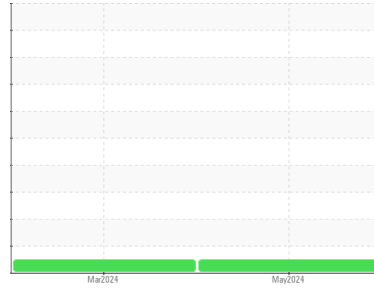




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**FREIGHTLINER 165561**  
 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>PC0085532</b>	PC0085544	---
Sample Date	Client Info			<b>02 May 2024</b>	11 Mar 2024	---
Machine Age	kms	Client Info		<b>182085</b>	177996	---
Oil Age	kms	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

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

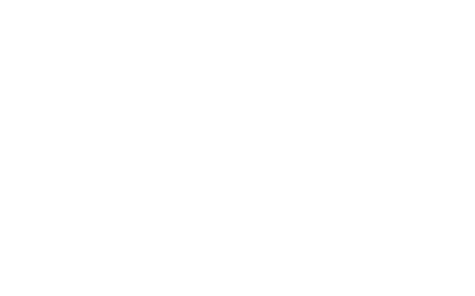
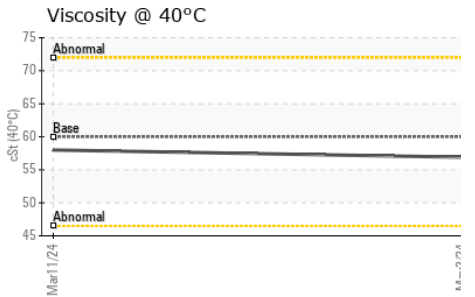
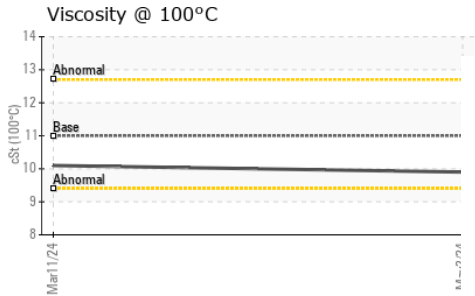
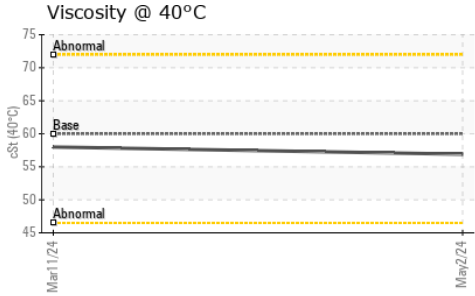
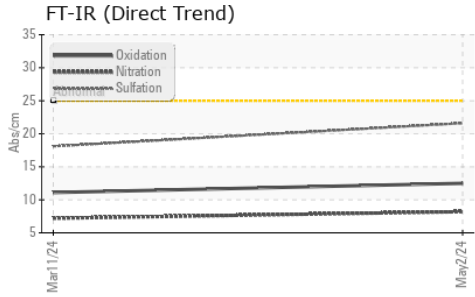
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	<b>19</b>	16	---
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	---
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>40	<b>2</b>	2	---
Lead	ppm	ASTM D5185(m)	>50	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m)	>155	<b>22</b>	23	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<b>45</b>	88	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)		<b>70</b>	71	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185(m)		<b>570</b>	592	---
Calcium	ppm	ASTM D5185(m)		<b>1180</b>	1198	---
Phosphorus	ppm	ASTM D5185(m)		<b>593</b>	603	---
Zinc	ppm	ASTM D5185(m)		<b>788</b>	841	---
Sulfur	ppm	ASTM D5185(m)		<b>2161</b>	2289	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	<b>25</b>	12	---
Sodium	ppm	ASTM D5185(m)	>400	<b>2</b>	1	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.2</b>	7.2	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.6</b>	18.1	---

# OIL ANALYSIS REPORT

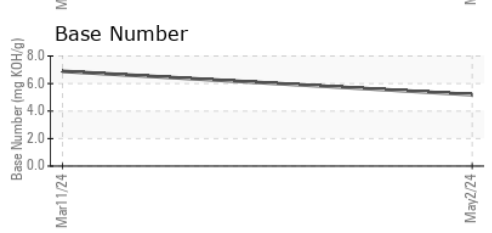
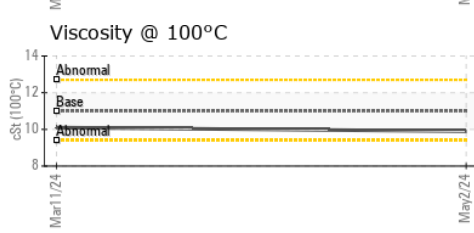
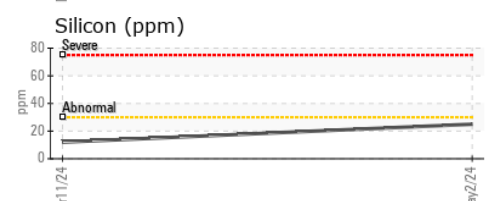
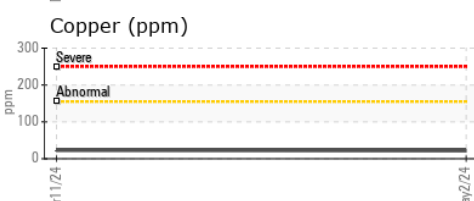
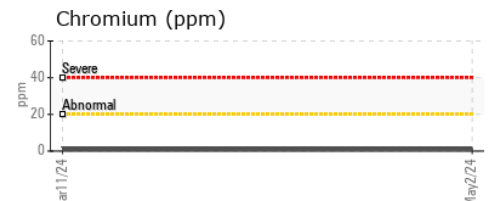
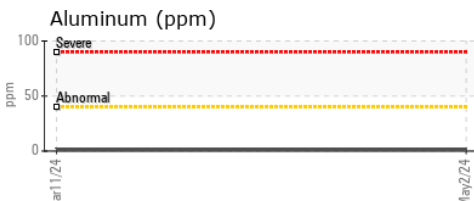
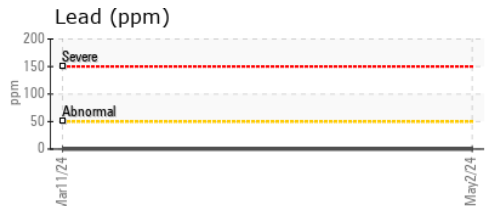
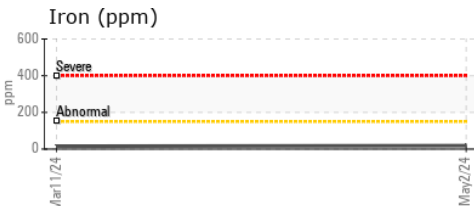


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>12.5</b>	11.1	---
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>5.19</b>	6.89	---

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	60.0	<b>56.9</b>	58.0	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	<b>9.9</b>	10.1	---
Viscosity Index (VI)	Scale	ASTM D2270*	177	<b>161</b>	162	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0085532 **Received** : 27 May 2024  
**Lab Number** : **02637620** **Tested** : 28 May 2024  
**Unique Number** : 5786782 **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.

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F: