

## 2023 HUNGARIAN GRAND PRIX

21 - 23 July 2023

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<b>From</b>	The FIA Formula One Technical Delegate	<b>Document</b>	15
<b>To</b>	The Stewards	<b>Date</b>	21 July 2023
		<b>Time</b>	19:23

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### Technical Delegate's Report

#### **Before the first free practice session:**

The exhaust system components of all cars were checked against the declaration submitted by the relevant team before the start of the Competition.

#### **During the first free practice session:**

The tyre starting pressures of all cars during P1 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 plenum temperature of all cars was checked.

#### **After the first free practice session:**

The installation of the driver helmet camera assembly, respectively the installation of the correct ballast if no driver helmet camera is used, was checked on all cars.

The fuel pressure of all cars during the first free practice session was checked.

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

The IVT code and calibration checksums were checked on car numbers 01, 11, 16, 55, 63, 44, 31, 10, 81, 04, 77, 24, 18, 14, 20, 27, 22, 23 and 02.

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 custom software versions were checked on all cars.

A fuel sample was taken from car number 02.

An engine oil sample was taken from car number 02.

### **During the second free practice session:**

The tyre starting pressures of all cars during P2 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 plenum temperature of all cars was checked.

### **After the second free practice session:**

Car number 23 was weighed.

The fuel pressure of all cars during the second free practice session was checked.

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

The IVT code and calibration checksums were 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 custom software versions were checked on all cars.

The SECU software versions were checked on all cars.

Chassis FIA checksum was checked 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.

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

A fuel sample was taken from car number 10.

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 10.

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 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**