

## ASX / Media Release

4 March 2010

### **Meridian Minerals announces Cadjebut Splay Mineral Resource trebles to 1.1Mt on the Lennard Shelf Project in WA**

#### **Highlights**

- **Following a revision of the Cadjebut Splay historical drill holes over a 550m strike length, an updated Inferred mineral resource of 1.1Mt @ 8.5% Pb, 2.4% Zn and 15.7g/t Ag, above a combined 3% zinc plus lead cutoff, has been reported for the Cadjebut Splay prospect according to the guidelines of the JORC Code (2004). This total includes contributions from the high grade lead Cadjebut Splay Fault domain of 0.7Mt @ 1.2% Zn, 10.8% Pb, and 20.6g/t Ag and an extension to the Cadjebut deposit of 0.3Mt @ 6.0% Zn, 2.4% Pb, and 2.5g/t Ag;**
- **The total mineral resource inventory on the Lennard Shelf Project has increased a further 6% to 12.8Mt @ 6.4% Zn and 3.8% Pb, with the addition of the Cadjebut Inferred mineral resource;**
- **Since completing the Lennard Shelf Project acquisition in November 2009, Meridian has increased the project's mineral resource inventory by 56%, by defining a new Inferred mineral resource at the Palijippa prospect and revising the existing mineral resource inventories for the Cadjebut Splay and Kapok West prospects;**
- **The Cadjebut Splay mineral resource occurs 200-250m immediately north of the Kapok West prospect and underground access should be possible by re-establishing the existing decline at the Kapok mine;**
- **Drilling continues at the Kapok West prospect where 23 of 36 extensional drill holes have been completed. Further results will be released next week;**
- **Meridian's understanding of the mineral resources on the Lennard Shelf project is continually improving through the information provided from the ongoing drill program and better analysis of historical data.**

Australian resources company, Meridian Minerals Limited (**'Meridian'** or **'Company'**) (**ASX: MII**), has further increased the mineral resource inventory on the Lennard Shelf Project ("Lennard Shelf") located in the Kimberly region of Western Australia (Figure 1). Following evaluation of 24 historical drill holes at the Cadjebut Splay prospect, Xstract Mining Consultants Pty Ltd ("Xstract") has reported an updated Inferred mineral resource for Cadjebut Splay of 1.1Mt @ 8.5% Pb, 2.4% Zn and 15.7g/t Ag, according to the guidelines of the JORC Code (2004) (see Table 1).

Meridian's Managing Director Jeremy Read said that previous operators of the Lennard Shelf project had not fully determined the potential of the Cadjebut Splay prospect but Meridian's view is that Cadjebut Splay could play a critical role in establishing a profitable mining operation due to its relatively high grade, shallow depth and close proximity to the existing Kapok decline.

"Cadjebut Splay occurs immediately to the north of the Kapok West mineral resource and should be accessible by a drive off the existing Kapok decline," Mr Read said.

"Due to the relatively shallow depth of the Cadjebut Splay mineral resource - around 150m - Cadjebut Splay has the potential to be brought into production approximately six months before either of the Kapok or Kapok West mineral resources and this will have a positive impact on the overall profitability of the Lennard Shelf project."

“Cadjebut Splay is also open to the east and west and we will be undertaking drilling to expand the Cadjebut Splay mineral resource in both directions.”

A breakdown of the mineral resource inventory for the Lennard Shelf Project is detailed in Table 1.

**Table 1 – Lennard Shelf Mineral Resource Inventory March 2010**

Resource	Cutoff Grade		Measured	Indicated	Inferred	Total
Cadjebut Splay	3% Zn+Pb	Tonnes			1,100,000	1,100,000
		Zn %			2.4	2.4
		Pb %			8.5	8.5
		Ag g/t			15.7	15.7
Kapok West	3% Zn+Pb	Tonnes			2,500,000	2,500,000
		Zn %			3.1	3.1
		Pb %			6.3	6.3
		Ag g/t			13.0	13.0
Kapok Central*	5% Zn Eq	Tonnes	23,000	868,000		891,000
		Zn %	7.0	8.6		8.6
		Pb %	9.4	5.5		5.6
Kapok East*	5% Zn Eq	Tonnes	1,000	261,000	357,000	619,000
		Zn %	2.6	6.9	8.0	7.6
		Pb %	18.2	6.6	11.2	9.3
Kutarta*	5% Zn Eq	Tonnes		1,910,000	430,000	2,340,000
		Zn %		7.4	6.4	7.2
		Pb %		0.6	0.3	0.5
		Ag g/t		36	53	39
Palijippa	3% Zn+Pb	Tonnes			2,620,000	2,620,000
		Zn %			5.4	5.4
		Pb %			1.2	1.2
		Ag g/t			33.6	33.6
Fossil Downs*	3% Zn Eq	Tonnes			2,150,000	2,150,000
		Zn %			9.5	9.5
		Pb %			2.1	2.1
		Ag g/t			50	50
Napier Range*	5% Zn Eq	Tonnes			590,000	590,000
		Zn %			8.5	8.5
		Pb %			8.0	8.0
		Cu %			0.5	0.5
		Ag g/t			75	75
<b>Lennard Shelf Total</b>		<b>Tonnes</b>	24,000	3,039,000	9,747,000	<b>12,810,000</b>
		<b>Zn%</b>	6.8	7.7	5.9	<b>6.4</b>
		<b>Pb%</b>	9.8	2.5	4.2	<b>3.8</b>

Prospects marked with an \* indicate the mineral resource has been reported according to the guidelines of the Australasian Code for Reporting Resources and Ore Reserves (The JORC Code 1999). Where used, zinc equivalent (Zn Eq) cut-off grades were calculated using the formula  $Zn\ Eq = Zn\ \% + (Pb\ \% / 2)$ . Also, a minimum downhole thickness of two meters was used during the mineral resource estimation for the prospects marked with an asterisk.. At Palijippa, Kapok West and Cadjebut Splay the mineral resource is reported according to the guidelines of the Australasian Code for Reporting Resources and Ore Reserves (The JORC Code 2004).

## **Cadjebut Splay Mineral Resource Estimation**

In July 2003, Western Metals announced an Inferred mineral resource for the Cadjebut Splay of 390,000t @ 1.4% Zn and 14.1% Pb in accordance with the guidelines of the JORC Code (1999).

### *Drilling*

The mineral resource estimate completed by Xstract for the Cadjebut Splay is based on 24 diamond drill holes completed by BHP between 1985 and 1991. All the drill holes used in the mineral resource estimate are supported by detailed collar and downhole surveys records. Although the drilling samples are not supported by quality control and quality assurance ("QA/QC") information, Xstract considers the historical drill hole data adequate for mineral resource estimation and public reporting purposes.

Drilling at the Cadjebut Splay prospect occurs on 5 cross sections separated by 75 to 100m over a strike length of 550m. Typically, there are a minimum of two drill holes per section separated by 40 to 100m. Most drill holes have an azimuth towards the north and range in dip from sub-vertical to 55°. Several drill holes in the west of the deposit are drilled towards the south and as such are sub parallel to the Cadjebut Splay Fault domain. All samples are derived from half core intervals, typically 1m in length.

### *Geology*

The Cadjebut Splay prospect is located directly east, and abuts the western end of the Cadjebut deposit which was previously mined by BHP. The Cadjebut Splay mineralisation currently has a strike length of 550m. The prospect is characterised by two major geological domains:

- The east-west striking, southerly dipping (45°) Cadjebut Splay Fault; and
- The sub-horizontal extension of the east-west striking Cadjebut mineralisation.

The geological domains have distinct base metal assemblages; with the Cadjebut Splay Fault domain being strongly lead dominant and the extension of the Cadjebut mine mineralisation being zinc dominant with a ratio of approximately 2:1.

The mineralogy of the Cadjebut Splay prospect is similar to all the other defined deposits in the Lennard Shelf region with mineral assemblages consisting of sphalerite, galena, marcasite and calcite.

### *Domains*

Xstract produced a 3-dimensional interpretation of the lead and zinc mineralisation at Cadjebut Splay using a 3% zinc plus lead sample threshold. The cutoff grade was determined by sample grade statistics. A strict minimum downhole intersection width was not applied, but generally the intersections are greater than 1m downhole

The two main domains have been extrapolated 15m east and west of known data points. The top of the interpreted mineralisation occurs 100m below the surface topography and has not been altered by oxidation and weathering processes.

### *Estimation Parameters*

Ordinary kriging was used to estimate the lead, zinc and silver grades into a block model with cells of dimensions 10mN, 25mE and 10m elevation, using search and estimation parameters obtained from variography. No top cuts were applied to the assay data. Short range continuity along strike for lead, zinc and silver is poorly defined due to the wide spaced drilling.

Dry Bulk density for each block was calculated using the following formula:

$$\text{Dry Bulk density} = 2.5446 + 0.0133 * \text{Zn}\% + 0.0362 * \text{Pb}\% + 0.0317 * \text{Fe}\%$$

#### Resource Statement

The Inferred mineral resource for the Cadjebut Splay prospect, reported according to the guidelines of the JORC Code (2004), as at March 2010 is:

**1.1Mt @ 2.4% Zn, 8.5% Pb, and 15.7g/t Ag above a combined 3% zinc plus lead cutoff**

The total mineral resource for the Cadjebut Splay reported above includes contributions from the two separate geological domains of :

#### Cadjebut Splay Fault domain

**0.7Mt @ 1.2% Zn, 10.8% Pb, and 20.6g/t Ag above a combined 3% zinc plus lead cutoff**

and

#### Extension to Cadjebut domain

**0.3Mt @ 6.0% Zn, 2.4% Pb, and 2.5g/t Ag above a combined 3% zinc plus lead cutoff**

The grade and tonnage values listed in Table 2 are an accumulation of blocks above a given cutoff for the total Cadjebut Splay mineral resource model.

**Table 2 - Tonnes and Grade Data for the Cadjebut Splay Inferred Mineral Resource**

Zn + Pb (%) Cutoff Grade	Cummulative Tonnes (millions)	Zn (%)	Pb (%)	Ag (ppm)
3	1.1	2.4	8.5	15.7
5	1.0	2.3	9.0	16.5
6	1.0	2.2	9.4	17.1
7	0.9	2.2	10.1	18.1
8	0.8	2.2	10.7	18.9
9	0.7	2.2	11.2	19.9
10	0.6	2.0	11.9	21.2
11	0.5	1.8	12.6	22.1
12	0.4	1.8	13.2	23.3
13	0.4	1.6	13.8	24.4
14	0.2	1.8	14.7	25.2
15	0.2	2.0	15.3	24.8

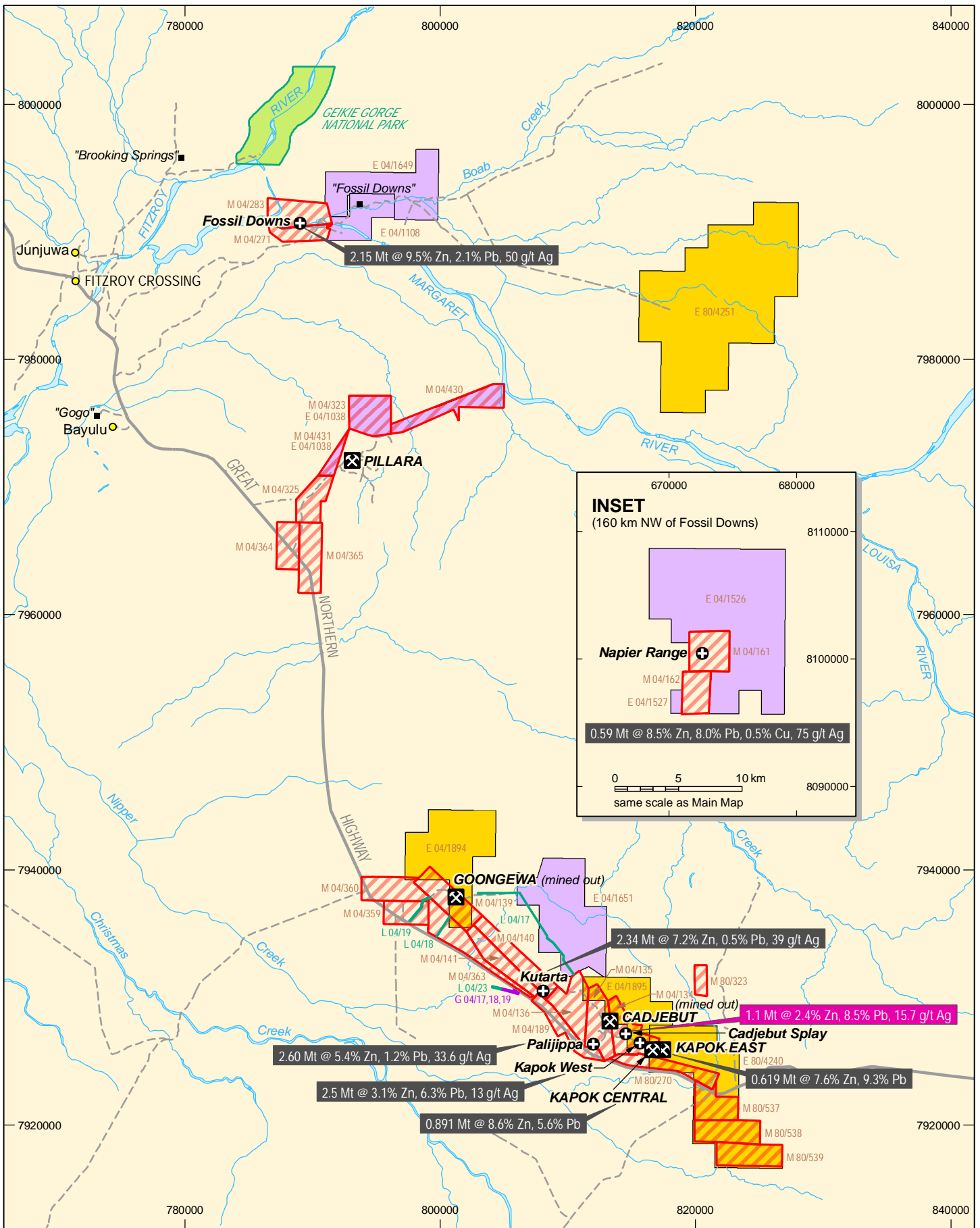


For further information please visit [www.meridianminerals.com.au](http://www.meridianminerals.com.au) or contact:

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The information in this report that relates to Exploration Results and historical Mineral Resources is based on information compiled by Mr Jeremy Read, who is a member of The Australasian Institute of Mining and Metallurgy. Mr Read is a full-time employee of Meridian Minerals Limited. 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'. Mr Read consents to the inclusion in this announcement of the matters based upon his information in the form and context in which it appears. The information in this report that relates to the Cadjebut Splay mineral resource is based on information compiled by Mr Trevor Ellice, who is a member of The Australasian Institute of Mining and Metallurgy. Mr Ellice is a full-time employee of Xstract Mining Consultants Pty Ltd. 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'. Mr Ellice consents to the inclusion in this announcement of the matters based upon his information in the form and context in which it appears.



Tenements purchased from Lennard Shelf Pty Ltd

- Exploration Licence
- Mining Lease
- General Purpose Lease
- Miscellaneous Licence

Tenements purchased from ZincCo Australia Ltd

- Exploration Licence

0 5 10km

UTM Projection  
MGA Zone 51. GDA94 Datum.

X Mine

+ Resource

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**LENNARD SHELF ZINC PROJECT, WESTERN AUSTRALIA  
LOCATION OF TENEMENTS**

Prepared: JR	Date: Jan 2010
Revised: Feb 2010	Drwg: MML-0100a

**FIGURE 1**