



Nolans Project Update

Central Australia Mining Services Breakfast

Neil Graham - General Manager Operations
Brian Fowler - Sustainability Manager
9th November 2010

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The information in this presentation that relates to exploration results, mineral resources or ore reserves is based on information compiled by Mr Richard Brescianini BSc(Hons). The information in this presentation that relates to mineral resources or ore reserves is also based on metallurgical results and interpretation compiled by Mr Steven Mackowski BAppSc. Both are full-time employees of Arafura Resources.

Mr Brescianini is a Member of the Australian Institute of Geoscientists and he has sufficient experience which 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 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code)”. Mr Brescianini consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

Mr Mackowski is a Fellow of the Australasian Institute of Mining and Metallurgy and he has sufficient experience which 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 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code)”. Mr Mackowski consents to the inclusion in this presentation of the matters based on his metallurgical results and interpretation in the form and context in which it appears.



Arafura - An Emerging Rare Earths Company

“Clear Strategy + Confirmed Business Model + World class Nolans Project + Robust Plan for delivery + growing organizational capability = creation of wealth for shareholders”

As at 5th November 2010

Capital

335m shares

Market capitalisation

@ A\$1.30 = ~A\$435 million

Top shareholders

JP Morgan Nominees ¹	26.9%
ECE ²	19.2%
Institutions ³	13.0%
Board & Management	2.5%

Company formed in 1997

Listed on Australian Stock Exchange (ASX) in 2003 (ARU)

Making rapid excellent progress through the ‘Emerging Company’ phase towards first production in 2013

‘We know where we are going and what we have to do, are building the capability to succeed and are going full pace to deliver’

1. Substantial German-based shareholding amongst many shareholders (formerly ANZ Nominees)
2. East China Mineral Exploration & Development Bureau
3. Tranche 1 of the \$90m placement to institutions –details announced shortly.



Strategy & Vision

Clear Strategy

Our strategy is:

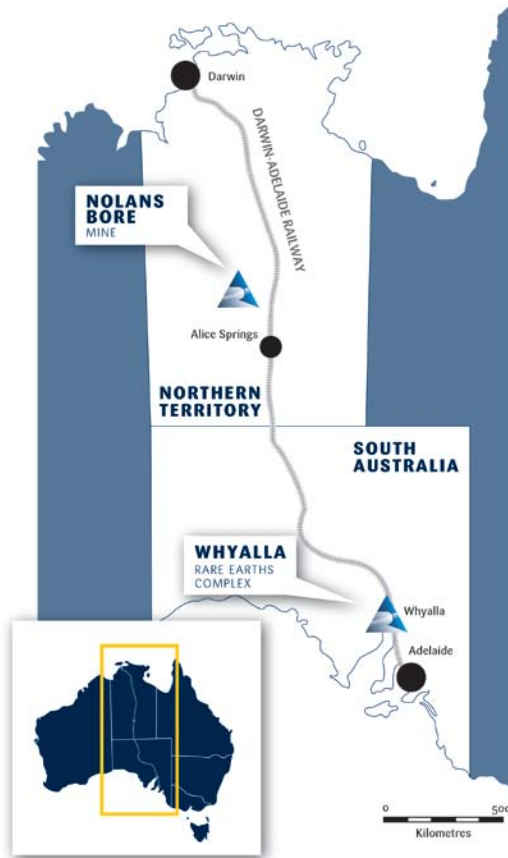
- To focus on Rare Earths;
- To generate significant value for shareholders via our Nolans project to exploit the World Class Nolans Bore Rare Earths resource
- To deliver the Nolans Project to become one of the very few new rare earths suppliers in the short to medium term timeframe
- To exhibit EHS and manufacturing excellence in all of our operations

***Our vision is to be the recognised leading supplier
of Rare Earths to the world***



Business Model

Confirmed Business Model



Adding Value in Australia:

- Mining & ore beneficiation at Nolans Bore in the Northern Territory
- Mineral Concentrate transported by rail to Whyalla in South Australia
- 20,000 tpa Rare Earth Oxides (REO) produced in Whyalla

Capturing Value in the Industry Supply Chain:

- Production of rare earth oxides rather than lower priced concentrates or intermediates
- Rare Earth oxides sales to users worldwide
- Products available for sale in rising market with excellent outlook

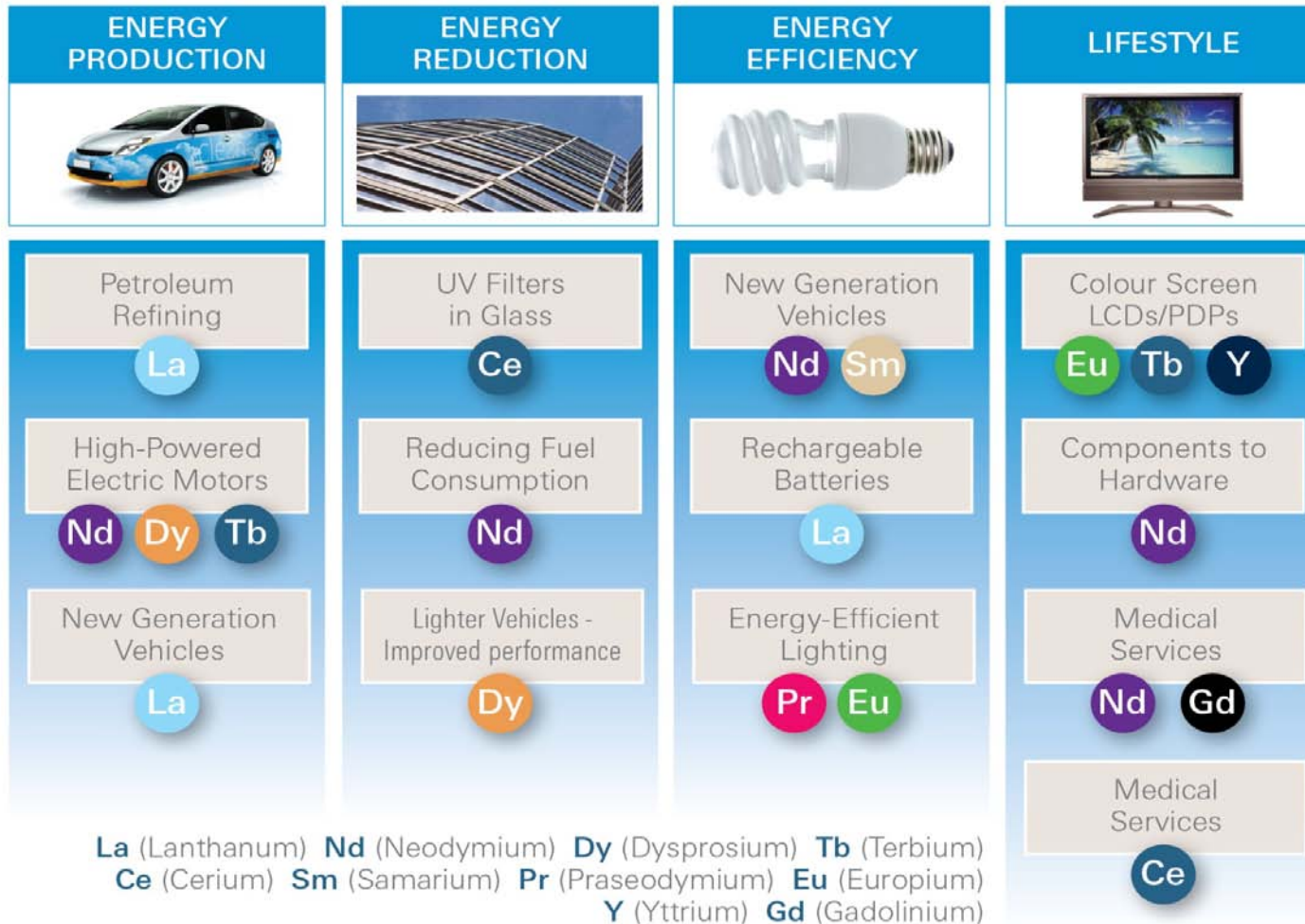




Rare Earths Market

Rare Earths: applications

An exciting market outlook in new high technology applications with increasing demand driven by consumers, society & regulators



- Critical ingredients of end products
- No substitutes available
- Minor recycling opportunities
- Very small part of end product cost

Rare Earths - global supply challenge

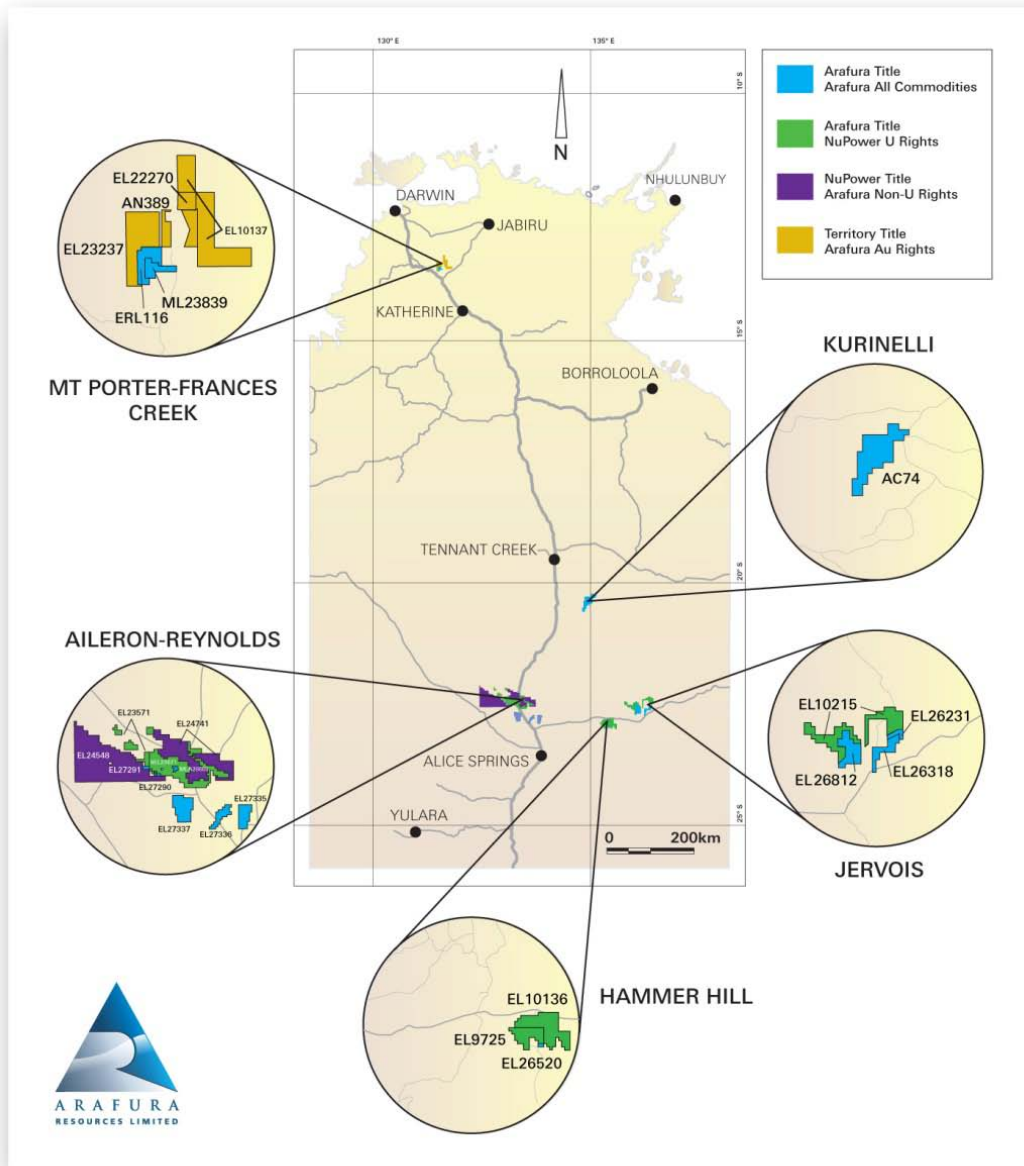
The world is looking for new (non – Chinese based) suppliers

- High capital and technology development – *different for each ore body* – are significant barriers to entry for new suppliers
- Each rare earths deposit is geologically unique and requires its own metallurgy to be developed. (*i.e.* long lead time to production and return on investment)
- New significant resources with proven technology are limited.
- China currently supplies 95% of rare earths
- China restricting supply through industry consolidation, quotas and tariffs.
- Arafura is well positioned to meet globally growing demand and importantly, has unfettered supply to anywhere in the world.



Nolans Project Progress

Nolans - exploration portfolio fit



Arafura's exploration focus remains on Rare Earths in the Aileron-Reynolds region of the Northern Territory.

We will add value to our non-Rare Earth assets through joint ventures.

Nolans is already a globally significant resource

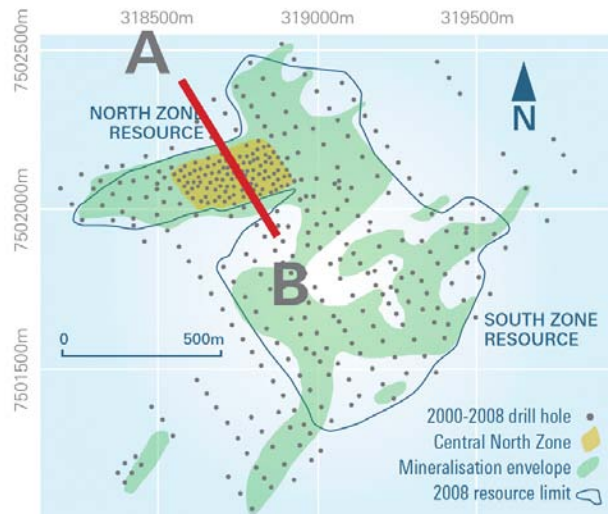
Total resources for Nolans Project

RESOURCES	TONNES ¹ (million)	RARE EARTHS REO %	PHOSPHATE P ₂ O ₅ %	URANIUM U ₃ O ₈ lb/t
Measured	5.1	3.2	13.5	0.57
Indicated	12.3	2.8	13.4	0.43
Inferred	12.8	2.6	12.2	0.40
TOTAL	30.3	2.8	12.9	0.44
CONTAINED METAL		848,000 t	3.9 Mt	13.3 Milb

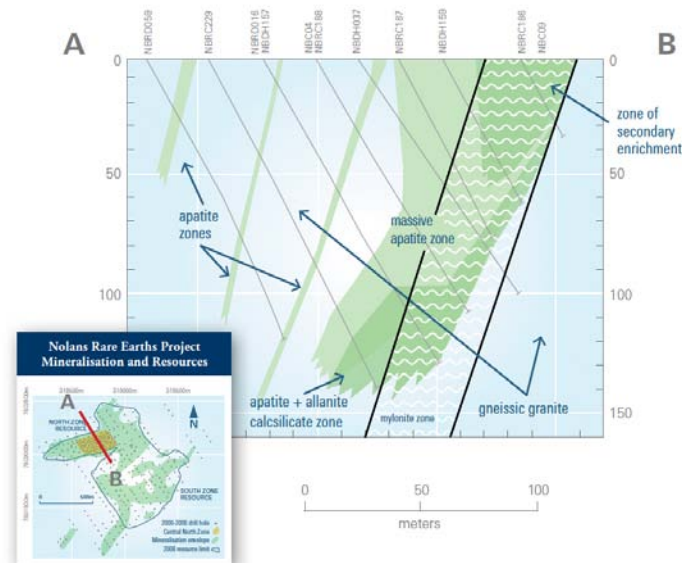
- Exposed at surface;
- Size extent unknown;
- Most drilling to approx 130 m below surface.

1. Using 1% REE cut-off grade

Nolans Rare Earths Project Mineralisation and Resources



Nolans Bore Cross Section



Nolans Project Alignment

Community Benefits

- NT Government regional strategies
- Local business development opportunities and synergies
- Local employment opportunities
- Unique DIDO opportunity
- Training and up-skilling
- Taxes and royalties

Approach:

- Open and meaningful engagement and communication
- Participation in community activities
- Support for community initiatives
- Respect for indigenous culture

Nolans Project update 2010

Building momentum towards project financing....

Nolans Bore

- Additional resource drilling
- Large diameter drilling programme completed
- Commenced engineering and environmental studies

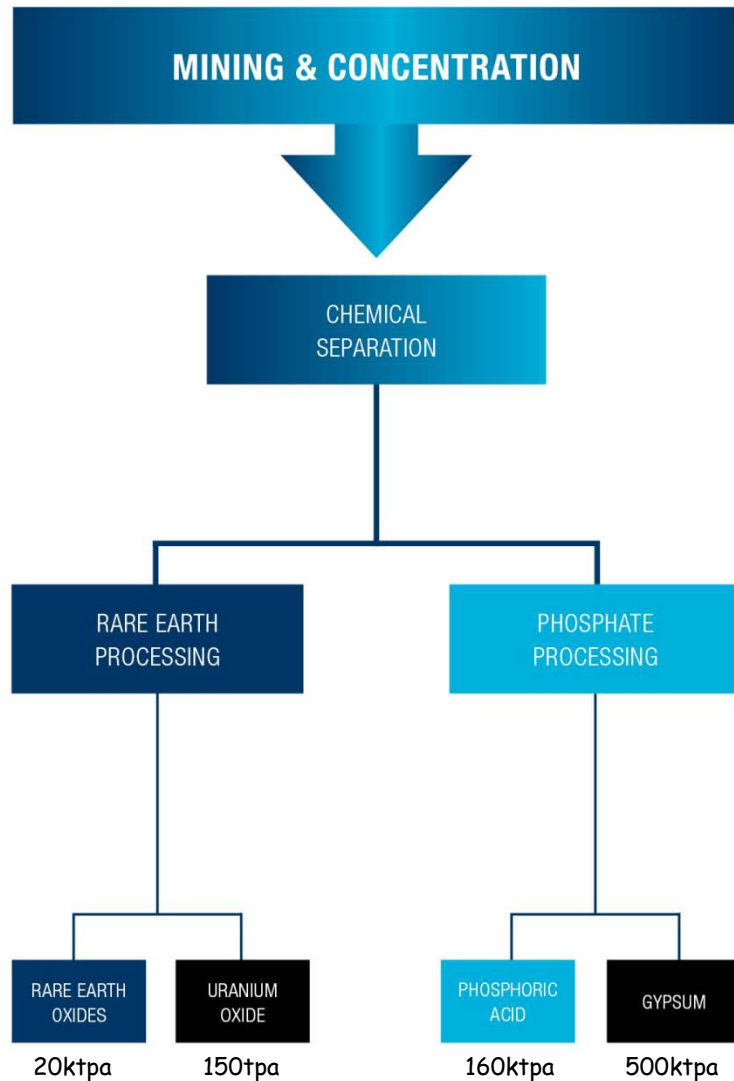
Rare Earths Complex

- Confirmed Whyalla as the preferred site location
- Major Project Status declared by South Australian Government
- Commenced engineering and environmental studies

Corporate

- Key employee appointments as part of building all-round capabilities
- Engaged with prospective marketing and supply partners
- Successful fund raising recently completed

Nolans Project – the process



Nolans Mine

- Mining Operation – Ore contains low level radionuclides
- Beneficiation Plant
- Iron Thorium Precipitate Storage

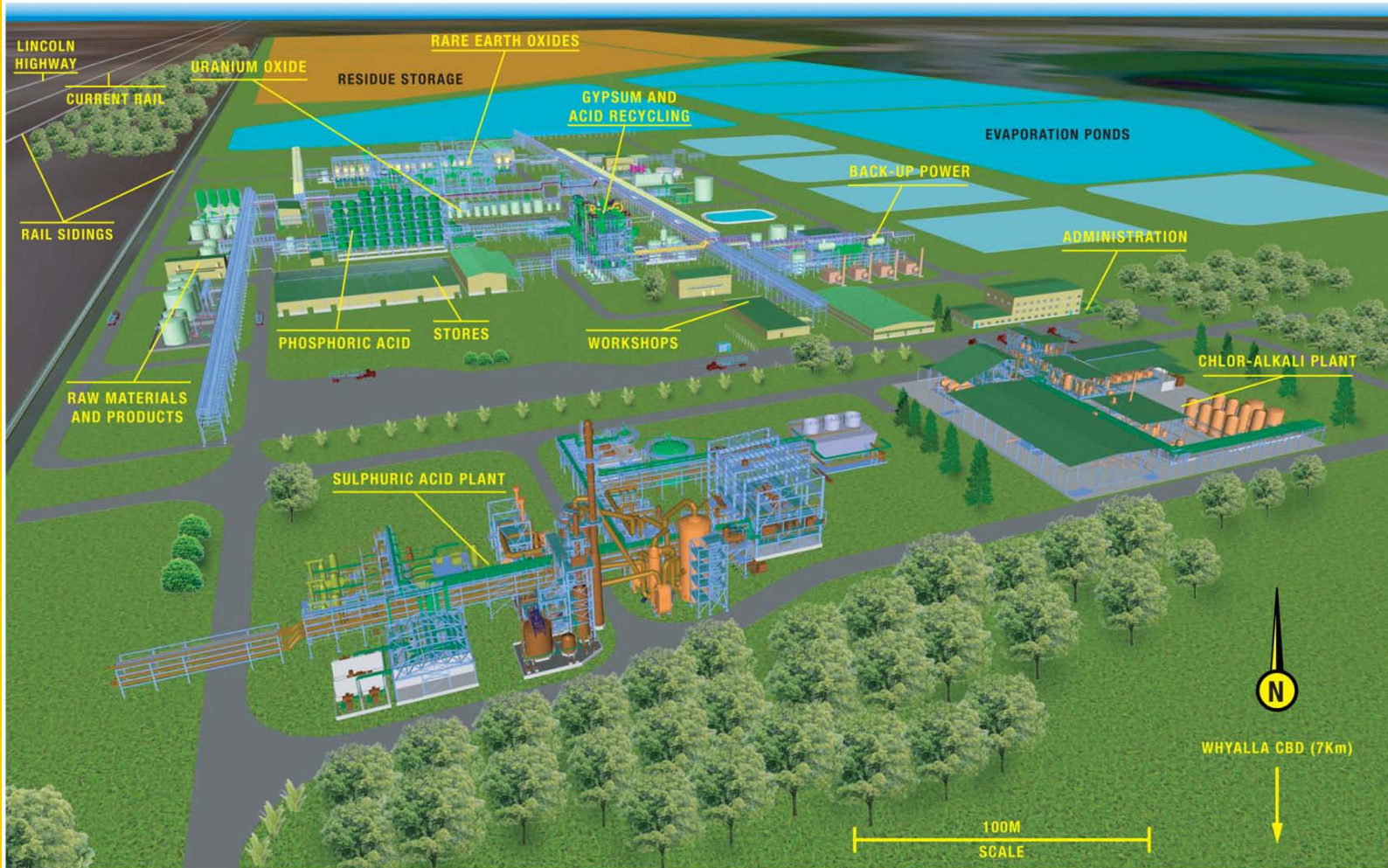
Whyalla Rare Earths Complex

- Rare Earth Oxides Plant
- Phosphoric Acid Plant
- Sulphuric Acid Plant
- Chloride recycle/Gypsum Plant
- Chlor-alkali Plant
- Reverse osmosis Plant
- Rail Siding

