USE OF PHOS-CHECK FIRE RETARDANT

At a recent pine fire (Compartment 75, Section A, Gnangara) Phos-Check was used under actual pine fire conditions, for the first time at Gnangara, and the benefits from using the retardant were obvious.

The fire occurred in an area planted in 1942, reduced by a second thinning to 500 SPha in 1966 and further reduced to 125 SPha in 1973, with no pine burning since this latter thinning. Reasonably heavy needle fall and old tops still retaining some needles formed a very inflammable fuel which burned fiercely. The R.O.S. index at the time of outbreak was 54/h with a south-west wind of 30 km/h, and the R.O.S. becoming 118 m/h with the application of the fuel correction factor.

The small fire developed quickly from the southern boundary of the compartment for a distance of approximately 50 m, and was knocked down just as the first H.D. emptied its tank of water. Before a second H.D. could get to the head fire this had developed again strongly on the north east side on a narrow front of approximately 10 m and with flame height to 3 m. The third H.D. containing Phos-Check assisted to knock down the head fire and then immediately laid a swathe of Phos-Check approximately 4 m wide at the head of the fire and around both flanks for a certain distance. Numerous spots within 50 m of the head fire had been put out by this time.

The outstanding effect of Phos-Check was that where it was applied as a swathe flames did not subsequently appear, although debris continued to smoulder and strong winds dislodged smouldering duff and continued to start spot fires outside the Phos-Check swathe. Where Phos-Check had not been applied as a swathe flames continued to break out even at the tail of the fire.

The total area burned was .2 ha and the total volume of Phos-Check used was 900 litres.