



WEAR
CONTAMINATION
FLUID CONDITION

ATTENTION
NORMAL
NORMAL

Area

LAMPHER

Machine Id

ZF 20039516

Component

Starboard Transmission

Fluid

SAE 30W (--- GAL)

RECOMMENDATION

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

WEAR

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

CONTAMINATION

There is no indication of any contamination in the fluid.

FLUID CONDITION

The condition of the fluid is acceptable for the time in service.

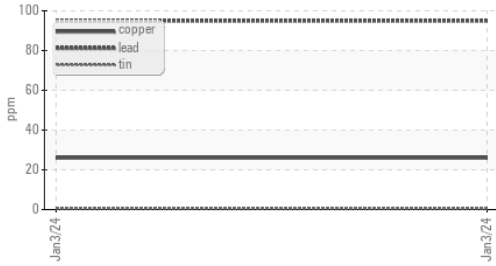
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA045597	---	---
Sample Date		Client Info		03 Jan 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ATTENTION	---	---

PQ		ASTM D8184		16	---	---
Iron	ppm	ASTM D5185m	>200	3	---	---
Chromium	ppm	ASTM D5185m	>10	0	---	---
Nickel	ppm	ASTM D5185m		0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>50	1	---	---
Lead	ppm	ASTM D5185m	>50	▲ 95	---	---
Copper	ppm	ASTM D5185m	>200	26	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	LIGHT	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

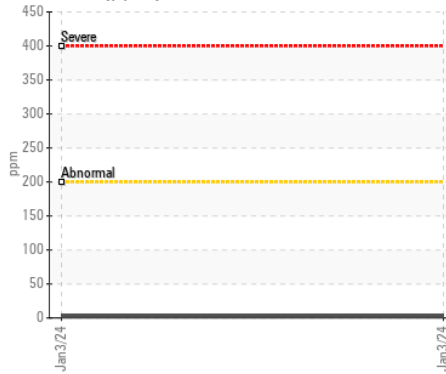
Silicon	ppm	ASTM D5185m	>50	2	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water		WC Method	>0.1	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---

Sodium	ppm	ASTM D5185m		83	---	---
Boron	ppm	ASTM D5185m		145	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		63	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		435	---	---
Calcium	ppm	ASTM D5185m		1135	---	---
Phosphorus	ppm	ASTM D5185m		694	---	---
Zinc	ppm	ASTM D5185m		762	---	---
Sulfur	ppm	ASTM D5185m		2917	---	---
Visc @ 40°C	cSt	ASTM D445	95.0	84.0	---	---

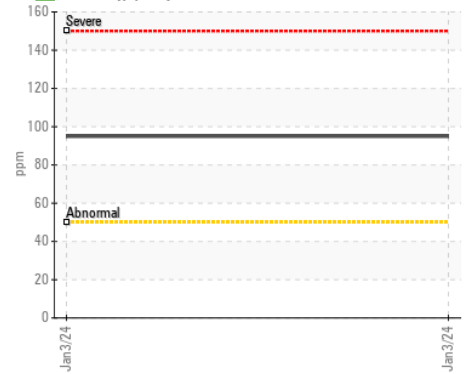
▲ Non-ferrous Metals



Iron (ppm)



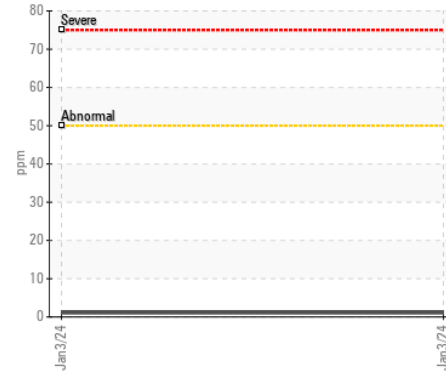
▲ Lead (ppm)



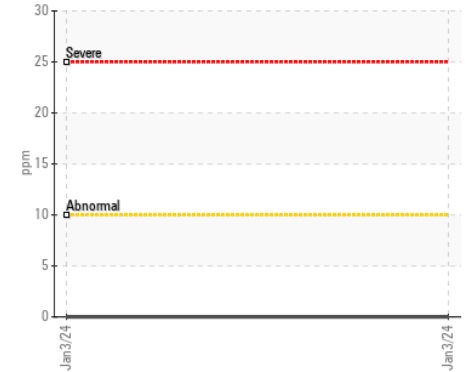
Viscosity @ 40°C



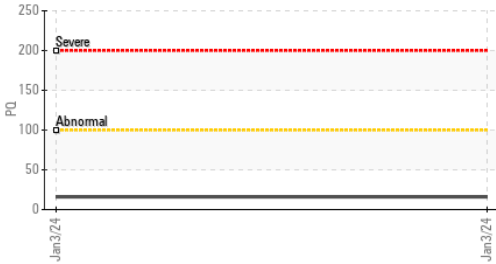
Aluminum (ppm)



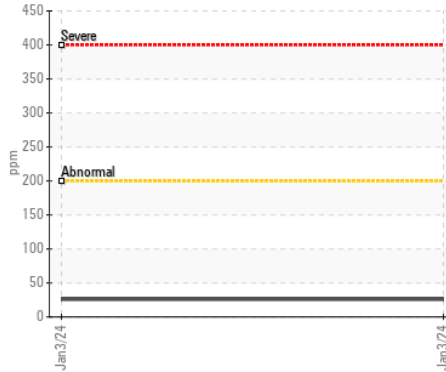
Chromium (ppm)



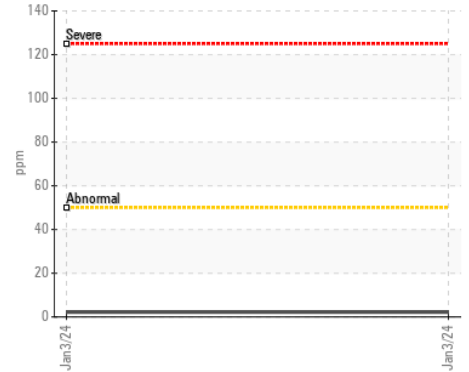
PQ



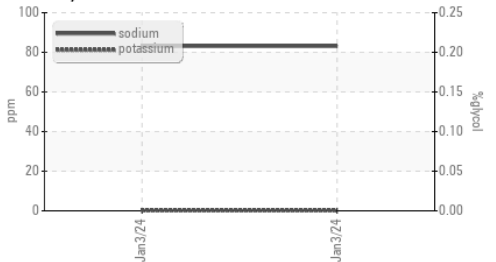
Copper (ppm)



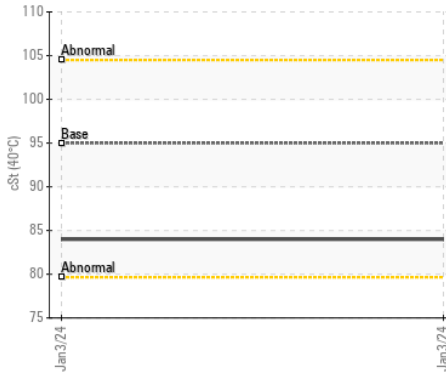
Silicon (ppm)



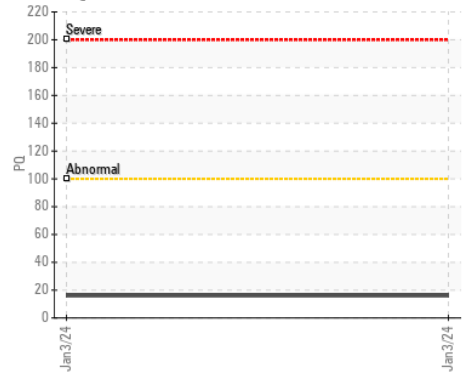
Glycol Contamination



Viscosity @ 40°C



PQ



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA045597 **Received** : 09 Jan 2024
Lab Number : 06055600 **Diagnosed** : 10 Jan 2024
Unique Number : 10821549 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, PQ)

Aqua Yacht Harbor Marina
 3832 Hwy. 25 North, 3832 Hwy. 25 North
 IUKA, MS
 US 38852
 Contact: DENNIS KANIZAI
 dkanizai@shmarinas.com

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: