

2023 ABU DHABI GRAND PRIX

24 - 26 November 2023

From The FIA Formula One Technical Delegate Document 43

To The Stewards Date 25 November 2023

Time 21:19

Technical Delegate's Report

During the third free practice session:

The tyre starting pressures of all cars during P3 were checked.

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

The fuel flow meter calibration checksum was checked on all cars.

The instantaneous fuel mass flow of all cars was checked.

The fuel temperature of all cars was checked.

The fuel pressure of all cars during the qualifying session was checked.

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

The plenum temperature of all cars 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 MGU-K power model was checked on all cars.

The ES power model was checked on all cars.

Torque sensor software version checks have been carried out on all cars.

Torque sensor calibration checks have been carried out on all cars.

SECU custom software versions were checked on all cars.

After the third free practice session:

An engine oil sample was taken from car number 55.

Before the Qualifying practice session:

A fuel sample was taken from car numbers 31, 24 and 22.

An engine oil sample was taken from car numbers 24 and 22.

The thickness of the brake discs of car numbers 16, 55, 63, 44, 31, 10, 24, 18, 27, 23 and 02 was checked.

During the Qualifying practice session:

Car numbers 01, 11, 55, 44, 31, 04, 18, 20 and 23 were weighed.

The weight distribution was checked on car numbers 01. 11. 55. 44. 31. 04. 18. 20 and 23.

The uppermost rear wing element adjustable positions were checked on car numbers 55, 31 and 20.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 55, 31 and 20.

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

After the Qualifying practice session:

Car numbers 01, 11, 16, 63, 10, 81, 04, 14, 27 and 22 were weighed.

The following aerodynamic component or bodywork areas were checked on car numbers 63, 04 and 14:

Floor Fences - TR Article 3.5.2 Floor Edge Wing - TR Article 3.5.3 - TR Article 3.6.1 Nose Forward Chassis - TR Article 3.6.2 Mid Chassis - TR Article 3.6.3 Mirror Housing - TR Article 3.6.4 - TR Article 3.7.1 Sidepod Coke Panel - TR Article 3.7.2 - TR Article 3.7.3 **Engine Cover** Front Wing Endplate body - TR Article 3.9.2 Front Wing Tip - TR Article 3.9.3 - TR Article 3.9.4 Front Wing Diveplane 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 - TR Article 3.10.5 Rear Wing Tip - TR Article 3.10.7 Rear Wing Endplate

The uppermost rear wing element adjustable positions were checked on car numbers 01, 11, 16, 63, 10, 81, 14, 27 and 22.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 01, 11, 16, 63, 10, 81, 14, 27 and 22.

The pressure relief valve of the coolant header tank of car numbers 01, 16, 63 and 10 was checked.

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

The plenum temperature was checked on all cars.

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 MGU-K power model was checked on all cars.

The ES power model 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 qualifying sessions.

Torque sensor software version checks have been carried out on all cars.

Torque sensor calibration checks have been carried out on all cars.

The torque coordinator demands were checked on all cars.

The torque control was checked on all cars.

The rear brakes pressure control was checked on all cars.

Custom software version checks have been carried out on all cars.

SECU software version checks have been carried out on all cars.

The fuel pressure of all cars during the qualifying session was checked.

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

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

The fuel flow meter calibration checksum was checked on all cars.

The instantaneous fuel mass flow of all cars was checked.

The fuel temperature of all cars was checked.

A fuel sample was taken from car numbers 16 and 04.

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

The results of 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 04.

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.

The following SECU software versions have been used by the teams during the qualifying sessions:

Team	FIA Standard ECU system version
Oracle Red Bull Racing	SR1512
Scuderia Ferrari	SR1512
Mercedes-AMG PETRONAS Formula One Team	SR1512
BWT Alpine F1 Team	SR1512
McLaren Formula 1 Team	SR1512
Alfa Romeo F1 Team Stake	SR1512
Aston Martin Aramco Cognizant Formula One Team	SR1512
MoneyGram Haas F1 Team	SR1512
Scuderia AlphaTauri	SR1512
Williams Racing	SR1512

All the above items were found to be in conformity with the 2023 FIA Formula One Technical Regulations.

Jo Bauer

The FIA Formula One Technical Delegate