MOB II

Dura-Check Fluid Analysis

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
CATERPILLAR 303.5 MINI EX2123 (S/N 0CR502472)
Component
Right Final Drive
Fluid
CAT TDTO SAE 50 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. 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

Gear wear is indicated.

CONTAMINATION

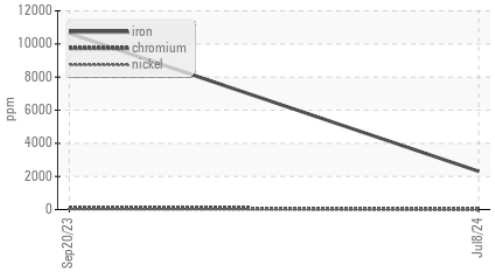
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

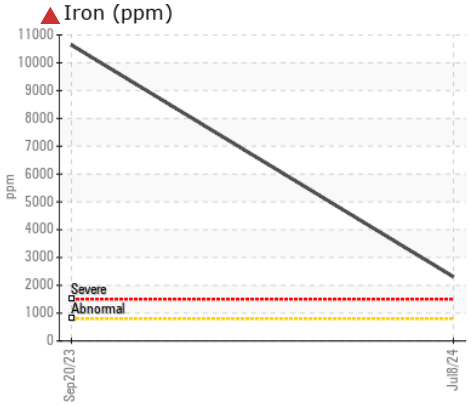
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0035814	DC0027528	---
Sample Date		Client Info		08 Jul 2024	20 Sep 2023	---
Machine Age	hrs	Client Info		4160	4050	---
Oil Age	hrs	Client Info		110	2000	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				SEVERE	SEVERE	---
Iron	ppm	ASTM D5185m	>800	▲ 2309	▲ 10641	---
Chromium	ppm	ASTM D5185m	>10	▲ 21	▲ 110	---
Nickel	ppm	ASTM D5185m	>5	4	▲ 23	---
Titanium	ppm	ASTM D5185m	>15	14	▲ 75	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>75	● 127	● 586	---
Lead	ppm	ASTM D5185m	>10	<1	3	---
Copper	ppm	ASTM D5185m	>75	8	36	---
Tin	ppm	ASTM D5185m	>8	<1	3	---
Vanadium	ppm	ASTM D5185m		<1	3	---
White Metal	scalar	*Visual	NONE	MODER	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>400	▲ 913	▲ 5281	---
Potassium	ppm	ASTM D5185m	>20	25	140	---
Water		WC Method	>0.2	NEG	NEG	---
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	>0.2	NEG	0.2%	---
Sodium	ppm	ASTM D5185m		9	40	---
Boron	ppm	ASTM D5185m		8	15	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		8	16	---
Manganese	ppm	ASTM D5185m		12	64	---
Magnesium	ppm	ASTM D5185m		109	327	---
Calcium	ppm	ASTM D5185m	2980	3130	3152	---
Phosphorus	ppm	ASTM D5185m	1100	1126	957	---
Zinc	ppm	ASTM D5185m	1270	1279	1163	---
Sulfur	ppm	ASTM D5185m		12382	11721	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.83	2.46	---
Visc @ 40°C	cSt	ASTM D445	195	180	219	---

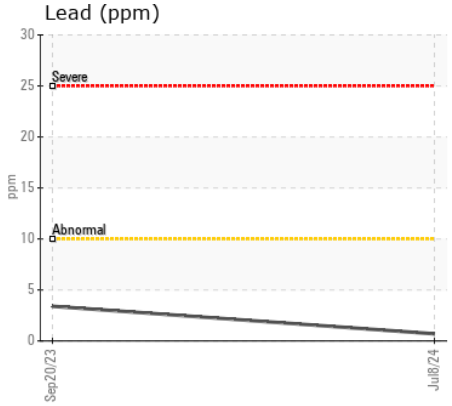
Ferrous Alloys



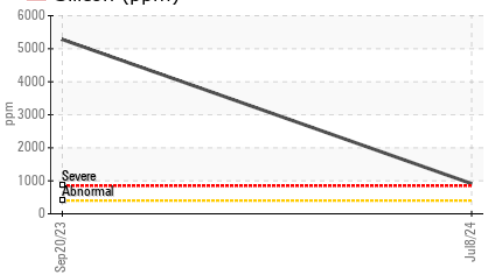
Iron (ppm)



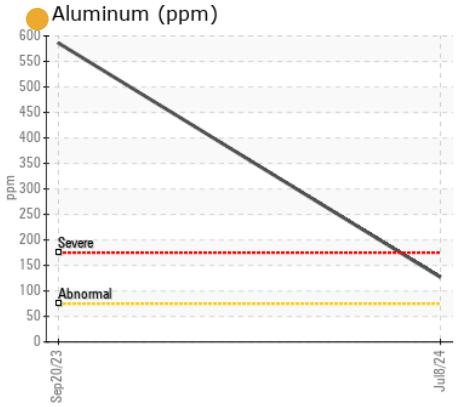
Lead (ppm)



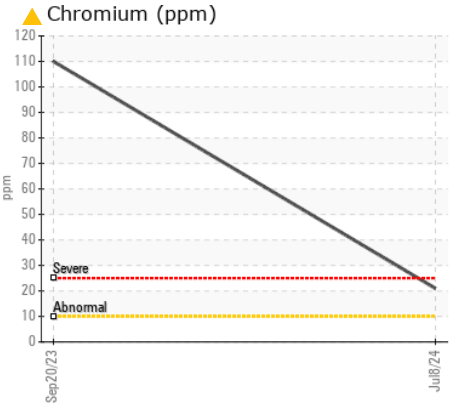
Silicon (ppm)



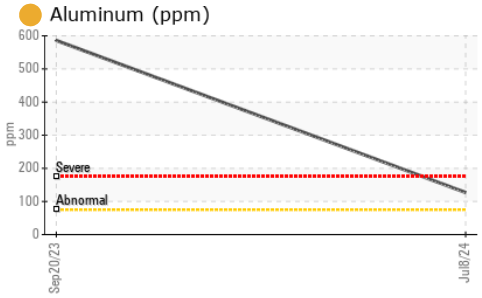
Aluminum (ppm)



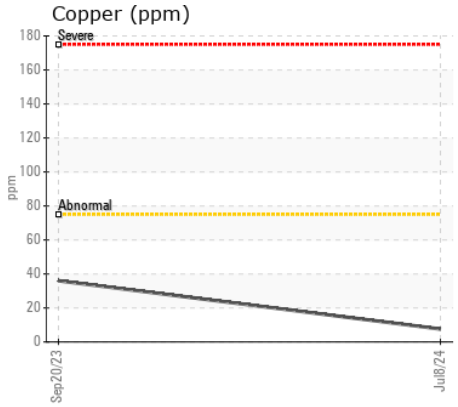
Chromium (ppm)



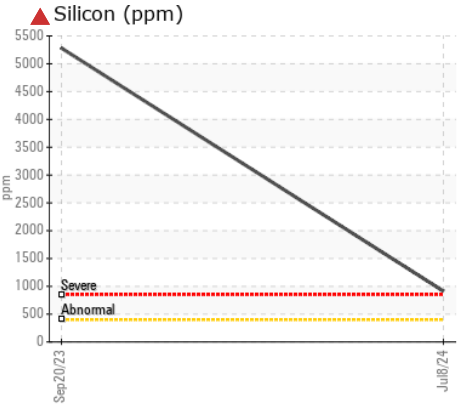
Aluminum (ppm)



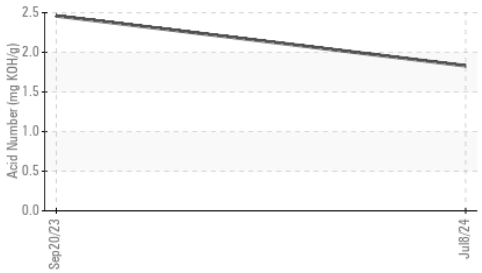
Copper (ppm)



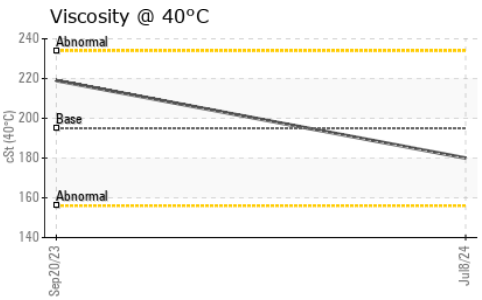
Silicon (ppm)



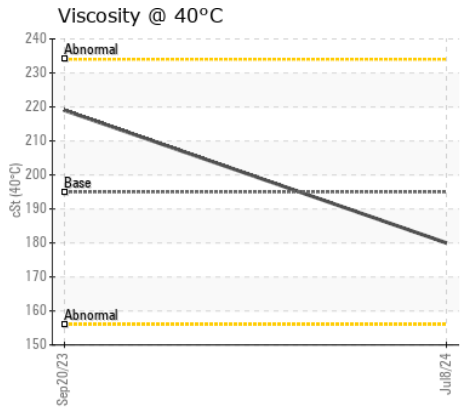
Acid Number



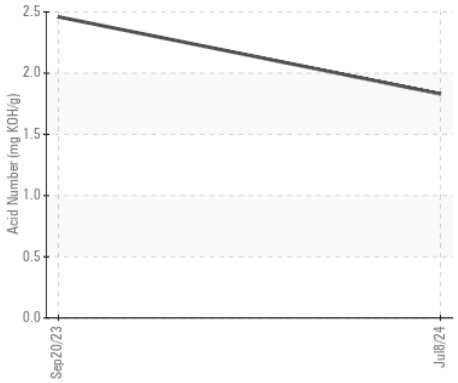
Viscosity @ 40°C



Viscosity @ 40°C



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0035814
Lab Number : 06235089
Unique Number : 11123923
Test Package : MOB 2

Received : 12 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 15 Jul 2024 - Don Baldridge

Certificate L2367

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)

COMER CONSTRUCTION
2100 SLADE LANE
FOREST HILL, MD
US 21050
Contact: RANDY SLADE
rslade@comerconstruction.com
T:
F: (410)638-0289