

SERIOUS INJURY ACCIDENT: August 2007 Driller Burned In Flash Fire

A driller was seriously injured when an air compressor line ruptured on a track mounted drill. The victim and a contractor mechanic were troubleshooting an over-heating problem involving the discharge air from the compressor. During a test procedure, the victim started the drill and began drilling a hole in order to bring the machine up to operating temperature. As the machine temperature rose, an air compressor oil cooler line ruptured spraying oil into the engine compartment where it caught fire. The fire flashed forward from the engine compartment to the cab area. The victim suffered deep second degree burns to his back and arms as he exited the cab upon seeing the fire. He was transported by med-flight to a hospital for treatment of his injuries.

CONCLUSIONS/RECOMMENDATIONS:

- Analysis of the hydraulic hose that failed was conducted by an independent laboratory after the accident. The failure was deemed to be maintenance related resulting from loss of strength due to heat effects on the hose.
- The investigation revealed that during the troubleshooting hoses had been removed and/or re-routed including the hose that failed. In accomplishing this, a brazing tip/torch assembly was used to heat the hose connections to aid in loosening them.
- Extreme caution must be used when performing activities that can result in excess heating of hydraulic hoses/connections.
- When work is being done on pressurized systems, be alert for unexpected failures.
- Use of fire suppression systems on mobile equipment can assist in rapidly extinguishing a fire.

