ASX / MEDIA ANNOUNCEMENT **15 September 2014**

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Projects:

Gabanintha Vanadium

Gabanintha Gold, copper

VANADIUM CONCEPT STUDY DEMONSTRATES POTENTIAL FOR SIGNIFICANT PRODUCTION

Estimated Cost of Production is Competitive

KEY HIGHLIGHTS

- Concept Study indicates Gabanintha is a technically low risk and long life (+20 years) vanadium project
- Estimated C1 cash operating cost[1] of A$7.26/kg (A$3.29/lb) vanadium pentoxide could position Yellow Rock as a competitive open pit producer
- Estimated capital cost to first production of A$230 million including A$18.5 million of contingency to direct costs
- 2.1 mtpa throughput plant resulting in average annual vanadium production of 10,000 tpa
- A lower production rate scenario of 5,000 tpa and lower capital requirements warrants further evaluation
- Production of high-purity (+98.5% V_2O_5 Flake) via open pit mining, feed preparation/beneficiation and a salt roast-leach extraction process is well understood and commonly available technology. Higher purity at >99% V_2O_5 is also expected to be achievable
- The Gabanintha Vanadium Deposit can be considered as high grade on a global basis compared to existing producing and potential projects
- Infill drilling and selective resource estimation techniques to better define high grade vanadium zones within the current Gabanintha JORC-2004 Mineral Resource Estimate have the potential to improve project economics.

CONCEPT STUDY PARAMETERS – CAUTIONARY STATEMENT

The Concept Study in this report (nominal +/- 50% accuracy) is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the current conclusions of the Concept Study will be realised. There is a low level of geological confidence associated with Indicated and Inferred Mineral Resources and there is no certainty that further exploration and development work will result in the estimation of Ore Reserves or that the production target

itself will be realised. The Company advises the Concept Study results and production targets reflected in this announcement are highly preliminary in nature as conclusions are drawn from the average grade of Indicated and Inferred Resources. A generic mining cost per tonne of material moved and an average resource grade has been used to determine overall mining and processing costs as opposed to a detailed mining block model evaluation to produce a detailed mining schedule.

The Company has concluded it has a reasonable basis for providing the forward looking statements included in this announcement. The detailed reasons for that conclusion are outlined throughout this announcement and in particular in the Appendix B – Statements, headed "Forward Looking and Cautionary Statements".

SUMMARY

Yellow Rock Resources Limited (ASX: YRR) ("Yellow Rock" or "the Company") is pleased to report the completion of a concept engineering study for the generation of vanadium pentoxide (V_2O_5) from the 100% owned Gabanintha Vanadium Project in Western Australia (*see ASX announcement dated 24 July 2014)*.

The study was compiled by independent Perth-based process engineering consultancy group Battery Limits Pty Ltd with the assistance of a number of mining and industry consultancy groups and Yellow Rock personnel. It highlights the technical and economic potential of the Gabanintha deposit to support an open pit mining and processing operation to produce V_2O_5.

The Study considered a number of mine production, grade and processing rate scenarios to determine the most economically robust combinations on which to use as a basis for further economic and technical evaluation. A key outcome of the study was to define the parameters of an economic project given the high grade nature of the Gabanintha Mineral Resource.

The Company believes there is significant potential within the existing resource to increase the estimated grade of high grade mineralisation domains by completing targeted infill drilling and utilising selective modelling techniques. The current Mineral Resource Estimate is based on geological data from 164 holes comprising 13,124m on an along strike drill spacing of between 100m – 500m (Figure 1).

Currently the best option for a commercially attractive operating and capital cost combination based on limited financial assessment is to produce 10,000 tpa of high-purity +98.5% V_2O_5 Flake via open pit mining and a salt roast-leach extraction process. The capital cost of this option is estimated to be A$230 million with an estimated C1 operating cost of A$7.26/kg (A$3.29/lb) vanadium pentoxide.

The capital cost includes an average contingency of 8.8% of direct costs which has been applied on an equipment item by item basis. A further nominal $20 M has been added for mine pre-strip capital in the financial assessment. The assumed price used to economically evaluate the project is a flat non-escalated A$15/kg (A$6.80/lb) against the current price of ~A$15.40/kg (~7.00/lb). Key outcomes are shown in Table 1.

The average operating cost of vanadium mining producers globally is estimated to be ~A$9.72/kg (~A$4.40/lb).

Item	**Units**	**Case**
V_2O_5 Production	Tpa	10,000
V_2O_5 Feed	%	1% V_2O_5 Bene
Feed Rate	Tpa	2,100,000
Capital Cost Estimate	A$ M	$230 M
Op Cost Estimate	A$/kg V_2O_5	7.26
Concept Study Price Used	A$/kg V_2O_5	15.00
Current V_2O_5 Price	A$/kg V_2O_5	15.40

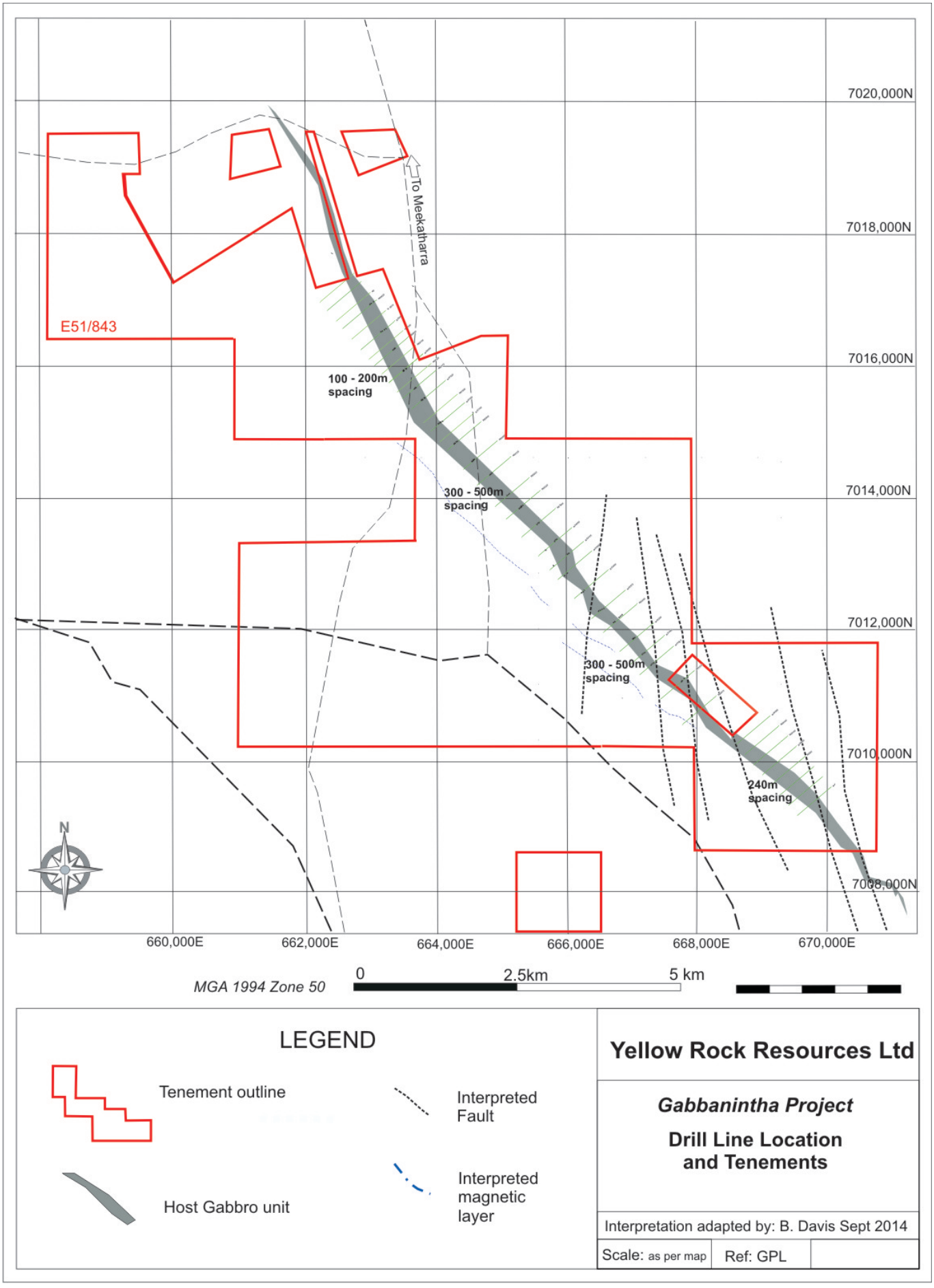

Figure 1: Plan view of the Gabanintha Vanadium Project showing the mineralised gabbro host unit and vanadium resource drilling lines.

A 5,000 tpa case without beneficiation demonstrated a lower capital cost with higher operating costs which requires further economic evaluation. At this stage the Company is of the opinion that the optimum potential development production rate will be in the range of 5,000 to 10,000 tpa.

Yellow Rock CEO, Lorry Hughes said "The concept engineering study results indicate the Gabanintha deposit could support a significant vanadium mine for in excess of 20 years. There are a number of areas that the study has identified that require follow-up development work however I consider the results to be highly encouraging.

"There is a good opportunity to identify higher grade zones within the existing resource with infill drilling and utilise selective modelling techniques to define them more accurately. Any improvement in the resource grade is likely to positively impact the project by allowing lower production rates and therefore a lower capital expense project to be more attractive. There are mines in production and development that have significantly lower vanadium grades than Yellow Rock has at Gabanintha."

"The Study team decided to evaluate the production of vanadium pentoxide flake as a product that can be sold into the majority of end-user markets which has the effect of broadening the size of this market. Most vanadium is consumed in the global steel alloy industry with about 9% used in the chemical, titanium alloy and redox battery markets. By producing vanadium pentoxide flake there is potential to sell to companies that convert vanadium pentoxide to ferrovanadium" he added.

NEXT STEPS

Near term follow-up work programs are in the advanced planning stages on the back of concept study results and are expected to include database improvements, drilling, baseline environmental data capture and initial stakeholder liaison. Key activities will include;

- Combination Reverse Circulation and Diamond drilling to;
  - Target higher grade near surface mineralisation zones;
  - Improve geological definition of the oxide, transitional and primary ore zones;
  - Undertake an updated geological resource estimate;
  - Undertake further more comprehensive metallurgical testwork for material to be beneficiated;
  - Provide samples for potential strategic investor testing;

- Development of an initial mining schedule and updated cost estimates;

- Financial testing analysis of combinations of feed grade and ore types in conjunction with mining costs and metallurgical recoveries to define the optimum project size and configuration;

- Vanadium market research to provide confidence in the tonnage of V_2O_5 products that can be supplied to market.

For further information, please contact:
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APPENDIX A - DETAIL

MINING AND FEED PREPARATION

The project would involve contract open pit mining and crushing of vanadium-titanium-iron ore and focus on high grade near surface zones from within the resource. The contractor would drill, blast and deliver to a stockpile. For the study a waste to ore strip ratio of 1:1 has been used with a mining cost of $10/t.

Ore will then be crushed and ground prior to magnetic separation, producing a concentrate which is then filtered prior to being fed to the roast leach plant.

PROCESSING

The crushed ore is to be mixed with a sodium salt (preferably soda ash) and fed to a rotary kiln operated at ~1,000^{o}C with a retention time in the hot zone for two hours. Solubilisation of vanadium as sodium meta-vanadate ($NaVO_3$) between 85-90% can be expected.

The roasted vanadium salt discharging from the kiln will be cooled to ~300^{o}C and passed to a regrinding mill at an assumed p80 106 micron. The slurry will be discharged into the 1st tank of the atmospheric leach circuit (ATL) at ~50% w/w solids.

The ATL is comprised of a cascade of three stirred tanks operating at 30-40^{o}C for a nominal retention time of two hours. Assumed extraction is 85-90% of vanadium from the ore. Vanadium concentration up to 50 g/L can be expected.

Discharge slurry from the ATL circuit would be fed into a 6-stage Counter Current Decantation (CCD) circuit where residue is washed using recycled water to separate the pregnant leach liquor from the leach residue. In each CCD stage, the incoming thickener underflow would be diluted with recycled thickener overflow to reduce the pulp density to about 5% (w/w) solids before pumping to a flocculant contact tank adjacent to the thickener feedwell. Dilute flocculant solution is to be added to the contact tank to aid settling.

