



06 Dec 2009 From: Michael Lanzer / Kevin Monkhouse

To: Texas Richards

# DRILLING MORNING REPORT # 8 Rockhopper-1

| Rockhopper-1      |                |                       |                   |                  |  |   |                |  |  |
|-------------------|----------------|-----------------------|-------------------|------------------|--|---|----------------|--|--|
| Date:             | 06 Dec 2009    | Well Site Represer    | ntative:          | Michael Lanzer   | OIM:   | Bria  | n Meechan      |  |  |
| Report Number:    | 8              | Night Representat     | ive:              | Kevin Monkhouse  | Drilling Com   | npany: Mae  | ersk           |  |  |
| Latitude (South): | 39 ° 47 ' 34.1 | 8 " Longitude (East): | Longitude (East): |                  | Geologist:   |   |                |  |  |
| Well Data         |                |                       |                   |                  |  |   |                |  |  |
| Country           | Australia      | MDBRT                 | 966.0n            | Cur. Hole Size   | 17.500in   | AFE Cost  | US\$27,409,709 |  |  |
| Field             | Rockhopper     | TVDBRT                | 966.0n            | Last Casing OD   | 13.375in   | AFE No.   | Rockhopper-1   |  |  |
| Drill Co.         | Maersk         | Progress              | 0.0n              | n Shoe TVDBRT    | 961.0m   | Daily Cost  | US\$634,191    |  |  |
| Rig               | Kan Tan IV     | Days from spud        | 6.02              | Shoe MDBRT       | 961.0m   | Cumul. Cost   | US\$6,893,180  |  |  |
| Wtr Dpth(MSL)     | 74.3m          | Days on well          | 7.96              | FIT/LOT:         | /  | Last LTI Date   | 01 Nov 2009    |  |  |
| RT-ASL(MSL)       | 26.0m          | Planned TD MD         | 3486.5n           | n                |  | Days Since La   | st LTI 35      |  |  |
| RT-ML             | 100.3m         | Planned TD TVDRT      | 3166.4n           | Current Op @ 060 | OO Preparing to  | o run BOP.  |                |  |  |
| Datum             | GDA 94         | Last BOP Test         |                   | Planned Op       | joint. Install<br>Make up MI<br>stack on we<br>psi. Lay out<br>down riser I<br>and test we | Run BOP on riser. Make up slip joint and landi joint. Install C&K hoses and pressure test sam Make up MRT lines to slip joint and land BOP stack on well. Pressure test connector to 1000 psi. Lay out landing joint, install diverter and rig down riser handling equiment. RIH with test pli and test wellhead connector to 5000psi and LMRP connector to 3500 psi. |                |  |  |

#### Summary of Period 0000 to 2400 Hrs

Racked back cement stand and POOH with 18-3/4" RT. Laid out same. Laid out cement head. Laid out 17-1/2" BHA. Rigged up to run BOP stack. Made up riser double, skidded BOP to well centre and installed riser to LMRP. Attempted to lift BOP off carrier. Unable to release at H4 Connector. Trouble shot H4 Connector. BOP released from test stump. Installed guide lines and prepared BOP for running.

| <b>HSE Summary</b> |             |            |                                  |   |
|--------------------|-------------|------------|----------------------------------|---|
| Events             | Num. Events | Days Since | Descr.                           | F |
| Abandon Drill      | 0           | 1 Day      | Held abandon drill               |   |
| Emergency Drill    | 0           | 32 Days    | Full Emergency drill performed   |   |
| ER Exercises       | 0           | 4 Days     |                                  |   |
| Fire Drill         | 0           | 22 Days    | Main deck - Fire in Control room |   |
| Permit To Work     | 16          | 0 Days     | Permits administered             |   |
| Pre-tour Meeting   | 2           | 0 Days     | Shift change meetings            |   |
| Safety Meeting     | 16          | 0 Days     | Prejob safety meetings           |   |
| Safety Meeting     | 7           | 0 Days     | Safety Meetings                  |   |
| Safety Meeting     | 2           | 0 Days     | General safety meetings          |   |
| STOP Card          | 48          | 0 Days     | Number of STOP Cards submitted   |   |

### Operations For Period 0000 Hrs to 2400 Hrs on 06 Dec 2009

| Phse | Cls<br>(RC) | Ор  | From | То   | Hrs  | Depth  | Activity Description  |  |  |  |
|------|-------------|-----|------|------|------|--------|---|--|--|--|
| P5   | Р           | G8  | 0000 | 0030 | 0.50 | 966.0m | Racked back cement head in mast. POOH with 18-3/8" WHRT.  |  |  |  |
| P5   | Р           | G15 | 0030 | 0100 | 0.50 | 966.0m | Laid out 18-3/4" WHRT assembly (ROV inspected 18-3/4" Wellhead / PGB and seabed).   |  |  |  |
| P5   | Р           | G15 | 0100 | 0300 | 2.00 | 966.0m | Laid out Halliburton cement head and racked back drillpipe stand in mast.   |  |  |  |
| P4   | Р           | G6  | 0300 | 0500 | 2.00 | 966.0m | Laid out 9-1/2" DC, NMHOC and 17-1/2" stabiliser from mast.   |  |  |  |
| P5   | Р           | G1  | 0500 | 0530 | 0.50 | 966.0m | Cleared excess equipment from drillfloor.   |  |  |  |
| P6   | Р           | G13 | 0530 | 0800 | 2.50 | 966.0m | Rigged up to run riser and BOPs.  |  |  |  |
| P6   | Р           | G13 | 0800 | 1030 | 2.50 | 966.0m | Made up 2 x 50ft riser lengths.   |  |  |  |
| P6   | Р           | G13 | 1030 | 1300 | 2.50 | 966.0m | Skidded BOP to moonpool and made up double riser section to LMRP.   |  |  |  |
| P6   | TP<br>(SS)  | G13 | 1300 | 2030 | 7.50 | 966.0m | Attempted to release BOP from Test Stump on carrier. Unable to release H4 connector from Test Stump. Troubleshot H4 connector while continuing to work at separating BOP from test stump on carrier. Confirmed the open/close displacement volumes correct. |  |  |  |





| Phse | Cls<br>(RC) | Ор  | From | То   | Hrs  | Depth  | Activity Description   |
|------|-------------|-----|------|------|------|--------|--|
|      |             |     |      |      |      |        | Disconnected riser double from LMRP and attempted to release H4 connector by "rocking" the Test Stump with tuggers - no go. Pressured up below shear rams and test stump - H4 connector released and separated with 400 psi. |
| P6   | TP<br>(SS)  | G13 | 2030 | 2100 | 0.50 | 966.0m | Reconnected riser double to LMRP.  |
| P6   | Р           | G13 | 2100 | 2400 | 3.00 | 966.0m | Installed guide lines to BOP. Prepared umbilical lines and installed BOP beacon. Subsea engineer checked and functioned H4 connector.  |

# Operations For Period 0000 Hrs to 0600 Hrs on 07 Dec 2009

| Phse     | Cls<br>(RC)     | Ор         | From         | То           | Hrs          | Depth            | Activity Description   |
|----------|-----------------|------------|--------------|--------------|--------------|------------------|--|
| P6<br>P6 | P<br>TP<br>(SS) | G13<br>G13 | 0000<br>0100 | 0100<br>0600 | 1.00<br>5.00 | 966.0m<br>966.0m | Prepared BOP on carrier. Secured yellow and blue pod umbilical hoses to BOP.  Leak observed on yellow pod umbilical hose between outer sheath and control hoses.  Subsea Engineer removed hose connector block from yellow POD and investigated same. Hoses live at time of leak were tested. No leak found. Connector block reconnected to yellow POD and lines functioned - no leak. |

