DRILLING MORNING REPORT # 22 Henry-2 (14 Sep 2008)

							Peter Devine/ Dennis Gore	Rohan Richards	son		
Well I	Data					/////. L					
Country			Australia	Meas	sured De	onth	2042.0m	Current Hole Size	311mm	AFE Cost	\$41,512,83
Field	ý		Australia	TVD		pui	1757.0m	Casing OD	340mm	AFE No.	574604
	ntractor		DOGC		'ess		0.0m	Shoe MD	652.0m	Daily Cost	\$771,68
5					from sp	ud	20.87	Shoe TVD	652.0m	Cum Cost	\$23,912,05
-	Depth (LA		66.3m		on well	uu		F.I.T. / L.O.T.	/ 2.20sg	Planned TD	2552.0r
RT-SL		')	21.5m		ent Op @	0600		time drill off cemen	0		2002.01
RT-ML			87.8m		ned Op	0000		a, commence side tr			1/4") hole
Rig Hea	adina		217.0deg		ieu op		Nick on plu	, commence side ti			1/4) 11016.
U	0										
RIH 89		2") cemer	nt stinger	from 13	60 m to	TD at 2042 d RIH to 122		ed 3 by cement plug	gs from 2042 m	to 1600 m. POOI	I and laid out
Form	ations										
		Name				Top (MD)		Top (TVD)		Comment	
	conformit	у			1956.0		1714.0		35.7 m Low		
Waarre					1956.0		1714.0		35.7 m Low		
	alla Forma	ation			2003.0		1738.0		33.8 m Low		
Total D		or Dor:	00 000		2042.0		1757.0 14 Sep 2008				
Phse	Cls	OF Perio	From	To			14 Sep 2000			ation	
	(RC)			1	Hrs	Depth	T		Activity Descri		
PA	P	TI	0000	0130	1.50	2042.0m		RIH with cement stil	0		
PA	Р	WIN	0130	0200	0.50	2042.0m		and washed down			
PA PA	P P	CHC CMP	0200 0300	0300 0415	1.00 1.25	2042.0m 2042.0m		e clean with 3785 L ent sub and lined up	•	,	
	6	TO	0445	0500	0.75	20.40.0	water, P/t sur of drill water s slurry, 430 sa cement with 1 to 1900m.	face lines to 10.3 M pacer. Mixed and p cks. Pumped 0.1 m 6.2 m3 (102 bbls) o	Pa (1500 psi) fo umped 13 m3 (3 (0.75 bbls) of f 1.3 SG (11 pp	or 5 min and pump 81.5 bbls) of 2 SC drill water spacer og) mud. Spotted	bed 1.3 m3 (8 bbls 6 (16.5 ppg) class and displaced blug #1A f/ 2042m
PA	P	TO	0415	0500	0.75	2042.0m		d out cement sub, P			
PA	Р	CHC	0500	0600	1.00	2042.0m	(1000 GPM).	ball into DP and ma Dumped 9.5 m3 (60	bbls) of contai	minated mud at sh	nakers.
ΡΑ	Ρ	CMP	0600	0700	1.00	2042.0m	water, P/t sur of drill water s slurry, 440 sa	ent sub and lined up ace lines to 10.3 Mi pacer. Mixed and p cks. Pumped 0.1 m 4.8 m3 (93 bbls) of	Pa (1500 psi) fo umped 13.7 m3 3 (0.5 bbls) of c	or 5 min and pump 3 (86 bbls) of 2 SC Irill water spacer a	bed 0.8 m3 (5 bbls 6 (16.5 ppg) class and displaced
PA	Р	то	0700	0800	1.00	2042.0m	Broke and lai	d out cement sub, P	OOH from 190	0 m to 1750 m at	5 min/stand.
PA	Р	CHC	0800	0900	1.00	2042.0m		ball into DP and ma Dumped 4.9 m3 (31			
PA	Ρ	CMP	0900	1000	1.00	2042.0m	push, P/t surf of drill water s slurry, 440 sa with 12.5 m3	ent sub and lined up ace lines to 10.3 MF pacer. Mixed and p cks. Pumped 1 m3 (79 bbls) of 1.3 SG	Pa (1500 psi) fo umped 13.7 m3 (6.5 bbls) of dri (11 ppg) mud. 3	r 5 min and pump 3 (86 bbls) of 2 SC Il water spacer an Spotted plug #2 f/	ed 7.3 m3 (46 bbl 6 (16.5 ppg) class d displaced ceme 1750m to 1600m.
PA	P	то	1000	1130	1.50	2042.0m		d out cement sub, P			
PA	Р	CHC	1130	1230	1.00	2042.0m	(1000 GPM).	ball into DP and ma Dumped 5.2 m3 (33	bbls) of contai	minated mud at sh	
PA	Р	то	1230	1530	3.00	1600.0m	Commenced	POOH from 1500 m	to 206 m with	cement stinger.	
PA	Р	то	1530	1600	0.50	1600.0m	Ũ	handling gear for 89	()		
PA	Р	то	1600	1700	1.00	1600.0m		POOH, laid out 89 r ed in mule shoe.	nm (3 1/2") DP	cement stinger ar	nd mule shoe. Foa
IH	Р	HBHA	1700	1730	0.50	1600.0m	Changed out	handling gear for 12	27 mm (5") DP.		
IH	Ρ	НВНА	1730	2100	3.50	1600.0m	weight at casi and 10-20 RF	d made up 311 mm ng swadge, worked 'M. Continued to RII to RIH BHA to 211	past with 757- ⊣ to 100 m and	1514 L/min (200-4	00 GPM) flow rate
								Operations: with casing crew to gear change out.	discuss 244 m	m (9 5/8") casing	running procedure
ІН	Р	TI	2100	2200	1.00	1600.0m		RIH from 211 m to 6			

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Phse	Cls (RC)	Ор	From	То	Hrs	Dept	Activity Description											
IH	Р	RS	2200	2230	0.50	1600.0	n Se	rviced th	e block	s and T	DS prior t	o leaving c	asing sho	e.				
IH	P	TI	2230	2400	1.50	1600.0					0 m to 122	•	g					
Opera	tions Fo	or Peri	od 000	0 Hrs	to 060	0 Hrs o	n 15	Sep 20	08									
Phse Cls Op From To (RC)						Dept	ו	Activity Description										
H	Р	TI	0000	0130	1.50	1600.0		Continued to RIH from 1220 m to 1500 m. Worked and reamed thro 1300 m.								ugh dogleg at		
IH	Ρ	WIN	0130	0215	0.75	1600.0r	to	Downlinked to directional tool and set tool face to 100%. Washed down from 1500 m to 1550 m tagging ratty cement with 4.4 - 8.9 t (10-20 klbs) and rotating through. Green cement observed at shakers.										
IH	TP (VE)	OA	0215	0315	1.00	1600.0		Pneumatic lines from FAC tool in TDS service loop blown into dolly track due to high winds. Removed and resecured to service loop. Installed storm line to kelly hoses.										
IH	Р	ТΙ	0315	0400	0.75	1611.0r						m to 1611 reen ceme				n 4.4 - 8.9 t		
IH	Р	ST	0400	0500	1.00	1628.0r	fro	Tagged with 11 t (25 klbs) cement at 1611 m. Attempted to dress TOC and sidetrack from 1611 m to 1628 m, unsuccessful. Predominately green cement at shakers and unable to set down weight with rotary at 80 rpm.										
IH	Р	ST	0500	0600	1.00	1629.0	n Co	Commenced time drilling from 1628 m to 1629 m at 1 m/hr.										
WBM	Data						Cost	Today	/\$18	57								
Mud Typ	e:	KCL/G	LY API	FL:	5	cm ³ /30m	KCI:			9%	Solids:		10.4	Viscosity:		0sec/L		
Sample	-From:			r-Cake:			Hard/C	Ca:		1200	H2O:		90%	PV:		0.027Pa/s 0.158MPa		
Time:		22:	00 нтн	P-FL:			MBT:				Oil:			Gels 10s:		0.043		
Weight:		1.32		P-Cake	<u>):</u>	0mm	PM:						0.5	Gels 10m: Fann 003:		0.101		
Temp:							PF:	-			pH:		9	Fann 006:		11		
										0.15	PHPA:		1ppb	Fann 100: Fann 200:		34 48		
														Fann 300: Fann 600:		60 87		
Comme	nt		botto bbls	oms up after pl	after cem	enting. Du 33 after l	mped 6	0 bbls of	contam	inated c	ement afte	lst circulatir r the first pl bits. Used b	ug, 31					
Bit #	5						Wea	r I		O1	D	L	В	G	02	R		
								1		3	BT	N2	E	-				
Size:			311mi			117		Nozzles	Drilled over last					Calculated over Bit Run				
Mfr:	Н	ughes C	hristense		(O /		No.	Size		Progre				Progress		482.0m		
Type:					M(avg)		1		'32nd"		ttom Hrs		h Cum. (43.32h		
Serial N Bit Mod			514631 MXL-1				3	20/	32nd"	4	Drill Hrs	0.00				51.25h 222800		
Depth I			1560.0			1.071					Total Revs ROP(avg)		A ROP(a	Total Revs		11.13 m/hr		
Depth C			2042.0			1.07 1					• g)			(' 9)		11.10 11/11		
BHA																		
Weight(Wet) 19.05mt Length							2	216.5m	Torau	e(max)		D.C. (1) Ann Ve	locitv	0mpm			
Wt Below Jar(Wet) 18.14mt String							-	Torque(Off.Btm)						2) Ann Ve		0mpm		
		,			k-Up					e(On.Bt				.P. Ann V		0mpm		
					ck-Off						''			.nn Veloci	,	0mpm		
BHA RI	un Descrip	otion			ectional /	FFWD									-,	5111211		
	un Comme																	
		FIIL		0.0	Jar hours:	00.0												

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	Equipment	Length	OD ID			Se	rial #	Comment							
Bit			0.33m	31	1mm			514631	8						
Powerdrive 900	D		8.62m		8mm	127mr	m	16		Blank float inst					
			5.00		231mm 76mm					Xceed survey = $5.10m$ from the bi					
ARC-8			5.90m	23	231mm 76mm			1871		Resistivity & Gama = 11.36m from the bit.					
In-Line Stabilis	er		0.83m	291mm 111mm			ASQ806	62							
Telescope HF		8.15m	21				E0005		Powerpulse survey = 19.25m from t						
la Line Otebilie			0.00-	20	308mm 111mm ASQ8-61					bit.					
In-Line Stabilis Sonic	er		0.83m 7.21m		1mm	83mr		FE75		Sonic = 28.89r	n				
ADN			6.57m		6mm	213mr		43150		Density = 35.0					
					-	_				Neutron is 36.0		e bit.			
NMDC			8.55m		3mm	71mr		N688							
X/O			1.09m		3mm	67mr		GUD12	3-1						
HWDP 6.375in Jars			121.38m 9.73m		5mm 2mm	76mr 70mr		DAH016	528						
HWDP			37.30m	10.		1011			20						
Bulk Stock	S														
	Name		Unit		Ir	n	U	sed	Adjust	Balance	Co	mment			
Barite			mT			0		0	() 137.0					
Gel			mT			0		0	(33.0					
Cement			mT			0		63	C	0.0					
Fuel			m3			0		14.2	C						
Potable Water			m3			30		23	(
Drill Water			m3			0		90	(687.0					
Personnel (
	Company					(Cor	nment				Pax			
Santos												4			
DOGC												52			
ESS												8			
ЗНI												6			
Dowell												2			
Rheochem												2			
MI Swaco												1			
ГМТ												6			
Cameron												2			
Schlumberger I	Drilling & Measureme	ents I	MWD / LWD									3			
Santos	-		Geologist	ogist								2			
	Drilling & Measureme		Directional									3			
Premium Casir	-		-									6			
											Total	-			
Casing												•			
OD	L.O.T. / F.I.T.	Casing	Shoe (MD/TVD)	D/TVD) Cementing											
762mm	/	13	1.70/131.70			Slurry: 30	18.0	m³ (194b	bl x 916sx	s) of 1.9sg (15.8	ppg) class	G			
340mm	2.20 /	652	2.00/652.00	3						.5sg (12.5ppg)	class G slur	rv.			

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Santos

HSE Summary

Ev	rents	Num Events	Date of Last	Days Remarks Since										
Abandon Drill		1	14 Sep 2008	0 Days	Abandon drill completed after the simulated fire was under control. Completed full muster at the forward lifeboats at 10:49 hrs.									
Environmental	Audit	1	03 Sep 2008	11 Days	Rig visit by DPI. Conducted an environmental audit on Santos operation.									
Fire Drill		1	14 Sep 2008	0 Days	Simulated a fire in the purifier flat. Emergency alarm sounded at 10:30 hrs, emergency under control at 10:44 hrs. Full muster complete at 10:49 hrs									
First Aid		1	06 Sep 2008	8 Days	IP was needle gunning when his right hand slipped off the gun and the right index finger went under the needles of the gun causing a 3cm laceration. The finger was treated and the IP resumed full duties.									
JHA		22	14 Sep 2008	0 Days	Drill crew - 1 Deck Crew - 15 Mech - 2 Welder - 2 Marine - 2									
Lost Time Incident 1			30 May 2008	107 Days	Man had his left hand caught between an 8" drill collar and the casing tongs when he was trying to secure the tong. Preliminary checks on the rig deemed only stitches required and the hand was not broken. The person was medivac'd off the rig @ 23:00hrs. Man was released from Royal Hobart hospital with 12 stitches to the hand (no broken bones).									
Medical Treatn	nent Incident	1	13 Aug 2008	32 Days	During lifting operations of 3rd party tooling on the pipe deck, IP was assisting the dogman in attaching slings to the whip-line hook. During this process the hook swung and hit the IP in the side of the hardhat resulting in an injury to the IPs neck. The IP was immobilised as a precautionary measure, treated as per symptoms and in readiness for medivac to hospital for further assessment.									
Pre-Tour Meeting 4			14 Sep 2008	0 Days	Discussed upcoming operations and associated hazards prior to each shift starting.									
PTW Issued		14	14 Sep 2008	0 Days	10 x hot work permits 4 x cold work permits									
Safety Audit		1	29 Jul 2008	47 Days	Santos environment audit conducted.									
Safety Audit		1	30 Jul 2008	46 Days	EHSMS audit conducted onboard.									
Safety Meeting)	3	14 Sep 2008	0 Days	Reviewed stop cards for the week. Discussed the fire drill and the scenario of a fire in the purifier flat. Reviewed fire extinguisher location, housekeeping and availability.									
Santos Inductio	on	0	14 Sep 2008	0 Days	No new personal to site									
Stop Observat	ions	59	14 Sep 2008	0 Days	38 - Safe 21- Corrective Actions									
STOP Tour		11	14 Sep 2008	0 Days Submitted Diamond supervisor audits.										
Shakers, V	olumes and	l Losses Da	ata	Engineer : K	Cellie Jericho / Fius Siregar									
Available	341.2m ³	Losses	60.6m ³	Equi	p. Descr. Mesh Size Hours									
Active	34.2m ³	Downhole		Centrifuge 1	MI SW FVS 518 6									
Mixing		Surf+ Equip	4.8m ³	Centrifuge 1	MI SW FVS 518 0									
Hole	118.8m³	Dumped	55.8m ³	Centrifuge 2										
		•	55.6m ³	Centrifuge 2										
Slug	0.0m ³	De-Sander		Shaker 3	MI SW - BEM 650 10/20 230/240 x 4 0									
Reserve	115.7m ³	De-Silter		Shaker 3 Shaker 4	MI SW - BEM 650 10/20 230/240 x 4 0 MI SW - BEM 650 40/30 270/230 x 4 13									
Kill	0.0m ³	Centrifuge		Shaker 4	MI SW - BEM 650 40/30 270/230 x 4 13 MI SW - BEM 650 40/30 270/230 x 4 16									
Storage	72.5m³			Shaker 5	MI SW - BEM 650 10/20 230/240 x 4 0									
				Shaker 5	MI SW - BEM 650 10/20 230/240 x 4 0									
				Shaker 6	MI SW - BEM 650 40/30 270/230 x 4 13									
				Shaker 6	MI SW - BEM 650 40/30 270/230 x 4 16									

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Marine														
Weather che	eck on 14 Sep	2008 at 24:0	00							Rig Support				
Visibility	Wind Speed	Wind Dir.	Pressu	re	Air Temp.	Wave Hei	ght	Wave Dir.	Wave Period	Anchors	Chain o	ut (m) T	Tension (mt)	
18.5km	56km/h	355.0deg	1005.00	bar	13.0C°	0.5m	;	355.0deg	3sec	1 1353.0		5.0	120.20	
Roll	5		iaht	Swell Dir.	Swell Peri	5			2	1372	.8	117.93		
			1	-				weather	Comments	- 3	1386	5.8	123.83	
0.5deg	0.4deg	1.50m	2.0m	1	220.0deg	12sec				4	1414.0		125.19	
Rig Dir.	Ris. Tension	VDL			Comments					5	1365.8		132.00	
217.0deg	122.47mt	957.53mt								6	1389	.9	130.18	
21110409										7	1393	9.9	126.10	
										8	1389	.9	128.82	
Boats	Arrive	ed (date/time	e)	Depa	arted (date	/time)		Statu	us		Bul	ks		
Far Grip					20:00 hrs	s 14/09/08	Relea	ased to Portla	and	ltem		Unit	Quantity	
										Fuel		m3		
										Potable Water		m3		
										Drill Water		m3		
										Gel Cement		mt		
										Barite		mt mt		
										KCI Brine		m3		
										NaCl Brine		m3		
												m3		
										Mud		m3		
Nor Captain		20:00 hrs 14/	09/08					n Patriot Sta		ltem		Unit	Quantity	
								and PW figure		Fuel		m3	438	
							due to	o trimming of	the vessel	Potable Water		m3		
										Drill Water		m3		
										Gel		mt		
										Cement		m		
										Barite KCI Brine		mt m3		
										NaCl Brine		m3		
										Mud		m3		
Helicopte	er Moveme	nt												
Flight #	Time		C	Destina	ation				Com	nment			Pax	
BYV		Ocean F	Patriot				No H	leliconter fli	ight on weeks	and				
							No Helicopter flight on weekend No Helicopter flight on weekend							
BYV		Essendo	חכ				INO H	ielicopter fli	ignt on weeke	ena				