



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**TK20551**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0716890</b>	WC0585219	---
Sample Date		Client Info		<b>25 Jan 2023</b>	08 Jun 2021	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	Not Changd	---
Filter Changed		Client Info		<b>N/A</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>9</b>	8	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>75	<b>1</b>	1	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>VLITE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

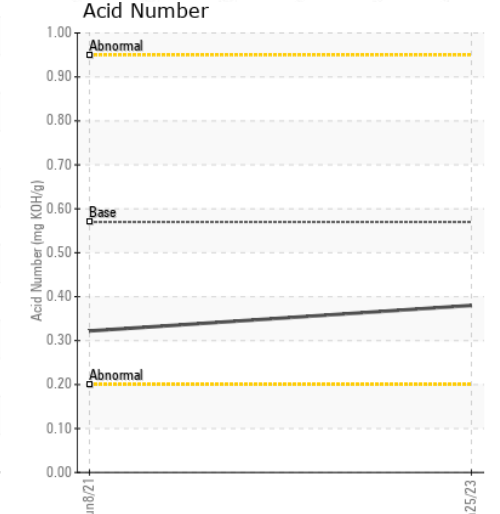
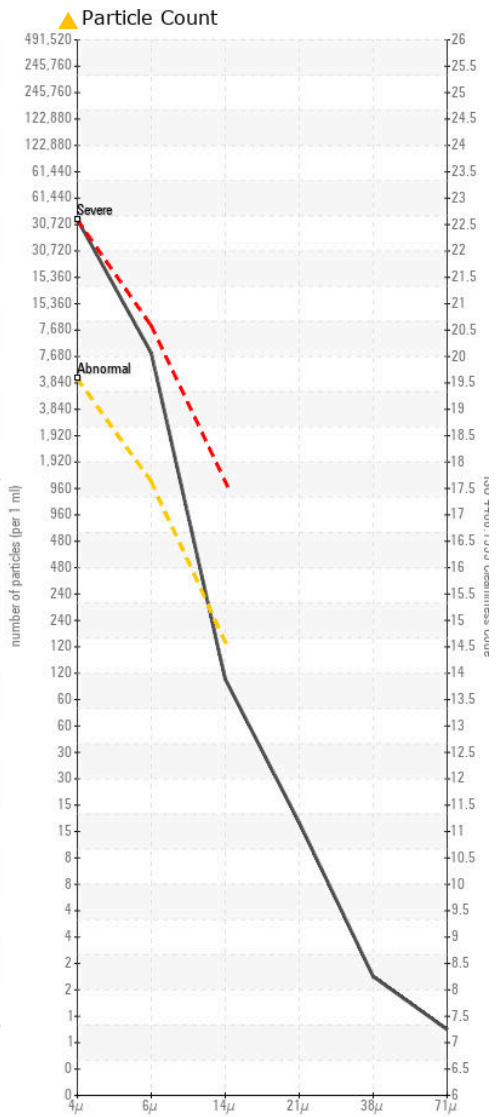
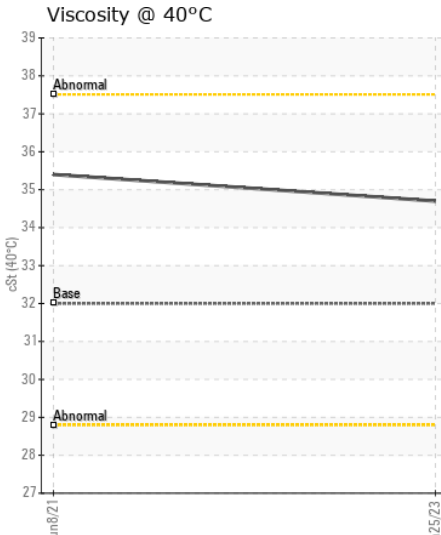
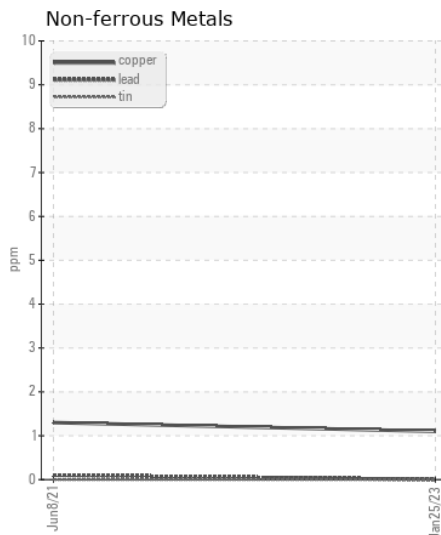
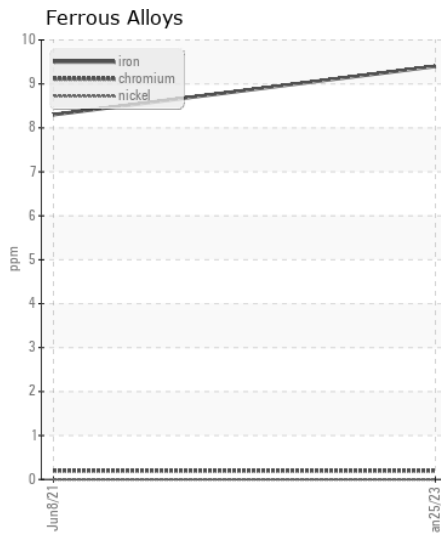
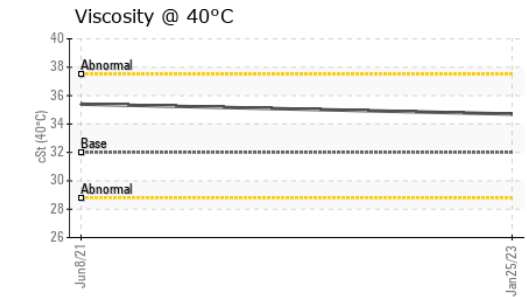
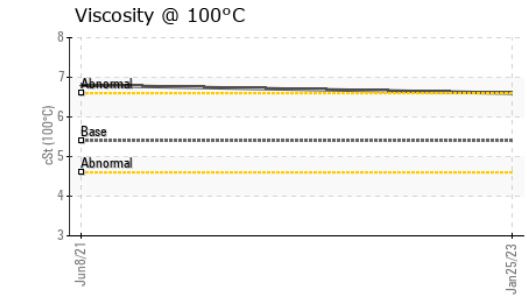
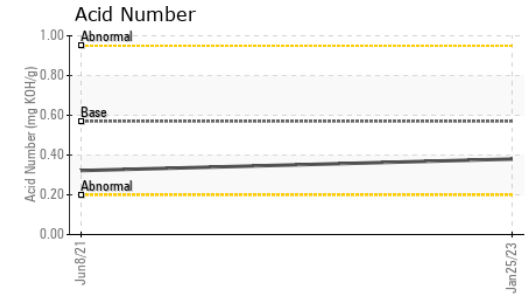
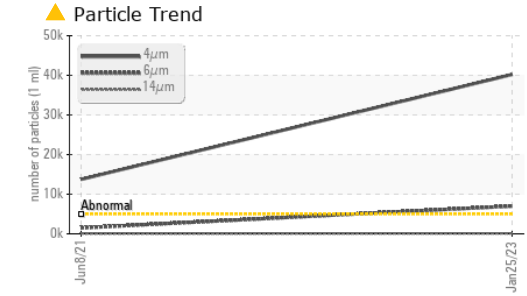
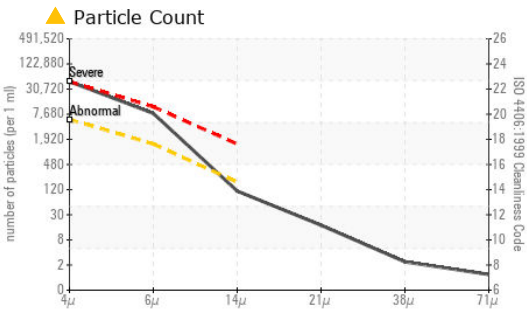
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>1</b>	<1	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 40221</b>	▲ 13736	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 6999</b>	▲ 1492	---
Particles >14µm		ASTM D7647	>160	<b>98</b>	58	---
Particles >21µm		ASTM D7647	>40	<b>15</b>	16	---
Particles >38µm		ASTM D7647	>10	<b>2</b>	2	---
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 23/20/14</b>	▲ 21/18/13	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>VLITE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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>0</b>	0	---
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	5	<b>1</b>	0	---
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	25	<b>1</b>	<1	---
Calcium	ppm	ASTM D5185m	200	<b>64</b>	69	---
Phosphorus	ppm	ASTM D5185m	300	<b>342</b>	346	---
Zinc	ppm	ASTM D5185m	370	<b>435</b>	466	---
Sulfur	ppm	ASTM D5185m	2500	<b>3527</b>	3084	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.38</b>	0.322	---
Visc @ 40°C	cSt	ASTM D445	32	<b>34.7</b>	35.4	---
Visc @ 100°C	cSt	ASTM D445	5.4	<b>6.6</b>	6.8	---
Viscosity Index (VI)	Scale	ASTM D2270	102	<b>148</b>	153	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0716890 **Received** : 26 Jan 2023  
**Lab Number** : 05750782 **Diagnosed** : 29 Jan 2023  
**Unique Number** : 10310386 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: KV100, V1 )

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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