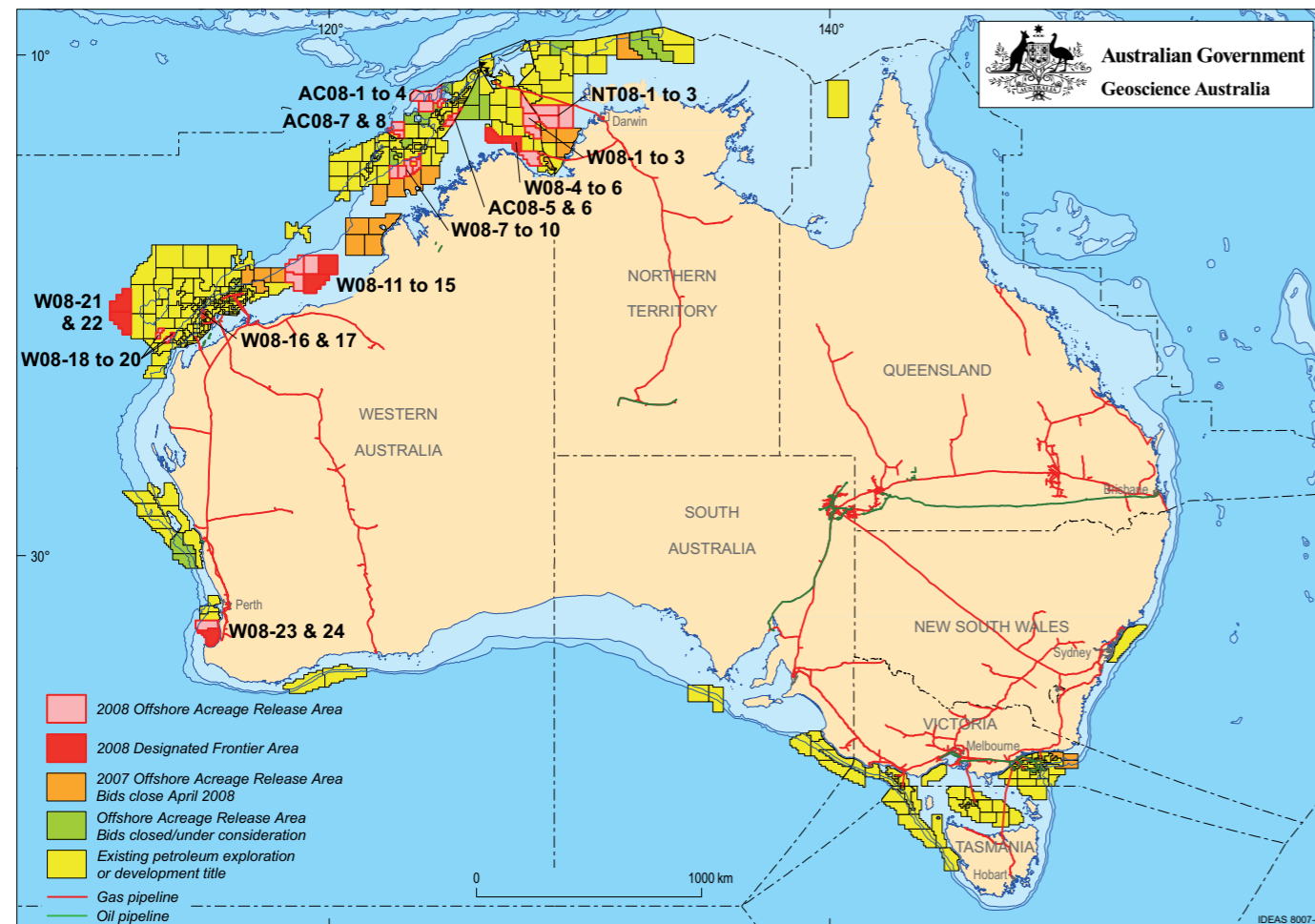


2008 Release of Offshore Petroleum Exploration Areas

The 2008 Offshore Petroleum Exploration Acreage release comprises 35 Release areas, located across five basins. The Release areas range from frontier to mature status and offer opportunities for exploration companies of all sizes.

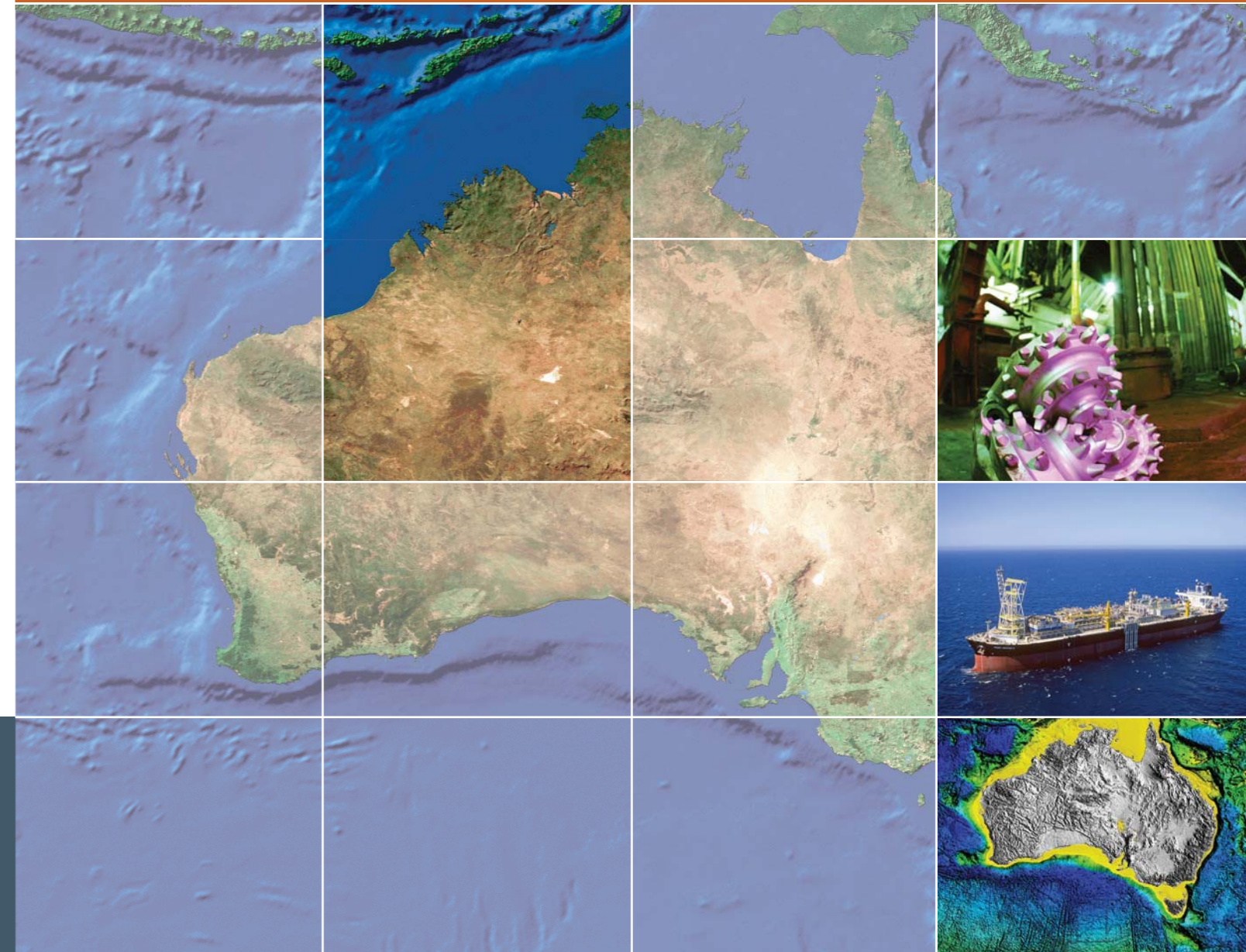
Comprehensive acreage release information packs can be obtained (free of charge) by emailing contact details to: petroleum.exploration@ret.gov.au



