



# DRILLSAFE

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# Agenda

- Challenges facing the industry
- Santos' Challenges
- Wellsite Leadership
- What Santos is doing
- Today's Presentations



# 2006/2007 Drilling HSE Challenges

In an environment with a shortage of experienced personnel...

- Worldwide high activity levels
  - Shortage of equipment & personnel
  - Competencies diluted / equipment reliability & availability issues
  - Competition for staff
  - Shortage of 'Frontline Leaders' (i.e. our onsite Safety Leaders)
- New Rigs and contracting companies
  - Onshore – 2 new drilling contractors and numerous rigs entered the Australian market in 2006
    - More rigs to come in 2007
  - Offshore – 5 new drilling contractors will enter the Australian market in 2006/2007



...the quality of our Frontline Leaders is more important than ever

# Santos' Challenge

Our offshore drilling HSE performance has been world class ...

- Offshore Australia Drilling & Completions

- Zero TRCFR for 2005 & 2006
- High quality systems
- (both Santos and Contractor)
- Strong planning focus
- "Mature" Frontline Leaders (both Santos and Rig Contractor)



- Onshore Australia Drilling

- Drop in EHS performance from 2005 to 2006
- Substantial increase in drilling activity in 2006
- Strong focus on equipment improvement in 2006
- Commenced Safety Leadership training for Frontline Leaders

...we now need to now replicate this in our onshore business

# Safety Leadership

Safety is all about people's behaviour and their acts or inaction...

- Safety Leadership is an effective safeguard in an environment with significant 'green' crews
- Safety Leadership Training for frontline leaders
  - Santos vision and expectations
  - Leadership roles and responsibilities
  - Basic intervention skills to new leaders
- Common themes from recent incidents
  - Lack of identification of the hazard – no Stepback or ineffective JHA
  - Lack of control for the identified hazard
  - Ineffective use of tools (eg Permit to Work)
  - Perception of pressure to 'get on with it'



...no behaviour is more critical than that of the leader



# Safety Leadership

## We demand a lot from our Safety Leaders...

- We expect our leaders to set the standard
  - Show exemplary personal safety behaviour Set clear safety expectations
  - Possess a good knowledge of safety
  - Consistently raise safety standards
  - Recognise and act on poor safety conditions
  - Regularly observe, assess and intervene in the workplace
  - Understand your people and demonstrate a real concern for their well-being
  - Commend good safety performance
  - Give and receive constructive feedback
  - Demonstrate an enthusiasm for safety



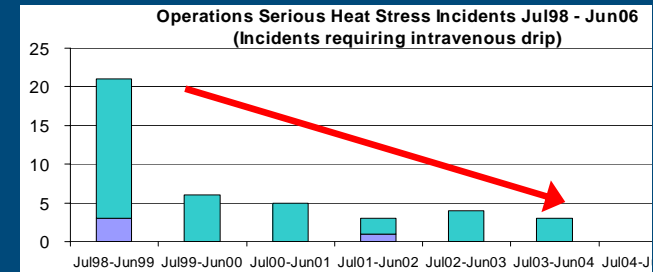
...but we also supply help, training and support

# What Santos is doing

Santos are rolling out a range of education initiatives...

- Heat Stress Management

- Implemented in response to a number of incidents in past years
- Successfully reduced incidents of heat stress to zero in past 3 years
- Subject of one of the presentations later today



- SafeDrive

- Santos safe driving initiative
- Combination of education and equipment/process (in vehicle monitoring systems)
- Currently being rolled-out to Santos' field operations



...we still require significant contractor "buy-in" for these to succeed

# What Santos is doing

Focus on elimination and engineering out of hazards...

- Introduction of automated land rigs
  - Significantly reduced manual handling
    - No manual handling of pipe or casing
    - Bulk mud product handling system
    - Simplified rig moving
- Significant Hazard Risk Registers
  - Process of hazard identification and control measure identification
  - Focuses attention on potential major accident events



...while improving key EHS systems and process



# Today's Presentations

The Forum has a general onshore 'flavour'...

- Incident Reviews
  - Dropped Casing Near Miss (PDI)
  - Driving Incident (Schlumberger)
  - Finger Injury (Atwood/BHP)
- Safety Management
  - Heat Stress Management
  - Fitness for Work
  - Driving Management

...however themes are common to both onshore and offshore operations