



# 2024 AUSTRALIAN GRAND PRIX

## 22 - 24 March 2024

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<b>To</b>	The Stewards	<b>Date</b>	23 March 2024
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**Title** P3 and Qualifying scrutineering  
**Description** P3 and Qualifying scrutineering  
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**Manuel Leal**

**The FIA Formula One Technical Delegate**



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### TECHNICAL DELEGATE'S REPORT

#### During the third free practice session:

The tyre starting pressures of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 during P3 were checked.

The fuel pressure of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 during the second free practice session was checked.

The logged pressure within the engine cooling system during the second free practice session was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The engine high rev limit bands were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The fuel flow meter calibration checksum was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The instantaneous fuel mass flow of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

The partial load fuel mass flow of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

The fuel temperature of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

The plenum temperature of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

The exhaust fluid mass flow of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

The IVT temperatures were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The ES state of charge on-track limits were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The lap energy release and recovery limits were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The MGU-K power limits were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The maximum MGU-K speed was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The maximum MGU-K torque was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The maximum MGU-H speed was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

Torque sensor software version checks have been carried out on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

Torque sensor calibration checks have been carried out on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The SECU custom software versions were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

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

An engine oil sample was taken from car number 04.

#### **Before the Qualifying practice session:**

A fuel sample was taken from car numbers 81, 03 and 20.

An engine oil sample was taken from car numbers 03 and 20.

It was confirmed for all cars that the gear ratios used during the remainder of this Competition belong to the gear ratios declared to the FIA technical delegate at or before the first Competition of the 2024 Championship.

The thickness of the brake discs of car numbers 01, 63, 44, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

#### **During the Qualifying practice session:**

Car numbers 01, 11, 63, 55, 81, 14, 31, 23, 77 and 27 were weighed.

The weight distribution was checked on car numbers 01, 11, 63, 55, 81, 14, 31, 23, 77 and 27.

The uppermost rear wing element adjustable positions were checked on car numbers 10, 23 and 03.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 10, 23, 03 and 77.

The tyre starting pressures of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 during the qualifying sessions were checked.

### **After the Qualifying practice session:**

Car numbers 01, 11, 63, 16, 55, 81, 04, 18, 14 and 22 were weighed.

The following aerodynamic component or bodywork areas were checked on car numbers 01, 55 and 04:

- Floor Body - TR Article 3.5.1
- Floor Fences - TR Article 3.5.2
- Floor Edge Wing - TR Article 3.5.3
- Nose - TR Article 3.6.1
- Forward Chassis - TR Article 3.6.2
- Mid Chassis - TR Article 3.6.3
- Mirror Housing - TR Article 3.6.4
- Sidepod - TR Article 3.7.1
- Coke Panel - TR Article 3.7.2
- Engine Cover - TR Article 3.7.3
- Front Wing Endplate body - TR Article 3.9.2
- Front Wing Tip - TR Article 3.9.3
- Front Wing Diveplane - TR Article 3.9.4
- Front Wing Endplate - TR Article 3.9.5
- Rear Wing Profiles - TR Article 3.10.1
- Pylons - TR Article 3.10.2
- Rear Wing Beam - TR Article 3.10.3
- Rear Wing Endplate Body - TR Article 3.10.4
- Rear Wing Tip - TR Article 3.10.5
- Rear Wing Endplate - TR Article 3.10.7

The uppermost rear wing element adjustable positions were checked on car numbers 01, 11, 63, 16, 55, 81, 04, 18, 14 and 22.

The minimum distance between the adjacent rear wing sections at any longitudinal vertical plane was checked on car numbers 01, 11, 63, 16, 55, 81, 04, 18, 14 and 22.

The fuel pressure of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 during the qualifying session was checked.

The logged pressure within the engine cooling system during the qualifying session was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The engine high rev limit bands were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

Fuel flow meter calibration checksums were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The partial load fuel mass flow of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

The fuel temperature of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

The plenum temperature was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The exhaust fluid mass flow of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 was checked.

The IVT temperatures were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The ES state of charge on-track limits were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The lap energy release and recovery limits were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The MGU-K power limits were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The maximum MGU-K speed was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The maximum MGU-K torque was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The maximum MGU-H speed was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

It was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 that the ES was not charged while the car was stationary in the pits.

The torque coordinator demands were checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The torque control was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The session type has been confirmed for car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

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

Torque sensor software version checks have been carried out on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

Torque sensor calibration checks have been carried out on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The rear brakes pressure control was checked on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

The steering wheel of car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 has been checked.

It was verified on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27 that the PCU dashboard display configuration was not changed.

Custom software version checks have been carried out on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

SECU software version checks have been carried out on car numbers 01, 11, 63, 44, 16, 55, 81, 04, 18, 14, 31, 10, 23, 03, 22, 77, 24, 20 and 27.

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

A fuel sample was taken from car numbers 01 and 63.

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 Competition.  
Further the density change of the fuel samples taken today was within the permitted limits.

An engine oil sample was taken from car number 63.

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 Competition.

The following SECU software versions have been used by the teams during the qualifying sessions:

<b>Team</b>	<b>FIA Standard ECU system version</b>
Oracle Red Bull Racing	SR1603
Mercedes-AMG PETRONAS Formula One Team	SR1603
Scuderia Ferrari	SR1603
McLaren Formula 1 Team	SR1603
Aston Martin Aramco Formula One Team	SR1603
BWT Alpine F1 Team	SR1603
Williams Racing	SR1603
VISA Cash App RB Formula One Team	SR1603
Stake F1 Team Kick Sauber	SR1603
MoneyGram Haas F1 Team	SR1603

All the above items were found to be in conformity with the 2024 FIA Formula One Technical Regulations.

**Manuel Leal**  
**The FIA Formula One Technical Delegate**