# Pacific Niugini Ltd

Near term, high grade gold production at Nicolsons



September 2014





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# **Exploration and Resource Data**

Full results, JORC Table 1 disclosure, and resource details are available in ASX releases dated 28/7/14 (June Quarterly report), 16/9/2014 (Drilling results ASX announcement), and 23/9/14 (Drilling results announcement).

# **Competent Person Statement**

The information in this report that relates to exploration, mineral resources or ore reserves is based on information compiled by Mr Peter Cook (BSc Geol) ) MAusIMM (111072) who is the non-executive chairman of Pacific Niugini Limited. Mr Cook 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 described by the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Cook consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

# HALLS CREEK PROJECT HIGHLIGHTS



# All the ingredients for a rapid, high grade mine development:

- **Excellent tenure position:** The project lies on granted Mining leases with established high grade resources.
- Existing JORC resource: 260,000oz @ 5.6g/t. Majority at Nicolsons (214,000oz @ 5.9g/t) with obvious potential for extension.
- **High grades identified:** Current drilling program has identified high grade quartz lode intercepts up to 149g/t.
- **Processing plant and infrastructure in place:** Major cost and time savings through use of existing extensive site infrastructure.
- **Great team in place:** Corporate, project and operational personnel have the runs on the board to enable development of the project.
- Low capital requirements: Maximum cash out to first production estimated to be <\$10 million.
- **Low costs:** Aiming for AIC in the range of A\$800 to \$900 per ounce, with opportunity to reduce if higher than modeled grades are achieved.





### **Board:**

**Peter Cook – Non-Executive Chairman**. Highly successful Australian mining identity behind companies such as Hill 50 Gold Limited; Abelle Limited, and Metals X Limited.

**Paul Cmrlec – Managing Director.** Mining engineer with strong operational and corporate background focused on project feasibility, development, and operations. Director of Metals X Limited.

**David Osikore – Executive Director.** Leading Papua New Guinean geologist with exploration and production experience across most known deposits in PNG.

**Sam Akoitai – Non Executive Director.** Papua New Guinean with background in mine operations and politics. Instrumental in changes to the PNG mining regime while serving as mining minister, and advisor to current government.

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**ASX** 

Ticker: PNR

# **Capital Structure:**

Market Capitalisation @ 6.5c – A\$20.5 Million

Ordinary Shares – 314 Million

Employee Options and Rights – 4.65 Million

Top 20 - 59%

Cash on Hand - \$2.1 Million at end of August 2014

# DRILLING PROGRAM NEARING COMPLETION



- Initial 11 hole (approximately 2,500m) diamond drilling program designed to extend and validate resource close to completion.
- First time the Nicolsons deposit has been the subject of a substantial diamond drilling campaign well defined geology with numerous high grade intercepts\*:
  - NRCD14007 1.2m @ 102.92g/t, inc 0.8m @ 149.17g/t
  - NRCD14005 3.0m @ 20.43g/t, inc 1.6m @ 34g/t
  - NRCD14003 3.4m @ 13.21g/t, inc 0.36m @ 121g/t
  - NRCD14001 1.43m @ 6.88g/t, inc 0.76m @ 11.8g/t
  - NRCD14013 4.9m @ 1.00g/t, inc 0.52m @ 8.8g/t
  - NRCD14016A 0.57m @ 22g/t
- ➤ Holes NRCD14013 and NRCD14016A are 20m and 40m beyond the previous northern drilling boundary at depth proof of resource expansion potential open in all directions.
- Drilling focused on initial mining zones and current lower grade zone adjacent to planned mining areas.
- Results from remaining holes not yet released.
  - \* Full results in ASX announcements on 12/9/14 and 22/9/14

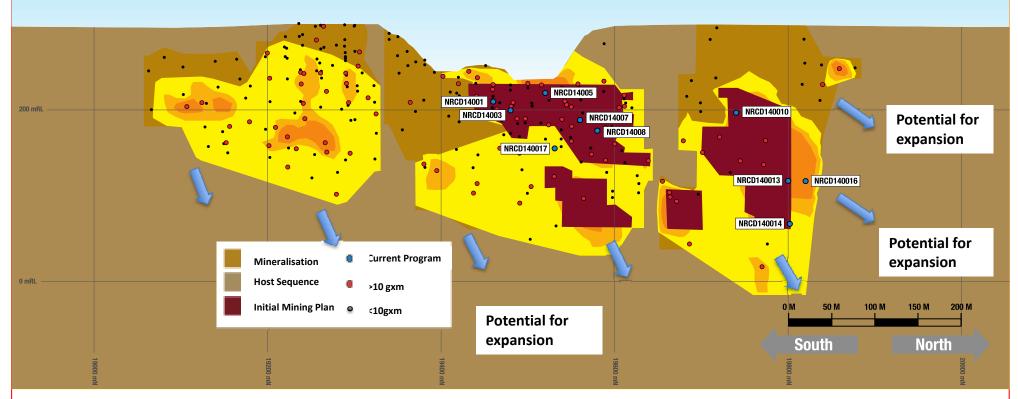




# **Nicholson's Deposit**

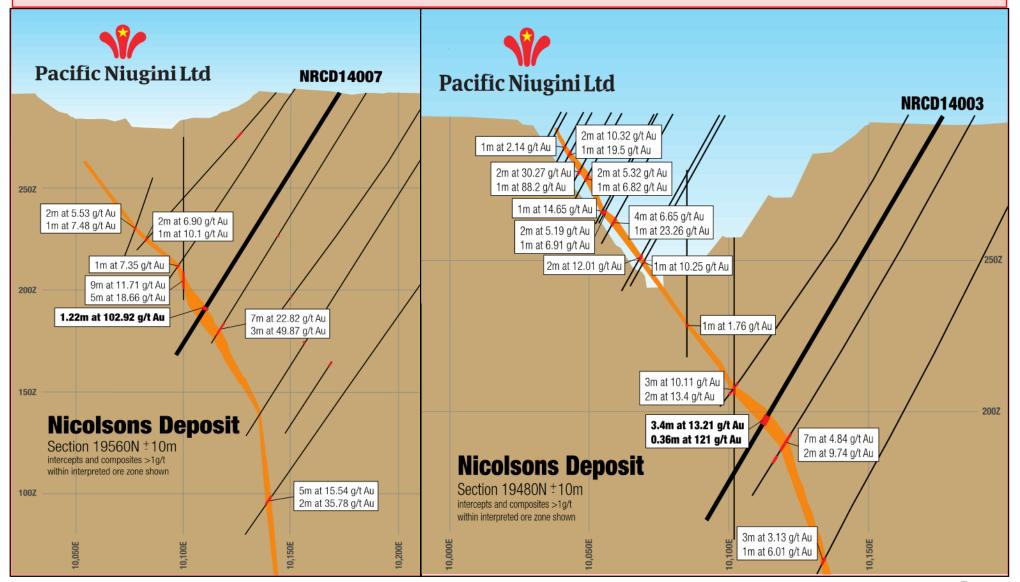
Schematic Long-Section





Expansion Opportunity – resource only constrained by lack of drilling at depth and to the north with multiple high grade intercepts at the extremities. Virtually no drill testing to the south.







# **Capital Discipline**

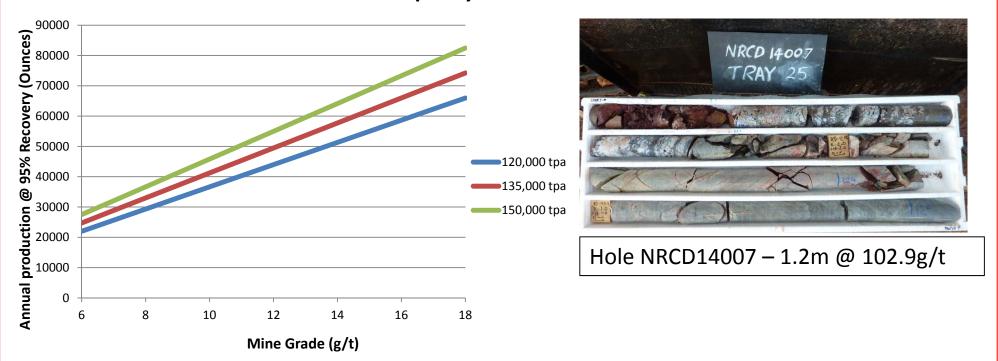
- Capital requirements split into three phases:
  - <u>Phase 1</u> Critical works for mining commencement, to make processing plant compliant and operational, and minimum infrastructure upgrades to commence work nominally the first 6 months of operating, and commencement of positive cashflow;
  - <u>Phase 2</u> Establishment of new surface infrastructure required for long term operation. Consideration of projects to reduce operating cost nominally 6 to 18 months from commencement;
  - Phase 3 Contingent on successful operations, and expansion of resources and reserves.
- FOCUS ON MINIMISATION OF CAPITAL EXPENDITURE UNTIL OPERATIONS ARE CASHFLOW POSITIVE.
- ASSESSMENT OF POTENTIAL TO REDUCE COSTS THROUGH MINOR UPGRADES ONCE OPERATING.

# **Operating Criteria – NO FRILLS**

- This mine will be operated appropriate to scale and requirements to safely produce at 10,000 to 13,000 ore tonnes per month.
- Corporate office will be maintained at the minimum level possible for a public company.
- Corporate personnel will remain intimately involved with operations to ensure success.
- Focus will be on mine-life extension through in-mine exploration in preference to early stage exploration.

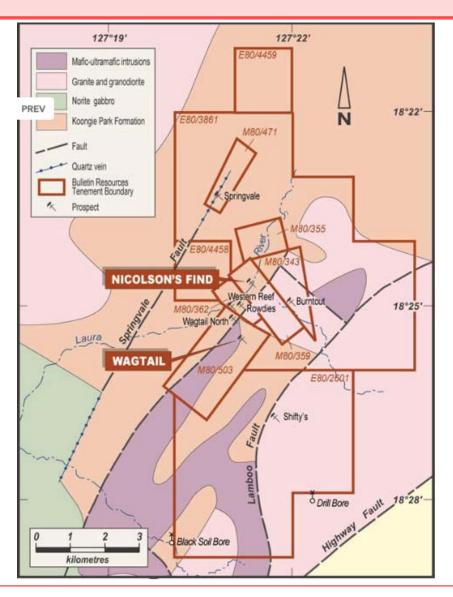


# **Nicolsons Plant Production Capacity**



- Increased grade provides direct increase in production capacity.
- Mining and processing unit costs decrease:
  - No change in crew size (circa 30% of operating cost);
  - No change in diesel consumption (circa 30% of operating cost).





# Project on granted mining leases free of encumbrances

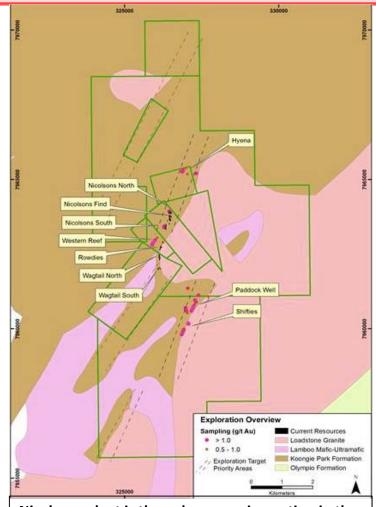
- All resources at the Nicolsons Project located on granted mining leases.
- Leases are pre-Native Title legislation.
- Excellent relationship with underlying pastoral lease owner – Ngunjiwirri Aboriginal Corporation.
- All planned working areas and infrastructure located on granted mining leases or granted miscellaneous licenses.
- Surrendered interest in non-core green fields tenements in order to focus.
- Project only 8km from sealed Great
   Northern Highway and 45km from Halls
   Creek sealed airstrip and multiple services.

# EXCELLENT POTENTIAL FOR LONG MINE LIFE



# Lamboo Project area – more than just Nicolsons Mine

- ➢ Independent geological review concluded Exploration Targets in the range of 4 to 7 million additional tonnes @ 5.2 to 5.4 g/t for 0.7 to 1.1 million additional ounces. Includes large upside in Nicolsons Deposit.
- ➤ Historical drilling identified numerous high grade intercepts +20g/t at Rowdies, Wagtail North, and Wagtail South. All resources currently lacking diamond drilling.
- > Zone between Rowdies and Nicolsons virtually untested.
- Multiple exploration targets identified with high-grade mineralisation identified in rock chip sampling and in drilling. Results quoted by project vendor include:
  - Nicolsons North 12m @ 13.6g/t from 55m, including 1m @ 74.3 g/t Au;
  - Hyena Prospect (1.5km along strike from Nicolsons Pit) Rock Chip Samples including 22.4 and 32.6g/t Au;
  - Shifty's Reef 700m long quartz vein with best results to date 2m
     @ 8.3g/t Au;



Nicolsons plant is the only processing option in the region. Numerous third party projects that need a home.



"Nothing more to pay the vendor in order to reach 80% ownership – Project expenditure only"

## **Deal Structure**

- Purchased from Bulletin Resources (ASX:BNR).
- Structured to defeat competing offer from alternative bidder.
- PNR effectively purchasing 80% of the project for consideration of A\$1.5 million cash, and \$1.3 million in new ordinary shares. Deal breakdown:
  - 49% and full management control upon payment of consideration;
  - Additional 16% (total of 65%) earned by spending A\$1.2 million in first 12 months;
  - Additional 15% (total of 80%) earned by spending additional A\$1.2 million in first 24 months;
  - PNR to spend first \$4 million in JV (inclusive of first \$2.4 million);
  - PNR to purchase remaining 20% for \$2 million or 1% royalty to total value of \$4 million (at PNR election) if BNR do not elect to contribute once first \$4 million is spent.

# **EXPECT TO REACH 65% OWNERSHIP BEFORE END OF 2014**

<sup>\*</sup> Refer June 2014 quarterly report for full acquisition details

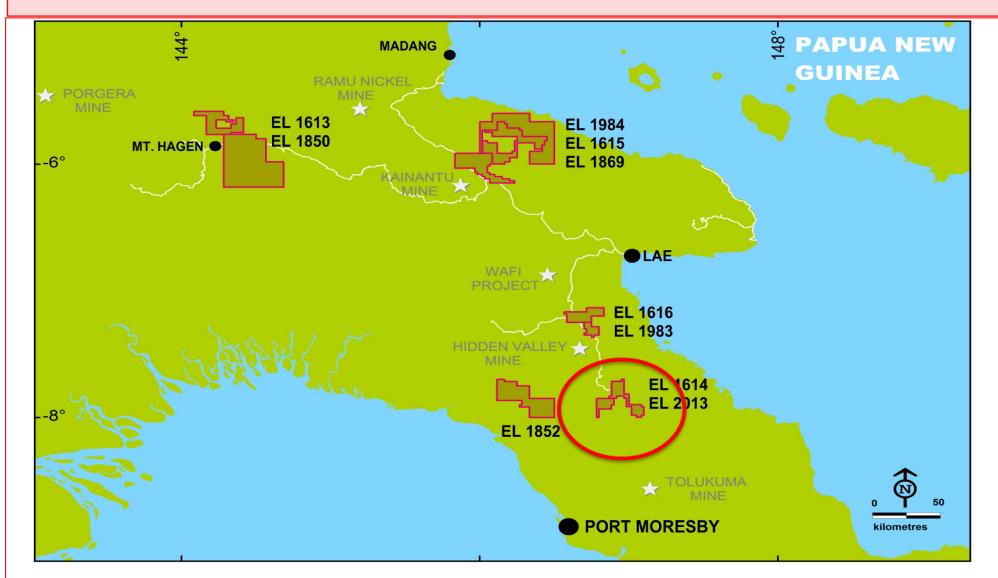


# Production at Nicolsons Deposit at Halls Creek is Pacific Niugini's focus

- Excellent drilling program results.
- Excellent tenure with granted mining leases and access agreements in place.
- Infrastructure including processing plant in place, located adjacent to major sealed highway, sealed air strip, and associated infrastructure.
- Low capital requirement, with high grades to provide excellent operating metrics.
- Initial target of 25,000 to 35,000oz per annum with excellent potential to increase production.

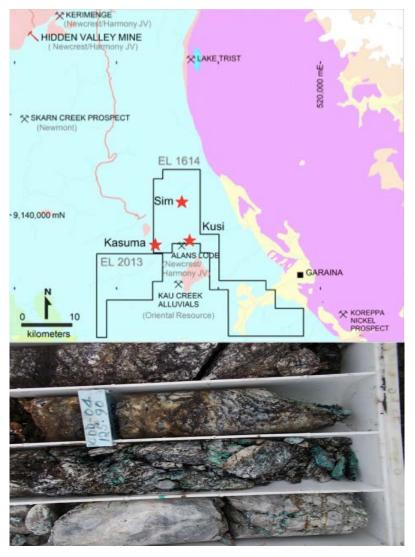










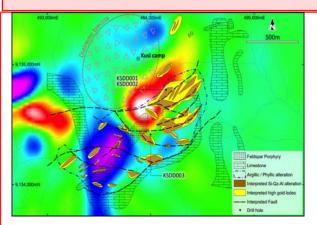


# **Exploration success story**

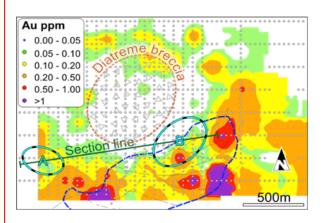
- Virgin discovery by PNR in 2011 with rapid progression relative to other known PNG projects.
- Detailed magnetic surveys and petrology confirm porphyry copper-gold potential.
- Kusi surface anomaly > 1.5km x 1km.
- Recent drilling has intersected classic porphyry style mineralisation adding to the potential for discovery of a major copper-gold porphyry system.
- Farm out and JV agreement with MGL Limited in place.
  All current work is at MGL's expense:
  - \$3 million spent to date;
  - Required to spend a further \$3 million before initial interest is earned;
  - At PNR's election MGL can increase their interest to 70%. If this occurs MGL must complete \$15M of exploration expenditure over a further 3-year period.

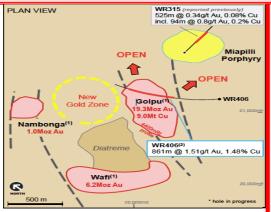
# Pacific Niugini

# EXCITING INITIAL DRILLING RESULTS

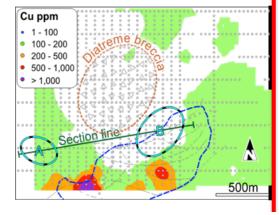


**Kusi Magnetics** showing interpreted diatreme and potential porphyry bodies highlighted (red)





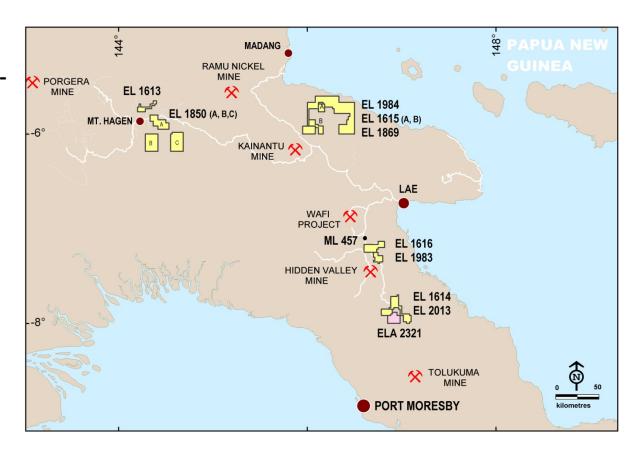
Wafi Resource Plan view. Current resource is stated at 460 MT @0.77 g/t Au &0.81% Cu for 11.4 Moz Au & 3.73 Mt Cu (From Newcrest Mining Website)



- Drilling targeting known zones of high and low magnetic susceptibility.
- High grade gold identified in both zones drilled to date, with vectors indicating a potential porphyry deposit in the zone of magnetic destruction.
- MGL have spent approximately \$3 million to date – still required to spend a further \$3 million to earn an initial interest in the project – further upside potential prior to a requirement to spend PNR funds.
- Very large zone of surface mineralisationapproximately 1.5km x 1km.
- 20m @ 2.89g/t (with 2.0m of core loss) from 107m, including 11m @ 4.72g/t (with 1.4m of core loss) from 114m.
- 35m @ 3.04g/t from 136m, including 4m @ 18.75g/t from 160m, and 11m @ 8.24g/t from 160m.
- High-grade intercepts sit within an overall broad alteration zone of 106m @ 1.32g/t from 109m.
- 61m @ 306ppm Mo from 202m, including 1.7m of core loss.



- ➤ EL 1616/ML457 Bulolo near term production opportunity now fully permitted with mining lease issued under the current mining act in place at ML457.
- Potential for project JV or divestment currently in discussion with multiple parties. Ten additional exploration tenements concentrated in 3 project areas with outcropping mineralisation identified and high grade



exploration results (current and historical) identified. Recent geological and geophysical data review and field visit by expert consultants has identified a number of potential porphyry targets at both Gusap and Hagen.



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# Advanced pipeline of highly prospective projects in PNG

- Exciting discovery at Garaina with JV partner meeting expenses. Project provides major upside potential for the company.
- > Excellent initial drilling results demonstrate the large potential of the system.
- Numerous highly prospective mineralisation occurrences at Gusap and Mt Hagen, with new porphyry targets identified in recent geological and geophysical data reviews and field visits.
- Approvals in place for mining at Widubosh ML457.
- Good potential for further partnership with third parties to retain-cost neutral positions and massive project upside.