



MILLENNIUM

MINERALS LIMITED

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Manager Company Announcements
Company Announcements Office
Australian Securities Exchange Limited
Level 4, 20 Bridge Street
SYDNEY NSW 2000

Via Electronic Lodgement

Dear Sir/Madam

Nullagine Gold Project

31% Ore Reserve increase to 741,000 ounces contained gold

Millennium Minerals Limited is pleased to report an update of the gold Mineral Resource and Ore Reserve Inventories for the Company's Nullagine Gold Project ("The Project")

Highlights:

Increased Mineral Resources:

- **A further 81,000 ounces of gold added to the Project Mineral Resources from Golden Eagle, Shearers, Otways, All Nations, Bartons and Little Wonder deposits.**
- **The global Mineral Resource estimate now stands at 34.68 Mt grading at 1.19 g/t Au for 1,328,500 contained gold ounces.**

Increased Ore Reserve:

- **Ore Reserve is now 16.38 Mt at 1.4 g/t Au containing 741,000 ounces, using a cut-off grade of 0.5 g/t Au, and AUD\$1,500 per ounce gold price.**
- **57% increase in Ore Reserve tonnes equating to 5,928,700 t.**
- **31% increase in Ore Reserve ounces equating to 174,000 oz**
- **The new Ore Reserve will be used to prepare an updated mining plan in the coming weeks.**

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Introduction

Millennium Minerals Limited (“Millennium” or “the Company”) is pleased to announce upgraded Mineral Resource and Ore Reserves estimates for 6 of its gold deposits located within the Project in the East Pilbara District of Western Australia (Figure 1). The six gold deposits’ (Golden Eagle, Shearers, Otways, All Nations, Bartons and Little Wonder) were drilled during 2011 to test for extensions to mineralisation outside the margins of the current proposed pit designs. The new Mineral Resource estimates for the six deposits are listed in Table 3, along with the unchanged estimates for Golden Gate (ABCD Reef) and the Golden Gate satellite deposits of Falcon, Condor, Harrier, Crow and G Reef.

The JORC reported Mineral Resource estimates were carried out by independent consultants, CSA Global Pty Ltd. The JORC reported Ore Reserve estimates were carried out on the same deposits by independent consultants, Auralia Mining Consulting.

CEO’s QUOTE:

Commenting on the announcement, Millennium Minerals CEO, Brian Rear, said: “We are delighted to be able to deliver such a substantial increase in Ore Reserves at our Project in the run up to the start of gold production next year.”

“Our construction program is now well advanced with engineering, earth works, civils, tank refurbishment and village construction on schedule and on budget. We are on track to commence commercial operations by the fourth quarter of 2012”

“We are confident in our ability to further increase the Mineral Resource inventory at all of the deposits that make up the Project and we are considering a very substantial drilling program in 2012,” he said.

New Mineral Resource Estimates

The **Golden Eagle** deposit contains a new Mineral Resource estimate of 22.27 Mt at 1.16 g/t Au using a 0.5 g/t gold cut-off grade for 829,000 ounces contained gold. The new estimate shows a 3% increase, or an additional 23,400 ounces over the previous estimate. These Mineral Resources are classified as Measured, Indicated and Inferred under the 2004 JORC Code.

The **Bartons** deposit contains a new Mineral Resource estimate of 3.71 Mt at 1.2 g/t Au using a 0.5 g/t gold cut-off grade for 141,000 ounces contained gold. The new estimate shows a 13% increase, or an additional 16,000 ounces over the previous estimate. These Mineral Resources are classified as Measured, Indicated and Inferred under the 2004 JORC Code.

The **Shearers** deposit contains a Mineral Resource estimate of 2.33 Mt at 1.1 g/t Au using a 0.5 g/t gold cut-off grade for 81,000 ounces contained gold. The new estimate shows a 20% increase, or an additional 13,300 ounces over the previous estimate. These Mineral Resources are classified as Measured, Indicated and Inferred under the 2004 JORC Code.

The **Otways** deposit is located approximately 300 metres to the south east of the Shearers deposit. It contains a new Mineral Resource estimate of 2.74 Mt at 0.86 g/t Au using a 0.5 g/t gold cut-off grade for 75,000 ounces contained gold. The new estimate shows a 39% increase, or an additional

21,000 ounces over the previous estimate. These Mineral Resources are classified as Measured, Indicated and Inferred under the 2004 JORC Code.

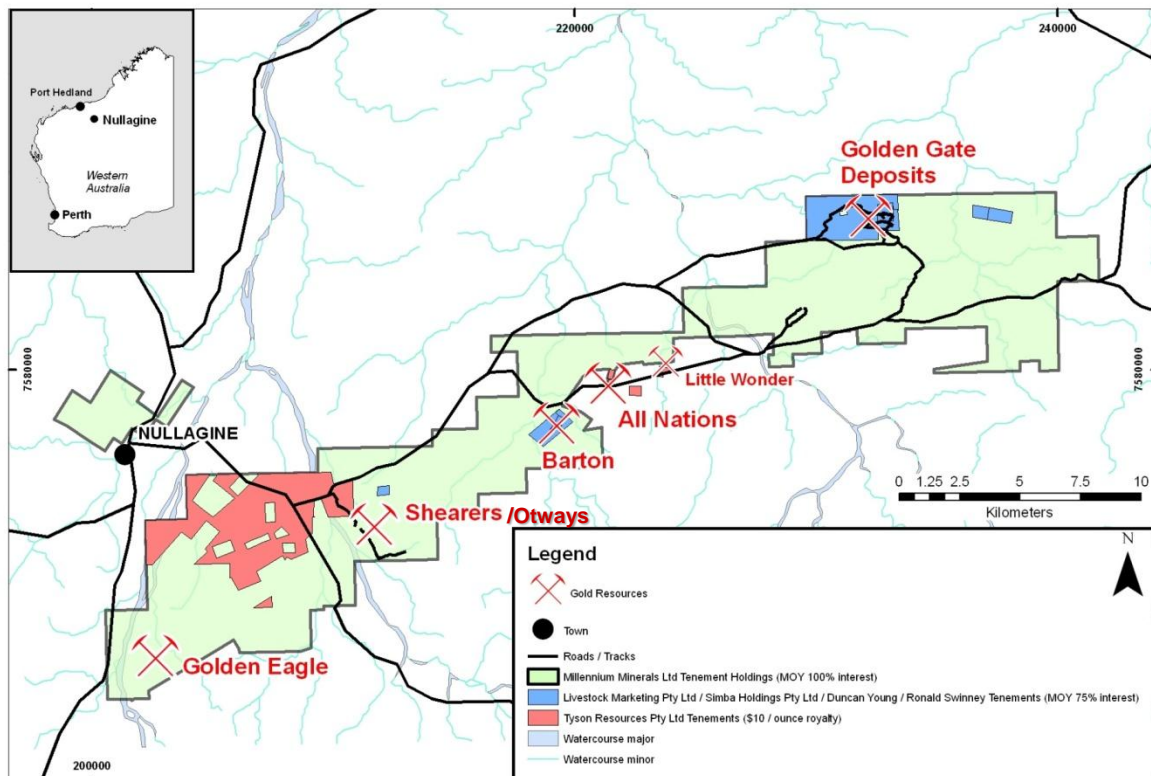
The **All Nations** deposit is located approximately 21 kilometres to the northeast of the proposed 1.5 Mt per annum CIL gold processing facility at Golden Eagle (the Process Facilities). It contains a new Mineral Resource estimate of 1.93 Mt at 1.1 g/t Au using a 0.5 g/t gold cut-off grade for 66,000 ounces contained gold. The new estimate shows a 14% increase, or an additional 8,000 ounces over the previous estimate. These Mineral Resources are classified as Measured, Indicated and Inferred under the 2004 JORC Code.

The **Little Wonder** deposit is located approximately 23 kilometres to the northeast of the ore processing facilities. It contains a new Mineral Resource estimate of 0.56 Mt at 1.2 g/t Au using a 0.5 g/t gold cut-off grade for 22,100 ounces contained gold. The new estimate shows a slight decrease of 800 ounces over the previous estimate. These Mineral Resources are classified as Measured, Indicated and Inferred under the 2004 JORC Code.

The Company is pleased to note that not only was overall total gold increased by 81,000 ounces, equivalent to a further years production but that it maintained the ratio of the ounces reporting to the Measured and Indicated categories at 83%.

The Company attributes the increases in gold Mineral Resource inventories to strong results from the 22,531 metre RC drilling programme, which was completed in September this year. The Company believes there is still good potential to increase the Mineral Resource inventories at the deposits drilled in 2011. However, it strongly believes that it can add even more significantly to its other deposits at Nullagine, with the very substantial drilling programme planned for 2012.

Figure 1. Nullagine Gold Deposits Location Plan



Resource Modelling and Grade Estimation

Independent resource consultants, CSA Global Pty Ltd, completed the resource modelling for the six deposits, which are listed in Table 3, along with unchanged Mineral Resource estimates for Golden Gate (ABCD Reef) and the Golden Gate satellite deposits of Falcon, Condor, Harrier, Crow and G Reef.

The Mineral Resources for Shearers, Otways, All Nations, Bartons, and Little Wonder deposits have been completed using the Ordinary Kriging methodology for grade estimation, the method considered most suitable for this style of deposit. The Mineral Resources for Golden Eagle deposit has been completed using the Multiple Indicator Kriging methodology for grade estimation, the method considered most suitable for this style of deposit. The results have been checked either via internal validation (Shearers, Otways, All Nations & Bartons) or using Inverse Distance Squared estimation methods (Little Wonder), or Ordinary Kriging (Golden Eagle). These alternative methodologies produced similar estimates of Mineral Resources. Detailed resource work has comprised:

- Resource modelling and wireframing
- Variography and statistical analyses
- Block modelling
- Resource estimation

With the inclusion of the new resource modelling, the updated global Mineral Resource estimate for all deposits at the Project is now 34.68 Mt at 1.19 g/t Au for 1.33 M ounces (Table 3.).

Importantly, a total of 28.5 Mt at 1.21 g/t Au for 1.11 M ounces of gold is contained within the Measured and Indicated Mineral Resource categories (Table 1.), which includes significant upgrades from the Inferred category.

The Golden Eagle, Shearers, Otways, Bartons, All nations and Little Wonder deposits are hosted within east northeast trending, upright sequence of rhythmically interlayered sandstones, siltstones and shales of the Mosquito Creek Formation. Gold mineralisation is associated with a complex array of sub parallel, tabular quartz-carbonate veins and veinlets dipping between 60 degrees and vertical.

A key objective of the new estimates was to produce revised inputs for inclusion in new pit optimization studies, and subsequently new Ore Reserve estimates for the six deposits. These studies have now been completed and are reported below.

Optimisation and Ore Reserve Estimates

The Company has re-estimated the Nullagine Gold Project's Ore Reserve in light of the increase in the Mineral Resource inventory (as reported in this announcement), improvements in the gold price and the upward pressure on operating costs generally.

Table 1 shows a summary of the combined material and grade contained within the supplied Mineral Resource models for all areas, and which were included in the mine design study.

Table 1: Measured and Indicated Mineral Resources Summary

Description	Tonnes	Au>0.5 g/t	Ounces
Measured	18,540,000	1.20	715,000
Indicated	9,960,000	1.23	393,000
M + I	28,500,000	1.21	1,108,000

The contained gold ounces included in the Measured and Indicated Mineral Resource estimates increased by approximately 7% over the existing Mineral Resource categories used due to an increase in average gold grade and an increase in ore tonnage.

The project consists of five main deposit areas; Golden Eagle, All Nations, Barton, Golden Gate and Shearers/Otways, with Golden Eagle being the biggest and main economic driver of the Project.

Although the Golden Gate deposits are small representing only 9.9% of the total Ore Reserve estimate, they contain the higher grades in the Project (Table 3 & 4). Accordingly, they serve as a useful grade enhancer as and when required by the planned mining operation.

Auralia Mining Consulting was commissioned to conduct the Ore Reserve study. Operating cost assumptions were developed from preferred supplier tendering for mining fleet, drill and blast and consumables. Labour costs were updated based on October 2011 remuneration surveys. Other design parameters for the study, such as pit slope angles, discount rates and milling limits, were taken from the previously completed 2009 Feasibility Study and final process design. A gold price of AUD\$1,500/oz was used for pit optimisation.

A series of Whittle optimisations and pit designs were completed in updating the Ore Reserve which is summarised in Table 2 and detailed in Table 4

This case is confined to those Mineral Resources classified under the Measured and Indicated resource categories as defined by the JORC Code (2004).

Table 2: Ore Reserves Summary

Description	Ore (Mt)	Grade (g/t Au)	Ounces
Proven	13.4	1.39	601,300
Probable	2.96	1.47	139,900
Total	16.38	1.41	741,172

Mining costs reflect an Owner operate “supply and maintain” approach with the Company maintaining direct control of mining operations. Process costs assume single stage SAG milling and on-site diesel power generation. Labour costs have been referenced to industry surveys dated October 2011 and the fly in-fly out manning levels assumes a two week on – one week off schedule.

Background

The Project is a 1.33 million ounce gold resource contained within 7 deposit locations on granted mining leases (Table 3). The largest deposit is Golden Eagle located approximately 10 kilometres south of the township of Nullagine and containing 62% of the total Mineral Resource inventory. Permitting and design work for a 1.5 million tonne per annum Carbon-In-Leach (CIL) processing facility and associated infrastructure on the Golden Eagle mining lease has been completed.

In May 2011, Millennium announced the ordering of long lead items for project construction including camp, offices, buildings, workshop, stores and facilities, as well as a 4 MW semi-autogenous (SAG) mill. These items define the critical path for the construction phase of the Project and the timing of the orders will ensure the 14 month development period is achievable as planned. Site activity commenced in July 2011 and as of the end of November the project is on schedule and within the capital budget. Commencement of commercial gold production is expected in the fourth quarter of calendar 2012.

Brian Rear
Chief Executive Officer

*ENQUIRIES: Brian Rear
CEO
Telephone: +61 (8) 9216 9011*

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Table 3. Nullagine Gold Project Mineral Resource Estimate December 2011 (0.5 g/t Au Cut off)

Deposit	Measured		Indicated		Inferred		Total		Ounces
	Mt	Grade Au (g/t)	Mt	Grade Au (g/t)	Mt	Grade Au (g/t)	Mt	Grade Au (g/t)	
Golden Eagle ²	13.61	1.23	4.44	1.03	4.2	1.06	22.27	1.16	829,000
Bartons ³	1.72	1.21	1.44	1.17	0.55	1.12	3.71	1.2	141,000
Shearers ³	0.59	1.27	1.48	1.01	0.26	1	2.33	1.1	81,000
Otways ³	1.15	0.81	0.9	0.87	0.692	0.92	2.74	0.86	75,000
All Nations ³	1.3	1.13	0.42	0.95	0.21	0.92	1.93	1.1	66,000
Little Wonder ³	0.17	1.2	0.38	1.2	0.01	1.3	0.56	1.2	22,100
Golden Gate (ABCD Reef) ⁴	-	-	0.58	3.24	0.11	2.6	0.68	3.12	69,000
Falcon ⁵	-	-	0.09	3.9	0.04	4.4	0.14	4	18,000
Condor ⁵	-	-	0.08	3.3	0.04	3.5	0.11	3.3	12,000
Harrier ⁵	-	-	0.1	1.8	0.04	1.8	0.14	1.8	8,000
Crow ⁵	-	-	0.02	4.5	0.02	4.5	0.04	4.5	5,000
G_Reef ⁵	-	-	0.03	2.1	-	-	0.03	2.1	2,000
Total	18.54	1.2	9.96	1.23	6.17	1.11	34.68	1.19	1,328,100

Notes:

- 1 Figures in Table may not sum due to rounding.
- 2 The Golden Eagle deposit was estimated using Multiple Indicator Kriging methodology for grade estimation by CSA Global.
- 3 The Bartons, Shearers, Otways, All nations and Little Wonder were estimated using Ordinary Kriging methodology for grade estimation by CSA Global.
- 4 The Mineral Resources at Golden Gate (ABCD reef) were estimated using Multiple Indicator Kriging methodology for grade estimation by Hellman and Schofield Pty Ltd.
- 5 The Mineral Resources at Golden Gate satellite deposits, namely Falcon, Harrier, Crow, G-Reef and Condor were estimated using Ordinary Kriging methodology for grade estimation by CSA Global.
- 6 The Golden Gate and Bartons deposits are the subject of a mining licence agreement whereby Millennium has the sole and exclusive right to explore and mine gold and other minerals. Millennium then is required to pay 25% of the net proceeds to the tenement owners (Livestock Marketing Pty Ltd, Duncan Thomas Young, Simba Holdings Pty Ltd and Ronald Lane Swinney) after mining and processing cost deductions.
- 7 Mineral Resource estimates include stated Ore Reserves.

Table 4. Nullagine Gold Project Ore Reserve Estimate December 2011

Prospect	Proven		Probable		Total		Ounces
	tonnes	grade (g/t)	tonnes	grade (g/t)	tonnes	grade (g/t)	
Golden Eagle	10,348,000	1.3	1,545,000	1.2	11,893,000	1.3	508,000
Bartons	1,144,000	1.4	498,000	1.4	1,642,000	1.4	73,000
All Nations	536,000	1.4	38,000	1.2	574,000	1.4	26,000
Shearers	532,000	1.3	388,000	1.2	920,000	1.2	37,000
Otways	336,000	1.0	78,000	1.0	414,000	1.0	13,000
Little Wonder	145,000	1.2	113,000	1.3	258,000	1.3	10,400
Golden Gate							
ABCD	376,000	3.4	88,000	3.5	464,000	3.4	51,000
Condor ²			72,000	3.1	72,000	3.1	7,300
Crow ²			19,000	4.1	19,000	4.1	2,500
Falcon ²			76,000	3.9	76,000	3.9	9,500
Harrier ²			38,000	2.0	38,000	2.0	2,400
G reef ²			11,000	2.0	11,000	2.0	700
Total	13,417,000	1.4	2,964,000	1.5	16,381,000	1.4	740,800

Notes:

- 1 Numbers may not sum due to rounding.
- 2 These deposits are collectively known as Golden Gate Area Satellite deposits.

Competent Persons Statements – Exploration Results

Mr Irvine Hay (MAIG), a geologist employed full-time by Millennium Minerals Limited, compiled the technical aspects of this Report. Mr Hay is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to this style of mineralization and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2004 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Hay consents to the inclusion in the report of the matters in the form and context in which it appears.

Competent Persons Statements – Mineral Resources

The Golden Eagle, Bartons, Shearers, Otways and All Nations deposits Mineral Resource estimate has been compiled and prepared by Dr Bielin Shi, (MAusIMM) of CSA Global Pty. Ltd. who is a Competent Person as defined by the Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2004 Edition and who consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The Little Wonder deposit Mineral Resource estimate has been compiled and prepared by Mr. Wawan Hermawan (MAusIMM) of CSA Global Pty. Ltd. who is a Competent Person as defined by the Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2004 Edition and who consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The Golden Gate satellite deposits Mineral Resource estimate has been compiled and prepared by Steven Hodgson, (MAIG) of CSA Global Pty. Ltd. who is a Competent Person as defined by the Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2004 Edition and who consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The reported Mineral Resource as it relates to Golden Gate ABCD reef has been compiled by Mr Nic Johnson. Mr Johnson is a Member of the Australian Institute of Geoscientists and an employee of Hellman & Schofield Pty Ltd. He has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking, to qualify as a Competent Person as defined in the ‘Australasian Code for Reporting of Mineral Resources and Ore Reserves’ of December 2004 (“JORC Code”) as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia. The Competent Persons listed consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Competent Persons Statements – Ore Reserves

The information in this Report, which relates to the Ore Reserve estimates, accurately reflects information prepared by competent persons (as defined by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves). The information in this public statement that relates to the Ore Reserves at the Millennium Minerals Nullagine Project is based on information compiled by Mr Steve Lampron and Mr. Daniel Tuffin. Mr. Daniel Tuffin of Auralia Mining Consulting, completed the Ore Reserve estimate. Mr Daniel Tuffin is a Member of the Australasian Institute of Mining and Metallurgy (#228649) and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that they are undertaking to qualify him as a Competent Person as defined in accordance with the Australasian Joint Ore Reserves Committee (JORC).

Qualifying Statement

This release may include forward-looking statements. These forward-looking statements are based on Millennium’s expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Millennium, which could cause actual results to differ materially from such statements. Millennium makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of this release.