

From: Little, Ian
Sent: Tue Oct 06 22:16:40 2009
To: Guide, John; Daigle, Keith G
Subject: FW: Deepwater Horizon Rig Audit
Importance: Normal

John,

fyi - I assume these are the same issues that are on the audit list - there are some that were not on Kevan's list, but that is ok. I have talked with Harry and told him we are working with Transocean to close out the actions. We do need to think about how and who can help us to verify that these are closed out. Let's discuss when we go through the list.

Thanks, Ian.

From: Thierens, Harry H
Sent: Tuesday, October 06, 2009 10:10 AM
To: Little, Ian
Subject: Fw: Deepwater Horizon Rig Audit

Sent from my BlackBerry Wireless Handheld

From: Wong, Norman (SUN)
To: Thierens, Harry H; Sprague, Jonathan D
Sent: Tue Oct 06 15:52:08 2009
Subject: Deepwater Horizon Rig Audit

Harry John

As Wells Director and Wells Engineering Authority, I just wanted to bring to your attention the most significant findings from the recent rig audit of the Deepwater Horizon. You may have been made aware of this already but just in case you were not, thought it best you should know. Although I did not perform the audit I am happy to discuss this matter with you.

- Closing out of the last audit recommendations had no apparent verification by BP. Consequently a number of the recommendations that Transocean had indicated as closed out had either deteriorated again or not been suitably addressed in the first instance.
- Control of work issues identified specifically with isolation permit process and integrity of mechanical isolations



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- Overdue planned maintenance considered excessive 390 jobs amounting to 3545 man hours. With the recent move from Empac to RMS II maintenance systems, and revised maintenance, scheduling the back log does not look as though it will improve
- The iron roughneck could not be made to operate from Cyberbase unless the anti collision system was in override
- Top drive guard is not fitted with a safety sling, not only is this an NOV requirement but also a lesson learned from industry incidents, including one on this rig, where the guard had been knocked off due to equipment clash.
- Annual drawworks maintenance routine overdue since February 2009, includes critical checks on the braking system
- Test, middle and upper BOP ram bonnets are original and out with OEM and API five year recommended recertification period.
- The port aft quadrant watertight dampers failed to close when tested
- The starboard aft quadrant bilge and ballast valves, ballast pump and tank sounding system were rendered inoperable due to a process station (PCU 18) card failure
- Three out of four electric bilge pumps were tested, all three failed to achieve suction due to defective priming systems
- Emergency bilge suction check valve integrity checks concluded valves were passing
- Several hydraulic watertight door issues concerning both operability and functionality. Insufficient onboard spares to make repairs
- Just one of the eight seawater cooling pumps was totally defect free. Two of the defective pumps were identified during the previous audit (January 2008) while some of the defective pumps could be operated, four pumps were deemed non operational

Regards

Norman Wong

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