

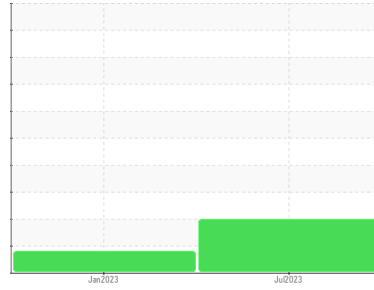


PROBLEM SUMMARY



Machine Id
CATERPILLAR 745D 13377 (S/N 3T603285)
 Component
Center Differential
 Fluid
TDTO FLUID SAE 30 (--- GAL)

Sample Rating Trend

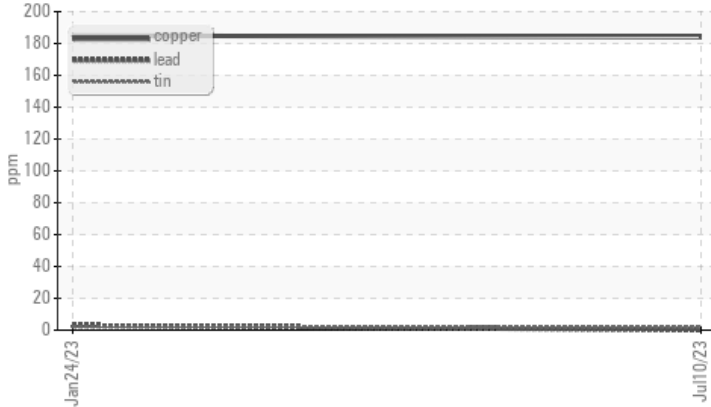


VISUAL METAL



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	---
Copper	ppm	ASTM D5185m	>103	▲ 184	▲ 185	---
Yellow Metal	scalar	*Visual	NONE	▲ HEAVY	NONE	---

Customer Id: TRANEW
 Sample No.: WC0831224
 Lab Number: 05898937
 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

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

24 Jan 2023 Diag: Don Baldrige

WEAR



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. The copper level is abnormal. All other metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report





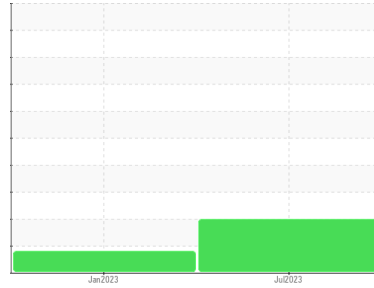
OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL



Machine Id
CATERPILLAR 745D 13377 (S/N 3T603285)
 Component
Center Differential
 Fluid
TDTO FLUID SAE 30 (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

The copper level is abnormal. High concentration of visible yellow metal present.

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		WC0831224	WC0775864	---
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	185	173
Chromium	ppm	ASTM D5185m	>3	1	2
Nickel	ppm	ASTM D5185m	>3	0	<1
Titanium	ppm	ASTM D5185m	>2	0	<1
Silver	ppm	ASTM D5185m	>2	0	3
Aluminum	ppm	ASTM D5185m	>30	19	12
Lead	ppm	ASTM D5185m	>13	0	3
Copper	ppm	ASTM D5185m	>103	▲ 184	▲ 185
Tin	ppm	ASTM D5185m	>5	2	2
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	37	105	<1
Barium	ppm	ASTM D5185m	7	0	<1
Molybdenum	ppm	ASTM D5185m	5	<1	2
Manganese	ppm	ASTM D5185m		2	3
Magnesium	ppm	ASTM D5185m	40	4	13
Calcium	ppm	ASTM D5185m	2650	761	3009
Phosphorus	ppm	ASTM D5185m	1050	527	987
Zinc	ppm	ASTM D5185m	1075	309	1211
Sulfur	ppm	ASTM D5185m	5750	3920	8686

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>100	10	22
Sodium	ppm	ASTM D5185m		1	2
Potassium	ppm	ASTM D5185m	>20	<1	0

VISUAL

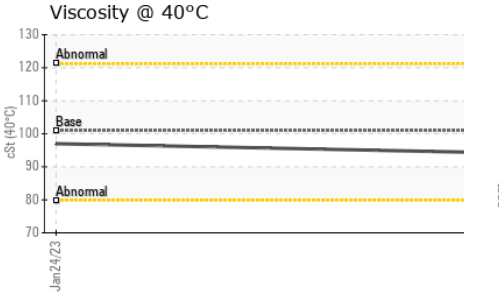
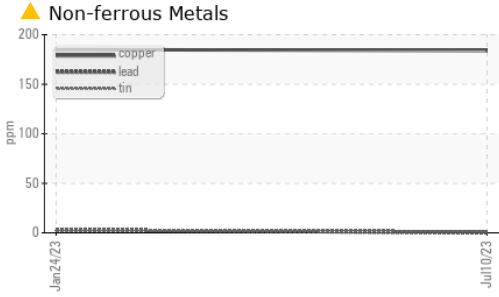
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	▲ HEAVY	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar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

FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	101	94.3	97.0

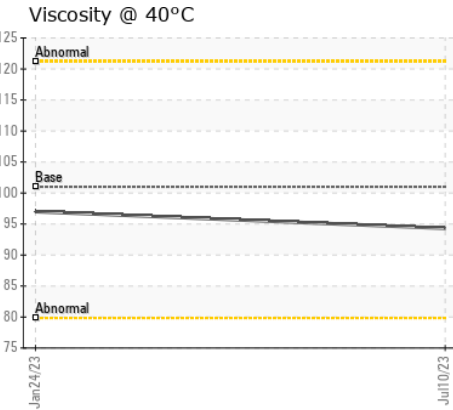
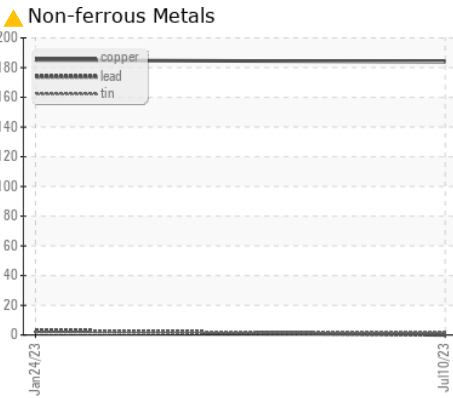
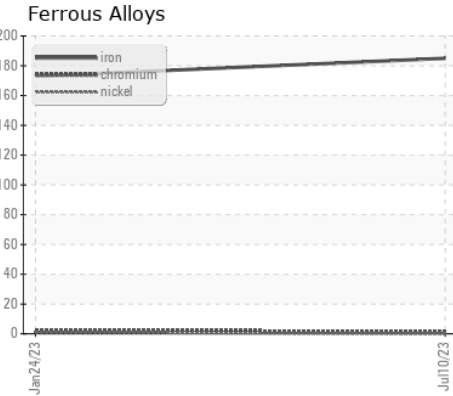


OIL ANALYSIS REPORT



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. : WC0831224 **Received** : 14 Jul 2023
Lab Number : 05898937 **Diagnosed** : 17 Jul 2023
Unique Number : 10560293 **Diagnostician** : Don Baldrige
Test Package : CONST

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 NEW BERN, NC
 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)