



OIL ANALYSIS REPORT

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



Machine Id  
**KOMATSU PC-490 TH-12 (S/N A41656)**  
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>CL0005449</b>	CL0004709	CL0003391
Sample Date		Client Info		<b>20 May 2024</b>	14 Sep 2023	17 Jul 2022
Machine Age	hrs	Client Info		<b>5857</b>	5325	4755
Oil Age	hrs	Client Info		<b>5857</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>ABNORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>34</b>	28	17
Chromium	ppm	ASTM D5185m	>10	<b>22</b>	10	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>5</b>	5	4
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185m	>75	<b>4</b>	5	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

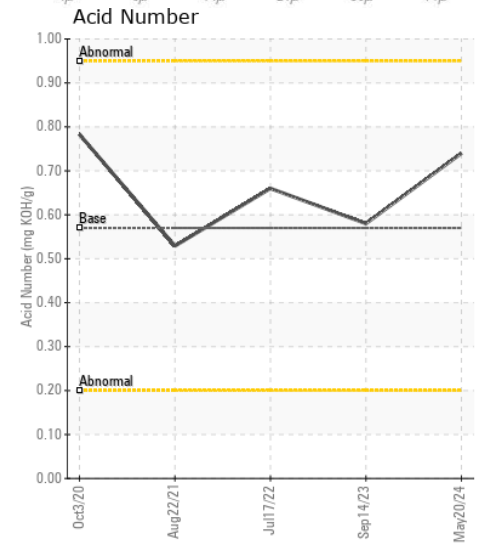
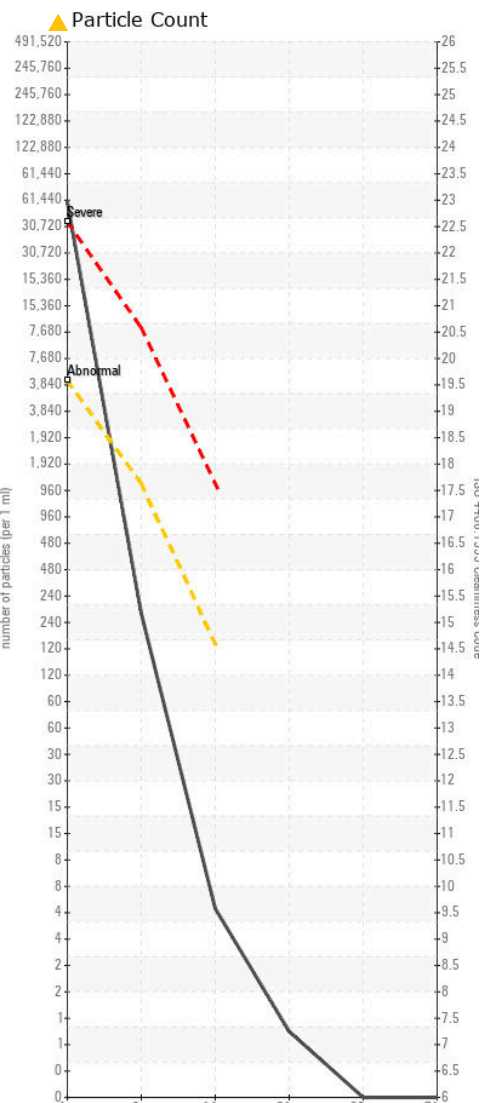
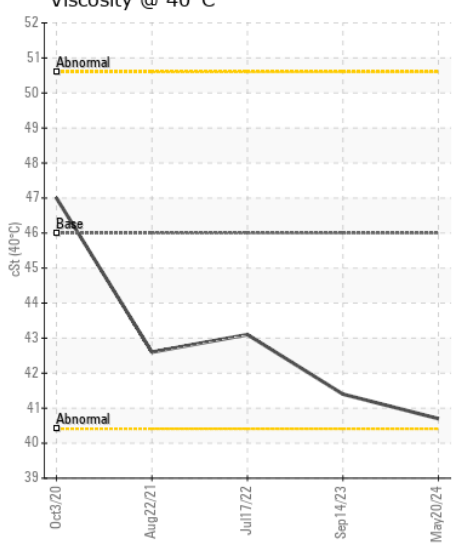
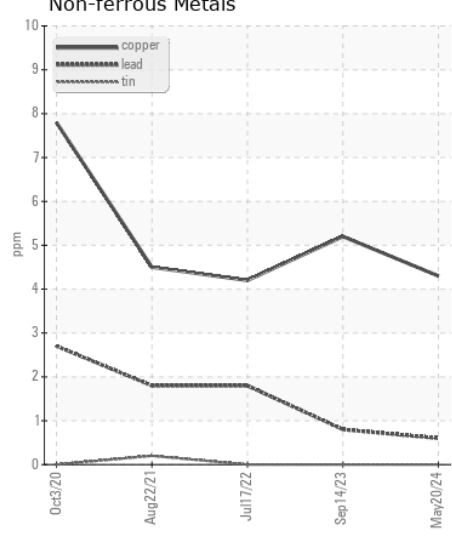
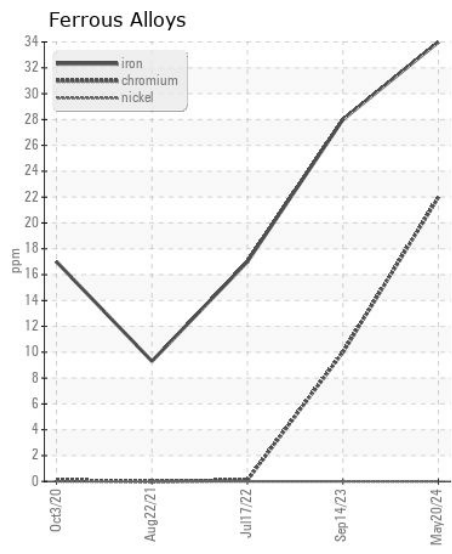
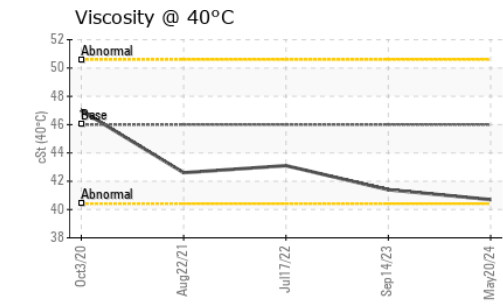
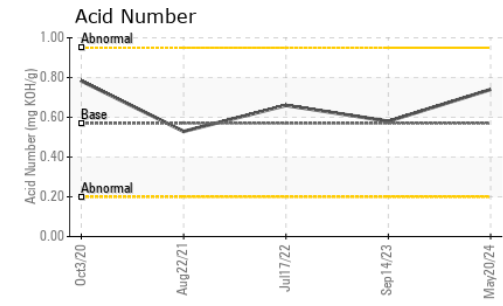
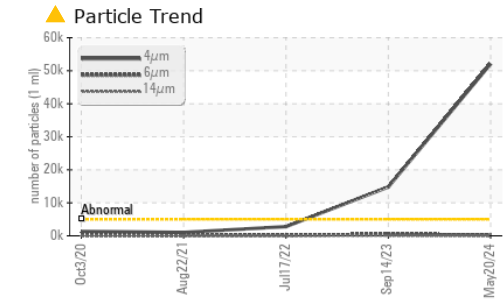
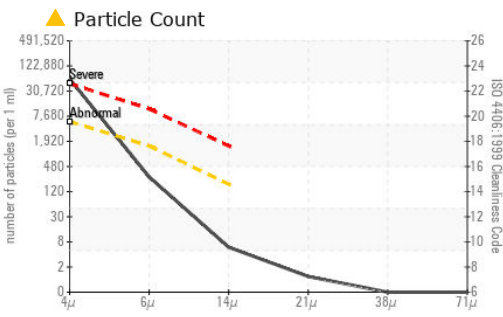
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>9</b>	7	7
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>52086</b>	14807	2784
Particles >6µm		ASTM D7647	>1300	<b>238</b>	477	146
Particles >14µm		ASTM D7647	>160	<b>5</b>	29	15
Particles >21µm		ASTM D7647	>40	<b>1</b>	6	5
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>23/15/10</b>	21/16/12	19/14/11
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	>0.1	<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>2</b>	2	0
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>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	25	<b>10</b>	0	6
Calcium	ppm	ASTM D5185m	200	<b>138</b>	111	91
Phosphorus	ppm	ASTM D5185m	300	<b>286</b>	310	272
Zinc	ppm	ASTM D5185m	370	<b>313</b>	329	316
Sulfur	ppm	ASTM D5185m	2500	<b>1464</b>	1534	879
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.74</b>	0.58	0.66
Visc @ 40°C	cSt	ASTM D445	46	<b>40.7</b>	41.4	43.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : CL0005449  
**Lab Number** : 06190990  
**Unique Number** : 11047742  
**Test Package** : CONST  
**Received** : 24 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 30 May 2024 - Angela Borella

**BULLSEYE CONSTRUCTION**  
 581 N POLK ST  
 PINEVILLE, NC  
 US 28134  
 Contact: SERVICE MANAGER

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)