# **Operations For Period Hrs to Hrs on**

| Phase Data to 2400hrs, 06 Dec 2009 |           |             |             |            |             |           |  |  |  |  |  |
|------------------------------------|-----------|-------------|-------------|------------|-------------|-----------|--|--|--|--|--|
| Phase                              | Phase Hrs | Start On    | Finish On   | Cumul. Hrs | Cumul. Days | Max Depth |  |  |  |  |  |
| Mob/Demob(P1)                      | 23.5      | 29 Nov 2009 | 30 Nov 2009 | 23.50      | 0.979       | 0.0m      |  |  |  |  |  |
| Conductor Hole(P2)                 | 33.5      | 30 Nov 2009 | 01 Dec 2009 | 57.00      | 2.375       | 158.0m    |  |  |  |  |  |
| Conductor Casing(P3)               | 19        | 01 Dec 2009 | 02 Dec 2009 | 76.00      | 3.167       | 158.0m    |  |  |  |  |  |
| Surface Hole(P4)                   | 65.5      | 02 Dec 2009 | 06 Dec 2009 | 141.50     | 5.896       | 966.0m    |  |  |  |  |  |
| Surface Casing(P5)                 | 31        | 04 Dec 2009 | 06 Dec 2009 | 172.50     | 7.188       | 966.0m    |  |  |  |  |  |
| BOPs/Risers(P6)                    | 18.5      | 06 Dec 2009 | 06 Dec 2009 | 191.00     | 7.958       | 966.0m    |  |  |  |  |  |

| WBM Data     |            |                        | Cost Today |          |               |     |           |                         |
|--------------|------------|------------------------|------------|----------|---------------|-----|-----------|-------------------------|
| Mud Type:    |            | API FL:                | CI:        | 1300mg/l | Solids(%vol): |     | Viscosity | 58sec/qt                |
|              | PHB/Guar   | Filter-Cake:           | K+C*1000:  |          | H2O: 9        | C0/ | PV        | 12cp                    |
|              | gum Sweeps | Filler-Cake.           | K+C 1000.  |          | П2О.          | 070 | YP        | 36lb/100ft <sup>2</sup> |
| Sample-From: | PIT 2      | HTHP-FL:               | Hard/Ca:   |          | Oil(%):       |     | Gels 10s  | 10                      |
|              |            | HTHP-cake:             | MBT:       | 15       | Sand:         |     | Gels 10m  | 16                      |
| Time:        | 2145       | HIMP-cake.             | IVID I .   | 15       | Sand.         |     | Fann 003  | 14                      |
| Weight:      | 8.80ppg    |                        | PM:        |          | pH:           | 9   | Fann 006  | 16                      |
|              | олоорру    |                        | PF:        |          | PHPA:         |     | Fann 100  | 5                       |
| Temp:        |            |                        | ΓΙ.        |          | FUEA.         |     | Fann 200  | 40                      |
| Comment      |            | Note: Costs are in AUD | •          |          | •             |     | Fann 300  | 48                      |
|              |            |                        |            |          |               |     | Fann 600  | 60                      |

| Bulk Stocks        |       |    |      |        |         |  |  |  |  |
|--------------------|-------|----|------|--------|---------|--|--|--|--|
| Name               | Unit  | In | Used | Adjust | Balance |  |  |  |  |
| Rig Fuel           | m3    | 0  | 22   | 0      | 348.0   |  |  |  |  |
| Drill Water        | m3    | 0  | 66   | 0      | 460.0   |  |  |  |  |
| Pot Water          | m3    | 15 | 25   | 0      | 254.0   |  |  |  |  |
| Brine              | m3    | 0  | 0    | 0      | 180.0   |  |  |  |  |
| Cement class \'G\' | MT    | 0  | 0    | 0      | 158.5   |  |  |  |  |
| Barite             | MT    | 0  | 0    | 0      | 125.9   |  |  |  |  |
| Bentonite          | MT    | 0  | 0    | 0      | 33.0    |  |  |  |  |
| BIOCIDE            | can   | 0  | 0    | 0      | 8.0     |  |  |  |  |
| Baradefoam-W300    | cans  | 0  | 0    | 0      | 7.0     |  |  |  |  |
| XANTHUM GUM        | sxs   | 0  | 0    | 0      | 110.0   |  |  |  |  |
| Barolift           | box   | 0  | 0    | 0      | 16.0    |  |  |  |  |
| Barofibre          | sxs   | 0  | 0    | 0      | 40.0    |  |  |  |  |
| Barofilm/Petrofree | sxs   | 0  | 0    | 0      | 40.0    |  |  |  |  |
| Caustic Soda       | can   | 0  | 0    | 0      | 11.0    |  |  |  |  |
| Circal 60/16       | Sacks | 0  | 0    | 0      | 149.0   |  |  |  |  |
| Circal Y           | sxs   | 0  | 0    | 0      | 91.0    |  |  |  |  |
| Citric Acid        | sxs   | 0  | 0    | 0      | 32.0    |  |  |  |  |
| Clayseal +         | Drums | 0  | 0    | 0      | 46.0    |  |  |  |  |
| DEFOAMER           | sxs   | 0  | 0    | 0      | 126.0   |  |  |  |  |
| EZ-SPOT            | Drum  | 0  | 0    | 0      | 5.0     |  |  |  |  |





| Bulk Stocks        |         |    |      |        |         |  |  |  |  |  |
|--------------------|---------|----|------|--------|---------|--|--|--|--|--|
| Name               | Unit    | In | Used | Adjust | Balance |  |  |  |  |  |
| EZ-MUD             | pail    | 0  | 0    | 0      | 121.0   |  |  |  |  |  |
| Gel                | sxs     | 0  | 0    | 0      | 123.0   |  |  |  |  |  |
| Milpac - LV        | sxs     | 0  | 0    | 0      | 36.0    |  |  |  |  |  |
| N-DRILL HT +       | sxs     | 0  | 0    | 0      | 105.0   |  |  |  |  |  |
| ОВМ                | sxs     | 0  | 0    | 0      | 6.0     |  |  |  |  |  |
| OXYGON             | can     | 0  | 0    | 0      | 33.0    |  |  |  |  |  |
| Pipe-Lax W         | sxs     | 0  | 0    | 0      | 87.0    |  |  |  |  |  |
| POTASSIUM CHLORIDE | MT      | 0  | 0    | 0      | 33.0    |  |  |  |  |  |
| кон                | can     | 0  | 0    | 0      | 44.0    |  |  |  |  |  |
| SOBM               | sxs     | 0  | 0    | 0      | 18.0    |  |  |  |  |  |
| Soda Ash           | sxs     | 0  | 0    | 0      | 0.0     |  |  |  |  |  |
| Sodium Bicarbonate | sxs     | 0  | 0    | 0      | 38.0    |  |  |  |  |  |
| SALT FINE          | pail    | 0  | 0    | 0      | 32.0    |  |  |  |  |  |
| Surface Water      | sxs     | 0  | 0    | 0      | 40.0    |  |  |  |  |  |
| Foaming Agent      | sxs     | 0  | 0    | 0      | 40.0    |  |  |  |  |  |
| Generic Mesh 24    | Screens | 0  | 0    | 0      | 12.0    |  |  |  |  |  |
| Techmesh 84        | Screens | 0  | 0    | 0      | 8.0     |  |  |  |  |  |
| Techmesh 110       | Screens | 0  | 0    | 0      | 24.0    |  |  |  |  |  |
| Techmesh 140       | Screens | 0  | 0    | 0      | 16.0    |  |  |  |  |  |
| Techmesh 175       | Screens | 0  | 0    | 0      | 7.0     |  |  |  |  |  |
| Lime               | sxs     | 0  | 0    | 0      | 42.0    |  |  |  |  |  |

| Pu                      | ımps                 |               |            |         |              |              |               |                |               |                |          |                 |  |                |    |  |                |
|-------------------------|----------------------|---------------|------------|---------|--------------|--------------|---------------|----------------|---------------|----------------|----------|-----------------|--|----------------|----|--|----------------|
| Pump Data - Last 24 Hrs |                      |               |            |         |              |              |               | Slow Pump Data |               |                |          |                 |  |                |    |  |                |
| No.                     | Туре                 | Liner<br>(in) | MW<br>(sg) | Eff (%) | SPM<br>(SPM) | SPP<br>(psi) | Flow<br>(gpm) | Depth<br>(m)   | SPM1<br>(SPM) | SPP1F<br>(psi) | low1(gpr | n)SPM2<br>(SPM) |  | Flow2<br>(gpm) |    |  | Flow3<br>(gpm) |
| 1                       | Continental<br>Emsco | 6.50          | 1.05       | 97      | 67           | 1900         | 335           |                | 30            |                | 252      | 40              |  | 336            | 50 |  | 420            |
| 2                       | Continental<br>Emsco | 6.50          | 1.05       | 97      | 66           | 1900         | 330           |                | 30            |                | 252      | 40              |  | 336            | 50 |  | 420            |
| 3                       | Continental<br>Emsco | 6.50          | 1.05       | 97      | 67           | 1900         | 335           |                | 30            |                | 252      | 40              |  | 336            | 50 |  | 420            |

| Casing |           |                   |   |  |  |  |  |  |  |  |
|--------|-----------|-------------------|---|--|--|--|--|--|--|--|
| OD     | LOT / FIT | Csg Shoe (MD/TVD) | Cementing   |  |  |  |  |  |  |  |
| 30 "   | 1         | 156.80m / 156.80m | 265bbl 15.9ppg G cement slurry pumped.<br>Used: 1271sx of G cement - 160bbls of mix water.<br>Yield 1.17 ft3/sx<br>Ratio 5.20gal/sx   |  |  |  |  |  |  |  |
| 13.38  | /         | 961.00m / 961.00m | 460bbl of 11.5 ppg lead cement slurry. (Used: 387bbl SW mix fluid, 858 sx class G cement. Yield, 18.96 gal/sk - 3.01 ft3/sk) 66.8bbl of 15.8 ppg tail cement slurry (Used: 39.5bbl fresh water mix, 323sx class G cement. Yield, 5.12 gal/sk - 1.16 ft3/sk) |  |  |  |  |  |  |  |

| Personnel On Board    |     |  |  |  |  |  |  |
|-----------------------|-----|--|--|--|--|--|--|
| Company               | Pax |  |  |  |  |  |  |
| ADA                   | 4   |  |  |  |  |  |  |
| Maersk                | 36  |  |  |  |  |  |  |
| GRN                   | 5   |  |  |  |  |  |  |
| OMS                   | 21  |  |  |  |  |  |  |
| Dril-Quip             | 2   |  |  |  |  |  |  |
| Geoservices           | 4   |  |  |  |  |  |  |
| Halliburton Cementers | 3   |  |  |  |  |  |  |
| Halliburton (Baroid)  | 2   |  |  |  |  |  |  |
| Sperry Sun            | 2   |  |  |  |  |  |  |
| Fugro ROV             | 6   |  |  |  |  |  |  |
| PCS                   | 3   |  |  |  |  |  |  |
| Reach                 | 1   |  |  |  |  |  |  |
| Other Contractor      | 1   |  |  |  |  |  |  |



**Vessel Name** 



Bulks

| Personnel On Board |          |
|--------------------|----------|
|                    | Total 90 |

Arrived (Date/Time)

| Mud Volumes, Mud Losses and Shale<br>Shaker Data |           |                          |        | Engineer : Jay Wan / Kosta Georgiou |             |           |          |
|--|-----------|--------------------------|--------|-------------------------------------|-------------|-----------|----------|
| Available  | 2705.1bbl | Losses                   | 0.0bbl | Equipment                           | Description | Mesh Size | Comments |
| Active   | 55.0bbl   | Downhole                 |        |                                     |             |           |          |
| Mixing   | 1477.0bbl | Surf+ Equip              | 0.0bbl |                                     |             |           |          |
| Hole   | 983.1bbl  | Dumped                   |        |                                     |             |           |          |
| Slug   |           | De-Gasser                |        |                                     |             |           |          |
| Reserve<br>Kill                                  |           | De-Sander<br>De-Silter   |        |                                     |             |           |          |
| PAD MUD  | 190.0bbl  | Centrifuge               |        |                                     |             |           |          |
|  |           | Pumped<br>Sweep/Displace |        |                                     |             |           |          |

