

For personal use only



**Heron Resources Limited**



# Nickel Laterite in Western Australia

**Zhejiang Development and Reform Commission**

**24 November 2009**

**Robert Klug**

**Heron Resources Limited**

**ASX: HRR**

# Disclaimer Forward Looking Statement

The material used in this presentation is intended to be a summary of selected geological data, current and proposed activities, as well as resource estimates based on information available to Heron Resources at the time. It does not include all available information and should not be used in isolation as a basis to invest in Heron Resources. Any potential investor should refer to Heron Resources' ASX releases and statutory reports before considering investing in the company.

This presentation includes information relating to a completed independent scoping study, completed independent resource estimate and a feasibility study which is in progress and includes "*forward looking statements*" which include, without limitation, estimates of potential nickel in concentrate production based on mineral resources that are currently being evaluated. While the Company has a reasonable basis on which to express these estimates, any forward looking statement is subject to risk. Risks include, without limitation: nickel metal prices, foreign exchange rate movements, failure to meet joint venture milestones, project funding capacity, concentrate off-take contracts and estimates of future capital and operating costs.

The Company does not undertake to release publicly any revisions to forward looking statements included in this presentation to reflect events or results after the date of this presentation, except as may be required under applicable securities laws.

The information in this report that relates to Mineral Resources is based on information compiled by James Ridley who is a Member of the Australasian Institute of Mining and Metallurgy. James Ridley is a full time employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the resource estimation activities undertaken to qualify as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. James Ridley consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.

The information in this report that related to Exploration is based on information compiled by Norman Mathew Longworth who is a member of Australasian Institute of Mining and Metallurgy. Norman Mathew Longworth is a full time employee of Heron Resources Limited. Norman Mathew Longworth has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the exploration activity that he is undertaking to qualify as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Norman Mathew Longworth consents to the inclusion in this report of the matters based on his information in the form and context that it appears.

# NICKEL LATERITE - ON THE MOVE

- ◆ **Mitsubishi purchases 33.4% Halmahera for US\$145M**  
(Source: Reuters Feb 09)
- ◆ **Sumitomo approves Coral Bay expansion** (Source: SMMC)
- ◆ **Sumitomo enters JV to proceed with Taganito Project – Philippines US\$1.3B** (Source: SMMC)
- ◆ **Ningbo Shanshan enters JV with Heron on Yerilla Nickel Cobalt Project** (Source: Heron)
- ◆ **Anglo says: Nickel demand recovery gathers momentum  
Nickel market needs 500,000t/y new capacity  
by 2020** (Source: Bloomberg)
- ◆ **Nickel demand may rise to 1.35mt in 2010** (Source: INSG)
- ◆ **4 bidders expected for Ravensthorpe** (Source: Mitsui)

# HERON SNAPSHOT

- ◆ Listed on the ASX in 1996
- ◆ Issued Shares 252.98M
- ◆ Share Price \$0.33\*
- ◆ Market Capitalisation \$82M
- ◆ Cash plus equities \$62M\*\*
- ◆ Major Nickel Laterite projects in study phase
- ◆ Seeking project partner on Kalgoorlie Nickel Project
- ◆ Experienced Board and Senior Management
- ◆ Top Shareholders
  - BHP Billiton 13.0%
  - Inco Australia Holdings Pty Ltd 12.8%
  - Ningbo Shanshan Limited 4.8%

\*As at close of trade on ASX on 22/11/09

\*\* \$27M cash plus \$35M value of Polaris Metals NL stake on ASX

# EXPERIENCED BOARD



**Chairman, Craig Readhead**



**Executive Director Strategy, Ian Buchhorn**



**Non Executive Director, Ken Hellsten**



**Managing Director, Mathew Longworth**



**Non Executive Director, Stephen Dennis**

# THE PROJECTS

## **KNP**

- Heron secured 100% ownership from Vale July 2009
- Re-estimation of resources completed
- Mining engineering work on revised resources optimising pits and schedule
- Commenced international partner search assisted by KPMG in Perth and Satori Investment in China as advisors

## **Yerilla Nickel Cobalt Project**

- Agreement with Shanshan May 2009
- Shanshan constructing and commissioning Pilot Plant using segregation roast
- Piloting expected before year end
- Shanshan completed first tranche placement October 2009

# COMPANY WIDE RESOURCES

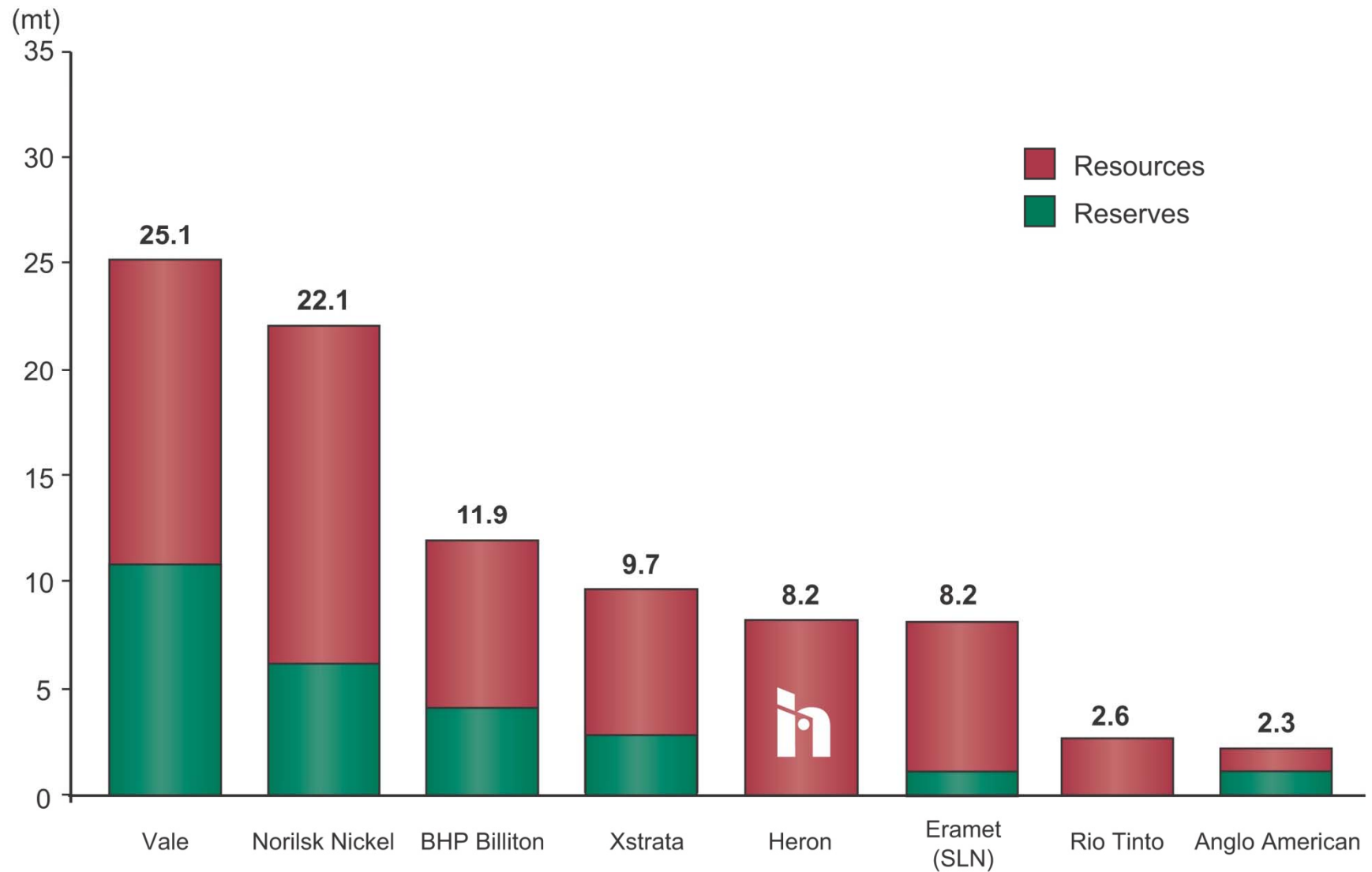
## Mineral Resources based on 0.5% Ni cutoff

Prospect Group	Resource Category	Tonnes ( mt )	Ni (%)	Co (%)
KNP	Measured	5.6	1.11	0.107
	Indicated	256.2	0.81	0.051
	Inferred	697.3	0.71	0.042
	<b>Total</b>	<b>959.0</b>	<b>0.74</b>	<b>0.045</b>
Yerilla	Measured	3.9	0.94	0.048
	Indicated	67.5	0.79	0.049
	Inferred	63.9	0.73	0.056
	<b>Total</b>	<b>135.3</b>	<b>0.77</b>	<b>0.052</b>
<b>Company total of 8.22mt of Ni and 0.506mt of Co</b>		<b>1099.9</b>	<b>0.75</b>	<b>0.046</b>

The information in this report that relates to Mineral Resources is based on information compiled by James Ridley who is a Member of the Australasian Institute of Mining and Metallurgy. James Ridley is an employee of Heron Resources Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the resource estimation activity that he is undertaking to qualify as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. James Ridley consents to the inclusion in this report of the matters based on his information in the form and context that it appears. Note that Mineral Resources that are not Ore Reserves do not have demonstrated viability.



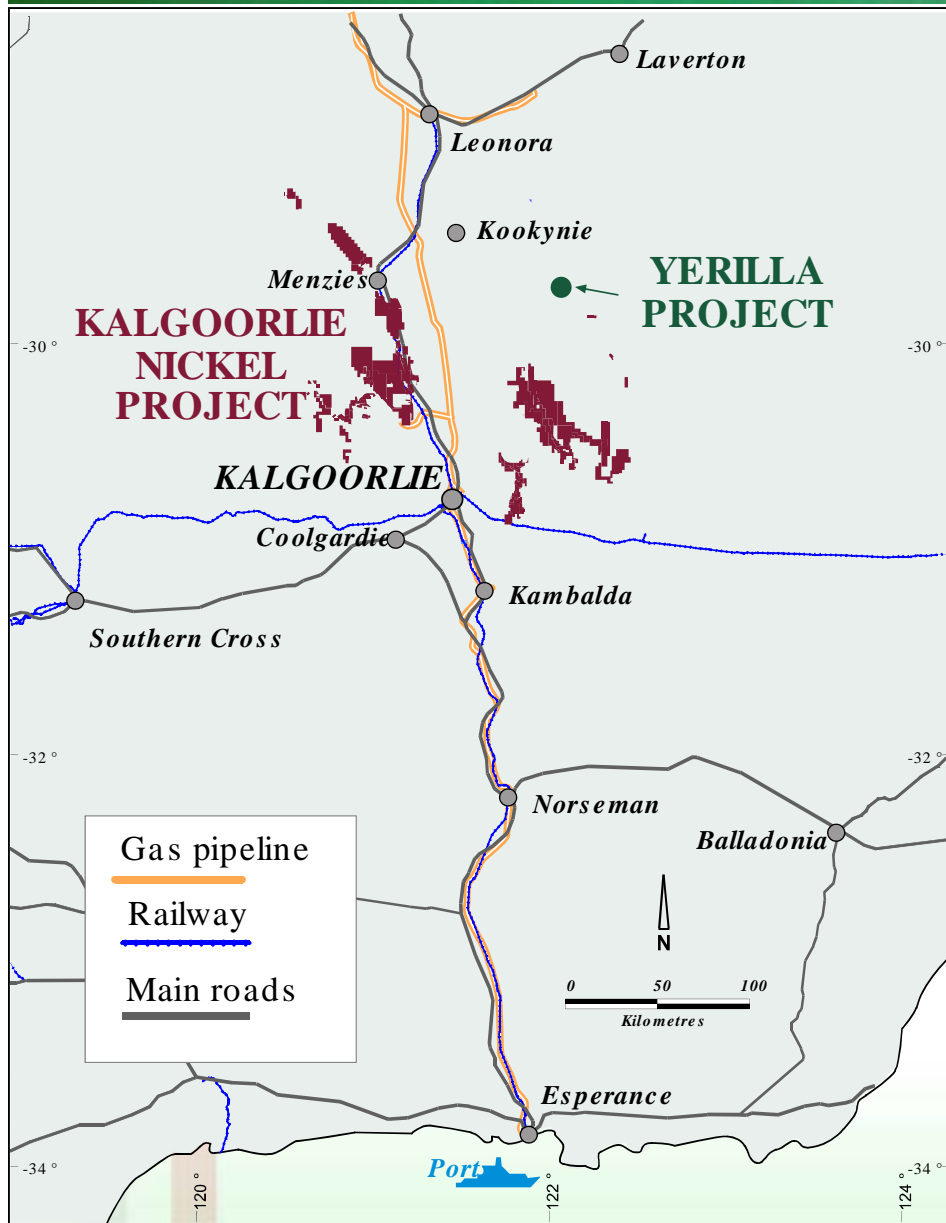
# WORLD NICKEL RESOURCES



For personal use only



# PROJECT LOCATION



## ◆ Infrastructure

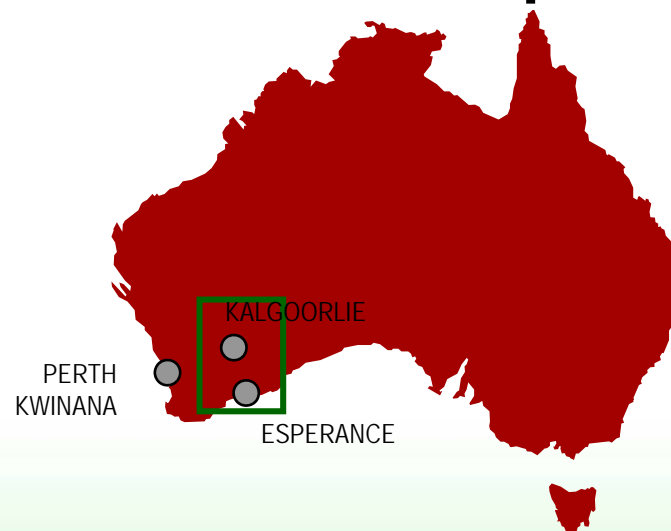
➤ Gas

➤ Rail

➤ Road

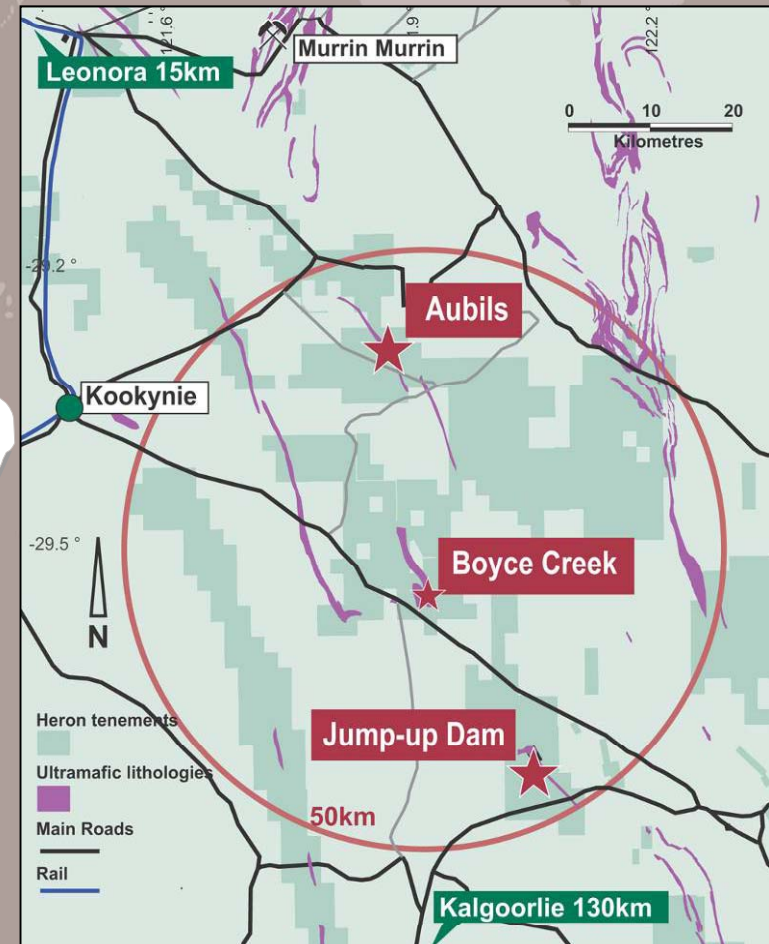
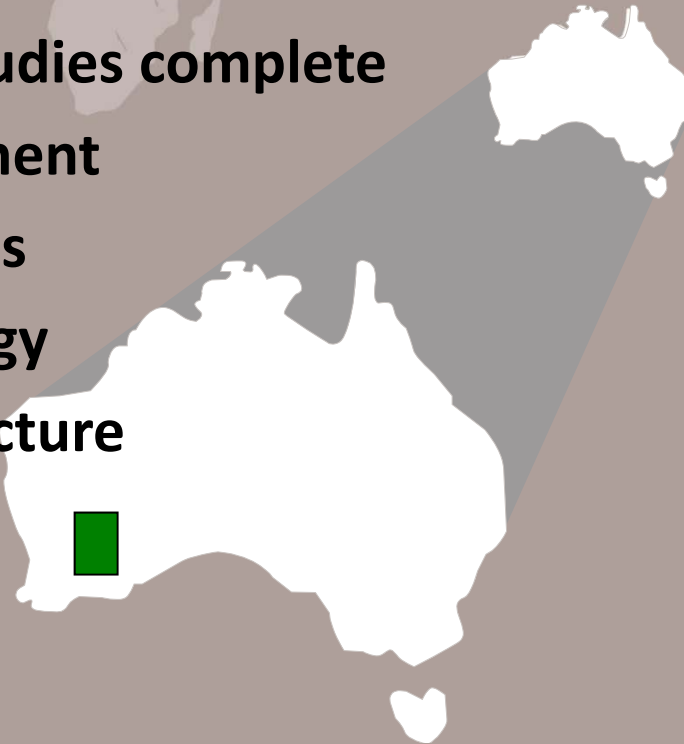
➤ Ports

## ◆ Skilled labour pool



# YERILLA NICKEL COBALT PROJECT

- ◆ Comprises of Jump-up Dam, Boyce Creek and Aubils resources 135mt at 0.77% Ni 0.05% Co
- ◆ JV with Shanshan Co Ltd May 2009
- ◆ Placement completed September 2009
- ◆ Extensive studies complete
  - ◆ Environment
  - ◆ Resources
  - ◆ Metallurgy
  - ◆ Infrastructure
  - ◆ Logistics



# PILOTING AT SHANSHAN IN CHINA

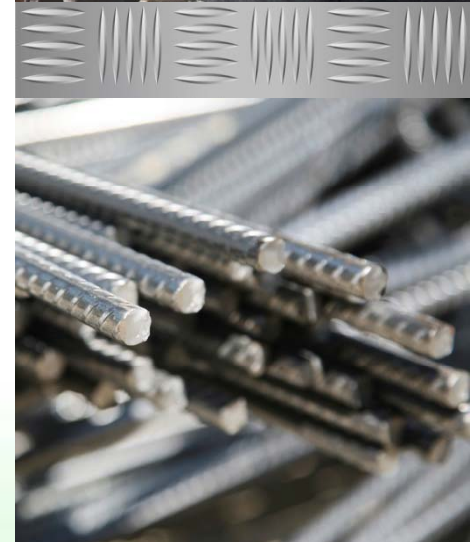


Rotary Kiln

- ◆ **Front end of Pilot Plant commissioned**
- ◆ **Construction of back end of Plant December 2009**
- ◆ **All key components in manufacture**
- ◆ **Piloting aims to determine:**
  - Grade of ferro nickel product
  - Recovery of nickel and cobalt
  - Reagent and energy consumption
  - Emissions composition and volumes
- ◆ **Feasibility Study**

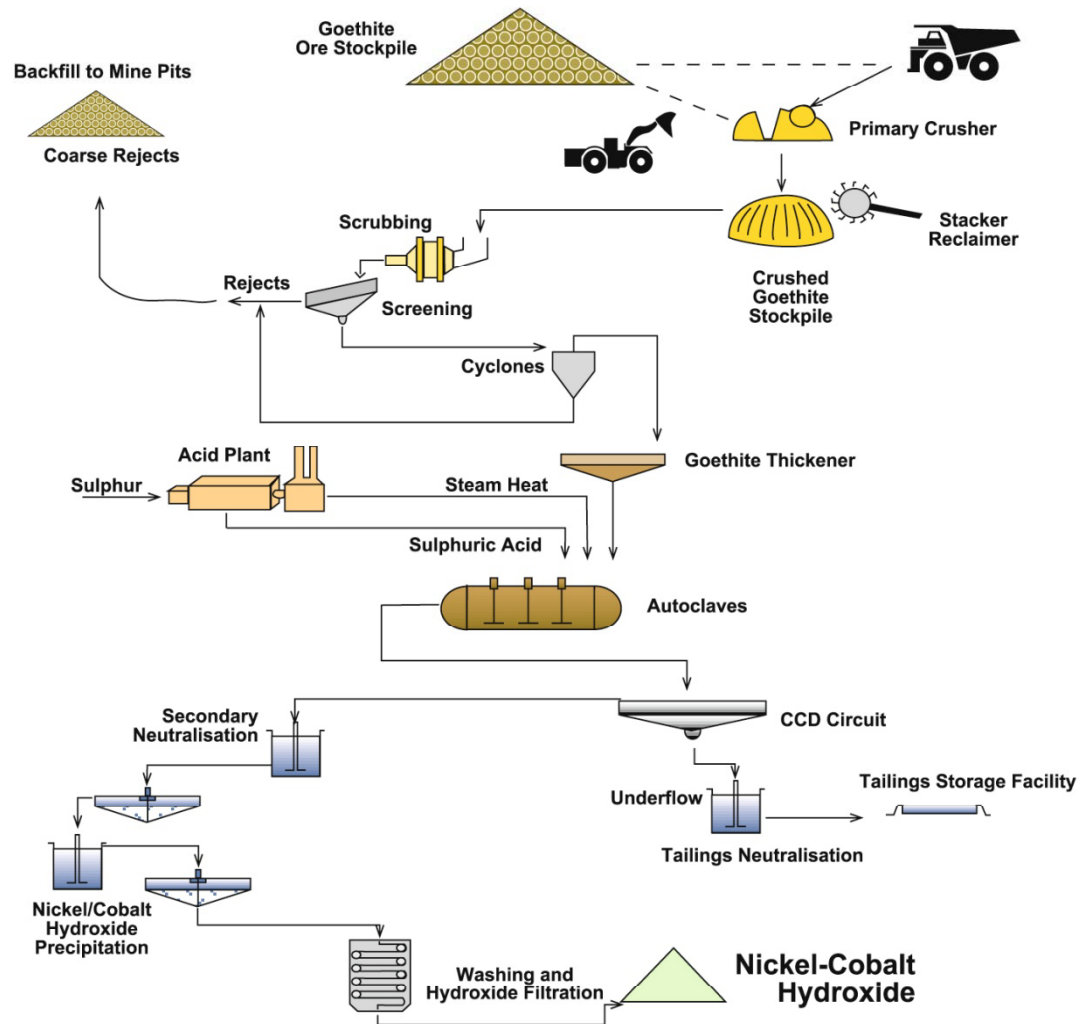
# KALGOORLIE NICKEL PROJECT PFS KEY POINTS

- ◆ **Pressure acid leach selected through beneficiation and autoclave circuit**
- ◆ **Cash Operating Costs of US\$4.42 per pound**
- ◆ **Capital Expenditure of US\$1.5 Billion**
- ◆ **Low acid consumption of 280kg/t of leach feed**
- ◆ **Production of 23,000 tonnes pa average for 34 years – peaking at 36,000 tonnes pa**
- ◆ **Only 4 of 14 deposits considered by Vale delivering 134mt at 1.04% Ni leach feed**
- ◆ **Heron optimisation ongoing**





# KALGOORLIE NICKEL PROJECT



## WHY THE KNP

- ◆ **Resource base**
- ◆ **Low up front entry cost to a major project**
  - Timing and rate of development
  - Manage construction and development cycle
  - Product selection
- ◆ **Chinese construction opportunity – manage capital costs**
- ◆ **Location**
  - Kalgoorlie district as infrastructure and population
  - Stable mining law and environment
  - Low sovereign risk
- ◆ **Learning from current generation projects**
- ◆ **Flexibility of operating and development options**

# NICKEL SUMMARY

## KNP

- Heron secured 100% ownership from Vale July 2009
- Re-estimation of resources nearing completion
- Mining engineering work on revised resources optimising pits and schedule
- Seeking development partner assisted by KPMG in Perth and Satori Investment in China as advisors

## Yerilla Nickel Cobalt Project

- Agreement with Shanshan May 2009
- Shanshan constructing and commissioning Pilot Plant using segregation roast
- Piloting expected before year end
- Shanshan completed first tranche placement October 2009



For personal use only



**Heron Resources Limited**



**ASX: HRR**

**Robert Klug**

**Business Development Manager**

**Phone: +61 8 9215 4444**

**Mobile : +61 417 923 142**

