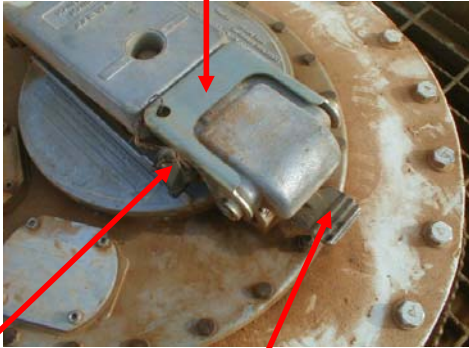




Opening Manhole Covers on Clean Crude Tanks

Locking Lever closed position



Release Key

Locking Lever released position



Release Pedal

What Happened?

A Near Miss occurred on a rig site in Oman on the 17th March 2003, when a member of the rig crew opened the manhole cover on top of a clean crude tank without first releasing the accumulated pressure build up in the tank. In this case the sudden release of pressure was sufficient to blow the rig worker's hard hat off.

Why Did it Happen?

The correct opening procedure was not followed.

Learning Value:

The manhole covers on these tanks are fitted with a two stage opening device; the correct procedure for opening the covers is:

1. Turn the release key to release the locking lever. The manhole cover will rise up slightly to allow any build up of pressure to be released.
2. Press the release foot pedal to enable the locking lever to be pulled upwards to open the cover.

The pressure relief valves fitted in these manhole covers is set at 21 kpa (2.1 bar), therefore a release of pressure is to be expected when the cover is being opened.

N.B. Make sure your chinstrap is in place when working at height.