# **P**REVIEW

#### **ADVERTISERS INDEX**

Aarhus Geophysics	121
Absolute Geophysics	2
Alpha Geoscience	31
Archimedes	32
Baigent Geosciences	104
Bartington Instruments	128
Beach Petroleum	47
BHP Billiton (Bronze Sponsor)	16
Borehole Wireline	106
CGGVeritas (Silver Sponsor)	26
Chevron (Silver Sponsor)	106
Daishsat	32
EAGE	50
Elliott Geophysics	48
EMIT	OBC
Fugro Airborne Surveys	IBC
Fugro Instruments	105
Gap Geophysics	18
Geoforce	12
Geoimage	5
Geokinetics	122
Geophysical Software Solutions	3
Geosensor/Scintrex	46
Groundwater Imaging	32
IMT Geophysics	3
Intrepid Geophysics	18
ORE (Bronze Sponsor)	32, 104
PIRSA (Silver Sponsor)	121
Quantec	104
Rio Tinto (Gold Sponsor)	14
Santos (Platinum Sponsor)	98
Southern Geoscience Consultants	4
Stuart Petroleum (Bronze Sponsor)	16
Technic Pty Ltd	96
Thomson Aviation	104
UTS Geophysics	126
Vortex	IFC
WesternGeco (Gold Sponsor)	6
Woodside (Gold Sponsor)	28
Zonge	128

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#### CONTENTS

From the Premier From the Organising Committee From the Presidents Conference Sponsors Maps and Floor Plans General Information	3 4 5 7 13 15
Section 1. Conference Program Conference Program Business Meetings Social Program	19 26 27
Section 2. Exhibition Exhibition Floor Plan Exhibitors and Stand Number Company Details	30 31 33
Section 3. Oral Abstracts Abstracts from the Oral Presentations	51
Section 4. Poster Abstracts Abstracts from the Poster Presentations	97
Section 5. Biographies About the Speakers and Poster Presenters	108
Section 6. Society Memberships ASEG Membership Application PESA Membership Application	124 127

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#### From the Premier



The South Australian Government has long recognised that the resources sector offers significant opportunities for longterm, sustainable growth. That's why, since coming to office in 2002, we have made a concerted effort to expand our State's resources industries, and to take advantage of its unique resource base.

In particular, the Plan for Accelerated Exploration (PACE) program that we implemented in 2004 has delivered significant benefits through its partnership with industry. Our efforts to expand and diversify the sector through initiatives such as the PACE scheme have won international recognition. The *ResourceStocks* 2008 World Risk Survey ranked South Australia as the number one jurisdiction in Australia – and number two in the world – for investment in mining and exploration. As a result of this concerted investment and partnership, the number of operating mines in South Australia has risen from four in 2002 to 10 in 2009, with around 20 more in the planning or development stage.

Mineral exploration expenditure reached a new record of \$355.2 million in the most recent financial year – representing a 10-fold increase in the past five years. There have also been a number of new oil and gas explorers drilling in the State's Cooper, Otway and Officer Basins, as well as developments in coal to liquid fuels in the Arckaringa Basin.

In addition to a sound outlook in the mining sector, South Australia has significant advantages in the development of emissions-free geothermal energy. Our comparative advantages in this naturally occurring "hot rock" resource, combined with our supportive investment framework have – to date – attracted more than 95 per cent of the nation's investment in geothermal exploration, appraisal and pilot development.

The first wave of mineral exploration generated by the PACE scheme has undoubtedly cemented South Australia's status as a mining investment destination, and created significant new activity in South Australia's resource sector. However, the recent global economic turmoil and dramatic falls in some key commodity prices contain significant ramifications for the resources industry worldwide. In South Australia, it is likely that it will result in some weakening of exploration activity in the short term. Despite this, the outlook for the South Australian resources sector remains positive as our known resources are long life and very competitive. The diversity of our resource base, coupled with the multitude of recent discoveries of world-class ore bodies and South Australia's global reputation as a secure place for investment in mining all bode well for the future of the resources sector in this State.

On behalf of the South Australian Government, I welcome you all to Adelaide for the 2009 International Geophysical Conference and Exhibition. I hope that you are able to enjoy some of the sights, tastes and experiences that our city and our State have to offer, and I wish all delegates a productive, enjoyable and successful Conference.

