# **ASX ANNOUNCEMENT**







Yellow Rock Resources Ltd (Yellow Rock) is pleased to announce the completion of RC drilling and the commencement of the diamond drilling phase of the resource drilling program (image shows massive magnetite mineralisation in new core) at the Gabanintha Vanadium Project in Western Australia;

- A diamond drilling rig has commenced a planned program of 789m of PQ size diamond drilling to gather metallurgical and geotechnical in 8 drill holes along a 2km strike length.
- RC drilling by McKay Drilling recently completed 63 RC drill holes for 5,955m from 27 March to 23 April 2015
- Magnetite mineralisation, which hosts both vanadium and titanium minerals was intersected in 59 holes, with 3 holes being drilled as diamond pre-collars
- All RC samples have been delivered to a laboratory in Perth for analysis and results are expected in the coming weeks.
- Upon completion of the entire drilling program and receipt of all assay results, metallurgical samples with be selected from the RC samples and diamond core for beneficiation and roast/leach test work.
- Updated resource estimation and pit optimisation/mining studies will commence on receipt of all assay results.

06 05.2015

### **ASX ANNOUNCEMENT**

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# **Projects:**

Gabanintha Vanadium Gabanintha Gold, Copper Nowthanna Uranium Northern Territory Uranium



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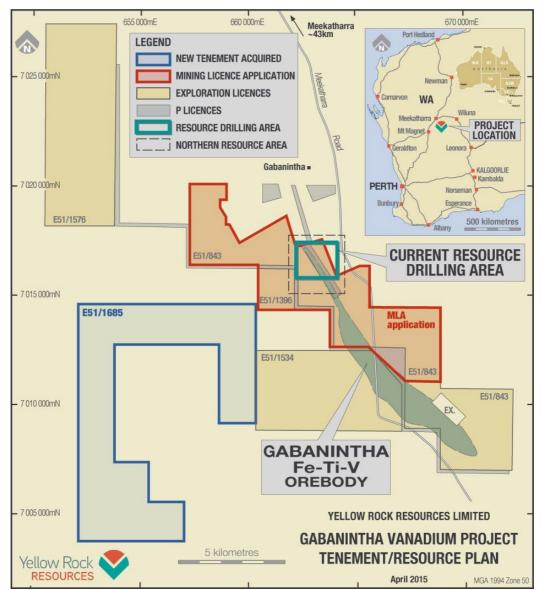


Figure 1: Plan view of the Gabanintha Vanadium Project showing the vanadium resource drilling area.

# **Diamond Drilling Program Commences at Gabanintha**

Yellow Rock has commenced the diamond drilling phase of the resource drilling program currently underway at the Gabanintha Vanadium Project in the Murchison District of Western Australia (See Figure 1). The commencement of the program follows the successful completion of the 63 hole, 5,955m RC drilling component of the program. Drilling intersected the vanadiferous, titaniferous magnetite horizons in 59 of the 63 RC holes drilled, with three holes being RC pre-collars preceding diamond drill holes to be drilled in the current program.

The diamond drilling being conducted is large PQ size core, which will allow for representative samples and data to be collected for;

- Geotechnical logging and rock strength measurements (used in the determination of ground conditions and pit stability estimates)
- Structural measurements
- Geological and mineralisation domain assessment
- Metallurgical sampling and test work.
- Twin holes for selected RC drill holes for validation purposes

The diamond program will consist of 8 drill holes for a total of 789m, drilled at even spacing along the 2km length of the current program. Figure 2 below shows a plan of the historical RC and diamond drilling, new RC drilling and planned diamond drill collars.

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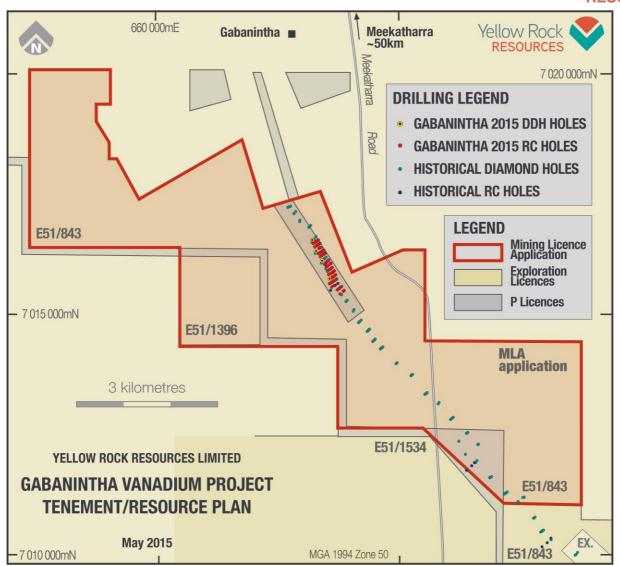


Figure 2 Location diagram showing current program RC drilling, historical and planned diamond drilling locations at Gabanintha

The objectives of the RC and diamond program are to increase the level of geological and resource detail on a 2 kilometre section of the Gabanintha vanadium deposit. The key objectives of the program being as follows:

- o to improve and increase the Resources at the Gabanintha Vanadium Project including the generation of an updated Mineral Resource Estimate;
- o to increase geological definition of the resources including understanding of the oxide, transitional and fresh zones at Gabanintha;
- o to conduct a series of detailed metallurgical tests on sampling of mineralisation domains to allow definitive processing studies to commence.

The zone to be drilled represents approximately 16% of the current resource strike length with significant opportunities for further infill drilling of the current Inferred Mineral Resource<sup>1</sup> of 125 Mt @ 0.70% V2O5, 8.64%TiO2, and 32.6% Fe including a separate High Grade Indicated and Inferred Resource of 60.4Mt @ 0.98% V2O5, 11.4% TiO2 and 42.15% Fe.

<sup>&</sup>lt;sup>1</sup> Details of the current Resource Estimate for Gabanintha are contained in this release. The information that refers to 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 reported to ASX on 8<sup>th</sup> February 2011.



Upon completion of the entire RC and diamond drilling program and the receipt of all assay information, samples will be selected for metallurgical testing which will address beneficiation and roast/leach characteristics of the various mineralised horizons and allow open pit optimisation studies and ore characterisation to begin.

The Company is aiming to develop its vanadium resource to supply a high quality  $V_2O_5$  flake product to the steel market and the emerging Vanadium Redox Battery (VRB) market.

## **Vanadium Market Developments**

Yellow Rock has initiated a series of high level studies and is actively engaging with key players in the Vanadium Redox Battery market. Research by the Company indicates that rapid acceleration in the development of renewable energy projects on a global scale is being accompanied by rapidly growing interest in the emergence of grid storage technologies. One of the strongly emerging technologies is the Vanadium Redox Flow Battery or VRB. The uptake of VRB technology along with other grid storage technologies could have a significant effect on the vanadium ( $V_2O_5$ ) market as the use of  $V_2O_5$  electrolyte is a large component (50% of current cost) of the battery units.

The unique characteristics of VRB's, specifically their scalability, long lifespan cycles and the use of one battery element, make them a strong candidate to earn up to 30% of the growing energy storage market, which is expected to grow from a current 0.4GW to 40GW in just the next 7 years.

Yellow Rock, as a potential vanadium producer, recognises the importance of the steel markets, but is also actively seeking to link the use of its products to the rise of this globally significant use vanadium battery technology.

In the steel market, A vanadium supply restriction is likely after a major producer, Evraz Highveld Steel, placed the South African business into "Business Rescue", a precursor state to Voluntary Administration. Highveld Steel produces a significant percentage of global vanadium for use in steel markets. This adds to the ongoing frozen Windimurra Mine production from Australia.

Yellow Rock recently attended the annual Vanitec (vanadium producers organization, www.vanitec.org ) meeting in South Africa.

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## **Investor Coverage**

Recent news on the Company activities can be found on the Yellow Rock Resources website: www.yellowrock.com.au

### **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 vanadiferous, titaniferous magnetite bands ranging in width 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 identified over 12km along strike, outcrops at surface and is largely continuous. Over 19,000m of drilling has been conducted on the deposit comprising reverse circulation (RC) holes and diamond (DD) holes. A JORC 2004 Compliant Mineral Resource Estimate was compiled in 2011 (Table below).

The Company's previously reported the results of a Concept Engineering Study (see ASX announcement of 15 September 2014) into the development of an open cut vanadium mine at Gabanintha that planned to mine, beneficiate and process ore to produce vanadium pentoxide flake and plans to update the study parameters during the course of 2015.

Recent developments in vanadium redox battery technology for grid-scale energy storage with improved vanadium market demand fundamentals underpin the current work programs. 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%	TiO <sub>2</sub> %	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
	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
	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.

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### **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 and is the Non-Executive Chairman of Yellow Rock Resources Limited. Mr Davis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is 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'.

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.

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