

4 D2: Kick Whilst Drilling

The purpose of this drill is to familiarise the crew with the control procedure that will be implemented in the event of a kick whilst drilling.

This Drill may be conducted either in open or cased hole. However, if the drill is conducted when the drillstring is in open hole, the well will not be shut in.

When the pipe is on bottom, the following procedure can be used as a guideline for the drill:

- (1) Without prior notice, the Company Representative and Senior Contractor Representative gradually increase the apparent pit level by manually raising the float.
- (2) The Driller is expected to detect the pit gain or increase in return flow and take the following steps:
 - (a) Pick up the kelly (or topdrive) until the tooljoint clears the BOPs and the kelly cock is just above the rotary table.
 - (b) Shut down the pumps.
 - (c) Check the well for flow.
 - (d) Report to the Company Representative.
 - (e) Record the time required for the crew to react and conduct the drill on the IADC Drilling Report.

When the bit has been tripped to the previous casing shoe, a further drill may be conducted that will result in the well being shut in.

Therefore, after tripping the bit to the shoe, the following procedure may be used as a guideline for this drill:

- (1) Stop tripping operations and install the kelly (or topdrive) and start circulating.
- (2) Having been instructed to do so by the Company Representative, the Driller is expected to take the following steps to shut in the well:
 - (a) Pull up until the tooljoint clears the BOPs.
 - (b) Shut down the pumps.
 - (c) Open the choke/line valve.
 - (d) Close the annular preventer.
 - (e) Record the casing and drillpipe pressure.
 - (f) If on a floating rig, doublecheck spaceout, close and lock hang-off rams and hang-off pipe and check that the kelly cock is just above the rotary table.
 - (g) Notify the Company Representative that the well has been shut in.
 - (h) Record the time taken for the crew to shut in the well on the IADC Drilling Report.

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The procedures adopted during these drills should be in line with the shut-in procedures as outlined in the Standing Orders. These procedures are outlined in Section 4 Chapter 2.

