

Safety Alert

Subject: Uncontrolled release of a land geotechnical drill rig winch wire whilst under tension.

Issue Number:

IMPACT No. 11976

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Description / Narrative:

In preparation for High Pressure Dilatometer (HPD) testing at the borehole location the driller cleared the immediate drilling area of non-essential drilling equipment and tools including the drill rig main winch wire which was placed to one side of the drill rig as is common practice. On this occasion the winch wire was stowed to the right-hand side of the drill rig, behind the levelling jack.

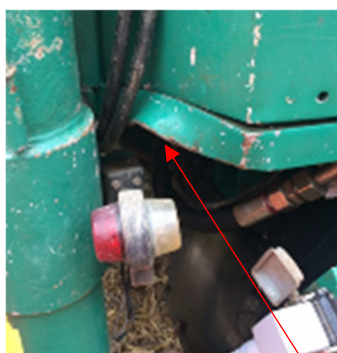
To facilitate the HPD test the driller needed to raise the drill mast resulting in the winch wire being pulled upwards. As the winch wire was pulled up, the thimble within the hard eye of the winch wire momentarily caught (snagged) on the edge of the drill rig chassis.

The driller failed to notice that the winch wire had become snagged and continued to raise the mast, thus continuing to increase the tension in the wire until the steel thimble bent, causing the wire and attached hoist plug to release in an uncontrolled manner within close proximity of the driller.

The sudden and uncontrolled release of the winch wire and the attached hoist plug had the potential to cause significant personal injuries had it struck a member of the drill crew.



Hoist plug



Damage sustained to chassis and steel winch wire thimble



Safety Alert

Corrective Actions Taken / Recommendations

Immediate Actions:

- Communicate the incident through the distribution of a safety alert and share the safety alert with the client and appropriate external organisations.
- Communicate the incident safety alert through toolbox talks. Highlight the importance of managing all lifting operations, including winch operations and awareness of complacency creeping into routine tasks.
- Review the task risk assessments to ensure that the potential for lifting equipment (winch wires) becoming snagged is appropriately considered and mitigated. All control measures shall be included in the operating procedure / work instruction.
- Retract the winch wire to a safe position when not in use, where this is not possible, lower the winch wire to a safe location away from all structures and other potential snagging hazards. Contain within a trip tray or bucket to prevent a tripping hazard.
- All potential snagging hazards must be checked before operation of the winch or the lowering / raising of the drill mast.

Long-Term Actions:

- Review the way that lifting equipment and accessories (winches & wire ropes etc) interacts with drilling rigs and associated operations.
- Investigate engineering solutions that will mitigate against snagging risks between lifting equipment (winch wires) and the structure of the drilling rig.

Golden Rules Breached

Golden Rule 7 - Lifting Operations



Safety Alert Comment

Where appropriate, safety devices such as safety chains, whip checks and solid cover fittings etc. should be installed where there is a risk of high-pressure release.