

## 2018 AZERBAIJAN GRAND PRIX

26 - 29 April 2018

From The FIA Formula One Technical Delegate Document 52

To The Stewards Date 29 April 2018

**Time** 21:06

## **Technical Delegate's Report**

## Before the race:

Clutch paddle linearity checks have been carried out on car numbers 31 and 14.

A fuel sample was taken from car numbers 05 and 09 and analysed during the race.

An engine oil sample was taken from car numbers 27 and 09.

On the grid it was checked that all cars had fitted their tyres when the "3-Minutes" signal was given.

On the grid it was checked that the top ten cars had fitted the tyres which they had used when doing their fastest lap in Q2.

On the grid the temperature of the LHS and RHS front and rear tyre was checked on car numbers 77, 07 and 33.

On the grid the minimum tyre starting pressure of the LHS and RHS front and rear tyre was checked on all cars.

## After the race:

The following cars were weighed:

Number	Car	Driver
44 05 07 11 18	Mercedes Ferrari Ferrari Force India Mercedes Williams Mercedes Renault	Lewis Hamilton Sebastian Vettel Kimi Räikkönen Sergio Perez Lance Stroll Carlos Sainz

28	Toro Rosso Honda	Brendon Hartley
20	Haas Ferrari	Kevin Magnussen
14	McLaren Renault	Fernando Alonso
02	McLaren Renault	Stoffel Vandoorne
16	Sauber Ferrari	Charles Leclerc

The steering wheel of all classified cars has been checked.

Car numbers 18, 28, 14, 02 and 16 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) Skidblock thickness
- 9) Stepped bottom
- 10) Diffuser height
- 11) Diffuser area
- 12) Overall height
- 13) Overall width

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 18, 28, 14, 02 and 16.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 18, 28, 14, 02 and 16.

It was confirmed for car numbers 18, 28, 14, 02 and 16 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 18, 28, 14, 02 and 16.

The front and rear brake air duct dimensions were checked on car numbers 18, 28, 14, 02 and 16.

The inclination, the diameter and the position of the last 150mm of the exhaust tailpipes were checked on car numbers 18, 28, 14 and 16.

The ICE plenum of car number 07 was checked.

It was checked that no classified car exceeded 80 km/h when leaving the formation grid prior to the start of the race.

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.

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

Single clutch paddle use for the race start has been checked on all cars.

The race start data of all cars have been checked.

The gear shift data of car numbers 05 and 07 have been checked.

The plenum temperature was checked on all cars.

The oil consumption was checked on car numbers 44, 05, 55 and 16.

The brake temperature warnings were checked on car numbers 44, 77, 05, 07, 03, 33, 08 and 20.

The ES state of charge on-track limits were checked on car numbers 44, 11, 18, 55, 28, 14, 02 and 16.

The lap energy release and recovery limits were checked on car numbers 44, 11, 18, 55, 28, 14, 02 and 16.

The MGU-K power limits were checked on car numbers 44, 11, 18, 55, 28, 14, 02 and 16.

The maximum MGU-K torque was checked on car numbers 44, 11, 18, 55, 28, 14, 02 and 16.

The maximum MGU-H speed was checked on car numbers 44, 11, 18, 55, 28, 14, 02 and 16.

It was checked on car numbers 44, 77, 05, 07, 11, 18, 55, 28, 10, 20, 14, 02, 09 and 16 that the MGU-K was not used below 100 km/h at the start.

The tyre starting pressures of all cars during the race were checked.

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

The fuel temperature of all cars was checked.

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

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

The total fuel mass used by every classified car during the race was checked.

A fuel sample was taken from car number 44.

The fuel samples have been checked for density and analysed by gas chromatography.

The results of all the 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 car weights and the items checked were found to be in conformity with the 2018 FIA Formula One Technical Regulations.

Jo Bauer

The FIA Formula One Technical Delegate