



Australian Government

Department of Resources, Energy and Tourism

2008 RELEASE OF AUSTRALIAN OFFSHORE PETROLEUM EXPLORATION AREAS

DATA – RELEASE AREAS W08-18 TO W08-20 EXMOUTH SUB-BASIN, CARVARVON 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 Exmouth Sub-basin are listed below.

WELL DATA

Well Completion Reports – W08-18 to W08-20, Exmouth Sub-basin

Well	Year [§]	Data Avail [*]	Basic	Interpretive	Well Logs	Additional Data
Investigator 1 (Esso)	1979	A	Yes	Yes	Yes	Extended Well Rep
Sirius 1 (Esso)	1980	A	Yes	Yes	Yes	
Coniston 1	2000	A	Yes	Yes	Yes	
Eskdale 1	2003	B	Yes		Yes	
Leyden 1	1996	A	Yes	Yes	Yes	
Leyden 1A	1996	A	Yes	Yes	Yes	
Leyden 1B	1996	A	Yes	Yes	Yes	
Leyden 1B ST1	1996	A	Yes	Yes	Yes	
Zeewulf 1	1979	A	Yes	Yes	Yes	
Blackdragon 1	2004	B	Yes		Yes	
Falcone 1	2005	B	Yes		Yes	VSP
Falcone 1A	2005	B	Yes		Yes	VSP
Resolution 1	1979	A	Yes	Yes	Yes	Various
Resolution 1 ST1	1979	A	Yes	Yes	Yes	Various
Stybarrow 1	2003	B	Yes		Yes	
Stybarrow 1 ST1	2003	B	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 – W08-18 to W08-20, Exmouth Sub-basin

Well	Report #	Report Title	Company	Test	Year
Investigator 1 (Esso)	DAR0730	Studies in Australian Mesozoic Palynology	Assoc of Aust Palynology	Palynology(Mesozoic)	1987
Investigator 1 (Esso)	DAR1000	Geochemical analysis of samples from the Exmouth Sub-basin.	BHP Petroleum Pty Ltd	TOC	1993
Investigator 1 (Esso)	DAR1000	Geochemical analysis of samples from the Exmouth Sub-basin.	BHP Petroleum Pty Ltd	Pyrolysis GC	1993
Investigator 1 (Esso)	DAR1000	Geochemical analysis of samples from the Exmouth Sub-basin.	BHP Petroleum Pty Ltd	Rock - eval pyrolysis	1993
Investigator 1 (Esso)	DAR1037	Microfossils of Rhaetian Marls: Investigator, Sirius, Vinck & Eendracht.	University of Wien	Palynology	1993
Investigator 1 (Esso)	DAR1140	Petrology and Seal Capacity of Exmouth SWC's	BHP Petroleum Pty Ltd	Petrographic	1996
Investigator 1 (Esso)	DAR1162	Oil Migration on the Exmouth Plateau	APCRC	Hydrocarbon petrography	1997
Investigator 1 (Esso)	DAR1191	Sedimentological & Petrographical Descriptions	Mobil Exploration	Sedimentology/Petrography	1998
Investigator 1 (Esso)	DAR1185	Geochemical Analyses of selected wells from the Exmouth Plateau	PGA Consultants	Geochemical	1998
Investigator 1 (Esso)	DAR1297	Triassic biostratigraphic study - Greater Exmouth Plateau	BHP Petroleum Pty Ltd	Biostratigraphy	2006
Investigator 1 (Esso)	DAR0670	Pyrolysis analysis on samples from eight Exmouth Plateau wells.	BMR Geology and Geophysics	Rock - Eval pyrolysis	NA
Leyden 1B ST1	DAR1329	Hydrocarbon Characterisation Study	Apache Energy	Geochemistry	2005
Resolution 1	DAR0730	Studies in Australian Mesozoic Palynology	Assoc of Aust Palynology	Palynology(Mesozoic)	1987
Resolution 1	DAR0711	Palynological review of eight wells in the Carnarvon Basin WA.	BP Australia Ltd	Palynology	1988
Resolution 1	DAR0965	Geochemical analysis of samples from the government store (4 wells).	BHP Petroleum Pty Ltd	Rock - Eval pyrolysis	1992
Resolution 1	DAR0965	Geochemical analysis of samples from the government store (4 wells).	BHP Petroleum Pty Ltd	Pyrolysis GC	1992
Resolution 1	DAR0965	Geochemical analysis of samples from the government store (4 wells).	BHP Petroleum Pty Ltd	TOC	1992
Resolution 1	DAR1036	Results of TOC, Rock - Eval pyrolysis & Pyrolysis GC analysis from 15 well	PGA Consultants	Pyrolysis GC	1992
Resolution 1	DAR1036	Results of TOC, Rock - Eval pyrolysis & Pyrolysis GC analysis from 15 well	PGA Consultants	Rock - Eval pyrolysis	1992
Resolution 1	DAR1036	Results of TOC, Rock - Eval pyrolysis & Pyrolysis GC analysis from 15 well	PGA Consultants	TOC	1992
Resolution 1	DAR1000	Geochemical analysis of samples from the Exmouth Sub-basin.	BHP Petroleum Pty Ltd	Pyrolysis GC	1993