-: / ( (

Mike Rann Premier of South Australia Minister for Economic Development

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#### From the Organising Committee

Dear Convention Delegates, Sponsors and Exhibitors

Welcome to Adelaide and the 20th ASEG/PESA International Conference and Exhibition. On behalf of the Conference Organising Committee, the Australian Society for Exploration Geophysicists and the Petroleum Exploration Society of Australia we are proud to bring you one of the premier geophysical forums on the world stage.

As Co-Chairs we wish to thank the Organising Committee for their hard work and enthusiasm throughout the long lead up to the conference. We would like to thank the staff and principals of SAPRO, our Conference Organiser, for their valuable experience and guidance. The efforts of David Denham in editing Preview for not only this conference but also a number of years should also not go by unacknowledged. Also without the crucial support of the many presenters, sponsors and exhibitors the conference could not succeed.

The technical program will feature presentations from the minerals, petroleum and environmental fields. To complement the technical papers a series of workshops and field trips have been organised, also the SEG Distinguished Instructor Short Course (DISC) will be held in conjunction with the Conference.

In addition to enjoying the Conference we invite you to venture beyond the Convention Centre and sample many of the delights that Adelaide has to offer. Including the world leading wines and restaurants, all presented within the stunning backdrop of the Adelaide Hills or amazing beaches and to be enjoyed in a sophisticated cosmopolitan lifestyle that retains the big country town charm. In these trying financial times the Conference Platinum Sponsor, Santos, is to be thanked for its support. In addition, we would like to express our appreciation for Gold Sponsors: RioTinto, Beach Petroleum, WesternGeco, Shell and Woodside Energy; the Silver Sponsors: Chevron Australia, CGGVeritas, Barrick and the Government of South Australia. The many Bronze Sponsors are also thanked for their support.

We look forward to enjoying the company of old friends and making new ones during your stay in Adelaide.

#### **Co-Chairs**

Andrew Shearer (*Taylor Collison*) and Tony Hill (*PIRSA*)

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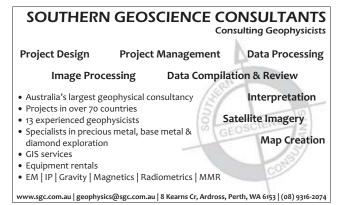
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#### From the Presidents

'Geophysics in a Changing Environment' is the theme of this 20th International Geophysical Conference and Exhibition. 'Brighter - Deeper - Greener' is a slogan that emphasises the changing environment, not only of our global community, but also the environment in which we work as geoscientists. Geoscience is one of the most important disciplines for sustainable development and conferences like this one are an opportunity to show that we can tackle many environmental challenges by thinking differently about the application of geology and geophysics. One of our challenges is to ensure that we have an adequate supply of geoscientists to be able to tackle resource and environmental issues. We should be looking for as many meanings as possible in the Brighter -Deeper – Greener slogan!

The ASEG and PESA are again collaborating to produce a world class conference and exhibition, during which 'Brighter' ideas will be presented to highlight better ways of applying our discipline. The 'resource boom' is now recent history as prices of most commodities have dropped over the last 12 months. However, we should now be focusing on the next boom, which is just around the corner. Now is the time to share ideas on how we can be more effective in finding new resources and at the same time preserve our environment. No doubt we will need to go 'Deeper' with our exploration to find new world class deposits of metals, coal, and oil and we will need to consider 'Greener' ways of doing this to protect the natural

environment in which we work. We also need to go further and demonstrate the importance of geoscience and geophysics during both 'booms' and 'busts'.

This Conference, through the technical sessions, keynote addresses, exhibitions and informal gatherings, is going to provide an important forum to discuss philosophies, technologies and practices that will contribute to exploration and production success. It will not only offer a stimulating and enjoyable week to learn and to hear some new ideas, but provide an opportunity to catch up with old friends and to make new ones.

The Conference is being held in the Adelaide Convention Centre, which nestles on the edge of the Torrens River in one of Australia's famous cities. The City of Adelaide offers many delights. Beside the many attractions within the city itself, within one hour's drive are rolling hills covered in vineyards stretching from McLaren Vale in the south to the Barossa and Clare Valleys in the north. These are the production centres of the South Australian wine industry. Not to mention the charming town of Handorf situated in the Adelaide Hills, which is a historical German settlement. There are many attractions for delegates and their partners, when not engrossed in the excellent presentations at the conference and exhibition.

We sincerely thank the Convenors, Mike Hatch and Andrew Shearer, along with the Conference Organising Committee for their wonderful work in bringing this Conference to realisation. It gives us great pleasure to welcome you all to the 20th International Geophysical Conference and particularly those delegates from overseas, our colleagues from ASEG and PESA, and representatives from our affiliated societies the SEG, EAGE, SEGJ, KSEG, HAGI and SAGA.

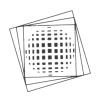
Enjoy your week.



Peter Elliott President of the Australian Society of Exploration Geophysicists



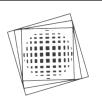
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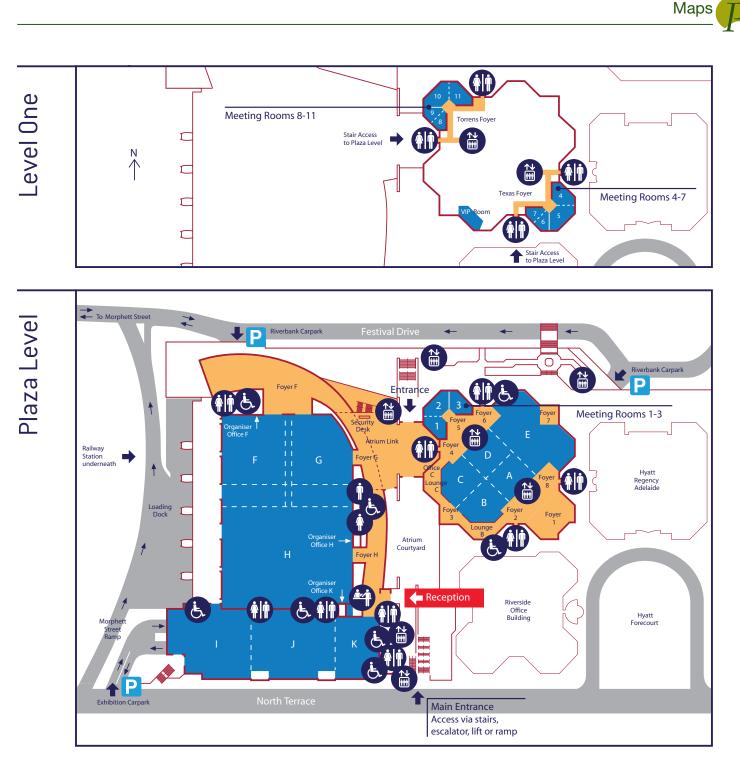
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- Orebody mapping and delineation
- Palaeochannel mapping
- Soil characterisation
- Geotechnical evaluation
- Environment monitoring
- Radar Ballast Scanning

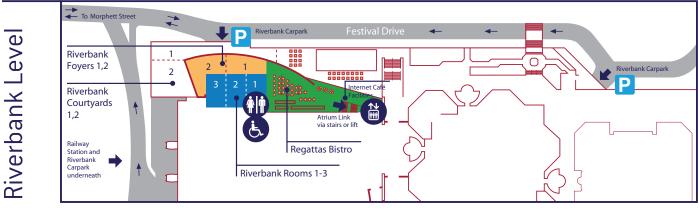
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ASEG 09 Conference Handbook

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# BE PARTOE OUR EUTURE

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Rio Tinto is a world leader in discovering, mining and processing minerals, with a commitment to health, safety, environment and the enhancement of the skills and capabilities of its employees.

Our major products include aluminium, copper, diamonds, energy products, gold, industrial minerals, and iron ore.

With operations around the world we can offer talented students the opportunity to pursue challenging and diverse careers. Our graduate programme aims to develop future leaders in both management and technical streams by providing a range of experiences in addition to structured learning and development.

Rio Tinto believes by participating in the ASEG student sponsorship programme we can help develop the next generation of geophysicists.

For further information on graduate opportunities with Rio Tinto visit www.graduates.riotinto.com

J16975

#### **Conference Venue**

Adelaide Convention Centre North Terrace Adelaide 5000 Australia Tel: +61 (8) 8212 4099 Fax: +61 (8) 8212 5101 Email: sales@adelaidecc.com.au Website: http://www.adelaidecc.com.au/

#### **Conference Secretariat**

Sapro Conference Management PO Box 187, Torrensville South Australia 5031 Tel: +61 (8) 8352 7099 Fax: +61 (8) 8352 7088 Email: admin@sapro.com.au Website: www.sapro.com.au

#### **Registration Desk**

The registration desk will be located in the foyer of the Adelaide Convention Centre. The desk will open on Sunday 22 February 2009 from 2:30 pm to 6:30 pm. The desk will be open each day of the Conference from 8:15 am to 4:30 pm.

