







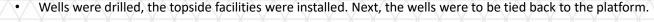


We apply procedures

- We use operating and maintenance procedures, even if we are familiar with the task.
- We discuss the key steps within a critical procedure before starting it.
- We pause before key steps and check readiness to progress.
- We stop, inform supervision and avoid workarounds if procedures are missing, unclear, unsafe, or cannot be followed.
- We take time to become familiar with, and practice, emergency procedures.

Well blowout - What happened?







The pressure-containing cap was removed. There was no significant pressure recorded under the cap prior to removal, but the blowout occurred within hours.

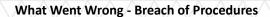


Oil and gas flowed for over ten weeks before a relief well was successfully put in place.



In addition to this, there was an ignition of the release, resulting in a fire which continued for two days before the flowing fluids were brought under control and the fire extinguished.







The Well Construction Standard required two proven independent barriers to be in place.



The integrity of the primary cemented 9^{5/8} casing shoe track was never proven.



Only one of the secondary barriers (pressure containing caps) was installed and this was later removed and not re-instated.



In addition to this, monitoring of the fluid in the well bore to maintain a safety margin in the bottom hole pressure did not take place [1].



[1] Another form of well control barrier is to ensure that the hydrostatic head of fluid in the well bore always exceeds the reservoir pressure, this will prevent fluid from flowing to surface.



- How are the applicable procedures communicated prior to starting a task?
- What action do you take if procedures are missing, unclear, unsafe or cannot be followed?
- How do you familiarise yourself with the procedures that apply in an emergency?





