

Over Pressure Causes Production Tank Damage

POTENTIALLY SERIOUS INCIDENT

Description:

A crew was hydrotesting a newly constructed pipeline when an incident occurred. During pigging operations, hydrotest fluid and the pig became lodged. While the crew dewatered and depressured the equipment, a large volume of air inadvertently escaped into the adjacent 400-barrel production tank. High pressure in the tank blew off the tank lid and vent lines. No one was injured in the incident, but it could have resulted in severe or fatal injuries to workers in the surrounding area.

What Went Wrong:

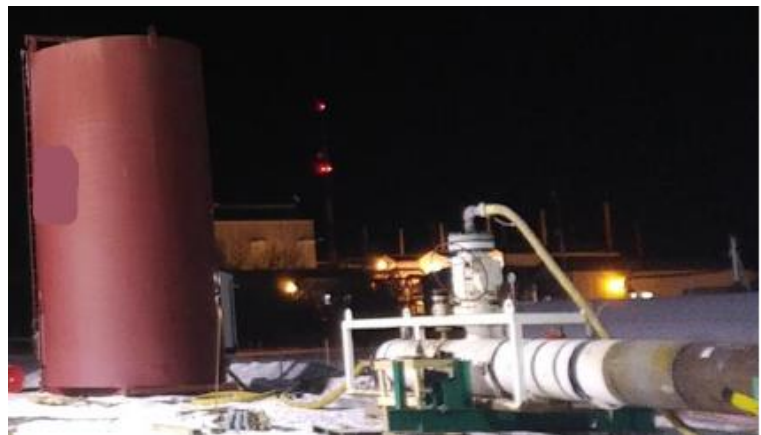
- Hydrotest fluid froze during the dewatering process.
- A non-pressurized production tank was used.
- The hydro-testing plan did not include a process that recognized appropriate risk associated with the change in process, including evaluation, risk controls and equipment operating limits.

Actions Taken/Recommendations:

- Work with a professional engineer to develop the appropriate engineering controls i.e., equipment selection, use and configuration.
- Revise project specific hydro-testing plans, appropriate management of change processes and authorizations.

Industry Resources:

- [Process Safety Fundamentals](#)
- [Free on-line Process safety management course](#)
- [CSA Store Z662 O&G Pipeline Systems](#)
- [Supervisor Competency Guideline](#)



A view of a typical 400-barrel production tank to pig catcher set up.

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