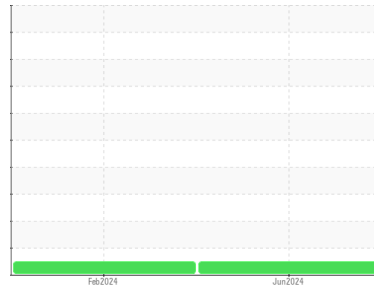


# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**TWIN DISC STEPHEN T**  
Component  
**Starboard Gearbox**  
Fluid  
**KENDALL SUPER-D 3 SAE 15W40 (--- GAL)**

**DIAGNOSIS**

**Recommendation**  
Resample at the next service interval to monitor.

**Wear**  
All component wear rates are normal.

**Contamination**  
There is no indication of any contamination in the oil.

**Fluid Condition**  
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>HRE0000264</b>	WC0843965	---
Sample Date	Client Info			<b>24 Jun 2024</b>	23 Feb 2024	---
Machine Age	hrs	Client Info		<b>23861</b>	21084	---
Oil Age	hrs	Client Info		<b>1000</b>	1000	---
Oil Changed	Client Info			<b>Not Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	NEG	---

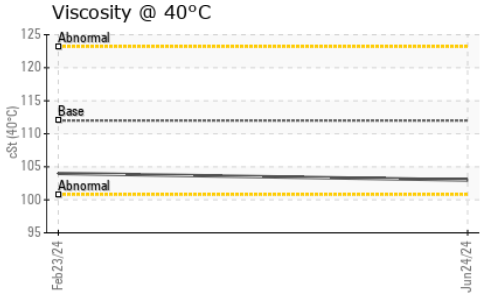
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>16</b>	15	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>12</b>	9	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	---
Lead	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>200	<b>8</b>	8	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>35</b>	31	---
Barium	ppm	ASTM D5185m		<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m		<b>45</b>	48	---
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>481</b>	504	---
Calcium	ppm	ASTM D5185m		<b>1967</b>	1800	---
Phosphorus	ppm	ASTM D5185m		<b>1052</b>	988	---
Zinc	ppm	ASTM D5185m	1450	<b>1170</b>	1084	---
Sulfur	ppm	ASTM D5185m		<b>6037</b>	7279	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>3</b>	3	---
Sodium	ppm	ASTM D5185m		<b>3</b>	5	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	---

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

# OIL ANALYSIS REPORT

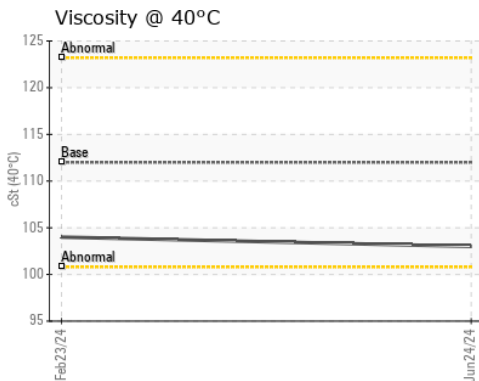
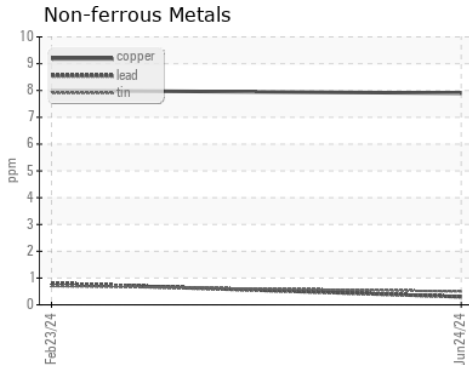
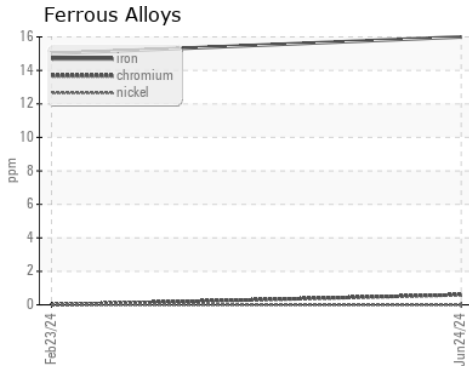


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	112	<b>103</b>	104	---

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HRE0000264      **Received** : 11 Jul 2024  
**Lab Number** : **06234123**      **Tested** : 12 Jul 2024  
**Unique Number** : 11122957      **Diagnosed** : 14 Jul 2024 - Don Baldrige  
**Test Package** : FLEET

**SUPERIOR MARINE**  
 201 KELLY LANE  
 CHESAPEAKE, OH  
 US 45619

Contact: DARRELL KEARNS  
 darrellkearns@superiormarineinc.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: