

# 2019 JAPANESE GRAND PRIX

10 - 13 October 2019

From The FIA Formula One Technical Delegate Document 26

To The Stewards Date 13 October 2019

Time 12:54

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

# Before the qualifying practice session:

An engine oil sample was taken from car numbers 23 and 10.

An fuel sample was taken from car number 10.

It was confirmed for all cars that the gear ratios used during the remainder of this Event belong to the gear ratios declared to the FIA technical delegate at or before the first Event of the 2019 Championship.

The thickness of the brake discs of all cars taking part in the qualifying session was checked.

## **During the qualifying practice session:**

Car numbers 16, 03, 18, 07 and 63 were weighed.

The weight distribution was checked on car numbers 16, 03, 18, 07 and 63.

Fuel samples were taken from car numbers 18 and 63.

## After the qualifying practice session:

Car numbers 44, 77, 05, 16, 33, 23, 08, 55, 04 and 10 were weighed.

The uppermost rear wing element adjustable positions were checked on car numbers 77, 05 and 33.

The plenum temperature was checked on all cars.

The IVT code and calibration checksums were checked on all car numbers 44, 77, 05, 16,03, 23, 27, 08, 20, 55, 04, 11, 18, 07, 99, 10, 63 and 88.

The IVT temperatures were checked on all cars.

The ES state of charge on-track limits were checked on car numbers 44, 05, 33, 27, 08 and 55.

The lap energy release and recovery limits were checked on car numbers 44, 05, 33, 27, 08 and 55.

The MGU-K power limits were checked on car numbers 44, 05, 33, 27, 08 and 55.

The maximum MGU-K speed was checked on car numbers 44, 05, 33, 27, 08 and 55.

The maximum MGU-K torque was checked on car numbers 44, 05, 33, 27, 08 and 55.

The maximum MGU-H speed was checked on car numbers 44, 05, 33, 27, 08 and 55.

The MGU-K power model was checked on car numbers 44, 05, 33, 08,55 and 10.

The ES power model was checked on car numbers 44, 05, 33, 08,55 and 10.

The TAG320 locked status 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 car numbers 44, 77, 05, 16, 33, 08, 55 and 04.

The torque control was checked on car numbers 44, 77, 05, 16, 33, 08, 55 and 04.

The rear brakes pressure control was checked on car numbers 44, 77, 05, 16, 33, 08, 55, 04 and 10.

Gear shift data checks have been carried out for car numbers 05 and 16.

It was checked that all cars did not exceed 15000 rpm during the qualifying practice session.

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.

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 checked.

A fuel sample was taken from car number 08.

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 Event.

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

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 Event.

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

Team	FIA Standard ECU system version
Mercedes AMG Petronas Motorsport	SR1118
Scuderia Ferrari Mission Winnow	SR1118
Aston Martin Red Bull Racing	SR1118
Renault F1 Team	SR1118
Haas F1 Team	SR1118
McLaren F1 Team	SR1118
SportPesa Racing Point F1 Team	SR1118
Alfa Romeo Racing	SR1118
Red Bull Toro Rosso Honda	SR1118
ROKiT Williams Racing	SR1118

All the above items were found to be in conformity with the 2019 FIA Formula One Technical Regulations.

#### Jo Bauer

The FIA Formula One Technical Delegate