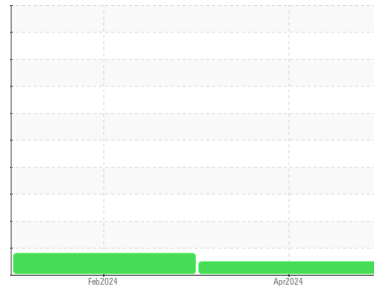




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FREIGHTLINER 212268
 Component
Gasoline Engine
 Fluid
SAE 5W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0085549	PC0085551	---
Sample Date	Client Info			04 Apr 2024	09 Feb 2024	---
Machine Age	kms	Client Info		22014	18003	---
Oil Age	kms	Client Info		0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	MARGINAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<1.0	▲ 3.4	---
Water	WC Method	>0.2		NEG	NEG	---
Glycol	WC Method			NEG	NEG	---

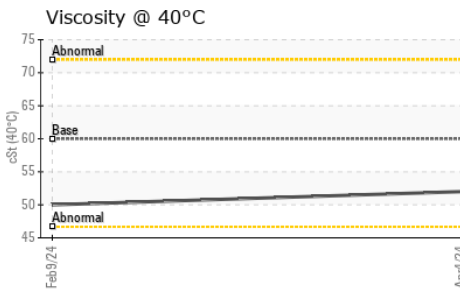
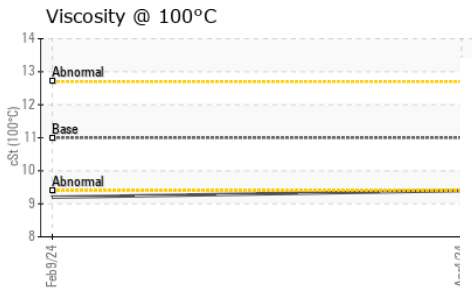
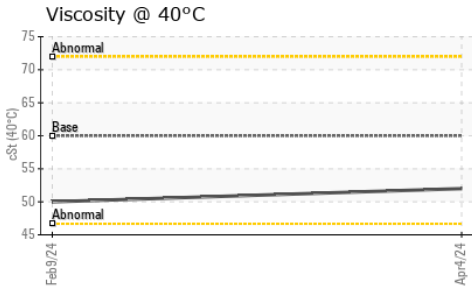
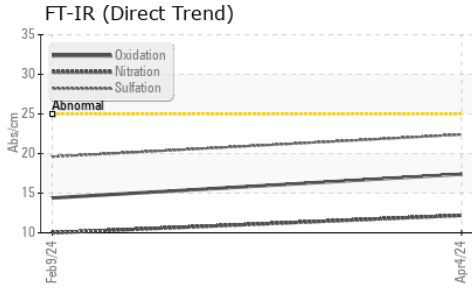
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	22	20	---
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>5	0	<1	---
Titanium	ppm	ASTM D5185(m)		<1	0	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>40	4	5	---
Lead	ppm	ASTM D5185(m)	>50	0	<1	---
Copper	ppm	ASTM D5185(m)	>155	9	9	---
Tin	ppm	ASTM D5185(m)	>10	<1	<1	---
Antimony	ppm	ASTM D5185(m)		0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		46	87	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		83	87	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)		516	521	---
Calcium	ppm	ASTM D5185(m)		1238	1282	---
Phosphorus	ppm	ASTM D5185(m)		640	671	---
Zinc	ppm	ASTM D5185(m)		739	758	---
Sulfur	ppm	ASTM D5185(m)		2134	2357	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	27	34	---
Sodium	ppm	ASTM D5185(m)	>400	3	3	---
Potassium	ppm	ASTM D5185(m)	>20	2	2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	12.2	10.0	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.4	19.6	---

OIL ANALYSIS REPORT

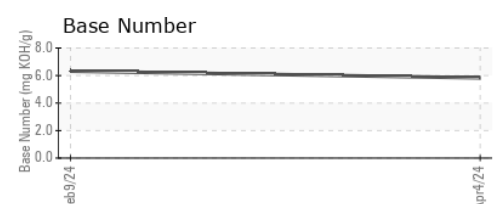
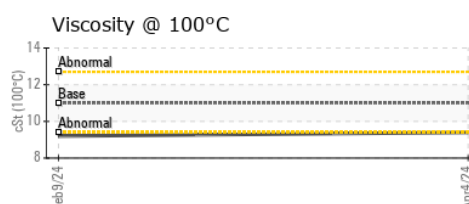
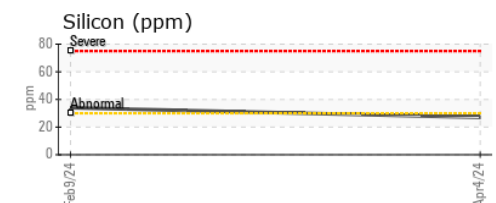
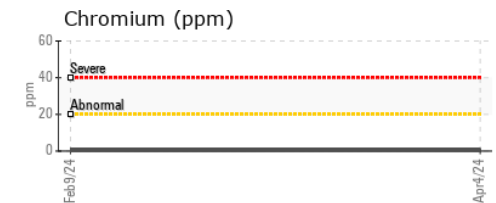
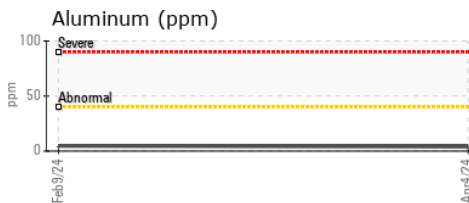
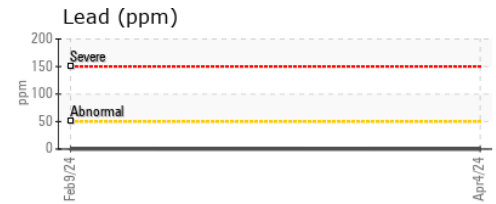
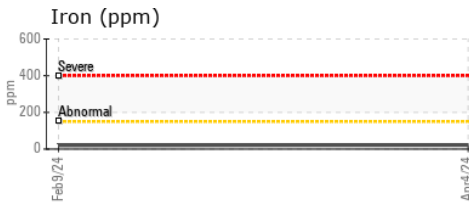


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.4	14.4	---
Base Number (BN)	mg KOH/g	ASTM D2896*		5.83	6.32	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	VLITE	---
Silt	scalar	Visual*	NONE	VLITE	VLITE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Free Water	scalar	Visual*		NEG	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	60.0	52.0	50.0	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	9.4	9.2	---
Viscosity Index (VI)	Scale	ASTM D2270*	177	165	168	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0085549 **Received** : 01 May 2024
Lab Number : **02632528** **Tested** : 02 May 2024
Unique Number : 5773681 **Diagnosed** : 02 May 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: KV40, VI)

UPS CANADA
 2900 STEELES AVE W
 CONCORD, ON
 CA L4K 3S2
 Contact: Service Manager

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.

T:
F: