



Delayed Blowout

CAGC SAFETY ALERT

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Canadian Association of Geophysical Contractors

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Safety Alert

06-01

The following incident has been reported to the CAGC by WesternGeco.

General Details

On April 20 at approximately 11:25, a shooter's helper was injured when he was hit by debris ejected from a shot hole as a consequence of a delayed blowout. The helper had waited at a position just over 30 metres away from the hole for 8-10 seconds following detonation to approach the hole. We estimate that the total delay from detonation to blowout was over 20 seconds. The shooter's helper had approached the hole in order to clip the lead wires and retrieve the survey markings following the shot.

The hole was loaded with 10 kg of Geogel loaded to a depth of 18 metres. Near surface conditions consisted of a combination of tundra and permafrost. Blowouts on the project had been fairly frequent, but none had the long delay observed in this instance.

Injury Details

Injuries consisted of abrasions and small lacerations to his right hand and his face. He has small lacerations to his right eye, which we now believe were caused by his prescription eyewear. We note that the safety glasses were intact (although covered in mud), but the prescription eyewear was never retrieved.

We commend the shooter's helper for having all appropriate PPE on at the time, including hard hat, high visibility clothing, Arctic clothing, ankle support boots, and safety glasses (overtop of prescription eyewear). Without the safety glasses in place, we are convinced his injuries would have been much worse.

We commend the crew for an extremely efficient medevac, as he was evacuated to camp via helicopter and tended to by a medic within 8 minutes, and he was in the Inuvik hospital within 27 minutes.

We believe that this was a delayed blowout, and not a delayed detonation.

As a consequence of this incident, the following actions have been implemented:

- Shooting crews no longer trash the hole immediately following the shot;
- For 2-D operations, this will become the responsibility of the pick-up crew;
- For 3-D & 4-D operations, a separate trashing crew will be assigned to the task;
- Initial training for shooter's helpers is being formalized. While shooter training is formalized and follows both PITS and regulatory requirements, helper training has to date been informal;
- Work instructions for seismic blasting are being revised and improved;
- Safety prescription eyewear will be issued to all employees who require prescription eyewear. WesternGeco will bear this cost;
- A full management review of the incident is underway with both internal management and the client.