Recent Gas Discoveries on the Rankin Trend, North West Shelf, Australia: the Echo/Yodel and North Rankin West Fields.

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Abstract

Several large gas fields have been discovered along the Rankin Trend on the Northwest Shelf. In recent years a further two significant gas discoveries have been made: the Echo/Yodel and the North Rankin West fields.

The Echo/Yodel Field occurs in Upper Triassic fluvial sands within a major tilted fault block in the southern part of the Rankin Trend. The North Rankin West Field occurs in Bathonian barrier bar sands within a downfaulted graben adjacent to the North Rankin Field. Similar to other Rankin Trend accumulations, these fields are truncated by a major erosional surface, the Main Unconformity, and are overlain by Cretaceous claystones.

Introduction

The gas and oil fields of the Rankin Trend and northern Barrow Dampier sub-basins have been discussed in detail by Vincent and Tilbury (1988). This work covered all fields up to and including the Dixon discovery drilled in 1984. Since that time, Woodside and its Joint Venture Partners have made several further significant hydrocarbon discoveries in

Figure 1: Tectonic elements map of the northern Barrow–Dampier sub-basins highlighting the major fault blocks.

Acknowledgements: I wish to thank the North West Shelf Development Project Participants for permission to publish this short paper. The participants in the Project are Woodside Petroleum Ltd, BP Developments Australia Pty Ltd, Chevron Asiatic Ltd, Shell Development (Australia) Pty Ltd, BHP Petroleum (North West Shelf) Pty Ltd and Japan Australia LNG (MIMI) Pty Ltd.

1Woodside Offshore Petroleum Pty Ltd.

The Sedimentary Basins of Western Australia, 1994
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