



SPEEWAH METALS LTD

ASX Code: SPM

Capital Structure:

Shares on Issue: 130.7m
Options on issue: 6.95m
Exercise Price: 24c – 55c
Market Cap: \$15.6m (12c)

Board of Directors:

Non Executive Chairman:
Anthony Barton

Non Executive Director:
Derek Carew-Hopkins

Non Executive Director:
Leon Charuckyj

Executive Director:
Richard Wolanski

Projects:

Speewah Dome, 575 km²
Kimberley, WA

Resources:

Titanium/Vanadium:
4.7 Billion tonnes @ 0.30%
V₂O₅ and 2% Ti (at 0.23% V₂O₅
cut-off grade)

Fluorite: 6.7 Million tonnes @
24.6% CaF₂ (at 10% CaF₂ cut-
off grade)

Metallurgy:

Recovery from concentrate

- Ti (+91.1%)
- V (+94.6%)
- Fe (+97.0%)

Purity of end products

- TiO₂, Fe₂O₃ (+99%)
- V₂O (+94%)

Project Scoping:

Target production

- TiO₂ 75,000 tonne pa
- V₂O₅ 12,400 tonne pa

Revenue: US\$570 million pa

NPV: US\$1.4 Billion

Other prospects:

Copper/Gold/Silver & Lead
PGE+Au

QUARTERLY ACTIVITIES REPORT QUARTER ENDED 30 JUNE 2012

HIGHLIGHTS FOR THE QUARTER

INITIAL METALLURGICAL TESTWORK & SCOPING MODEL COMPLETED

Scoping study released 23 April 2012 supported the potential for a significant and highly profitable future mining project that generated +90% recoveries of Titanium (Ti), Vanadium (V) and Iron (Fe) as 3 separate high grade end products.

Scoping Model Summary	
Target production (Key products)	75,000 tn TiO ₂ , 12,400 tn V ₂ O ₅
By Products (Production Credits)	410,000 tonne Fe ₂ O ₃ (Hematite), 200,000 tonne (NH ₄) ₂ SO ₄ (Ammonium Sulphate)
Mining Ore (Annual)	4.2 million tonne
Mine Life	+100 years
Production of Concentrate per year	550,000 tonne
Recovery from Concentrate	Ti (91.1%); V (94.6%); Fe (97.0%)
Indicated Purity of End Products & Forecast Prices (per tonne)	TiO ₂ (+99%) US\$3,750 V ₂ O ₅ (+99%) US\$13,500 Fe ₂ O ₃ (+99%) US\$160 (NH ₄) ₂ SO ₄ US\$275
Annual Revenue	US\$569 million
Cost to Create 1 tonne Concentrate Feedstock (Stage 1)	US\$166 per tonne
Transport/ Royalty/ Technology Costs	US\$145 per tonne
Cost Mixed Chloride Leach & Recovery (Stage2)	US\$341 per tonne
Total Annual Operating Costs	US\$359 million
Net Annual Operating Cashflow (EBITDA)	US\$210 million
Capital Expenditure	US\$896 million
Payback Period	4-5 years
Internal Rate of Return (IRR)	23.4%
Conceptual project valuation	US\$1.4 Billion

MODULAR DEVELOPMENT SCOPING

The mixed chloride leach, solvent extraction and precipitation plant production facility could be developed in stages, allowing commercial production at lower target levels of production which can be scaled up once commercialisation has been proven and customer demands dictate. This opportunity represents a significant reduction in the development risk of the Ti/ V project. Capital expenditure for the initial production facility is expected to be significantly reduced in line with production output. Operating and Capital Cost estimates for this initial phase of development are expected to be completed during the current quarter.

AGREEMENT WITH TRADITIONAL OWNERS

A binding Memorandum of Understanding (MOU) was completed with the Orla People who have a traditional connection to, and claim native title rights to, the area on which the Speewah tenements are located. The MOU sets out the process for negotiations, scope of negotiations, establishes an agenda and confirms a timetable to complete negotiations that will satisfy the future act provisions of the *Native Title Act 1993* in respect of the recently scoped Titanium/ Vanadium/ Hematite Mining Project.

GRANT/REBATE FUNDING RECEIVED

The following Grants/rebates funding were received:

- 2011 Research & Development Rebate \$747,000
- 2011/2012 Exploration Incentive Scheme (2nd Stage) \$ 30,000

END OF HIGHLIGHTS



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BACKGROUND & SYNOPSIS OF SPEEWAH METALS LTD

Speewah Metals Ltd has established a portfolio of 100% owned tenements covering approximately 575 square kilometres in the East Kimberley region of Western Australia ("Tenements").

Since Speewah was listed on the ASX in 2007, the company has focused on exploring an extensive zone of vanadiferous and titaniferous magnetite mineralisation. This exploration has delivered Australia's largest titanium/vanadium in magnetite resource and a high grade Fluorite resource. The projects have advanced beyond exploration and have entered the feasibility and development phase.

The Titanium/ Vanadium/ Hematite Project represents the major asset and value add project for shareholders. Metallurgical studies have significantly reduced technical risk associated with the acid leach and solvent extraction processing technique and enables a focus towards development of a significant mining operation.

Initial planning envisages a mining /processing operation that produces a minimum of the following end products:

- Titanium Dioxide (TiO_2) 75,000 tonnes per year
- Vanadium Pentoxide (V_2O_5) 12,400 tonnes per year
- Hematite (Fe_2O_3) 410,000 tonnes per year
- Ammonium Sulphate ($(\text{NH}_4)_2\text{SO}_4$) 200,000 tonnes per year

Each of the end products is expected to be produced at high grade purity levels of >98% which should enable Speewah to secure premium pricing for the end products. The recovery process and testwork confirms that modular development of a mine and process facility could see Speewah commence at lower target production levels than were used in the attached financial model and then be scaled up to match capital availability and product demand.

Subject to adequate funding, the objectives for 2012/13 include:

1. Planning of a modular development production facility that will allow commercial production at materially lower start up capital costs;
2. Optimisation of metallurgical process to improve profitability of Scoping Model;
3. Construction and completion of a pilot plant processing facility to demonstrate titanium/vanadium/hematite flowsheet and produce marketing sample to attract off-take and investment/strategic partners;
4. Input pilot plant results into pre-feasibility studies that will deliver optimised flowsheet, operating, and capital cost estimates that have the potential to significantly increase the existing project valuation of US\$1.4 Billion.
5. Delivery of the following development approval requirements:
 - a. Achieving Reserve status on Titanium/Vanadium in magnetite Resource;
 - b. Mining Lease;
 - c. Mining Agreement with landholders;
 - d. Application for Environmental Impact Assessment.
6. Commencement of definitive feasibility studies on Titanium/Vanadium/Hematite project.

These objectives are designed to reduce commercial risk and facilitate mine development.



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RESOURCES

The Speewah tenements contains one of the **world's largest undeveloped titanium/vanadium in magnetite deposits** with combined Measured, Indicated and Inferred **Resources totaling 4.7 billion tonnes at 0.30% V_2O_5 and 2% Ti** (at 0.23% V_2O_5 cut-off grade) in 3 deposits. The combined Central, Red Hill and Buckman (Appendix A) (Figure 1) deposits, include:

- Measured Resource of 322 Mt at 0.32% V_2O_5 and 2% Ti;
- Indicated Resource of 1,054 Mt at 0.33% V_2O_5 and 2% Ti, and
- Inferred Resource of 3,335 Mt at 0.29% V_2O_5 and 2% Ti.

Metallurgical testwork has confirmed that upon separation of a magnetite concentrate the outstanding feature of the Resource is that the upgraded concentrate assays at 54.2% Fe, 2.48% V_2O_5 and 14.9% TiO_2 .

With its flat lying geometry, extensive outcrop at surface and up to 80 metres thick, the deposit has the potential for large scale mining on a low strip ratio over the long term.

The tenements also contain a high-grade, high-quality **fluorite deposit** with Indicated and Inferred **Resources totaling 6.7 million tonnes at 24.6% CaF_2** (at 10% CaF_2 cut-off grade), comprising an Indicated Resource of 4.1 million tonnes at 25.3% CaF_2 and an Inferred Resource of 2.6 million tonnes at 23.6% CaF_2 . See Appendix A for Resources details.

TENEMENT OVERVIEW

Figure 1 below shows the Speewah tenements with existing Titanium/Vanadium Resources.

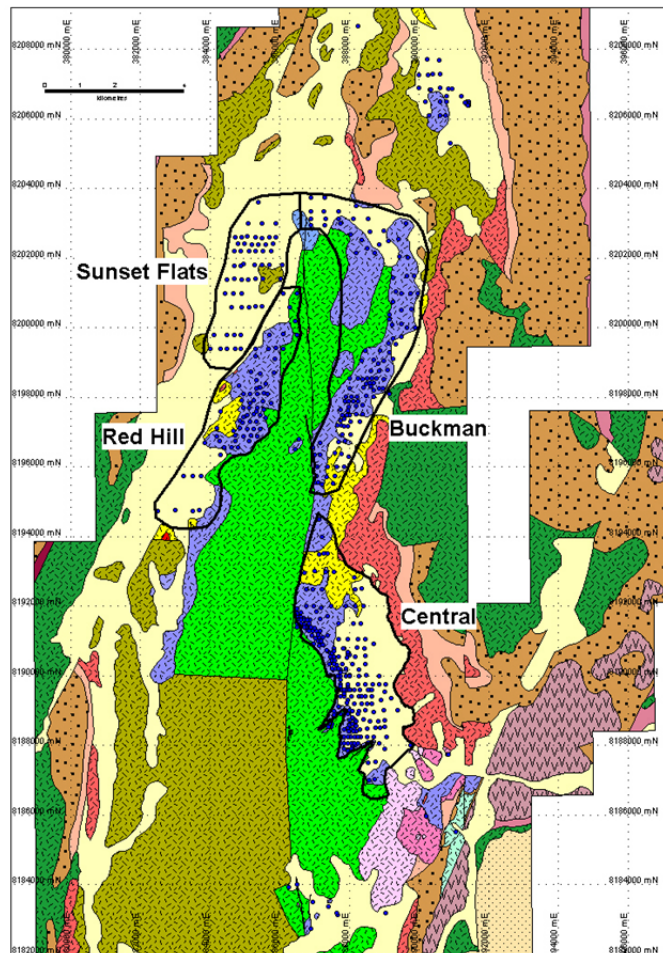


Figure 1: Geology of the Speewah Dome showing location of the Titanium-Vanadium Mineral Resources



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PRE-FEASIBILITY STUDIES AND FURTHER TESTWORK

Completion of the Scoping studies allows commencement of pre-feasibility studies during 2012/3. Subject to adequate funding further metallurgical testwork is also planned that aims to add value and de-risk the project. This will involve:

Stage 1 – Beneficiation of Ore to Magnetite Concentrate

Production of a titanium/vanadium magnetite concentrate represents the 1st stage of processing. Testwork will consider ore variability, feedstock optimisation and tailings characterisation to refine the JORC resource and mine life calculations. This work will also support development of a tailings plan, footprint calculation and Mining Lease application.

Crush and grind testing will be completed to optimise the process and potentially provide significant operating and capital cost savings. Consideration of economic factors to upgrade the resource to Reserve status will be undertaken.

Stage 2 – Mixed Chloride Leach & Solvent Extraction Plant: - Pilot plant testing of the mixed chloride leach and solvent extraction process to produce high grade end products including TiO_2 and V_2O_5 . The pilot plant testing will:

- Enable process flowsheet design to deliver operating and capital cost estimates at a feasibility level;
- Refine metallurgical recoveries;
- Confirm end product purities;
- Provide products for market evaluation;
- Provide solid and liquid samples for Environmental Impact Assessment.

ADDITIONAL SENIOR TECHNICAL HUMAN RESOURCES

With the transition from exploration to project development Speewah has commenced a process of securing additional senior technical people that will assist with the next key pre-feasibility, development approvals and other pre-mine construction objectives.

ACCESS, TENURE, APPROVAL AND LOGISTICS WORKS

Mining Lease - An application for a Mining Lease is planned following analysis of the flowsheet generated from the Scoping studies to determine footprint of the combined mine site and tailings areas. The determination of this factor is the only matter outstanding as the company has already compiled other information necessary to support the application for a Mining Lease.

Mining Agreement - A binding Memorandum of Understanding (MOU) was completed with the Orla People and negotiation of a Mining Agreement with landholders continues and has achieved significant progress. Speewah will continue to work with traditional owners to deliver a beneficial and equitable outcome.

Environmental Application - Fieldwork has been completed on Flora and Fauna studies on the Central Deposit Resource. This work supports completion of the application for environmental assessment.

Aboriginal Heritage Survey was completed and approved in 2010 over proposed initial mining area of the Central Deposit. This represents a major step towards development of a mining operation at Speewah.

Logistics - Scoping studies indicates that transporting the magnetite concentrate to Wyndham for further processing or loading onto barges before being loaded onto larger ships away from the port is likely to be the most efficient method to transport large quantities of product for export. This transport and shipment method is being used by a nearby iron-ore mine and confirms the feasibility and proof of concept of this transport method for Speewah. Port loading facilities with spare capacity exist in Wyndham and have the ability to link Speewah to nearby Asian markets.



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OTHER PROSPECTS - COPPER/GOLD AND FLUORITE AND PGE+AU

Copper/Gold—The Cu/Au opportunity remains largely untested and there remains significant exploration potential on the Speewah tenement. The Company is undertaking an independent geological review of the Copper/Gold prospects for the purposes of identifying new exploration targets.

Fluorite— Drill results have identified fluorite rich intersections and extensions of the existing fluorite resource. This has led to the discovery of a new fluorite vein along the east contact of the King River Fault and there are a number of new drill intersections of fluorite veins that are not part of the existing resource. The Exploration Target* for fluorite deposits, in addition to the existing resource of 6.7Mt at 24.6% CaF₂, is an additional 2 to 4Mt at 20-25% CaF₂. Fluorite could be mined along with a potential Ti/ V/ Fe operation to share infrastructure and improve project economics.

PGE+Au – A PGE+Au reef that runs through the existing Titanium/Vanadium resource may improve project economics of the Ti/ V/ Fe project through associated recovery.

PROMOTION OF THE SPEEWAH OPPORTUNITY

Titanium dioxide is used to make pigments for paints and ceramics for the construction industry. Vanadium is a ferro-alloy used to produce hardened and tool steel. The titanium industry is many times larger than the vanadium industry.

With the increases in demand for these commodities driven by the construction and global steel production in Asia and specifically China, Speewah's focus has been to identify customer demand from this region.

The strategy for the Speewah assets has been to promote the Speewah tenements potential for a multi-commodity mine with shared infrastructure (road, campsite, power, tailings and water) with focus on the very large Titanium/Vanadium magnetite deposit to identify a strategic investor or development partner.

CONCLUSIONS

Full Scale Scoping studies confirm that the development of the Mixed Chloride Leach and Solvent Extraction Process Route for the Titanium/ Vanadium project is the primary strategic objective of the Company. Scoping study results provide an indication of a highly valuable development opportunity for the Speewah project.

Focus will turn to pre-development to de-risk the project through obtaining the necessary approvals for development.

Significant further project value could be added throughout 2012/13 via further technical studies that aim to optimise the recovery process and improve the financial model. These studies, subject to sufficient working capital, will include pilot plant testing leading to prefeasibility studies and consideration of optimisation opportunities including:

- Optimisation of the metallurgical process to improve profitability;
- expansion of the target production levels following an initial start up period;
- further metallurgical processing to produce a higher value pigment product from the high grade TiO₂;
- cost reduction through testwork on crushing/ grinding and iron extraction/acid recovery;
- potential development of the fluorite resource that exists near the project.

The opportunity for modular development offers the potential for commercial operation at lower production target levels. This would significantly lower initial capital expenditure requirements and improve confidence in funding of the project.

End of Quarterly Activities Report

* Note: Exploration Target is not a mineral resource and further drilling is required which may not define these tonnes & grade. The potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a mineral resource and it is uncertain if future exploration will result in the determination of a mineral resource.



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APPENDIX A

RESOURCES

The Speewah tenements contain the following Mineral Resources:

TITANIUM - VANADIUM

The Mineral Resource for the **combined Central, Red Hill and Buckman** deposits (fresh material) within the Speewah project area is presented in Table A:

Table A: Speewah Mineral Resource Estimate March 2012 (0.23% V₂O₅ Cut-off)

Speewah Project		Tonnes Mt	V %	V ₂ O ₅ %	Fe %	Ti %
Zone	Class					
High Grade	Measured	181	0.21	0.37	15.1	2.1
	Indicated	404	0.20	0.35	15.0	2.0
	Inferred	1,139	0.19	0.34	14.9	2.0
High Grade Total		1,725	0.20	0.35	15.0	2.0
Low Grade	Measured	141	0.15	0.27	14.6	2.0
	Indicated	650	0.15	0.27	14.5	1.9
	Inferred	2,196	0.15	0.27	14.4	1.9
Low Grade Total		2,987	0.15	0.27	14.5	1.9
Combined Zones	Measured	322	0.18	0.32	14.9	2.0
	Indicated	1,054	0.18	0.33	14.9	2.0
	Inferred	3,335	0.16	0.29	14.6	2.0
Grand Total*		4,712	0.17	0.30	14.7	2.0

V₂O₅ calculated as V%*1.785

**Total does not include oxide material (218Mt at 0.29% V₂O₅ and 2.1% Ti) for which further metallurgical work is required to determine recovery.*

The Mineral Resource for **each of the Central, Red Hill and Buckman** deposits (fresh material) within the Speewah project area is presented in Table B:

Table B – Speewah Mineral Resource Estimate (0.23% V₂O₅ Cut-off)

Deposit	Tonnes Mt	V %	V ₂ O ₅ %	Fe %	Ti %
Central	1,240	0.17	0.31	14.6	2.0
Buckman	1,495	0.16	0.29	14.7	1.9
Red Hill	1,977	0.16	0.29	14.7	2.0
Grand Total	4,712	0.17	0.30	14.7	2.0

V₂O₅ calculated as V%*1.785

**Total does not include oxide material (218Mt at 0.29% V₂O₅ and 2.1% Ti) for which further metallurgical work is required to determine recovery.*

FLUORITE

The Fluorite resource is given in Table C. The deposit contains Indicated and Inferred Resources totaling 6.7 Mt at 24.6% (within high grade domains at 10% CaF₂ cut-off grade), comprising:

- Indicated Resource of 4.1 Mt at 25.3% CaF₂;
- Inferred Resource of 2.6 Mt at 23.6% CaF₂.

Table C: Speewah Fluorite Prospect Mineral Resource Estimate (August 2009)

Type	Indicated		Inferred		Total		
	Tonnes	CaF ₂	Tonnes	CaF ₂	Tonnes	CaF ₂	CaF ₂
	Mt	%	Mt	%	Mt	%	Mt
High Grade	4.1	25.3	2.6	23.6	6.7	24.6	1.7



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APPENDIX B

LOCATION

The Speewah tenements are located approximately 110 kilometres southwest of Kununurra and 110 kilometres south of the port of Wyndham in the Kimberley region of Western Australia (Figure 2). The Tenements are accessed via 35 kilometres of unsealed tracks from the sealed Great Northern Highway.

