

2019 BRAZILIAN GRAND PRIX

14 - 17 November 2019

From	The FIA Formula One Technical Delegate	Document	12
To	The Stewards	Date	15 November 2019
		Time	19:26

Technical Delegate's Report

Before the first free practice session:

An engine oil sample was taken from car number 11.

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 car numbers 44, 77, 05, 16, 33, 23, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26 and 10.

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:

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 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 77, 05, 33, 27, 04, 11, 18, 07 and 63.

The lap energy release and recovery limits were checked on car numbers 77, 05, 33, 27, 04, 11, 18, 07 and 63.

The MGU-K power limits were checked on car numbers 77, 05, 33, 27, 04, 11, 18, 07 and 63.

The maximum MGU-K speed was checked on car numbers 77, 05, 33, 27, 04, 11, 18, 07 and 63.

The maximum MGU-K torque was checked on car numbers 77, 05, 33, 27, 04, 11, 18, 07 and 63.

The maximum MGU-H speed was checked on car numbers 77, 05, 33, 27, 04, 11, 18, 07 and 63.

The MGU-K power model was checked on car numbers 77, 05, 33, 27, 04, 11, 18, 07 and 63.

The ES power model was checked on car numbers 77, 05, 33, 27, 04, 11, 18, 07 and 63..

A fuel sample was taken from car number 99.

Before the second free practice session:

An engine oil sample was taken from car number 99.

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:

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

The IVT temperatures were checked on car numbers 44, 77, 05, 16, 33, 23, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26, 10 and 63.

The ES state of charge on-track limits were checked on car numbers 44, 77, 05, 16, 33, 23, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26, 10 and 63.

The lap energy release and recovery limits were checked on car numbers 44, 77, 05, 16, 33, 23, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26, 10 and 63.

The MGU-K power limits were checked on car numbers 44, 77, 05, 16, 33, 23, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26, 10 and 63.

The maximum MGU-K speed was checked on car numbers 44, 77, 05, 16, 33, 23, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26, 10 and 63.

The maximum MGU-K torque was checked on car numbers 44, 77, 05, 16, 33, 23, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26, 10 and 63.

The maximum MGU-H speed was checked on car numbers 44, 77, 05, 16, 33, 23, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99, 26, 10 and 63.

The MGU-K power model was checked on car numbers 77, 05, 16, 33, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99 and 63.

The ES power model was checked on car numbers 77, 05, 16, 33, 03, 27, 08, 20, 55, 04, 11, 18, 07, 99 and 63.

The custom software versions were 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 20.

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