



PE990489

FORAMINIFERAL ANALYSIS, LEATHERJACKET-1  
GIPPSLAND BASIN

by

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## INTRODUCTION

The washed residues of seven samples from near the Top of the Latrobe Group in Leatherjacket-1 have been examined and their foraminiferal content noted.

Only two samples (from 742.1m and 740.3m) yielded foraminifera, both are assigned to the Early Miocene.

## LITHOLOGY

A brief lithological description of each of the washed residues is given in the Data Summary table. The top of the Latrobe group occurs between sidewall core 28 at 745.5 and sidewall core 29 at 742.1m. The boundary is marked by a change from a greensand dominated by pelletal glauconite to a carbonate dominated residue.

Sidewall core 28 at 745.5m is the only true greensand examined, although traces of glauconite have been found in samples from below this level.

## BIOSTRATIGRAPHY

Zone H1 - Early Miocene  
742.1 to 740.3 m

Foraminiferal assemblages from both samples assigned to this zone contain Globigerina woodi connecta without Globigerinoides trilobus. This is sufficient for the zonal assignment.

Assemblages recovered were of moderate diversity and included Globorotalia miozea, Globigerina falconensis and Globigerina venezuelana.

Sidewall core 29 at 742.1m also contained Globigerina brevis which is considered to be restricted to Zone K, indicating a significant amount of reworking.

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## MICROFOSSIL

| <u>DEPTH</u> (m) | <u>SWC</u><br><u>NO.</u> | <u>YIELD</u> | <u>PRESERVATION</u> | <u>ZONE</u> | <u>AGE</u>    | <u>LITHOLOGY*</u>                                                                         |
|------------------|--------------------------|--------------|---------------------|-------------|---------------|-------------------------------------------------------------------------------------------|
| 759.8            | 21                       | Barren       | -                   | -           | Indeterminate | fine quartz sand                                                                          |
| 757.4            | 22                       | Barren       | -                   | -           | Indeterminate | fine quartz sand                                                                          |
| 752.4            | 25                       | Barren       | -                   | -           | Indeterminate | fine quartz sand,<br>glauconitic, micaceous                                               |
| 747.3            | 27                       | Barren       | -                   | -           | Indeterminate | fine, ferruginous quartz<br>sand, glauconitic,<br>slightly micaceous.                     |
| 745.5            | 28                       | Barren       | -                   | -           | Indeterminate | Greensand, dominated by<br>pelletal glauconite, some<br>fine quartz grains and<br>pyrite. |

MICROFOSSIL

| <u>DEPTH (m)</u> | <u>SWC<br/>NO.</u> | <u>YIELD</u> | <u>PRESERVATION</u> | <u>ZONE</u> | <u>AGE</u>    | <u>LITHOLOGY*</u>        |
|------------------|--------------------|--------------|---------------------|-------------|---------------|--------------------------|
| 742.1            | 29                 | Low          | Fair                | H1          | Early Miocene | Recrystallized carbonate |
| 740.3            | 30                 | Moderate     | Fair                | H1          | Early Miocene | Recrystallized carbonate |

Summary diagram - Leatherjacket-1

Lithologies from washed residues.

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