



Australian Government

Department of Resources, Energy and Tourism

2008 RELEASE OF AUSTRALIAN OFFSHORE PETROLEUM EXPLORATION AREAS

DATA – RELEASE AREAS W08-23 TO W08-24 VLAMING SUB-BASIN, PERTH 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 has 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 visiting http://www.ga.gov.au/oceans/oar_DataRoom.jsp, or emailing biu@ga.gov.au

Additional information Geoscience Australia products that support the 2008 release areas can also be obtained from the Geoscience Australia Acreage Release webpage, <http://www.ga.gov.au/oceans/Acreage2008.jsp>

Packages of specific seismic data relevant to the 2008 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 2008 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

Available data relevant to the 2008 release areas in the Vlaming Sub-basin are listed below.

WELL DATA

Well Completion Reports – W08-23 to W08-24, Vlaming Sub-basin

Well	Year ^{\$}	Data Avail [*]	Basic	Interpretive	Well Logs	Additional Data ¹
Araucaria 1	1993	A	Yes	Yes	Yes	
Bouvard 1	1975	A	Yes	Yes	Yes	
Challenger 1	1975	A	Yes	Yes	Yes	
Cockburn 1	1967	A	Yes	Yes	Yes	
Felix 1	1998	A	Yes	Yes	Yes	Well Post Mortem
Gage Roads 1	1969	A	Yes	Yes	Yes	
Gage Roads 2	1971	A	Yes	Yes	Yes	
Gingin 1	1965	A	Yes	Yes	Yes	
Marri 1	1993	A	Yes	Yes	Yes	FWR
Parmelia 1	1981	A	Yes	Yes	Yes	VSP
Pinjarra 1	1965	A	Yes	Yes	Yes	
Sugarloaf 1	1971	A	Yes	Yes	Yes	
Tuart 1	1991	A	Yes	Yes	Yes	
Warnbro 1	1971	A	Yes	Yes	Yes	
Lake Preston 1	1973	A	Yes	Yes	Yes	
Sabina River 1	1982	A	Yes	Yes	Yes	
Whicher Range 1	1968	A	Yes	Yes	Yes	
Wonnerup 1	1972	A	Yes	Yes	Yes	

^{\$}Year is based on Rig-release date, * A = All data (Basic and Interpretive) are available, B = Basic data only available, C = Basic and Interpretive data are confidential. Data is accurate as at 18 January 2008. ¹EOWR = End of Well Report, FWR = Final Well Report, VSP= Vertical Seismic Profile. Data is accurate as at 18 January 2008.

Analysis Reports – W08-23 to W08-24, Vlaming Sub-basin

Well	Report #	Report Title	Company	Test	Year
Araucaria 1	DAR1344	Oil Migration and Accumulation in the Offshore Perth Basin WA	Geoscience Australia	QGF	2005
Araucaria 1	DAR1344	Oil Migration and Accumulation in the Offshore Perth Basin WA	Geoscience Australia	GOI	2005
Bouvard 1	DAR1003	Perth Basin Palynological review: Seven offshore wells.	Petrofina Exploration	Palynology	1991
Bouvard 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Challenger 1	DAR0417	Source rock data from the Perth, Carnarvon, Canning, Browse & Bonaparte Basin	CSIRO	Source rock geochemistry	1980
Challenger 1	DAR0949	Late Cretaceous - Palaeogene Nannofossil Biostratigraphy of Challenger 1, Perth Basin.	AGSO	Palynology	1991
Challenger 1	DAR1003	Perth Basin Palynological review: Seven offshore wells.	Petrofina Exploration	Palynology	1991
Challenger 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Cockburn 1	DAR1003	Perth Basin Palynological review: Seven offshore wells.	Petrofina Exploration	Palynology	1991
Cockburn 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Gage Roads 1	DAR0035	Sedimentary Basins of Australia and PNG and hydrocarbon occurrence.	BMR Geology and Geophysics	Stratigraphy	1969
Gage Roads 1	DAR0311	Vitrinite Reflectance Data on many wells.	University of Wollongong	Vitrinite reflectance	1978
Gage Roads 1	DAR0417	Source rock data from the Perth, Carnarvon, Canning, Browse & Bonaparte Basin	CSIRO	Source rock geochemistry	1980
Gage Roads 1	DAR0836	Geochemical Analysis of crude oil from Gage Roads 1	Norcen International Ltd	Gas chromatography MS	1990
Gage Roads 1	DAR1164	Palynological review of wells in the Vlaming Sub-basin	Ampolex Ltd	Palynological review	1991
Gage Roads 1	DAR1025	Vitrinite reflectance study of offshore wells, Vlaming Sub-basin, WA.	Petrofina Exploration	Vitrinite reflectance	1993
Gage Roads 1	DAR1344	Oil Migration and Accumulation in the Offshore Perth Basin WA	Geoscience Australia	QGF	2005
Gage Roads 1	DAR1344	Oil Migration and Accumulation in the Offshore Perth Basin WA	Geoscience Australia	GOI	2005
Gage Roads 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Gage Roads 2	DAR1164	Palynological review of wells in the Vlaming Sub-basin	Ampolex Ltd	Palynological review	1991
Gage Roads 2	DAR1344	Oil Migration and Accumulation in the Offshore Perth Basin WA	Geoscience Australia	QGF	2005
Gage Roads 2	DAR1344	Oil Migration and Accumulation in the Offshore Perth Basin WA	Geoscience Australia	GOI	2005
Gingin 1	DAR0254	Preliminary analyses of Australian crude oils for geochemical studies	Dept Minerals and Energy	Preliminary Oil analyses	1974
Gingin 1	DAR0388	Preliminary petrological studies of cores of the Yarragadgee fm Perth WA	Macquarie University	Petrology	1980
Gingin 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Lake Preston 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA

Marri 1	DAR1344	Oil Migration and Accumulation in the Offshore Perth Basin WA	Geoscience Australia	QGF	2005
Marri 1	DAR1344	Oil Migration and Accumulation in the Offshore Perth Basin WA	Geoscience Australia	GOI	2005
Parmelia 1	DAR1003	Perth Basin Palynological review: Seven offshore wells.	Petrofina Exploration	Palynology	1991
Parmelia 1	DAR1002	Perth Basin Palynological review: Parmelia 1, well.	Petrofina Exploration	Palynology	1992
Pinjarra 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Sugarloaf 1	DAR0311	Vitrinite Reflectance Data on many wells.	University of Wollongong	Vitrinite reflectance	1978
Sugarloaf 1	DAR0388	Preliminary petrological studies of cores of the Yarragadgee fm Perth WA	Macquarie University	Petrology	1980
Sugarloaf 1	DAR1003	Perth Basin Palynological review: Seven offshore wells.	Petrofina Exploration	Palynology	1991
Sugarloaf 1	DAR1006	Perth Basin Core Descriptions	Petrofina Exploration	Lithological descriptions	1991
Sugarloaf 1	DAR1025	Vitrinite reflectance study of offshore wells, Vlaming Sub-basin, WA.	Petrofina Exploration	Vitrinite reflectance	1993
Sugarloaf 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Warnbro 1	DAR0311	Vitrinite Reflectance Data on many wells.	University of Wollongong	Vitrinite reflectance	1978
Warnbro 1	DAR0388	Preliminary petrological studies of cores of the Yarragadgee fm Perth WA	Macquarie University	Petrology	1980
Warnbro 1	DAR1001	Perth Basin Geochemical Analysis: Charlotte 1, Warnbro 1.	Petrofina Exploration	Rock - Eval Pyrolysis	1991
Warnbro 1	DAR1001	Perth Basin Geochemical Analysis: Charlotte 1, Warnbro 1.	Petrofina Exploration	Pyrolysis GC	1991
Warnbro 1	DAR1001	Perth Basin Geochemical Analysis: Charlotte 1, Warnbro 1.	Petrofina Exploration	Liquid Extracts	1991
Warnbro 1	DAR1003	Perth Basin Palynological review: Seven offshore wells.	Petrofina Exploration	Palynology	1991
Warnbro 1	DAR1006	Perth Basin Core Descriptions	Petrofina Exploration	Lithology	1991
Warnbro 1	DAR1005	High Pressure Mercury Capillary Pressure: Warnbro 1 well.	Petrofina Exploration	Seal capacity	1993
Warnbro 1	DAR1025	Vitrinite reflectance study of offshore wells, Vlaming Sub-basin, WA.	Petrofina Exploration	Vitrinite reflectance	1993
Warnbro 1	DAR1026	Fluid history investigation of sandstones in the Warnbro 1 hole, Perth B	Petrofina Exploration	Fl. inclusion petrography	1993
Warnbro 1	DAR1026	Fluid history investigation of sandstones in the Warnbro 1 hole, Perth B	Petrofina Exploration	Stable Isotope Geochem.	1993
Warnbro 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Whicher Range 1	DAR0254	Preliminary analyses of Australian crude oils for geochemical studies	Dept Minerals and Energy	Preliminary Oil analyses	1974
Whicher Range 1	DAR0265	Source rock analyses on samples from 13 Australian sedimentary Basins	BMR Geology and Geophysics	Source rock geochemistry	1977
Whicher Range 1	DAR0329	Vitrinite Reflectance Analyses on samples from four Perth Basin wells.	BMR Geology and Geophysics	Vitrinite reflectance	1978

Whicher Range 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA
Wonnerup 1	DAR0566	Pyrolysis data on wells drilled in the Perth Basin.	CRA Exploration	Rock - Eval pyrolysis	NA

Data is accurate as at 17 December 2007.

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

PHYSICAL DATA

Cores and Cuttings – W08-23 to W08-24, Vlaming Sub-basin

Confid*	Area	Well	Test Type	Top (m)	Bottom (m)
OF	W08-23	Araucaria 1	Cuttings	760	2218
OF	W08-23	Araucaria 1	Core	1807	1821.6
OF	W08-23	Bouvard 1	Cuttings	103.63	603.5
OF	W08-23	Challenger 1	Cuttings	460	2250
OF	W08-23	Felix 1	Cuttings	550	1013
OF	W08-23	Gage Roads 1	Cuttings	106.7	3658.53
OF	W08-23	Gage Roads 1	Core	301.21	3661.28
OF	W08-23	Gage Roads 2	Core	1357.62	1362.5
OF	W08-23	Gage Roads 2	Cuttings	371.95	2972.56
OF	W08-23	Gingin 1	Cuttings	21.34	4541.76
OF	W08-23	Gingin 1	Core	380.48	4447.56
OF	W08-24	Lake Preston 1	Cuttings	6.09	4566.15
OF	W08-23	Marri 1	Cuttings	100	2595
OF	W08-23	Parmelia 1	Cuttings	519	1770
OF	W08-23	Pinjarra 1	Core	302.43	4573.47
OF	W08-23	Pinjarra 1	Cuttings	18.29	4573.17
OF	W08-24	Sabina River 1	Cuttings	65	4305
OF	W08-23	Sugarloaf 1	Core	2588.41	3267.37
OF	W08-23	Sugarloaf 1	Cuttings	356.7	3658.53
OF	W08-23	Tuart 1	Cuttings	372	1599
OF	W08-23	Warnbro 1	Core	1960.47	3582.31
OF	W08-23	Warnbro 1	Cuttings	505.97	3660.34
OF	W08-24	Whicher Range 1	Core	562.66	4210.2
OF	W08-24	Whicher Range 1	Cuttings	6.1	4651.25
OF	W08-24	Wonnerup 1	Core	4453.74	4461.05
OF	W08-24	Wonnerup 1	Cuttings	914.4	4727.45

* Confidentiality denotes whether 1) interpretive and basic data is open file (OF) or 2) only basic data is open file (B). Data is accurate as at 19 December 2007.

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

GEOPHYSICAL DATA

Seismic Surveys – W08-23, Vlaming Sub-basin

Survey Name	Client	Line km's	Year	Processed Data	Field Data	Snip ID	PIMS ID
Challenger (302)	Wapet	374	1971	No	Yes	2431	S6710001
WA-174-P 1982	BP	1634	1982	Yes	Yes	539	S6820037
PV91	Petrofina	2437	1991	Yes	Yes	280	S6910007
Naturaliste 1993	Woodside	1444	1993	Yes	Yes	151	S6930019
Southwest Frontier (S280)	Geoscience Australia	2761	2004	Yes	Yes	3051	S6200412

Data is accurate as at 17 December 2007.

Seismic Surveys – W08-24, Vlaming Sub-basin

Survey Name	Client	Line km's	Year	Processed Data	Field Data	Snip ID	PIMS ID
WA-174-P 1982	BP	1634	1982	Yes	Yes	539	S6820037
Naturaliste 1993	Woodside	1444	1993	Yes	Yes	151	S6930019
Southwest Frontier (S280)	Geoscience Australia	2761	2004	Yes	Yes	3051	S6200412

Data is accurate as at 17 December 2007.

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

PRODUCTS

Geoscience Australia Reports/Products

- Basic Data Results from new biostratigraphic and geochemical sampling and analysis of offshore wells from the Vlaming Sub-basin, Western Australia. (2006) Geoscience Australia, Professional Opinion No. 2006/05. (Report for Approval to Sample No S31784.)
- Biostratigraphic re-appraisal of nine wells from the northern Vlaming Sub-basin, Perth Basin, Australia. (2005) Geoscience Australia, Professional Opinion, 14 p.
- A revised structural framework for frontier basins on the southern and southwestern Australian continental margin. (2003) GA Record 2003/03.
- Geological cross-sections of the Vlaming Sub-basin, South Perth Basin. (1990) BMR Record 1990/064.
- Hydrocarbon prospectivity of the offshore South Perth Basin. (1989) BMR Record 1989/023.
- The Vlaming Sub-basin, offshore South Perth Basin. AGSO, Continental Margins Folio 7, 85p. Geocat # 761325
- Vlaming Sub-basin Petroleum Prospectivity. Bureau of Resource Sciences, Petroleum Prospectivity Bulletin 1996/1, 401p.

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

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

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/

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 PETROLUUM 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 2008 Acreage Release areas directly from Geoscience Australia's databases.
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 January 2008. 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: [AR08 Vlaming.zip](#)

Please contact 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