

## POOR ADHESION CAUSED BY TRACKSIDE RAIL LUBRICATORS

In dry weather low adhesion occurs for a small proportion of the time on all normal running rails. However, certain sections of track consistently give low adhesion and it is suspected that one of the most common reasons is the presence of trackside lubricators. An investigation of whether these low adhesion levels could be attributed solely to track lubricators has therefore been made and this report describes the findings of the investigation.

The report results are only from a few measurements. The adjustment level of the lubricators could only be judged by eye and therefore it is difficult to quantify the relationship between adhesion and the adjustment. Nevertheless the following conclusions could be reached:

- Badly adjusted flange lubricators can put excess grease on the rail head and so lower the adhesion over a distance greater than half a mile.
- Reasonably well adjusted lubricators can also cause a marked reduction in adhesion, but this may always be associated with grease being visibly deposited in small amounts on the rail head.
- Lubricators can be well adjusted so that they provide grease to the rail side without noticeably reducing adhesion.
- The decision to install rail side lubricators at any site where high traction forces are necessary should be made with their possible effect on adhesion kept in mind. At these sites great care should be taken over the initial adjustment and subsequent maintenance.