EXPLORE AUSTRALIA

PETREL SUB-BASIN, BONAPARTE BASIN NORTHERN TERRITORY / WESTERN AUSTRALIA

Release areas NT08-1, NT08-2, NT08-3, W08-1, W08-2 and W08-3



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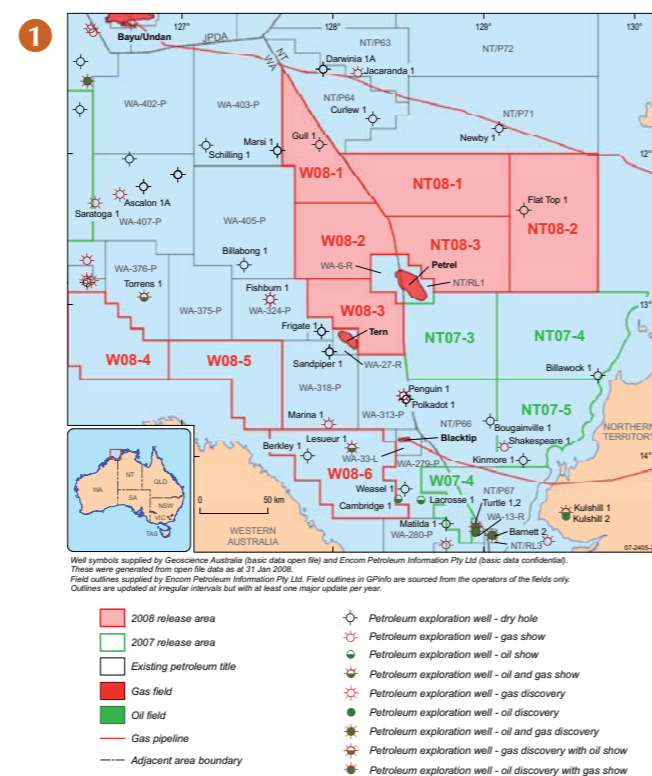
Current Exploration Opportunities in the Petrel Sub-basin, Bonaparte Basin Northern Territory / Western Australia, Offshore Australia. Open for bids until 9 April 2009

Release areas NT08-1, NT08-2, NT08-3, AND W08-1, W08-2 and W08-3

- Under-explored, shallow water areas in a proven Palaeozoic gas province
- Close to the Petrel, Tern and Blacktip gas fields and the Blacktip pipeline
- Faulted anticlines, salt associated structures and stratigraphic traps
- Special Notices apply, refer to Guidance Notes.

Geoscience Australia Reports/Products

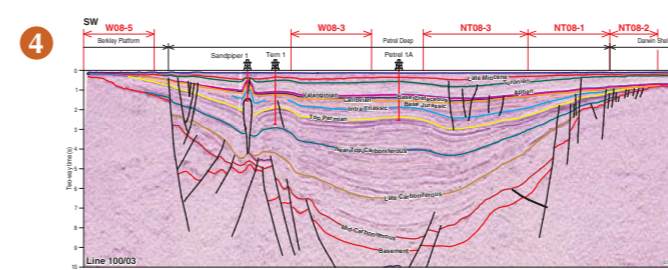
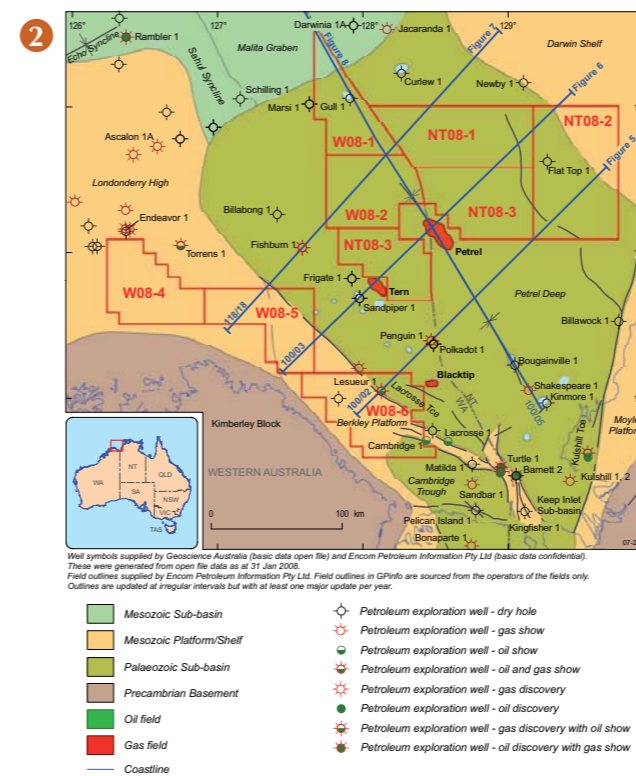
- Oils of Western Australia II: Regional petroleum geochemistry and correlation of crude oils and condensates from Western Australia and Papua New Guinea. (2005) Geoscience Australia and GeoMark Research
- Source rock time-slice maps (TOC, HI, VR), offshore northwest Australia —1:3,000,000 scale. (2004) GeoCat # 61179
- Line drawings of Geoscience Australia's regional seismic profiles, offshore northern and northwestern Australia. (2001) GeoCat # 36353
- Interpretations of Geoscience Australia's regional seismic data, survey 98, 100, 116, 118, 119 and 130, (2001) — digital horizon and fault data in ASCII format. (2001) GeoCat # 35237, 35239, 35249, 35243, 35244, 35248 respectively
- Northwestern and northern Australia margins stratigraphic chart showing Geoscience Australia's interpreted regional seismic horizons. (2001). GeoCat # 36454.
- Northern Bonaparte biozonation and stratigraphy chart 15. (1998). GeoCat # 24222
- Petrel Sub-basin biozonation and stratigraphy chart 1. (1996). GeoCat # 23333
- Bonaparte Basin biozonation and stratigraphy chart 32. (2008). GeoCat # 65649
- Characterisation of natural gases from West Australian basins: Bonaparte Basin module. (2000) AGSO and Geotechnical Services non-exclusive study
- Petrel Sub-basin geohistory modelling CD. GeoCat # 39676. GA Record 2002/17
- Petrel Sub-basin study 1995-1996:
 - Summary report. AGSO Record 1996/40
 - Gravity modelling. AGSO Record 1996/41
 - Organic geochemistry of oils and source rocks AGSO Record 1996/42
 - Geohistory modelling. AGSO Record 1996/43.



