



Report for the Quarter Ending 31 December, 2006

31 January, 2007

Highlights

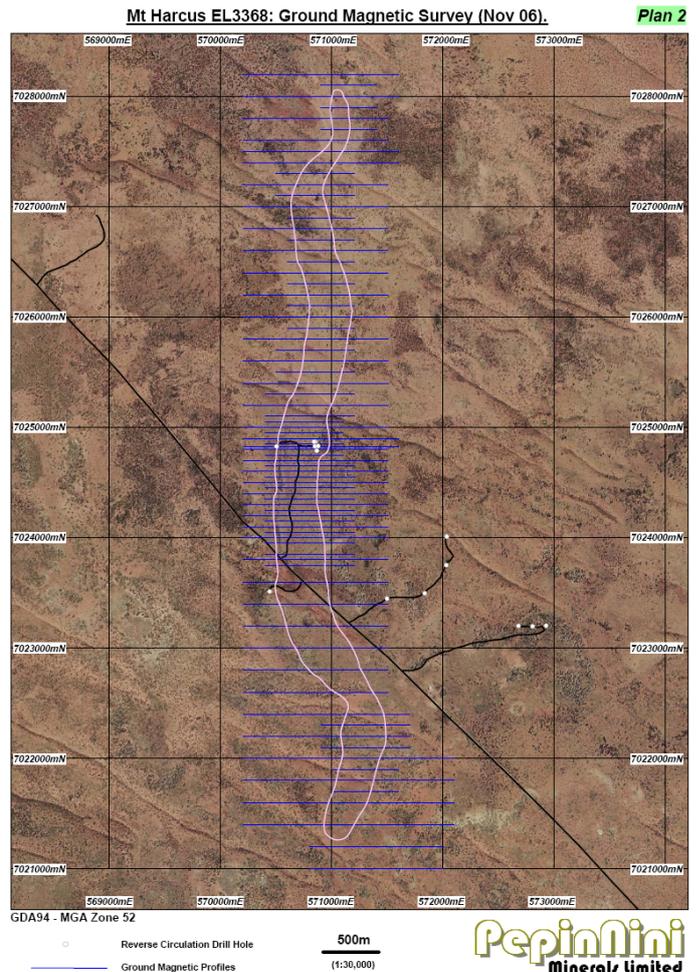
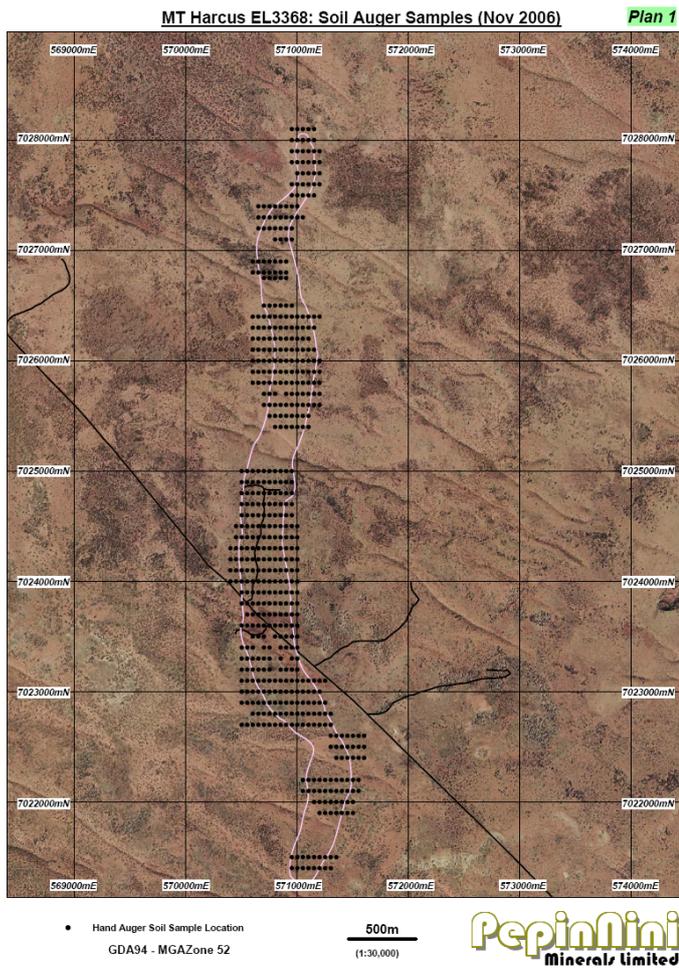
- ◆ Ten Uranium Prospects in the vicinity of Crocker Well were investigated by scintillometer and surface sampling. Four prospects with extensive radiometric anomalies associated with surface uranium mineralisation have been prioritised for drilling. Very high grade uranium assays were obtained from surface samples collected from three of the prospect areas including:
 - Three samples from the Becaroo Prospect:
26.2 kg/t U₃O₈ (2.62%), 1.30 kg/t U₃O₈ (0.13%), 1.26 kg/t U₃O₈ (0.13%)
 - Two samples from Anomaly A:
24.1 kg/t U₃O₈ (2.41%), 14.8 kg/t U₃O₈ (1.48%)
 - Two samples from Anomaly H:
8.9 kg/t U₃O₈ (0.89%) 5.6 kg/t U₃O₈ (0.56%).
- ◆ On 8th December, 2006 Sinosteel Corporation extended their period of exclusivity for a further two months to 8th February, 2007 in order to complete due diligence and allow legal documentation to be finalised and approvals to be obtained from the Chinese and Australian Governments for the proposed joint venture to develop Crocker Well and other uranium deposits and explore for base metal prospects in the Curnamona Province of South Australia.
- ◆ An extensive surface geochemical sampling program and ground magnetometer survey was completed over the full seven kilometre strike length of the Marcus Nickel Prospect in the Musgrave Province to define areas of elevated nickel and copper. The data will be processed to assist in optimizing borehole locations for a drilling program to commence as soon as possible.
- ◆ A preliminary reconnaissance survey of the North Queensland tenements was completed in December. Approximately 150 surface samples have been submitted to a laboratory for analysis. Gold, copper, lead and uranium mineralisation was visually evident in some samples.

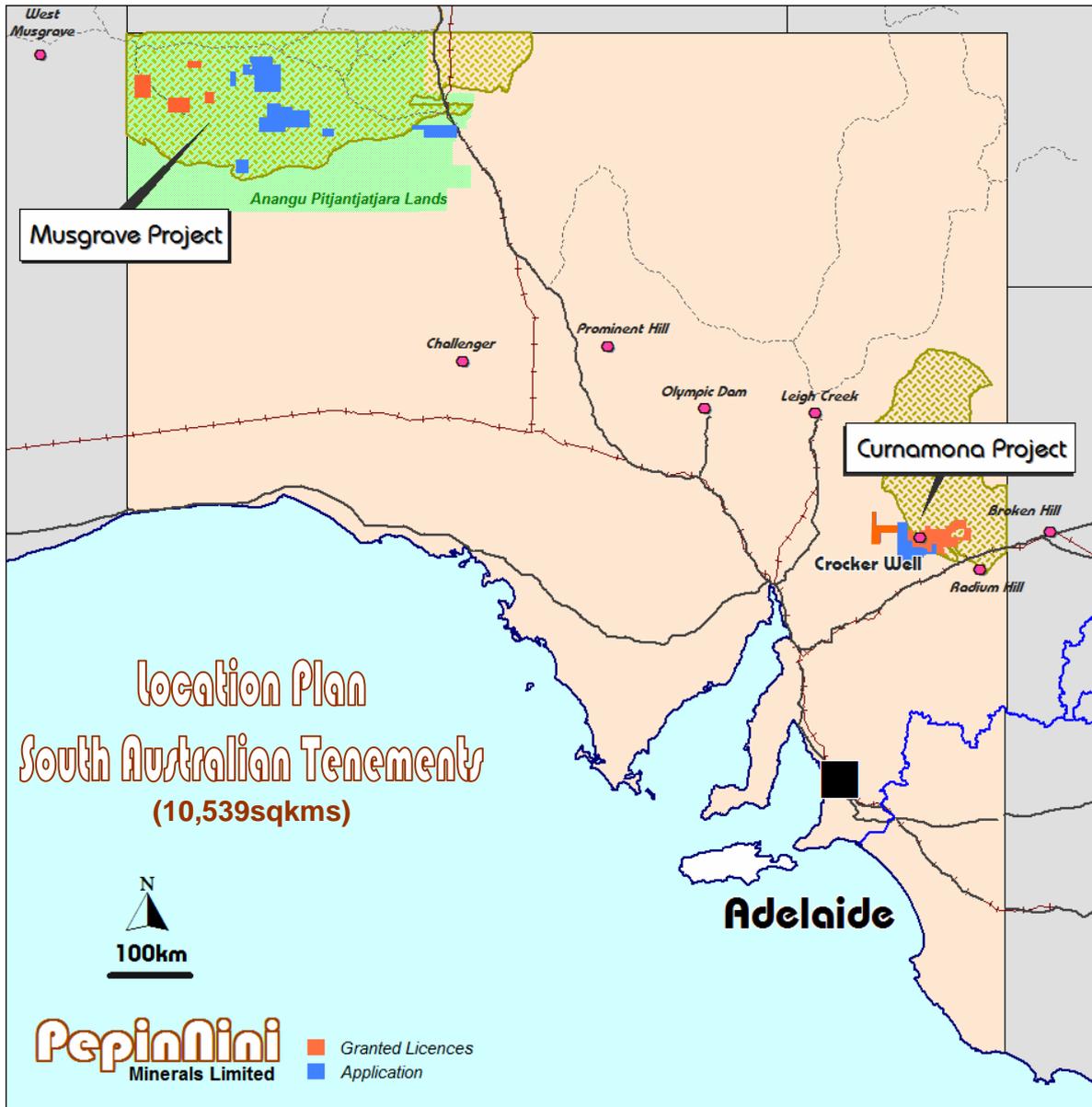
Musgrave Province Project - Nickel

Current exploration activities are focused on the investigation of two prominent magnetic features located near Mt Moulden and Mt Harcus within EL 3368 which are interpreted as representing ultramafic/mafic intrusions and are considered to be prospective for nickel copper sulphide mineralisation similar to that at Voisey's Bay in Canada.

A first pass shallow RC drilling program was completed in May, 2006 and intersected massive, sub net-texture and disseminated sulphide mineralisation associated with the Mt Harcus Intrusion. The presence of mixed sulphide mineralisation assaying up to 0.46% Cu and 0.13% Ni confirms that the Harcus Intrusion could host significant nickel-copper sulphide mineralisation

An extensive surface geochemical sampling program and ground magnetometer survey was completed over the full seven kilometre strike length of the Harcus Nickel Prospect in November and December to define areas of elevated nickel and copper. Eighty three line kilometres of ground magnetic surveying (200m traverses, 5m station spacing) with some infill traverses at 100m and 50m was completed and five hundred and seventy four hand auger soil samples were also collected from across the Prospect for multi element geochemical analysis. The data will be processed to assist in optimizing borehole locations for a drilling program to commence as soon as possible.

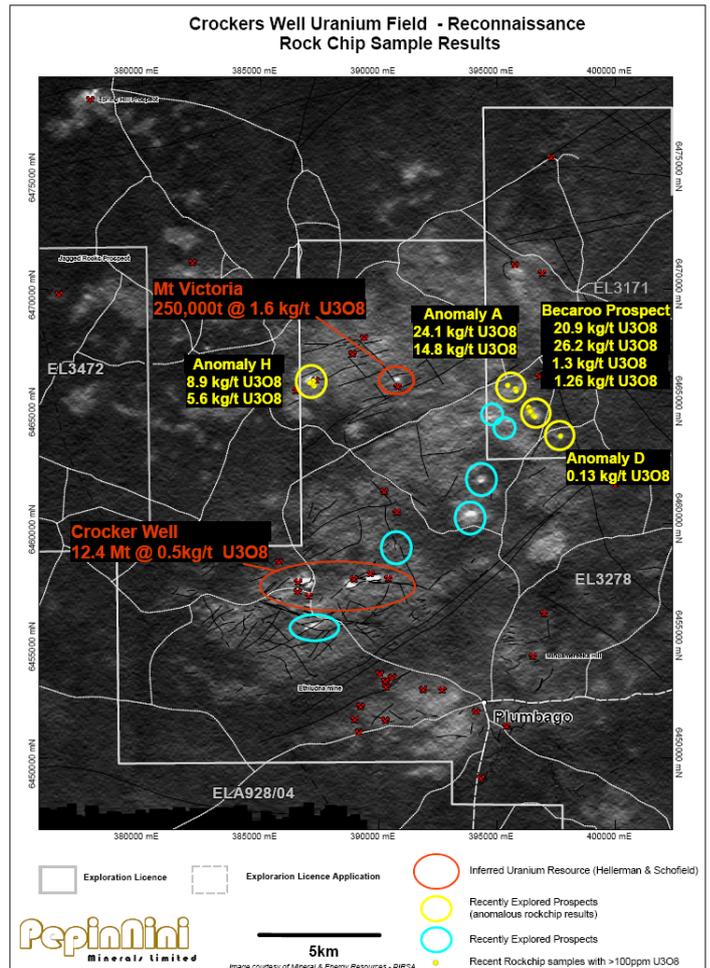
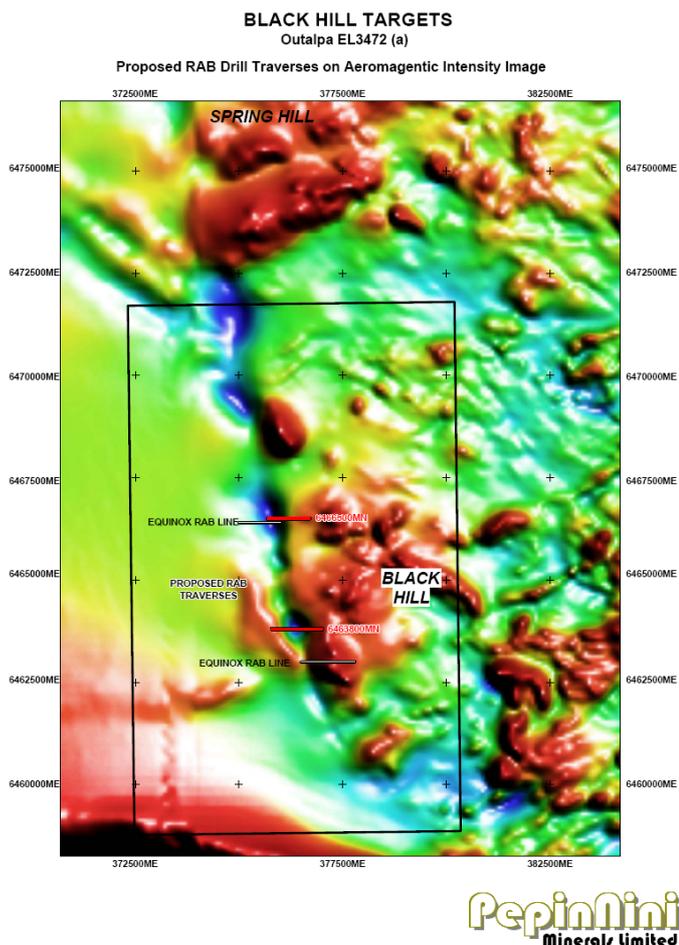




Curnamona Province Project

PepinNini Minerals Limited has a 100% interest in four granted exploration licences and one exploration licence application covering approximately 3,778 sq. kms of the Curnamona Province of South Australia. Current exploration activities are focused on investigating more than 30 priority copper/gold and lead/zinc targets that have been identified within granted ELs 3171, 3278, 3472 and 3587. Apart from the Crocker Well Uranium Field and the Mt Victoria Uranium Deposit there are 26 additional known uranium prospects located within the granted tenements. Considerable potential for secondary palaeochannel style deposits as well as unconformity related uranium mineralisation has also been identified within the PepinNini tenements.

During the quarter a reconnaissance survey including a field mapping exercise was undertaken within EL 3472 and primarily targeted the Black Hill IOCG Prospect. Environmental monitoring and rehabilitation was continued within ELs 3171 and 3278 and a native title mining agreement pursuant to Part 9B of the SA Mining Act covering all current tenements was negotiated with the traditional owners of the area, the Adnyamathanha No. 1 native title claim group.



Curnamona Province Uranium Project

Eighty seven surface rock chip samples were collected from ten Uranium Prospect areas in the vicinity of the Crocker Well and Mt Victoria Uranium Deposits during a field exploration program completed in October.

The samples were collected as part of reconnaissance investigations in conjunction with detail scintillometer surveys across airborne radiometric anomalies. Samples collected include both representative rock types from each of the prospect areas as well as suspected uranium mineralised samples. Samples generally comprise granites, gneiss or schist.

Twenty of the samples collected returned anomalous uranium values in excess of 100ppm U_3O_8 . Seven samples returned very high grades in excess of 1kg/t U_3O_8 (1,000ppm or 0.1%).

Significant Results

Very high grade samples were returned from three prospect areas (Becaroo, Anomaly A, and Anomaly H)

- Three samples from the Becaroo Prospect returned the following very high grades:
26.2kg/t U_3O_8 (2.62%) 1.30kg/t U_3O_8 (0.13%) 1.26 kg/t U_3O_8 (0.13%)

- Two samples from Anomaly A returned the following very high grades:
24.1 kg/t U₃O₈ (2.41%) 14.8 kg/t U₃O₈ (1.48%)
- Two samples from Anomaly H returned the following very high grades:
8.9 kg/t U₃O₈ (0.89%) 5.6 kg/t U₃O₈ (0.56%)

The high grade uranium samples from the Becaroo Prospect and Anomaly A contain accompanying high levels of cerium (max. 23,440ppm or 2.3%) and lanthanum (max. 26,684ppm or 2.7%) mineralisation confirming likely davidite mineralisation at these sites. The elevated samples from Anomaly H do not contain high levels of cerium and lanthanum and suggest probable thorian-brannerite or other higher grade uranium mineralisation.

The results are very encouraging and endorse the potential for significant new resources of uranium to be discovered in the area. A drilling program to commence early in 2007 will be designed using the scintillometer survey results, reconnaissance mapping and geochemical results and will prioritise the investigation of potential economically significant resources of uranium at the Becaroo, Anomaly A and Anomaly H prospects as well as upgrading the currently defined 14.85 million lbs JORC compliant Inferred uranium resource at Crocker Well and Mt Victoria.

Sinosteel Corporation Strategic Alliance

On 8th September, 2006 PepinNini Minerals signed a Memorandum of Understanding with a Chinese state owned enterprise Sinosteel Corporation to enter a strategic alliance for the joint participation and co-operation in the development and operation of the Crocker Well and Mt Victoria Uranium Deposits and other mineral commodities in the Curnamona Province of South Australia.

Under the terms of the MOU PepinNini granted Sinosteel an exclusivity period of 3 calendar months (extendable to 5 months) in order to permit the entry into legally binding documentation subject to such Australian and PRC Government and other regulatory approvals as may be required (including the approval of the Australian FIRB).

On the 11th December the Company announced that Sinosteel Corporation had paid A\$1million and extended the exclusivity period for a further two months to complete due diligence and allow legal documentation to be finalised and approvals to be obtained from the Chinese and Australian Governments.

Subject to completion of appropriate legally binding agreements and government approvals, Sinosteel will pay PepinNini \$A30.5 million for a 60% stake in the Curnamona Province project and tenements. In addition Sinosteel will contribute \$A6 million exploration expenditure over a 2 year period for commodities other than uranium

Georgetown Inlier/Woolgar Goldfield Project

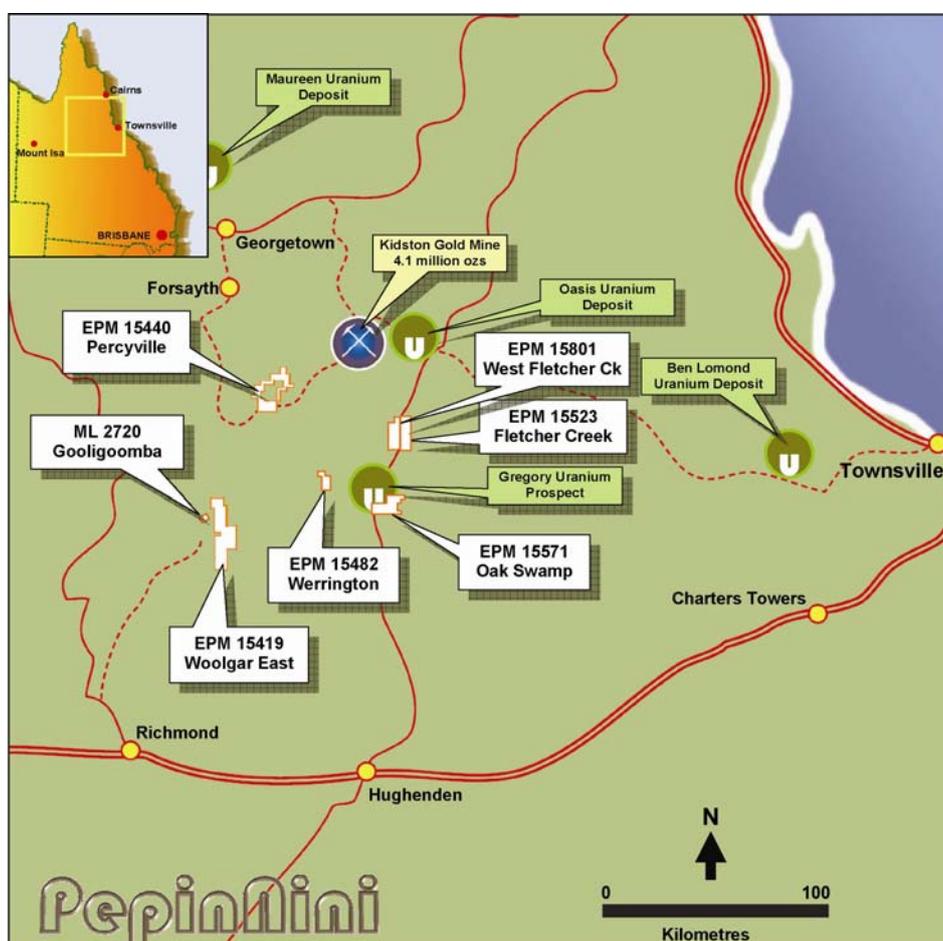
PepinNini has established a substantial presence in the Georgetown Inlier/Woolgar Goldfield region in north Queensland with 100% interest in seven tenements covering more than 900 square kilometres of prospective ground. Uranium occurrences which have been inadequately tested by previous explorers and favorable geological settings for uranium mineralization occur in all of the application areas. The uranium targets are hard rock volcanic type deposits similar to the nearby Maureen and Ben Lomond Uranium Deposits. Ben Lomond represents one of the highest value per tonne uranium resources in Australia with an average grade of 0.25% U₃O₈ and molybdenum credits of 0.15%.

It should be noted that the current policy of the Queensland State Government does not allow for the mining and processing of uranium. However, the policy is not enacted by legislation in the Queensland Minerals Act and would therefore not apply if there was a change of Government or if the current Government reversed its policy at a party meeting.

In addition to the uranium potential the new application areas have potential to host large intrusion related gold deposits such as the nearby Kidston Gold Deposit from which 4.1 million ozs were produced.

There are numerous gold prospects located within the PepinNini tenements as well as tungsten, lead, zinc and copper prospects.

A preliminary reconnaissance survey of the North Queensland tenements was completed in December. Approximately 150 surface samples have been submitted to a laboratory for analysis. Gold, copper, lead and uranium mineralisation was visually evident in some samples.



Corporate

Appointment of an Independent Non Executive Director

Mr Christopher Lambert was appointed as an Independent Non Executive Director with the Company on 12th October, 2006. Mr Lambert brings to the Company financial and capital raising expertise and a close association with major investment institutions based in London and Asia.

His financial background is predominantly commodity based specializing in base and precious metals. Over a period of 17 years Mr Lambert headed up the London and global precious and base metals trading for Elders Finance Group, The Rural and Industries Bank of Western Australia, Barclays Bank and Prudential Securities (USA). During his time at these companies he was responsible for the managing of global dealing operations in the worlds major financial centres and the structuring of corporate and project finance transactions for governments, central banks, industrial companies and mining houses.

Appointment of Chairman

The current Managing Director, Mr Norman Kennedy, was elected Chairman of the Company on 12th October, 2006. He had been performing the duties as acting Chairman when required since June, 2006. Mr Kennedy is a founding Director of PepinNini Minerals Limited and has been instrumental in the direction and progress of the Company since its inception.

Appointment of General Manager

On the 31st October the Company announced that Mr Phillip Sutherland had agreed to accept a position of General Manager with the Company commencing in January, 2007. Mr Sutherland is an experienced advocate specializing in resources industry related public policy and public affairs. He has a whole of industry appreciation of the challenges and opportunities facing resources companies particularly those operating in South Australia and is well known in government, media and industry circles.

Mr Sutherland has extensive executive general management experience. Since February, 2001 he has been the Chief Executive Officer of the South Australian Chamber of Mines and Energy which has expanded rapidly under his leadership from 60 member companies to more than 150 companies. The Chamber's sphere of influence and visibility has also grown to the extent that it is now firmly positioned in the eyes of government, the community and media as the peak industry body for the resources industry in South Australia.

Placement

On 14th December, 2006 the Company announced it had agreed to place five million ordinary fully paid shares in the Company, at \$1.05 per share, raising a total of \$5.25 million before costs. The placement represents 8.6% of PepinNini's post placement undiluted capital or 7.3% of post placement capital on a diluted basis.

It is intended the funds will be used for working capital and will allow the Company to substantially expand and accelerate its nickel exploration project in the Musgrave Province of South Australia.

The information in this report that relates to Exploration Results 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
Managing Director, PepinNini Minerals Limited
Phone: (02) 9417 6212

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.

Name of entity

PepinNini Minerals Limited

ABN

55 101 714 989

Quarter ended ("current quarter")

December 2006

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		
1.2 Payments for (a) exploration and evaluation (b) development (c) production (d) administration	(360)	(741)
1.3 Dividends received	(281)	(564)
1.4 Interest and other items of a similar nature received	79	91
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other - Drilling Refund PACE – SA Govt		
Net Operating Cash Flows	(562)	(1,214)
Cash flows related to investing activities		
1.8 Payment for purchases of: (a)prospects (b)equity investments (c)other fixed assets	(22)	(72)
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) – Fee for exclusivity period extension - Sinosteel Corporation purchase of Crocker Well Uranium project – South Australia	1,000	1,000
Net investing cash flows	978	928
1.13 Total operating and investing cash flows (carried forward)	416	(286)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	416	(286)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	5,410	8,560
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) – issue expenses paid	(316)	(316)
	Net financing cash flows	5,094	8,244
	Net increase (decrease) in cash held	5,510	7,958
1.20	Cash at beginning of quarter/year to date	3,871	1,423
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	9,381	9,381

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	138
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 and non-executive directors' remuneration & expenses	\$69,098
2. Office, accounting & secretarial services & exploration expenses paid to an entity related to Directors	\$ 69,015

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	600
4.2 Development	
Total	600

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	154	181
5.2 Deposits at call	9,227	3,690
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	9,381	3,871

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	Nil		
6.2	Interests in mining tenements acquired or increased	Nil		

+ 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	58,499,166	36,786,666	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	5,000,000	5,000,000	105c	105c
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>	9,908,333 300,000 500,000	Nil Nil Nil	<i>Exercise price</i> 20cents 30cents 40cents	<i>Expiry date</i> 9 Dec 2007 31 Dec 2007 31 Dec 2007
7.8 Issued during quarter				
7.9 Exercised during quarter	500,000 200,000	500,000 200,000	20cents 30cents	20cents 30cents
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:

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Date: **31 January 2007..**

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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+ See chapter 19 for defined terms.