

## 2018 AZERBAIJAN GRAND PRIX

26 - 29 April 2018

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<b>From</b>	The FIA Formula One Technical Delegate	<b>Document</b>	25
<b>To</b>	The Stewards	<b>Date</b>	28 April 2018
		<b>Time</b>	21:39

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### Technical Delegate's Report

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

An engine oil sample was taken from car number 35.

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

The temperature of the LHS and RHS front and rear tyre was checked on car numbers 33, 11 and 27.

The instantaneous fuel flow of all cars was checked.

The tyre starting pressures of all cars during P3 were checked.

#### **Before the qualifying practice session:**

An engine oil sample was taken from car numbers 11 and 20.

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 2018 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 77, 07, 33, 18 and 55 were weighed.

The weight distribution was checked on car numbers 07, 33, 18 and 55.

Fuel samples were taken from car numbers 35 and 28.

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

**After the qualifying practice session:**

Car numbers 44, 77, 05, 07, 03, 33, 11, 31, 27 and 55 were weighed.

Car numbers 44, 77, 05, 07, 03, 33, 11, 31, 27 and 55 were checked for the following:

- 1) Bodywork around the front wheels
- 2) Front wing height and overhang
- 3) Rear wing height and overhang
- 4) Front and rear wing width
- 5) Rear wing configuration
- 6) Rear bodywork area
- 7) Rear winglet height
- 8) Stepped bottom
- 9) Diffuser height
- 10) Diffuser width
- 11) Overall height
- 12) Overall width

The chassis identification transponders have been confirmed for car numbers 44, 77, 05, 07, 03, 33, 11, 31, 27 and 55.

The profile of the prescribed front wing section in Article 3.3.2 of the 2018 Formula One Technical Regulations was checked on car numbers 44, 77, 05, 07, 03, 33, 11, 31, 27 and 55.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 44, 77, 05, 07, 03, 33, 11, 31, 27 and 55.

It was confirmed for car numbers 44, 77, 05, 07, 03, 33, 11, 31, 27 and 55 that any vertical cross section of bodywork normal to the car centre line and situated in the volumes defined in Article 3.5.7 form one tangent continuous curve on its external surface with a radius no less than 75mm.

The concave radius of sections of the two rear wing elements which are in contact with the external air stream was checked on car numbers 44, 77, 05, 07, 03, 33, 11, 31, 27 and 55.

The front and rear brake air duct dimensions were checked on car numbers 44, 77, 05, 07, 03, 33, and 55.

The inclination, the diameter and the position of the last 150mm of the exhaust tailpipes were checked on car numbers 77, 07, 33, 11 and 27.

The uppermost rear wing element adjustable positions were checked on car numbers 07, 77 and 33.

It was confirmed for all drivers taking part in the qualifying session that they have used their sealed power unit.

The units locking status was checked on all cars.

The session type has been confirmed for all cars.

Software version checks have been carried out on all cars.

Torque sensor software version checks have been carried out on all cars.

Torque sensor calibration checks have been carried out on all cars.

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

Gear shift data checks have been carried out for car numbers 05 and 07.

The plenum temperature was checked on all cars.

The oil consumption was checked on car numbers 44, 07, 03, 35, 28 and 16.

The rear brakes pressure control was checked on car numbers 11 and 31.

The ES state of charge on-track limits were checked on car numbers 44, 77, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16.

The lap energy release and recovery limits were checked on car numbers 44, 77, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16.

The MGU-K power limits were checked on car numbers 44, 77, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16.

The maximum MGU-K torque was checked on car numbers 44, 77, 05, 07, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16.

The maximum MGU-K speed was checked on car numbers 44, 77, 05, 07, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16.

The maximum MGU-H speed was checked on car numbers 44, 77, 05, 07, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16.

The FiA power sensor calibration checksums were checked on car numbers 44, 77, 05, 07, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16.

The ERS lap energy limits were checked on all cars.

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.

The fuel temperature of all cars was checked.

The instantaneous fuel flow of car numbers 44, 77, 05, 07, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16 was checked.

Fuel flow meter checksums were checked on car numbers 44, 77, 05, 07, 03, 33, 11, 31, 18, 35, 27, 55, 28, 10, 20, 14, 02, 09 and 16.

Fuel samples were taken from car numbers 33, 11 and 27.

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:

<b>Team</b>	<b>FIA Standard ECU system version</b>
Mercedes	SR1010
Ferrari	SR1010
Red Bull	SR1010
Force India	SR1010
Williams	SR1010
Renault	SR1010
Toro Rosso	SR1010
Haas	SR1010
McLaren	SR1010
Sauber	SR1010

All the above items were found to be in conformity with the 2018 FIA Formula One Technical Regulations.

**Jo Bauer**

**The FIA Formula One Technical Delegate**