



WEAR	<b>SEVERE</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**TWIN DISC BOM512396 - INBOARD**

Component  
**Starboard Gearbox**

Fluid  
**NAPA 30WT (9 QTS)**

### RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA060711	---	---
Sample Date		Client Info		30 Jan 2024	---	---
Machine Age	hrs	Client Info		12015	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---

### WEAR

Gear wear is indicated. Torque converter wear is indicated. The very high ferrous density (PQ) index indicates that severe wear is occurring.

PQ		ASTM D8184		▲ 180	---	---
Iron	ppm	ASTM D5185m	>200	▲ 261	---	---
Chromium	ppm	ASTM D5185m	>10	2	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		4	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	● 386	---	---
Lead	ppm	ASTM D5185m	>50	49	---	---
Copper	ppm	ASTM D5185m	>200	65	---	---
Tin	ppm	ASTM D5185m	>10	3	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

### CONTAMINATION

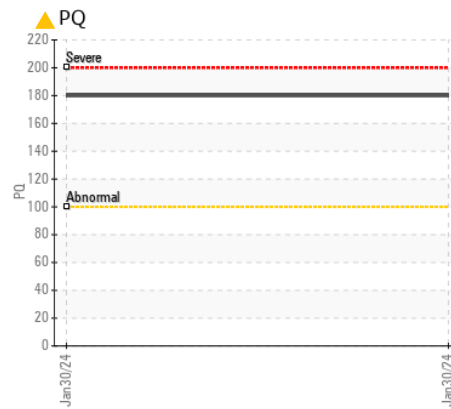
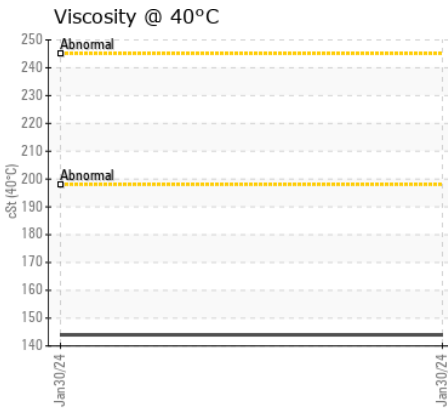
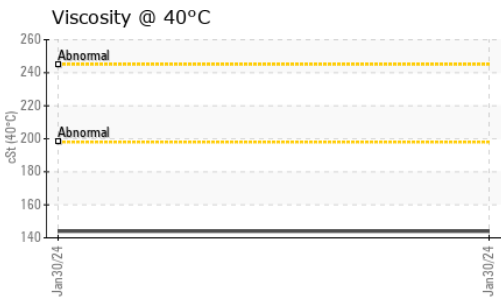
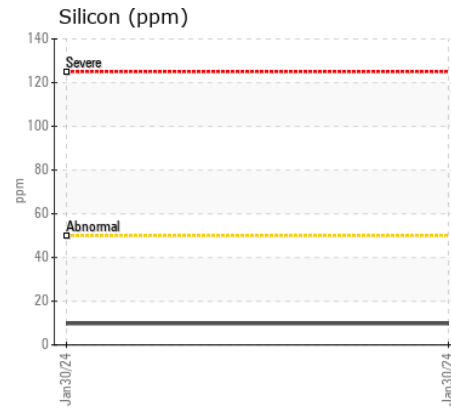
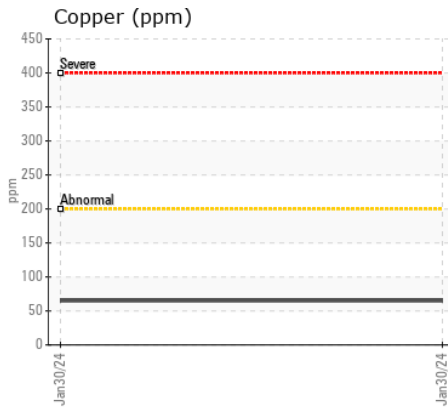
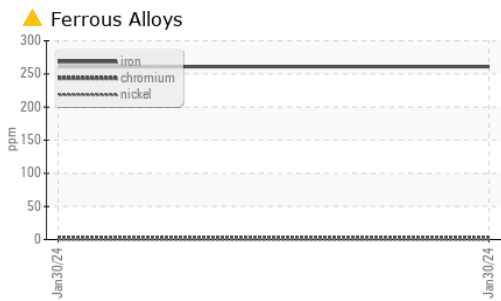
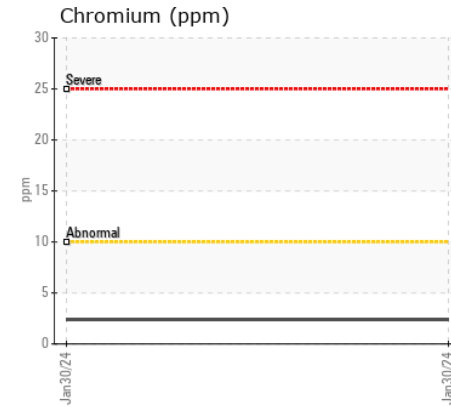
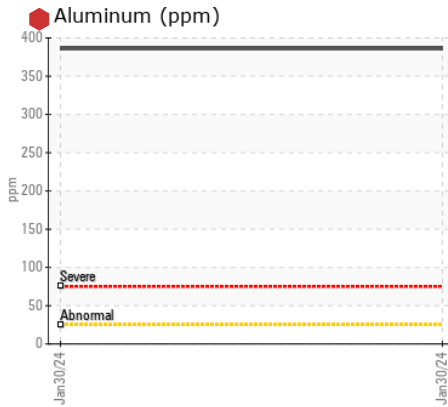
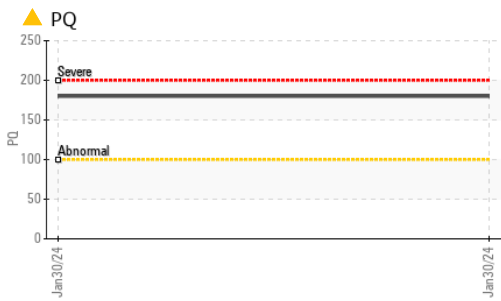
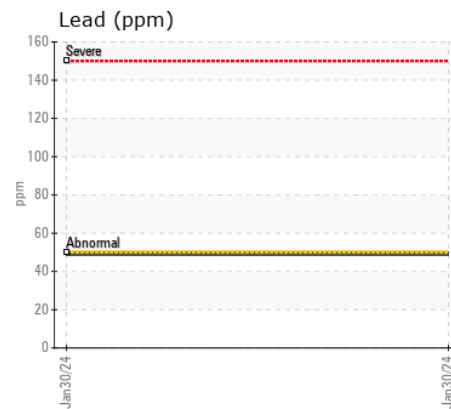
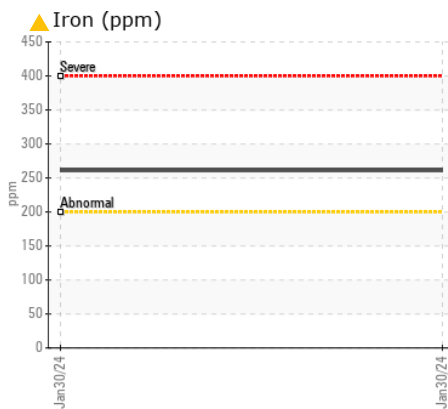
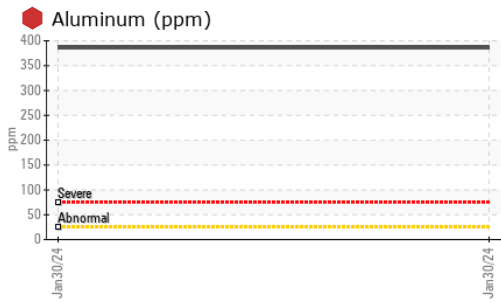
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	10	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Water		WC Method	>0.2	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	>0.2	NEG	---	---

### FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		345	---	---
Barium	ppm	ASTM D5185m		8	---	---
Molybdenum	ppm	ASTM D5185m		54	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		31	---	---
Calcium	ppm	ASTM D5185m		2990	---	---
Phosphorus	ppm	ASTM D5185m		997	---	---
Zinc	ppm	ASTM D5185m		1089	---	---
Sulfur	ppm	ASTM D5185m		4628	---	---
Visc @ 40°C	cSt	ASTM D445		144	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA060711 **Received** : 01 Feb 2024  
**Lab Number** : 06077848 **Diagnosed** : 05 Feb 2024  
**Unique Number** : 10859939 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: PQ )

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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