highways england

INFORMATION

Safety Alert

Ground Investigation Rig, Wire Rope Failure

27th January 2020

Background information

During ground investigation works on the A303 Amesbury to Berwick Down project a wire rope used for retrieving drilling equipment failed.

The incident took place on Wednesday 27th November 2019 whilst a Massenza MI3 rotary drilling rig was recovering Standard Penetration Test (SPT) rods. During the extraction process the wire cable lifting the load broke resulting in the rods falling back into the sample hole.

The investigation found that the failure was due to the operator lifting the rods too high causing the clamped end of the rope to come into contact with the masts winch guide, the damage and excess stress causing the rope to break.

Further findings include, a 10mm wire rope which had been tested with the rig had been replaced with a 5mm rope. There was no indication that the 5mm rope had been tested, certificated or modified and there was no evidence of a pre-works visual inspection.

The investigation also found that there was discrepancies between the safe working load of the wire, the winch pull capability and the understanding of these factors amongst the operators.

At the time of wire rope failure all operatives were located a safe distance from the operation and therefore no injuries were sustained as a result of the incident.

Lessons Learnt

- Ensure that Principal Contractors are sufficiently planning, managing and monitoring Ground Investigation operations.
- Drill operators are competent to undertake the tasks they have been assigned.
- Drill teams have read and understood the appropriate safe systems of work.
- All lifting equipment has a LOLER certificate.
- Tested equipment is tagged, colour coded or has a clear system for ensuring that operators can understand what equipment has been tested.
- Any modifications to lifting accessories (ropes, shackles etc.) are recorded and clear.
- Pre-use checks are undertaken and the lifting equipment is in good condition without excessive damage.

If you have any queries about this safety alert information announcement or any other safety announcement then please contact **Ian.Scott@highwaysengland.co.uk**

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home safe and well