

**From:** Tieszen, Sheldon R  
**Sent:** Friday, June 04, 2010 10:53 AM  
**To:** Aselage, Terrence L; Lash, Joel; Dimos, Duane B  
**CC:** Thornton, Anthony L; Tieszen, Sheldon R  
**Subject:** FW: 1 June Report from Houston

All,

Ron Dykhuizen and Charlie Morrow are working on an activity for the BP oil spill which may very well be Sandia's signature contribution. Wednesday they gave a briefing to Steven Chu, his science team, national lab representatives in Houston, and BP principal scientists on what the top kill operational data says about the state of the well. (See Tom Hunter's praise below).

BP had concluded (under duress from the government, in the middle of the night, with little to no sleep) that the well casing burst disks had been blown and that the well could not be shut in without failing the formation. This is the nightmare scenario, and to BP's credit, they examined it along with other scenarios and concluded it was likely.

However, there are alternate plausible explanations that in fact may be more likely, and there is reason to believe that further analysis can eliminate the nightmare scenario. If the nightmare scenario holds, there is only one kill option left - the bottom kill from the relief wells, which is 60+ days out. Further, hurricanes will make it extremely difficult, if not impossible, to produce the well during those events. The alternative scenario does not involve blowing the burst disks, and thus allows more options to shut in the well. It also has significant implications to the bottom kill procedures since it assumes the top kill operation fractured the bottom of the well. (BP went all out of the top kill - no half hearted attempt there.)

Ron has worked hard on the BP problem and will deserve some recognition when this is over. You may have noticed his picture on the DOE web site along with Steven Chu in the 1814 conference room at WestLake 4 in Houston. When he arrived back, before he even said hello, he said - why did you tell me to get a hotel room - I did not need it. A joke of course, but more than half true. He has been putting in a lot of hours.

Thank you,

Sheldon

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**From:** Hurst, Kathleen T **On Behalf Of** Hunter, Tom  
**Sent:** Wednesday, June 02, 2010 6:18 PM  
**To:** Dykhuizen, Ronald C; Morrow, Charles W; Tieszen, Sheldon R  
**Cc:** Hunter, Tom; Hurst, Kathleen T  
**Subject:** RE: 1 June Report from Houston

Ron, Charlie, Sheldon,

Excellent job on the analysis. Nicely structured, good logic and very valuable in reaching conclusions.

Thanks,  
Tom

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**From:** Tieszen, Sheldon R  
**Sent:** Tuesday, June 01, 2010 4:08 PM  
**To:** Hunter, Tom; 'Slocum42@gmail.com'; 'slocum42@MIT.edu'; 'Arun.Majumdar@hq.doe.gov'; 'RLG2@us.ibm.com'; 'RGarwin@ostp.eop.gov'; 'gcooper@berkeley.edu'; 'jholdren@ostp.eop.gov'; 'mcnuttt@usgs.gov'; 'Ray\_Merewether@seektech.com'; 'rod.oconnor@hq.doe.gov'; 'schu@hq.doe.gov'  
**Cc:** 'hunsaker61@comcast.net'; Keese, David L; Hurst, Kathleen T; O'Sullivan, Donald Q. (LANL); jack.bullman@nasa.gov; Perfect, Scott A (Lawrence Livermore National Laboratory); Edwards, Michael L; McDonald, W Leith; galkowski1@llnl.gov; Burns, Michael J. (LANL); Tieszen, Sheldon R; O'Sullivan, Donald Q. (LANL); Tatro, Marjorie; Bickel, Thomas C  
**Subject:** 1 June Report from Houston

All,

Attached you will find the Houston daily brief and two technical products from the lab team. Cutting operations are taking longer than expected but making progress.

Thank you,

Sheldon