



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 345C 345C-2 (S/N TDG00286)
Component
Right 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TLY0002281	TLY0001650	---
Sample Date		Client Info		16 Apr 2024	29 Jun 2023	---
Machine Age	hrs	Client Info		12433	12050	---
Oil Age	hrs	Client Info		12050	2050	---
Filter Age	hrs	Client Info		12050	2050	---
Oil Changed		Client Info		Not Changed	Not Changed	---
Filter Changed		Client Info		Not Changed	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>800	349	212	---
Chromium	ppm	ASTM D5185m	>10	3	2	---
Nickel	ppm	ASTM D5185m	>5	0	0	---
Titanium	ppm	ASTM D5185m	>15	2	2	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>75	16	14	---
Lead	ppm	ASTM D5185m	>10	0	0	---
Copper	ppm	ASTM D5185m	>75	84	82	---
Tin	ppm	ASTM D5185m	>8	2	2	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

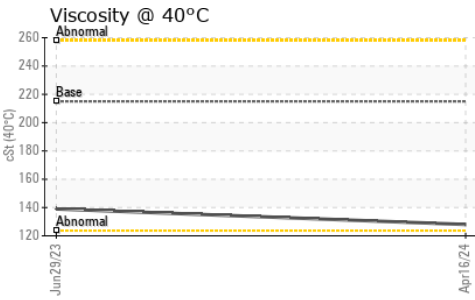
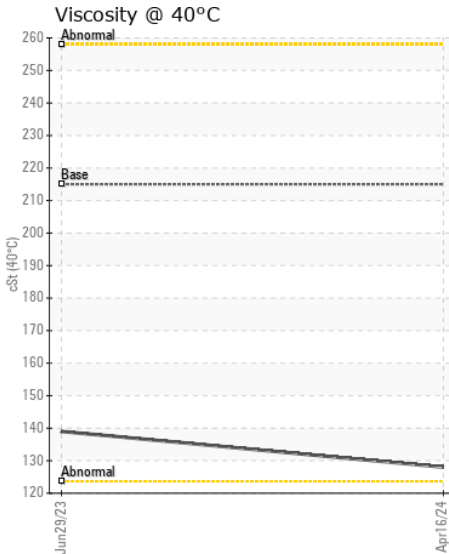
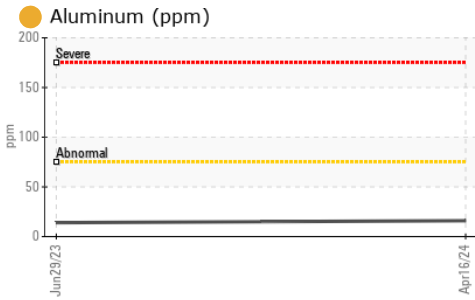
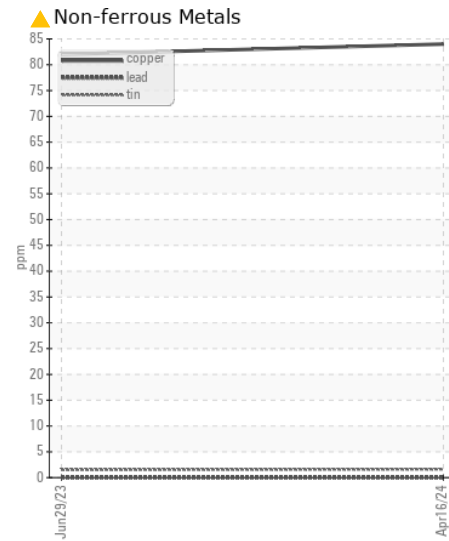
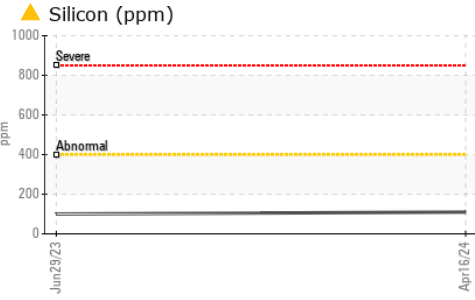
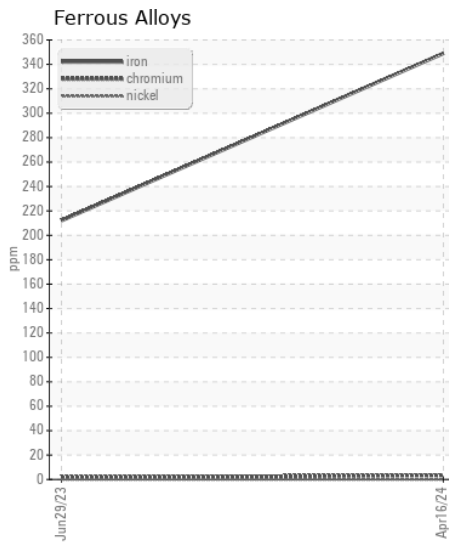
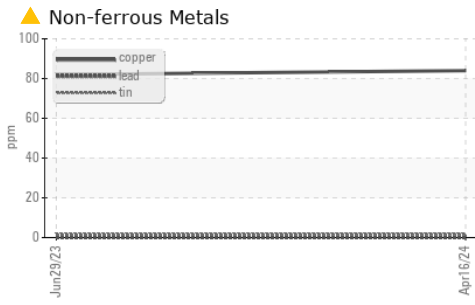
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>400	110	100	---
Potassium	ppm	ASTM D5185m	>20	4	3	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	MODER	HEAVY	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	1	---
Boron	ppm	ASTM D5185m		54	4	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		7	3	---
Manganese	ppm	ASTM D5185m		8	2	---
Magnesium	ppm	ASTM D5185m		0	8	---
Calcium	ppm	ASTM D5185m		351	464	---
Phosphorus	ppm	ASTM D5185m		1229	500	---
Zinc	ppm	ASTM D5185m		139	194	---
Sulfur	ppm	ASTM D5185m		27552	25056	---
Visc @ 40°C	cSt	ASTM D445	215	128	139	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLY0002281
Lab Number : 06154935
Unique Number : 10990358
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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