| Marine        |            |              |            |              |             |                  |             |             |                |
|---------------|------------|--------------|------------|--------------|-------------|------------------|-------------|-------------|----------------|
| Weather on 06 | 6 Dec 2009 |              |            |              |             |                  |             | Rig Support |                |
| Visibility    | Wind Speed | Wind Dir.    | Pressure   | Air Temp.    | Wave Height | Wave Dir.        | Wave Period | Anchors     | Tension (klb)  |
| 10.0nm        | 10kn       | 282.0deg     | 1011.0mbar | 13C°         | 1.0m        | 240.0deg         | 5s          | 1           | 134.0          |
| Heave         | Pitch      | Roll         | Rig Dir.   | Ris. Tension | VDL         | Weather Comments |             | 2           | 115.0          |
| 1.0m          | 0.9deg     | 1.4deg       | 315.0deg   | 0.00klb      | 1100.00klb  | Calm             |             | 3<br>4      | 190.0<br>125.0 |
| Swell Height  | Swell Dir. | Swell Period |            | Comments     |             |                  |             | 5           | 170.0          |
| 1.3m          | 240.0deg   | 5s           |            |              |             |                  |             | 6           | 190.0          |
|               |            |              |            |              |             |                  |             | 7           | 160.0          |
|               |            |              |            |              |             |                  |             | 8           | 160.0          |

Status

Departed (Date/Time)

| Far Scimitar                            |                 | 19:10 - 5/12/09 | In Port               | Item  | Unit                     | Used | Quantity        |
|---|-----------------|-----------------|-----------------------|---|--------------------------|------|-----------------|
|   |                 |                 |                       | Rig Fuel  | M3                       |      | 712             |
|   |                 |                 |                       | Potable Water                                   | M3                       |      | 130             |
|   |                 |                 |                       | Drill Water                                     | M3                       |      | 637             |
|   |                 |                 |                       |   | t                        |      | 0               |
|   |                 |                 |                       | Barite  | t                        |      | 0               |
|   |                 |                 |                       | Bentonite                                       | t                        |      | 0               |
|   |                 |                 |                       | Brine   | M3                       |      | 45              |
|   |                 |                 |                       | Mud   | bbl                      |      | 0               |
| Bunkers commenced a<br>Completed: 21:16 | at 19:52        |                 |                       |   |                          |      |                 |
|   | 19:15 - 4/12/09 |                 | Standby at Kan Tan IV | Item  | Unit                     | Used | Quantity        |
| Completed: 21:16                        |                 |                 | Standby at Kan Tan IV | Item<br>Rig Fuel                                | Unit<br>M3               | Used | Quantity<br>591 |
| Completed: 21:16                        |                 |                 | Standby at Kan Tan IV |   |                          | Used | -               |
| Completed: 21:16                        |                 |                 | Standby at Kan Tan IV | Rig Fuel  | M3                       | Used | 591             |
| Completed: 21:16                        |                 |                 | Standby at Kan Tan IV | Rig Fuel<br>Pot Water                           | M3<br>M3                 | Used | 591<br>304      |
| Completed: 21:16                        |                 |                 | Standby at Kan Tan IV | Rig Fuel<br>Pot Water<br>Drill Water            | M3<br>M3                 | Used | 591<br>304      |
| Completed: 21:16                        |                 |                 | Standby at Kan Tan IV | Rig Fuel Pot Water Drill Water Bentonite Barite | M3<br>M3<br>M3<br>t<br>t | Used | 591<br>304      |
| Completed: 21:16                        |                 |                 | Standby at Kan Tan IV | Rig Fuel Pot Water Drill Water Bentonite        | M3<br>M3                 | Used | 591<br>304      |