



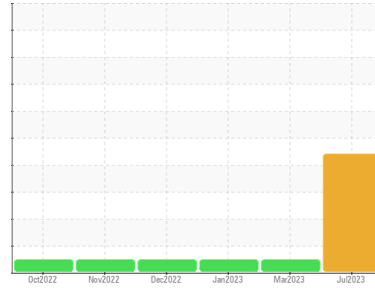
PROBLEM SUMMARY

Sample Rating Trend

VISUAL METAL

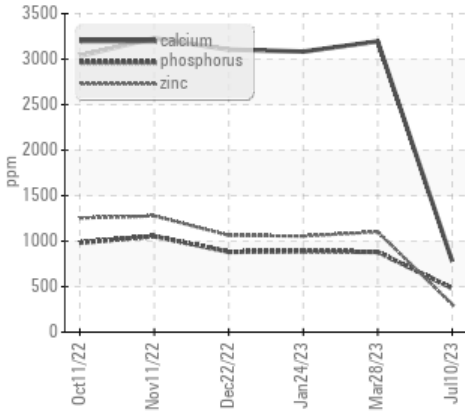


Machine Id
CATERPILLAR 745D 13377 (S/N 3T603285)
 Component
Transmission (Manual)
 Fluid
TDTO FLUID SAE 30 (--- GAL)

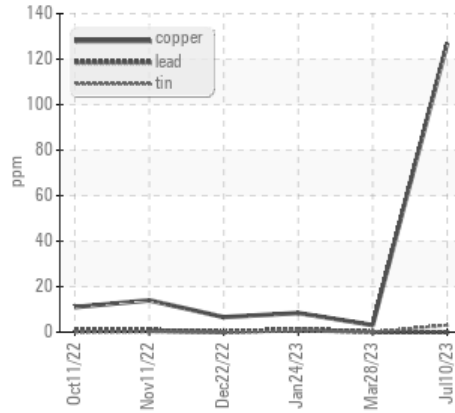


COMPONENT CONDITION SUMMARY

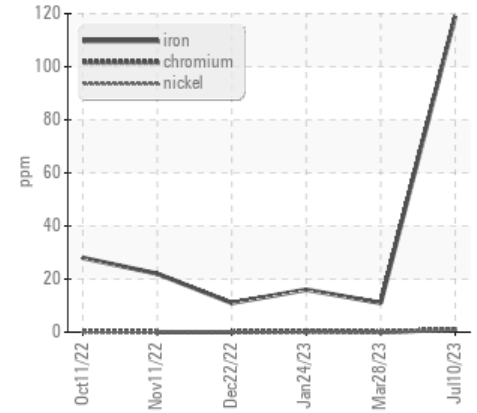
▲ Additives



▲ Non-ferrous Metals



▲ Ferrous Alloys



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	▲ 119	11	16
Copper	ppm	ASTM D5185m	>225	▲ 127	3	8
Boron	ppm	ASTM D5185m	37	▲ 107	6	14
Calcium	ppm	ASTM D5185m	2650	▲ 781	3195	3083
Phosphorus	ppm	ASTM D5185m	1050	▲ 482	881	889
Zinc	ppm	ASTM D5185m	1075	▲ 306	1102	1055
Yellow Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE

Customer Id: TRANEW
 Sample No.: WC0831228
 Lab Number: 05899064
 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
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

28 Mar 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



24 Jan 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



22 Dec 2022 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.

view report



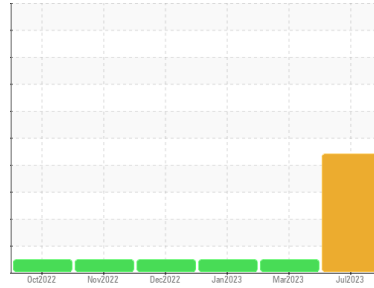


OIL ANALYSIS REPORT



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

Sample Rating Trend



VISUAL METAL



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

An increase in the iron level is noted. An increase in the copper level is noted. Moderate concentration of visible yellow metal present.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of fluid. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0831228	WC0791047	WC0775860
Sample Date	Client Info		10 Jul 2023	28 Mar 2023	24 Jan 2023
Machine Age	hrs	Client Info	4089	2821	2025
Oil Age	hrs	Client Info	1268	796	964
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	▲ 119	11	16
Chromium	ppm	ASTM D5185m	>5	1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>7	0	0	0
Aluminum	ppm	ASTM D5185m	>25	9	1	<1
Lead	ppm	ASTM D5185m	>45	0	0	1
Copper	ppm	ASTM D5185m	>225	▲ 127	3	8
Tin	ppm	ASTM D5185m	>10	3	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	37	▲ 107	6	14
Barium	ppm	ASTM D5185m	7	2	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	5	4
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m	40	4	64	51
Calcium	ppm	ASTM D5185m	2650	▲ 781	3195	3083
Phosphorus	ppm	ASTM D5185m	1050	▲ 482	881	889
Zinc	ppm	ASTM D5185m	1075	▲ 306	1102	1055
Sulfur	ppm	ASTM D5185m	5750	3228	4013	4578

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>125	9	7	8
Sodium	ppm	ASTM D5185m		1	1	2
Potassium	ppm	ASTM D5185m	>20	<1	0	0

VISUAL

	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

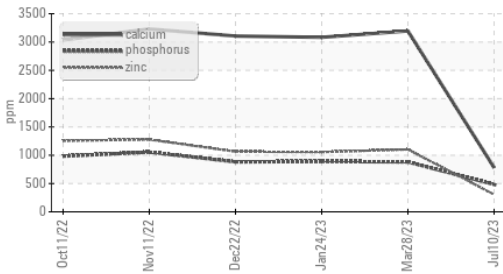
FLUID PROPERTIES

	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	101	94.0	80.7	80.5

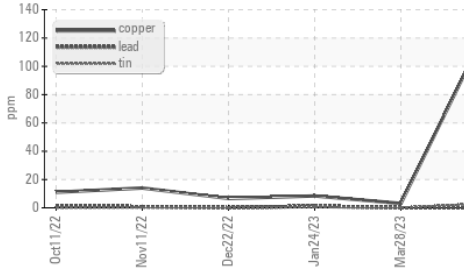


OIL ANALYSIS REPORT

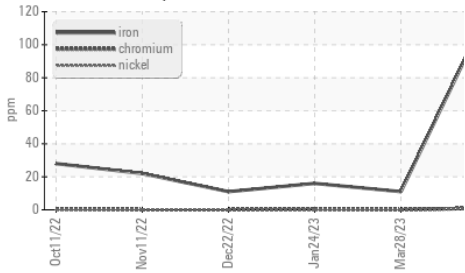
▲ Additives



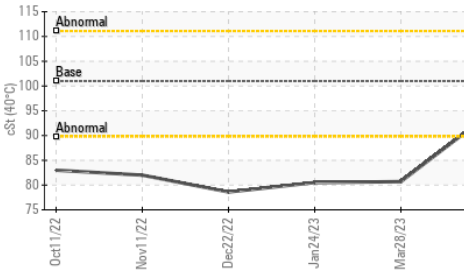
▲ Non-ferrous Metals



▲ Ferrous Alloys



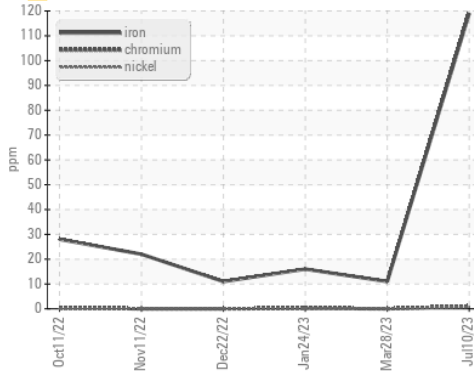
Viscosity @ 40°C



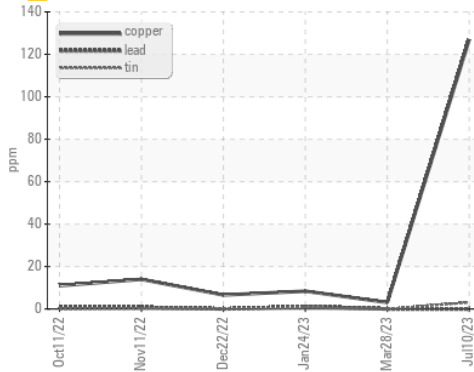
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

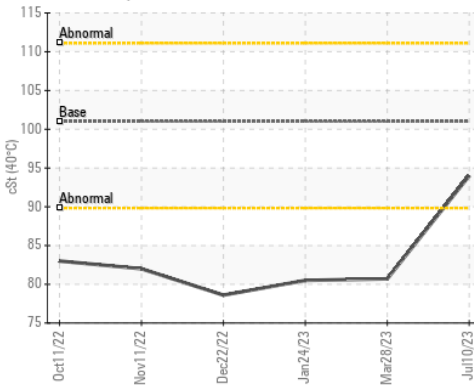
▲ Ferrous Alloys



▲ Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0831228
Lab Number : 05899064
Unique Number : 10560420
Test Package : CONST

Received : 14 Jul 2023
Diagnosed : 18 Jul 2023
Diagnostician : Don Baldrige

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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)