



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 174771

Component
Diesel Engine

Fluid
PETRO CANADA SUPREME 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0085573	---	---
Sample Date		Client Info		19 Dec 2023	---	---
Machine Age	kms	Client Info		38046	---	---
Oil Age	kms	Client Info		0	---	---
Filter Age	kms	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

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

CONTAMINATION

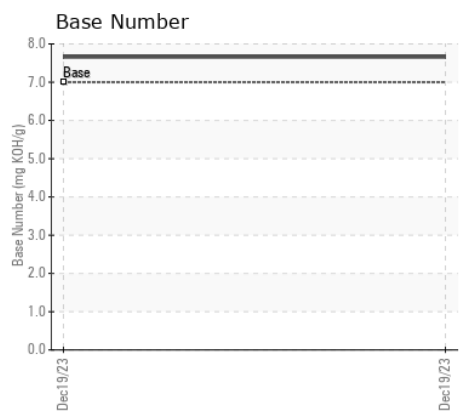
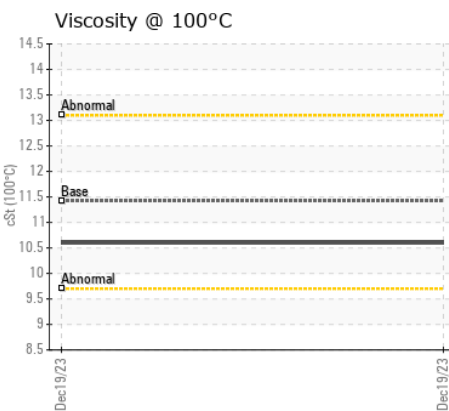
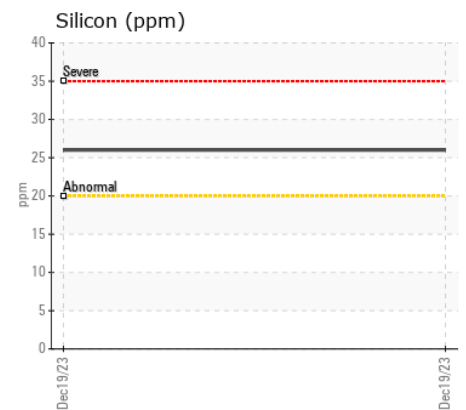
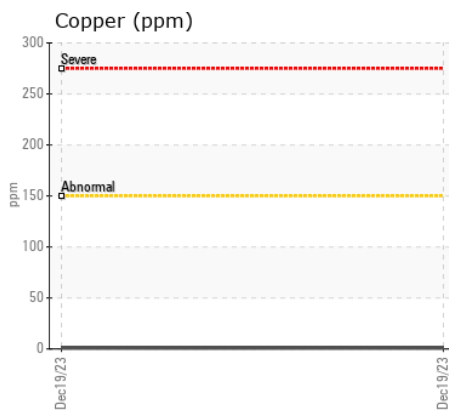
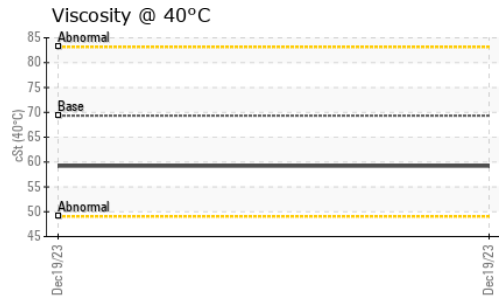
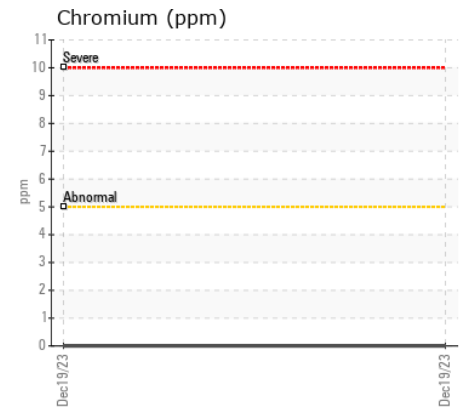
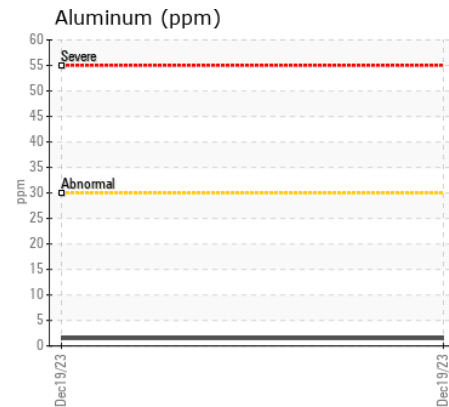
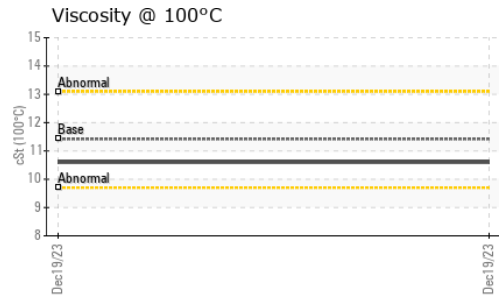
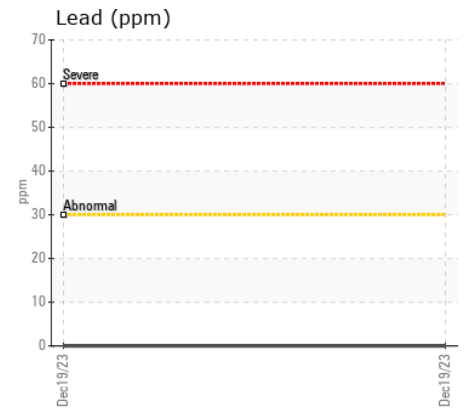
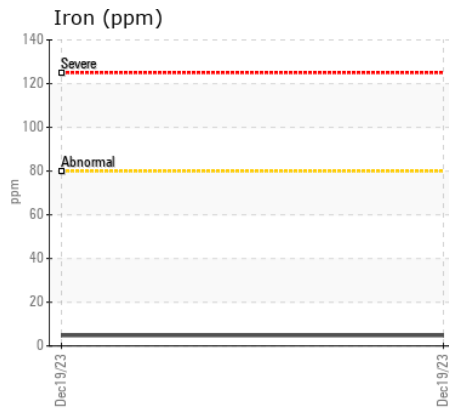
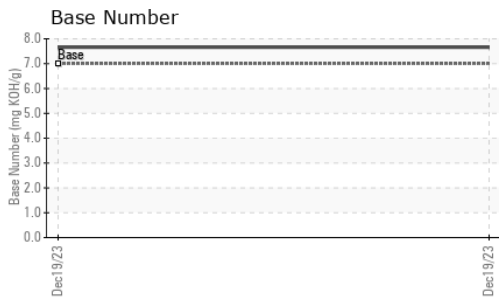
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	26	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	6.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	16.0	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

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)		1	---	---
Boron	ppm	ASTM D5185(m)	186	155	---	---
Barium	ppm	ASTM D5185(m)	<1	0	---	---
Molybdenum	ppm	ASTM D5185(m)	79	64	---	---
Manganese	ppm	ASTM D5185(m)	0	0	---	---
Magnesium	ppm	ASTM D5185(m)	578	489	---	---
Calcium	ppm	ASTM D5185(m)	1002	1149	---	---
Phosphorus	ppm	ASTM D5185(m)	745	602	---	---
Zinc	ppm	ASTM D5185(m)	837	683	---	---
Sulfur	ppm	ASTM D5185(m)	2502	2268	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	10.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	7.0	7.66	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	69.33	59.2	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.42	10.6	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	159	171	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Petro-Canada Technical/Behshad Sabah
Sample No. : PC0085573 **Received** : 27 Dec 2023
Lab Number : 02605287 **Diagnosed** : 28 Dec 2023
Unique Number : 5698372 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: KV40, VI, Visual)

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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