

SAFETY ALERT



DRILLER KILLED AT A NEW ZEALAND QUARRY

INCIDENT

A driller was killed at a limestone quarry in New Zealand when manually fitting a new rod into the rod changer of a crawler rig.

CIRCUMSTANCES

The machine was a hydraulic Ingersoll Rand XL 635 crawler rig, with an automatic rod changer and an operator's cab from where drilling is done. The driller was found dead, tightly bound on a rotating drill rod by his clothes. No one saw the accident.

INVESTIGATION

Two rods and the shank adapter were damaged when 89mm diameter blastholes were being drilled. The driller went to get new parts. He came back and was seen fitting a new shank adapter. The driller was still working on the machine when he had a talk with a truck driver who was going off shift. The truck driver said the driller's overalls might have been open down the front as it was a warm day.

The drill carriage was about a metre above the ground and about parallel to it. To fit a new rod into the automatic rod changer rack, the rod is first fixed to the drill shank adapter. The driller was doing this with the drill shank rotating at about 60 rpm.

The 3.66 metre rod weighed 43.5 kg. The driller was probably holding it against his body at about hip level to lift it up and onto the shank. As the rod started to rotate it probably caught the driller's overalls and dragged him onto the shaft.

RECOMMENDATIONS

Operations using drilling equipment should assess safe work procedures for rod handling and energy isolation. Work procedures must be set up to remove the risk of people being caught by equipment that is moving or stopped and likely to move.

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