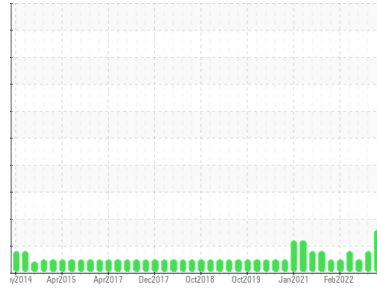


OIL ANALYSIS REPORT

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		Y2K0000865	Y2K0000844	Y2K0000835
Sample Date	Client Info		26 Sep 2023	26 Jul 2023	18 May 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	NORMAL

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	16	11	13
Chromium	ppm	ASTM D5185m >20	▲ 53	▲ 48	41
Nickel	ppm	ASTM D5185m >20	0	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >20	4	3	3
Lead	ppm	ASTM D5185m >20	0	<1	0
Copper	ppm	ASTM D5185m >20	15	15	13
Tin	ppm	ASTM D5185m >20	0	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	0	0	0
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 5	0	0	<1
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 25	2	0	1
Calcium	ppm	ASTM D5185m 200	69	70	67
Phosphorus	ppm	ASTM D5185m 300	331	350	339
Zinc	ppm	ASTM D5185m 370	385	402	381
Sulfur	ppm	ASTM D5185m 2500	933	903	969

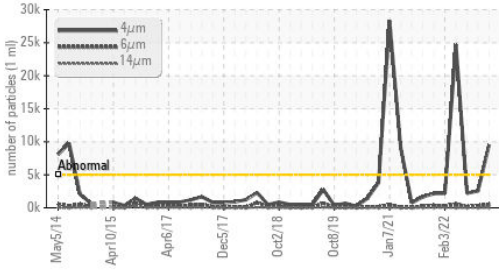
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	9	8	6
Sodium	ppm	ASTM D5185m	8	9	8
Potassium	ppm	ASTM D5185m >20	6	5	4
Water	%	ASTM D6304 >0.05	0.007	0.021	0.006
ppm Water	ppm	ASTM D6304 >500	76.4	217.8	61.3

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 9519	2564	2183
Particles >6µm	ASTM D7647	>1300	525	324	177
Particles >14µm	ASTM D7647	>160	18	12	7
Particles >21µm	ASTM D7647	>40	5	3	3
Particles >38µm	ASTM D7647	>10	1	0	1
Particles >71µm	ASTM D7647	>3	1	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/16/11	19/16/11	18/15/10

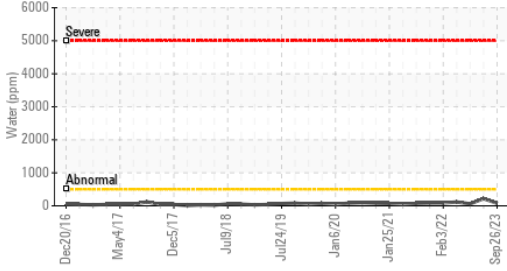
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	0.32	0.29	0.24

OIL ANALYSIS REPORT

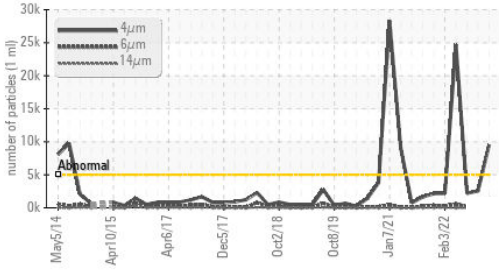
▲ Particle Trend



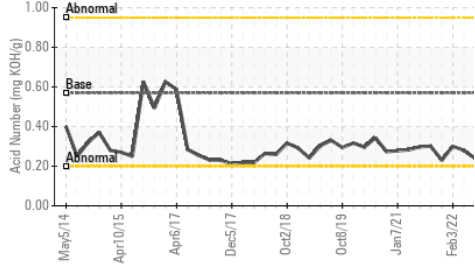
Water (KF)



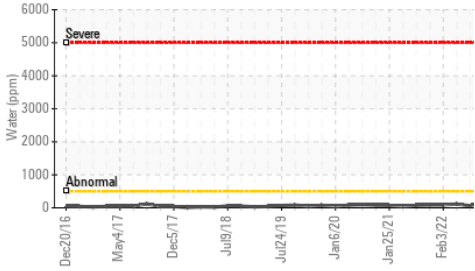
▲ Particle Trend



Acid Number



Water (KF)

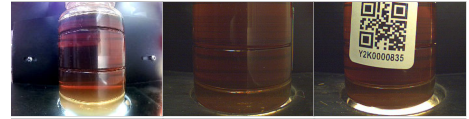


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

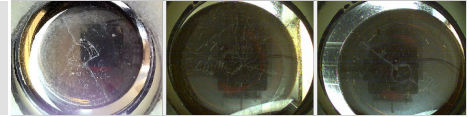
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	46.4	46.5	46.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

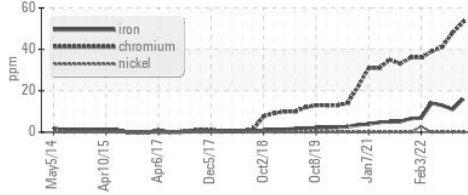


Bottom

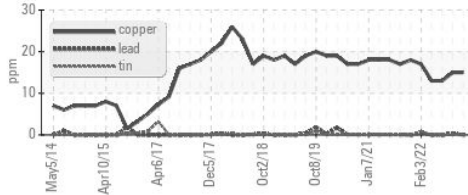


GRAPHS

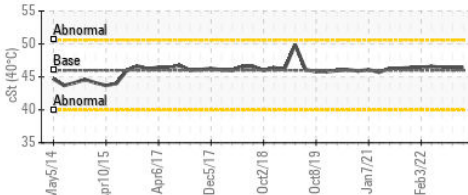
▲ Ferrous Alloys



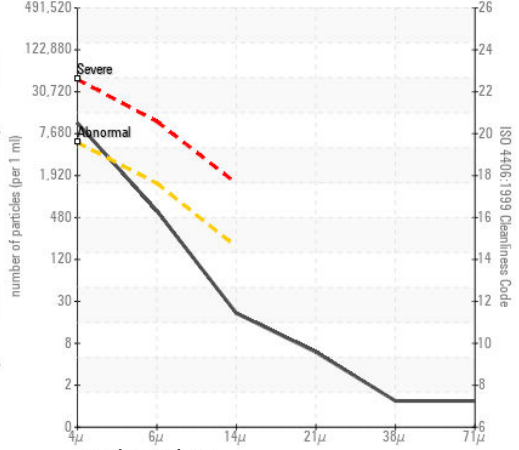
Non-ferrous Metals



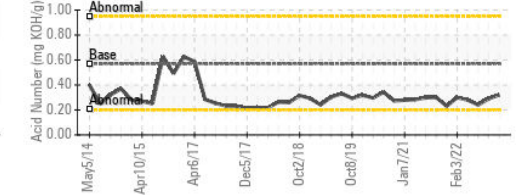
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : Y2K000865 **Received** : 02 Oct 2023
Lab Number : 05967011 **Diagnosed** : 04 Oct 2023
Unique Number : 10673562 **Diagnostician** : Jonathan Hester
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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