

CORROSION CONTAMINANTS FUEL CONDITION NORMAL SEVERE NORMAL



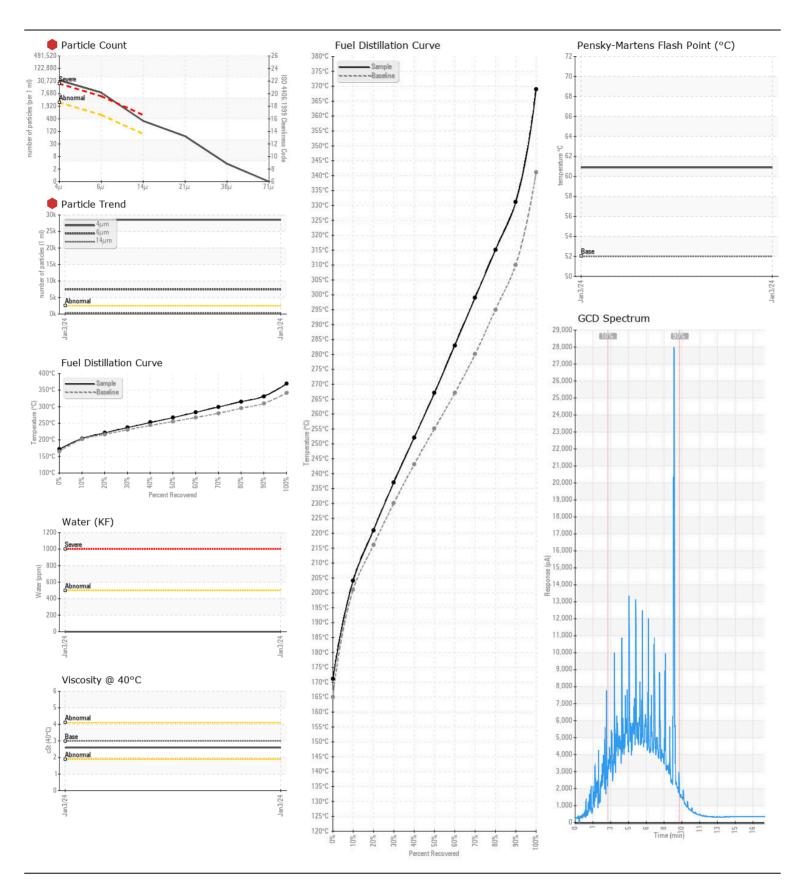
MACK 2073
Component
Diesel Fuel

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- LTR)

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (LTR)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check all areas where contaminants can enter the system. Laboratory test indicate that this fuel is suitable for use and meets all test requirements. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you filter this fluid before use. Resample in 30-45 days to monitor this situation. Please contact your representative for information regarding the proper sampling kits for your service.	Sample Number		Client Info		WC0887222		
	Sample Date		Client Info		03 Jan 2024		
	Machine Age	kms	Client Info		497000		
	Sample Status				SEVERE		
CORROCION			407140-40-4				
CORROSION {not applicable}	Aluminum	ppm	ASTM D5185(m)	<0.1	0		
	Nickel	ppm	ASTM D5185(m)	<0.1	0		
	Lead	ppm	ASTM D5185(m)	<0.1	0		
	Vanadium	ppm	ASTM D5185(m)	<0.1	0		
	Iron	ppm	ASTM D5185(m)	<0.1	0		
CONTAMINANTS There is a high amount of particulates (2 to 100 microns in size) present in the fuel. The water content is negligible.	Silicon	ppm	ASTM D5185(m)	<1.0	0		
	Sodium	ppm	ASTM D5185(m)	<0.1	0		
	Potassium	ppm	ASTM D5185(m)	< 0.1	<1		
	Water	%	ASTM D6304*	< 0.05	0.00		
	ppm Water	ppm	ASTM D6304*	< 500	0		
	Particles >4μm		ASTM D7647	>2500	28522		
	Particles >6µm		ASTM D7647	>640	1429		
	Particles >14μm		ASTM D7647	>80	4 335		
	Particles >21µm		ASTM D7647	>20	▲ 62		
	Particles >38μm		ASTM D7647	>4	3		
	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>18/16/13	22/20/16		
	Calcium	ppm	ASTM D5185(m)	<0.1	<1		
	Magnesium	ppm	ASTM D5185(m)	<0.1	0		
	Phosphorus	ppm	ASTM D5185(m)	<0.1	<1		
	Zinc	ppm	ASTM D5185(m)	<0.1	0		
FUEL CONDITION The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels. All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel (US EPA/CGSB-3.517-3 type B).	Specific Gravity		ASTM D1298*	0.839	0.841		
	Fuel Color	text	Visual Screen*	Yllow	Yllow		
	Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.6		
	Pensky-Martens Flash Point	°C	ASTM D7215*	52	60.9		
	Sulfur	ppm	ASTM D5185(m)	10	10		
	Initial Boiling Point	°C	ASTM D2887*	165	171		
	10% Distill Point	°C	ASTM D2887*	201	204		
	20% Distill Point	°C	ASTM D2887*	216	221		
	30% Distill Point	°C	ASTM D2887*	230	237		
	40% Distill Point	°C	ASTM D2887*	243	252		
	50% Distill Point	°C	ASTM D2887*	255	267		
	60% Distill Point	°C	ASTM D2887*	267	283		
	70% Distill Point	°C	ASTM D2887*	280	299		
	80% Distill Point	°C	ASTM D2887*	295	315		
	90% Distill Point	°C	ASTM D2887*	310	331		
	Final Boiling Point	°C	ASTM D2887*	341	369		
	API Gravity		ASTM D1298*	37.7	36		

Cetane Index

ASTM D4737* <40.0





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: WC0887222 : 02607617

: 5708703

Recieved Diagnosed

: 09 Jan 2024 : 11 Jan 2024

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CORNWALL TRUCK MAINTENANCE P.O. BOX 1828, 1930 McCONNEL AVENUE CORNWALL, ON

Diagnostician : Kevin Marson **CA K6H 6N6** Test Package : MOB 1 (Additional Tests: API, CC Flash, Cetane, Fuel, GC-PercFuel, GCD, KF, PrtCount) Contact: CTM SERVICE

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Service@CTMVOLVO.com T: (613)936-1585

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

F: (613)936-2149