



#### ASX RELEASE

13 May 2010

Major Diversified Western Australian Minerals Explorer

- Manganese
- Base metals
- Uranium
- Gold
- Iron ore
- Nickel
- PGE

#### 47% owner of Uranium explorer Desert Energy Ltd (ASX Listed)

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#### CAPRICORN SOUTHEAST MANGANESE PROJECT

- COMPLETION OF FIRST DRILLING PROGRAM
- ASSAYS AWAITED
- UPDATED COMPANY PRESENTATION ATTACHED
- PLANNING FOR NEXT DRILL PROGRAM UNDERWAY

Aurora Minerals Limited is pleased to announce the completion of the first drilling program of its 2010 drilling campaign on its 100% owned Capricorn Southeast Manganese project in Central Western Australia.

180 RC holes were drilled for approximately 7,500m. The Company is very pleased with the progress of the drilling rig, which completed the work in just one month, providing valuable information for the next program.

Drill logs are anticipated to be available for release to the market within the next two weeks.

The first of the beneficiation samples are now being processed with results due by the end of May. Individual one metre sample assays are expected to be available in the later part of June.

Permitting is underway for the next drilling campaign which will be a 650 hole campaign. The next drilling program is planned to infill parts of the program 1 drilling plus testing laterite and detrital targets shown in the presentation. The program maybe modified according to ongoing results.

The attached presentation includes a map showing areas the proposed next drilling program.

Dr Robert Taylor Managing Director Garry O'Hara Executive Director The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Robert S Taylor, a Member of The Institute of Materials, Minerals and Mining and Mr. Garry P O'Hara, a corporate member of the Australasian Institute of Mining and Metallurgy based on information supplied by a number of geological consultants to Aurora Minerals and Desert Energy who are corporate members of the. Australasian Institute of Mining and Metallurgy

Robert Taylor and Garry O'Hara are both executive directors of Aurora Minerals Limited and consult to the Company through their respective consulting companies Able Kids Pty Ltd and Anketell Pty Ltd.

Robert Taylor and Garry O'Hara have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Robert Taylor and Garry O'Hara consent to the inclusion in the report of the matters based on the information provided to them in the form and context in which it appears.

The Company's website <u>www.auroraminerals.com</u> is recommended reading for interested market watchers, brokers and investors. The website contains information on the Company's projects project maps, a list of the Company's announcements to ASX, information on Native Title ( including the tenement grant process and heritage surveys) including in the Aurora Minerals Annual Reports and the Desert Energy Prospectus, the legislative environments under which the Company operates, Corporate Governance, a section on risks, many of which are common to exploration companies, and other useful information. A list of the Company's announcements is also obtainable from the Australian Securities Exchange website at <u>www.asx.com.au</u>

If you would like copies of announcements emailed to you please contact Ken Banks.

## CAPRICORN SOUTHEAST MANGANESE PROJECT

# EXPLORATION

2010





## AURORA MINERALS LIMITED CAPITAL STRUCTURE



Shares on issue Directors and Management Options (Exercise price between \$0.30-\$1.62)

Market Capitalisation at \$0.70c Fully Diluted Market Cap at 70c

Cash on Hand (approx) Investments Desert Energy 47.4 million shares at 15 cents

Top 20 Shareholders own 53% of issued capital •New Zealand Group Fully Diluted •Directors Fully Diluted •Forbar Custodians •ANZ Nominees

104.1	million
33.25	million
\$72.87 \$96.14	million million
\$20.7	million
\$7.11	million
18%	
19%	
5.55%	2 3 36

5.27%



## Project Location & Infrastructure

Situated Central Pilbara, 100km SW of Paraburdoo and 420km from Dampier port.

Logistics, various possibilities:

- Truck to Paraburdoo and rail to Dampier
- Truck to Dampier port
- Oakajee port/rail
- Truck to Carnarvon

All subject to availability and economics





## MANGANESE



- Essential to iron and steel production hardens and strengthens steel - there is no substitute!
- Steel making accounts for 90% of total manganese demand
- Annual global production is 38 million tonnes of manganese mine product
- 70-75% of production is from South Africa (mainly Kalahari region)
- China accounts for between 45-50% of demand

## AUSTRALIAN MANGANESE DEPOSITS AURORA



#### Bootu Creek NT (OM Holdings – Market Cap \$1.1bn)

- Ore Reserves 22.4m tonnes at 22.1% Mn
- Beneficiates to produce 650,000+ tonnes per annum at 41.9% Mn
- Deposits occur as series of pods and lenses over 20kms

## Woodie Woodie WA (ConsMin - Privatised 2008 for \$1.15bn)

- Ore Reserves 15.8m tonnes at 42.1% Mn
- Produces 900,000 tonnes per annum at up to 48% Mn
- Deposits occur as series of 50 pods and lenses over 20kms

## EXPLORATION TARGETS CAPRICORN SOUTHEAST AURORA MINERALS LIMITED

>10 million tonnes of manganese resources (based on Bootu Creek Feasibility Study)

Grades of 15-40% Mn, low impurities

**Beneficiation to +42% Mn, saleable product** 

#### **PROJECT OVERVIEW 2009 PROSPECTING RESULTS** AURORA MINERALS LIMITE 500 000mE 530 000mE Ullawarra Formation host to manganese mineralisation Project WEST - OF - ROAD Location Rock-chip samples to 56.8%Mn WESTERN NORTHERN FLATS AUSTRALIA Rock-chip samples to 55.6%Mn 7 340 000mN MANGO 4 PROSPECT Rock-chip samples to 52.6%Mn Dooley Downs EVEN - FURTHER - EAST MANGO 103 4th HORIZON Rock-chip samples to 47.7%Mn Not yet prospected EAST - OF - ROAD 4th HORIZON Project Tenemen Rock-chip samples to 50.8%Mn

Boundary FAR EAST **Mount Augustus** 7 310 000mN SOUTHERN HILLS E09/1359 FIVE FINGERS PROSPECT Rock-chip samples to 40%Mn **NEW JOINT VENTURE AREA** Rock-chip samples to 55.1%Mn Rock-chip samples to 56.3%Mn **AURORA MINERALS LIMITED** 10km CAPRICORN SOUTHEAST PROJECT GENERAL PROSPECTING AREAS Datum: GDA94 Zone 50

## CAPRICORN SOUTHEAST CONCEPTUAL MODEL



## TARGET MINERALISATION FOR DRILLING



#### Massive manganese oxide horizons +40% Mn

#### Interbedded manganese oxides and shales

15 to 35% Mn Potential beneficiation material Upgrade to +40% product

#### Laterite-hosted

Large area for prospecting to north

#### **Detrital-hosted**

Large alluvial fans to southwest

## **PLANNED EXPLORATION PROGRAM – 2010**



Program 1 first pass drilling. First 30 prospects Commenced Week of 12 April 2010

More Drilling Approvals

Simultaneously Prospecting & Mapping - key areas

**Develop More Drill Targets** 



MINERALS LIMITED SOUTHEAST PROJECT ence E09/1359



**Beneficiation Testwork & Drill Assays** 



# **2010 DRILLING**



#### First Drill Program Completed May 2010

- 69 named prospects identified in 2009
- First pass reconnaissance drilling completed on first 30 prospects
- Excellent drilling progress commenced 12 April 2010 and took 1 month to complete 180 RC drill holes for approximately 7,500m
- Samples being collected for shipment to metallurgical and assay labs
- First beneficiation results expected by end of May
- Individual 1metre samples Mn assay expected later in June

0901600

Beneficiation tests ongoing





## **2010 DRILLING**



#### **Next Drill Program**

- Proposed 650 drill holes
- DMP (Governmental) permitting and Heritage Surveys process underway

#### Geophysics

EM and Gravity Surveys proposed



## BENEFICIATION TESTWORK



#### **Beneficiation Tests**

- Selected RC drill samples plus laterite/colluvial samples
- Uses density differences between heavy manganese oxide (density 4 to 4.5) and lighter shale beds (density 2 to 2.5)
- Separates out heavy material to produce an upgraded Mn product

#### Aim

• Determine if lower grade manganese (18% to 30% Mn) and interbedded Mn-shale samples are upgradable to high grade Manganese

#### Note

 Beneficiation on RC drill chips is very preliminary and may not be representative of lump ore beneficiation in a mining operation

# PROSPECTING



#### **2009 Discoveries**

- 95 kms of strike of Mn-host Ullawarra Formation identified (53kms prospected)
- Multiple pods and lenses of massive manganese oxides
- High grade surface samples up to 56.5% Mn
- Laterites initial samples (Mango 4 area) up to 59% Mn

#### **2010 Prospecting to Identify Further Drill Targets**

- Laterites northeast of the Ullawarra Formation
- Detrital deposits to the south of the Ullawarra Formation
- 40kms of strike in Even-Further-East Area
- Bedrock mineralisation at
  - o Northern Flats
  - o Southern Hills



## MAP OF FIRST DRILL PROGRAM 2010





## Syndicate Five Fingers Prospects Showing Program1 drill holes









#### Selected Field Geologist Drill Logs from First 70 drill holes Syndicate-Five Fingers-Far East Areas



HOLE #	Interval (Thickness) metres	FROM (depth) metres	MINERALISATION (VISUAL ONLY)
CSRC0013	36	18	ShI w/ interbedded Mn
CSRC0008	35	5	ShI w/ interbedded Mn
CSRC0004	22	11	shl w/ interbedded Mn
CSRC0009	19	9	Shl/Slt w/ interbedded Mn
CSRC0014	18	6	ShI w/ interbedded Mn
CSRC0002	15	6	ShI w/ interbedded Mn
CSRC0001	13	19	shl w/ interbedded Mn
CSRC0012	13	20	Shl/Slt w/ interbedded Mn
CSRC0011	12	18	Shl/Slt w/ interbedded Mn
CSRC0026	12	0	Mn
CSRC0006	11	18	ShI w/ interbedded Mn
CSRC0025	11	0	Mn
CSRC0010	10	34	Shl/Slt w/ interbedded Mn
CSRC0019	10	0	Mn
CSRC0009	3	6	Banded to Massive Mn
CSRC0001	2	8	Banded Mn
CSRC0002	2	4	Bedded Mn
CSRC0007	2	11	Banded Mn
CSRC0018	2	0	Massive Mn
CSRC0005	1	10	Massive Mn
CSRC0006	1	10	Massive Mn
CSRC0007	1	13	Massive Mn
CSRC0010	1	2	Massive Mn

## MAP OF FIRST DRILL PROGRAM 2010





## MAP OF PLANNED NEXT DRILLING 2010







## **SUMMARY**



- 95kms hard-rock greenfields manganese strike potential
- Prospected 55kms, rock-chip sampling and traversing
- Surface samples up to 56% Mn
- Series of pods/lenses massive manganese identified
- Plus manganese interbedded in shale sequence
- 94 drill targets identified so far
- First drill program commenced April 2010
- Next program in planning/application
- Manganese-in-laterite, prospecting underway
- Detrital potential to the south of main ridges

## Disclaimer

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## **Forward-looking statements**

Forward-Looking Statements are statements included herein, including regarding future ability to finance projects and other statements that express management's expectations or estimates regarding the timing of completion of various aspects of the projects' development or of our future performance, constitute "forward-looking statements". The words "believe", "expect", "anticipate", "contemplate", "target", "plan", "aims", "intends", "continue", "budget", "estimate", "may", "will", "schedule", and similar expressions identify forward-looking statements. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by management, are inherently subject to significant business, economic and competitive uncertainties and contingencies.

In particular, Aurora Minerals and Desert Energy's announcements and presentations include many such forward-looking statements and such forward- looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual financial results, performance or achievements of Aurora Minerals and Desert Energy to be materially different from its estimated future results, performance or achievements expressed or implied by those forward- looking statements and its forward-looking statements are not guarantees of future performance. These risks, uncertainties and other factors are included in the Risks section of the Companies' websites and ASX announcements available on the companies' and ASX websites. Aurora Minerals and Desert Energy expressly disclaim any intention or obligation to update or revise any forward-looking statements whether as a result of new information, events or otherwise, except where required by law.