



Report for the Quarter Ending 31st December, 2012

23rd January, 2013

Highlights

- ◆ **Musgrave Project**, South Australia: Statutory Approvals and Heritage Clearances have been received for ground EM and drilling of V-TEM survey targets in the western Cooperinna Block of EL4587. A diamond drill hole has been completed at the Bondi Prospect and intercepted a 27m zone containing weakly disseminated sulphides hosted in a pyroxene-olivine-quartz granulite. The sulphides are predominantly pyrrhotite (Fe-sulphide) with minor chalcopyrite (Cu-sulphide). Drilling is underway to test high-quality VTEM targets at the Yagen Ni-Cu Prospect.
- ◆ **Curnamona Project**, South Australia: Reconnaissance surface sampling within EL4239 Kalabity and EL4375 Bimbowrie has confirmed encouraging high grade iron mineralisation at four sites. Very encouraging surface sample assay results of up to 68.3% Fe with low levels of SiO₂ and other deleterious contaminants have been reported. An RC drilling program to investigate accessible high grade iron mineralisation that is either outcropping or concealed beneath shallow surface cover is currently being finalised and is anticipated to commence early in 2013. Heritage Clearance approvals to conduct drilling were received during the quarter. A Heritage Clearance approval to conduct a drilling program to assess the potential magnitude and metallurgical characteristics of the magnetite resource at the Mt Victor Iron Ore Prospect was also received during the quarter.
- ◆ **Queensland Project**: The Company has sold six tenements in North Queensland for a total consideration of \$850,000 as part of a strategy to divest non-core assets. The first payment of \$600,000 has been received and the second payment of \$250,000 is due on or before 31st March, 2013. Three of the remaining five tenements held by PepinNini in North Queensland cover 415km² and are prospective for uranium. The Oasis Project contains shear hosted uraninite mineralisation over a strike extent of 300m with an average grade of 0.1% U₃O₈ as delineated by Esso Exploration and Production Australia Inc (1977-1979) and Glengarry (2005/2006). Subsequent work has also been undertaken on this prospect by Mega Uranium (2007-2010). The Company is considering options regarding these tenements in view of the Queensland Government announcement on 22nd October lifting its uranium mining ban.
- ◆ At the end of the quarter the Company held \$1.59 million in cash.



Project Locations

SOUTH AUSTRALIA

Musgrave Province Project

Heritage surveying of proposed exploration areas within the Cooperinna Block of EL4587 (100% PepinNini) was completed during the quarter. The planned exploration activities, which include ground electromagnetic (EM) surveys, infill vacuum drilling and diamond drilling, will enable PepinNini to refine and test a number of priority VTEM targets within the western Cooperinna Project area.

PepinNini is keen to test drill these V-TEM targets after recently intersecting encouraging intervals of massive to semi-massive, matrix and disseminated sulphides at the Byron and Byron South Prospects on the eastern side of the Cooperinna Block (ASX release, 19th October, 2012). Whilst those intercepts were dominated by iron sulphide they are encouraging and further confirm that the process of sulphur saturation (a step critical to the formation of magmatic nickel-copper sulphide deposits) had occurred within the intrusive rocks. The dominance of iron sulphides does not preclude the potential of segregation of nickel and copper laden sulphides from earlier phases of primitive silicate melt. The suite of sulphides present indicates an intrusive melt depleted in chalcophiles (nickel & copper) and from which the desired nickel & copper has been stripped. These chalcophile enriched sulphides are potentially deposited in a suitable trap environment

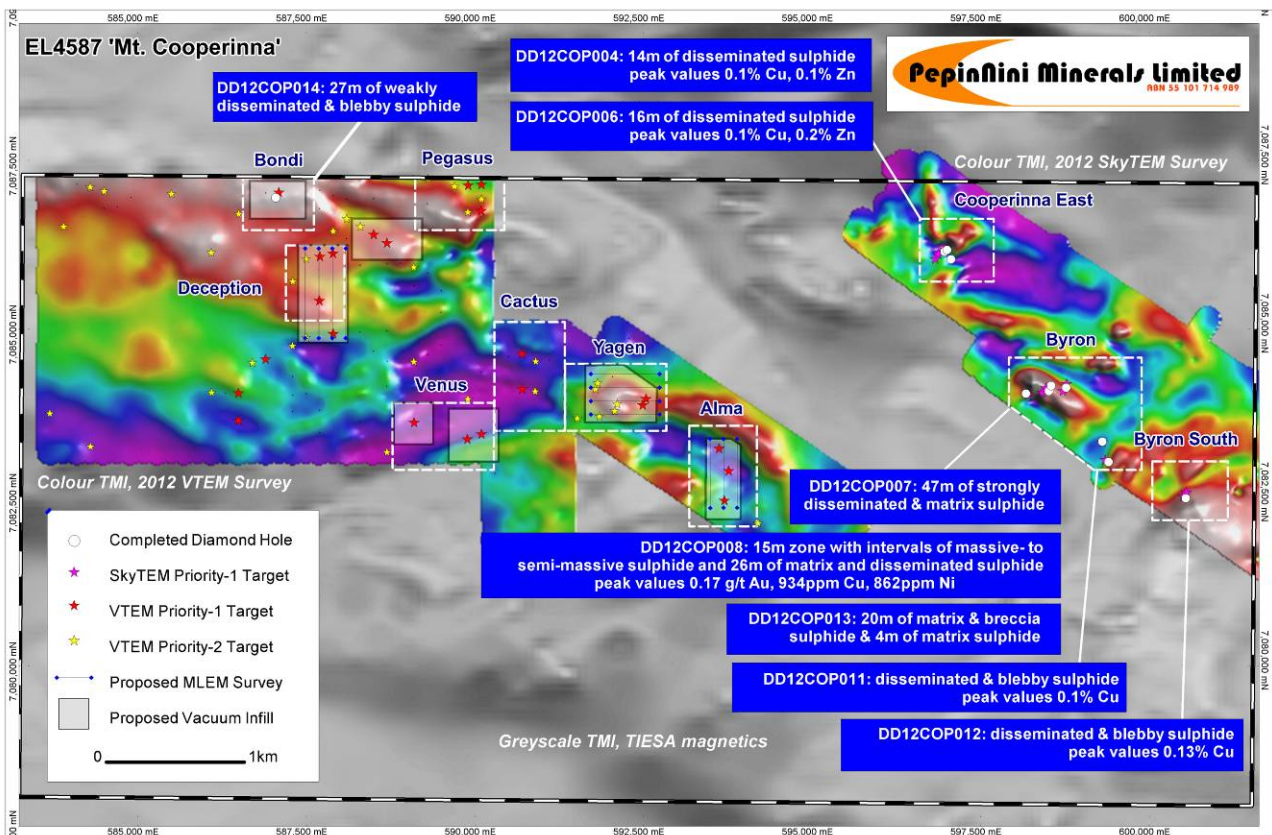
during ascent through the crustal rocks if the favourable conditions existed. The drill testing of SkyTEM⁵⁰⁸ targets at the Byron and Byron South Prospects has intercepted sulphide (pyrrhotite + pyrite ± chalcopyrite) and weakly anomalous Cu within five out of six targets.

Exploration activities are currently focused on the drill testing of a category-1 target at the Yagen Prospect where electro-magnetic conductivity anomalies are encouragingly modelled adjacent to magnetic units similar to those hosting intervals of massive, breccia and disseminated sulphides intersected at the Byron Prospect. Vacuum drilling proximal to the conductivity targets previously returned up to 366ppm Ni and 70ppm Cu thus reinforcing the potential of this prospect.

A diamond drill hole was completed during the quarter at the Bondi Prospect and intercepted a 27m zone containing weakly disseminated sulphides hosted in a pyroxene-olivine-quartz granulite. The sulphides are predominantly pyrrhotite (Fe-sulphide) with minor chalcopyrite (Cu-sulphide).

Drilling is being undertaken using the Company's LF90D diamond drilling rig which is currently located on site.

Ground electro-magnetic surveying activities to better define the conductivity targets are planned to be undertaken early in 2013. PepinNini also plans to undertake infill regolith sampling with the company owned Vacuum Drill Rig within the Bondi, Venus, Cactus and Yagen prospect areas to better detail surface geochemical anomalies detected through the 2011 regional vacuum drilling work. Extensions to the regolith sampling vacuum drilling will also be undertaken across V-TEM conductivity targets at the Pegasus, Paradise and Deception prospects.



Location plan of PepinNini prospects within the Cooperinna block of EL4587. Visual intercepts and peak assay values are provided for selected diamond boreholes.

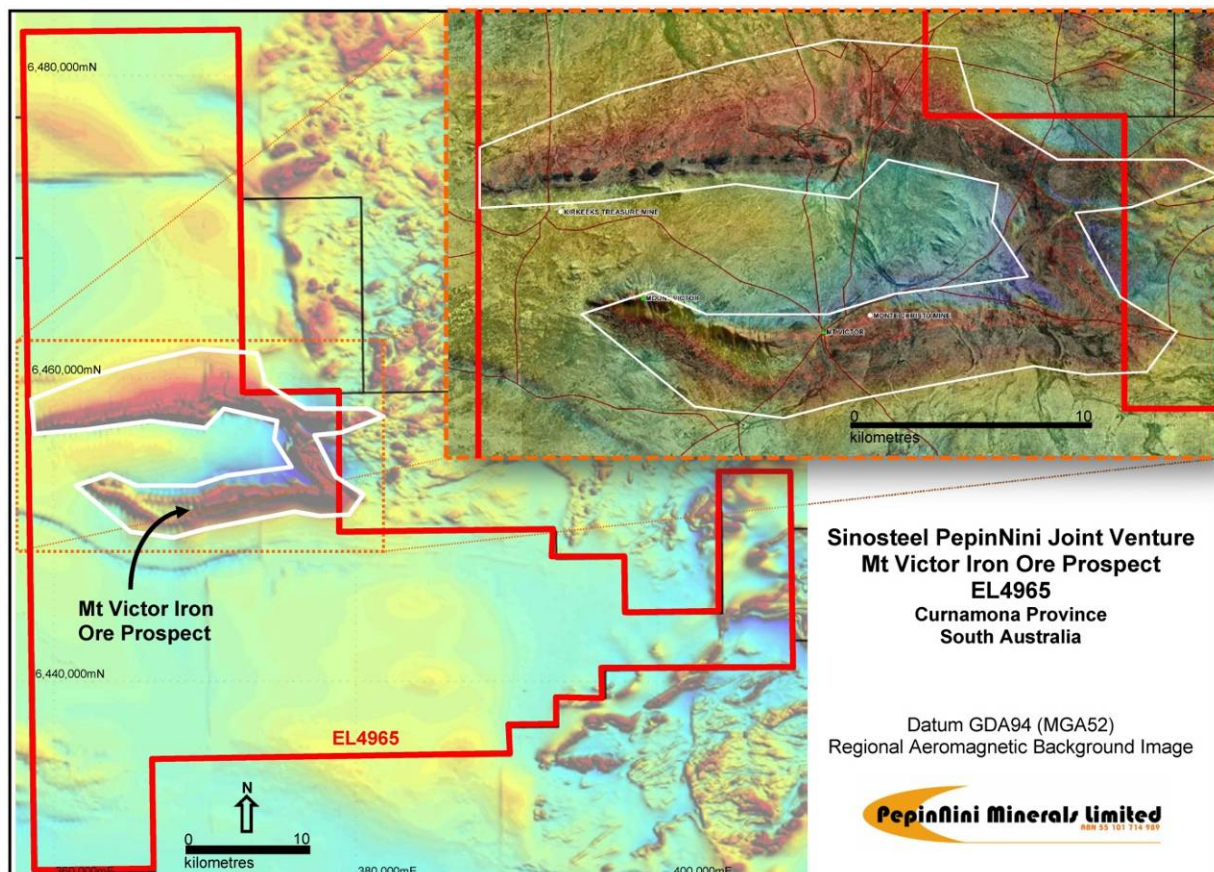
Curnamona Province Project

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 five tenements covering approximately 3,778kms² held by the Joint Venture.

Braemar Iron Formation

Three significant target areas have been identified within the Joint Venture tenements and have been designated as the Mt Victor Iron Ore Prospect (EL4965 Mt Victor), the Macdonald Corridor Iron Ore Prospect (EL4375 Bimbowrie) and the Outalpa Iron Ore Prospect (EL4749 Outalpa & EL4965 Mt Victor). Each of the prospects 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.

A drilling program to assess the potential magnitude and metallurgical characteristics of the magnetite resource at the Mt Victor Iron Ore Prospect has been approved by the JV and a Heritage Clearance Survey was undertaken during the quarter.



Regional DSO Iron Project

Reconnaissance surface sampling undertaken during the quarter within EL4239 “Kalabity” and EL4375 “Bimbowrie” has identified four prospect areas “Billeroo Prospect”, “Ironstone Prospect”,

“Dome Rock Prospect” and “Plumbago Prospect” which display potential for DSO grade magnetite mineralisation at surface or shallow depths.

Billeroo Prospect is recognised as four discontinuous iron rich outcrops up to 300m in length and up to 40m wide that have been identified across an east west trend of approximately 3 kilometres. Iron grades from samples collected at Billeroo are variable and range up to 65.7% Fe.

Two discontinuous outcrops up to 200m in length and 15m in width and separated by approximately 1 kilometre have been identified at the Ironstone Prospect. Eight of the nine surface samples collected from the prospect returned grades of greater than 64.9% Fe with low levels of contaminants.

The Dome Rock Prospect contains discontinuous outcrops up to 300m in length and 40m in width covering a trend distance of approximately 5 kilometres. Samples from this prospect returned variable grades ranging from 47.9% Fe to 55.5% Fe.

The Plumbago Prospect is recognised as a continuous iron rich outcrop approximately 150m in length and approximately 15m wide. The outcrop appears to extend under cover in both directions. Scattered subcrop of ironstone was observed to the north of the main outcrop. All six surface samples from the prospect returned high grades of greater than 67.5% Fe with very low levels of contaminants.

Assay results from the surface samples are summarized in Table 1. Samples were submitted for geochemical analysis by fused disk XRF at ALS Global's Laboratory (Adelaide, SA). Loss on ignition analysis was undertaken for all samples at 1000°C using thermo-gravimetric techniques.

SPCM is currently finalising a drilling program designed to investigate accessible deposits where high grade iron mineralisation is either outcropping or concealed beneath shallow surface cover. The drilling program is expected to commence early in 2013.



Outcrop of high grade magnetite at the Ironstone Prospect - EL4239 Kalabity

Table 1: DSO Magnetite Project – EL4239 Kalabity and EL4375 Bimbowrie – Surface sample results

Sample No	Prospect	East MGA94	North MGA94	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	S %	TiO ₂ %	LOI %
KY1001	Dome Rock	447122	6473294	47.88	28.80	0.66	0.048	0.013	0.02	0.94
KY1002	Dome Rock	447122	6473294	54.46	20.60	0.25	0.008	0.043	0.01	0.78
KY1003	Dome Rock	447777	6469444	55.50	19.60	0.24	0.020	0.009	0.01	0.57
KY1004	Ironstone	422439	6472392	68.27	2.37	0.26	0.095	0.004	0.02	-0.62
KY1005	Ironstone	422232	6471667	67.54	0.97	0.36	0.201	0.039	0.61	0.54
KY1006	Ironstone	422232	6471667	67.32	1.06	0.28	0.176	0.026	0.64	0.83
KY1007	-	420497	6456043	16.36	50.90	12.35	0.196	0.002	0.65	1.34
KY1008	Billeroo	398698	6468513	49.44	26.50	0.67	0.060	0.059	0.06	1.46
KY1009	Billeroo	399283	6467650	52.35	25.00	0.53	0.023	0.002	0.01	-0.67
KY1010	Billeroo	399283	6467650	46.38	32.70	0.45	0.036	0.005	0.03	0.19
KY1011	Billeroo	399283	6467650	45.48	34.10	0.75	0.011	0.004	0.02	-0.20
KY1012	Billeroo	401001	6468126	43.79	28.80	4.24	0.041	0.080	0.17	0.91
KY1013	Billeroo	401001	6468126	53.15	24.40	0.55	0.007	0.002	0.01	-1.31
KY1014	Billeroo	400199	6468164	43.84	37.40	0.37	0.153	0.007	0.02	-1.11
KY1015	Billeroo	397433	6469267	65.74	2.87	1.75	0.010	0.010	0.84	-0.41
KY1016	Billeroo	397697	6469136	6.85	28.80	16.2	0.113	0.004	0.59	0.13
BIM1001	Plumbago	394307	6449113	67.53	1.04	0.43	0.053	0.099	0.08	1.34
BIM1002	Plumbago	394322	6449141	67.55	1.04	0.32	0.046	0.070	0.03	1.49
BIM1003	Plumbago	394334	6449150	67.50	1.42	0.29	0.036	0.058	0.01	1.30
BIM1004	Plumbago	394372	6449193	68.12	0.67	0.25	0.027	0.108	0.02	1.11
BIM1005	Plumbago	394369	6449217	68.14	0.47	0.25	0.027	0.065	0.03	1.36
BIM1006	Plumbago	394387	6449245	68.26	0.73	0.22	0.017	0.019	0.04	1.10
KAL1025	Ironstone	422216	6471630	67.00	1.70	0.33	0.274	0.019	0.62	0.19
KAL1026	Ironstone	422222	6471632	64.93	4.04	0.67	0.534	0.024	0.59	0.01
KAL1027	Ironstone	422232	6471635	67.27	1.06	0.37	0.136	0.021	0.64	0.84
KAL1028	Ironstone	422245	6471661	67.73	1.08	0.23	0.142	0.017	0.64	0.24
KAL1029	Ironstone	422248	6471664	57.88	9.37	1.80	1.225	0.060	0.51	2.06
KAL1030	Ironstone	422254	6471671	66.21	2.90	0.31	0.207	0.029	0.59	0.53

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. PNN Area C is located within exploration tenement E51/1033 held by PepinNini Robinson Range Pty Limited (40%), Resource and Investment NL (ASX:RNI) (40%) and Fe Limited (ASX:FEL) (20%).

The joint venture has delineated an Inferred Mineral Resource for PNN Area C as follows; (*PNN ASX Release 6th June, 2012*);

Inferred Mineral Resource Estimate for PNN Area C (June, 2012)

Million Tonnes	Cut Off %Fe	Density SG	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	S %	TiO ₂ %	LOI %
17.7	45	3.6	49.7	13.3	8.5	0.06	0.04	0.29	5.4
4.3	52	3.8	55.2	8.5	6.5	0.06	0.05	0.21	4.7

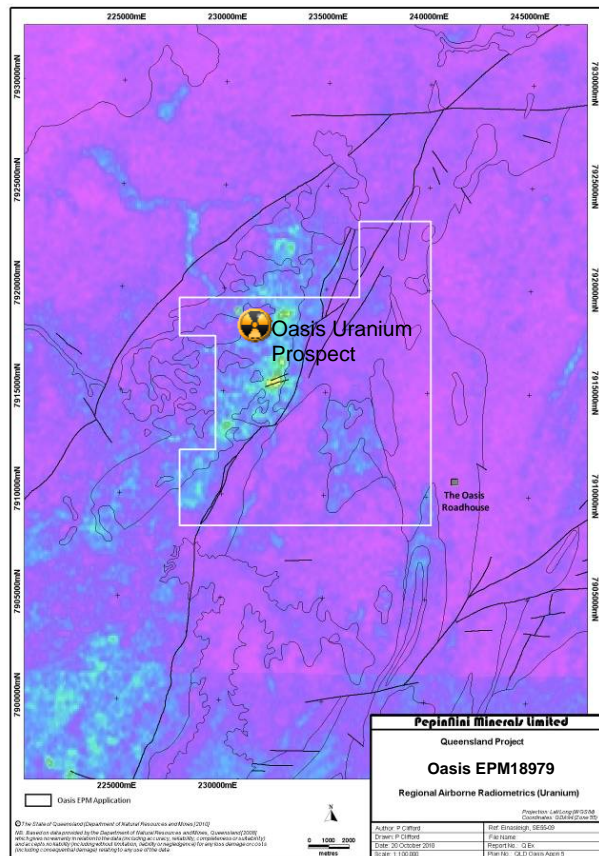
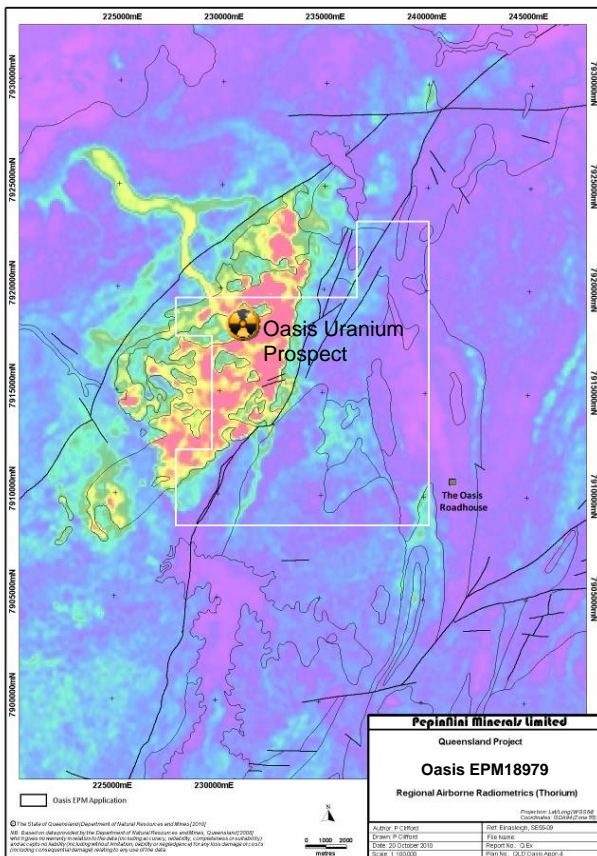
No field activities were undertaken on the project during the quarter.

NORTH QUEENSLAND

PepinNini Minerals has sold six tenements in North Queensland as part of a strategy to divest non-core assets. The total consideration of \$850,000 for the sale of the tenements will be paid in two instalments. The first payment of \$600,000 has been received and the second payment of \$250,000 is due on or before 31st March, 2013.

Three of the remaining five tenements the Company holds in North Queensland cover 415km² prospective for uranium. The Company is considering options regarding these tenements following the Queensland Government announcement on 22nd October lifting its uranium mining ban.

The principal area of uranium mineralisation within the tenement package is the Oasis Prospect, a north-south trending shear zone hosted in a Proterozoic syenogranite, in which drilling by Esso Exploration and Production Australia Inc (1977-1979), Glengarry (2005/2006) and Mega Uranium (2007-2010) delineated a coherent, steeply dipping, tabular zone of disseminated uraninite mineralization, up to 15m thick, with an average grade of 0.1% U₃O₈, and extending over a 300m strike length to a depth of 175m.



ARGENTINA

Salta Project

PepinNini have four granted cateos (exploration leases), one granted mina (mining lease) and applications for a cateo and a mina covering approximately 300 kms² in the Argentine province of Salta. The Salta Project comprises two separate areas designated as Santa Ines and Chivinar. No field activities were undertaken on the project during the quarter.

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. Several significant copper-gold porphyry and epithermal silver deposits are currently being progressed by other companies to development in the area.

Significant assay results for grab samples collected from a historic mine working confirms potential for high grade copper and gold mineralization within the Santa Ines Project Area. PepinNini is progressing plans to target this area with detailed surface mapping and ground geophysical surveys to identify priority drill targets. There is no evidence of any modern exploration work having been undertaken at Santa Ines and no historical data is available.

The Santa Ines Project comprises one mina and one application for a cateo covering approximately 82 km². This project logistically benefits by being only 5kms from the Salta-Antofagasta railway and is easily accessed using existing roads and tracks.

The Project lays within a crustal scale NW trending mega-lineament, which in Andean geology are widely recognised as being major long-lived structural corridors that are fundamental in the control of the distribution of porphyry-epithermal deposits. The "Archibarca" NW lineament extends from Cerro Galán (Argentina's largest ignimbrite caldera complex) in the southeast through to the Pacific coast of Chile.



Known mineralization along this lineament to the immediate southeast of Santa Ines includes Mansfield's Lindero Gold Porphyry project (2.2 Moz. Au) that is currently in feasibility and advanced Cu-Au exploration projects including Rio Grande, Arizario and Samenta. Situated approximately 80km to the northwest along the same lineament is BHP's giant Escondida Cu-Au porphyry (~5 billion tonnes at 1% Cu and 0.25 g/t Au) which also was deposited contemporaneously with the Santa Ines Formation event during the Late Eocene-Oligocene.

Santa Ines mina comprises a number of small artisanal diggings consisting of shallow pits and adits exploiting abundant secondary copper and specular haematite mineralisation associated with haematite-silica veining within a broader envelope of albitic alteration. Orientated to the NE this

steeply dipping vein system and phyllic alteration extends across a low outcropping hill. More recent shallow pits indicate that mineralisation is evident for at least 400m across strike whereas along strike it becomes lost under thin cover at the base of a hill after a few hundred metres. Published reports by SEGEMAR (Argentine Geological Survey) describe the mineralisation at Santa Ines as being gold bearing with mineralisation present dominantly as malachite, azurite, chrysocolla and specular haematite with minor primary mineralisation occurring as chalcopyrite and chalcocite.

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 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10

Name of entity

PepinNini Minerals Limited

ABN

55 101 714 989

Quarter ended ("current quarter")

Dec 2012

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	148	204
1.2 Payments for (a) exploration & evaluation	(532)	(1,162)
(b) development		
(c) production		
(d) administration	(166)	(460)
1.3 Dividends received		
1.4 Interest and other items of a similar nature received	9	24
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other (provide details if material)	2	7
Net Operating Cash Flows	(539)	(1,387)
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	600	600
(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	600	600
1.13 Total operating and investing cash flows (carried forward)	61	(787)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	61	(787)
Cash flows related to financing activities			
1.14	Proceeds from issues of shares, options, etc.	-	676
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	-	676
	Net increase (decrease) in cash held	61	(111)
1.20	Cash at beginning of quarter/year to date	1,532	1,704
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	1,593	1,593

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	111
1.24	Aggregate amount of loans to the parties included in item 1.10	

1.25 Explanation necessary for an understanding of the transactions

1. Managing Director, Administration Director and non-executive directors' Remuneration.....	\$101,736
2. Managing Director, Administration Director and non-executive directors' Superannuation.....	\$9,041

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	500
4.2	Development	
4.3	Production	
4.4	Administration	200
Total		700

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	590	332
5.2	Deposits at call	1,003	1,200
5.3	Bank overdraft		
5.4	Other (provide details)		
Total: cash at end of quarter (item 1.22)		1,593	1,532

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 15801 QLD	Expiry	7 sub-blocks	0 sub-blocks
		EPM 18168 QLD	Statutory partial relinquishment	11 sub-blocks	6 sub-blocks
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	115,177,993	115,177,993	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>	250,000	0	<i>Exercise price</i> 5.5c	<i>Expiry date</i> 31 Dec 14
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.
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:  Date: ...Wednesday 23rd January 2013

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 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report.

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+ See chapter 19 for defined terms.