



PROBLEM SUMMARY



Machine Id
CATERPILLAR 745D 13393 (S/N 3T605704)
 Component
Hydraulic System
 Fluid
TDH FLUID SAE 70W80 (--- GAL)

Sample Rating Trend

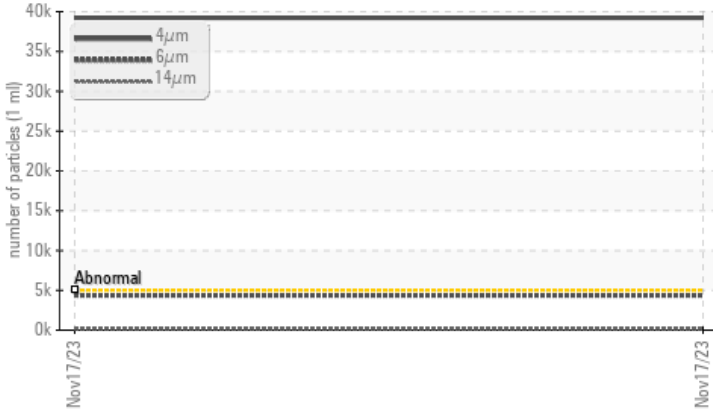


ISO



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) TDH FLUID SAE 70W80. Please confirm.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	---	---
Particles >4µm	ASTM D7647	>5000	▲ 39217	---	---
Particles >6µm	ASTM D7647	>1300	▲ 4358	---	---
Particles >14µm	ASTM D7647	>160	▲ 177	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/19/15	---	---

Customer Id: TRANEW
 Sample No.: WC0831282
 Lab Number: 06026346
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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

RECOMMENDED ACTIONS

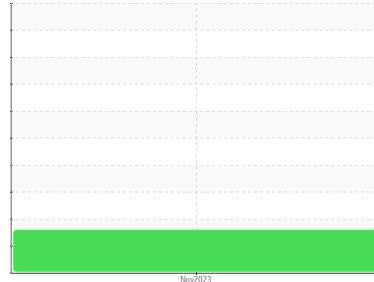
Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) TDH FLUID SAE 70W80. Please confirm.
Information Required	---	---	?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) TDH FLUID SAE 70W80. Please confirm.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
CATERPILLAR 745D 13393 (S/N 3T605704)
 Component
Hydraulic System
 Fluid
TDH FLUID SAE 70W80 (--- GAL)

DIAGNOSIS

▲ Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) TDH FLUID SAE 70W80. Please confirm.

Wear

All component wear rates are normal.

▲ Contamination

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

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0831282	---	---
Sample Date	Client Info		17 Nov 2023	---	---
Machine Age	hrs	Client Info	1915	---	---
Oil Age	hrs	Client Info	1915	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<1	---	---
Chromium	ppm	ASTM D5185m >10	0	---	---
Nickel	ppm	ASTM D5185m >10	0	---	---
Titanium	ppm	ASTM D5185m	<1	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >10	1	---	---
Lead	ppm	ASTM D5185m >10	1	---	---
Copper	ppm	ASTM D5185m >75	<1	---	---
Tin	ppm	ASTM D5185m >10	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 10	0	---	---
Barium	ppm	ASTM D5185m 10	0	---	---
Molybdenum	ppm	ASTM D5185m 10	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 100	11	---	---
Calcium	ppm	ASTM D5185m 3500	2902	---	---
Phosphorus	ppm	ASTM D5185m 1150	980	---	---
Zinc	ppm	ASTM D5185m 1150	1173	---	---
Sulfur	ppm	ASTM D5185m 5000	3884	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	5	---	---
Sodium	ppm	ASTM D5185m	2	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---

FLUID CLEANLINESS

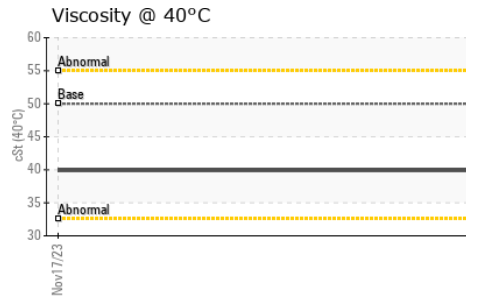
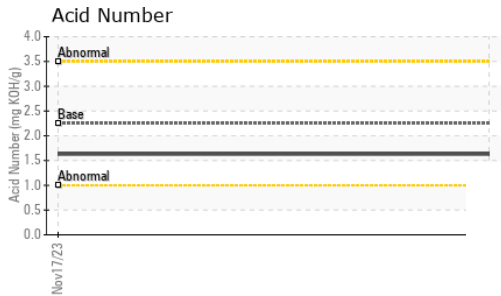
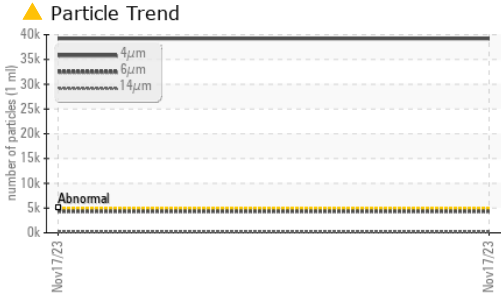
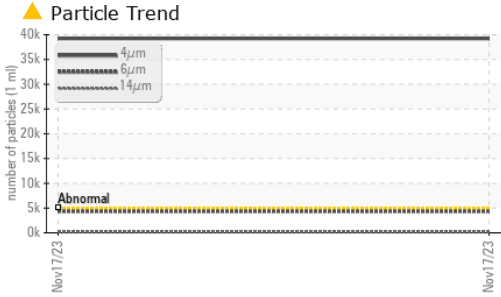
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 39217	---	---
Particles >6µm	ASTM D7647	>1300	▲ 4358	---	---
Particles >14µm	ASTM D7647	>160	▲ 177	---	---
Particles >21µm	ASTM D7647	>40	51	---	---
Particles >38µm	ASTM D7647	>10	2	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 22/19/15	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 2.25	1.63	---	---



OIL ANALYSIS REPORT



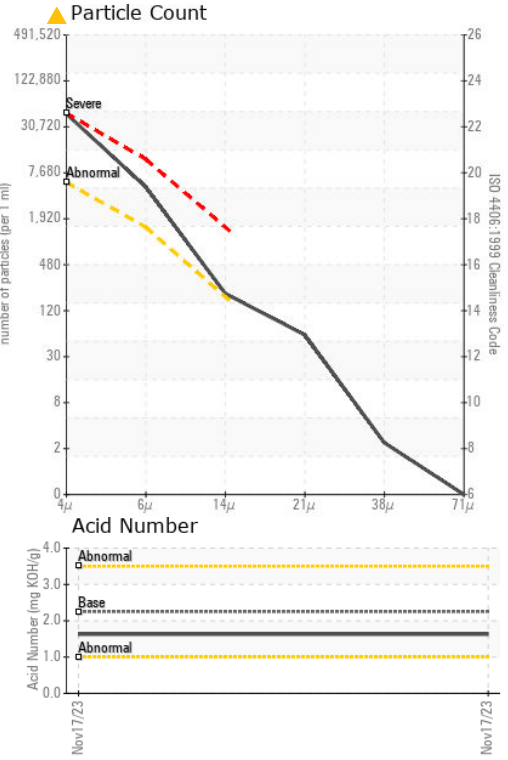
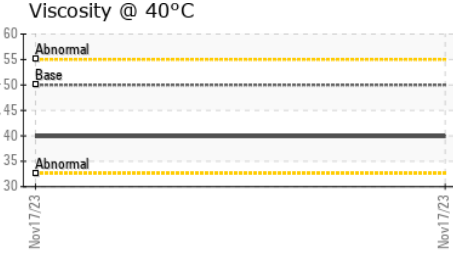
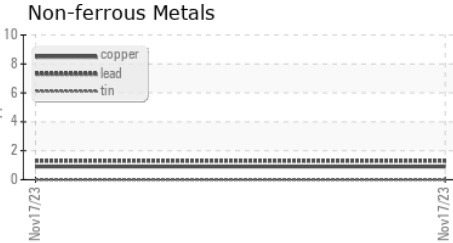
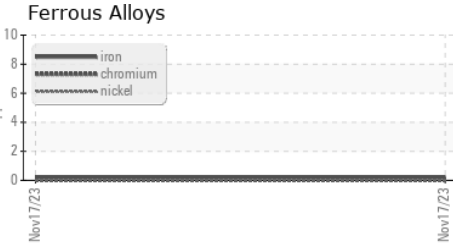
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 50	39.9	---	---

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0831282 **Received** : 06 Dec 2023
Lab Number : 06026346 **Diagnosed** : 07 Dec 2023
Unique Number : 10776137 **Diagnostician** : Wes Davis
Test Package : CONST

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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)