ANNEX B - GRAPHICAL PRESENTATION OF DATA SET-UP 2

Threshold pressures

- Towing Vehicle: 0.4 bar
- Semi-trailer: 0.6 bar
- Threshold pressure difference: +0.2

Laps completed during road trials: 57 (10,350km) fully laden

End result

- **Tractor**
  - Slight degradation in performance
  - 0.095 mm/1000km steer axle lining wear
  - 0.149 mm/1000km drive axle lining wear
  - No glazing

- **Trailer**
  - Slight degradation in performance
  - 0.033 mm/1000km lining wear
  - No glazing

List of Figures

- **Figure B1** Brake temperature changes during road trials
- **Figure B2** Brake temperature changes during before and after road trial snub tests
- **Figure B3** Pressure and deceleration frequencies during road trials
- **Figure B4** Mean Fully Developed Deceleration and fifth wheel forces
- **Figure B5** Roller brake tester results
ANNEX B1: Road trials

Brake temperature changes during road trial. Sample one (1st run), second set-up

Elapsed Time (hh:mm)

Temperature rise wrt ambient (deg. C)

STEER AXLE
DRIVE AXLE
TRAILER

Brake temperature changes during road trial. Sample two (7th run), second set-up

Elapsed Time (hh:mm)

Temperature rise wrt ambient (deg. C)

STEER AXLE
DRIVE AXLE
TRAILER

Brake temperature changes during road trial. Sample three (15th run), second set-up

Elapsed Time (hh:mm)

Temperature rise wrt ambient (deg. C)

STEER AXLE
DRIVE AXLE
TRAILER
ANNEX B2: Snub tests

![1 bar snub test (before road runs)](image1)

![1 bar snub test (after road runs)](image2)

![2 bar snub test (before road runs)](image3)

![2 bar snub test (after road runs)](image4)

![3 bar snub test (before road runs)](image5)

![3 bar snub test (after road runs)](image6)
ANNEX B3: Brake demand

Average coupling head pressure (bar)

- Average overall coupling head pressure = 0.89 bar
- 95th Percentile = 1.32 bar

Average vehicle deceleration (g) second set-up

- Average overall vehicle deceleration = 0.057 g
- 95th percentile = 0.102 g
ANNEX B4: Mean Fully Developed Deceleration

**Setup 2**

![Graph](image1.png)

**Fifth wheel forces: second setup**

![Graph](image2.png)
ANNEX B5: Brake efficiency
Number in brackets equals the number of locked wheels

(a) Vehicle combination Set-up 2

(b) Towing Vehicle Set-up 2

(c) Semi trailer Set-up 2