



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
CATERPILLAR 745D 13403 (S/N 3T606051)
Component
Rear Differential
Fluid
TDTO FLUID SAE 30 (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

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

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0888105	---	---
Sample Date	Client Info		15 Mar 2024	---	---
Machine Age	hrs	Client Info	2246	---	---
Oil Age	hrs	Client Info	2246	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	128	---	---
Chromium	ppm	ASTM D5185m >3	2	---	---
Nickel	ppm	ASTM D5185m >3	<1	---	---
Titanium	ppm	ASTM D5185m >2	<1	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >30	15	---	---
Lead	ppm	ASTM D5185m >13	0	---	---
Copper	ppm	ASTM D5185m >103	▲ 198	---	---
Tin	ppm	ASTM D5185m >5	3	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 37	2	---	---
Barium	ppm	ASTM D5185m 7	0	---	---
Molybdenum	ppm	ASTM D5185m 5	3	---	---
Manganese	ppm	ASTM D5185m	2	---	---
Magnesium	ppm	ASTM D5185m 40	9	---	---
Calcium	ppm	ASTM D5185m 2650	3031	---	---
Phosphorus	ppm	ASTM D5185m 1050	995	---	---
Zinc	ppm	ASTM D5185m 1075	1209	---	---
Sulfur	ppm	ASTM D5185m 5750	8426	---	---

CONTAMINANTS

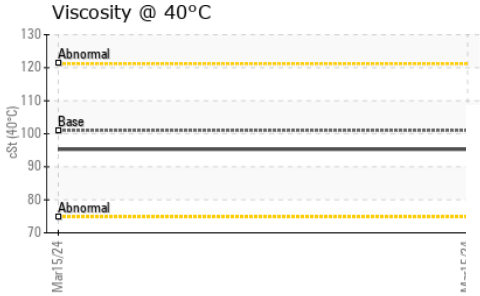
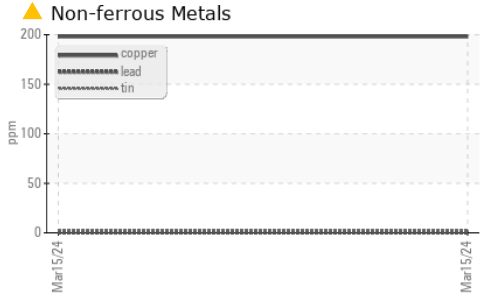
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	25	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	---	---
Yellow Metal	scalar	*Visual NONE	NONE	---	---
Precipitate	scalar	*Visual NONE	NONE	---	---
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 >.2	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---



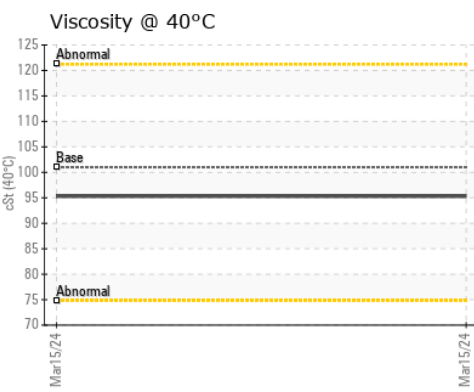
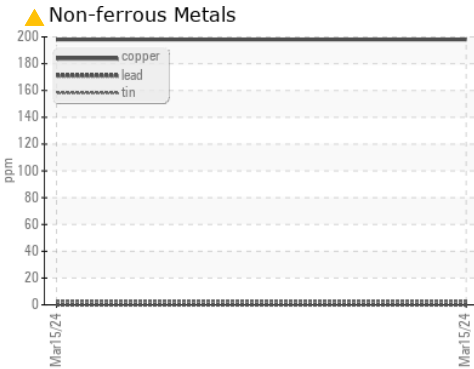
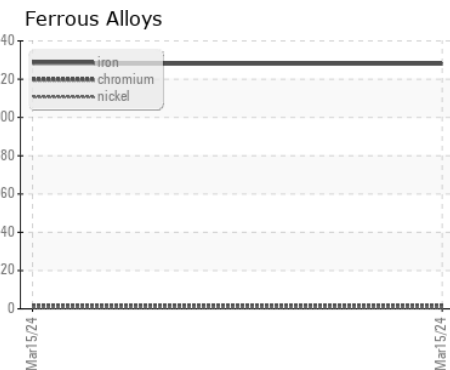
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 101	95.3	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0888105 **Received** : 19 Mar 2024
Lab Number : **06122754** **Tested** : 20 Mar 2024
Unique Number : 10936905 **Diagnosed** : 21 Mar 2024 - Jonathan Hester
Test Package : CONST

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 US 28563
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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)