

### FIA FORMULA 1 WORLD CHAMPIONSHIP



# 2024 BAHRAIN GRAND PRIX

## 29 February - 02 March 2024

From The FIA Formula One Technical Delegate Document 31

To The Stewards Date 02 March 2024

**Time** 22:12

#### **Technical Delegate's Report**

#### Before the Race:

Components of all cars were checked and compared with the information supplied by the relevant team's **U**sed **I**nventory **I**ncremental **L**ist (UIIL).

Tyre cold pressure checks were carried out on car numbers 01 and 04.

A symmetric and asymmetric front wing deflection test was carried out on car numbers 01, 63 and 14.

A front wing flap deflection test was carried out on car numbers 01, 63 and 14.

A front floor deflection test was carried on car numbers 16, 04 and 02.

Clutch paddle linearity checks have been carried out on cars 10 and 02.

A fuel sample was taken from car numbers 11, 44 and 16.

An engine oil sample was taken from car numbers 11 and 44.

On the grid it was checked that all cars had fitted their tyres and the tyre heating blankets were disconnected, when the "5-Minutes" signal was given.

On the grid the temperature of the LHS and RHS front and rear tyre was checked on car numbers 11, 44, 16, 04, 14 and 23.

On the grid the minimum tyre starting pressure of the LHS and RHS front and rear tyre was checked on all cars.

#### After the Race:

All cars were weighed.

The following aerodynamic component or bodywork areas were checked on car numbers 63, 16 and 24:

Floor Body - TR Article 3.5.1 Floor Fences - TR Article 3.5.2 Floor Edge Wing - TR Article 3.5.3 Nose - TR Article 3.6.1 Forward Chassis - TR Article 3.6.2 Mid Chassis - TR Article 3.6.3 Mirror Housing - TR Article 3.6.4 Sidepod - TR Article 3.7.1 Coke Panel - TR Article 3.7.2 **Engine Cover** - TR Article 3.7.3 Front Wing Endplate body - TR Article 3.9.2 Front Wing Tip - TR Article 3.9.3 Front Wing Diveplane - TR Article 3.9.4 Front Wing Endplate - TR Article 3.9.5 **Rear Wing Profiles** - TR Article 3.10.1 **Pylons** - TR Article 3.10.2 Rear Wing Beam - TR Article 3.10.3 Rear Wing Endplate Body - TR Article 3.10.4 Rear Wing Tip - TR Article 3.10.5 - TR Article 3.10.7 Rear Wing Endplate

The plank thickness was checked on car numbers 01 and 55.

The engine high rev limit bands were checked on all cars.

The plenum temperature was checked on all cars.

The oil consumption was checked on car numbers 01, 11, 63, 44, 16, 55, 81 and 04.

The exhaust fluid mass flow of car numbers 01, 11, 63, 44, 16, 55, 81 and 04 was checked.

The IVT temperatures were checked on all cars.

The ES state of charge on-track limits were checked on all cars.

The lap energy release and recovery limits were checked on all cars.

The MGU-K power limits were checked on all cars.

The maximum MGU-K speed was checked on all cars.

The maximum MGU-K torque was checked on all cars.

The maximum MGU-H speed was checked on all cars.

The session type has been confirmed for all cars.

Chassis FIA checksum was checked on all cars taking part in the race.

The torque coordinator demands were checked on car numbers 01, 11, 63, 44, 16, 55, 81 and 04.

The torque control was checked on car numbers 01, 11, 63, 44, 16, 55, 81 and 04.

The rear brakes pressure control was checked on all cars.

The brake temperature warnings were checked on all cars.

The race start data of all cars have been checked.

Single clutch paddle use for the race start has been checked on all cars.

The MGU-K use at the race start was checked on all cars.

It was checked on all cars that the ES was not charged while the car was stationary in the pits.

It was checked that no car exceeded 80 km/h when leaving the formation grid prior to the start of the race.

The tyre starting pressures of all cars during the race were checked.

The tyres used by all drivers during the race today have been checked.

The fuel pressure of all cars during the race was checked.

The logged pressure within the engine cooling system during the race was checked on all cars.

Fuel flow meter calibration checksums were checked on all cars.

The instantaneous fuel mass flow of all cars was checked.

The partial load fuel mass flow of all cars was checked.

The fuel temperature of all cars was checked.

A fuel sample was taken from car number 81.

The fuel samples have been checked for density and analysed by gas chromatography.

The results of all the fuel analyses show that the fuels were the same as ones, which had been approved for use by the relevant competitors prior to the Competition.

Further the density change of the fuel samples taken today was within the permitted limits.

An engine oil sample was taken from car number 81.

The engine oil samples have been analysed by FTIR spectroscopy and viscometry.

The results of the FTIR analyses show that the sampled oils were consistent with reference engine oil samples which had been approved for use by the relevant competitors prior to the Competition.

All car weights and the items checked were found to be in conformity with the 2024 FIA Formula One Technical Regulations.

Jo Bauer

The FIA Formula One Technical Delegate