Safety Alert



Electrical Fire

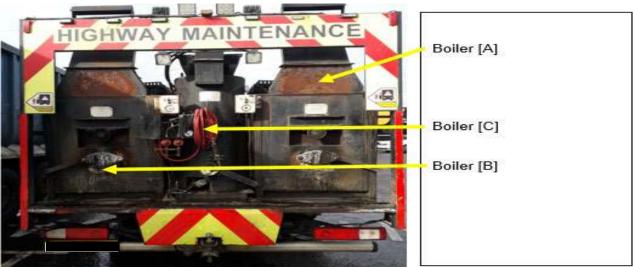
Incident Details

This incident occurred within a shed building during general housekeeping of a HFS Rig on 10-03-2021. No one was injured, but the Rig was damaged and off the road for many weeks for extensive re-wiring, with fire to the surrounding shed fortunately avoided.

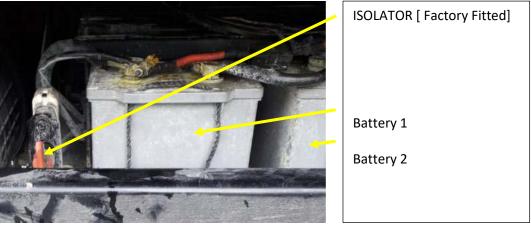
It had been decided to utilise down time on a wet day to switch a faulty/defective temperature sensor on boiler A with a similar type that was already fitted to boiler C to enhance productivity the next day.

After turning the isolation switch at the main battery, wires were disconnected of the sensors on boilers A and C. Whilst pulling through the wires from the control box housing, the wires began to spark and melt the protective insulation sheath to the cable loom. A fire extinguisher was swiftly discharged to reduce the possibility of a fire igniting and batteries were quickly disconnected.

Dia. 1 shows location of installed boiler to rear of vehicle.



Batteries isolated at battery ... see Dia 2.



This safety alert has been prepared by the RSTA. For further information regarding this safety alert please email rory@rsta-uk.org or phone 07817 116420 Alert No: 03 / 2021

Incident Findings

Persons performing the electrical alteration were not suitably qualified and did not follow Company Procedure fully regard 'lock-out tag-out', as a check by Multimeter was not performed to make sure electrical circuits were isolated. Assumption had been made that the isolator switch at the batteries controlled all rig circuits. The isolator switch was later proven to only cut power to the driving cab. Fuses were present at the control panel (loaded end) of the auxiliary system, but only by disconnecting the batteries would it have been possible to isolate the cable loom affected.

Incident Outcome

Electrical 'Lock-out Tag-out' procedures & training were revisited, with direction given that only qualified auto electricians are to work on company vehicles. As best practice an isolator switch was installed for the renewed cable loom, and a 'check point' added to company procurement procedures ensuring such specialist fabricated plant will always require isolation controls as standard.