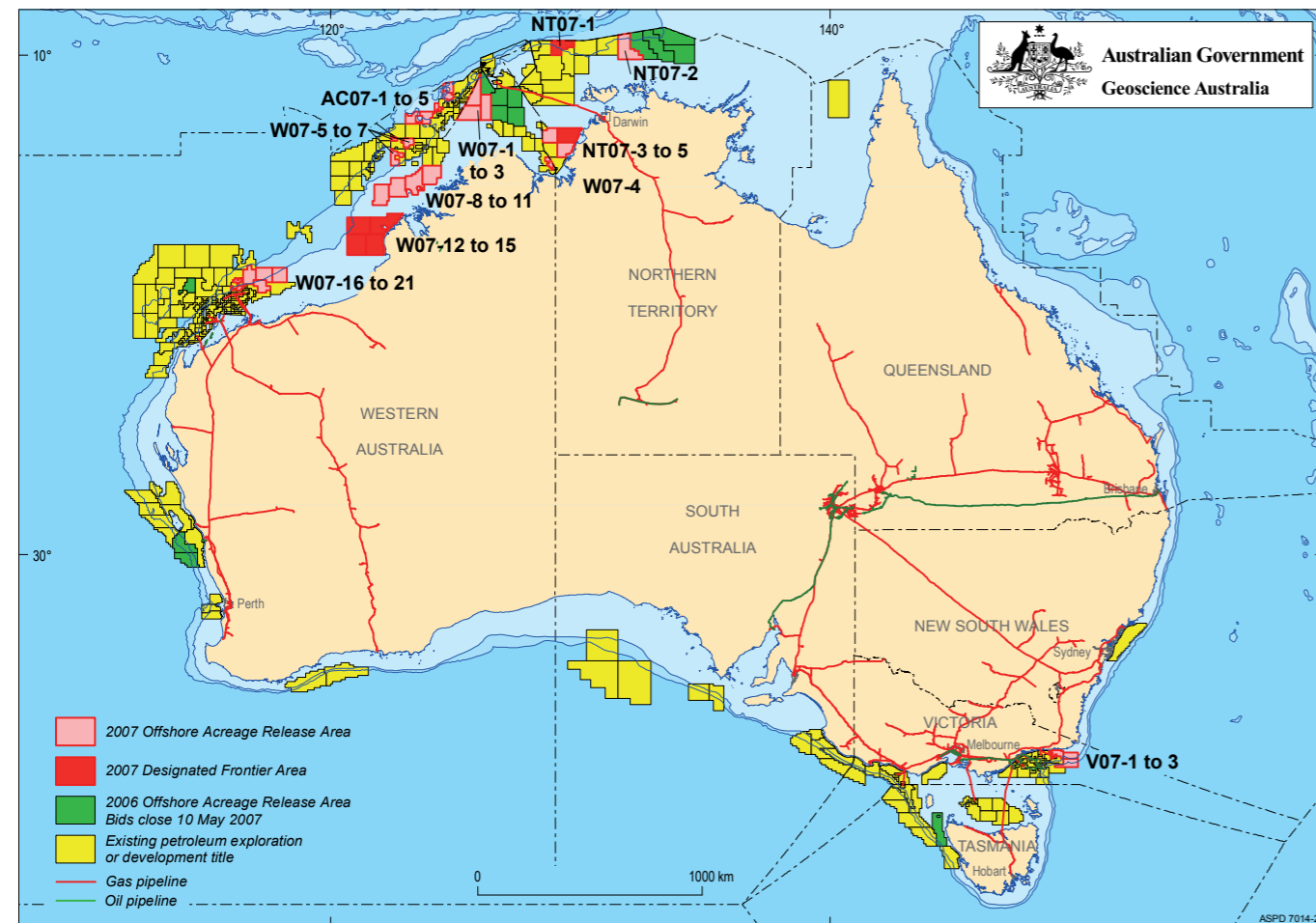


## 2007 Release of Offshore Petroleum Exploration Areas

The 2007 Offshore Petroleum Exploration Acreage release comprises 34 areas, located across six basins. The release areas range from frontier to mature status and offer opportunities for exploration companies of all sizes.

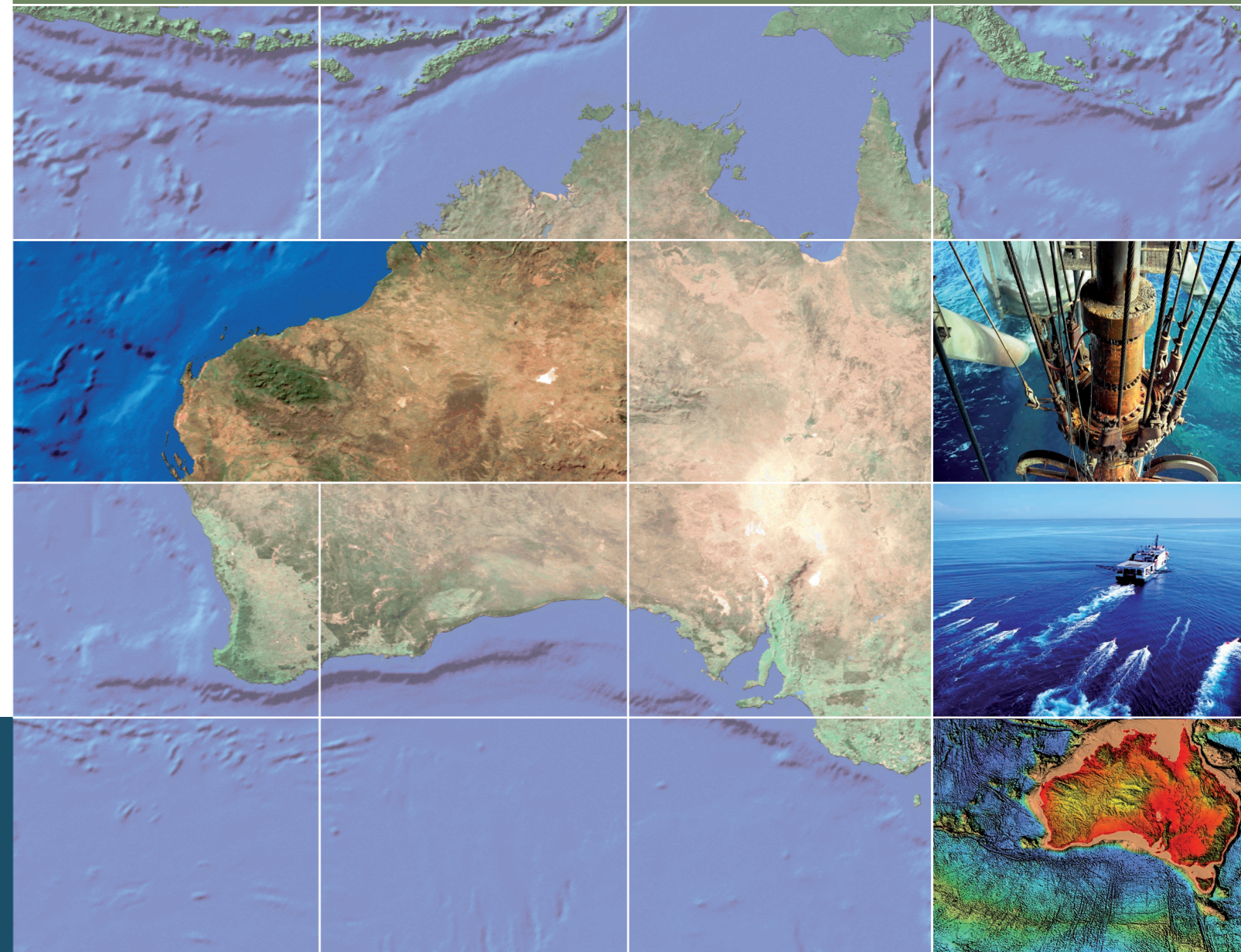
Comprehensive acreage release information packs can be obtained (free of charge) by emailing contact details to: [petroleum.exploration@industry.gov.au](mailto:petroleum.exploration@industry.gov.au)



# EXPLORE AUSTRALIA

## BEAGLE SUB-BASIN, CARNARVON BASIN, WESTERN AUSTRALIA

Areas W07-18, W07-19, W07-20 and W07-21



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## BIDS CLOSE 17 APRIL 2008



Australian Government  
Geoscience Australia

# Current Exploration Opportunities in the Beagle Sub-basin, Carnarvon Basin, Offshore Australia

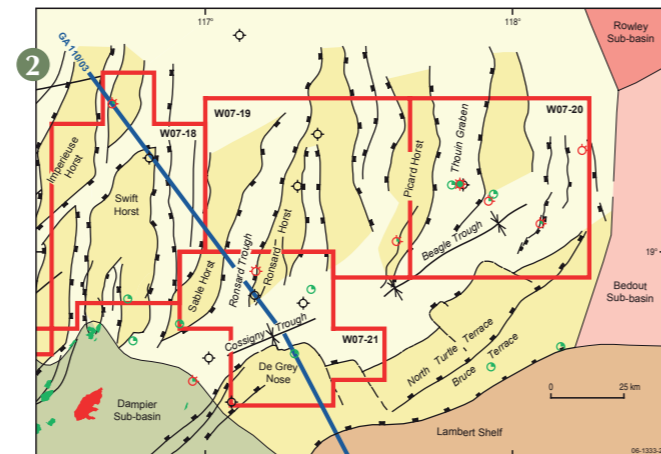
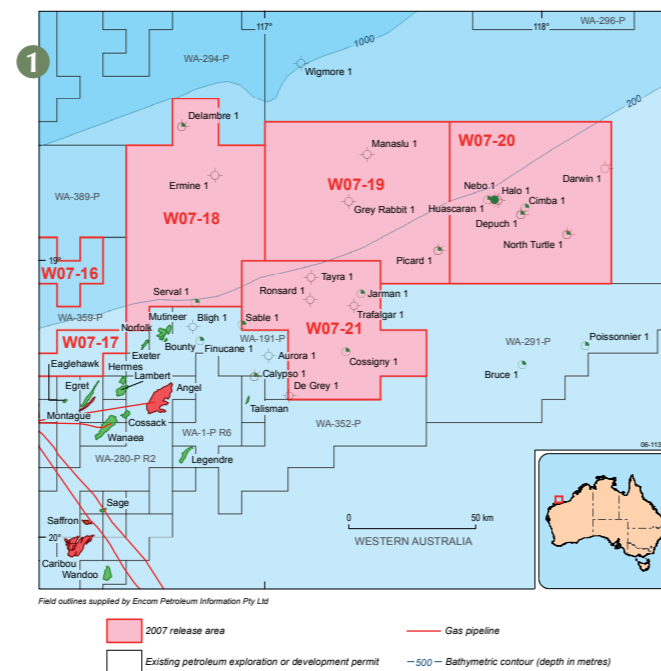
## Open for bids until 17 April 2008

### Areas W07-18, W07-19, W07-20 and W07-21

- Active petroleum system confirmed by Nebo 1 oil discovery.
- Abundant Jurassic–Triassic horsts and intervening wrench-controlled troughs.
- Basin-margin Permo-Carboniferous terraces and horsts.
- Triassic–Jurassic fluvio-deltaic and Late Jurassic marine fan reservoirs.
- Regional Early Cretaceous and Middle Triassic seals.
- Proven local Early Jurassic source pod, but regional source distribution/quality risk.
- Special Notices apply, refer to Guidance Notes.

### Geoscience Australia Reports/Products

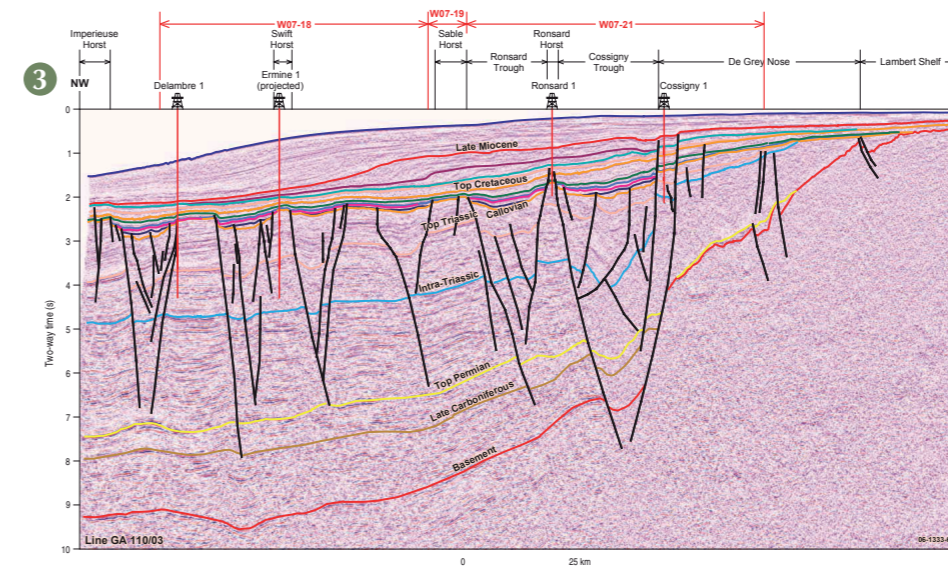
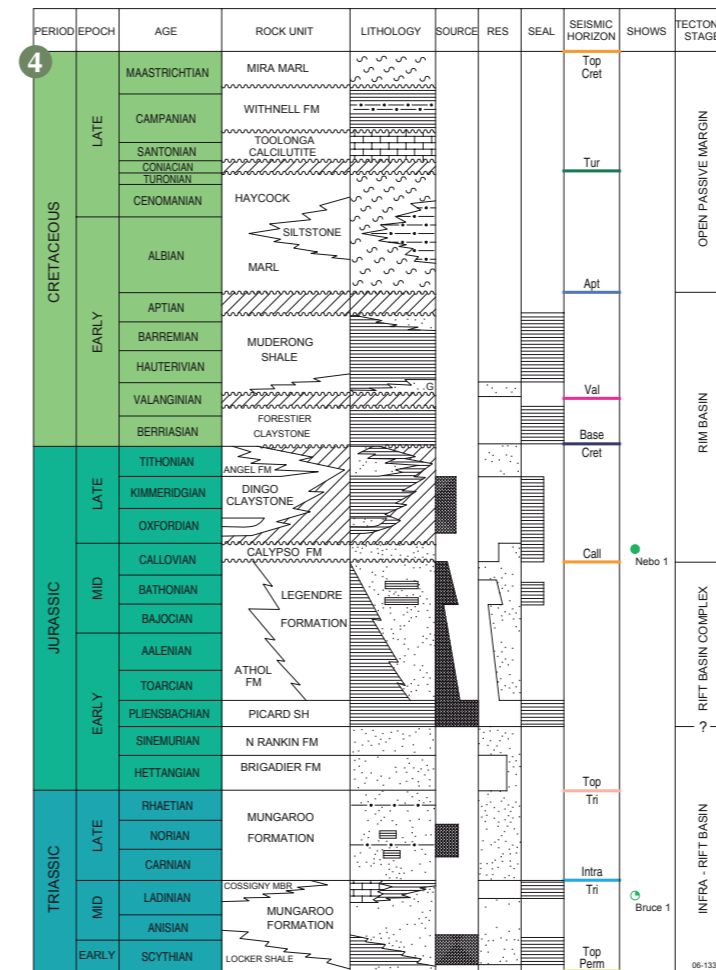
- Interpretations of Geoscience Australia's regional seismic data, Survey 101, 110 and 128 (2001) – digital horizon and fault data in ASCII format. GA Catalog No. 35240, 35242 and 35247.
- Line drawings of Geoscience Australia's regional seismic profiles, offshore northern and northwestern Australia. GA Catalog No. 36353.
- Northern Carnarvon Basin high-resolution seismic survey CTT-136, and Interpretation Report. GA Record 1996/36.
- Source rock time-slice maps (TOC, HI, VR), offshore Northwest Australia - 1:3,000,000 scale. GA Catalog No. 61179.
- Characterisation of Natural Gases from West Australian Basins: Carnarvon Basin Module. GA and Geotechnical Services Non-exclusive Study, 2000.
- Oils of Western Australia: Regional Petroleum Geochemistry and correlation of crude oils. GA and GeoMark Research, 1996.
- Oils of Western Australia II: Regional Petroleum Geochemistry and correlation of crude oils and condensates from Western Australia and Papua New Guinea. GA and GeoMark Research, 2005.
- Northwestern and Northern Australian margins stratigraphic chart showing GA's interpreted regional seismic horizons, 2001. GA Catalog No. 36454.
- Basin Biozonation and Stratigraphy charts for the Southern and Northern Carnarvon Basins, Charts 4 and 11, 1998.



Contact Geoscience Australia's Sales Centre for more information or to order these reports or products, phone 61 (0)2 6249 9966, e-mail sales@ga.gov.au

### Relevant Industry Data

- Australian North West Shelf Digital Atlas, www.nwsda.com



### BEAGLE SUB-BASIN PETROLEUM PLAY ELEMENTS

Element	Description
Source	Locker Shale (Early Triassic), Mungaroo Formation (Middle to Late Triassic), Picard Shale (Early Jurassic), Legendre/Atthol Formation (Early to Middle Jurassic) and Dingo Claystone (Late Jurassic).
Reservoir	Good quality potential reservoirs occur at several levels, including the Mungaroo Formation (Middle to Late Triassic), North Rankin Formation (Early Jurassic), Legendre Formation (Early to Middle Jurassic) and Angel Formation (Late Jurassic). Secondary potential reservoirs include Brigadier Formation (Late Triassic to Early Jurassic) and Calypso Formation (Middle Jurassic).
Seal	Regional seals provided by Locker Shale (Early Triassic), Cossigny Member of the Mungaroo Formation (Middle Triassic) and Forestier Claystone and Muderong Shale (Early Cretaceous). Potential intraformational seals occur within Picard Shale (Early Jurassic), Atthol Formation (Early Jurassic) and Calypso Formation (Middle Jurassic).
Traps	Horsts, drape anticlines, tilted fault blocks, fault roll-over structures and stratigraphic pinch-outs.
Infrastructure and Markets	Active petroleum system confirmed by Nebo 1 oil discovery in Area W07-20. Producing oil accumulations at Mutineer/Norfolk and Exeter lie no more than 10km to the south of Area W07-18. Talisman oil accumulation extends to within 22km of the southern edge of Area W07-21

1. Location map of area W07-18 to W07-21 in the Beagle Sub-basin, Carnarvon Basin.

2. Structural elements of the Beagle Sub-basin also showing the location of Figure 3.

3. Seismic line 110-3 through Cossigny 1, Ronsard 1, Ermine 1 and Delambre 1, Beagle Sub-basin.

4. Stratigraphy of the Beagle Sub-basin.