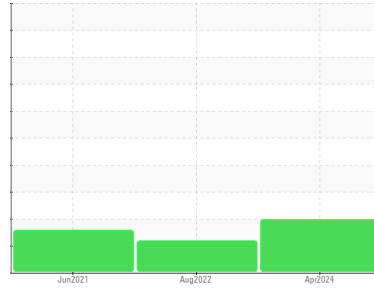




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

ZANI

Machine Id

MITSUBISHI 720T 19

Component

Hydraulic System

Fluid

AW HYDRAULIC OIL ISO 46 (--- GAL)

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

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

### 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.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KFS0002838</b>	KFS0002175	KFS0000446
Sample Date	Client Info	<b>12 Apr 2024</b>	18 Aug 2022	02 Jun 2021
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	<b>2</b>	15	11
Chromium	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Aluminum	ppm ASTM D5185m >10	<b>3</b>	<1	0
Lead	ppm ASTM D5185m >10	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185m >75	<b>1</b>	5	5
Tin	ppm ASTM D5185m >10	<b>&lt;1</b>	0	<1
Antimony	ppm ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 5	<b>0</b>	<1	2
Barium	ppm ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 5	<b>&lt;1</b>	<1	<1
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm ASTM D5185m 25	<b>&lt;1</b>	<1	1
Calcium	ppm ASTM D5185m 200	<b>39</b>	26	19
Phosphorus	ppm ASTM D5185m 300	<b>345</b>	328	314
Zinc	ppm ASTM D5185m 370	<b>406</b>	283	270
Sulfur	ppm ASTM D5185m 2500	<b>925</b>	1561	1315

## CONTAMINANTS

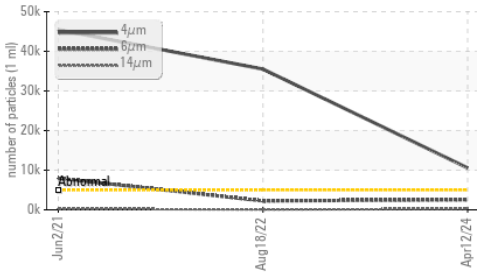
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>2</b>	<1	0
Sodium	ppm ASTM D5185m	<b>0</b>	0	<1
Potassium	ppm ASTM D5185m >20	<b>2</b>	<1	<1

## FLUID CLEANLINESS

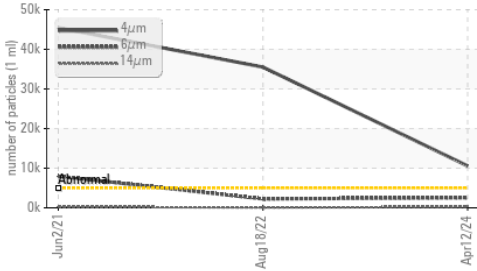
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 10576</b>	▲ 35511	▲ 45449
Particles >6µm	ASTM D7647 >1300	<b>▲ 2537</b>	● 2244	▲ 7961
Particles >14µm	ASTM D7647 >160	<b>● 201</b>	74	▲ 214
Particles >21µm	ASTM D7647 >40	<b>● 65</b>	28	▲ 49
Particles >38µm	ASTM D7647 >10	<b>5</b>	3	1
Particles >71µm	ASTM D7647 >3	<b>1</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 21/19/15</b>	▲ 22/18/13	▲ 23/20/15

# OIL ANALYSIS REPORT

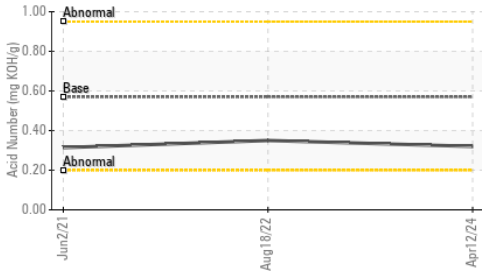
▲ Particle Trend



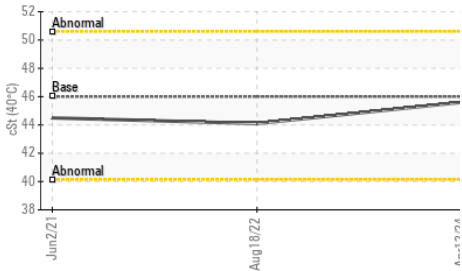
▲ Particle Trend



Acid Number



Viscosity @ 40°C



FLUID DEGRADATION	method	limit/base	current	history1	history2
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Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.32</b>	0.35	0.314
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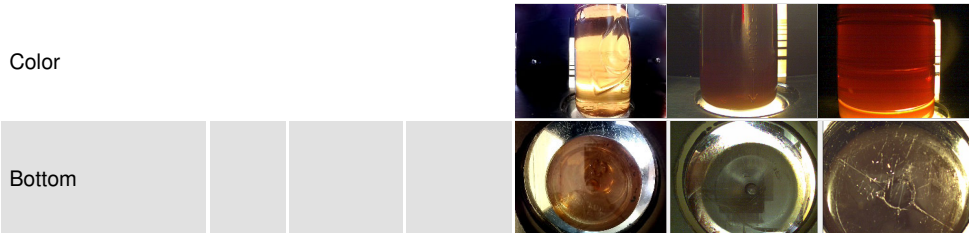
VISUAL	method	limit/base	current	history1	history2
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White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	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
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
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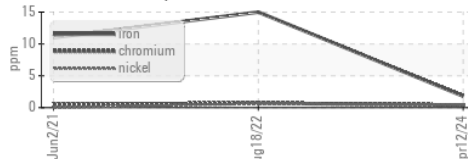
Visc @ 40°C	cSt	ASTM D445	46	<b>45.6</b>	44.1	44.5
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SAMPLE IMAGES	method	limit/base	current	history1	history2
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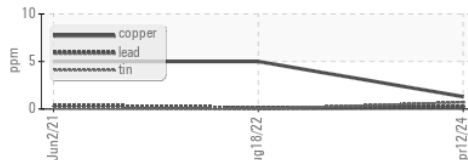


### GRAPHS

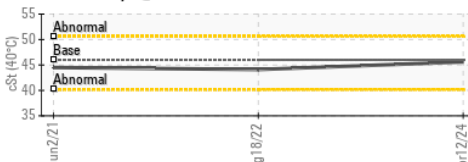
Ferrous Alloys



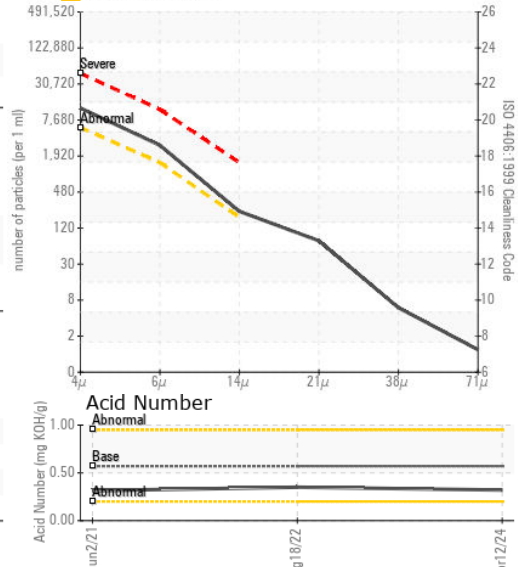
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Certificate L2367

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

**Sample No.** : KFS0002838

**Lab Number** : **06156877**

**Unique Number** : 10992300

**Test Package** : IND 2

**Received** : 22 Apr 2024

**Tested** : 23 Apr 2024

**Diagnosed** : 23 Apr 2024 - Wes Davis

**ZANINI**

840 INDUSTRIAL DR

WINCHESTER, TN

US 37398

Contact: TIM DOTY

tdoty@tn.zanini.com

T:

F:

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)