

ENGINE PERFORMANCE REPORT

APL ANTWERP

Engine : Main Engine

Performance Date : Jul 3rd 2023

Evaluation Report

Evaluation Report - Main Report

Parameter	Alerts	Comments / Recommendation
Pscav	Low	1. Check the turbocharger casings assembly. 2. Clean the turbocharger filter. 3. Chemical cleaning required for Air coolers. 4. Check the compressor axial clearance because during overhauling the bearing assembly are not correct.
Tscav	Normal	
Pmax	Very High	1. Exhaust valve opening too late.i.e incorrect exhaust valve timing/Check the Exhaust valve opening timing. 2. Overload of the engine/Check the load of the engine.
Pcomp	Very Low	1. Piston rings (leaking)/Replace the Piston Rings. 2. Piston crown (Burnt)/Check the piston crown by means of the template. 3. Cylinder liner (Worn)/Check the liner by means of the measuring tool. 4. Leaking Exhaust Valve/ Replace or overhaul the valve. 5. Exhaust valve (Timing) may be wrong/Check the valve Timing. 6. Piston rod and stuffing box (leaking)/ Overhaul the stuffing box.
Exhaust Temperature	Very Low	1. Falling scavenge air temperature./Check the sea water system thermostat valve is functioning correctly. 2. Air/gas/steam in fuel system./Check the suction side of the supply pump for air leakage, Check the fuel oil supply pump and circulating pump pressures, Check the function of the de-aerating valve,Check the fuel oil preheater for steam leakage.
Exhaust Gas Temperature T/C Inlet	Normal	
Exhaust Gas Temperature T/C Outlet	Normal	
SFOC	Normal	
TC Inlet-TC Outlet	Very Low	
Torque Rich Index	Within Range	

Evaluation Report - Unit wise Report

Parameter	Alerts	Comments / Recommendation
No records found		

Performance Chart

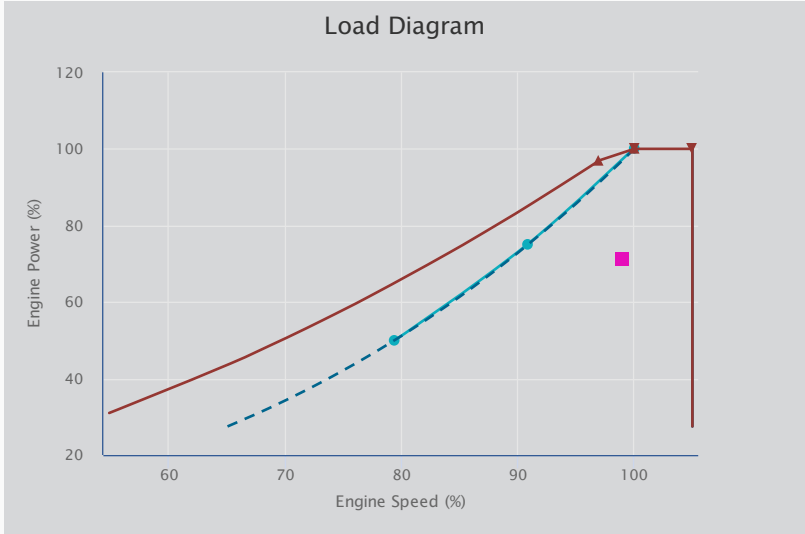
Group

All Group Selected

Chart

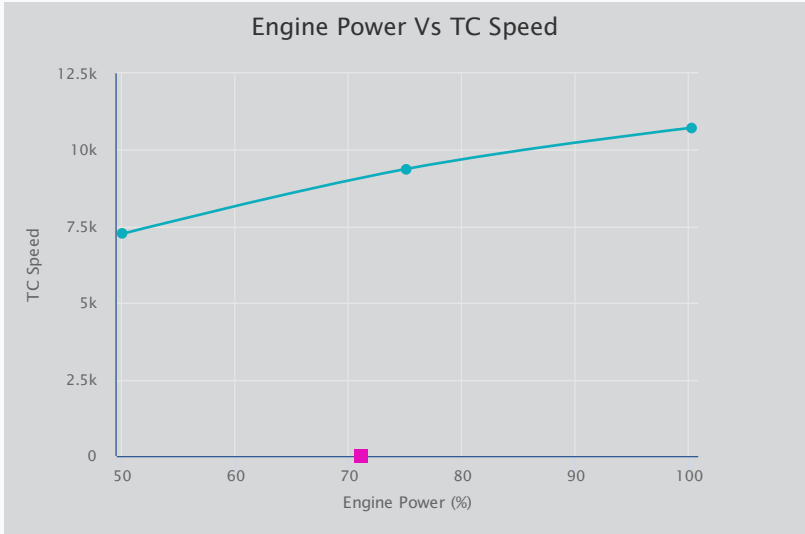
All Chart Selected

Load Diagram



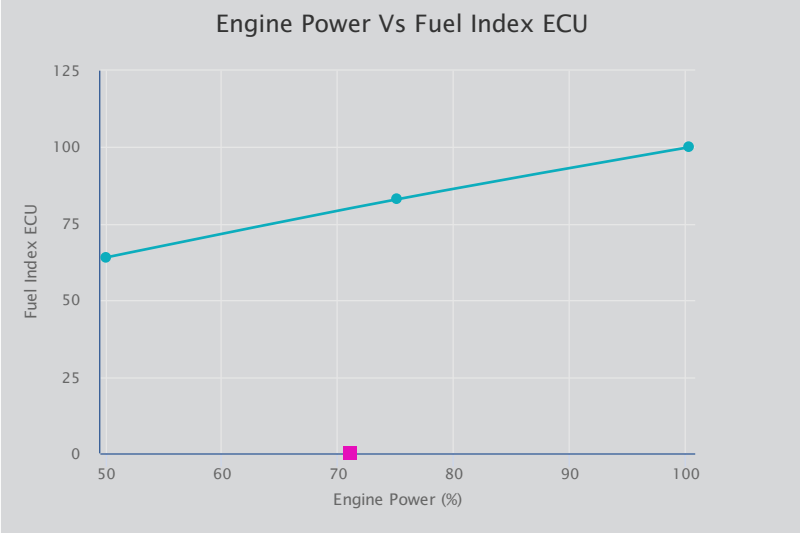
Performance Date	Engine		
	Speed	Speed (%)	Power (%)
Shop Trial			
15-Oct-2012	77	79.38	49.98
15-Oct-2012	88.1	90.82	75.09
15-Oct-2012	97	100	100.27
Performance Value			
03-Jul-2023	96	98.97	71.09

Engine Power Vs TC Speed



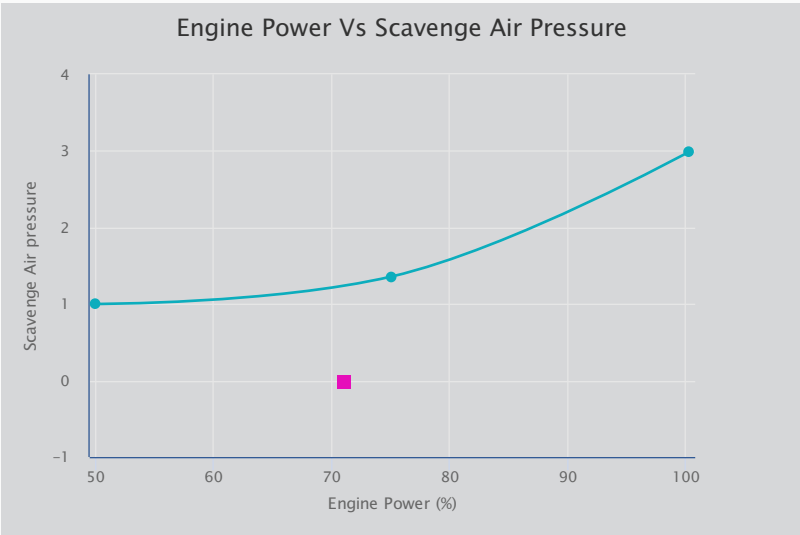
Performance Date		Engine Power (%)	TC Speed	
			Measured	ISO Corrected
Shop Trial				
15-Oct-2012	49.98	7200	7258.78	
15-Oct-2012	75.09	9350	9382.43	
15-Oct-2012	100.27	10833.33	10724.03	
Performance Value				
<div></div> 03-Jul-2023	71.09	0	0	

