

Step Change Safety Alert Template



Alert Title

Leak from oil export temperature probe

What leaked and where from? E.g.: "Lube oil leak from compressor system open vent"

Incident Date

01-12-2013

The date on which the incident occurred, not when this form was completed

Location Type

Fixed Production

E.g. Floating/Fixed Production, Drill Rig, Vessel, etc.

Specific Equipment Involved

Oil export temperature probe

Give as much detail as possible about the equipment involved

Description of What Happened

During start up of oil export, area tech observed a leak from the temperature probe on the export pump discharge

Be as detailed as possible. Give equipment history and approximate time(s) of actions/occurrences related to the incident

Cause of Incident

Investigation found failed thermowell allowed process pressure to act on instrument 'conduit' which subsequently failed leading to release. The two final fracture regions suggest that two cracks propagated from opposing sides of the shank most likely as a result of vibrational oscillation from the passing oil flow.

Build from OIR/12 checklist

Incident Consequences

Area tech informed control room operator and oil export shutdown. Local isolation valves closed. Barriers put in place and absorbent matting used to contain leak. Equipment drained down to fixed drainage system. 8.7kg leaked to deck

Include the release itself and any subsequent emergency actions/dangerous occurrences

Lessons Learned

Operation of the export pumps had historically been continuous but had changed to stop/start operation in recent years due to reduced flowrate. It is important to consider the effects of operational change on all equipment associated with the change.

Include a few bullet points clarifying what was learned from the incident

Recommendations/Actions

Consider alternative measurement device eg surface mounted, to remove requirement for thermowell.

If thermowells are the only option, specify new thermowells with resistance to fatigue failure. New spec thermowells to take into account of operating envelope of pump and location of thermowell in relation to discharge of pump

Include a few bullet points stating any recommendations/actions that will be made/taken as a result of the lessons learned

Contact Details (Optional)

If you would like your submission to be anonymous, leave this section blank