

From : Peter Devine / Nathan Peri
OIM : Dennis Gore

Well Data

Country	Australia	Measured Depth	1870.0m	Current Hole Size	315mm	AFE Cost	\$19,265,000
Field		TVD	1744.6m	Casing OD	340mm	AFE No.	5738085
Drill Contractor	DOGC	Progress	0.0m	Shoe MD	642.2m	Daily Cost	\$1,077,682
Rig	Ocean Patriot	Days from spud	10.71	Shoe TVD	642.2m	Cum Cost	\$13,291,513
Water Depth (LAT)	65.4m	Days on well	11.48	F.I.T. / L.O.T.	/ 2.12sg	Planned TD	2503.0m
RT-SL(LAT)	21.5m	Current Op @ 0600	Continued running wiper trip down to 642 mRT				
RT-ML	86.9m	Planned Op	Run a wiper trip to 1365m, reciprocate and work tight hole. Run to bottom and circulate bottoms up. POH. Run logging tools as per programme.				
Rig Heading	215.0deg						

Summary of Period 0000 to 2400 Hrs

Circulated 3 x bottoms up volumes until the shakers were clean. POH to tight hole at 1575m. Back reamed to the shoe at 642m.
Circulated until shakers clean. POH and laid out FEWD.
Rigged up wireline. Run logging tool run #1 down to 1365m. Unable to pass this depth. POH and change bottom configuration of tools. Rerun the log down to 990m.

Formations

Name	Top (MD)	Top (TVD)	Comment
K85 Unconformity	1783.0m	1673.6m	38.6m low
Waarre A	1792.0m	1683.1m	48.1m low
Eumeralla Formation	1820.0m	1705.2m	43.2m low
Total Depth	1870.0m	1744.0m	

Operations For Period 0000 Hrs to 2400 Hrs on 25 Jul 2008

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
EP	P	CHC	0000	0100	1.00	1870.0m	Continued circulating until shakers cleared. Circulated 3 x bottoms up volumes at 3785 L/min (1000gpm), 120rpm.
EP	P	FC	0100	0115	0.25	1870.0m	Flow checked the well. Prepared the floor for tripping.
EP	P	TO	0115	0300	1.75	1870.0m	POH from 1870m to 1575m. Worked pipe to 26.7 kdaNm (60klbs), the pipe started swabbing in.
EP	P	CHC	0300	0400	1.00	1870.0m	Made up TDS, circulated and worked the stand from 1575m to 1546m at 3785 L/min, 120 rpm, torq 13 - 38 kNm (10-28 kft/lbs). Cutting returns observed over the shakers, circulated 2 x bottoms up volumes until the shakers cleared.
EP	P	WTH	0400	0600	2.00	1870.0m	Attempted to pull the next stand on elevators, overpull observed. Made up TDS and back reamed out from 1546m to 1287m.
EP	P	WTH	0600	1030	4.50	1870.0m	Continued back reaming from 1287m to the casing shoe at 642m. Parameters: 120rpm, 3785 L/min (1000gpm), torq 13 - 38 kNm (10-28 kft/lbs)
EP	P	CHC	1030	1100	0.50	1870.0m	Circulated at the shoe until shakers clear (2 x BU).
EP	P	FC	1100	1115	0.25	1870.0m	Flow checked the well, pumped 1.6 m ³ (10bbl), 1.5 sg (13ppg) slug.
EP	P	TO	1115	1230	1.25	1870.0m	POH to the BHA at 270m
EP	P	HBHA	1230	1500	2.50	1870.0m	Pulled and racked back the BHA. Unable to break out the ARC-8 from the Powerpulse (galled). Laid out both pieces as one.
EP	P	LOG	1500	1530	0.50	1870.0m	Held Wireline JSA. Rigged up to run wireline logging tools.
EP	P	LOG	1530	1800	2.50	1870.0m	Made up logging run #1 tools: PEX-HRLA-MSIP.
EP	P	LOG	1800	2100	3.00	1870.0m	Run logging tool #1, unable to pass through at 1365 mRT. Attempted to pass tight spot varying speeds.
EP	P (HC)	LOG	2100	2300	2.00	1870.0m	Pulled out to change the tool configuration. Tools at surface. Laid out tools and nuclear source. Changed out the bottom bull nose sub for an extended tapered nose sub. Picked up the tools and rerun.
EP	TP (HC)	LOG	2300	2400	1.00	1870.0m	Continued to run new bottom configuration logging tool #1.

Operations For Period 0000 Hrs to 0600 Hrs on 26 Jul 2008

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
EP	TP (HC)	LOG	0000	0200	2.00	1870.0m	Continued running logging tool run #1: PEX-HRLA-MSIP. Tagged up again at 1365m, unable to pass this depth after several attempts. POH.
EP	TP (HC)	LOG	0200	0300	1.00	1870.0m	Rigged down wireline. Static mud losses of 0.25 m ³ /hr (1.5 bbl/hr).
EP	TP (HC)	HBHA	0300	0500	2.00	1870.0m	Picked up new 311mm (12-1/4") bit and BHA to 230 mRT. Note: Tagged casing swedge at 92m, slow rotation and the bit passed through.

Phse	Cls (RC)	Op	From	To	Hrs	Depth	Activity Description
EP	TP (HC)	TI	0500	0600	1.00	1870.0m	Continued 311mm (12-1/4") wiper trip to 642 mRT.

WBM Data **Cost Today \$ 15000**

Mud Type:	KGLY	API FL:	4cm ³ /30m	KCl:	9%	Solids:	11.81	Viscosity:	0sec/L
Sample-From:	Pit	Filter-Cake:	1mm	Hard/Ca:	800	H ₂ O:	88%	PV:	0.022Pa/s
Time:	18:00	HTHP-FL:		MBT:	5	Oil:		YP:	0.201MPa
Weight:	1.34sg	HTHP-Cake:		PM:	0.1	Sand:	0.2	Gels 10s:	0.048
Temp:				PF:	0.07	pH:	9	Gels 10m:	0.110
						PHPA:	Oppb	Fann 003:	10
								Fann 006:	13
								Fann 100:	38
								Fann 200:	51
								Fann 300:	64
								Fann 600:	86

Comment No treatments or additions to the Active system while reaming OOH. Screen up remaining shaker to 230 mesh while backreaming OOH, to minimise LGS contamination. MW increase observed due to LGS invasion while reaming. Losses during logging 10 bbl. Charge off remaining Barite from yesterday's usage.

Bit # 4	Wear	I	O1	D	L	B	G	O2	R
		3	4	CT	A	X	1	ER	TD

Size:	311mm	IADC#	M422	Nozzles		Drilled over last 24 hrs		Calculated over Bit Run	
Mfr:	REED	WOB(avg)		No.	Size	Progress	0.0m	Cum. Progress	449.0m
Type:	Rock	RPM(avg)	160	6	16/32nd"	On Bottom Hrs	0.00h	Cum. On Btm Hrs	17.40h
Serial No.:	215850	F.Rate	3623lpm			IADC Drill Hrs	0.00h	Cum IADC Drill Hrs	25.00h
Bit Model	RSX616-A16	SPP	19995kPa			Total Revs	0	Cum Total Revs	174700
Depth In	1421.0m	TFA	1.178			ROP(avg)	N/A	ROP(avg)	25.80 m/hr
Depth Out	1870.0m								

Daily Comment Back reamed from 1575m to the casing shoe at 642m.

Bitwear Comment Several chipped teeth on the bit in all areas. Some erosion inside the bit by the nozzle fluid entrance.

BHA # 4

Weight(Wet)	36.29mt	Length	278.1m	Torque(max)	38080.0Nm	D.C. (1) Ann Velocity	83.07mpm
Wt Below Jar(Wet)	20.41mt	String	117.93mt	Torque(Off.Btm)	14960.0Nm	D.C. (2) Ann Velocity	0mpm
		Pick-Up	122.47mt	Torque(On.Btm)	5440.0Nm	H.W.D.P. Ann Velocity	69.59mpm
		Slack-Off	122.47mt			D.P. Ann Velocity	57.17mpm

BHA Run Description Directional / FEWD

BHA Run Comment ACR-8 and Powerdrive tools galled when trying to breakout and lay out. Laid out the pieces as one.

Equipment	Length	OD	ID	Serial #	Comment
Bit	0.27m	311mm		2158520	6 x 16 nozzles Xceed directional survey = 3.33m from the bit.
Powerdrive 900	8.18m	311mm	127mm	CR5058	
Saver Sub	0.46m	229mm	127mm	CR59-015	Resistivity & Gama = 11.1m from the bit. Powerpulse directional survey = 18.40m from the bit.
Saver Sub	0.36m	210mm	108mm	ASQ8058	
ARC-8	5.48m	213mm	76mm	1106	
Saver Sub	0.34m	210mm	111mm	ASQ8012	
Power Pulse	7.69m	229mm	76mm	E0005	
Saver Sub	0.48m	210mm	111mm	ASQ8065	
NMDC	9.30m	213mm	83mm	SBD5552	
NMDC	9.30m	213mm	83mm	SBD5553	
Drill Collar	65.65m	203mm	73mm		
8in Jar	10.11m	210mm	76mm	718096	
Drill Collar	18.91m	203mm	73mm		
X/O	1.09m	203mm	67mm	GUD1231-6	
HWDP	140.40m	175mm	76mm		

Bulk Stocks						Personnel On Board	
Name	Unit	In	Used	Adjust	Balance	Company	Pax
Barite	MT	0	65	0	8.0	Santos	4
Gel	MT	0	0	0	53.0	Santos	2
Cement	MT	0	0	0	140.0	DOGC	48
Fuel	M3	0	16.2	0	492.8	ESS	8
Potable Water	M3	19	23	0	391.0	BHI	6
Drill Water	M3	0	42	0	1,005.0	Dowell	2
						Rheochem	2
						TMT	3
						Cameron	3
						Anadrill	2
						Anadrill	2
						Schlumberger Wireline	9
						MI Swaco	1
						Schlumberger Testing	1
						Total	93

Casing			
OD	L.O.T. / F.I.T.	Casing Shoe (MD/TVD)	Cementing
762mm	/	130.90/130.90	As per cement data.
340mm	2.12 /	642.20/642.20	Class G lead slurry to surface. Class G tail TOC at ± 492m (150m).

HSE Summary				
Events	Num Events	Date of Last	Days Since	Remarks
Abandon Drill	1	20 Jul 2008	5 Days	Abandonment drill completed after the fire drill. Completed full muster at lifeboat stations 2 and 3 in 6 minutes.
Fire Drill	1	20 Jul 2008	5 Days	Simulated a fire in the paint locker room. Muster complete within 8 minutes and incident under control in 7 minutes.
First Aid	1	23 Jun 2008	32 Days	IP was opening PPE locker in the sack room to exchange a dirty dust mask with a new mask. IP opened locker door harder than he expected and locker door swung open and struck him on the safety glasses. Safety glasses cut left eye brow (2.5 cm) from the impact. Hard hat had been taken off to exchange dust masks.
JHA	22	25 Jul 2008	0 Days	Drill crew - 6 Deck Crew - 13 Welder - 0 Mech - 3
Lost Time Incident	1	30 May 2008	56 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 Treatment Incident	0	13 May 2008	73 Days	No MTI since start of campaign
Medical Treatment Incident	1	24 Jul 2008	1 Day	IP sustained a deep cut to his left leg. This was caused by his foot slipping off a timber support and hitting his shin. The IP will be flown out on crew chopper. Note: IP received 7 stitches and has been given clearance to return to work. Resumed duties 25th Jul 08.
Pre-Tour Meeting	4	25 Jul 2008	0 Days	Discussed upcoming operations and associated hazards
PTW Issued	13	25 Jul 2008	0 Days	7 x hot work permits 6 x cold work permits
Rig Inspection	1	02 Jul 2008	23 Days	Conducted hazard hunt checking for flammable liquids in containers secured properly and in correct place with signage.
Safety Meeting	3	20 Jul 2008	5 Days	Reviewed stop cards for the week and awarded Santos best stop card to Brendon Hayward. Discussed fire and abandonment drill and muster times. Played the Dodi Induction video.
Santos Induction	4	25 Jul 2008	0 Days	Completed Santos induction with new personnel to site.
Stop Observations	67	25 Jul 2008	0 Days	43 - Safe 24 - Corrective Actions
STOP Tour	1	24 Jul 2008	1 Day	1 x Dodi audits last 24hrs. Santos conducted a STOP audit of the welding room. All PPE worn during cutting/welding operations. Good ventilation. Hot work permit in place (14 Jul).
Trip/Pit Drill	1	24 Jul 2008	1 Day	Sounded the alarm on the drill floor for a kick drill. Crew reacted and had the FOBV in place within 40 seconds.

Shakers, Volumes and Losses Data				Engineer : Carissa Thompson / Wojciech Czarny			
Available	415.4m ³	Losses	15.3m ³	Equip.	Descr.	Mesh Size	Hours
Active	91.4m ³	Downhole	1.6m ³	Centrifuge 1	MI Swaco		0
Mixing	0.0m ³	Surf+ Equip	13.7m ³	Centrifuge 1	MI Swaco		0
Hole	143.2m ³	Dumped		Centrifuge 2	MI Swaco		0
Slug		De-Sander		Centrifuge 2	MI Swaco		0
Reserve	110.8m ³	De-Silter		Shaker 3	Bem 650 - MI Swac	20/20/165/165/200/200	24
Kill		Centrifuge		Shaker 3	Bem 650 - MI Swac	0/20/230/230/230/230	12
Brine	70.0m ³			Shaker 4	Bem 650 - MI Swac	20/20/165/165/200/200	24
				Shaker 4	Bem 650 - MI Swac	0/20/230/230/230/230	12
				Shaker 5	Bem 650 - MI Swac	20/20/165/165/200/200	24
				Shaker 5	Bem 650 - MI Swac	0/20/230/230/230/230	12
				Shaker 6	Bem 650 - MI Swac	20/20/165/165/200/200	24
				Shaker 6	Bem 650 - MI Swac	0/20/230/230/230/230	12

Comment #2 Centrifuge needs repair done (awaiting spare parts).

Marine								Rig Support		
Weather check on 25 Jul 2008 at 24:00										
Visibility	Wind Speed	Wind Dir.	Pressure	Air Temp.	Wave Height	Wave Dir.	Wave Period	Anchors	Chain out (m)	Tension (mt)
18.5km	33km/h	0.0deg	1019.00bar	14.0C°	0.5m	0.0deg	3sec	1	1382.9	99.79
Roll	Pitch	Heave	Swell Height	Swell Dir.	Swell Period	Weather Comments				
1.0deg	0.7deg	1.50m	2.5m	235.0deg	12sec					
Rig Dir.	Ris. Tension	VDL	Comments							
215.0deg	120.20mt	945.29mt								
								2	1382.9	103.87
								3	1399.9	112.04
								4	1376.8	103.87
								5	1410.9	112.04
								6	1421.0	103.87
								7	1410.9	117.93
								8	1414.0	120.20

Boats	Arrived (date/time)	Departed (date/time)	Status	Bulks		
Far Grip		22:15 23 Jul 08	Transit to Portland	Item	Unit	Quantity
				Fuel	m3	698
				Potable Water	m3	190
				Drill Water	m3	450
				Cement	mt	43.5
				Barite	mt	84
				Gel	mt	59
				KCl Brine	m3	140
				NaCl Brine	m3	185
				Mud	m3	0
Nor Captain	21:40 23 Jul 2008		On location.	Item	Unit	Quantity
				Fuel	m3	581
				Potable Water	m3	324
				Drill Water	m3	289
				Cement	mt	42
				Barite	mt	84
				Gel	mt	42
				Mud	m3	140
				KCl Brine	m3	0

Helicopter Movement					
Flight #	Time	Destination	Comment	Pax	
GYJ	11:29	Ocean Patriot		13	
GYJ	11:46	Essendon		10	