1. Location map of Release areas NT08-1, NT08-2 and NT08-3, and Release areas W08-1, W08-2 and W08-3 in the Petrel Sub-basin showing their proximity to hydrocarbon accumulations.
2. Regional setting of the Petrel Sub-basin.
3. Stratigraphy of the Petrel Sub-basin (after Jones et al, 1996; Gorter, 1998).
4. Regional cross-section of the Petrel Sub-basin showing Geoscience Australia line 100/03 through the Northern Territory Release areas and the Petrel and Tern gas accumulations. Location of the line is shown in Figure 2.

Relevant Industry Data

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



Age (Ma)	System	Epoch	Group	Formation/Unit	Tectonics	Discoveries
10	CENOZOIC	Quaternary	Woodbine	Undiff.	PASSIVE MARGIN	
20		Oligocene		Undiff.		
30		Eocene		Undiff.		
60	CRETACEOUS	Late	Bathurst Island	Wangaru Formation	RIFTING	
100		Early		Darwin Formation		
120		Early		Sandpaper Sandstone		
140	JURASSIC	Late	Flinders	Frigate Formation	BREAKUP	
160		Mid		Power Formation		
180		Early		Malta Formation		
200	TRIASSIC	Late	Trough	Cape Londonderry Formation	NORTHEAST RIFT SEQUENCE	
220		Mid		Malta Formation		
240		Early		Hyland Bay Sub-group		
260	PERMIAN	Late	Koonen	Mt Goodwin Formation	PRE-EXTENSION PHASE	Blacktip, Petrel, Tern, Fishburn 1, Penguin 1, Polkadot 1
280		Mid		Cape Hay Fm		
300		Early		Palica Fm		
320	CARBONIFEROUS	Late	Koolahill	Fossil Head Formation	NORTH WEST RIFTING	
340		Mid		Treachery Shale		
360		Early		Kuruyippi Formation		
380	DEV.	Late	Weaber	Langfield Group	BREAKUP	Turtle 2, Blacktip, Barnett 2, Weaber, Wagon Creek 1, Keep River 1, Bonaparte 2, Vienta 1, Garimata 1
400		Mid		Milligans Fm		
420		Early		Ningbing Group		
440	DEV.	Late	Weaber	Bonaparte Formation	RIFT SEQUENCE	
460		Early		Cockatoo Group		

PETREL SUB-BASIN PETROLEUM PLAY ELEMENTS

Source	Early Permian Keyling Formation and Late Permian Hyland Bay Sub-group for gas.
Reservoir	Petroleum-bearing reservoirs are found in numerous Carboniferous and Permian formations. The most prospective reservoirs are the Early Carboniferous Milligans Formation, Late Carboniferous–Early Permian Kuruyippi Formation, Early Permian Keyling Formation and Late Permian Cape Hay and Tern formations of the Hyland Bay Sub-group.
Seal	Regional seals are provided by the Early Permian Treachery Shale Early–Late Permian Fossil Head Formation, and Early Triassic Mount Goodwin Formation. Intraformational seals include the Late Permian Cape Hay, Dombey and Pearce formations of the Hyland Bay Sub-group.
Traps	Structural and stratigraphic traps. The Fitzroy Movement is responsible for creating large-scale inversion anticlines, commonly associated with salt mobilisation.
Infrastructure and Markets	Proximal to the Petrel and Tern gas fields, the Turtle and Barnett oil fields and the Blacktip gas field and pipeline.

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