

IMCA Safety Flash 03/02

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learned from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links Additional links should be submitted to webmaster@imca-int.com

I Guidewire Anchor Failure

A member has reported that during subsea operation, the upper part of a guidewire anchor disengaged from the main body of the anchor, resulting in the unintended release of the guidewire.

Upon investigation, it was found that the shear pin, which was secured in the guidewire anchor housing by the use of a setscrew, had become unscrewed (probably due to vibration), allowing the shear pin to drop out.

During interviews, it was also established that on some sites, the shear pin had been removed by force, without the setscrew first being set or unscrewed. This misuse would, in due course, cause damage to and weaken the shear pin.

Action taken:

The manufacturer involved in this instance, as a result of the investigation, has carried out modifications to the outer sleeve on the upper part of the guidewire anchor, to secure the shear pin when the outer sleeve is in the 'set' position. Its user manual has also been updated accordingly, emphasising the correct use of the setscrew. The manufacturer is offering the improved guidewire anchor as both a modification kit for existing anchors and as a new product.

The member involved has issued an instruction that only the modified guidewire anchor is to be used in its operations.

2 Caution Advised on Cellphone Use due to Ignition Fears

A member has passed on a report of an incident where a contracted specialist was working on an open panel supplying instrumentation gas. He was carrying a cellphone that was turned on and rang while he was working on the panel. When he flipped it open to answer the call, a flash fire occurred, causing second degree burns on his forearms and a "sunburn"-type burn on his nose and cheeks.

Although people are aware of electronic devices being a source of ignition, there appears to be very little belief that this type of incident can really happen and, as a result, electronics are still being used with little regard to the potential danger.

Action taken:

The company involved has banned cellphones from being used in the field concerned and has reasserted the danger electronic devices pose if not used in safe locations or in conjunction with a gas detector.

3 Explosion of Hose-Ball Valve Assembly

A member has reported the following incident, which occurred during an onshore drilling operation. During the operation (run in hole) with a $4\frac{1}{2}$ " liner, the crew was instructed to fill up the casing every five joints. To fulfil this task they were using a centrifugal pump. The centrifugal pump and mid pump were controlled by a common device, operated from the driller's console. During the operation, the driller was in position at the brake and was controlling the SPM and the pressure on the line. The floorman was in charge of the hose filling.

When the operation was completed, the floorman closed the ball valve and asked the roustabout to help him and pick up the filling hose. At that moment, the mud pump activation increased the hose pressure and the ball valve and hose blew, causing an injury to the right hand of the roustabout. The roustabout was visited and the doctor confirmed strong contusion from the elbow to the fingers of his right arm.

The accident investigation pointed out that:

- the filling hose was not a heavy pressure type;
- the centrifugal pump and mud pump were controlled from the driller's console by the same device (see photo). This system is to be changed to eliminate the reoccurrence;
- there was no relief valve in the circuit;
- the roustabout hadn't received the appropriate training to carry out duties on the rig floor.









The member concerned has instigated the following corrective action:

- Toolbox meetings and JSA to be implemented and developed in order to ensure proper planning;
- A relief valve will be installed, over pressure shall be safely released and a new control for pumps operating separately from the driller's console will be installed;
- Ensuring roustabouts will not operate on the rig floor without prior suitable training.

4 Improper Use of Lifting Equipment

A member has reported the following incident. A driller was positioning a rig sub-structure base area, lifting up the front extension. The sub-structure was lower than the extension and the driller used a forklift to lift it up and push a connecting pin. He used the forklift to push the pin inside by one fork. While pushing, he started hammering the pin and the fork slid to one side and hit his right foot.

The driller suffered a fracture of his right foot.

The investigation revealed improper use of equipment conventionally used only for lifting operations and the contractor involved has reiterated that forklifts shall only be used for lifting operations and the handling of goods.