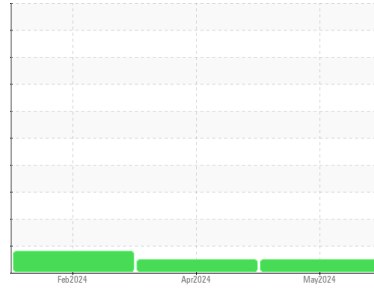




# OIL ANALYSIS REPORT

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			<b>PC0085525</b>	PC0085549	PC0085551
Sample Date	Client Info			<b>21 May 2024</b>	04 Apr 2024	09 Feb 2024
Machine Age	kms	Client Info		<b>25970</b>	22014	18003
Oil Age	kms	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

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

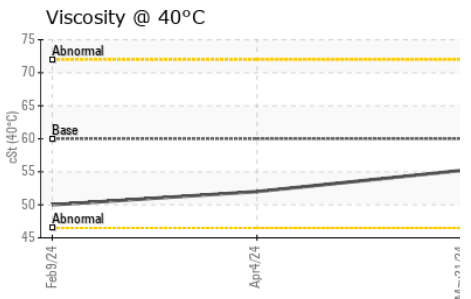
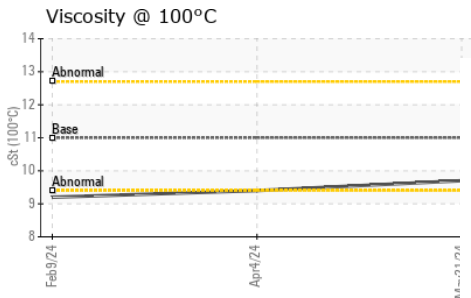
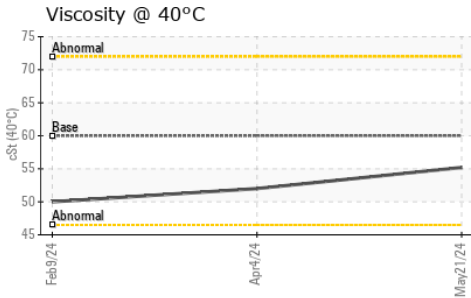
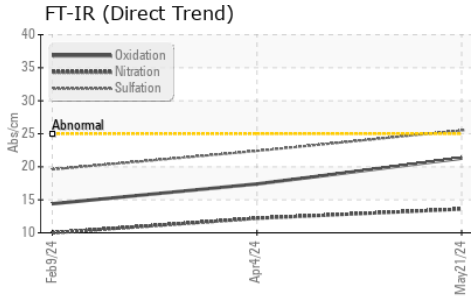
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	<b>28</b>	22	20
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>40	<b>5</b>	4	5
Lead	ppm	ASTM D5185(m)	>50	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>155	<b>9</b>	9	9
Tin	ppm	ASTM D5185(m)	>10	<b>2</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>35</b>	46	87
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>87</b>	83	87
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>547</b>	516	521
Calcium	ppm	ASTM D5185(m)		<b>1287</b>	1238	1282
Phosphorus	ppm	ASTM D5185(m)		<b>679</b>	640	671
Zinc	ppm	ASTM D5185(m)		<b>782</b>	739	758
Sulfur	ppm	ASTM D5185(m)		<b>2205</b>	2134	2357
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

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

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.6</b>	12.2	10.0
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>25.5</b>	22.4	19.6

# OIL ANALYSIS REPORT

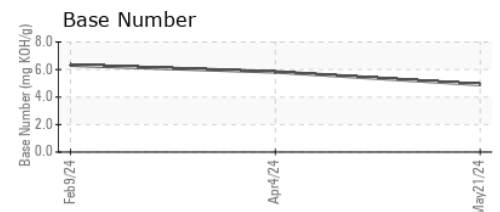
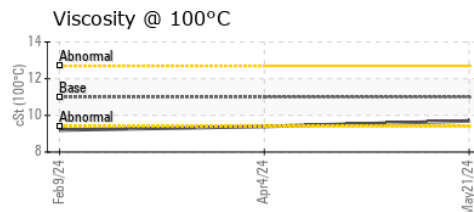
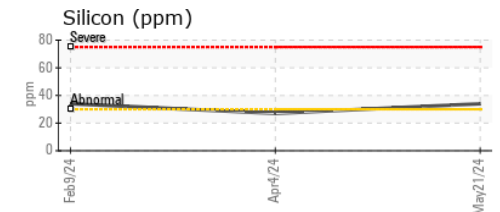
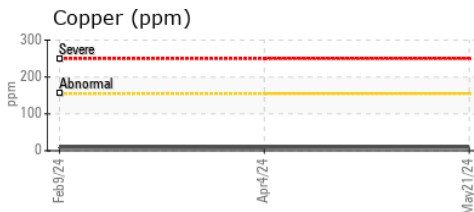
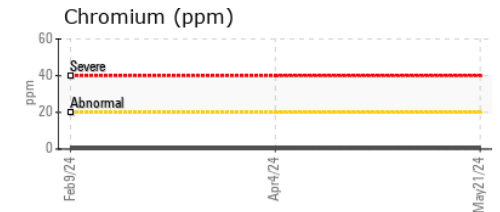
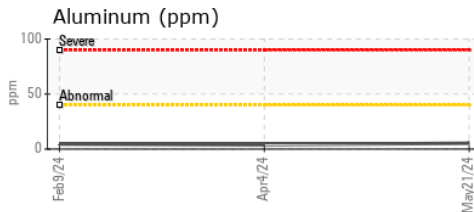
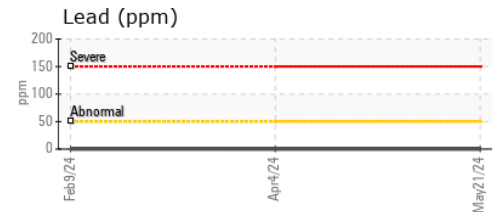
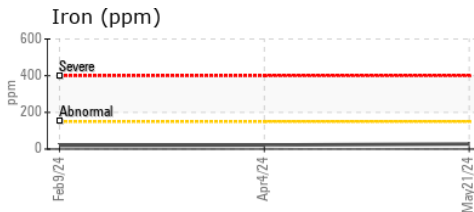


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>21.3</b>	17.4	14.4
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>4.91</b>	5.83	6.32

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	60.0	<b>55.2</b>	52.0	50.0
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	<b>9.7</b>	9.4	9.2
Viscosity Index (VI)	Scale	ASTM D2270*	177	<b>161</b>	165	168

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0085525 **Received** : 27 May 2024  
**Lab Number** : **02637623** **Tested** : 28 May 2024  
**Unique Number** : 5786785 **Diagnosed** : 28 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: