Introduction

The resources for prosperity are here in South Australia now!

- The State offers an attractive risk reward profile. Frontier basins, both onshore and offshore South Australia, have attracted work programs. Roughly 80% of the play trends considered reasonably prospective for petroleum are under licence or licence application.
- Conjunctive (full-cycle) access agreements that are fair to registered Native Title claimants and sustainable in relation to petroleum E&P have been realised at an increasing pace in SA. 27 new exploration licences have been granted in the Cooper Basin as a result of successful native title agreements. The work programs include 82 exploration wells, 6400 km of 2D and 320 km² 3D, totalling A\$275 MM investment through to 2007.
- Licensing processes work and are at least as, or more, expedient than those in other Australian jurisdictions.
- In SA there is a resurgence in oil exploration. Though the find sizes are modest, the 50% success rate being sustained is outstanding. In 2002 the new entrants to SA Cooper Basin drilled six exploration and two development / appraisal wells. All six exploration wells encountered oil shows or pools. Four of the six exploration wells discovered new oil pools. Three of the new field discoveries were of sufficient size to justify casing and all three of these new fields are now producing oil. Significantly for the value of the projects, Sellicks and Acrasia were producing within six months of discovery. Congratulations to Stuart Petroleum, Beach Petroleum, Cooper Energy and Magellan Petroleum for joining the ranks of Cooper producers, along with Santos, ExxonMobil, Origin, OMV and Novus. Applications were received in May 2003 for the OT2002 A and B blocks in the onshore Otway Basin. Rawson Resources Limited is the successful applicant for both blocks and their exploration work programs for both blocks equates to an investment of \$5.1 MM.
- Nothing is so easy as to follow success. So it is unsurprising that the Cooper and Otway basins are relatively easy to market compared to the State's frontier basins. Hence, PIRSA's biggest challenge is to demonstrate there are frontier trends in SA with a realistic chance for material oil and gas discoveries, with an emphasis on oil plays. Right now – PIRSA's main efforts are to: (1) provide workstation-ready seismic and well data for the Cooper, Officer, Otway and Bight basins and (2) demonstrate which trends exhibit the geologic characteristics generally associated with giant fields, with an

Petroleum In SA

- emphasis on undiscovered oil e.g. the onshore Officer and offshore Otway and Bight basins
- Studies that reduce critical geologic uncertainties provide leverage to have a positive influence on explorers' perceptions of expected values – and hence entice investment. PIRSA's precompetitive geoscientific studies are largely focused to reduce critical uncertainties in areas with promise but yet to be proven to be productive.
- Emissions-free geothermal energy provides considerable potential as an energy source. In SA, two consortia are exploring for geothermal energy in Australia's premier geothermal province the Nappamerri Trough in the Cooper Basin. Geodynamics is currently drilling Habanero-1 to test deep hot dry rocks.
- Geoscientific information is readily available from PIRSA, and the State benefits enormously from world-class petroleum experts resident in Adelaide. Intellectual capital in SA is responsible for an increasing proportion of Australia's petroleum geoscientists and petroleum engineers. The new Australian School of Petroleum at the University of Adelaide has just been formed from a merger of the NCPGG and the School of Petroleum Engineering and Management. It is worth noting that the petroleum E&P companies in Adelaide, Santos in particular, have been terrific in supporting the University of Adelaide, and hence, the Australian petroleum geoscience community in
- There is increasing competition in the State's electricity and gas markets. The SEAGas pipeline will roughly double gas

- transmission capacity into SA on completion in first quarter 2004. Major city gas markets, including power generators, suburban and regional centres will be supplied.
- South Australia is perceived to be a secure and competitive international supplier of minerals. The world class Olympic Dam copper-uranium-gold-silver mine has a potential life of over 50 years and major expansions are planned. The Challenger Gold Mine commenced production last year, and production from the Mindarie heavy mineral sands project is expected to start next year. Mines are good energy markets!
- At the moment, international petroleum explorers in SA hail from Austria, Canada, and the US and it is my understanding that explorers from other nations in our region are on the way. Enticing well-funded new entrants to exploration into SA remains a high priority.

In conclusion, PIRSA forecasts for the period 2003–2007 include:

- More oil and gas found
- hot dry rocks tested
- 320 exploration wells
- 11,000 km 2D seismic
- 1,700 km² 3D seismic, and
- over A\$500 MM exploration expenditure.

Companies not already planning to take part in this profile are asked to reconsider their options.

Barry Goldstein
Director Petroleum Group
Minerals Petroleum And Energy Division,
PIRSA.

