

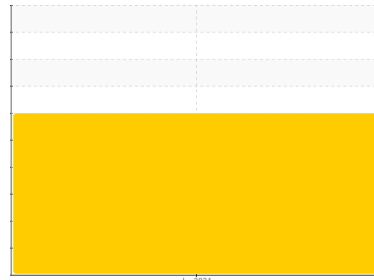


PROBLEM SUMMARY



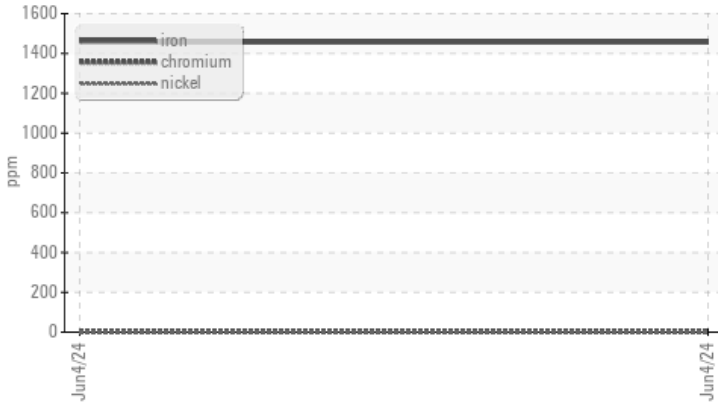
Area
MINING
 Machine Id
ME-38 CATERPILLAR 980M KRS02863
 Component
Front Differential
 Fluid
CAT TDTO SAE 50 (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. 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				SEVERE	---	---
Iron	ppm	ASTM D5185m	>500	▲ 1456	---	---

Customer Id: COVELC
 Sample No.: WC0929607
 Lab Number: 06220109
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@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
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
MINING
 Machine Id
ME-38 CATERPILLAR 980M KRS02863
 Component
Front Differential
 Fluid
CAT TDTO SAE 50 (--- GAL)



DIAGNOSIS

▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

▲ Wear

The iron level is severe. Gear wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0929607	---	---
Sample Date	Client Info		04 Jun 2024	---	---
Machine Age	hrs	Client Info	8406	---	---
Oil Age	hrs	Client Info	500	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	▲ 1456	---	---
Chromium	ppm	ASTM D5185m >3	1	---	---
Nickel	ppm	ASTM D5185m >3	<1	---	---
Titanium	ppm	ASTM D5185m >2	<1	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >30	5	---	---
Lead	ppm	ASTM D5185m >13	0	---	---
Copper	ppm	ASTM D5185m >103	35	---	---
Tin	ppm	ASTM D5185m >5	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	14	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	17	---	---
Manganese	ppm	ASTM D5185m	13	---	---
Magnesium	ppm	ASTM D5185m	61	---	---
Calcium	ppm	ASTM D5185m 2980	2778	---	---
Phosphorus	ppm	ASTM D5185m 1100	1074	---	---
Zinc	ppm	ASTM D5185m 1270	1220	---	---
Sulfur	ppm	ASTM D5185m	7224	---	---

CONTAMINANTS

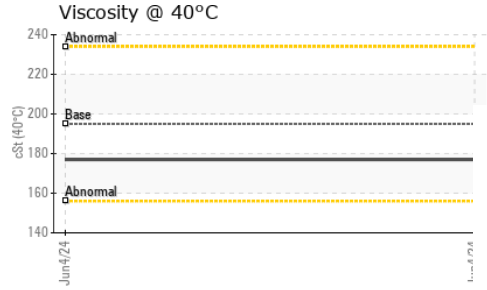
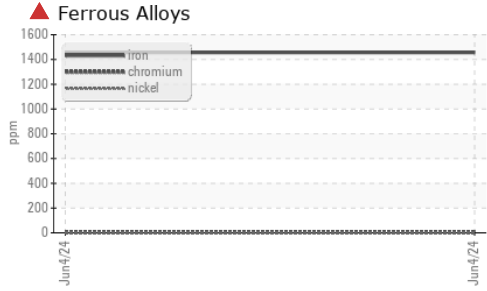
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	21	---	---
Sodium	ppm	ASTM D5185m	4	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

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 >.2	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---



OIL ANALYSIS REPORT



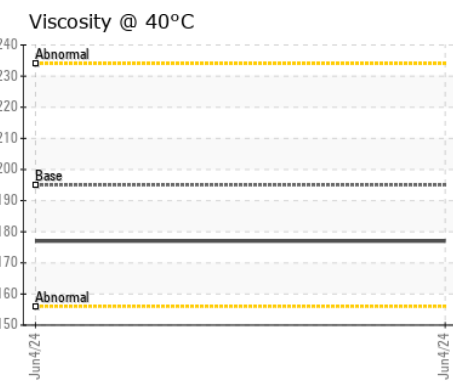
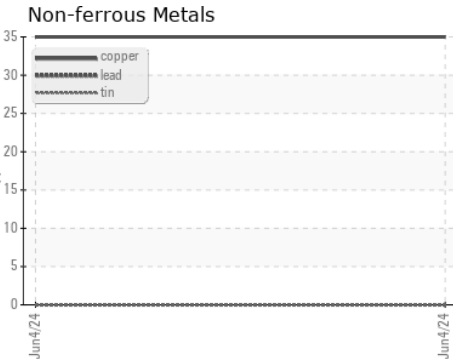
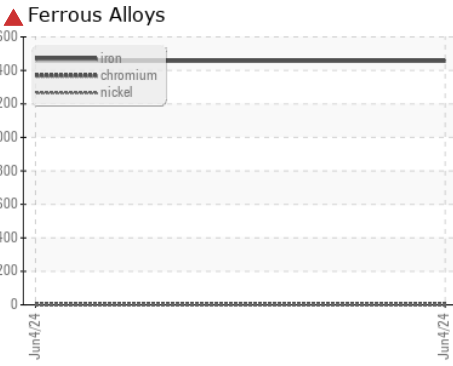
FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 195	177	---	---

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. : WC0929607
Lab Number : 06220109
Unique Number : 11098306
Test Package : CONST

Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 27 Jun 2024 - Sean Felton

COVIA - ELCO AND TAMMS - 043 - 040
 32079 STATE HWY 127
 TAMMS, IL
 US 62988

Contact: Blevé Willoughby
 bleve.willoughby@coviacorp.com
 T: (573)233-9694

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)