

Area
[15123]
 Machine Id
ZF 20092499 - INBOARD
 Component
Starboard Gearbox
 Fluid
DIESEL ENGINE OIL SAE 15W40 (1 GAL)



DIAGNOSIS

- ▲ Recommendation**
 No corrective action is recommended at this time. Resample at the next service interval to monitor.
- ▲ Wear**
 The copper level is abnormal. All other 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		VPA036426	---	---
Sample Date	Client Info		27 Sep 2023	---	---
Machine Age	hrs	Client Info	1085	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			ATTENTION	---	---

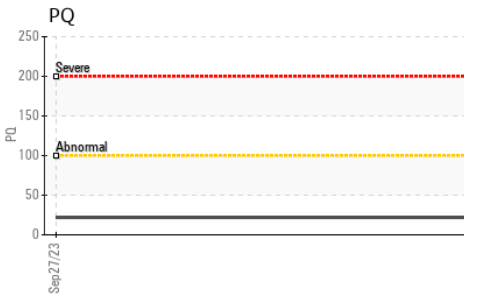
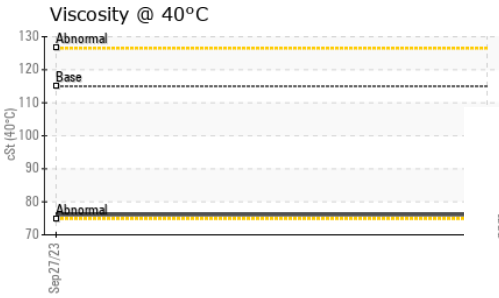
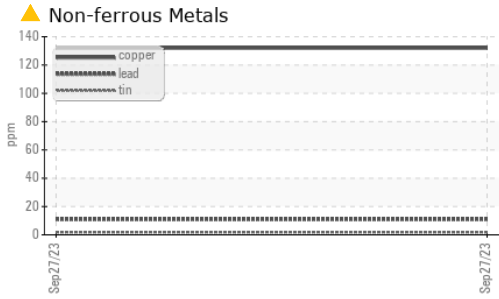
WEAR METALS	method	limit/base	current	history1	history2
PQ	ASTM D8184		22	---	---
Iron	ppm	ASTM D5185m >150	56	---	---
Chromium	ppm	ASTM D5185m >10	<1	---	---
Nickel	ppm	ASTM D5185m >10	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	<1	---	---
Aluminum	ppm	ASTM D5185m >5	3	---	---
Lead	ppm	ASTM D5185m >65	11	---	---
Copper	ppm	ASTM D5185m >80	▲ 132	---	---
Tin	ppm	ASTM D5185m >8	2	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	7	---	---
Barium	ppm	ASTM D5185m 10	0	---	---
Molybdenum	ppm	ASTM D5185m 100	12	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 450	669	---	---
Calcium	ppm	ASTM D5185m 3000	943	---	---
Phosphorus	ppm	ASTM D5185m 1150	908	---	---
Zinc	ppm	ASTM D5185m 1350	1037	---	---
Sulfur	ppm	ASTM D5185m 4250	3003	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	2	---	---
Sodium	ppm	ASTM D5185m >158	141	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

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	NONE	---	---
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	---	---

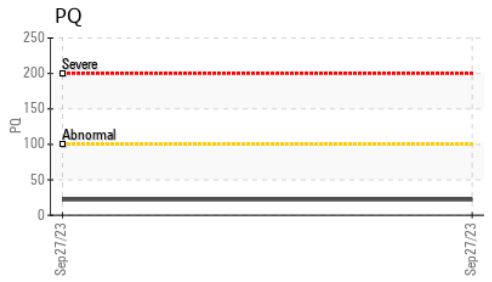
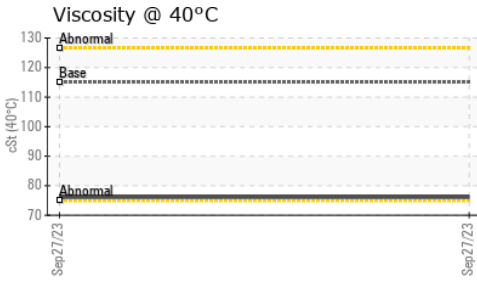
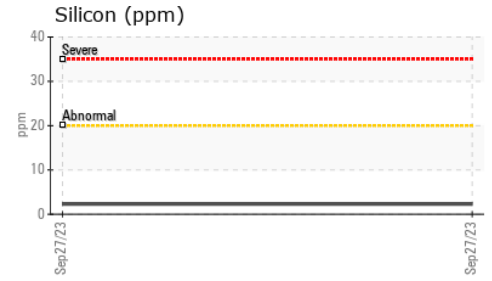
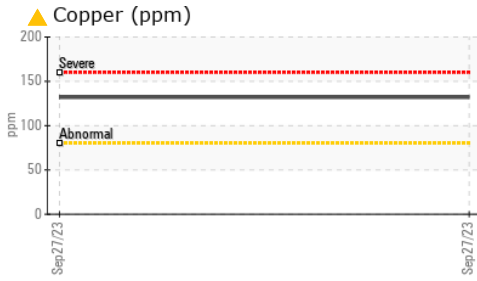
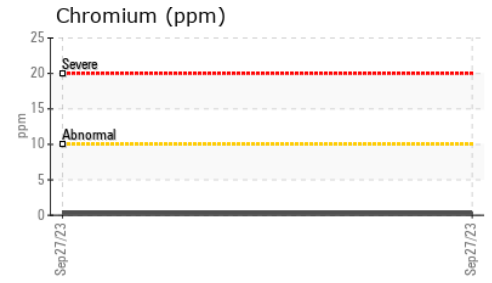
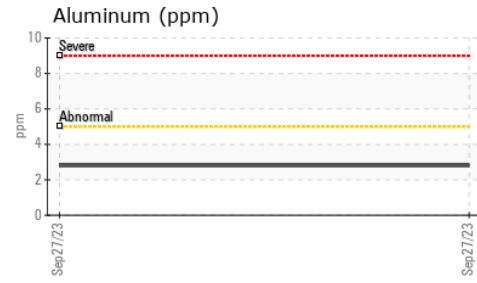
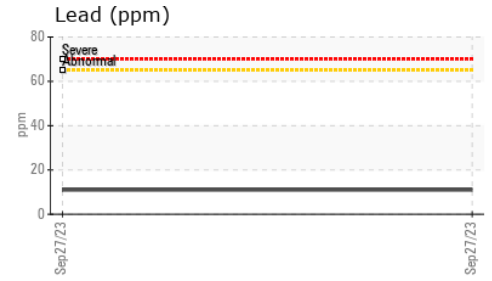
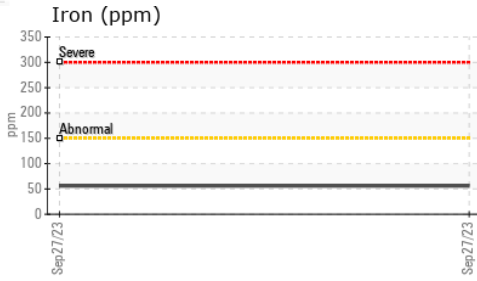
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 115	76.1	---	---

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA036426 **Received** : 02 Oct 2023
Lab Number : 05966613 **Diagnosed** : 04 Oct 2023
Unique Number : 10673164 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: PQ)

W J Clark Inc
 4517 Dunning Road
 NORFOLK, VA
 US 23518
 Contact: WALTER CLARK
 ychtfixer@aol.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)

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F: