

THE OFFER

A new petroleum exploration licence (PEL) in the Cooper and Eromanga Basins is being offered by the South Australian Government on the basis of work program bidding. The area contains a number of known prospects and abuts producing oil and gasfields located in Santos Joint Venture production licences.

Previous exploration data and reports are readily available from PIRSA, including:

- well completion reports
- well and licence location geographics
- seismic survey geographics (shot points)
- seismic survey reports and archive stack data (SEGY format)
- digital well logs
- velocity survey check shot information
- structure maps
- databases with drillstem tests and well completion intervals
- company prospectivity reports.

COOPER AND EROMANGA BASINS

The Cooper Basin is a Permo-Carboniferous to Triassic intracratonic basin located 800 km north of Adelaide. It is overlain by the prospective Jurassic to Cretaceous Eromanga Basin. The Cooper and Eromanga Basins collectively contain up to 3700 m of predominantly fluvial, glaciofluvial, lacustrine and deltaic sediments with some marine sediments. Targets are 1200–3700 m deep. The basins represent Australia's largest onshore oil and gas province, with >1400 wells drilled and over 71 580 line kilometres of 2D and 5890 km² of 3D seismic recorded.

PROVEN HYDROCARBON PROVINCE

Cooper Basin gas supplies markets in Adelaide, Sydney, Brisbane and Melbourne. Cooper and Eromanga Basins oil and gas liquids are exported via facilities at Port Bonython.



COOPER BASIN

South Australia

**BIDS CLOSE 4.00 pm
Thursday 29 July 2004**
Australian Central Standard Time

A free acreage release CD will be available from July 2003. To order:

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COOPER BASIN ACREAGE RELEASE BLOCKS CO2003-A



**11 July 2003
South Australia**



MINERALS
& ENERGY





In the Eromanga Basin, the principal reservoirs are good to excellent reservoir quality Hutton and Namur Sandstones. Oil is also reservoired in fair to excellent quality sandstones in the Poolowanna and Birkhead Formations, McKinlay Member and Murta Formation. The Cadna-owie Formation (Wyandra Sandstone Member) forms a significant oil reservoir in Queensland, however, economic hydrocarbons have yet to be discovered in this unit within South Australia.

Anticlines are the proven production trap type in the Eromanga Basin. Faulted, structure-stratigraphic and stratigraphic pinchout traps at Jurassic-Cretaceous levels plausibly exist — but definitive evidence has still to be published.

It is not unusual to find oil pools in the Eromanga at positions proximal to where the Triassic regional seal is faulted, thin or absent. Stacked oil pay exists in the north in Keleary (Birkhead, Hutton, Poolowanna, Tinchoo) and Tarragon Fields (Hutton, Tinchoo) trending to the south in Spencer (Namur, Birkhead, Hutton), Taloola (Namur, Hutton, Poolowanna) and Wancoocha Fields (Murta, Birkhead, Hutton).

LAND ACCESS

Environmental considerations

Proximity of environmentally sensitive wetlands and freshwater lakes is the basis for specifying certain additional access restrictions for parts of the gazettal area that do not apply to the rest of the Cooper Basin. The key objective in this regard is to provide clear measures of protection of creek channels and associated riparian vegetation, particularly from the potential for oil leakage or spills. The core wetland area is in the process of being proclaimed as a national park. The proposed park has been defined but is yet to be precisely surveyed. No surface access and subsurface drilling for petroleum exploration, development or production activities will be permitted within that national park. Surface and subsurface petroleum activities are also not permitted in the no-go zone surrounding the park (pastoral activities are allowed). Both the park and the no-go zone are excluded from the acreage offered in the CO2003-A gazettal.

A buffer zone is specified within CO2003-A wherever the area is adjacent to the national park. In the buffer zone, access is restricted to foot-based geophysical surveying (i.e. no surface vehicular access) and surface drilling activities are not permitted. However, wells may be drilled into the subsurface of the buffer zone from locations outside the zone. These restrictions also apply to a small area in the southwest of CO2003-A covering a key waterhole and associated riparian vegetation. The total area of 'walk-in-only' access covers 255 km² (63 012 acres) of a total gazettal area of 1745 km² (431 199 acres).

Production pipelines and flowlines are likewise not permitted to extend into the buffer and no-go zones or the national park.

