



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
CN RAIL [152661]

Machine Id
2

Component
Diesel Engine

Fluid
VALVOLINE PREMIUM BLUE EXTREME 5W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0022456	---	---
Sample Date		Client Info		03 Jan 2024	---	---
Machine Age	hrs	Client Info		2171	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	32	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	2	---	---
Lead	ppm	ASTM D5185(m)	>40	2	---	---
Copper	ppm	ASTM D5185(m)	>330	15	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

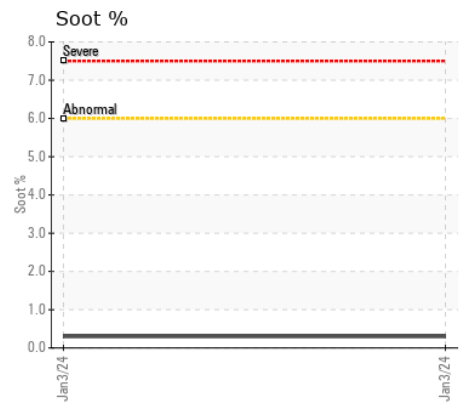
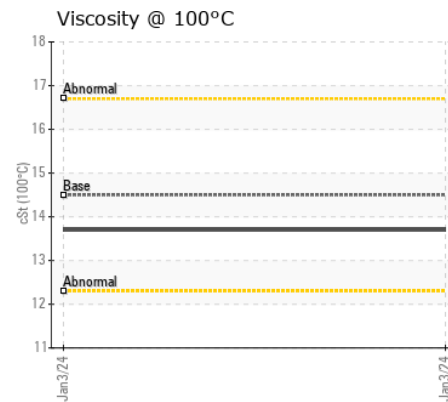
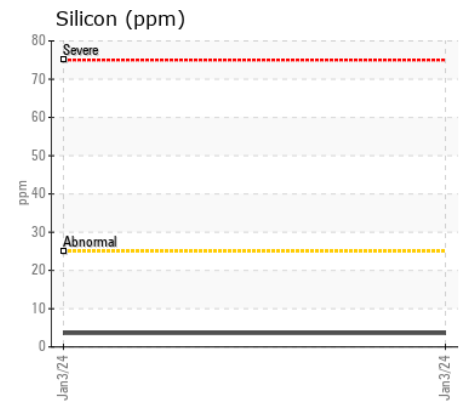
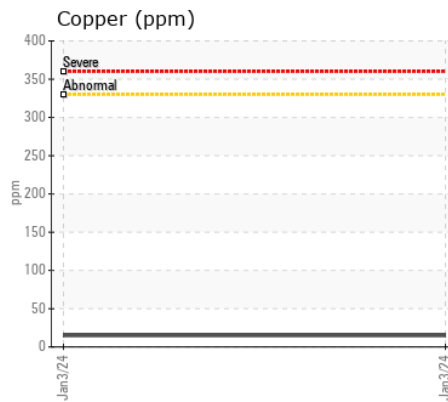
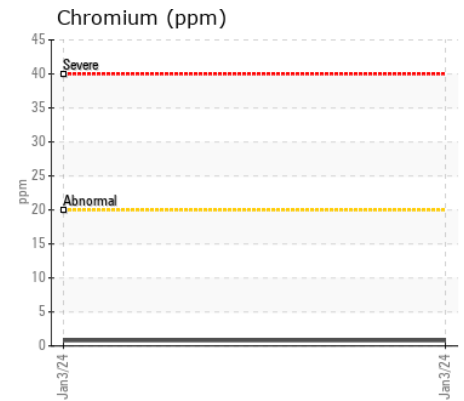
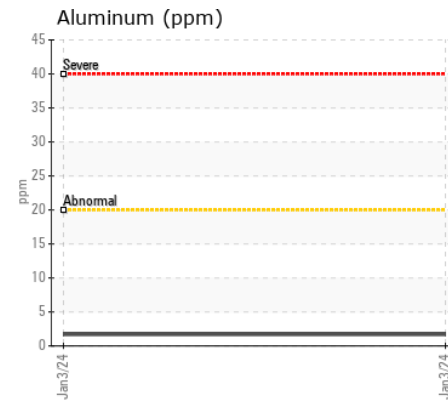
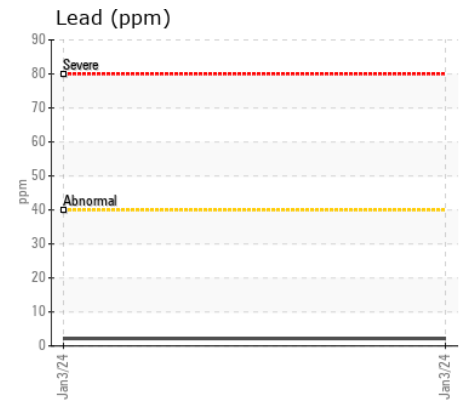
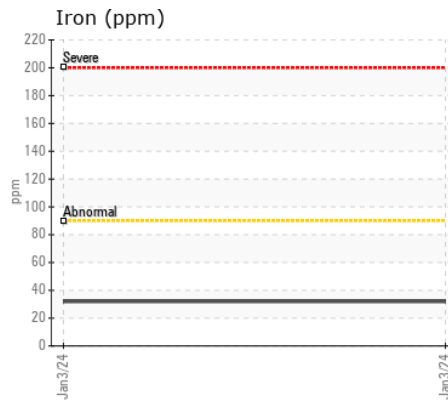
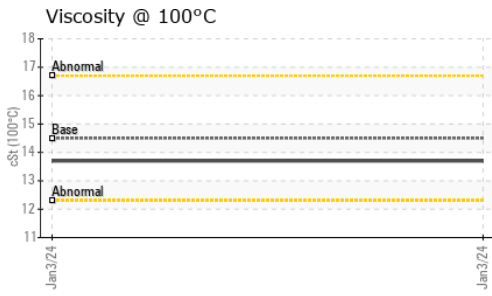
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel		WC Method	>3.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>6	0.3	---	---
Nitration	Abs/cm	ASTM D7624*	>20	11.3	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.9	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		4	---	---
Boron	ppm	ASTM D5185(m)		31	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		63	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)		1122	---	---
Calcium	ppm	ASTM D5185(m)		828	---	---
Phosphorus	ppm	ASTM D5185(m)		989	---	---
Zinc	ppm	ASTM D5185(m)		1209	---	---
Sulfur	ppm	ASTM D5185(m)		2743	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	13.7	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CUMMINS CANADA ULC - GENERATOR DIVISION
Sample No. : CU0022456 **Received** : 22 Jan 2024 7175 PACIFIC CIRCLE
Lab Number : 02610143 **Diagnosed** : 22 Jan 2024 MISSISSAUGA, ON
Unique Number : 5711229 **Diagnostician** : Wes Davis CA L5T 2A5
Test Package : MOB 1

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.

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