SAFETY ALERT

FIELD TECHNICIANS INJURED AT DRILLING SITE

INCIDENT:

Two field technicians were injured when struck on the head by a 3 m long 89 mm diameter drill rod weighing approximately 35 kilograms. The field technicians were assisting a contract driller to break a frozen thread on the air swivel of an exploration drilling rig. The field technicians sustained moderate injuries.



Drill Rig with Drill Rod Being Used as a Lever

CIRCUMSTANCES:

The driller and his assistant had attempted to crack the thread on the air swivel without success. It was decided to use a 3 metre long drill rod as a lever to try and crack the frozen thread. Two field technicians who were working nearby were asked to assist hold the drill rod in position. The lever was positioned over a set of large stilsons below the frozen thread. Another set of large stilsons

were positioned above the frozen thread. *Refer photograph page 1*. The drill rig was started and forward rotation applied to hold the top set of stilsons in place. The forward rotation force was released resulting in the drill rod immediately moving in the reverse direction. The two field technicians were struck on the head by the drill rod, knocking them to the ground. They both sustained head injuries. The driller's assistant was also knocked to the ground by the drill rod, he was uninjured.

INVESTIGATION

Investigations are continuing but contributing factors include, but were not limited to, the following:

- Lever used without first applying risk management principles and the hierarchy of controls
- Drill rig started while persons were at risk
- The drilling contractor's safety management plan included isolation and Job Safety Analysis (JSA) / risk assessment programs. The JSA and risk assessment programs were not effectively implemented

RECOMMENDATIONS

All mines, exploration drill rig owners and operators should review their exploration drilling activities and practices with regard to:

- 1. Developing and implementing effective isolation procedures to control exposure to hazardous energies
- 2. Providing information and training to ensure persons are competent to carry out their work activities
- 3. Ensuring contractors safety management plans are approved, regularly reviewed and are effectively implemented
- 4. Ensure equipment is fit for purpose
- 5. Conduct JSA or risk assessment for all non routine high risk work activities apply the hierarchy of controls
- Refer and review Minerals Industry Safety Handbook Section 4.2.7 Exploration Drilling

Signed

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MINE SAFETY OPERATIONS BRANCH
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