

# 2023 SÃO PAULO GRAND PRIX

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From The FIA Formula One Technical Delegate Document 44

To The Stewards Date 04 November 2023

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## **Technical Delegate's Report**

## Before the ShootOut practice session:

A fuel sample was taken from car number 24.

An engine oil sample was taken from car number 24.

### **During the ShootOut practice session:**

Car numbers 01, 11, 16, 44, 77, 18 and 23 were weighed.

The weight distribution was checked on car numbers 01, 11, 16, 44, 77, 18 and 23.

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

### After the ShootOut practice session:

Car numbers 01, 11, 16, 55, 63, 44, 81, 04, 03 and 22 were weighed.

The following aerodynamic component or bodywork areas were checked on car number 22:

-	Floor Body	- TR Article 3.5.1
-	Floor Fences	- TR Article 3.5.2
-	Floor Edge Wing	- TR Article 3.5.3
-	Bib	- TR Article 3.5.4
-	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 - TR Article 3.7.3 **Engine Cover** Tail - TR Article 3.8.1 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 Endplate Body - TR Article 3.10.4 Rear Wing Tip - TR Article 3.10.5 Rear Wing Endplate - TR Article 3.10.7

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.

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

The torque coordinator demands were checked on all cars.

The torque 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 ShootOut session was checked.

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

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

Fuel flow meter calibration checksums were 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 number 77

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 77.

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 ShootOut sessions:

Team	FIA Standard ECU system version
Oracle Red Bull Racing	SR1511
Scuderia Ferrari	SR1511
Mercedes-AMG PETRONAS Formula One Team	SR1511
BWT Alpine F1 Team	SR1511
McLaren Formula 1 Team	SR1511
Alfa Romeo F1 Team Stake	SR1511
Aston Martin Aramco Cognizant Formula One Team	SR1511
MoneyGram Haas F1 Team	SR1511
Scuderia AlphaTauri	SR1511
Williams Racing	SR1511

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