Late Cretaceous and Tertiary evolution of the Zambezi Delta Basin, Mozambique.

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This volume contains the appendices to Chapter 3 in volume I of the Thesis. This is composed of time (TWT) isochron and isopach maps derived from seismic data, a large table, well log examples referred to in the main text and some interpreted seismic sections, which were referred to in the main thesis text.
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Figure D.57: Time isochron map of parasequence D11:2-1.
Figure D.58: Time isopach map of parasequence D11:2-1.
Figure D.59: Time isochron map of parasequence D11:2-2.
Figure D.60: Time isopach map of parasequence D11.2.

The Zambezi Delta Basin, Central offshore Mozambique.
Appendix E

The Quaternary sedimentary succession of the Zambezi Delta Basin.

*The time (TWT) isochron map of Top Pliocene, the time (TWT) isopach map of the Quaternary sediment succession and the time (TWT) isochron of the sea bed.*
Figure E.1: The Top Pliocene (Top Tertiary) time (TWT) isochron map offshore the Zambezi Delta Basin.
Figure E.2: The Quaternary time (TWT) isopach map offshore the Zambezi Delta Basin.
Figure E.3: The time (TWT) isochron of the sea bed (time isopach of the water depth).
Appendix F

Tables.

*Summary table of well logging reference data for the nine wells used in this study.*
Figure F.1: Table of the Zambezi River monthly average discharges recorded at the Lupata station in central Mozambique from 1930 to 1973.
Table F.1: Summary of well logging reference data for nine wells used in this work, data supplied by ENH and INTERA. *KB - Kelly Bushing, GL - ground level, SB - Depth to the sea bed from mean sea level, MSL - Mean sea level, SP - Spontaneous Potential (Self-Potential).*

Well logging reference data

<table>
<thead>
<tr>
<th>Well name: Divinhe-1</th>
<th>Total Depth: 12593' (3840.0 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent datum</td>
<td>GL (elevation 14.4')</td>
</tr>
<tr>
<td>Water depth</td>
<td>-</td>
</tr>
<tr>
<td>Depth measured from</td>
<td>KB</td>
</tr>
<tr>
<td>KB elevation</td>
<td>33' above GL</td>
</tr>
<tr>
<td>Bit size record</td>
<td>505 - 12590'</td>
</tr>
<tr>
<td>Depth interval logged</td>
<td>505 - 12590'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Well name: Micaune-1</th>
<th>Total Depth: 13482' (4125.0 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent datum</td>
<td>GL (elevation 7')</td>
</tr>
<tr>
<td>Water depth</td>
<td>-</td>
</tr>
<tr>
<td>Depth measured from</td>
<td>KB</td>
</tr>
<tr>
<td>KB elevation</td>
<td>24' above GL</td>
</tr>
<tr>
<td>Bit size record</td>
<td>460 - 15117'</td>
</tr>
<tr>
<td>Depth interval logged</td>
<td>0 - 15117'</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Well name: Nemo-1</th>
<th>Total Depth: 13457' (4101 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent datum</td>
<td>MSL</td>
</tr>
<tr>
<td>Water depth</td>
<td>78' (24 m)</td>
</tr>
<tr>
<td>Depth measured from</td>
<td>RT (69'+MSL)</td>
</tr>
<tr>
<td>KB elevation</td>
<td>70' (21m-MSL)</td>
</tr>
</tbody>
</table>

... table continues next page ...
Well name: Nhamura-1  
Total Depth: 17914' (5490.0 m)

<table>
<thead>
<tr>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>547' - 13501'</td>
<td>547' - 12238', 12250' - 13490'</td>
</tr>
</tbody>
</table>

**Gamma ray log and Sonic log**

Permanent datum: GL (elevation 46')

<table>
<thead>
<tr>
<th>Water depth</th>
<th>Depth measured from</th>
<th>KB elevation</th>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>KB</td>
<td>15.4' above GL</td>
<td>18 - 18000'</td>
<td>0 - 15165'</td>
<td></td>
</tr>
</tbody>
</table>

**Induction electrical log and SP log**

Permanent datum: GL (elevation 46')

<table>
<thead>
<tr>
<th>Water depth</th>
<th>Depth measured from</th>
<th>KB elevation</th>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>KB</td>
<td>15.4' above GL</td>
<td>18 - 18000'</td>
<td>0 - 15165'</td>
<td></td>
</tr>
</tbody>
</table>

Well name: Nhanguazi-1  
Total Depth: 10986' (3350.0 m)

<table>
<thead>
<tr>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>547' - 13501'</td>
<td>547' - 12238', 12250' - 13490'</td>
</tr>
</tbody>
</table>

**Gamma ray log and Sonic log**

Permanent datum: GL (elevation 32')

<table>
<thead>
<tr>
<th>Water depth</th>
<th>Depth measured from</th>
<th>KB elevation</th>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>KB</td>
<td>15.8' above GL</td>
<td>3264 - 10984'</td>
<td>0 - 11000'</td>
<td></td>
</tr>
</tbody>
</table>

**Induction electrical log and SP log**

Permanent datum: GL (elevation 32')

<table>
<thead>
<tr>
<th>Water depth</th>
<th>Depth measured from</th>
<th>KB elevation</th>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>KB</td>
<td>15.8' above GL</td>
<td>3264 - 10984'</td>
<td>0 - 11000'</td>
<td></td>
</tr>
</tbody>
</table>

Well name: Sangussi Marine-1  
Total Depth: 12014' (3664.0 m)

<table>
<thead>
<tr>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>547' - 13501'</td>
<td>547' - 12238', 12250' - 13490'</td>
</tr>
</tbody>
</table>

**Gamma ray log and Sonic log**

Permanent datum: MSL

<table>
<thead>
<tr>
<th>Water depth</th>
<th>Depth measured from</th>
<th>KB elevation</th>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>95' (29m)</td>
<td>KB</td>
<td>178' (54m-SB)</td>
<td>533' - 12014'</td>
<td></td>
</tr>
</tbody>
</table>

**Induction electrical log and SP log**

Permanent datum: MSL

<table>
<thead>
<tr>
<th>Water depth</th>
<th>Depth measured from</th>
<th>KB elevation</th>
<th>Bit size record</th>
<th>Depth interval logged</th>
</tr>
</thead>
<tbody>
<tr>
<td>95' (29m)</td>
<td>KB</td>
<td>178' (54m-SB)</td>
<td>533' - 12014'</td>
<td></td>
</tr>
<tr>
<td>Depth interval logged</td>
<td>: 533' - 12001'</td>
<td>Depth interval logged</td>
<td>: 533' - 12014'</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------</td>
<td>-----------------------</td>
<td>-----------------</td>
<td></td>
</tr>
</tbody>
</table>

Well name: **Sengo Marine-1**  
Total Depth: **14052' (4286.0 m)**

**Gamma ray log and Sonic log**  
**Induction electrical log and SP log**

<table>
<thead>
<tr>
<th>Permanent datum</th>
<th>: MSL</th>
<th>Permanent datum</th>
<th>: MSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water depth</td>
<td>: 79' (24m)</td>
<td>Water depth</td>
<td>: 79' (24m)</td>
</tr>
<tr>
<td>Depth measured from</td>
<td>: KB</td>
<td>Depth measured from</td>
<td>: KB</td>
</tr>
<tr>
<td>KB elevation</td>
<td>: 162' (49m-SB)</td>
<td>KB elevation</td>
<td>: 162' (49m-SB)</td>
</tr>
<tr>
<td>Bit size record</td>
<td>: 534' - 14052'</td>
<td>Bit size record</td>
<td>: 534' - 14052'</td>
</tr>
<tr>
<td>Depth interval logged</td>
<td>: 534' - 892', 8937' - 14004'</td>
<td>Depth interval logged</td>
<td>: 534' - 4111', 4113' - 8931', 8937' - 14049'</td>
</tr>
</tbody>
</table>

Well name: **Sofala-1**  
Total Depth: **10588' (3232.0 m)**

**Gamma ray log and Sonic log**  
**Induction electrical log and SP log**

<table>
<thead>
<tr>
<th>Permanent datum</th>
<th>: MSL</th>
<th>Permanent datum</th>
<th>: MSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water depth</td>
<td>: 37' (11m)</td>
<td>Water depth</td>
<td>: 37' (11m)</td>
</tr>
<tr>
<td>Depth measured from</td>
<td>: RT (85'+MSL)</td>
<td>Depth measured from</td>
<td>: RT (85'+MSL)</td>
</tr>
<tr>
<td>KB elevation</td>
<td>: 86' (26m-MSL)</td>
<td>KB elevation</td>
<td>: 86' (26m-MSL)</td>
</tr>
<tr>
<td>Bit size record</td>
<td>: 495' - 10596'</td>
<td>Bit size record</td>
<td>: 495' - 10596'</td>
</tr>
<tr>
<td>Depth interval logged</td>
<td>: 493' - 3460', 3484' - 10578'</td>
<td>Depth interval logged</td>
<td>: 495' - 10590'</td>
</tr>
</tbody>
</table>

Well name: **Zambezi-1**  
Total Depth: **15222' (4656.0 m)**

**Gamma ray log and Sonic log**  
**Induction electrical log and SP log**

<table>
<thead>
<tr>
<th>Permanent datum</th>
<th>: MSL</th>
<th>Permanent datum</th>
<th>: MSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water depth</td>
<td>: 140' (43m)</td>
<td>Water depth</td>
<td>: 140' (43m)</td>
</tr>
<tr>
<td>Depth measured from</td>
<td>: KB</td>
<td>Depth measured from</td>
<td>: KB</td>
</tr>
<tr>
<td>KB elevation</td>
<td>: 83' (25m-MSL)</td>
<td>KB elevation</td>
<td>: 83' (25m-MSL)</td>
</tr>
<tr>
<td>Bit size record</td>
<td>: 3947' - 15229'</td>
<td>Bit size record</td>
<td>: 807' - 15229'</td>
</tr>
<tr>
<td>Depth interval logged</td>
<td>: 75' - 15222'</td>
<td>Depth interval logged</td>
<td>: 772' - 3290', 3947' - 15138'</td>
</tr>
</tbody>
</table>

... table continues next page ...
Well name: Zambezi-3  
Total Depth: 14798' (4501.0 m)

<table>
<thead>
<tr>
<th>Gamma ray log and Sonic log</th>
<th>Induction electrical log and SP log</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Permanent datum</strong></td>
<td><strong>Permanent datum</strong></td>
</tr>
<tr>
<td>: KB</td>
<td>: KB</td>
</tr>
<tr>
<td><strong>Water depth</strong></td>
<td><strong>Water depth</strong></td>
</tr>
<tr>
<td>: 143' (44m)</td>
<td>: 143' (44m)</td>
</tr>
<tr>
<td><strong>Depth measured from</strong></td>
<td><strong>Depth measured from</strong></td>
</tr>
<tr>
<td>: KB</td>
<td>: KB</td>
</tr>
<tr>
<td><strong>KB elevation</strong></td>
<td><strong>KB elevation</strong></td>
</tr>
<tr>
<td>: 228' (69m-SB)</td>
<td>: 228' (69m-SB)</td>
</tr>
<tr>
<td><strong>Bit size record</strong></td>
<td><strong>Bit size record</strong></td>
</tr>
<tr>
<td>: 809' - 14785'</td>
<td>: 809' - 14785'</td>
</tr>
<tr>
<td><strong>Depth interval logged</strong></td>
<td><strong>Depth interval logged</strong></td>
</tr>
<tr>
<td>: 810' - 4006', 4007' - 14785'</td>
<td>: 810' - 14798'</td>
</tr>
</tbody>
</table>
Appendix G

Well log data.

Appendices displaying the summary of paleontology and stratigraphy compiled from well completion reports for Micaune-1, Nhanguazi-1, Zambezi-1, Zambezi-3, Sangussi Marine-1, Sengo Marine-1, Sofala-1, Nemo-1 and Divinhe-1.

See Figs. G.1, G.2, G.3, G.4 and G.5 in the enclosures pocket, this Volume.
Figure G.1: Graphic display of the summary of paleontology and stratigraphy of Micaune-1 and Nhanguazi-1 wells, from this wells completion reports plotted alongside the Gamma ray. The lithostratigraphy is derived from Gamma ray and SP-log (not displayed).
Figure G.2: Graphic display of the summary of paleontology and stratigraphy of Zambezi-1 and Zambezi-3 wells, from this wells completion reports plotted alongside the Gamma ray. The lithostratigraphy is derived from Gamma ray and SP-log (not 165
Figure G.3: Graphic display of the summary of paleontology and stratigraphy of Sangussi Marine-1 and Sengo Marine-1 wells, from this wells completion reports plotted alongside the Gamma ray. The lithostratigraphy is derived from Gamma ray and
Figure G.4: Graphic display of the summary of paleontology and stratigraphy of Nemo-1 and Sofala-1 wells, from this well completion reports plotted alongside the Gamma ray. The lithostratigraphy is derived from Gamma ray and SP-log. Gamma ray is not displayed for Nemo-1 well and SP-log is not displayed for Sofala-1 well in this diagram.
Figure G.5: Graphic display of the summary of paleontology and stratigraphy of Divinhe-1 well, from this well completion report plotted alongside the Gamma ray. The lithostratigraphy is derived from Gamma ray and SP-log (not displayed).