Engine Power Vs Fuel Index ECU



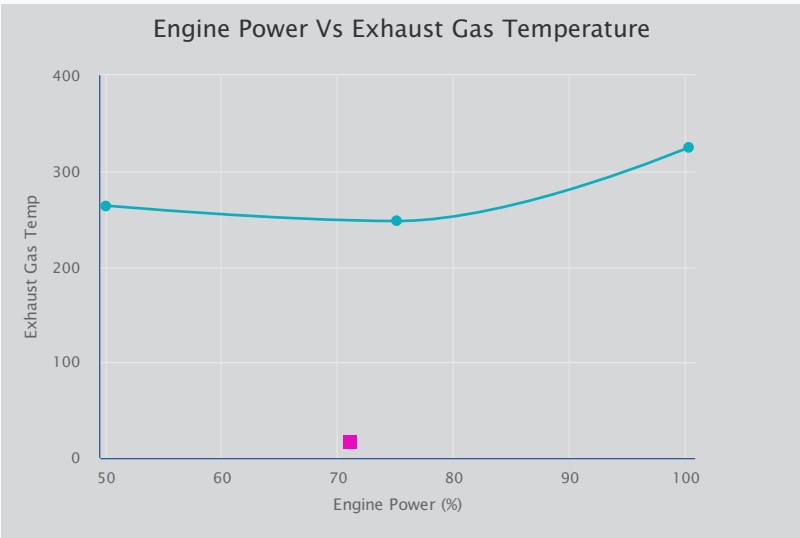
Performance Date		Engine Power (%)	Fuel Index ECU	
			Measured	ISO Corrected
Shop Trial				
15-Oct-2012	49.98	64	0	
15-Oct-2012	75.09	83	0	
15-Oct-2012	100.27	100	0	
Performance Value				
<div><div></div></div> 03-Jul-2023	71.09	0	0	

Engine Power Vs Scavenge Air Pressure



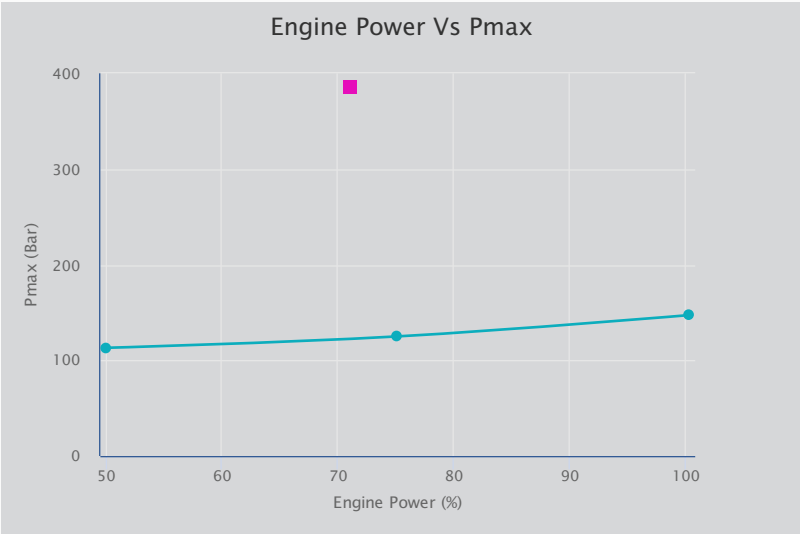
Performance Date		Engine Power (%)	Scavenge Air pressure	
			Measured	ISO Corrected
Shop Trial				
15-Oct-2012	49.98	1.04	1	
15-Oct-2012	75.09	2.1	1.36	
15-Oct-2012	100.27	3.1	2.99	
Performance Value				
<div>03-Jul-2023</div>	71.09	0	-0.02	

Engine Power Vs Exhaust Gas Temperature



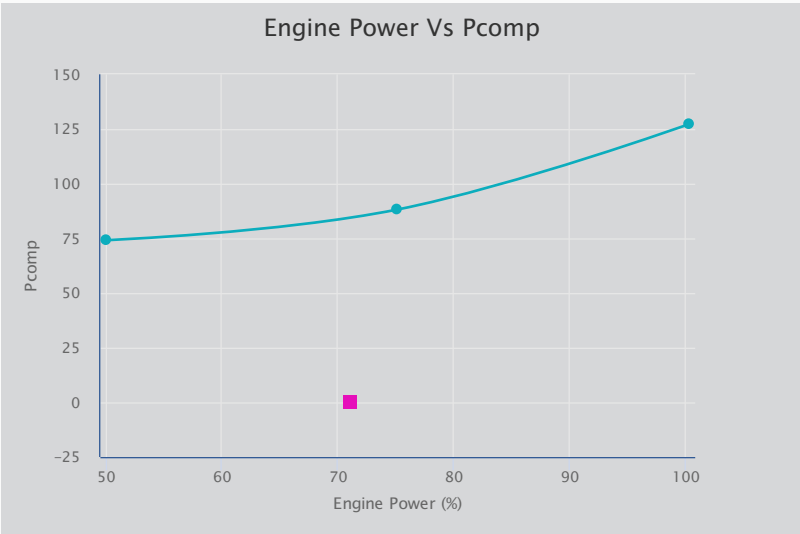
Performance Date		Engine Power (%)	Exhaust Gas Temp	
			Measured	ISO Corrected
Shop Trial				
15-Oct-2012	49.98	272.18	263.85	
15-Oct-2012	75.09	289.73	247.74	
15-Oct-2012	100.27	338.91	324.95	
Performance Value				
<div>03-Jul-2023</div>	71.09	0	16.83	

Engine Power Vs Pmax



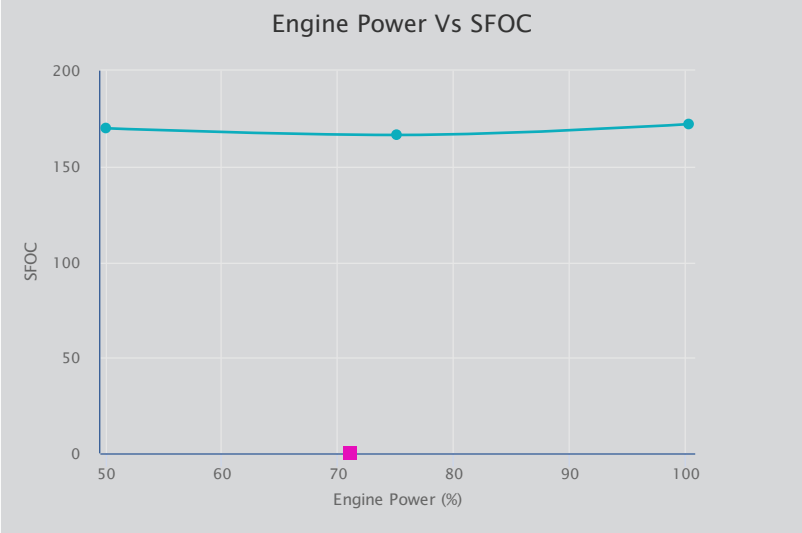
Performance Date		Engine Power (%)	Pmax (Bar)	
			Measured	ISO Corrected
Shop Trial				
15-Oct-2012	49.98	114.18	113.11	
15-Oct-2012	75.09	137.27	125.03	
15-Oct-2012	100.27	148.73	147.32	
Performance Value				
<div><div></div></div> 03-Jul-2023	71.09	400	386.09	

Engine Power Vs Pcomp



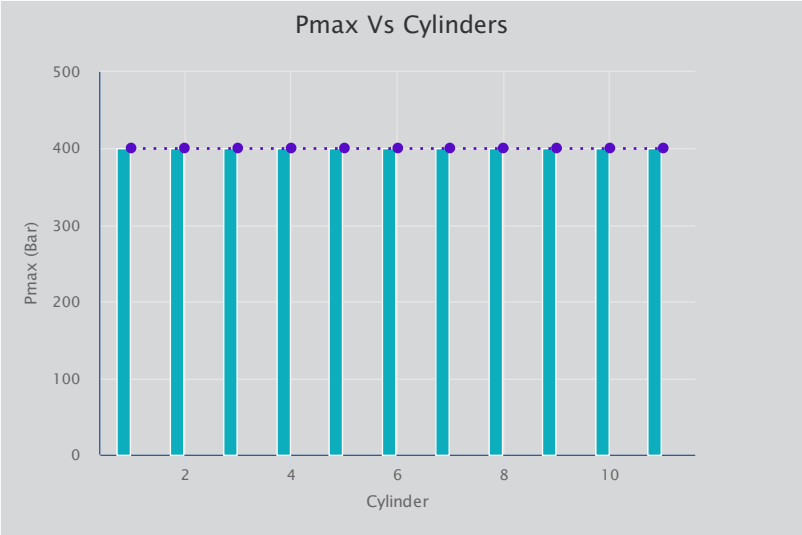
Performance Date		Engine Power (%)	Pcomp	
			Measured	ISO Corrected
Shop Trial				
15-Oct-2012	49.98	75.36	74.16	
15-Oct-2012	75.09	105.91	88.18	
15-Oct-2012	100.27	129.64	127.28	
Performance Value				
<div></div> 03-Jul-2023	71.09	0	-0.04	

Engine Power Vs SFOC



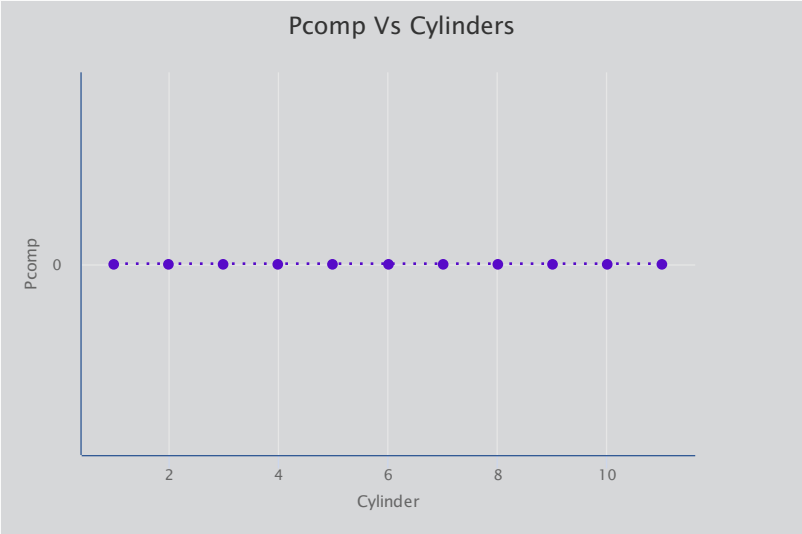
Performance Date		Engine Power (%)	SFOC	
			Measured	ISO Corrected
Shop Trial				
15-Oct-2012	49.98	169.9	0	
15-Oct-2012	75.09	166.4	0	
15-Oct-2012	100.27	172.1	0	
Performance Value				
<div>03-Jul-2023</div>	71.09	0	0	

Pmax Vs Cylinders



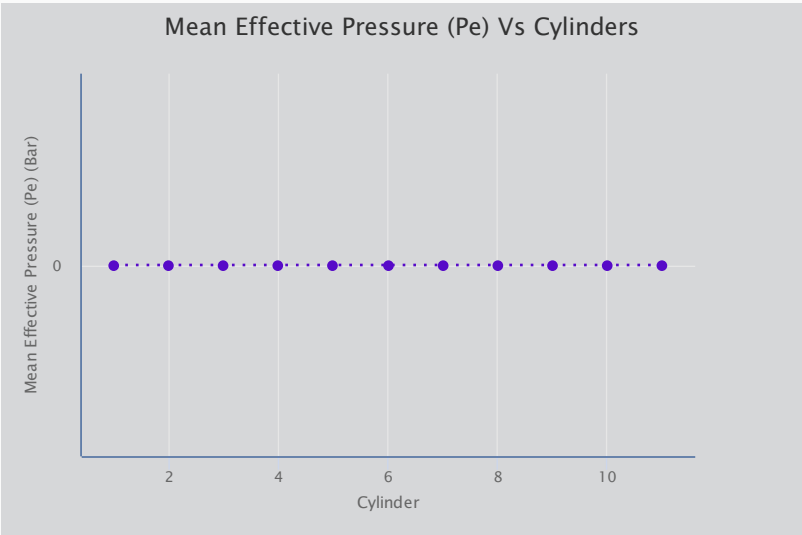
Cylinder	Pmax (Bar)		
	Measured	Average	Deviation
Performance Date - 03-Jul-2023			
1	400	400	0
2	400	400	0
3	400	400	0
4	400	400	0
5	400	400	0
6	400	400	0
7	400	400	0
8	400	400	0

Pcomp Vs Cylinders



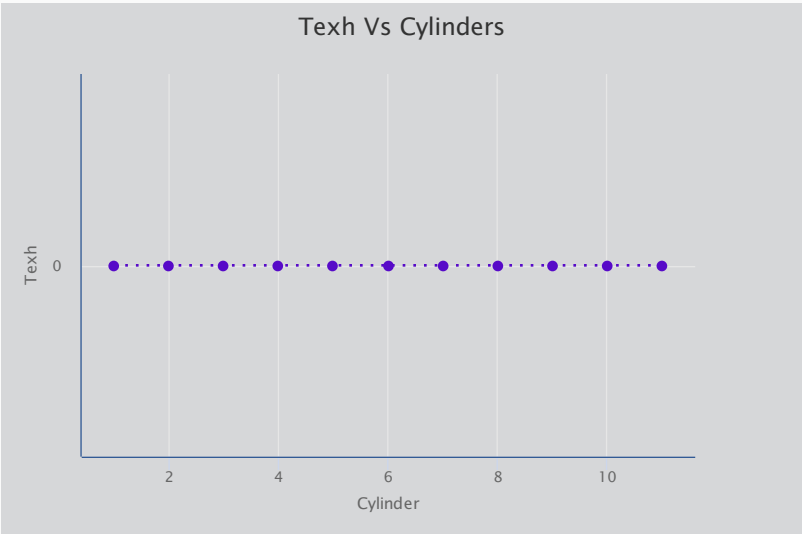
Cylinder	Pcomp		
	Measured	Average	Deviation
Performance Date - 03-Jul-2023			
1		0	0
2		0	0
3		0	0
4		0	0
5		0	0
6		0	0
7		0	0
8		0	0

Mean Effective Pressure (Pe) Vs Cylinders



Cylinder	Mean Effective Pressure (Pe) (Bar)		
	Measured	Average	Deviation
Performance Date - 03-Jul-2023			
1		0	0
2		0	0
3		0	0
4		0	0
5		0	0
6		0	0
7		0	0
8		0	0

Texh Vs Cylinders



Cylinder	Texh		
	Measured	Average	Deviation
Performance Date - 03-Jul-2023			
1		0	0
2		0	0
3		0	0
4		0	0
5		0	0
6		0	0
7		0	0
8		0	0

General Parameters

Vessel Name	APL Atlanta
Engine	Main Engine
Maker	
Model Type	
Performance Date	
	
Hours From	
Hours To	
Duration (Hrs)	

Voyage Parameters

Loaded Ballast	
Total Cargo on Board	
Voyage Number	
Voyage From	
Voyage To	
Trim	
M	
Draft Fore	
Draft Aft	
Draft Midship	
Weather	
Wind Direct	
Wind Force	
Wave Height	
State of Sea	
Log Knots	
Slip %	
Sea Margin	
Speed by O.G	
Speed by Pitch	

[illegible]

Engine Parameters - Turbo Charger Parameters							
	UOM	REF	ISO	AVG	TC 1	TC 2	TC 3
TC Serial Number							
Turbo Charger Cutoff							
Turbo Charger Rpm							
Exhaust Gas Temperature T/C Inlet							
Exhaust Gas Temperature T/C Outlet							
Air Temperature - T/C Suction Temperature							
Pressure Drop Across T/C							
LO Pressure T/C Inlet							
LO Temperature T/C Inlet							

Engine Parameters - Air Cooler Parameters									
	UOM	REF	ISO	AVG	AC 1	AC 2	AC 3	AC 4	AC 5
AC Serial Number									
CW Temperature Air Cooler Inlet									
CW Temperature Air Cooler Outlet									
Pressure Drop Across Air Cooler									
Air Temperature Air Cooler Inlet									
Air Temperature Air Cooler Outlet									

Engine Parameters - Fo Parameters	
FO Received At	
FO Grade	
FO LCV	
FO Density @15 Deg C	
FO Vis @50deg C	
FO Mass	
FO Sulphur	

FO Consumption

SFOC remark

	UOM	REF	ISO	MEAS
SFOC				
FO Temperature				
FO Pressure				

Engine Parameters - Cylinder Lo Parameters

Cyl.Oil Feed Amount

Cyl.Oil maker/Type

Cyl.Lo Density @15 Deg C

Cyl oil Consumption

Cyl. Lo feed rate setting

Cyl. Lo Sulphur

ACC Factor

Mep% (Fuel Index)

rxxx (Total Inj - /min)

Specify Cly. Lo Consumption

	UOM	REF	ISO	MEAS
Specify Cylinder Lo Consumption				

Engine Parameters -System Lo Parameters

LO Pressure Engine Inlet

LO Temperature Engine Inlet

LO Temperature Engine Outlet

Camshaft LO Pressure

LO Temperature Camshaft Inlet

LO Temperature Camshaft O...

Thrust Bearing LO Temperature

Engine Parameters - Other Parameters

Variable Turbine Area, Actua...
%
Exhaust Bybass Value
(open/close/nothing)
Mitsubishi VTi
(open/close/nothing)
Aux.Blower
Valve Opening
%
Variable Valve
(open/close/nothing)

Engine Parameters - Emission Details
Carbon Dioxide Emission (To...
Sulphur Oxide Emission

Authorization
Performance Updated Date
Updated By (User)
Updated By (Rank)

Comments
Comments

File Bucket

