

6 September 2010

## Increase in Resource Estimate for Deposit with Elevated Heavy Rare Earths

### Highlights

- **The Rare Earths Mineral Resource at Mount Weld has been divided into two deposits**
- **The Mineral Resource estimate for the deposit with a higher distribution of Heavy Rare Earths has increased threefold to 7.62 million tonnes at a grade of 4.8% REO for a total of 366,000 tonnes REO, and has been renamed the Duncan Deposit**
- **The Central Lanthanide Deposit which includes the area of the current mine plan remains essentially unchanged**
- **The combined Rare Earths Mineral Resource estimate for Mount Weld increased to 17.49 million tonnes at 8.1% REO, giving a new Resource of 1.416 million tonnes of REO, a 19.4% increase in contained REO compared to the previous Resource estimate.**

The Board of Lynas Corporation Limited (ASX:LYC, OTC:LYSDY) is pleased to announce a significant increase in the Mineral Resource estimate for the deposit with elevated heavy Rare Earths oxides. Previously known as the Southern Zone, this second deposit at Mount Weld has extended in terms of area and Resource and has been renamed the Duncan Deposit, in recognition of Mr Robert Duncan. Mr Duncan, the exploration geologist who first drilled Mount Weld in the 1970's, has held a passion for this resource for 40 years and recently retired from Lynas.

### THE DUNCAN DEPOSIT

The Resource with elevated heavy Rare Earths oxides has increased significantly, and has been renamed the Duncan Deposit. This deposit is located immediately to the north, east and south of the Central Lanthanide Deposit (see Figure 1).

The Duncan Deposit, according to the 2004 JORC Code, has an estimated Resource of 7.62 million tonnes at a grade of 4.8% REO for a total of 366,000 tonnes REO with a distribution biased more towards high value heavy Rare Earths. This represents more than a threefold increase in contained Rare Earths oxide compared to the previous Mineral Resource estimate, announced on 3 March 2008. Table 1 shows the classification of Mineral Resource for the Duncan Deposit (previously known as the Southern Zone).

**TABLE 1: CLASSIFICATION OF MINERAL RESOURCES FOR THE DUNCAN DEPOSIT**

Duncan Deposit Category	'000 tonnes	REO (%) *	TLnO (%) **	Y2O3(ppm)
<b>Measured</b>	3,650	5.5	5.2	2,700
<b>Indicated</b>	3,560	4.1	3.9	2,460
<b>Inferred</b>	410	4.3	4.1	2,360
<b>Total</b>	<b>7,620</b>	<b>4.8</b>	<b>4.5</b>	<b>2,570</b>

\* REO (%) includes all the lanthanide elements plus Yttrium

\*\* TLnO (%) includes all the lanthanides elements only (i.e. Yttrium is not included)

The average REO distribution of the Duncan Deposit is shown in Table 5. The average depth of this Resource is approximately 35 metres below the surface, which would allow an open-pit approach to mining.

Work has commenced on a pre-feasibility study to determine the optimal process flow sheet to maximise recovery of these valuable Rare Earths. Preliminary mineralogy test work has been completed and has identified the minerals associated with the heavy Rare Earths as churchite and xenotime, in addition to secondary monazite. Beneficiation process test work is due to commence in late 2010.

#### THE CENTRAL LANTHANIDE DEPOSIT - CURRENT OPERATION

The existing Rare Earths operation is based on a mine plan covering a high REO grade zone in the centre of the Mount Weld Carbonatite, this area is within the Central Lanthanide Deposit. This Central Lanthanide Deposit has a Resource, above a REO cut-off of 2.5%, of 9.88 million tonnes at an average grade of 10.7% REO for a total of 1,057,000 tonnes REO.

The Resource estimate for this area is essentially unchanged from the 3 March 2008 Resource estimate which was 9.46 million tonnes at an average grade of 11.3% REO for a total of 1,073,000 tonnes REO. Table 2 shows the updated classification of Mineral Resource for the Central Lanthanide Deposit. The Rare Earths distribution in this Central Lanthanide Deposit is shown in Table 5.

**TABLE 2: CLASSIFICATION OF MINERAL RESOURCES FOR THE CENTRAL LANTHANIDE DEPOSIT**

Central Lanthanide Deposit Category	'000 tonnes	REO (%) *	TLnO (%) **	Y2O3(ppm)
<b>Measured</b>	3,550	14.4	14.3	820
<b>Indicated</b>	1,440	8.2	8.1	960
<b>Inferred</b>	4,884	8.6	8.5	1,120
<b>Total</b>	<b>9,880</b>	<b>10.7</b>	<b>10.6</b>	<b>990</b>

\* REO (%) includes all the lanthanide elements plus Yttrium

\*\* TLnO (%) includes all the lanthanides elements only (i.e. Yttrium is not included)

Further Resource drilling is planned in early 2011 within the Central Lanthanide Deposit to the west of the current mine plan and pit design. Following this drilling programme it is anticipated a new pit optimisation will be undertaken, resulting in an expansion of the mine plan and pit design.

### THE COMBINED CENTRAL LANTHANIDE DEPOSIT AND DUNCAN MINERAL RESOURCE ESTIMATE

The combined Rare Earths Resource estimate for the Central Lanthanide Deposit and the Duncan Deposit at Mount Weld is 17.49 million tonnes at 8.1% REO (Rare Earths Oxide), at a cut-off grade of 2.5% REO, giving a total Resource of 1.416 million tonnes REO (Table 3).

**TABLE 3: CLASSIFICATION OF THE RARE EARTHS MINERAL RESOURCES AT MOUNT WELD**

Category	'000 tonnes	REO (%) *	TLnO (%) **	Y2O3(ppm)
<b>Measured</b>	7,200	9.8	9.7	1,770
<b>Indicated</b>	5,000	5.3	5.1	2,020
<b>Inferred</b>	5,290	8.3	8.2	1,210
<b>Total</b>	<b>17,490</b>	<b>8.1</b>	<b>7.9</b>	<b>1,680</b>

\* REO (%) includes all the lanthanide elements plus Yttrium

\*\* TLnO (%) includes all the lanthanides elements only (i.e. Yttrium is not included)

Since the previous Mineral Resource estimate, announced on 3 March 2008, a grade control drilling programme within the area of the current mine plan and a drilling program within areas of elevated heavy Rare Earths have been completed. These drill results generated a large amount of new data warranting a new Resource model to update the Rare Earths Resource estimates.

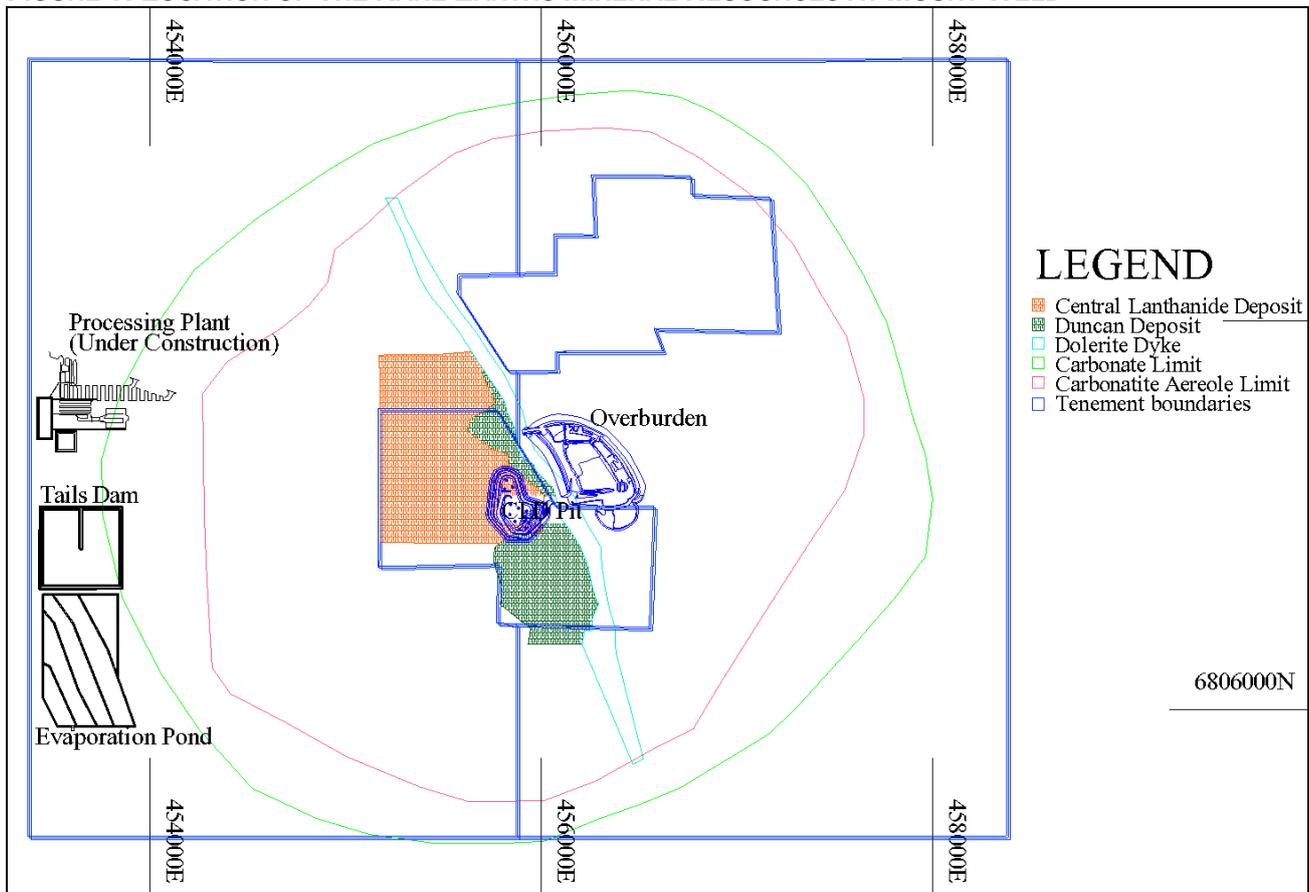
Table 4 shows a comparison between the 2010 Resource estimate and the 3 March 2008 Resource estimate. The new Resource represents a 19.6% increase in contained REO, 232,000 tonne REO, compared to the previous Resource estimate announced on 3 March 2008 as a result of the grade control drilling program and the drilling program over the Duncan Deposit delineating mineralisation that was not included in the 3 March 2008 Resource estimate.

**TABLE 4: COMPARISON OF 2010 RESOURCE ESTIMATE AND 2008 RESOURCE ESTIMATE**

Model	kt	REO (%)	Contained REO kt
2010 Model	17,490	8.1	1,416
2008 Model	12,240	9.7	1,184

Figure 1 below shows the approximate locations of the deposits referred to in this announcement.

**FIGURE 1: LOCATION OF THE RARE EARTHS MINERAL RESOURCES AT MOUNT WELD**



**TABLE 5: REO DISTRIBUTION OF MINERAL RESOURCES**

Rare Earths Oxides	Central Lanthanide Deposit	Duncan Deposit
Lanthanum Oxide	25.57%	23.93%
Cerium Oxide	46.90%	39.42%
Praseodymium Oxide	4.92%	4.85%
Neodymium Oxide	16.87%	18.08%
Samarium Oxide	2.29%	2.87%
Europium Oxide	0.49%	0.77%
Gadolinium Oxide	1.33%	2.15%
Terbium Oxide	0.13%	0.29%
Dysprosium Oxide	0.31%	1.36%
Holmium Oxide	0.04%	0.21%
Erbium Oxide	0.13%	0.46%
Thulium Oxide	0.01%	0.04%
Ytterbium Oxide	0.05%	0.20%
Lutetium Oxide	0.02%	0.03%
Yttrium Oxide	0.95%	5.36%
Total	100.00%	100.00%

## About Lynas Corporation

Lynas owns the richest known deposit of Rare Earths, also known as Lanthanides, in the world at Mount Weld, near Laverton in Western Australia. This deposit underpins Lynas' strategy to create a reliable, fully integrated source of Rare Earths supply from the mine through to customers in the global Rare Earths industry.

Lynas will concentrate the ore mined at Mount Weld in a Concentration Plant approximately 1.5km from the mine. The concentrate produced by the Concentration Plant will be shipped in sea containers and transported by road and ship to the east coast of Malaysia to the Lynas Advanced Materials Plant (LAMP) within the Gebeng Industrial Estate, Kuantan, Pahang, Malaysia, to process the Mount Weld concentrate through to separated Rare Earths products

Development of the mine at Mount Weld is complete. Engineering and construction of the Concentration Plant in Western Australia remains on time and within budget, as at 30 June 2010, for completion in December 2010. Engineering and construction of the LAMP remains on time and within budget as at 30 June 2010; with the first feed to kiln at the LAMP on target for the third quarter of 2011. Lynas has received all required approvals to construct both plants.

The company plans to become the benchmark for security of supply and a world leader in quality and environmental responsibility to an international customer base, with production anticipated to commence in 2011.

'Rare Earths' is the term given to fifteen metallic elements known as the lanthanide series, plus yttrium. They play a key role in green environmental products, from energy efficient compact fluorescent light bulbs (CFLs) to hybrid cars, automotive catalytic converters and wind turbine generators. They are also essential in the development and manufacturing of many modern technological products, from hard disc drives to flat panel displays, iPods and magnetic resonance imaging (MRI) scans.

Lynas American Depositary Receipts (**ADRs**) trade under the code LYSDY (CUSIP number 551073208). Each Lynas ADR is equivalent to 10 ordinary shares of Lynas as traded on the Australian Securities Exchange (ASX). The Bank of New York Mellon is the depositary bank in respect of Lynas ADRs.

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## Notes on Resource Estimates

The Resource estimates were prepared by Brendan Shand MAusIMM who is an employee of Lynas Corporation. Brendan Shand is a Competent Person as defined by the 2004 JORC Code. Information in this release relating to Resource estimates is based on and accurately reflects information provided by Brendan Shand who consents to the inclusion of the new Resource estimates. Brendan Shand consents to the inclusion of these results and the accompanying notes in the form and context in which they appear.

REO are defined as the rare earth oxides from La to Lu. Yttrium is associated with REO and in this report Yttrium has been included in the REO grades. Some Resources within the pit have been mined and are currently on stockpiles awaiting processing.

**Quality assurance and quality control.** The surveying, sampling and assaying carried out by Lynas Corporation has had rigorous QAQC applied to them to ensure accuracy and representivity of the drilling data collected by Lynas Corporation. Previous work by Hellman and Schofield (H&S) draws attention to an uncertainty with assaying accuracy in pre-Lynas assays that may contribute to the Resource estimates being understated by up to approximately 5-10%. These holes have only been used to estimate inferred Resources. Grade control and mining has been carried out in one section of the Central Lanthanide Deposit and there has been very good reconciliation between the grade control drilling, the mined ore and the wider spaced Resource drilling.

**Geology and mineralisation.** The area referred to in this report occurs within the Mount Weld carbonatite which is a 3.5 km diameter near-vertical plug that has been deeply weathered and covered with lake sediments ranging from 20 m to 50 m in thickness. The mineralisation has been defined on the basis of various regolith units, approximately 30 m thick, below the lake sediments and above the fresh carbonatite. These include the "CZ", "LI" and "AP" units. The CR unit was excluded because of a lack of sampling in the unit.

**Drilling and sampling.** The geological database used for the Resource Estimates consists of 626 assayed vertical holes (6 diamond core holes and 620 air-core reverse circulation holes (“RC”), representing 14,314 assayed metres. In addition, there are 173 assayed RC holes (4896 assayed metres) that are suspected to have suffered loss of fines in the hydrocyclone sampling plant due to high water flows experienced before dewatering of the regolith in 1991. Accordingly, these have only been used to estimate inferred Resources. The drill hole spacing is a combination of 10 by 10 and 20 by 20 metres in the pit area where grade control and Ore Reserve definition drilling has been carried out. The Duncan Deposit has a 40 by 40 metre pattern over the entire deposit and the rest of the area referred to in this report has a nominal 100 by 100 metre drilling pattern.

**Assaying.** Routine assaying of 14 lanthanides, Y, Th, U, Al, Si, P, Mn, Fe and Ca has been undertaken by Genalysis Laboratories, Perth. The lanthanides and Y, Th and U were assayed using a 0.2 g sample and a total fusion/HCl digestion.

**Geological modelling.** Cross-sectional geological interpretations were completed for the entire area referred to in this report and used to create wireframes to define the boundaries of different lithologies. The wireframes were used to create a geological block model with dimensions of 10 x 10 x 2.5 m (x, y, z). Each lithology was assigned a constant density ranging from 1.6 to 2.4. The densities were determined for each lithology from 71 samples in previous Resource estimations and it was found during mining there was good reconciliation with these bulk densities. Hence they have been used in these Resource estimations.

**Resource Estimation.** Ordinary kriging was used to estimate TLnO grades from two metre composites within the mineralised zone using three estimation passes. Confidence classification is on the basis of proximity to and number of data points as well as data quality. Measured block grades are estimated from a 40x40x8 m search with a maximum and minimum number of data of 32 and 10, respectively. Indicated block grades result from a 60x60x12 m search (32/10 points) and Inferred from a 60x60x12 m search (32/5 points), respectively.

**Cut-off grades.** Reported cut-off grades have been based on the assumptions made by Lynas Corporation that are believed to be realistic in terms of current considerations of prices, processing and mining costs and the marketability of the REO Resource.