



Macondo Technical Note

Title: Depleted Pressure
 Contributors:
 Issued by:
 Date: July 1, 2010
 Version: C – DRAFT

Question Addressed in this Technical Note:

Discussions with the National Laboratories and other teams has resulted in a request for an estimated reservoir pressures for the Macondo field. This note provides the reservoir pressures calculated for the case in which the reservoir has produced at constant 35,000 stb/d from 20-April to 1-July.

Key Conclusions

Well Block Pressures at shut-in on 1-July-2010

Depletion 35mbd from 4/20/2010 (cumulative prodn: 2.52 mmstb total production)

Reservoir Section	Top Depth ft(TVDSS)	Near Well Pressure psia	Reservoir Pressure psia	Comment
M110	8,969	4,730	4,730	gas sand at 18" shoe (depth of 18" shoe)
M57B	17,381	10,875	11,567	gas sand (cross flow)
M57C	17,614	11,397	12,875	gas sand (cross flow)
M56A	17,718	10,248	9,895	gas sand (cross flow)
M56B	17,890	10,846	10,878	water sand (little flow)
M56C	17,944	11,059	11,771	water sand (little flow)
M56D	17,981	10,921	11,539	oil sand
M56E	18,034	10,842	11,258	Main Oil Sand (on which 11,850 psia is based)
M56F	18,132	10,939	11,524	oil sand

Note: all pressures hydrocarbon pore volume weighted at mid-point of reservoir layer

These calculations were repeated with crossflow between the deep sands and the M110. For the purposes of this exercise the M110 sands were made effectively "infinite" (using a pore volume multiplier) to minimize the impact of increasing reservoir pressure: