



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



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

### RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. 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		JR0191812	---	---
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		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		22	---	---
Iron	ppm	ASTM D5185m	>20	8	---	---
Chromium	ppm	ASTM D5185m	>10	0	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>10	<1	---	---
Lead	ppm	ASTM D5185m	>10	0	---	---
Copper	ppm	ASTM D5185m	>75	0	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

### CONTAMINATION

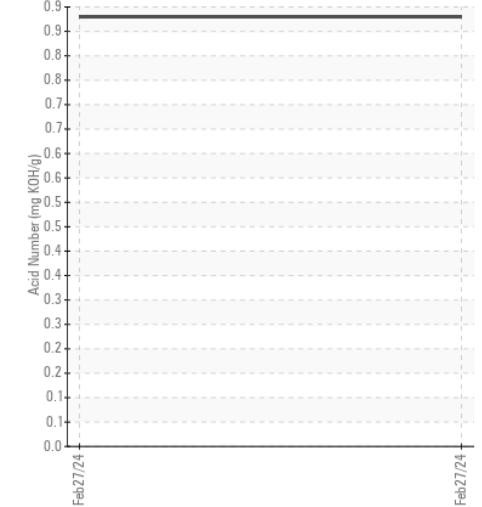
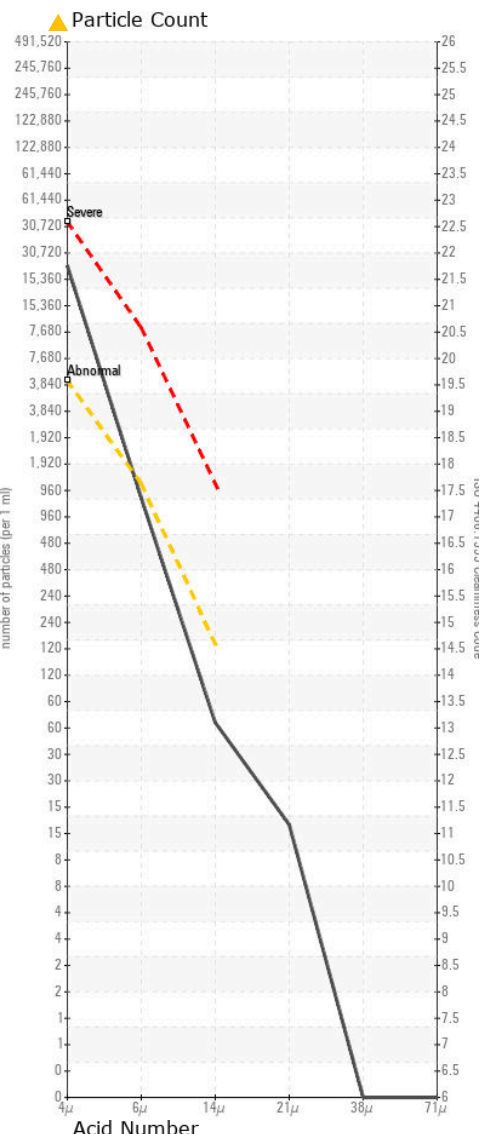
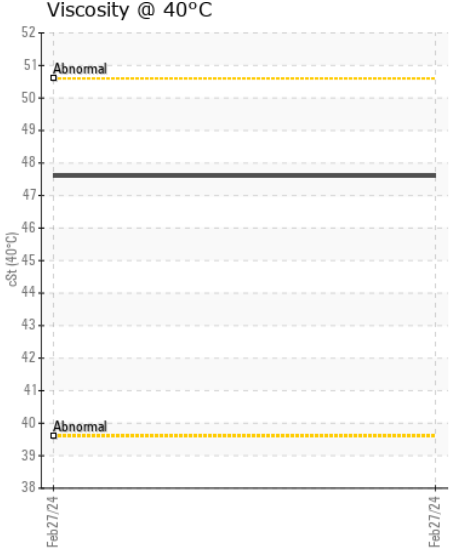
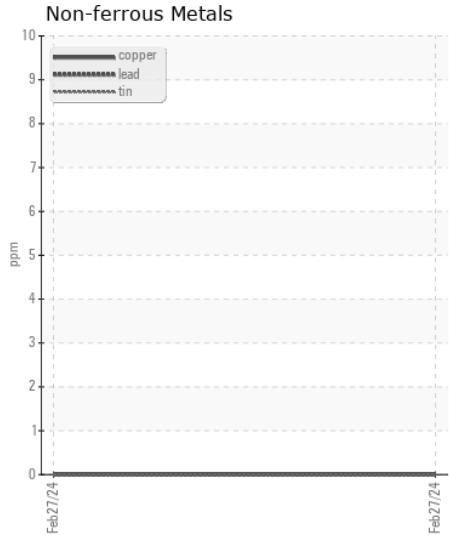
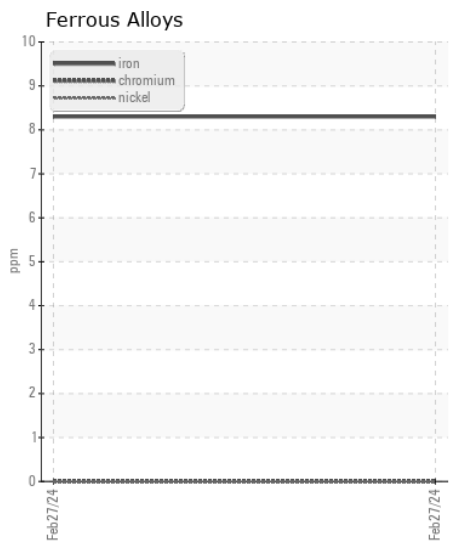
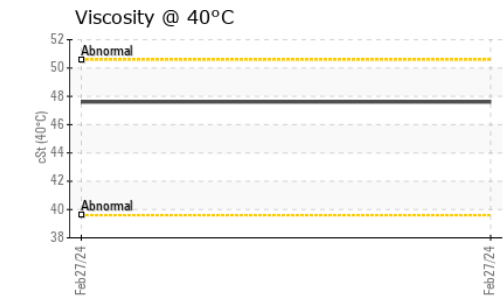
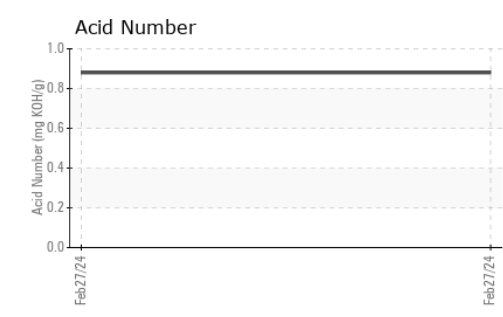
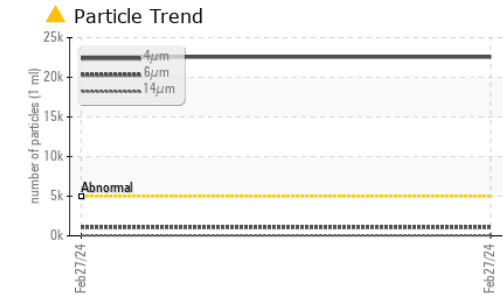
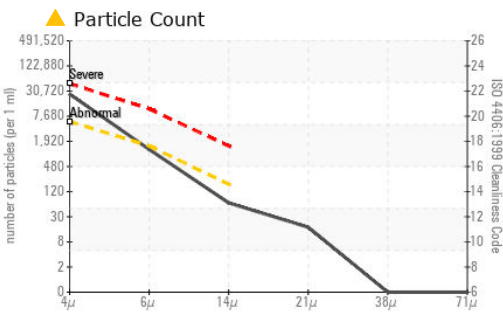
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	6	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 22564	---	---
Particles >6µm		ASTM D7647	>1300	1079	---	---
Particles >14µm		ASTM D7647	>160	57	---	---
Particles >21µm		ASTM D7647	>40	15	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/17/13	---	---
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	>0.1	NEG	---	---

### FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<1	---	---
Boron	ppm	ASTM D5185m		68	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		17	---	---
Calcium	ppm	ASTM D5185m		2529	---	---
Phosphorus	ppm	ASTM D5185m		1001	---	---
Zinc	ppm	ASTM D5185m		1242	---	---
Sulfur	ppm	ASTM D5185m		6949	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.88	---	---
Visc @ 40°C	cSt	ASTM D445		47.6	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0191812 **Received** : 15 Apr 2024  
**Lab Number** : 06148558 **Tested** : 16 Apr 2024  
**Unique Number** : 10978636 **Diagnosed** : 16 Apr 2024 - Wes Davis  
**Test Package** : MOBCE ( Additional Tests: PQ )

**TURNER MURPHY**  
 PO BOX 3490  
 ROCK HILL, SC  
 US 29730  
 Contact: Bridget Thomas  
 bthomas@turnermurphy.com  
 T: (803)328-3874  
 F: (803)328-8243

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)