

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

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PC0085567</b>	---	---
Sample Date		Client Info		<b>19 Dec 2023</b>	---	---
Machine Age	kms	Client Info		<b>295844</b>	---	---
Oil Age	kms	Client Info		<b>0</b>	---	---
Filter Age	kms	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	<b>9</b>	---	---
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>30	<b>1</b>	---	---
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m)	>150	<b>2</b>	---	---
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

### CONTAMINATION

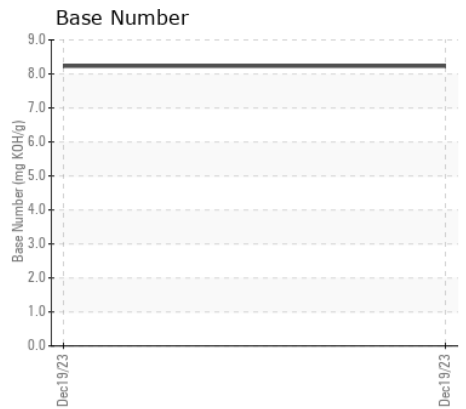
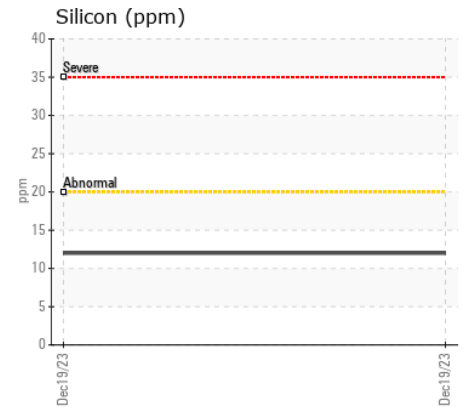
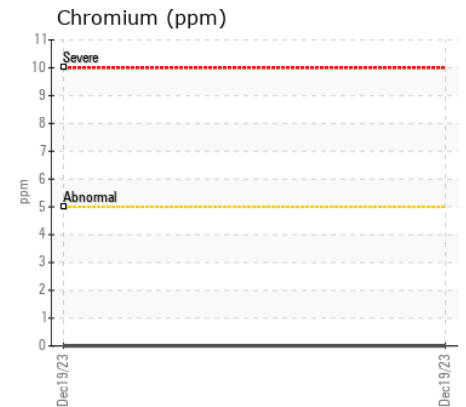
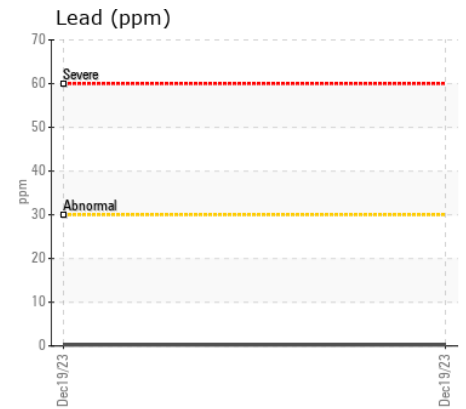
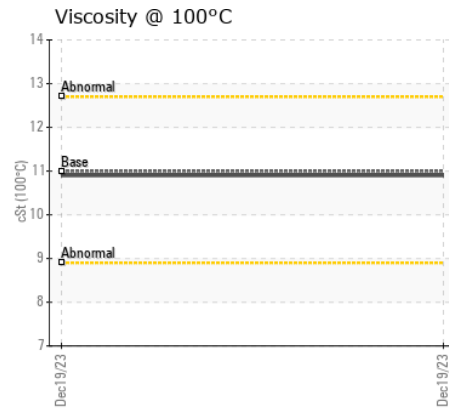
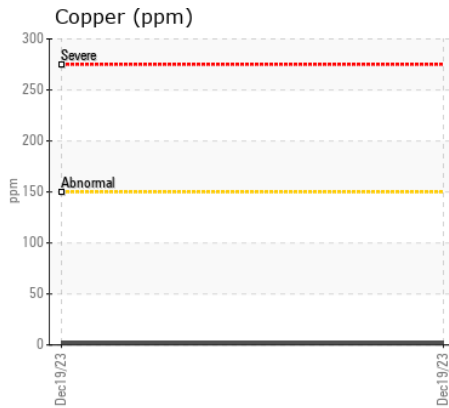
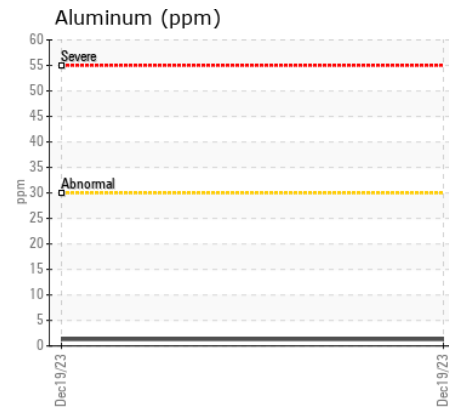
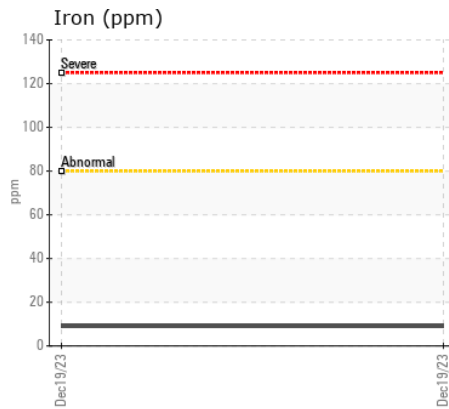
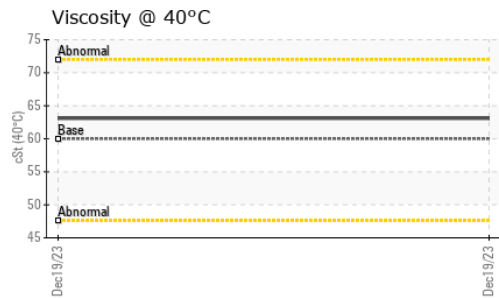
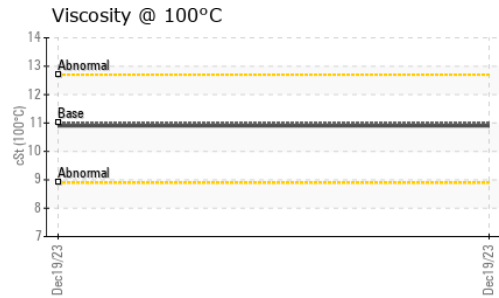
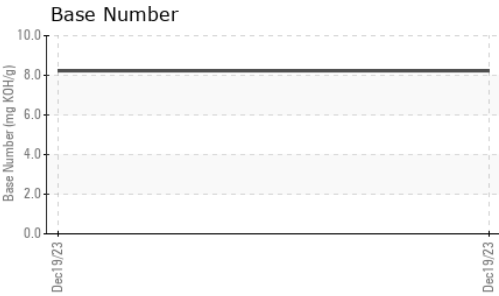
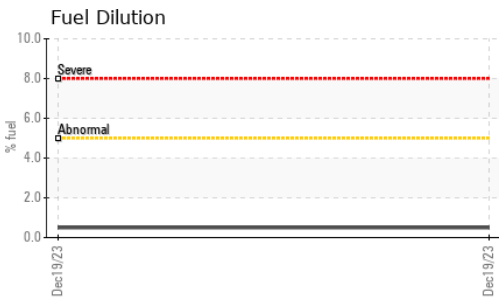
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>12</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Fuel	%	ASTM D7593*	>5	<b>0.5</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>4.9</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>14.9</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

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



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Petro-Canada Technical/Behshad Sabah  
**Sample No.** : PC0085567 **Received** : 27 Dec 2023  
**Lab Number** : 02605286 **Diagnosed** : 02 Jan 2024  
**Unique Number** : 5698371 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual )

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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.