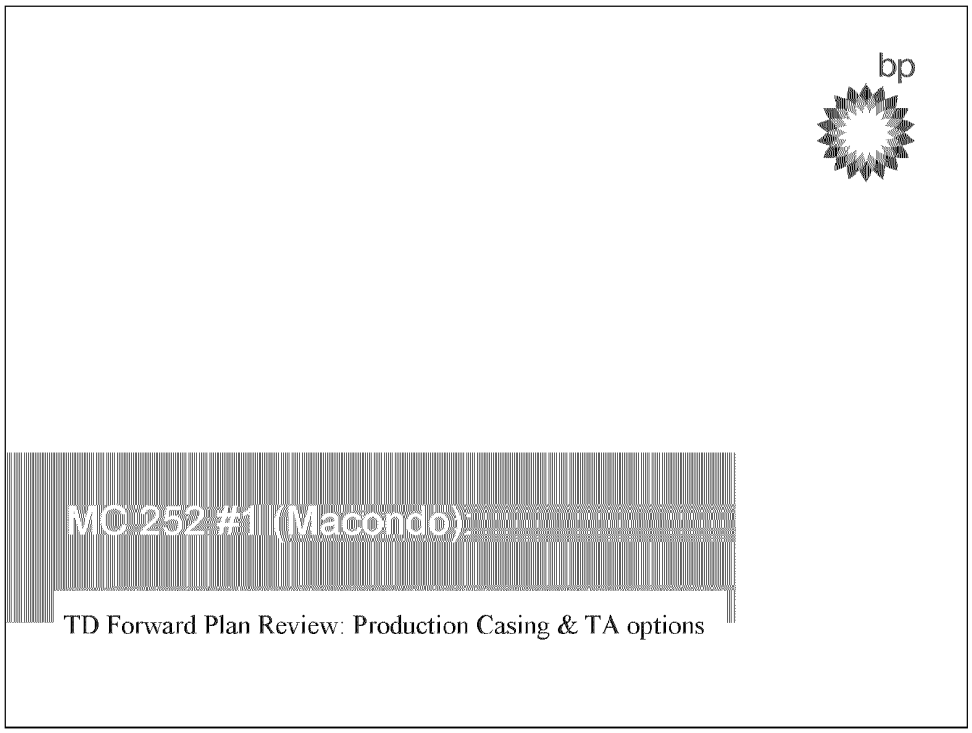
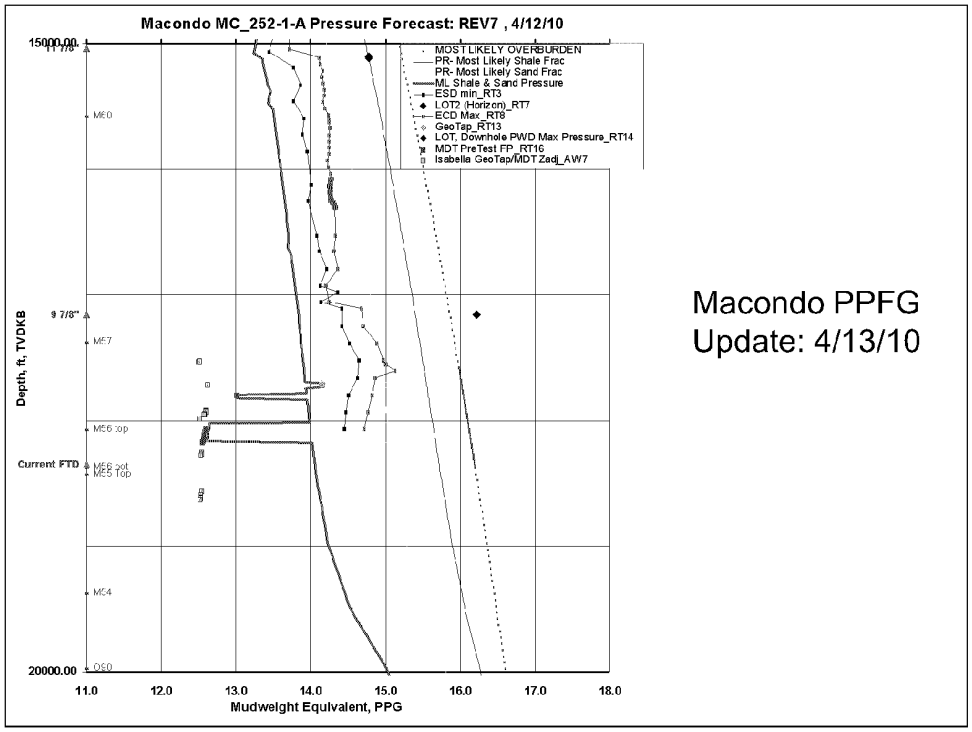
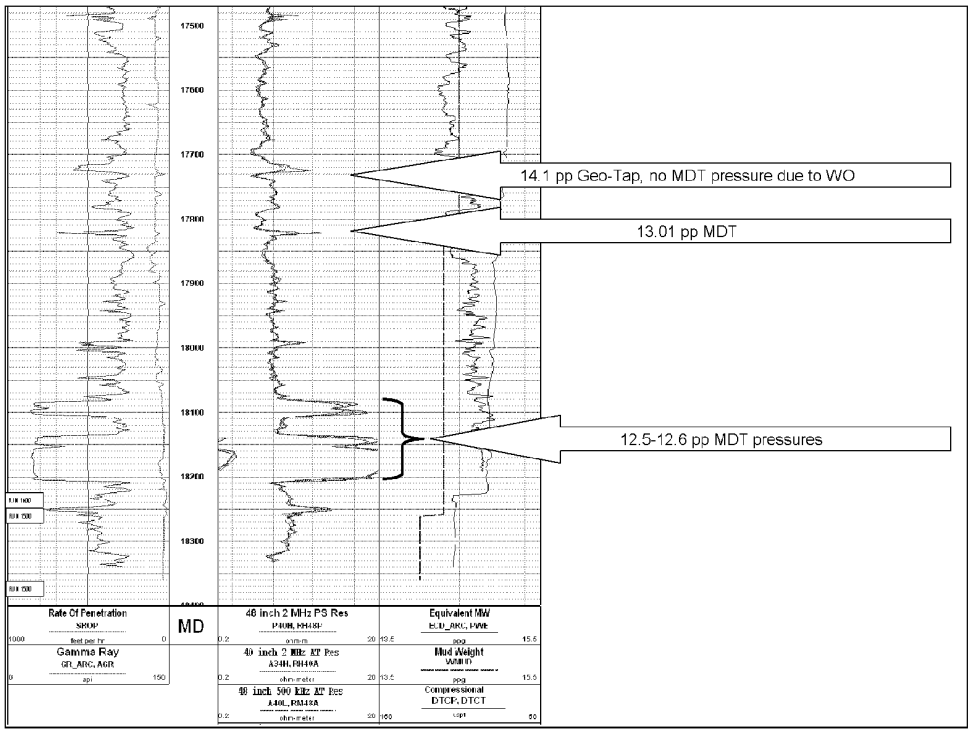
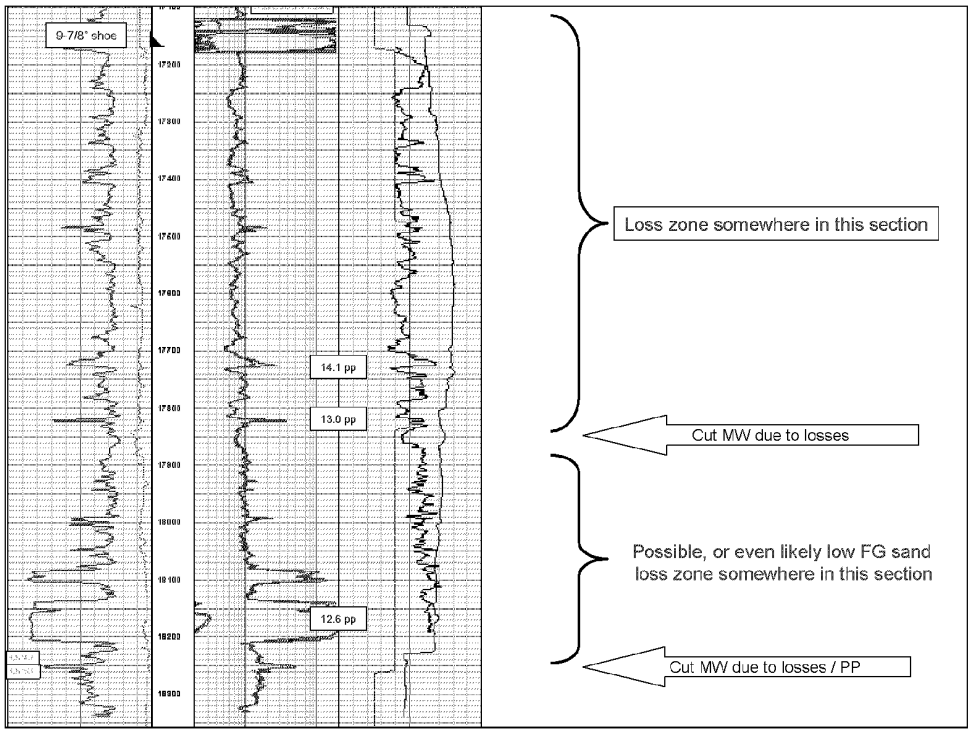
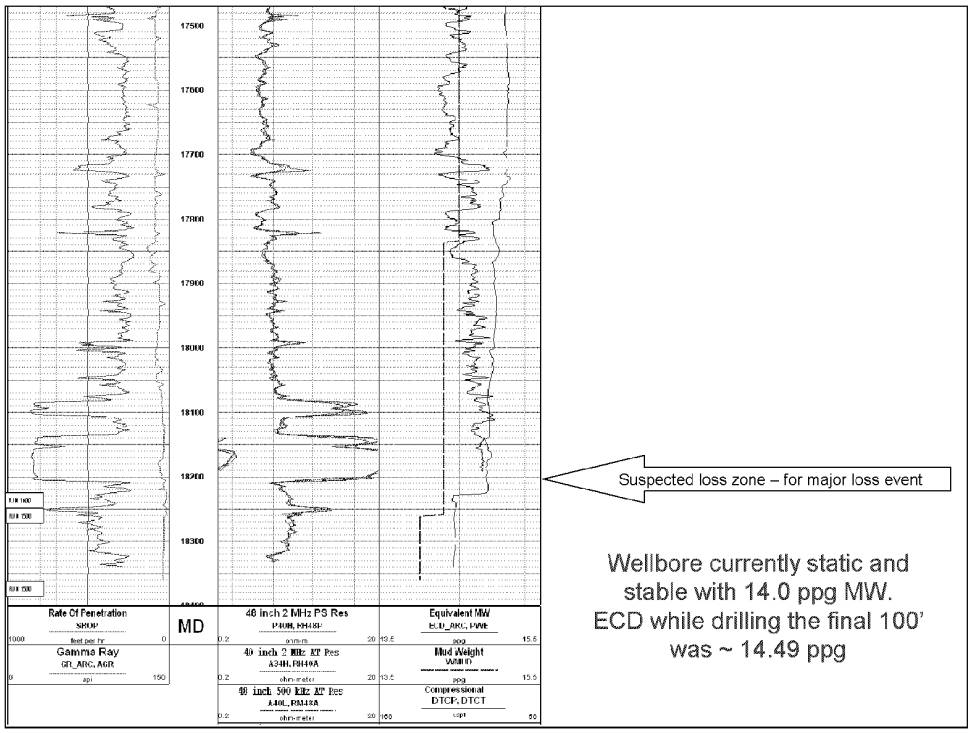




Macondo PPFG
Update: 4/13/10







"KeeperWell" options…

- Long string of 9-7/8" x 7" casing *is again* the primary option…
  - Cement simulations indicate it is possible to obtain a successful cement job.
  - It is possible to fulfill MMS regulations of 500' of cement above top HC zone (thought to be 17,803')
  - Some risk, if losses occur, to have and open annulus to wellhead, with HC zone(s) open to 9-7/8" seal assembly as only barrier.
  - Potential need to verify TOC with USIT log and perform remedial cement job prior to TA if losses occur during cement job. May also need to obtain a BP / MMS dispensation for TOC.
  - Best economic case and well integrity case for future completion operations.

"KeeperWell" options…

- 7" Liner (with 7" x 9-7/8" XO x 11-7/8" Versaflex hanger) is now the *contingency* option…
  - Use this option if losses or hole stability problems occur during the conditioning run with 8-1/2" bit and bha.
  - Less issue with landing it shallow (we can also ream it down)
  - Can run it to bottom, if bridge at 18,280' seen during logging reappears.
  - Liner hanger acts as second barrier for HC in annulus if losses occur during cement job.
  - Primary cement job has slightly higher chance for successful cement lift due to lower ECD.
  - Remedial cement job, if required, easier to justify to be left for later due to liner top seal acting as second barrier.

"KeeperWell" options...

- Plug open hole and TA well (*least preferred*, but still an option if hole conditions go south)
  - Minimizes today's dollars and NPT exposure.
  - All primary well objectives have been achieved.
  - Increases cost to completion by $10 - $15 MM+ for drilling plugs, re-drilling production hole, re-logging.

9 7/8" X 7" Prod Casing