

Area
UPS CANADA
Machine Id
FREIGHTLINER 863911
Component
Diesel Engine
Fluid
SAE 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0085535	PC0085567	---
Sample Date		Client Info		12 Apr 2024	19 Dec 2023	---
Machine Age	kms	Client Info		307900	295844	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	N/A	---
Filter Changed		Client Info		Not Chngd	N/A	---
Sample Status				MARGINAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	65	9	---
Chromium	ppm	ASTM D5185(m)	>5	2	0	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>30	2	1	---
Lead	ppm	ASTM D5185(m)	>30	2	<1	---
Copper	ppm	ASTM D5185(m)	>150	29	2	---
Tin	ppm	ASTM D5185(m)	>5	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

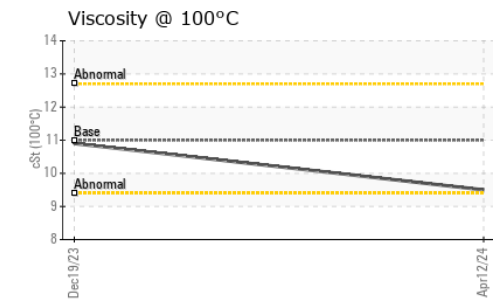
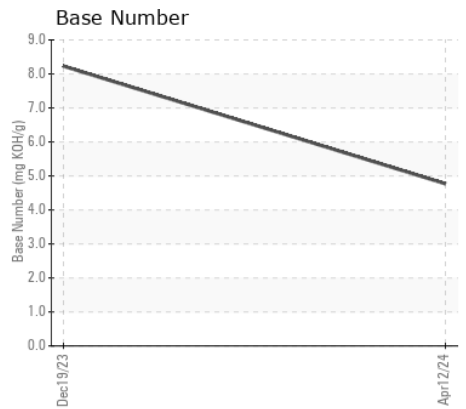
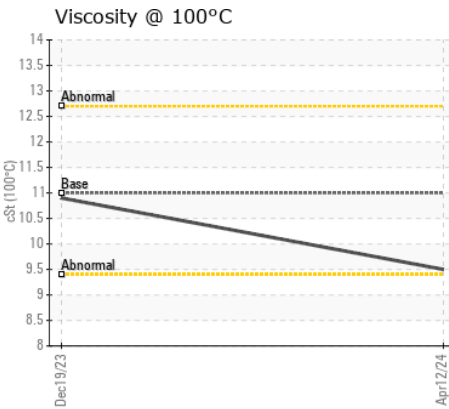
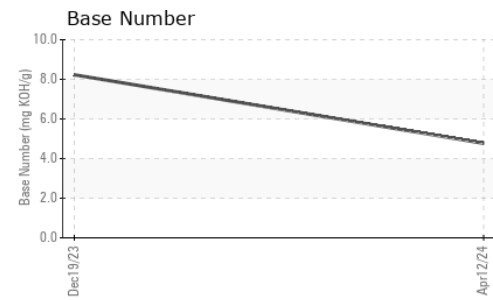
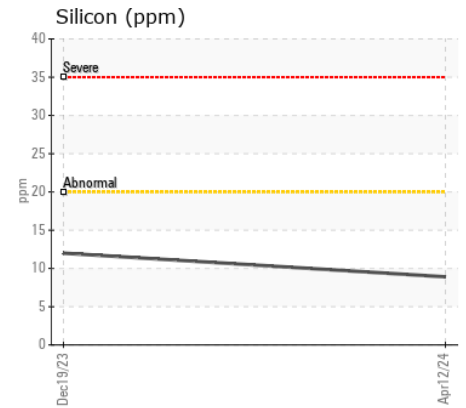
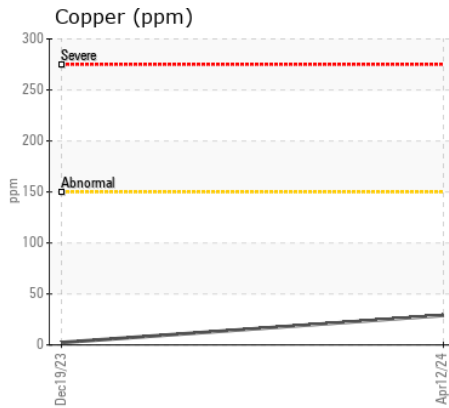
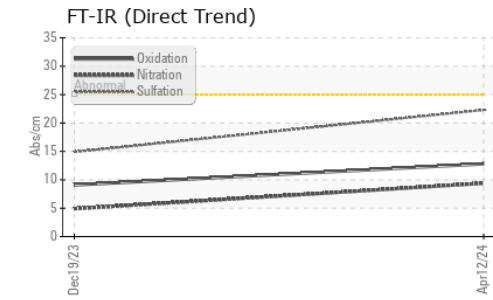
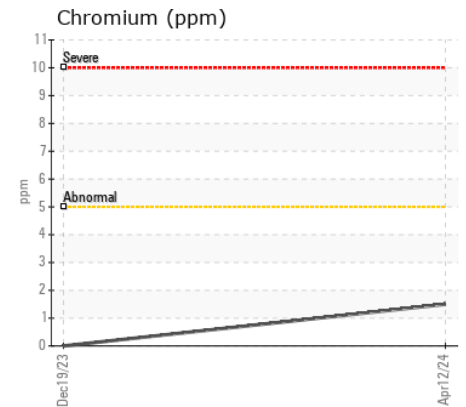
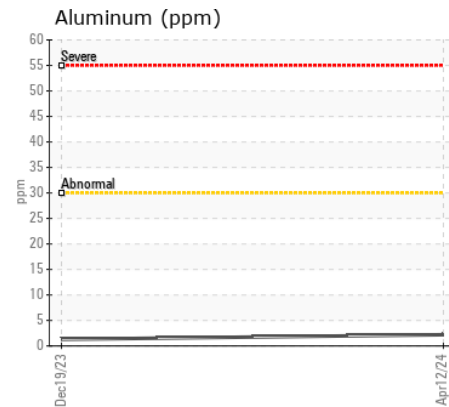
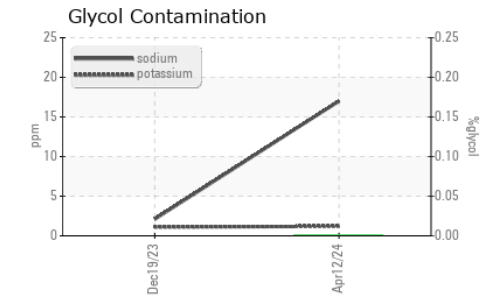
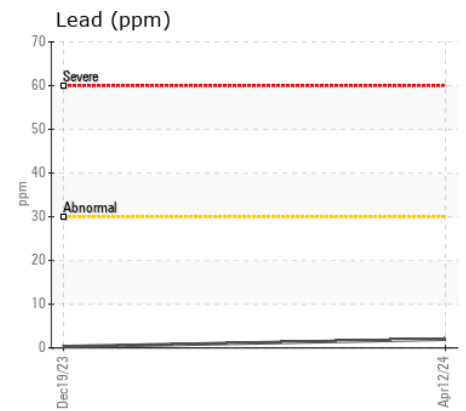
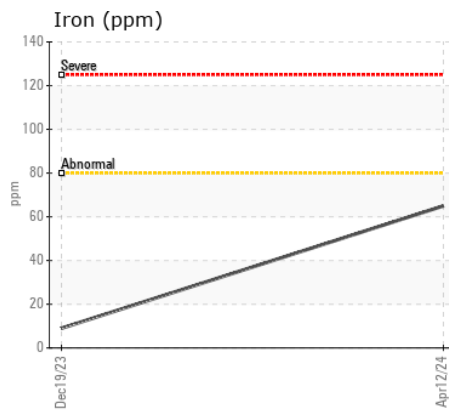
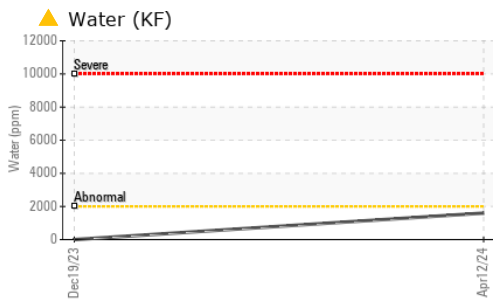
There is a trace of moisture present in the oil. Test for glycol is negative.

Silicon	ppm	ASTM D5185(m)	>20	9	12	---
Potassium	ppm	ASTM D5185(m)	>20	1	1	---
Fuel		WC Method	>5	<1.0	0.5	---
Water	%	ASTM D6304*	>0.2	▲ 0.159	---	---
ppm Water	ppm	ASTM D6304*	>2000	▲ 1599	---	---
Glycol	%	ASTM D7922*		0.0	NEG	---
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	9.4	4.9	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.3	14.9	---
Emulsified Water	scalar	Visual*	>0.2	▲ .2%	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		17	2	---
Boron	ppm	ASTM D5185(m)		30	153	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		72	62	---
Manganese	ppm	ASTM D5185(m)		<1	0	---
Magnesium	ppm	ASTM D5185(m)		544	552	---
Calcium	ppm	ASTM D5185(m)		1212	1105	---
Phosphorus	ppm	ASTM D5185(m)		573	630	---
Zinc	ppm	ASTM D5185(m)		772	733	---
Sulfur	ppm	ASTM D5185(m)		2157	2261	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.8	9.1	---
Base Number (BN)	mg KOH/g	ASTM D2896*		4.77	8.23	---
Visc @ 40°C	cSt	ASTM D7279(m)	60.0	54.9	63.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	9.5	10.9	---
Viscosity Index (VI)	Scale	ASTM D2270*	177	157	165	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Petro-Canada Technical/Behshad Sabah**
Sample No. : PC0085535 **Received** : 19 Jun 2024
Lab Number : 02642851 **Tested** : 21 Jun 2024
Unique Number : 5800390 **Diagnosed** : 21 Jun 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: Glycol, KF, KV40, VI)

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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