SIGNIFICANT INCIDENT REPORT NO:  119

DRILLER’S OFFSIDER BLASTED WITH SAMPLE DUST UNDER PRESSURE

Incident:
A driller’s offsider received potentially serious facial injuries, when a sample hose on an R/C exploration drill rig ruptured under pressure. The driller was attempting to clear a blockage in the hose by attaching a blow back sub and applying high-pressure air into the sample hose. The sample hose failed near the cyclone. The offsider was walking past the cyclone when the hose suddenly ruptured blasting the offsider in the face with abrasive sample material.

Cause:
- High-pressure air was used in an attempt to clear the blockage.
- Personnel were not instructed to stand clear whilst attempting to clear the hose.
- The sample hose was worn internally due to abrasive sample passing through the hose.
- The pressure used to clear the blockage exceeded the reduced integrity of the hose.
- The driller had not been given instruction on clearing blockages. The company simply relied on the driller’s experience.

Preventative Action:
Drilling companies should develop their own procedures detailing the safe removal of blockages in the sample hose using the following principles:
- Ensure all personnel are clear of the sample hose.
- Under no circumstances should boosted air be used in the unblocking of a sample hose. Initial attempts to clear the blockage should be limited to low pressure air only.
- Consideration should be given to using water injection to assist in clearing blockages.
- Consideration should be given to using a hand held auger if necessary.
- When severely blocked, the sample hose may be changed out with a spare and the blocked hose cleared safely using manual methods.
- Internal wear of the sample hose should be monitored and the hose rotated regularly.

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