

#### **MEO Australia Limited**

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## **ASX AND MEDIA RELEASE**

### HERON-2 WELL WEEKLY DRILLING REPORT - No 11

## **Key Points:**

- Current 6 inch hole depth: 4182m
- Preparing to log well

MELBOURNE, AUSTRALIA (December 27, 2007) -- MEO Australia Limited (ASX: MEO) submits this drilling report for the period ending 0900 hours, December 27, 2007. The Heron-2 well was spudded at 2230 hours (ACST) on October 12, 2007 in Exploration Permit, NT/P68.

The rig has drilled the 6 inch hole to a depth of 4182m and is continuing to record significant mud gas readings in the Plover formation target reservoir. The well has sustained significant mud losses from increased permeability, possibly due to fracture/fault development in the section. The losses have been controlled by LCM (loss circulation material) treatment and mud weight reduction to 1.115 SG or 9.3 ppg. The rig is preparing to run logs. The joint venture partners expect to review log data and then decide to either continue drilling at reduced mud weights to the prognosed total depth of 4300m or commence production testing.

The participants in the well are:

TSP Arafura Petroleum Pty Ltd (MEO subsidiary)	45%
Oz-Exoil Pty Ltd (MEO subsidiary)	45%
Petrofac Energy Developments Oceania Ltd (Petrofac Limited subsidiary)	10%

Heron-2 is being drilled by Seadrill's West Atlas jack-up rig contracted to MEO for two firm wells and one option well. The Heron-2 well is designed as a vertical well to penetrate and production test the Epenarra Darwin Formation and the deeper Elang/Plover Formation of the Heron North structure.

The Heron-1 well drilled by ARCO in 1972 intersected a 52m gas bearing column in the Darwin Formation (a fractured carbonate reservoir) within the 1,200 square km mapped closure of the large Epenarra structure. Heron-1 also reached a gas charged zone in the deeper underlying Elang/Plover horizon, which is a secondary objective for the Heron-2 well.

C.R. Hart, Managing Director

MEO Australia Limited, NT/P68 Operator

### **HERON-2 WELL**

## **DETAILS**

Licence: **NT/P68** 

**Operator: MEO Australia Limited** 

Rig: Seadrill West Atlas jack-up

Surface location: Latitude: 10 deg 25 min 12.443 sec

Longitude: 128 deg 56 min 20.155 sec

Datum: GDA94

**Seawater Depth:** 35 m LAT

Spud Date: 2200 hours (ACST), October 12, 2007

**Target Strata:** Primary: **Darwin Formation; Facies C** 

Secondary: Elang/Plover Formation

**Total Depth:** 4334 metres (MDRT)

(MD - measured depth below the rig's rotary table - RT)

**Primary Target Depth:** Top Darwin Fm 3124 metres (MDRT)

**Secondary Target Depth:** Top Elang/Plover Fm 3944 metres (MDRT)

**Designated Authority: Northern Territory Department of Primary** 

**Industry, Fisheries and Mines** 

**Reservoir Objectives:** Darwin Formation: Determine the development of

> intergranular porosity; the presence a fracture system; the effectiveness of the fracture system in accessing the porosity, delivering hydrocarbons to the well bore on production; and the liquids content of the gas

(condensate & LPG) and the levels of C02, H2S and

mercury.

Elang/Plover Formation: Determine the presence or otherwise of hydrocarbons (gas/condensate); reservoir properties including intergranular porosity and fracturing; the effectiveness of the fracture system to access porosity and deliver hydrocarbons to the well bore on production; and the level of CO2 and H2S in the

gas.

**Production Objectives:** In a success case, separate cased hole tests are planned

for the Elang/Plover and Darwin Formations.

Well Design: Heron-2 is a vertical well. The well design is to drill a 36"

hole to 107m and set a 30" conductor. A 20" surface

casing will be set at approximately 1100m in a 26" hole drilled to 1110m. A 13\%" intermediate casing will be set in a 17\%" hole drilled to 2210m. Drill a 12 \%" vertical hole down to just below the Darwin Formation (3344m) and log and case. After setting 9 5/8" casing, drill 8 \%" hole to TD in the Plover Formation and log. Depending on success both Plover and Darwin Formations will be tested separately.

Heron-2 is being planned as a high pressure/high temperature (HPHT) well, based on the conditions encountered at the nearby offset well, Heron-1. The HPHT criteria being:

- Maximum possible surface pressures exceed 10,000 psi;
- Maximum anticipated bottom-hole temperatures exceeds 150°C

## **MEO Pre-Drill Estimates**

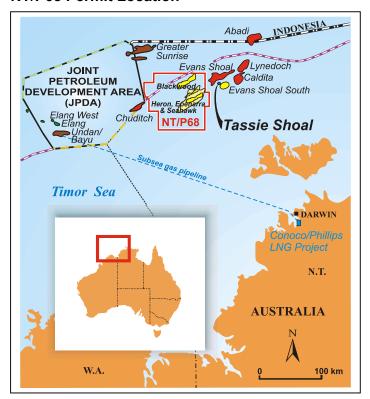
Target Reservoir	Gas-in-Place Mean Contingent Resource <sup>1</sup>	Recoverable Mean Gas Contingent Resource <sup>1</sup>
Epenarra:		
Darwin Formation facies C	5620 Bcf	3200 Bcf
Heron North:		
Elang/Plover Formation	3790 Bcf	2650 Bcf
Heron South:		
Elang/Plover Formation	1750 Bcf	1225 Bcf

Note 1: Contingent Resource are those resources which relate to quantities of petroleum (oil or gas) which are estimated, on a given date, to be potentially recoverable from a known accumulation but which are not currently considered to be commercially recoverable. Contingent Resources may include, for example, accumulations for which there is currently no viable market, or where commercial recovery is dependent on the development of new technology, or where evaluation of the accumulation is still at an early stage.

# **Summary of potential**

The joint venture has conducted a series of geoscientific studies to better define the nature of the potential gas accumulation in Epenarra and the probability for commercial deliverability. These included charge and migration modelling, regional tectonic stress regimes and fracture modelling, well-bore stability and hydrocarbon inclusion testing. CSIRO Petroleum was engaged to conduct hydrocarbon inclusion and Raman Laser microprobe testing on cutting and core samples obtained through the gas charged zones within Facies C of the Darwin Formation identified in the Heron-1 well. The CSIRO study confirmed that the hydrocarbon inventory in Epenarra would most likely have a high condensate gas ratio (CGR) (~100bbls/MMscf) and contain low levels of CO<sub>2</sub> (1% to 3%). Based on the Contingent Resource estimate for gas in Epenarra above, the recoverable mean Contingent Resource for condensate based on a CGR of 80 bbls/MMscf is estimated at 234 MMbbls.

## **NT/P68 Permit Location**



### Schematic showing target horizons and Heron-2, Heron-3 and Blackwood-1 well locations

