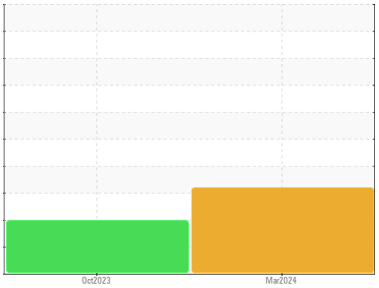
PROBLEM SUMMARY

Sample Rating Trend

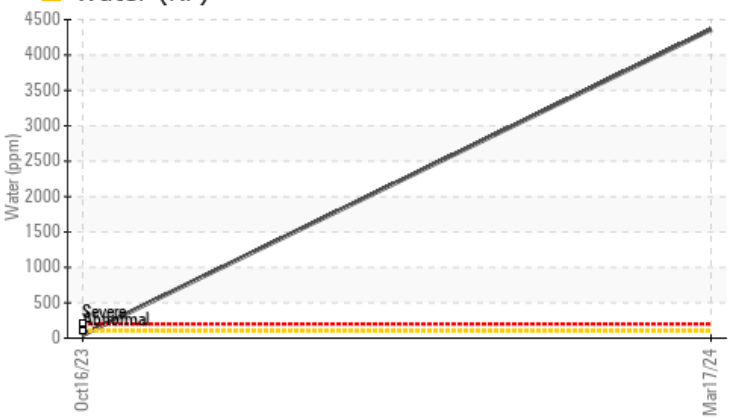


WATER

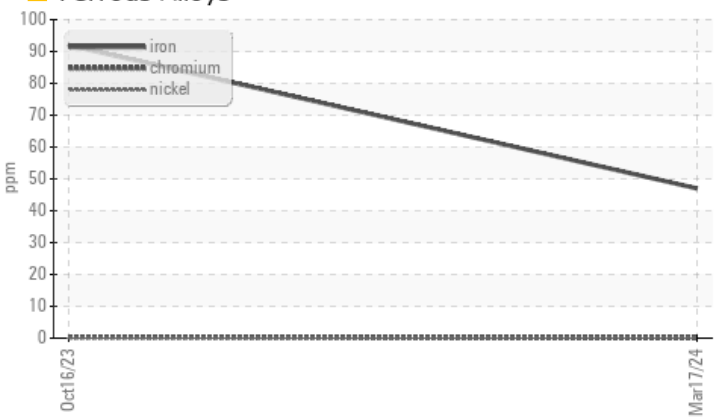
Machine Id
RC-4 (S/N 0075)
Component
Refrigeration Compressor
Fluid
FRICK COMPRESSOR OIL #11 (--- GAL)

COMPONENT CONDITION SUMMARY

Water (KF)



Ferrous Alloys



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	---
Iron	ppm	ASTM D5185m	>8	▲ **47**	▲ 92	---
Water	%	ASTM D6304	>0.01	▲ **0.435**	0.004	---
ppm Water	ppm	ASTM D6304	>100	▲ **4359**	44.4	---
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Emulsified Water	scalar	*Visual	>0.01	▲ **0.2%**	NEG	---

Customer Id: TYSKEYGAD
Sample No.: USP0006077
Lab Number: 06121626
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

16 Oct 2023 Diag: Doug Bogart

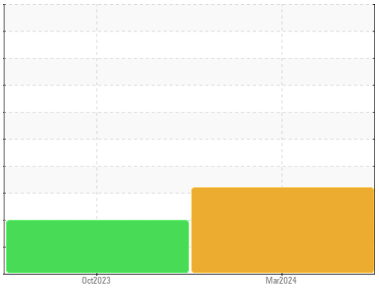
WEAR

We recommend an early resample to monitor this condition. Elemental data confirmed.The iron level is abnormal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
RC-4 (S/N 0075)
Component
Refrigeration Compressor
Fluid
FRICK COMPRESSOR OIL #11 (--- GAL)

DIAGNOSIS

▲ Recommendation
We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

▲ Wear
The iron level has decreased but is still abnormal.

▲ Contamination
There is a light concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Fluid Condition
An increase in the AN level is noted. Confirmed. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**USP0006077**	USP0002999	---
Sample Date		Client Info		**17 Mar 2024**	16 Oct 2023	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**SEVERE**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>8	▲ **47**	▲ 92	---
Chromium	ppm	ASTM D5185m	>2	**0**	<1	---
Nickel	ppm	ASTM D5185m		**0**	<1	---
Titanium	ppm	ASTM D5185m		**0**	0	---
Silver	ppm	ASTM D5185m	>2	**0**	0	---
Aluminum	ppm	ASTM D5185m	>3	**0**	0	---
Lead	ppm	ASTM D5185m	>2	**0**	0	---
Copper	ppm	ASTM D5185m	>8	**0**	1	---
Tin	ppm	ASTM D5185m	>4	**0**	0	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	---
Barium	ppm	ASTM D5185m		**0**	<1	---
Molybdenum	ppm	ASTM D5185m		**0**	0	---
Manganese	ppm	ASTM D5185m		**0**	0	---
Magnesium	ppm	ASTM D5185m		**0**	<1	---
Calcium	ppm	ASTM D5185m		**3**	36	---
Phosphorus	ppm	ASTM D5185m		**0**	0	---
Zinc	ppm	ASTM D5185m		**6**	25	---
Sulfur	ppm	ASTM D5185m		**0**	0	---

