



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HRE0000264	WC0843965	---
Sample Date		Client Info		24 Jun 2024	23 Feb 2024	---
Machine Age	hrs	Client Info		23861	21084	---
Oil Age	hrs	Client Info		1000	1000	---
Filter Age	hrs	Client Info		1000	1000	---
Oil Changed		Client Info		Not Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	16	15	---
Chromium	ppm	ASTM D5185m	>10	<1	0	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		12	9	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	2	<1	---
Lead	ppm	ASTM D5185m	>50	<1	<1	---
Copper	ppm	ASTM D5185m	>200	8	8	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

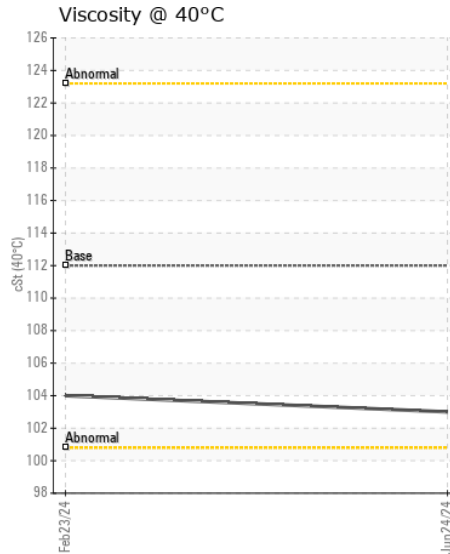
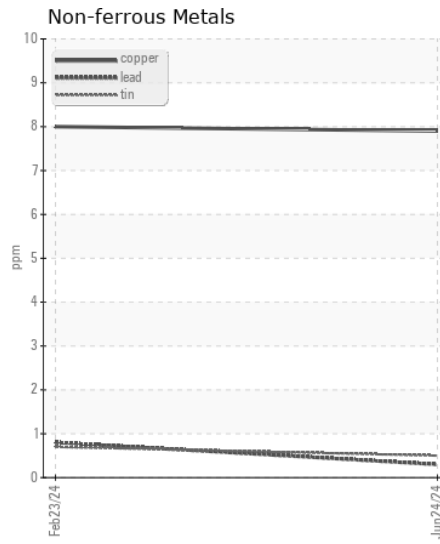
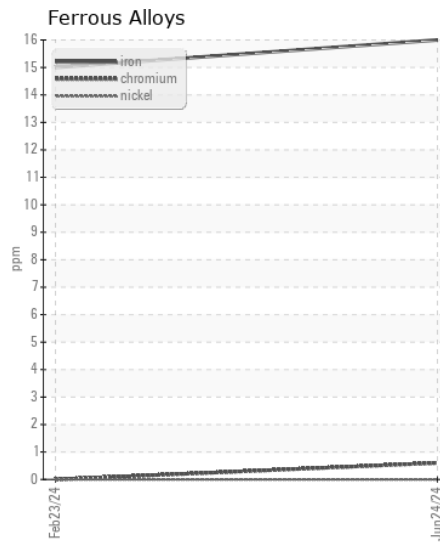
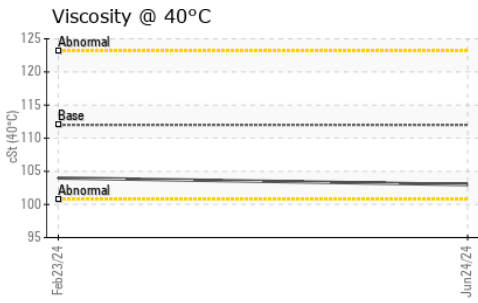
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	3	3	---
Potassium	ppm	ASTM D5185m	>20	2	1	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	NONE	---
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	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		3	5	---
Boron	ppm	ASTM D5185m		35	31	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		45	48	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		481	504	---
Calcium	ppm	ASTM D5185m		1967	1800	---
Phosphorus	ppm	ASTM D5185m		1052	988	---
Zinc	ppm	ASTM D5185m	1450	1170	1084	---
Sulfur	ppm	ASTM D5185m		6037	7279	---
Visc @ 40°C	cSt	ASTM D445	112	103	104	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HRE0000264
Lab Number : 06234123
Unique Number : 11122957
Test Package : FLEET

Received : 11 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 14 Jul 2024 - Don Baldrige

SUPERIOR MARINE
 201 KELLY LANE
 CHESAPEAKE, OH
 US 45619

Contact: DARRELL KEARNS
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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: