

Mandalay Resources Corporation Provides Update on Year-End 2019 Resources and Reserves

21.02.2020 | [Globenewswire Europe](#)

TORONTO, Feb. 21, 2020 - [Mandalay Resources Corp.](#) ("Mandalay" or the "Company") (TSX: MND, OTCQB: MNDJF) is pleased to announce updated Mineral Resources and Reserves numbers estimates for its Costerfield gold-antimony mine in Australia and its Björkdal gold mine in Sweden as at December 31, 2019. All dollar amounts in this press release are in U.S. dollars, unless otherwise noted.

Highlights

Costerfield

- Net of depletion for production in 2019, Proven and Probable Mineral Reserves for contained gold and antimony increased by 13% and 3%, respectively;
- Site maintains minimum 3-year mine life for the eighth year in a row; and
- Majority of Mineral Reserves increase was a result of Resource conversion drilling and upgrade of the Youle vein.

Björkdal

- Net of depletion for production in 2019, Björkdal underground Proven and Probable Mineral Reserves for contained gold increased slightly;
- Site maintains a 10-year mine life; and
- Exploration costs of adding to Mineral Reserves was approximately \$27 per ounce of gold.

Dominic Duffy, President and CEO of Mandalay, commented, "Mandalay's Proven and Probable Mineral Reserves as of December 31, 2019, totaled 816,000 ounces of gold and 17,800 tonnes of antimony, compared to 824,000 ounces of gold and 17,200 tonnes of antimony at year-end 2018;

Mr. Duffy added, "At Costerfield, we were pleased to increase Mineral Reserves net of depletion for production in 2019 as contained gold and antimony increased by 13% and 3%, respectively. By year-end 2019, the site exploration team had completed 6.8 kilometres of diamond drilling to test the extensions of the Youle ore body, and 2.8 kilometres of diamond drill core was drilled from the Costerfield Deeps project. Detailed grade control drilling as well as face sampling increased the confidence in grade continuity of the upper section of Youle. This allowed for the conversion of Inferred Resources into Indicated Resources, as well as a 16% increase in gold grade for the Measured and Indicated areas of the Youle deposit;

Mr. Duffy added, "A small net reduction in Mineral Reserves from 2019 depletion was experienced at Björkdal, predominantly from a 35,000 ounces of gold reduction from the open pit. This can be attributable to a shift in strategy with resources directed towards infill-drilling of the underground Aurora deposit, and the pausing of open pit mining during July 2019. Excluding the open pit reduction, Björkdal increased its underground Reserves by 5,000 ounces of gold net of 2019 depletion. During 2019, the underground operations completed 5,621 metres of on-vein development, which was mapped and sampled in accordance with our grade control protocols. Overall, a total of 26,800 ounces of gold were added to Reserves at a cost of \$0.7 million which equates to \$27 per ounce of gold added;

Mr. Duffy concluded, "Exploration successes achieved during 2019 allowed Costerfield to grow its Mineral Reserves through further Resource conversion at Youle, and for Björkdal to preserve its 10-year mine life. Over the last two years, our Mineral Reserves have remained relatively unchanged net of depletion, but we have grown our Mineral Resources, underpinning the strength of our core assets. Looking

forward to 2020, Costerfield's exploration program will continue on the Youle vein, drilling will commence at the near-mine exploration targets of: Damper Gully, True Blue, Robinsons and Browns, and the deep hole program will continue during 2020. Lastly, at Björkdal, its exploration program will continue with its four priorities: depth extensions in Aurora; up-dip drilling of Aurora from surface; north of Aurora zone; and the high-grade skarn deposit.

Table 1: Mineral Reserves as of December 31, 2019 and 2018

	2019			2018	
	Contained Au (koz)	Contained Ag (koz)	Contained Sb (kt)	Contained Au (koz)	Contained Ag (koz)
Proven	37	292	5.4	22	292
Probable	779	7,511	12.4	802	7,511
Proven + Probable	816	7,803	17.8	824	7,803

Notes:

1. Reserves are contained at Björkdal, Costerfield and Cerro Bayo properties only.
2. See tables 4 and 6 for details of Proven and Probable Reserve tonnages and grades at each property, including cut-off grades and Qualified Persons.
3. Mineral Reserves have not been estimated for Challacollo.
4. Totals may appear different from the sum of their components due to rounding.

Table 2: Mineral Resources, Inclusive of Mineral Reserves, as of December 31, 2019 and 2018

	2019			
	Contained Au (koz)	Contained Ag (koz)	Contained Sb (kt)	Contained Cu (klbs)
Measured	90	421	12.7	-
Indicated	1,465	39,871	24.0	459,000
Measured + Indicated	1,555	40,292	36.7	459,000
Inferred	477	10,255	9.0	13,000

	2018			
	Contained Au (koz)	Contained Ag (koz)	Contained Sb (kt)	Contained Cu (klbs)
Measured	70	421	9.8	-
Indicated	1,415	39,871	31.0	459,000
Measured + Indicated	1,487	40,292	40.8	459,000
Inferred	457	10,255	9.5	13,000

Notes:

1. See tables 3 and 5 for details of tonnages and grades at each property.
2. Totals may appear different from the sum of their components due to rounding.

Details of the Mineral Resources and Reserves estimates at each property are set out below. Estimates were prepared or verified by the following independent third parties: Roscoe Postle Associates Inc. (RPA), now part of SLR Consulting Ltd. (SLR), at Björkdal; and SRK Consulting (Australasia) Pty Ltd. (SRK) at Costerfield.

The year-end 2019 estimates of Mineral Resources and Reserves for the Costerfield and Björkdal will be fully documented in independent Technical Reports prepared in accordance with National Instrument 43-101 (NI 43-101) to be filed on www.sedar.com and the Mandalay website www.mandalayresources.com within 45 days of this press release.

Mineral Resources and Reserves were estimated at Cerro Bayo by depleting the year-end 2016 estimates (verified by RPA and press released on February 23, 2017) to account for production through the operating suspension on June 9, 2017. The estimate of Mineral Resources at the Challacollo project has not changed from 2014. For more details, please refer to the technical reports prepared in accordance with NI 43-101 filed

on www.sedar.com and the Mandalay website www.mandalayresources.com

Table 3: Mineral Resources at Costerfield, Inclusive of Mineral Reserves, as of December 31, 2019 and December 1, 2018

	2019				
	Tonnes (kt)	Au Grade (g/t)	Sb Grade (%)	Cont. Au (koz)	Cont. Sb (kt)
Measured	283	9.6	4.5	87	12.7
Indicated	830	9.6	2.9	256	24.0
Measured + Indicated	1,113	9.6	3.3	344	36.7
Inferred	533	6.8	1.7	117	9.0
	2018				
	Tonnes (kt)	Au Grade (g/t)	Sb Grade (%)	Cont. Au (koz)	Cont. Sb (kt)
Measured	245	8.5	4.0	67	9.8
Indicated	1,073	8.2	2.9	283	31.0
Measured + Indicated	1,319	8.3	3.1	351	40.8
Inferred	497	8.0	1.9	128	9.5

Notes:

1. Mineral Resources estimated as of December 31, 2019, 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) rounded to the nearest thousand and contained antimony (t) rounded to the nearest hundred.
4. Totals may appear different from the sum of their components due to rounding.
5. A 3.5 g/t Au Equivalent (AuEq) cut-off grade over a minimum mining width of 1.2 m is applied where AuEq is calculated at a gold price of USD1,500/oz, antimony price of USD10,000/t.
6. The Au Equivalent value (AuEq) is calculated using the formula: $AuEq = Au \text{ g/t} + 1.52 * Sb \%$
7. Geological modelling and sample compositing was performed by Mandalay Resources and Cael Gniel MAIG, full time employee of Mining Plus. The models were independently verified by Danny Kentwell FAusIMM, full time employee of SRK Consulting.
8. The Mineral Resource estimation was performed by Cael Gniel. The resource models were verified by Danny Kentwell. Danny Kentwell is the qualified person under NI 43-101 and is responsible for the Resource estimate.

Since the last Resources and Reserves was estimated (December 1, 2018), Mandalay drilled a total of 9.5 kilometres (5.9 miles) of diamond core at a cost of \$1.76 million. Of this, 6.8 km of diamond drill core was dedicated to testing extension of the Youle ore body, and 2.8 km of diamond drill core was drilled from the Costerfield Deeps project. In addition, the Company completed 3,094 metres (2.0 miles) of on-vein development with mine sampling predominantly on the Brunswick deposit, but also along the first mined drives of Youle.

Drill core was logged and sampled by Costerfield geologists, who also performed mine sampling. All samples were sent to Onsite Laboratories in Bendigo, Victoria, Australia, for sample preparation and assay. Site geological and metallurgical personnel have implemented a QA/QC process that includes the regular submission of standard reference materials, duplicates and blanks with drill and face samples submitted for assay. Standard reference materials have been certified by Geostats Pty Ltd.

A two-dimensional modelling method was undertaken for all models. Core and mine sampling data were entered into Datamine software and composited to true vein width. Gold accumulation, antimony accumulation and true vein width were estimated into a two-dimensional block model for each lode using ordinary kriging and inverse distance where the density of data was insufficient for ordinary kriging. Gold and antimony vein grades were back calculated using estimated accumulated data and true vein width.

Where vein true widths are less than 1.2 m, vein grades were diluted to a minimum mining width of 1.2 m

using dilution grades of zero g/t gold and zero percent antimony. Grades where vein true widths are greater than 1.2 m were not diluted. Mineral Resources were estimated at a cut-off grade of 3.5 g/t Au equivalent (AuEq) grade (using \$1,500/oz Au and \$10,000/t Sb), AuEq is calculated using the formula $AuEq = Au + (Sb \times 1.52)$ where Sb is in % and Au is in grams per tonne based on 1.2 m diluted grades.

From the Mineral Resources, a mine plan was designed based only on Measured and Indicated Resource blocks using, predominantly, the cemented rock fill blast hole stoping method. A cut-off grade of 4.0 g/t AuEq and minimum stoping width of 1.5 m were used, with planned and unplanned dilution at zero grade. AuEq grade (using \$1,300/oz Au and \$7,000/t Sb), AuEq is calculated using the formula $AuEq = Au + (Sb \times 1.28)$ where Sb is in % and Au is in grams per tonne.

Financial viability of Proven and Probable Mineral Reserves was demonstrated at metal prices of \$1,300/oz Au and \$7,000/t Sb.

Table 4: Mineral Reserves at Costerfield as of December 31, 2019 and December 1, 2018

	2019				
	Tonnes (kt)	Au Grade (g/t)	Sb Grade (%)	Cont. Au (koz)	Cont. Sb (kt)
Proven	114	9.5	4.8	35	5.4
Probable	360	14.6	3.4	169	12.4
Proven + Probable	474	13.4	3.8	204	17.8
	2018				
	Tonnes (kt)	Au Grade (g/t)	Sb Grade (%)	Cont. Au (koz)	Cont. Sb (kt)
Proven	76	8.4	4.0	20	3.1
Probable	461	10.8	3.1	160	14.2
Proven + Probable	537	10.4	3.2	180	17.2

Notes:

1. Mineral Reserve estimated as of December 31, 2019
2. Tonnes are rounded to the nearest thousand; contained gold (oz) rounded to the nearest thousand and contained antimony (t) rounded to the 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 4.0 g/t Au Equivalent (AuEq) cut-off grade is applied.
6. Commodity prices applied are; gold price of \$1,300/oz, antimony price of \$7,000/t and exchange rate USD:AUD of 0.70.
7. AuEq value is calculated using the formula: $AuEq = Au \text{ g/t} + 1.28 * Sb \%$.
8. The Mineral Reserve is a subset, a Measured and Indicated only Schedule, of a Life of Mine Plan that includes mining of Measured and Indicated Resources.
9. The Mineral Reserve estimate was prepared by Daniel Fitzpatrick and Dylan Goldhahn, AAusIMM who are full time employees of Mandalay Resources and was independently verified by Anne-Marie Ebbels, MAusIMM, CP (Mining) who is a full time employee of SRK Consulting who is a qualified person under NI 43-101.

The net increase of 24,000 ounces of gold in Proven and Probable Reserves for 2019 relative to 2018 is the result of a total of 24,000 ounces of gold depleted from the 2018 Reserves, which has been positively offset by the addition of 48,000 ounces of gold added by Resource conversion and mining re-evaluation. The 600 tonnes of antimony net increase in Proven and Probable Reserves is the result of 3,800 tonnes of antimony depleted from the 2018 Reserves, offset by the 4,400 tonnes of antimony added by Resource conversion and mining re-evaluation.

The majority of the increase (24,000 ounces of gold and 600 tonnes of antimony) is a result of Resource conversion drilling and upgrade of the Youle deposit.

Table 5: Mineral Resources at Björkdal, Inclusive of Mineral Reserves, as of December 31, 2019 and 2018

Category	2019		
	Tonnage (kt)	Au Grade (g/t)	Contained Au (koz)
Indicated Resources			
Underground	9,656	2.58	799
Open Pit	3,114	2.08	208
Norrberget Open Pit 144		3.29	15
Stockpile	2,644	0.64	54
Total Indicated	15,558	2.15	1,077
Inferred Resources			
Underground	2,143	2.36	163
Open Pit	3,338	1.30	139
Norrberget Open Pit 3		4.03	0.5
Stockpile	-	-	-
Total Inferred	5,483	1.71	302
Category	2018		
	Tonnage (kt)	Au Grade (g/t)	Contained Au (koz)
Indicated Resources			
Underground	7,416	2.98	711
Open Pit	2,947	2.30	218
Norrberget Open Pit 144		3.29	15
Stockpile	2,700	0.64	56
Total Indicated	13,207	2.36	1,000
Inferred Resources			
Underground	1,922	2.63	162
Open Pit	2,516	1.32	107
Norrberget Open Pit 3		4.03	1
Stockpile	-	-	-
Total Inferred	4,441	1.89	271

Notes:

1. Björkdal Mineral Resources are estimated using drill hole and sample data as of September 30, 2019 and depleted for production through December 31, 2019. Norrberget Mineral Resources are based on a data crystallization date of October 4, 2017.
2. CIM definitions (2014) were followed for Mineral Resources.
3. Mineral Resources are inclusive of Mineral Reserves.
4. Mineral Resources are estimated using an average Au price of \$1,500/oz. and an exchange rate of 9.0 SEK/US\$.
5. Bulk density is 2.74 t/m³ for veins and host rock. Bulk density is 2.92 t/m³ for skarn ore bodies.
6. High gold assays were capped to 30 g/t Au for the open pit mine.
7. High gold assays for the underground mine were capped at 60 g/t Au for the first search pass and 40 g/t Au for subsequent passes.
8. High gold assays at Norrberget were capped at 24 g/t Au.
9. Interpolation was by inverse distance cubed utilizing diamond drill, reverse circulation and chip channel samples.
10. Open pit Mineral Resources are estimated at a cut-off grade of 0.34 g/t Au and constrained by the resource pit design.
11. Underground Mineral Resources are estimated at a cut-off grade of 0.80 g/t Au.
12. A nominal two metres minimum mining width was used to interpret veins using diamond drill, reverse circulation, and underground chip sampling.
13. Reported Mineral Resources are exclusive of previously mined underground development and stopes.
14. Stockpile Mineral Resources are estimated at a cut-off grade of 0.40 g/t Au and are 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 add due to rounding.
17. The Björkdal Mineral Resource estimate was prepared by Reno Pressacco, P.Geo., Principal Geologist with RPA, who is a Qualified Person as defined by NI 43-101. The Norrberget Mineral Resource estimate was prepared by Jack Lunnion, CGeol, Senior Geologist with RPA, who is a Qualified Person as defined by NI 43-101.

During 2019, Mandalay drilled 8,057 m of diamond holes at Björkdal for a total expenditure of \$0.7 million. In addition, underground operations completed 5,621 m of on-vein development, which was mapped and sampled in detail according to our grade control protocols.

Table 6: Mineral Reserves at Björkdal as of December 31, 2019 and 2018

Category	2019		
	Tonnage (kt)	Au Grade (g/t)	Contained Au (koz)
Probable			
Underground	5,410	2.10	365
Open Pit	2,875	1.23	114
Norrberget Open Pit 162		2.80	15
Stockpile	2,644	0.64	54
Total Probable	11,090	1.54	548
Category	2018		
	Tonnage (kt)	Au Grade (g/t)	Contained Au (koz)
Probable			
Underground	4,754	2.36	360
Open Pit	3,768	1.23	149
Norrberget Open Pit 162		2.80	15
Stockpile	2,700	0.64	56
Total Probable	11,384	1.58	580

Notes:

1. Björkdal Mineral Reserves are estimated using drill hole and sample data as of September 30, 2019 and depleted for production through December 31st, 2019. Norrberget Mineral Reserves are based on a data crystallization date of October 4, 2017.
2. CIM definitions (2014) were followed for Mineral Reserves.
3. 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 between 0.4 g/t and 1.0 g/t. The application of these block dilution factors is based on historical reconciliation data. A cut-off grade of 0.4 g/t Au was applied.
4. Underground Mineral Reserves are based on mine designs carried out on an updated resource model. Minimum mining widths of 3.85 m for stopes (after dilution) and 4.35 m for development (after dilution) were used. Stope dilution was applied by adding 0.5 m on each side of stopes as well as an additional 10% over break dilution. An overall dilution factor of 14.5% 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 0.92 g/t Au was applied. An incremental cut-off grade of 0.4 g/t Au was used for development material.
5. Stockpile Mineral Reserves are estimated at a cut-off grade of 0.40 g/t Au and are based upon surveyed volumes supplemented by production data.
6. Mineral Reserves are estimated using an average long-term gold price of \$1,300/oz, and an exchange rate of 9.0 SEK/US\$.
7. Tonnes and contained gold are rounded to the nearest thousand.
8. Totals may appear different from the sum of their components due to rounding.
9. The Björkdal Mineral Reserve estimate was prepared by Derek Holm, FSAIMM, Senior Mining Engineer with RPA, who is a Qualified Person as defined by NI 43-101.

The net decrease 32,200 ounces of gold in Probable Reserves for 2019 relative to 2018 included mining depletion of 59,000 ounces of gold during 2019. Therefore, a total of 26,800 ounces of gold were added to

reserves for the 2019 exploration spend of \$0.7 million reported above. The exploration cost of adding those Reserves was \$27 per ounce of gold.

Qualified Persons:

All Qualified Persons listed below have read and approved the contents of this news release as it pertains to the Mineral Resource and Mineral Reserve estimates disclosed in this news release.

For Costerfield: The Mineral Resource estimate was carried out under the supervision of Danny Kentwell, FAusIMM, an employee of SRK Consulting 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 Anne-Marie Ebbels, MAusIMM CP(Mining), an employee of SRK Consulting and independent of Mandalay. She is a Qualified Person for the purposes of NI 43-101.

For Björkdal: The Mineral Resource estimate was carried out under the supervision of Reno Pressacco, P.Geo., Principal Geologist and an employee of RPA 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 Derek Holm, FSAIMM, Senior Mining Engineer and an employee of RPA and independent of Mandalay. He is a Qualified Person for the purposes of NI 43-101. For Norrberget: The Mineral Resource Estimate was carried out under the supervision of Jack Lunnon, CGeol, Senior Geologist and an employee of RPA 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 David Smith, CEng., FIMMM, Principal Mining Engineer and an employee of RPA and independent of Mandalay. He is a Qualified Persons for the purposes of NI 43-101.

For Further Information:

Dominic Duffy
President and Chief Executive Officer

Edison Nguyen
Manager, Analytics and Investor Relations

Contact: 647.260.1566

About Mandalay Resources Corporation:

Mandalay Resources is a Canadian-based natural resource company with producing assets in Australia and Sweden, and care and maintenance and development projects in Chile. The Company is focused on executing a roll-up strategy, creating critical mass by aggregating advanced or in production gold, copper, silver and antimony projects in Australia, the Americas and Europe to generate near-term cash flow and shareholder value.

Forward-Looking Statements:

This news release contains "forward-looking statements" within the meaning of applicable securities laws. Readers are cautioned not to place undue reliance on forward-looking statements. Actual results and developments may differ materially from those contemplated by these statements depending on, among other things, changes in commodity prices and general market and economic conditions. The factors identified above are not intended to represent a complete list of the factors that could affect Mandalay. A description of additional risks that could result in actual results and developments differing from those contemplated by forward-looking statements in this news release can be found under the heading "Risk Factors" in Mandalay's annual information form dated March 28, 2019, a copy of which is available under Mandalay's profile at www.sedar.com. In addition, there can be no assurance that any inferred resources that are discovered as a result of additional drilling will ever be upgraded to proven or probable reserves. Although Mandalay has attempted to identify important factors that

could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

Dieser Artikel stammt von [Rohstoff-Welt.de](https://www.rohstoff-welt.de)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/345067--Mandalay-Resources-Corporation-Provides-Update-on-Year-End-2019-Resources-and-Reserves.html>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2025. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).