



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
Caterpillar TL1055-C 54 (S/N 0KDE00625)
Component
Transformer Oil
Fluid
{not provided} (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0191815	---	---
Sample Date		Client Info		27 Feb 2024	---	---
Machine Age	hrs	Client Info		4064	---	---
Oil Age	hrs	Client Info		4064	---	---
Filter Age	hrs	Client Info		4064	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

The copper level is abnormal. All other component wear rates are normal.

PQ		ASTM D8184	>65	47	---	---
Iron	ppm	ASTM D5185m	>125	61	---	---
Chromium	ppm	ASTM D5185m		<1	---	---
Nickel	ppm	ASTM D5185m		<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>5	3	---	---
Lead	ppm	ASTM D5185m	>30	3	---	---
Copper	ppm	ASTM D5185m	>10	▲ 13	---	---
Tin	ppm	ASTM D5185m	>2	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	LIGHT	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

There is no indication of any contamination in the transformer oil.

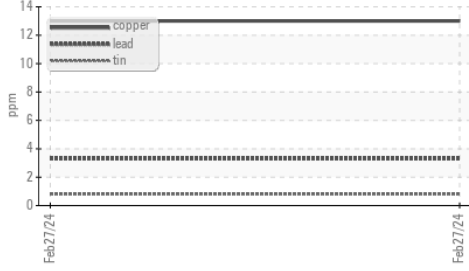
Silicon	ppm	ASTM D5185m	>25	14	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Water		WC Method	>0.0035	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.0035	NEG	---	---

FLUID CONDITION

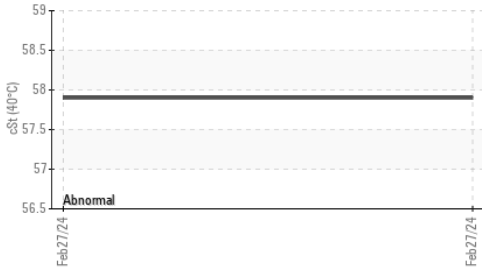
The condition of the transformer oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m		57	---	---
Barium	ppm	ASTM D5185m		1	---	---
Molybdenum	ppm	ASTM D5185m		1	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		12	---	---
Calcium	ppm	ASTM D5185m		2795	---	---
Phosphorus	ppm	ASTM D5185m		1074	---	---
Zinc	ppm	ASTM D5185m		1258	---	---
Sulfur	ppm	ASTM D5185m		9155	---	---
Visc @ 40°C	cSt	ASTM D445		57.9	---	---

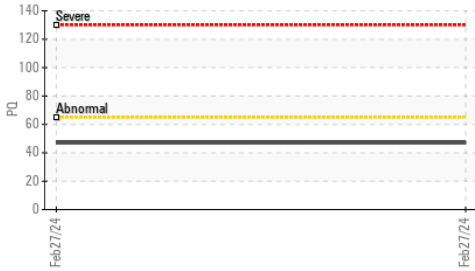
▲ Non-ferrous Metals



Viscosity @ 40°C



PQ



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0191815 **Received** : 15 Apr 2024
Lab Number : 06148948 **Tested** : 16 Apr 2024
Unique Number : 10979026 **Diagnosed** : 17 Apr 2024 - Sean Felton
Test Package : MOBCE (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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