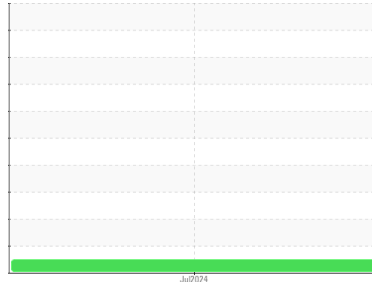


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
TWIN DISC LD MANNNS
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			HRE0000265	---	---
Sample Date	Client Info			05 Jul 2024	---	---
Machine Age	hrs	Client Info		34746	---	---
Oil Age	hrs	Client Info		1000	---	---
Oil Changed	Client Info			Not Chngd	---	---
Sample Status				NORMAL	---	---

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

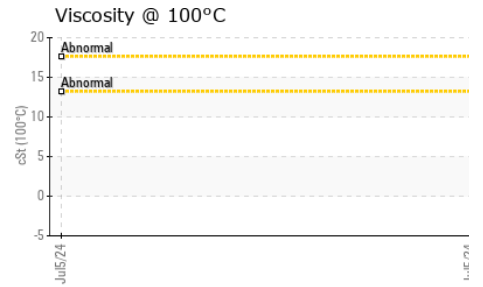
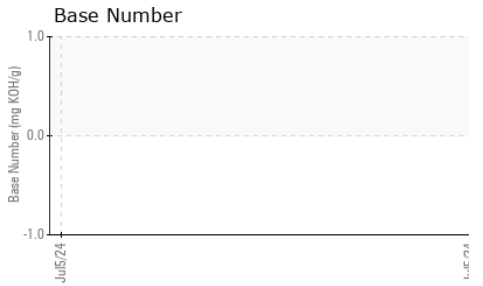
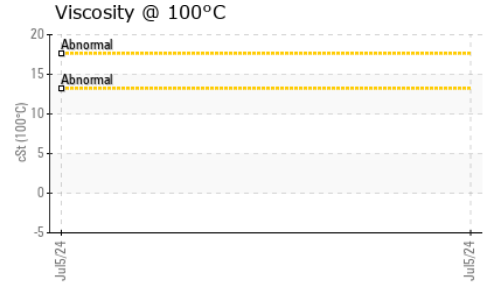
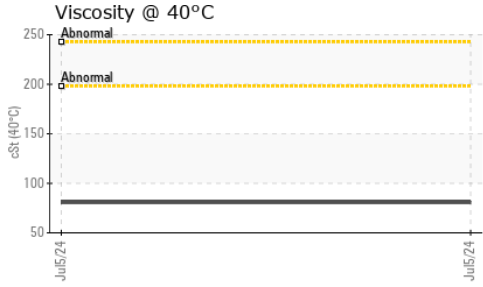
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	30	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		9	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>25	2	---	---
Lead	ppm	ASTM D5185m	>50	0	---	---
Copper	ppm	ASTM D5185m	>200	4	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
Cadmium	ppm	ASTM D5185m		<1	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		45	---	---
Barium	ppm	ASTM D5185m		1	---	---
Molybdenum	ppm	ASTM D5185m		10	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		260	---	---
Calcium	ppm	ASTM D5185m		1855	---	---
Phosphorus	ppm	ASTM D5185m		882	---	---
Zinc	ppm	ASTM D5185m		911	---	---
Sulfur	ppm	ASTM D5185m		4757	---	---

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

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

OIL ANALYSIS REPORT



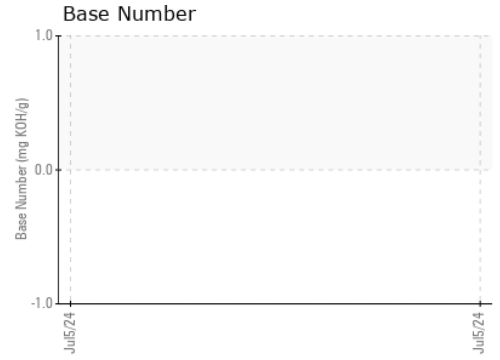
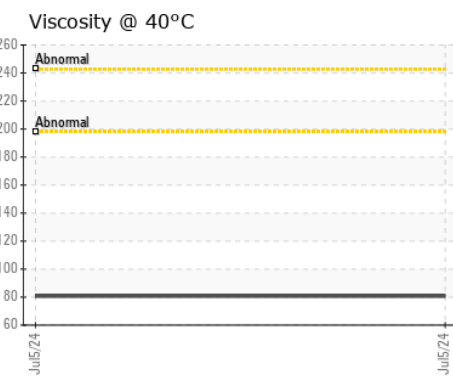
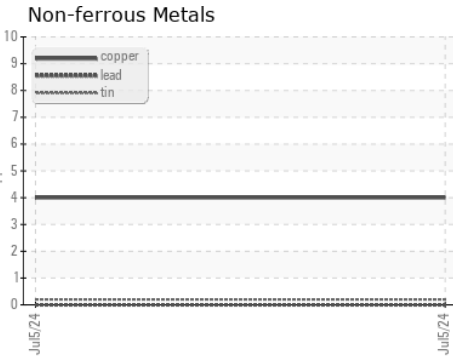
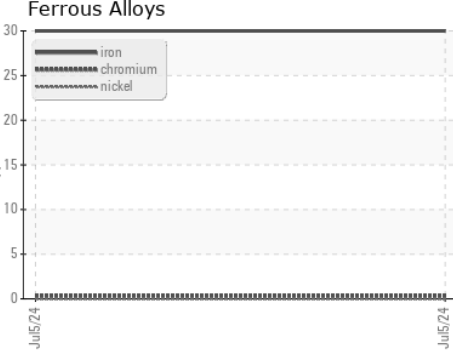
FLUID PROPERTIES	method	limit/base	current	history1	history2
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Visc @ 40°C	cSt	ASTM D445	80.7	---	---
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SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color	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. : HRE0000265 **Received** : 11 Jul 2024
Lab Number : **06234100** **Tested** : 14 Jul 2024
Unique Number : 11122934 **Diagnosed** : 14 Jul 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FT-IR, KV100, TBN)

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)