



Machine Id
CATERPILLAR CB64B 2161601

Component
Rear Final Drive

Fluid
PETRO CANADA ENDURATEX EP 220 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0084914	---	---
Sample Date		Client Info		29 Feb 2024	---	---
Machine Age	hrs	Client Info		3662	---	---
Oil Age	hrs	Client Info		500	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Lead ppm levels are abnormal. Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185(m)	>800	29	---	---
Chromium	ppm	ASTM D5185(m)	>10	<1	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)	>15	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>75	<1	---	---
Lead	ppm	ASTM D5185(m)	>10	▲ 11	---	---
Copper	ppm	ASTM D5185(m)	>75	2	---	---
Tin	ppm	ASTM D5185(m)	>8	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

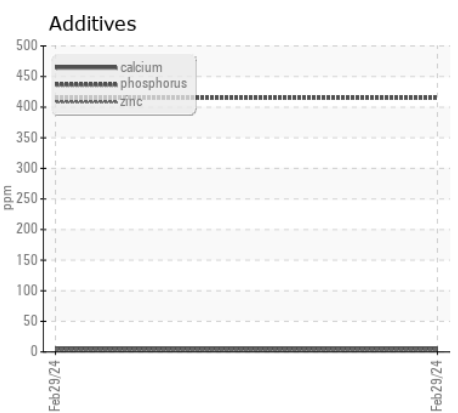
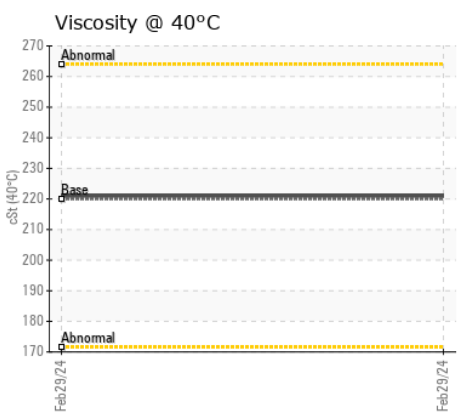
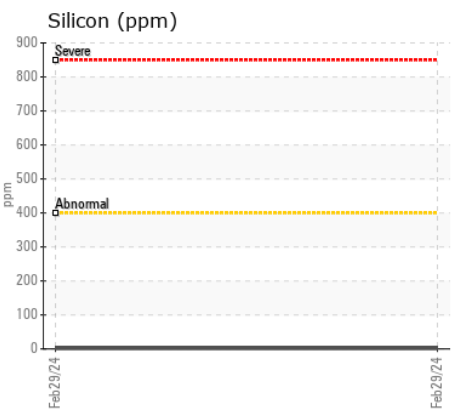
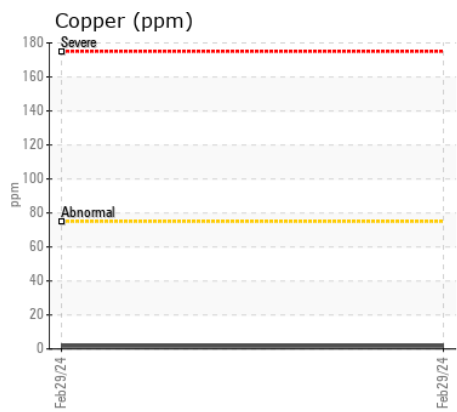
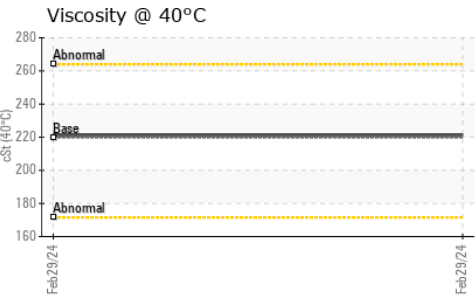
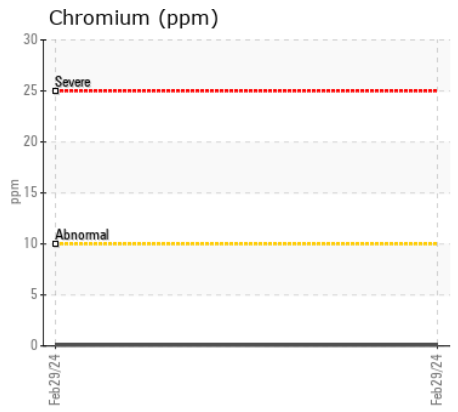
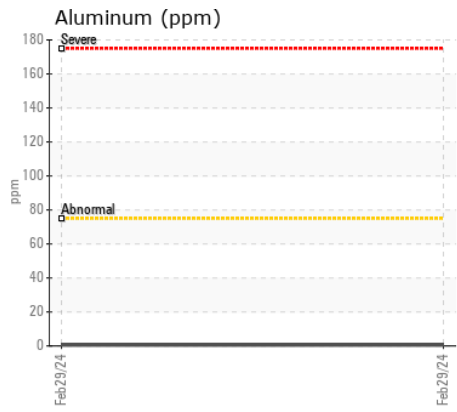
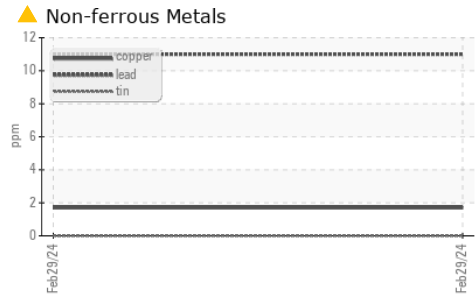
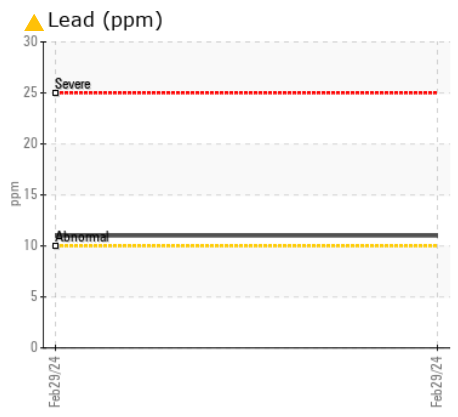
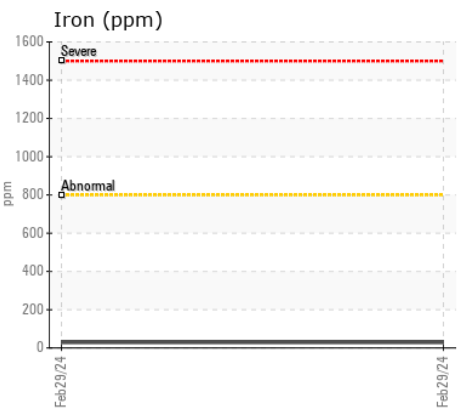
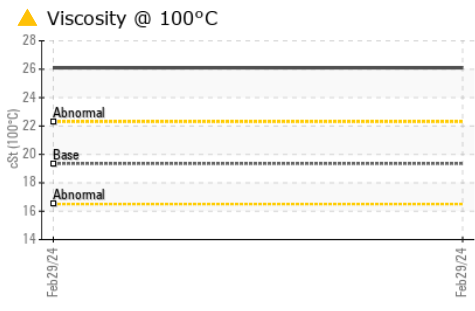
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>400	2	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	Visual*	NONE	LIGHT	---	---
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 viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)	60	18	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---	---
Manganese	ppm	ASTM D5185(m)	0	0	---	---
Magnesium	ppm	ASTM D5185(m)	0	2	---	---
Calcium	ppm	ASTM D5185(m)	0	5	---	---
Phosphorus	ppm	ASTM D5185(m)	270	415	---	---
Zinc	ppm	ASTM D5185(m)	0	4	---	---
Sulfur	ppm	ASTM D5185(m)	11200	● 4971	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	220	221	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	▲ 26.1	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	99	▲ 150	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0084914 **Received** : 04 Mar 2024
Lab Number : 02619639 **Tested** : 04 Mar 2024
Unique Number : 5736749 **Diagnosed** : 04 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KV100, VI)

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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.