



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION



Area  
**[0781122]**  
Machine Id  
**CATERPILLAR G #3**  
Component  
**Diesel Engine**  
Fluid  
**CAT DIESEL ENGINE OIL 10W30 (--- GAL)**

## RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC</b>	---	---
Sample Date		Client Info		<b>04 Mar 2024</b>	---	---
Machine Age	hrs	Client Info		<b>148</b>	---	---
Oil Age	hrs	Client Info		<b>31</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Not Changd</b>	---	---
Filter Changed		Client Info		<b>Not Changd</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	<b>5</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>1</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>4</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>121</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

## CONTAMINATION

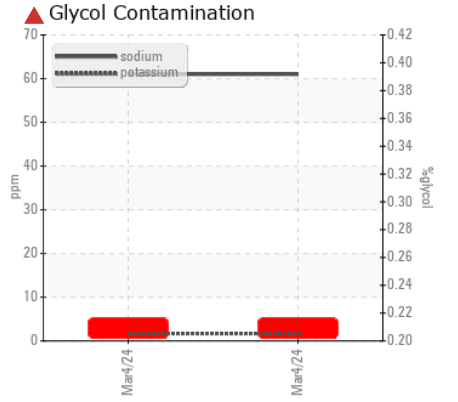
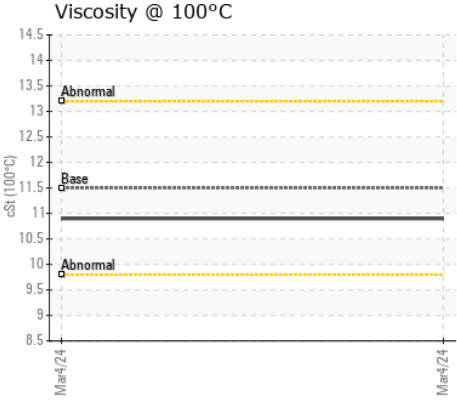
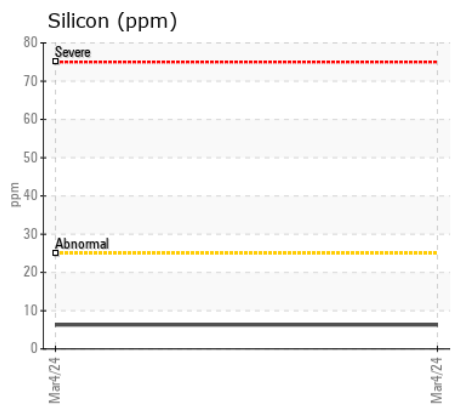
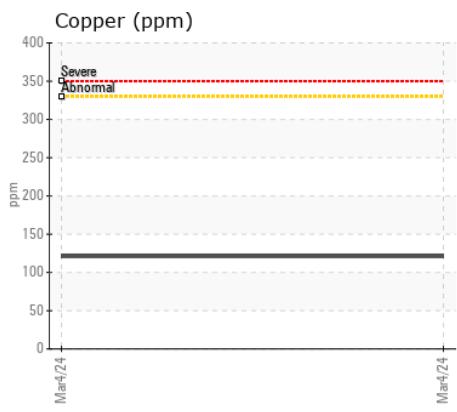
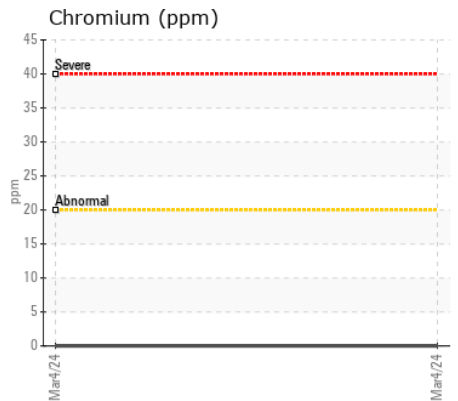
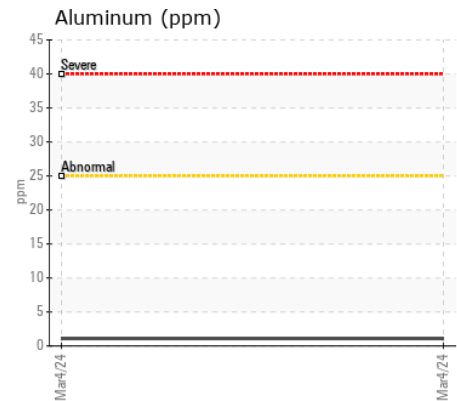
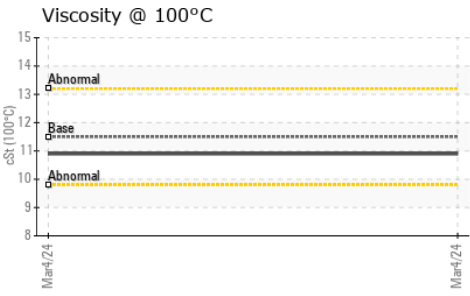
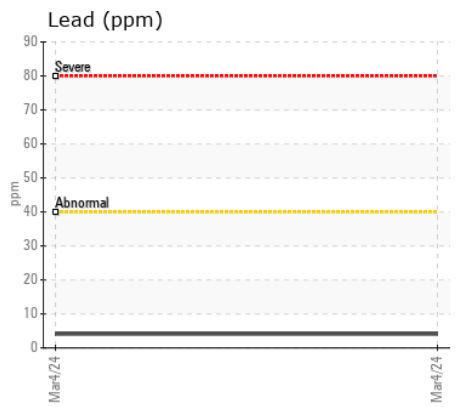
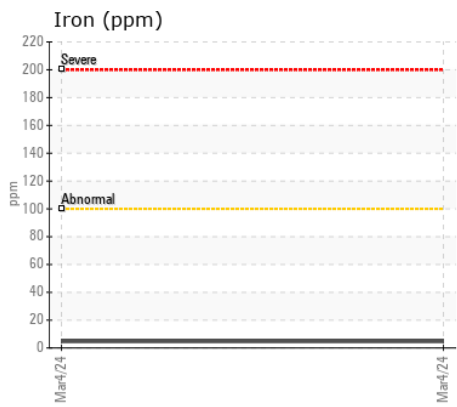
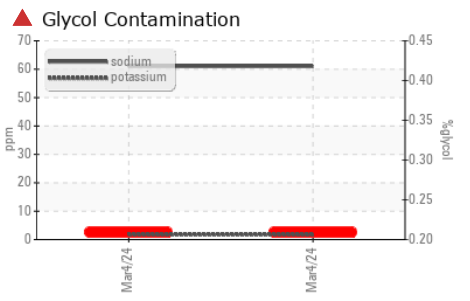
Test for glycol is positive. There is a high concentration of glycol present in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol	%	ASTM D7922*		<b>▲ 0.216</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.3</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.6</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

## FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		<b>● 61</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>51</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>47</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>494</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>1671</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>909</b>	---	---
Zinc	ppm	ASTM D5185(m)	1460	<b>1024</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>2575</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.6</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.5	<b>10.9</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC  
**Lab Number** : 02619847  
**Unique Number** : 5736957  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**Toromont CAT - Power Systems**  
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 Contact: Scott McMahon  
 smcmahon@toromont.com

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.