

**Approved Determination of Exploration Well (ADEW)**

BU/PU: GoMX DW

License: MC 252

Well name: Macondo - 1 (MC252 #1)

Spud date: 6 Oct 2009 (Marianas rig spud date; the Horizon took over on 11 Feb 2010)

Horizon Incident date: 20 April 2010

Date of completion of drilling operations: 9 April 2010

Estimated well cost: \$151m (\$88m net bp) (pre-drill AFE gross: \$96m)

**Well objectives:**

The Macondo well was drilled to test an amplitude supported channel feature draped across a 4-way closure in Mississippi Canyon. The targets were Miocene sandstones (M56) with total net pay thickness of 60-95-120 feet (P90-Mean-P10) at the target location and pre-drill gross resource of 40-64-94 mmboe (P90-Mean-P10) at 67% CoS.

**Well outcome:**

The well reached a total depth of 18,360 feet MD in the M55 section and encountered oil pay in the Miocene sands (M56) with approximately 92' of net pay, very close to the pre-drill prediction. Drilling performance was poor, with costs above AFE and performance of 79 days/10k, due to narrow drilling margin and 4 non-productive time events (2 kicks, 2 loss zones, 1 sidetrack). The M56 sands have average porosity of 22%, within predicted range of 17-23-28. Early information on oil properties shows 35 API and 3000 GOR. The thickness and quality of the reservoir were determined from wireline logs, and fluid properties were determined from MDT sampling. Sidewall cores were taken. There is one main pay sand (64 feet net pay) with two side lobes and no hydrocarbon/water contacts. The well came in very close to prognosis, so the gross oil discovered resources are expected to be within the predicted 40-64-70 mmbo range and the gross discovered oil drainable from the BP MC252 lease within 32-51-75 mmbo. The unknown hydrocarbon/water contacts cause size and development uncertainty.

**Forward plan for well:**

The response continues on the Macondo incident. The main focus is on stopping the uncontrolled flow from the blow-out preventer, and the ultimate solution hinges on the relief wells currently being drilled.

After the well is under control, the exploration team will conduct the RAM/RROS process, and the Macondo discovery board will recommend whether the field should remain in exploration for resource appraisal or be handed over to the Pompano team for development.

**Recommendation:**

It is recommended that Macondo - 1 be classified a commercial discovery.

Proposed: \_\_\_\_\_

Jay Thorseth, GoM DW CoreX Manager

\_\_\_\_\_  
Date

Approved: \_\_\_\_\_

Michael Daly, Head of Exploration and Access

\_\_\_\_\_  
Date

