



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
BRIAN CAPO
Machine Id
VPA050717 - OUTDRIVE
Component
Starboard Gearbox
Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA050717	---	---
Sample Date		Client Info		03 Apr 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Gear wear is indicated.

PQ		ASTM D8184		34	---	---
Iron	ppm	ASTM D5185m	>150	▲ 160	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	4	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>5	6	---	---
Lead	ppm	ASTM D5185m	>65	0	---	---
Copper	ppm	ASTM D5185m	>80	3	---	---
Tin	ppm	ASTM D5185m	>8	0	---	---
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.

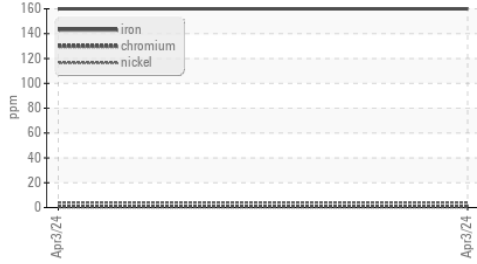
Silicon	ppm	ASTM D5185m	>20	4	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

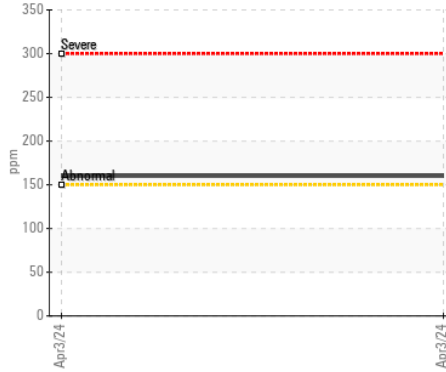
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>170	6	---	---
Boron	ppm	ASTM D5185m	400	104	---	---
Barium	ppm	ASTM D5185m	200	0	---	---
Molybdenum	ppm	ASTM D5185m	12	<1	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m	12	<1	---	---
Calcium	ppm	ASTM D5185m	150	4	---	---
Phosphorus	ppm	ASTM D5185m	1650	1511	---	---
Zinc	ppm	ASTM D5185m	125	20	---	---
Sulfur	ppm	ASTM D5185m	22500	29107	---	---
Visc @ 40°C	cSt	ASTM D445	143	190	---	---

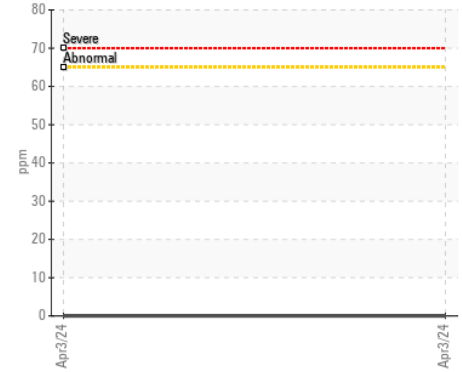
▲ Ferrous Alloys



▲ Iron (ppm)



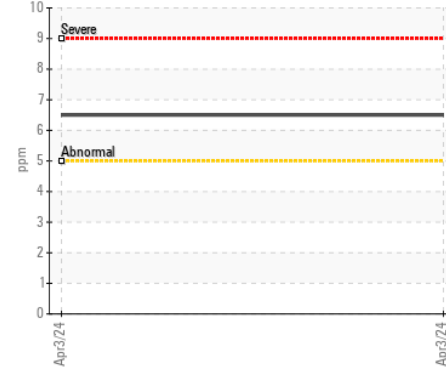
Lead (ppm)



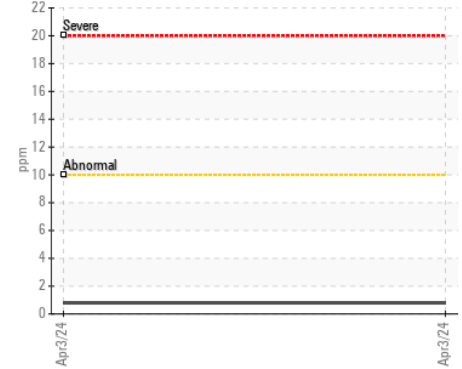
Viscosity @ 40°C



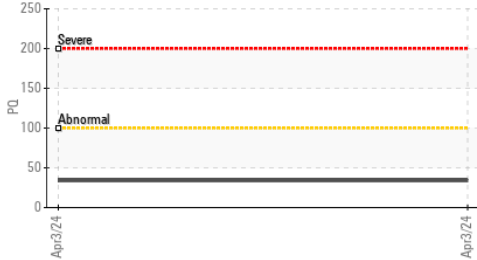
Aluminum (ppm)



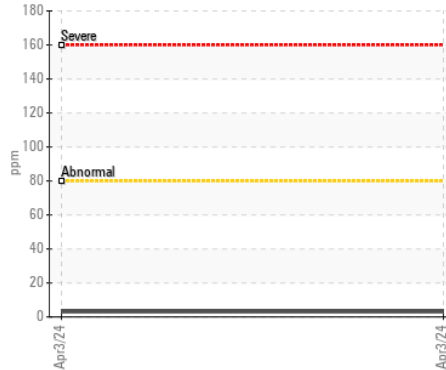
Chromium (ppm)



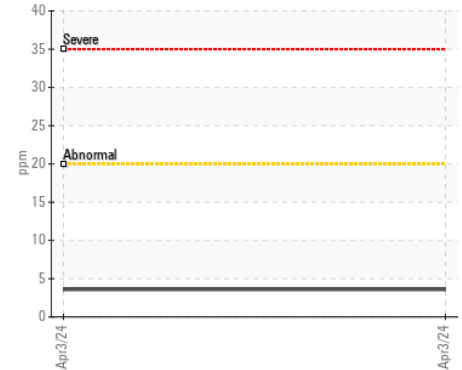
PQ



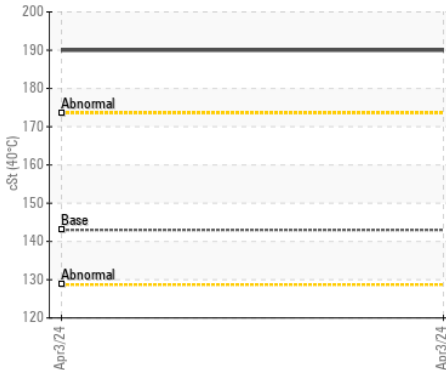
Copper (ppm)



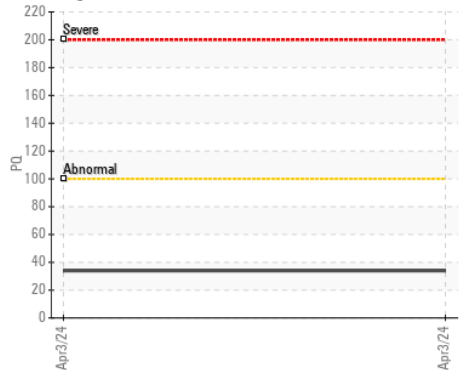
Silicon (ppm)



Viscosity @ 40°C



PQ



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : VPA050717 Received : 12 Apr 2024
 Lab Number : 06147652 Tested : 15 Apr 2024
 Unique Number : 10977730 Diagnosed : 16 Apr 2024 - Jonathan Hester
 Test Package : MOB 1 (Additional Tests: PQ)

Steve's Marine Service West
 255 S. Ketcham Ave.
 AMITYVILLE, NY
 US 11701
 Contact: Steven Stavracos
 steve@stevesmarine.com
 T: (631)264-1600
 F: (631).26-4.1601

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)