

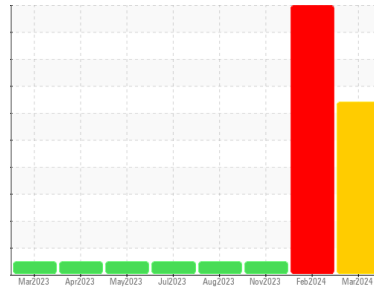


PROBLEM SUMMARY



Machine Id
CATERPILLAR D6 10036 (S/N KEW01123)
 Component
Right Final Drive
 Fluid
{not provided} (--- GAL)

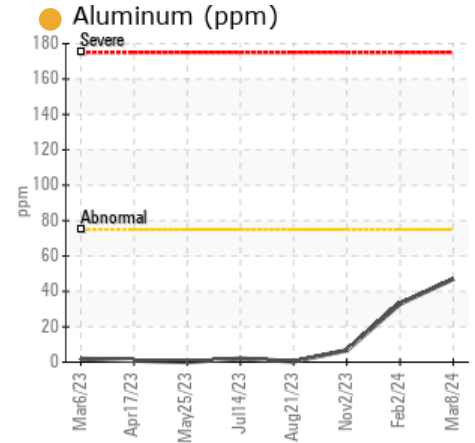
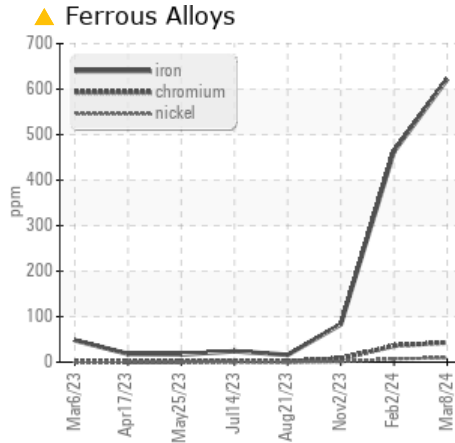
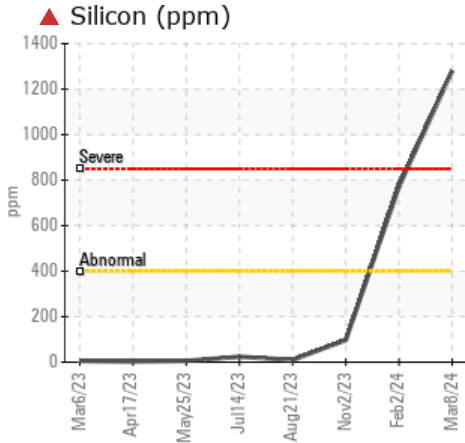
Sample Rating Trend



DIRT



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status	SEVERE	SEVERE	NORMAL
Iron	ppm ASTM D5185m >800 ▲ 622	463	83
Silicon	ppm ASTM D5185m >400 ▲ 1280	772	97

Customer Id: TRANEW
 Sample No.: WC0888123
 Lab Number: 06122746
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

02 Feb 2024 Diag: Don Baldrige

WEAR



We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. An increase in the iron level is noted. The chromium level is abnormal. Gear wear is indicated. There is a light concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil is no longer serviceable due to the presence of contaminants.

[view report](#)



02 Nov 2023 Diag: Jonathan Hester

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](#)



21 Aug 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](#)



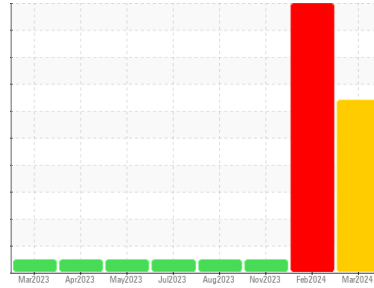


OIL ANALYSIS REPORT



Machine Id
CATERPILLAR D6 10036 (S/N KEW01123)
 Component
Right Final Drive
 Fluid
{not provided} (--- GAL)

Sample Rating Trend



DIAGNOSIS

▲ Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

▲ Wear

Gear wear is indicated.

▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0888123	WC0888198	WC0862973
Sample Date	Client Info		08 Mar 2024	02 Feb 2024	02 Nov 2023
Machine Age	hrs	Client Info	4355	3775	3060
Oil Age	hrs	Client Info	557	684	508
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	SEVERE	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	▲ 622	● 463	83
Chromium	ppm	ASTM D5185m >10	43	▲ 36	8
Nickel	ppm	ASTM D5185m >5	10	7	1
Titanium	ppm	ASTM D5185m >15	12	8	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >75	● 47	● 33	7
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >75	1	0	0
Tin	ppm	ASTM D5185m >8	0	<1	0
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	122	157	198
Barium	ppm	ASTM D5185m	0	<1	0
Molybdenum	ppm	ASTM D5185m	17	6	1
Manganese	ppm	ASTM D5185m	9	7	1
Magnesium	ppm	ASTM D5185m	56	3	1
Calcium	ppm	ASTM D5185m	1135	100	91
Phosphorus	ppm	ASTM D5185m	573	347	350
Zinc	ppm	ASTM D5185m	391	25	21
Sulfur	ppm	ASTM D5185m	2745	2110	1962

CONTAMINANTS

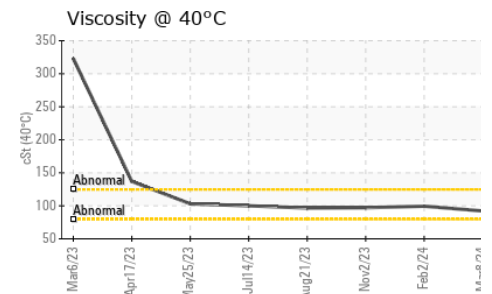
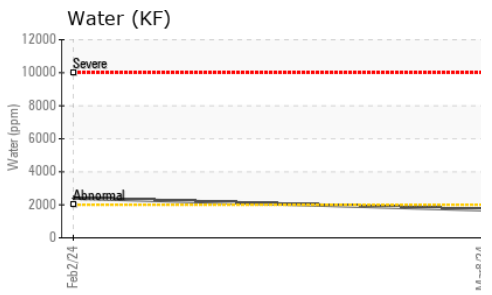
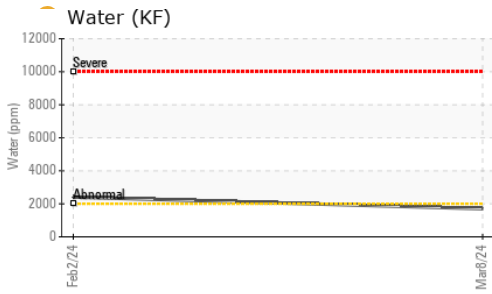
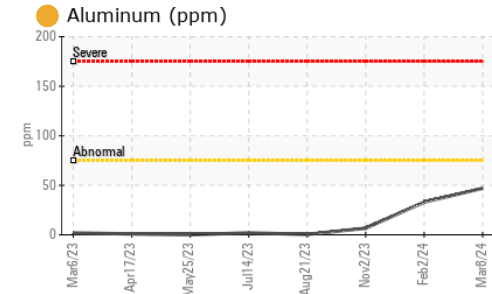
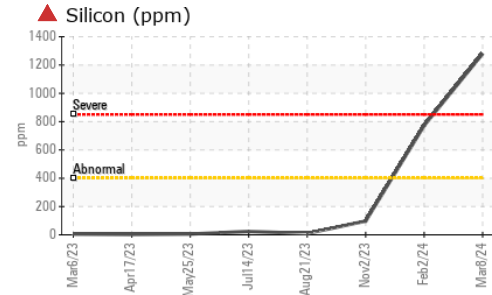
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	▲ 1280	▲ 772	97
Sodium	ppm	ASTM D5185m	6	3	2
Potassium	ppm	ASTM D5185m >20	21	10	3
Water	%	ASTM D6304 >0.2	0.170	▲ 0.241	---
ppm Water	ppm	ASTM D6304 >2000	1700	▲ 2410	---

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	MODER	NONE
Debris	scalar	*Visual NONE	NONE	NONE	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 >0.2	0.2%	0.2%	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG



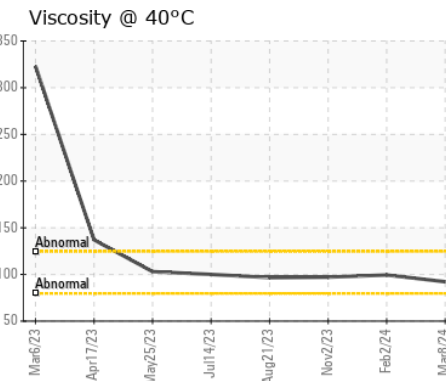
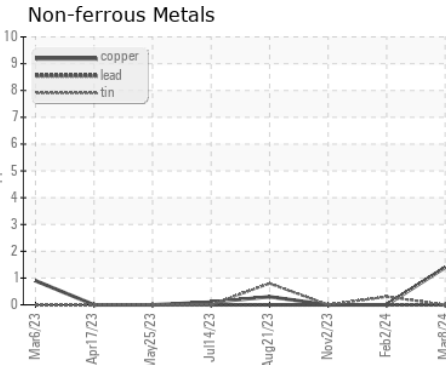
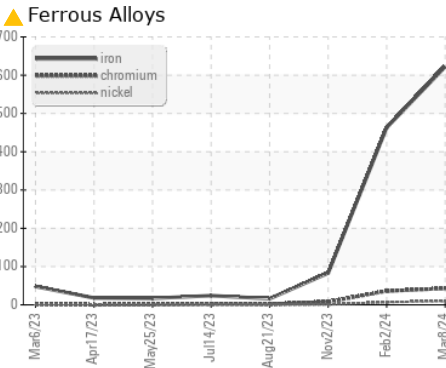
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		92.2	99.4	97.1

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. : WC0888123 **Received** : 19 Mar 2024
Lab Number : 06122746 **Tested** : 20 Mar 2024
Unique Number : 10936897 **Diagnosed** : 21 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF)

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)

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