

CHALLENGES FACING THE DRILLING INDUSTRY – SAFETY COLLABORATION

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Santos

Santos Drilling & Completions Safety Performance

Injury performance is unacceptable & in many cases caused ...

- YTD TRCFR ~ 10.8
- Fatality on drilling rig
- Three severity 10 incidents
 - Sprain to ankle
 - Broken finger (x2)
- Three high potential incidents
 - Dropped pipe on drilling rig
 - Uncontrolled h/c release
 - Equipment failure on offshore rig
- Most injuries during routine activities
 - Mainly hand injuries & back strains

Area	TRCFR	Average Severity
Onshore Drilling	10.5	300
Onshore Completions	3.7	5
CSG D&C	30	2
Offshore D&C	19	1
International D&C	0	0

...by a lack of mindfulness & system compliance

Stop for Safety

“We take safety seriously and we stopped work at all sites to talk about our performance.....”

A Collaborative Approach (?)

All our incidents involved ...

- Santos will drill > 250 wells in 2008 - up to 3 offshore rigs, 4 onshore rigs, 6 CSG rigs
- Incidents nearly always involve contractor personnel
 - What are we doing to work with contractors to eliminate incidents?
- One of the more common incident root causes is lack of compliance with contracting companies own safety management systems (SMS)
- We know companies have good SMS but how do we work with the contractor to ensure compliance?
- Have we as client companies 'overstepped the mark' and taken too much responsibility off contractors?

...contractor personnel

Santos

A Collaborative Solution

Contractor & Client relationship is a meshing of sometimes conflicting priorities and goals ...

- Senior management alignment with common goal of not hurting people and having process in place for checking systems compliance
- Ownership & accountability to develop/implement systems for a safe & efficient operation
 - Share audit findings - view them as a free service to improve business
 - Must not be afraid to shutdown operations over any safety concerns
- Continual reinforcement from senior management of both client and contractor
 - No inferred pressure to complete work program if it compromises SMS
- Execution of work programs is a Joint Venture with our contractors, who bring the expertise we require

...however are aligned to ensure risk involved in work execution is ALARP