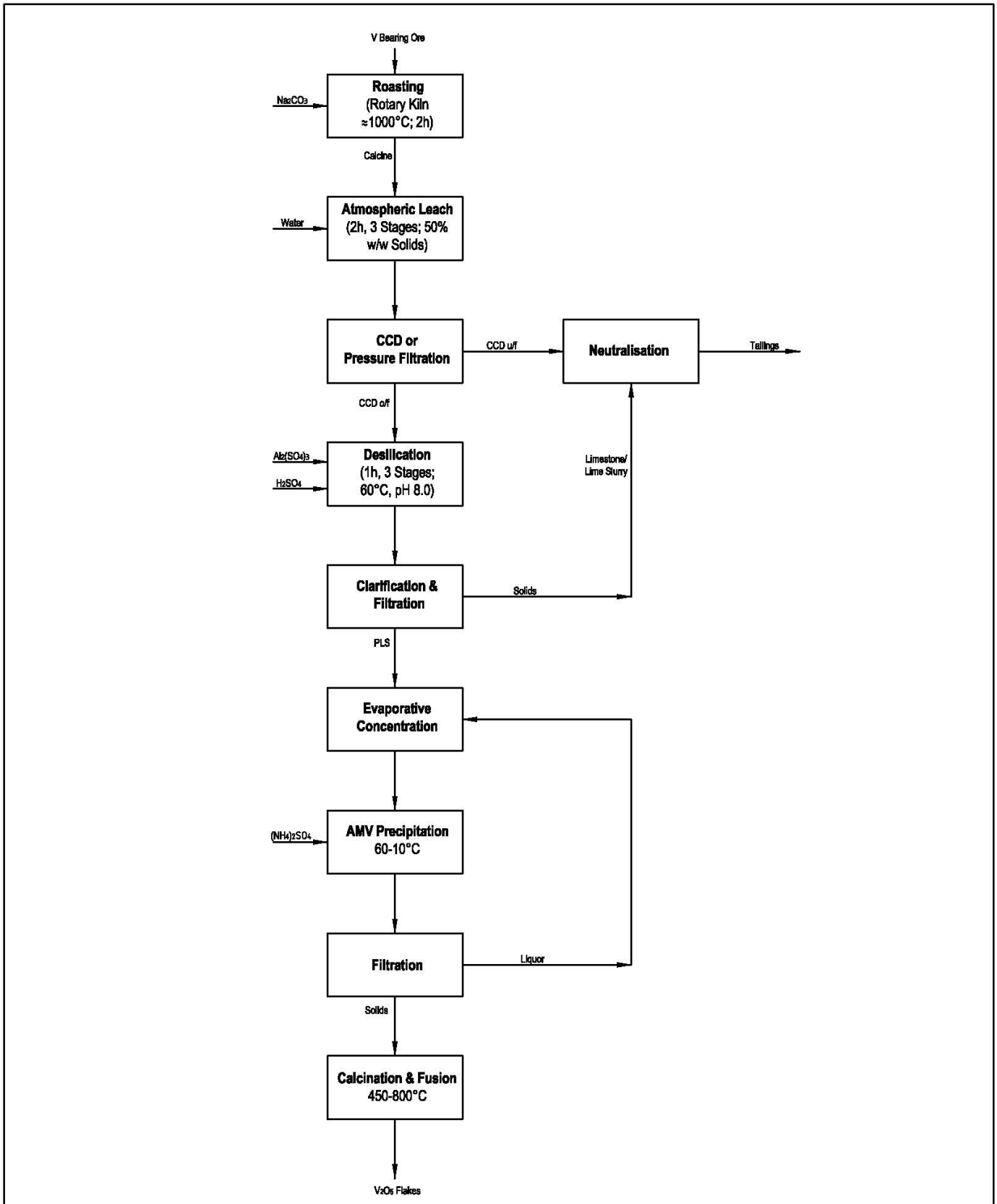
CCD1 overflow proceeds to the desilication circuit whilst CCD6 underflow reports to the Tailings Neutralisation circuit. Alternatively, a pressure filtration circuit may be employed for the solid liquid separation.

The desilication circuit includes three stirred tanks in a cascade to provide an overall retention time of one hour at 60°C. In this circuit, aluminium sulphate is to be added in order to reject silica as sodium aluminosilicate. A dilute aluminium sulphate solution is to be dosed into Tank 1, at a stoichiometric ratio to the silica tenor in the feed at a molar ratio of Al:Si at 1.2:1 (assumption). A diagrammatic summary of the study flowsheet is included as Figure 2.

Desilication discharge is to be advanced to a clarifier where coagulant and flocculant will be added to improve the clarity. The clarifier overflow can be introduced to a polishing filter whilst the underflow is to be forwarded to a pressure filter.

To assure a high recovery of ammonium meta vanadate (AMV) precipitation, it is desirable that the desilicified pregnant leach solution to be concentrated up to 90-100 g/L V_2O_5.

AMV is to be precipitated from the solution obtained from the Evaporative Concentration step by adding ammonium sulphate solids to the solution under controlled conditions. The circuit requires at least six stages, two operating at 60°C, where ammonium sulphate is added with pH controlled at ~8.5 with concentrated H_2SO_4 with a retention time of two hours. (Assumption NH^{4+}:V molar ratio of 2.0).



No	BY	DATE	REVISION DETAILS	CHKD	APPR
A	ER	28.08.14	PRELIMINARY ISSUE		

DRAWN	E RITTER	28.08.14
CHECKED		
DESIGNED	P HEARSE	28.08.14
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CLIENT: YELLOW ROCK RESOURCES

TITLE: GABANINTHA PROJECT
V205 PROCESSING FLOWSHEET

SCALE: NTS
ALL DIMENSIONS IN MILLIMETRES
SIZE: A3
REV No: A
DRAWING No: 201410-BF-001

Figure 2: Concept Engineering Study flowsheet for vanadium pentoxide production for the Gabanintha project.

The other four stages are to be equipped with chillers to drop the temperature down to 10 °C gradually with seeding to encourage precipitation and crystal growth. Assume four hours retention time and the V_2O_5 recovery of 99%. AMV crystals will be recovered by filtration. (AMV can also be sold to chemical customers or subject to further processing as is the case assumed for this study).

The production of V_2O_5 flakes from AMV is achieved in a kiln fired at 650-750 °C. Ammonia is driven off at about 450°C and then fused to produce V_2O_5 flakes at ~750°C. (V_2O_5 flakes can be used as the starting product in the preparation of electrolytes for vanadium redox batteries and sold to chemical customers or converters for further processing to ferrovanadium).

CAPITAL COSTS

A summary of processing capital cost estimates are shown in Table 2. The capital cost includes an average contingency of 8.8% of direct costs which has been applied on an equipment item by item basis. A further nominal $20 M has been added for mine pre-strip capital in the financial assessment. The total pre-production capital cost is ~A$230 M.

Description	1% V_2O_5 Beneficiation 10,000 tpa
Plant Site Bulk Earthworks	3,227,087
Primary Crushing	8,436,646
Stockpile and Reclaim	1,321,696
Grinding	10,400,686
Magnetic Separation and Filtration	6,374,883
Roaster	47,606,249
Atmospheric Leach	931,730
Leach Residue Filtration	4,594,241
Desilication and Solution Clarification	1,933,691
Evaporation and Crystallisation	18,105,335
Calcination	21,328,603
Reagent Mixing and Distribution	896,682
Tails Thickening and Disposal	4,398,110
Plant and Instrument Air	290,050
Plant Water and Services	1,563,438
Sewerage Treatment	200,758
Fuel Storage and Distribution	864,604
Administration Buildings	757,919
Workshops and Stores	765,218
Laboratory	764,361
Power Supply and Reticulation	14,077,226
Communications	608,598
Mobile Fleet	3,062,011
Process Plant Piping	14,166,344
Borefield and Raw Water Supply	4,394,032
Potable Water Supply	217,522
Access Road	1,023,971
Construction Equipment	6,552,648
TOTAL Direct Costs	**178,864,339**
EPCM	24,551,552
Commissioning	1,636,770
Initial Fills	111,720
Spare Parts	4,910,310
Temporary Facilities	481,491
TOTAL Indirect Costs	**31,691,843**
TOTAL CAPITAL ESTIMATE	**210,556,183**

Table 2: Capital Cost Estimate Summary (A$)

OPERATING COSTS

A summary of total operating cost estimates are shown in Table 3. Mining costs are estimated at $10/t ore mined at a waste to ore ratio of 1:1. Freight costs are estimated at $150/t product and General and Administration are included in operating costs.

Parameter	Units	Case
V_2O_5 Production	**tpa**	**10,000**
V_2O_5 Feed	**%**	**1% V_2O_5 Bene**
Feed Rate	tpa	2,100,000
Mining Cost	A$/kg V_2O_5	2.00
Processing	A$/kg V_2O_5	5.11
Freight to Market	A$/kg V_2O_5	0.15
Total	**A$/kg V_2O_5**	**7.26**
Annual Operating Cost	**A$**	**72,600,000**

Table 3: Total Operating Costs Estimate Summary (A$)

A summary of processing operating costs are shown in Table 4.

Parameter	Units	Case
V_2O_5 Production	**tpa**	**10,000**
V_2O_5 Feed	**%**	**1% V_2O_5 Bene**
Feed Rate	tpa	2,100,000
Labour	A$/kg V_2O_5	0.90
Power	A$/kg V_2O_5	0.02
Reagents	A$/kg V_2O_5	2.69
Consumables	A$/kg V_2O_5	0.15
Maint Materials	A$/kg V_2O_5	1.17
G & A	A$/kg V_2O_5	0.18
Total	**A$/kg V_2O_5**	**5.11**

Table 4: Processing Operating Costs Estimate Summary (A$)

[1]Estimated C1 cash operating cost

Estimated C1 cash operating cost is are as defined in Table 3 and 4. Only site based General and Administration is included.

APPENDIX B - STATEMENTS

Forward Looking Statements

This announcement contains certain forward looking statements. The words "expect", "forecast", "should", "projected", "could", "may", "predict", "plan" and other similar expressions are intended to identify forward looking statements. Indications of, and guidance on, future earnings, cash flows costs and financial position and performance are also forward looking statements. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statement about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results or trends to differ materially. These variations, if materially adverse, may affect the timing or the feasibility of the development of the Gabanintha project.

The Company believes it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any production targets, based on the information contained in this announcement.

Competent Person Reference

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 mineralisation 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.

The information in this statement that relates to ore processing and vanadium pentoxide production is based on information compiled by independent process engineering company Battery Limits Pty Ltd (BatteryLimits). Mr Phil Hearse, Managing Director of BatteryLimits, is the Competent Person for the purpose of this release with regard to the processing aspects. Mr Hearse (B App Sc Prim Met) (MBA) is a metallurgist with 40 years' experience. He is a Fellow of The Australian Institute of Mining and Metallurgy. Mr Hearse 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 JORC Code.

Mr. Hearse 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.

Cautionary Statements

The Company advises the Engineering Concept Study results and Production targets reflected in this announcement are preliminary in nature as conclusions are based on lower-level technical and economic assessments and are insufficient to support Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Engineering Concept Study will be realised. There is a lower level of geological confidence associated with mineral resources and there is no certainty that further exploration work will result in the determination of Measured mineral resources or that the production target itself will be realised.

Resource Statement

JORC 2004 Mineral Resource Estimate by CSA (4 February 2011)

Material	JORC Resource Class	Million tonnes	In situ bulk density	V_2O_5 %	Fe%	TiO_2 %	SiO_2 %	Al_2O_3 %	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 0.3% V_2O_5 for Low Grade (LG) and 0.7% V_2O_5 for High Grade (HG). Tonnages have been rounded to reflect that this is an estimate.*

The Company has completed an annual review of the Gabanintha Vanadium Resource and concluded that at this time, during a Concept Engineering Study, there is no immediate requirement to update or revise the Gabanintha Resource Estimation since there has been no material change to the database since the last estimation. There is insufficient data generated on the vanadium ore body since 2011 to add to the current knowledge. On completion of the Concept Engineering Study further drilling of the resource will be planned to generate material for metallurgical testing and possibly upgrading the category of the resource in certain areas. Recent drilling has concentrated on gold and copper exploration on the eastern areas of the Gabanintha tenements, away from and not connected to, the vanadium resource.

Mineral Resources & Reserves Governance

Yellow Rock has appropriate systems in place and suitably qualified and competent geological consultants to complete any resource estimation or review to the required standards as shown in the 2012 JORC Code Guidelines. The Quality Assurance, Sampling Systems, Assay Procedures, Data Recording, Interpretation Standards and Resource Estimation Methods and other parameters as set out in Table 1 of the JORC Code 2012 Guidelines are closely followed. The Company policy is that all steps are recorded during the resource drilling program and then the estimation stage. All results from field logs and assays to database entries and modelling data are validated, reviewed and checked by independent and qualified geological personnel.

However, the current resource was completed under the 2004 guidelines and, since there has been no additional data added, this resource has not yet been revised with reference to the JORC Code 2012 Guidelines.

The Company will report any future Mineral Resources and Reserves Estimates in accordance with the JORC Code 2012.