



# OIL ANALYSIS REPORT

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



Machine Id  
**KOMATSU PC300 PC300-5 (S/N A90914)**  
Component  
**Left Final Drive**  
Fluid  
**SAE 50W (--- 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

There is a light concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

## FLUID CONDITION

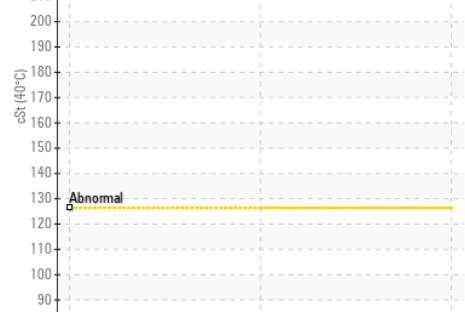
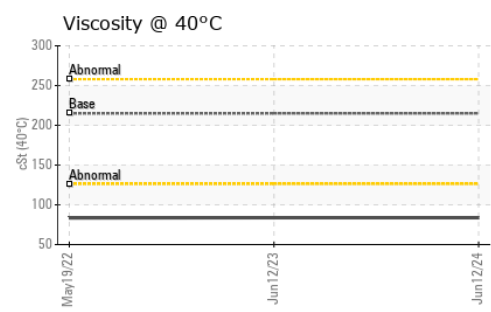
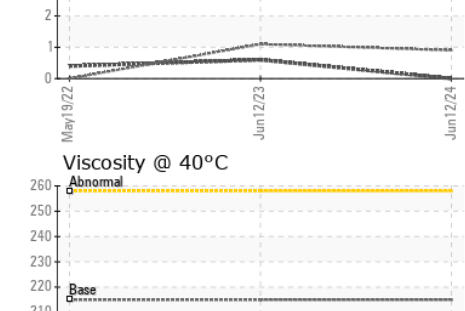
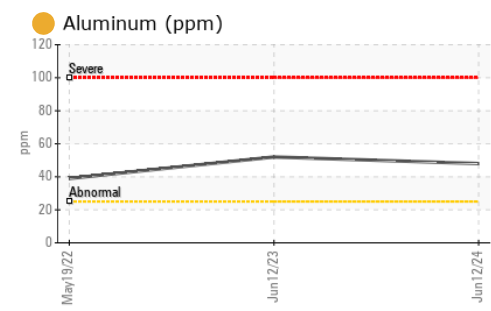
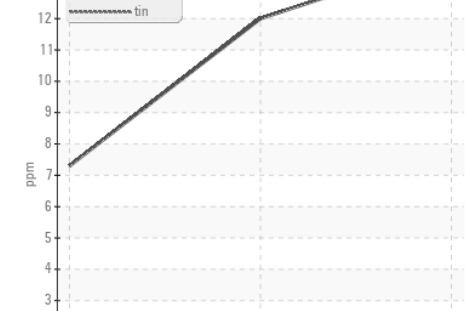
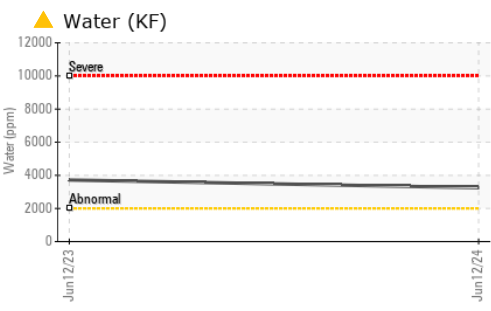
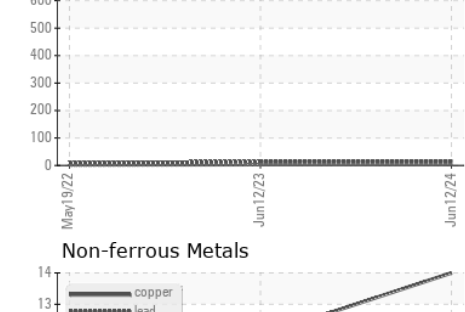
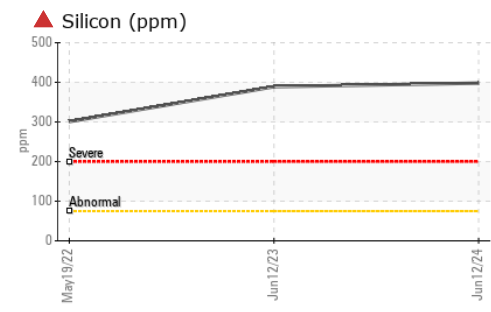
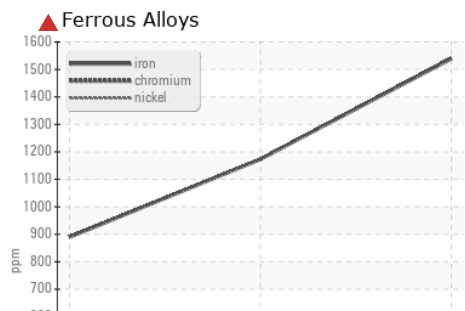
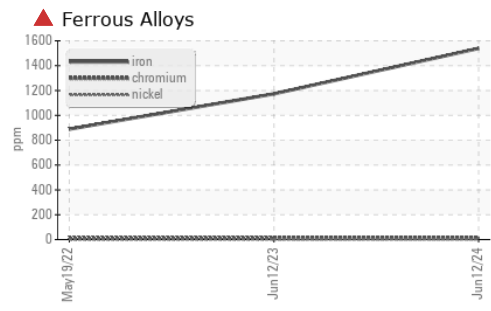
The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TLY0002479</b>	TLY0001746	TLY0001167
Sample Date		Client Info		<b>12 Jun 2024</b>	12 Jun 2023	19 May 2022
Machine Age	hrs	Client Info		<b>12810</b>	12442	11791
Oil Age	hrs	Client Info		<b>11791</b>	651	2000
Filter Age	hrs	Client Info		<b>11791</b>	651	2000
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	Changed
Sample Status				<b>SEVERE</b>	SEVERE	SEVERE

Iron	ppm	ASTM D5185m	>500	<b>▲ 1539</b>	▲ 1173	▲ 889
Chromium	ppm	ASTM D5185m	>10	<b>▲ 14</b>	▲ 13	▲ 10
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>6</b>	6	5
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>● 48</b>	● 52	● 39
Lead	ppm	ASTM D5185m	>25	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>50	<b>14</b>	12	7
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>1</b>	1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

Silicon	ppm	ASTM D5185m	>75	<b>▲ 398</b>	▲ 389	▲ 301
Potassium	ppm	ASTM D5185m	>20	<b>14</b>	13	10
Water	%	ASTM D6304	>0.2	<b>▲ 0.325</b>	▲ 0.372	---
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 3250</b>	▲ 3720	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</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	>0.2	<b>▲ 0.2%</b>	0.2%	NEG

Sodium	ppm	ASTM D5185m		<b>9</b>	6	5
Boron	ppm	ASTM D5185m		<b>13</b>	5	7
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	3	3
Manganese	ppm	ASTM D5185m		<b>10</b>	8	6
Magnesium	ppm	ASTM D5185m		<b>18</b>	17	17
Calcium	ppm	ASTM D5185m		<b>4086</b>	4167	4314
Phosphorus	ppm	ASTM D5185m		<b>1537</b>	1425	1466
Zinc	ppm	ASTM D5185m		<b>1695</b>	1753	1821
Sulfur	ppm	ASTM D5185m		<b>14779</b>	14763	11661
Visc @ 40°C	cSt	ASTM D445	215	<b>83.8</b>	83.8	83.5



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLY0002479 **Received** : 18 Jun 2024  
**Lab Number** : 06214109 **Tested** : 20 Jun 2024  
**Unique Number** : 11086973 **Diagnosed** : 20 Jun 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: KF )

**GAINES & COMPANY**  
 112 WESTMINSTER RD  
 REISTERSTOWN, MD  
 US 21136  
 Contact: LANCE TANCRAITOR  
 ltancraitor@gainesandco.com  
 T: (410)833-9833  
 F:

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)