

Questions for which National Labs' Assistance Would be Beneficial

1. Question: What is the maximum predicted shut-in pressure at the mudline?  
Requested by Mike Moore at noon meeting, 14 May

This question is already under consideration by several groups, and discussions have been most helpful. Separate calculations from 1 other groups in the National Labs are expected Sunday. Tim is the number one priority.

2. Question: 1) Calculate the mass flow rate through the system for the 4 geometries based on the pressures in the pressure folder and the reservoir properties and other information provided through Chris Cecil in the file named Safety Case Summary - Shallow Gas from the Wellbore folder. We discuss the first two

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4. W  
5. D  
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17. S  
18. E  
19. S  
20. E

**4. We would value an independent review of the dynamic kill pumping schedule. Top kill of the well, if successful, would shut off the well flow more quickly than other options available, but we should only undertake such an operation if we are confident that there exists a window of achievable pump rates and pressures high enough to kill the well but low enough to avoid further damage to the well construction. We envision such a review might include 5 or 6 scientists/engineers from the National Labs holding a range of relevant domain expertise. To allow time to use the outcomes of such a review to inform the forward plan and yet move forward expeditiously to halt the flow of hydrocarbons, we hope such a review might take place on Monday, 17 May. We believe**

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We will endeavour to provide you with the details of the well kill schedule today so that review team members have a chance to understand the problem before they arrive.

Please call me or Kate Baker if you have any questions or require clarification on the above.

With regards

Paul