

FIVE SHOCKING FACTS FROM THE DEEPWATER HORIZON'S FINAL HOURS¹

Beth Buczynski[©]

This morning, the New York Times released a telling compilation of personal accounts² from workers who survived not only the Macondo Well blowout, but also the fire and destruction of the Deepwater Horizon that followed. Although Justice Department has spent countless hours investigating the initial well failure and subsequent oil spill, hardly any attention has been paid to the events that transpired after the explosion--events that claimed the lives of 11 workers and injured many others.

Many say that a rig like the Horizon should have been able to withstand the explosion and fire without sinking or leaking. So why didn't it?

The Times' story "is based on interviews with 21 Horizon crew members and on sworn testimony and written statements from nearly all of the other 94 people who escaped the rig" and is well worth the read. Here are some of the most shocking truths revealed in the Times' investigation:

- (1) Nearly 400 feet long, the Horizon had formidable and redundant defenses against even the worst blowout. It was equipped to divert surging oil and gas safely away from the rig. It had devices to quickly seal off a well blowout or to break free from it. Unfortunately, **when the explosion occurred, the crew were frozen by the sheer complexity of the Horizon's defenses**, and by the policies that explained when they were to be deployed. One emergency system alone was controlled by 30 buttons.
- (2) At critical moments, members of the crew hesitated and did not take the decisive steps needed. **Communications fell apart, warning signs were missed and crew members in critical areas failed to coordinate a response.** For nine long minutes, as the drilling crew battled the blowout and gas alarms eventually sounded on the bridge, no warning was given to the rest of the crew. For many, the first hint of crisis came in the form of a blast wave.
- (3) The Horizon's owner, Transocean, the world's largest operator of offshore oil rigs, had provided the crew with a detailed handbook on how to respond to signs of a blowout. Yet its **emergency protocols often urged rapid action while also warning against overreaction.** Fred Bartlit, chief counsel for the presidential commission that is looking into the Horizon disaster, said Transocean's handbook was "[a safety expert's dream](#)," and yet after reading it cover to cover he struggled to answer a basic question: "How do you know it's bad enough to act fast?"
- (4) Heavy drilling fluid, called mud, kept disappearing into formation cracks. Less mud meant less weight bearing down on the oil and gas that were surging up. This set off violent "kicks" of gas and oil that sent the Horizon's drilling teams scrambling to control the well. **March 8 had been especially bad. A nasty kick had left millions of dollars worth of drilling tools jammed in the well. Operations were halted**

¹ care2 causes daily, December 27, 2010

² David Barstow and Stephanie Saul, Deepwater Horizon's Final Hours, New York Times, December 25, 2010

for nine maddening days. There was still so much gas filtering up in the days leading to the April 20 explosion that cook-outs were suspended on the deck.

- (5) As the dangerous job of drilling the deepwater well drew to a close, **there was one crucial test remaining before the Horizon could plug the Macondo and move on.** To make sure the well was not leaking, the crew would withdraw heavy mud from it and replace it with lighter seawater. Then they would shut in the well to see if pressure built up inside. If it did, that could mean hydrocarbons — oil and gas — were seeping into the well.

In effect, **they were daring the well to blow out.** Designing and interpreting this test — a "negative pressure" test — requires a blend of art and engineering expertise. There are no industry standards or government rules. Designing the test was BP's job, yet the oil company's instructions, e-mailed to the rig that morning, were all of 24 words long.