

Preliminary Conclusions – Technical

- Flow path was exclusively through shoe track and up through casing.
- Cement (potentially contaminated or displaced by other materials) in shoe track and in some portion of annular space failed to isolate hydrocarbons.
- Pre-job laboratory data should have prompted redesign of cement slurry.
- Cement evaluation tools might have identified cementing failure, but most operators would not have run tools at that time. They would have relied on the negative pressure test.
- Negative pressure test repeatedly showed that primary cement job had not isolated hydrocarbons.
- Despite those results, BP and TO personnel treated negative pressure test as a complete success.
- BP's temporary abandonment procedures introduced additional risk.

Preliminary Conclusions – Technical

- Number of simultaneous activities and nature of flow monitoring equipment made kick detection more difficult during riser displacement.
- Nevertheless, kick indications were clear enough that if observed would have allowed the rig crew to have responded earlier.
- Once the rig crew recognized the influx, there were several options that might have prevented or delayed the explosion and/or shut in the well.
- Diverting overboard might have prevented or delayed the explosion. Triggering the EDS prior to the explosion might have shut in the well and limited the impact of any explosion and/or the blowout.
- Technical conclusions regarding BOP should await results of forensic BOP examination and testing.
- No evidence at this time to suggest that there was a conscious decision to sacrifice safety concerns to save money.