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The Companies Announcement Office Level 10 Exchange Centre 20 Bond Street SYDNEY NSW 2000

#### PRESENTATION AT SOUTH AUSTRALIAN RESOURCES & ENERGY INVESTMENT CONFERENCE

#### ADELAIDE, SOUTH AUSTRALIA

The following presentation was made at the South Australian Resources & Energy Investment Conference at 12:30pm (Adelaide time) today.

Yours sincerely

A. H. Hall - Kennegy

Rebecca Holland-Kennedy Company Secretary/Director PepinNini Minerals Limited

# Pepineninie

Exploring and Developing the Mineral Potential of South Australia



# Pepinenlinie

Uranium, Mickel

**Base Metals** 

Gold, Iron Ore

North Queensland

**Musgrave Province** 

Robinson Range Iron Ore

**Peak Hill Goldfield** 

Curnamona Province

122 exploration tenements covering 16,500 sq.kms.



- 51% of Fortnum Gold Mine and tenements covering 2,500sq kms
- 1.2Mtpa processing plant
- 1 million oz gold resource







## Robinson Range Iron Ore Project WA

- Farm-in agreement to earn 50% of iron ore rights by spending \$500,000 over 2 years on exploration
- 7 tenements covering Fe prospective ground in Midwest Province
- DSO grades, >60%Fe, low phosphorous
- At least 7 outcropping deposits known



North Queensland Project Georgetown Inlier and Woolgar Goldfield

- 100% interest in 19 EPMs and 1 ML covering 2,007 sq kms
- Gold, base metals, uranium and phosphate potential



 Encouraging results from initial reconnaissance survey including 65.1g/t Au, 957g/t Ag, 20.3% Cu and 64.7% Pb



## **Curnamona Province Project**

Advanced Uranium Project

19.8 million lbs of  $U_3O_8$  at Crocker Well with the potential to be in production within 3 years

Strategic alliance with Sinosteel Corporation to jointly develop the Uranium Project

Pepinilini

26 additional known uranium prospects

**Other Projects** 

More than 30 Base Metal (Copper/Lead/Zinc) and Gold targets ready to drill

# Pepineral Limited



A\$11 million budget over 2 years to explore and develop tranium prospects and investigate the non uranium potential of the tenements



An Advanced Uranium Project covering 3,778sq kms under 4 granted exploration licences and 1 exploration licence application



26 additional known primary uranium prospects other than Crocker Well and Mt Victoria. Potential for secondary palaeochannel style deposits as well as unconformity related uranium mineralisation



Ten Prospects identified in the vicinity of Crocker Well and Mt Victoria. High grade surface samples (> 2%  $U_3O_8$ ) from newly discovered **Becaroo and Anomaly A Prospects** 

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EL3171

2.4% U2O8

O2.6% U<sub>3</sub>O8

EL3278

10m @ 0.07% U<sub>3</sub>O<sub>8</sub> 1.2m @ 0.17% U<sub>3</sub>O<sub>8</sub>

Plumbago



Drilling at Crocker Well – June, 2007



Drilling at Crocker Well – June, 2007



Drilling at Crocker Well – March, 2008



Field camp at Crocker Well – March, 2008



# **Crocker Well**

Bankable Feasibility Study

Resource Validation

## **Metallurgical testing**





Regulatory Approvals and EISURSKBR

BFS and EPCM BATEMAN – process plants that work



## Musgrave Tenement Status (March 08)



## Musgrave Tenement Status (March 08)



2 Exploration Licence Applications (4 blocks = 3,238 km<sup>2</sup>)

## **Nickel Sulphide Target Locations**



# Mt Moulden Nickel Target



- Nickel copper sulphide & platinum group metal target
- Similar geological setting to Voisey's Bay
- 10kms diameter magnetic low interpreted as layered ultramafic intrusion
- Prospective Giles Complex rocks intersected in PIRSA boreholes. (sulphides in core, elevated Ni, Cu, Au, Pt in chip samples)

# Mt Harcus Nickel Target



Nickel copper sulphide platinum group metal target

Similar geological setting to Voisey's Bay

Magnetic anomaly modelled as 300m wide vertical mafic/ultramafic dyke extending 7 kms













## Harcus Prospect

- Soil auger sampling
- Ground mag surveying
- Gravity surveying
- 2007 drilling
  - 5 holes (~2165m)
  - Incl. 2 PACE holes
- Sulphides intersected
  - Pyrrhotite Dominant (Fe)
  - Minor Chalcopyrite (Cu)
  - Trace Pentlandite (Ni)
  - Max results (2007)
    - 0.2% Cu, 254ppm Ni
  - Core Drill Hole (2007) (completed or in progress) Reverse Circulation Drill Hole (2006) Gravity Survey (1 mGal Contour Intervals)

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0.3%Cu, 0.3% Ni



#### EL3368 (Moulden Block): Drilling Program Status (April 2008)



Outcrop Geology Mafic Intrusion (Giles Complex) 0 Granulite (Watarru Gneiss) 5 km

530000mE

DD08MTM004

DD08MTM003

DD08MTM002



#### EL3368 (Mt Moulden Block): Moulden NE Prospect - Gravity Survey.



# Mt Caroline Nickel Target



Nickel copper sulphide & platinum group metal target

- Similar geological setting to Voisey's Bay
- Largest outcropping layered ultramafic intrusion in SA (18kms x 8kms)
- Published reports consider Mt Caroline to have the highest potential for hosting significant NiS mineralisation
- Airborne EM survey conducted by Rio Tinto has defined drill targets for potential shallow conductive sulphide bodies



Mt Caroline intrusion will be investigated by drilling for the first time in 2008 targeting Tempest EM anomalies. Pentlandite has been identified in outcrop at Mt Caroline.





## Pine Ridge EL3536



- Acquired from Rio Tinto
- Mapped ultramafic rocks
- Known Ni & Ni-Cu prospects
- Drilling of nickel targets planned during 2008
- Basement rocks similar to Broken Hill region.
- Potential base metal targets
- Regional shallow drilling to generate base metal targets planned during 2008

## **Company Vacuum Drilling Rig**



## **SUMMARY**

- Actively drill testing targets at Moulden and Harcus
- Discovery & confirmation of sulphides at Harcus
- Testing for zones of sulphide accumulation at Harcus
- Currently testing gravity targets at Moulden
- Extensive exploration programs planned for Mt Caroline and Pine Ridge







## 2008/09 Program

## Uranium Project

Drilling for resource definition at Crocker Well and investigation of other uranium prospects

Metallurgical testing of Crocker Well ore

Commence Regulatory Approvals Process, Environmental Impact Statement and Bankable Feasibility Study for Crocker Well Uranium Deposit

A\$5 million budget over 18 months (Sinosteel Corporation commitment)

### **Curnamona Base Metals Project**

 Extensive drilling program of identified prospects with copper/gold and lead/zinc potential

A\$6 million budget over 18 months (Sinosteel Corporation commitment)



## 2008/09 Program

## Musgrave Province Nickel Project

- Geophysical and geochemical surveys over all granted tenements
- Drilling programs at Mt Harcus, Mt Moulden, Mt Caroline and Pine Ridge targets A\$3 million budget over 12 months

### Western Australia

- Iron Ore drilling program
- **Gold reserves drilling program** A\$1.5 million over 12 months

### **Queensland Project**

 Commence field operations including a drilling program A\$1.5 million over 12 months

## Thank You

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