



# OIL ANALYSIS REPORT

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



Machine Id  
**CATERPILLAR 1600G SCOOP 213**  
Component  
**Front Left Planetary**  
Fluid  
**DIESEL ENGINE OIL SAE 50 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0952477</b>	WC0879711	---
Sample Date		Client Info		<b>02 Jul 2024</b>	22 Nov 2023	---
Machine Age	hrs	Client Info		<b>18405</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>500	<b>7</b>	23	---
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>1</b>	2	---
Lead	ppm	ASTM D5185(m)	>25	<b>0</b>	<1	---
Copper	ppm	ASTM D5185(m)	>75	<b>2</b>	6	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
White Metal	scalar	Visual*	NONE	<b>VLITE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

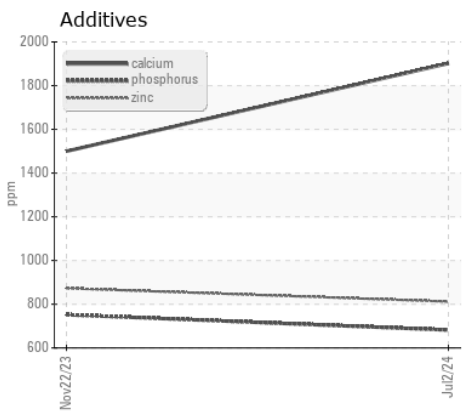
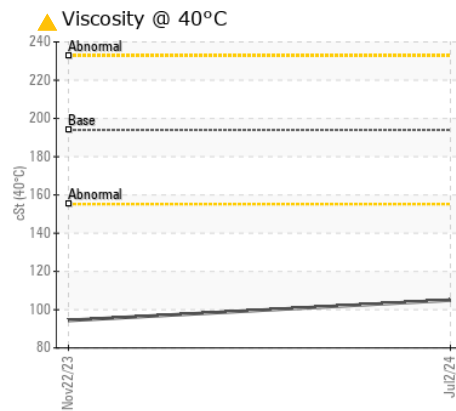
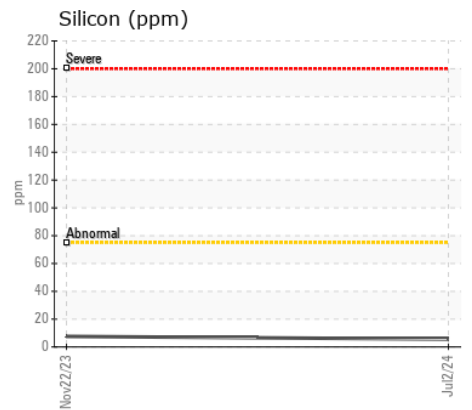
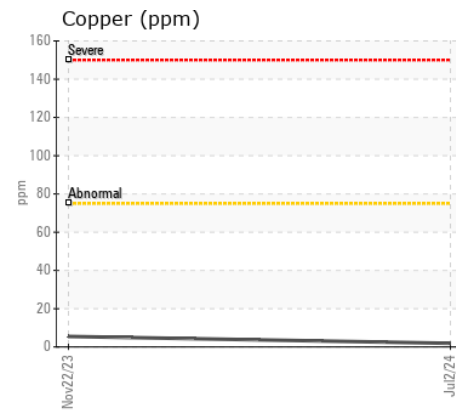
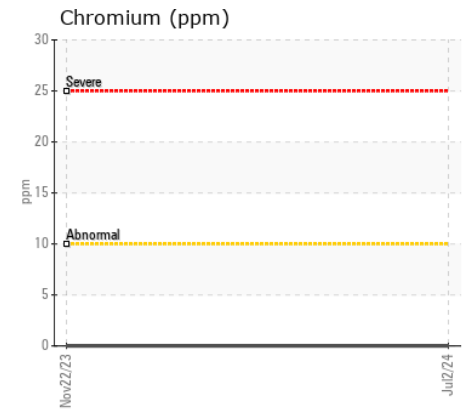
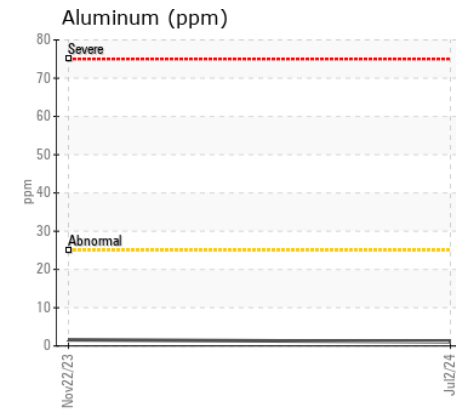
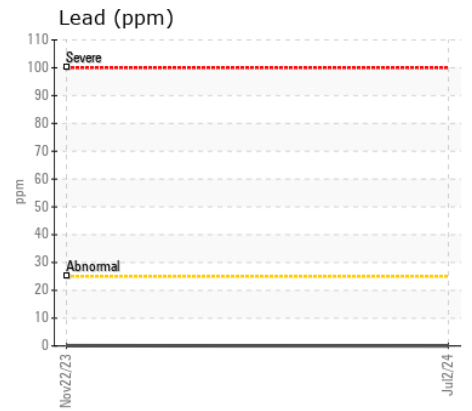
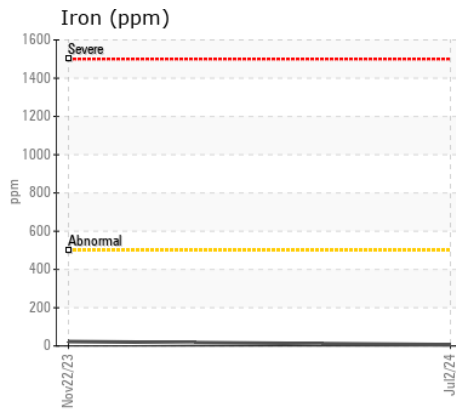
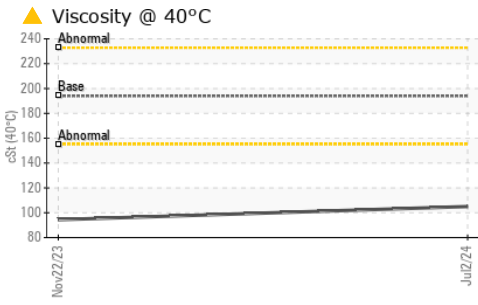
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>75	<b>6</b>	8	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>LIGHT</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	---
Boron	ppm	ASTM D5185(m)	250	<b>36</b>	24	---
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	<b>21</b>	30	---
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Magnesium	ppm	ASTM D5185(m)	450	<b>262</b>	438	---
Calcium	ppm	ASTM D5185(m)	3000	<b>1902</b>	1500	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>682</b>	752	---
Zinc	ppm	ASTM D5185(m)	1350	<b>812</b>	873	---
Sulfur	ppm	ASTM D5185(m)	4250	<b>4363</b>	4072	---
Visc @ 40°C	cSt	ASTM D7279(m)	194	<b>▲ 105</b>	▲ 94.4	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0952477  
**Lab Number** : 02645569  
**Unique Number** : 5803108  
**Test Package** : MOB 1

**Received** : 04 Jul 2024  
**Tested** : 04 Jul 2024  
**Diagnosed** : 05 Jul 2024 - Kevin Marson

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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.