



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area

[8015]

Machine Id

TAKEUCHI 410005178

Component

Diesel Engine

Fluid

CAT DIESEL ENGINE OIL 10W30 (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP434346	VCP383278	---
Sample Date		Client Info		01 May 2024	27 Jul 2023	---
Machine Age	hrs	Client Info		2080	1560	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	21	19	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	6	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	3	5	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

## CONTAMINATION

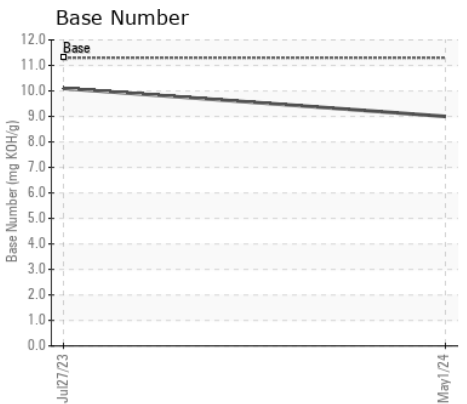
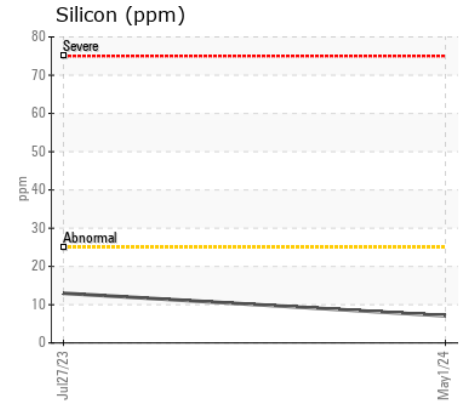
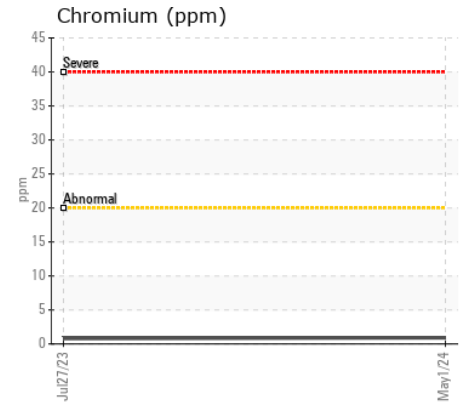
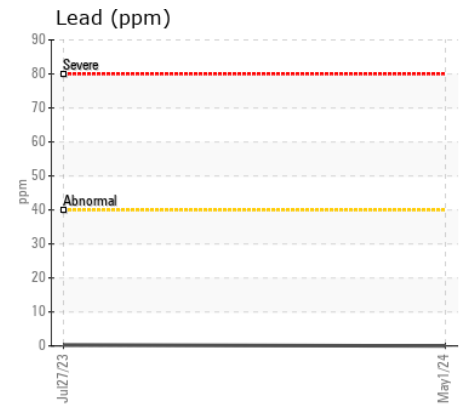
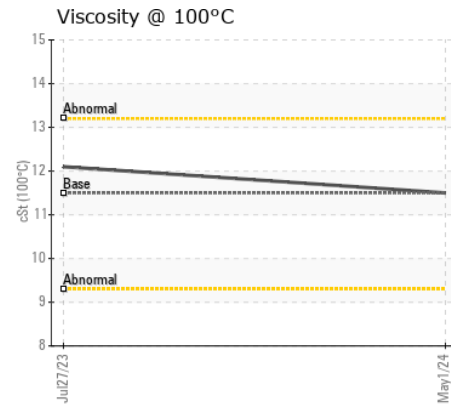
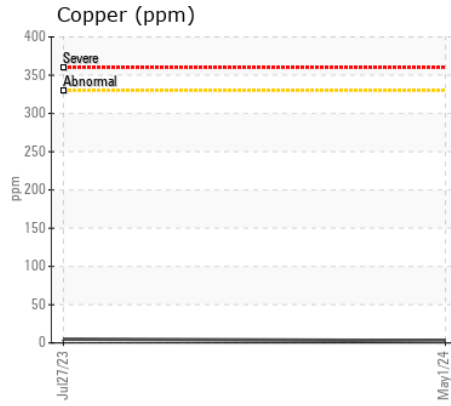
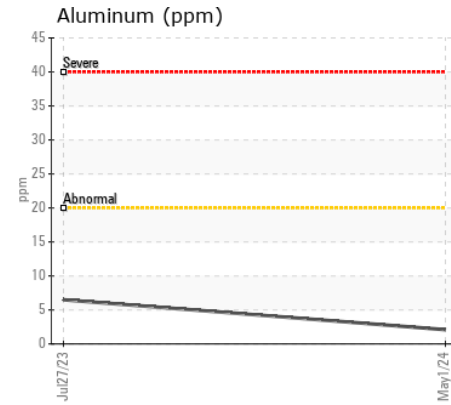
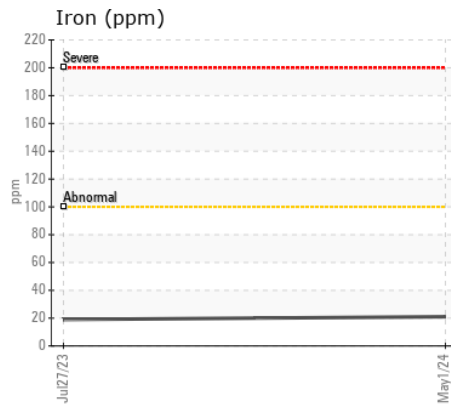
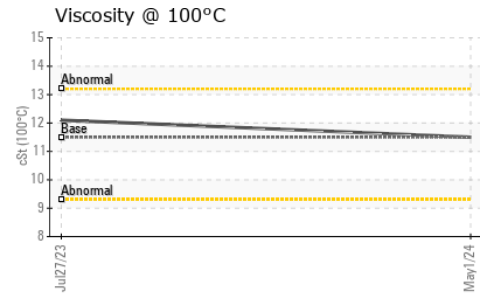
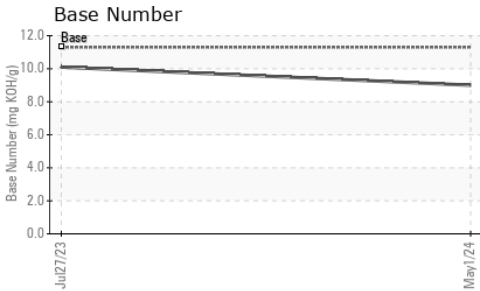
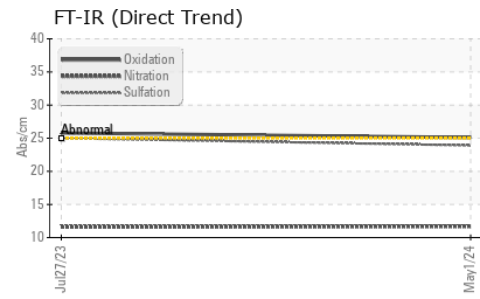
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	13	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	11.7	11.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	25.0	---
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	NEG	---

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		2	4	---
Boron	ppm	ASTM D5185m	145	40	43	---
Barium	ppm	ASTM D5185m	0.0	1	0	---
Molybdenum	ppm	ASTM D5185m	0.0	43	45	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	248	506	615	---
Calcium	ppm	ASTM D5185m	2203	1707	1979	---
Phosphorus	ppm	ASTM D5185m	731	1000	1068	---
Zinc	ppm	ASTM D5185m	1460	1115	1350	---
Sulfur	ppm	ASTM D5185m	5088	2684	3781	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.1	25.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.3	9.0	10.1	---
Visc @ 100°C	cSt	ASTM D445	11.5	11.5	12.1	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP434346 **Received** : 30 May 2024  
**Lab Number** : 06194960 **Tested** : 31 May 2024  
**Unique Number** : 11057083 **Diagnosed** : 31 May 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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)

**LEONARDS CONTRACTING**  
 30850 STEPHENSON HWY  
 MADISON HEIGHTS, MI  
 US 48071  
 Contact: LARRY SCHRADER  
 larry.schrader@sdevelop.com  
 T: (810)499-1953  
 F: x: