

ASX RELEASE

5 September 2013

Barrambie Mineral Resource Estimate

HIGHLIGHTS

- Mineral Resource estimate report confirms Barrambie as one of world's highest grade titanium deposits at 22% TiO₂.



Figure 1 Location Plan

Reed Resources Ltd (ASX: RDR) ("Reed") is pleased to report an updated Mineral Resource estimate for its Barrambie deposit adopting a titanium based cut-off grade. This reflects a change in process route to primarily recover titanium rather than vanadium which previous reports were based on.

The Mineral Resource estimate contains total **Indicated and Inferred Mineral Resources of 47.2Mt at 22.2% TiO₂, 0.63% V₂O₅, and 46.7% Fe₂O₃**, at a cut-off grade of 15% TiO₂ (Table 1).

Barrambie is the world's second highest grade hard-rock titanium deposit (Figure 3). Test work has produced 99.9% TiO₂ direct from ore at recoveries in excess of 90%.

Table 1 Barrambie Resource Table for 15% TiO₂ cut-off (Attachment 1)

Category (JORC, 2004)	Tonnage (Mt)	TiO ₂ (%)	V ₂ O ₅ (%)	Fe ₂ O ₃ (%)	Al ₂ O ₃ (%)	SiO ₂ (%)
Indicated	34.7	22.25	0.64	46.77	9.48	14.95
Inferred	12.5	21.99	0.58	46.51	9.32	15.40
Total	47.2	22.18	0.63	46.70	9.44	15.07

All tonnage and grade figures have been rounded down to two or three significant figures, respectively; slight errors may occur due to rounding of values.



Snowden Mining Industry Consultants Pty Ltd ("Snowden") performed the Mineral Resource estimate in 2009 and has provided Reed with revised reports using a TiO_2 cut-off. The estimate includes assay results from 782 RC and 36 diamond drill holes drilled by Reed in 2007 and 2008. The Resource is reported by weathering type ('oxide', 'transitional' and 'fresh') and Resource classification at a cut-off grade of 15% TiO_2 (explanatory notes are provided in Attachment 1).

The Resource has been modelled to the limit of drilling of approximately 60 metres below surface, and remains open at depth and along strike (Figure 2). The depth limit of 60 metres has been applied as this is the planned depth for initial open pit mining of the deposit.

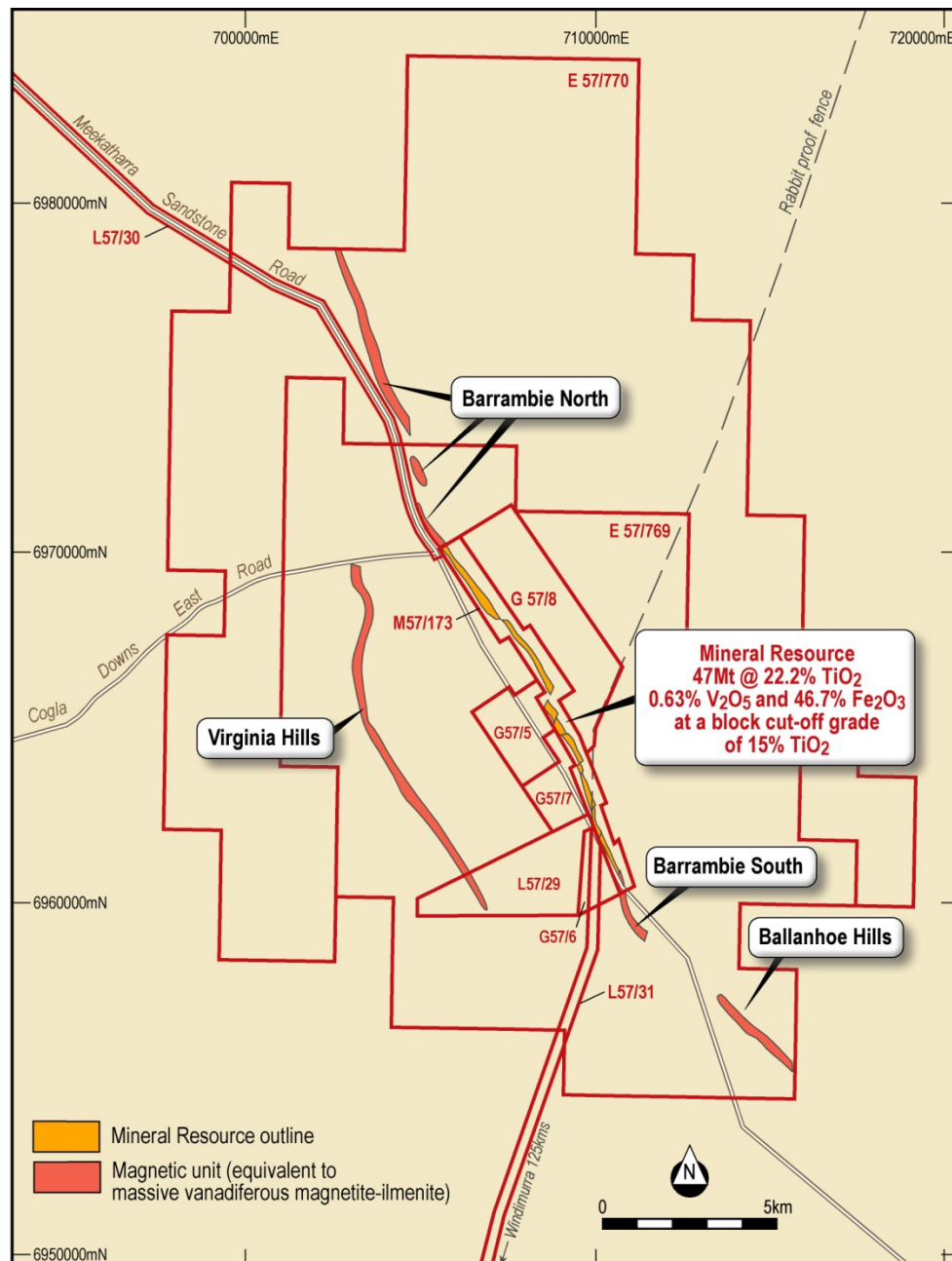


Figure 2 Plan of the Barrambie Titanium project showing an outline of the Mineral Resource within M57/173. Distribution of titanomagnetite mineralisation along strike and to the west of Barrambie is based on interpretation of aeromagnetic survey data.

Australia's Highest TiO₂ Grade and the World's 2nd Highest Grade Ti Deposits

Project	Location	Owner	Tonnage (Mt)	Grade (% Fe)	Resources		Fe / TiO ₂ Ratio
					Grade (% TiO ₂)	Grade (% V ₂ O ₅)	
Lac Tio	Quebec, Canada	Rio Tinto Fer et Titane	125	39%	34%	0.41%	1.2x
Barrambie	Meekatharra, WA	Reed Resources	47.2	33%	22%	0.63%	1.4
La Blanche	Quebec, Canada	Argex Mining	44	44%	19%	0.44%	2.3x
Tellnes	Rogaland, Norway	Titania AS (Kronos)	400	?	18%	?	?
Balla Balla	Pilbara, WA	Forge Resources	456	45%	14%	0.66%	3.2x
Various	Sichuan, China	China VTM Mining	419	25%	10%	0.21%	2.5x
Gabiantha	Meekatharra, WA	Yellow Rock Resources	126	32%	9%	0.70%	3.6x
Iron-T	Quebec, Canada	Apella Resources	14	27%	7%	0.42%	3.9x
Mt Peake	Arunta, NT	TNG	160	22%	5%	0.27%	4.4x
Speewah Dome	Kimberley, WA	Speewah Metals	4,712	15%	3%	0.30%	4.6x
Windimurra	Mt Magnet, WA	Atlantic Limited	243	?	?	0.48%	?

Source: Intierra (Aug 2013)

Figure 3 Global titanium project benchmarking (Source: Intierra August 2013).

ENDS

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Competent Persons Statement

Information in this report that relates to Mineral Resources is based on information compiled by Mr Andrew Ross, a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), and Dr Bryan Smith a Member of the Australian Institute of Geoscientists (AIG).

Mr Andrew Ross, Senior Principal Consultant, is employed by Snowden and compiled the resource estimate report. Mr Ross has sufficient experience 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 Ross consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Dr Bryan Smith (Bryan Smith Geosciences), employed as a consultant geologist by Reed Resources Ltd, has compiled and provided drilling results and geological interpretations for Mineral Resource estimates. Dr Smith has sufficient experience 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". Dr Smith consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Attachment 1. Notes to accompany Mineral Resource estimates:

1. Resource estimation has been completed by Snowden Mining Industry Consultants Pty Ltd ("Snowden") using the geology, weathering, mineralisation interpretations, drilling and density data supplied by Reed Resources Ltd ('Reed').
2. The reported tonnages and grades are in accordance with the guidelines and recommendations of the JORC Code (December 2004).
3. The resource estimate is based on 796 reverse circulation (RC) and 41 diamond drillholes; of these, 782 RC and 36 diamond drill holes were drilled by Reed in 2007 and 2008. Snowden has reviewed the drilling and sampling database underlying the resource estimate and has undertaken an analysis of the available QAQC data. Snowden believes that the drilling data is of sufficient quality to support the resource classifications applied to the Barrambie Mineral Resource estimate
4. Assay determinations were carried out by XRF analysis, as outlined in previous announcements (2 March, 4 April, 1 May, 14 June and 23 July 2007), except for four early diamond drillholes which used AAS.
5. Variograms were developed and interpreted by Snowden to define the observable spatial characteristics of the TiO_2 , V_2O_5 , Fe_2O_3 assay grades.
6. Block grades were interpolated into a 3D block model with a block size of 10 mE by 40 mN by 5 mRL, and a minimum subcell resolution of 0.25 mE by 10 mN by 1.25 mRL.
7. Ordinary block kriging was used to estimate TiO_2 , V_2O_5 , Fe_2O_3 , Al_2O_3 and SiO_2 grades into the block model reflecting the interpreted mineralised zones and the interpreted structural regime. Where appropriate, grade capping was applied prior to estimation. Search ellipses and ranges used in the estimation reflect the spatial continuity and the mineralisation trends of the mineralised domains.
8. Densities were applied to the block model using multiple regression equations with Fe_2O_3 , Al_2O_3 and SiO_2 derived from density measurements taken from diamond drill core. There were a total of 86 diamond drill core samples taken for density measurements. The average densities of the blocks for the Indicated and Inferred resource at the 15% TiO_2 cut-off grade are 2.83 t/m³ for 'oxide', 3.46 t/m³ for 'transitional' and 3.76 t/m³ for 'fresh'.
9. The drill spacing at Barrambie is predominantly 100 m X 25 m and the along strike maximum grade continuity range for TiO_2 in the Eastern and Central bands is 200 m. Mineralised zones where the drill spacing is 100 m by 25 m have been classified as Indicated Resources, except in some areas where kriging variance has identified lower confidence grade extrapolation. These areas are included in the Inferred Resources.

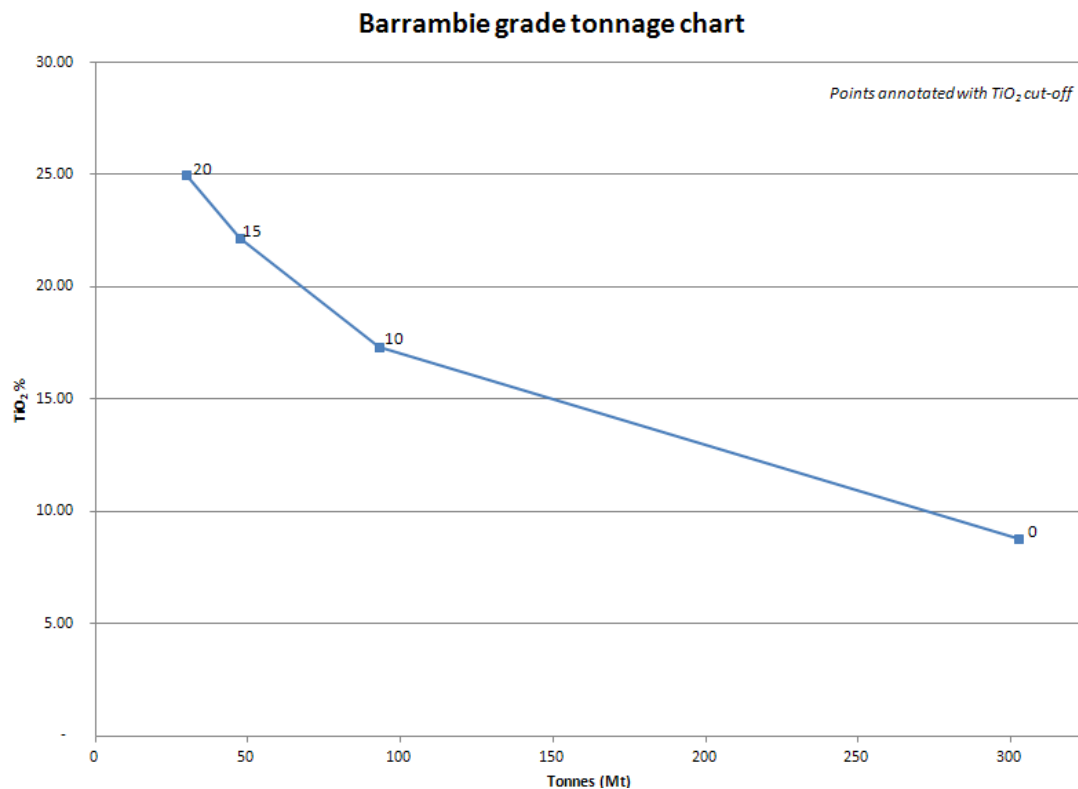
10. Mineralised zones that have been extrapolated below the base of drilling are classified as Inferred Resources, and the extrapolated portion of the resource below the base of drilling constitutes 67% of the Inferred Resource tonnes.
11. Snowden's recommended resource classification is based upon a number of criteria, including the geological confidence, the integrity of the data, the spatial continuity of the mineralisation as demonstrated by variography, and the quality of the estimate.

Mineral Resource estimates for the Barrambie Ti-V deposit, as at September 2013, for a block cut-off grade of 15% TiO₂

Classification	Zone	Oxidation	MTonnes	Density	TiO ₂	V ₂ O ₅	Fe ₂ O ₃	Al ₂ O ₃	SiO ₂
				(t/m ³)	(%)	(%)	(%)	(%)	(%)
Indicated	Eastern	Oxide	18.7	2.82	23.29	0.59	42.93	10.70	16.36
		Transition	8.7	3.52	23.11	0.61	50.80	7.34	12.99
		Fresh	2.4	3.85	21.77	0.56	52.90	5.99	12.84
		Sub-total	29.8	3.10	23.11	0.60	46.02	9.35	15.10
	Central	Oxide	3.5	2.95	16.84	0.92	49.82	11.06	14.91
		Transition	1.3	3.50	17.39	0.89	54.76	8.49	12.15
		Fresh	0.1	4.04	15.59	0.88	59.93	7.22	10.96
		Sub-total	4.9	3.12	16.95	0.91	51.40	10.28	14.08
	Total		34.7	3.11	22.25	0.64	46.77	9.48	14.95
	Inferred	Eastern	Oxide	2.6	2.71	20.88	0.48	40.00	12.20
Transition			3.3	3.29	23.04	0.59	47.51	8.62	14.45
Fresh			5.5	3.71	22.82	0.57	47.50	8.39	14.57
Sub-total			11.4	3.36	22.44	0.55	45.78	9.33	15.65
Central		Oxide	0.1	3.07	16.64	0.98	53.63	9.96	13.33
		Transition	0.4	3.47	18.36	0.86	54.15	8.79	12.43
		Fresh	0.7	3.86	17.30	0.91	53.48	9.44	13.17
		Sub-total	1.2	3.64	17.55	0.90	53.71	9.30	12.96
Total		12.5	3.38	21.99	0.58	46.51	9.32	15.40	
Grand Total		47.2	3.18	22.18	0.63	46.70	9.44	15.07	

Zone	MTonnes	Density (t/m ³)	TiO ₂ (%)	V ₂ O ₅ (%)	Fe ₂ O ₃ (%)	Al ₂ O ₃ (%)	SiO ₂ (%)
Oxide (Indicated +Inferred)	24.9	2.83	22.11	0.63	43.64	10.90	16.46
Transition (Indicated +Inferred)	13.6	3.46	22.44	0.64	50.46	7.80	13.25
Fresh (Indicated + Inferred)	8.7	3.76	21.99	0.60	49.65	7.78	13.93

All tonnage and grade figures have been rounded down to two or three significant figures, respectively; slight errors may occur due to rounding of values.



About Reed Resources

Reed Resources Ltd (ASX: RDR, OTC: RDRUY) is a Western Australian resource developer.

Reed Resources' American Depositary Receipts (ADR's) trade under the code RDRUY (CUSIP Number: 758254106). Each Reed Resources ADR is equivalent to 10 ordinary shares of Reed Resources as traded on the ASX. The Bank of New York Mellon is the depository bank.

Website: www.reedresources.com