The 1989 Timor Gap Treaty created an area known as the Timor Gap Zone Of Cooperation (ZOC). A Joint Authority was established to manage petroleum operations in Area A, a portion of the ZOC. In February 2000, the United Nations Transitional Administration in East Timor (UNTAET) agreed with Australia to continue the terms of the Treaty on behalf of the people of East Timor. Approximate distances to the centre of Area A, from the East Timor cities of Dili and Suai and the Northern Territory city of Darwin, are:

**AIR:**
- Dili = 320 kms
- Darwin = 460 kms

**SHIPPING:**
- Suai = 250 kms
- Darwin = 460 kms

Twelve Production Sharing Contracts (PSCs) are operative in 2000. Area A was initially subdivided into 14 areas. Acreage releases in 1991, 1994, 1995 and 1996 resulted in 11, 1, 4 and 2 awards of PSCs, respectively, whilst PSC’s were terminated in 1995 (3), 1997 (2) and 1998 (1). The water depth ranges from 50 to 1,500 meters.

Adjacent to Area A, exploration activity resulted in the following discoveries: Jabiru, Challis, Skua and Buffalo (oil); Petrel, Tern, Troubadour and Sunrise (gas); and more recently, the large oil discovery in the Laminaria structure within the Flamingo and Plover Formations.

Exploration in Area A prior to the Treaty, comprised 19,000 kms of seismic data and 1 exploratory well. Since then, more than 210,000 kms of 2D and 3D seismic data have been acquired and 42 wells have been drilled.

The status of these 42 wells are as follows:

<table>
<thead>
<tr>
<th>Wells Oil/Gas/Cnd Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discovery</strong></td>
</tr>
<tr>
<td>6 Oil</td>
</tr>
<tr>
<td>6 Gas/Cnd</td>
</tr>
<tr>
<td><strong>HC Shows/ResOil Col.</strong></td>
</tr>
<tr>
<td>9 Oil</td>
</tr>
<tr>
<td>3 Gas/Cnd</td>
</tr>
<tr>
<td><strong>Appraisal/Delineation</strong></td>
</tr>
<tr>
<td>2 Oil</td>
</tr>
<tr>
<td>8 Gas/Cnd</td>
</tr>
<tr>
<td><strong>No Show (Dry Holes)</strong></td>
</tr>
<tr>
<td>8 wells</td>
</tr>
</tbody>
</table>

Within Area A, the Elang and Kakatua oil fields were discovered. The first oil from these fields was produced on 20 July 1998, after a 1.5 year development phase. The fields are currently producing up to 25,000 bopd and have exported more than 15 million barrels through 23 offtakes.

The Bayu and Undan gas/condensate discoveries (10 kms apart) are part of the one large field. The Bayu – Undan Gas Recycle Development Plan was approved in February 2000. The Hingkip volatile oil discovery north of Undan-1 confirmed separation of the structure from the Bayu-Undan field. However, the Mistral gas discovery to the east may be part of the Bayu-Undan accumulation.

In 1998, 4 exploratory wells were drilled with three gas/condensate discoveries, Sunset West-1, Bard-1 and Chuditch-1. The Sunset-1, Sunset West-1 and Bard-1 discoveries proved the Sunrise and Troubadour gasprone structural trend in the northern part. These accumulations straddle the Area A/Australia boundary.

To follow up on recent successes, three new areas (ZOCA 00-21, ZOCA 00-22 and ZOCA 00-23) are being released in 2000. Contract areas are awarded via a work program bidding system, consistent with the provisions in the Petroleum Mining Code (Annex B to the Treaty).
Approximate areas for the blocks to be released are listed below:

<table>
<thead>
<tr>
<th>Block</th>
<th>Approx. Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZOCA 00-21</td>
<td>2737.86 km²</td>
</tr>
<tr>
<td>ZOCA 00-22</td>
<td>2567.32 km²</td>
</tr>
<tr>
<td>ZOCA 00-23</td>
<td>3117.36 km²</td>
</tr>
</tbody>
</table>

**AREA A PETROLEUM GEOLOGY**

The ZOC occupies 62,000 sq-km of the Northern Bonaparte Basin. Area A is approximately half of the ZOC and overlies major structural features which were formed during Juro-Cretaceous rift faulting. The dominant fault strike trend is in a NE-SW direction.

**Structural & Depositional Framework**

The main structural elements are the Sahul Syncline to the west, Malita Graben to the south, Troubadour High to the east and Timor Trough to the north. The first rifting occurred in Mid-Devonian when the NW-SE trending Sahul Syncline developed and was later filled by Triassic and subsequently Jurassic Plover sediments. The second rifting, which is characterised by NE-SW trending depocentres, e.g. Malita Graben and Echo Syncline, was responsible for the horst blocks and half grabens forming the main trap type in Area A.

**Stratigraphic units:**

1. Plover and Elang Formation comprising transgressive sequences ranging from braided stream and flood plain facies, to shelfal and deeper marine deposits,
2. Flamingo Group comprising turbidites overlain by thick shale deposited in a distal shelfal environment.
3. Bathurst Island Group comprising claystones and argillaceous sandstones deposited in prograding shelf and slope conditions.

Hydrocarbon accumulations are found in association with the following key parameters:

1. Structures identified by a NE-SW trend developed during the Triassic-Jurassic rifting which formed depocentres with possible stratigraphically trapped accumulations in Flamingo Group.
2. Target reservoirs which are shallow marine Flamingo Group sandstones and fluvo-deltaic Plover and Elang sandstones of Middle Jurassic age.
3. Flamingo & Cretaceous Bathurst Island Group claystones which provide the sealing mechanism.
4. Three source rock intervals are identified:
   - Lower-Middle Jurassic Shales of Plover Fm,
   - Late Jurassic-Early Cretaceous Claystones of Flamingo Group, and
   - Early Cretaceous Shales of Darwin Fm.

The source kitchens are in synclinal areas e.g. Sahul & Flamingo Synclines and Malita Grabs.

**AVAILABILITY OF DATA**

1. Prospecting Surveys performed in 1991 by Australian Seismic Brokers and Phillips are available in Perth.
2. The Area A 1992-1997 2D Seismic Surveys totalling approx. 60,000 line kms are now available in the public domain. In addition, 31,500 kms of High Resolution Aeromagnetic and 13,500 kms of marine gravity data are available.
3. All PSC Operators have been notified to submit all geophysical data to AGSO. Geophysical data are available from AGSO.

**INFORMATION**

Treaty and associated details are available at the following Websites:


Contacts in the Darwin Office are as follows:

**APPLICATIONS**

- Applications are invited under the PSC regime for contract areas, ZOCA 00-21, ZOCA 00-22 & ZOCA 00-23 as from Thursday 4th May 2000. Applications close at 16.30 local time on Wednesday 5th July 2000.
- Applications should be submitted in duplicate in a sealed package and marked “Application for Area-A, Timor Gap Zone Of Co-Operation”.
- Applications should be addressed to:
  
  **The Executive Directors, Timor Gap Joint Authority for the Zone Of Cooperation**
  
  8th Floor, NT House
  
  22 Mitchell Street
  
  DARWIN NT 0800
  
  AUSTRALIA
  
  darwinoffice@timorgap.org.au
  
  tel: (08)-8941-1861
  
  fax: (08)-8981-7365

- Pre-payment of the prescribed fee of US$7,500 (Article 44 of the PMC, as amended) may be made by bank transfer to the following bank:
  
  ANZ Bank
  
  43 Smith Street Mall
  
  DARWIN NT 0800
  
  BSB No. 015-021
  
  US $ Account-715847-00001
  
  SWIFT No. ANZBAU5A

Alternatively, payment by a bank cheque in US dollars may be lodged with the bid.

Application fees are non-refundable.