

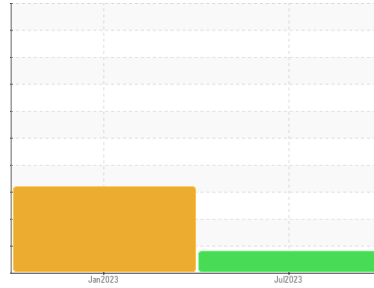


PROBLEM SUMMARY



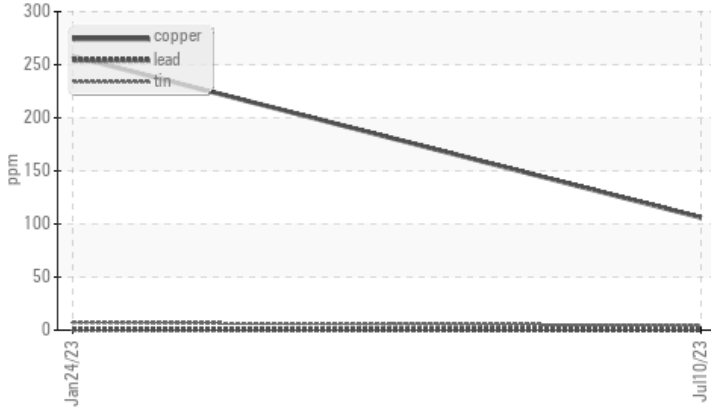
Machine Id
CATERPILLAR 745D 13377 (S/N 3T603285)
 Component
Rear Differential
 Fluid
NOT GIVEN (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL	ABNORMAL	---
Copper	ppm	ASTM D5185m	>103
	▲ 106	▲ 258	---

Customer Id: TRANEW
 Sample No.: WC0831223
 Lab Number: 05898935
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

24 Jan 2023 Diag: Don Baldrige

WATER



We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. All other metal levels are typical for a new component breaking in. There is a moderate concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

view report





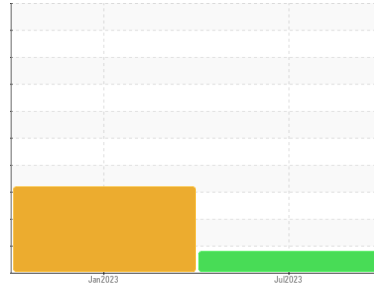
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
CATERPILLAR 745D 13377 (S/N 3T603285)
Component
Rear Differential
Fluid
NOT GIVEN (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The copper level has decreased, but is still 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		WC0831223	WC0775865	---
Sample Date	Client Info		10 Jul 2023	24 Jan 2023	---
Machine Age	hrs	Client Info	4089	2025	---
Oil Age	hrs	Client Info	2064	2025	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	235	360	---
Chromium	ppm	ASTM D5185m >3	1	4	---
Nickel	ppm	ASTM D5185m >3	<1	<1	---
Titanium	ppm	ASTM D5185m >2	2	4	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >30	4	9	---
Lead	ppm	ASTM D5185m >13	0	<1	---
Copper	ppm	ASTM D5185m >103	▲ 106	▲ 258	---
Tin	ppm	ASTM D5185m >5	4	7	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	38	3	---
Barium	ppm	ASTM D5185m	100	193	---
Molybdenum	ppm	ASTM D5185m	1	5	---
Manganese	ppm	ASTM D5185m	3	4	---
Magnesium	ppm	ASTM D5185m	4	12	---
Calcium	ppm	ASTM D5185m	692	2994	---
Phosphorus	ppm	ASTM D5185m	485	964	---
Zinc	ppm	ASTM D5185m	316	1179	---
Sulfur	ppm	ASTM D5185m	3875	8852	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	15	30	---
Sodium	ppm	ASTM D5185m	2	2	---
Potassium	ppm	ASTM D5185m >20	1	<1	---

VISUAL

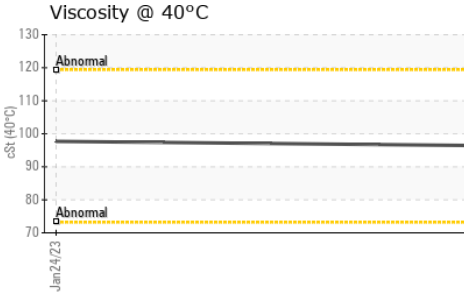
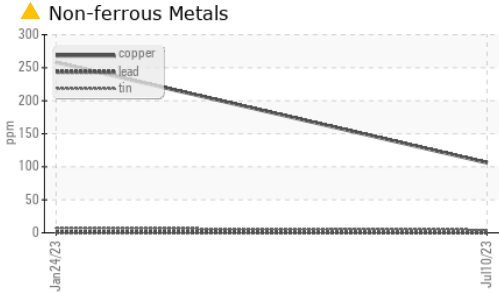
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual NONE	NONE	NONE	---
Precipitate	scalar	*Visual NONE	NONE	NONE	---
Silt	scalar	*Visual NONE	NONE	NONE	---
Debris	scalar	*Visual NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	---
Appearance	scalar	*Visual NORML	NORML	▲ HAZY	---
Odor	scalar	*Visual NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual >.2	NEG	▲ 0.2%	---
Free Water	scalar	*Visual	NEG	NEG	---

FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	96.4	97.7	---

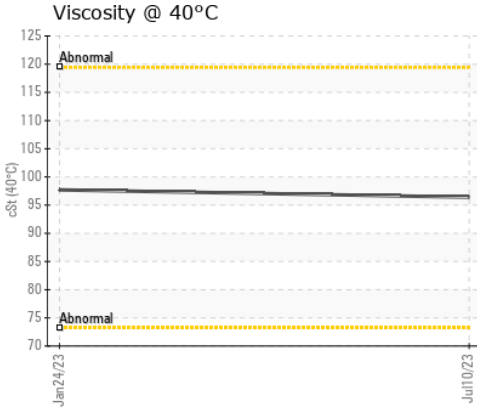
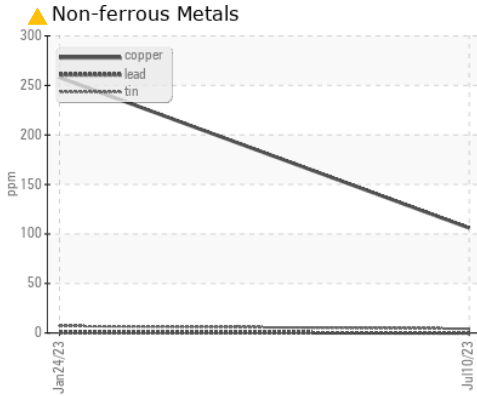
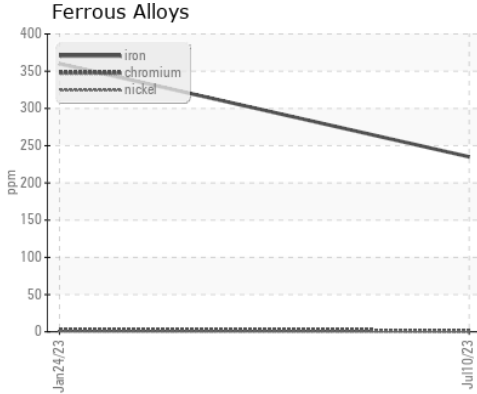


OIL ANALYSIS REPORT



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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0831223 **Received** : 14 Jul 2023
Lab Number : 05898935 **Diagnosed** : 17 Jul 2023
Unique Number : 10560291 **Diagnostician** : Don Baldrige
Test Package : CONST

TRADER CONSTRUCTION CO.
 PO DRAWER 1578
 NEW BERN, NC
 US 28563
 Contact: MIKE WYATT
 mw Wyatt@traderconstruction.com
 T: (252)633-1399
 F: (252)638-4871

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)