



Report for the Quarter Ending 31st December, 2011

31st January, 2012

Highlights

- ◆ A maiden Mineral Resource Estimate was reported to JORC standards on 28th December, 2011 for the iron ore prospect PNN Area C as follows;

**Inferred Mineral Resource Estimate for PNN Area C – Robinson Range Project
Total iron cutoff of greater than 51%. (December, 2011)**

Category	Density SG	Million Tonnes	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	S %	TiO ₂ %	LOI %
Inferred	3.69	4.65	55.2	8.2	6.3	0.056	0.03	0.2	4.9

The Inferred Resource estimate is a result of recent drilling at the Robinson Range Project located in the Midwest region of WA. PNN Area C is located within exploration tenement E51/1033 which is part of the Robinson Range Joint Venture held by PepinNini Robinson Range Pty Limited (40%), Grosvenor Gold Pty Limited (40%) and Fe Limited (20%). Drilling is scheduled to recommence at the prospect in February, 2012.

- ◆ Drilling commenced on the Braemar Iron Formation Project with five holes completed before the Christmas break for a total of 574m. Drilling is scheduled to recommence early February. A number of potential magnetite prospects have been identified within the tenements held by the Sinosteel PepinNini Joint Venture in the Curnamona Province of South Australia. The Joint Venture has prioritized the investigation of the iron ore potential of the tenements and commenced the current drilling program in December to assess the potential magnitude of the resource and metallurgical characteristics of the magnetite at the Macdonald Corridor Iron Ore Prospect.
- ◆ Appointment of Mr Wei Sun as an Independent Non Executive Director with the Company. Mr Sun brings to the Company extensive knowledge of the International Mineral Resources Industry. In particular his close association with major Chinese companies involved in Mineral Resources and contacts within the Asian investment sector will add substantially to the Company's strength in these areas.
- ◆ At the end of the quarter the Company held \$3.2 million in cash.



Project Locations

WESTERN AUSTRALIA

Robinson Range Iron Ore Project

The Robinson Range Project comprises seven tenements that cover approximately 700km². PepinNini has a 50% interest in the iron ore contained within three tenements and a 40% interest in the iron ore contained within the other four tenements and manages exploration on behalf of the Joint Venture partners.

All analytical results for samples collected from sixty three boreholes completed within six prospect areas before drilling operations were suspended due to recurring mechanical problems in October were received during the quarter. Intersection of encouraging Hematite and Hematite-Goethite iron enrichment has continued at PNN Area C. .

Highlights include;

- ◆ 26 metres @ 61.2% Fe in borehole RC11RR062 from a depth of 20 metres,
- ◆ 10 metres @ 53.9% Fe in borehole RC11RR063 from a depth of 2 metres to the base of hole at 12 metres. (intersection includes an interval of 4 metres @ 57.5% Fe from 4 metres

- ◆ 45 metres @ 59.7% Fe in borehole RC11RR030 from a depth of 6 metres to the base of hole at 51 metres. (intersection includes an interval of 39 metres @ 61.1% Fe from 12 metres to base of hole),
- ◆ Two other holes, RC11RR032 and RC11RR033, each located approximately 200m from borehole RC11RR030 also intersected reportable iron mineralisation. (RC11RR032 included 4 metres @ 53.6% Fe from 16 metres to base of hole at 20 metres, RC11RR033 intersected 45 metres @ 51.3% Fe from 12 metres to base of hole at 57 metres including 6 metres @ 59.5% Fe from 16 metres),
- ◆ Borehole RC11RR029 located approximately 100 metres from borehole RC11RR030 intersected 10 metres @ 58.0% Fe from 12 metres depth.

Independent technical specialists, Hellman & Schofield Pty Ltd, were commissioned to undertake a resource estimation of PNN Area C mineralisation and a maiden Mineral Resource Estimate reported to JORC standards as follows was announced on 28th December, 2011.

**Inferred Mineral Resource Estimate for PNN Area C – Robinson Range Project
Total iron cutoff of greater than 51%. (December, 2011)**

Category	Density SG	Million Tonnes	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	S %	TiO ₂ %	LOI %
Inferred	3.69	4.65	55.2	8.2	6.3	0.056	0.03	0.2	4.9

Data utilised for the resource estimation was derived from 21 shallow reverse circulation (RC) drill holes for a total 931m of drilling. Boreholes were positioned on 200 to 400m spaced lines at 100m hole spacing.

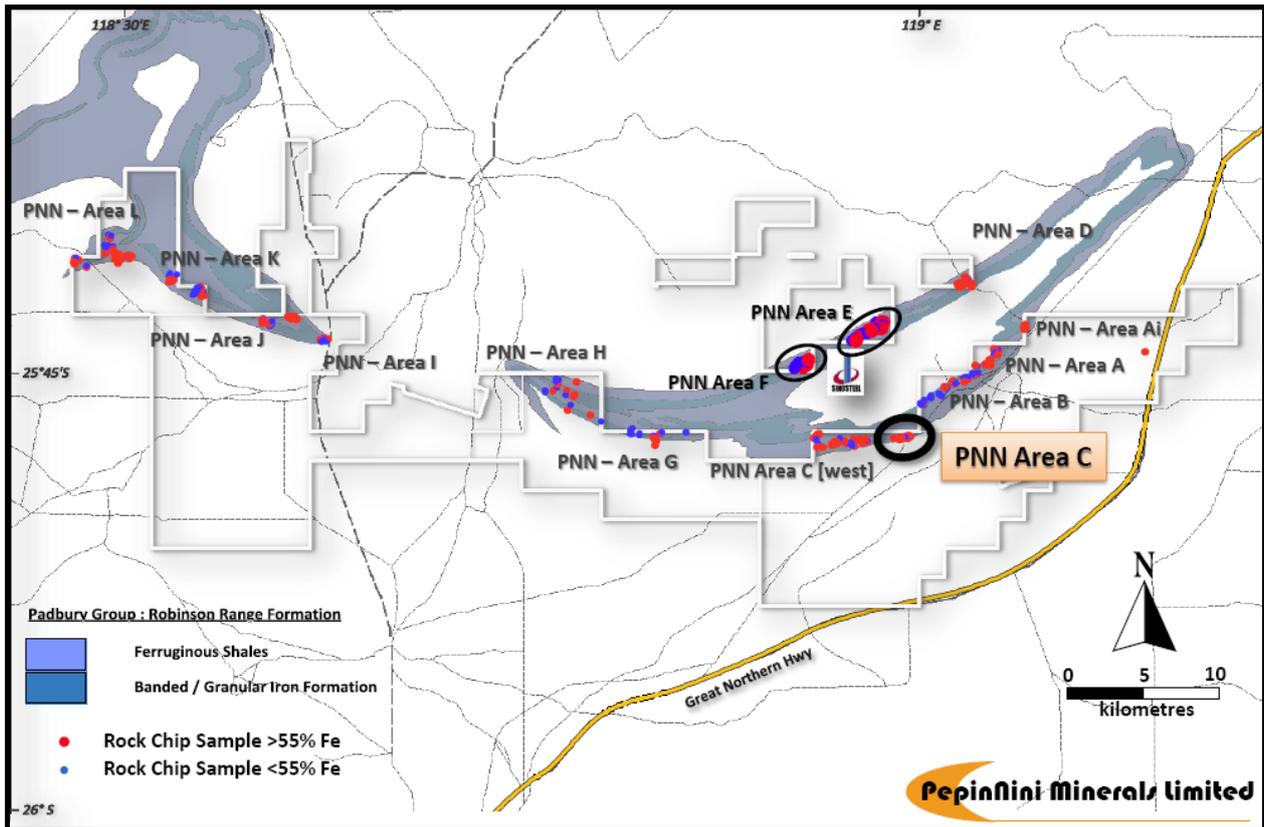
Samples were submitted for chemical analysis by fused disk XRF at ALS Global's Laboratory (Malaga, WA). Loss on ignition analysis was undertaken for all samples at 1000°C using thermo-gravimetric techniques. Control reference material samples and duplicate field samples were submitted routinely within the sample batches.

Estimation of the mineralisation was reported using a total iron cut-off of 51% Fe.

Grade interpolation was by ordinary Kriging methods. Density was estimated by regression from Fe grade based on wet density measurements collected by PepinNini at the time of drilling.

Consideration was given to the current understanding of the mineralisation style, observed geological distributions, analytical results and field density measurements when undertaking this resource estimation.

Drilling of PNN Area C was suspended in October 2011 due to mechanical failure of the contracted drilling equipment. PepinNini intends to return and complete the planned drilling for PNN Area C and other prospects during the 1st quarter of 2012. Drilling is scheduled to recommence in February, 2012.



Robinson Range Iron Ore Project - Prospect Locations

SOUTH AUSTRALIA

Musgrave Province Project

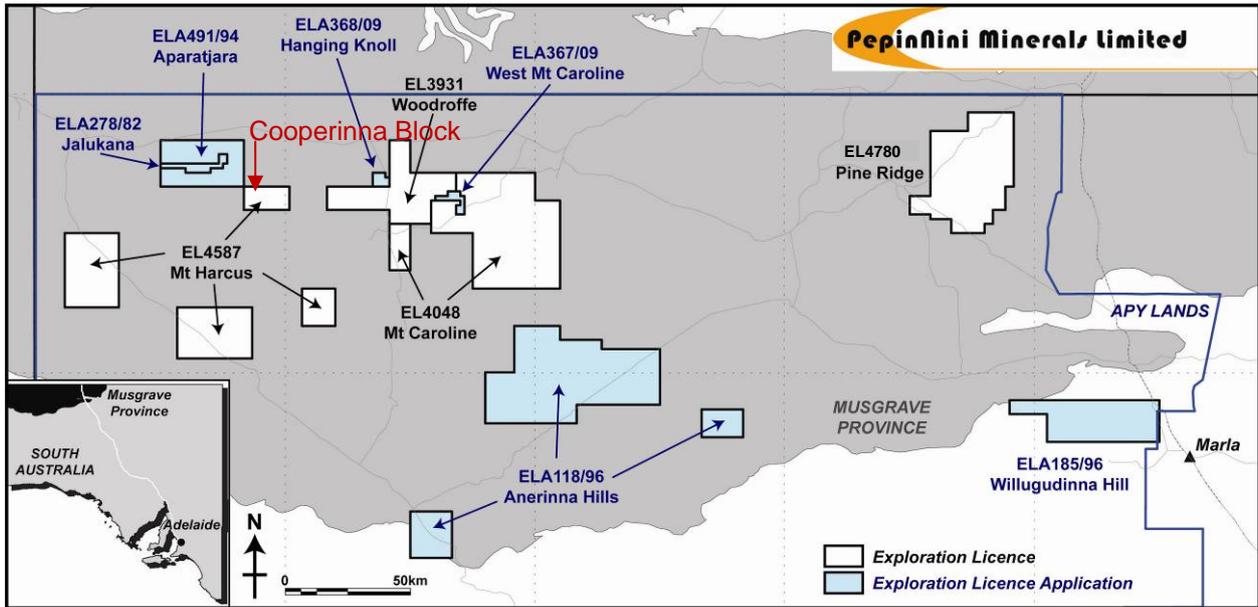
The Musgrave Project is currently targeting nickel-copper sulphide mineralisation and base metal mineralisation in the Musgrave Province of South Australia. PepinNini has four granted exploration licences (EL3931, EL4048, EL4587, EL4780) covering ~5,669 km² and six exploration licence applications (ELA118/96, ELA185/96, ELA278/82, ELA491/94, ELA367/09, ELA368/09) covering ~3,932 km². PepinNini subsidiary NiCul Minerals Limited (formerly PepinNini Resources Pty Limited) is earning a 51% interest in EL3931 and ELA278/82 and ELA491/94 under a Farm-in and Joint Venture Agreement with Rio Tinto Ltd subsidiary Rio Tinto Exploration Pty Limited.

During the quarter discussions were continued with the Traditional Owners to progress the grant of ELAs 491/94 and 278/82.

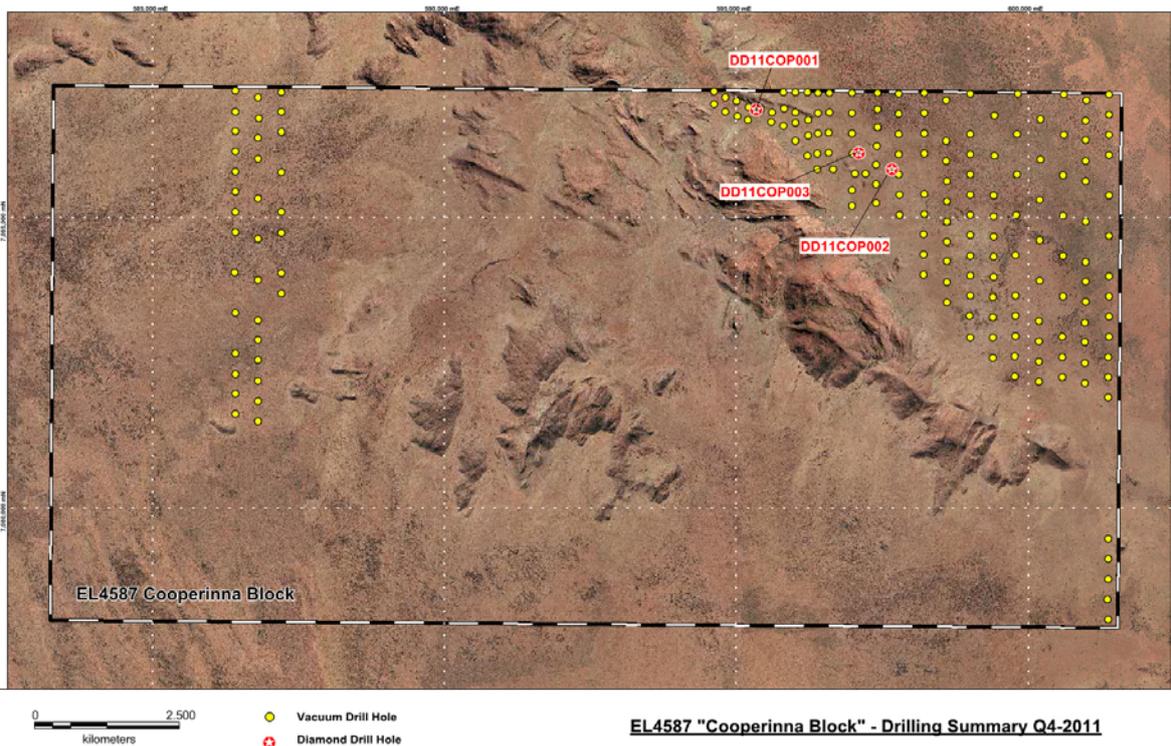
Vacuum drilling and diamond drilling continued during the quarter within the Cooperinna block of EL 4587. A total of 190 vacuum holes for 3,055.4m of drilling were completed and generated 190 samples for multi-element analysis to be used for litho-geochemical mapping. In addition 3 stratigraphic diamond holes were drilled for a total of 499.6m. The diamond holes intersected garnet-bearing quartzofeldspathic gneiss of the Birksgate Complex with localised intervals of minor

pyrite and pyrrhotite. Both vacuum and diamond drilling programmes are incomplete and will be finished after the summer break.

During the quarter the Company commissioned an orientation airborne electromagnetic survey (AEM) of approximately 1,500 line kms over the Caroline Intrusion, the Hanging Knoll Area and the Cooperinna Block. The survey will be undertaken as part of a collaborative funding program with the South Australian Government. PepinNini Minerals has been awarded a \$75,000 grant for the program as part of the South Australian Government's 'Plan for Accelerated Exploration 2020' (PACE 2020) Initiative.



PepinNini Minerals Limited tenement location in the Musgrave Province, SA.



EL4587 "Cooperinna Block" - Drilling Summary Q4-2011

The AEM system deployed was the new SkyTEM super low moment system which has recently been imported into Australia from Scandinavia. The system which is much higher powered than previous versions is designed to be able to resolve both near surface and deep conductors thus making it highly suitable for use in the Musgrave Province. Equipment failure and unsuitable weather has caused the survey to be postponed until after February, 2012

If the orientation survey is successful it is envisaged that SkyTEM will provide an excellent exploration tool for future broader use in the under-explored Musgrave Province. Previous AEM systems such as GeoTEM, Tempest and HoistEM have been trialed with limited success over the tenements and invariably failed to see through areas with overlying conductive palaeo-drainage systems.

Curnamona Province Project

Exploration within the Curnamona Province Project area, which includes the Crocker Well Uranium Deposit, is being managed by Sinosteel PepinNini Curnamona Management Pty Ltd (SPCM) on behalf of the Joint Venture partners Sinosteel Corporation (60%) and PepinNini Minerals (40%). The Joint Venture has prioritized the investigation of the iron ore potential of the Braemar Iron Formation.

Braemar Iron Formation

Three priority target areas have been identified within the Joint Venture tenements and have been designated as the Mt Victor Iron Ore Prospect (ELA928/04 Mt Victor), the Macdonald Corridor Iron Ore Prospect (EL4375 Bimbowrie) and the Outalpa Iron Ore Prospect (EL3472 Outalpa & ELA928/04 Mt Victor). Each of the prospects identified has the potential to host a very large magnetite iron ore resource which could be beneficiated to a high grade blast furnace feed product at a very competitive cost relative to other magnetite prospects currently under development consideration elsewhere in Australia.

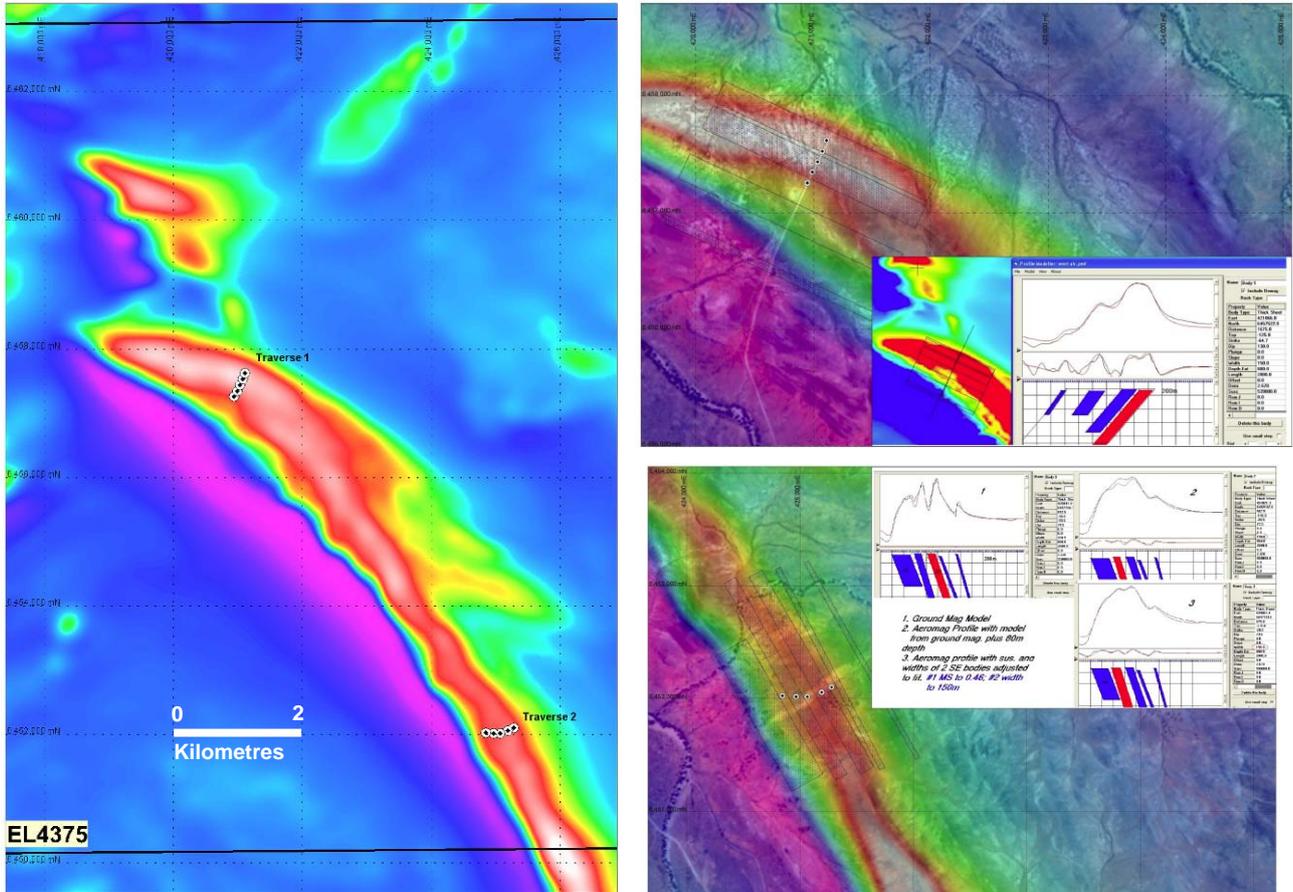
The Magnetite Prospects have been identified within outcropping to shallow glacial BIFm of Neoproterozoic age by interpretation of detailed regional magnetic data and geological mapping of the area. The BIFm consists of a series of alternating and interbedded tillitic and magnetite units representing cycles of glacial advances and retreats.

The area is favourably located with regard to current infrastructure being between the towns of Broken Hill and Peterborough and 20kms to 40kms from the heavy duty trans-Australian railway and adjacent sealed Barrier Highway.

A drilling program of approximately 2,000 metres of RC percussion drilling designed to test interpreted magnetic units of the Braemar Iron Formation within EL4375 at the Macdonald Corridor Iron Ore Prospect commenced in December. Drillholes are approximately 100m deep and located along two planned traverses.

Modeling of aeromagnetic data indicates the main magnetic units of the Braemar Iron Formation to be approximately 425-450m wide along Traverse 1 and approximately 750-800m wide along Traverse 2.

Five holes were completed along Traverse 2 before the Christmas break for a total of 574m. Drilling is scheduled to recommence in early February, 2012.



**Proposed drill traverses on regional aeromagnetic data
McDonald Corridor Magnetite Prospect**

NORTH QUEENSLAND

PepinNini is currently in the process of prioritising targets for follow-up exploration in 2012 for the North Queensland Project. The Project comprises 14 tenements covering approximately 1,086 km² prospective for high grade gold and silver, copper, base metals, uranium, phosphate and potash.

ARGENTINA

Salta Project

PepinNini have five granted cateos, one granted minas and one application for a cateo covering approximately 330 sq kms in the Argentine province of Salta. The Salta Project comprises two separate areas designated as Santa Ines and Chivinar.

Salta Province is recognised as one of the most mining friendly provinces in Argentina and is a province where mining rights are well regulated. The geology is prospective for copper-gold porphyries, precious and base-metal epithermal systems and breccia-complexes associated with the Andean volcanic belt.

The area is being targeted by PepinNini for copper-gold-silver mineralization. The Company is currently in discussion with parties interested in participating in the exploration of the tenements.

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Norman Kennedy BSc MAusIMM. Norman Kennedy is the Chairman and Managing Director of PepinNini Minerals Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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". Norman Kennedy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For further information please contact:

Mr Norman Kennedy
Chairman and Managing Director, PepinNini Minerals Limited
Phone: (08) 8218 5000

Note: Additional information on PepinNini Minerals Limited can be found on the website:

www.pepinnini.com.au

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001, 01/06/10.

Name of entity

PepinNini Minerals Limited

ABN

55 101 714 989

Quarter ended ("current quarter")

December 2011

Consolidated statement of cash flows

	Current quarter \$A'000	Year to date (6 months) \$A'000
Cash flows related to operating activities		
1.1 Receipts from product sales and related debtors	134	327
1.2 Payments for (a) exploration & evaluation (b) development (c) production (d) administration	(674)	(1,281)
1.3 Dividends received		
1.4 Interest and other items of a similar nature received	56	129
1.5 Interest and other costs of finance paid		
1.6 Income taxes (paid)/refunds	5	55
1.7 Other (Government Grants)	5	11
Net Operating Cash Flows	(862)	(1,448)
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	0	0
1.13 Total operating and investing cash flows (carried forward)	(862)	(1,448)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(862)	(1,448)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	-	-
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	-	-
	Net increase (decrease) in cash held	(862)	(1,448)
1.20	Cash at beginning of quarter/year to date	4,028	4,614
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	3,166	3,166

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	108
1.24	Aggregate amount of loans to the parties included in item 1.10	

1.25 Explanation necessary for an understanding of the transactions

Within Item 1.2

1. Managing Director, Administration Director and non-executive directors' remuneration.....	\$99,842.52
2. Managing Director and Administration Director Superannuation.....	\$8,489.23

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

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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

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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		
3.2	Credit standby arrangements		

+ See chapter 19 for defined terms.

Estimated cash outflows for next quarter

		\$A'000
4.1	Exploration and evaluation	900
4.2	Development	-
4.3	Production	-
4.4	Administration	300
Total		1,200

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	666	528
5.2 Deposits at call	2,500	3,500
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	3,166	4,028

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	EPM 16537	Surrendered	50 sub-blocks	0 sub-blocks
6.2 Interests in mining tenements acquired or increased	Salta, Argentina #20438	Granted	0 hectares	7,899ha

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

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 <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 *Ordinary securities	89,702,499	89,702,499	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5 *Convertible debt securities <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options <i>(description and conversion factor)</i>				
7.8 Issued during quarter				
7.9 Exercised during quarter				
7.10 Expired during quarter				
7.11 Debentures <i>(totals only)</i>				
7.12 Unsecured notes <i>(totals only)</i>				

+ See chapter 19 for defined terms.

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: .. **Tuesday, 31 January 2012..**
(Director/Company secretary)

Print name: ... **Rebecca Holland-Kennedy**.....

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* apply 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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