

# 2019 SPANISH GRAND PRIX

## 9 - 12 May 2019

---

<b>From</b>	The FIA Formula One Technical Delegate	<b>Document</b>	11
<b>To</b>	The Stewards	<b>Date</b>	10 May 2019
		<b>Time</b>	19:05

---

### Technical Delegate's Report

#### Before the first free practice session:

An engine oil sample was taken from car number 18.

#### During the first free practice session:

The tyre starting pressures of all cars during P1 were checked.

The instantaneous fuel mass flow of all cars was checked.

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

The fuel temperature of all cars was checked.

#### After the first free practice session:

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

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 MGU-K power limits were checked on car numbers 27, 04, 23 and 88.

The MGU-K power model was checked on car numbers 27, 04, 23 and 88.

The custom software versions were checked on all cars.

A fuel sample was taken from car number 88.

**Before the second free practice session:**

An engine oil sample was taken from car number 55.

**During the second free practice session:**

The tyre starting pressures of all cars during P2 were checked.

The plenum temperature of car numbers 44, 77, 05, 16, 33, 10, 03, 27, 08, 20, 55, 04, 11, 07, 99, 23, 63 and 88 was checked.

The instantaneous fuel mass flow of car numbers 44, 77, 05, 16, 33, 10, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26, 23, 63 and 88 was checked.

The fuel temperature of all cars was checked.

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

**After the second free practice session:**

Car numbers 77 and 10 were weighed.

Car number 10 was checked for the following:

- 1) Bodywork around the front wheels
- 2) Rear wing height and overhang
- 3) Front and rear wing width
- 4) Rear wing configuration
- 5) Rear bodywork area
- 6) Overall height
- 7) Overall width

The profile of the in Article 3.3.1 of the 2019 Formula One Technical Regulations prescribed front wing section was checked on car number 10.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car number 10.

The oil consumption was checked on car numbers 44, 16, 33, 03, 08, 04 and 26.

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 car numbers 44, 16, 33, 03, 08, 04 and 26.

The lap energy release and recovery limits were checked on car numbers 44, 16, 33, 03, 08, 04 and 26.

The maximum MGU-K speed was checked on car numbers 44, 16, 33, 03, 08, 04 and 26.

The maximum MGU-K torque was checked on car numbers 44, 16, 33, 03, 08, 04 and 26.

The MGU-K power limits were checked on car numbers 44, 77, 05, 16, 33, 03, 08, 04 and 26.

The maximum MGU-H speed was checked on car numbers 44, 16, 33, 03, 08, 04 and 26.

The MGU-K power model was checked on car numbers 77, 05, 03, 04 and 26.

The ES power model was checked on car numbers 77, 05, 03, 04 and 26.

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

A fuel sample was taken from car number 07.

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.

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**