



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

Machine Id  
**KOMATSU TH-27**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>CL0005310</b>	CL0004474	CL0003767
Sample Date		Client Info		<b>05 Apr 2024</b>	15 Jul 2023	30 Nov 2022
Machine Age	hrs	Client Info		<b>6530</b>	5985	5440
Oil Age	hrs	Client Info		<b>6530</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>27</b>	27	15
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	2	3
Lead	ppm	ASTM D5185m	>10	<b>6</b>	8	6
Copper	ppm	ASTM D5185m	>75	<b>8</b>	8	5
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

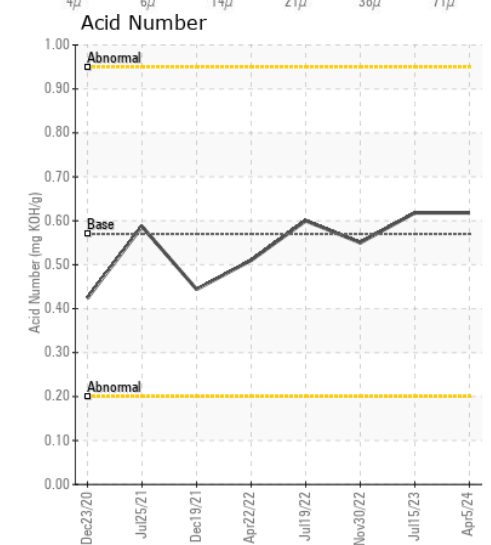
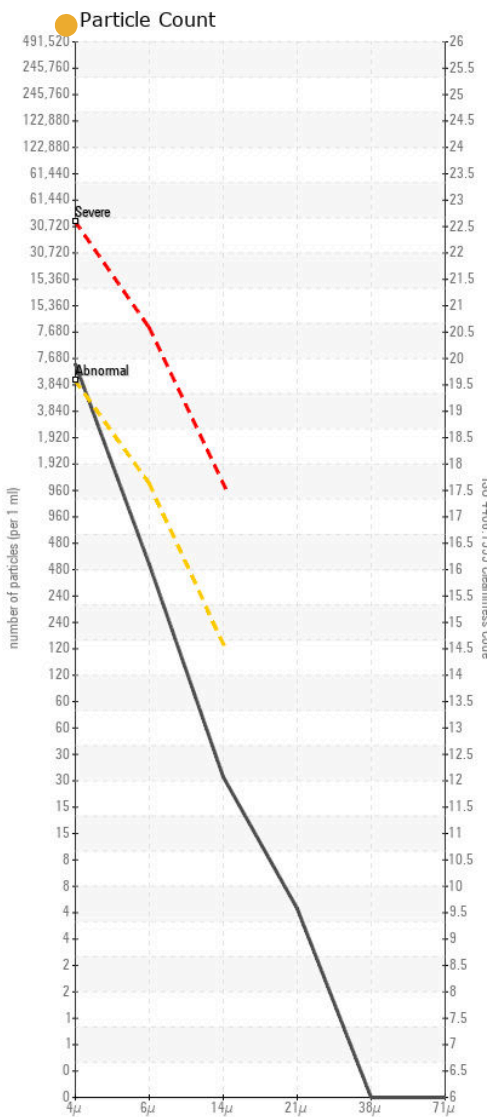
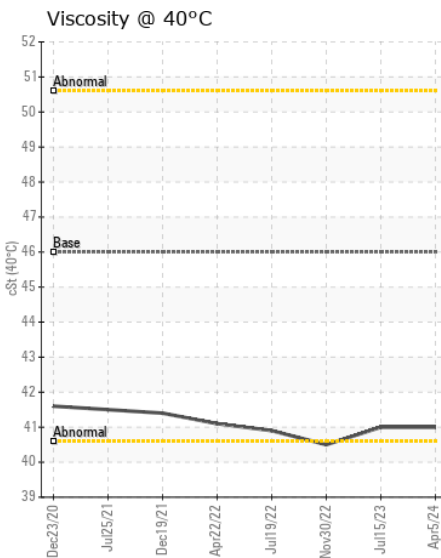
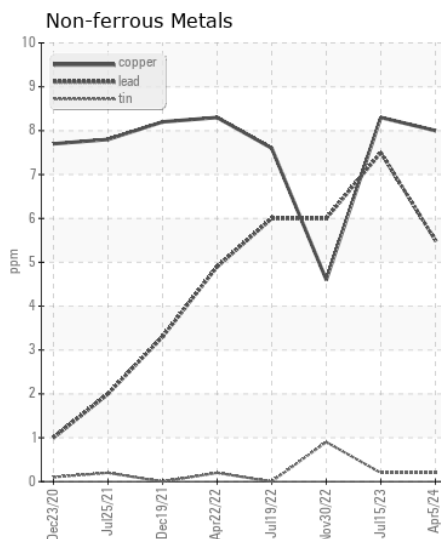
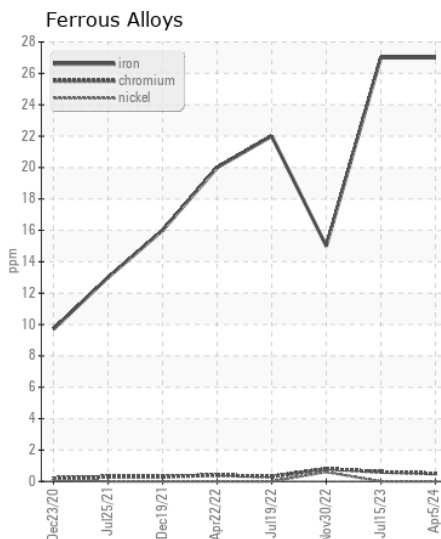
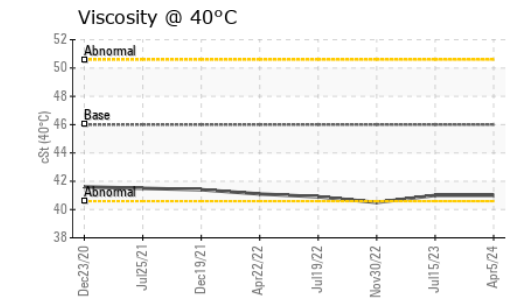
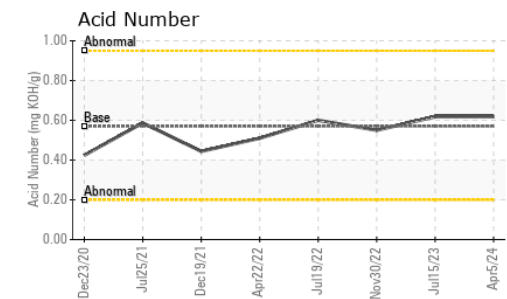
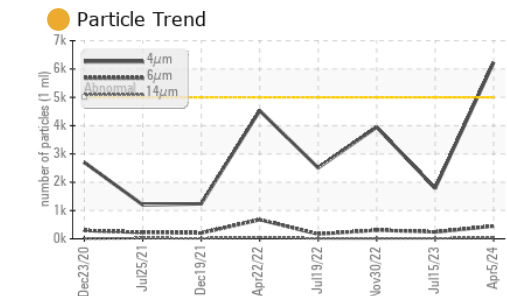
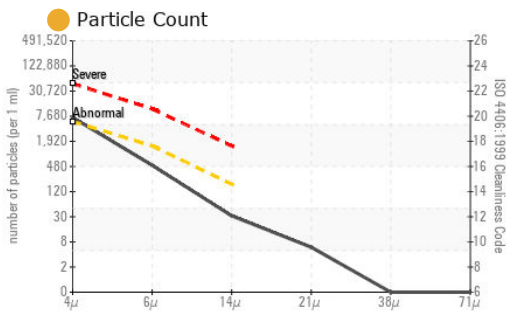
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	6	3
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	12
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>6230</b>	1785	3944
Particles >6µm		ASTM D7647	>1300	<b>452</b>	241	304
Particles >14µm		ASTM D7647	>160	<b>28</b>	18	14
Particles >21µm		ASTM D7647	>40	<b>5</b>	7	4
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/16/12</b>	18/15/11	19/15/11
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	4	2
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	1
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>2</b>	1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	25	<b>14</b>	8	17
Calcium	ppm	ASTM D5185m	200	<b>371</b>	387	168
Phosphorus	ppm	ASTM D5185m	300	<b>379</b>	376	235
Zinc	ppm	ASTM D5185m	370	<b>416</b>	436	206
Sulfur	ppm	ASTM D5185m	2500	<b>1240</b>	1365	590
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.618</b>	0.618	0.55
Visc @ 40°C	cSt	ASTM D445	46	<b>41.0</b>	41.0	40.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : CL0005310

Lab Number : 06145264

Unique Number : 10970072

Test Package : CONST

Received : 10 Apr 2024

Tested : 12 Apr 2024

Diagnosed : 13 Apr 2024 - Don Baldrige

**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: