

Overall Information

Table1- Overall Information

Vehicle plate number	85423
CPK data logger number	LN: 001505, DN: 2001, Sim Number +989218469621
Bus line	Number 4 (south to north bus line)
Bus Terminals	South Bus Terminal - Park Way Bus Tehran Terminal
Total path distance	22.8 km
DPF producer company	HJS_02 (active system with FBC – electrical heater)
Installation date	19/Feb/2015
Report period	01/Apr/2016- 15/Apr/2016 (fifteen days)
K value - DPF upstream	1.81 [1/m]
K value – DPF downstream	0.02 [1/m]

Table 2- DPF Maintenance History

Filter maintenance date	DPF was cleaned on 2016-02-03 for the first time.
Dosing status	Dosing value has been kept constant from installation date until now.

Table 3- Fuel and Additive Consumption Information

Bus mileage (from DPF installation date)	71013 km
Bus mileage over the period	4146 km
Working days over the period	15 days
Stop days	0 day
Data logger working days	- *
Working hours over the period	-
Average working hours per day (including stop days)	-
Bus average speed	-
idle speed time to all working time ration	-
Total Bus fuel consumption over the period	2447 lit
Fuel consumption per hour	- lit/hr
Average fuel consumption	0.59 lit/km
Total Bus additive consumption over the period	1.15 lit
Average additive consumption	277 cc/km
Additive consumption to fuel ration	470 cc/1000lit

*** Notice: Due to electrical problem, lots of data was missed during the period. So next pages results were driven considering available data.**

Temperature, Pressure and Engine Speed Overview

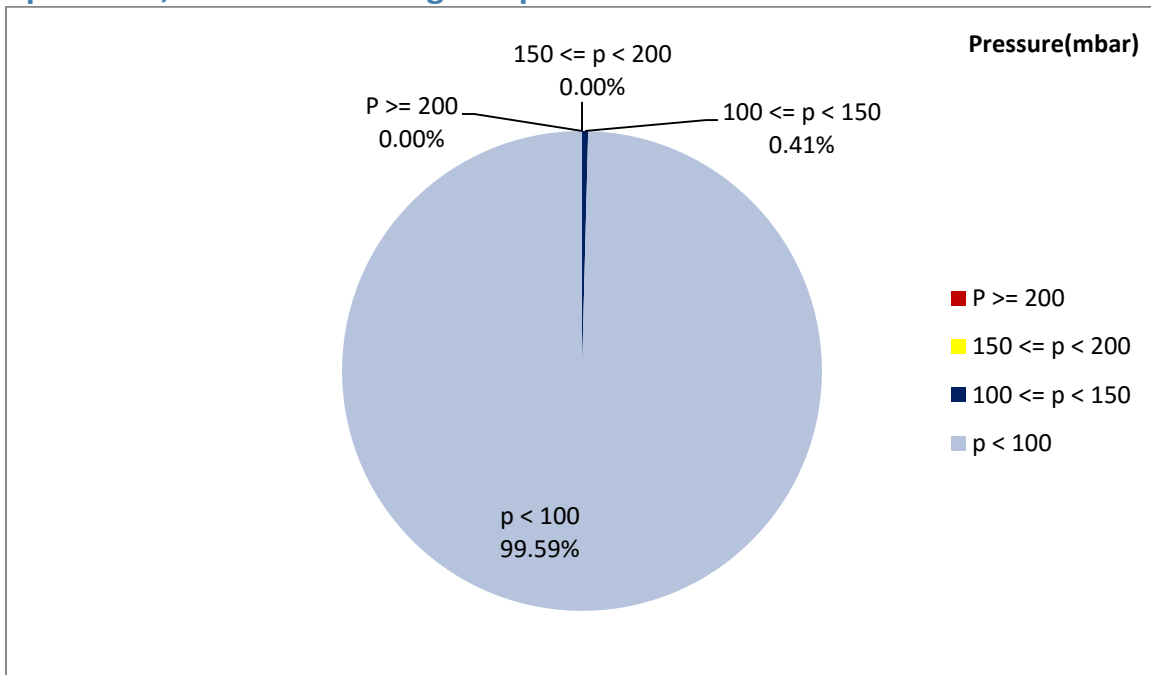


Figure 1- Pressure distribution over the working hours

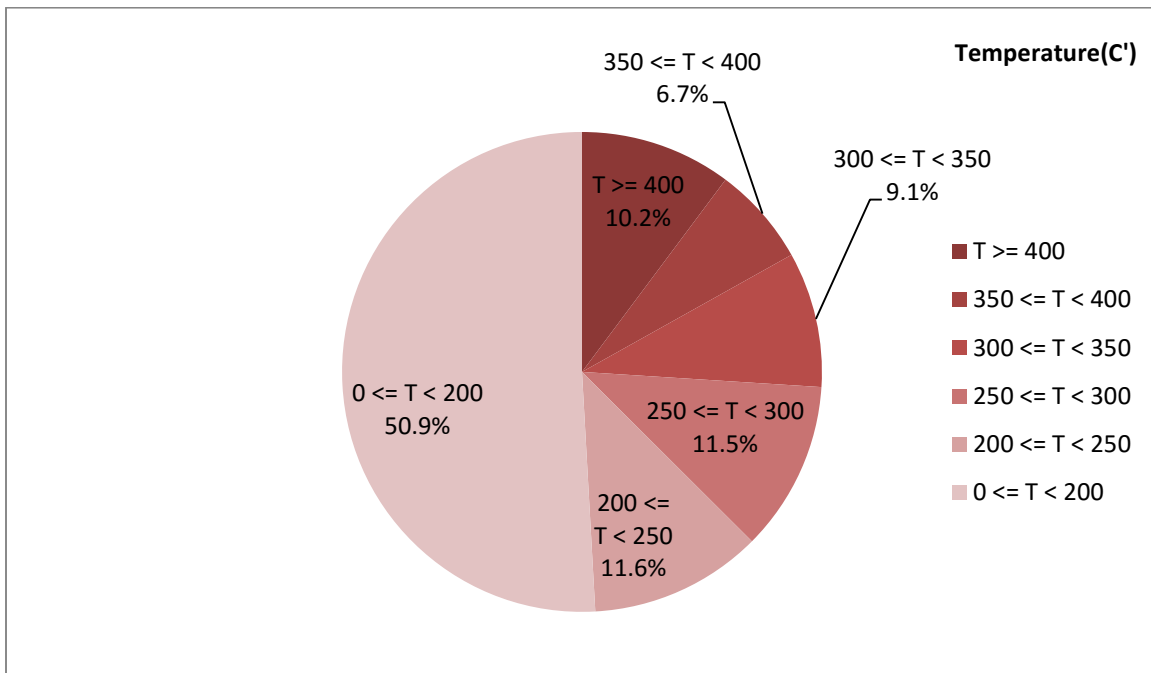


Figure 2-Temperature distribution over the working hours

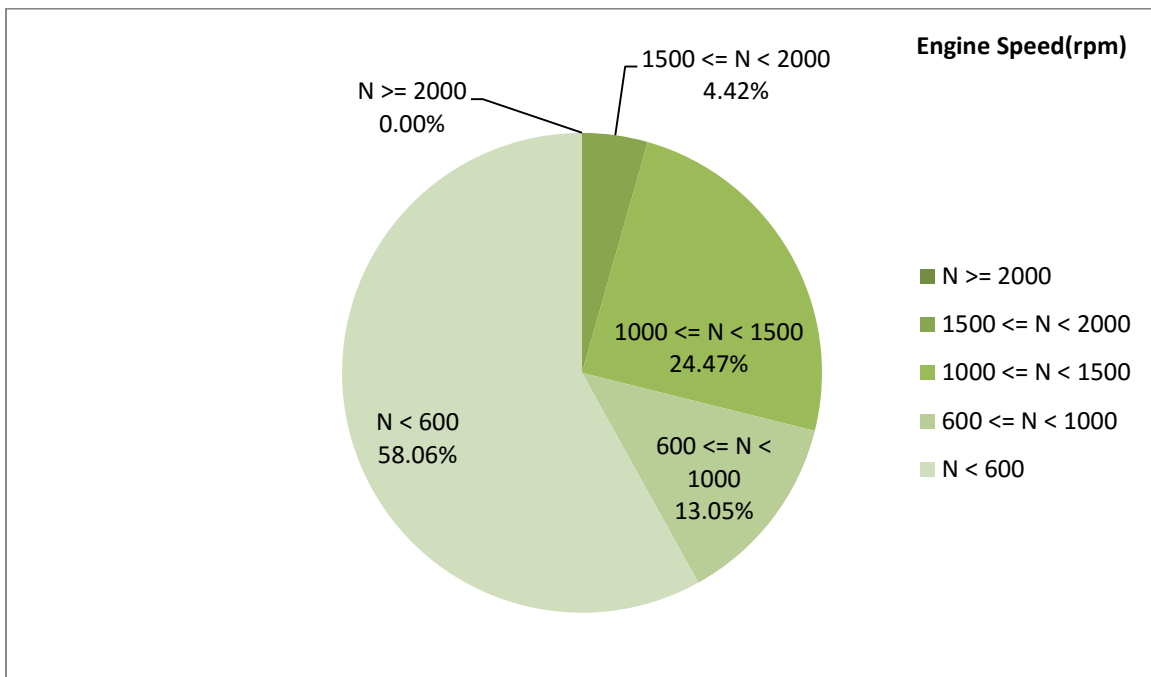


Figure 3- Engine speed distribution over the working hours

Table 4- Mean values

Mean temperature (C)	Mean pressure(mbar)	Mean engine speed(rpm)
232.99	12.87	788

Table 5- Mean values without idling

Mean temperature (C)	Mean pressure(mbar)	Mean engine speed(rpm)
331.01	27.73	1124

Table 6- Max-min values

Max-min temperature(C)	Max-min pressure(mbar)	Max-min engine speed(rpm)
650-50	147-0	1968-544

Detailed Pressure Analysis

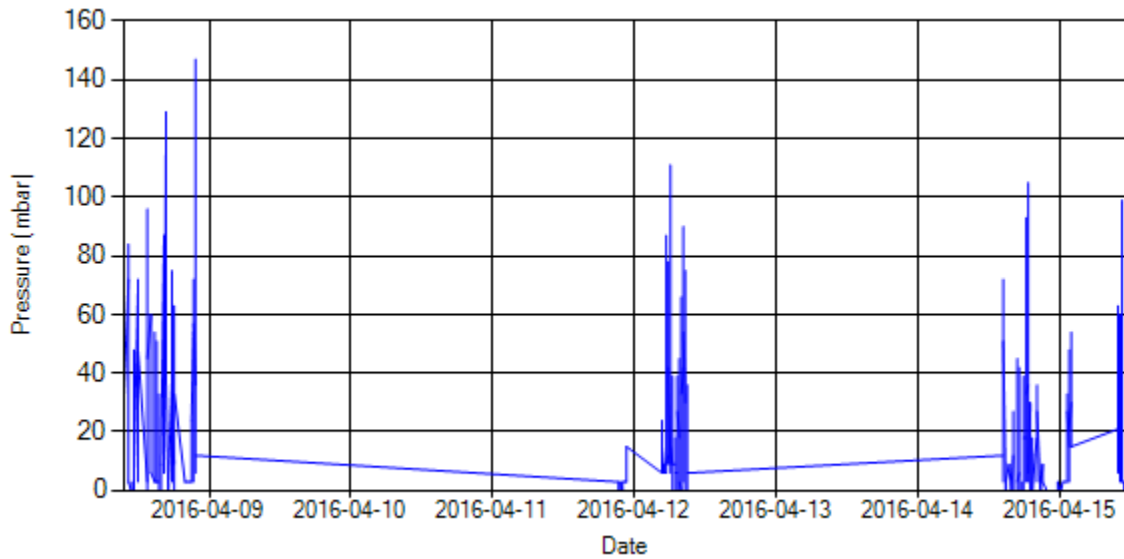


Figure 4- Pressure distribution over the period

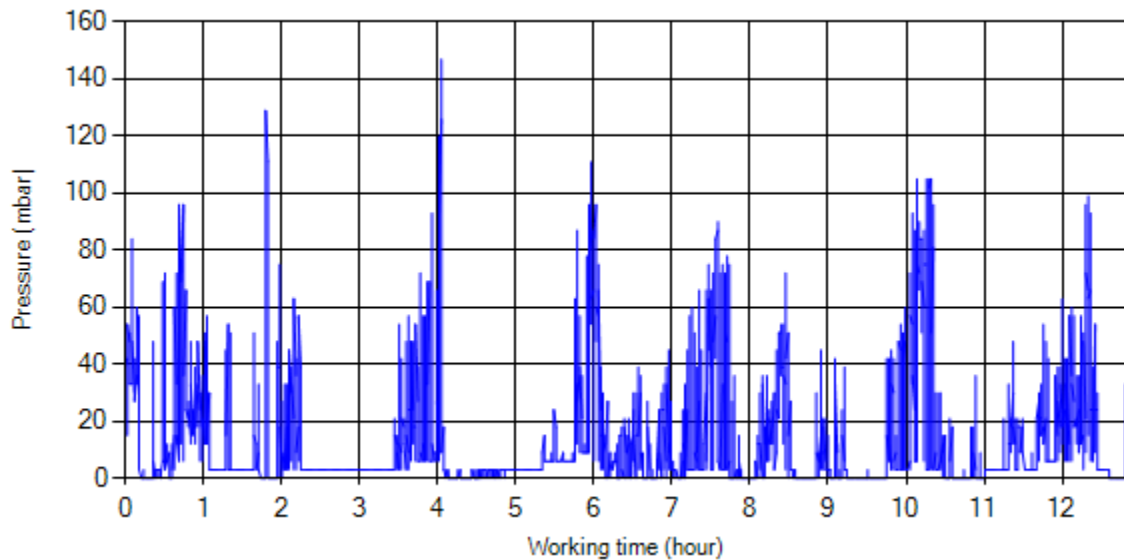


Figure 5- Pressure vs. working hours

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

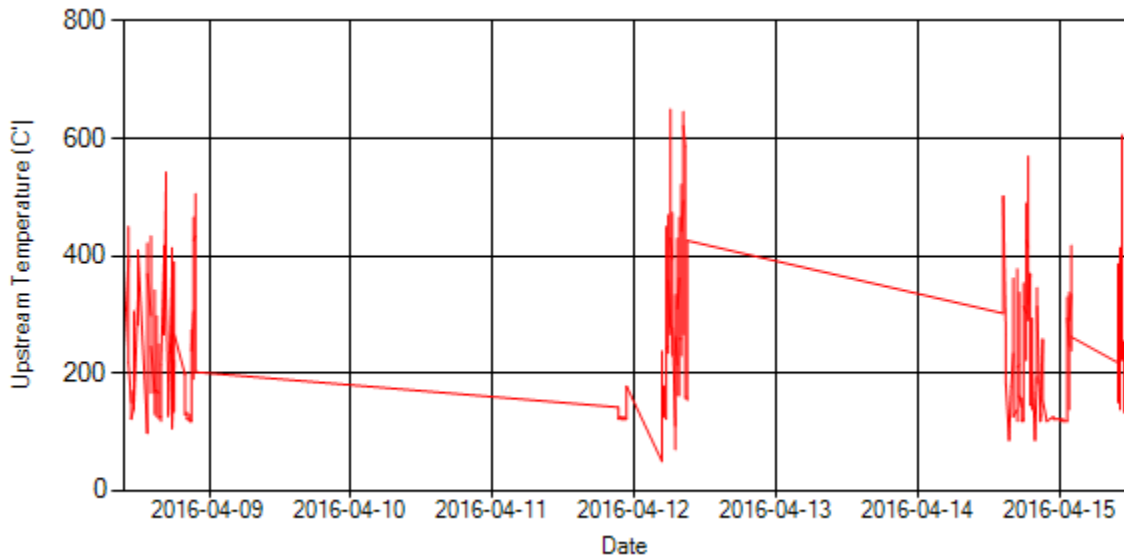


Figure 6- Temperature distribution over the period

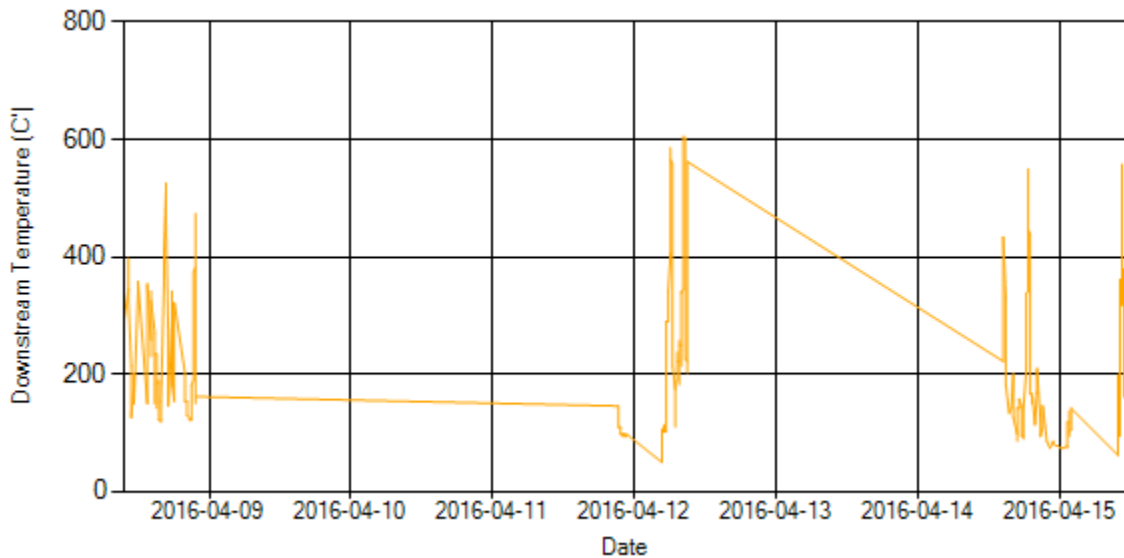


Figure 7- Temperature distribution over the period

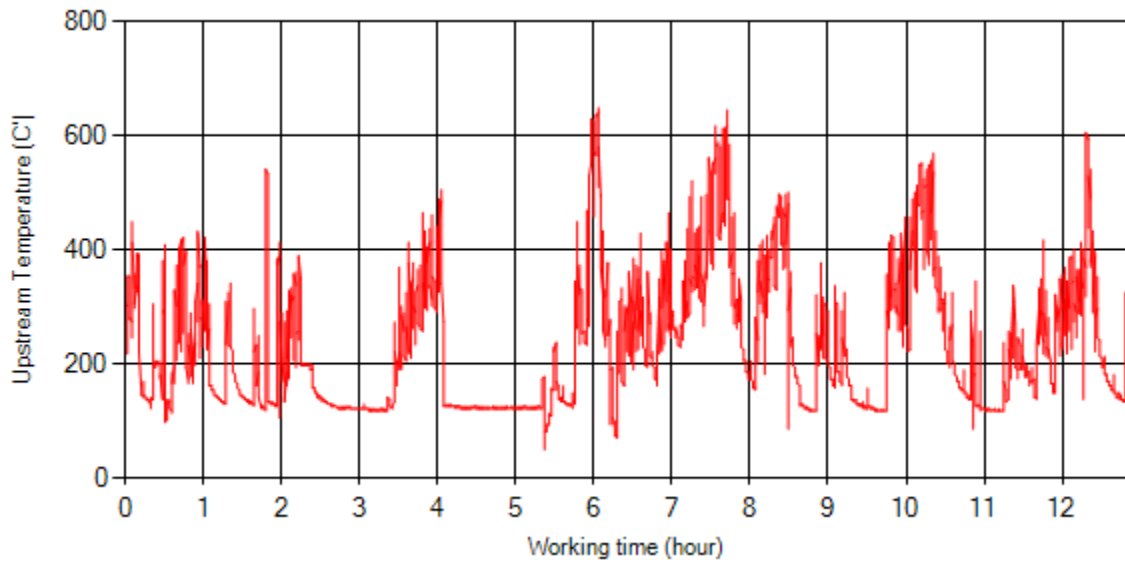


Figure 8- Temperature vs. working hours

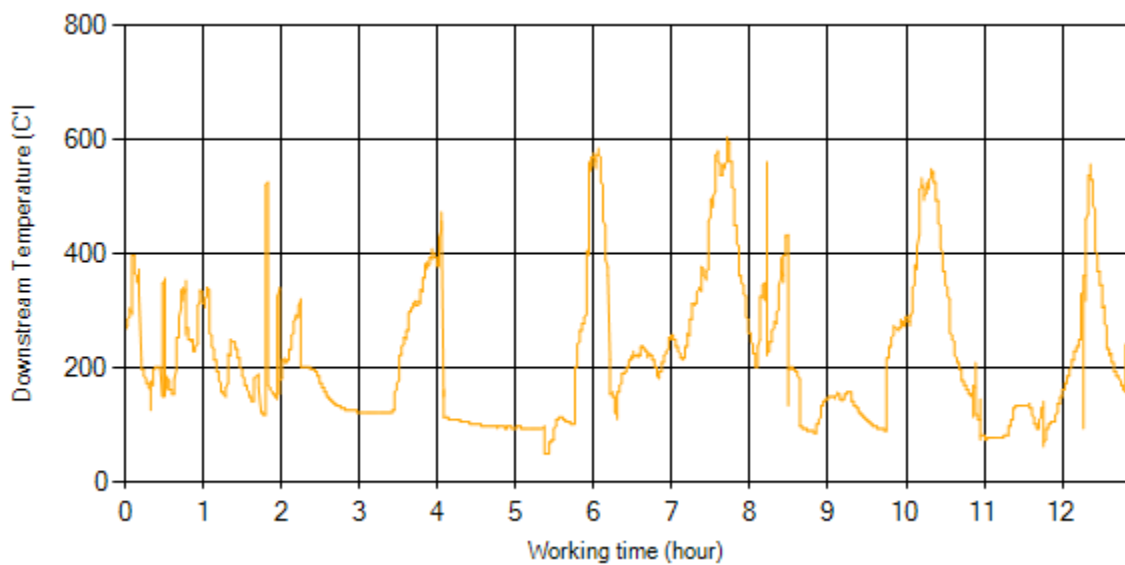


Figure 9- Temperature vs. working hours

Engine Speed Diagrams

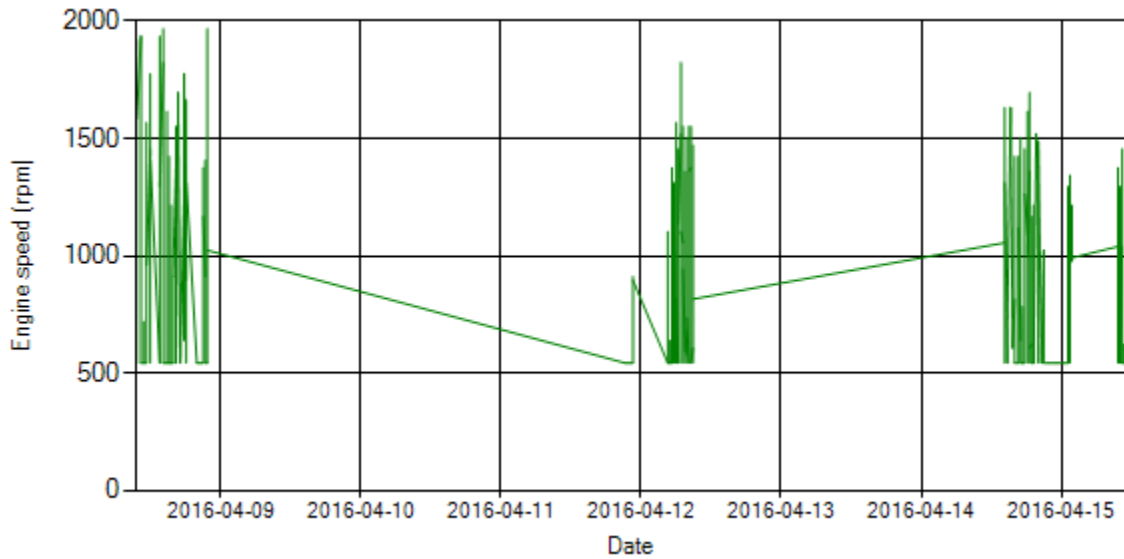


Figure 10- Engine speed distribution over the period

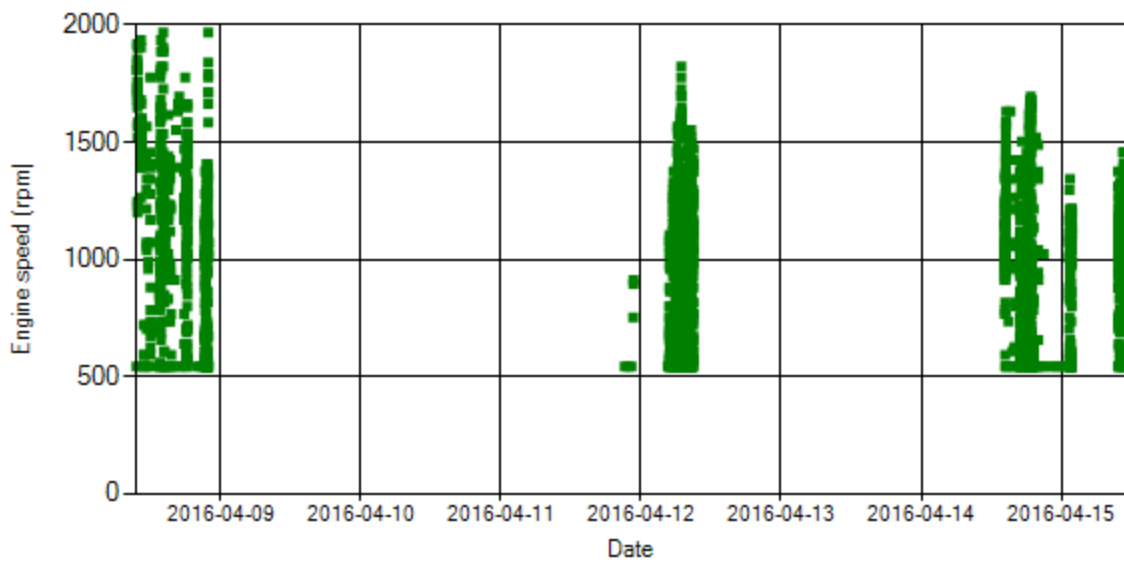


Figure 11- Engine speed diagram for calculating CPK's working days

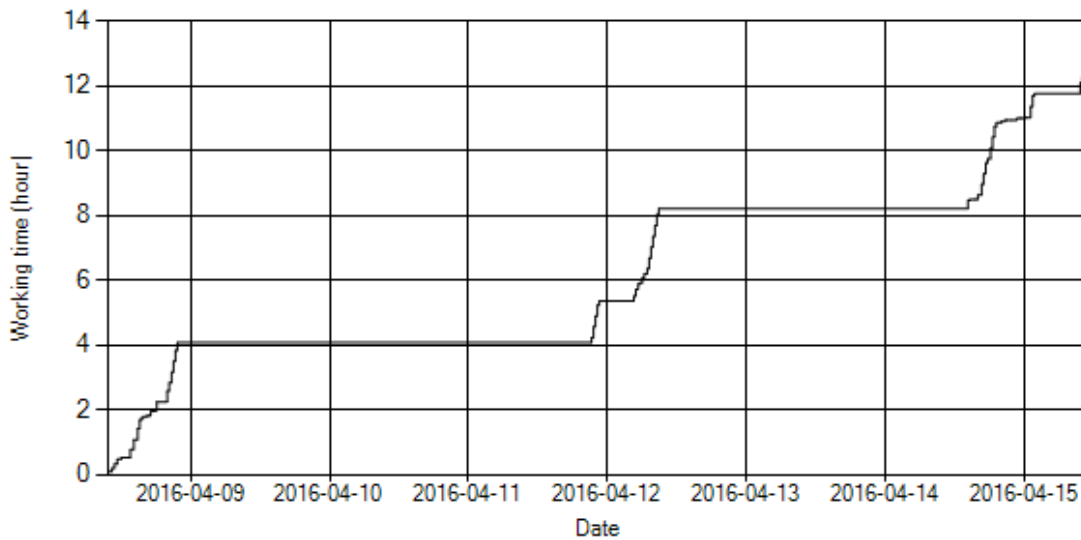


Figure 12- Time diagram for calculating CPK's working days

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

Notice: Because of electrical problem and missing lots of data, stop days could not be calculated from figures 11 and 12.

Pressure-Engine Speed diagrams

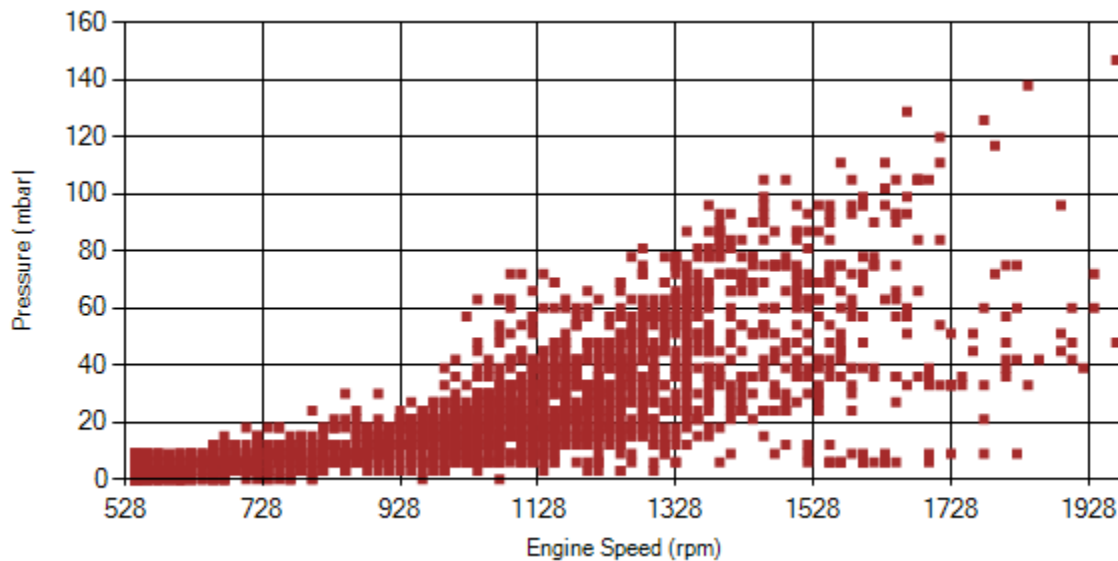


Figure 13- Pressure against engine speed

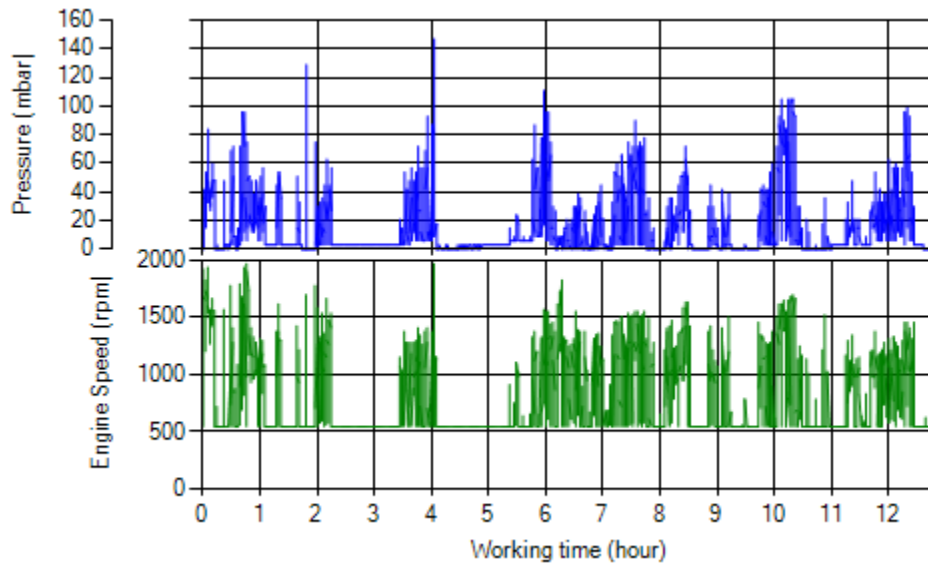


Figure 14- P, N distribution vs. working hours

Temperature-Engine Speed diagrams

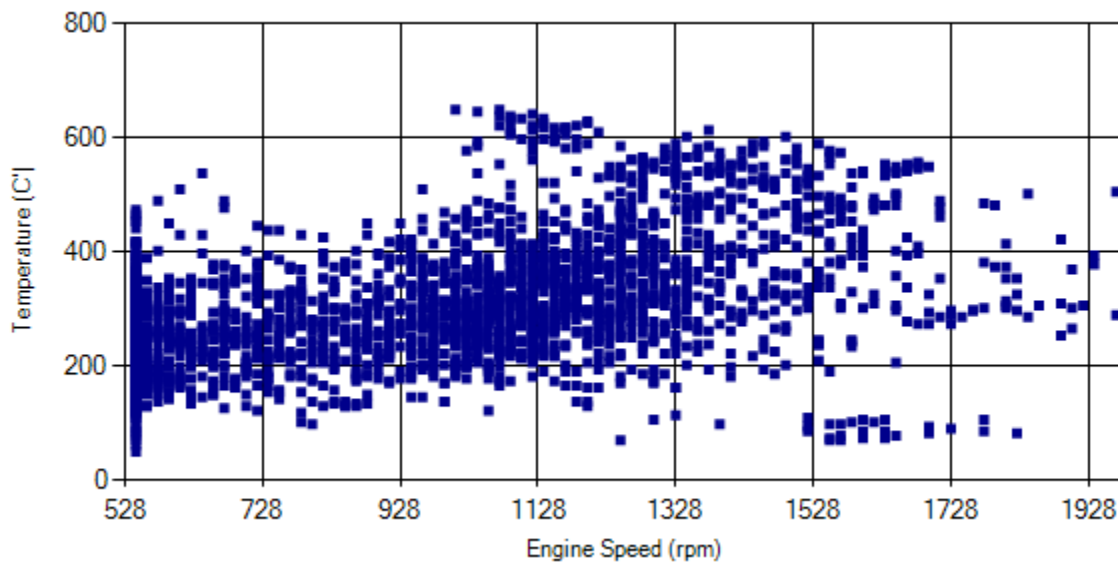


Figure 15- Temperature against engine speed

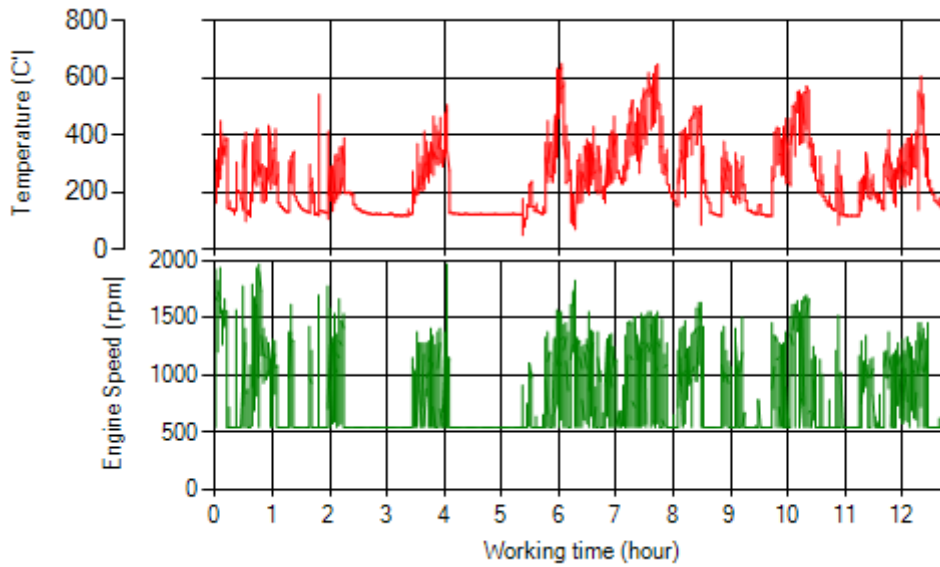


Figure 16- T, N distribution vs. working hours

Filter Operation Analysis

- Due to missing lots of data, reliable judgment could not be done. But considering available data, DPF operation was excellent during the period.

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