Resolution 1	DAR1000	Geochemical analysis of samples from the Exmouth Sub-basin.	BHP Petroleum Pty Ltd	Rock - Eval Pyrolysis	1993
Resolution 1	DAR1000	Geochemical analysis of samples from the Exmouth Sub-basin.	BHP Petroleum Pty Ltd	TOC	1993
Resolution 1	DAR1047	Geochemical analysis & Source rock kinetics on samples from Carnarvon Basin	BHP Petroleum Pty Ltd	Source rock kinetics	1993
Resolution 1	DAR1047	Geochemical analysis & Source rock kinetics on samples from Carnarvon Basin	BHP Petroleum Pty Ltd	Rock - Eval pyrolysis	1993
Resolution 1	DAR1049	Geochemical analysis for source rock potential in four Carnarvon Basin wells	WAPET	Pyrolysis GC	1993
Resolution 1	DAR1049	Geochemical analysis for source rock potential in four Carnarvon Basin wells	WAPET	Rock - Eval pyrolysis	1993
Resolution 1	DAR0521	Analytical results of the organic matter study from some well cuttings.	Aust Elf Aquitaine	Source rock geochemistry	1994
Resolution 1	DAR1207	Geochemical & Fluid Inclusion Analyses	WAPET	Geochemistry	1999
Resolution 1	DAR1262	Palynology review of Macedon1 - 5, Pyrenees1 - 2, Resolution - 1A	Woodside Energy Ltd	Palynology	2001
Resolution 1	DAR0670	Pyrolysis analysis on samples from eight Exmouth Plateau wells.	BMR Geology and Geophysics	Rock - Eval pyrolysis	NA
Sirius 1 (Esso)	DAR0730	Studies in Australian Mesozoic Palynology	Assoc of Aust Palynology	Palynology(Mesozoic)	1987
Sirius 1 (Esso)	DAR1047	Geochemical analysis & Source rock kinetics on samples from Carnarvon Basin	BHP Petroleum Pty Ltd	Rock - Eval pyrolysis	1993
Sirius 1 (Esso)	DAR1047	Geochemical analysis & Source rock kinetics on samples from Carnarvon Basin	BHP Petroleum Pty Ltd	Source rock kinetics	1993
Sirius 1 (Esso)	DAR1037	Microfossils of Rhaetian Marls: Investigator, Sirius, Vinck & Eendracht.	University of Wien	Palynology	1993
Sirius 1 (Esso)	DAR1162	Oil Migration on the Exmouth Plateau	APCRC	Hydrocarbon petrography	1997
Sirius 1 (Esso)	DAR1172	Geochemical Analysis for Source Rock Potential of Sediments	WAPET	Geochemistry	1997
Sirius 1 (Esso)	DAR1185	Geochemical Analyses of selected wells from the Exmouth Plateau	PGA Consultants	Geochemical	1998
Sirius 1 (Esso)	DAR1297	Triassic biostratigraphic study - Greater Exmouth Plateau	BHP Petroleum Pty Ltd	Biostratigraphy	2006
Sirius 1 (Esso)	DAR0670	Pyrolysis analysis on samples from eight Exmouth Plateau wells.	BMR Geology and Geophysics	Rock - Eval pyrolysis	NA
Zeewulf 1	DAR0649	Petroleum Geology & Geochemistry, NW shelf, WA - Phase 2, Vol 2, part 6b.	Robertson Research (Aust) Pty	Migrant oil stains	1986
Zeewulf 1	DAR0730	Studies in Australian Mesozoic Palynology	Assoc of Aust Palynology	Palynology(Mesozoic)	1987
Zeewulf 1	DAR1049	Geochemical analysis for source rock potential in four Carnarvon Basin wells	WAPET	Pyrolysis GC	1993

