ENERGY SAFETY CANADA

SAFETY ALERT

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Worker Injured While Working on Wellhead

Description:

A worker was injured when a sudden release of wellbore pressure caused the disconnection of the flow 'T' from the wellhead.

A rig crew was on location to begin abandonment of an orphaned well. The task required the rig manager to check and record the shut-in wellhead pressure. The crew heard a hissing sound and observed the rig manager rotating on top of the flow 'T', until the flow 'T' disconnected from the wellhead master valve. The rig manager was taken to hospital with multiple head lacerations.

Lessons Learned:

- Often, historical information is unavailable for orphaned wells.
- Sudden release of wellbore pressure through the 90 degree thread created enough force in the counter-clockwise direction to disconnect the flow 'T' from the wellhead master valve.
- The rig manager, who did not recall any of the event, was positioned in the line of fire.

Life Saving Rule: LINE OF FIRE

This safety alert relates to the Line of Fire Life Saving Rule

Keep yourself and others out of the line of fire.

I position myself to avoid:

- Moving objects
- Vehicles
- Pressure releases
- Dropped objects

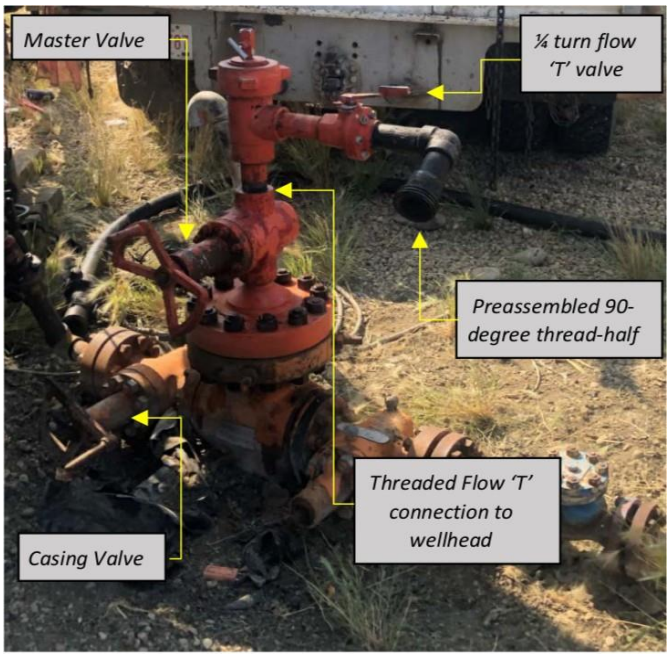

Image of the wellhead and labeled equipment

Image of Flow 'T' and wellhead *(post incident)*

What did they learn? What were the recommendations:

- The use of a 90-degree elbow with thread-half on the flow 'T' should be avoided. Equipment should be connected and oriented to account for the potential of pressure.
- Do not assume that wellhead components are in good working order, including valve function, valve orientation, and that component connections are secure.
- Prior to checking pressures, verify orientation of wellhead master valve (in the closed position) and orientation of valves above the master valve are closed.
- No work to be performed on wellhead components above the master valve, unless master valve is closed, and trapped pressure is bled off.
- Verification of wellbore pressure must be performed prior to connecting components to the flow 'T' ¼ turn valve.

Help industry by sharing learnings from an incident. Submit your Safety Alert.