

Overall Information

Table1- Overall Information

Vehicle plate number	33592 (32441)
CPK data logger number	LN: 001506, DN: 1927
Bus line	Number 2 (west to east bus line)
Bus Terminals	Khavaran Bus Terminal - Western Bus Terminal
Total path distance	19 km
DPF producer company	Tehag_02 (Catalyzed DPF)
Installation date	25/Jan/2016
Report period	01/Mar/2016-15/Mar/2016 (fifteen days)
K value - DPF upstream	1.65 [1/m]
K value – DPF downstream	0 [1/m]

Table 2- DPF Maintenance History

Filter maintenance date	System have been working without any cleaning from installation date.
Dosing status	This type do not use FBC.

Table 3- Fuel and Additive Consumption Information

Bus mileage (from DPF installation date)	3542 km
Bus mileage over the period	500 km
Working days over the period	9 days
Stop days	6 days
Data logger working days	9 days
Working hours over the period	45 hours 9 minutes
Average working hours per day (including stop days)	3 hours 0 minutes
Bus average speed	11.1 km/hr
idle speed time to all working time ration	62.23 %
Total Bus fuel consumption over the period	305 lit
Fuel consumption per hour	6.75 lit/hr
Average fuel consumption	0.62 lit/km

Temperature, Pressure and Engine Speed Overview

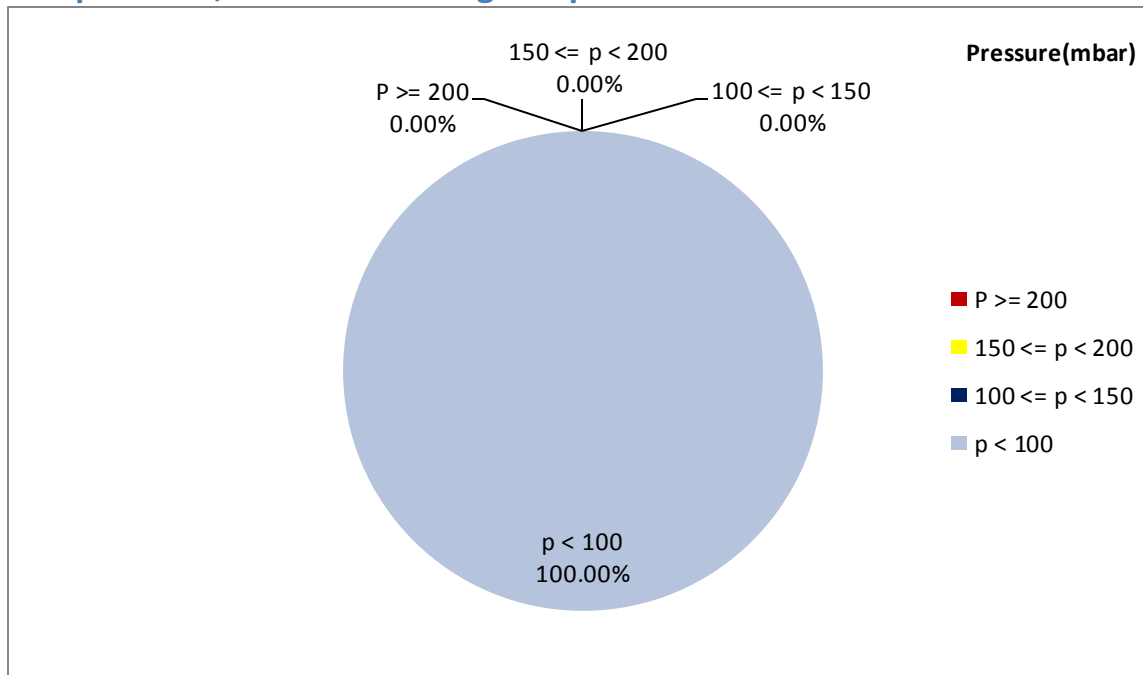


Figure 1- Pressure distribution over the working hours

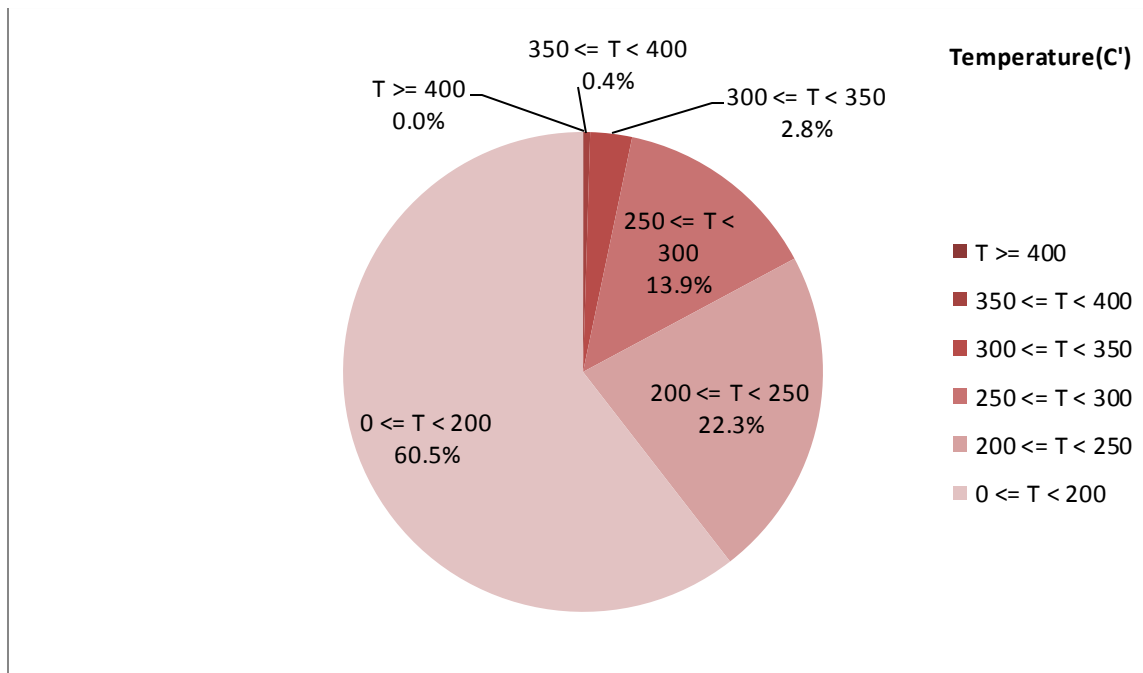


Figure 2-Temperature distribution over the working hours

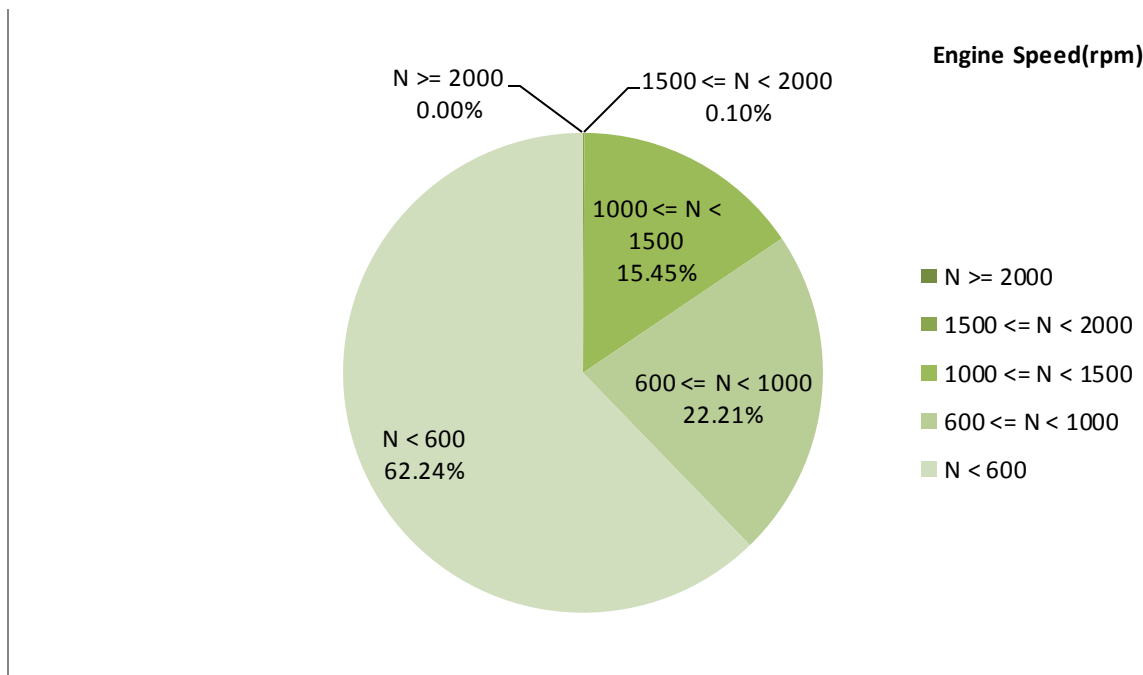


Figure 3- Engine speed distribution over the working hours

Table 4- Mean values

Mean temperature (C)	Mean pressure(mbar)	Mean engine speed(rpm)
181.35	4.37	686

Table 5- Mean values without idling

Mean temperature (C)	Mean pressure(mbar)	Mean engine speed(rpm)
238.65	9.95	942

Table 6- Max-min values

Max-min temperature(C)	Max-min pressure(mbar)	Max-min engine speed(rpm)
442-50	87-0	1984-368

Detailed Pressure Analysis

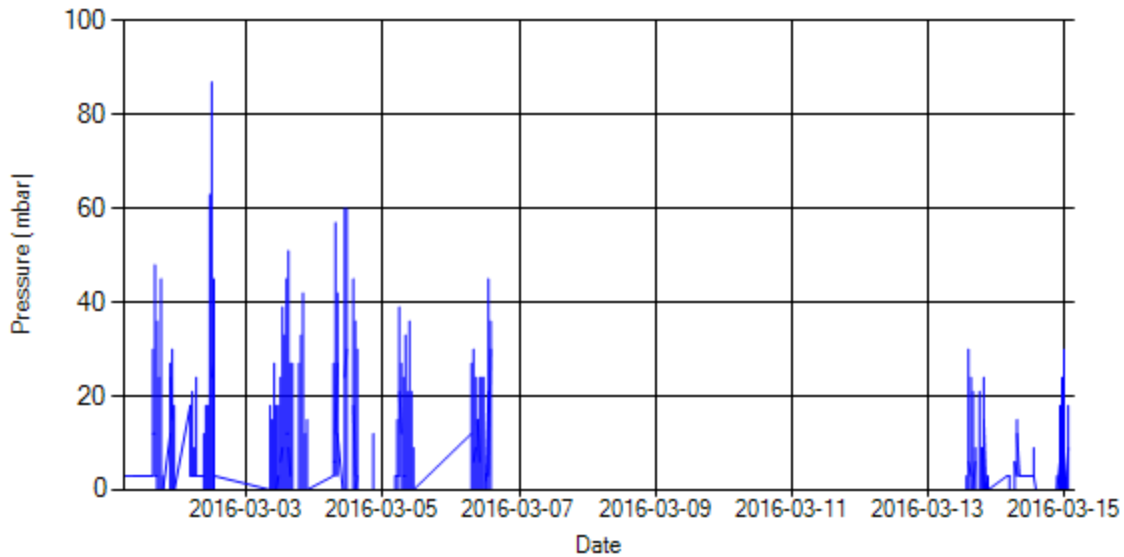


Figure 4- Pressure distribution over the period

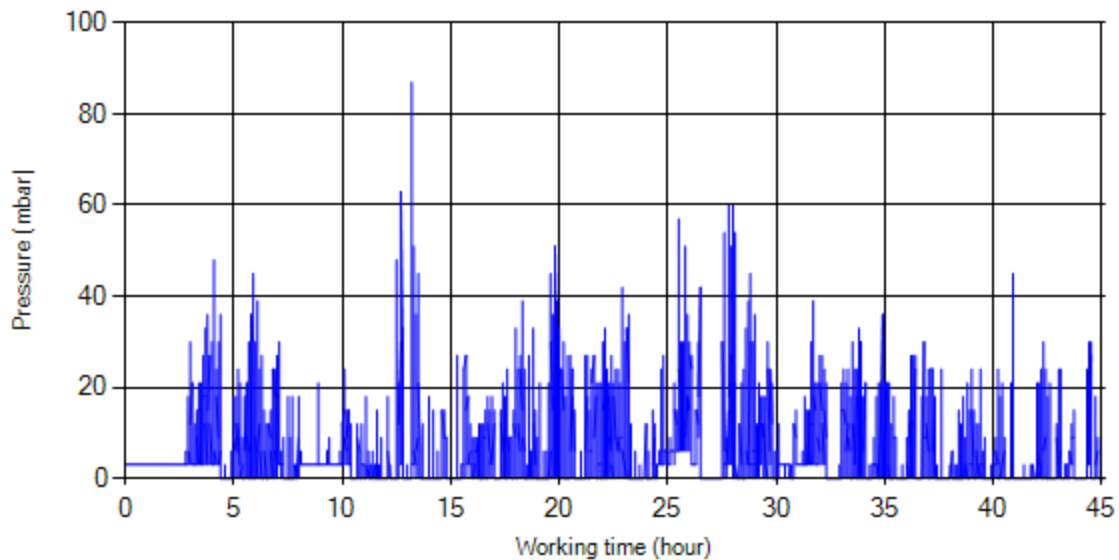


Figure 5- Pressure vs. working hours

Notice: backpressure distribution was shown into two diagrams. As obvious in figure 5, stop-working periods were eliminated and pressure was displayed along working hours.

Detailed Temperature Analysis

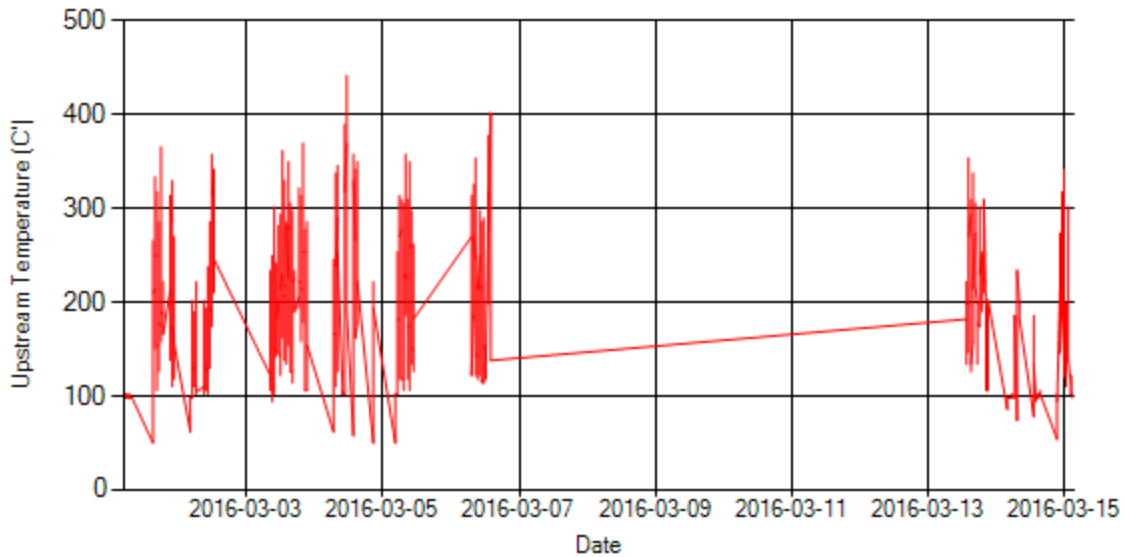


Figure 6- Temperature distribution over the period

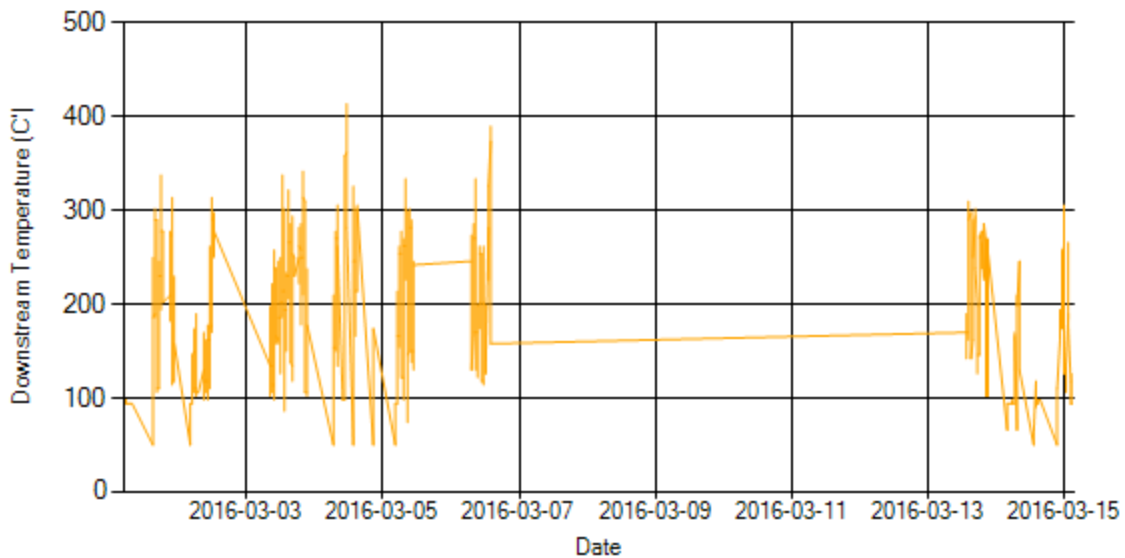


Figure 7- Temperature distribution over the period

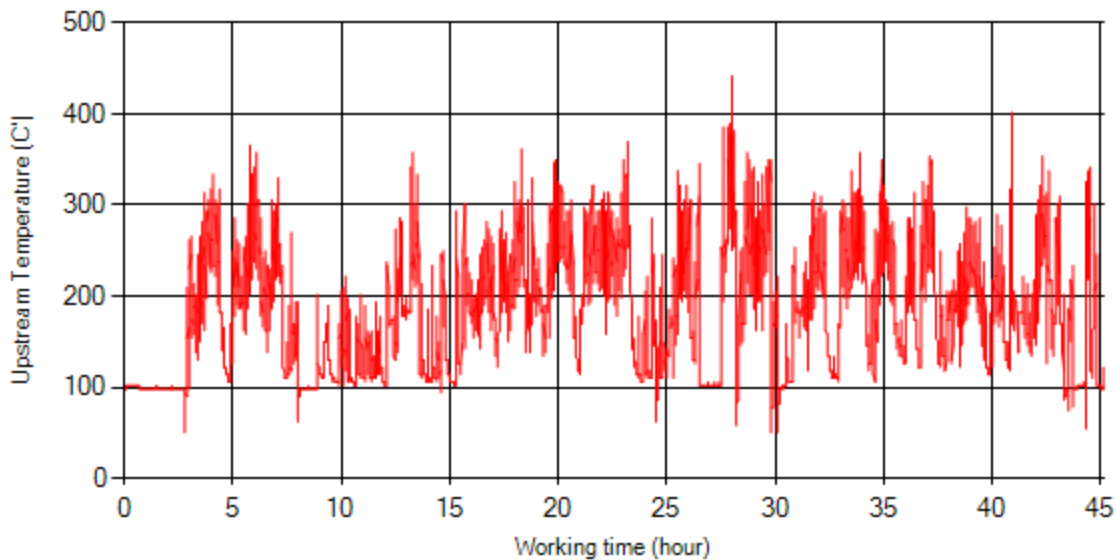


Figure 8- Temperature vs. working hours

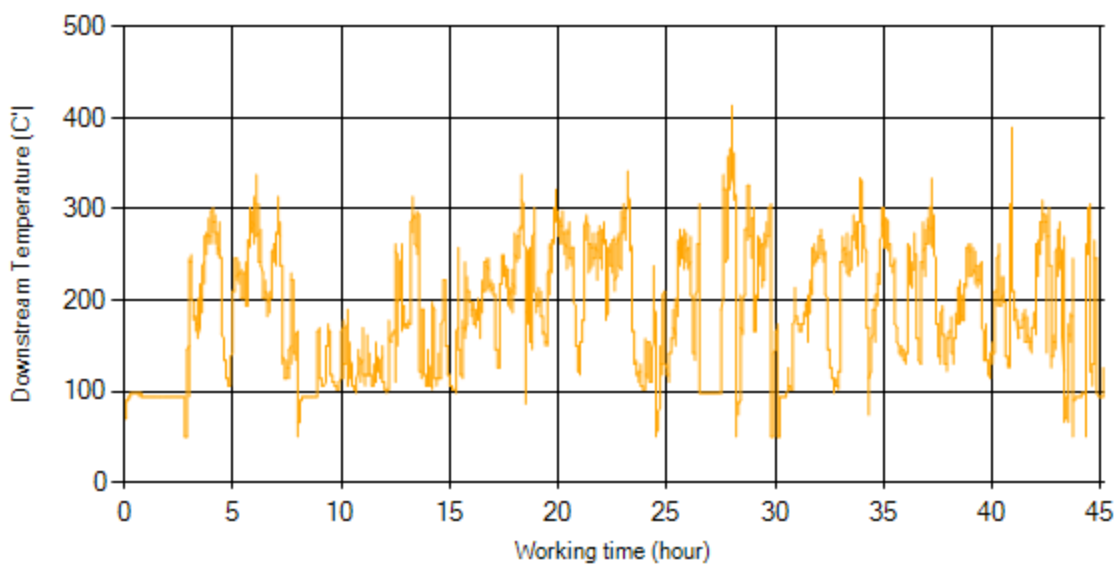


Figure 9- Temperature vs. working hours

Engine Speed Diagrams

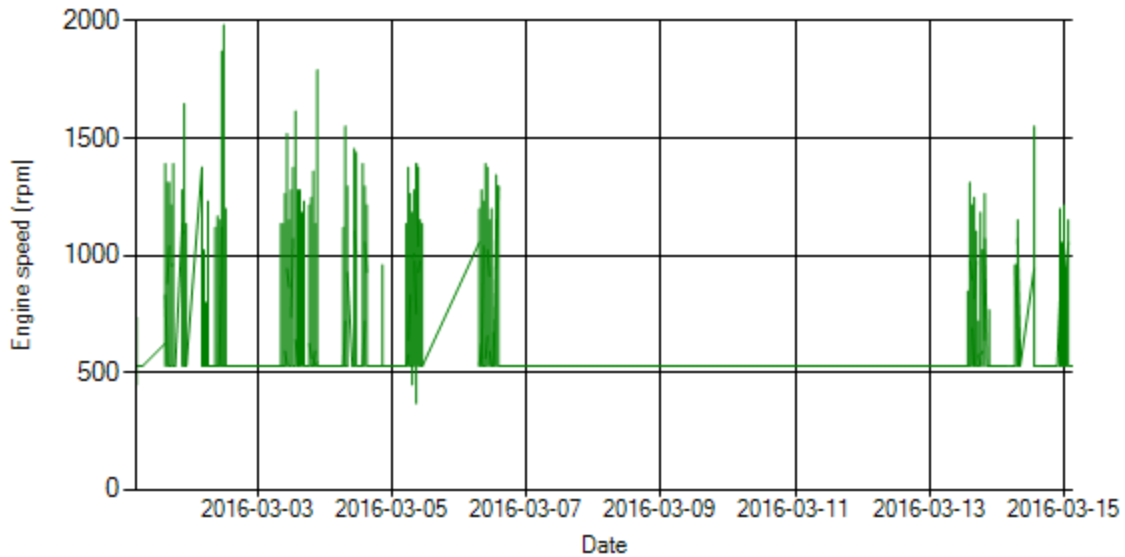


Figure 10- Engine speed distribution over the period

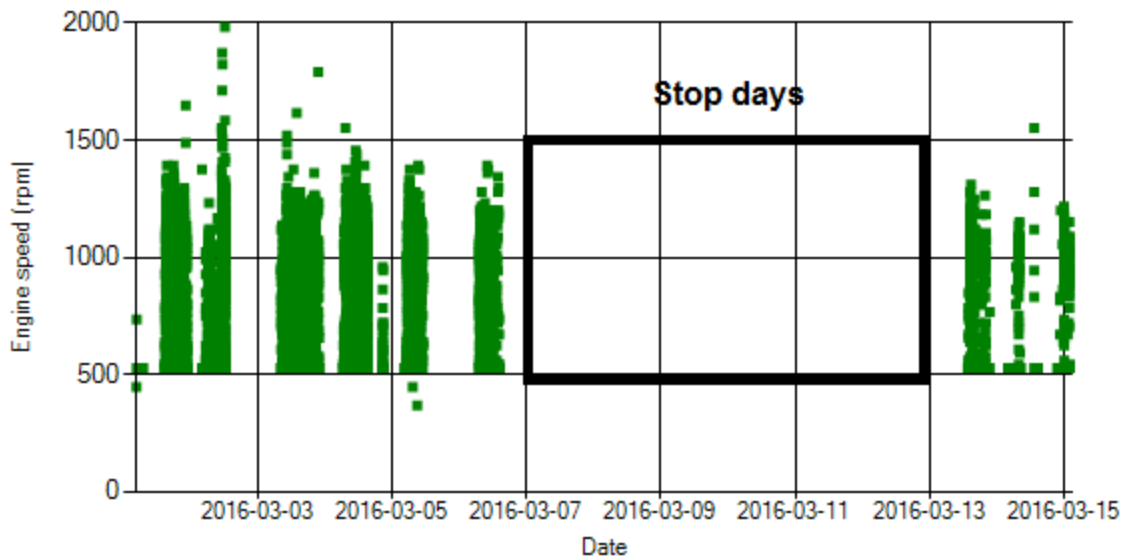


Figure 11- Engine speed diagram for calculating CPK's working days

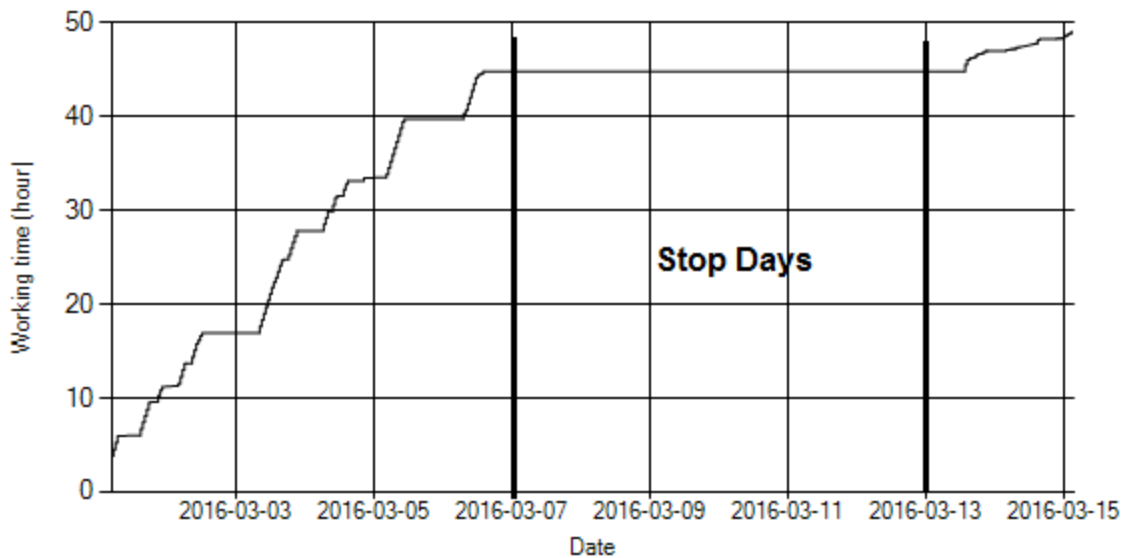


Figure 12- Time diagram for calculating CPK's working days

Notice: Data logger sampling time can be calculated from Figure 12. The lines parallel with Date axis show days without data logger data.

Pressure-Engine Speed diagrams

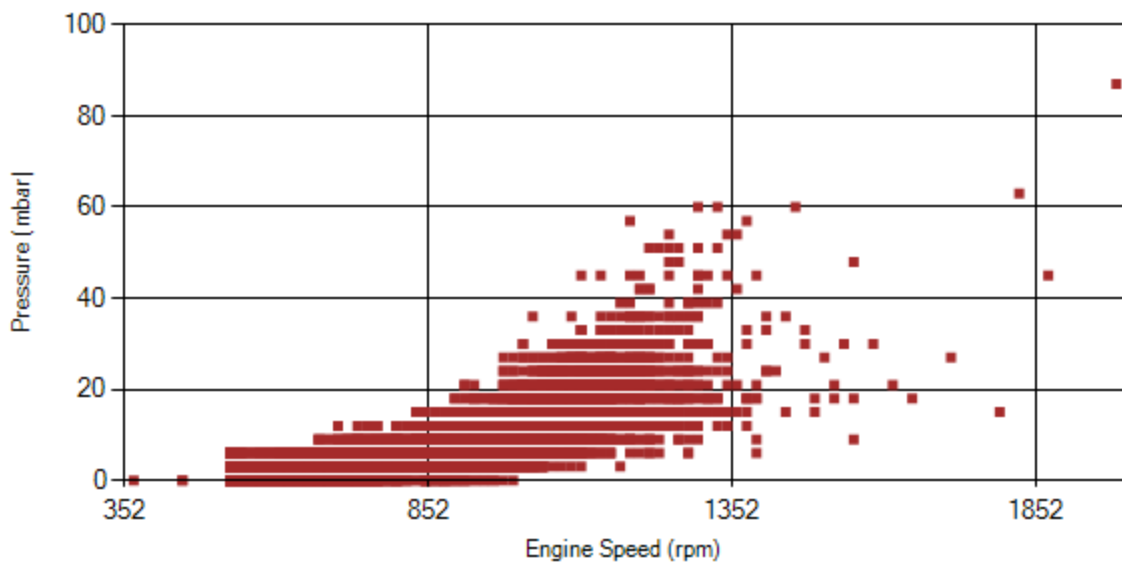


Figure 13- Pressure against engine speed

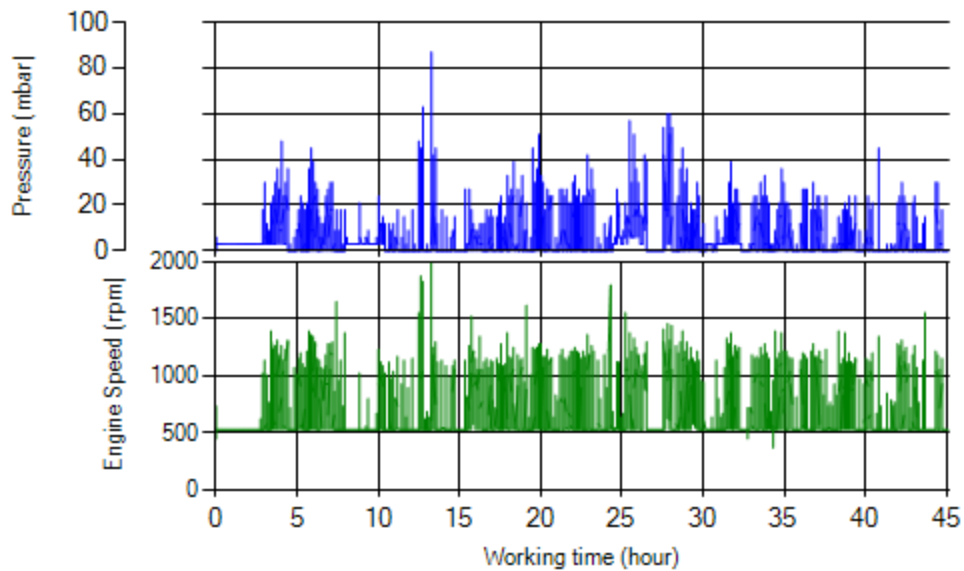


Figure 14- P, N distribution vs. working hours

Temperature-Engine Speed diagrams

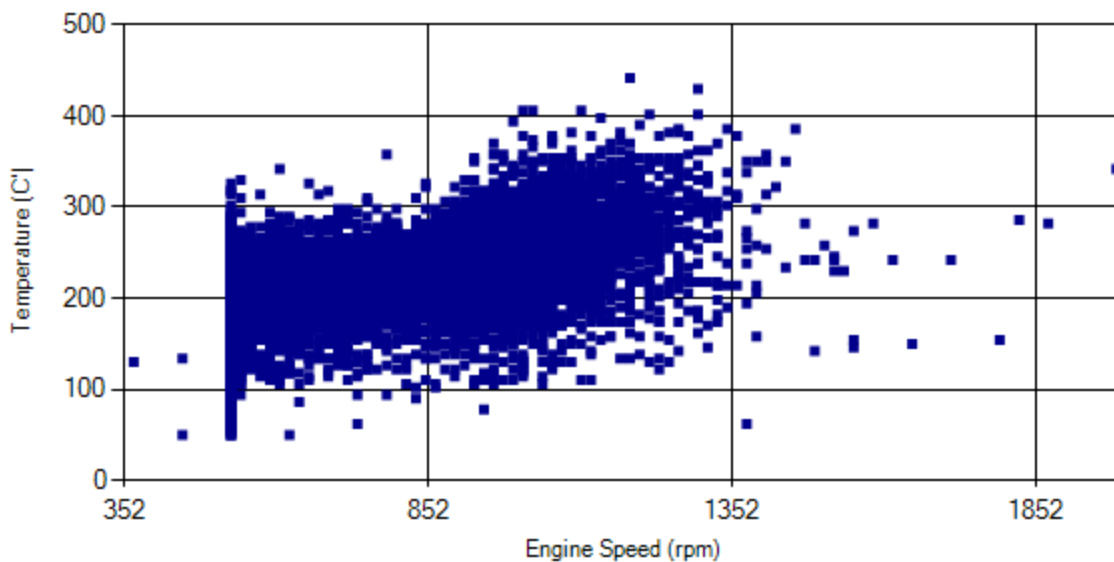


Figure 15- Temperature against engine speed

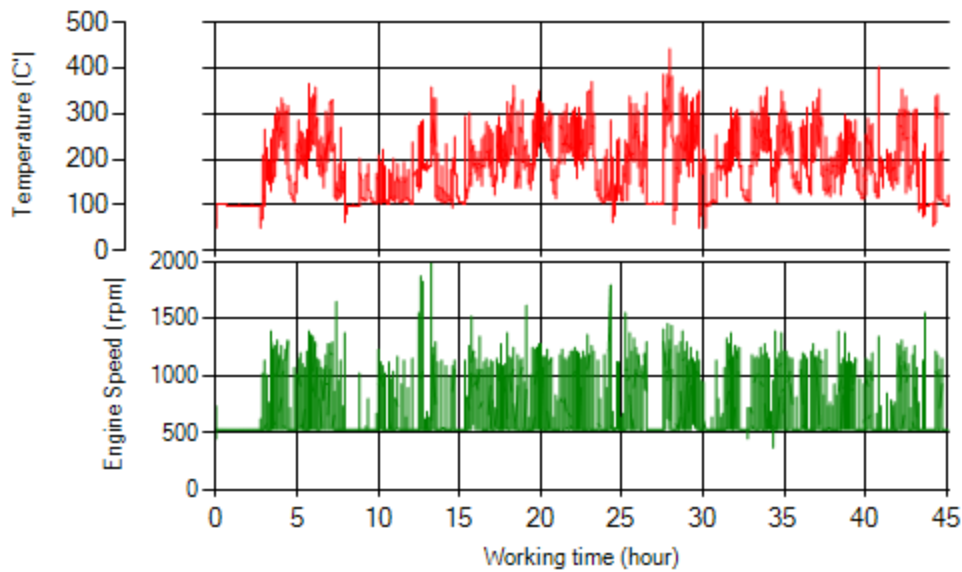


Figure 16- T, N distribution vs. working hours

Filter Operation Analysis

- As depicted in figure 1, pressure above 100 mbar was not observed during this period.
- Figure 2 display flow temperature distribution for DPF’s upstream. It can be obviously observed that 0.4% of total working-time temperature is above 350 °C and 17.1 % above 250°C.

Filter operation status	Excellent <input checked="" type="checkbox"/>	Good <input type="checkbox"/>
	Maintenance required <input type="checkbox"/>	Failed <input type="checkbox"/>