



29 April 2011

## ACTIVITIES REPORT FOR THE QUARTERLY PERIOD ENDED ON 31 MARCH 2011

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### GABANINTHA VANADIUM PROJECT

#### Highlights:

- A revised Mineral Resource for the Gabanintha project prepared by CSA Global Pty Ltd ("CSA").
- Compared to the previous resource estimate, this Mineral Resource has seen a significant improvement in grade for the main target commodities V<sub>2</sub>O<sub>5</sub> (0.6 up to 0.7%), Fe (29.5 up to 32.3%) and TiO<sub>2</sub> (7.8 up to 8.6%), with a reduction in tonnes from 151.2Mt down to 125.8Mt.
- Based on a review of all available data, the Mineral Resource has been classified as Indicated Resources and Inferred Resources and delivers a more realistic estimate for the deposit.

#### Gabanintha Project

The Gabanintha titaniferous – vanadiferous magnetite deposits are located in the Murchison Province of Western Australia. The project consists of five leases located 43 kilometres south east of Meekatharra via the Great Northern Highway (see Figure 1). The Gabanintha deposit is comprised of massive to disseminated bands of titaniferous - vandiferous magnetite (and ilmenite) hosted in a differentiated gabbro of the Gabanintha Formation. There are two distinct zone of mineralisation a basal, massive, high grade band and an upper disseminated band with lower grade (see Figure 2). The deposit strikes north-northwest in the project area and dips at 45° to 60° to the southwest. The mineralised bands are 5-30m thick and share the same orientation as the gabbro host.

Yellow Rock Resources Ltd (YRR) commissioned CSA to review the Mineral Resource estimate for the Gabanintha project. The review forms part of a broader strategy aimed at defining the technical direction for the next phase of project development. The resource review resulted in significant grade improvement for the resource due to tighter modelling constraints and a reclassification to Indicated and Inferred.

The high-grade component of the resource indicates this is one of the richest vanadium projects in Australia. The Mineral Resource for the high-grade component is 60.4Mt @ 0.98% V<sub>2</sub>O<sub>5</sub>, 42.15% Fe and 11.4% TiO<sub>2</sub> (Indicated and Inferred).

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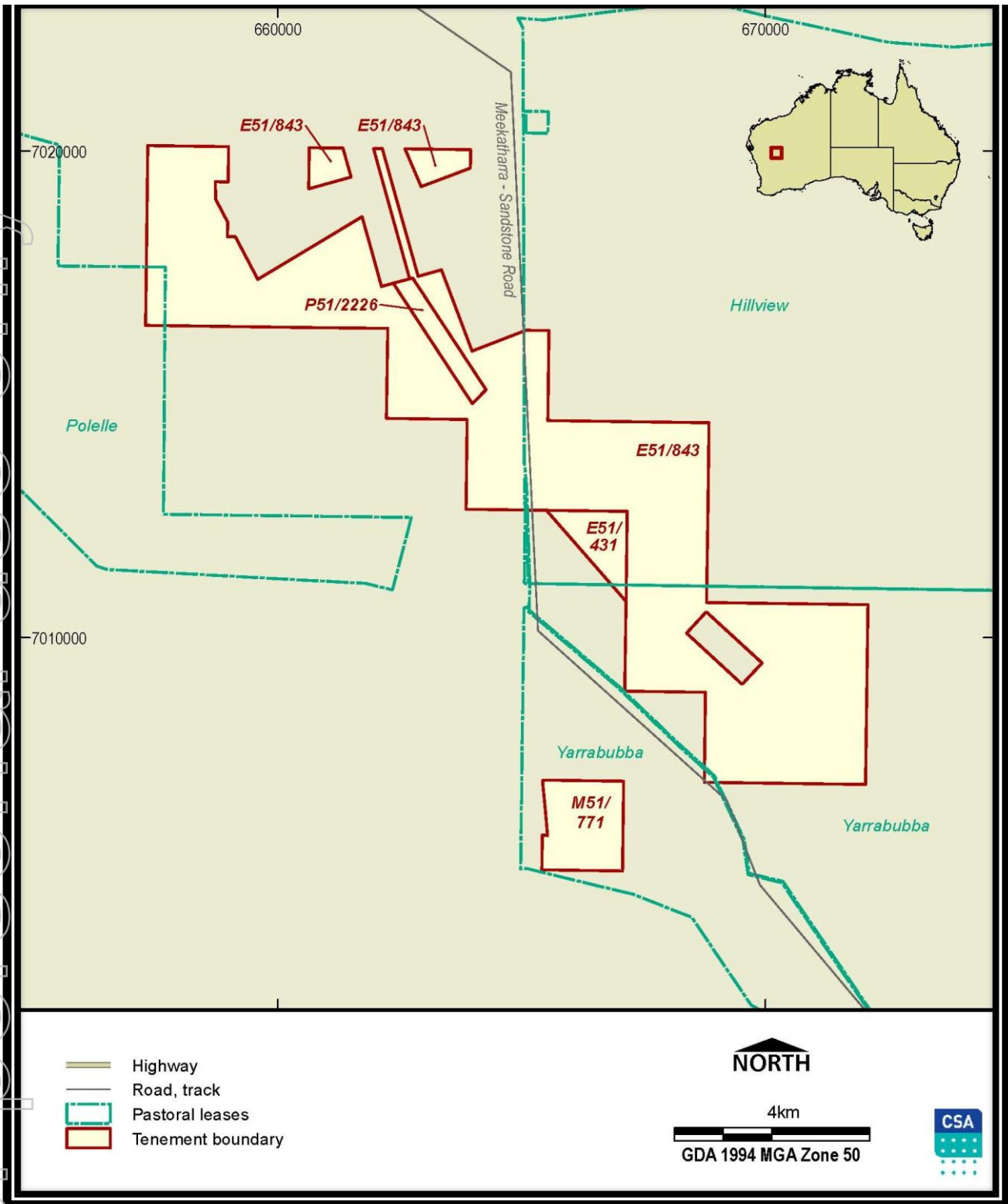


Figure 1. Tenement location plan

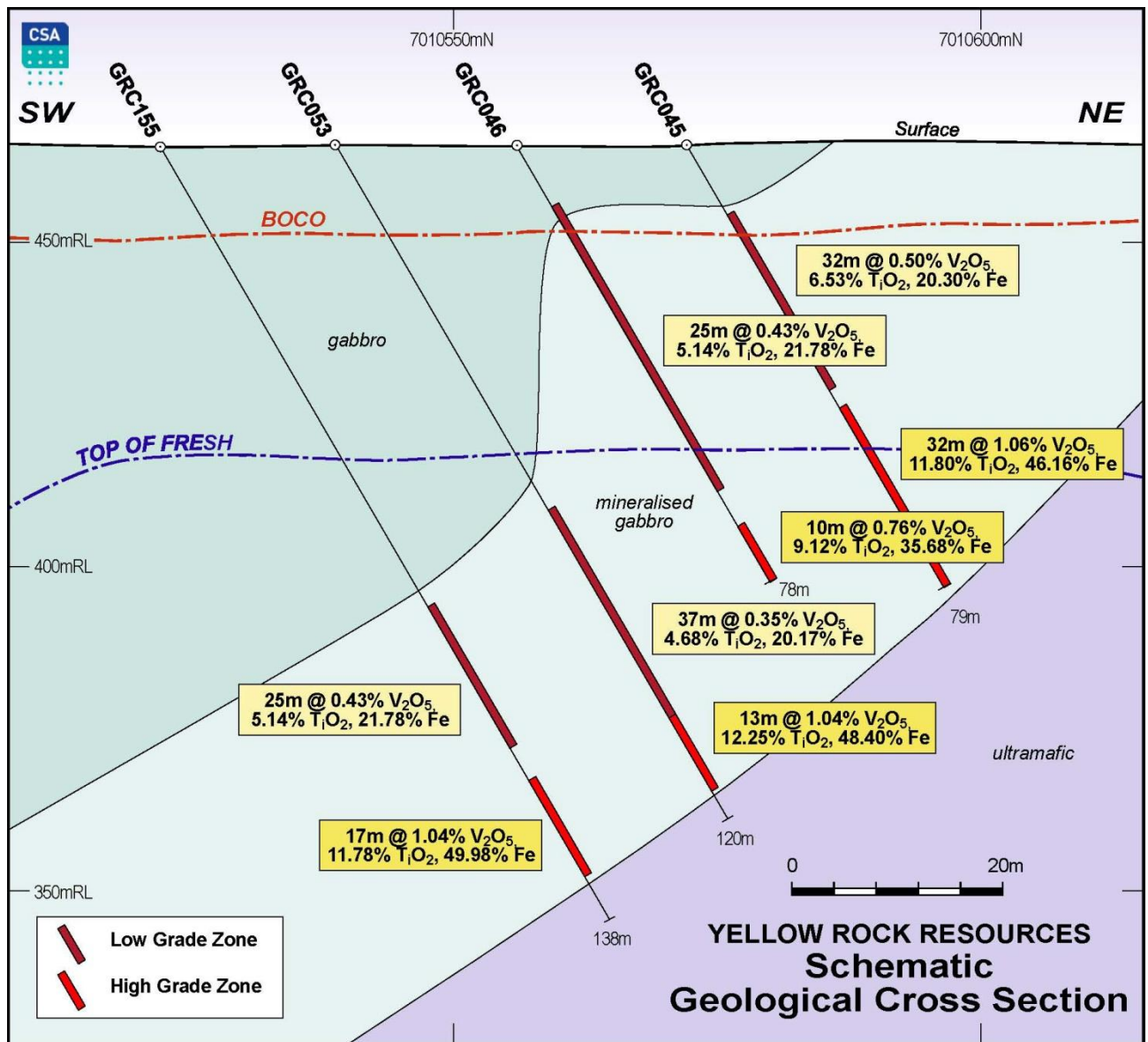


Figure 2. Schematic cross-section

### 2011 Mineral Resource Summary

The 2011 Mineral Resource estimate is based and relies on analytical data collected from 142 RC percussion and 6 diamond core drill holes. The majority of these data (130 RC holes and 6 diamond holes) were collected by YRR in the period 2007 to 2010. The other 12 RC holes were collected by previous explorers. The resource model was constructed to reflect the geology and analytical results that indicate two zones of mineralisation exist; a basal high-grade zone and an upper lower grade zone.

Based on a review the descriptive statistics of the analytical data, cut-offs of 0.3% and 0.7% V<sub>2</sub>O<sub>5</sub> were used to model the low-grade and high-grade zones respectively. The interpretation was undertaken on a sectional basis to reflect the drill hole spacing which ranges from 30m x 150m to 50m x 450m. The Mineral Resource was estimated using Ordinary Kriging inside separate constraining wireframes for the high-grade and low-grade zones. Data was extrapolated by half the distance to the preceding drill line at the deposit ends.

The Mineral Resources at the Gabanintha project are classified using the JORC code 2004. The Resources are classified as a mixture of Indicated and Inferred Resources as outlined in the summary table below.

**Table 1. Gabanintha Magnetite-Vanadiferous-Ilmenite Deposit - Mineral Resource Estimate**

Material	JORC Resource Class	Million tonnes	In Site Bulk Density	V2O5%	Fe%	TiO2%	SiO2%	AL2O3%	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
	Sub-total	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
	Sub-total	65.4	2.70	0.43	23.12	6.08	29.73	17.70	8.24
Total	Indicated	57.0	2.97	0.59	28.10	7.59	24.76	15.51	7.54
	Inferred	68.8	3.51	0.79	35.70	9.50	18.40	11.15	4.43
	Total	125.8	3.25	0.70	32.26	8.64	21.29	13.13	5.84

Note: In-situ dry bulk density has been assigned based on V<sub>2</sub>O<sub>5</sub> 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<sub>2</sub>O<sub>5</sub> for Low Grade (LG) and 0.7% V<sub>2</sub>O<sub>5</sub> for High Grade (HG). Tonnages have been rounded to reflect that this is an estimate.

### Comparison with Previous Resources

The aim of CSA's work was to deliver a Mineral Resource for the project that was a realistic estimate based on the data collected to date. The review has resulted in several key changes from the previous Mineral Resource estimate completed in 2008. The key differences are;

- an improved geological control on the constraining wireframes (through the review and inclusion of surface mapping data and structural interpretation undertaken by Southern Geoscience),
- an improvement in grade for all of the main target commodities (V<sub>2</sub>O<sub>5</sub>, Fe and TiO<sub>2</sub>), and
- a more realistic classification of the resources.

The main reason for the increased grade is tighter modelling constraints for the mineralised lenses, where zones were modelled on the basis of a minimum 5m down-hole interval thickness, internal waste being kept to a minimum (approximately 3m), and minimum overall grade of 0.3% for low grade and 0.7% for high grade material.

**Table 2. Resource comparison between 2011 and 2008**

Domain	Resource	Tonnage			Grade								
					V2O5			Fe			TiO2		
		Nov-08	Dec-10	% Diff	Nov-08	Dec-10	% Diff	Nov-08	Dec-10	% Diff	Nov-08	Dec-10	% Diff
High Grade	Measured Resource	32.5		-100%	0.90		-100%	38.33	0.00	-100%	10.40		-100%
	Indicated Resource	23.7	14.4	-39%	0.80	1.03	28%	36.93	42.14	14%	9.80	12.07	23%
	Inferred Resource	13.4	46.0	244%	0.90	0.97	8%	39.80	42.15	6%	10.80	11.19	4%
	Sub-total Resource	69.6	60.4	-13%	0.90	0.98	9%	38.12	42.15	11%	10.30	11.40	11%
Low Grade	Measured Resource	53.9		-100%	0.40		-100%	21.61		-100%	5.60		-100%
	Indicated Resource	9.7	42.7	340%	0.40	0.44	9%	22.73	23.37	3%	5.80	6.08	5%
	Inferred Resource	6.2	22.7	267%	0.40	0.42	5%	22.59	22.65	0%	5.80	6.08	5%
	Sub-total Resource	69.8	65.4	-6%	0.40	0.43	8%	21.89	23.12	6%	5.70	6.08	7%
Scree	Measured Resource	8.3			0.40			22.10			4.90		
	Indicated Resource	1.2			0.30			19.65			4.40		
	Inferred Resource	2.3			0.70			34.20			7.50		
	Sub-total Resource	11.8			0.40			24.20			5.40		
Total	Measured Resource	94.7			0.56			27.41			7.21		
	Indicated Resource	34.6	57.0	65%	0.69	0.59	-15%	32.37	28.10	-13%	8.52	7.59	-11%
	Inferred Resource	21.9	68.8	214%	0.74	0.79	7%	34.31	35.70	4%	9.02	9.50	5%
	TOTAL	151.2	125.8	-17%	0.60	0.70	16%	29.52	32.26	9%	7.80	8.64	11%

Based on a comparison of the 2008 and 2011 models, the CSA resource has less tonnes, 125.8Mt compared to 151.2Mt. This is the result of the constraining wireframes incorporating recent geological interpretation and a greater understanding of the structural controls on mineralisation which terminated and displaced mineralisation wireframes at faults and tighter wire frames (extrapolated to half drill spacing). In addition, a small proportion of the 2008 resource was excluded as it actually occurs off YRR tenure. Although there are lower tonnages the grades are significantly higher. CSA's review did not model a separate scree resource due to inadequate geological evidence to support its inclusion. All low grade material was statistically comparable and contained one grade population. It was therefore deemed appropriate to model all low grade material as one domain.

The principal difference between the two Mineral Resource estimates is the classification. The 2008 model had a significant proportion of the resource in the Measured and Indicated categories whereas the CSA resource has classified the resource as Indicated and Inferred Resources. The reason for the differences in classification relate primarily to:

- The resource includes a significant amount of oxide material. The raw density data was reviewed but there was insufficient data to define any relationship between the level of oxidation and density. Similar resources in the region have shown that density values in the oxide are lower than that of transitional and fresh material. The relationship between grade and density (where higher V2O5 grades are assigned a higher density value) leads to a level of uncertainty about assigned density values such that the tonnage estimate cannot be reported to the confidence level required to report Measured Resources.
- No recovery analysis results have been received by CSA. Davis tube recovery analysis should be completed to investigate the possibility of upgrading material via magnetic separation. Without this, it is not possible to upgrade any part of the resource to Measured Resources.
- Uncertainty over the geological continuity and structural controls of some of the domains, particularly the high grade domain. Recent mapping work has improved the level of understanding of controls on mineralisation, however further work is required in this area.
- Variography was not conducted on the high grade domain, and inter-element correlation plots suggest that purely from a grade point of view, their relationships in the high grade domain differs from that of the low grade domain. Therefore, a lower level of confidence is attached to the grade estimate of the high-grade domain where estimation was undertaken using the variography from the low grade domain.

#### *Competent Persons Statement*

*The Mineral Resource estimates discussed in this report were prepared under the supervision of Mr Galen White BSc AusIMM, a full time employee of CSA Global Pty Ltd and is a competent person as defined by the Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) 2004 Edition. Mr White consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

#### **New Tenement Acquisition**

The Company's principle focus will be on its Gabanintha and Nowthanna Hills tenements and as part of this focus, during the quarter, the company acquired for a consideration of \$9,100 four surrounding tenements – E51/1396, P51/2634, P51/2635 and P51/2636.

#### **TURNER'S DOME PROJECT**

As previously reported, the Company had undertaken an assessment of its first phase field work on the Turner's Dome tenement, E25426 in the Northern Territory to determine justification for further expenditure on the tenement.

Following an assessment of this first phase field work it was determined that further expenditure on the tenement was not justified and a decision was taken to surrender the tenement.

As a result of the surrender of the tenement the Company raised an allowance for impairment on capitalised exploration and evaluation of \$8,659,481 which has been reflected in the Company's financial report for the half year ended 31 December 2011.

**Sydney Chesson**  
**Chairman**

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