



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
MACK 05-35
Component
Diesel Engine
Fluid
SAE 5W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0081767	PC0060059	PC0066976
Sample Date		Client Info		19 Dec 2023	25 May 2023	10 May 2023
Machine Age	hrs	Client Info		15281	14728	14728
Oil Age	hrs	Client Info		551	600	600
Filter Age	hrs	Client Info		551	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	17	11	16
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	1
Lead	ppm	ASTM D5185(m)	>40	1	1	1
Copper	ppm	ASTM D5185(m)	>330	6	46	6
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

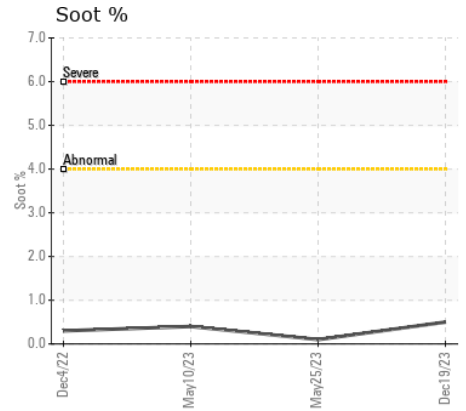
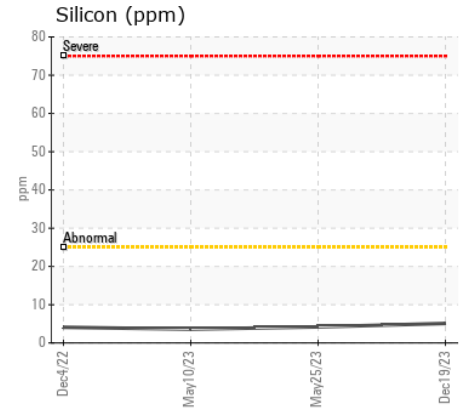
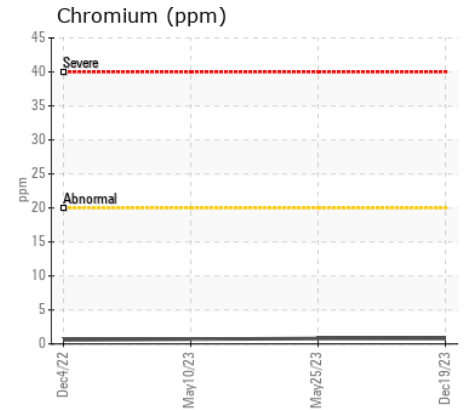
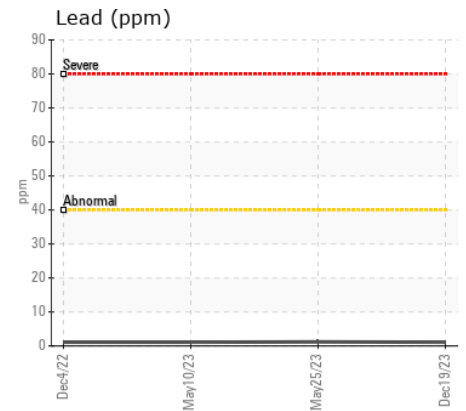
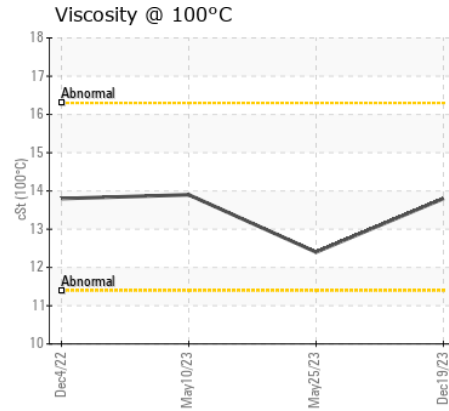
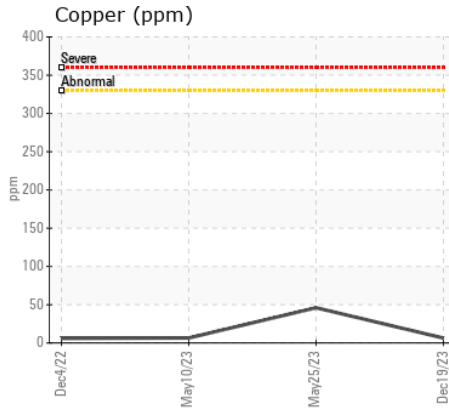
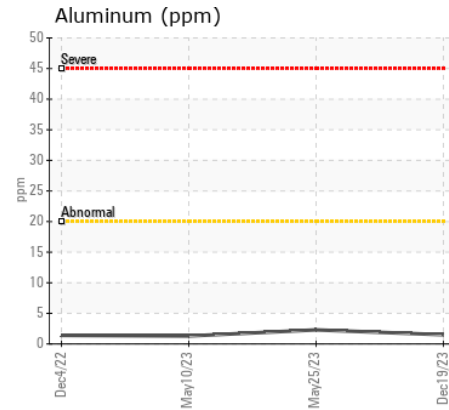
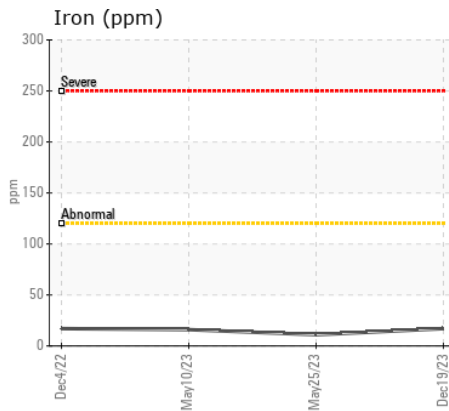
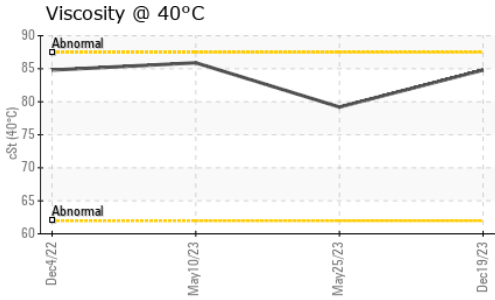
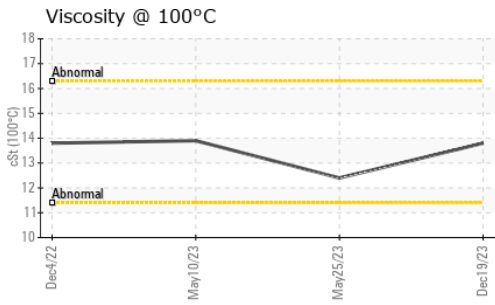
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	4	4
Potassium	ppm	ASTM D5185(m)	>20	1	<1	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.5	0.1	0.4
Nitration	Abs/cm	ASTM D7624*	>20	9.8	10.2	10.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	22.5	21.5
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		5	5	5
Boron	ppm	ASTM D5185(m)		28	23	35
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		60	63	59
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		1084	1201	1122
Calcium	ppm	ASTM D5185(m)		841	903	912
Phosphorus	ppm	ASTM D5185(m)		952	1090	1097
Zinc	ppm	ASTM D5185(m)		1146	1218	1245
Sulfur	ppm	ASTM D5185(m)		2798	2357	2882
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.8	23.1	19.6
Visc @ 40°C	cSt	ASTM D7279(m)		84.8	79.2	85.9
Visc @ 100°C	cSt	ASTM D7279(m)		13.8	12.4	13.9
Viscosity Index (VI)	Scale	ASTM D2270*		167	154	166



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0081767 **Received** : 22 Jan 2024
Lab Number : 02610137 **Diagnosed** : 22 Jan 2024
Unique Number : 5711223 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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