

# Scenarios to Explain Top Kill Results:



## Defining Observations

1. Immediately after pumping ceased, hydrocarbons were seen venting at the kink (plume color at the kinks quickly reverted to brown as previously observed for oil/gas).
2. During the kills, always appeared to have gas entrained at the vents in the kink (similar energy/velocity as oil/gas only, but with a grey color due to mud).
3. During Kills, pressures reduced for a while by a maximum of ca.700 psi (for a fixed rate) independent of the rate though "Flat-Lined".
4. Pressure below BOP recovered back to near starting pressure very rapidly as pumping ceased.
5. Pressure drops across rams in BOP have remained, although they have reduced somewhat.

## Implications

- Hydrocarbon (HC) not displaced very far from wellhead
- HC must have alternate path to mud going in, probably via drill pipe.
- Indicates level is controlling the pressure reduction in well. Coincident w/ rupture disc height.
- HC not displaced/limited mud column built in main flow path.
- Drill pipe (including 3.1/2") is still present. Limited flow path by rams causing minor erosion.