A major creek-floodplain with significant environmental, social and cultural values occurs along the western edge of CO2003-A and is subject to access restriction. This control zone covers 244 km² (60 294 acres) and will have conditions set for access that are over and above normal environmental management requirements and practices undertaken for the rest of the Cooper Basin. Indicative conditions for the control zone include:

- no earthmoving permitted within periods of flood
- no drilling of wells permitted within 300 m of a major creek channel
- no trucking of oil permitted during flood periods (Note: the Moomba plant lies 80 km south of the gazettal area and 'normal' access through north-south corridors either side of the control and no-go zones and national park would still be permitted, subject to *Petroleum Act 2000* requirements)
- all creek crossings of pipelines to be buried and incorporate at least two physical mechanisms of oil spill protection and at least two systematic mechanisms of oil spill protection
- no blockage of any creek channel will be permitted.

Area-specific statements of environmental objectives (SEOs) will need to be developed to detail these conditions and other environmental management criteria within the gazettal area. PIRSA will develop draft SEOs with appropriate consultation with stakeholders so that they are available prior to close of bidding for the block.

Most of the gazettal area lies within the Innamincka Regional Reserve. This is a reserve proclaimed under the *National Parks and Wildlife Act 1972* that specifically accommodates multiple land use. Designated management zones exist in the reserve to reflect specific conservation protection measures. The SEOs developed will meet the requirements of these management zones.

Native title

Negotiations pursuant to the right-to-negotiate process (as prescribed under the *Native Title Act 1993*) are a necessary precedent to the grant of a petroleum exploration licence over the CO2003-A area.

Breakthrough native title access agreements for 11 Cooper Basin exploration licence application areas were signed in late 2001, enabling the grant of new Cooper Basin licences. In late 2002 through to early 2003, additional native title access agreements (modelled on the deeds established in late 2001) enabled the grant of an additional 16 licences. All these native title access agreements are:

- 1) conjunctive, e.g. cover all petroleum licence activities from exploration through to production

- 2) considered both fair to the native title claimants and sustainable with respect to petroleum exploration, development and production.

These Cooper Basin native title access agreements sustain efficient processes to protect Aboriginal heritage in relation to field operations and provide appropriate benefits to the registered native title claimants. The native title deeds for all South Australian petroleum exploration licences are available for public scrutiny from the PIRSA website.

For further details of the right-to-negotiate process contact Joe Zabrowarny, Manager, Petroleum Licensing and Royalties, email <zabrowarny.joe@sa.gov.au>, phone (08) 8463 3203. As it may be necessary to access adjoining areas to conduct seismic operations (for well ties and full-flood control), the right-to-negotiate process will include facilitation of appropriate access to adjacent areas reasonably necessary to conduct such operations.

INFRASTRUCTURE AND TRANSPORT

A total of 5240 km of pipeline have been laid to gas markets in South Australia, New South Wales and Victoria and to the liquids load out facility at Port Bonython. Gas from individual wells passes via field gathering systems (flowlines) to satellite stations which separate gas, free water and condensate. Evaporation ponds are used for water disposal. The essentially water-free gas and condensate pass to the Moomba treatment plant through trunklines. Approximately 1010 km of trunklines and 1135 km of flowlines have been laid to date in the region. Crude oil is transported by either pipeline or truck to the Moomba plant which has been designed to process 25.4 x 10⁶ m³ (902 mmcf) of raw gas and 6000 KL (42 000 bbl) of condensate and crude oil per day. Nine oil and 11 gas satellites are currently in operation.

The new entrants to the Cooper Basin have secured access to Moomba facilities operated by Santos. Oil is trucked from the Acrasia, Sellicks and Aldinga Fields to Moomba. Condensate, LPG, crude and some ethane are transported as a cocktail from Moomba via a pipeline to Port Bonython where they are separated and marketed.

BIDDING AND AWARD PROCESS

Winning bidders will be selected on the basis of the total five-year work program bid. The work program must include a statement of exploratory operations the applicant proposes to carry out in the first five-year licence term. It is expected that at least one petroleum exploration well would be included in the program.

Bids will be assessed taking account of the criteria listed below. It is important to note that the timing of well drilling and seismic acquisition will be taken into account. The most important criteria for assessment of CO2003-A work programs are:

- number of exploration wells to be drilled, their timing and anticipated targets (Eromanga, Cooper and Warburton Basins)
- extent to which proposed wells are supported by seismic data
- number of years the applicant is prepared to guarantee the program
- adequacy of financial resources and technical expertise available to the applicant
- applicant's past performance in fulfilling work program commitments elsewhere in Australia.

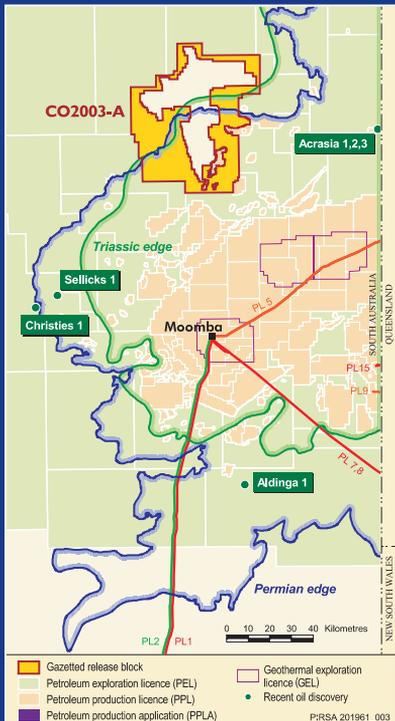
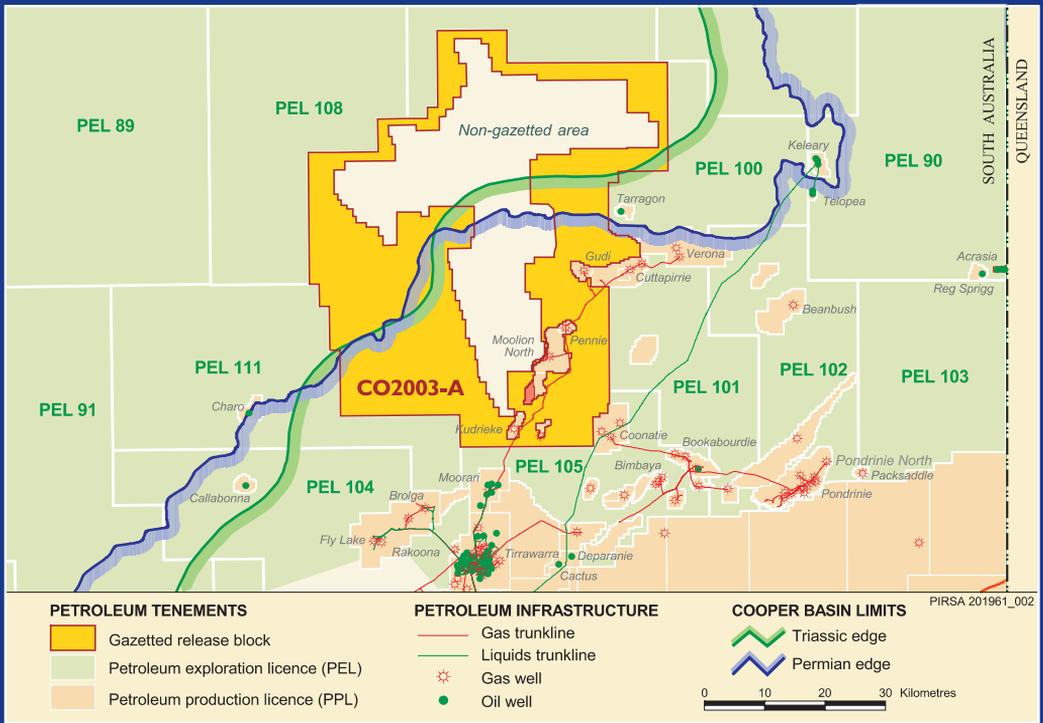
Secondary criteria that may be taken into account are:

- amount and nature of seismic surveying to be carried out and its timing
- other data acquisition and seismic reprocessing to be carried out.

In addition to the above criteria, in the event of a tie between two bids, the benefits of the introduction of new explorers into the area (including intention with regard to establishing an office in South Australia) may be taken into account. In the case of cascading bids (i.e. multiple or hybrid bids by one applicant or joint venture), only the highest bid will be considered.

The Minister for Mineral Resources Development will announce the winning bidder, together with details of the work program. The exploration licence cannot be granted until the right-to-negotiate process has been concluded with relevant registered native title claimants.

For more detailed information on applications and the relevant pro forma please refer to the PIRSA website or the CD.



CONTACT INFORMATION

Comments, inquiries and applications for exploration licences may be addressed to:

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