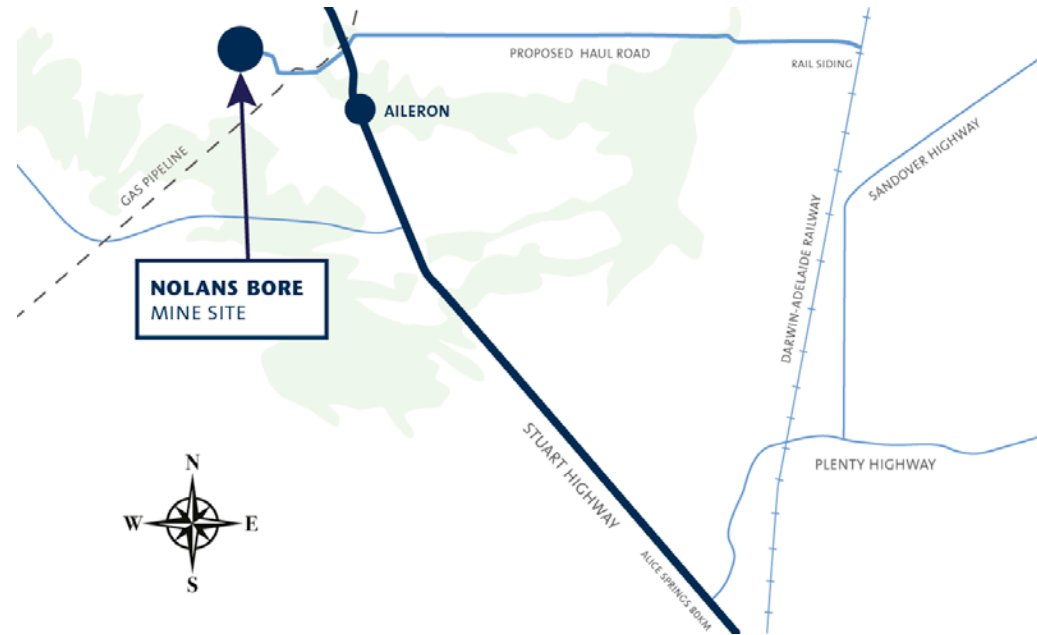
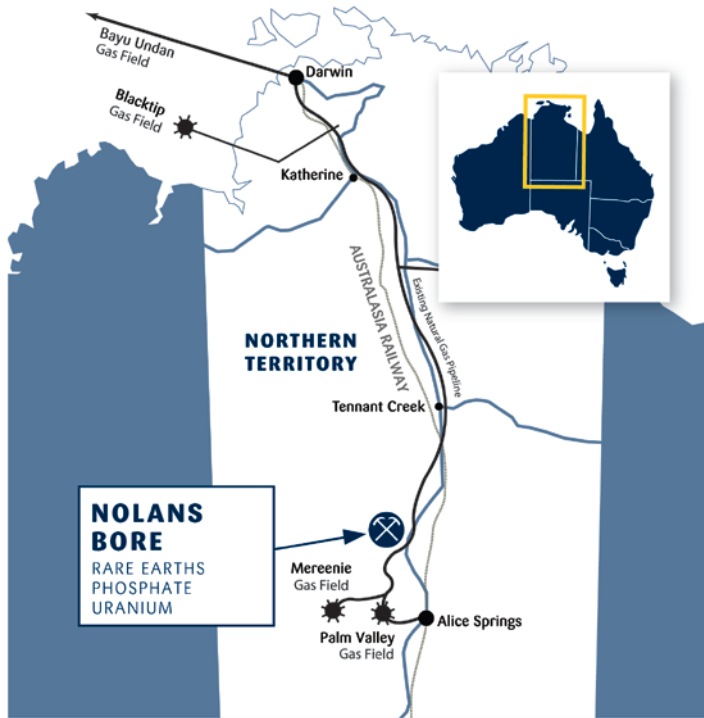
Locations



ARAFURA RARE EARTHS COMPLEX ARTIST'S IMPRESSION



Nolans Bore Mine: location



- 5 km to gas pipeline; 10 km to Stuart Highway; 135 km to Alice Springs;
- Mineral concentrate to be transported by road to Darwin-Adelaide rail line for transport to Whyalla.

Nolans Project Activities 2011

The next 12 months:

Technology

- Commercial quantities of Rare Earth Oxides produced
- Complete all piloting and demonstration programs

Mine

- Complete all engineering and environmental studies
- Regulatory approvals
- Resource definition and expansion drilling

Rare Earths Complex

- Complete all engineering and environmental studies
- Regulatory approvals

Corporate

- Continue to build technical capabilities
- Marketing and Supply contracts
- Finalise project finance

Nolans Project Timeline

First production remains on target for 2013....

Activity	Date
Mine design and site plan	Q4 2010
HCl Recovery Program (Calcium Chloride recycle)	Q1 2011
Mine Approvals	Q2 2011
Mine EIS	Q2 2011
Whyalla EIS	Q3 2011
Rare Earths Complex plant approvals	Q4 2011
BFS	Q4 2011
Project Financing	Q4 2011
Construction	2012/13
FIRST PRODUCTION	2013



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Thank You

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Erbium 167.259	Thulium 168.9342	Ytterbium 173.04	Lutetium 174.967

For more information.....

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01
HOME | **RARE EARTHS** | **OPERATIONS** | **EXPLORATION** | **SUSTAINABILITY** | **ABOUT US** | **INVESTOR INFO**

Arafura Fact Sheets

01. Who We Are

02. Nolans Project

03. Our Products

04. Nolans Bore Mine

05. Community Central Australia

06. Whyalla Rare Earths Complex

07. Community Whyalla

08. Radiation and its management

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Nolans Project Fact Sheets at www.arafuraresources.com.au

