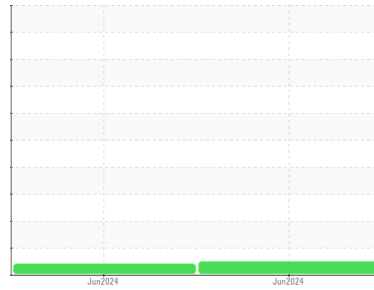


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

TWIN DISC CAPTAIN JEFF IRBY

Component

Starboard Gearbox

Fluid

KENDALL D3 40WT (--- 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			HRE0000281	HRE0000274	---
Sample Date	Client Info			17 Jun 2024	05 Jun 2024	---
Machine Age	hrs	Client Info		3266	3256	---
Oil Age	hrs	Client Info		1000	1000	---
Oil Changed	Client Info			Not Chngd	Not Chngd	---
Sample Status				NORMAL	ABNORMAL	---

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

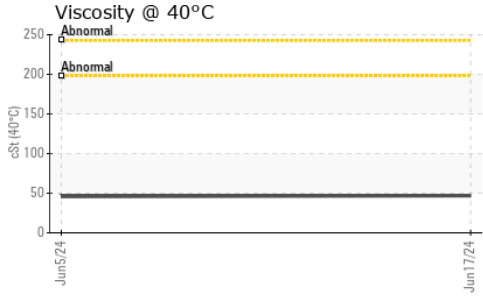
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	117	119	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		4	4	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	<1	0	---
Lead	ppm	ASTM D5185m	>50	0	0	---
Copper	ppm	ASTM D5185m	>200	9	9	---
Tin	ppm	ASTM D5185m	>10	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		102	124	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		14	15	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		804	757	---
Calcium	ppm	ASTM D5185m		1281	1234	---
Phosphorus	ppm	ASTM D5185m		1149	1039	---
Zinc	ppm	ASTM D5185m		1232	1152	---
Sulfur	ppm	ASTM D5185m		4173	4054	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	4	3	---
Sodium	ppm	ASTM D5185m		20	19	---
Potassium	ppm	ASTM D5185m	>20	7	<1	---

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	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Free Water	scalar	*Visual		NEG	NEG	---

OIL ANALYSIS REPORT



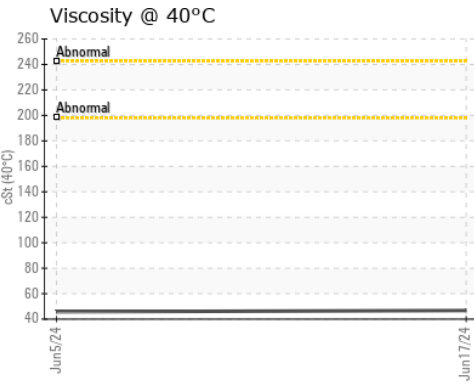
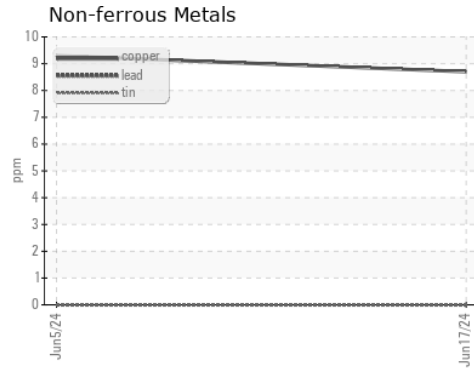
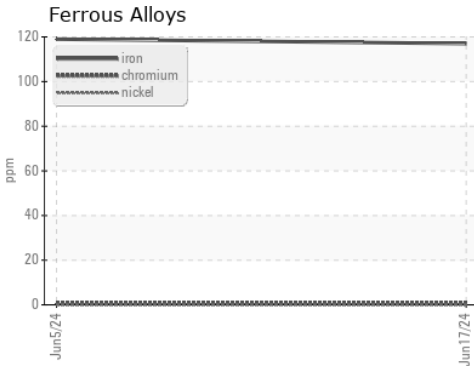
FLUID PROPERTIES	method	limit/base	current	history1	history2
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Visc @ 40°C	cSt	ASTM D445	46.8	45.8	---
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SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color	no image	no image	no image
Bottom	no image	no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HRE0000281 **Received** : 20 Jun 2024
Lab Number : **06216384** **Tested** : 21 Jun 2024
Unique Number : 11089248 **Diagnosed** : 21 Jun 2024 - Wes Davis
Test Package : FLEET

SUPERIOR MARINE
 201 KELLY LANE
 CHESAPEAKE, OH
 US 45619

To discuss this sample report, contact Customer Service at 1-800-237-1369. Contact: DARRELL KEARNS
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. darrellkearns@superiormarineinc.com
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) T:
 F: