



OIL ANALYSIS REPORT

WEAR **NORMAL**

CONTAMINATION **SEVERE**

FLUID CONDITION **NORMAL**



Area
PCS - PORTABLE CRUSHING SERVICES
 Machine Id
KOMATSU PC290LC TH01 - PCS
 Component
Hydraulic System
 Fluid
STP HYDRO OIL ISO AW 46 (66 GAL)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014751	KL0013776	KL0014099
Sample Date		Client Info		09 Jul 2024	10 Apr 2024	09 Jan 2024
Machine Age	hrs	Client Info		13105	12916	12462
Oil Age	hrs	Client Info		5754	5565	5112
Filter Age	hrs	Client Info		5754	5565	5112
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	16	▲ 113	▲ 34
Chromium	ppm	ASTM D5185m	>10	0	1	0
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	● 13	● 6
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	30	▲ 98	14
Tin	ppm	ASTM D5185m	>10	1	2	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

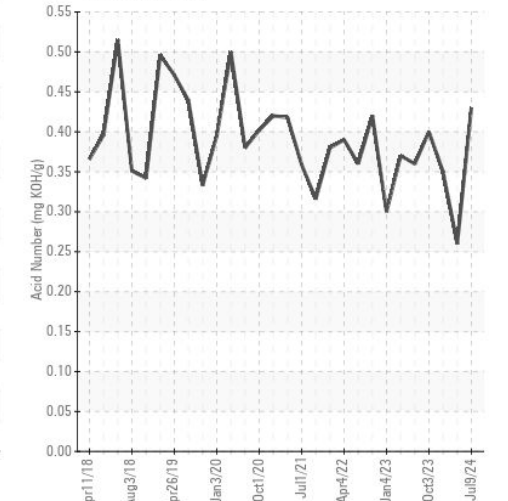
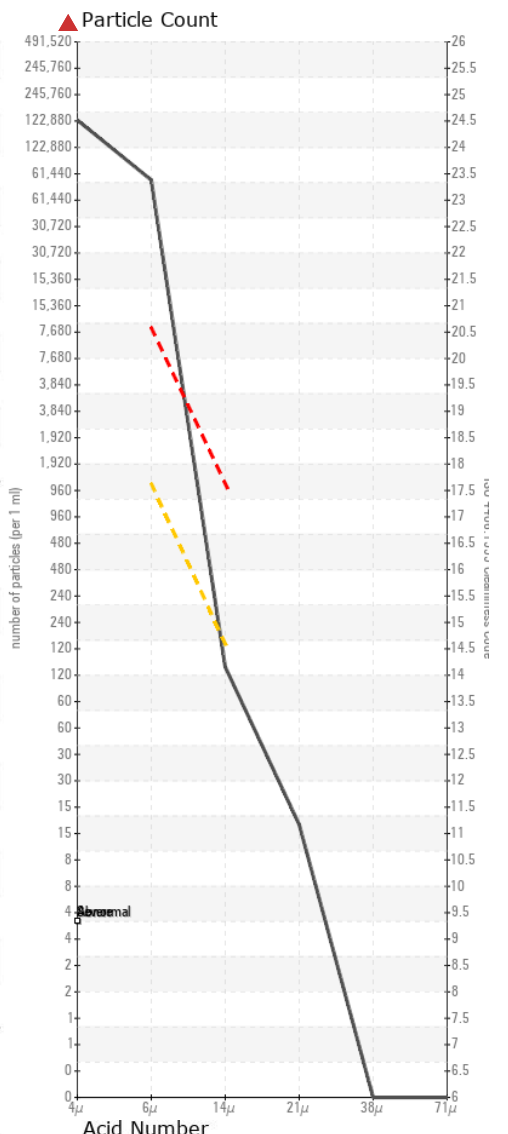
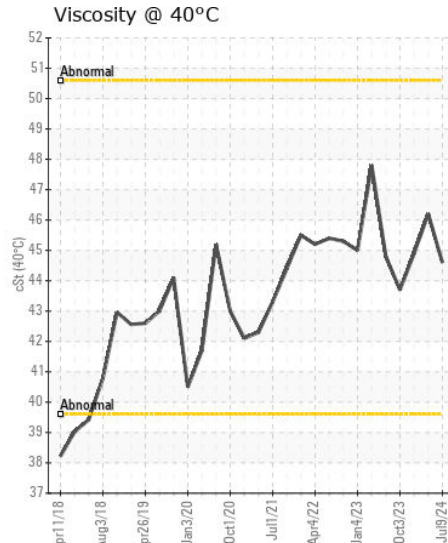
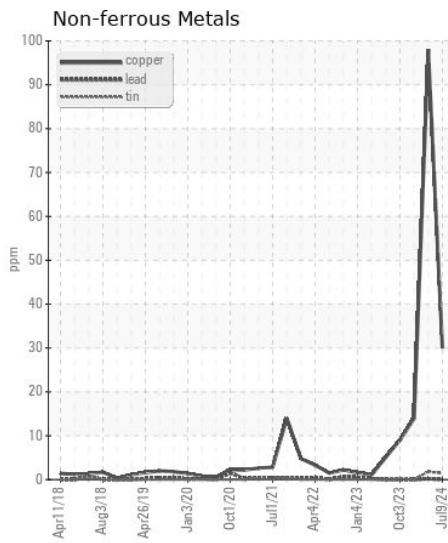
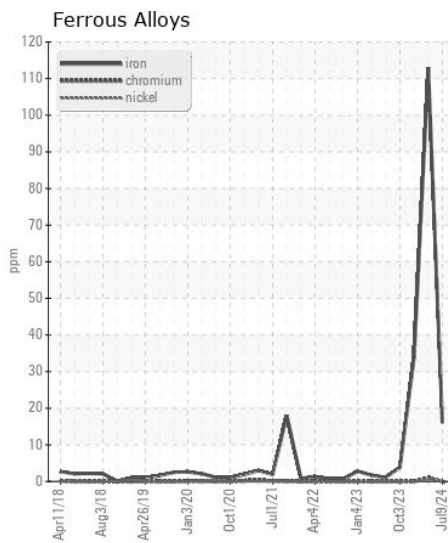
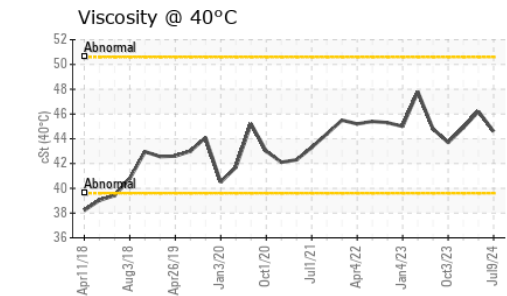
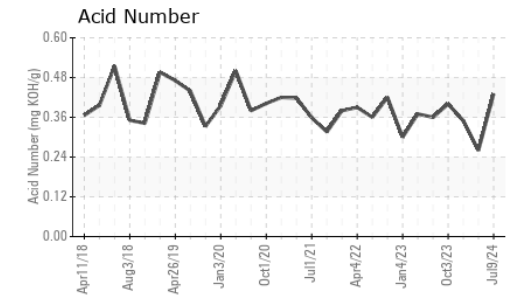
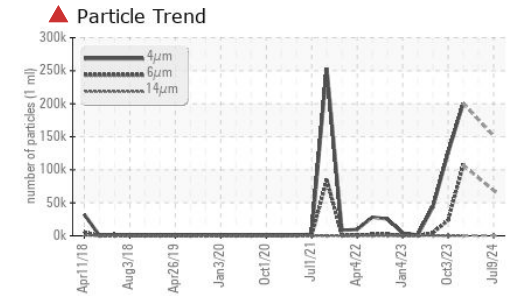
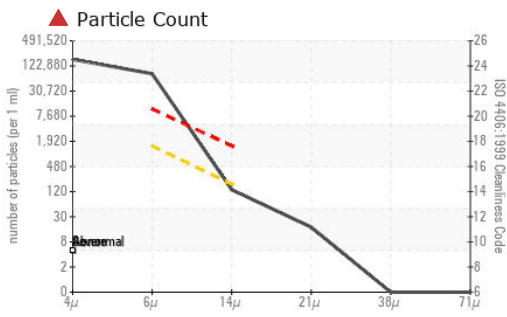
There is a high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

Silicon	ppm	ASTM D5185m	>20	9	▲ 61	▲ 28
Potassium	ppm	ASTM D5185m	>20	0	5	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		151436	---	200528
Particles >6µm		ASTM D7647	>1300	▲ 69064	---	▲ 106645
Particles >14µm		ASTM D7647	>160	118	---	▲ 162
Particles >21µm		ASTM D7647	>40	15	---	4
Particles >38µm		ASTM D7647	>10	0	---	1
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>17/14	▲ 23/14	---	▲ 24/15
Silt	scalar	*Visual	NONE	NONE	▲ HEAVY	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		1	5	2
Boron	ppm	ASTM D5185m		0	5	3
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		1	14	11
Manganese	ppm	ASTM D5185m		0	1	<1
Magnesium	ppm	ASTM D5185m		<1	1	0
Calcium	ppm	ASTM D5185m		65	305	124
Phosphorus	ppm	ASTM D5185m		335	274	298
Zinc	ppm	ASTM D5185m		347	257	338
Sulfur	ppm	ASTM D5185m		1710	1480	1335
Acid Number (AN)	mg KOH/g	ASTM D8045		0.43	0.26	0.35
Visc @ 40°C	cSt	ASTM D445		44.6	46.2	44.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014751 **Received** : 16 Jul 2024
Lab Number : 06237717 **Tested** : 17 Jul 2024
Unique Number : 11126551 **Diagnosed** : 17 Jul 2024 - Wes Davis
Test Package : MOB 2

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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)