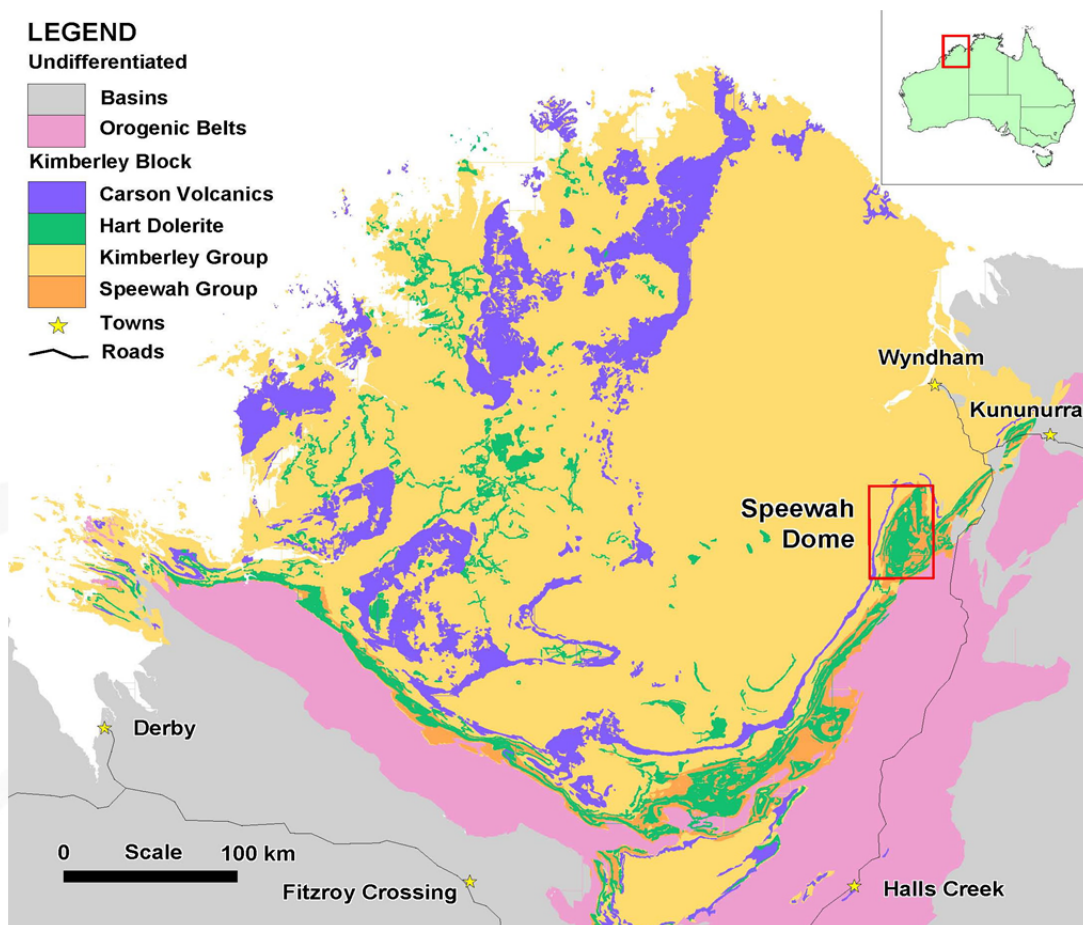


Figure 2: Location Map

FOR FURTHER INFORMATION, PLEASE CONTACT:

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Competent Persons Statement

The information in this report that relates to Exploration Results, Minerals Resources or Ore Resources is based on information compiled by Ken Rogers who is a Member of the Australian Institute of Geoscientists. Mr Rogers, Chief Geologist of Speewah Metals Limited, compiled the technical aspects of this report relating to the Speewah Project and content of this release. Mr Rogers has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Mineral Resources and Ore Reserves (the JORC Code). Mr Rogers consents to the inclusion in the report of the matters in the form and context in which it appears.