

# **2018 GERMAN GRAND PRIX**

19 - 22 July 2018

From The FIA Formula One Technical Delegate Document 31

To The Stewards Date 22 July 2018

**Time** 18:18

## **Technical Delegate's Report**

#### Before the race:

The following parts have been replaced today after 14:05 and before the start of the race:

#### Renault:

Car 55: RHS side pod

A front wing deflection test was carried out on car numbers 33 and 20.

A front wing flap deflection test was carried out on car numbers 77, 33, 27 and 20.

A fuel sample was taken from car numbers 33, 31 and 10 and analysed during the race.

An engine oil sample was taken from car numbers 31 and 10.

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 03, 31, 35, 55 and 09.

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 steering wheel of all classified cars has been checked.

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

The race start data of all cars have been checked.

The units locking 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 race.

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

The brake temperature warnings were checked on car numbers 44, 07, 33, 31, 27, 08, 14 and 16.

The plenum temperature was checked on all cars.

The oil consumption was checked on car numbers 07, 33, 31, 20, 02 and 09.

The MGU-K use at the race start was checked on all cars.

It was checked on all cars that the ES was not charged while the car was stationary in the pits.

The ES state of charge on-track limits were checked on all cars.

The lap energy release and recovery limits were checked on all cars.

The maximum MGU-K speed was checked on all cars.

The maximum MGU-K torque was checked on all cars.

The MGU-K power limits were checked on all cars.

The maximum MGU-H speed was checked on all cars.

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.

Fuel flow meter calibration checksums were checked on all cars.

The instantaneous fuel flow of all cars was checked.

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

The fuel temperature of all cars was checked.

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