



QUARTERLY REPORT June 2014

# Yellow Rock Resources Limited

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# Projects:

Gabanintha Vanadium

Gabanintha Gold, copper



# ACTIVITIES REPORT FOR THE QUARTERLY PERIOD ENDED 30 JUNE 2014

# **KEY HIGHLIGHTS**

- Concept engineering study commenced on the Gabanintha Vanadium Deposit in Western Australia;
- Appointment of Chief Executive Officer Lorry Hughes;
- Completion of Rights Issue and Shortfall Placement raises \$3.4 million;
- Vanadium industry technical and scientific committee event hosted by Yellow Rock in Perth;
- Yellow Rock is well funded to significantly advance current projects.

Yellow Rock Resources Limited (ASX: YRR) ("Yellow Rock" or "the Company") is pleased to provide the following quarterly update on its exploration and development activities during and subsequent to 30 June 2014.

# Gabanintha Vanadium Project (100% Owned)

A concept engineering study has commenced (see ASX announcement dated 24 July 2014) for the generation of vanadium pentoxide ( $V_2O_5$ ) products from the Gabanintha Vanadium Project. The project is located approximately 43km south of the mining town of Meekatharra in Western Australia (Figure 1).

The study is being conducted by Perth-based process engineering consultancy group Battery Limits Pty Ltd ("Battery Limits") and is expected to be complete in August 2014. Battery Limits are highly experienced and have extensive knowledge of the Gabanintha Vanadium Deposit having completed a concept study for the production of ferro-vandium (FeV<sub>80</sub>) in 2009.

The aim of the current concept study is to assess the potential for a smaller more economical vanadium project that can take advantage of near surface high-grade mineralisation found at the Gabanintha Deposit.

The scope of the study will include;

- Preparing a start-up project scenario based on small scale mining and processing to produce V<sub>2</sub>O<sub>5</sub> products with consideration given to whole ore roasting;
- Designing a conceptual flowsheet and plant description;
- Defining conceptual capital and operating cost estimates and conducting financial analysis.



The Gabanintha JORC-2004 Compliant Mineral Resource Estimate is detailed in the "About Yellow Rock Resources" Section at the end of this report. Recent developments in vanadium redox battery technology for grid-scale energy storage and the potential for them to positively impact vanadium demand have underpinned the assessment of production options including high purity vanadium pentoxide products.

Additional information regarding potential demand drivers for vanadium including vanadium redox batteries and high strength low alloy steel can be located in the "About" and "Links" sections of the Company website. <a href="http://www.yellowrock.com.au/">http://www.yellowrock.com.au/</a>

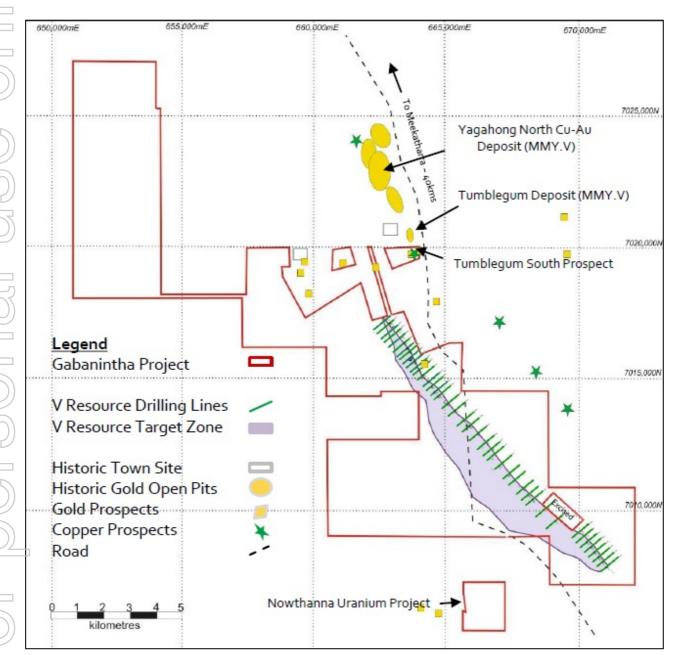


Figure 1: Plan view of the Gabanintha Project showing vanadium resource drilling lines and the proximity to historic gold and copper mining activity.

# Gabanintha Gold and Base Metal Projects (100% Owned)

Immediately adjacent to and within the Gabanintha Project there is significant potential for the discovery of gold and base metal deposits. At the Tumblegum South Prospect (Figure 1), the Company discovered significant gold and copper mineralisation in RC drilling conducted in November 2013 (see ASX announcement dated 27 November 2013). The mineralisation is interpreted to be an extension of the Tumblegum Deposit which is owned by listed mining company Monument Mining Limited (MMY.V).



A significant reverse circulation (RC) drill program had previously been approved at the Tumblegum South Prospect to follow-up gold and copper targets (see ASX announcement dated 3 March 2014). This program has been delayed due to the assessment of drilling requirements for all the Gabanintha Projects so that they can be combined and executed together to improve exploration efficiency and to reduce overall exploration costs. There is potential depending on the results of the current concept engineering study at the Gabanintha Vanadium Project that further metallurgical and resource definition RC drilling will be planned for approval.

During the quarter there was no on ground exploration conducted on the Gabanintha Projects and exploration work was restricted to technical assessment of historic data and discussions with strategic parties to advance the non-core projects toward commercial outcomes.

# Corporate

On the 4<sup>th</sup> June Yellow Rock appointed experienced geologist David "Lorry" Hughes as Chief Executive officer (see ASX announcement 5 June 2014). Mr Hughes is an economic geologist and corporate executive with over 20 years' experience in Australia and internationally across all aspects of the resources industry including exploration, development, mining and finance.

Lorry is a geology graduate from Curtin University in Western Australia and has worked in a number of roles in Australia in various gold, uranium and base metal mining operations including technical services manager of the Ranger Uranium Mine in the Northern Territory for Rio Tinto and as Managing Director and CEO of ASX listed South Boulder Mines Limited. He also managed South Boulder's Australian exploration portfolio, which resulted in the Rosie Ni-Cu-PGE discovery by joint venture partner Independence Group NL.

Mr Hughes holds a BSc in Geology, is member of the AusIMM and resides in Perth, Western Australia.

# Rights Issue

Subsequent to the end of the quarter Yellow Rock completed a non-renounceable pro-rata rights issue and shortfall placement raising \$3,362,027 (before costs). A total of 336,202,700 fully paid ordinary shares at \$0.01 per share and 336,202,700 free attaching unlisted options exercisable at \$0.015 each on or before 31<sup>st</sup> December 2017.

Yellow Rock is now well funded to complete significant exploration and development programs in the near term.

# **Vanitec Meeting**

During the period Yellow Rock hosted the 86<sup>th</sup> Vanitec Meeting in Perth at the Crown Perth Hotel from the 31 March to 2<sup>nd</sup> April. Vanitec is a technical and scientific committee which brings together representatives of companies and organisations involved in the mining, processing, manufacture, research and use of vanadium and vanadium-containing products from across the globe.

Vanitec operates as a not-for-profit organisation with the objective of researching and promoting the use of vanadium bearing materials. Yellow Rock looks forward to continued participation with Vanitec and the vanadium industry to assist engagement with potential development partners for the Gabanintha Vanadium Project.

# **Upcoming Events**

Further to the Company focus on the Gabanintha Vanadium Project, Yellow Rock has registered a subsidiary named Australian Vanadium Resources Pty Ltd (AVR) for marketing purposes.



In addition to promoting and marketing through AVR and the inclusion of vanadium market information on the company website, Yellow Rock is planning to increase its exposure to global financial markets and strategic investors with a view to improving access to future exploration and development capital. A global investment roadshow is planned for major cities across Australia, US, Canada, UK and UAE in August followed by an Asian flow battery focused roadshow in September.

Yellow Rock will also be continuing the program of exploration of its Gabanintha copper and gold prospects recently identified by Yellow Rock's HeliTEM, Soil Sampling and Induced Polarization studies.

Tenement Information as Required by Listing Rule 5.3.3											
For the Quarter Ended 31 June 2014											
Project	Location	Tenements	Economic Interest Notes	Change in Quarter							
WESTERN AUSTRAI	LIA										
Gabanintha	Gabanintha	EL51/1534	100% On application								
	Gabanintha	E51/1576	Granted 100%	Granted							
	Gabanintha	EL51/843	Granted 100%								
	Gabanintha	E51/1396	Granted 100%								
	Gabanintha	P51/2634	Granted 100%								
	Gabanintha	P51/2635	Granted 100%								
	Gabanintha	P51/2636	Granted 100%								
	Gabanintha	P512566	Granted 100%								
	Gabanintha	P51/2567	Granted 100%								
Nowthanna	Nowthanna	MLA51/771	100% On application								
NORTHERN TERRIT	ORY										
Arunta Region	Mt Denison	ELA 25418	100% On application								
	Mt Nicker	ELA27503	100% On application								
West Arnhem	Table Hill	ELA 28158	100% On application								
	Mann	ELA 28159	100% On application								

For further information, please contact:

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#### **Investor Coverage**

Recent news on the Company activities can be found on the Yellow Rock Resources website <a href="http://www.yellowrock.com.au/">http://www.yellowrock.com.au/</a>

#### **About Yellow Rock Resources Limited**

Yellow Rock is developing the Gabanintha high-grade Vanadium Deposit located in the Murchison Province ~43kms south of the mining town of Meekatharra in Western Australia. The project consists of eight granted exploration licenses and one exploration license application in the Gabanintha Formation in the north of the Murchison granite-greenstone terrane of the Archaean Yilgarn Craton.

Mineralisation is associated with titaniferous magnetite bands ranging in size from a few metres to 30m thick that outcrop at surface. There are two distinct zones of mineralisation a separate basal, massive, high grade zone and an upper disseminated zone with lower grade. The deposit is over 12km along strike, outcrops at surface and is largely continuous. Over 13,000m of drilling has been conducted on the deposit comprising 155 reverse circulation (RC) holes and nine diamond (DD) holes. These holes have been geologically logged and sampled and were used to determine a JORC 2004 Compliant Mineral Resource Estimate in 2011 (Table below).

Engineering scoping studies into the development of a vanadium mine at Gabanintha conducted in 2009 demonstrated that an operation to mine and beneficiate ore to produce ferro-vanadium is technically and commercially viable. Recent developments in vanadium redox battery technology for grid-scale energy storage with improved vanadium demand fundamentals have underpinned the technical assessment into production options including high purity vanadium pentoxide products. The Company is focused on definition of the most economical start-up mining and product combination that minimises capital expense and maximises value.

Material	JORC Resource Class	Million tonnes	In situ bulk density	V <sub>2</sub> O <sub>5</sub> %	Fe%	TiO₂%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	LOI%
High grade	Indicated	14.4	4.17	1.03	42.14	12.07	11.42	7.84	3.37
3	Inferred	46.0	4.16	0.97	42.15	11.19	12.37	8.28	3.20
Subtotal		60.4	4.16	0.98	42.15	11.40	12.15	8.17	3.24
Low grade	Indicated	42.7	2.71	0.44	23.37	6.08	29.25	18.09	8.94
7	Inferred	22.7	2.67	0.42	22.65	6.08	30.62	16.96	6.92
Subtotal	Indicated	57.0	2.97	0.59	28.10	7.59	24.76	15.51	7.54
Subtotal	Inferred	68.8	3.51	0.79	35.70	9.50	18.40	11.15	4.43
	Total	125.8	3.25	0.70	32.60	8.64	21.29	13.13	5.84

Note: In-situ dry bulk density has been assigned based on  $V_2O_5$  grade, therefore density values quoted here are weighted average values. The Mineral Resource was estimated as a block model within constraining wireframes based upon logged geological boundaries and grade cut-offs of 0.30%  $V_2O_5$  for Low Grade (LG) and 0.70%  $V_2O_5$  for High Grade (HG). Tonnages have been rounded to reflect that this is an estimate.

The Gabanintha Project area is also highly prospective for gold and copper mineralisation.

#### **Competent Person Statement**

The information in this statement that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by independent consulting geologist Brian Davis B.Sc (Hons), Dip.Ed. Mr Davis is a Member of The Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Brian Davis is employed by Geologica Pty Ltd. Mr Davis has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which is undertaken 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 Davis consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which it appears". The information that refers to Exploration Results and Mineral Resources in this announcement 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 last reported.

#### **Forward Looking Statements**

No representation or warranty is made as to the accuracy, completeness or reliability of the information contained in this release. Any forward looking statements in this presentation are prepared on the basis of a number of assumptions which may prove to be incorrect and the current intention, plans, expectations and beliefs about future events are subject to risks, uncertainties and other factors, many of which are outside Yellow Rock Resources Limited's control. Important factors that could cause actual results to differ materially from the assumptions or expectations expressed or implied in this presentation include known and unknown risks. Because actual results could differ materially to the assumptions made and Yellow Rock Resources Limited's current intention, plans, expectations and beliefs about the future, you are urged to view all forward looking statements contained in this release with caution. The release should not be relied upon as a recommendation or forecast by Yellow Rock Resources Limited. Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.