



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
KOMATSU PC228 PC228-1 (S/N 1028)
 Component
Left Final Drive
 Fluid
SAE 50W (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

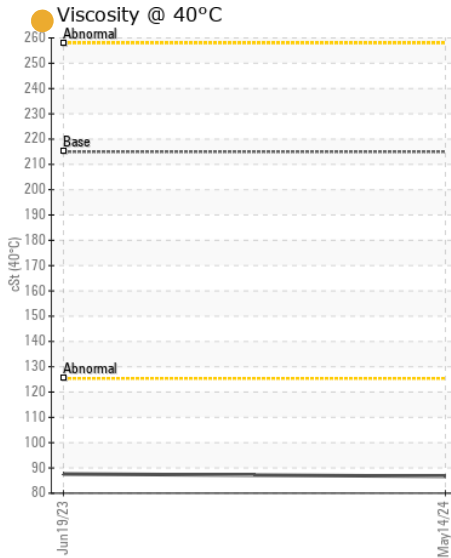
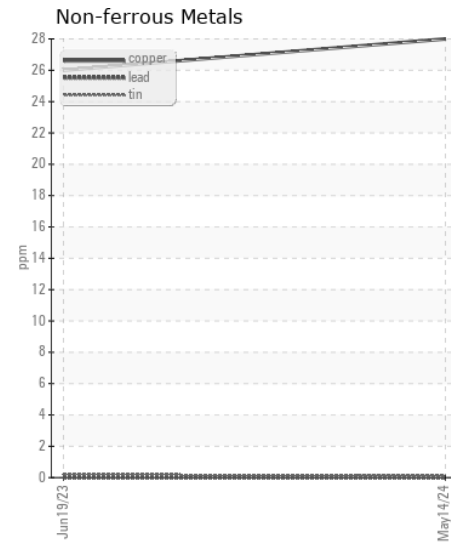
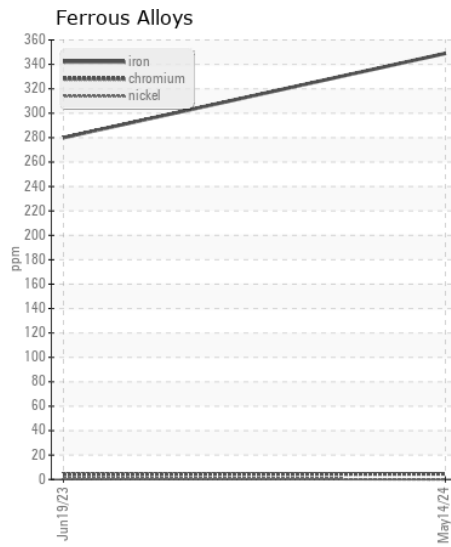
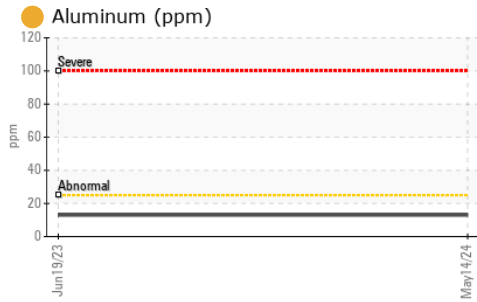
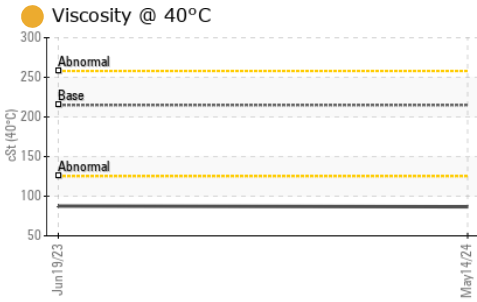
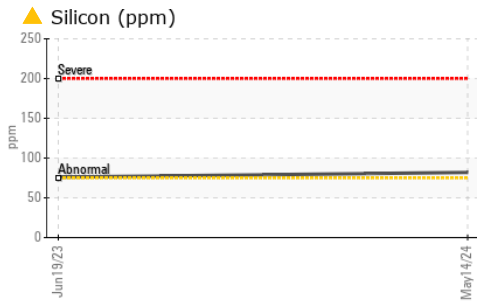
CONTAMINATION

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

FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TLY0002464	TLY0001786	---
Sample Date		Client Info		14 May 2024	19 Jun 2023	---
Machine Age	hrs	Client Info		6143	5605	---
Oil Age	hrs	Client Info		5605	1605	---
Filter Age	hrs	Client Info		5605	1605	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	Not Changd	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>500	349	280	---
Chromium	ppm	ASTM D5185m	>10	5	4	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		1	1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	13	13	---
Lead	ppm	ASTM D5185m	>25	0	0	---
Copper	ppm	ASTM D5185m	>50	28	26	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>75	82	76	---
Potassium	ppm	ASTM D5185m	>20	0	4	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	MODER	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	---
Sodium	ppm	ASTM D5185m		2	0	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	<1	---
Manganese	ppm	ASTM D5185m		3	2	---
Magnesium	ppm	ASTM D5185m		20	18	---
Calcium	ppm	ASTM D5185m		3983	4539	---
Phosphorus	ppm	ASTM D5185m		791	842	---
Zinc	ppm	ASTM D5185m		944	1044	---
Sulfur	ppm	ASTM D5185m		4539	4649	---
Visc @ 40°C	cSt	ASTM D445	215	86.7	87.6	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLY0002464
Lab Number : 06194430
Unique Number : 11056553
Test Package : CONST

Received : 29 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Sean Felton

GAINES & COMPANY
 112 WESTMINSTER RD
 REISTERSTOWN, MD
 US 21136

Contact: LANCE TANCRAITOR
 ltancraitor@gainesandco.com

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)

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F: