



## Report for the Quarter Ending 30<sup>th</sup> September, 2008

31<sup>st</sup> October, 2008

### **Highlights**

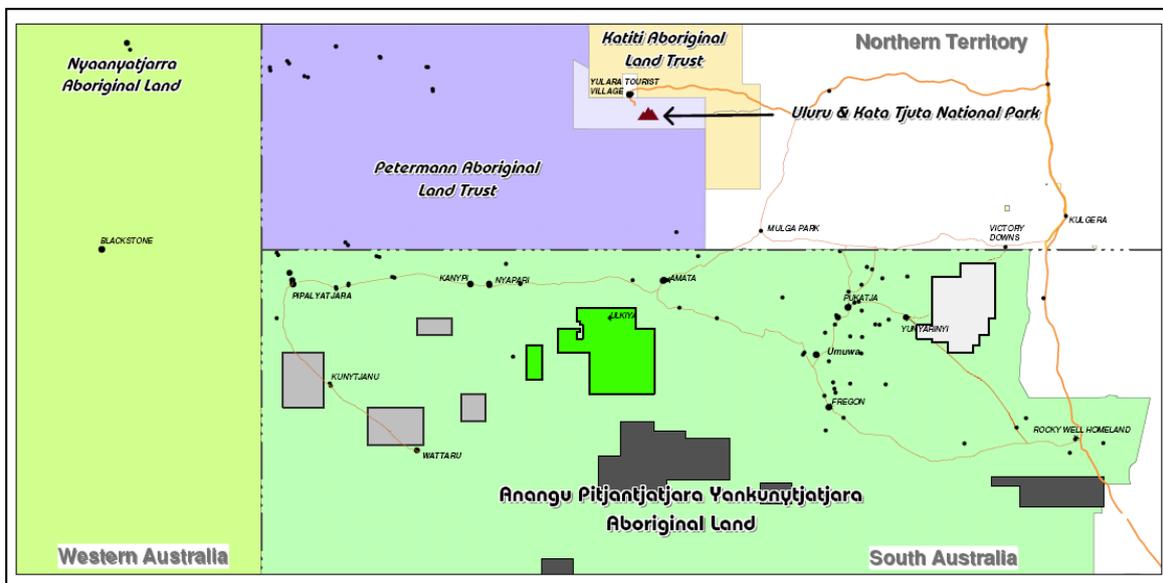
- ◆ Positive initial results from regional geochemical drill sampling across EL 4048 Mt Caroline using the newly acquired Company vacuum drilling rig. Analytical results for the first batch of 145 samples have returned anomalous values of silver (up to 25.5 g/t), lead (up to 23ppm), zinc (up to 1,240ppm), nickel (up to 510ppm), copper (up to 115ppm), cobalt (up to 195ppm), molybdenum (up to 14ppm) and strontium (up to 1,040ppm). The assay values are notably higher than results previously reported for regional geochemical sampling programs across other parts of the Musgrave Province of South Australia.
- ◆ Four diamond boreholes completed and a fifth commenced for a total of 1,983.09 metres of drilling at the Mt Caroline nickel copper sulphide targets located in the Musgrave Province of South Australia. 157 vacuum boreholes were also drilled for a total of 1,168.45 metres.
- ◆ New satellite based communication system installed at the Base Camp located within Mt Caroline EL4048.
- ◆ Lodgement of a Referral under the Commonwealth Government Environment Protection and Biodiversity Conservation Act for the development of a uranium mine at Crocker Well.
- ◆ Submission of an application for a Mining Lease for a uranium mine at Crocker Well.
- ◆ Completion of more than 180 boreholes at Crocker Well as part of a resource validation program.
- ◆ Significant uranium intercepts from drilling at Crocker Well including 98.5m @ 541ppm U<sub>3</sub>O<sub>8</sub> from surface(DD08CWE006) and 41.0m @ 848ppm U<sub>3</sub>O<sub>8</sub> from 15.5m(DD08CWE002)
- ◆ The appointment of Mr Gary Ferris as Exploration Manager for the Company's Queensland project to direct the exploration of the considerable potential already identified in the Queensland tenements held by the Company. Initial priority exploration targets have been identified as gold and base metals in EPM 15440 Percyville and uranium and phosphate in EPM 14834 Plain Creek.
- ◆ Uranium grades of up to 0.42% U<sub>3</sub>O<sub>8</sub> and phosphate grades of up to 27% P<sub>2</sub>O<sub>5</sub> reported by previous explorers from rock chip samples collected from within EPM 14834 Plain Creek
- ◆ At the end of the quarter the Company held \$13.1 million in cash.



## SOUTH AUSTRALIA

### Musgrave Province Project

The project consists of three granted exploration licences, EL 3368, EL3536 and EL 4048, and two exploration licence applications, ELAs 118/96 and 185/96 which are considered prospective for base metals, gold, platinum group metals, ferrous metals and precious stones. The tenements comprise eleven separate areas covering approximately 8,143 km<sup>2</sup>.



- |  |                          |
|--|--------------------------|
|  Mt Caroline EL4048 | • Aboriginal Communities |
|  Pine Ridge EL3536  | • Aboriginal Homelands   |
|  Mt Marcus EL3368   |                          |
|  EL Applications    |                          |



**Pepinini**  
Minerals Limited  
MT CAROLINE  
EL4048

Musgrave Project SA

Field exploration activities are currently being undertaken within EL 3536 Pine Ridge and EL 4048 Mt Caroline.

**Exploration Licence EL4048 – Mt Caroline**

EL4048 covering approximately 1,916 km<sup>2</sup> was granted to PepinNini Minerals on 25th February, 2008. The Caroline Intrusion is a large layered mafic/ultramafic intrusion belonging to the Giles Complex with potential for significant nickel copper sulphide mineralisation and platinum group metals similar to the Voisey’s Bay and Platreef styles of mineralisation.



During the quarter a satellite communication system was installed at the base camp to facilitate efficient management of the current exploration programs being undertaken within EL 4048. Exploration activities are primarily focused on targeting nickel-copper

sulphides contained within the layered mafic-ultramafic Giles Complex rocks. The base metal potential of felsic and mafic gneisses of the Birksgate Complex is also being assessed.

During the quarter, four diamond boreholes were completed and a fifth is currently being drilled for a total of 1,983.09m. Drilling intersected layered anorthosite, leuco-gabbro and minor gabbro and troctolite lithologies within the Giles Complex. Country rocks are typically felsic and granitic gneisses of the Birksgate Complex. Sulphides have been intersected in all boreholes to date confirming sulphur saturation occurred within the primary melt.

Diamond borehole collar details.

Hole_ID	MGA_East	MGA_Nth	Depth
DD08CAR001	672000	7079350	432.05m
DD08CAR002	672950	7076000	404.90m
DD08CAR003	671200	7086000	444.17m
DD08CAR004	664900	7078500	488.97m
DD08CAR005	663847	7080847	213m (incomplete)



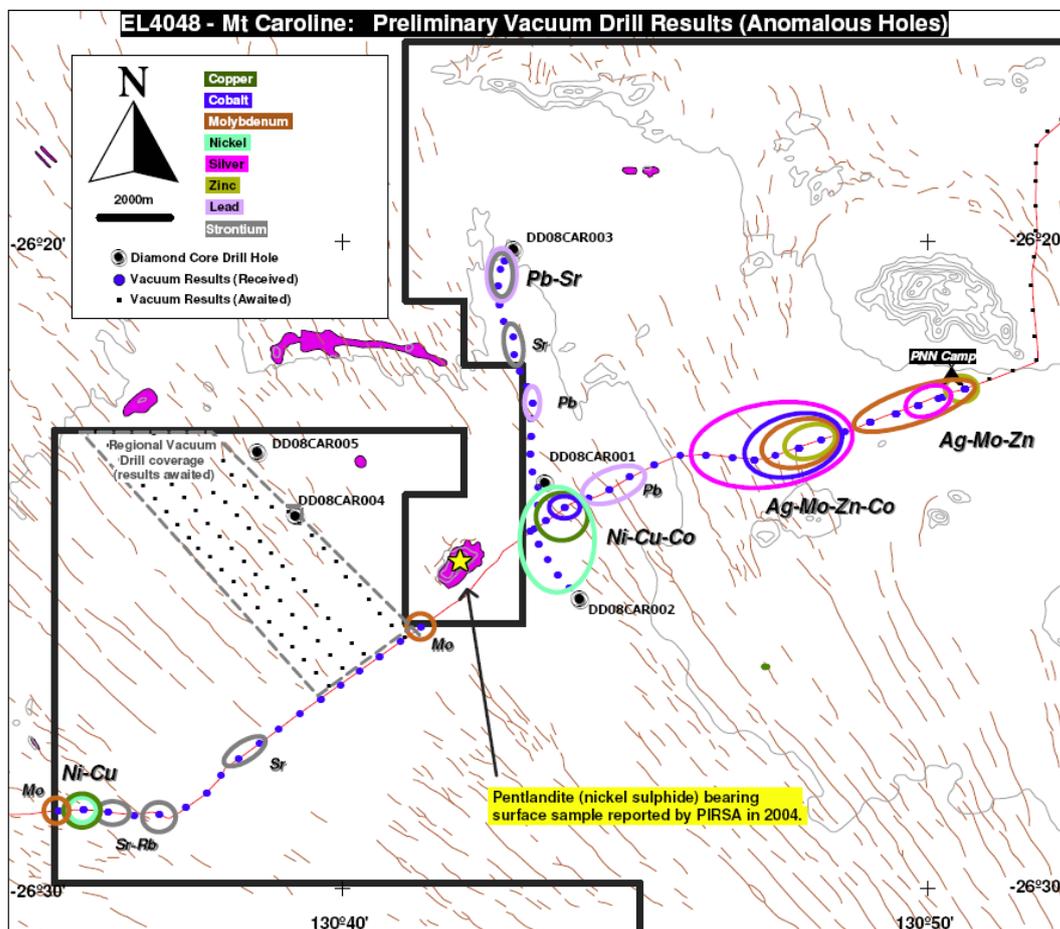
A total of 402 diamond drill core samples were submitted for assaying during the quarter. No significant results were received from the first three diamond boreholes (DD08CAR001-DD08CAR003). Assay results for DD08CAR0004 and DD08CAR005 are yet to be received.

The diamond drill program within EL4048 is augmented by a regional geochemical survey utilising the company owned vacuum drill rig. Relatively shallow soil and rock chip samples are been taken from across the tenement, primarily along established tracks and roads. During the quarter, 157 vacuum boreholes were drilled for a total of 1,168.45m.

Analytical results for the first batch of 145 regional bedrock geochemical samples drilled by the vacuum rig within EL 4048 have returned anomalous values of silver (up to 25.5 g/t), lead (up to 23ppm), zinc (up to 1,240ppm), nickel (up to 510ppm), copper (up to 115ppm), cobalt (up to 195ppm), molybdenum (up to 14ppm) and strontium (up to 1,040ppm). The assay values are notably higher than results previously reported for regional geochemical samples collected in the Musgrave Province of South Australia. The Company is awaiting results from an additional 179 samples drilled across the Caroline Intrusion.

A number of distinct priority targets have been defined from the initial results as shown on the following plans and each will be systematically investigated by more detailed grid drilling to ascertain if a coherent anomaly exists the size of which may represent an economically viable target. The results are very encouraging and demonstrate the vacuum drilling can be an effective tool for sampling below the widespread aeolian sand cover in the Musgrave Province. PepinNini is confident that the technique will assist the identification of potential targets within the underlying bedrock. The Company has an ongoing program of approximately 1500 vacuum holes approved within EL4048 Mt Caroline and EL3536 Pine Ridge.

### Summary of Anomalous Results From Vacuum Drilling (Holes VC001-62)





### ***Vacuum Drilling - EL 4048 Mt Caroline***

During the quarter, PepinNini had Work Program Proposals approved through Work Program Clearances attended by Traditional Owners and APY representatives. Reconnaissance exploration programs have been approved across the Caroline Block and Kintore Block of EL4048 Mt Caroline. Exploration activities approved in these regions include regional mapping, rock chip sampling and vacuum drilling.

### **Exploration Licence EL3536 – Pine Ridge**

A reconnaissance and mapping survey including geochemical sampling of significant parts of EL 3536 as well as an extensive program of shallow vacuum drill holes primarily undertaken along existing tracks and fences has been approved by a Work Program Clearance conducted by traditional owners and APY. Field operations are scheduled to commence as soon as the Company's diamond rig and vacuum rig have completed the current program within EL 4048. The project includes a reassessment followed by investigation by drilling of five nickel copper prospects "Kenmore 1", "Kenmore 2", "South Bank", "Eremorphila" and "Aidan Walking" previously identified by Department of Mines and Rio Tinto within EL 3536.

During the quarter, PepinNini had Work Program Proposals approved through Work Program Clearances attended by Traditional Owners and APY representatives. Reconnaissance exploration programs have been approved throughout EL3536 Pine Ridge which include regional mapping, rock chip sampling and vacuum drilling. A diamond drilling program has also been approved. Five prospect sites identified by previous explorers within EL3536 will be tested by vacuum and diamond drilling.

## **Curnamona Province Project**

The development of the Crocker Well Uranium Deposit by Sinosteel Corporation (60%) and PepinNini Minerals (40%) is being managed by Sinosteel PepinNini Curnamona Management Pty Limited (SPCM) on behalf of the Joint Venture partners.

A new dedicated website <http://www.crockerwell.com.au/> was established for the project during the quarter by SPCM.

### **Resource Verification Drilling Program**

Drilling operations to verify and upgrade sufficient of the currently defined JORC compliant uranium resource from an Inferred category to an Indicated or Measured category to allow for a Bankable Feasibility Study (BFS) to be completed continued during the quarter with the use of up to 3 drilling rigs. SPCM have reported the completion of more than 180 boreholes. All boreholes have been geophysically logged using a spectral gamma tool.

Significant uranium intercepts from recent drilling at Crocker Well include:

- ◆ **98.5m @ 541ppm U<sub>3</sub>O<sub>8</sub> from surface(DD08CWE006)**  
including 12.0m @ 996ppm U<sub>3</sub>O<sub>8</sub> from 68.0m  
and 8.0m @ 1063ppm U<sub>3</sub>O<sub>8</sub> from 24.5m
- ◆ **41.0m @ 848ppm U<sub>3</sub>O<sub>8</sub> from 15.5m(DD08CWE002)**  
including 9.5m @ 2012ppm eU<sub>3</sub>O<sub>8</sub> from 37.0m
- ◆ **84.0m @ 857ppm eU<sub>3</sub>O<sub>8</sub> from 5.0m(RC08CWJ017)**  
including 8.0m @ 1757ppm eU<sub>3</sub>O<sub>8</sub> from 72.0m
- ◆ **120.0m @ 411ppm eU<sub>3</sub>O<sub>8</sub> from 20.0m(RC08CWJ007)**  
including 28.0m @ 586ppm eU<sub>3</sub>O<sub>8</sub> from 20.0m
- ◆ **131.0m @ 360ppm eU<sub>3</sub>O<sub>8</sub> from 1.0m(RC08CWJ013)**  
including 14.0m @ 810ppm eU<sub>3</sub>O<sub>8</sub> from 16.5m

(eU<sub>3</sub>O<sub>8</sub> refers to the U<sub>3</sub>O<sub>8</sub> grade as estimated from spectral gamma logging and may be subject to revision on receipt of assay results)

### **Commonwealth Government Environment Protection and Biodiversity Conservation (EPBC) Referral**

On 8<sup>th</sup> August, 2008 the Sinosteel PepinNini Joint Venture lodged a Referral under the Commonwealth Government Environment Protection and Biodiversity Conservation (EPBC) Act for the development of a uranium mine at Crocker Well in South Australia.

### **Mining Lease Application**

On 2<sup>nd</sup> September, 2008 the Sinosteel PepinNini Joint Venture lodged an application for a Mining Lease with the South Australian Government for the development of a uranium mine at Crocker Well.



**Core Logging at Crocker Well Field Camp**

## **WESTERN AUSTRALIA**

### ***Peak Hill Gold Project and Robinson Range Iron Ore Project***

#### **The Peak Hill Gold Project**

PepinNini presently holds a 51% interest in Eagle Gold Mines Limited (EGM) a public unlisted United Kingdom company. EGM owns a wholly owned Australian subsidiary Eagle Gold Mines Pty Ltd (EGM Pty Ltd) which owns the mineral tenements and processing plant and infrastructure referred to as the Peak Hill Gold Project and Fortnum Gold Mine in PepinNini's ASX announcement of 20<sup>th</sup> December 2007.

On 9<sup>th</sup> July PepinNini Minerals announced it had been notified by EGM that a Receiver and Manager had been appointed to EGM Pty Limited.

At the invitation of the Receiver and Manager, PepinNini has submitted an expression of interest to acquire some or all of the assets of EGM Pty Limited and is currently undertaking due diligence before submission of a formal offer.

#### **Robinson Range Iron Ore Project**

PepinNini Minerals has entered a Farm-In Agreement with Eagle Gold Mines Pty Limited whereby it can earn 50% of the Robinson Range Iron Ore Project through the expenditure of \$500,000 on exploration over a two year period commencing from December, 2007. The seven tenements subject to the Farm-In Agreement contain a significant portion of the area within the Bryah-Padbury Basin deemed prospective for Iron Ore. The potential Iron Ore deposits have grades of up to 65% Fe with low phosphorous content suitable for exploitation as Direct Shipping Ore (DSO). The prospects have never been drilled, and exploration for iron ore has not been conducted over this ground since 1974.

PepinNini Minerals has identified approximately 40 kms strike length of the prospective Robinson Range Formation within the JV tenements and has undertaken a detailed 250m grid gravity survey to identify priority drill targets.

## **NORTH QUEENSLAND**

### ***Georgetown Inlier/Woolgar Goldfield/Drummond Basin Project***

On 3<sup>rd</sup> September PepinNini Minerals Limited announced the appointment of Mr Gary Ferris as Exploration Manager for the Company's Queensland projects. Mr Ferris was previously employed by Primary Industry and Resources South Australia as Project Team Leader for the Musgrave Province before joining Internet Resources Limited as Managing Director. Under his leadership Internet Resources established a substantial portfolio of exploration tenements in North Queensland and undertook exploration programs successfully delineating gold and iron ore resources. The Directors of PepinNini consider the Company is very fortunate to have been able to attract an exploration manager of the calibre of Mr Ferris to direct the exploration of the considerable potential already identified in the Queensland tenements held by the Company.

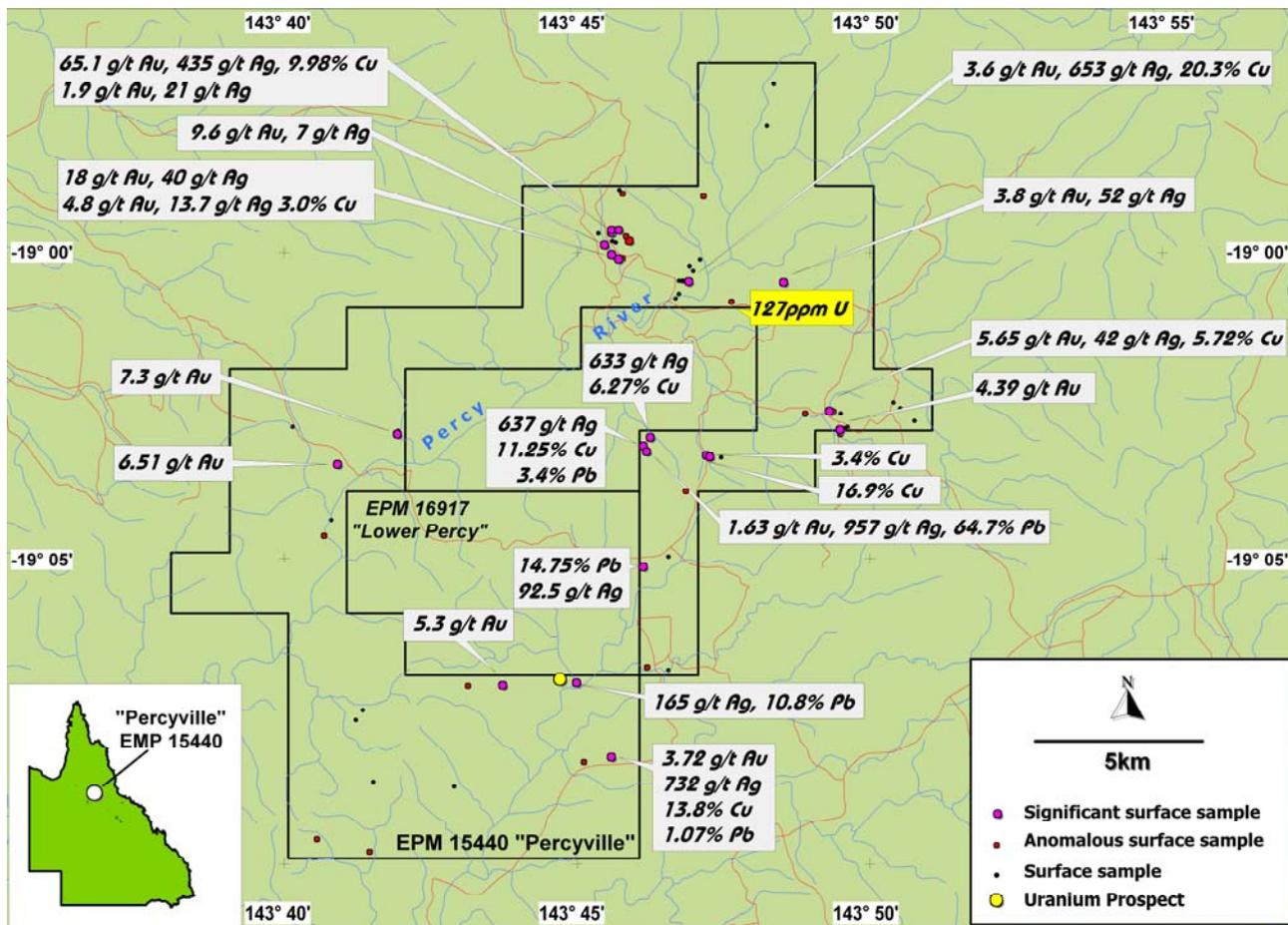
PepinNini Minerals have established a significant presence in North Queensland with 19 exploration tenements and 1 mining lease covering approximately 2,007 sq kms.

Initial priority exploration targets have been identified as gold and base metals in EPM 15440 Percyville and uranium and phosphate in EPM 14834 Plain Creek.

Widespread copper, gold, silver and lead mineralization has been identified in rock chip samples collected during an initial regional reconnaissance survey of EPM 15440. Some of the more significant assays include:

- **65.1g/t gold**, 435g/t silver, 9.98% copper
- 3.6g/t gold, 653g/t silver, **20.30% copper**
- 5.65g/t gold, 42g/t silver, 5.72% copper
- 0.7g/t gold, 22g/t silver, 16.90% copper
- 3.72g/t gold, 732g/t silver, 13.8% copper, 1.07% lead
- 0.6g/t gold, 637g/t silver, 11.25% copper, 3.4% lead
- 0.27g/t gold, 165g/t silver, 10.8% lead
- 1.63g/t gold, **957g/t silver, 64.7% lead**

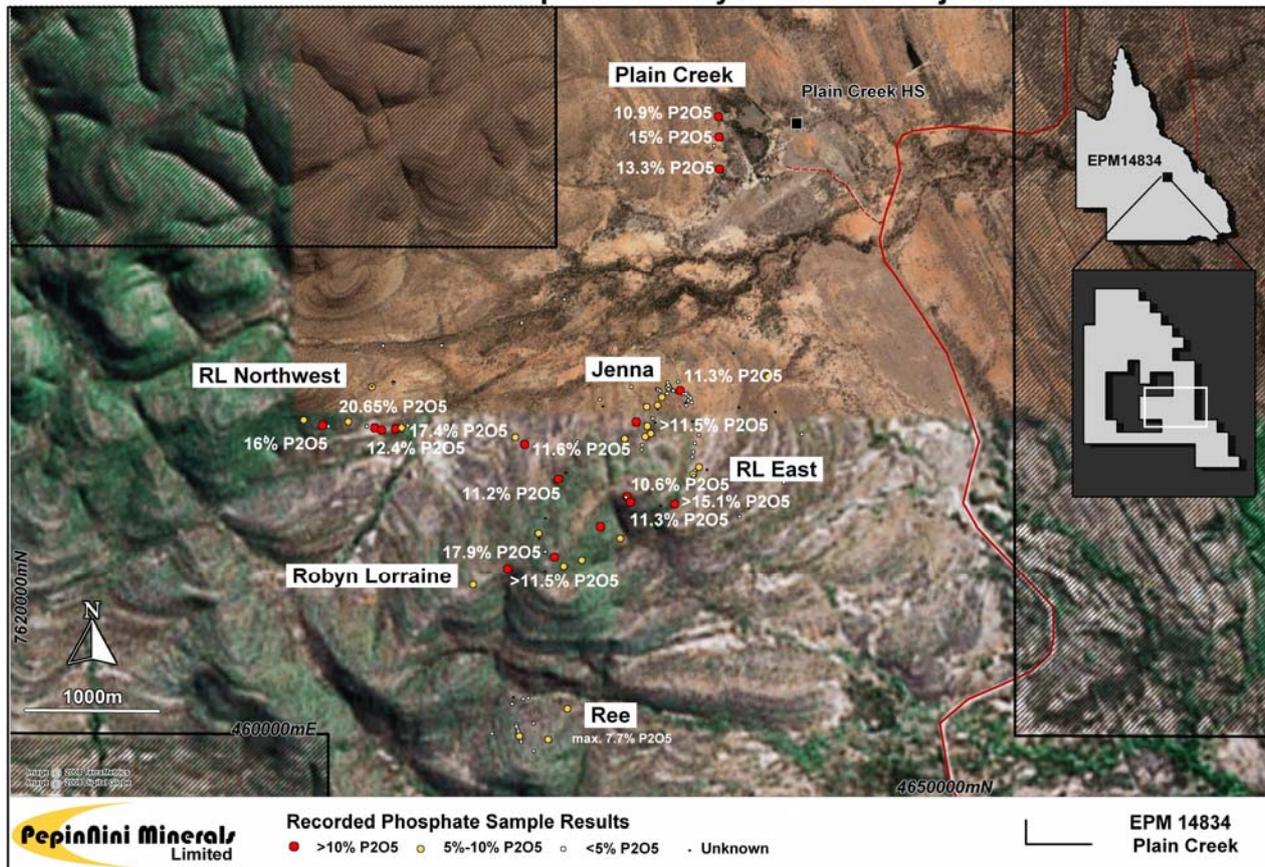
EPM 15440 is located in the Percyville area approximately 50kms south of Forsayth. The 4.1Moz Kidston Gold Mine is located approximately 30kms to the northeast of the area.



Regional Surface Sampling program – EPM 15440 Percyville

Within the Plain Creek EPM 14834 (259 sq kms) extensive uranium mineralisation associated with a phosphate rich horizon in the upper part of the Drummond Basin sediments has been identified by previous explorers. Uranium grades of up to 0.42% U<sub>3</sub>O<sub>8</sub> have been reported from rock chip samples. Phosphate grades of up to 27% have been reported by previous explorers.

### Plain Creek Rock Phosphate - Robyn Lorraine Project Area



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: (02) 9417 6212

**Note:** Additional information on PepinNini Minerals Limited can be found on the website:  
[www.pepinnini.com.au](http://www.pepinnini.com.au)

Additional information for the Crocker Well Uranium Project can be found on the website:  
[www.crockerwell.com.au](http://www.crockerwell.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

<b>PepinNini Minerals Limited</b>
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ABN

<b>55 101 714 989</b>
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Quarter ended ("current quarter")

<b>September 2008</b>
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### Consolidated statement of cash flows

	Current quarter \$A'000	Year to date (... 3... months) \$A'000
<b>Cash flows related to operating activities</b>		
1.1 Receipts from product sales and related debtors		
1.2 Payments for (a) exploration and evaluation (b) development (c) production (d) administration	<b>(2,076)</b>	(2,076)
1.3 Dividends received	<b>(402)</b>	(402)
1.4 Interest and other items of a similar nature received	<b>431</b>	431
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other	<b>2</b>	2
<b>Net Operating Cash Flows</b>	<b>(2,045)</b>	(2,045)
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of: (a)prospects (b)equity investments (c)other fixed assets	<b>(2)</b>	(2)
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) – controlled entity contributing cash		
<b>Net investing cash flows</b>	<b>(2)</b>	(2)
1.13 Total operating and investing cash flows (carried forward)	<b>(2,047)</b>	(2,047)

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

1.13	Total operating and investing cash flows (brought forward)	<b>(2,047)</b>	(2,047)
	<b>Cash flows related to financing activities</b>		
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 – On market Share Buy-back	(270)	(270)
	<b>Net financing cash flows</b>	<b>(270)</b>	(270)
	<b>Net increase (decrease) in cash held</b>	<b>(2,317)</b>	(2,317)
1.20	Cash at beginning of quarter/year to date	15,421	15,421
1.21	Exchange rate adjustments to item 1.20		
1.22	<b>Cash at end of quarter</b>	<b>13,104</b>	13,104

**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	117
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	\$114,999
2. Reimbursement of Directors' expenses	\$2,052

**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	
<b>Total</b>		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	<b>3,104</b>	<b>5,421</b>
5.2 Deposits at call	<b>10,000</b>	<b>10,000</b>
5.3 Bank overdraft		
5.4 Other (provide details)		
<b>Total: cash at end of quarter</b> (item 1.22)	<b>13,104</b>	<b>15,421</b>

**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			

+ 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 <b>Preference securities</b> <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 <b>+Ordinary securities</b>	67,999,195	67,999,195	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	(b)405,000	(b)405,000		
7.5 <b>+Convertible debt securities</b> <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 <b>Options</b> <i>(description and conversion factor)</i>	500,000		<i>Exercise price</i> 138cents	<i>Expiry date</i> 30 Nov 2010
7.8 Issued during quarter	200,000		130cents	1 Sep 2011
7.9 Exercised during quarter				
7.10 Expired during quarter				
7.11 <b>Debentures</b> <i>(totals only)</i>				
7.12 <b>Unsecured notes</b> <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<sup>st</sup> October 2008.**

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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