



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Machine Id
KOMATSU TH-43
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005376	CL0005132	---
Sample Date		Client Info		18 Apr 2024	31 Jan 2024	---
Machine Age	hrs	Client Info		3340	3125	---
Oil Age	hrs	Client Info		215	3125	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				SEVERE	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	22	▲ 119	---
Chromium	ppm	ASTM D5185m	>20	2	12	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	8	---
Lead	ppm	ASTM D5185m	>40	<1	<1	---
Copper	ppm	ASTM D5185m	>330	2	10	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

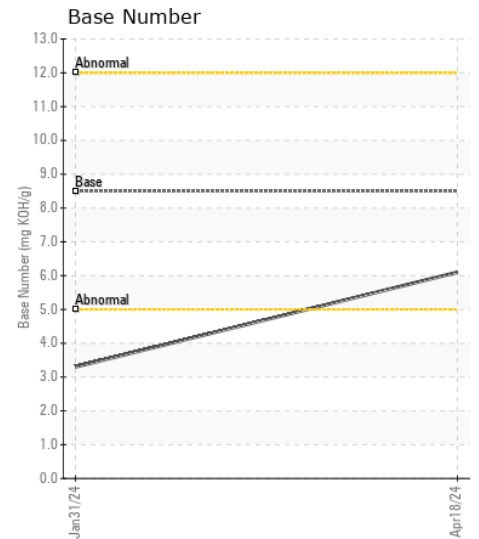
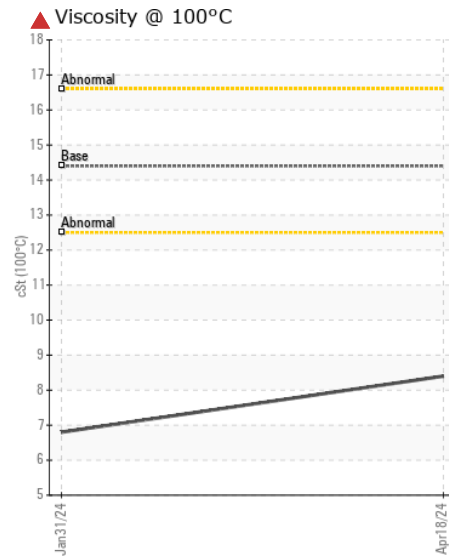
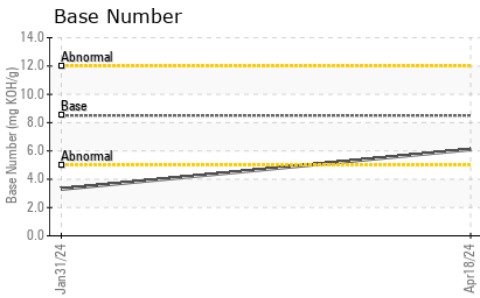
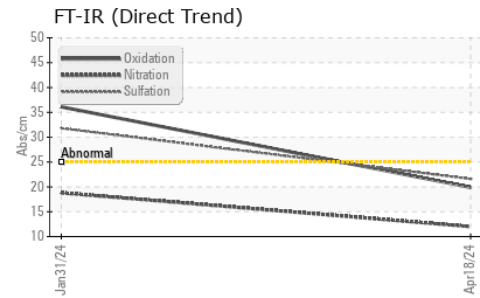
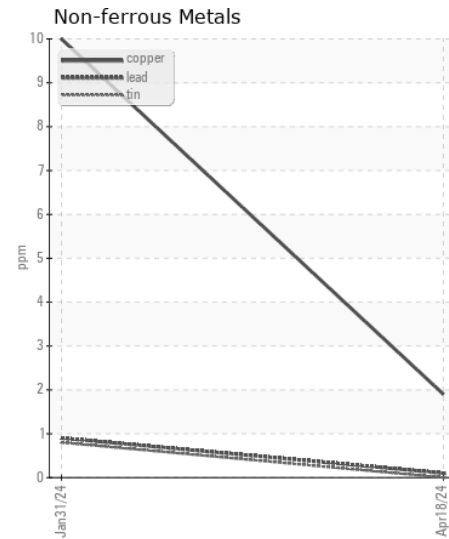
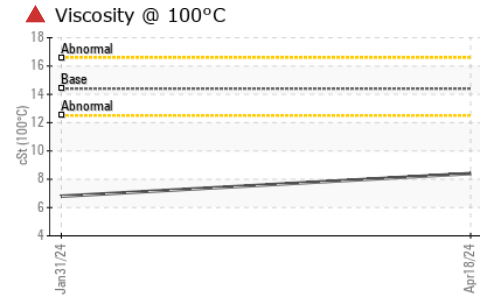
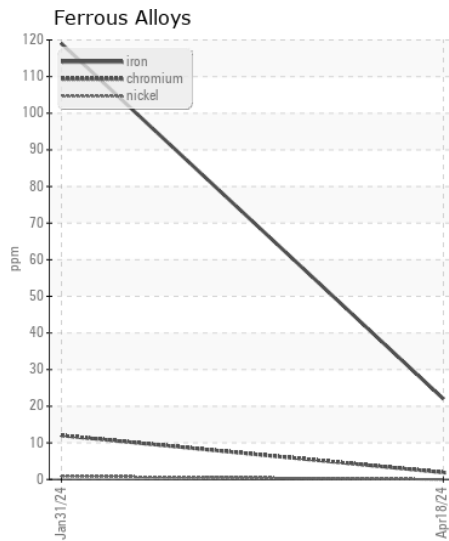
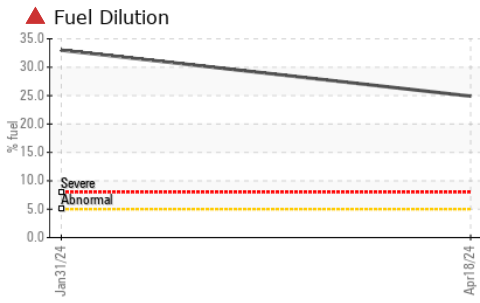
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	3	7	---
Potassium	ppm	ASTM D5185m	>20	0	2	---
Fuel	%	ASTM D3524	>5	▲ 24.9	▲ 33.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1	2.8	---
Nitration	Abs/cm	*ASTM D7624	>20	12.0	18.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	31.8	---
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. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>158	<1	<1	---
Boron	ppm	ASTM D5185m	250	49	7	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	67	45	---
Manganese	ppm	ASTM D5185m		0	1	---
Magnesium	ppm	ASTM D5185m	450	71	540	---
Calcium	ppm	ASTM D5185m	3000	1784	984	---
Phosphorus	ppm	ASTM D5185m	1150	804	771	---
Zinc	ppm	ASTM D5185m	1350	993	876	---
Sulfur	ppm	ASTM D5185m	4250	3336	1620	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	36.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.1	▲ 3.3	---
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 8.4	▲ 6.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005376 **Received** : 24 Apr 2024
Lab Number : 06159627 **Tested** : 25 Apr 2024
Unique Number : 10995050 **Diagnosed** : 25 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: PercentFuel, TBN)

PEDULLA
 146 MCLELLAND
 MOORESVILLE, NC
 US 28115
 Contact: LARRY

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)

T:
F: