

# Daily Operations - A4

Well: SOUTH EAST REMORA-1

Wellbore Reg. Name: SER-1

	Planned	Actual (Cum)
Days (orig)	32.82	5.88
MD/TVD	3,936.08/ 3,671.99	150.50/ 150.49
Cost (w/suppl)	41,700,820	6,100,030

**Esso Australia Pty. Ltd.**  
ExxonMobil Use Only

Unit Set: Mixed  
Reference Elev: OP  
Currency: AUD

Report No: 6 Progress: 39.50  
Phase: Drilling, Drilling, Run LP WH housingn and 30"x20" structural casing

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Rpt. Period: 12/20/2009 05:00 to 12/21/2009 05:00

## Well Information

Country	Territory/State	Field Name	Lease	Operating Facility	Slot / Conductor
Australia	Victoria		VIC/RL-04		
Operator	Drilling Purpose	Regulatory Well ID	Local Latitude (DMS)	Local Longitude (DMS)	
Esso Australia Pty. Ltd.	Near Field Wildcat		38° 9' 40.988" S	148° 12' 58.46" E	
Original KB Elevation (m)	Ground Elevation (m)	KB-Ground Distance (m)	Working Elevation (m)	Water Depth (m)	Well Spud Date/Time
21.50	0.00	21.50	21.50	57.00	12/20/2009 02:00

## Job Information

Primary Job Type	Job Start Date/Time	Job End Date/Time	Client	Working Interest (%)	Job Spud Date/Time
Drilling	12/15/2009 08:00		EMPC	50.00	12/20/2009 02:00
Stewarding Company	Stewarding Team	Primary Wellbore Affected	Orig DCI	Orig WCI	
EMDC Drilling	Australia	SOUTH EAST REMORA-1	3.4		
AFE or Job Number	Appropriation Type	Currency	Exchange Rate	Ttl Orig AFE	Tot AFE (w/Spp)
607/ 09000.1	Capital	AUD	0.67	41,700,820	41,700,820

## Daily Operations Information

Rig (Names)	Cum % NPT (%)	Days From Spud	Days Ahead/Behind	Daily Cost Total		
Diamond Offshore - Ocean Patriot	2.13	1.13		787,505		
Daily Personnel Count	Daily Personnel (hrs)	Days Since Hurt	Days Since RI	Days Since LTI	Drill Time (hrs)	Average ROP (m/hr)
96.0	1,152.00	5.00	20.00	20.00	4.00	9.9
Performance Limiter	Mitigation Attempts/Results					
Solids Handling/Removal						
Activity at Report Time	Next Activity					
Cmt	Wait on cmt					

## Management Summary

Drill 26" x 36" hole to 150.5, clirc clean, spot Pad mud, trip out pick up 20"x30" csg. lay out 20" shoe and pick up back up. and rih with 30" x 20" casing to 148m check height and incl.

## Remarks

Days without spills = 19.  
- Carried pre-tour safety meetings with day and night crews. Topics: STOP cards, JSAs, run casing, cmt

- Last Weekly Safety Meeting: 21-Dec-09.
- Last Ops Supt Inspection: 10-Dec-09.
- Last Fire / Abandon Ship Drill: 20-Dec-09.
- Last BOPE test: 10-Dec-09.
- Last BCFT: 10-Dec-09.
- Last Choke Manifold test: 12-Dec-09.
- Last Diverter function: 11-Dec-09.

Spud SER 1 Dec 20th @ 0200hrs

Wellbore	Average Background Gas	Average Connection Gas	Average Trip Gas	Average Drilling Gas	Maximum H2S (ppm)	
SOUTH EAST REMORA-1						
Time Log (hrs)	Last Casing String	Next Casing String	Formation Description			
24.00		30" conductor				

## Time Log

Start Time/Ti...	Elapsed Time (hrs)	End MD (mOP)	Category	NPT Ref #	Comments
05:00	4.00	150.50	DRLG		drill 26"x36" hole from 111m to 150.5 (RKB). with 1200 gpm 1500 psi, and 120 rpm with 4k torq. with 0-2k on bit, pump 50bbl hi-vis sweep mid std and spotting, 75bbl around bha on connections.
09:00	0.50	150.50	CIRC		pump 150bbl hi-vis pill and circ. out @ 150.5 and spot 300bbl 10.0ppg pad mud with 500 psi
09:30	1.00	150.50	CIRC		trip out of hole to 115m and spot 300 bbl of 10.0 ppg pad mud
10:30	0.50	150.50	TRIP		trip out of hole from 115m to 88m (and ROV place marker bouys on see bed @ 180^ apart
11:00	1.00	150.50	TRIP		Trip out of hole and rack back 26"x36" bha in derrick
12:00	1.25	150.50	TRIP		clean rig floor and prepare to run 30" casing, while moving PGB to well center.
13:15	1.75	150.50	TBLR		Hold JSA and R/u wetherford 30" equip.
15:00	0.50	150.50	TBLR		M/u 30"x20" shoe jt, and fill with sea h2o, float not draining, layed out and check for debris (none noticed)
15:30	3.00	150.50	WAIT	1	P/u shoe joint, and run 3 joints of 30", floats still not draining, lay out joints and change out 20" shoe joint to back up
18:30	2.00	150.50	TBLR		Jsa- pick up 20" shoe x 30" casing and test floats, (ok) to 59m
20:30	1.00	150.50	TBLR		P/u vetco well head housing and install hang off clamp and land in rotary.
21:30	1.00	150.50	TRIP		Remove Vetco and rig up c-plate and bowl/slips and run 5" inner string (total jts 5)
22:30	0.50	150.50	TRIP		M/u 30" cart tool to 30" housing and stab in 30" hole with ROv asst. and latched in to PGB in moonpool
23:00	2.50	150.50	TBLR		Install 30" housing into PGB as per vetco reps instructions/ Neptune surveyors installing survey beacons and install guide lines.
01:30	0.50	150.50	TBLR		attempt to fill 30" casing with sea h2o at surface, circ. going through shoe, and not valve on RT.
02:00	0.50	150.50	TBLR		Lower RDGB and casing to water line, while pump sea h2o (29 bbls) returns from RT (lub out air) and close RT valve.

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## Time Log

Start Time/Ti...	Elapsed Time (hrs)	End MD (mOP)	Category	NPT Ref #	Comments
02:30	1.00	150.50	TBLR		Tih with 30" casing on 5" landing string, wash last stand down (taking 15k shoe depth @ 148m ROV check Orientation (211^) and height (2.08) Position rig to correct bulls eye, aft bulls eye 1-3/4^ port/aft Port bullseye 1-1/2^ port aft
03:30	1.00	150.50	TBLR		
04:30	0.50	150.50	TBLR		Jsa- rig up surface lines and break circ, test surface lines to 2500 psi (ok) Pump 50bbl Sw with dye and complete rig postion Final Bullseye reading Aft 1/2^ stb port Port 3/4^ stb (moved rig 3 m to port)

## Problem Events (NPT, Non-NPT, and Quality)

NPT Bearing?	Ref No	Category	Type	Start Date/Time	End Date/Time	Cum Dur (hrs)	Acc Party Type	Accountable Party
Yes	1	Tubulars or Strings	Casing problem	12/20/2009 15:30	12/20/2009 18:30	3.00	Operator	EXXONMOBIL OIL CORP

### Comment

Change out 20" shoe to back up, floats would not pump through

## Phase Time and Cost Summary - Shows original AFE time and cost only - no supplement

Phase	Cum Actual (days)	Phase AFE (days)	Cum Actual Cost	Phase AFE Cost
Pre-Execution	0.00	0.00	1,600,000	1,200,000
Drilling	5.88	32.82	4,500,030	36,100,820
Post-Execution	0.00	0.00	0	4,400,000

## Daily Personnel Count

Type	Head Count	Total Hours (hrs)	Comments
Contractor (Excluding SSE)	49	588.00	Diamond Offshore, crew
Contractor (SSE Only)	0		Diamond Offshore, crew
Contractor (Excluding SSE)	2	24.00	Diamond Offshore, BTB Safety
Contractor (Excluding SSE)	8	96.00	Diamond Offshore, ESS Catering
ExxonMobil	3	36.00	Drilling Supervisors
ExxonMobil	1	12.00	Engineer
Service Company	1	12.00	Drilling Logistics
Service Company	4	48.00	SLB Anadrill
Service Company	3	36.00	SLB Cementing/HLB
Service Company	2	24.00	HLB Baroid
Service Company	6	72.00	Sub Sea 7
Service Company	2	24.00	Neptune
Service Company	0		Go Marine
Service Company	1	12.00	Arrosmith positioning control
Service Company	2	24.00	Vetco Gray
Service Company	3	36.00	Scomi
Service Company	4	48.00	Weatherford casing
Service Company	3	36.00	Mud Loggers
Service Company	2	24.00	Tasman

## Personnel on Location

Contact	Comments
Drilling Engineer, ExxonMobil, Juergen Schamp, 61-3-9270-3890	
Drilling Supervisor, Bond Logistics, Bryan Webb, 61-8-6311-4183	
Drilling Supervisor, ExxonMobil, Josh Lepp, 61-8-6311-4181	
Drilling Supervisor, ExxonMobil, Robert Spence, 61-8-6311-4182	

## Safety Check Summary

Type	Last Date	Freq
Abandon Ship Drill	12/20/2009 10:30	1
Fire Drill	12/20/2009 10:30	1
Pre-Tour Safety Meeting	12/20/2009 11:30	5
Safety Meeting	12/21/2009 00:30	3

## STOP Cards and JSA's

Obs/JSA Type	No. Rpts	Comment
Green (+) SH&E Observations	49	
JSA's/JRA's (or equivalent)	30	
Red (-) SH&E Observations	27	

## Support Vessels

Vessel Name	Vessel Type	Vessel Count	Arrival Dt/Tm	Departure Dt/Tm	Origin	Destination	Pass Capacity
Tourmaline	Workboat		12/15/2009	12/18/2009			
Coral	Workboat		12/15/2009				

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## Fluid Checks

Source	Date/Time	Fluid Type	Fluid Category	MD (mOP)	Density (lb/gal)	ECD (lb/gal)
Flowline	12/20/2009 05:00	Water Based	Seawater Gel	150.5	8.50	
Funnel Viscosity (s/qt)	FL Temp (°C)	Plastic Viscosity (cp)	Yield Point (lb/100ft²)	10-Sec Gel (lb/100ft²)	10-Min Gel (lb/100ft²)	30-Min Gel (lb/100ft²)
600 RPM Dial Reading	300 RPM Dial Reading	200 RPM Dial Reading	100 RPM Dial Reading	6 RPM Dial Reading	3 RPM Dial Reading	Visc Temp (°C)
API FL (mL/30min)	API FC (/32")	HTHP FL (mL/30min)	HTHP FC (/32")	HTHP Temp (°C)	HTHP Pressure (psi)	BHST (°C)
Excess Lime (lb/bbl)	Ca++ (mg/L)	Chlorides (mg/L)	n (Calc)	K (Calc)	Wellbore SOUTH EAST REMORA-1	
pH	Pm (mL/mL)	Pf (mL/mL)	Mf (mL/mL)	Potassium (mg/L)	MBT (lb/bbl)	Activity
Alkalinity (mL/mL)	WPS (ppm)	Electrical Stability (V)	Filter Size (µm)	Iron Content (mg/L)	NTU	TCT (°C)
Volume % Water (%)	Volume % Oil (%)	Oil/Water Ratio	Sand Content (%)	Volume % Solids (%)	LGS (%)	HGS (%)
Circ Volume (bbl)	Active Pit Vol (bbl)	Reserve Volume (bbl)	Whole Mud Added (b...	Base Fluid Add (bbl)	Additives Vol (bbl)	Dilution Rate
Evap Vol Add (bbl)	Downhole Losses (b...	Cum DH Loss (bbl)	Surface Losses (bbl)	Cum Surf Loss (bbl)	Cumulative Mud Added (bbl)	

Comments  
S/W w/- Gel Sweeps

## Job Supply Summary

Typ	Unit Sz	Unit Label	Consumed	Cum Consumed	Received	Cum Received	Returned	Cum Returned	Cum On Loc
Potable Water	1	m3	0.0	0.0	0.0	277.0	0.0	0.0	277.0
Fuel	1	m3	0.0	0.0	0.0	1,214.0	0.0	0.0	1,214.0
Drill Water [aka Dilution/Makeup Water]	1	m3	0.0	0.0	0.0	22.0	0.0	0.0	22.0
Barite	100	Pound	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bentonite	100	Pound	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cement Neat	94	Pound	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## Safety Checks

Type	Result	Date/Time	Comments
Abandon Ship Drill	Satisfactory	12/20/2009 10:30	
Fire Drill	Satisfactory	12/20/2009 10:30	
Pre-Tour Safety Meeting	Satisfactory	12/20/2009 11:30	
Safety Meeting	Satisfactory	12/20/2009 18:30	
Safety Meeting	Satisfactory	12/21/2009 00:30	

## Job Contacts - Only shows Superintendent(s) and Engineers(s)

Type	Name	Office
Drilling Engineer	Chris Meakin	61-3-9270-3536
Drilling Engineer	Juergen Schamp	61-3-9270-3890
Drilling Engineer	Ryan Turton	61-3-9270-3008
Ops Superintendent	Kevan Jenkins	61-3-9270-3604
Ops Superintendent	Steve Wilson	61-3-9270-3604

## Rig and BOP Information - all BOP's for this rig

Company	Rig Name	Rig Type	Rig Start Date/Time	Rig Release Date/Time	
Diamond Offshore	Ocean Patriot	Semi-Submersible	12/15/2009		
Installation	API Designation	Nominal ID (in)	Pressure Rating (psi)	Service	Height (m)
Subsea	CwRdRdAlAuCr	18 3/4	15,000.0	Sour (NACE)	13.07

## String No. 1

Drill String Name	String Number	Date/Time Run	Dt Lst Drlg Par	MD In (mOP)	MD Lst Drlg Par (mOP)	
26"x36"	1	12/20/2009 02:00	12/20/2009 09:00	78.50	150.50	
Min WOB (1000lbf)	Min Total RPM (rp...)	Min Circ Rate (gpm)	Min SPP (psi)	Min Pickup HL (1000lbf)	Min Slackoff HL (1000lbf)	Min Rotate HL (1000lbf)
Max WOB (1000lbf)	Max Total RPM (rp...)	Max Circ Rate (gpm)	Max SPP (psi)	Max Pickup HL (1000lbf)	Max Slackoff HL (1000lbf)	Max Rotate HL (1000lbf)

Comments

## String No. 1 - Bit Information

Bit	Bit And Run Number	Bit Type	Nozzles (/32")	Total Bit TFA (in²)
26in, Y11C, D74535	1	Mill Tooth		
IADC Classification	Hole Made (Run) (m)	Hours Drl (Run) (hrs)	ROP (m/hr)	IADC Dull Grade
111	72.00	7.00	10.3	-----

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## Daily Drilling Parameters and Hydraulics - If hydraulics are blank, check string output report for errors

Start MD (mOP)	End MD (mOP)	Avg ROP (In/ hr)	Drill Time (hrs)	Total Circ Time (hrs)	WOB (1000lbf)	Total RPM (rpm)	Circ Rate (gpm)	Standpipe Pres (psi)	Rotating HL (1000lbf)	Pickup HL (1000lbf)	Slackoff HL (1000lbf)	Drilling Torque	ECD End (lb/gal)	HP/Area (hp/in <sup>2</sup> )	Jet Vel (m/s)	Bit dP (psi)	% P @ bit (%)
111.00	150.50	9.9	4.00	5.50													

## String Components

Item Des	Nominal OD (in)	Nominal ID (in)	Nominal Weight (lbs/ft)	Grade	Length (m)	Btm Conn Thread	Btm Conn Size (in)	Serial Number	Blade OD (in)	Cum Len to Bit (m)	Cum Vol Disp (bbl)	Cum Weight (1000lbf)
Drill Pipe - Heavy Wall	5	3.000	49.30	E	64.49	IF	4 1/2			150.50	21.0	53
Drill Pipe - Heavy Wall	5	3.000	49.30	E	9.34	IF	4 1/2			86.01	17.7	43
XO Sub	8 1/4	2.750			0.78	IF	4 1/2	186-0056		76.67	17.2	41
Drill Collars	8 1/4	2.813	160.75		18.40	REG	6.63			75.89	17.1	41
XO Sub	9 1/2	3.000			1.16	REG	6.63	186-0060		57.49	13.6	32
Drill Collars	9 1/2	3.500	208.46		27.35	REG	7.63			56.33	13.3	32
Drill Collar - Non Mag	9 1/2	3.000	217.14		9.07	REG	7.63	OSSO06027...		28.98	6.5	13
Drill Collar - Non Mag	9 1/2	3.000	217.14		8.89	REG	7.63	DOTS6064		19.91	4.1	6
MWD - Directional	9 1/2	6.250			8.85	REG	7.63	E0436		11.02	1.8	0
Bit Sub w/Float	9	3.500			0.92	REG	7.63	WDF2315		2.17	0.4	0
Hole Opener	9.38	3.000			0.65	REG	7.63	46450	36	1.25	0.2	0

## Wellbore Information

Wellbore Name	Purpose	Profile Type	Regulatory Name	Regulatory ID
SOUTH EAST REMORA-1	Original Wellbore	Vertical	SER-1	SER-1
Parent Wellbore	Starting MD (mOP)	Kick-off MD (mOP)	Kick-off Method	Job
	78.50	78.50	Steerable Motor	Drilling, 12/15/2009 08:00 - <End Date/Time?>
Actual Dir Srvy	Prop Dir Srvy	VS Azimuth (°)	VS EW Origin (m)	Vertical Section North-South Origin (m)
Actual Survey SER-1	Proposed Survey SE Remora Rev 7.1	227.02	0.0	0.0

## Wellbore (Hole) Sections

Act Start DI/Tm	Act End DI/Tm	Section	Diameter (in)	Actual Top MD (mOP)	Bottom MD (mOP)
12/20/2009 02:00	12/20/2009 05:00	Structural	36	78.50	150.50

## PBTD's

Date	Type	Depth (mOP)	Total Depth (mOP)	Method	Comment
			150.50		

## Deviation Survey (Tie point) - Actual Survey SER-1

Survey Date/Time	Description	Azimuth North Type	Job			
12/20/2009 02:00	Actual Survey SER-1	Grid North	Drilling, 12/15/2009 08:00 - <End Date/Time?>			
Tie-In MD (mOP)	Tie-In Inclination (°)	Tie-In Azimuth (°)	Tie-In TVD (mOP)	VS Tie In (m)	TieIn NS Offset...	TieIn EW Offset (m)
78.50	0.67	177.87	78.50	0.30	-0.46	0.02
Declination (°)	Convergence (°)	Comments				
13.10	-0.75	KB=21.5				

## Survey Data - Shows all surveys entered during the report period

MD (mOP)	Inclination (°)	Azimuth (°)	TVD (mOP)	VS (m)	NS Offset (m)	EW Offset (m)	DLS (°/30m)
110.15	0.96	158.16	110.15	0.52	-0.89	0.12	0.34
141.43	0.58	156.05	141.42	0.67	-1.28	0.28	0.37
150.50	0.58	156.05	150.49	0.70	-1.37	0.32	0.00

## Casing Strings - Only shows information for the longest casing component in a string - for other components see casing detail report

Wellbore	Description	Nominal OD (in)	Nominal ID (in)	Nominal Weight (lbs/ft)	Nominal Grade	Nom Top Conn	Length (m)	Leak Off Dens (lb/gal)	Top MD (mOP)	Cut/Pull MD (mOP)	Bottom MD (mOP)
SOUTH EAST REMORA-1	Structural	30	28.000	157.80	X-52	RL-4S	61.00		87.30		148.30