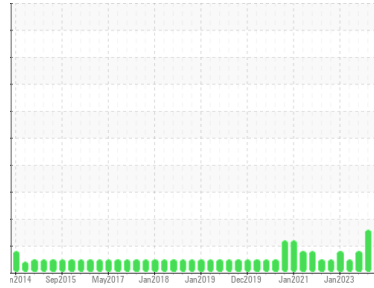


# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**NCR TSSI2500 2 H (S/N C2763)**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**

The chromium level is abnormal. All other component wear rates are normal.

**Contamination**

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

**Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>Y2K0000728</b>	Y2K0000865	Y2K0000844
Sample Date	Client Info			<b>25 Jan 2024</b>	26 Sep 2023	26 Jul 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>14</b>	16	11
Chromium	ppm	ASTM D5185m	>20	<b>▲ 58</b>	▲ 53	▲ 48
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	4	3
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>13</b>	15	15
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	25	<b>&lt;1</b>	2	0
Calcium	ppm	ASTM D5185m	200	<b>63</b>	69	70
Phosphorus	ppm	ASTM D5185m	300	<b>310</b>	331	350
Zinc	ppm	ASTM D5185m	370	<b>323</b>	385	402
Sulfur	ppm	ASTM D5185m	2500	<b>719</b>	933	903

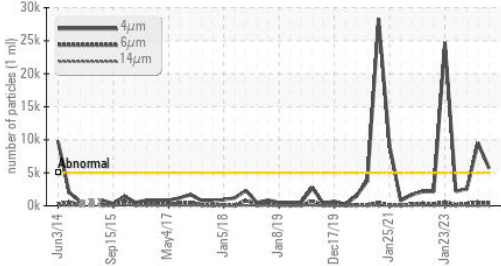
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>9</b>	9	8
Sodium	ppm	ASTM D5185m		<b>10</b>	8	9
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	6	5
Water	%	ASTM D6304	>0.05	<b>0.019</b>	0.007	0.021
ppm Water	ppm	ASTM D6304	>500	<b>194</b>	76.4	217.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>▲ 5669</b>	▲ 9519	2564
Particles >6µm		ASTM D7647	>1300	<b>485</b>	525	324
Particles >14µm		ASTM D7647	>160	<b>28</b>	18	12
Particles >21µm		ASTM D7647	>40	<b>6</b>	5	3
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 20/16/12</b>	▲ 20/16/11	19/16/11

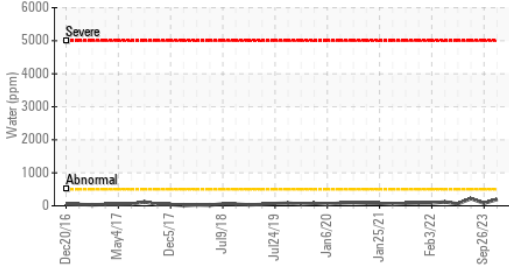
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.47</b>	0.32	0.29

# OIL ANALYSIS REPORT

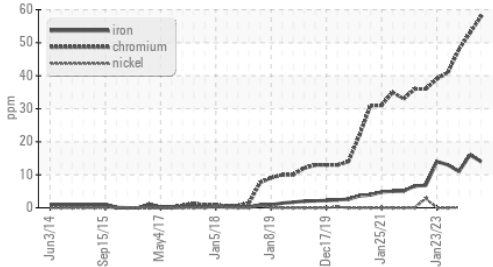
### ▲ Particle Trend



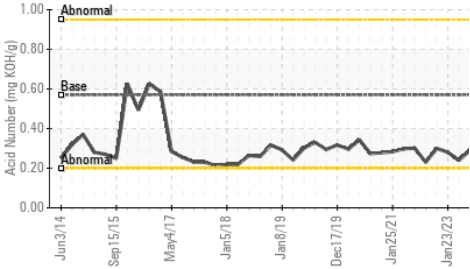
### Water (KF)



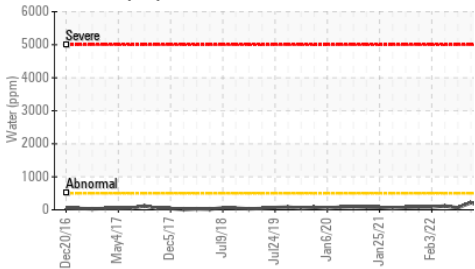
### ▲ Ferrous Alloys



### Acid Number



### Water (KF)



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	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	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	46.5	46.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

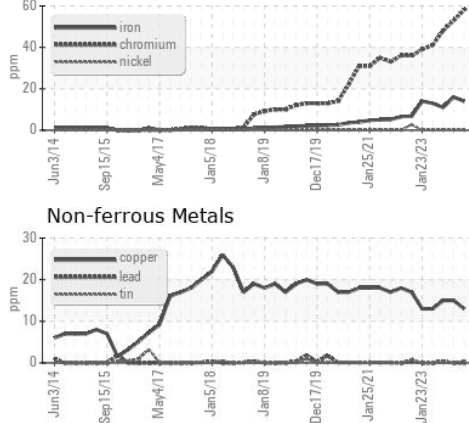


Bottom

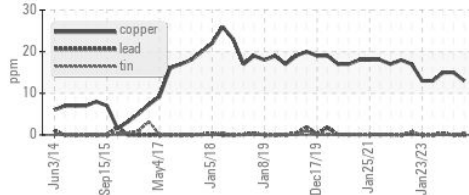


### GRAPHS

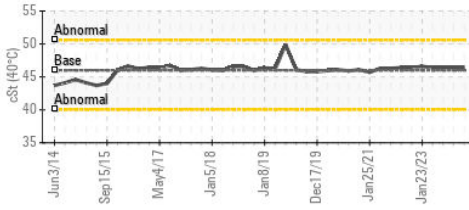
#### ▲ Ferrous Alloys



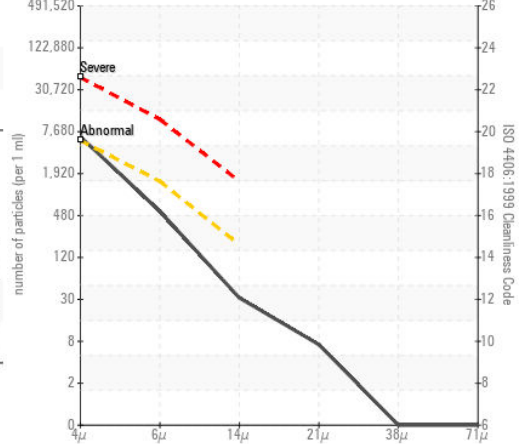
#### Non-ferrous Metals



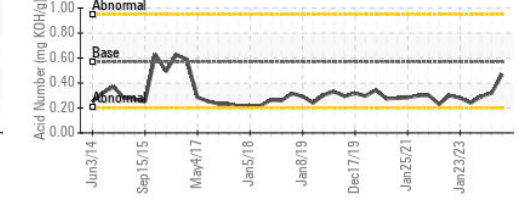
#### Viscosity @ 40°C



#### ▲ Particle Count



#### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : Y2K0000728 **Received** : 31 Jan 2024  
**Lab Number** : 06075809 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 10857900 **Diagnostician** : Doug Bogart  
**Test Package** : MOB 2 ( Additional Tests: KF )

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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