

**From:** Fry, Michael (Houston)  
**Sent:** Monday, February 01, 2010 6:41 PM  
**To:** Guidry, Ronald (Offshore); Boughton, Geoff (Houston)  
**Cc:** DWH, SubSeaSup (Deepwater Horizon); chapmanpaco66@yahoo.com; jimdeems@gmail.com  
**Subject:** RE: Issue on the Horizon with pie connectors.

Ron,

I would go ahead and change out the ones that you deem as bad. We need to get subsea and the ET's to start cleaning them regularly. I will talk to Mark about this

Regards,

Michael Fry

Subsea Superintendent  
Transocean Technical Field Support  
Office 832-587-8516  
Cell 832-202-4011  
Fax 832-587-8555

---

**From:** Guidry, Ronald (Offshore)  
**Sent:** Sunday, January 31, 2010 2:54 PM  
**To:** Boughton, Geoff (Houston); Fry, Michael (Houston)  
**Cc:** DWH, SubSeaSup (Deepwater Horizon); chapmanpaco66@yahoo.com; jimdeems@gmail.com  
**Subject:** Issue on the Horizon with pie connectors.

Mike, Geoff;

Last August, when I was last out here, there was a group of solenoids that was regularly giving "break" conditions. When I'd investigated, I found that the 2 anodes mounted above it had dropped residue all over the pie connectors as it broke down. This residue had worked its way between the pies, hardened and started to crystallize and grow, pushing apart the pies allowing reduced continuity between the pins. Many of the pies were so bad, that the SEM was sent in to have all pies replaced, and the spare SEM (which had recently returned, and equipped with all new pie connectors) was put on yellow.

As a control measure we:  
removed the offending anodes, and thoroughly cleaned the mounting surface of residue.  
cleaned off all solenoid, and the flow meter pie leads thoroughly using a pic to chip off the crystals, then contact cleaner, and WD-40, then wiped down thoroughly, and a light coat of 624 non-conductive silicone applied.

I'd thought I'd removed all of the material, but this go-around, Mark Hay had informed me that they were getting a number of coil break indications, again on yellow. Today, when I went to replace them, I'm finding all of the solenoids that are having issues have the same crystal residue growing in them again. Attached are photo's of what I've seen so far. I'm going to break off a few samples and bring them in with me when I leave the rig

I can go ahead and pull them, clean them, replace the solenoids that were giving break indications, but I'm not sure what else I can do to prevent this from occurring again. We currently have 32 solenoids on hand that I can change out.

Regards,

Ronald Guidry  
Subsea Supervisor, Electronic  
Subsea Field Tech. Support

