
Dr. Johnson's Principal Opinions

- **The Government's hydraulic methods cannot be used to calculate a cumulative release from Macondo to a reasonable degree of engineering certainty.**
 - The inputs required for a proper hydraulic model are complex and change over time.
 - Applying constant values derived on July 15 to all prior days does not account for known and unknown changes in the system, and results in erroneous and uncertain cumulative estimates.
- **Additionally, Dr. Griffiths:**
 - Does not account for alternative productivity index (PI) profiles.
 - Inaccurately estimates BOP pressures when there is no PTB data (pre-May 8) and inaccurately interprets PTB data in his "best estimate" after May 8.
 - Inaccurately estimates a decreasing flow rate trend by failing to model multiphase effects in the actual dual flow paths caused by the drillpipe.
 - Presents a false validation of his best estimate by comparing it to methods that use the same constant values.
- **Additionally, Dr. Dykhuizen:**
 - Provides unreliable Top Hat estimates.
 - Provides unreliable Top Kill estimates.