
Australian Securities Exchange Announcement **1 April 2019**

King River Resources Limited (ASX: KRR) is pleased to advise that Mining Industry Consultants CSA Global Pty Ltd (CSA Global) has completed an amended resource estimate reporting in accordance with the JORC Code (2012)[1] for its 100% owned Speewah Specialty Metals ("SSM") Project in the Kimberley of Western Australia (Figure 1).

KRR requested CSA Global to amend the manner in which the Mineral Resource estimate was reported, such that TiO_2 was tabulated in addition to Ti. The 2017 Mineral Resource estimate reported V, V_2O_5, Fe and Ti grades, with V_2O_5 calculated as V multiplied by 1.785. CSA Global notes that V and Ti (elemental) were reported by the primary laboratory. TiO_2 was calculated as Ti multiplied by 1.668 and the Mineral Resource tables were updated accordingly. The amended Mineral Resource table is shown in Table 1.

Table 1: Speewah project Global Mineral Resource estimate (0.23% V_2O_5 cut-off grade)

Zone	JORC Classification	Tonnage (Mt)	V (%)	V_2O_5 (%)	Fe (%)	Ti (%)	TiO_2 (%)
High Grade	Measured	181	0.21	0.37	15.1	2.1	3.5
	Indicated	404	0.20	0.35	15.0	2.0	3.4
	Inferred	1,139	0.19	0.34	14.9	2.0	3.4
Total High Grade		1,725	0.20	0.35	15.0	2.0	3.4
Low Grade	Measured	141	0.15	0.27	14.6	2.0	3.3
	Indicated	650	0.15	0.27	14.5	1.9	3.2
	Inferred	2,196	0.15	0.27	14.4	1.9	3.2
Total Low Grade		2,987	0.15	0.27	14.5	1.9	3.2
Combined Zones	Measured	322	0.18	0.32	14.9	2.0	3.4
	Indicated	1,054	0.18	0.33	14.9	2.0	3.3
	Inferred	3,335	0.16	0.29	14.6	2.0	3.3
Grand Total		**4,712**	**0.17**	**0.30**	**14.7**	**2.0**	**3.3**

** Due to the effects of rounding, the total may not represent the sum of all components*
** V_2O_5 calculated as V x 1.785*
** TiO_2 calculated as Ti x 1.668*

From Table 1, the Speewah deposits comprise a combined Measured, Indicated and Inferred Mineral Resource of 4,712 million tonnes at 0.3% V_2O_5, 3.3% TiO_2 and 14.7% Fe (reported at a 0.23% V_2O_5 cut-off grade from the Central, Buckman and Red Hill deposits). This combined resource comprises Measured Resources of 322 million tonnes at 0.32% V_2O_5, 3.4% TiO_2 and 14.9% Fe, Indicated Resources of 1,054 million tonnes at 0.33% V_2O_5, 3.3% TiO_2 and 14.9% Fe, and Inferred Resources of 3,335 million tonnes at 0.29% V_2O_5, 3.3% TiO_2 and 14.6% Fe.

A summary report prepared by CSA Global also forms part of this ASX release (refer Appendix), including JORC Table 1.

[1] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

The Mineral Resource estimates for Central, Buckman and Red Hill are shown in Table 2, Table 3 and Table 4 respectively.

Table 2: Central Mineral Resource estimate (0.23% V_2O_5 cut-off grade)

Zone	JORC Classification	Tonnage (Mt)	V (%)	V_2O_5 (%)	Fe (%)	Ti (%)	TiO_2 (%)
High Grade	Measured	139	0.21	0.37	15.1	2.1	3.5
	Indicated	135	0.21	0.37	14.8	2.0	3.4
	Inferred	247	0.20	0.36	14.7	2.0	3.3
Total High Grade		520	0.20	0.36	14.8	2.0	3.4
Low Grade	Measured	91	0.15	0.26	14.6	2.0	3.3
	Indicated	167	0.15	0.27	14.8	2.0	3.4
	Inferred	462	0.15	0.27	14.3	1.9	3.2
Total Low Grade		720	0.15	0.27	14.5	2.0	3.3
Combined Zones	Measured	230	0.18	0.33	14.9	2.0	3.4
	Indicated	301	0.17	0.31	14.8	2.0	3.4
	Inferred	709	0.17	0.30	14.5	2.0	3.3
Grand Total		**1,240**	**0.17**	**0.31**	**14.6**	**2.0**	**3.3**

** Due to the effects of rounding, the total may not represent the sum of all components*
** V_2O_5 calculated as V x 1.785*
** TiO_2 calculated as Ti x 1.668*

From Table 2, the Central deposit comprises a Measured, Indicated and Inferred Mineral Resource of 1,240 million tonnes at 0.31 V_2O_5, 3.3% TiO_2 and 14.6% Fe (reported at a 0.23% V_2O_5 cut-off grade). This combined resource total comprises Measured Resources of 230 million tonnes at 0.33% V_2O_5, 3.4% TiO_2 and 14.9% Fe, Indicated Resources of 301 million tonnes at 0.31% V_2O_5, 3.4% TiO_2 and 14.8% Fe, and Inferred Resources of 709 million tonnes at 0.30% V_2O_5, 3.3% TiO_2 and 14.5% Fe.

Table 3: Buckman Mineral Resource estimate (0.23% V_2O_5 cut-off grade)

Zone	JORC Classification	Tonnage (Mt)	V (%)	V_2O_5 (%)	Fe (%)	Ti (%)	TiO_2 (%)
High Grade	Measured	21	0.20	0.35	15.4	2.2	3.6
	Indicated	221	0.19	0.34	15.1	2.1	3.4
	Inferred	281	0.19	0.34	14.9	2.0	3.3
Total High Grade		523	0.19	0.34	15.0	2.0	3.4
Low Grade	Measured	36	0.16	0.28	14.8	2.0	3.3
	Indicated	406	0.15	0.27	14.4	1.9	3.2
	Inferred	530	0.15	0.26	14.5	1.9	3.2
Total Low Grade		972	0.15	0.27	14.5	1.9	3.2
Combined Zones	Measured	57	0.17	0.31	15.0	2.1	3.4
	Indicated	627	0.16	0.29	14.6	2.0	3.3
	Inferred	811	0.16	0.29	14.6	1.9	3.2
Grand Total		**1,495**	**0.16**	**0.29**	**14.7**	**1.9**	**3.2**

** Due to the effects of rounding, the total may not represent the sum of all components*
** V_2O_5 calculated as V x 1.785*
** TiO_2 calculated as Ti x 1.668*

Table 4: Red Hill Mineral Resource estimate (0.23% V_2O_5 cut-off grade)

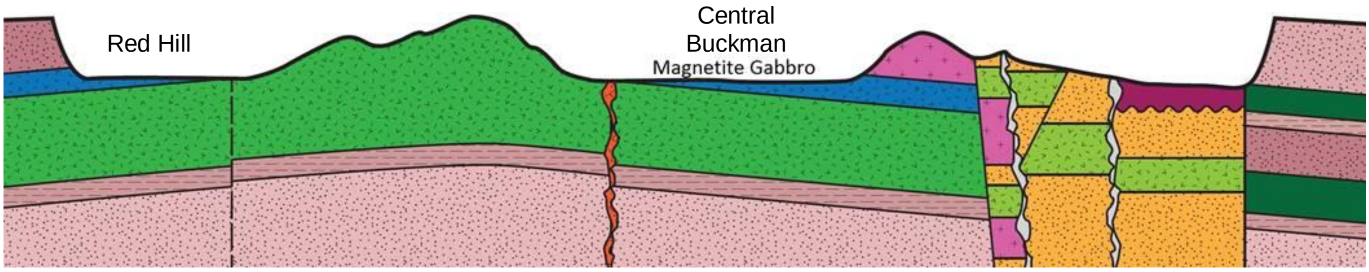
Zone	JORC Classification	Tonnage (Mt)	V (%)	V_2O_5 (%)	Fe (%)	Ti (%)	TiO_2 (%)
High Grade	Measured	21	0.19	0.35	15.3	2.1	3.5
	Indicated	48	0.19	0.34	15.2	2.1	3.5
	Inferred	612	0.19	0.34	15.0	2.1	3.5
Total High Grade		681	0.19	0.34	15.0	2.1	3.5
Low Grade	Measured	14	0.16	0.29	13.8	1.7	2.8
	Indicated	77	0.15	0.27	14.4	1.9	3.2
	Inferred	1,204	0.15	0.27	14.5	1.9	3.2
Total Low Grade		1,296	0.15	0.27	14.5	1.9	3.2
Combined Zones	Measured	35	0.18	0.32	14.7	1.9	3.2
	Indicated	126	0.17	0.30	14.7	2.0	3.3
	Inferred	1,816	0.16	0.29	14.7	2.0	3.3
Grand Total		**1,977**	**0.16**	**0.29**	**14.7**	**2.0**	**3.3**

** Due to the effects of rounding, the total may not represent the sum of all components*
** V_2O_5 calculated as V x 1.785*
** TiO_2 calculated as Ti x 1.668*

Speewah Geology and Resources

The Speewah Mineral Resource estimate is based on analysis of data collected from several reverse circulation (RC) and diamond drilling campaigns and geological mapping carried out from 2006 to 2011. The geology and resource modelling methodology is the same as set out in the ASX announcement on 26 May 2017 which first reported the resource under JORC 2012.

The reported Mineral Resources lie entirely within fresh magnetite gabbro of the Hart Dolerite sill within the Speewah Dome. The west-east cross section below shows the location of the magnetite gabbro unit.



The magnetite gabbro unit can be subdivided into an upper low grade zone and a basal high grade zone, based on increasing V tenor (grade) in the magnetite grains towards the base of the unit. This V zonation has been classified in the resource estimates.

Metallurgy

This resource amendment reporting Ti as TiO2 allows for the direct comparison between resource grade and the metallurgical grade of magnetic magnetite-ilmenite concentrates and final refined products.

All the V resides in titanomagnetite and therefore substantially reports to the magnetic fraction in a magnetic concentration process. Similarly, all Ti is likely to reside in titanomagnetite and in ilmenite and therefore also reports to the magnetic fraction. In a magnetic concentration process, the quantity and quality (grade) of the magnetic material that will be available for leaching will be dependent on the grind size. There will be some loss of the magnetic fraction (and therefore V and Ti metal) which will be dependent on the grind size chosen.

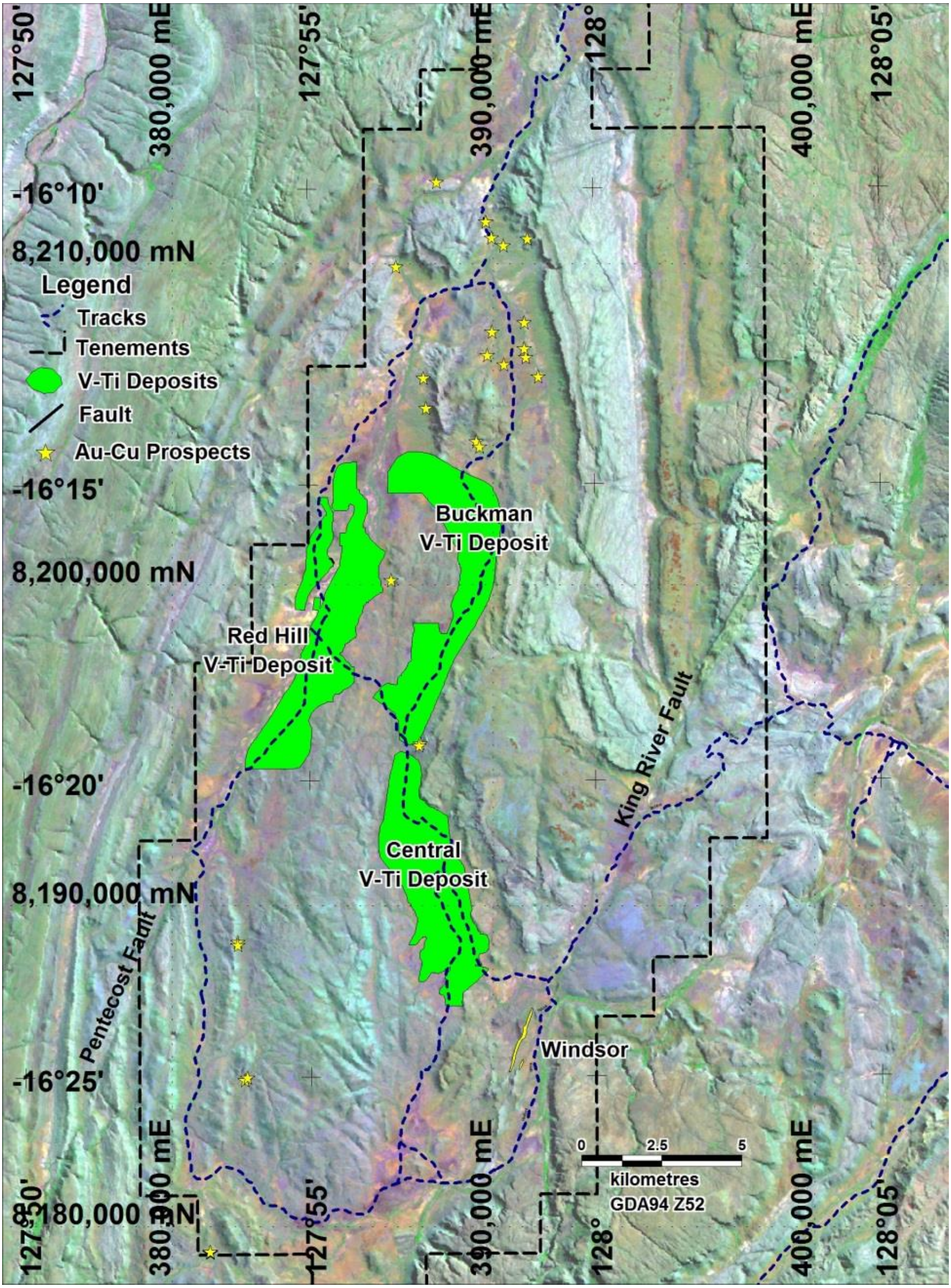


Figure 1: Location of the Central, Buckman and Red Hill Vanadium JORC 2012 resource outlines (green), copper-gold prospects (gold stars) and tenement outlines.

COMPETENT PERSONS STATEMENTS

The information in this report on pages 1 and 4 is based on information compiled by Ken Rogers (BSc Hons) and fairly represents this information. Mr. Rogers is the Chief Geologist and an employee of King River Resources Ltd, and a Member of both the Australian Institute of Geoscientists (AIG) and The Institute of Materials Minerals and Mining (IMMM), and a Chartered Engineer of the IMMM. Mr. Rogers has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Rogers consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this report that relates to Mineral Resources is based on information compiled by Aaron Meakin. Mr. Meakin is a full-time employee of CSA Global Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Meakin 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 Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr. Meakin consents to the disclosure of the information in this report in the form and context in which it appears.

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MEMORANDUM

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To: Ken Rogers
Cc: Aaron Green
Date: 1st April, 2019
From: Aaron Meakin
CSA Global Report Nº: R195.2019

Re: **Speewah Project Mineral Resource estimate**

EXECUTIVE SUMMARY

CSA Global Pty Ltd (CSA Global) was engaged by King River Resources Limited (KRR) in 2017 to report Mineral Resource estimates for their Speewah Project in accordance with the JORC Code[1].

KRR recently requested CSA Global to amend the manner in which the Mineral Resource estimate was reported, such that TiO_2 was tabulated in addition to Ti. The 2017 Mineral Resource estimate reported V, V_2O_5, Fe and Ti grades, with V_2O_5 calculated as V x 1.785. CSA Global notes that V and Ti (elemental) were reported by the primary laboratory. TiO_2 was calculated as Ti *1.668 and the Mineral Resource tables were updated accordingly. The amended Mineral Resource table is shown in Table 1.

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Table 3: Buckman Mineral Resource estimate, 0.23% V_2O_5 cut-off grade

Zone	JORC Classification	Tonnage (Mt)	V (%)	V_2O_5 (%)	Fe (%)	Ti (%)	TiO_2 (%)
High Grade	Measured	21	0.20	0.35	15.4	2.2	3.6
	Indicated	221	0.19	0.34	15.1	2.1	3.4
	Inferred	281	0.19	0.34	14.9	2.0	3.3
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Table 4: Red Hill Mineral Resource estimate, 0.23% V_2O_5 cut-off grade

Zone	JORC Classification	Tonnage (Mt)	V (%)	V_2O_5 (%)	Fe (%)	Ti (%)	TiO_2 (%)
High Grade	Measured	21	0.19	0.35	15.3	2.1	3.5
	Indicated	48	0.19	0.34	15.2	2.1	3.5
	Inferred	612	0.19	0.34	15.0	2.1	3.5
Total High Grade		681	0.19	0.34	15.0	2.1	3.5
Low Grade	Measured	14	0.16	0.29	13.8	1.7	2.8
	Indicated	77	0.15	0.27	14.4	1.9	3.2
	Inferred	1,204	0.15	0.27	14.5	1.9	3.2
Total Low Grade		1,296	0.15	0.27	14.5	1.9	3.2
Combined Zones	Measured	35	0.18	0.32	14.7	1.9	3.2
	Indicated	126	0.17	0.30	14.7	2.0	3.3
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DATA COLLECTION TECHNIQUES

High-quality reverse circulation (RC) samples have substantially informed the Mineral Resource estimate. A total of 432 RC holes for 28,383 m and 1 diamond hole for 328 m are included in the data set used for Mineral Resource estimate. 15,691 m of RC samples and 76 m of diamond samples lie within the modelled mineralisation envelopes.

A summary of drill hole location techniques, and sampling, analytical and logging procedures is included in Table 1 of the JORC Code, which forms Attachment 1 to this Memorandum.

The deposit was discovered in 2006 and Quality Control (QC) data has been collected throughout the drilling programmes completed from 2007 through 2012. Field duplicate results give confidence in RC sampling procedures and umpire laboratory results (from sample pulps) given confidence in the accuracy of the primary laboratory. Primary laboratory repeat results give confidence in analytical precision.

Almost 90% of all drill hole collars have been surveyed using a differential global position system (DGPS), with the remaining collars surveyed using a hand-held GPS. Most holes have not been surveyed downhole, however this is not considered to represent a risk to the Mineral Resource estimate given the shallow, vertical nature of the holes.

Bulk density measurements were taken on fresh core using the water immersion method. A total of 59 results were available.

The Competent Person considers that data has been collected according to industry good practice and is therefore suitable to prepare a Mineral Resource estimate to be publicly reported in accordance with the JORC Code.

Eleven RC holes were removed from the database used to prepare the Mineral Resource estimate given that no assay results were available for these holes. Most of these holes were not in the Mineral Resource area. Three holes now have assay results and lie within the Mineral Resource area. The exclusion of these holes is not considered material; however, they should be included in future Mineral Resource estimates. A list of the three holes excluded from the 2012 Mineral Resource estimate that now have assay data is provided below:

- SRC270
- SRC365a
- SRC374.

According to KRR, 18 diamond holes were drilled either as twin holes or for metallurgical test work at the Speewah Project and most of these were not assayed. Sixteen were drilled in the Central deposit (SDH08-3/4/6, SDH09-2/3/4/5, SDH11-6–14), and two were drilled at Red Hill (SDH09-6 and SDH11-15).

Four of these holes (SDH09-2/3/4 and 5) at Central and one of these holes (SDH11-15) at Red Hill contained assay results when the 2012 Mineral Resource estimate was prepared. Only SDH11-15 was used however when the 2012 Mineral Resource estimate was prepared. The remaining four holes at Central were therefore not used. These holes twinned RC holes SRC344, SRC154, SRC220 and SRC228.

DEPOSIT GEOLOGY AND MINERALISATION CONTROLS

Mineralisation at the Speewah Project is hosted within the Hart Dolerite which was intruded c1790 Ma. Since the discovery of Speewah in 2006, at least two distinct types of felsic granophyres and three mafic gabbros have been identified in the Hart Dolerite as follows:

- K felsic granophyre (youngest)
- Mafic granophyre
- Pegmatoidal gabbro

- Magnetite gabbro (host unit)
- Felsic gabbro (oldest).

The magnetite gabbro is a fine- to medium-grained, very dark grey to greyish green gabbro which contains traces of olivine. The unit is characterised by the presence of disseminated 1–2 mm vanadiferous magnetite and scattered ilmenite grains which increase in abundance toward the base of the unit. The unit becomes less magnetic and in some cases k-felsic toward the upper part.

The deposit therefore represents part of a large layered intrusion. Given the mode of formation, mineralisation displays excellent geological and grade continuity which has been considered when classifying the Mineral Resource estimate.

GEOLOGICAL MODELLING AND RESOURCE ESTIMATION

The following approach was adopted when modelling the mineralisation:

- A base of oxidation was modelled at each deposit to define the base of the oxidised gabbro which is considered likely to have different metallurgical properties to the remaining mineralisation. This surface represents the base of the soil horizon or oxidised gabbro.
- High grade mineralisation was modelled based on a cut-off grade of 0.18% V as this grade appeared to represent the boundary between the lower and higher grade mineralisation.
- Low grade mineralisation was modelled based on a cut-off grade of 0.1% V as this grade appeared to represent the boundary between the background and lower grade mineralisation.
- A minimum downhole length of 2 m was used.
- Some zones of internal dilution were included to maintain continuity of the lenses.
- Interpretations were completed on drill sections. Sectional interpretations were then joined to form 3D solid or surface models, with surface mapping used to guide interpretations near surface.
- If high or low grade zones were not obvious in drill holes, the interpretation was thinned as required. If no mineralisation was present, the strings were digitised to half the distance from the last mineralised hole. Wireframes were adjusted as required to match the known dip, strike and plunge of each deposit.

Four objects representing the high- and low-grade zones were created at Central, while eight were created at Buckman and 17 at Red Hill. Both Buckman and Red Hill are characterised by having low-grade zones below the basal high-grade zones. At the Central deposit, the high-grade zones occur below the low-grade zones. Nine internal waste zones have been modelled at Red Hill.

The Central deposit comprises two high-grade zones (objects 2 and 12) and six low-grade zones (objects 3 and 13). The modelled mineralisation (coloured by object) and drilling (coloured by V_2O_5 grade) are shown in Figure 1.

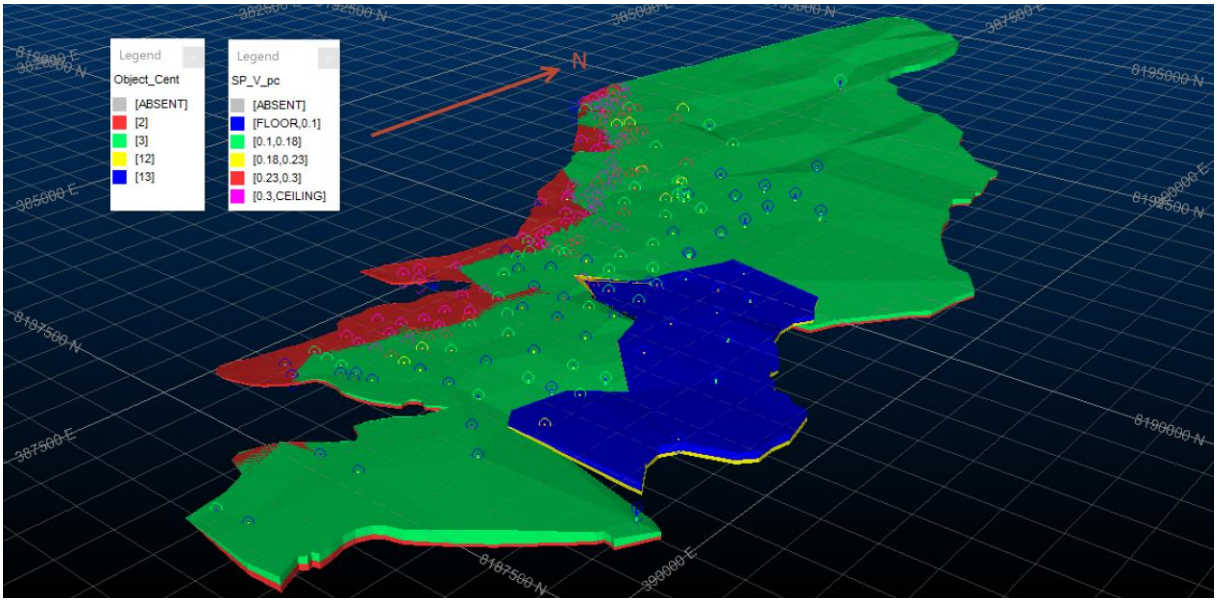

Figure 1: Central deposit and drilling (view looking down from southeast)

The Buckman deposit comprises two high-grade zones (objects 2 and 12) and six low-grade zones (objects 3, 4, 13, 14, 23 and 33). The modelled mineralisation (coloured by object) and drilling (coloured by V_2O_5 grade) are shown in Figure 2.

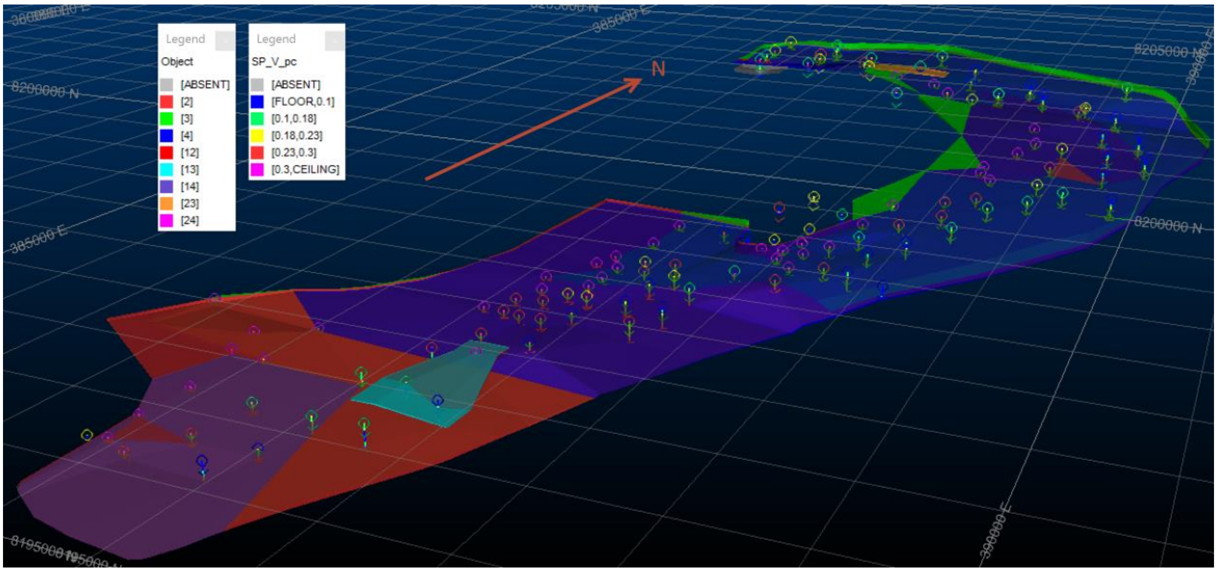

Figure 2: Buckman deposit and drilling (view looking down from southeast)

The Red Hill deposit comprises seven high-grade zones (objects 2, 12, 22, 32, 42, 52 and 62) and ten low-grade zones (objects 3, 4, 13, 14, 23, 33, 34, 44, 54 and 64). The modelled mineralisation (coloured by object) and drilling (coloured by V_2O_5 grade) are shown in Figure 3.

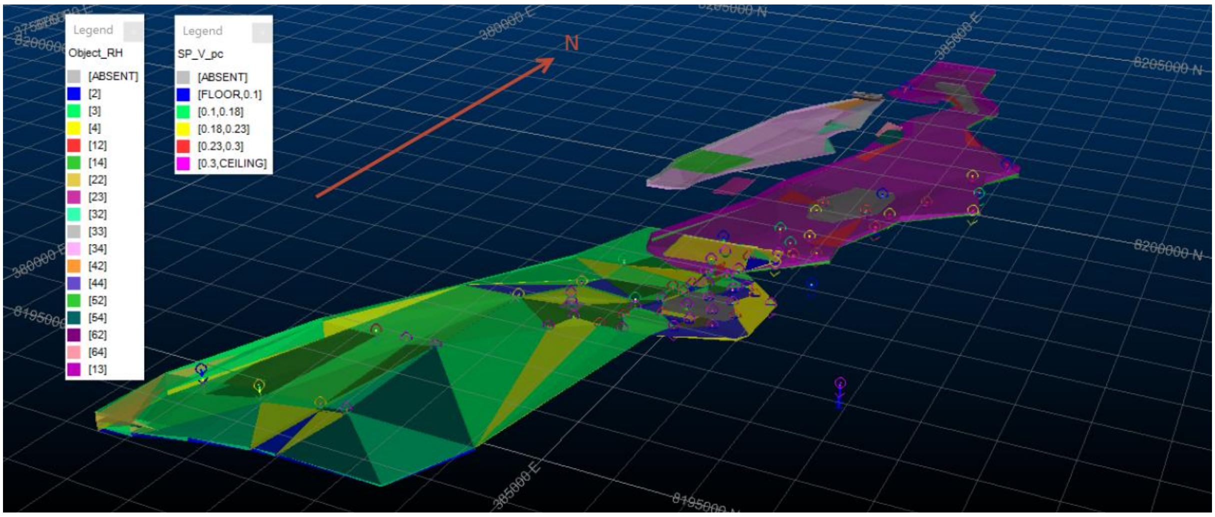

Figure 3: Red Hill deposit and drilling (view looking down from southeast)

V, Ti and Fe statistics were reviewed for the high and low-grade domains. Given the low variability of the data, no high-grade cuts were considered necessary. Strong correlations between V, Ti and Fe were observed in the high-grade domains, while V and Fe/Ti were poorly correlated within the low-grade domains. Fe and Ti were strongly correlated in the low-grade domains.

Variography was completed for Fe, Ti and V at each deposit. V data was separated into high and low-grade domains at each deposit prior to variography, however Ti and V data was combined to improve variogram quality. The nugget component varied from 2% to 15%, and long-ranges were modelled for each constituent reflecting the good grade continuity. A two-structure spherical model was adopted for variogram modelling.

A 3D block model of the mineralisation was created using Surpac software for each deposit, with 1 m composite samples (which corresponds to the dominant sample length) used to interpolate grades into blocks using ordinary kriging.

The block size chosen represented approximately half of the average drill spacing and the search ellipse was varied to reflect the geometry of each deposit. A parent cell size of 100 m N by 50 m E by 5 m RL was used for the Central and Buckman deposits, with sub-celling to 25 m N by 12.5 m E by 1.25 m RL to honour the wireframe boundaries. A parent cell size of 200 m N by 100 m E by 5 m RL was used for Red Hill, with sub-celling to 50 m N by 25 m E by 1.25 m RL. The search parameters for Central, Buckman and Red Hill are shown in *Table 5*, *Table 6* and *Table 7* respectively.

Table 5: Central Search Parameters

Parameter	Pass 1	Pass 2	Pass 3	Pass 4
Major-Semi ratio	1			
Major-Minor ratio	10			
Search Radius	350 m	800 m	1,500 m	2,500 m
Minimum Samples	10	10	4	2
Maximum Samples	40	40	40	40
Discretisation	4 X by 4 Y by 3 Z			
Percentage blocks filled	61	35	4	<1

Table 6: Buckman Search Parameters

Parameter	Pass 1	Pass 2	Pass 3
Major-Semi ratio	1		
Major-Minor ratio	10–12		
Search Radius	500 m	1000 m	2000 m
Minimum Samples	10	10	4
Maximum Samples	40	40	40
Discretisation	4 X by 4 Y by 3 Z		
Percentage blocks filled	74	24	2

Table 7: Red Hill Search Parameters

Parameter	Pass 1	Pass 2	Pass 3
Major-Semi ratio	1		
Major-Minor ratio	10		
Search Radius	600–700 m	800–900 m	1,600–1,800 m
Minimum Samples	4–10	2–6	2–4
Maximum Samples	40	40	40
Discretisation	4 X by 4 Y by 3 Z		
Percentage blocks filled	88	11	1

An average density value of 3.11 g/cm^3 was assigned to the block model based on the average of 59 water immersion measurements of fresh material. **The reported Mineral Resources lie entirely within fresh gabbro.**

Following grade interpolation, a three-step process was used to validate the block model. Firstly, drill hole grades were compared with model grades on drill sections. Interpolated grades were then compared with composite grades for each deposit within each mineralised "pod". Lastly, swath plots were prepared which compared drill hole grades with block model grades in slices throughout the deposit. All validation exercises gave confidence in the estimation results.

METALLURGY

The information below is presented to support, and provide context to, this Mineral Resource estimate.

KRR publicly released the results of a Scoping Study on 1 November 2018. The processing route proposed in the Scoping Study involves magnetic concentration to produce a magnetite-ilmenite concentrate followed by leaching to produce V_2O_5, TiO_2, iron oxide and other high purity products (vanadyl sulphate and high-purity alumina).

The Scoping Study included combining the findings of multiple metallurgical test programs and led to the development of a conceptual design for an on-site beneficiation route consisting of:

- Primary crushing of run-of-mine ore and pebble crushing of semi-autogenous grind (SAG) mill discharge (pebbles)
- Single-stage SAG milling with classification cyclones targeting product of p80 of 0.5 mm
- Rougher Low Intensity Magnetic Concentration (LIMS) / Scavenger Medium Intensity Magnetic Separation (MIMS/REMS) separation of mill product
- Regrind of magnetic concentrate to p80 106–120 µm
- Cleaner/recleaner MIMS producing final concentrate
- Concentrate dewatering and stockpiling
- Tails dewatering.

A review of processing options in the Scoping Study found that the highest extraction and most effective hydro-metallurgical approach to recovering iron, titanium and vanadium form the magnetic concentrate is direct atmospheric hydrochloric acid leaching of the concentrate and solvent extraction of V_2O_5 and TiO_2 and Fe_2O_3. The products produced included iron oxide or iron metal, pigment grade TiO_2, and V_2O_5 flake.

Laboratory test work is ongoing to assess and optimise each aspect of the processing route, including how to extract the metals from the leach solutions.

All V resides in titanomagnetite and therefore substantially reports to the magnetic fraction in a magnetic concentration process. Similarly, all Ti is likely to reside in titanomagnetite and in ilmenite and therefore also reports to the magnetic fraction.

In a magnetic concentration process, the quantity and quality (grade) of the magnetic material that will be available for leaching will be dependent on the grind size. There will be some loss of the magnetic fraction (and therefore V and Ti metal) which will be dependent on the grind size chosen.

A significant challenge for magnetite operations is to minimise capital and operating costs associated with construction and operation of the magnetite concentration plant. Operating costs are dominated by the cost of power required to grind the ore in order to achieve acceptable concentrate grades together with low impurity content.

If a lump product is used, there will be no magnetic concentration circuit (hence substantially reduced costs) and no loss of magnetic material as part of the magnetic concentration process.

KRR is progressing metallurgical test work with a view to select the most viable processing option to be used in the Pre-feasibility Study, including sulphuric acid vat and agitated tank leach processing scenarios.

REASONABLE PROSPECTS HURDLE

Clause 20 of the JORC Code (2012) requires that all reports of Mineral Resources must have reasonable prospects for eventual economic extraction, regardless of the classification of the Mineral Resource. The Competent Person deems there are reasonable prospects for eventual economic extraction of mineralisation on the following basis:

- The mineralisation is very continuous and laterally extensive. There is therefore potential for a long-life asset and a long-term view can be taken for the asset.
- The mineralisation occurs at shallow depths and is therefore amenable to low-cost open pit mining. The limited amount of cover and sizeable Mineral Resource would lead to low strip ratios in an open pit mining environment.
- There is potential to optimise the asset through mining higher grade areas earlier.
- A Scoping Study was publicly reported by KRR on 1 November 2018 which demonstrated a viable business case for further development.

A cut-off grade of 0.23% V_2O_5 has been applied when reporting the Mineral Resource. Material above 0.23% V_2O_5 is well constrained within the host magnetite gabbro. The 0.23% V_2O_5 cut-off grade is within the range adopted for reporting Mineral Resources at other Australian Fe-V-Ti deposits for planned open cut operations.

MINERAL RESOURCE CLASSIFICATION

The Mineral Resource has been classified in accordance with guidelines contained in the JORC Code. The classification applied reflects the author's view of the uncertainty that should be assigned to the Mineral Resources reported herein. Key criteria that have been considered when classifying the Mineral Resource are detailed in JORC Table 1 which is contained in Attachment 1.

After considering data quality, data distribution, and the very good geological and grade continuity at the project, the following approach was adopted when classifying the Mineral Resource:

- The Mineral Resource was classified as Measured where drilling had been completed on a 250 m by 250 m pattern (or denser) and geological continuity was very good. There is some drilling at 50 m and 100 m spacings in this area.
- The Mineral Resource was classified as Indicated where drilling had been completed on a 400 m by 400 m pattern (or denser), geological continuity was very good and there were two or more holes on individual drill sections.
- The Mineral Resource was classified as Inferred where drilling had been completed on broader pattern and geological continuity was reasonable.

COMPETENT PERSONS STATEMENT

The information in this report that relates to Mineral Resources is based on information compiled by Mr Aaron Meakin. Mr Aaron Meakin is a full-time employee of CSA Global Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. Mr Aaron Meakin has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Aaron Meakin consents to the disclosure of the information in this report in the form and context in which it appears.

Attachment 1: JORC Table 1

JORC Table 1 Section 1 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*	Samples used in the Mineral Resource estimate were mainly obtained through reverse circulation (RC) drilling methods. The Speewah database contains 502 holes including 14 diamond holes and 488 RC holes for a total of 33,390 m.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	RC samples were split through the use of a trailer-mounted cone splitter and diamond core was sawn in half and then quarters using a core saw.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. "RC drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay"). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	1 m samples were taken which were pulverised and submitted for X-ray Fluorescence (XRF) spectrometry with silicate fusion preparation to determine concentrations of Ti, V and Fe.
Drilling techniques	*Drill type (e.g. core, RC, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	RC using a 5.5" hammers and diamond (primarily PQ and HQ) drilling were completed to support the preparation of the Mineral Resource estimate.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and*	Recovery data was not provided to CSA Global. Very good ground conditions exist however and recovery is expected to be very high.

Criteria	JORC Code explanation	Commentary
	results assessed.	
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC drilling utilised an external booster typically keeping samples dry to maximise recoveries. A face-sampling hammer was used to minimise contamination. Larger diameter (HQ and PQ) core sizes were used to maximise sample recovery.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No relationship between grade and recovery has been identified.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Logging included lithology, sulphides, alteration, vein type and vein percentage. Logging codes were not assigned to all intervals.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is generally qualitative in nature. Core has been photographed either wet and dry.
	The total length and percentage of the relevant intersections logged.	Logging exists for 32,816.2 m of the 33,390.2 m drilled. This represents 98.2% of the database.
Subsampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Diamond samples were quarter-cored.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC samples were collected using a cone splitter mounted on a trailer at regular 1 m intervals.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	RC samples were cone split into calico bags at 1 m intervals. Samples were submitted to Ultratrace Laboratories in Perth for analysis. Samples were dried in a convection oven prior to being crushed using a Jaw Crusher. A sub-sample was then taken using a riffle splitter which was then pulverised using a vibrating disc LM-5 pulveriser. The pulp was then submitted for XRF analysis.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Subsampling is performed during the preparation stage according to the assay laboratories' internal protocol.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	RC field duplicates were inserted in the sample stream as a check on sample precision. Prior to 2009, one complete drill hole (SRC236A) was resampled to provide 236 field duplicates. From 2009 through 2011, field duplicates were routinely taken at a rate of 1 in every 20 samples. A total of 246 samples were taken in 2009 and 184 duplicates were taken from 2010 through 2011.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate to the grain size of the material being sampled.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The techniques are considered total. Samples were analysed using XRF by Ultratrace in Perth with silicate fusion preparation. The method chosen is considered appropriate for the style of mineralisation under consideration.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools have been used in the preparation of this Mineral Resource estimate.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Field duplicate samples were taken to monitor sample precision from 2009 through 2011. Pulps from samples collected during the 2009 programme were submitted to a second laboratory (Genalysis in Perth) for XRF analysis to check the accuracy of the primary laboratory. The field duplicate results given confidence in sampling procedures, and the results from the umpire laboratory compared well with the primary laboratory which gives confidence in accuracy of the analytical results. No certified reference materials or blanks were inserted in the sample stream by SPM. Given all available QC results, CSA Global considers that a relatively high level of confidence can be placed in the precision and accuracy of the analytical data used in the preparation of this Mineral Resource estimate.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections have been verified by alternative company personnel.
	The use of twinned holes.	No twinning has occurred.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Templates have been set up to facilitate geological logging. Prior to the import into the central database, logging data is validated for conformity and overall systematic compliance by the geologist. Assay results are received from the laboratory in digital format.
	Discuss any adjustment to assay data.	No adjustment was made to the assay data.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Almost 90% of the collars have been surveyed using a differential global positioning system (DGPS) instrument, with the remaining surveyed using a hand-held GPS. Downhole deviations have been measured by downhole survey instruments on 3 holes only using a Globaltech Pathfinder digital downhole camera. All but four holes are vertical. The vertical and shallow nature of the drilling means that the absence of downhole surveys is not considered a material risk.
	Specification of the grid system used.	The adopted grid system is GDA 94 Zone 52.
	Quality and adequacy of topographic	A topographic file provided by SPM was calibrated for use

Criteria	JORC Code explanation	Commentary
	control.	in the Mineral Resource estimate using DGPS and GPS collar data. The Competent Person considers that the topography file is accurate given the use of DGPS data in the Mineral Resource area.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drill spacing is 250 m by 250 m at the Central deposit, and 300 m to 500 m at Buckman and Red Hill.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The Competent Person believes the mineralised domains have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern.
	Whether sample compositing has been applied.	Samples were composited to 1 m prior to grade interpolation. This was considered appropriate given that most the samples have been collected over this interval. This allowed the natural variability of the sample data to be maintained prior to grade interpolation.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Most holes are vertical. This allows the holes to intersect the mineralisation at a high-angle.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The relationship between the drilling orientation and the orientation of key mineralised structures is not considered to have introduced a sampling bias.
Sample security	*The measures taken to ensure sample security.*	A SPM geologist and field assistant were present at the RC drill rig while samples are being drilled and collected. Samples were bagged and tied for transport to the laboratory by a courier. All pulps and residues are currently stored in SPM's West Perth warehouse.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews of sampling techniques and data have been carried out.

JORC 2012 Table 1 Section 2 – Key Classification Criteria

Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites,*	The Central Mineral Resource is located on E80/2863. The Buckman Mineral Resource is mostly on E80/2863, however extends slightly onto E80/3657. The Red Hill Mineral Resource is on E80/3657. The Exploration Licences are held by Speewah Mining Pty Ltd, a wholly owned subsidiary of KRR. The Mineral Resources are located on Doon Doon pastoral lease in the East Kimberley of Western Australia. No Native Title Claims are located over the tenements.

	wilderness or national park and environmental settings.	
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	Both E80/2863 and E80/3657 are granted tenements, with expiry dates of 10/8/2017 and 28/1/2019 respectively. The tenements are in good standing, and extensions of terms for the tenements have been previously granted on the basis of exploration is incomplete, expenditure commitments have exceeded the minimum requirements, and new exploration and development programmes planned.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	No exploration completed by other parties is relevant for the Mineral Resource estimates reported herein.
Geology	*Deposit type, geological setting and style of mineralisation.*	The deposit represents part of a large layered intrusion (the Hart Dolerite), which was intruded c1790 Ma. Since the discovery of Speewah in 2006, at least two distinct types of felsic granophyres and three mafic gabbros have been identified in the Hart Dolerite as follows: • K felsic granophyre (youngest) • Mafic granophyre • Pegmatoidal gabbro • Magnetite gabbro (host unit) • Felsic gabbro (oldest). Given the mode of formation, mineralisation displays excellent geological and grade continuity which has been considered when classifying the Mineral Resource estimate.
Drill hole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *Easting and northing of the drill hole collar* • *Elevation or RL (Reduced Level – Elevation above sea level in metres) of the drill hole collar* • *Dip and azimuth of the hole* • *Downhole length and interception depth* • *Hole length.*	Exploration results are not being reported.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Exploration results are not being reported.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually*	Exploration results are not being reported.

	Material and should be stated.	
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Exploration results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Exploration results are not being reported.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	The mineralisation is near horizontal and drilling is generally vertical. The drill holes therefore intersect the mineralisation at close to right angles.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. "downhole length, true width not known").	Exploration results are not being reported.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.*	Significant discovery not being reported.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Exploration results are not being reported.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical*	No other substantial exploration data has been used in the preparation of this Mineral Resource estimate.

	test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Further work will be focused on: 1. pit optimization studies on the Central deposit to select areas with high vanadium grade and tenor at shallow depth with a small strip ratio; and 2. beneficiation and hydrometallurgical testwork on drill chips and core samples to develop a process flow sheet for the extraction of high purity vanadium pentoxide, titanium dioxide and vanadium electrolyte.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams have been included in the body of this report showing the dimensions of the modelled Mineral Resource, however no additional drilling is planned in the near future.

JORC 2012 Table 1 Section 3 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Logging is completed onto templates using standard logging codes. Analytical results are imported directly into the Access database by a database specialist.
	Data validation procedures used.	Numerous checks were completed on the data. Downhole survey depths were checked to make sure they did not exceed the hole depth, hole dips were checked that they fell between 0 and –90, sample intervals were checked to ensure they did not extend beyond the hole depth defined in the collar table, and assay and survey information were checked for duplicate records. No material validation errors were detected. All holes were visually reviewed in Datamine to ensure hole paths were sensible.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	The Competent Person has not completed a site visit. A CSA Global consultant visited site in 2009 while drilling was being completed at the project.
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	A high confidence is placed in the interpretation of the mineral deposit. The mineralisation represents part of a layered intrusion and displays excellent geological continuity.
	Nature of the data used and of any assumptions made.	All interpretations were based on both drill holes and surface mapping. High grade mineralisation was modelled based on a cut-off grade of 0.18% V_2O_5 and low grade mineralisation was modelled based on a cut-off grade of 0.1% V_2O_5.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative interpretations are unlikely to be plausible.
	The use of geology in guiding and controlling Mineral Resource estimation. *The factors affecting continuity both of grade and geology.*	Geological logging and geochemistry has been used to guide mineralisation interpretations. Continuity of mineralisation is excellent. The mineralisation is limited to the interpreted gabbro unit
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The Speewah Project comprises three deposits which cover a total extent of approximately 17 km in a north-south direction. Each deposit is approximately 2 km in width. The maximum depth of the deposit is approximately 295 m from surface. Individual mineralised zones vary in thickness with the high-grade zone varying from 1 m to 77 m with an average of 19 m and the low grade zone varying from 2 m to 65 m with an average of 24 m.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	A Mineral Resource estimate has been completed for the deposits: Central, Buckman and Red Hill. All deposits are in close proximity and lie within the same intrusion (the Hart Dolerite). High and low-grade domains were modelled at each deposit, and hard boundaries were placed between them for estimation (only samples within each domain were used to inform interpolation). No top cuts were applied following statistical analysis given the low variability of the data. A 1 m composite length was chosen to regularise the data prior to variography and grade interpolation given this was the dominant sample interval Variography was completed for Fe, Ti and V at each deposit. V data was separated into high and low-grade domains prior to variography, however Ti and V data was combined to improve variogram quality. The nugget components varied from 2% to 15%, and long-ranges were modelled for each constituent reflecting the good grade continuity. A two-structure spherical model was adopted for variogram modelling. A 3D block model of the mineralisation was created using Surpac software for each deposit, with 1 m composite samples used to interpolate grades into blocks using ordinary kriging. A four pass (Central) three-pass (Buckman and Red Hill) search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not select sufficient data for the block estimate.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Previous Mineral Resource estimates were undertaken for the Central deposit (CSA Global) in April 2009, and all three deposits by Runge in 2010. An update to the Buckman Mineral Resource was reported by Runge in April 2011. In March 2012, Runge reported an updated Mineral Resource for all three deposits under the JORC Code (2004). This report updates the March 2012 Mineral Resource in accordance with the current JORC Code (2012). The Mineral Resource estimates increased from 2009 to 2012 due to completion of additional drilling.
	The assumptions made regarding recovery of by-products.	No assumptions have been made regarding recovery of by-products.
	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	No deleterious elements have been estimated.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	The block size chosen represented approximately half of the average drill spacing and the search ellipse was varied to reflect the geometry of each deposit. A parent cell size of 100 m N by 50 m E by 5 m RL was used for the Central and Buckman deposits, with sub-celling to 25 m N by 12.5 m E by 1.25 m RL to honour the wireframe boundaries. A parent cell size of 200 m N by 100 m E by 5 m RL was used for Red Hill, with sub-celling to 50 m N by 25 m E by 1.25 m RL.
	Any assumptions behind modelling of	No assumptions were made regarding selective mining

Criteria	JORC Code explanation	Commentary
	selective mining units.	units.
	Any assumptions about correlation between variables	No assumptions have been made regarding correlation between variables.
	Description of how the geological interpretation was used to control the resource estimates.	The following approach was adopted when modelling the mineralisation: • A base of oxidation was modelled at each deposit to define the base of the oxidised gabbro which is considered likely to have different metallurgical properties to the remaining mineralisation. This surface represents the base of the soil horizon or oxidised gabbro. • High grade mineralisation was modelled based on a cut-off grade of 0.18% V_2O_5. • Low grade mineralisation was modelled based on a cut-off grade of 0.1% V_2O_5. • A minimum downhole length of 2 m was used. • Some zones of internal dilution were included to maintain continuity of the lenses. • Interpretations were completed on drill sections. Sectional interpretations were then joined to form 3D solid or surface models, with surface mapping used to guide interpretations near surface. • If high or low grade zones were not obvious in drill holes, the interpretation was thinned as required. If no mineralisation was present, the strings were digitised to half the distance from the last mineralised hole. Wireframes were adjusted as required to match the known dip, strike and plunge of each deposit.
	Discussion of basis for using or not using grade cutting or capping.	No grade cuts were applied given the low variability of the data.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	Drillhole grades were initially visually compared with cell model grades. Domain drill hole and block model statistics were then compared. Swath plots were also created to compare drillhole grades with block model grades for easting, northing and elevation slices throughout the deposit. The block model reflected the tenor of the grades in the drill hole samples both globally and locally.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages are estimated on a dry basis. No moisture values were reviewed.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	A cut-off grade of 0.23% V_2O_5 has been applied when reporting the Mineral Resource. Material above 0.23% V_2O_5 is well constrained within the host magnetite gabbro. The 0.23% V_2O_5 cut-off grade is within the range adopted for reporting Mineral Resources at other Australian Fe-V-Ti deposits for planned open cut operations.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the*	No assumptions regarding mining method have been made. The large shallow nature of the mineralisation means the deposit lends itself to open pit mining.

Criteria	JORC Code explanation	Commentary
	process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Metallurgical test work has indicated production of a magnetite concentrate is possible with much higher grades that the current Mineral Resource implies. Metallurgical test work is ongoing to determine the preferred processing route to be considered in the upcoming Pre-feasibility Study.
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the*	Environmental considerations have not yet been considered due to the early stage of this project. It is therefore assumed that waste could be disposed in accordance with a site-specific mine and rehabilitation plan.

Criteria	JORC Code explanation	Commentary
	environmental assumptions made.	
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Bulk density determinations adopted the water displacement method.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	The host rocks are not porous hence standard water immersion techniques were considered appropriate.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Bulk density was assigned to the block model based on the average of 59 measurements taken from fresh material within two diamond holes. There was little variation in density across the deposit.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1 as follows: • Areas of the deposit were classified as Measured where the drill spacing was 250 m by 250 m. • Areas of the deposit were classified as Indicated where the drill spacing was 400 m by 400 m. • Subsidiary lodes were classified as Inferred if the drill spacing was broader than 400 m by 400 m within the mineralised envelope.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource estimate appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the*	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.

Criteria	JORC Code explanation	Commentary
	Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production has occurred.