ACN 001 717 540

ASX code: RMS

RESOURCES

30 May 2013

### **ISSUED CAPITAL**

Ordinary Shares: 365M

### DIRECTORS

Chairman: Robert Kennedy Non-Executive Directors: Kevin Lines Michael Bohm Managing Director: Ian Gordon

www.rameliusresources.com.au info@rameliusresources.com.au

#### RAMELIUS RESOURCES LIMITED

#### **Registered Office**

Suite 4, 148 Greenhill Road Parkside, Adelaide South Australia 5063 Tel +61 8 8271 1999 Fax +61 8 8271 1988

Operations Office Level 1, 130 Royal Street East Perth WA 6004 Tel 08 9202 1127 Fax 08 9202 1138 30 May 2014 For Immediate Release

## Vivien Gold Mine Feasibility Completed

The Directors of gold producer, Ramelius Resources Limited (ASX: RMS) ("Ramelius" or "the Company"), are pleased to announce that the Company has completed a Feasibility Study for its high grade Vivien gold project in Western Australia which envisages mining a Total Mining Inventory of 451,000 tonnes at 7.6 g/t Au for 109,000 ounces<sup>1</sup> over a period of 30 months, after 8 months of underground development.

RELEASE

On the basis of the feasibility study, the Board has approved the payment of the remaining A\$4.5m to complete the Vivien acquisition from Agnew Gold Mining Company Pty Ltd which will be made in late June 2014.

The project's all-in operating costs are estimated to be A\$890 per ounce (including sustaining capital) after development costs of A\$20m. Ore from the project is expected to be processed at the Company's Checkers Processing Plant at Mt Magnet commencing in FY2016 and will provide significant cash flow for Ramelius.

The Company has engaged the management team who delivered the highly successful Wattle Dam project, to develop Vivien subject to formal Board and statutory approvals. The Vivien mine will be a similar project to Wattle Dam in many respects including levels of ore production, coarse gold content and mine design.

Ramelius has submitted a Mining Proposal and Project Management Plan to the Department of Mines and Petroleum and anticipates that these will be approved in the near future.

Significant potential for deeper resources exist and an exploratory drilling program will commence once an underground drill position can be established.

### For further information contact:

Ian Gordon Managing Director Ph: (08) 9202 1127

Mark Zeptner Chief Operating Officer Ph: (08) 9202 1127

<sup>1</sup> Total Mining Inventory includes Inferred Mineral Resource. See Table 2 and notes below.

## Vivien Mine Plan Commentary

The Vivien deposit is a high-grade, quartz vein hosted lode deposit. It is steeply dipping (70°) and contains higher grade shoots which plunge shallowly to the NE. The vein is typically between 1 and 5 metres wide. The mine will be developed using conventional methods including a standard 5m x 5.5m decline, ore development drives of 4m x 4m, 20m spaced levels and open stoping, with an average stope width of 2.85m. Ramelius already has significant infrastructure from its Wattle Dam mine for use at Vivien.



Figure 1: View to West - Longsection showing mine development at the Vivien project

The Vivien Ore Reserve and Total Mining Inventory were generated during the Feasibility study, utilising the 1 April 2014 Mineral Resource. A detailed mine design and economic evaluation was used to generate the Ore Reserve and Total Mining Inventory, which is completely sourced from underground mining.

### Table 1 Vivien Ore Reserve

Category	Tonnes	Grade	Ounces
Probable	400,000	7.9	101,000

Note: Figures are rounded to nearest 10,000 tonnes, 0.1 g/t and 1,000 ounces.

JORC reporting criteria are attached in Appendix A.

### Table 2 Total Mining Inventory

	Tonnes	Grade	Ounces	Proportion
JORC Probable Reserve	400,000	7.9	101,000	93%
Inferred Resources Mined	51,000	5.0	8,000	7%
Total Mining Inventory	451,000	7.6	109,000	100%

Note: Figures are rounded to nearest 10,000 tonnes, 0.1 g/t and 1,000 ounces. Rounding errors may occur.

The Total Mining Inventory contains some Inferred Mineral Resources. These are immediately adjacent to, and/or below mined Ore Reserves. They have had the same modifying factors applied as per the Probable Ore Reserve. Ramelius believes it is reasonable to expect a proportion of Inferred Resource to be upgraded when ore development and grade control occur in these areas.

Ore Reserves and Total Mining Inventory are based on the Vivien Mineral Resource reported in ASX Release, RMS - 1<sup>st</sup> April 2014 - "Resource boost for Vivien high grade gold project". No material change has occurred since reporting and Mineral Resources are inclusive of Ore Reserves.

The Information in this report that relates to Mineral Resources is based on information compiled by Rob Hutchison, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Rob Hutchison is a full-time employee of Ramelius Resources Limited. Rob Hutchison has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity they have undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Rob Hutchison consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Information in this report that relates to Ore Reserves is based on information compiled by Mark Zeptner, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mark Zeptner is a full-time employee of Ramelius Resources Limited. Mark Zeptner has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity they have undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mark Zeptner consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# Appendix A – JORC Reporting Criteria

For sections 1 to 3 relating to reporting of Mineral Resources, please refer to the ASX announcement, RMS, 1<sup>st</sup> April 2014, "Resource boost for Vivien high grade gold project", Appendix A

Section 4 Estimation and Reporting of Ore Reserves		
Mineral Resource estimate for conversion to Ore Reserves	The resource model <i>MODViv1405</i> was used to for Ore Reserve generation. The model is a conventional geologically derived, narrow lode, block model, using composited, top-cut drill data, anisotropic ordinary kriging estimation. Economic resource is outlined by a broad longsectional 10 gram x metres envelope. Mineral Resources are reported inclusive of Ore Reserves	
Site Visits	The Competent Person is a full time employee of Ramelius Resources Ltd and has made multiple site visits to Vivien	
Study Status	A Feasibility Study has been undertaken. All material aspects have been considered internally or with external consultation, including resource estimation, mine design, costs, ground and surface water, geotechnical, metallurgical and environmental areas. Some aspects notably ground and surface water and metallurgy rely on previous external reports and testwork commissioned by Agnew Gold Mining Company (AGMC) in earlier Feasibility studies.	
Cut-off Parameters	A development operating cut-off grade of 5.0 g/t and a marginal stoping cut-off grade of 4.3 g/t were calculated. These cut-off grades were used to optimize economic areas within the orebody resource.	
Mining Factors or Assumptions	All ore mining will be carried out by underground methods. A small cutback (100,000m3) to the eastern pit wall will initially be mined to ensure wall stability and ramp access to the portal position. A 5m x 5.5m decline will be mined to 100m depth before ore levels commence. Ore drives will be 4m x 4m with an average vein expected lode width of 2.5m. An external geotechnical investigation was carried out, utilising new diamond drillholes and existing geotechnical reporting. Findings were incorporated into the mine design. Stoping will be a top-down retreat sequence with small dilution control island pillars and one large CRF barrier pillar. Remote bogging will be used for 60% of stope ore production. Minimum stope with of 1.5m was assumed with 20% dilution (0 g/t) and 10% dilution if wider than 2m. Mining recovery of 95% with 5% left as island rib pillars. The mining method is appropriate for a narrow sub-vertical lode orebody. The mining study includes 7% of gold production sourced from Inferred resources. These resources are immediately adjacent or below reserve mined areas. It is reasonable to expect some upgrade of inferred resources to reserves upon mining and grade control of less well drilled resource extents.	
Metallurgical factors or assumptions	Gold mineralisation is coarse with frequent visible gold occurrences. A number of metallurgical tests have been previously carried out including gravity recovery, leach recovery, bond work index and concentrate mineralogy studies. Samples were collected as composited diamond half core ore zones and were representative. These show the deposit is free milling, has high gravity recovery (+50%) and high overall recovery (95%). RMS has not carried out new metallurgical testwork.	
Environmental	Environmental studies were conducted for the Mining Proposal approval process. This included waste rock characterisation studies from drill samples, flora and fauna and hydrological surveys. No significant PAF waste material occurs for the deposit. Waste will be placed in the existing Vivien pit.	
Infrastructure	Infrastructure requirements are relatively small, comprising offices, workshop, generators, underground fan, dewatering pumps, pipeline and magazine. Excess water will be delivered to the Agnew Gold Mine processing storage system. Site access roads largely exist. Milling and accommodation facilities will utilise existing Mt Magnet and Lienster based infrastructure.	
Costs	Costs have been derived from forecast costs, including mining, haulage, milling, administration and capital costs. Capital costs include numerous actual quotes for infrastructure items, including dewatering, pipelines, offices, generators, etc. Operating costs include quotes for haulage and external advice on recent underground mining rate tenders. Rates have been applied within an extensive mine design scheduling/costing/production spreadsheet. Milling costs is current Mt Magnet budgeted. Applicable royalties are included.	
Revenue factors	Revenue has been based on a gold price of AUD \$1400 per ounce	
Market Assessment	Doré is sold direct to the Perth Mint at spot price	
Economic	Discounted cash flows were carried out to determine relative NPV's, using a 5% annual discount rate. Sensitivity to gold price, grade and costs was also evaluated.	

Social	Agreements are in place with stakeholders including traditional land owner claimants, pastoralists and the relevant Shires
Other	No material risks or impacts are identified
Classification	Ore Reserves are classed as Probable based on Indicated Resource classification and reflect the Competent Person's views
Audits or reviews	An external review of the Feasibility study has been undertaken by an independent mining consultant, no fatal flaws were identified
Discussion of relative accuracy/confidence	Confidence is in line with gold industry standards and the company's aim to provide effective prediction for current and future mining operations. Estimate is global by deposit. The Reserve is most sensitive to a) gold price and b) resource grade prediction. No production data is currently available