Opinion #1: BP’s concern that one or more collapse disks could be open was reasonable.

BP’s concern that one or more of the collapse disks in the 16” Liner might be open had significant implications for the future direction of the Response. This concern was reasonable. During the initial blowout of the well, while hydrocarbons were exiting at the rig floor and there was not a large pressure drop across the BOP stack (i.e., the BOP was not fully closed), there could have been sufficient inward-acting differential pressure for one or more collapse disks to open. These conditions could have existed at any time between the point when hydrocarbons first reached the rig floor and the point when the Deepwater Horizon sank into the Gulf of Mexico, taking the Macondo riser with it. Once the Macondo well was discharging to the sea instead of the atmosphere, the pressure conditions that might have caused the collapse disks to open no longer existed.

Blowout Flow Path Scenarios

The rupture disks could only have opened if there was hydrocarbon flow through the annulus, which we now know did not occur. However, at the time of the analyses examined in this report, the flow path was uncertain. Hydrocarbons could have been flowing up the Macondo wellbore and into the environment via any one of three possible paths. Those paths were:

“Casing Flow” - Flow up the Production Casing
“Annular Flow” - Flow in the annulus behind the Production Casing
“Combined Flow” - Some combination of the Casing and Annular Flow scenarios

17 BP-H2N-2179MDL05760839 at 0641 (Disk Rupture and Communication with the 18 in. Shoe, May 29, 2010).