



# OIL ANALYSIS REPORT

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



Machine Id  
**CATERPILLAR 345C 345C-2 (S/N TDG00286)**  
 Component  
**Left Final Drive**  
 Fluid  
**SAE 50W (--- GAL)**

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

## WEAR

Bearing and/or bushing wear is indicated.

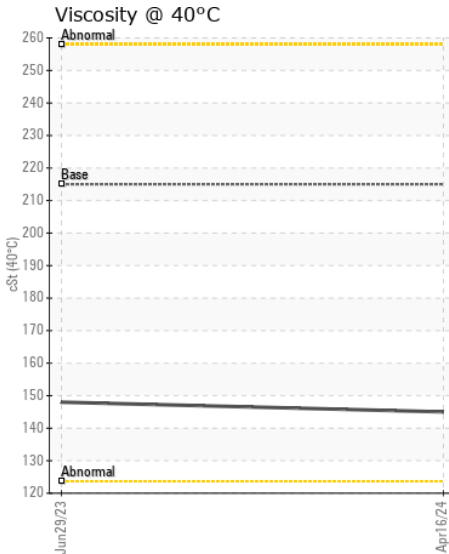
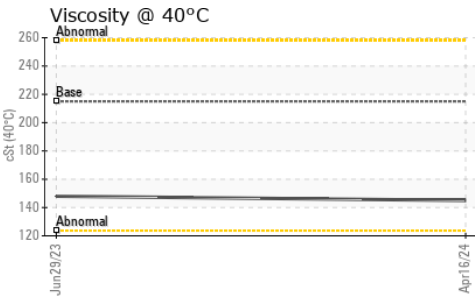
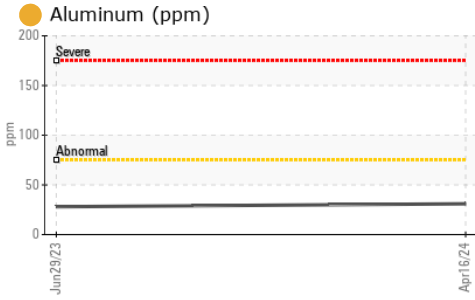
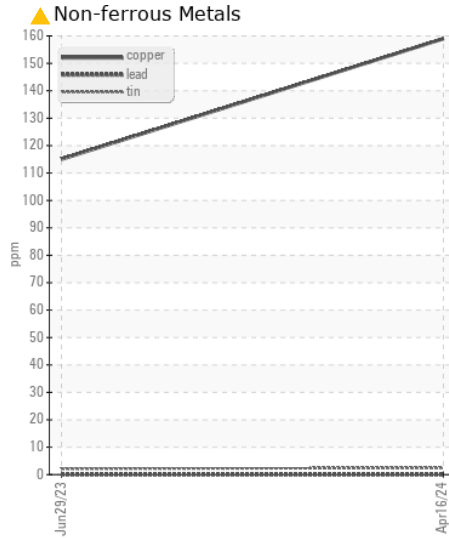
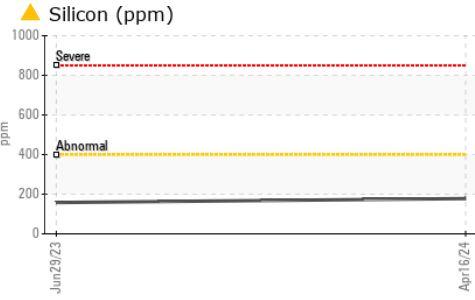
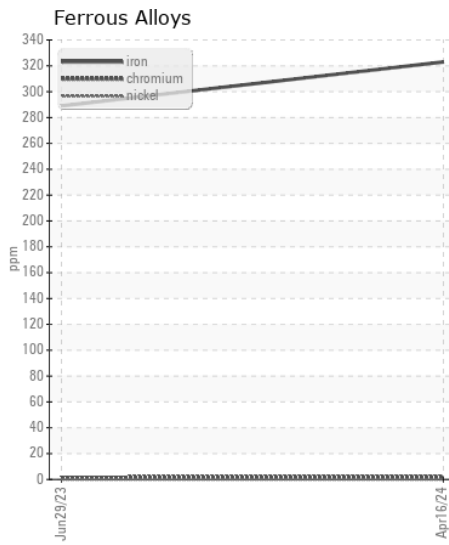
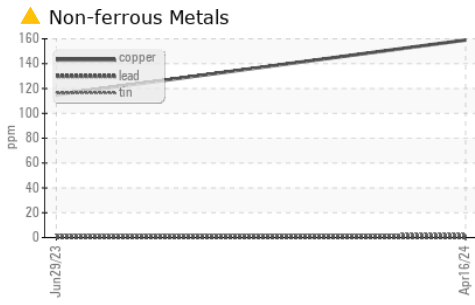
## CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

## FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TLY0002279</b>	TLY0001649	---
Sample Date		Client Info		<b>16 Apr 2024</b>	29 Jun 2023	---
Machine Age	hrs	Client Info		<b>12433</b>	12050	---
Oil Age	hrs	Client Info		<b>12050</b>	2050	---
Filter Age	hrs	Client Info		<b>12050</b>	2050	---
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	---
Filter Changed		Client Info		<b>Not Changed</b>	N/A	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---
Iron	ppm	ASTM D5185m	>800	<b>323</b>	289	---
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	2	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	>15	<b>2</b>	2	---
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>75	<b>31</b>	28	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>75	<b>159</b>	115	---
Tin	ppm	ASTM D5185m	>8	<b>2</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silicon	ppm	ASTM D5185m	>400	<b>178</b>	158	---
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	6	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Silt	scalar	*Visual	NONE	<b>MODER</b>	MODER	---
Debris	scalar	*Visual	NONE	<b>NONE</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	---
Sodium	ppm	ASTM D5185m		<b>1</b>	1	---
Boron	ppm	ASTM D5185m		<b>0</b>	0	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>3</b>	2	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	1	---
Calcium	ppm	ASTM D5185m		<b>320</b>	305	---
Phosphorus	ppm	ASTM D5185m		<b>399</b>	413	---
Zinc	ppm	ASTM D5185m		<b>110</b>	126	---
Sulfur	ppm	ASTM D5185m		<b>27235</b>	25056	---
Visc @ 40°C	cSt	ASTM D445	215	<b>145</b>	148	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLY0002279  
**Lab Number** : 06154933  
**Unique Number** : 10990356  
**Test Package** : CONST

**Received** : 19 Apr 2024  
**Tested** : 22 Apr 2024  
**Diagnosed** : 24 Apr 2024 - Sean Felton

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

Contact: LANCE TANCRAITOR  
 ltancraitor@gainesandco.com  
 T: (410)833-9833

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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