

INFORMATION ALERT

SO YOU THINK YOU FOUND A SEISMIC SHOT HOLE?



Seismic lines are used for the exploration of oil and gas formations; in most cases seismic charges or shots are typically discharged. For safety purposes if a worker comes across protruding wires and/or nearths wires; please see the following procedure and precautions.

In preparation of a seismic job, drillers will move down a seismic line drilling holes at pre-determined coordinates, the location of these shot holes are marked by numbered pin flags or lath. Typically the depths of these holes range from 6 – 20 metres (20 to 60 feet) and are 7 to 10 cm (3 to 4 inches) in diameter.

Once the hole is drilled, an explosive charge is primed with a detonator and loaded to the bottom of the hole. The wires from the detonator will come to the surface and should be shunted (twisted together). When plugging the hole, each province has different requirements; in most cases, bentonite is used part way down as a sealant and the drill cuttings are returned to the hole and the remnants are evenly spread at the surface. After detonation, these wires will be cut off at ground level and frequently pushed into the ground.

The charge size of explosives used while shooting a line can vary from 1/8 kg to 20 kg but typically the size will be between 1 to 2 kg's. Once loaded, the holes are plugged and the shunted detonator wires are secured for firing later. From the time holes are drilled & loaded with explosives, it may be several days, or even weeks before the holes are fired.

Most shot holes will completely close back in over time. As such the only indication of a seismic shot hole may be the protruding wires - **do not twist them together to try and shunt them.**

If you or anyone in your company happens to come across what may be a seismic shot hole, assume the shot hole to be loaded and primed and CEASE work in the vicinity (30 metres). Check the area for a seismic permit tag - this tag should indicate the name of the seismic company conducting the work along with the shot hole & exploration number. It will be a small silver tag attached to a tree or fence post within the immediate vicinity.

Record the information and then contact the company indicated on the seismic tag and ask for a representative to come and inspect the shot hole in question. If using a cell phone move a safe distance away from the hole (industry recommended distance is 30 meters). Do NOT use a radio, cell phone, blackberry or any other transmitting device within 30 metres of the hole.

If a seismic permit tag cannot be located, contact Alberta Energy Regulator (AER) at 1.855.297.8311 as they will have a record of the seismic companies conducting work in the area.

INFORMATION ALERT

When dealing with suspected shot holes precautions should be taken to ensure the safety of yourself and anyone in the vicinity.

- ◆ Do not transmit by radio and if possible turn your radio off when near a suspected shot hole. If a radio frequency enters the detonator of a primed charge it may set it off the explosive.
- ◆ Do not tamper or adjust wires protruding from the hole.
- ◆ Do not attempt to dig up the charge or pull the charge out.
- ◆ Do not smoke near a suspected shot hole.
- ◆ Do not use a cell phone or pager near the suspected shot hole.
- ◆ Do not use radios.
- ◆ Avoid shot holes during electrical storms.

If you find suspected loaded seismic shot holes, do not touch them. Contact your Supervisor or Party Manager immediately or contact AER or the RCMP.



INFORMATION ALERT



Example of a Seismic Permit Tag



Example of a Loaded Shot Hole with Protruding Wires

INFORMATION ALERT



Example of how Excavation may Unearth Wires



Example of Exposed Wires During Excavation