#### **Conference Satchel**

The Conference will offer a choice of two satchels for delegates. A quality vinyl bag suitable for laptops will be offered as standard. Delegates will have the option of upgrading to a larger satchel with wheels. It would be ideal as a "carry on" airline overnight case. The cost will be \$25 per satchel. Please check out both options on the conference website in the 'Registration' section. Order your upgrade on the registration form.

#### Name Badges

Name badges must be worn at all times and will be required to gain admission to lunches, morning and afternoon teas and the trade exhibition. If you misplace your badge, please see the registration staff for a replacement.

#### Admission Tickets

Attendance at the welcome reception and the dinner are by ticket only. These tickets are in your registration envelope. If these tickets are misplaced or missing, or you wish to attend, please see the registration staff.

#### Messages

Messages can be collected and left at the Conference Registration Desk. All messages will be posted on the message board adjacent to the desk. Please check the board regularly. No guarantee can be given to deliver messages personally. Please ensure your personal mail is sent to your accommodation address.

#### Speaker's Support Room

The speaker support room will be located in Meeting Rooms 8 and 9, located on the 1st floor of the Adelaide Convention Centre. The room will contain a full range of the equipment available in the meeting rooms. All electronic presentations must be downloaded onto the Centre's server. Individual laptops cannot be used in the rooms. Opening hours are:

Sunday 22 February 2009: 3:00 pm to 6:00 pm Monday 23 February 2009: 7:30 am to 4:30 pm Tuesday 24 February 2009: 7:30 am to 4:30 pm Wednesday 25 February 2009: 8:00 am to 1:00 pm

#### Program Changes Board

All changes to the program will be displayed on the program changes board daily. The program changes board will be located near the conference registration desk.

#### Posters

Posters will be on display in the Exhibition Hall throughout Monday, Tuesday and Wednesday. The roster for poster presentations will be provided at the conference.

#### The Exhibition

The exhibition will be housed in Hall H. It will be open during the following times:

Sunday 22 February 2009: 6:00 pm to 7:30 pm Monday 23 February 2009: 8:30 am to 6:00 pm Tuesday 24 February 2009: 8:00 am to 6:00 pm Wednesday 25 February 2009: 8:00 am to 3:00 pm

Delegates will be able to meet with exhibitors during the refreshment breaks provided.

#### Internet Café

A free Internet café for the convenience of delegates – proudly sponsored by Newmont – will be located in the Trade Exhibition Hall.

#### Catering

Morning & afternoon teas and lunches are included in the registration fees will be served in Hall G. Access is via the main entrance of the Trade Exhibition. Delegates with special dietary needs must advise the Conference Secretariat in writing via the registration form.

#### Car Parking

A number of car parks are located at or near the Adelaide Convention Centre. Earlybird fees are available although delegates should contact the individual car parks to confirm times and conditions.

#### Disclaimer

The 2009 International Geophysical Conference and Exhibition committee, including the conference organisers, accept no liability for injury of any nature sustained by delegates or partners, or for loss/ damage to personal property as a result of the conference or associated events. The conference program is correct at the time of printing, though conference organisers hold the right to make necessary changes to programming. Receipt of delegate and partner registration acts as an acceptance of this disclaimer. Some scheduled events are subject to minimum numbers enrolling by a preset date, and we otherwise reserve the right to amend or cancel the proposed event.

#### **Privacy Statement**

In addition to administering the event, unless you advise otherwise in writing, the personal information you provide to us may be disclosed in the event delegate list made available to sponsors, speakers, exhibitors and delegates.

#### Dress Code

Conference Sessions: Smart casual Evening Functions: Smart casual Conference Dinner: Lounge suit/Cocktail dress

#### Climate

February is summer in Adelaide and daytime temperatures could reach mid-high  $30^{\circ}$ Cs with evening temperatures ranging between  $14^{\circ}$ C and  $20^{\circ}$ C.

#### Airport

The Adelaide Airport is approximately 6 km from the Adelaide city centre. International and domestic passengers arrive and depart from the same terminal (T1). Skylink Airport shuttle provides a regular scheduled service between the Airport and the Adelaide CBD. The cost is A\$8 each way: www.skylinkadelaide.com. Taxis and hire cars are also available.

