



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**CATERPILLAR B1600 SCP220**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0916333</b>	WC0861380	---
Sample Date		Client Info		<b>27 May 2024</b>	11 Nov 2023	---
Machine Age	hrs	Client Info		<b>7358</b>	326	---
Oil Age	hrs	Client Info		<b>250</b>	0	---
Filter Age	hrs	Client Info		<b>250</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>4</b>	15	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	2	---
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	15	---
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	428	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	5	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

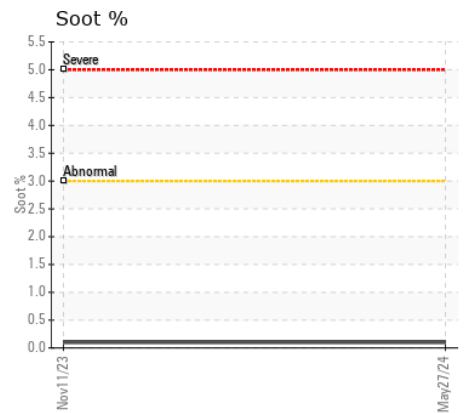
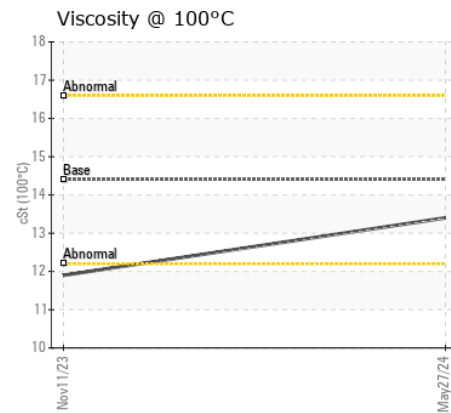
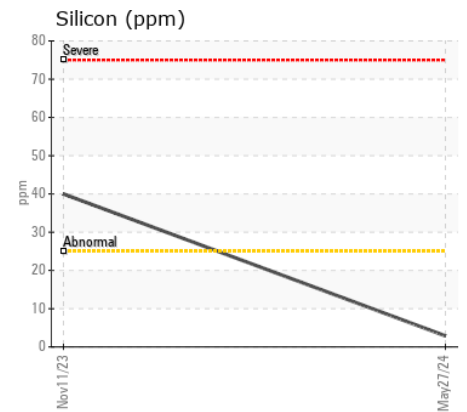
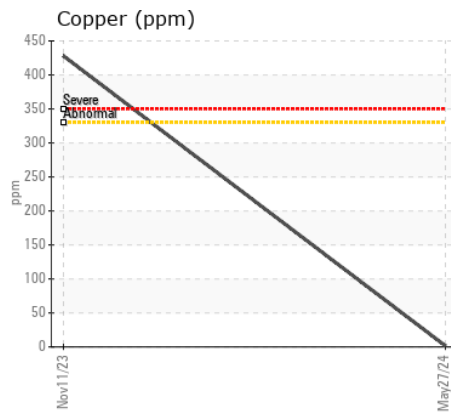
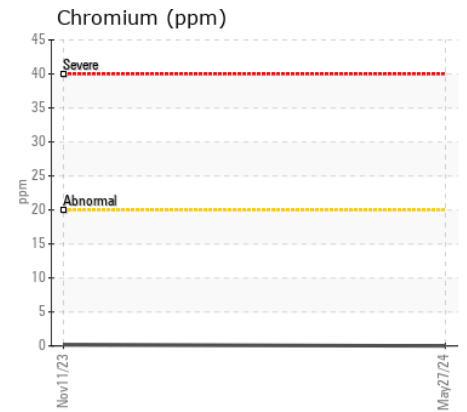
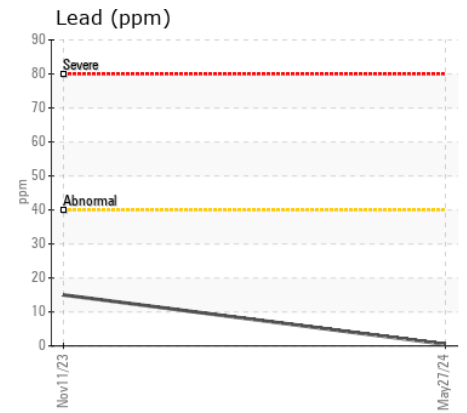
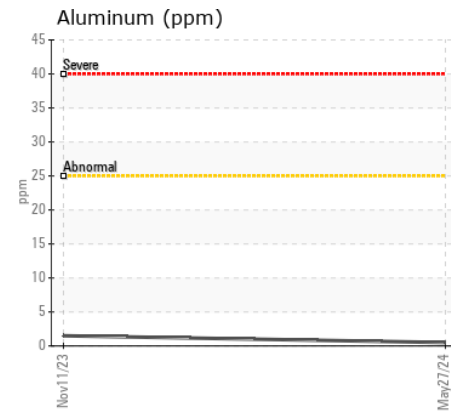
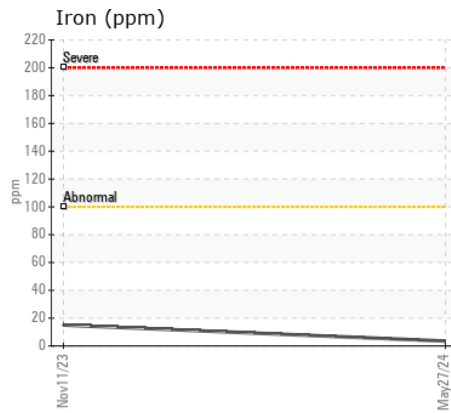
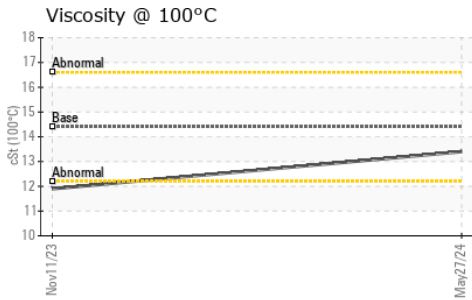
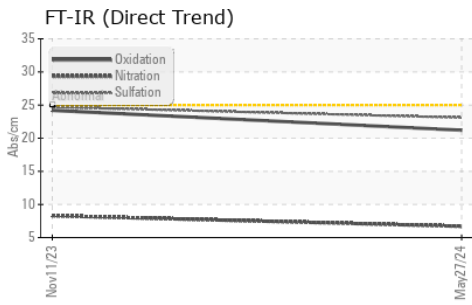
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	40	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	▲ 4.6	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.7</b>	8.3	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.1</b>	24.7	---
Silt	scalar	Visual*	NONE	<b>VLITE</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>	NORML	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>158	<b>2</b>	3	---
Boron	ppm	ASTM D5185(m)	250	<b>55</b>	40	---
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	<b>39</b>	37	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m)	450	<b>510</b>	461	---
Calcium	ppm	ASTM D5185(m)	3000	<b>1726</b>	1586	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>736</b>	713	---
Zinc	ppm	ASTM D5185(m)	1350	<b>845</b>	854	---
Sulfur	ppm	ASTM D5185(m)	4250	<b>2024</b>	1959	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>21.2</b>	24.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.4</b>	▲ 11.9	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0916333 **Received** : 29 May 2024  
**Lab Number** : 02638423 **Tested** : 29 May 2024  
**Unique Number** : 5787585 **Diagnosed** : 29 May 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: 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.