



Unintended Detonation – Re-issue

CAGC SAFETY ALERT

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Safety Alert

04-11

A recent unintended detonation of a seismic shot hole has highlighted the need for reminding CAGC members of certain safeguards that may not be well known regarding the use of electronic caps and their respective blasting machines.

Incident:

A seismic shooter was shooting a swath of source points that had all been capped with electronic detonators due to their proximity to a radio antenna with a relatively high RF output. The program outside this area was loaded with electric detonator capped shots. The electronic detonator leads were not visually discernable from electric leads or otherwise marked. After finishing with all the electronic detonator capped shots, the shooter hooked up to the next electric detonator capped hole with his blasting rig set up for electronic detonators. He pressed the button on the device to program the detonator to prepare it to shoot. As this was not an electronic detonator, the voltage from programming set off the electric detonator and detonated the source.

Summary:

It is critical for CAGC members and their clients to keep in mind the warnings, advice and procedural instructions given by explosive manufacturers and the Institute of Makers of Explosives (IME) with regards to any and all explosive products and materials being used onsite.

Specifically, companies that may use both electronic and electric detonators on the same program must ensure both are compatible with the test equipment or blasting machines being used. Ideally, electronic and electric detonators should not be mixed on the same program unless explicitly approved in writing by the manufacturer and there are controls in place to visually identify them.

Communication between the explosive manufacturer and seismic contractor is crucial throughout all stages of a seismic program, especially when electronic and electric detonators are, or may be used during the same program. Please check with your explosive supplier before mixing these detonators.

Manufactures Statement:

In regards to this specific incident, the manufacturer of the shooting system and the electronic detonator has issued a corrective firmware upgrade and hardware current limiter upgrade and is in the process of recalling all seismic electronic shooting systems for upgrade