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HERON RESOURCES LIMITED

Media Release

21 December 2004

KALGOORLIE NICKEL PROJECT, SCREEN UPGRADE STUDY

- **Independently verified, >1.5% Ni Leach Feed Grades, exceed KNP Scoping Study estimates**
- **Run-of-mine siliceous goethite mineralisation returns nickel upgrades exceeding 100%**
- **Excellent screened nickel metal recoveries across all ore types, ranging from 73% to 81%**

Overview

Heron Resources Limited (ASX:HRR) is pleased to announce that average Leach Feed Grades exceeding 1.5% Ni were returned for siliceous ore in screen upgrade test work completed on bulk samples from the Highway Prospect by independent consulting metallurgist SGS Lakefield Oretest (Oretest). The results confirm the assumptions used by Sinclair Knight Mertz in the July 2004 Kalgoorlie Nickel Project (KNP) Scoping Study. These Leach Feed Grade (LFG) screen upgrade results represent another significant milestone in advancing the Kalgoorlie Nickel Project towards production. Heron's KNP is the world's 2nd largest contained nickel resource, and the Company is continuing with its Feasibility Study schedule.

Heron's Managing Director Ian Buchhorn said "the screen upgrade of siliceous mineralisation has previously been identified as a key economic driver of the Kalgoorlie Nickel Project. These pilot-scale results are very encouraging, particularly as they are in line with screen upgrade achieved at the Cawse operation, and those predicted at BHP Billiton's proposed Ravensthorpe project."

"The results at Highway when extrapolated to the overall KNP indicate that targeting a Leach Feed Grade in excess of a 1.5% Ni over a life of mine exceeding 25 years is realistic."

Mr Buchhorn went on to say; "These results are particularly significant when viewed together with the KNP's considerable resource scale advantage over comparable nickel laterite projects. The KNP's resultant feed stock flexibility is expected to ensure that a consistently high grade nickel feed is delivered to the proposed plant over the full life of project."

Positive screen upgrade results achieved

Following screening, the Pressure Acid Leach (PAL) circuit average LFG for the siliceous mineralisation was **1.57% Ni and 0.16% Co**, with average nickel upgrades of 116%. Results for siliceous saprolite mineralisation were similarly encouraging, returning an average LFG of 1.44% Ni. This represents an upgrade of 66% together with a metal recovery of 81% for the siliceous saprolite ore (refer Table following).

The high nickel metal recoveries indicate that the screen upgrade process is efficient, with X-ray Diffraction studies confirming minimal nickel in the siliceous screen reject material. A summary of the Highway Prospect results are as follows:

Ore Type	Bulk Samples RC Composite	% Nickel Head Grade	% Nickel Leach Feed	Nickel Upgrade	Nickel Metal Recovery
Siliceous Goethite	HWMT01, 03, 05	0.73	1.57	116%	73%
Siliceous Saprolite	HWMT02, 06	0.87	1.44	66%	81%
Non Siliceous Goethite	HWMT07, 09	0.67	0.92	37%	80%
Nontronite	HWMT08	0.90	0.92	3%	76%
Siliceous Saprolite Sub-grade	HWMT04	0.49	0.76	54%	76%

Ore Type	Bulk Samples RC Composite	% Cobalt Head Grade	% Cobalt Leach Feed	Cobalt Upgrade	Cobalt Metal Recovery
Siliceous Goethite	HWMT01, 03, 05	0.074	0.162	118%	73%
Siliceous Saprolite	HWMT02, 06	0.030	0.049	63%	79%
Non Siliceous Goethite	HWMT07, 09	0.044	0.048	9%	47%
Nontronite	HWMT08	0.034	0.038	12%	35%
Siliceous Saprolite Sub-grade	HWMT04	0.027	0.045	66%	82%

Note:

1. The siliceous mineralisation results are from "run-of-mine" bulk samples with average head grades of 0.73% Ni, compared to a resource average head grade of 0.74% Ni for the full 903 million tonne KNP resource. See Appendix A for further information regarding the testing methodology.
2. The Highway Prospect is a joint venture between Heron and Helix Resources NL (Helix 49% and diluting in the current budget period).

Further Testing Underway

Heron is continuing to aggressively pursue metallurgical test work and resource definition drilling as part of its Pre-Feasibility Study.

Bulk beneficiation test work is being completed on a routine basis as new drill material becomes available. In particular:

- Pilot-scale testing by Oretest of bulk RC drill samples from the Siberia Prospect is nearing completion.
- Testing of samples from the recently completed Goongarrie Hill drilling has commenced.

Drilling to provide material for metallurgical test work will continue in the New Year. Initial drilling on 800m spaced lines has been completed at the Goongarrie Hill, Big Four and Scotia Dam Prospects. Drilling is currently underway on recently granted tenements at the Siberia Prospect. Results of this drilling and associated screen upgrades will be released as they come to hand.

Yours faithfully



Ian Buchhorn
Managing Director

"The information in this report that relates to Mineral Resources or mineralisation is based on information compiled by Norman Mathew Longworth, who is a Member of the Australasian Institute of Mining and Metallurgy. Norman Mathew Longworth has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 1999 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves".

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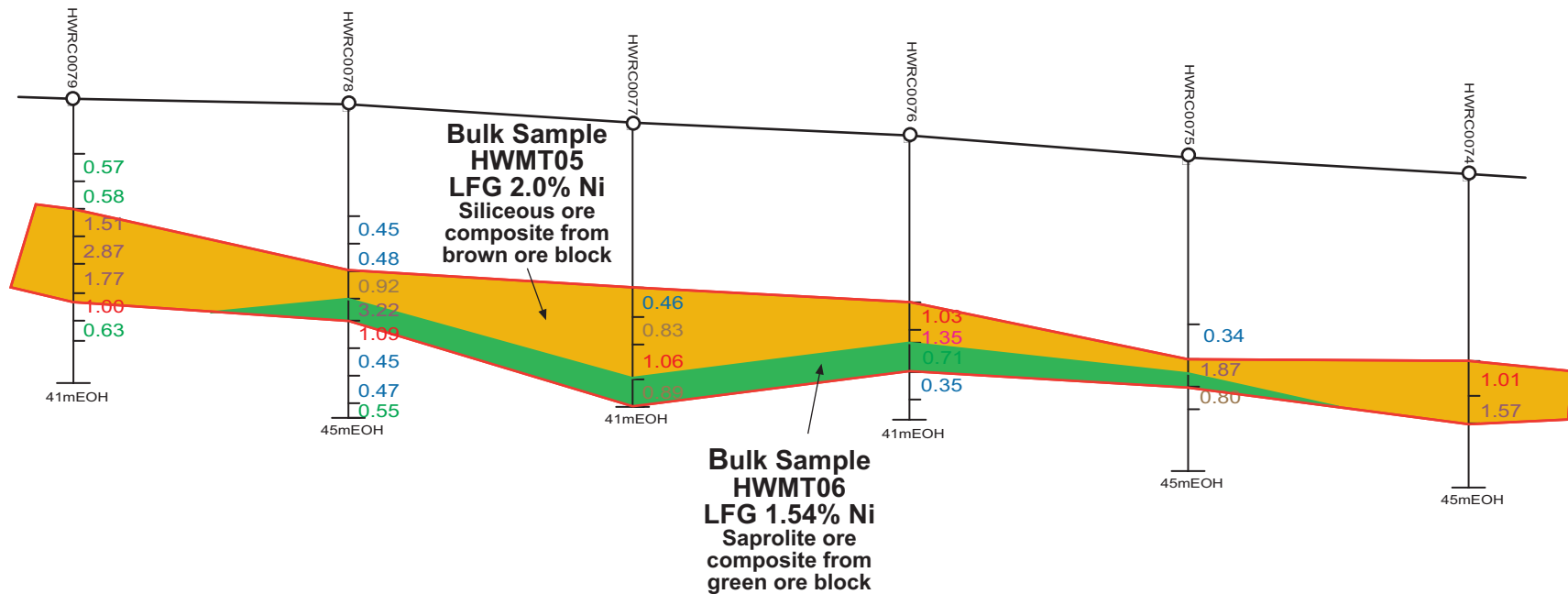
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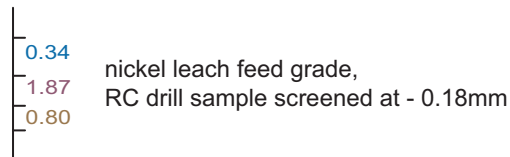
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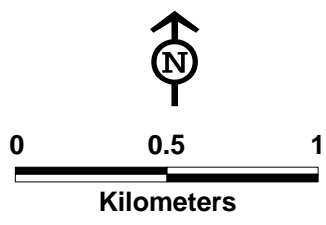
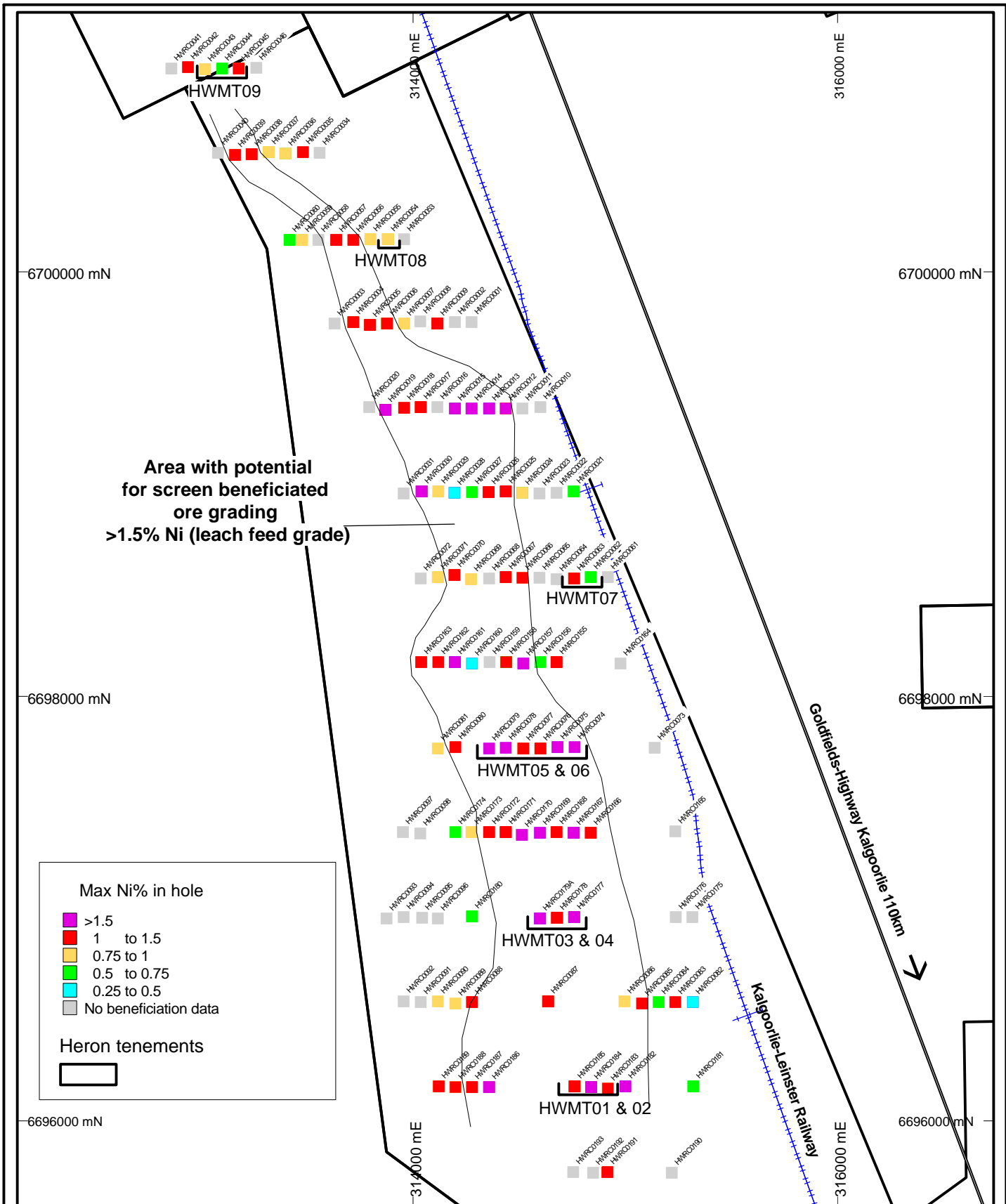


LEGEND



HIGHWAY PROSPECT
Section 669 7760N
Bulk Metallurgical Samples
Screened at -0.075mm

Note: x2 vertical exaggeration



HERON RESOURCES LTD
 ABN 30 068 263 098

HIGHWAY PROJECT
-0.18mm Screen Upgrade Results & Met Sample Locations

Author: Heron	Date: December 2004
Drawn: Kalgoorlie	Revised:
Dwg No.:	Report No.:
Projection: MGA Zone 51	Scale: 1:25,000

Appendix A

Testing Methodology

Test results were completed by independent consulting metallurgist SGS Lakefield Oretest using Reverse Circulation (RC) drill samples from Heron's Highway Prospect as part of a comprehensive KNP testing program.

For the Highway beneficiation test work, nine approximate 90kg composite samples of representative ore types were submitted to Oretest:

- Three samples of siliceous mineralisation for the PAL circuit (Cawse and Ravensthorpe mineralisation style, expected to screen upgrade);
- Two samples of siliceous saprolite mineralisation for the neutralisation circuit (Ravensthorpe mineralisation style, expected to screen upgrade);
- Two samples of non siliceous dominantly goethite PAL feed (Goro mineralisation style, low to moderate screen upgrade expected);
- One sample of nontronite mineralisation (Murrin Murrin and Bulong mineralisation style, metallurgically difficult with poor rheology, not expected to screen upgrade, minor component only of the overall KNP resource inventory); and
- One sample of siliceous saprolite sub-grade (to evaluate dilution effects during bulk mining).

Test work included pilot-scale scrubbing, screening and attritioning, with mineralogical studies by X-ray Diffraction to define the mode of nickel occurrence. All samples performed as well or better than expected in their screen upgrade responses.

These bulk test results complement Heron's routine RC drill sample "bottle roll" testing, to give a comprehensive estimate of the upgrade potential throughout the KNP resources. This exhaustive, best practice testing is aimed to generate future KNP resource estimates which include Leach Feed Grades and recoveries for each mineralisation type present within the extensive resource base.

