



Australian Government

Department of Industry  
Tourism and Resources

## 2007 RELEASE OF AUSTRALIAN OFFSHORE PETROLEUM EXPLORATION AREAS

### DATA – AREA W07-5 TO W07-7 CASWELL SUB-BASIN, BROWSE BASIN

Public access to exploration data in Australia, including digital seismic tapes, well reports and core and cuttings samples is a result of legislation that initially subsidised exploration in return for lodgement and public availability of the data. When the subsidy was removed the requirement that data be lodged with government and made available for future exploration continued.

These open-file reports, data and down-hole samples are available from Geoscience Australia (GA), Canberra and the Western Australian Department of Industry and Resources (DoIR), Perth.

Geoscience Australia, Australia's national geoscientific information agency, also undertakes regional basin studies, assessments of hydrocarbon resources and provides geoscientific data and reports in support of acreage release rounds.

Geoscience Australia is currently establishing a Data Room where specific seismic and well data relevant to current acreage release rounds can be viewed. Appointments to visit this Data Room or to meet with Geoscience Australia officers can be made by contacting Jenny Maher, Petroleum Promotion Co-ordinator, phone 61(0) 2 62499111, e-mail [jenny.maher@ga.gov.au](mailto:jenny.maher@ga.gov.au)

Additional information on the Data Room or Geoscience Australia products that support the 2007 release areas can also be obtained from the Geoscience Australia Acreage Release webpage, [http://www.ga.gov.au/oceans/ss\\_Acreage.jsp](http://www.ga.gov.au/oceans/ss_Acreage.jsp)

Packages of specific seismic data relevant to the 2007 acreage release area are available in either Geoquest, Kingdom or Landmark format. Digital Well Completion Reports and digital Well Logs (in original format) for specific wells are also available in packages relevant to the 2007 acreage release areas. These data can be ordered through the Geophysical and Geological Data Repository, phone 61 (0)2 6249 9222, e-mail [ausgeodata@ga.gov.au](mailto:ausgeodata@ga.gov.au)

Available data relevant to the 2007 release areas in the Caswell Sub-basin, Browse Basin are listed below.

## WELL DATA

### Well Completion Reports– W07-5 to W07-7, Caswell Sub-basin, Browse Basin

Well	Operator	Year
Brecknock 1	Woodside Petroleum Development Pty Ltd	1979
Brecknock South 1	Woodside Energy Ltd	2000
Caswell 1	Woodside Petroleum Development Pty Ltd	1978
Caswell 2	Woodside Offshore Petroleum Pty Ltd	1983
Firetail 1	Woodside Energy Ltd	2002
Gorgonichthys 1	Inpex Browse, Ltd.	2000
Kaleidoscope 1	Coveyork Pty Ltd	2001
Maginnis 1A ST2	BHP Billiton Petroleum Pty. Ltd.	2003
Marabou 1	Santos Ltd	2001
Marabou 1 ST1	Santos Limited	2001
Walkley 1	Ampolex Limited	1993

### Analysis Reports – W07-5 to W07-7, Caswell Sub-basin, Browse Basin

Well	Report No	Report Title	Company	Year
Caswell 1	DAR0520	Microscopical study of organic matter from 26 wells on the NW shelf Aust	Aust Elf Aquitaine	1984
Caswell 1	DAR0521	Analytical results of the organic matter study from some well cuttings.	Aust Elf Aquitaine	1984
Caswell 1	DAR0640	Petroleum Geochemistry of the Australian NW shelf. Progress report No.5	Robertson Research (Aust) Pty	1985
Caswell 1	DAR0650	Petroleum Geology & Geochem - NW shelf WA - Phase 2 Vol 3 Part 6c.	Robertson Research (Aust) Pty	1986
Caswell 1	DAR0674	Biostratigraphy and Palaeoenvironments of Mid Cretaceous, Browse Basin, WA	BP Australia Ltd	1988
Caswell 1	DAR0685	Kerogen analysis of selected cuttings from Caswell 1 and Barcoo 1 wells.	Esso Australia Limited	1987
Caswell 1	DAR0899	Bulk fluid inclusion Mass spectrometry of samples from Caswell 1	Amoco Aust Pet Co	1992
Caswell 1	DAR1087	Vitrinite Reflectance and Apatite Fission Track Analysis	Monash University	1994
Caswell 1	DAR1105	Rapid Palynological reviews of seven Browse Basin wells.	Not reported	1994
Caswell 2	DAR0900	Bulk fluid inclusion mass spectrometry of samples from Caswell 2	Amoco Aust Pet Co	1992
Caswell 2	DAR1045	Reconniassance palynological survey in thirteen wells from NW Aust.	Amoco Aust Pet Co	1993
Caswell 2	DAR1105	Rapid Palynological reviews of seven Browse Basin wells.	Not reported	1994
Caswell 2	DAR1192	Evaluation of Top Seal Potential : Browse Basin	Texaco Petroleum Co	1998
Caswell 2	DAR1212	Apatite Fission Track Analysis and Vitrinite Reflectance-Browse Basin	Geotrack International	1999
Caswell 2	DAR1245	GOI Analysis Browse Basin	CSIRO	2003

Contact Geoscience Australia's Repository for more information regarding access to well completion and analysis reports, phone 61 (0)2 6249 9222, e-mail [ausgeodata@ga.gov.au](mailto:ausgeodata@ga.gov.au)

## SAMPLES

### Cores and Cuttings – W07-5 to W07-7, Caswell Sub-basin, Browse Basin

Well	Type	Top (m)	Bottom (m)
Caswell 1	Cuttings	680	4097
Caswell 1	Cuttings	680	4105
Caswell 2	Cuttings	691	5000
Firetail 1	Cuttings	3020	3355
Gorgonichthys 1	Core	3962	4594.46
Gorgonichthys 1	Cuttings	2420	4767
Ichthys 1A	Cuttings	2420	4825
Ichthys Deep 1	Cuttings	2441	4955
Kaleidoscope 1	Cuttings	2409	4437
Maginnis 1A ST2	Cuttings	3798	4642
Marabou 1	Cuttings	755	1860
Marabou 1 ST1	Cuttings	2247	3729
Phrixus 1	Cuttings	1695	3874
Walkley 1	Cuttings	710	3950

Contact Geoscience Australia's Repository for more information or to arrange access to core and cuttings, phone 61 (0)2 6249 9222, e-mail [ausgeodata@ga.gov.au](mailto:ausgeodata@ga.gov.au).

## GEOPHYSICAL DATA

### Seismic Surveys - W07-5 to W07-7, Caswell Sub-basin, Browse Basin

Release Area	Vintage	Survey	Operator	GA Unique No	Processed Data	Field Data
W07-05	1994	AGSO Marine Survey 130;Browse Basin Infill	AGSO	S6940031	Yes	Yes
W07-05	1994	AGSO Marine Survey 130;Browse Basin Infill	AGSO	S6940031	Yes	Yes
W07-05	1981	Dampier-Broome Marine Seismic : Projects 81B to 81K	Woodside Oil NL	S6810043	No	Yes
W07-05	1977	Haycock-Laminaria Marine Seismic	Woodside Oil NL	S0770002	Yes	Yes
W07-05	1978	Hermite-Barton Marine Seismic	Woodside Oil NL	S0780015	No	Yes
W07-05	1998	IFR-98 Seismic Survey	International Frontier Resources	S6980040	Yes	Yes
W07-05	1969	Legendre-Marie Marine Seismic	Burmah Oil Co of Australia	S0690066	Yes	Yes
W07-05	1973	Mermaid-Cartier Marine Seismic	Burmah Oil Co of Australia	S6730011	No	Yes
W07-05	1982	Project 82A to 82F of 2DW Marine Seismic	Woodside Oil NL	Numerous	No	Yes
W07-05	1997	SPA BR 98 Marine Seismic	Aust Seismic Brokers	S6980002	Yes	Yes
W07-05	1971	Trimouille -Dillon Seismic	Woodside Oil NL	S0700120	Yes	Yes
W07-05	1979	Woodbine-Victoria Projects 79	Woodside Oil NL	S6790018-38	No	Yes
W07-06	1993	AGSO Marine Survey 119;Browse Basin M.S.S.	AGSO	S6930071	Yes	Yes
W07-06	1993	AGSO Marine Survey 119;Browse Basin M.S.S.	AGSO	S6930071	Yes	Yes
W07-06	1994	AGSO Marine Survey 130;Browse Basin Infill	AGSO	S6940031	Yes	Yes
W07-06	1996	AGSO Marine Survey 175, Browse Basin	AGSO	S9690034	Yes	Yes
W07-06	1996	AGSO Marine Survey 175, Browse Basin	AGSO	S6960034	Yes	Yes
W07-06	1995	Browse 1995 Marine Seismic	Shell Dev (Aust) P/L	S6950010	Yes	Yes
W07-06	1992	BS92 Marine Seismic	Shell Dev (Aust) P/L	S6920022	Yes	Yes
W07-06	1977	Haycock-Laminaria Marine Seismic	Woodside Oil NL	S0770002	Yes	Yes
W07-06	1978	Hermite-Barton Marine Seismic	Woodside Oil NL	S0780015	No	Yes
W07-06	1998	IB-98 Seismic Survey	Inpex Ashmore Ltd	S6980042	Yes	Yes
W07-06	1998	IFR-98 Seismic Survey	International Frontier Resources	S6980040	Yes	Yes
W07-06	1973	Mermaid-Cartier Marine Seismic	Burmah Oil Co of Australia	S6730011	No	Yes
W07-06	1984	Scientific Investigation 16SL Marine Seismic (VS)	GSI	S6840005	No	Yes
W07-06	1984	Scientific Investigation 17SL Marine Seismic	GSI	S6840031	No	Yes

W07-06	1997	SPA BR 98 Marine Seismic	Aust Seismic Brokers	S6980002	Yes	Yes
W07-06	1976	Tessa-Troubadour Marine Seismic& Magnetic	Barkley Oil Co	S0750001	Yes	Yes
W07-07	1991	1991 MI Marine Seismic	Ampol Explor Ptd	S6910028	Yes	Yes
W07-07	1993	AGSO Marine Survey 119;Browse Basin M.S.S.	AGSO	S6930071	Yes	Yes
W07-07	1982	BE82A Marine Seismic (S82A)	Esso Exploration and Prod Aust	S6820010	Yes	Yes
W07-07	1987	BW87_34P Marine Seismic	BHP Petroleum	S6870009	Yes	Yes
W07-07	1998	Firetail 98 Marine Seismic.	Woodside Offshore Petroleum	S6980004	Yes	Yes
W07-07	1979	Fraser Inlet Marine Seismic	Oberon Oil	S6790007	Yes	Yes
W07-07	1977	Haycock-Laminaria Marine Seismic	Woodside Oil NL	S0770002	Yes	Yes
W07-07	1998	IFR-98 Seismic Survey	International Frontier Resources	S6980040	Yes	Yes
W07-07	1973	Kendrew-Cootamundra Marine Seismic	Barkley Oil Co	S6730010	Yes	Yes
W07-07	1986	Leveque Margin Marine Seismic	GSI	S6860020	Yes	Yes
W07-07	1973	Mermaid-Cartier Marine Seismic	Burmah Oil Co of Australia	S6730011	No	Yes
W07-07	2000	Rising Sun 2D Marine Seismic	Santos Offshore Pty Ltd	S6200022	Yes	Yes
W07-07	1992	Sarah Marine Seismic	Ampol Explor Ltd	S6920030	Yes	Yes
W07-07	1992	Sascha 1992 Seismic	Ampol Explor Ltd	S6920013	Yes	Yes
W07-07	1976	Tessa-Troubadour Marine Seismic& Magnetic	Barkley Oil Co	S0750001	Yes	Yes
W07-07	1979	Woodbine-Victoria Projects 79	Woodside Oil NL	S6790018-38	No	Yes
W07-07	1969	Adele-Scott Seismic	Burmah Oil Co	S0690083	Yes	Yes

Contact Geoscience Australia's Repository for more information regarding access to seismic data, phone 61 (0)2 6249 9222, e-mail [ausgeodata@ga.gov.au](mailto:ausgeodata@ga.gov.au).

## PRODUCTS

### Geoscience Australia Reports/Products – W07-5 to W07-7, Caswell Sub-basin, Browse Basin

#### New Reports/Products

- Browse Basin Composite Well Logs (2005), GA Catalog No. 61819.
- 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).
- Source rock time-slice maps (TOC, HI, VR), offshore Northwest Australia - 1:3,000,000 scale. GA Catalog No. 61179.
- Testing natural hydrocarbon seepage detection tools on the Yampi Shelf, northwestern Australia. GA Catalog No. 61717

#### Other Reports/Products

- Browse Basin Biozonation and Stratigraphy Chart 7 (2001). GA Catalog No 36593
- Browse Basin high-resolution seismic survey BBHR-175, and Interpretation Report. GA Record 1997/38.
- Browse Basin Organic Geochemistry Study. GA Record 1997/57.
- Characterisation of Natural Gases from West Australian Basins: Browse Basin Module (GA and Geotechnical Services Non-exclusive Study, 2000).
- Interpretations of Geoscience Australia's regional deep-seismic data, Survey 119, 130 (2001) – digital horizon and fault data in ASCII format. GA Catalog No. 35244, 35248.
- Interpretative Study of Hydrocarbon Migration and Seepage in the Timor Sea and Northern Browse Basin (2001). GIS format (ArcView) on CD. GA Catalog No. 35246.

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](mailto:sales@ga.gov.au)

## **OTHER DIGITAL DATA**

### **AMSIS**

The Australian Marine Spatial Information System (AMSIS), a recent release from Geoscience Australia, is an on-line mapping and decision support tool that presents a vast array of Commonwealth interests in Australia's marine jurisdiction. With the cooperation of other Government and private sector agencies, this system integrates administrative boundary information including petroleum leases with scientific data against other background data such as bathymetry.

AMSIS is easy to use and provides access to data via a web browser for those interested in the marine environment without the need for specialised software or mapping skills. AMSIS not only displays 'what's out there', but also allows users to query the information, view metadata, and conduct more advanced functions such as return the nearest distance from a point to a nominated boundary.

AMSIS can be found on the web at: [www.ga.gov.au/amsis](http://www.ga.gov.au/amsis)

### **AUSTRALIAN GEOLOGICAL PROVINCES DATABASE**

The Australian Geological Provinces Database provides interpretive data on Australia's sedimentary, igneous, metallogenic, structural and metamorphic provinces. The database has been jointly developed and populated by the Onshore Energy and Minerals Division of Geoscience Australia, which is concentrating on onshore geological provinces, and the Petroleum and Marine Division, which is capturing data for offshore sedimentary basins. The database provides the mapped extent of Australia's geological provinces, and includes attributes such as size, water depth, tectonic setting, age, sediment thickness, main rock types, depositional environments, main resources, key references, and relations to other geological provinces. It also includes an overview of the geology, exploration status, and petroleum system elements of each province.

The Australian Geological Provinces Database is available online. Access to the database is provided through the Geoscience Australia website using an interactive mapping system, at [www.ga.gov.au/oracle/provinces/](http://www.ga.gov.au/oracle/provinces/)

The interface allows users to view and select provinces of interest based on their key attributes, and to add key map layers (exploration data, surface geology, images, bathymetry). Database extracts are provided as an html report, and include links to key images (structural element maps, regional cross-sections, stratigraphic and petroleum system charts).

This database interface provides explorers with basic geological information on all offshore sedimentary basins, and many of their component sub-basins, along Australia's continental margin.

## **NATIONAL PETROLUEM WELLS DATABASE**

Geoscience Australia's geological databases provide detailed open file header data, biostratigraphic data, organic geochemical data, reservoir and facies data, interpreted depositional environment information and directional survey data. These data have been extracted from open file Well Completion Reports or are the results of Geoscience Australia studies. These data can be accessed via the following paths:

- Download data for wells relevant to the 2007 Acreage Release areas directly from Geoscience Australia's databases.  
[http://www.ga.gov.au/oracle/apcrc/ar\\_list.jsp](http://www.ga.gov.au/oracle/apcrc/ar_list.jsp)
  
- Search page allowing access to all open file wells for the above datasets.  
<http://dbforms.ga.gov.au/www/npm.well.search>
  
- Static file compiled from the Geoscience Australia databases in December 2006. This file is intended for clients without facility to download web data. Data may have been added to the databases after this file was compiled. Clients are encouraged to use the above web download sites in preference to this static file. **Caswell Sub-basin.zip**

Please contact [sales@ga.gov.au](mailto:sales@ga.gov.au) with any technical problems using the web pages listed above. For technical information on these data contact David Rowland, Petroleum Database Manager, phone 61 (0)2 62499111, e-mail [David.Rowland@ga.gov.au](mailto:David.Rowland@ga.gov.au)