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ANNOUNCEMENT

23 December 2004

EUCLA BASIN HEAVY- MINERAL SAND PROJECT

Diatreme Resources Limited (DRL), through its wholly owned subsidiary, Lost Sands Pty Ltd (LSPL), is exploring for heavy mineral sand deposits in the Eucla Basin in both South Australia (SA) and Western Australia (WA).

DRL commands a prime exploration position along the ancient marine shorelines of the Eucla Basin, held under three exploration licence applications (ELAs) in SA (total area 6,100 km^2) and three ELAs in WA (total area 630 km^2).

A recent independent valuation of LSPL by Veronica Webster Pty Ltd stated that the Eucla Basin Project:

> "*is interpreted to have potential as a world-class heavy-mineral sand province*", and
> "*it allows for the discovery of large deposits of mineralisation*".

Figure 1. Eucla Basin Project – Project Location

Iluka Resources Limited (ILU) has made recent announcements relating to the discovery of the Jacinth and nearby Ambrosia heavy mineral sand deposits along the ancient Eucla Basin coastline in SA. A mineral resource has been announced for the Jacinth deposit. These deposits are located to the south–east of the three ELAs held by DRL in SA. A considerable pegging rush has accompanied the recent discoveries with tenements now virtually surrounding the ELAs held by DRL in both SA and WA.

DRL directors believe that the recent discoveries considerably enhance the potential of the large area held by DRL and that shareholders should be informed of the current status of activity in the Eucla basin in relation to the DRL areas. The enclosing maps and table illustrate the current situation.

BHP Minerals Limited previously completed drilling of shallow holes on widely spaced traverses within some of the areas held by DRL in SA. This drilling intersected a number of heavy mineral sand bearing layers within the ancient coastal sand deposits of the Eucla Basin. The most significant of these intersections are located in the Eucla Basin 2 ELA which is shown in Figures 3 and 4.

Composited results from the BHP Minerals Limited drilling are shown in Table 1.

THe directors believe that the DRL Eucla Basin tenements have potential for significant heavy mineral sand deposits and it is important that shareholders are informed about that potential.

DRL will carry out programs of work on the Exploration Licence Applications once the areas are granted. The time of granting is uncertain.

A J FAWDON
Executive Chairman/CEO

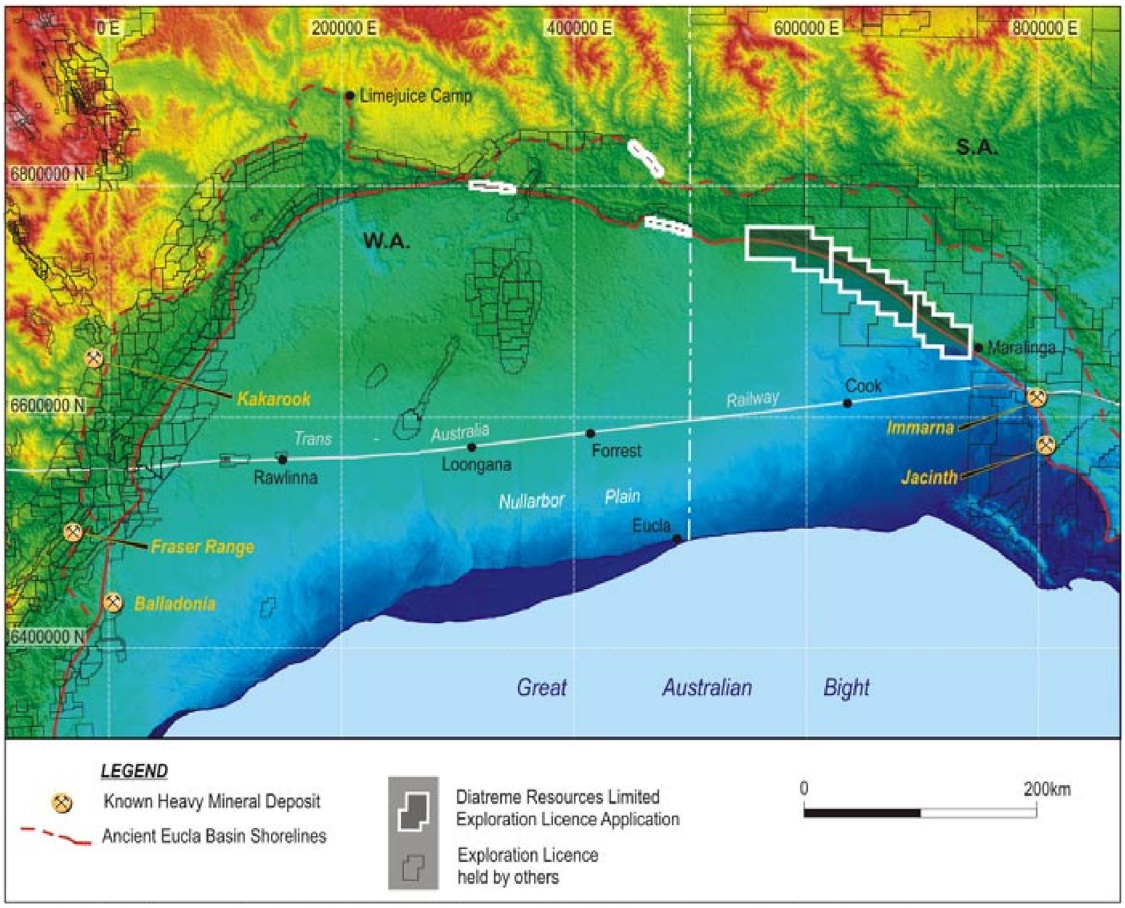

Figure 2. Eucla Basin Project – Plan of the Eucla Basin showing the Shuttle Radar Altimetry digital terrain model, DRL's ELAs and tenements held by other parties.

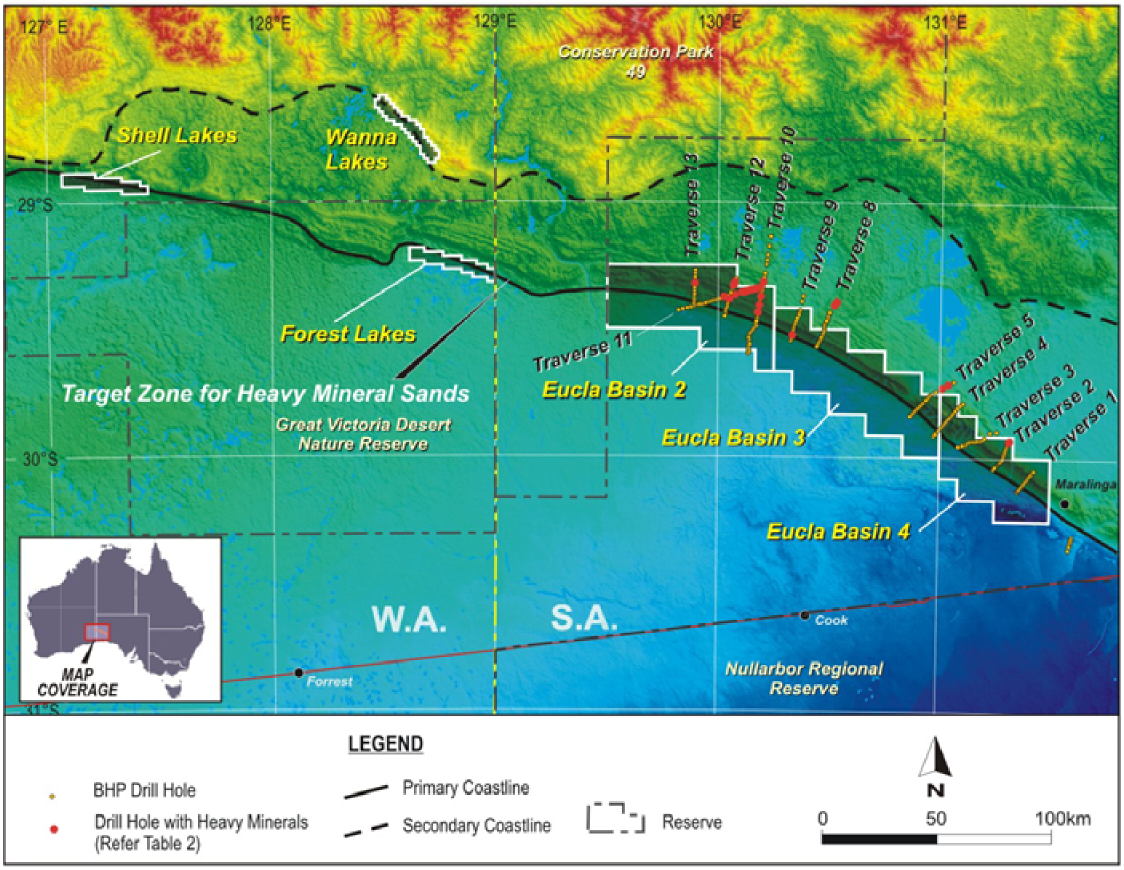

Figure 3. Eucla Basin Project - Plan of portion of the Eucla Basin showing the Shuttle Radar Altimetry digital terrain model, DRL's ELAs and the location of drill hole traverses completed by BHP Minerals Limited.

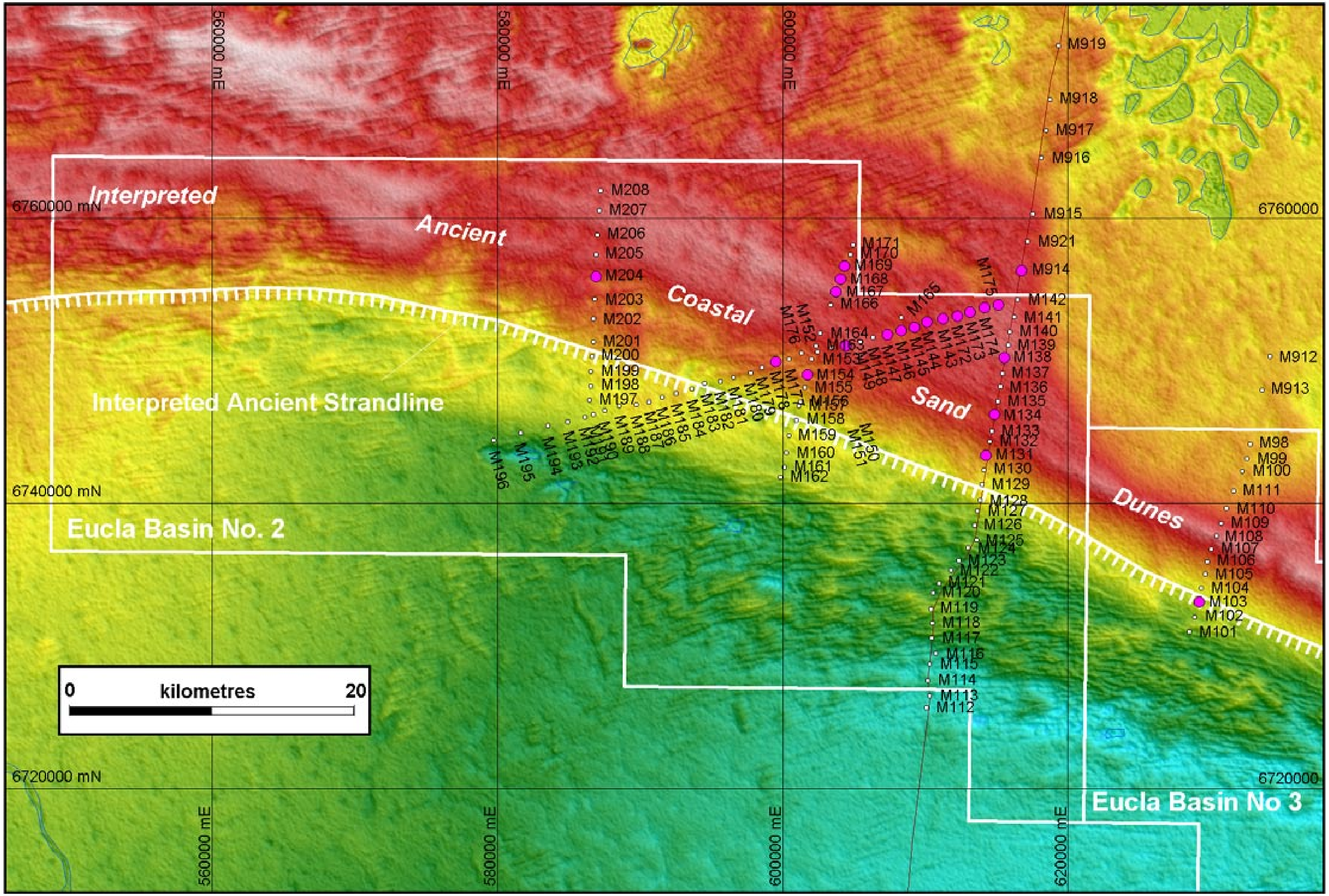

Figure 4. Eucla Basin Project - Plan of the Eucla Basin 2 Exploration Licence Application showing the Shuttle Radar Altimetry digital terrain model, DRLs interpretation of the ancient coastal features and the location of drill hole traverses completed by BHP Minerals Limited. Drill holes with significant results are shown with large symbols and results are shown in Table 1.

<table>
<tr><th>Hole</th><th>Traverse</th><th>From</th><th>To</th><th>Length(m)</th><th>HM(%)</th><th>Minerals</th><th>%</th></tr>
<tr><td>M131</td><td>10</td><td>30</td><td>46</td><td>16</td><td>0.44</td><td rowspan="2">Ilmenite
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5
77</td></tr>
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8
84</td></tr>
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Leucoxene
Trash</td><td rowspan="9">13
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4
9
73</td></tr>
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Monazite
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Leucoxene
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Monazite
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14
5.5
tr
48</td></tr>
</table>

Table 1. Heavy mineral (HM) sands intersections (composited) obtained by previous exploration by BHP Minerals Limited in drill holes in DRL’s Eucla Basin 2 Exploration Licence Application.