Zeewulf 1	DAR1049	Geochemical analysis for source rock potential in four Carnarvon Basin wells	WAPET	Rock - Eval pyrolysis	1993
Zeewulf 1	DAR1107	Correlation and Sequence Stratigraphy on four wells	WAPET	Sequence/Strat/Biozone	1994
Zeewulf 1	DAR1140	Petrology and Seal Capacity of Exmouth SWC's	BHP Petroleum Pty Ltd	Petrographic	1996
Zeewulf 1	DAR1185	Geochemical Analyses of selected wells from the Exmouth Plateau	PGA Consultants	Geochemical	1998
Zeewulf 1	DAR1297	Triassic biostratigraphic study - Greater Exmouth Plateau	BHP Petroleum Pty Ltd	Biostratigraphy	2006

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 – W08-18 to W08-20, Exmouth Sub-basin

Confid*	Area	Well	Test Type	Top (m)	Bottom (m)
B	W08-20	Black Dragon 1	Cuttings	2115	2640
OF	W08-19	Coniston 1	Cuttings	1074	1350
B	W08-19	Eskdale 1	Cuttings	1273	3127
B	W08-20	Falcone 1	Cuttings	320	1080
B	W08-20	Falcone 1A	Cuttings	2085	3872
OF	W08-18	Investigator 1 (Esso)	Core	3735	3745.6
OF	W08-18	Investigator 1 (Esso)	Cuttings	1320	3735
OF	W08-19	Leyden 1	No Samples submitted to date		
OF	W08-19	Leyden 1A	No Samples submitted to date		
OF	W08-19	Leyden 1B	Cuttings	1650	4300
OF	W08-19	Leyden 1B ST1	Cuttings	1660	4300
OF	W08-20	Resolution 1	Cuttings	1572	3880
OF	W08-20	Resolution 1 ST1	Cuttings	2600	3880
OF	W08-18	Sirius 1 (Esso)	Cuttings	1590	3500
B	W08-20	Stybarrow 1	No Samples submitted to date		
B	W08-20	Stybarrow 1 ST1	No Samples submitted to date		
OF	W08-19	Zeewulf 1	Core	1250.92	1716.7
OF	W08-19	Zeewulf 1	Cuttings	1766.5	3485

* 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 – W08-18, Exmouth Sub-basin

Survey Name	Client	Line km's	Year	Processed Data	Field Data	Snip ID	PIMS ID
GSI Scientific 10SL Marine Seismic, Gravity & Magnetic	Geophysical Service Inc	772	1976	Yes	Yes	2529	S6760001
X78A	Esso Australia	17899	1978	Yes	Yes	199	S6780003
X79B	Esso Australia	6563	1979	Yes	Yes	172	S6790017
AGSO Marine Survey 101, Southern Carnarvon	AGSO	1660	1991	Yes	Yes	740	S6910031
AGSO Marine Survey 110, Southern NW Shelf 2	Geoscience Australia	2889	1992	Yes	Yes	2407	S6900062
SPA Carnarvon Tie (SPA 4SL/92-3 and IT/93-3) (GPCT93)	Geco Prakla	5181	1993	Yes	Yes	662	S6930009
HE94	BHP	6398	1994	Yes	Yes	419	S6940010
HC97X	BHP	632	1997	Yes	Yes	1810	S6970017

Data is accurate as at 17 December 2007.

Seismic Surveys – W08-19, Exmouth Sub-basin

Survey Name	Client	Line km's	Year	Processed Data	Field Data	Snip ID	PIMS ID
GSI Scientific 10SL Marine Seismic, Gravity & Magnetic	Geophysical Service Inc	772	1976	Yes	Yes	2529	S6760001
X78A	Esso Australia	17899	1978	Yes	Yes	199	S6780003
X79A	Esso Australia	484	1979	Yes	Yes	245	S6790011
X79B	Esso Australia	6563	1979	Yes	Yes	172	S6790017
X80A	Esso	255	1980	No	Yes	2565	S6800017
C81B (DW)	Esso Australia	2987	1981	Yes	Yes	467	S6810011
AGSO Marine Survey 110, Southern NW Shelf 2	Geoscience Australia	2889	1992	Yes	Yes	2407	S6900062
SPA Carnarvon Tie (SPA 4SL/92-3 and IT/93-3) (GPCT93)	Geco Prakla	5181	1993	Yes	Yes	662	S6930009
AGSO Marine Survey 136, Carnarvon Tertiary Tie	AGSO	4221	1994	Yes	Yes	1828	S6940033
HE94	BHP	6398	1994	Yes	Yes	419	S6940010
HE96 2D Marine Seismic	BHP	1782	1996	Yes	Yes	666	S6960017
HC97X	BHP	632	1997	Yes	Yes	1810	S6970017

Data is accurate as at 17 December 2007.

Seismic Surveys – W08-20, Exmouth Sub-basin

Survey Name	Client	Line km's	Year	Processed Data	Field Data	Snip ID	PIMS ID
GSI Scientific 10SL Marine Seismic, Gravity & Magnetic	Geophysical Service Inc	772	1976	Yes	Yes	2529	S6760001
X78A	Esso Australia	17899	1978	Yes	Yes	199	S6780003
X79B	Esso Australia	6563	1979	Yes	Yes	172	S6790017
X80A	Esso	255	1980	No	Yes	2565	S6800017
X81A	Esso	698	1981	Yes	Yes	2566	S6810040
AGSO Marine Survey 101, Southern Carnarvon	AGSO	1660	1991	Yes	Yes	740	S6910031
SPA Carnarvon Tie (SPA 4SL/92-3 and IT/93-3) (GPCT93)	Geco Prakla	5181	1993	Yes	Yes	662	S6930009
AGSO Marine Survey 136, Carnarvon Tertiary Tie	AGSO	4221	1994	Yes	Yes	1828	S6940033
HE94	BHP	6398	1994	Yes	Yes	419	S6940010
Exmouth South 1996 Marine Seismic (SPA 6SL/95-96)	PGS Nopec	1841	1996	Yes	Yes	743	S6960016
HC97X	BHP	632	1997	Yes	Yes	1810	S6970017
Jawa	Woodside	1695	1998	Yes	Yes	861	S6980013
HCA2000A 3D Marine Seismic Survey	BHP	51196	2001	Yes	No	2832	S6200029

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

New Reports/Products

- Seismic transects of Australia's frontier continental margins. (2006) GA Record 2006/004.

Other Reports/Products

- Triassic biostratigraphic study of greater Exmouth Plateau, synthesis report. (2006) Geoscience Australia Repository destructive analysis report 1297 unpublished.
- 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.
- Geological framework of the outer Exmouth Plateau and adjacent ocean basins. (2004) GA Record 2004/13.
- Geological framework of the Wallaby Plateau and adjacent areas. (2002) GA Record 2002/21.

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

Industry Products

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

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 PETROLEUM 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 Exmouth.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