



# OIL ANALYSIS REPORT

WEAR	<b>SEVERE</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**CUMMINS J BOWMAN 5.9**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA SENTRON LD 5000 (--- GAL)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0915620</b>	PC0078870	---
Sample Date		Client Info		<b>07 Mar 2024</b>	28 Nov 2023	---
Machine Age	hrs	Client Info		<b>34029</b>	34145	---
Oil Age	hrs	Client Info		<b>984</b>	0	---
Filter Age	hrs	Client Info		<b>984</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>SEVERE</b>	SEVERE	---

## WEAR

Chromium ppm levels are severe. Ring wear is indicated. A cylinder ring may be cracked or broken.

Iron	ppm	ASTM D5185(m)	>50	<b>24</b>	▲ 55	---
Chromium	ppm	ASTM D5185(m)	>4	<b>▲ 9</b>	▲ 21	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</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)	>9	<b>3</b>	4	---
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	3	---
Copper	ppm	ASTM D5185(m)	>35	<b>1</b>	5	---
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## CONTAMINATION

There is no indication of any contamination in the oil.

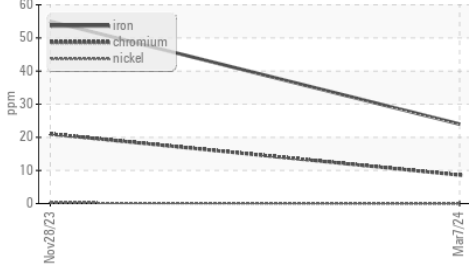
Silicon	ppm	ASTM D5185(m)	>+100	<b>8</b>	68	---
Potassium	ppm	ASTM D5185(m)	>20	<b>7</b>	42	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	---
Soot %	%	ASTM D7844*		<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.3</b>	12.3	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.8</b>	23.9	---
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	---

## FLUID CONDITION

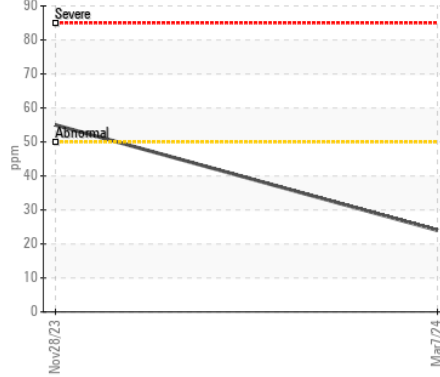
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<b>16</b>	109	---
Boron	ppm	ASTM D5185(m)	2	<b>7</b>	3	---
Barium	ppm	ASTM D5185(m)	3	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	8	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	4	---
Magnesium	ppm	ASTM D5185(m)	4	<b>8</b>	10	---
Calcium	ppm	ASTM D5185(m)	1727	<b>2028</b>	1592	---
Phosphorus	ppm	ASTM D5185(m)	272	<b>449</b>	806	---
Zinc	ppm	ASTM D5185(m)	333	<b>554</b>	1009	---
Sulfur	ppm	ASTM D5185(m)	3415	<b>2652</b>	2394	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.9</b>	17.3	---
Visc @ 100°C	cSt	ASTM D7279(m)	13.4	<b>13.9</b>	12.6	---

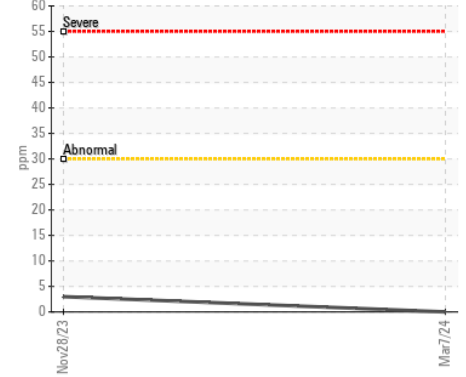
▲ Ferrous Alloys



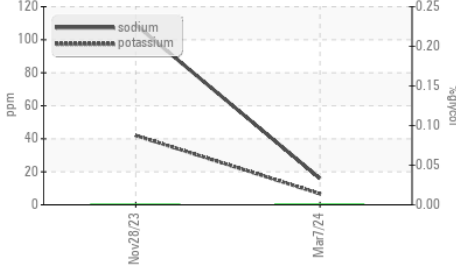
Iron (ppm)



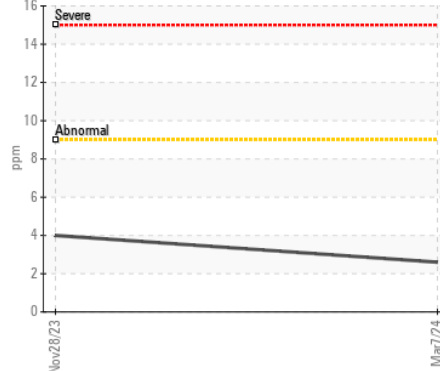
Lead (ppm)



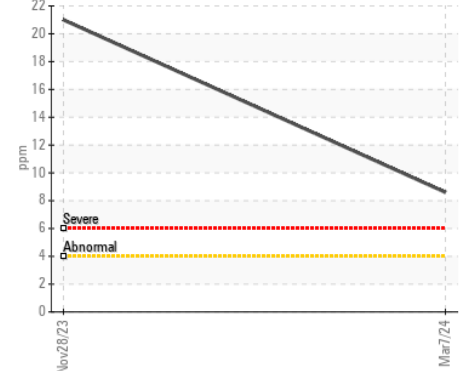
Glycol Contamination



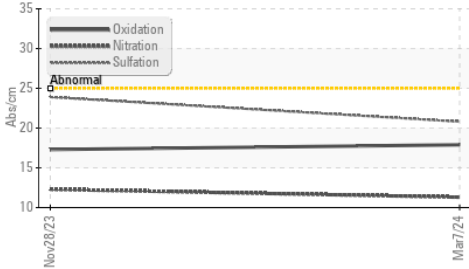
Aluminum (ppm)



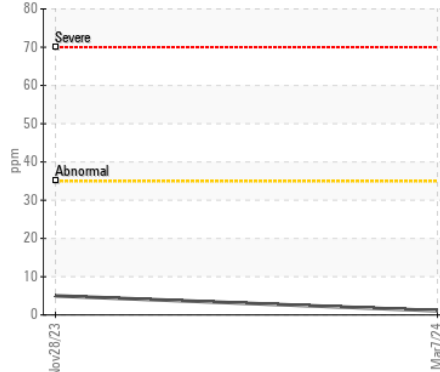
▲ Chromium (ppm)



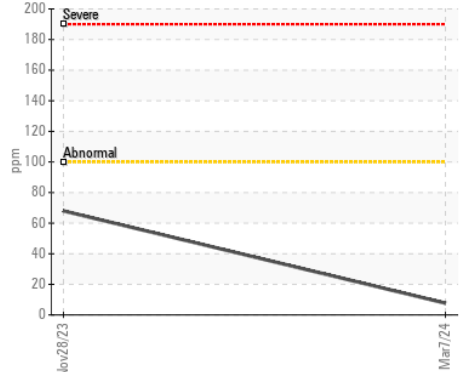
FT-IR (Direct Trend)



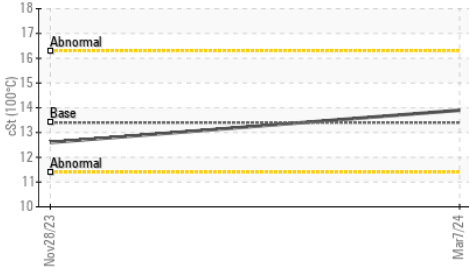
Copper (ppm)



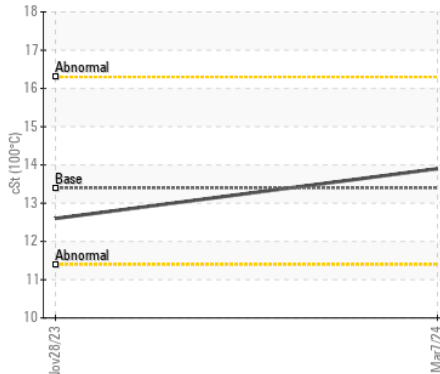
Silicon (ppm)



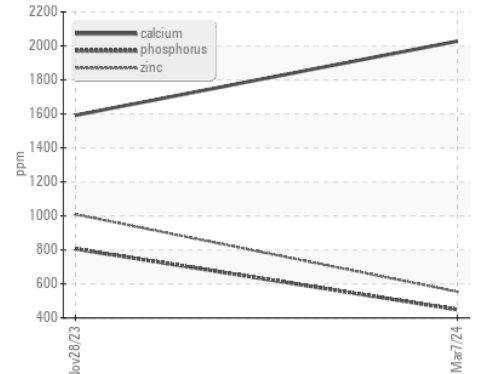
Viscosity @ 100°C



Viscosity @ 100°C



Additives



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0915620 **Received** : 04 Apr 2024  
**Lab Number** : 02626591 **Tested** : 04 Apr 2024  
**Unique Number** : 5759723 **Diagnosed** : 04 Apr 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

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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.