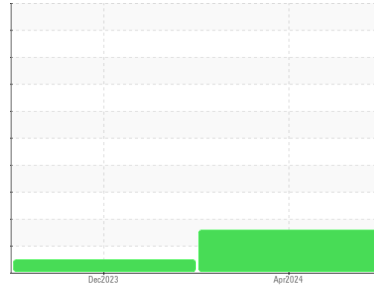


Area  
**UPS CANADA**  
Machine Id  
**FREIGHTLINER 863911**  
Component  
**Diesel Engine**  
Fluid  
**SAE 5W30 (--- GAL)**

Sample Rating Trend



**WATER**



**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

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

**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>PC0085535</b>	PC0085567	---
Sample Date	Client Info			<b>12 Apr 2024</b>	19 Dec 2023	---
Machine Age	kms	Client Info		<b>307900</b>	295844	---
Oil Age	kms	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>Not Chngd</b>	N/A	---
Sample Status				<b>MARGINAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method		>5	<b>&lt;1.0</b>	0.5	---

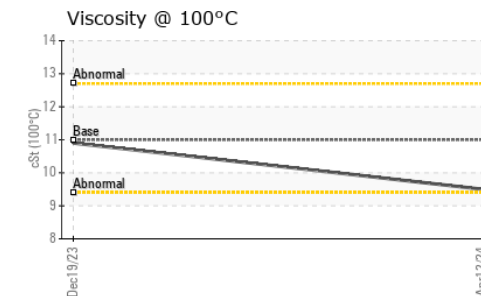
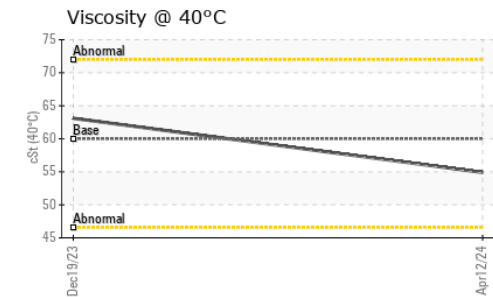
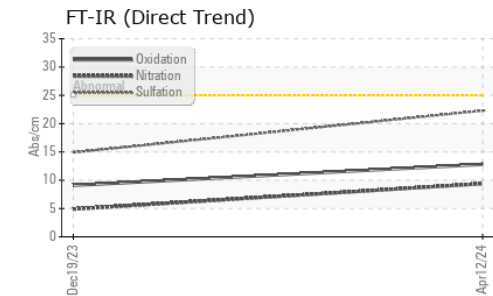
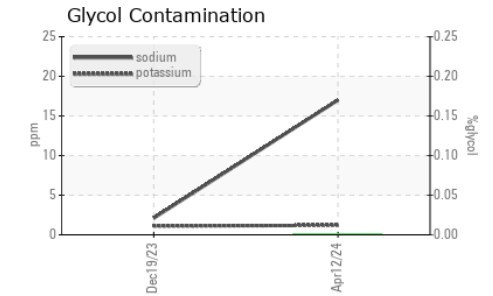
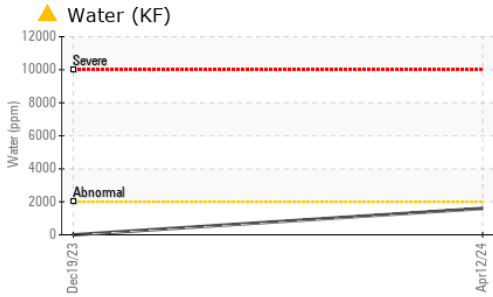
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>80	<b>65</b>	9	---
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	0	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>30	<b>2</b>	1	---
Lead	ppm	ASTM D5185(m)	>30	<b>2</b>	<1	---
Copper	ppm	ASTM D5185(m)	>150	<b>29</b>	2	---
Tin	ppm	ASTM D5185(m)	>5	<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>30</b>	153	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)		<b>72</b>	62	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185(m)		<b>544</b>	552	---
Calcium	ppm	ASTM D5185(m)		<b>1212</b>	1105	---
Phosphorus	ppm	ASTM D5185(m)		<b>573</b>	630	---
Zinc	ppm	ASTM D5185(m)		<b>772</b>	733	---
Sulfur	ppm	ASTM D5185(m)		<b>2157</b>	2261	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	<b>9</b>	12	---
Sodium	ppm	ASTM D5185(m)		<b>17</b>	2	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	---
Water	%	ASTM D6304*	>0.2	<b>▲ 0.159</b>	---	---
ppm Water	ppm	ASTM D6304*	>2000	<b>▲ 1599</b>	---	---
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.4</b>	4.9	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>22.3</b>	14.9	---

# OIL ANALYSIS REPORT

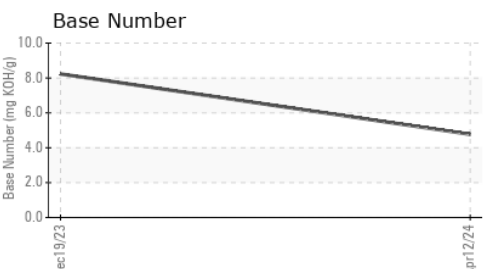
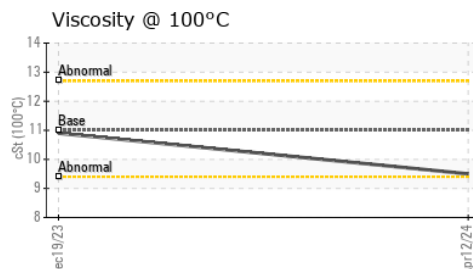
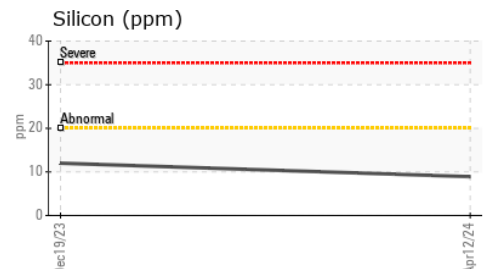
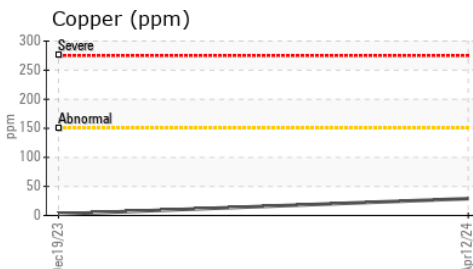
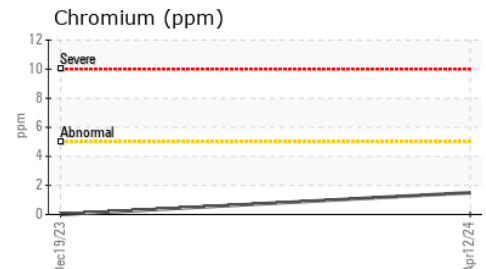
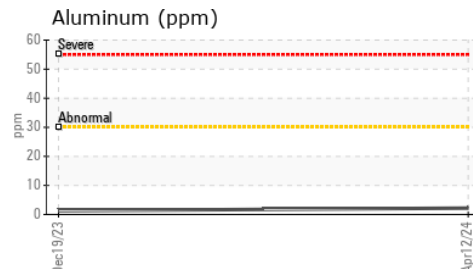
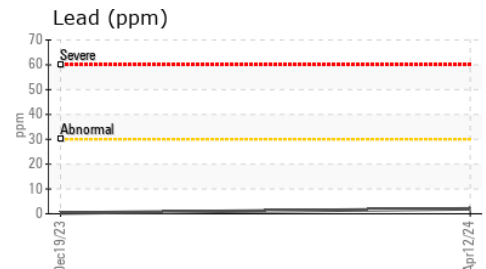
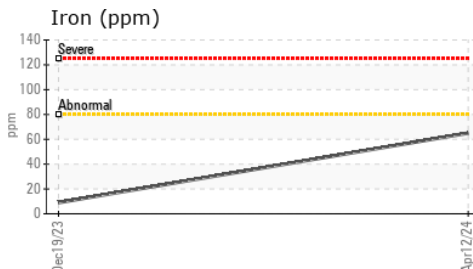


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>12.8</b>	9.1	---
Base Number (BN)	mg KOH/g	ASTM D2896*		<b>4.77</b>	8.23	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>▲ .2%</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>54.9</b>	63.1	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	<b>9.5</b>	10.9	---
Viscosity Index (VI)	Scale	ASTM D2270*	177	<b>157</b>	165	---

## GRAPHS



**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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