



**DEPARTMENT OF MINERALS AND ENERGY
WESTERN AUSTRALIA**

SIGNIFICANT INCIDENT REPORT NO. 50

TRAILING CABLE COUPLER – ELECTRICAL ACCIDENT

INCIDENT

An electrician had been carrying out repairs to a coupler used to join trailing cables supplying power to an underground development drilling jumbo. With the supply cable inserted and the outgoing cable removed, the tradesman elected to prove the effectiveness of the repair by connecting a home made “diode test lead” between the pilot contact pin and the earthed body of the coupler. As a consequence, the coupler became energised at 415 volt, an arcing fault developed, and the resultant flash caused burns to the electrician’s hands and face.

CAUSE

The accident was caused by adopting an unsafe work practice. In doing so, the electrician exposed himself to hazards associated with work in close proximity to “live” parts.

COMMENT AND PREVENTATIVE ACTION

The accident could have been avoided had an appropriate purpose designed and commercially available test plug been used. Alternatively, the circuit could have been tested in a more conventional manner using an electrician’s ohmmeter with the power source disconnected.

Employers and electrical workers are reminded that the use of improvised equipment for the testing of trailing cable systems is hazardous.

Duty of Care provisions under the Mines Regulation Act 1946 includes a requirement for safe systems of work to be implemented.

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STATE MINING ENGINEER

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SAFETY AWARENESS SAVES LIVES