

# Golden Rim Completes Acquisition of the Paguanta Zinc - Silver - Lead Project

# Summary

- Golden Rim has finalised the acquisition of a 70% interest in the Paguanta Project in northern Chile.
- The final acquisition price is **US\$1.49m** cash and a further **US\$0.8m** worth of Shares, at a decision to mine, for a total of US\$2.29m.
- The Patricia Prospect at Paguanta hosts Mineral Resources<sup>1</sup> of **4.4Mt at 3.7% zinc, 1.4% lead**, **84 g/t silver and 0.2 g/t gold** at 2% zinc cut-off and **0.6Mt at 93 g/t silver and 1.4% lead** at 40 g/t silver cut-off.
- Golden Rim's due diligence on Paguanta revealed that coherent higher grade mineralisation predominantly associated with a hydrothermal breccia in the Cathedral Vein at Patricia is likely to be the Company's focus for a future mine development.
- At a 3% zinc cut-off, there is a higher grade Mineral Resource at Patricia of **1.8Mt at 5.6%** zinc, **2.0% lead**, **125** g/t silver and **0.2** g/t gold or **1.8Mt at 9.8% zinc equivalent** (ZnEq)<sup>2</sup>.
- The higher grade mineralisation is mainly associated with the Cathedral Vein and is open at depth and along strike.
- An initial Exploration Target of approximately 4.5Mt to 6.8Mt at approximate grades of 4.5% to 6.7% zinc, 1.5% to 2.3% lead and 100 g/t to 150 g/t silver has been estimated for this area of potential extension to the higher grade resource at Patricia.
- Golden Rim's strong cash balance enables the Company to commence a significant work program at Paguanta with initial work focussed on drilling to extend the high grade resource at Patricia.
- Since the start of 2016, there has been a strong rise in zinc (44%) and silver (41%) prices, and the Directors of Golden Rim believe the acquisition of Paguanta presents a timely and exciting new opportunity for shareholders.

Cautionary Statement: The potential quantity (tonnage) and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of Mineral Resources.

<sup>&</sup>lt;sup>1</sup> This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

 $<sup>^{2}</sup>$  ZnEq = zinc equivalent. Zinc equivalent calculation details are provided in Appendix 1.



**Golden Rim Resources Ltd** (ASX: GMR, **Golden Rim**, **Company**) is pleased to announce that it has finalised the transaction with Herencia Resources plc (**Herencia**) to acquire all the issued shares in Herencia's wholly owned subsidiary Paguanta Resources (Chile) SA (**PRC**). PRC holds 70% of the shares in Compania Minera Paguanta S.A. (**CMP**) which holds mineral concessions at the Paguanta zinc-silver-lead project in northern Chile.

Golden Rim's Managing Director, Craig Mackay, said "The Paguanta Project presents as an exciting opportunity for Golden Rim to progress an advanced zinc-silver-lead project located in a favourable jurisdiction, which can be quickly progressed to a decision to mine."

"The project exhibits significant upside, with potential to extend the existing high grade resource associated with the Cathedral Vein at depth and to define additional resources along strike."

"Zinc and silver prices are enjoying a tremendous upswing and we look forward to commencing work at Paguanta shortly", said Mr Mackay.

Paguanta is located in the Tarapacá Region of northern Chile, approximately 120km northeast of lquique and 30km west of the Chile-Bolivia border. Paguanta is situated approximately 40km northeast of BHP Billiton's Cerro Colorado Mine, which has a Mineral Resource of 400Mt @ 0.62% copper for 5.5Blb of copper and annual copper cathode production of approximately 175Mlb.

Paguanta is predominantly owned through a joint venture company, CMP, where Golden Rim indirectly holds a 70% interest and an unrelated party, Costa Rica Dos SpA (Costa Rica), holds the remaining 30% interest. Costa Rica is a contributing party to the joint venture.

Paguanta is comprised of 14 exploitation concessions covering a total surface area of 3,900ha, and 8 exploration concessions covering a total surface area of 2,100ha. In Chile, an exploitation concession, also known as a mining concession, is granted for an indefinite time period and allows the holder to undertake mining activities on the concession area.

Since acquiring Paguanta in late 2005, CMP has completed approximately **40,000m** of drilling, for total expenditure, including the majority of a feasibility study, of approximately **US\$31.5M (A\$42m<sup>3</sup>)**.

# Geology and Mineral Resources

The Patricia zinc-silver-lead deposit, located in the south of the Project area, is the best explored area at Paguanta and represents the major economic interest (Photo 1). The mineralisation is hosted in andesite and rhyolite volcanic rocks and consists of silver-lead-zinc sulphides in multiple mineralised vein structures that are typically steep dipping, 3m to 15m in width, and have an east-west orientation (Figure 1). The style of mineralisation within the vein structures includes massive to semi-massive breccia zones and stockwork vein zones.

The Patricia Prospect hosts Mineral Resources<sup>4</sup> of **4.4Mt at 3.7% zinc**, **1.4% lead**, **84 g/t silver** and **0.2 g/t gold** at 2% zinc cut-off and **0.6Mt at 93 g/t silver** and **1.4% lead** at 40 g/t silver cut-off.

<sup>&</sup>lt;sup>3</sup> Calculated at the conversion rate of US1 = A0.75

<sup>&</sup>lt;sup>4</sup> This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.



The mineralisation at Patricia is outcropping and amenable to initial open pit mining followed by underground mining.

# High Grade Zinc and Silver Mineralisation

Golden Rim's due diligence on Paguanta has revealed that a coherent higher grade resource predominantly associated with a hydrothermal breccia in the Cathedral Vein at Patricia is likely to be the Company's focus for any future mine development (Photos 2 & 3).

At a 3% zinc cut-off, the higher grade resource mainly associated with the Cathedral Vein is **1.8Mt** at **5.6% zinc**, **2.0% lead**, **125 g/t silver and 0.2 g/t gold** or **1.8Mt at 9.8% ZnEq<sup>5</sup>**. The higher grade resource is open at depth and along strike.

The Patricia East target is a strike extension of the Patricia deposit, with the area of interest extending 1.0km to 1.5km east of Patricia. An IP geophysical survey has outlined a large chargeability anomaly at Patricia East which is increasing significantly in size with depth and suggests there is potential to extend the size of the Patricia deposit several times (Figure 2).

Very limited drilling at Patricia East discovered multiple new zones of high grade mineralisation, that require follow-up drilling (e.g. **16m at 209 g/t silver** from 42m in PTRC021 and **7.6m at 4.3% zinc, 2% lead and 247 g/t silver** from 186m in PTDD049).

Deeper drilling at Patricia has intersected continuous zones of high grade zinc-silver-lead mineralisation and these zones remain open at depth (Figure 3). There is considerable scope to extend the resource at depth and for underground mining to be considered beneath any open pit. Some of the better deep drilling intercepts include:

- 6.3m at 9.1% zinc, 3.6% lead and 209 g/t silver from 188.75m in PTDD095, including 1.75m at 16% zinc, 9.7% lead and 544 g/t silver from 188.75m;
- 5m at 10.2% zinc, 4.2% lead and 244 g/t silver from 196m in PTDD096, including 1.1m at 17.6% zinc, 6.0% lead and 315 g/t silver from 198.7m; and
- 6m at 10.4% zinc, 2.9% lead and 150 g/t silver from 110m in PTDD089, including 2m at 21.0% zinc, 6.3% lead and 337 g/t silver from 112m.

A new parallel vein was intersected to the south of Patricia with an intercept of **6m at 5.9% zinc**, **2.6% lead and 144 g/t silver** in a broad 20m wide mineralised zone. Follow-up drilling to determine the extent of this vein has as yet to be conducted.

# **Exploration Target**

Mining Plus Pty Ltd (**Mining Plus**) was contracted by Golden Rim to estimate an initial Exploration Target in accordance with JORC (2012), for the potential strike and depth extensions to the higher grade mineralisation at Patricia. The results of this study are presented in Table 1 and the area included in the Exploration Target is depicted in Figure 4.

The Exploration Target represents potential polymetallic endowment in addition to the defined Mineral Resource for the Patricia deposit.

 $<sup>^{5}</sup>$  ZnEq = zinc equivalent calculation details provided in Appendix 1.



# Table 1. Patricia Exploration Target Estimation

Tonnage Range		Zinc Grade		Lead Grade		Silver Grade		Gold Grade	
(Mt)		Range (%)		Range (%)		Range (g/t)		Range (g/t)	
80%	120%	80%	120%	80%	120%	80%	120%	80%	120%
4.5	6.8	4.5	6.7	1.5	2.3	100	150	0.16	0.24

Notes:

- 1) Cautionary Statement: The potential quantity (tonnage) and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of Mineral Resources.
- 2) Mining Plus created an indicative mineralisation model to identify the potential location and size of the immediate strike and dip extensions to the current mineralised system utilising Leapfrog Geo implicit modelling software to create solids at a 3% cut-off grade and a maximum vein width of 5m.
- 3) The Exploration Target was based on drilling data, surface geochemical data and a 3D model of Induced Polarisation (IP) chargeability data. The surface geochemical data (1,930 samples) and IP geophysical data (survey by Zonge, Chile, 2012) were utilised to support the continuity of mineralisation in areas where drilling was more sparse.
- 4) A total of 28 RC drill holes (3,626m) and 11 diamond drill holes (1,338m) were used to prepare the Exploration Target. The holes are generally drilled on lines spaced from 20m 250m apart, with spacing along the lines ranging from 30m 200m.
- 5) A base for the Exploration Target was set at 3250mRL 200m below the base of the current drilling. The Exploration Target extends along strike for 250m from the eastern-most drill hole.
- 6) The Exploration Target was calculated using a SG of 3.2 g/cm<sup>3</sup>

## Zinc and Silver Market Update

The bulk of the metal value at Paguanta is from its zinc and silver content.

Zinc and silver have been two of the top performing commodities thus far in 2016 with the price of zinc increasing by **44%** and the price of silver increasing by **41%** since the start of the year (Figures 5). In comparison, gold has risen 25% over the same period.

The Directors of Golden Rim believe that the zinc price will continue to be positively influenced by demand for the product outstripping supply. There is a declining global supply of zinc due to significant mine closures (e.g. Century in Australia, and Lisheen in Ireland) and major producers announcing supply curtailments (e.g. Glencore). The declining global supply combined with positive expectations around demand, have led to an outlook in the zinc market of supply deficits and a strong zinc price. Recent commentary from market analysts regarding zinc supports this view:

- "Refined deficits of 550kt in 2016 and 660kt in 2017, representing nearly 5% of refined consumption, will rapidly destock the zinc market and will provide the foundations for zinc to reach record high prices in the next 24 months" (ICBC Standard Bank, March 2016).
- "Zinc is our favourite industrial metal, in fact favourite commodity overall" (Macquarie Research, May 2016).
- "Zinc remains the clear outperformer of the base metal complex..." (Citibank, May 2016).
- "We view zinc as the bullish exception in the metals space... Zinc has by far the most bullish supply-side dynamic" (Goldman Sachs, May 2016).

The precious metals (silver and gold) mining sector has seen a major positive change in sentiment in 2016. Market commentators suggest the fundamental factors for the increase in prices include: the massive amount of money printing, faltering economies, a dismal performance in the banking sector, and the increased demand from China and India which is exerting pressure on the physical supply of both gold and silver. The Directors of Golden Rim believe this situation will intensify over the next few years driving the precious metals sector higher and that the Company is well positioned to capitalise on this revival given the high grade silver component at Paguanta.



# **Development Advantages of Paguanta**

Golden Rim is one of only a handful of companies listed on the ASX with an advanced zinc - silver - lead project.

Paguanta has a number of development advantages:

- the mineralisation is outcropping and is amenable to initial open pit mining before more expensive underground mining;
- there is no significant past mining at Paguanta. The orebodies are intact and there are no mining legacy issues;
- Paguanta is not remote and lies 120km (175km by road) from a tax-free port (Iquique) that can ship concentrates;
- the project already has granted mining concessions with an indefinite time period; and
- the bulk of a feasibility study has already been completed.

## **Transaction Details**

The final acquisition price for Paguanta is **US\$1.49m cash**. In addition to the cash consideration, Golden Rim will issue **US\$0.8m** in fully paid ordinary shares (**Shares**) to Herencia at a deemed issue price equal to the 20 day volume weighted average price (VWAP), in the event of a decision to mine at Paguanta.

The consideration under the transaction is payable in instalments and to date Golden Rim has paid US\$1,027,000 (including two deposits previously paid). Prior to the next instalment of US\$413,000, all outstanding creditors in PRC and CMP are required to be paid. A final amount of US\$50,000 is payable within 3 months. Any unknown costs previously incurred that become evident during this period will be deducted from this amount.

Chilean exporters may recover the value added tax (VAT) paid with respect to their exports. Under certain circumstances, exporters may claim VAT credits in advance before exports are completed or the VAT has been incurred. CMP has received such VAT credits in advance of approximately £1.5 million. It is expected that upon export, the VAT credit received will be applied to reduce this advanced VAT credit over time. The Company further notes that if CMP does not carry out the exports as approved, such amounts of VAT credits claimed in advanced must be paid back to the tax authorities.

#### **Next Steps**

Exploration work envisaged for Paguanta for the second half of 2016 includes:

- Geological mapping on-site and re-logging of the existing diamond drill core to better define the extent of and the structural controls on the zinc-silver-lead mineralisation.
- Drilling to test the Exploration Target area and to extend the high grade mineralisation (both at depth and along strike) associated with the Cathedral Vein.
- Initially a reverse circulation (RC) drilling program (100m spaced lines, 20 holes for 4,000m) is
  planned to test the shallow strike extent of the mineralisation suggested in the previous limited
  drilling, surface geochemistry and the IP geophysical data for 800m along strike to the east of
  the current Mineral Resource.



- Preparation of a JORC (2012) Mineral Resource estimate for Paguanta.
- Additional metallurgical test work on the Cathedral Vein mineralisation to further optimise recoveries.
- Further study to determine a suitable source(s) for mine raw water supply.

# -ENDS-



**Photo 1.** General overview of the Patricia Prospect at Paguanta. Fully equipped camp for 30 personnel in the foreground. Drill pads for drilling predominantly into the Cathedral Vein are visible on the hillside.





**Photo 2:** Drill core from Hole PTDD101 with hydrothermal breccia from the Cathedral Vein. This metre interval (119 - 120m) assayed 7.4% zinc, 14.6% lead, 631 g/t silver and 0.5 g/t gold.





**Photo 3:** Outcropping Cathedral Vein zinc-silver-lead mineralisation associated with hydrothermal breccia and surrounding stockwork veining.



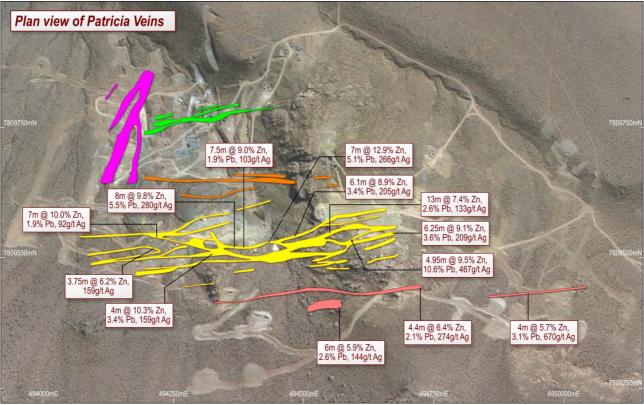
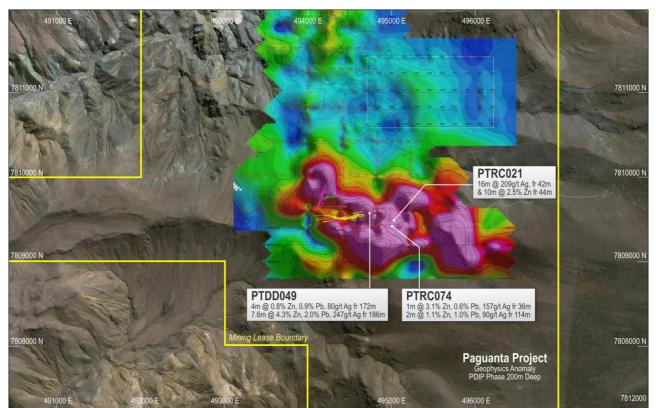
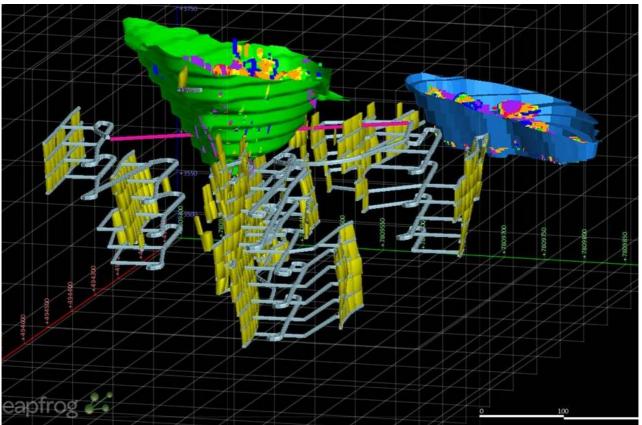


Figure 1. Plan view of the Patricia Veins and selected significant drilling intercepts

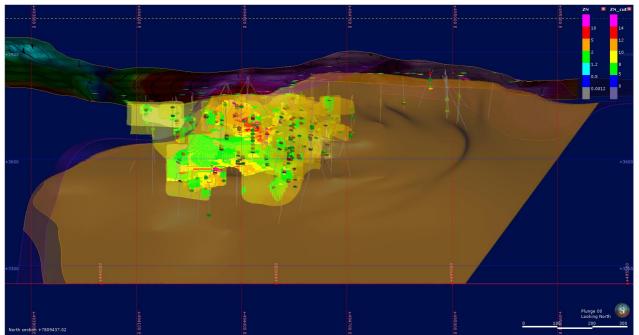


**Figure 2.** Extensive IP chargeability geophysical anomaly (purple) that largely remains untested by drilling to the east of the Patricia Veins (yellow).





**Figure 3.** 3D representation of the proposed open pit and underground mine design in the previous Paguanta feasibility study (note the multiple parallel mineralised lodes that comprise the Patricia Veins).



**Figure 4.** Current Mineral Resource Model block (green-yellow). The orange shape represents the extent of the Exploration Target (*Cautionary Statement: The potential quantity (tonnage) and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of Mineral Resources*).





**Figure 5.** Comparison of metal price performance since 1<sup>st</sup> January 2016. Zinc and silver have clearly been the best performers (source: Terra Studio).



# Appendix 1.

# Zinc Equivalent (ZnEq) Calculation Details

- Metal prices quoted on Kitco.com on 14 July 2016 were utilised in the ZnEq calculation and included the following: Zn = US\$0.98/lb; Pb = US\$0.85/lb; Ag = US\$20.36/oz and Au = US\$1344/oz).
- Non-optimised metallurgical recoveries were derived from testwork as part of the feasibility study at Paguanta and include 82%, 80% and 90% for Zn, Pb and Ag respectively. For Au a 90% recovery has been assumed, which Golden Rim believes is a reasonable average for an epithermal style of deposit.
- It is Golden Rim's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.
- The ZnEq calculation formula is as follows: ZnEq = (Zn% x 0.82) + (Pb% x 0.80 x 0.87) + (Au% x 0.90 x 19,996) + (Ag% x 0.90 x 302).

#### **Competent Persons Statement**

The information in this report that relates to previous Mineral Resource estimates, historical Metallurgical test work and historical drilling is based on information compiled by Mr Craig Mackay who is a member of The Australasian Institute of Mining and Metallurgy. Mr Mackay is an employee of Golden Rim Resources Ltd. Mr Mackay 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 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Mackay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Golden Rim continues to report exploration results as defined under the 2004 edition of the JORC Code where those results were initially reported prior to the 2012 edition of the JORC Code on the basis that the information has not materially changed since it was initially compiled.

The information in this release that relates to the estimation of the Exploration Target has been compiled by Mr. Richard Buerger BSc (Hons). Mr. Buerger is a full-time employee of Mining Plus Pty Ltd and has acted as an independent consultant during the estimation of the Exploration Target for the Paguanta Deposit. Mr. Buerger is a Member of the Australian Institute of Geoscientists and has sufficient experience with the style of mineralisation, deposit type under consideration and to the activities 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" (The JORC Code). Mr. Buerger consents to the inclusion in this report of the contained technical information relating to the estimation of the Exploration Target in the form and context in which it appears.

#### Forward Looking Statements

Certain statements in this document are or maybe "forward-looking statements" and represent Golden Rim's intentions, projections, expectations or beliefs concerning among other things, future exploration activities. The projections, estimates and beliefs contained in such forward looking statements necessarily involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Golden Rim, and which may cause Golden Rim's actual performance in future periods to differ materially from any express or implied estimates or projections. Nothing in this document is a promise or representation as to the future. Statements or assumptions in this document as to future matters may prove to be incorrect and differences may be material. Golden Rim does not make any representation or warranty as to the accuracy of such statements or assumptions.



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