Title: Gas leakage from Offshore Well with failed SCSSV

Location: Production platform

Activity Type (Result/outcome): Gas leakage leading to platform shutdown and abandonment

What happened:

Acid spotting job was carried out to remove scale deposits around a leaking SCSSV after many unsuccessful attempts of scraping with wire line. The well was again re-entered for scraping after the acid job. Subsequently gas began leaking from the wellhead between the master valve and the adapter.

All the persons onboard were evacuated and emergency shutdown system of the platform was activated. A dedicated field boat was stationed near the platform to keep the well under observation. The oil spill response team was mobilized to combat spillage in the event of any liquid discharge from the well.

The well could be killed, and cement squeeze job performed after three days.

What caused it:

- Post incident inspection of the Christmas tree indicated that the gasket involved in the incident was heavily corroded which caused the loss of mechanical integrity of the ring leading to the incident.

- Acid spotting job, to reduce scale, likely accelerated the loss of mechanical integrity of the ring gasket.

Corrective actions:

- It should be ensured that pressure tests are conducted on wells prior to acid related jobs to verify the mechanical integrity of the ring gasket and other critical wellhead components.

- Acid used for spotting should contain the necessary additives for corrosion management.

- Condition of ring gaskets and other critical well head components should be known, through records and inspection, prior to the performance of such operations in the well.

It is provided for information purpose. This information should be evaluated to determine if it is applicable in your operations, to avoid reoccurrence of such incidents.