SYERSTON SCANDIUM PROJECT: LONG TERM SUSTAINABLE SCANDIUM SUPPLY USING CLEAN TEQ'S CONTINUOUS RESIN-IN-PULP TECHNOLOGY

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ABSTRACT

Clean TeQ is developing its Syerston Scandium Project in New South Wales, Australia. The Syerston ore body hosts the richest known natural concentration of scandium at scale in the world.

Scientists and metallurgists have known for decades that scandium has a range of unique properties, notably as an alloying agent for aluminium. Aluminium-Scandium (Al-Sc) alloys have remarkable strength, corrosion resistance and welding characteristics. As such, they hold the promise of lighter weight and more energy-efficient solutions in mainstream economic activities ranging from transportation (aerospace, rail, marine, automotive) to construction to power distribution. More recently, the substitution of scandium for yttrium in solid oxide fuel cells (SOFCs) has been critical to the emerging commercial success of these distributed power systems.

Until now, the world has derived limited benefit from scandium's unique potential because of a largely dysfunctional global supply chain. Scandium has only ever been recovered as a by-product of other mining or metal processing activities, from sources with low starting scandium concentrations. The available supply has been limited, unreliable and costly; the market has been opaque and distorted by political forces.

Clean TeQ is changing this paradigm, by combining Syerston's grade and unique hydrometallurgical processing technology to provide large-scale, low cost scandium to the market. At the core of the process is Clean TeQ's Continuous Resin-In-Pulp (cRIP) technology, which provides a simple highly efficient process route for recovery of scandium, as well as other by-product metals.

Keywords: scandium, aluminium alloys, Syerston, continuous ion exchange, resin-in-pulp, aerospace, automotive.

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The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Sharron Sylvester, who is a Registered Professional Geoscientist (10125) and Member (2512) of the Australian Institute of Geoscientists, and a full time employee of OreWin Pty Ltd. Sharron Sylvester has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australiain Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Sharron Sylvester, who is a consultant to the Company, consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

For further details on the content of this presentation, please refer to the ASX releases dated 24th November 2014, 23rd January 2015 and 25th May, 2015.





Scandium Strategic Lightweighting Material















Syerston | Scandium Mineral Resource

- The Syerston Project has almost 200 years supply at a production rate of 40tpa Sc₂O₃
- Cut-off grade can be adjusted to accommodate various production scenarios
- Potential resource upgrade once new scandium-targeted drilling is included.
- Syerston will be the world's first primary scandium mine.

Measured, Indicated and Inferred Scandium Resource (JORC 2012):

Scandium cut-off of 300ppm Sc:

Category	Tonnage,	Sc Grade,	Sc	Sc ₂ O ₃ Equiv
	Mt	ppm	Tonnes	Tonnes*
Measured	5.8	454	2,635	4,032
Indicated	15.9	420	6,697	10,247
Inferred	6.4	386	2,487	3,805
Total	28.2	419	11,819	18,083

Scandium cut-off of 600ppm Sc:						
Category	Tonnage, Mt	Sc Grade, ppm	Sc Tonnes	Sc ₂ O ₃ Equiv Tonnes*		
Measured	0.6	685	394	603		
Indicated	0.8	663	545	834		
Inferred	0.1	630	57	87		
Total	1.5	670	996	1,524		

* Sc multiplied by 1.53 to convert to Sc₂O₃.

















Scandium | Scoping Study Summary

Parameter	Assumption / Output	
Resource Base used for Mine	Measured & Indicated Resource	
Processing Plant Throughput	64,000tpa (1.28Mt over 20 yrs)	
Processing Plant Average Feed Grade	510g/t Sc 1	
Sc ₂ O ₃ Average Production (Years 1-20)	42.5tpa Sc ₂ O ₃	
Processing Plant Recovery	85%	
Life of Mine	20 years	
Long Term Sc ₂ O ₃ Price (99.9% purity)	USD\$1,500/kg Sc ₂ O ₃	
Exchange Rate	0.78USD:1AUD	
Total Capital Cost	AUD\$78.4M ²	
	AUD\$571/kg Sc ₂ O ₃	
Average Sc_2O_3 Unit Operating Cost (Yr 1-20)	USD\$446/kg Sc ₂ O ₃	
Average Annual Revenue	AUD\$81.8M	
Net Present Value (NPV) - post tax	AUD\$279.1M ³	
Internal Rate of Return (IRR) - post tax	53% ³	

1. Pit selection, dilution and mining factors applied

2. 20% contingency on direct capital costs 3. Post Tax, 8% discount rate, 100% equity, real terms All \$ are in Australian Dollars (AUD) unless otherwise stated.

- Robust project economics for • long term scandium production - lowest cost scandium mine currently being developed
- Key assumptions are output and price - unit opex is sensitive to production volume - larger volumes will lead to lower cost of production
- Low mining, processing and • permitting risk

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Feasibility Study to provide updated project economics based on additional drilling, metallurgical testwork and piloting

