



Safety Alert

From the International Association of Drilling Contractors

ALERT 05 – 34

FLASH FIRE AT DEGASSER LINE FLARE PIT INJURES WORKER

WHAT HAPPENED:

While workers were circulating well gas through the choke with the annular closed SIDPP (Shut In Drill Pipe Pressure @ 350 kpa [51 psi]), it was noticed that the fire in a pail, positioned under the degasser line, had extinguished. On the Rig Manager's order, the rig stopped pumping, and the HCR valve was closed, shutting in the well. The Rig Manager then instructed a worker to go to the end of the degasser line at the flare pit and to re-ignite the contents of the pail. The worker attempted to light the contents of the pail with his personal cigarette lighter, and a flash fire resulted from the spark of his lighter, igniting the methane gas venting from the opening at the end of the degasser line. As a result, the worker was seriously injured, with second degree burns to his hands and face.

WHAT CAUSED IT:

- The mud weight was too low. Gas kicks were circulated out seven times during the week prior to the incident.
- No remote ignition kit was available on location.
- There was no pre-job safety meeting.
- A gas detection device was not utilized prior to attempting ignition.
- The injured worker was not wearing his fire-retardant coveralls properly prior to the attempted ignition. (The sleeves were rolled up to the elbows.)
- Sufficient time was not spent venting or properly purging the gas in the degasser line prior to ignition.

CORRECTIVE ACTIONS: To address this incident, this company issued the following directives to rig personnel:

- Drill with a heavier mud system to improve well conditions relating to gas kicks.
- Create a JSA (Job Safety Analysis) on both "Circulating gas through choke" and "Ignition of gas flare at end of degasser line."
- Acquire a remote ignition kit, and develop a safe work plan to implement its use.
- Develop an action plan to train and mentor workers on the pro-active risk and hazard assessment tools (e.g. JSAs).

Train all personnel on a gas detection device and proper use and maintenance of fire-retardant coveralls.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.

This material is presented for information purposes only. Managers & Supervisors should evaluate this information to determine if it can be applied to their own situations and practices

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