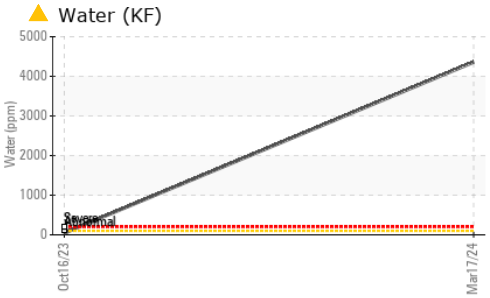
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	1	---
Sodium	ppm	ASTM D5185m		**0**	0	---
Potassium	ppm	ASTM D5185m	>20	**0**	1	---
Water	%	ASTM D6304	>0.01	▲ **0.435**	0.004	---
ppm Water	ppm	ASTM D6304	>100	▲ **4359**	44.4	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**---**	▲ 103978	---
Particles >6µm		ASTM D7647	>2500	**---**	▲ 9945	---
Particles >14µm		ASTM D7647	>320	**---**	40	---
Particles >21µm		ASTM D7647	>80	**---**	6	---
Particles >38µm		ASTM D7647	>20	**---**	0	---
Particles >71µm		ASTM D7647	>4	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**---**	▲ 24/20/12	---

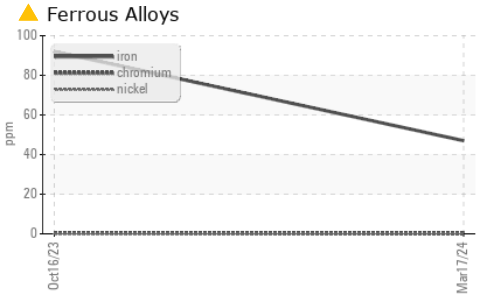
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974		**0.06**	0.015	---

OIL ANALYSIS REPORT

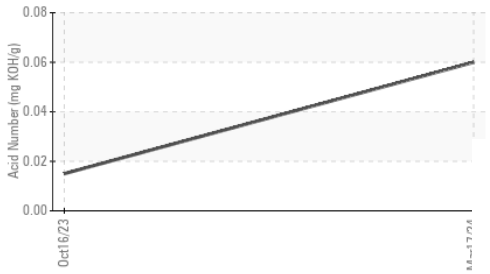
Water (KF)



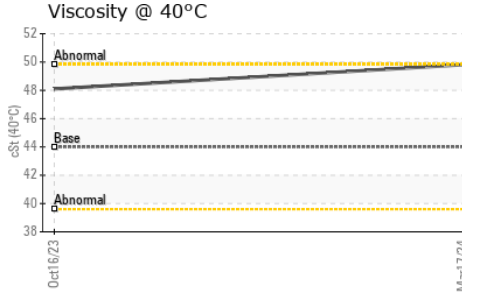
Ferrous Alloys



Acid Number

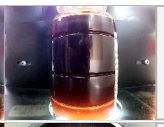


Viscosity @ 40°C



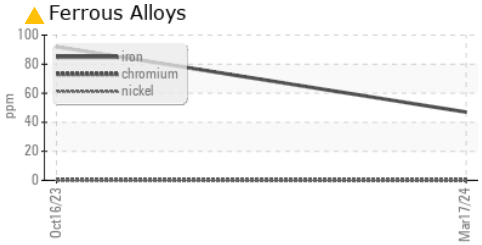
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.01	▲ **0.2%**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	44.0	**49.81**	48.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

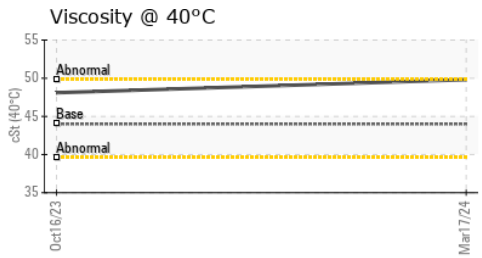
GRAPHS

Ferrous Alloys

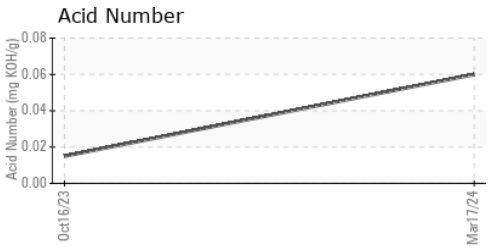


Non-ferrous Metals

Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0006077
Lab Number : 06121626
Unique Number : 10930459
Test Package : IND 2

Received : 18 Mar 2024
Tested : 25 Mar 2024
Diagnosed : 25 Mar 2024 - Doug Bogart

TYSON KEYSTONE - GADSDEN
2281 STEELE STATION RD
RAINBOW CITY, AL
US 35906
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)

T:
F: