recovery values generally in excess of 95%.

Production (POD-series) and development (DOD-series) optimization holes are primarily drilled with Mandalay-owned and operated drill rigs and drilling staff, although contractors have been used at times when extra capacity is required (Drillcon AB and Protek Norr AB). Starting in 2013, infill underground diamond drilling programs using WL46 drill string (28.8 mm diameter core) were implemented, the rig has been decommissioned as of May 2018. In March 2016, an Atlas Copco model Diamec U4 data rig was purchased and in April 2020, an Epiroc Diamec U6 data rig was purchased. The rigs are operated by three drillers working single shifts using a WL56/39 drill string (39.0 mm diameter core). They work seven days a week, producing 27 m per shift. During 2021, a fourth shift was added to the U4 rig. These rigs are primarily used for development optimization.

All drilling is designed and supervised by Mandalay/Björkdalsgruvan geologists. Drill hole layouts are designed with the aid of the GEOVIA Surpac 3D software.

Drill core is transported to Mandalay’s core logging facilities located within the mine area for processing. The core is examined by trained geologists who prepare a descriptive log of the alteration, structure, and mineralization that may have been encountered by the drillhole. The information is entered directly to computer files at the core shack and subsequently uploaded to the master drillhole database.

Logging of drill core has been carried out according to Mandalay’s Standard Operating Procedure (SOP) GEO 20200331. Logging geologists examine the drill core and mark off any lengths of the core judged to hold potential for hosting significant quantities of gold mineralization. The locations of the sample intervals, along with the sample identification numbers are entered into the computer log of the drillhole and subsequently uploaded to the master drillhole database. The drill core is then photographed by geological technicians before samples of the core are selected for assaying using the entire drill core.

## **Sampling and Analysis**

Samples from Björkdal and Norrberget are prepared and analyzed at CRS Laboratories Oy (CRS), an independent laboratory located in Kempele, Finland and with a subsidiary laboratory on-site at Björkdal. CRS is currently certified according to the International Organisation for Standardisation (ISO) ISO9001:2008 standard and accredited by FINAS Finnish Accreditation Service, ISO 17025:2017 (T342) standard, and is independent of Mandalay. Samples are also analyzed by ALS Minerals, an ISO accredited commercial laboratory located in Piteå, Sweden, which is independent of Mandalay. The ALS laboratory is accredited by SWEDAC for several analytical methods (reg nr 2030) and compliant with international standard ISO 17025.

Whole core samples and RC samples are sent directly to the laboratories for sample preparation and assaying. Assaying is conducted utilizing the PAL1000 test machine and the LeachWell process. Quality assurance and quality control (QA/QC) systems include the use of certified reference material (CRM) standards, blanks, duplicates, repeats, and internal laboratory quality assurance procedures employed by the assaying laboratory. It is understood by Björkdal personnel that the PAL method reports the cyanide soluble portion of gold within a sample. Checks have been conducted on residue material remaining after PAL assaying to confirm the completeness of the digestion stage and the transfer of gold to solution. The checks typically demonstrate that Björkdal mineralized material behaves well with this method and returns residue values of between 0.6 to 1% of the reported gold assay value.

Underground chip and sludge samples are collected by geological technicians and delivered directly to the on-site laboratory. The on-site laboratory, which utilises a PAL1000 unit, was established in June 2016 and was run by Minlab AB, a subsidiary of CRS, until April 2018. From May 2018 to April 2020 the on-site laboratory was run by ALS Minerals. Since May 2020, the on-site laboratory has been run by Minlab AB.

Underground sludge samples have been submitted to the site laboratory for analysis for production purposes, however these assay results have not been used in the Mineral Resource Estimation.

## **Data Verification**

The Mining Plus QP considers that the qualitative and quantitative geological data used to inform the Björkdal Mineral Resource estimates have been collected, validated and stored in line with industry best practice as defined in the CIM Mineral Exploration Best Practice Guidelines (CIM, 2018) and the CIM Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines (CIM, 2019). Although some very minor issues have been identified, the QP considers that the data are suitable for use in the estimation of Mineral Resources.

The QP for Norrberget is of the opinion that the Norrberget drill hole data are adequate for the purposes of Mineral Resource estimation.

## **Security of Samples**

The Björkdal mine site has not experienced any major security issues. Access to the mine area, which is fenced, is restricted to authorized personnel that have conducted the SSG safety training and SSG Björkdal local training course and have been given access to pass through the gates with their personal key card.

Drill and mine samples are transported from the site to the Björkdal on-site core logging and sample preparation facility, which is located within a secure area.

All diamond drill core is logged into laptop versions of GeoSpark. Only persons permitted by Björkdal are allowed to handle the samples, and measures are in place to limit and deny access by unauthorized persons.

Commercial freight companies are used to transport samples to the appropriate independent sampling and assaying laboratories. Sample shipment lists are emailed to the assay laboratory and the laboratory provides a confirmation receipt of the sample shipment.

### **Quality Assurance and Quality Control**

No QA/QC data is available for historical drilling prior to 2004. RC drilling for grade control purposes carried out from 2006 to 2013 and assayed at ALS did not include any QA/QC insertions into the sample stream. From 2013 to 2014, standard and blank samples were inserted into the sample stream with one blank and one standard sample inserted per RC drill hole.

Following Mandalay's acquisition of Björkdal in 2014, the QA/QC protocols were updated to include the regular insertion of blanks and multiple standards within each 30-sample batch. A blank sample was also inserted after every sample containing visible gold. All samples collected from the regional exploration programs, the underground and near-mine surface-based exploration programs, and the grade control sampling from 2015 onwards were included in the QA/QC program.

### **Mineral Resources and Reserves**

#### *Björkdal*

Since the 2014 Mineral Resource and Reserve estimate, Mandalay has been carrying out drilling programs in both the open pit and underground mines. From September 30, 2020, to the data cut-off of September 30, 2021, Björkdal completed 59 drill holes totalling approximately 20,755 m in length. In addition to this, a large data contribution was available from POD and DOD drilling totalling 24,592 m, which was completed in line with underground mine development. In addition, underground operations completed 5,988 m of on-vein development, which was mapped and sampled in detail. This new drill hole information was used in conjunction with the chip sample information to prepare an update of the Mineral Resource estimate.

Mandalay have generated wireframe models of the mineralized veins at Björkdal. Modelling has been completed in both Surpac and Leapfrog Geo software. Surpac wireframes have been created using sectional interpretation over a minimum of two metres. Leapfrog wireframes have been generated using the vein tool over a minimum of two metres. Those wireframes found mostly in the mined pit have been generated using a threshold of 0.3 g/t Au while those mined underground have been generated using a threshold of 0.5 g/t Au.

Separate cut-off grades were developed for reporting of the underground and open pit Mineral Resources.

Mineral Resources were estimated at a cut-off grade of 0.33 g/t gold for the potentially open-pittable portion of the Resource, and 0.77 g/t gold for the portion of the Resource that is potentially mineable by underground methods. These cut-offs were determined using Björkdal's 2021 production costs, using a gold price of \$1,700/oz and an exchange rate of 9.0 SEK/US\$.

At a cut-off grade of 0.77 g/t Au, the Measured and Indicated Mineral Resources potentially mineable by underground methods are estimated to comprise 11.54 million tonnes at an average grade of 2.35 g/t Au for 869,000 oz Au, and an Inferred Mineral Resource of 3.48 million tonnes at an average grade of 2.12 g/t Au for 237,000 oz Au.

At a cut-off grade of 0.33 g/t Au, the Indicated Mineral Resources potentially mineable by open pit methods are estimated to comprise 3.02 million tonnes at an average grade of 2.19 g/t Au for 212,000 oz Au, and an Inferred Mineral Resource of 3.33 million tonnes at an average grade of 1.13 g/t Au for 121,000 oz Au.

The QP classified the Mineral Resources based on the confidence of the input data, the data spacing, and the grade and geological continuity. All material contained within either the North or South stockpile areas was classified as an Indicated Mineral Resource.

The Mineral Resource has been classified on the following basis:

- The mineralization estimated in the first pass with face sample data but not chip sample data have been classified as high confidence.
- The mineralization that has been estimated using an average distance to three drillholes of less than 25 m has been classified as moderate confidence.
- The mineralization that has been estimated using an average distance to three drillholes of more than 25 m and less than 35 m using at least 2 drillholes has been classified as low confidence.
- Blocks that are outside of these criteria remain unclassified.

Mining Plus has applied a smoothing operation to the confidence categories in order to generate, as close as possible, contiguous resource category regions. This process necessarily smooths across vein boundaries where two veins either intersect or are within one cell of each other.

After the smoothing operation, those blocks coded as high confidence have been classified as a Measured Resource while those classified as moderate confidence have been classified as an Indicated Resource and those blocks coded as low confidence have been classified as Inferred Resource. Additionally, the surrounding waste has been classified as an Inferred Resource.

### *Norrberget*

The following description for Norrberget was taken from the 2020 Technical Report (SLR, 2021). No changes have been made to the Mineral Resource estimate since the underlying assumptions have not changed materially. SLR reviewed data for Norrberget and has independently prepared Mineral Resource estimates using a drill hole database with a cut-off date of September 30, 2017. The Mineral Resource estimate has an effective date of December 31, 2017. No drilling has been carried out since October 4, 2017.

SLR generated three mineralized domains for Norrberget that reflected packages of mineralized and altered material above a 0.35 g/t Au cut-off that was a minimum of 2 m in horizontal width.

SLR reviewed the Norrberget data and capped the grades to ensure that sporadic high-grade values were not overrepresented. A 24 g/t Au capping value was applied. The capped samples were flagged by the

mineralized domain wireframes and the intercepts were composited on a 1.0 m length between the wireframe boundaries, with a minimum residual of 0.5 m.

A block model that encompassed the mineralization wireframes and sufficient waste to constrain the resource within a pit was generated. Au grades were interpolated into the mineralized blocks using ID3. A total of three interpolation passes were carried out to estimate the grades in the block model.

Cut-off grades were developed using the January to September 2017 actual cost information from Björkdal along with an Au price of \$1,400 per ounce. The cut-off grade for reporting of Mineral Resources for Norrberget was determined to be 0.35 g/t Au.

SLR classified the Mineral Resources as Indicated and Inferred based on drill hole spacing, grade continuity, and reliability of data.

At a cut-off grade of 0.35 g/t Au, the Norrberget Mineral Resources comprise 144,000 t at an average grade of 3.29 g/t Au containing 15,000 oz of Au in the Indicated Mineral Resource category and approximately 500 oz of Au in the Inferred Mineral Resource category. Mineral Resources were estimated within an open pit.

The Mineral Resource estimates, as shown in the table below, are reported inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

**Mineral Resources at the Björkdal Mine and Norrberget Deposit as of December 31, 2021, inclusive of Mineral Reserves**

Category	Area	Tonnage (kt)	Grade (g/t Au)	Contained Au (koz)
<b>Measured Resources</b>				
	Underground	1,851	2.62	156
<b>Indicated Resources</b>				
	Underground	9,663	2.30	713
	Open Pit	3,017	2.19	212
	Norrberget Open Pit	144	3.29	15
	Stockpile	2,532	0.61	50
<b>Total Indicated</b>		<b>17,207</b>	<b>2.07</b>	<b>1,146</b>
<b>Inferred Resources</b>				
	Underground	3,484	2.12	237
	Open Pit	3,326	1.13	121
	Norrberget Open Pit	3	4.03	0.5
<b>Total Inferred</b>		<b>6,813</b>	<b>1.64</b>	<b>359</b>

1. The Björkdal Mineral Resource is estimated using drillhole and sample data as of September 30, 2021 and depleted for production through December 31<sup>st</sup>, 2021. Norrberget Mineral Resources are based on a data cut-off date of September 30<sup>th</sup>, 2017.
2. CIM definitions (2014) were followed for the Mineral Resource.
3. The Mineral Resource is inclusive of the Mineral Reserve.
4. The Mineral Resource is estimated using an average gold price of \$1,700/oz. and an exchange rate of 9.0 SEK/US\$.
5. In situ bulk density is 2.74 t/m<sup>3</sup> for veins and host rock. In situ bulk density is 2.92 t/m<sup>3</sup> for skarn orebodies. Stockpile bulk density is 1.8 t/m<sup>3</sup>.
6. High gold assays were capped at 60 g/t Au for the first search pass and 40 g/t Au for subsequent passes.
7. High gold assays at Norrberget were capped at 24 g/t Au.
8. Interpolation was by inverse distance cubed utilizing diamond drill, reverse circulation, and chip channel samples.
9. The Björkdal open pit Mineral Resource is estimated at a cut-off grade of 0.33 g/t Au and constrained by a resource pit shell to comply with the reasonable prospects for eventual economic extraction (RPEEE) criteria.
10. The Norrberget open pit Mineral Resources are estimated at a cut-off grade of 0.35 g/t Au and constrained by a resource pit shell to comply with the RPEEE criteria.
11. The Björkdal underground Mineral Resource is estimated at a block cut-off grade of 0.77 g/t Au for all veins
12. A nominal two meter minimum mining width was used to interpret veins and comply with the RPEEE criteria.
13. The Reported Mineral Resource is depleted for previously mined underground development and stopes.
14. The Stockpile Mineral Resource is estimated based upon surveyed volumes supplemented by production data.
15. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
16. Numbers may not sum due to rounding.
17. The Mineral Resource Estimate as of 31<sup>st</sup> December 2021 for Björkdal was independently reviewed and verified by Dr Andrew Fowler MAusIMM CP (Geo), a full time employee of Mining Plus. Dr Fowler fulfils the requirements to be a "Qualified Person" for the purposes of NI 43-101 and is the Qualified Person under NI 43-101 for the Mineral Resource. The Independent Qualified Person for Norrberget Mineral Resource estimate is Reno Pressacco, P.Geo., Principal Geologist with SLR, who is a Qualified Person as defined by NI 43-101.

The Mineral Reserves estimated by Mining Plus with an effective date of December 31, 2021, are listed in the table below.

The Mineral Reserve estimate for Björkdal is 12.12 million tonnes at a grade of 1.39 g/t Au, for a total of 542,000 oz contained Au. The Mineral Reserve estimate for Norrberget is 162,000 t at a grade of 2.80 g/t Au, for a total of 15,000 oz contained Au.

## Mineral Reserves at the Björkdal Mine and the Norrberget Deposit as of December 31, 2021

Category/Area	Area	Tonnage (kt)	Grade (g/t Au)	Contained Au (koz)
<b>Proven</b>				
	Underground	1,127	2.05	74
<b>Probable Reserves</b>				
	Underground	5,350	1.76	302
	Open Pit	2,949	1.07	101
	Norrberget Open Pit	162	2.80	15
	Stockpile	2,532	0.61	50
<b>Total Proven and Probable</b>		<b>12,121</b>	<b>1.39</b>	<b>542</b>

- Björkdal Mineral Reserves are estimated using drillhole and sample data as of September 30, 2021, and depleted for production through December 31<sup>st</sup>, 2021.
- Norrberget Mineral Reserves are based on a data cut-off date of September 30<sup>th</sup>, 2017.
- CIM definitions (2014) were followed for Mineral Reserves.
- Open Pit Mineral Reserves are based on mine designs carried out on an updated resource model, applying a block dilution of 100% at 0.0 g/t Au for blocks above 1.0 g/t and 100% at in-situ grade for blocks below 1.0 g/t, but above a cut-off grade of 0.37 g/t Au. The application of these block dilution factors is based on historical reconciliation data. A marginal cut-off grade of 0.37 g/t Au was applied to estimate open pit Mineral Reserves.
- Underground Mineral Reserves are based on mine designs carried out on an updated resource model. Minimum mining widths of 3.7 m for stopes (after dilution) and 4.75 m for development (after dilution) were used. Stope dilution was applied by adding 0.6 m on each side of stopes as well as an additional 10% over break dilution. Further dilution, ranging from 5% to 50%, was added on a stope-by-stope basis depending on their proximity to other stopes. An overall dilution factor of 25% was added to development designs. Mining extraction was assessed at 95% for contained ounces within stopes and 100% for development. A cut-off grade of 0.88 g/t Au was applied to material mined within stopes. An incremental cut-off grade of 0.37 g/t Au was used for development material.
- Stockpile Mineral Reserves are estimated at a cut-off grade of 0.37 g/t Au and are based upon surveyed volumes supplemented by production data.
- Mineral Reserves are estimated using an average long-term gold price of US\$1,500/oz for Björkdal, US\$1,300/oz for Norrberget, and an exchange rate of 9.0 SEK/US\$.
- Tonnes and contained gold are rounded to the nearest thousand.
- Totals may not sum due to rounding.
- The Mineral Reserve Estimate as of 31<sup>st</sup> December 2021 for Björkdal was independently verified by Aaron Spong FAusIMM CP (Min) who is a full time employee of Mining Plus. Mr Spong fulfils the requirements to be a "Qualified Person" for the purposes of NI 43-101 and is the Qualified Person under NI 43-101 for the Mineral Reserve. The Independent Qualified Person for the Norrberget Mineral Reserve estimate is Rick Taylor, MAusIMM (CP), Principal Mining Engineer with SLR, who is a Qualified Person as defined by NI 43-101.

## Mining Operations

### *Underground – Björkdal*

Measured and Indicated Mineral Resource blocks greater than 0.78 g/t Au were used as the basis for initial stope designs generated by Auto Stope Designer, an automated layout function within Deswik software. The resulting stopes were evaluated manually, and adjustments made where necessary. Stopes were evaluated based on size, grade, and relative distance to existing development. Stopes that were not economically viable were removed from the reserves. Most stopes that were within five metres of each other were combined into larger stopes and dilution was applied based on the additional internal waste captured in the new stope. The five-metre pillar requirement is based on actual mining conditions experienced at Björkdal. The current long-term stope designs do not incorporate localized geotechnical

and geological considerations including detailed knowledge of hangingwall and footwall contacts, fault zones, and structural features such as folding.

The underground mining method used at Björkdal is longhole stopeing with a sub-level spacing of 15 m to 20 m, depending on the zone. Crosscuts are established perpendicular to the vein system. Veins are then developed by drifting on each sub-level from the crosscut. All pre-production vein, crosscut, and ramp development is drilled and blasted using conventional trackless mining equipment.

Stopeing blocks are drilled with approximately 15 m long and 70 or 76 mm diameter up-holes connecting to the bottom of the overlying stope using Epiroc Simba drill rigs. When production drilling has been completed, initial slot raises are developed, and drill lines blasted in groups of three to five rings using a burden of 1.5 m and retreating towards the hangingwall. The material is removed between blasts, which allows a void for each successive blast. Remotely operated scoops are used to muck the stopes to nearby rehandle areas or directly into trucks.

In consideration of the variable vein geometry and existing equipment configuration, 3.7 m has been measured as the average minimum mining width. This includes a base 2.5 m minimum width plus an allowance for 0.6 m for overbreak on both the hangingwall and footwall sides of the stope. An additional 10% dilution is added for planning purposes.

Most of the mined-out stopes are left open without any backfill, however the relatively new Aurora Zone will have stopes that will be both wider, longer, and higher than in other areas. In these areas, the stopes are planned to be mined and backfilled with unconsolidated fill. This will allow pillars to be reduced and will increase the extraction ratio.

A prefeasibility study to determine the mining method of this area was completed by Itasca Consultants AB (Itasca) in 2019, which recommended a mining method, stope and pillar dimensions, as well as future support. Rill (or Avoca) mining with unconsolidated fill was determined to be the most cost-effective option. Mining Plus considers that as mining is already taking place in the Aurora Zone these results are appropriate.

The current top-down footwall to hanging wall retreat system results in the placement of ramp development outside the marble contact, while cross-cut pillars are within the ore zone.

#### *Open Pit – Björkdal*

The open pit has currently been halted and is planned to be restarted in 2025, however this could be delayed further in the event of additional underground reserves being identified. The planned method is standard truck and shovel mining, as done historically. Details will be redefined closer to the restart date.

#### **Mineral Processing**

The mineral processing plant at Björkdal commenced operation in 1989. Since that time, it has processed approximately 35.2 Mt of ore from open pit and underground sources and produced approximately 1.54 million ounces of gold (Moz Au). Currently, the concentrator throughput is 1.3 Mtpa and the overall gold recovery is 88.6%, of which 70% is obtained from the gravity processes and 20% from flotation.

The concentrator includes primary, secondary, and tertiary crushing, primary and secondary grinding, a series of gravity concentration steps, regrinding, and flotation to produce three gravity concentrates and a flotation concentrate.

### *Markets*

Björkdal produces four salable products: a gravity concentrate, a middlings concentrate, a Knelson concentrate and a flotation concentrate. Björkdal has concentrate sales agreements with Aurubis Ag in Germany and Boliden Commercial AB in Sweden. The terms and conditions of commercial sale are not disclosed pursuant to confidentiality requirements. Björkdal has also sold some concentrate on the spot market to customers in Europe and Asia.

### *Contracts*

Other contracts that exist with the mine, and suppliers, include those for:

- PEAB Anläggning AB: Tailings dam construction work
- Renfors AB: provides underground ore transport and is responsible for material haulage to the surface of all underground mined material and haulage from low grade stockpiles to crusher.
- Skellefteåbränslen AB: supplies diesel and gas to site.
- Blasting: EPC Sverige AB for the supply of emulsion explosives and blast hole loading for underground.
- Byggbetong AB: Shotcrete for underground mining operations
- Skellefteå Kraft: Electrical power supply
- Sandvik Mining & Constructions Sverige AB, Epiroc Sweden AB: Provision of spare parts for mining equipment.
- Exploration Diamond Drilling: Contracted with companies as required.
- Rexel/Selga: supply of electrical components and cables.
- Minlab AB: provide on-site assay laboratory services.
- Variety of leased mining equipment.

### *Environmental*

An annual environmental report is submitted to the authorities in Sweden for approval. The report summarises compliance to the terms stated in the environmental permits and water usage permit.

The Björkdal mining operation typically has a low sulphide content and, as a result, no acid rock drainage (“ARD”) potential exists. Gold is recovered by mechanical and gravity processes with no use of cyanide.

There are no harmful elements associated with the tailings material and they have been declared as non-toxic by the authorities. Previous characterisation studies have demonstrated that waste rock from the mine contains very low levels of heavy metals and sulphur and have concluded that the waste should be considered inert.

Water quality is monitored on a regular basis at eight strategically placed monitoring stations. Monitoring points in the Upper Lillträsk Creek, Upper Kåge River and Upper Vidmyr Creek stations are located upstream of the mining area and provide reference water quality data. One station on the Björkdal Property monitors discharge water quality from the TMF (PP2) and four additional stations have been located in Lillträsk Creek, Lower Lillträsk Creek, Kåge River, and Lower Røjmyr Creek to monitor any changes in the receiving watershed.

Sampling is performed by certified samplers and the protocol includes analyses for a suite of twenty-two metals, pH, temperature, and contents of ammonium-nitrogen, phosphates and phosphorus, nitrogen, nitrates and nitrites, oil and total suspended solids (“TSS”).

Historically, the Björkdal Property has reported that the discharge water quality from both the mine water management system (PP1) and the TMF (PP2) has exceeded permissible levels for nitrates and TSS. Elevated levels of phosphorus and phosphates have also been noted at PP1.

Since 2018, and following several studies conducted by the Björkdal Mine to establish the cause of the elevated levels, all mine discharge water has been discharged to the TMF through PP2, and PP1 removed from the control and monitoring system. Mine discharge water is no longer released from PP1. This change has been approved by the environmental court and is anticipated to resolve all issues with elevated nitrites and TSS. While ongoing measures are being implemented to continually reduce levels, Björkdal’s suggested long-term solution is the raising of Dam K1 embankment to support degradation of nitrogen with increased residence time and dilution.

The raising of Dam K1 was approved during 2021 (M2945-19). The supporting Environmental Impact Assessment (EIA) was completed in 2019 and included the extension of the underground mine. No significant impacts were identified during the EIA process.

Mine closure and reclamation plans are submitted and approved as an annex to the environmental permit and includes a reclamation bond with the Swedish authorities. Mandalay presently has \$4.82 million (SEK 43.35 million) in a secured reclamation account held by the Swedish authorities.

#### *Taxes*

The Corporation’s profit is subject to a corporate tax at a flat rate of 20.6% applying since January 1, 2021. Björkdal currently has SEK 67.8 million of untaxed reserves.

#### *Capital Costs*

Björkdal is an on-going operation with the necessary facilities, equipment, and manpower in place to produce gold. The basis for the LOM plan is the Probable Mineral Reserve estimate outlined in Section 15

of the Björkdal Technical Report. The majority of the capital cost estimates are based on quantities generated from the open pit and underground development requirements and data provided by Björkdal.

### **Björkdal LOM Capital Cost Summary**

<b>Description</b>	<b>Value (\$ '000)</b>
Sustaining Capital Fixed Assets	63,545
Capital Development Underground	39,200
Pre-Strip Open Pit	45,850
<b>Total Sustaining Capital</b>	<b>148,595</b>
Growth Capital Fixed Assets	9,113
<b>Total LOM Capital Expenditure</b>	<b>157,708</b>

### *Operating Costs*

The Björkdal Property maintains detailed and comprehensive operating cost records that provide an excellent basis for estimates of future operating costs. Mandalay produced a cash flow estimate based on the budgeted costs for 2022. This estimate was checked against the 2017 to 2021 costs provided by Mandalay. The majority of operating costs at Björkdal are expended in Swedish Kronor. All costs have been converted to US dollars using an exchange rate of 8.79 SEK/US\$.

### **Björkdal LOM Operating Costs**

<b>Description</b>	<b>LOM (\$ '000)</b>	<b>Annual Average (\$ '000)</b>	<b>Unit Cost (\$/t proc)</b>
Mining and Rehandle	210,705	19,155	14.9
Processing	131,787	11,981	9.32
G&A	126,194	11,472	8.92
<b>Total Operating Cost</b>	<b>468,686</b>	<b>42,608</b>	<b>33.14</b>

The LOM has been prepared on the basis that all planned mining activities can be carried out using the existing Björkdal manpower. It is assumed that current contract prices will remain unchanged for mining activities performed by a contractor such as open pit mining and underground rock haulage.

Cost inputs have been priced in real Q4 2021 dollars, without any allowance for inflation or consideration to changes in foreign exchange rates.

### **Exploration and Development**

For 2022, Mandalay anticipates the main focus to be on exploration in the underground. Capital development will continue to the north of the known mineralization proximal to the Aurora zone. Ramping will also continue at the main, central and lake zone areas following the depth extensions of those zones.

In 2022, near mine, underground exploration will be strongly focused on extending the mineralized package towards the North, above the Marble horizon. Drilling along the Eastern extent of the current underground mine will focus on additional testing and infilling at depth, under the marble.

The Björkdal Property covers several kilometres of area around the current operation that is prospective for additional Au mineralization and VMS style deposits. A project pipeline program has been underway for the past 2 year with targets ready to drill test in 2022.

This proposed workplan and budget is higher than previous years and will allow the development of additional regional targets in close proximity to the current operations

### **6.13 Mineral Projects – Costerfield**

Information referenced in this section referring to the Costerfield Property is based on the Costerfield Technical Report.

#### **Property Location**

The Costerfield Property is located within the Costerfield mining district of Central Victoria, approximately 10 km northeast of the town of Heathcote and 50 km east of the city of Bendigo.

The Costerfield Property encompasses the underground Augusta Mine including the Augusta, Cuffley, Brunswick, Youle and Shepherd Deposits; the Brunswick Processing Plant; Splitters Creek Evaporation Facility; Brunswick and Bombay Tailings Storage Facilities (“**TSF**”) and associated infrastructure.

The Augusta Mine (“**Augusta**”) is located at latitude of 36°52’ 27” south and longitude 144 47’ 38” east. The Cuffley Deposit is located approximately 500 m north-northwest of the Augusta workings. The Brunswick Deposit is located approximately 1.4 km north-northwest of the Augusta workings and 680 m north-northwest of the Cuffley Deposit. The Youle Deposit is located north of the Augusta workings and Cuffley Deposits approximately 2.2 km and 1.6 km respectively. The Shepherd Deposit is located vertically below the Youle Deposit. The Brunswick Processing Plant is located approximately 2 km northwest of the Augusta Mine.

The deposits are primarily accessed via the decline at Augusta. Ore haulage to the ROM takes place through the Brunswick portal, which opened in November 2020.

#### **Ownership**

Mandalay Costerfield holds a 100% interest in licences MIN4644, MIN5567, EL5432, and EL5519. On 2 November 2018 two EL applications (ELA6847 and ELA6842) were submitted to the Department of Jobs, Precincts and Regions (“**DJPR**”). These two licences are located to the east and west of the existing Costerfield tenement package and cover 64 km<sup>2</sup>. In September 2020, Mandalay Resources indicated their intention to comply with the standard conditions outlined in Schedule 4 of the Land Use Activity Agreement (“**LUAA**”). The DPJR acknowledged receipt of correspondence consenting to the Schedule 4 conditions and the DPJR is currently assessing the remaining EL applications in accordance with the Mineral Resources Sustainable Development (“**MRSD**”) Act, 1990. As it stands currently, a recent decision of the Native Title Registrar not to register the Indigenous Land Use Agreement (“**ILUA**”) has held up the approval process. Government department Earth Resources Regulation (“**ERR**”) is currently waiting on the advice from the Department of Justice on what options are available for Taungurung in regard to the implications of the deregistration.

On 17 September 2020, tenement EL3310 expired and on 15 September 2020, Retention Licence applications (RLA7485 of 3,170.4 ha and RLA7492 of 23.3 ha) were lodged in order to retain the licence area, except for an area of National Park that will be excised on any granting of the new licence. As of December 2021, the Retention licence applications remained pending approval from ERR. As part of the Retention licence application, Mandalay Resources applied for a s16A of the MRSDA (Mineral Resources Sustainable Development Act 1990) to allow work to continue until such time that the Retention Licence application has been determined.

Tenure information for the two Mining Licences (“ML”), two Exploration Licences (“EL”) two Exploration Licences under application (“ELA”), one expired Exploration License (“EXEL”) and two Retention Licence’s under application (“RLA”) which cover Costerfield are detailed in table below:

#### Costerfield Granted Tenement Details

Licence	Name	Status	Company	Area*	Grant Date	Expiry Date
MIN4644	Costerfield	Granted	AGD Operations P/L	1,219.3 ha	25/02/1986	30/06/2026
MIN5567	Splitters Creek	Granted	Mandalay Resources Costerfield Operations Pty Ltd	30.0 ha	20/02/2013	21/02/2023
EL5432	Peels Track	Granted	AGD Operations P/L	2.0 graticules	23/08/2012	22/08/2022
EL5519	Antimony Creek South	Granted	Mandalay Resources Costerfield Operations Pty Ltd	4.0 graticules	28/05/2015	27/05/2023
ELA6842	Costerfield West	Under Application	Mandalay Resources Costerfield Operations Pty Ltd	29.0 graticules	Submitted 2/10/2018	Pending
ELA6847	Costerfield East	Under Application	Mandalay Resources Costerfield Operations Pty Ltd	35.0 graticules	Submitted 2/10/2018	Pending
EL3310	Costerfield	Expired	AGD Operations P/L	59.0 graticules	17/09/1993	17/09/2020 Retention Licence application over the area.
RLA7485	Costerfield	Under Application (covers expired EL3310 area)	Mandalay Resources Costerfield Operations Pty Ltd	3,174.0 ha	Submitted 15/09/2020	Pending
RLA7492	Costerfield	Under Application (covers expired EL3310 area)	Mandalay Resources Costerfield Operations Pty Ltd	23.3 ha	Submitted 15/09/2020	Pending

\*1 graticule is equivalent to 1 km<sup>2</sup>

The mining licenses cover all current and future planned mining activity.

### **Permitting**

Primary approval for the operation of Costerfield is held through Mining License MIN4644. In December 2017, this license was renewed for 10 years (until June 30, 2026).

### **Royalties**

Royalties apply to the production of antimony and gold and are payable to the Victorian State Government through the DJPR. The royalty is applied at a rate of 2.75% on the revenue realised from the sale of antimony and gold produced, less the selling costs. However, there is a royalty exemption on the first 2,500 oz of gold produced each year.

There are no royalty agreements in place with previous owners.

Additional royalties are payable to the Victorian State Government through the DJPR at a rate of AUD\$0.87/t if waste rock or tailings is sold or provided to any third parties, since they are deemed to be quarry products.

### **Environmental Liabilities**

Costerfield is currently in compliance with all permits and authorizations.

In October 2018, a bond review was completed, and the value of the rehabilitation policy increased by AUD\$224,000 to a total of AUD\$4.08 million for both ML's MIN4644 and MIN5567. The total bond of AUD\$4.08 million has been fully funded.

There are three further AUD\$10,000 bonds, two held by the DJPR for EL licences EL3310 and EL5432, and one by Vic Roads for licences where pipelines crossroads.

The rehabilitation bond for MIN5567, the lease on which the Splitters Creek Evaporation Facility has been constructed, was calculated in October 2018 and AUD\$748,000 set aside.

The total bond for MIN4464, the lease where the Augusta mine site and Brunswick Processing Plant is situated, is AUD\$3.33 million. This bond has increased during the latest bond review due to the addition of the Brunswick vent shaft in 2018.

Rehabilitation is undertaken progressively at Costerfield, with the environmental bond only being reduced when rehabilitation of an area or site has been deemed successful by the DJPR. This rehabilitation bond is based on the assumption that all rehabilitation is undertaken by an independent third party. Therefore, various project management and equipment mobilisation costs are incorporated into the rehabilitation bond liability calculation. In practice, rehabilitation costs may be less if Mandalay Resources chooses to utilise internal resources to complete the rehabilitation.

Other than the rehabilitation bond, which is fully funded, the project is not subject to any other environmental liabilities. Table below presents the breakdown of the liability costs from the recent bond review.

### Total liability rehabilitation bond calculations, 2018

Area	AUD\$
Total Rehabilitation Liability – Augusta Mine Site (MIN4644)	\$1,419,000
Total Rehabilitation Liability – Brunswick Process Plant site (MIN4644)	\$1,912,000
Total Rehabilitation Liability – Splitters Creek Evaporation Facility (MIN5567)	\$748,000
Total Rehabilitation Liability – Costerfield Operations	\$4,079,000

### Local Resources and Infrastructure

#### *Power Supply*

Costerfield has a current agreement with Powercor for 3.227MVA of grid power, at a power factor of not less than 0.95, from Substation 1, the only high voltage supply point, located at the Augusta mine. The entire operation's power requirement is supplied via this location, including the underground operations and the Brunswick Processing Plant. The system's power quality is also supported by means of an 11 kV Power Factor Correction Unit (PFCU).

In addition, Costerfield has 1 MVA of diesel power generation which is automatically synchronised to connect to all the infrastructure in the event the power demand increases above the 3.277MVA which can be provided by Powercor. During periods of high demand on the Victorian electrical network, Mandalay Resources can manually activate this power source and therefore decrease the burden on the network and assist with the states grid supply.

Due to the need for additional electrical power for the development of the Brunswick, Youle and Shepherd underground orebodies, upgrades to the power supply and reticulation circuits were completed in 2019. This involved consolidating three separate incoming sources of electrical supply into a single supply source and distributing electrical power from that single point. This has allowed for greater efficiencies from minimising losses from each supply point and also allows additional local site back-up generation to occur at a single point. This has simplified starting and stopping of supplementary site diesel fired power depending on the demand. The mill and RO plant will continue to be powered from this single point. There is also provision for additional power demand for the mill up to 2 kVA.

Further improvements to electrical switchboard controls have been ongoing in order to remove local power boards and relocate them to a central location. This consolidation work is to continue in 2022 in parallel with the inclusion of extra plant mechanical equipment such as a second concentrate filter press or alternative concentrate filtration technology and a crushing circuit upgrade with the incorporation of a Finlay I-140RS mobile impact crusher (delivered in the first quarter of 2022) to allow for a second stage of crushing.

#### *Water*

Groundwater is currently pumped from the underground workings to the Mine Dam at a rate of approximately 1.5 ML per day. Mine water is then pumped from the Mine Dam to either the Splitters Creek Evaporation Facility, or a series of water treatment and disposal facilities (located at the Brunswick site).

The Augusta Evaporation Facility comprises of three dams with a total storage capacity of 137 ML. Total site water storage capacity including smaller catchment and operational dams at Splitters Creek, Brunswick and Augusta, is approximately 289 ML.

The water services at the Brunswick Processing Plant consists of the raw water, process water and excess water disposal systems. The process water supply consists of concentrate thickener overflow, tailing thickener overflow and Brunswick TSF decant return water. Whilst the process plant utilises water from a closed circuit, make-up process water is required to supplement water evaporated at the Brunswick TSF.

Total evaporation and water disposal capacity including discharge of RO treated water and from the Splitters Creek Evaporation Facility and is currently estimated at 555ML per year, assuming the long-term average Heathcote climatic conditions.

Aquifer Recharge trials have been successful, and the Costerfield Property has established the Margarets Aquifer Recharge Borefield, located approximately 1km South of the Augusta operations. The Aquifer Recharge infrastructure at Margarets includes two injection bores and is licensed to dispose of a maximum 730 ML of mine wastewater via injection to groundwater in the Margarets Aquifer over an operational period of 24 months.

#### *Buildings and Facilities*

The Costerfield office and ablution facilities are located on the Augusta underground mine site and at the Brunswick site.

Currently, all employees live in the surrounding towns and commute to work in private vehicles. There are two houses available with rooms available to rent short term for new employees and contractors as required. Five Dongas are also available on a needs basis for contractors.

#### *Tailings and Waste Rock Storage Areas*

Two tailings dams are currently in operation comprising the Bombay TSF and the Brunswick TSF.

Both TSFs were constructed based on a conventional turkey's nest type design with earthen embankments.

Tailings are currently deposited in the Brunswick TSF, which currently has capacity to allow tailings to be deposited until Q2 2022. Tailings storage beyond Q2 2022 will be facilitated with the following:

- An additional lift is permitted and planned to take place on the Bombay TSF. Construction of this lift is planned to commence in Q1 2022. The Bombay lift will provide tailings storage through to Q4 2023.
- Tailings storage beyond Q4 2023 will require permitting and construction of a new TSF.

#### *Workforce*

The workforce for Costerfield is sourced from the surrounding area and the large mining town of Bendigo. There is adequate access to labour available in the area for foreseeable operating plans.

### *Accessibility*

Access to Costerfield is via the sealed Heathcote–Nagambie Road which is accessed off the Northern Highway to the south of Heathcote, at a distance of approximately 100 km north of Melbourne. The Northern Highway links Melbourne and Central and North-Central Victoria.

The Augusta Mine site is accessed off the Heathcote–Nagambie Road via McNicols Lane which comprises a sealed/gravel road that continues for approximately 1.5 km to the Augusta site offices.

The Brunswick Processing Plant is located on the western side of the Heathcote–Nagambie Road, approximately 1 km further north of the McNicols Lane turnoff. The Brunswick site offices are accessed by a gravel road that is approximately 600 m long.

The access road to the mine off the Heathcote-Nagambie Road is a narrow-width bitumen strip with gravel shoulders.

### **Climate**

The climate of central Victoria is ‘Mediterranean’ in nature and consists of hot, dry summers followed by cool and wet winters. Annual rainfall in the area is approximately 500 mm to 600 mm, with the majority occurring between April and October. The annual pan evaporation is between 1,300 to 1,400 mm.

The temperature ranges from -2°C in winter (May to August) to +40°C in summer (November to February). The weather is amenable to year-round mining operations; however, occasional significant high rainfall events may restrict surface construction activity for a small number of days.

### Topography and Vegetation

The topography of the Costerfield area consists of relatively flat to undulating terrain with elevated areas to the south and west sloping down to a relatively flat plain to the north and east. The low-lying areas of the plain are a floodplain. The area ranges in elevation from approximately 160 m above sea level in the east along Wappentake Creek to 288 m above sea level in the northwest. Vegetation ranges from mixed species of open forest in the valleys and gentle slopes, with shrubby box gum on the stony gravelly hills and heath and grasses on the dry slopes and ridges. Much of the undulating land and alluvial flats have been cleared of vegetation for farming purposes.

### Geology and Mineralization

The Costerfield Au-Sb vein district, which overlaps the Costerfield Property, is located on the northern end of the Darraweit Guim Province. Stratigraphy in this area comprises a thick sequence of Lower Silurian to Lower Devonian shelf and flysch sedimentary rocks, dominated by turbiditic siltstone, with minor sandstone and argillite. These rocks form the Murrindindi Supergroup. At the base of the Supergroup is the Costerfield Formation, which is conformably overlain by the Wappentake (sandstone/siltstone) and Dargile (mudstone) formations, the Mclvor Sandstone and the Mount Ida Formation (sandstone/mudstone).

The north-trending Heathcote-Mt William fault system marks the western boundary of the Melbourne Trough in the Costerfield area.

The Au-Sb veins in the Costerfield district are hosted within the Silurian Costerfield Siltstone unit. Within the district, four north-northwest (“**NNW**”) - trending zones of mineralization have been identified. They are, from the west:

- 1) Antimony Creek Zone, approximately 6.5 km southwest of Costerfield, on the outer western flank of the Costerfield Dome;
- 2) Western Zone, approximately 1.5 km west of Costerfield, on the western flank of the Costerfield Dome;
- 3) Costerfield Zone, near the crest of the dome, centred on the Costerfield township and hosting the major producing mines and deposits; and
- 4) Robinsons – Browns (R-B) Zone, 2 km east of Costerfield.

Au-Sb veins of the Costerfield Property typically comprise quartz (laminated to brecciated) and sulphides. The dominant sulphide mineral is stibnite ( $Sb_2S_3$ ). Minor amounts of arsenopyrite and pyrite occur as well. Stibnite occurs as fine-grained, massive vein fill or as matrix support to vein-quartz breccias. Au is finely dispersed within the massive stibnite. As well, coarse Au is contained in the older quartz veins.

The Augusta Lodes occur within NNW-trending shear zones, which dip steeply to the west. They include E and W-Lodes, previously mined; N-Lode, currently being mined; and the smaller C-Lode. The E-Lode vein is approximately 0.4 m thick with a strike length of about 500 m. W-Lode averages approximately 0.4 m thick and has a strike length of approximately 230 m.

The Cuffley Lode lies approximately 200 m to the west of E-Lode. The lode dips at about  $85^\circ$  to the east and occurs over a strike length of approximately 750 m, with a down-dip extent of approximately 250 m. It has an average true thickness of approximately 0.53 m.

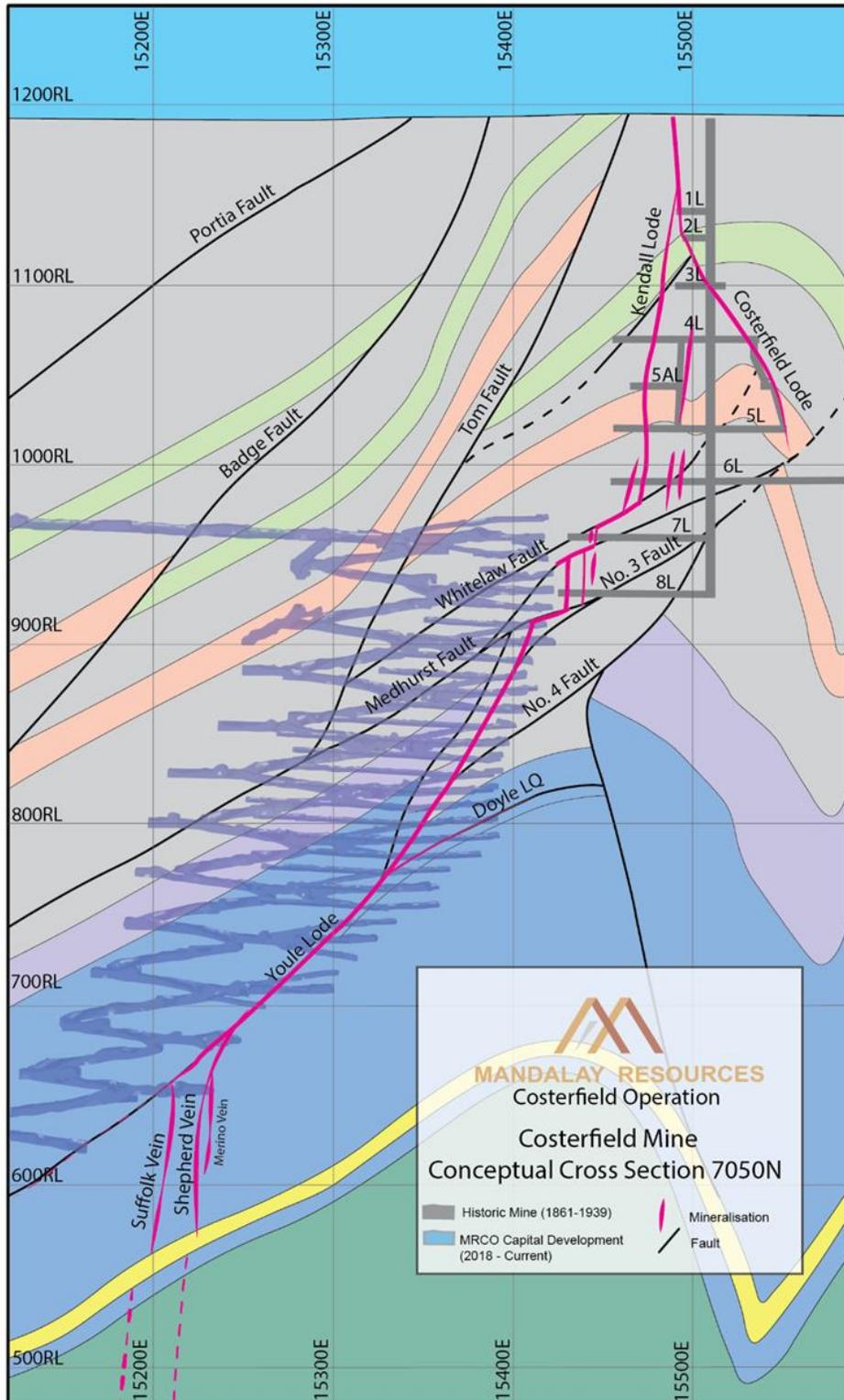
The Brunswick Lode lies approximately 600 m northwest of the northernmost point of the Cuffley Lode. The Lode is sub-vertical and occurs over a strike length of approximately 450 m, with a down-dip extent of approximately 200 m and an average true thickness of approximately 1.28 m. Exploration drilling has identified mineralization to the south and at depth below the known Brunswick Lode. Mineralization is broken into two zones of mineralization below the Brunswick Lode, called the P-K domain and Brunswick Deeps. The P-K domain is capped by the shallow west-dipping Penguin Fault and extends to the Kiwi Fault. The Brunswick Deeps zone is defined by the west-dipping Kiwi Fault and Adder Fault. Similar in nature to Cuffley and N-Lodes, the mineralization in the two domains is generally confined to sub-vertical quartz–stibnite veins.

The Youle Lode extends below the historical Costerfield, Minerva and Bombay group of mines located approximately 1.2 km northeast of Brunswick. Mineralization was identified in 2011 in drill hole MB012, which struck the down-dip continuation of the vertical Kendall Lode, offset westward over the west-dipping No. 3 thrust fault. In 2016, drill hole BC006W1 revealed the existence of a high-grade north–northwest striking, west-dipping Youle Lode structure. The Youle Lode dips at a shallower angle to the mineralized lodes in Augusta and Cuffley and has been identified as the down-dip continuation of the vertical Kendall Lode offset westward over the west-dipping No.4 thrust fault.

Youle has thus far demonstrated consistent structural and grade continuity over much of its extent. The Youle Lode has a strike length of 600 m (width of 150 m) and ranges in true thickness between 0.16 m and 1.37 m. Similar to the Augusta and Brunswick Lodes, mineralization is confined to quartz-stibnite veins.

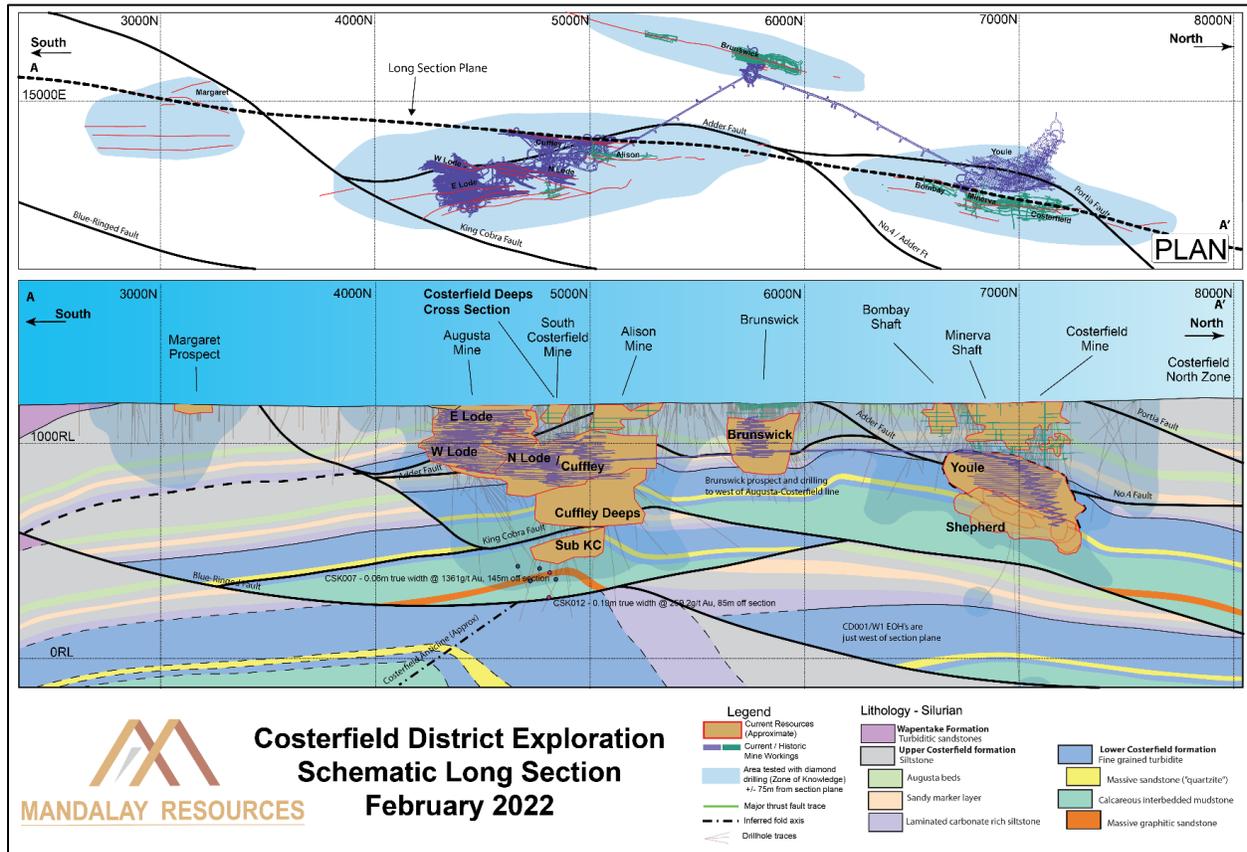
In September 2019, Mandalay Resources commenced development of the Youle Lode, which lies approximately 800 m north of the Brunswick Lode. Mine development of the Shepherd Zone commenced in October 2021, with 75 m of development completed over 2 levels to the report date.

**Cross section 7,030N through the Costerfield – Youle System**



The Shepherd Zone is a recently discovered swarm of mineralized veins proximal to and underlying the Youle Lode. Parallel, subvertical to east dipping quartz veins exhibit coarse gold with intense sulphide alteration surrounding the veins. The Shepherd Zone extends approximately 550 m in strike and 150 m vertically.

**Plan view and long section of Augusta, Cuffley, Brunswick, Youle and Shepherd Zone**



**History**

Exploration for Sb-Au deposits in the Costerfield area of Central Victoria started in the early 1850s and resulted in the discovery of the main Costerfield Reef in 1860. Around the same time, the Kelburn (Alison) Reef and Tait’s Reef were discovered at South Costerfield.

The Alison Mine ceased operations in 1923, while the South Costerfield/Tait’s Mine operated sporadically from the 1860s until 1978 and was the last shaft mine to operate on the field.

In 1970, Mid-East Minerals NL identified a large bedrock geochemistry anomaly south of Tait’s Shaft, which they called ‘Tait-Margaret’. This was subsequently drilled by the Mines Department in 1977 and mineralized veins were intersected.

In 2001, AGD drilled the ‘Tait-Margaret’ anomaly, which was re-named ‘Augusta’. AGD commenced underground mining of the Augusta resource (C, W and E-Lodes) in 2006. Brownfield exploration core drilling by Mandalay in 2011 located a faulted offset of the Alison Lode beneath the old Alison Mine and New Alison Mine workings. The deeper offset mineralization was renamed the Cuffley Lode. Subsequent

definition drilling throughout 2011 and 2012 resulted in an initial Inferred Resource for the Cuffley Lode being established in January 2012 and the Brunswick Lode in 2016.

Further infill and extension drilling continued to build on Inferred Resources and convert Inferred Resources to Indicated Resources in 2013-2016. Mining of the Cuffley Deposit began in 2014. Through 2014 and 2015 the focus of mining moved to N-Lode and Cuffley as extraction from E-Lode and W-Lode neared completion. 2017 ore extraction was predominantly from the N-Lode and Cuffley. In 2017, the Corporation began developing toward the Brunswick Lode, producing from Brunswick in late 2018. In 2018 successful exploration has led to the inclusion of the Youle Lode in mineral reserves and mining commenced on the Youle Lode in September 2019. In 2020, ore extraction was predominately on the Youle Lode with some ore mined on the Brunswick lode. There was an upsurge in production in 2020, with an increase of 137.5 kt in 2019 to 164.2 kt in 2020. The average gold grade also increased from 5.2 g/t Au in 2019 to 12.13 g/t Au in 2020.

In 2021, mining focus was dominantly on the Youle Lode, with minor material from Brunswick. The Shepherd Zone was discovered in early 2021 and first access achieved at the start of October the same year. Capital access reached the 729 RL, 450m below surface and the deepest development in the Costerfield operation. The Shepherd Zone was the dominant focus of exploration drilling, with the successful delineation and conversion to an indicated resource.

## **Exploration**

The Costerfield antimony-gold deposits were discovered in the 1860s. At that time, prospectors Coster, Field and Youle named and mined the Main Costerfield Reef. Further exploration found the Minerva and Bombay deposits between 1860 and 1883. From 1936, the south Costerfield deposit was defined and mined. This deposit is the northern extent of the Augusta deposits. Mid-East Minerals discovered the Brunswick line of Sb and Au mineralization in 1966. This deposit was further explored and mined by Forsyth Mineral Exploration & Costerfield Mining Pty Ltd. from 1973 to 1975. The Augusta mineralization was discovered by the Victoria Mines Department between 1975 and 1981. Continued exploration and resource definition drilling resulted in the completion of a successful feasibility study and development of the Augusta Lode underground mine by AGD in 2006.

Costerfield continued exploration in the mine area. Mandalay drilled the Augusta E and W-Lodes below the existing mine workings with a single rig from June to December 2010. Good results of that program led the mine to commit a 12-month, two-rig continuation of the Deeps drilling, in addition to inaugurating a single-rig, 8-month program to explore the district for new mineralized shoots. The 2011 drilling program yielded a number of intercepts in the Augusta E and W-Lodes and discovery of the Cuffley (formerly Alison Deeps) Lode. These results encouraged Mandalay to execute a three-rig program in 2012 that extended W, N, and Cuffley Lode resources.

In 2013, the drill program focused on infill drilling the central, high-grade part of the Cuffley Lode to convert some of the Inferred Mineral Resources to the Indicated category.

In 2014, Costerfield continued extending and infill drilling Cuffley Lode and tested several new targets along the principal strike of the district.

In 2015, exploration focused on extending the Cuffley and Augusta Resources both along strike and at depth. The expansion of the Cuffley Resource included the commencement of drilling in the Cuffley Deeps

and Sub King Cobra regions. Exploration drilling was also carried out in West Costerfield and the Margaret areas.

In 2016, exploration focused on drilling on Sub-King Cobra, Cuffley Deeps, Cuffley South/M and New Lode, Margaret and Brunswick Lodes with the purpose of extending and converting the existing Inferred Mineral Resource at Brunswick to an Indicated Resource, infill drilling in the Cuffley Deeps and extending the Cuffley Deeps West Lode.

In 2017, exploration was focused predominantly on near-mine and opportunistic targets close to existing infrastructure and capital development, with the primary focus to increase immediate mine life. A strong focus for the year was carrying out infill and extension of the Brunswick Resource and upgrading the Brunswick Mineral Resource with the aim to convert to Mineral Reserve, while also increasing in-mine Resources through Opportunistic Drilling Projects. A successful target testing campaign was undertaken, investigating the depth continuation of mineralization underneath the Costerfield mine.

In 2018, a strong focus was on replacing depletion, increasing reserve grade and extending the mine life. Exploration in 2018 resulted in the inclusion of the Youle Lode in Mineral Reserves. At Youle, 121.2k oz Au and 8,800 t Sb was added to the Mineral Reserves at grades of 14.1 g/t Au and 3.3% Sb.

Exploration also involved carrying out infill and extension drilling of the Brunswick and Youle resources while also increasing in-mine resources through opportunistic drilling projects. The Youle resource drilling has also informed the decision to mine the Youle Lode. Capital development commenced on the Youle Lode in 2018 from the Brunswick Lode workings. In August 2019, Mandalay commenced on-vein development of the Youle vein, which lies approximately 800 metres north of the Brunswick lode. With the ore body accessed, Mandalay initiated its first stope in the final weeks of 2019.

Exploration drilling during 2020 was predominantly focused on extending, defining and upgrading the Youle Mineral Resource. It involved both infill and extensional drilling designed to delineate the Youle Lode to the north, south, down-plunge, and above the Lode in areas of historical mining, adjacent to current and planned development. The focus of target generation was near the Youle Mineral Resource, in particular the northern extension and at depth. A series of regional diamond testing programs (Browns, Robinsons Damper Gully and True-Blue prospects) were designed and executed with the intent of testing the potential around Costerfield that could add to the life of the operation. In addition, Brunswick KR panel definition drilling was undertaken in an attempt to define mineralization in the Kiwi to Rooster panel below the existing Brunswick mine workings.

In total, 36.2 km of exploration drilling was completed during 2021 on the Costerfield Property. A majority (26.4 km) of this drilling focussed on the testing and conversion of mineralization at the Youle Lode and newly identified Shepherd Zone. The following was achieved:

- Down-plunge northern extension of the Youle Lode was realised, along with the identification of a new series of gold-rich veins intersecting the footwall of Youle early in the year (Shepherd Zone).
- The Shepherd Zone was then tested and expanded in all dimensions, resolving into several discrete veins. A considerable amount of material was brought into the Reserve, with scope to continue expansion drilling into 2022.
- A significant portion of the down-dip central portion of Youle with sparse drilling (the “Youle Bight”) was infilled and converted.

- A deep hole (Shepherd Deeps, CD003) was drilled from underground at Youle, aimed to locate a significant down-dip continuation of the Shepherd veining in the hangingwall of the King Cobra Fault as delineated by the earlier CD001 deep testing hole.
- An attempt to infill and upgrade the Cuffley Deeps mineralization panel was made.
- Surface drill testing of the Fox Fault and associated mineralization known from historic Cuffley Deeps drilling, immediately down-dip of Cuffley Deeps.
- Down-dip testing of the Brunswick system, between the Rooster and Adder Faults was initiated.
- Continued testing of several different targets at Browns Prospect. The deep Swallowtail thrust fault target was found to be mineralized in several drill holes, although narrow and of moderate grade. The Bogong vein testing was completed early in the year with mixed results and earned a follow-up program to extend the highest-grade portion identified in the previous program. The final drill hole of the Browns Bogong follow-up program resulted in the highest-grade intercept on the lode system to date.
- Deep drilling at the Margaret Prospect was undertaken to test a newly generated model of the area suggesting the zone of mineralization at depth had not been adequately tested with previous drilling.

## **Mineralization**

The economic mineralization at the Costerfield Property occurs in a north-south corridor that includes the Costerfield, Brunswick and Augusta Zones. The moderately west to steeply-dipping quartz-stibnite-gold lodes have thicknesses ranging from several millimetres to one metre, and extend over a strike of at least four kilometres. The lode system is centred in the core of the doubly plunging Costerfield Anticline and is hosted by Costerfield siltstones. Individual lodes can persist for up to 800 m along strike and 300 m down-dip.

The mineralogy of the vein contents and mineral proportions differ from vein to vein throughout the Augusta, Cuffley, Brunswick, Youle and Shepherd Zone. However, the texture and chronological order of each vein/mineral generation remains consistent across all lodes.

The overall paragenetic sequence is ordered as follows:

- Laminated quartz;
- Fibrous carbonate (siderite and ankerite);
- Crystalline quartz (rhombohedral quartz);
- Stibnite;
- Opaline quartz; and
- Milky quartz.

Acicular stibnite and botryoidal calcite are not generally associated with the main quartz-stibnite vein structures and are therefore regarded as a post mineralization mineralogical occurrence, most likely associated with meteoric events.

The Costerfield Property lodes are typically anastomosing, en-echelon style, narrow-vein systems, which dip from 25° to 70° west to 70° to 90° east. Mineralized shoots are observed to plunge to the north, when structurally controlled, and south when bedding controlled.

The mineralization occurs as single lodes and vein stockworks associated with brittle fault zones. These bedding and cleavage parallel faults, that influence the lode structures, range from sharp breaks of less than 1 mm to dilated shears up 3 m wide that locally contain fault gouge, quartz, carbonate, and stibnite.

Cross faults, such as those seen offsetting other Costerfield lodes, have been identified in both open-pit and underground workings.

The mineralized lodes vary from massive stibnite with microscopic gold to quartz-stibnite, with minor visible gold, pyrite, and arsenopyrite. The stibnite is clearly seen to replace quartz, and gold can also be hosted by quartz.

### **Drilling Procedure**

The Augusta Deposit has been subject to ongoing development and diamond drilling since commencement of mining operations in 2006. The current Mineral Resource estimates are completed using all historic drilling and then depleted for areas already mined.

Between 2006 and 2011, several drilling companies were contracted to provide both surface and underground drilling services at Costerfield. In order to ensure consistent results and quality of drilling, Starwest Drilling Pty Ltd was made the preferred drilling services supplier in 2011 and has been operating on site since.

Prior to 2011, various sized drill holes and drilling methods were used, including HQ2, HQ3, NQ2, LTK60, LTK48 diamond core sizes, and 5"1/8' to 5"5/8' RC hammers. Details of these drill holes were not always recorded, however, because the majority of this drilling is in areas that are already depleted by mining, the risk associated with this drilling is considered to be low.

Since 2011, underground diamond drilling has been completed predominantly using an LM90 drill rig, drilling HQ2 or NQ2 sized diamond drill holes. Underground Grade control drilling (UGGC) has been completed by either a kempe or Diamec drill rig producing LTK48-sized diamond core, with data from these drill holes providing both structural and detailed grade information.

In 2019, a LM30 drill rig, drilling BQ™TK, was utilised underground for additional UGGC drilling. Surface drilling was undertaken using HQ2 and NQ2 sized core barrels, with HQ3 used in zones of poor ground conditions or for noise reduction reasons.

### **Drilling at Costerfield**

<b>Year</b>	<b>Diamond Core (m)</b>	<b>Percussion/Auger (m)</b>
2009	458.9	547.0
2010	4,032.0	Nil
2011	13,515.0	Nil

2012	18,581.4	7,295.6
2013	24,329.0	3,838.0
2014	20,817.0	3,906.0
2015	18,439.0	2,732.0
2016	32,995.0	Nil
2017	27,827.0	Nil
2018	34,656.0	Nil
2019	9,556.0	Nil
2020	29,080.0	Nil
2021	36,255.0	Nil
<b>TOTAL</b>	<b>270,541.3</b>	<b>18,318.0</b>

For more information on drilling, reference is made to section 10 of the Costerfield Technical Report.

### Sampling and Analysis

Samples were routinely collected and analysed from diamond drill core and channel samples from the ore development drive walls and faces.

### Diamond Core Sampling

The mineralization style at the Costerfield Property is now well-understood and the geological controls on mineralization well-established. Sampling intervals were based on geological characteristics and marked on the diamond drill core by Mandalay Resources geologists. Mineralization was always clearly visible and therefore, systematic sampling of complete drill holes was not required.

The general rules that were followed in the selection of sample intervals were:

- All stibnite-bearing veins were sampled;
- Intersections of stockwork veins, laminated quartz veins or massive quartz veins were routinely sampled;
- A waste sample, ranging in size from 0.3 m to 1 m, was collected from either side of the mineralized vein, in order to determine the grade of the waste material immediately adjacent to the mineralization;
- Siltstone was sampled where disseminated arsenopyrite was observed; and
- Puggy fault zones were sampled at the discretion of the geologist.

Diamond core sampling intervals were standardised wherever possible and ranged from 5 cm to 1 m in length. The average sample length for drill core samples within the 2021 Youle and Shepherd drilling program was approximately 0.35 m.

Where there was a definitive lithological contact which marked the boundary of a sample, the sample was cut along the contact. If by doing this, the sample was less than 5 cm in length, the boundary of the sample was taken at a perpendicular distance from the centre of the sample, which achieved the 5 cm minimum sample length requirement.

A Mandalay exploration field technician undertook the sampling of the diamond drill core. To obtain consistent samples for analysis and retention, the diamond drill core was cut perpendicular to the core axis at the downhole sampling points and then cut in half lengthways with an Almonte automated diamond saw.

Drill holes that were designed for metallurgical analysis were sampled in intervals up to 2 m in length. In response to the visible gold in Shepherd, whole core samples were taken through the Shepherd Zone.

### **Underground Channel Wall and Face Sampling**

Ore drive face channel samples (face samples) were taken by Mandalay geologists at a frequency of between 1.8 m and 5 m along the drive. The data was collected on portable handheld computers (iPad) utilising the digital capture software RockMapper™. The following method was used:

- The face was marked up by the sampler to show the contacts of the mineralization, the bedding angle, and any geological structures that may offset the lode,
- Sample locations were determined so that the sample was collected perpendicular to the dip of the mineralization, from the FW to the HW,
- The face size and sample lengths were measured,
- Each sample was collected as a channel sample using a geological hammer or pneumatic chisel, and placed into pre-numbered sample bag with a unique ID,
- Care was taken to obtain a sample considered representative by the sampling geologist,
- Where there were two or more mineralized structures in the face, samples were also taken of the intervening waste,
- Sample lengths ranged from 5 cm to 1.5 m across the mineralization, and typically weighed between 1 kg and 3 kg,
- The face was labelled with the heading, dated and photographed into RockMapper™,
- The area of lode and waste was drawn onto the photo in RockMapper™,
- Key features were sketched digitally directly onto the RockMapper™ software and sampling and structural data recorded,
- On completion, data from the RockMapper™ files were automatically uploaded to the drillhole database,
- A record of the face photos, annotations, and sampling files was saved on the Mandalay Resources server,
- The location and orientation of the face was derived using the distance from survey marks and the survey pickup of the drive using Surpac™ and RockMapper™ to produce a georeferenced face photo.

- The coordinates, orientation and dip of the channel were derived from the georeferenced face photo using RockMapper™ with the resulting data stored in the drillhole database.
- The face photo and channel data were validated against the survey pickup.
- A digital mesh derived from photogrammetry by RockMapper™ had the drive photo overlaid and were then displayed in Leapfrog for validation against the channel sample.

Wall samples are rarely taken at Costerfield Property, where they are taken, they follow the same process as above.

### **Data Management**

In November 2016, Mandalay purchased the Geoscientific Information Management software acQuire™, due to the high rate of data collection occurring at Costerfield.

The installation of acQuire™ has improved the overall efficiency of the data collection and handling systems, and the improved data integrity by minimising the likelihood of human error.

### **Data Verification**

In fulfilment of the NI43-101 requirements, Mining Plus Principal Geologist and Qualified Person, Richard Buerger completed a personal inspection of the Costerfield Property on 23 September 2021. The Costerfield Property inspection focused on a review of the geological setting and mineralization style, as well as the processes and procedures in place to ensure that they are at an acceptable standard for the mineralization style, with the resultant information being suitable for use in the upcoming Mineral Resource estimation work.

In general, the Mining Plus QP considers that the qualitative and quantitative geological data used to inform the Costerfield Property Mineral Resource estimates have been collected, validated and stored in line with industry best practice as defined in the CIM Mineral Exploration Best Practice Guidelines (CIM, 2018) and the CIM Estimation of Mineral Resource and Mineral Reserves Best Practice Guidelines (CIM, 2019). Although some very minor issues have been identified, the QP considers that the data are suitable for use in the estimation of Mineral Resources.

### **Sample Security and Transport**

In 2021, Brunswick and Augusta sites were securely gated, with video surveillance, and time stamped swipe card access. This included areas used for storage and collection of drill and face samples.

All sample bags that contained sampled material were placed in heavy duty plastic bags, along with the sample submission sheet. The plastic bags were sealed with a metal twisting wire or heavy-duty plastic cable ties. This process was applied to both underground channel samples and diamond drill core samples.

Samples were delivered by a private contractor or directly by Mandalay Resources staff on a daily basis to On Site in Bendigo, where they were accepted by On Site laboratory personnel. A delivery consignment note system was enacted at the end of Q3 2021 which includes signed confirmation on pickup and on delivery of the samples to the laboratory.

Returned sample pulps from the On Site laboratory for 2021 remained in a secure On Site warehouse with a scheduled return to Mandalay Resources for storage in secured and monitored shipping containers, wrapped in plastic.

### Assaying Laboratories

Routine assaying of the diamond drill core and face samples was completed by On Site in Bendigo, which is independent of Mandalay Resources and holds a current ISO/IEC 17025 accreditation.

After Mandalay Resources dispatched the samples to On Site, the assaying laboratory’s personnel undertook sample preparation and chemical analysis. Results were returned to Mandalay Resources staff, who validated and loaded the assay data into the relevant databases.

ALS Global Brisbane and Bureau Veritas Perth have been used to verify the accuracy of the On-Site assays by completing umpire check analyses of selected samples.

### Assay Quality

In total, four project specific certified reference materials (“**CRM**”) produced from Costerfield ore and two commercial CRMs were routinely inserted into sample lots during 2020 to measure the assay quality and accuracy.

The four project specific CRMs, MR-C2, MR-F2, MR11-01 and GSB-02, have been prepared from ore grade material collected from the Augusta and Brunswick Deposits. The homogenisation, analysis and certification of these CRMs was performed and/or coordinated by Geostats Pty Ltd (“**Geostats**”).

Mandalay also used three commercially available CRMs sourced from Geostats and ORE Research and Exploration Pty Ltd (“**OREAS**”).

### List of Certified Reference Material and Methods

CRM Name	Material Source	Certifying Lab	Certified Methods	
			Method 1	Method 2
MR-C2	Costerfield-Ore	Geostats	4AD/ICP	Fusion/ICP
MR-F2	Costerfield-Ore	Geostats	4AD/ICP	Fusion/ICP
GSB-02	Commercial	Geostats	Fusion/ICP	Fusion/XRF
MR11-01	Commercial	Geostats	4AD/ICP	Fusion/ICP
OREAS247	Commercial	OREAS	4AD/ICP	NA
OREAS239	Commercial	OREAS	Aqua Regia/ICP	NA

At least one standard was submitted with each batch of diamond core samples, typically at a rate of 1 standard per 25 samples. CRMs were submitted at a similar rate in the underground face/wall channel sample batches, which typically included two different CRMs per batch.

An assay result for a CRM was considered acceptable when the returned assay fell within three standard deviations (SD) of the CRM certification grade. Outside this range, the CRM assay was considered to have failed and all significant mineralized samples within the batch were re-assayed, where significant grades

were defined as mineralized samples that may have a material-impact in future resource estimates. All actions or outcomes were recorded as comments in the QAQC register.

### **Mineral Resources and Reserves**

Gold and antimony grades, and lode thicknesses were estimated using the two-dimensional (2D) accumulation estimation method for all lodes. This method has been discussed in Bertoli et. Al., 2003, and is considered by the QP to be more suitable for modelling narrow vein systems than conventional three-dimensional (3D) block grade estimation due to its ability to more accurately model thin tabular geometry. The 2D accumulation method has remained the preferred Mineral Resource estimation methodology for the Costerfield Property lodes since 2008 (AMC, 2008), and is often called a seam-model estimation method.

The 2D accumulation method requires that gold and antimony grades are multiplied by the true thickness of the intersection in order to generate variables referred to as accumulations or accumulated grades, measured in gram/metres or percent/metres. This method assigns weights to composites of different lengths during estimation. Estimated gold and antimony block grades are then back calculated from the estimated accumulated block grade by dividing by the estimated true vein thickness.

Only those lode models that feature new drilling, face sampling and assay data and/or revised geological interpretation have been re-estimated for the production year 2021. The focus of mining, exploration and the estimations were Youle (500 series models) and Shepherd (600 series models) with additional drill information and re-estimation on the KR Model (310) at Brunswick.

The Mineral Resources are reported at a cut-off grade of 3.0 g/t gold equivalent (“**AuEq**”), after diluting to a minimum mining width of 1.2 m.

The gold equivalence formula used is calculated using recoveries achieved at the Costerfield Property Brunswick Processing Plant during 2021, and is as follows:

$$\text{AuEq} = \text{Au (g/t)} + 1.58 \times \text{Sb (\%)}$$

Where the AuEq factor of 1.58 is calculated:

- at a gold price of \$1,700/oz;
- at an antimony price of \$8,500/t; and
- 2021 total year metal recoveries of 93% for Au and 95% for Sb.

Only those lode models that feature new drilling, face sampling and assay data and/or revised geological interpretation have been re-estimated for the production year 2021.

A review and update of E Lode, N Lode, and W Lode was completed as part of this Mineral Resource update to incorporate technique improvements and additional depletion. This has led to a net decrease in the resource for both E Lode, W Lode, and N Lode. The majority of the increase in Measured and Indicated Resource was from Youle where extensive on vein development and diamond drilling was undertaken through the year.

The Mineral Resources are stated here for the Augusta, Cuffley, Brunswick and Youle Deposits with an effective date of 31 December 2021. This date coincides with the following:

- Depletion due to mining up to 31 December 2021.
- Survey of stockpiled ore that was mined and awaiting processing as of 31 December 2021.

All relevant diamond drill hole and underground face samples in the Costerfield Property, available as of 6 December 2021 for the Augusta, Cuffley, Brunswick, and Youle Deposits, and as of 17 December 2021 for the Shepherd Deposit, were used to inform the Mineral Resource Estimate.

Above a cut-off grade of 3 g/t AuEq, after applying a minimum mining width of 1.2 m, the in-situ Augusta, Cuffley, Brunswick, Youle and Shepherd Deposits consist of a combined Measured and Indicated Mineral Resource of 1,387,000 tonnes at 10.6 g/t Au and 2.8% Sb, and an Inferred Mineral Resource of 532,000 tonnes at 6.7 g/t Au and 1.3% Sb.

Stockpiles retained at the Brunswick Processing Plant represent a Measured Mineral Resource of 41,000 tonnes at 10.1 g/t Au, and 3.3% Sb. Stockpile tonnage balances were calculated using drone acquired survey pickups, bulk density factors, and grades from production movements. For the Mineral Resource Estimate, only surface stockpiles with accurate surveyed volumes were included.

The 2021 Mineral Resource is detailed in table below:

**Mineral Resources at Costerfield, Inclusive of Mineral Reserves, as of December 31, 2021**

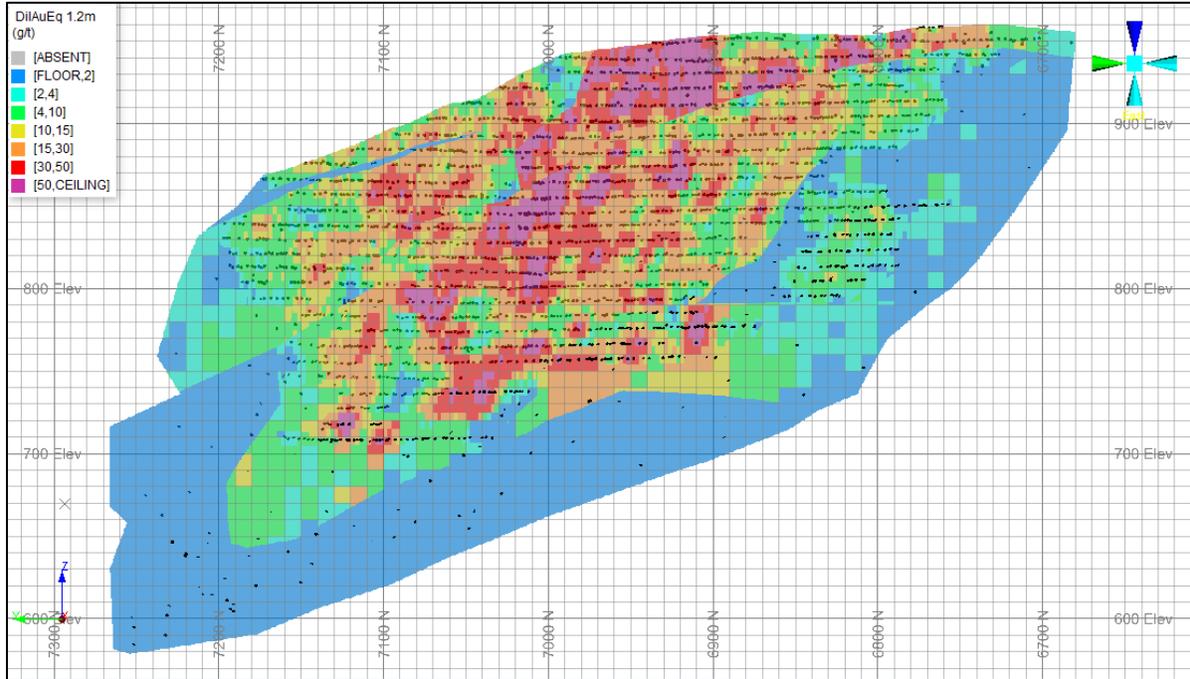
Category	Inventory (t)	Gold Grade (g/t)	Antimony Grade (%)	Contained Gold (koz)	Contained Antimony (kt)
<b>Measured (Underground)</b>	408,000	15.4	5.0	202	20.4
<b>Measured (Stockpile)</b>	41,000	10.1	3.3	14	1.4
<b>Indicated</b>	938,000	8.6	1.9	259	17.5
<b>Measured + Indicated</b>	<b>1,387,000</b>	<b>10.6</b>	<b>2.8</b>	<b>474</b>	<b>39.3</b>
<b>Inferred</b>	532,000	6.7	1.3	114	6.7

1. Mineral Resources estimated as of December 31, 2021 with depletion through to this date.
2. Mineral Resources stated according to CIM guidelines and include Mineral Reserves.
3. Tonnes are rounded to the nearest thousand; contained gold (oz) is rounded to the nearest thousand; contained antimony (t) is rounded to nearest hundred.
4. Totals may appear different from the sum of their components due to rounding.
5. 3.0 g/t AuEq cut-off grade over a minimum mining width of 1.2 m is applied where AuEq is calculated using the formula: AuEq = Au g/t + 1.58 \* Sb %
6. The AuEq factor of 1.58 is calculated at a gold price of \$1,700/oz, an antimony price of \$8,500/t, and 2021 total year metal recoveries of 93% for Au and 95% for Sb.
7. Veins were diluted to a minimum mining width of 1.2m before applying the cut-off grade and peripheral mineralization far from current development was excluded to comply with the Reasonable Prospects for Eventual Economic Extraction (RPEEE) criteria.
8. The Stockpile Mineral Resource is estimated based upon surveyed volumes supplemented by production data.
9. Geological modelling, sample compositing and Mineral Resource Estimation for updated models was performed by Joshua Greene, MAusIMM, a full-time employee of Mandalay Resources.
10. The Mineral Resource Estimate was independently reviewed and verified by Dr Andrew Fowler MAusIMM CP (Geo), a full time employee of Mining Plus. Dr Fowler fulfils the requirements to "e a "Qualified Person" for the purposes of NI 43-101, and is the Qualified Person under NI 43-101 for the Mineral Resource Estimate.

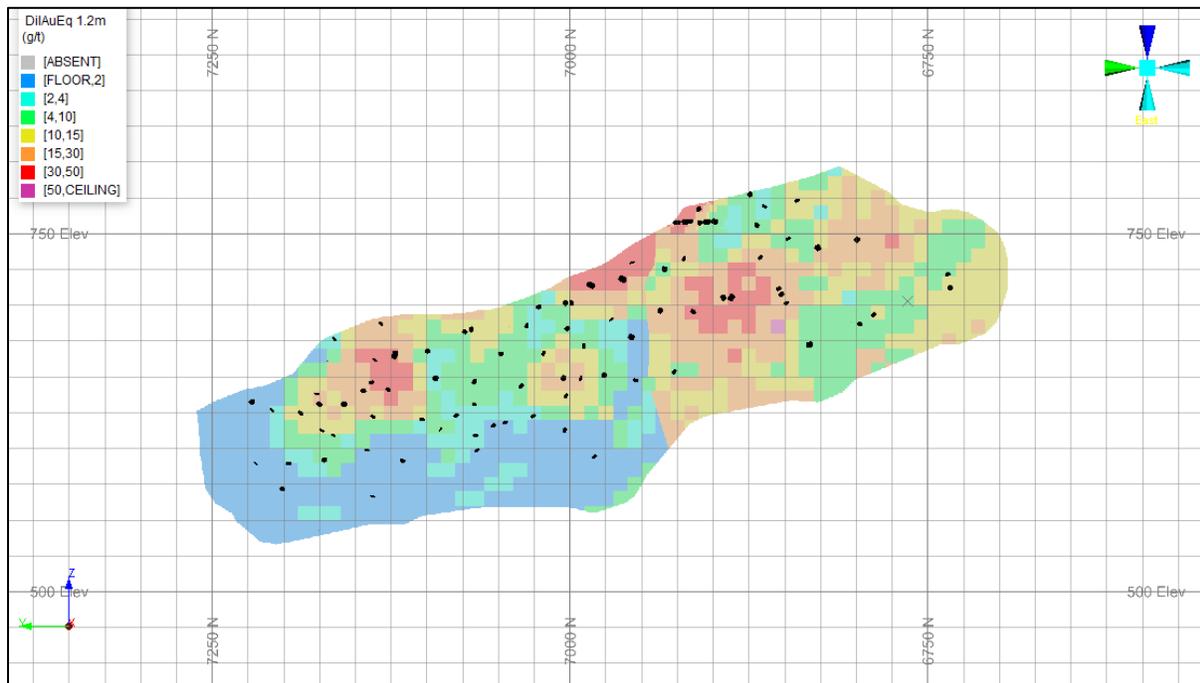
The reasonable prospects for eventual economic extraction ("RPEEE") have been satisfied by applying a minimum mining width of 1.2 m and ensuring that isolated blocks above cut-off grade, which are unlikely

to ever be mined due to distance from the main body of mineralization, were excluded from the Mineral Resource.

**Youle 500 Block Model showing model grade in gold equivalent g/t diluted to resource width of 1.2 m**



**Shepherd 600 Block Model showing model grade in gold equivalent g/t diluted to resource width of 1.2 m**



A mine plan was prepared from the 2021 Mineral Resource, based only on Measured and Indicated Resource blocks, mined primarily using a long-hole stoping mining method with cemented rock fill (“CRF”). The minimum stoping width of 1.5 m was used, with planned and unplanned dilution at zero grade for both Au and Sb.

A AuEq grade for Mineral Reserve has been calculated using commodity prices of USD \$1,500/oz Au and USD \$7,500/t Sb. AuEq grade is calculated using the formula:

$$AuEq = Au + (Sb \times 1.06)$$

Where Sb is in % and Au is in grams/tonne

The cut-off grade of 3.8 g/t AuEq was determined from the Costerfield Property 2021 production costs.

The financial viability of Proven and Probable Mineral Reserve was demonstrated at metal prices of USD \$1,500/oz Au and USD \$7,500/t Sb.

The 2021 Mineral Reserve is detailed in Table below.

#### Mineral Reserves at Costerfield, as at December 31, 2021

Category	Tonnes (kt)	Gold Grade (g/t)	Antimony Grade (%)	Contained Gold (koz)	Contained Antimony (kt)
<b>Proven Underground</b>	267	15.9	4.4	136	11.7
<b>Proven Stockpile</b>	41	10.1	3.3	14	1.4
<b>Probable</b>	460	10.9	1.4	162	6.5
<b>Proven + Probable</b>	<b>769</b>	<b>12.6</b>	<b>2.5</b>	<b>312</b>	<b>19.6</b>

1. Mineral Reserve estimated as of December 31, 2021 and depleted for production through to December 31, 2021.
2. Tonnes are rounded to the nearest thousand; contained gold (oz) Rounded to the nearest thousand and contained antimony (t) rounded to nearest hundred.
3. Totals may appear different from the sum of their components due to rounding.
4. Lodes have been diluted to a minimum mining width of 1.5 m for stoping and 1.8 m for ore development.
5. A 3.8 g/t Au Equivalent (AuEq) cut-off grade has been applied.
6. Commodity prices applied are; gold price of USD \$1,500/oz, antimony price of USD \$7,500/t and exchange rate AUD: USD of 0.71.
7. The Au Equivalent value (AuEq) is calculated using the formula:  $AuEq = Au \text{ g/t} + 1.06 * Sb \%$ .
8. The Mineral Reserve is a subset, a Measured and Indicated only Schedule, of a Life of Mine Plan that includes mining of Measured, Indicated and Inferred Resources.
9. The Mineral Reserve Estimate was prepared by Dylan Goldhahn, MAusIMM under the direction of Daniel Fitzpatrick, MAusIMM, who are both full-time employees of Mandalay Resources. The Mineral Reserve estimate was independently verified by Aaron Spong FAusIMM CP (Min) who is a full-time employee of Mining Plus. Mr Spong fulfils the requirements to be a Qualified Person for the purposes of NI 43-101 and is the Qualified Person under NI 43-101 for the Mineral Reserve.

There is a net increase of 57 koz of gold in the Proven and Probable Reserve for 2021, relative to 2020, this consists of the addition of 113 koz of gold added by Resource conversion and addition of resources to the Youle and Shepherd ore bodies. A total of 55 koz of gold has been depleted from the 2020 Reserve through mining production in 2021.

The net decrease of 2,200 tonnes of antimony in the Proven and Probable Reserve for 2021 consists of 3,600 tonnes of antimony added by Resource conversion, and additional resources to Youle and Shepherd ore bodies. A total of 5,800 tonnes of antimony has been depleted from the 2020 Reserve through mining production in 2021.

For more information in respect of the key assumptions, parameters and methods used to estimate the Mineral Resources and Mineral Reserves presented above, reference is made to sections 14 and 15 of the Costerfield Technical Report.

### **Mining Operations**

The Augusta Mine has been operational since 2006 and is serviced by a decline haulage system developed from a portal within a box-cut. The Augusta decline dimensions are primarily 4.8 m high by 4.5 m wide at a gradient of 1:7 down. The majority of the decline development has been completed with a twin-boom jumbo; however, development of the decline from the portal to 2 Level was completed with a road-header, this section of decline has dimensions of 4.0 m high by 4.0 m wide. The Augusta decline provides primary access for personnel, equipment and materials to the underground workings.

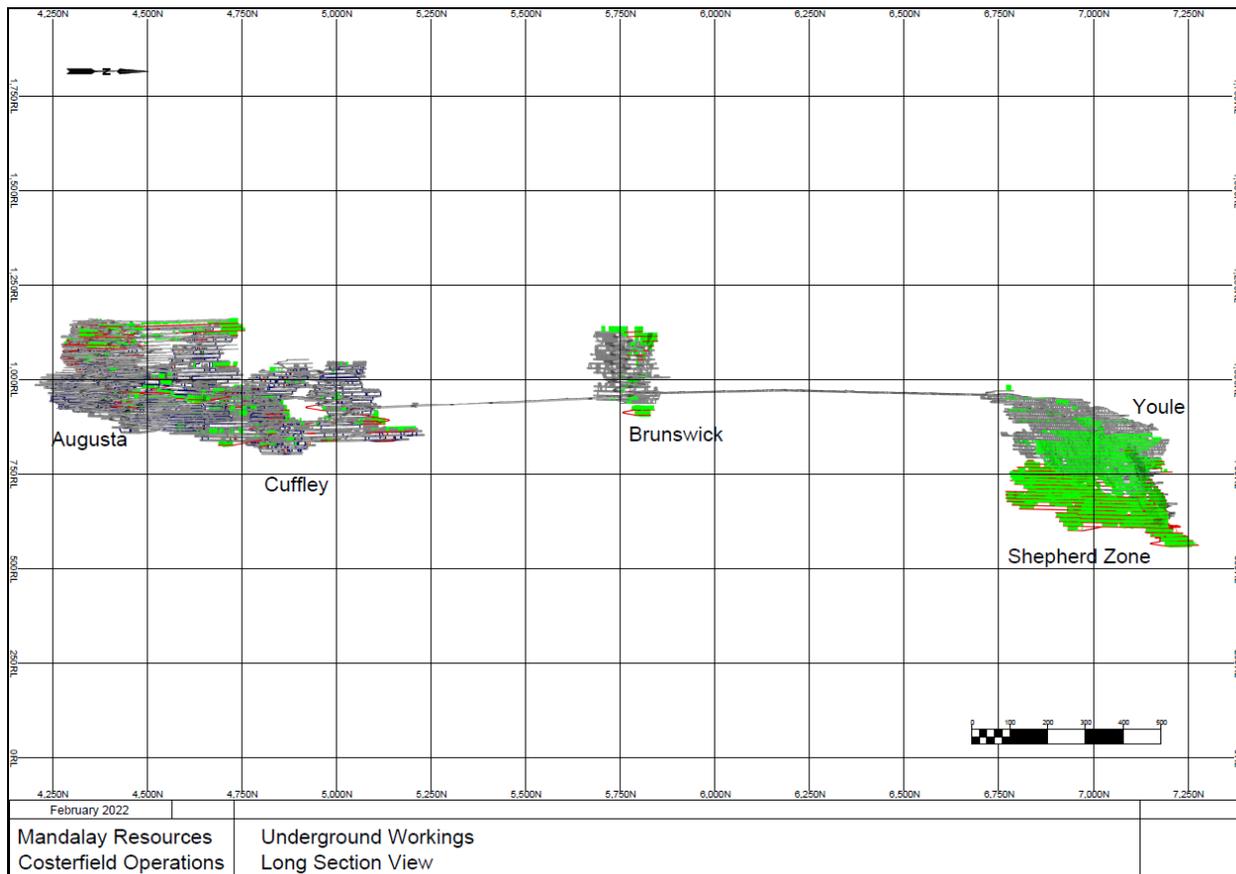
The Brunswick Incline development was mined to breakthrough into the Brunswick Open Pit, establishing the Brunswick Portal during the second half of 2020. The Brunswick Incline has the dimensions 4.8 m high by 4.5 m wide at a gradient of 1:7 up and was mined with a twin-boom jumbo. The Brunswick Open Pit was prepared for the portal breakthrough with a pushback completed by a combination of road-header and drill and blast supported by a twin-boom jumbo. The first 20 m advance of Brunswick Portal was completed by a road-header with the dimensions 5.0 m high by 5.0 m wide at a gradient of 1:25 up. The establishment of the Brunswick Portal provides an additional means of egress from the mine and is the primary material haulage route from underground to the Brunswick Mill for ore processing and waste storage.

Mill feed is produced from three different mining methods: full-face jumbo development, long-hole CRF (Cemented Rockfill) stoping and half upper stoping. All mined material is hauled from the underground working areas to the Brunswick ROM via the Brunswick Incline and Portal. Waste material produced from mining is stored underground for use as stope backfill.

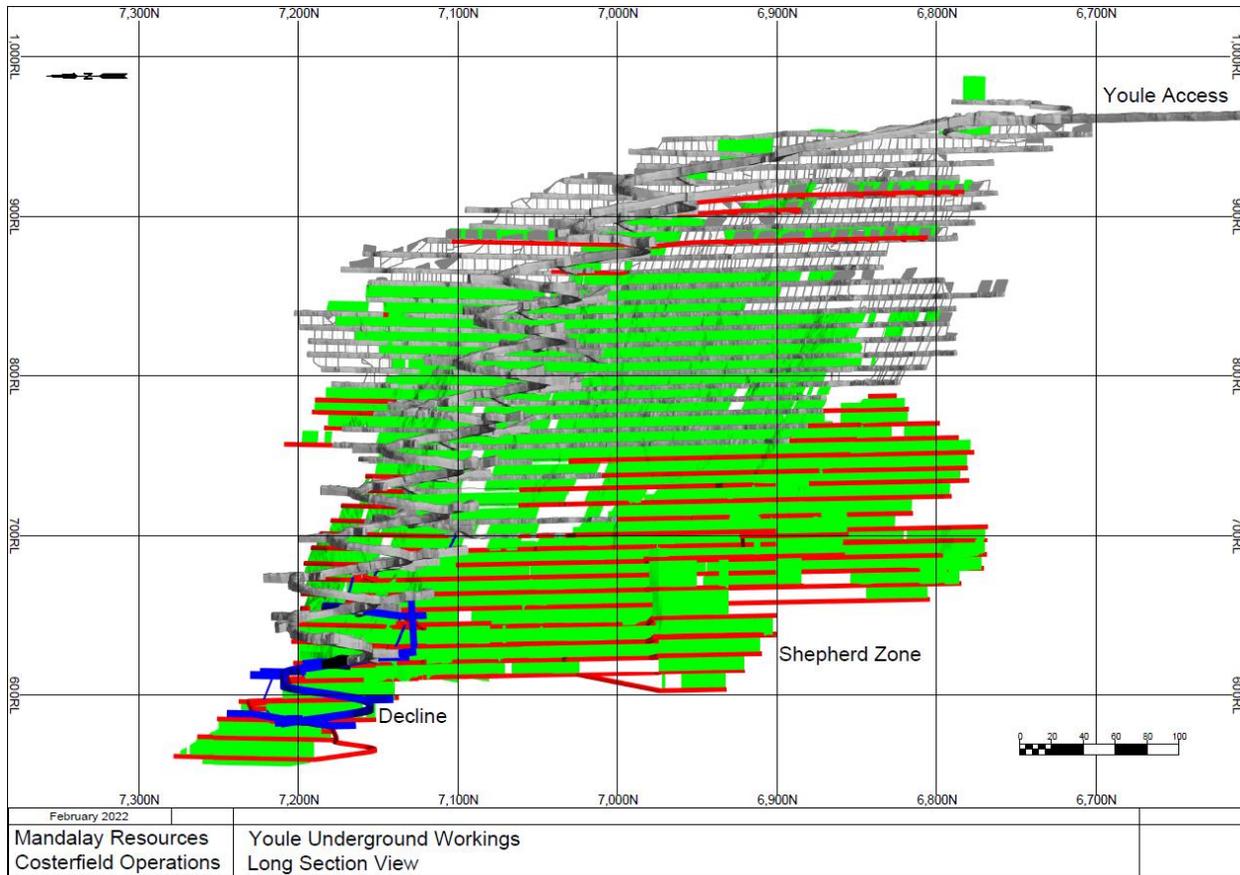
The Cuffley Decline extends as a branch off the Augusta Decline at 1028 mRL and continues down to approximately 895 mRL. At the 935 mRL, the Cuffley Incline extends off the Cuffley Decline and accesses mineral resources from the 945 mRL to the 1050 mRL. This incline was used to extract N and NV lodes. Mining in the Cuffley incline is complete and it is now the location of the High Explosive (HE) Magazine. A second decline within Cuffley, known as the 4800 Decline, accesses the southern part of the Cuffley Lode which is positioned south of the East Fault. This decline commences at the 960 mRL and extends to 814 mRL. Mineral Reserves in the 4800 Decline consist of remnant pillars from past stoping and long-hole HUS and CRF stopes.

The Mineral Reserve LoM Plan, based on the December 2021 Mineral Resource model, predominantly includes mining of the Brunswick, Youle and Shepherd Deposits. The Brunswick access, 5.5 m high by 4.5 m wide development, starts from the 925 mRL on the Cuffley Decline and accesses the Brunswick Deposit at 955 mRL. The Brunswick Incline continues from 955 mRL up to the Brunswick Portal. The Youle access, 5.5 m high by 5.5 m wide, extends from the Brunswick Incline at 961 mRL and accesses the Youle Deposit at 957 mRL. From this level, the Youle Decline, 4.8 m high and 4.5 m wide, continues down to 617 mRL, accessing both the Youle and Shepherd Deposits, and is planned to extend down to 580 mRL.

A schematic of the Augusta, Cuffley, Brunswick and Youle underground workings is presented in the figure below:



**Long-section of proposed Youle mine design on Youle and Shepherd lodes** (Blue – planned capital development, red-planned operating development, green – planned Youle stoping, yellow – planned Shepherd stoping and grey – as built).



The Brunswick access, 5.5 m high by 4.5 m wide development, starts from the 925 mRL on the Cuffley Decline and accesses the Brunswick deposit at 955 mRL. The Brunswick Incline continues from 955 mRL up to the Brunswick Portal. The Youle access, 5.5 m high by 5.5 m wide, extends from the Brunswick Incline at 961 mRL and accesses the Youle deposit at 957 mRL. From this level, the Youle Decline, 4.8 m high and 4.5 m wide, continues down to 722 mRL and is planned to extend down to 647 mRL.

#### *Metallurgical Processing and Recoverability*

The Brunswick Processing Plant treats an antimony and gold rich sulphide ore through a conventional comminution and flotation style concentrator. It has been operating since 2007, and by Mandalay Resources since late 2009. Since then, several plant upgrades have resulted in production capacity increases to the current rate of approximately 13,000 t/month over the 2015 to 2021 calendar years. The concentrator operates 24 hours per day, 7 days per week, while crushing operates under noise restriction guidelines during extended dayshift hours.

The surface crushing and screening facility processes underground feed down to a particle size range suitable for milling through a two-stage, closed circuit ball milling circuit. Centrifugal style gravity concentrators are used on the combined primary milling product and secondary mill discharge to recover

a gold-rich gravity concentrate. This is upgraded further over a shaking table and sold as a separate gold concentrate product which is transported to local refineries.

Secondary milled products are classified according to size and processed through a simple flotation circuit comprising of StackCell® roughers, two additional rougher tank cells followed by the original flotation train incorporating rougher, scavenger and single stage cleaning. Two CavTube® flotation columns were added to the tailings end of the existing flotation circuit and were successfully commissioned in April 2021.

The flotation concentrate is dewatered through thickeners and filtration to produce a final antimony-gold concentrate product which is bagged, packed into shipping containers and shipped to customers overseas. The flotation tailings are thickened before being pumped to one of two tailings storage facilities, one located to the east and one to the north of the Brunswick Processing Plant.

Simple head grade versus recovery relationships have been developed for both antimony and gold using plant operating data.

The gold head grade versus tailings grade recovery relationship has used the 2021 daily production data, although this can generate some daily fluctuations associated with gravity gold content. The data set used is between April 2021 and December 2021. Previously a more expansive data set has been used, as far back as 2015, however with the changes made to the flotation circuit completed in April improving the plant performance and enhanced gold recovery, particularly the StackCell® and CavTube® flotation cells, and the treatment of Youle-only feed, it is justified to remove the older Brunswick ore data from 2015 to 2020 that had previously been included.

Similarly, the antimony recovery algorithm has been updated due to the circuit modifications and processing of Youle ores only. The daily operational data for January to December 2021 has been used. The difference between the full year dataset and April to December 2021 is arbitrary.

Forecast antimony and gold recoveries used for LoM planning, budgeting and economic modelling are based on these recovery relationships. This is the best method of forecasting recovery when processing a similar feed blend. These algorithms are updated annually. Based on these algorithms, the forecast average LoM 2022 recoveries are 94.1% and 92.7% for antimony and gold respectively. These are not dissimilar to the 2021 end of year (“EOY”) reconciled plant recoveries of 94.6% Sb and 93.12% Au.

The recovery relationships are well understood and are appropriate for metallurgical recovery estimation purposes. They are supported by historic concentrator recoveries at similar feed grades and compare well to previous grade/recovery relationships on Youle feed and other similar ores. Further recovery confidence is provided by the consistent recoveries of both antimony and gold achieved over a number of years across a range of feed grades.

### *Markets*

Costerfield is a combined Au and Sb mine; the business is sensitive to the price of both metals. Sb is not traded on international metal exchanges, with prices being agreed upon between producer and consumer. Pricing is dependent on the quality and form of Sb product sold.

Sb is primarily used as a flame retardant and in the production of lead (“Pb”) acid batteries. These markets together account for nearly 90% of antimony consumption worldwide. China is the world’s largest producer of antimony, accounting for approximately 75-80% of world production.

The Sb-Au concentrate produced from the Costerfield mine is sold directly to smelters capable of recovering both the Au and Sb from the concentrates, such that Mandalay receives payment based on the concentration of both metals in the concentrate. The terms and conditions of commercial sale are not disclosed pursuant to confidentiality requirements. The marketing of the concentrate is conducted through a third party.

#### *Contracts*

Costerfield is employing a contractor to perform capital development to the Youle Lode.

#### *Environmental*

The Costerfield Operation is in compliance with all environmental rules and regulations. Other than the rehabilitation bond, the project is not subject to any other environmental liabilities. The total bond of AUD\$4.08 million has been fully funded.

#### *Taxes*

The Australian government taxes on Mandalay Resources Costerfield Operations include:

A Goods and Services Tax (“GST”) at a rate of 10%, as levied by the federal government on purchases by individuals and corporations on non-exempt goods and services. Businesses can claim back GST on most business inputs. It is assumed that all of the product sales will be to overseas customers, therefore no GST is applicable.

Company tax, payable at a rate of 30%, which is calculated on the profits generated by the operation.

As at the end of December 2021, Mandalay Resources Costerfield Operations had zero carried forward tax losses.

#### *Capital Costs*

A detailed breakdown of the individual capital items included in the Economic Model was sourced from the 2022 budget document. Sustaining capital costs listed in the 2022 budget are extended out through the duration of the reserves in the life of mine.

#### **Costerfield Operation – Capital Cost Estimate**

Area	Total	CY 22 (AUD\$ M)	CY 23 (AUD\$ M)	CY 24 (AUD\$ M)	CY 25 (AUD\$ M)	CY 26 (AUD\$ M)	CY 27 (AUD\$ M)
Capital Development	5.1	5.1	0.0	0.0	0.0	0.0	0.0
Processing Plant	13.7	3.8	3.6	3.3	1.3	1.3	0.5
Admin	1.7	1.1	0.2	0.2	0.2	0.0	0.0
Environmental	3.6	0.4	0.9	0.8	0.6	0.6	0.3
OH&S	0.4	0.1	0.1	0.1	0.1	0.1	0.0
Operational Geology	0.1	0.1	0.0	0.0	0.0	0.0	0.0

Exploration	0.3	0.2	0.1	0.1	0.0	0.0	0.0
Mining	12.3	5.3	3.9	2.6	0.3	0.1	0.1
<b>Total Capital Cost</b>	<b>37.5</b>	<b>16.4</b>	<b>8.7</b>	<b>7.0</b>	<b>2.4</b>	<b>2.1</b>	<b>0.9</b>

Totals may not add-up due to rounding.

### Operating Costs

Operating costs are derived from tracked historic expenditure under opex cost codes; financial analysis split costs using a combination of mining and milling physicals; along with mining operations timesheet and payroll data. This method ensures an accurate split of operational costs for estimating purposes.

The operating cost estimates applied in this Report are summarised in table below:

**Table: Operating Cost Inputs**

Description	Units	\$ (AUD)	Data Source
Mining			
Jumbo Lateral Development	AUD/m	3,115	2021 average
Stoping	AUD/t	131	2021 average
Mining Admin	AUD/day	13,398	2021 average
Geology	AUD/day	5,667	2021 average
ROM Haulage	AUD/t	3	2021 average
Processing Plant	AUD/t milled	65	2021 average
Site Services	AUD/day	5,862	2021 average
General and Administration	AUD/day	14,929	2021 average
Selling Expenses excluding Royalty	AUD/t con	137	2021 average

Royalty costs are calculated in accordance with royalty payment structures. Sb royalty is paid at a rate of 2.75% of revenue less selling costs. Au royalty is also paid at 2.75% of revenue less selling costs with 2,500 of saleable Au ounces exempt from royalty payment.

### Economic Analysis

The Costerfield Technical-Economic Model (“**TEM**”) was developed by Mandalay based on the production schedule and assumptions described in the Costerfield Technical Report. All 2022 costs are in AUD with no provision for inflation or escalation. The annual cash flow projections were estimated over the project life based on capital expenditures, operating costs and revenue assumptions. The financial indicators examined included pre-tax cash flow and Net Present Value (“**NPV**”).

For more information relating to the principal economic analysis assumptions (metal sale prices, concentrate and gold sales, exchange rate, taxes, royalties/agreements, reclamation and project financing) and economic summary (cash flow forecast, NPV and sensitivities) refer to section 22 of the Costerfield Technical report.

A summary of the economic factors associated with the project are presented in Table below.

Description	Units	Quantity
Proven + Probable Ore Tonnes Milled	Tonnes	769,074
Contained Gold	Ounces	311,796
Contained Antimony	Tonnes	19,592
Recovered Gold	Ounces	297,688
Recovered Antimony	Tonnes	18,121
Payable Gold	Ounces	287,720
Payable Antimony	Tonnes	18,302
Payable (Saleable) Metal, Au Eq	Oz Eq	379,230
Operating Cost	USD\$ M	272.1
Operating Cost per Payable ounce	USD\$/Oz E	718
Capital Cost	USD\$ M	37.5
Net Revenue (less selling expenses and royalties)	USD\$ M	660.7
Pre-tax cash flow	USD\$ M	351.0
After Tax Cash Flow	USD\$ M	268.3
Pre-tax NPV discounted at 5%	USD\$ M	310.9
After-tax NPV discounted at 5%	USD\$ M	233.2

1 Oz Eq – Gold Ounces + (Antimony Price / Gold Price) \* Antimony Tonnes, Tonnes and Ounces rounded to nearest thousand, dollars rounded to the nearest hundred thousand.

## Exploration and Development

Exploration drilling during 2021 was predominantly focused on extending, defining and upgrading the Youle and Shepherd Mineral Resources. It involved both infill and extensional drilling designed to delineate the both the Youle Lode and Shepherd Zone to the north, south, down-plunge, and above the Youle Lode in areas of historical mining, adjacent to current and planned development.

A series of regional diamond testing programs were designed and executed in 2021, with the intent of testing the potential in the Costerfield Property that could add to the life of the operation.

More regional exploration is in 2022, testing historical second line of lodes to the east and south of current mining operations. Continued extensional drilling at depth, north and south of Youle and Shepherd will continue throughout 2022, to test for high-grade gold domain at depth, as well as another emerging high-grade extension to the south. The cost of this exploration and development is not included in the base case financial analysis because it is not needed to produce metal from the Proven and Probable Reserves and no additional benefits are included in the analysis resulting from that exploration (i.e., more Resources and Reserves).

### 6.14 Risk Factors

The Corporation is exposed to a variety of risks in the normal course of operations that could significantly affect its performance and could cause its actual results to differ in material respects from its anticipated results. These risks are discussed below and are in addition to those outlined elsewhere in this Annual Information Form and in the Corporation's public filings with the Canadian securities regulatory authorities, including the Corporation's management's discussion and analysis of financial condition and results of operations for the years ended December 31, 2019, 2020 and 2021 and the Corporation's short

form base shelf prospectus dated October 25, 2021 (the “**Shelf Prospectus**”), all available on SEDAR at [www.sedar.com](http://www.sedar.com) under the Corporation’s profile.

As a result of any one or more of these risks, the Corporation’s operating results and Common Share price may be subject to a significant level of volatility.

#### *Risks Factors of the Business*

The Corporation’s operations are subject to all of the hazards and risks normally incidental to exploring, developing and exploiting natural resources. These risks include, but are not limited to: environmental hazards; industrial accidents; labour disputes; unusual or unexpected geologic formations or other geological or grade problems; unanticipated changes in metallurgical characteristics and metal recovery; unanticipated ground or water conditions, rock falls, seismic activity, cave-ins, pit wall failures, flooding (including the Inundation Event discussed below), rock bursts; periodic interruptions due to bad or hazardous weather conditions and other acts of God; unfavourable operating conditions; social unrest; and market conditions and customer performance to which management can react but which management cannot control.

Any of these risks and hazards could adversely affect the Corporation’s exploration activities or mining activities resulting in any of the following: an increase in the cost of exploration, development or production to a point where it is no longer economically feasible to continue; the Corporation writing down the carrying value of one or more properties or mines; delays or a stoppage in the exploration, development or production of the projects; suspensions of contracts with customers; damage to or destruction of mineral properties or processing facilities; environmental damage; and personal injury, death and legal liability. Although precautions to minimize risk will be taken, operations are subject to hazards that may have a material adverse impact on the business, operations and financial performance of Mandalay.

#### *COVID-19*

The Corporation’s business, operations and financial condition could be materially adversely affected by the outbreak of epidemics or pandemics or other health crises.

For example, in late December 2019, COVID-19 was identified and originating in the Wuhan Province of China, and subsequently spread worldwide, with infections being reported globally and on March 11, 2020, the World Health Organization declared it could be characterized as a pandemic. Cases of COVID-19 have now been reported in all the countries in which the Corporation operates, including Canada, Sweden, Australia and Chile.

Further spread of the infection could impact customers, vendors, suppliers and other counterparties and materially impact the Corporation’s business, operations and financial condition. The extent to which COVID-19 impacts the Corporation’s business, including its operations and the market for its securities, will depend on future developments, which are highly uncertain and cannot be predicted at this time, and include the duration, severity and scope of the outbreak and the actions taken to contain or treat the COVID-19 outbreak. In particular, the continued spread of COVID-19 could result in a slowdown or temporary suspension in operations.

The risks to the Corporation’s business include, without limitation, the risk of breach of material contracts and customer agreements, employee health, workforce productivity, increased insurance premiums, limitations on travel, the availability of industry experts and personnel, prolonged restrictive measures

put in place in order to control an outbreak of contagious disease or other adverse public health developments in Canada, Sweden, Australia and Chile or any of the Corporation's markets and other factors that will depend on future developments beyond the Corporation's control, which may have a material and adverse effect on the Corporation's business, financial condition and results of operations.

There can be no assurance that the Corporation will not ultimately see its workforce productivity reduced or that the Corporation will not incur increased medical costs / insurance premiums as a result of these health risks. Under the circumstances the Corporation or its customers, suppliers and other counterparties may be forced to declare force majeure on certain contracts. In addition, the coronavirus pandemic could adversely affect global economies and financial markets resulting in an economic downturn that could have an adverse effect on the demand for gold and antimony the Corporation's prospects and its ability to achieve its. The Corporation continues to monitor the situation and the impact COVID-19 may have on its business.

#### *Mining Industry Risks*

The exploration for and development of mineral deposits involves a high degree of risk, which even a combination of careful evaluation, experience and knowledge may not eliminate. Few properties that are explored are ultimately developed into producing mines. Substantial expenses may be required to locate and establish ore reserves, to develop metallurgical processes and to construct mining and processing facilities at a particular site. There is no certainty that the exploration programs planned by the Corporation will result in a profitable commercial mining operation. Whether a mineral deposit will be commercially viable depends on a number of factors such as the following: the particular attributes of the deposit, including size, grade and proximity to infrastructure; metal prices, which fluctuate widely and cannot be predicted with certainty; and government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals and environmental protection. As a result, it is possible that the financial performance of mineral properties will differ from plans and forecasts made in advance by the Corporation.

In addition, it is also common for mining operations to experience unexpected problems both during the start-up and during ongoing operations. To the extent that unexpected problems occur that affect production in the future, the Corporation's revenues may be reduced, costs may increase and the Corporation's profitability and ability to continue its mining operation may be adversely affected.

#### *Fluctuations in the Market Price of Mineral Commodities*

The profitability of Mandalay's operations is dependent in part upon the market price of mineral commodities and precious metals, particularly Au, Ag, and Sb. Mineral and metal prices fluctuate widely and are affected by numerous factors beyond the control of the Corporation. The level of interest rates, the rate of inflation, the world supply of and demand for mineral commodities, and exchange rate fluctuations can all cause significant commodity price fluctuations. Such external economic factors are in turn influenced by changes in international investment patterns, monetary systems and political developments. The price of mineral commodities has fluctuated widely in recent years, and future price declines could cause commercial production to be uneconomic, thereby having a material adverse effect on the Corporation's business, financial condition and results of operations. Fluctuations in market prices of mineral commodities subsequent to the date of any estimate of mineral reserve or mineral resource may require revision of such estimate. An adverse fluctuation in the market price of mineral commodities may cause a re-evaluation of the economic feasibility of any project. If the economic feasibility of a project

is subsequently questioned, the Corporation may be adversely affected and may have to write off costs previously incurred.

#### *Hedging Risks*

The Corporation uses or may use certain derivative products to hedge or manage the risks associated with gold price volatility, changes in other commodity input prices, foreign currency exchange rates and interest rates. In particular, in March 2020, Mandalay entered into a three-year hedge for a total of 150,000 ounces of saleable gold with the lenders under the over the new Syndicated Facility. This hedge consists of a zero-cost collar hedge for 75,000 ounces of saleable gold with a floor price of \$1,550 per ounce and a ceiling of \$1,617 per ounce and an Australian dollar gold forward contract for the remaining 75,000 ounces of saleable gold at AU\$2,390 per ounce.

The use of derivative instruments involves certain inherent risks including: (i) credit risk - the risk that the creditworthiness of a counterparty may adversely affect its ability to perform its payment and other obligations under its agreement with the Corporation or adversely affect the financial and other terms the counterparty is able to offer the Corporation; (ii) market liquidity risk – the risk that the Corporation has entered into a derivative position that cannot be closed out quickly, by either liquidating such derivative instrument or by establishing an offsetting position; and (iii) unrealized mark-to-market risk – the risk that, in respect of certain derivative products, an adverse change in market prices for commodities or currencies will result in the Corporation incurring an unrealized mark-to-market loss in respect of such derivative products. There is no assurance that any hedging program or transactions which may be adopted or utilized by the Corporation designed to reduce the risk associated with gold price volatility, changes in other commodity input prices, foreign currency exchange rates and interest rates will be successful. Although hedging may protect the Corporation from an adverse price change, it may also prevent the Corporation from benefiting fully from a positive price change.

#### *Licenses and Permits Necessary for Operations*

The operations of the Corporation require licenses and permits from various governmental authorities. Obtaining necessary permits and licenses can be a complex and time-consuming process. Although all current operations are conducted under valid licenses and permits, the Corporation cannot be certain that it will be able to obtain necessary new licenses or permits on acceptable terms, in a timely manner or at all. The costs and delays associated with obtaining necessary permits and complying with these permits and applicable laws and regulations could stop, delay or restrict the Corporation from proceeding with the development of an exploration project or the development and operation of a mine. Any failure to comply with applicable laws and regulations or permits could result in interruption or closure of exploration, development or mining operations, or fines, penalties or other liabilities being assessed against the Corporation. The Corporation could also lose its mining concessions under the terms of its existing agreements.

#### *Project Development, Expansion Targets and Operational Delays*

There can be no assurance that Mandalay will be able to effectively manage the expansion of its operations or that Mandalay's current personnel, systems, procedures and controls will be adequate to support Mandalay's operations. Some of Mandalay's projects may be operated and managed by contractors. Any failure of management to effectively manage Mandalay's growth and development could have a material adverse effect on Mandalay's business, financial condition and results of operations. Any

failure to meet disclosed production cost or capital guidance could result in a material adverse effect on Mandalay's share price performance.

Mandalay's operational targets are subject to the completion of planned operational goals on time and according to budget and are dependent on the effective support of Mandalay's personnel, systems, procedures and controls. Any failure of Mandalay's personnel, systems or procedures and controls may result in delays in the achievement of operational targets with a consequent material adverse impact on the business, operations and financial performance of Mandalay.

Unscheduled interruptions in Mandalay's operations due to mechanical or other failures, geotechnical events, industrial relations issues, local social unrest, or problems or issues with the supply of goods or services or the sale of product could have a negative impact on the financial performance of those operations.

### *Mergers and Acquisitions*

As part of Mandalay's business strategy, the Corporation has sought and may continue to seek new mining and development opportunities in the mining industry. In pursuit of such opportunities, the Corporation may fail to select appropriate targets partners or to negotiate acceptable arrangements, including arrangements to finance acquisitions or integrate the businesses and their personnel. Ultimately, any merger or acquisition transaction would be accompanied by risks. For example: there may be a significant change in commodity prices after the Corporation has committed to complete the transaction and established the purchase price or exchange ratio; a material ore body may prove to be below expectations; There can be difficulties integrating and assimilating the operations and personnel, realizing anticipated synergies and maximizing the financial and strategic position of the combined enterprise, and maintaining uniform standards, policies and controls across the organization; the integration of the acquired business or assets may disrupt Mandalay's ongoing business and its relationships with employees, suppliers, contractors and other stakeholders; a business combination or acquired assets or companies may have unknown liabilities which may be significant; there may be delays as a result of regulatory approvals; and Mandalay may be exposed to litigation (including actions commenced by shareholders) in connection with the transaction.

The Corporation may choose to finance a merger or acquisition through its existing resources, a raise of debt capital or the issuance of equity. In the event that Mandalay chooses to raise debt capital to finance any such acquisition, its leverage will be increased. If Mandalay chooses to use equity as consideration for such acquisition, existing shareholders may suffer dilution.

Mandalay cannot assure that it can complete any acquisition or business arrangement that it is presented, or is pursuing, on favourable terms, or that any acquisitions or business arrangements completed will ultimately benefit its business. Furthermore, there can be no assurance that Mandalay would be successful in overcoming the risks identified above or any other risks or problems encountered in connection with such acquisitions.

### *Environmental Risks and Hazards*

All phases of the Corporation's operations are subject to environmental regulation in the jurisdictions in which the Corporation operates. While the Corporation's operations are currently in compliance with local environmental regulations, environmental legislation is evolving in a manner that will require stricter standards, disclosure and enforcement, increased fines and penalties for non-compliance, more stringent

environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. Material risk disclosure related to climate change, carbon intensity and other environmental and pollution controls, as well as Environment, Social, Governance (“ESG”) metrics and disclosure will result in additional management systems and controls. There are no assurance that existing or future environmental regulations will not materially adversely affect the Corporation’s business, financial condition and results of operations. Environmental and climate related hazards may exist on the properties where the Corporation holds interests that are unknown to the Corporation at present and which have been caused by previous or current owners or operators of the properties. Government approvals and permits are currently, or may in the future be, required in connection with the Corporation’s operations. To the extent that such approvals are required and not received, the Corporation may be curtailed or prohibited from proceeding with planned exploration or development of mineral properties.

Failure to comply with applicable laws, regulations and 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, including the Corporation, may be required to compensate those suffering loss or damage by reason of mining activities and may be subject to civil or criminal fines or penalties imposed for violations of applicable laws or regulations. 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 exploration expenses, capital expenditures or production costs, reduction in levels of production at producing properties, or abandonment or delays in development of new mining properties.

#### *Tailings Dam Failure, and Unexpected Water Discharge into the Environment*

Both operating mines use tailings dams which are subject to annual third-party audits. While the tailings dams are in compliance, and the Corporation has only downstream tailings dams, there is no assurance that a tailings dam could be subject to unexpected water discharge into the environment as a result of dam stability failure.

#### *Requirement for Additional Financing*

The exploration and development of the Corporation’s properties, including continued exploration and development projects, the construction of mining facilities and the commencement of mining operations in the future, may require substantial additional financing. Failure to obtain sufficient financing may result in a delay or indefinite postponement of exploration, development or production on any or all of the Corporation’s properties and may lead to a loss of an interest in a property. Additional financing may not be available when needed. Even if such additional financing is available, the terms of such financing might not be favourable to the Corporation and might involve substantial dilution to existing shareholders or sale or other dispositions of an interest in any of the Corporation’s assets or properties. Failure to raise capital when needed could have a material adverse effect on the Corporation’s business, financial condition and results of operations.

#### *Health and Safety*

Mandalay’s activities are and will continue to be subject to health and safety standards and regulations in the jurisdiction within which it operates. While the Corporation is currently in compliance with these

standards and regulations, failure to comply with such requirements going forward may result in fines and/or penalties being assessed against Mandalay or its officers.

#### *Uncertainty as to Mineral Resource and Reserve Estimates*

There is a significant degree of uncertainty attributable to the estimation of size and grade of Mineral Resources and Reserves. Until the mineralized material is actually mined and processed, Mineral Resources and Reserves must be considered as estimates only. Consequently, there can be no assurance that any mineral deposit size or grade information contained herein (including in the documents incorporated herein by reference) will prove accurate. In addition, the value of mineral deposits may vary depending on mineral prices and other factors. Any material change in size or grade, stripping ratio or other mining and processing factors may affect the economic viability of the Corporation's projects and life of mine. Furthermore, mineral deposit estimate information should not be interpreted as any assurance of mine life or of the potential profitability of existing or future projects.

#### *Dependence upon Key Management Personnel and Executives*

The Corporation will be dependent upon the continued support and involvement of a number of key management personnel. The loss of the services of one or more of such personnel could have a material adverse effect on the Corporation. When there is a loss of key management personnel, significant management time and effort is required to mitigate the loss. The Corporation's ability to manage its exploration and development activities and, hence, its success, will depend in large part on the efforts of these individuals. The Corporation faces competition for qualified personnel and there can be no assurance that the Corporation will be able to attract and retain such personnel.

#### *Customer Concentration*

The mining industry is characterized by a relatively small number of customers worldwide. A loss of, declaration of force majeure, or a significant reduction in, purchases by one or more of Mandalay's largest customers could have a material adverse impact on the financial performance of Mandalay. The Corporation has several large customers for its concentrates, the loss of any of which could have a material adverse effect on the financial position, results of operations and liquidity of the Corporation. For the year ended December 31, 2021, five customers accounted for 100% of the Corporation's total sales.

#### *Title Matters*

The acquisition of title to mineral properties is a very detailed and time-consuming process. Title to, and the area of, mineral concessions may be disputed. Although the Corporation believes it has taken reasonable measures to ensure proper title to its properties, there is no guarantee that title to any of its properties will not be challenged or impaired. Third parties, including native or indigenous groups may have valid, or cause to be valid, claims underlying portions of the Corporation's interests or future exploration concessions. Any such claims could have a material adverse effect on the Corporation's business, financial condition and results of operations.

#### *Governmental Regulation of the Mining Industry*

The mineral exploration and production activities of the Corporation are subject to various laws governing prospecting, development, production, taxes, labour standards, employment and occupational health, mine safety, use of water, toxic substances and waste disposal, environmental and other matters. Mining and exploration activities are also subject to various laws and regulations relating to protection of the

environment including the potential for carbon taxes. Although the Corporation believes that its exploration and production activities are currently carried out in accordance with all applicable rules and regulations, 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 that could limit or curtail production or development. Amendments to current laws and regulations governing the operations and activities of the Corporation or more stringent implementation thereof could have a material adverse effect on the business, financial condition and results of operations of the Corporation.

#### *Currency Risk*

The Corporation's operations will incur most of its expenditures in Australian dollars, Chilean pesos and Swedish krona, while its products are priced, and its financial performance is reported, in US dollars. As a result of the use of different currencies, the Corporation may be subject to foreign currency fluctuations, which may materially affect the financial position and results of the Corporation. The Corporation occasionally engages in currency hedging to offset the risk of currency fluctuations and gold price.

#### *Uninsured Risks*

The Corporation does not carry insurance to protect against certain risks. Risks that are not insured include, but are not limited to: pandemic insurance, business interruption insurance, labour disruption, certain environmental losses and acts of war and terrorism; and other hazards against which the Corporation, and in general, mining corporations, cannot insure or against which the Corporation may elect not to insure due to high premium costs or for other reasons. Failure to have insurance coverage for any one or more of such risks or hazards could have a material adverse effect on the Corporation's business, financial condition and results of operations.

#### *Competition for Resources*

The mining industry is intensely competitive in all of its phases and the Corporation competes with many companies possessing greater financial and technical resources. Competition in the mining industry is primarily for the following: mineral-rich properties which can be developed and produced economically; technical expertise to find, develop, and manage such properties; labour to operate the properties; and capital for the purpose of funding such properties. Many competitors not only explore for and mine precious metals, but also conduct refining and marketing operations on a world-wide basis. Such competition may result in the Corporation being unable to: acquire desired properties (due to the auction process involved in some property acquisitions); recruit or retain qualified employees; or obtain the capital necessary to fund its operations and develop its properties. Existing or future competition in the mining industry could materially adversely affect the Corporation's prospects for mineral exploration and success in the future. Furthermore, increased competition could result in increased costs and lower prices for metal and minerals produced which, in turn, could reduce profitability. Consequently, the Corporation's revenues, its operations and financial condition could be materially adversely affected.

#### *Repatriation of Earnings and Restrictions from Subsidiaries on Internal Transfers*

There is no assurance that Chile, Australia, Sweden or any other foreign country in which the Corporation or its subsidiaries may operate in the future will not impose restrictions on the repatriation of earnings to foreign entities.

### *Properties without Known Mineable Reserves*

The activities of the Corporation will continue to be directed towards the search for, evaluation, and development of mineral deposits. There is no assurance that the expenditures of the Corporation will result in discoveries of commercial ore bodies. Furthermore, there can be no assurance that the Corporation's estimates of future exploration expenditures will prove accurate, and actual expenditures may be significantly different than currently anticipated.

### *Marketability*

The marketability of the minerals owned by Mandalay, or which may be acquired or discovered by Mandalay, will be affected by numerous factors beyond Mandalay's control. These factors include, but are not limited to: market fluctuations; the proximity and capacity of markets; and governmental regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting and environmental protection. A combination of one or more of these factors may result in Mandalay not receiving an adequate return on invested capital.

### *Infrastructure*

Development and exploration activities depend on adequate infrastructure, including reliable roads, power sources and water supply. The Corporation's inability to secure adequate water and power resources, as well as other events outside of its control, including unusual weather, geologic events such as earthquakes or volcanic eruptions, sabotage, government or other interference in the maintenance or provision of such infrastructure, could adversely affect the Corporation's operations and financial condition.

### *Litigation*

Legal proceedings may arise from time to time in the course of Mandalay's business. There have been a number of cases where the rights and privileges of mining and exploration companies have been the subject of litigation. Such litigation may be brought against Mandalay in the future or Mandalay may be subject to another form of litigation.

### *Difficulty in Enforcement of Judgements*

Substantially all of the Corporation's assets are located outside of Canada. Accordingly, it may be difficult for investors to enforce within Canada any judgements obtained against the Corporation, including judgements 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.

The Corporation has subsidiaries incorporated in Canada, Australia, Chile and Sweden. Certain directors and officers, including our Chair of the Board, 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 judgement is obtained in a Canadian court against one or more of our directors or officers for violations of Canadian securities laws, it may not be possible to enforce such judgement against those directors and officers not resident in Canada. 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, Chile or Sweden. 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.

#### *Potential Volatility of Market Price of Common Shares*

Securities traded on the TSX have, from time to time, experienced significant price and volume fluctuations unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the market price of the Common Shares. In addition, the market price of the Common Shares is likely to be highly volatile. Factors such as metals prices, the average volume of shares traded, announcements by competitors, changes in stock market analyst recommendations regarding the Corporation, and general market conditions and attitudes affecting other exploration and mining companies may have a significant effect on the market price of the Common Shares. During future quarterly periods, the Corporation's results and exploration activities may fluctuate significantly or may fail to meet the expectations of stock market analysts and investors and, as a result, the market price of the Common Shares could be materially adversely affected. In the past, securities class action litigation has often been initiated following periods of volatility in the market price of a Corporation's securities. Such litigation, if brought against the Corporation, could result in substantial costs and a diversion of management's attention and resources, which could have a material adverse effect on the Corporation's business, financial condition and results of operations.

#### *Possible Conflicts of Interest of Directors and Officers of the Corporation*

Certain of the directors and officers of the Corporation also serve as directors, officers and/or advisors of and to other companies involved in natural resource exploration and development. Consequently, there exists the possibility for such directors and officers to be in a position of conflict. The Corporation expects that any decision made by any of such directors and officers involving the Corporation will be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of the Corporation and its shareholders, but there can be no assurance in this regard. In addition, each of the directors is required to declare and refrain from voting on any matter in which such directors may have a conflict of interest.

#### *Risk of Dilution*

Under applicable Canadian law and the rules of the TSX, shareholder approval is not required for the Corporation to issue Common Shares in a number of circumstances. Moreover, the Corporation has a substantial number of stock options to acquire Common Shares under the Stock Option Plan (as defined below). The future business of the Corporation may require substantial additional financing which could involve the sale of equity capital. The Corporation can also be expected to issue additional options, warrants and other financial instruments, which may include debt. Future issuances of equity capital may have a substantial dilutive effect on existing shareholders. The Corporation is not able at this time to predict the future amount of such issuances or dilution.

#### *Instability of Political and Economic Environments*

The mining interests of the Corporation may be affected in varying degrees by political or economic stability. Associated risks include but are not limited to: temporary or extended loss of access to properties

due to social unrest; terrorism; military repression; emergencies; and extreme fluctuations in currency exchange rates and high rates of inflation. Any change in regulations or shifts in political attitudes are beyond the control of the Corporation and may materially adversely affect its business, financial condition and results of operations. Operations may also be affected in varying degrees by such factors as government regulations (or changes thereto) with respect to the restrictions on production, export controls, income taxes, expropriation of property, repatriation of profits, land use, environmental and climate change legislation, water use, land claims of local, native and indigenous people, and mine safety. The effect of these factors cannot be accurately predicted.

#### *Syndicated Facility*

The Syndicated Facility is secured by a first ranking security interest over substantially all of the Corporation's assets. The Syndicated Facility has customary representations and warranties and positive and negative covenants which, if breached, could lead to a default under the Syndicated Facility and the acceleration of the outstanding debt.

#### *Negative Operating Cash Flow*

There can be no assurance that any of the Corporation's current properties or properties the Corporation may hereafter acquire or obtain an interest in will generate earnings, operate profitably, pay liabilities as they are due or provide a return on investment in the future. There can also be no assurance that the underlying assumed levels of expenses will prove to be accurate. There can be no assurance that significant additional losses will not occur in the near future or that the Corporation will be profitable in the future. The Corporation's operating expenses and capital expenditures may increase in subsequent years as consultants, personnel and equipment associated with advancing exploration, development and commercial production of its properties are added. The amount and timing of expenditures will depend on the progress of ongoing exploration and development, the results of consultants' analyses and recommendations, the rate at which operating losses are incurred, the execution of any joint venture agreements with strategic partners, the Corporation's acquisition of additional properties and other factors, many of which are beyond the Corporation's control. If the Corporation has negative cash flow in future periods, the Corporation may need to deploy a portion of its cash reserves or raise equity or debt.

#### *Risk of Cybersecurity Event*

The risk of a cyber attack on the corporate servers or site servers is possible. The Corporation has local protocols in place to manage security risks related to cyber attacks, with dedicated servers and use of secure cloud-based servers, in addition specific insurance coverage for such an event, however there can be no assurance that this can effectively prevent or manage a cyber attack on the Corporation and risks exists related to exposing private non-public information or private personnel information.

#### *The Significant Shareholders Exercise Significant Control Over the Corporation*

Approximately 76% of the issued and outstanding Common Shares are held by the four largest shareholders of the Corporation (the "Significant Shareholders"). In addition, pursuant to the terms of the Bridge Loan, CE Mining will have the right to nominate two individuals for election as members of the Board for as long as it owns at least 10% of the outstanding Common Shares. As a result of their shareholdings, the Significant Shareholders will have the ability, among other things, to significantly influence the approval of significant corporate transactions and delay or prevent a change of control of the Corporation that could otherwise be beneficial to minority shareholders. The Significant Shareholders

will generally have the ability to control the outcome of any matter submitted for the vote or consent of the Corporation's shareholders and to determine the outcome of any election of the Board. In some cases, the interests of the Significant Shareholders may not be the same as those of the Corporation's other shareholders or each other, and conflicts of interest may arise from time to time that may be resolved in a manner detrimental to the Corporation or its minority shareholders.

## **7. DIVIDENDS**

The Corporation has not paid any dividend in the three most recently completed financial years and is currently restricted from paying dividends according to the terms and conditions of the Syndicated Facility.

## **8. CAPITAL STRUCTURE**

### **Common Shares**

The authorized capital of Mandalay is an unlimited number of Common Shares, of which 92,009,491 were issued as at March 30, 2022. The holders of Common Shares are entitled to receive notice of and attend all meetings of shareholders, with each Common Share entitling the holder to one vote on any resolution to be passed at such shareholder meetings. The holders of Common Shares are entitled to dividends if and when declared by the Board. The holders of Common Shares are entitled, upon the liquidation, dissolution or winding up of Mandalay, to receive the remaining assets of Mandalay available for distribution to shareholders.

### **Omnibus Equity Incentive Plan**

On May 20, 2020, the shareholders of the Corporation approved a rolling Omnibus Equity Incentive Plan (the "Omnibus Plan") which provides flexibility to the Corporation to grant equity-based incentive awards in the form of stock options, restricted share units, performance share units and deferred share units as described in the Corporation's Management Information Circular dated April 3, 2020. The Omnibus Plan replaced the Corporation's Stock Option Plan and Restricted Share Unit Plan which remain in effect with respect to stock options and restricted share units issued prior to the adoption of the Omnibus Plan, but no further stock options and restricted share units will be issued thereunder. The total number of common shares reserved for issuance pursuant to awards granted under the Omnibus Plan and all other security-based compensation outstanding under the Stock Option Plan and RSU Plan shall not exceed 10% of the issued and outstanding common shares from time to time.

### **Stock Options**

Prior to the Omnibus Plan, during 2013, the Corporation had established a "rolling" stock option plan (the "Option Plan") in compliance with the TSX's policy for granting stock options. The exercise price of each stock option shall not be less than the market price of the Corporation's stock at the date of grant. Options generally vest over three years. Options issued until December 31, 2016, had a maximum term of five years, and thereafter have a maximum term of up to seven years.

The stock options issued and outstanding as at December 31, 2021, are as follows:

Issue Date	Exercise Price CDN\$	Number of Options	Expiry Date
February 25, 2021	2.14	328,173	June 30, 2028
March 20, 2020	0.61	794,667	June 30, 2027
April 8, 2019	1.10	346,667	June 30, 2026
June 15, 2018	2.00	92,500	June 30, 2025
April 2, 2018	2.00	172,000	June 30, 2025
March 27, 2017	6.00	140,000	June 30, 2024

During 2021, 202,332 options were exercised, while 20,000 were exercised in 2020. There were 1,874,007 options outstanding as of December 31, 2021, which could result in the issuance of shares.

### RSU Plan

Prior to the Omnibus Plan, during 2013, the Corporation adopted a Restricted Share Unit Plan (the “RSU Plan”) and granted Restricted Share Units (“RSUs”) to certain directors. Under the RSU Plan, those directors granted RSUs received the Corporation’s common shares at no cost at the end of vesting periods. Each RSU entitles the holder to one common share. Commencing in 2021, non-executive directors will be granted part of their compensation in the form of DSUs, rather than RSUs, pursuant to the Omnibus Plan.

The RSUs issued and outstanding as at December 31, 2021, are as follows:

	Number of RSU Awards
<b>Outstanding at December 31, 2020</b>	<b>673,192</b>
Granted	168,025
Redeemed	(285,047)
Forfeited	(80,212)
<b>Outstanding at December 31, 2021</b>	<b>475,958</b>

### PSUs

The Corporation grants PSUs to certain employees pursuant to the Omnibus Plan. Those employees granted PSUs will receive the Company’s common shares at no cost upon the achievement of certain performance goals during such performance period. Each PSU entitles the holder to one common share.

The PSUs issued and outstanding as at December 31, 2021 is as follows:

	Number of PSU Awards
<b>Balance, December 31, 2020</b>	<b>-</b>
Granted	336,049
Redeemed	(40,000)
<b>Balance, December 31, 2021</b>	<b>296,049</b>

*DSUs*

Commencing in 2021, non-executive directors will be granted part of their compensation in the form of DSUs, rather than RSUs, pursuant to the Omnibus Plan. Those directors granted DSUs will receive the Company's common shares at no cost following their departure from the board. Each DSU entitles the holder to one common share.

The DSUs issued and outstanding as at December 31, 2021 is as follows:

	<b>Number of DSU Awards</b>
<b>Balance, December 31, 2020</b>	-
Granted	150,148
<b>Balance, December 31, 2021</b>	<b>150,148</b>

**9. MARKET FOR SECURITIES**

The Common Shares trade on the TSX under the symbol "MND". Information concerning the trading prices and volumes of the Common Shares on the TSX and Over-the-Counter Markets ("OTC"s) during fiscal 2021 is set out below.

<b>Month</b>	<b>High CDN (\$)</b>	<b>Low CDN (\$)</b>	<b>Close CDN (\$)</b>	<b>Total Monthly Volume</b>
January 2021	2.48	1.87	2.18	2,817,190
February 2021	2.73	1.90	2.04	1,603,161
March 2021	2.19	1.85	1.96	1,358,827
April 2021	2.72	1.87	2.38	1,749,169
May 2021	3.19	2.39	2.98	1,702,345
June 2021	3.68	2.79	3.08	1,431,928
July 2021	3.37	2.36	2.55	1,373,356
August 2021	2.88	2.40	2.58	608,271
September 2021	2.74	1.81	1.91	920,844
October 2021	2.68	1.89	2.30	2,023,641
November 2021	2.95	2.24	2.28	2,293,674
December 2021	2.68	1.97	2.30	777,984

**10. ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER**

Other than as described elsewhere in this Annual Information Form or in the Prospectus Supplement, the Corporation does not have any securities subject to regulatory escrow, or any securities subject to any contractual restriction on transfer.

## 11. DIRECTORS AND OFFICERS

The following table sets forth the name, province or state, country of residence, position held with the Corporation and principal occupation of each of the directors and executive officers of the Corporation as of the date of this Annual Information Form:

Name, Province/State and Country of Residence	Position with the Corporation	Principal Occupation <sup>(1)(2)</sup>	Director/Officer Since
Bradford A. Mills <sup>(3)</sup> Texas, United States	Chair	Chair of the Mandalay Board	September 2009
Abraham Jonker <sup>(4)(6)</sup> British Columbia, Canada	Lead Independent Director	Corporate Director Chief Financial Officer, Cypress Development Corp.	August 2010
Amy Freedman <sup>(4)(5)(7)</sup> Ontario, Canada	Director	Partner and Head of Engagement Fund Investing, Ewing Morris & Co.	May 2016
Dominic Duffy <sup>(8)</sup> Ontario, Canada	President, Chief Executive Officer and Director	President and Chief Executive Officer of the Corporation	Officer: March 2013 Director: May 2018
Julie Galloway <sup>(3)(5)</sup> Ontario, Canada	Director	Corporate Legal Counsel	May 2021
Robert Doyle <sup>(4)(5)</sup> Ontario, Canada	Director	Corporate Director	April 2010
Terrell Ackerman <sup>(3)</sup> Montana, United States	Director	Corporate Director	June 2019
Nick Dwyer <sup>(9)</sup> Ontario, Canada	Chief Financial Officer	Chief Financial Officer of the Corporation	Officer: August 2018
Jasmine Virk Ontario, Canada	Director of Corporate Affairs and Corporate Secretary	Director of Corporate Affairs and Corporate Secretary of the Corporation	Corporate Secretary: March 2017

1. The information in this table is supplied by the directors and officers of the Corporation.
2. The information provided reflects the principal occupation of the individual over the preceding five years.
3. Member of Safety, Health and Environmental Committee.
4. Member of the Corporation's Audit Committee (the "Audit Committee").
5. Member of Compensation, Corporate Governance and Nominating Committee.
6. Abraham Jonker joined Cypress Development Corp. on May 3, 2021. He was previously the CFO of Nevada Copper Corp.
7. Amy Freedman joined Ewing Morris & Co. On January 3, 2022. She was previously the CEO of Kingsdale Advisors.
8. Dominic Duffy transitioned from Chief Operating Officer to President and Chief Executive Officer on May 14, 2018.
9. Nick Dwyer transitioned from Group Financial Controller to Chief Financial Officer on August 15, 2018.

The term of office for each director of the Corporation will expire upon the completion of the next annual meeting of shareholders of the Corporation.

As of March 30, 2021, the directors and executive officers of the Corporation, as a group, beneficially owned, or controlled or directed, directly or indirectly, approximately 23,880,483 Common Shares, representing approximately 25.95% of the outstanding Common Shares. The information as to the number of Common Shares beneficially owned, directly or indirectly, or over which control or direction is exercised, by the directors and executive officers, but which are not registered in their names and not being within the knowledge of the Corporation, has been furnished by such directors and officers.

### **Cease Trade Orders, Bankruptcies, Penalties or Sanctions**

To our knowledge, 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: (a) is, as at the date hereof, or has been within the 10 years before the date hereof, a director or executive officer of any Corporation (including the Corporation) that, while that person was acting in that capacity, or within a year of that person 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 (b) has, within the 10 years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or 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 the director, executive officer or shareholder, except for the following:

- Abraham Jonker was Director, President and Interim CFO of EastCoal Inc. (“**EastCoal**”) when EastCoal filed a Notice of Intention to Make a Proposal pursuant to the provisions of Part III of the *Bankruptcy and Insolvency Act* (Canada) on November 5, 2013. EastCoal emerged from creditor protection on May 21, 2014 following the successful implementation of a compromise agreement with creditors, in which the creditors agreed to reduce the claim amount providing for the full and final settlement of all the claims against the Corporation.

To our knowledge, no director or executive officer of the Corporation is, as at the date hereof or has been, within the 10 years before the date hereof, a director, Chief Executive Officer or Chief Financial Officer of any Corporation (including the Corporation), that:

- (a) was the subject of a cease trade or similar order or an order that denied the relevant Corporation access to any exemption under securities legislation, 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, Chief Executive Officer or Chief Financial Officer; or
- (b) was subject to a cease trade or similar order or an order that denied the relevant Corporation access to any exemption under securities legislation, for a period of more than 30 consecutive days that was issued after the director or executive officer ceased to be a director, Chief Executive Officer or Chief Financial Officer and which resulted from an event that occurred while that person was acting in the capacity as director, Chief Executive Officer or Chief Financial Officer.

To our knowledge, 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, has been subject to:

- (a) 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
- (b) 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.

### **Conflicts of Interest**

Certain of the directors and officers of the Corporation and its subsidiaries also serve as directors, officers and/or advisors of and to other companies involved in natural resource exploration and development.

Consequently, there exists the possibility for such directors and officers to be in a position of conflict. The Corporation expects that any decision made by any director or officer involving the Corporation will be made in accordance with such director or officer's duties and obligations to deal fairly and in good faith with a view to the best interests of the Corporation and its shareholders. In addition, each director of the Corporation is required to declare and refrain from voting on any matter in which such director may have a conflict of interest in accordance with the procedures set forth in the BCBCA and applicable laws.

## **12. Audit Committee Information**

### **12.1 Description of the Audit Committee**

The Audit Committee assists the Mandalay Board in fulfilling its oversight responsibilities with respect to the following: (i) the quality and integrity of the financial statements of the Corporation; (ii) the compliance by the Corporation with legal and regulatory requirements in respect of financial disclosure; (iii) the qualification, independence and performance of the Corporation's independent auditor; (iv) the assessment, monitoring and management of the strategic, operational, reporting and compliance risks of the Corporation's business; and (v) the performance of the Corporation's Chief Financial Officer. The Audit Committee's charter is set out in Schedule "B" to this Annual Information Form.

As of the date of this Annual Information Form, the members of the Audit Committee are: (i) Robert Doyle; (ii) Abraham Jonker; and (iii) Amy Freedman. All members of the Audit Committee are, for the purposes of National Instrument 52-110 - *Audit Committees*, independent and financially literate. The following is a description of the education and experience of each member of the committee that is relevant to the performance of such member's responsibilities as a member of the Audit Committee.

#### **Robert Doyle**

Mr. Doyle has over 40 years of experience in all facets of international resource exploration, development and production. Currently, Mr. Doyle serves as a director of Golden Star Resources Ltd. He was Chief Executive Officer of Medoro Resources Limited until October 2009 and was Executive Vice President prior to that. Previously, Mr. Doyle was Chief Financial Officer of a number of companies including Pacific Stratus Energy Corp., Coalcorp Mining Inc., Bolivar Gold Corp. and HMZ Metals Inc., Lac Minerals and Falconbridge Limited. In addition, he was previously a gold market analyst at RBC Capital Markets and Credit Suisse First Boston. Mr. Doyle holds CPA, CA and C.Dir designations and graduated with a HBA in Business Administration from the Ivey School of Business, University of Western Ontario.

#### **Abraham Jonker**

Mr. Jonker is a registered Chartered Accountant in British Columbia, (Canada), England and Wales as well as South Africa. He is also a member of the Chartered Institute of Management Accountants in the United Kingdom and holds a Masters degree in South African and International Tax from the Rand Afrikaans University. Mr. Jonker has almost 30 years of extensive management, accounting and corporate finance experience across five continents, mostly in the mining industry. Mr. Jonker currently serves as the Lead Independent Director of the Mandalay Board and Chief Financial Officer of Cypress Development Corp. Previously he was the Chief Financial Officer of Nevada Copper Corp. and Western Coal Corp, at the time of its take-over by Walter Energy for \$3.3 billion. During his career Mr. Jonker has played a pivotal role in several business recoveries, has been a key team member at management level in the strategic growth of several public companies, has raised and overseen the raising of more than \$750 million in the form of

equity and debt instruments and has been involved in corporate transactions aggregating several billion dollars.

### **Amy Freedman**

Ms. Freedman is currently a Partner at Ewing Morris and Co., a boutique asset management firm based in Toronto and a director of Park Lawn Corp. Previously, Ms. Freedman was the CEO of Kingsdale Advisors, a leading shareholder services and advisory firm specializing in strategic and defensive advisory, governance advisory, proxy and voting analytics and investor communication. Prior to Kingsdale Ms. Freedman spent 15 years in capital markets as an investment banker with global firms including Stifel and Morgan Stanley in both Toronto and New York. Ms. Freedman holds an MBA and JD from the University of Toronto.

## **12.2 External Auditor Service Fees**

Fees paid to Mandalay's auditor, Ernst & Young LLP for 2021 and 2020 were as follows:

	<b>2021 (CDN\$)</b>	<b>2020 (CDN\$)</b>
<b>Audit Fees</b>	623,000	611,000
<b>Audit-related Fees</b>	-	-
<b>Tax Fees</b>	119,900	136,000
<b>All other Fees</b>	-	-
<b>Total Fees</b>	742,900	747,000

1. "Audit Fees" include assurance and services related to the performance of the audit or review of financial statements.
2. "Tax Fees" include tax compliance, tax advice and tax planning.

## **13. LEGAL PROCEEDINGS AND REGULATORY ACTIONS**

As at the date of this Annual Information Form, there are no material legal proceedings against or by the Corporation and no regulatory actions against the Corporation.

## **14. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS**

Other than as described elsewhere in this Annual Information Form, since January 1, 2021, no director, executive officer or 10% shareholder of the Corporation or any associate or affiliate of any such person or Corporation, has or had any material interest, direct or indirect, in any transaction that has materially affected or will materially affect the Corporation or any of its subsidiaries.

## **15. TRANSFER AGENTS AND REGISTRARS**

The Corporation's transfer agent and registrar is Computershare Investor Services Inc., and its office is in Toronto, Ontario.

## **16. MATERIAL CONTRACTS**

Except for contracts entered into in the ordinary course of business and not required to be filed under Section 12.2 of National Instrument 51-102 – *Continuous Disclosure Obligations* ("NI 51-102"), there are no contracts which are regarded as material and which were entered into by the Corporation within fiscal 2018 or before fiscal 2018 but are still in effect.

## **17. INTERESTS OF EXPERTS**

### **17.1 Names of Experts**

The persons referred to below have been named as having prepared or certified a statement, report or valuation described or included in a filing, or referred to in a filing, made under NI 51-102 during, or relating to, the Corporation's financial year ended December 31, 2021.

Ernst & Young LLP is the auditor of Mandalay and is independent within the meaning of the CPA Code of Professional Conduct of the Chartered Professional Accountants of Ontario.

The Björkdal and Costerfield Technical Reports filed on March 31, 2022, were prepared by Mining Plus, With the input from Qualified Persons listed below.

For the Björkdal Deposit and for the Costerfield Property:

The Mineral Resource Estimate was carried out under the supervision of Dr Andrew Fowler, MAusIMM CP(Geo), an employee of Mining Plus and independent of Mandalay Resources Corporation. He is a Qualified Person for the purpose of National Instrument 43-101.

The Mineral Reserve Estimate was carried out under the supervision of Aaron Spong, FAusIMM CP (Min), an employee of Mining Plus and independent of Mandalay Resources Corporation. He is a Qualified Person for the purposes of NI 43-101.

In addition for the Costerfield Property:

Richard Buerger, MAIG, BSc was responsible for Item 12 and those sections of items 1 and 25 to 27 pertaining thereto. He is a Qualified Person for the purpose of National Instrument 43-101.

Simon Walsh, BSc (Extractive Metallurgy), MBA Hons, MAusIMM CP(Met), GAICD, was responsible for Items 13 and 17, and sections pertaining thereto in Item 18. He is a Qualified Person for the purpose of National Instrument 43-101.

In addition for the Björkdal Property:

Matthew Field, PhD, Pr.Sci.Nat, was responsible for Item 12 and sections pertaining thereto in Item 1 and Items 25 to 27. He is a Qualified Person for the purpose of National Instrument 43-101.

Christopher Stinton, BSc(Hons), CEng MIMMM, was responsible for Items 13 and 17 excepting Item 13.2 which is related to the Norrberget Deposit, and sections pertaining thereto in Item 1 and Items 25 to 27. He is a Qualified Person for the purpose of National Instrument 43-101.

In addition for the Norrberget Deposit of the Björkdal Property:

The Mineral Resource Estimates for Norrberget were carried out under the supervision of Reno Pressacco, P.Geo., Principal Geologist, and an employee of SLR and independent of Mandalay Resources Corporation. He is a Qualified Person for the purpose of National Instrument 43-101.

The Mineral Reserve Estimate was carried out under the supervision of Rick Taylor, MAusIMM CP (Min), Principal Mining Engineer, and an employee of SLR and independent of Mandalay Resources Corporation. He is a Qualified Person for the purposes of National Instrument 43-101.

## **17.2 Interests of Experts**

To the knowledge of the Corporation, the persons above, as a group, beneficially owned, or controlled or directed, directly or indirectly, less than 1% of the issued and outstanding Common Shares, at the time of or after such person prepared the statement, report or valuation, and none of the persons 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.

## **18. ADDITIONAL INFORMATION**

Additional financial information and information regarding directors' and officers' remuneration and indebtedness, principal holders of Common Shares and securities authorized for issuance under equity compensation plans, as applicable, is contained in the Corporation's financial statements and management's discussion and analysis for the fiscal year ended December 31, 2021, and management information circular dated April 16, 2021, which are available on the Corporation's SEDAR profile.

**SCHEDULE A**

**Björkdal: Significant Intercepts**

Drill Hole ID	From (m)	To (m)	Drill Width (m)	True Width (m)	Au Grade (g/t)	Au (g/t) over min. 3m width
MU20-019	65.70	66.40	0.70	0.50	5.4	0.9
MU20-019	392.00	393.60	1.60	1.42	1.5	0.7
MU20-020A	39.45	39.80	0.35	0.25	8.8	0.7
MU20-020A	49.50	50.50	1.00	0.66	1.9	0.4
MU20-020A	62.40	63.00	0.60	0.26	2.9	0.3
MU20-020A	137.80	138.15	0.35	0.29	2.4	0.2
MU20-020A	155.95	156.25	0.30	0.14	9.3	0.4
MU20-020A	225.65	227.00	1.35	1.07	11.3	4.0
MU20-020A	271.50	271.80	0.30	0.17	4.1	0.2
MU20-020A	339.60	346.05	6.45	2.77	1.7	1.6
MU20-020A	351.60	352.10	0.50	0.23	5.7	0.4
MU20-021	56.00	56.70	0.70	0.54	1.8	0.3
MU20-021	70.00	71.20	1.20	1.06	2.4	0.9
MU20-021	186.60	187.30	0.70	0.50	16.7	2.8
MU20-021	201.45	204.00	2.55	2.28	5.4	4.1
MU20-021	248.20	250.00	1.80	1.10	32.5	11.9
MU20-021	283.65	284.00	0.35	0.27	2.8	0.3
MU20-021	293.55	297.70	4.15	4.08	5.2	5.2
MU20-021	314.20	316.00	1.80	1.23	3.1	1.3
MU20-021	354.60	355.10	0.50	0.40	92.2	12.3
MU20-021	396.95	397.30	0.35	0.23	17.4	1.3
MU20-022	62.20	63.40	1.20	0.72	6.3	1.5
MU20-022	149.50	149.90	0.40	0.15	4.8	0.2
MU20-022	208.30	209.80	1.50	1.11	16.4	6.1
MU20-022	243.40	244.00	0.60	0.22	2.9	0.2
MU20-022	286.40	286.70	0.30	0.19	4.4	0.3
MU20-022	369.80	370.50	0.70	0.45	8.0	1.2
MU20-023	12.55	13.25	0.70	0.45	4.4	0.7
MU20-023	54.10	54.75	0.65	0.27	6.8	0.6
MU20-023	106.55	107.65	1.10	0.73	10.9	2.7
MU20-023	114.05	114.70	0.65	0.44	119.2	17.5
MU20-023	129.30	129.70	0.40	0.29	45.6	4.4
MU20-023	175.65	175.95	0.30	0.19	4.2	0.3
MU20-023	241.90	242.30	0.40	0.21	7.6	0.5
MU20-024	29.90	30.65	0.75	0.51	25.3	4.3
MU20-024	54.50	54.85	0.35	0.18	9.6	0.6

MU20-024	61.75	62.35	0.60	0.25	36.7	3.1
MU20-024	188.60	195.30	6.70	5.01	3.4	3.4
MU20-025	106.55	107.25	0.70	0.32	58.5	6.2
MU20-025	122.60	122.90	0.30	0.23	3.2	0.2
MU20-025	326.40	326.80	0.40	0.24	17.4	1.4
MU20-037	161.90	162.20	0.30	0.21	4.4	0.3
MU20-037	203.35	203.70	0.35	0.23	2.6	0.2
MU20-037	326.50	326.90	0.40	0.24	4.6	0.4
MU20-038	93.10	94.90	1.80	1.23	2.9	1.2
MU20-038	99.40	99.80	0.40	0.25	5.5	0.5
MU20-038	131.00	131.60	0.60	0.42	1.6	0.2
MU20-038	175.00	176.00	1.00	0.73	14.6	3.6
MU20-038	321.40	321.70	0.30	0.14	18.6	0.9

1. Where True widths are greater than 3 m, grades are not diluted and are presented as the grade over the composite true width.
2. Composites that are below 0.2 g/t Au when diluted to 3 m are not reported in this table.

DRILL HOLE ID	FROM (M)	TO (M)	DRILL WIDTH (M)	TRUE WIDTH (M)	AU GRADE (G/T)	AU (G/T) OVER MIN. 3M WIDTH
MU21-001	13.80	14.10	0.30	0.12	6.3	0.8
MU21-001	82.80	83.20	0.40	0.29	6.3	1.8
MU21-001	118.60	120.70	2.10	1.37	4.2	4.2
MU21-002	14.40	14.70	0.30	0.18	5.8	1.0
MU21-002	61.50	61.80	0.30	0.10	40.1	4.0
MU21-002	93.20	93.60	0.40	0.08	32.7	2.6
MU21-002	117.60	118.50	0.90	0.50	1.5	0.8
MU21-003	32.60	34.00	1.40	0.85	10.9	9.2
MU21-003	269.80	270.10	0.30	0.21	226.0	47.5
MU21-003	281.00	281.55	0.55	0.23	9.0	2.1
MU21-003	287.00	287.40	0.40	0.10	6.7	0.7
MU21-003	426.55	426.90	0.35	0.32	16.6	5.3
MU21-004	37.10	37.80	0.70	0.38	31.7	12.0
MU21-004	132.20	133.00	0.80	0.48	1.2	0.6
MU21-004	147.35	148.50	1.15	0.81	4.2	3.4
MU21-004	165.05	167.25	2.20	0.38	2.1	0.8
MU21-004	208.75	216.50	7.75	4.11	4.2	4.2
MU21-004	232.80	233.10	0.30	0.29	4.1	1.2
MU21-004	245.35	245.75	0.40	0.35	3.1	1.1
MU21-005	61.70	62.40	0.70	0.54	13.3	7.2
MU21-005	99.00	99.60	0.60	0.42	2.7	1.1
MU21-005	162.80	163.25	0.45	0.33	24.6	8.1
MU21-005	186.90	187.20	0.30	0.26	2.7	0.7
MU21-005	191.65	193.60	1.95	1.33	5.4	5.4

MU21-005	203.20	203.60	0.40	0.24	7.1	1.7
MU21-005	208.50	208.80	0.30	0.19	4.9	0.9
MU21-005	220.90	224.65	3.75	2.15	6.2	6.2
MU21-005	226.90	228.20	1.30	1.10	1.6	1.6
MU21-005	229.95	230.70	0.75	0.43	1.7	0.7
MU21-005	259.45	262.00	2.55	1.28	1.4	1.4
MU21-005	365.90	366.90	1.00	0.70	0.8	0.6
MU21-006	67.35	68.10	0.75	0.68	1.3	0.9
MU21-006	69.10	69.50	0.40	0.35	2.2	0.8
MU21-006	71.75	72.50	0.75	0.57	7.1	4.0
MU21-006	182.85	183.40	0.55	0.39	10.7	4.2
MU21-006	248.20	248.90	0.70	0.70	9.2	6.4
MU21-006	251.85	252.50	0.65	0.50	1.3	0.6
MU21-006	325.60	326.20	0.60	0.52	4.3	2.2
MU21-006	392.40	393.30	0.90	0.64	1.1	0.7
MU21-007	51.80	53.60	1.80	1.03	25.3	25.3
MU21-007	63.50	64.00	0.50	0.45	13.1	5.9
MU21-007	79.40	80.00	0.60	0.46	1.3	0.6
MU21-007	134.00	134.70	0.70	0.61	1.0	0.6
MU21-007	146.00	146.50	0.50	0.29	2.0	0.6
MU21-007	152.00	152.40	0.40	0.35	18.0	6.3
MU21-007	224.00	225.00	1.00	0.70	1.4	1.0
MU21-007	297.50	298.20	0.70	0.61	5.4	3.3
MU21-007	302.50	303.00	0.50	0.50	1.0	0.5
MU21-007	408.50	410.00	1.50	0.65	0.9	0.6
MU21-008	49.00	52.00	3.00	1.50	1.3	1.3
MU21-008	55.80	56.80	1.00	0.71	5.3	3.7
MU21-008	224.00	224.40	0.40	0.33	9.1	3.0
MU21-008	328.30	328.70	0.40	0.20	4.4	0.9
MU21-009	72.80	73.80	1.00	0.70	1.1	0.8
MU21-009	76.90	77.90	1.00	0.70	0.9	0.6
MU21-009	85.60	87.60	2.00	1.40	1.1	1.1
MU21-009	93.00	94.00	1.00	0.70	2.0	1.4
MU21-009	96.00	97.00	1.00	0.70	0.9	0.6
MU21-009	97.40	103.60	6.20	3.94	2.3	2.3
MU21-009	110.90	111.90	1.00	0.70	1.3	0.9
MU21-009	131.00	131.50	0.50	0.34	1.6	0.5
MU21-009	135.40	136.00	0.60	0.42	1.4	0.6
MU21-009	142.00	143.00	1.00	0.70	1.1	0.7
MU21-009	150.60	152.00	1.40	1.29	1.0	1.0
MU21-010	8.90	10.50	1.60	1.31	26.2	26.2
MU21-010	102.00	103.00	1.00	0.98	2.0	1.9

MU21-010	106.00	116.80	10.80	8.85	6.1	6.1
MU21-010	119.70	120.50	0.80	0.64	1.2	0.8
MU21-010	132.00	133.00	1.00	0.80	1.4	1.1
MU21-010	336.40	336.90	0.50	0.17	3.6	0.6
MU21-010	379.40	379.70	0.30	0.26	2.3	0.6
MU21-010	388.70	389.20	0.50	0.49	174.0	85.3
MU21-010	438.40	439.00	0.60	0.56	1.1	0.6
MU21-010	446.00	446.60	0.60	0.52	1.9	1.0
MU21-011	1.40	2.40	1.00	0.60	2.9	1.7
MU21-011	19.60	24.10	4.50	2.66	1.0	1.0
MU21-011	55.50	57.35	1.85	1.01	17.5	17.5
MU21-011	62.30	64.45	2.15	1.33	2.0	2.0
MU21-011	67.90	69.00	1.10	0.66	1.5	1.0
MU21-011	71.95	73.10	1.15	0.69	1.4	1.0
MU21-011	100.70	101.15	0.45	0.24	3.6	0.9
MU21-011	213.15	213.60	0.45	0.21	13.6	2.9
MU21-011	346.60	349.30	2.70	2.59	5.8	5.8
MU21-012	1.00	2.90	1.90	1.33	3.4	3.4
MU21-012	26.40	28.70	2.30	1.61	2.2	2.2
MU21-012	65.30	65.90	0.60	0.49	4.8	2.3
MU21-012	71.50	71.95	0.45	0.32	2.4	0.7
MU21-012	83.15	85.00	1.85	1.79	5.2	5.2
MU21-012	108.95	109.60	0.65	0.61	1.2	0.7
MU21-012	269.45	270.00	0.55	0.39	3.4	1.3
MU21-012	299.45	299.85	0.40	0.28	4.8	1.4
MU21-013	124.30	124.65	0.35	0.25	2.6	0.7
MU21-013	141.50	142.20	0.70	0.54	1.5	0.8
MU21-013	161.85	163.00	1.15	1.00	2.7	2.7
MU21-013	226.50	227.30	0.80	0.80	0.9	0.7
MU21-013	237.55	238.30	0.75	0.80	0.9	0.7
MU21-013	246.55	248.50	1.95	1.83	1.1	1.1
MU21-013	252.65	253.50	0.85	0.43	1.7	0.7
MU21-013	255.20	255.55	0.35	0.80	1.2	1.0
MU21-014	185.90	186.40	0.50	0.38	28.0	10.6
MU21-014	190.00	190.30	0.30	0.23	3.6	0.8
MU21-014	198.70	199.20	0.50	0.32	2.3	0.7
MU21-014	278.70	280.10	1.40	1.27	1.8	1.8
MU21-014	343.75	344.25	0.50	0.25	56.0	14.0
MU21-014	350.50	351.20	0.70	0.35	2.1	0.7
MU21-014	354.00	355.50	1.50	1.19	5.1	5.1
MU21-015	301.95	302.40	0.45	0.23	8.0	1.8
MU21-015	371.35	374.00	2.65	1.63	14.5	14.5

<b>MU21-015</b>	389.50	390.55	1.05	0.74	17.8	13.2
<b>MU21-015</b>	395.55	396.60	1.05	0.80	1.3	1.0
<b>MU21-015</b>	406.00	407.20	1.20	0.85	1.9	1.6
<b>MU21-015</b>	411.85	412.40	0.55	0.45	1.4	0.6
<b>MU21-015</b>	413.65	416.10	2.45	2.12	1.3	1.3
<b>MU21-015</b>	423.85	424.15	0.30	0.23	22.1	5.1
<b>MU21-015</b>	428.70	429.00	0.30	0.21	105.0	22.1
<b>MU21-015</b>	434.85	435.15	0.30	0.25	3.3	0.8

1. Where true widths are greater than 1m, grades are not diluted and are presented as the grade over the composite true width.
2. Composites that are below 0.5 g/t Au when diluted to 1 m are not reported in this table.

## **SCHEDULE B**

### **MANDALAY RESOURCES CORPORATION**

(the “Corporation”)

#### **AUDIT COMMITTEE CHARTER**

##### **PURPOSE**

The Audit Committee is appointed by the Board of Directors to assist the Board of Directors in its oversight and evaluation of:

- the quality and integrity of the financial statements of the Corporation,
- the compliance by the Corporation with legal and regulatory requirements in respect of financial disclosure,
- the qualification, independence and performance of the Corporation’s independent auditor,
- the assessment, monitoring and management of the strategic, operational, reporting and compliance risks of the Corporation’s business (the “Risks”), and
- the performance of the Corporation's Chief Financial Officer.

In addition, the Audit Committee provides an avenue for communication between the independent auditor, the Corporation’s Chief Financial Officer and other financial senior management, other employees and the Board of Directors concerning accounting, auditing and Risk management matters.

The Audit Committee is directly responsible for the recommendation of the appointment and retention (and termination) and for the compensation and the oversight of the work of the independent auditor (including oversight of the resolution of any disagreements between senior management and the independent auditor regarding financial reporting) for the purpose of preparing audit reports or performing other audit, review or attest services for the Corporation.

The Audit Committee is not responsible for:

- planning or conducting audits,
- certifying or determining the completeness or accuracy of the Corporation’s financial statements or that those financial statements are in accordance with generally accepted accounting principles.

Each member of the Audit Committee shall be entitled to rely in good faith upon:

- financial statements of the Corporation represented to him or her by senior management of the Corporation or in a written report of the independent auditor to present fairly the financial position of the Corporation in accordance with generally accepted accounting principles; and

- any report of a lawyer, accountant, engineer, appraiser or other person whose profession lends credibility to a statement made by any such person.

“Good faith reliance” means that the Audit Committee member has considered the relevant issues, questioned the information provided and assumptions used, and assessed whether the analysis provided by senior management or the expert is reasonable. Generally, good faith reliance does not require that the member question the honesty, competence and integrity of senior management or the expert unless there is a reason to doubt their honesty, competency and integrity.

The fundamental responsibility for the Corporation’s financial statements and disclosure rests with senior management. It is not the duty of the Audit Committee to conduct investigations, to itself resolve disagreements (if any) between senior management and the independent auditor or to assure compliance with applicable legal and regulatory requirements.

In discharging its obligations under this Charter, the Audit Committee shall act in accordance with its fiduciary duties.

### **REPORTS**

The Audit Committee shall report to the Board of Directors on a regular basis and, in any event, before the public disclosure by the Corporation of its annual financial results. The reports of the Audit Committee shall include any issues of which the Audit Committee is aware with respect to the quality or integrity of the Corporation’s financial statements, its compliance with legal or regulatory requirements, the performance and independence of the Corporation’s independent auditor and changes in Risks.

The Audit Committee also shall prepare, as required by applicable law, any audit committee report required for inclusion in the Corporation's publicly filed documents.

### **COMPOSITION**

The members of the Audit Committee shall be three or more individuals who are appointed (and may be replaced) by the Board of Directors on the recommendation of the Corporation's Corporate Governance and Nominating Committee. The appointment of members of the Audit Committee shall take place annually at the first meeting of the Board of Directors after a meeting of shareholders at which directors are elected, provided that if the appointment of members of the Audit Committee is not so made, the directors who are then serving as members of the Audit Committee shall continue as members of the Audit Committee until their successors are appointed. The Board of Directors may appoint a member to fill a vacancy that occurs in the Audit Committee between annual elections of directors. Any member of the Audit Committee may be removed from the Audit Committee by a resolution of the Board of Directors. Unless the Chair is elected by the Board of Directors, the members of the Audit Committee may designate a Chair by majority vote of the members of the Audit Committee.

Each of the members of the Audit Committee shall meet the Corporation’s Categorical Standards for Determining Independence of Directors and shall be financially literate (or acquire that familiarity within a reasonable period after appointment) in accordance with applicable legislation and stock exchange requirements. No member of the Audit Committee shall:

- accept (directly or indirectly) any consulting, advisory or other compensatory fee from the Corporation or any of its subsidiaries<sup>1</sup> (other than remuneration for acting in his or her capacity as a director or committee member) or be an “affiliated person”<sup>2</sup> of the Corporation or any of its subsidiaries, or
- concurrently serve on the audit committee of more than three other public companies without the prior approval of the Board of Directors and their determination that such simultaneous service would not impair the ability of the member to effectively serve on the Audit Committee (which determination shall be disclosed in the Corporation’s annual management information circular).

## RESPONSIBILITIES

### Independent Auditor

The Audit Committee shall:

- Recommend the appointment and the compensation of, and, if appropriate, the termination of the independent auditor, subject to such Board of Directors and shareholder approval as is required under applicable legislation and stock exchange requirements.
- Obtain confirmation from the independent auditor that it ultimately is accountable, and will report directly, to the Audit Committee and the Board of Directors.
- Oversee the work of the independent auditor, including the resolution of any disagreements between senior management and the independent auditor regarding financial reporting.
- Pre-approve all audit and non-audit services (including any internal control-related services) provided by the independent auditor (subject to any restrictions on such non-audit services imposed by applicable legislation, regulatory requirements and policies of the Canadian Securities Administrators).
- Adopt such policies and procedures as it determines appropriate for the pre-approval of the retention of the independent auditor by the Corporation and any of its subsidiaries for any audit or non-audit services, including procedures for the delegation of authority to provide such approval to one or more members of the Audit Committee.
- Provide notice to the independent auditor of every meeting of the Audit Committee.
- Approve all engagements for accounting advice prepared to be provided by an accounting firm other than independent auditor.

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<sup>1</sup> A company is a subsidiary of another company if it is controlled, directly or indirectly, by that other company (through one or more intermediaries or otherwise).

<sup>2</sup> An “affiliate” of a person is a person that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with the first person.

- Review quarterly reports from senior management on tax advisory services provided by accounting firms other than the independent auditor.

### **The Audit Process, Financial Statements and Related Disclosure**

The Audit Committee shall:

- Meet separately and periodically with senior management and/or the independent auditor to review and discuss,
  - the planning and staffing of the audit by the independent auditor,
  - before public disclosure, the Corporation's annual audited financial statements and quarterly financial statements, the Corporation's accompanying disclosure of Management's Discussion and Analysis and earnings press releases and make recommendations to the Board of Directors as to their approval and dissemination of the annual financial statements and accompanying disclosure,
  - financial information and earnings guidance provided to analysts and rating agencies: this review need not be done on a case-by-case basis but may be done generally (consisting of a discussion of the types of information disclosed and the types of presentations made) and need not take place in advance of the disclosure,
  - any significant financial reporting issues and judgments made in connection with the preparation of the Corporation's financial statements, including any significant changes in the selection or application of accounting principles, any major issues regarding auditing principles and practices, and the adequacy of internal controls that could significantly affect the Corporation's financial statements,
  - all critical accounting policies and practices used,
  - all alternative treatments of financial information within GAAP or IFRS, as applicable that have been discussed with senior management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the independent auditor,
  - the use of "*pro forma*" or "adjusted" non-GAAP or non-IFRS, as applicable information,
  - the effect of new regulatory and accounting pronouncements,
  - the effect of any material off-balance sheet structures, transactions, arrangements and obligations (contingent or otherwise) on the Corporation's financial statements,
  - any disclosures concerning any weaknesses or any deficiencies in the design or operation of internal controls or disclosure controls made to the Audit Committee in connection with certification of forms by the Chief Executive Officer and/or the Chief Financial Officer for filing with applicable securities regulators, and
  - the adequacy of the Corporation's internal accounting controls and management information systems and its financial, auditing and accounting organizations and personnel (including any fraud involving an individual with a significant role in internal

controls or management information systems) and any special steps adopted in light of any material control deficiencies.

- Review disclosure of financial information extracted or derived from the Corporation's financial statements.
- Review with the independent auditor,

the quality, as well as the acceptability of the accounting principles that have been applied,

any problems or difficulties the independent auditor may have encountered during the provision of its audit services, including any restrictions on the scope of activities or access to requested information and any significant disagreements with senior management, any management letter provided by the independent auditor or other material communication (including any schedules of unadjusted differences) to senior management and the Corporation's response to that letter or communication, and

any changes to the Corporation's significant auditing and accounting principles and practices suggested by the independent auditor or other members of senior management.

### **Enterprise Risk Management**

The Audit Committee will oversee management's identification and monitoring of risks related to financial systems and reporting and recommending strategies to mitigate against such risks.

### **Compliance**

The Audit Committee shall:

- Review with senior management and the independent auditor any correspondence with regulators or governmental agencies and any employee complaints or published reports, which raise material issues regarding the Corporation's financial statements or accounting policies.
- Review senior management's written representations to the independent auditor.
- Review with the Corporation's General Counsel (or, if the Corporation does not have a General Counsel, its principal external legal advisors) legal matters that may have a material impact on the financial statements, the Corporation's compliance policies and any material reports or inquiries received from regulators or governmental agencies.
- Establish procedures for,
  - the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or auditing matters, and
  - the confidential, anonymous submission by employees of the Corporation with concerns regarding any accounting or auditing matters.

## **Delegation**

To avoid any confusion, the Audit Committee responsibilities identified above are the sole responsibility of the Audit Committee and may not be allocated by the Board of Directors to a different committee without revisions to this Charter.

## **MEETINGS**

The Audit Committee shall meet at least quarterly and more frequently as circumstances require. All members of the Audit Committee should strive to be at all meetings. The Audit Committee shall meet separately, periodically, with senior management and the independent auditor and may request any member of the Corporation's senior management or the Corporation's outside counsel or independent auditor to attend meetings of the Audit Committee or with any members of, or advisors to, the Audit Committee. The Audit Committee also may meet with the investment bankers, financial analysts and rating agencies that provide services to, or follow, the Corporation. The Audit Committee will also meet *in camera* at each of its regularly scheduled meetings.

Quorum for the transaction of business at any meeting of the Audit Committee shall be a majority of the number of members of the Audit Committee or such greater number as the Audit Committee shall by resolution determine. The powers of the Audit Committee may be exercised at a meeting at which a quorum of the Audit Committee is present in person or by telephone or other electronic means or by a resolution signed by all members entitled to vote on that resolution at a meeting of the Audit Committee. Each member (including the Chair) is entitled to one (but only one) vote in Audit Committee proceedings.

Meetings of the Audit Committee shall be held from time to time and at such place as a member of the Audit Committee may request upon 48 hours prior notice. The notice period may be waived by a quorum of the Audit Committee.

Except as otherwise provided in this Charter, the Audit Committee may form and delegate authority to individual members and subcommittees of the Audit Committee where the Audit Committee determines it is appropriate to do so.

## **INDEPENDENT ADVICE**

In discharging its mandate, the Audit Committee shall have the authority to retain (and authorize the payment by the Corporation of) and receive advice from special legal, accounting or other advisors as the Audit Committee determines to be necessary to permit it to carry out its duties.

## **ANNUAL EVALUATION**

Annually, or more frequently at the request of the Chief Executive Officer as a result of legislative or regulator changes, the Audit Committee shall, in a manner it determines to be appropriate:

- Conduct a review and evaluation of the performance of the Audit Committee and its members, including the compliance of the Audit Committee with this Charter.
- Review and assess the adequacy of its Charter and the position description for its Chair and recommend to the Board of Directors any improvements to this Charter or the position description that the Audit Committee determines to be appropriate, except for minor technical

amendments to this Charter, authority for which is delegated to the Chief Executive Officer, who will report any such amendments to the Board of Directors at its next regular meeting.

**Appendix A**

- Review the experience and qualifications of the senior members of the independent auditor's team.
- Discuss with the independent auditor its internal quality-control procedures.
- Confirm with the independent auditor that it is in compliance with applicable legal, regulatory and professional standards relating to auditor independence.
- Confirm with the independent auditor that it is a participating audit firm of the Canadian Public Accountability Board in compliance with all restrictions or sanctions imposed on it (if any).
- Review and approve clear policies for the hiring by the Corporation of partners, employees and former partners and employees of the present and former independent auditor.
- Review periodic reports from the independent auditor regarding its independence and consider whether there are any non-audit services or relationships that may affect the objectivity and independence of the independent auditor and, if so, recommend that the Board of Directors take appropriate action to satisfy itself of the independence of the independent auditor.
- Obtain and review such report(s) from the independent auditor as may be required by applicable legal and regulatory requirements.