



Report for the Quarter Ending 30th September, 2007

31st October, 2007

Highlights

- ◆ Company owned drill rig successfully commissioned with 2,080 metres of core drilling completed in 2 holes at Crocker Well Uranium Deposit and 5 holes at the Marcus nickel copper sulphide target.
- ◆ Sulphide-bearing mafic rocks have been intersected in four holes drilled at the Marcus Prospect. The sulphide mineralisation is dominated by pyrrhotite (iron sulphide) but is accompanied by chalcopyrite (copper sulphide) and pentlandite (nickel sulphide).
- ◆ Eighty nine metres of continuous uranium mineralisation with an average grade of 0.05%(eU₃O₈) was intersected from ten metres depth at Crocker Well confirming previously reported results.
- ◆ Discussions have been held with consultant groups and South Australian Government Departments to establish guidelines and a development timeframe for the development of the Crocker Well Uranium Deposit. Current strategy is aimed at being in production by 2010.
- ◆ Metallurgical tests aimed at improving the previously reported recoveries for processing the Crocker Well uranium ore have been commissioned with ANSTO and Amdel Laboratories.
- ◆ Independent resource consultants Hellman & Schofield have been commissioned to upgrade sufficient current JORC compliant uranium resource at Crocker Well from an Inferred category to an Indicated and Measured category to allow for a Definitive Feasibility Study to be undertaken for the development of the project.
- ◆ New Adelaide office officially opened by Hon. Paul Holloway, MLC, South Australian Minister for Mineral Resources Development on 10th September, 2007.
- ◆ At the end of the quarter the Company held \$32.95million in cash.



Musgrave Province Project

Drilling operations have commenced within EL3368 targeting Voisey's Bay style magmatic nickel-copper sulphide mineralisation in the Mt Harcus and Mt Moulden Prospect areas. The Company owned diamond rig was mobilised to the Project area and commenced drilling activities on 16th July 2007. Five holes have been completed and drilling is continuing.

Sulphide-bearing mafic rocks have been intersected in all three holes drilled at the Harcus Prospect and one of the boreholes drilled at the Harcus NW target. The primary sulphides are hosted within gabbroic intrusive rocks of the Giles Complex. The sulphide mineralisation occurs as fine to coarse disseminations with occasional blebby occurrences and is dominated by pyrrhotite (iron sulphide) but is accompanied by chalcopyrite (copper sulphide) and pentlandite (nickel sulphide).

Borehole DD07HAR001 was drilled adjacent to the sulphide intersection made during the reverse circulation drilling program in 2006. The core confirmed the previously intersected sulphide occurrences with accumulations of disseminated sulphide noted in zones between 16 metres and 21 metres, 42 metres and 45 metres and 92.5 metres and 93 metres depths. Assay results confirm the presence of elevated copper and nickel over a 52 metre interval between 41 metres and 93 metres depth. Best intercepts include 1 metre at 0.2% copper and 254ppm nickel at 42 metres and 5 metres at 0.13% copper and 158ppm nickel between 88 metres and 93 metres depth. The eastern contact of the intrusion against the metamorphic country rocks was intersected at a depth of 237 metres (down hole).



Borehole DD07HAR001 (Disseminated Sulphide in Gabbro at 42.0m depth – 0.2%Cu, 254ppmNi)

Borehole DD07HAR002 was drilled to a depth of 449.94 metres to test beneath the northern end of a soil auger Cu-Ni anomaly and also to intersect the contact of the intrusion. The hole intersected disseminated sulphide occurrences within gabbroic rocks from 312 metres to 327 metres. This zone is adjacent to a transition contact zone between the mafic intrusion and the metamorphic country rocks. The western contact of the intrusion was defined at the depth of 338 metres (down hole). The upward continuation of the sulphide occurrence in this hole may explain the source of the surface Cu-Ni anomaly being tested.

Borehole DD07HAR003 was drilled as a deep stratigraphic hole through the Marcus Intrusion as part of the 2006 PACE 4 collaborative funding program with the South Australian Government. The hole extends borehole RC06HAR011 which was drilled to a depth of 151 metres in 2006. DD07HAR003 was terminated at a depth of 776.16 metres still within the intrusion. The hole intersected mafic rocks from 151 metres to 420 metres with some disseminated sulphide zones between 245 metres and 295 metres. The hole was intended to test the strong magnetic and gravity properties within the intrusive rocks at this location. Magnetic minerals within the gabbro probably account for the magnetic anomaly, although further petrophysical tests are required on rock samples to confirm this. No source rock was intersected to account for the gravity anomaly.

Core samples from the first three holes have been cut and submitted to a laboratory for geochemical analysis.

Boreholes DD07HAR004 and DDH07HAR005 were drilled at the Marcus NW target to test a discrete 3 mGal gravity anomaly approximately 1km in diameter which is coincident with a strong negative magnetic feature interpreted as Giles Complex Intrusive rocks and a probable bedrock EM conductor detected by ground EM surveying in 2006. Borehole DD07HAR004 was

terminated at a depth of 195.56 metres in weathered basement material with minor sulphides being noted in the basal 10 metres. Boreholes DD07HAR005 was terminated at a depth of 198.27 metres and intersected Giles Complex Intrusive rocks from a depth of 40 metres to the base of the hole.

During the quarter PepinNini Minerals was proud to be the major sponsor for the APY Sport and Cultural Festival held over 4 days from 28th September to 1st October at Amata. The event was well attended and enjoyed by both spectators and participants.



PepinNini representatives at the Amata Sport and Cultural Festival – September, 2007



Drilling Borehole DD07HAR001, July 2007

Curnamona Province Project

PepinNini Minerals Limited has a 40% interest in four granted exploration licences and one exploration licence application covering approximately 3,778 sq. kms of the Curnamona Province of South Australia. A Joint Venture Alliance has been established with Sinosteel Corporation to manage and operate the development of the Crocker Well and Mt Victoria Uranium Deposits and explore for other commodities within the Joint Venture tenements. Under the Joint Venture Agreement Sinosteel Corporation will contribute \$11 million exploration expenditure over the next 2 years to the project.

Office premises have been established in Adelaide for the Joint Venture Management Company which will undertake further exploration with a priority objective of preparing a Bankable Feasibility Study for the development of the Crocker Well Uranium Deposit to produce at least 600 tonnes of U_3O_8 per year for at least 10 years. It is the intention of the Joint Venture to get into production as soon as possible to take advantage of the current uranium market.

Discussions have been held with consultant groups and South Australian Government Departments to establish guidelines and a timeframe for the development of the Crocker Well Uranium Deposit. Current strategy is aimed at being in production by 2010.

Metallurgical tests aimed at improving the previously reported recoveries for processing the Crocker Well uranium ore have been commissioned with ANSTO and Amdel Laboratories.

During June two diamond drill holes were completed at Crocker Well as an initial part of a verification program to upgrade the uranium resource contained within the Crocker Well Deposit from Inferred to an Indicated or Measured category.

One of the boreholes was successfully gamma logged to total depth during July and calibration pits located in the project area were verified and reinstated. The downhole gamma logging results indicate the borehole contains significant continuous uranium mineralisation from 10 metres to 99.2 metres with an average grade of 0.05% (e U_3O_8). Using a 250ppm cutoff the grade averages 0.06% (e U_3O_8) for a total thickness of 67.55 metres. There is a total of 15.75 metres grading in excess of 0.1% (e U_3O_8). Assay results have confirmed the grade and thickness of mineralization which is consistent with a large low grade deposit amenable to open cut extraction. The indicated grades are similar to those reported from the previous two holes drilled at the site but the thickness is greater because the hole intersected substantially more mineralization at depth. The previous cored borehole drilled at the site was terminated at 84 metres and an RC hole also drilled at the site did not return the same indicated mineralization below 80 metres.

During August twenty historic boreholes were successfully gamma logged at Crocker Well to assist in resource validation.

Independent resource consultants Hellman & Schofield have been commissioned to upgrade sufficient current JORC compliant uranium resource at Crocker Well from an Inferred category to an Indicated and Measured category to allow for a Definitive Feasibility Study to be undertaken for the development of the project.



Downhole Gamma Logging at Crocker well, July 2007



Drilling at Crocker Well, June 2007

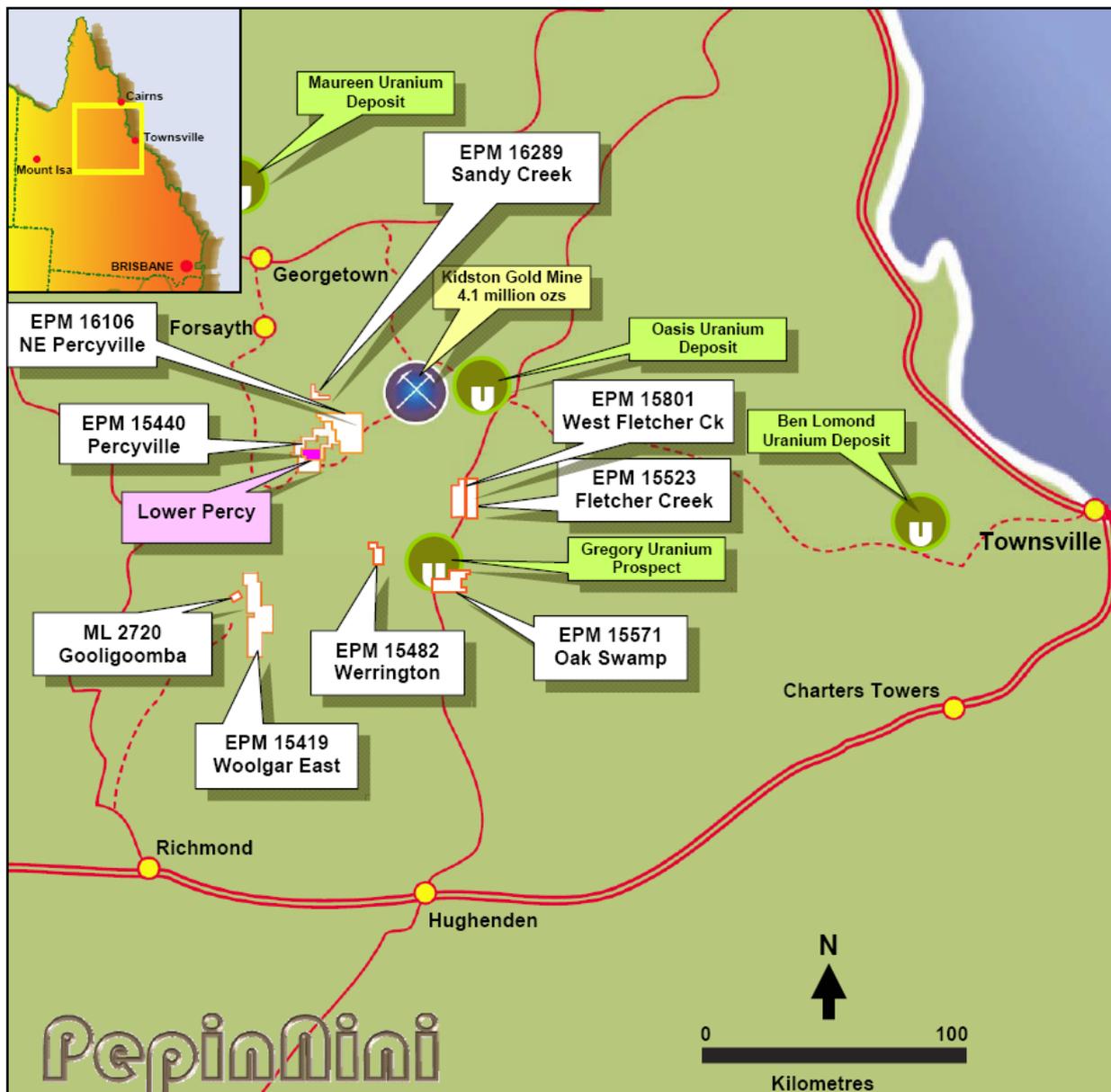
Georgetown Inlier/Woolgar Goldfield Project

The Company has established a substantial presence in the Georgetown Inlier/Woolgar Goldfield region in north Queensland with 100% interest in one granted Mining Lease, three granted exploration tenements and six exploration tenements under application covering approximately 1,250 sq. kms. Uranium occurrences which have been inadequately tested by previous explorers and favorable geological settings for uranium mineralization occur in all of the tenement 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% U_3O_8 and molybdenum credits of 0.15%.

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.

During the quarter the Company applied for an additional EPM 16917 Lower Percy covering approximately 48 sq. kms.



New Adelaide Office

The Company has established a new Principal Office in Adelaide located at Level 1, 117 King William Street, ADELAIDE. SA 5000. The office was officially opened by the Hon. Paul Holloway MLC, South Australian Minister for Mineral Resources Development on 10th September, 2007. It is expected that the establishment of an Adelaide office will greatly assist in the management and administration of our rapidly expanding South Australian projects particularly in the development of the Crocker Well Uranium Deposit. It ensures the necessary communication and administration facilities are located where they can best serve a focused team of consultants and employees to progress our projects as quickly and efficiently as possible.



The Hon. Paul Holloway MLC, Minister of Mineral Resources Development (centre) opening the Adelaide Office together with Mr Tianwen Huang, President of Sinosteel Corporation (right) and Mr Norman Kennedy, Chairman of PepinNini Minerals Limited (left).

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

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")

September 2007

Consolidated statement of cash flows

	Current quarter \$A'000	Year to date (... 3... 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	(542)	(542)
1.3 Dividends received	(381)	(381)
1.4 Interest and other items of a similar nature received	356	356
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other - Drilling Services receipts	36	36
Net Operating Cash Flows	(531)	(531)
Cash flows related to investing activities		
1.8 Payment for purchases of: (a)prospects (b)equity investments (c)other fixed assets	(11)	(11)
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	(11)	(11)
1.13 Total operating and investing cash flows (carried forward)	(542)	(542)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(542)	(542)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	250	250
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		
	Net financing cash flows	250	250
	Net increase (decrease) in cash held	(292)	(292)
1.20	Cash at beginning of quarter/year to date	33,245	33,245
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	32,953	32,953

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 and non-executive directors' remuneration & expenses	\$74,582
2. Office, accounting & secretarial services & exploration expenses paid to an entity related to Directors	\$ 32,996

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	92	75
5.2 Deposits at call	32,861	33,170
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	32,953	33,245

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 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	64,132,499	64,132,499	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>	5,075,000	Nil	<i>Exercise price</i> 20cents	<i>Expiry date</i> 9 Dec 2007
7.8 Issued during quarter				
7.9 Exercised during quarter	500,000 250,000		40cents 20cents	40cents 20cents
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 **31st October 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.