



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
DFO LOUISBOURG [AU134538]

Machine Id
72454047

Component
Diesel Engine

Fluid
VALVOLINE PREMIUM BLUE 2000 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0021738	---	---
Sample Date		Client Info		02 May 2024	---	---
Machine Age	hrs	Client Info		374	---	---
Oil Age	hrs	Client Info		81	---	---
Filter Age	hrs	Client Info		81	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	7	---	---
Chromium	ppm	ASTM D5185(m)	>20	0	---	---
Nickel	ppm	ASTM D5185(m)	>2	0	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	3	---	---
Lead	ppm	ASTM D5185(m)	>40	0	---	---
Copper	ppm	ASTM D5185(m)	>330	5	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

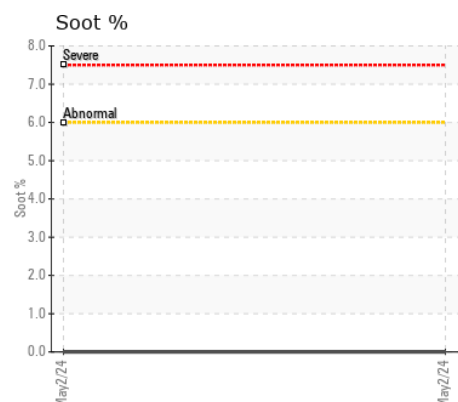
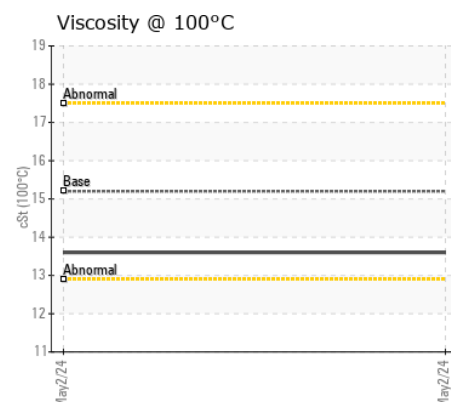
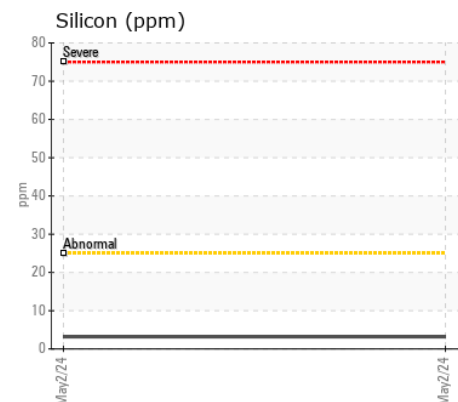
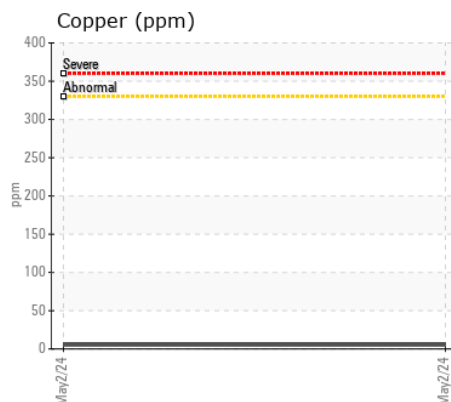
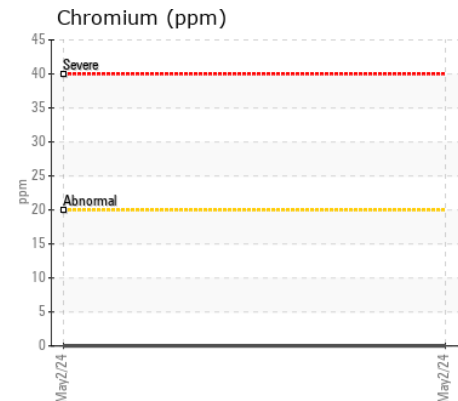
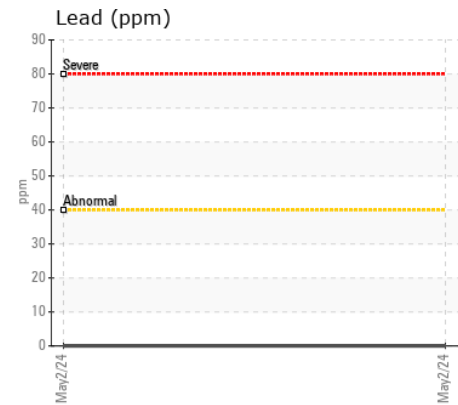
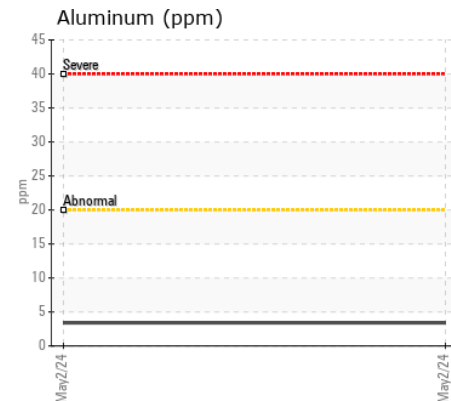
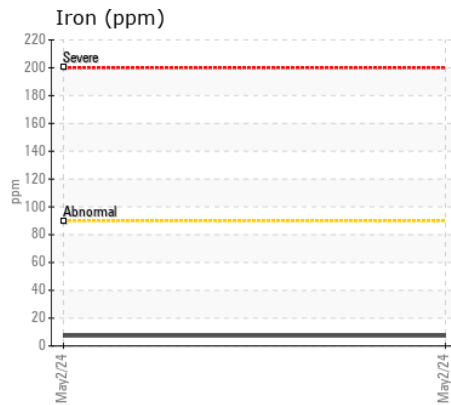
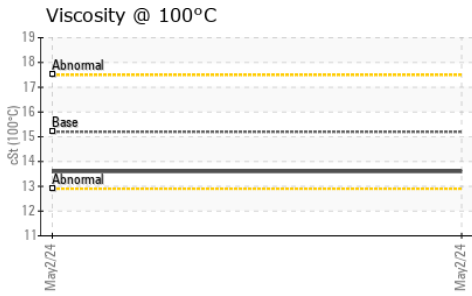
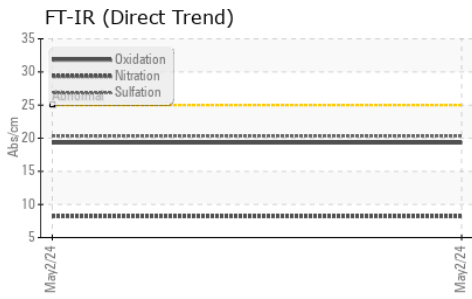
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	12	---	---
Fuel		WC Method	>3.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>6	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	8.2	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.3	---	---
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)		37	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		46	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		827	---	---
Calcium	ppm	ASTM D5185(m)		1199	---	---
Phosphorus	ppm	ASTM D5185(m)		726	---	---
Zinc	ppm	ASTM D5185(m)		835	---	---
Sulfur	ppm	ASTM D5185(m)		1971	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.3	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.2	13.6	---	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0021738
Lab Number : 02634252
Unique Number : 5775405
Test Package : MOB 1
Received : 09 May 2024
Tested : 09 May 2024
Diagnosed : 09 May 2024 - Wes Davis

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.

CUMMINS DIESEL
 50 SIMMONDS DRIVE
 DARTMOUTH, NS
 CA B3B 1R3
 Contact: Stephen Hulse
 stephen.hulse@cummins.com
 T: (782)409-4641
 F: (902)468-5177