Modeling of system flow behaviour (reservoir to sea)

There are four data points in which we have good confidence... reservoir pressure of ~12000 psi, seabed water pressure of ~2250 psi, fluid properties (bubble point ~6600 psi, gas-oil ratio ~2800 scf/bbl, and fluid composition), and flow path to sea being out of the full bore of the riser.

We are currently less certain of the following aspects, and need to keep abreast of the up-to-date view on each in order to maintain the best available model of the system:

- in-flow performance both prior to incident and after any formation damage that could have occurred during the incident
- flow path from sand face to mud line, whether this is through the drill pipe or up the casing string
- flow path through the BOP stack and into the riser, particularly on the effect of the kink and whether flow is in the drill pipe or in the riser... we are closely connected to the work under way by Julian Austin on modelling both of these flow paths
- flow path through the riser, whether flow remains in the drill pipe for most of the riser until a break in the drill pipe (particularly whether flow is in the drill pipe through the floating riser highpoint), or is discharged into the riser anywhere upstream of the highpoint

inches diam	bbl/day	pressure, psi	
0.25	2523	8557	All Drill string
0.5	9840	8514	
0.75	20888	8170	
1	33184	7472	
2	58384	4964	
5	85171	4179	