

## Alert Title

Hydrocarbon release from a screwed drain valve connection on the underside of a 6 inch ball valve.

## Incident Date

27<sup>th</sup> February 2014

## Location Type

Fixed Production Platform

## Specific Equipment Involved

Screwed drain valve connection on the bottom flange of a 6 inch ball valve located within a gas export line.

## Description of What Happened

A gas release occurred whilst carrying out blasting operations on a live line which was part of the gas export system. During the blasting operations an unprotected screwed drain valve connection on a ball valve in a gas crossover line was damaged, leading to a gas release from the base of the valve. The drain valve connection was underneath the valve; it was in poor condition as a result of corrosion and was not identified during the live line blasting pre-inspections.

## Cause of Incident

Poor maintenance regime for the ball valve – valve was jammed in a travel position (approx. 50% open). This meant that the drain valve connection on the underside of the valve was subject to the high pressure of the gas export system – the seals on the ball valve only provide isolation to the drain cavity when the valve is either fully open or fully closed. The drain valve connection on the underside of the valve was in poor condition due to external corrosion. The live line blasting pre-inspection failed to identify the corroded drain fitting on the ball valve.

## Incident Consequences

Hydrocarbon release and system shutdown.

## Lessons Learned

- The importance of a robust valve inspection and maintenance procedures for valves and all of their fittings.
- The importance of comprehensive inspection checks on all components within the envelope of the blasting activity, to ensure that they are either adequately protected during live line blasting or eliminated from the blasting activity.

## Recommendations/Actions

- Ensure that there is a robust valve maintenance procedure in place. In addition to monitoring the functionality of the valve, the condition of drain points and grease nipples should be assessed and managed.
- The management of live line blasting procedures must ensure that comprehensive inspection checks on all components within the envelope of the blasting activity are carried out.

## Contact Details (Optional)

Andrew Howard, Hydrocarbon Release Prevention Focal Point, Talisman Sinopec Energy UK