



MILLENNIUM

MINERALS LIMITED

ABN 85 003 257 556

March 2010 Quarterly Report

April 2010

HIGHLIGHTS

- Recent metallurgical test work demonstrates average gold recoveries of 95%, well above the feasibility case assumption of 87%. Significant recovery of gold in the gravity circuit, up to 52% may result in downstream reagent cost saving and higher overall gold recovery.
- Equipment supply, drill and blast, camp and catering tender process commenced.
- Resource definition drilling commenced late in the Quarter as part of the planned 17,000 metres (RC and RAB) programme announced recently.
- Rights Issue and Shortfall allocation closed raising circa A\$3.04M.
- Development financing, including debt and equity elements, progressing well.

CORPORATE

- **Cash position** as at 31 March, 2010 circa A\$5.5 million.
- **Rights Issue**

As advised on 16 February 2010, the Rights Issue closed on 11 February 2010. The total number of shares on offer was 116,490,381 at an issue price of 4.5 cents to raise a maximum of \$5,242,067.14. The total of funds raised from take-up of entitlements and shortfall applications allocated amounted to \$3.04 million which combined with the earlier private placement totalled \$5.77 million raised.

- **Financing**

The Company has engaged with a number of financial institutions in respect of project finance relating to funding development of the Nullagine Gold Project. These discussions are progressing well.

In addition, the company has had preliminary discussions with a number of parties in regard to considering a more strategic relationship with Millennium. Discussions are at a very early stage and share holders will be advised accordingly if and when a specific proposal is being considered.

Development Activities

Overview

Within the context of the overall development plan, the project team commenced:

- establishing a contractual base for engineering and construction of the process plant and infrastructure and selecting the mining equipment provider
- tendering drill and blast, camp, catering, telecommunications and reagent supply contracts

Tendering is due to be finalised next Quarter.

Metallurgy

A short diamond core drilling programme totalling 9 holes for 203 core metres was completed in December (ASX Release 20 January 2010). The programme was designed to collect sufficient sample to conduct confirmatory test work for:

- Recovery (in particular gravity concentration and use of oxygen in CIL)
- Variability within and across ore types.

Metallurgical test work commenced in early February and has recently been completed. A series of high grade and low grade samples were submitted for test work in order to allow for recovery and variability testing over a broad grade range for Golden Eagle, Bartons, Shearers and All Nations ore bodies (Table 1).

Results from the leach test work indicated a higher average recovery of 95% compared with the average leach recovery of 87% assumed in the feasibility study completed in 2005 and 2006. These leach results were

achieved without the benefit of gravity gold recovery at a grind size of 75 microns. There was no discernable head grade versus recovery effect arising from the test work, despite the wide range of sample gold head grades tested (1g/t to 15g/t).

Separate Gravity test work involved grinding approximately 3kgs of sample to 150 micron (coarse grind). The test involved passing the sample through a laboratory sized Knelson Concentrator and then recovering the free gold from the concentrate by amalgamation. The percentage of gravity recovered gold tended to increase with the sample head grade.

Positive results from the gravity test work confirm the decision to incorporate a gravity circuit in the process plant design and capital cost estimate included in the updated feasibility study. The gravity circuit benefits the process plant operation by recovering coarse gold ahead of the leach circuit thereby lowering reagent operating costs and generally improving overall gold recovery.

Only one of the nine samples tested had an Oxygen demand at the upper end of the range considered to warrant the need for oxygen injection in the process design. The current plant design (and capital and operating cost estimates) provides for oxygen injection so the test results will allow the company to review the need for oxygen injection in the early stages of plant start up, and a reduction in both capital and operating costs over the life of mine.

The current flow sheet, capital costs and operating costs are formulated and designed on the basis of a worst case scenario, in terms of ore hardness, reagent usage and ore type. The test work program demonstrates that the Company can potentially reduce capital and operating costs in the process area of the proposed operation and revise the base case gold recovery assumption upwards. Further process optimisation work is planned ahead of a decision to mine and to cover ore types not yet covered in the current testing programme.

Exploration Activities

Resource/ Reserve Development

The Company initiated a drilling programme in late March directed at converting substantial Inferred Mineral Resources to the Measured and Indicated categories. Of the total Measured, Indicated and Inferred Mineral Resource of 28.86 million tonnes, 80% or 23.24 million tonnes fall into the Measured and Indicated categories and the remainder of 5.63 million tonnes is in the Inferred category. The drilling will target the Inferred Resource material, the majority of which falls outside the current pit envelopes, to lift the resources to Measured and Indicated thus providing a basis for assessing the resource for conversion to Ore Reserve status and eventual inclusion in the mining inventory.

This priority objective is part of a wider programme that includes;

- exploration and testing of the heap leach potential of mineralised waste, scheduled for removal from existing pits,
- delineation of defined resource potential on strike and at depth across all ore bodies
- The evaluation of the prospectivity south west of Golden Eagle for medium grade gold mineralisation.

These elements above will be prioritized and scheduled when the current resource/reserve programme is completed. In total the programme provides for 12,490m RC and 5,100m RAB drilling. To date, a total of 3,000 metres of RC drill has been completed and the first assay results are expected in early May.

Going Forward

It is the Company's intention to continue:

- selection of the preferred mining equipment provider, drill and blast contractor, camp supply and construction, catering, telecommunications and reagent supply contracts
- completion of the preparation and submission of all statutory applications required to fully permit all designated mining areas across all ore bodies covered in the life of mine plan not yet fully permitted.
- drilling to convert Inferred Mineral Resource estimates to higher confidence levels from the current 80% in the Measured and Indicated categories (targeting Resource to Reserve conversion) followed by re-optimisation of open pits and rescheduling material movements as and where required.
- delineation of defined resource potential on strike and at depth across all ore bodies
- exploration and testing of the heap leach potential of mineralised waste scheduled for removal from existing pits
- evaluation of the prospectivity south-west of Golden Eagle for medium grade gold mineralisation that may be amenable to a parallel heap leach operation early in the project life.

Tenements

Millennium's tenement schedule is presented in Table 1.

Background - Nullagine Gold Project

The Nullagine Gold Project (Figure 1) is a 1.13 million ounce gold resource contained within 7 deposits on granted mining leases. The largest deposit is Golden Eagle located approximately 10 km south of the township of Nullagine and contains 68% of the total Mineral Resource inventory. Much of the permitting and design work for a nominal 1 million tonne per annum Carbon-in-Leach (CIL) processing facility has been completed providing for an early start to development.

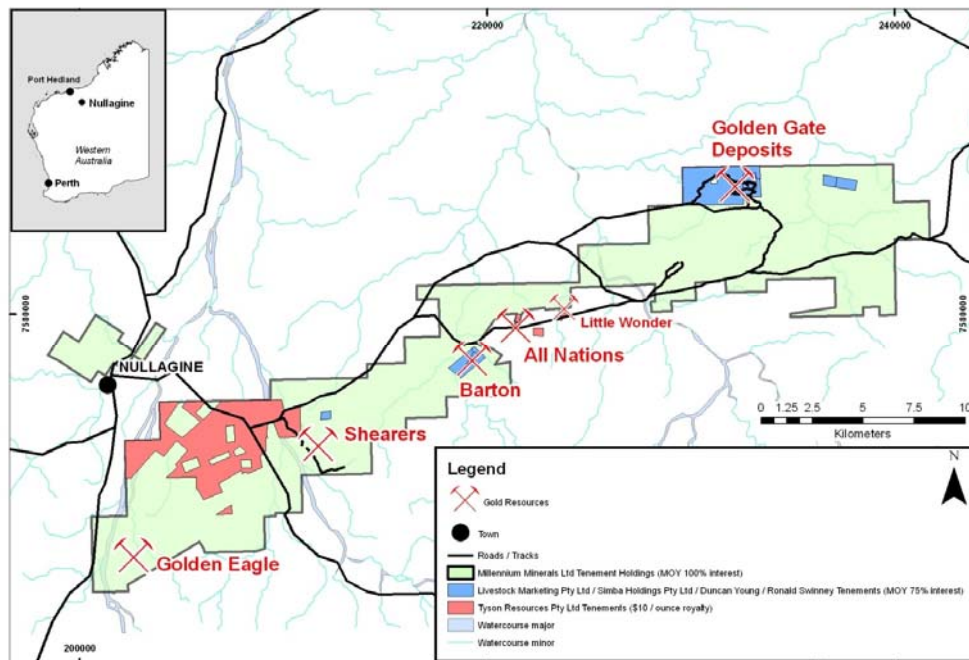


Figure 1: Nullagine Deposit Location Plan

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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.

Competent Persons Statements

Mr SJ Pooley (MAusIMM, MAIG), a geologist employed full-time by Millennium Minerals Limited, compiled the technical aspects of this report. Mr Pooley is a member of the Australasian Institute of Mining and Metallurgy 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 Codes for Reporting of Mineral Resources and Ore Reserves". Mr Pooley consents to the inclusion in the report of the matters in the form and context in which it appears.

Dr Evan Kirby, a metallurgist employed as a consulting engineer by Millennium Minerals Limited, compiled the metallurgical aspects of this report. Dr Kirby is a member of the Australasian Institute of Mining and Metallurgy 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 Codes for Reporting of Mineral Resources and Ore Reserves". Dr Kirby consents to the inclusion in the report of the matters in the form and context in which it appears.

Table 1: Schedule of Interests in Mining Tenements

Prospect Area	Tenement	Registered Holder	Millennium Beneficial Interest
ALL NATIONS	M46/199	MILLENNIUM MINERALS LTD	100%
	M46/225	MILLENNIUM MINERALS LTD	100%
	M46/98	MILLENNIUM MINERALS LTD	100%
BARTONS	G46/02	LIVESTOCK MARKETING PTY LTD	*75%
	M46/164	LIVESTOCK MARKETING PTY LTD	*75%
	M46/3	LIVESTOCK MARKETING PTY LTD	*75%
	M46/441	TUPPERGLENDA PTY LTD	*75%
BEATONS CREEK	M46/10	MILLENNIUM MINERALS LTD	100%
	M46/11	MILLENNIUM MINERALS LTD	100%
	M46/9	MILLENNIUM MINERALS LTD	100%
BEATONS CREEK EAST	M46/263	MILLENNIUM MINERALS LTD	100%
	P46/1329	MILLENNIUM MINERALS LTD	100%
	P46/1330	MILLENNIUM MINERALS LTD	100%
CADJEBUT	M46/432	MILLENNIUM MINERALS LTD	100%
DAVIS RIVER	L46/41	MILLENNIUM MINERALS LTD	100%
			100%
EASTERN CREEK	M46/56	DAVID JOHN TAYLOR	100%
	M46/245	DAVID JOHN TAYLOR	100%
			100%
FEDERATION	M46/64	MILLENNIUM MINERALS LTD	100%
FIVE MILE	E46/308	**TYSON RESOURCES PTY LTD	100%
	L46/33	MILLENNIUM MINERALS LTD	100%
	M46/192	MILLENNIUM MINERALS LTD	100%
	M46/212	TYSON RESOURCES PTY LTD	100%
	M46/213	TYSON RESOURCES PTY LTD	100%
	M46/234	TYSON RESOURCES PTY LTD	100%
	M46/235	TYSON RESOURCES PTY LTD	100%
	M46/261	**MILLENNIUM MINERALS LTD	100%
	M46/262	**MILLENNIUM MINERALS LTD	100%
	M46/264	TYSON RESOURCES PTY LTD	100%
	M46/265	TYSON RESOURCES PTY LTD	100%
	M46/266	TYSON RESOURCES PTY LTD	100%
	M46/445	MILLENNIUM MINERALS LTD	100%
	M46/446	MILLENNIUM MINERALS LTD	100%
	M46/50	SIMBA HOLDINGS PTY LTD	*75%
	P46/1123	MILLENNIUM MINERALS LTD	100%
	P46/1328	MILLENNIUM MINERALS LTD	100%
P46/1369	MILLENNIUM MINERALS LTD	100%	

Prospect Area	Tenement	Registered Holder	Millennium Beneficial Interest
FIVE MILE	P46/1370	MILLENNIUM MINERALS LTD	100%
	P46/1371	MILLENNIUM MINERALS LTD	100%
	P46/1404	MILLENNIUM MINERALS LTD	100%
	P46/1436	MILLENNIUM MINERALS LTD	100%
	P46/1437	MILLENNIUM MINERALS LTD	100%
	P46/1451	MILLENNIUM MINERALS LTD	100%
	P46/1452	MILLENNIUM MINERALS LTD	100%
	P46/1461	MILLENNIUM MINERALS LTD	100%
	P46/1604	MILLENNIUM MINERALS LTD	100%
	P46/1605	MILLENNIUM MINERALS LTD	100%
	P46/1606	MILLENNIUM MINERALS LTD	100%
GOLDEN EAGLE	E46/394	**MILLENNIUM MINERALS LTD	100%
	L46/45	MILLENNIUM MINERALS LTD	100%
	M46/186	**MILLENNIUM MINERALS LTD	100%
	M46/267	MILLENNIUM MINERALS LTD	100%
	M46/300	MILLENNIUM MINERALS LTD	100%
	M46/436	MILLENNIUM MINERALS LTD	100%
	M46/443	MILLENNIUM MINERALS LTD	100%
	M46/444	MILLENNIUM MINERALS LTD	100%
	P46/1444	MILLENNIUM MINERALS LTD	100%
GOLDEN GATE	E46/279	SIMBA HOLDINGS PTY LTD	*75%
	M46/129	SIMBA HOLDINGS PTY LTD	*75%
	M46/163	**MILLENNIUM MINERALS LTD	100%
	M46/187	SIMBA HOLDINGS PTY LTD	*75%
	M46/189	SIMBA HOLDINGS PTY LTD	*75%
	M46/200	SIMBA HOLDINGS PTY LTD	*75%
	M46/448	LIVESTOCK MARKETING PTY LTD	*75%
	M46/457	BIGHEAD ENTERPRISES PTY LTD	100%
	M46/47	SIMBA HOLDINGS PTY LTD	*75%
	P46/1421	BIGHEAD ENTERPRISES PTY LTD	100%
	P46/1422	BIGHEAD ENTERPRISES PTY LTD	100%
LITTLE WONDER	M46/146	MILLENNIUM MINERALS LTD	100%
	M46/198	MILLENNIUM MINERALS LTD	100%
MIDDLE CREEK	E46/391	MILLENNIUM MINERALS LTD	100%
	M46/272	MILLENNIUM MINERALS LTD	100%
	M46/273	MILLENNIUM MINERALS LTD	100%
	M46/274	MILLENNIUM MINERALS LTD	100%
	M46/275	MILLENNIUM MINERALS LTD	100%
	M46/276	MILLENNIUM MINERALS LTD	100%
	M46/277	MILLENNIUM MINERALS LTD	100%
	M46/282	MILLENNIUM MINERALS LTD	100%

Prospect Area	Tenement	Registered Holder	Millennium Beneficial Interest
MIDDLE CREEK	M46/302	MILLENNIUM MINERALS LTD	100%
	M46/430	MILLENNIUM MINERALS LTD	100%
	M46/431	MILLENNIUM MINERALS LTD	100%
	M46/447	MILLENNIUM MINERALS LTD	100%
	P46/1270	MILLENNIUM MINERALS LTD	100%
MOSQUITO CREEK	E46/452	MILLENNIUM MINERALS LTD	100%
	M46/278	MILLENNIUM MINERALS LTD	100%
	M46/279	MILLENNIUM MINERALS LTD	100%
	M46/283	MILLENNIUM MINERALS LTD	100%
	M46/303	MILLENNIUM MINERALS LTD	100%
	M46/426	MILLENNIUM MINERALS LTD	100%
	M46/427	MILLENNIUM MINERALS LTD	100%
	M46/428	MILLENNIUM MINERALS LTD	100%
	M46/429	MILLENNIUM MINERALS LTD	100%
	P46/1459	MILLENNIUM MINERALS LTD	100%
NULLAGINE	P46/1382	JOHN FRANCIS WALSH	100%
NULLAGINE SOUTH	P46/1557	MILLENNIUM MINERALS LTD	100%
	P46/1558	MILLENNIUM MINERALS LTD	100%
	P46/1559	MILLENNIUM MINERALS LTD	100%
	P46/1560	MILLENNIUM MINERALS LTD	100%
	P46/1561	MILLENNIUM MINERALS LTD	100%
	P46/1562	MILLENNIUM MINERALS LTD	100%
	P46/1563	MILLENNIUM MINERALS LTD	100%
	P46/1564	MILLENNIUM MINERALS LTD	100%
	P46/1565	MILLENNIUM MINERALS LTD	100%
	P46/1566	MILLENNIUM MINERALS LTD	100%
	P46/1567	MILLENNIUM MINERALS LTD	100%
	P46/1568	MILLENNIUM MINERALS LTD	100%
	P46/1569	MILLENNIUM MINERALS LTD	100%
	P46/1570	MILLENNIUM MINERALS LTD	100%
	P46/1571	MILLENNIUM MINERALS LTD	100%
	P46/1572	MILLENNIUM MINERALS LTD	100%
P46/1573	MILLENNIUM MINERALS LTD	100%	
P46/1574	MILLENNIUM MINERALS LTD	100%	
P46/1575	MILLENNIUM MINERALS LTD	100%	
P46/1576	MILLENNIUM MINERALS LTD	100%	
ONE MILE	P46/1587	MILLENNIUM MINERALS LTD	100%
TWENTY MILE SANDY	M46/433	MILLENNIUM MINERALS LTD	100%
	M46/434	MILLENNIUM MINERALS LTD	100%

*The percentage noted is not a beneficial ownership interest in the tenements or the ore contained within the tenements, but the percentage of the net proceeds from the sale of product Millennium Minerals Limited is entitled to retain on sale of product derived from the tenements. Millennium Minerals Limited has an interest under a Mining Licence Agreement with Livestock Marketing Pty Ltd, Duncan Thomas Young, Simba Holdings Pty Ltd and Ronald Lane Swinney (the "Tenement Owners") whereby Millennium has the sole and exclusive right to enter upon the tenements, conduct exploration and extract gold and other minerals. Millennium is then required to pay 25% of the net proceeds to the Tenement Owners after deductions relating to mining and processing costs. ** Royalties Apply

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

Millennium Minerals Limited

ABN

85 003257 556

Quarter ended ("current quarter")

31 March 2010

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter	Year to date
	\$A'000	(3 months) \$A'000
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for (a) exploration and evaluation	(485)	(485)
(b) development	-	-
(c) production	-	-
(d) administration	(445)	(445)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	23	23
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Other (provide details if material)	-	-
Net Operating Cash Flows	(907)	(907)
Cash flows related to investing activities		
1.8 Payment for purchases of: (a)prospects	-	-
(b)equity investments	-	-
(c) other fixed assets	-	-
1.9 Proceeds from sale of: (a)prospects	-	-
(b)equity investments	-	-
(c)other fixed assets	-	-
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other (provide details if material)	-	-
Net investing cash flows	-	-
1.13 Total operating and investing cash flows (carried forward)	(907)	(907)

1.13	Total operating and investing cash flows (brought forward)	(907)	(907)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	3,765	3,765
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (provide details if material)	-	-
	Net financing cash flows	3,765	3,765
Net increase (decrease) in cash held			
		2,858	2,858
1.20	Cash at beginning of quarter/year to date	2,653	2,653
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	5,511	5,511

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	57
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Non Executive Directors and executive services.

Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

None

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

None

Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	Nil	Nil
3.2 Credit standby arrangements	-	-

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	1,300
4.2 Development	0
Total	

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	5,511	74
5.2 Deposits at call	-	2,579
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	5,511	2,653

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	-	-	-	-
		Interests in mining tenements relinquished, reduced or lapsed		
6.2	-	-	-	-
		Interests in mining tenements acquired or increased		

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference securities (description)	-	-		
7.2 Changes during quarter				
(a) Increases through issues	-	-		
(b) Decreases through returns of capital, buy-backs, redemptions	-	-		
7.3 +Ordinary securities	535,331,698	535,331,698		
7.4 Changes during quarter				
(a) Increases through issues	(a) 917	917	7.5 cents	7.5 cents
(b) Decreases through returns of capital, buy-backs	(a) 69,369,257	69,369,257	4.5 cents	4.5 cents
	-	-		
7.5 +Convertible debt securities (description)	-	-		
7.6 Changes during quarter				
(a) Increases through issues	-	-		
(b) Decreases through securities matured, converted	-	-		
7.7 Options (description and conversion factor)	25,700,000	-	<i>Exercise price</i> 29 cents (6.2m)	<i>Expiry date</i> 19 Dec 11
		-	30 cents (3.5m)	31 Oct 11
		-	23 cents (5.0m)	19 Dec 11
		-	20 cents (8.5m)	31 Oct 11
		-	20 cents (2.5m)	21 Feb 12
	34,683,773	34,683,773	7.5 cents	28 Feb 13
7.8 Issued during quarter	34,684,690	34,684,690	7.5 cents	28 February 2013
7.9 Exercised during quarter	917	917	7.5 cents	28 February 2013
7.10 Expired during quarter	500,000	-	29 cents	19 December 2011
7.11 Debentures (totals only)	-			
7.12 Unsecured notes (totals only)	-			

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:



Date: 29 April 2010

(Director/Company secretary)

Print name: Pierre Malherbe, Company Secretary

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** the issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, AASB 1022: Accounting for Extractive Industries and AASB 1026: Statement of Cash Flows applies to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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