



# OIL ANALYSIS REPORT

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



Area  
**Store 9 - Marietta**  
Machine Id  
**CATERPILLAR TL943C E124 (S/N THH00942)**  
Component  
**Front Differential**  
Fluid  
**GEAR OIL SAE 90 (--- GAL)**

## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048968	---	---
Sample Date		Client Info		15 May 2024	---	---
Machine Age	hrs	Client Info		6995	---	---
Oil Age	hrs	Client Info		500	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---

## WEAR

Gear wear is indicated.

PQ		ASTM D8184		128	---	---
Iron	ppm	ASTM D5185m	>500	▲ 3207	---	---
Chromium	ppm	ASTM D5185m	>3	▲ 6	---	---
Nickel	ppm	ASTM D5185m	>3	2	---	---
Titanium	ppm	ASTM D5185m	>2	<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>30	2	---	---
Lead	ppm	ASTM D5185m	>13	0	---	---
Copper	ppm	ASTM D5185m	>103	3	---	---
Tin	ppm	ASTM D5185m	>5	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

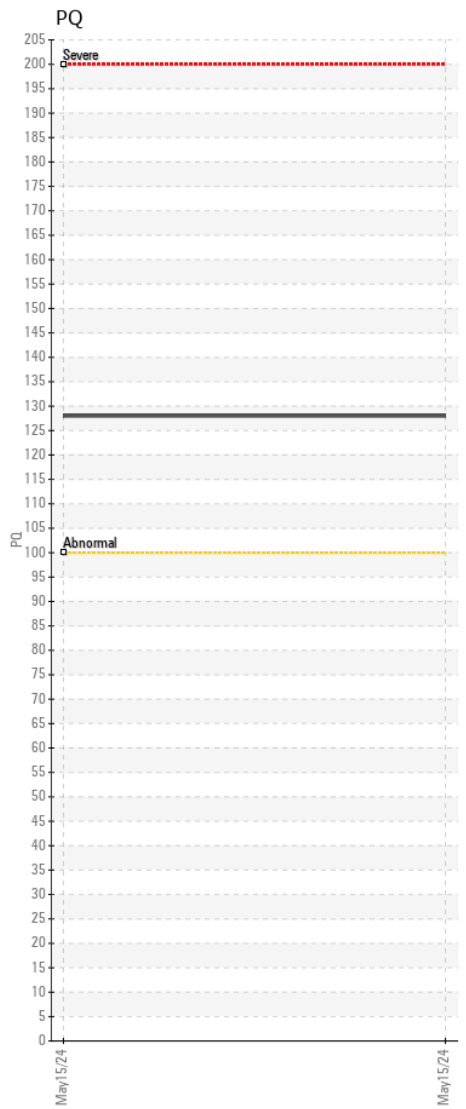
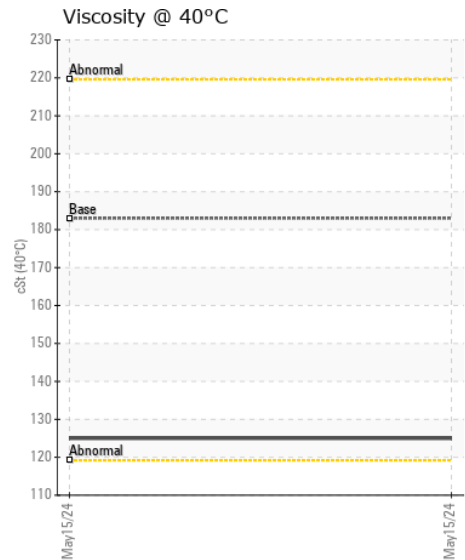
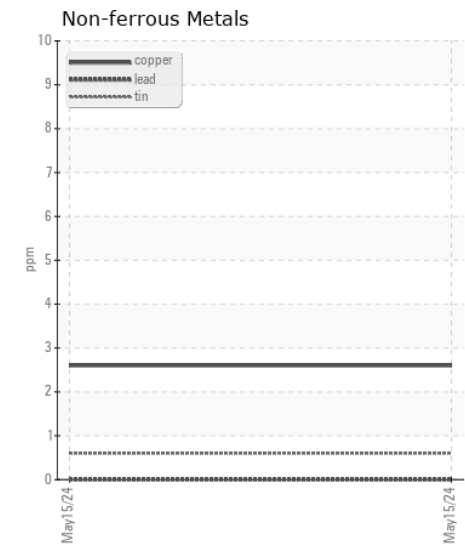
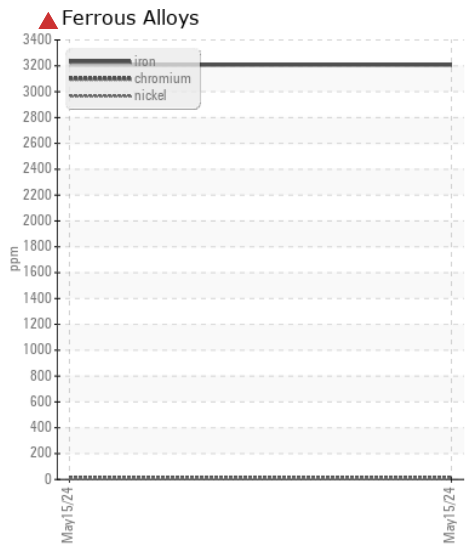
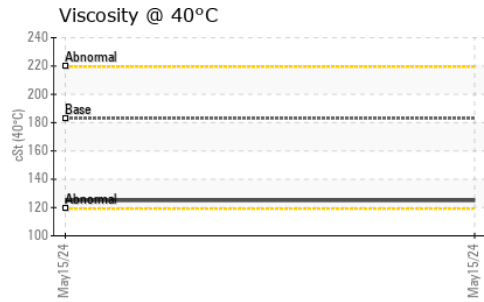
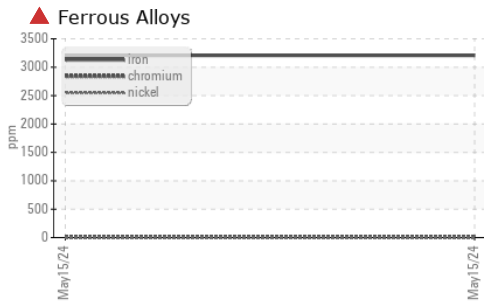
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	29	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water		WC Method	>.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
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	>.2	NEG	---	---

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		13	---	---
Boron	ppm	ASTM D5185m	400	132	---	---
Barium	ppm	ASTM D5185m	200	2	---	---
Molybdenum	ppm	ASTM D5185m	12	129	---	---
Manganese	ppm	ASTM D5185m		33	---	---
Magnesium	ppm	ASTM D5185m	12	4	---	---
Calcium	ppm	ASTM D5185m	150	131	---	---
Phosphorus	ppm	ASTM D5185m	1650	1730	---	---
Zinc	ppm	ASTM D5185m	125	147	---	---
Sulfur	ppm	ASTM D5185m	22500	22454	---	---
Visc @ 40°C	cSt	ASTM D445	183	125	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0048968 **Received** : 31 May 2024  
**Lab Number** : 06196998 **Tested** : 04 Jun 2024  
**Unique Number** : 11059121 **Diagnosed** : 04 Jun 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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