



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**CATERPILLAR 336E #2 (S/N FJH01180)**  
 Component  
**Front Left Final Drive**  
 Fluid  
**SAE 50W (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TLY0002328</b>	---	---
Sample Date		Client Info		<b>20 May 2024</b>	---	---
Machine Age	hrs	Client Info		<b>11666</b>	---	---
Oil Age	hrs	Client Info		<b>11613</b>	---	---
Filter Age	hrs	Client Info		<b>11613</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>800	<b>324</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	>15	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>75	<b>6</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>8	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

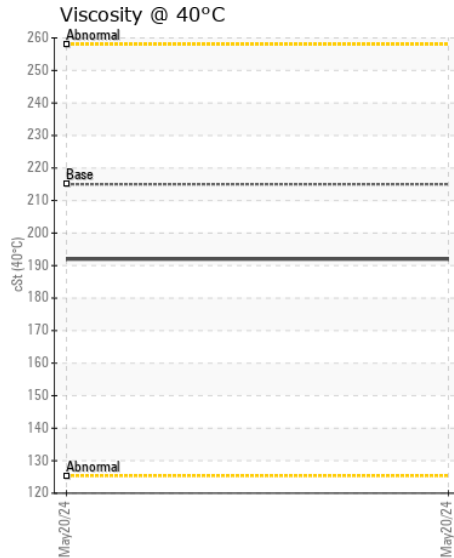
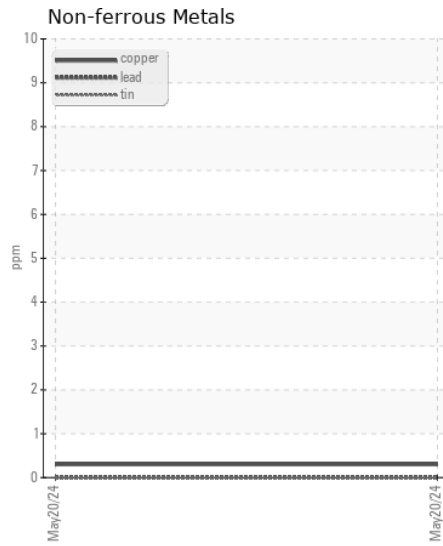
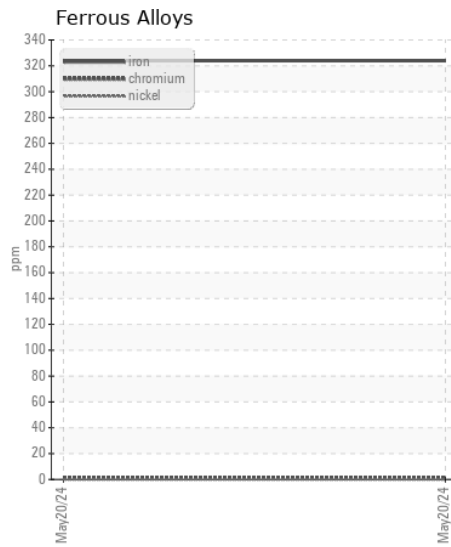
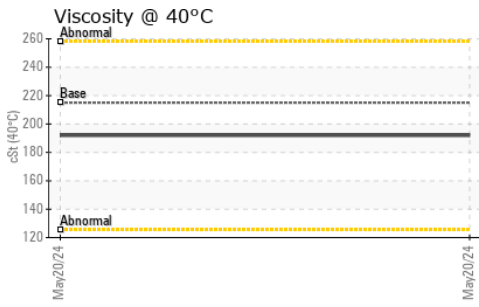
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	<b>38</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</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>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>0</b>	---	---
Boron	ppm	ASTM D5185m		<b>11</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>2</b>	---	---
Manganese	ppm	ASTM D5185m		<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>30</b>	---	---
Calcium	ppm	ASTM D5185m		<b>3692</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>989</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1142</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>9204</b>	---	---
Visc @ 40°C	cSt	ASTM D445	215	<b>192</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLY0002328  
**Lab Number** : 06194305  
**Unique Number** : 11056428  
**Test Package** : CONST

**Received** : 29 May 2024  
**Tested** : 31 May 2024  
**Diagnosed** : 31 May 2024 - Don Baldrige

**GAINES & COMPANY**  
 112 WESTMINISTER RD  
 REISTERSTOWN, MD  
 US 21136

Contact: BRANDY BADING  
bbading@gainesandco.com

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)

T:  
F: