



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**DAVID BOVEE [ANTHONY]**

Machine Id  
**ZF 20075809 - INBOARD**

Component  
**Starboard Gearbox**

Fluid  
**CHEVRON DELO 400 SAE 30 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VPA059096</b>	VPA044977	---
Sample Date		Client Info		<b>05 Feb 2024</b>	21 Dec 2022	---
Machine Age	hrs	Client Info		<b>1084</b>	991	---
Oil Age	hrs	Client Info		<b>93</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	N/A	---
Filter Changed		Client Info		<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

PQ		ASTM D8184		<b>15</b>	9	---
Iron	ppm	ASTM D5185m	>150	<b>11</b>	6	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	---
Lead	ppm	ASTM D5185m	>65	<b>24</b>	32	---
Copper	ppm	ASTM D5185m	>80	<b>32</b>	38	---
Tin	ppm	ASTM D5185m	>8	<b>2</b>	3	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

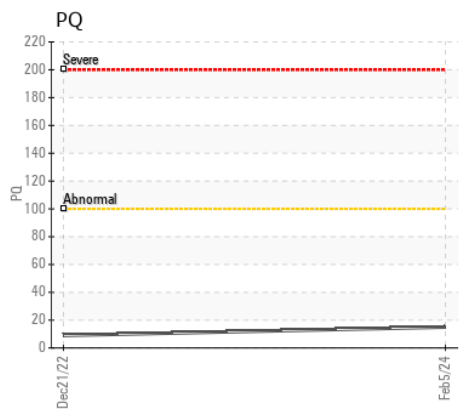
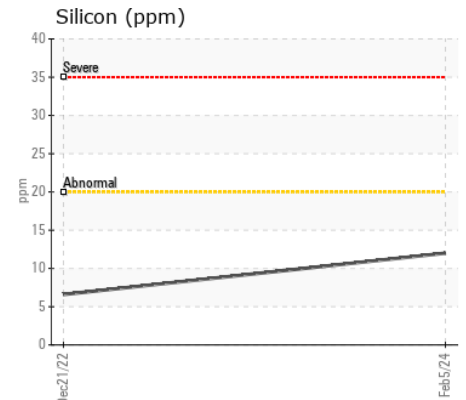
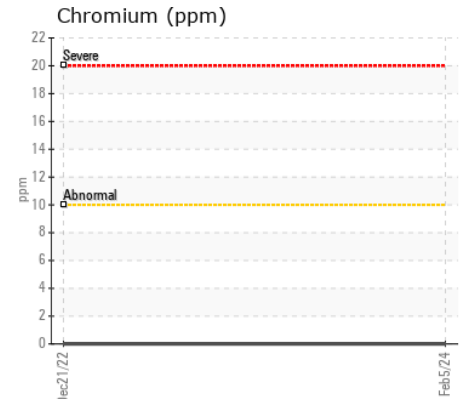
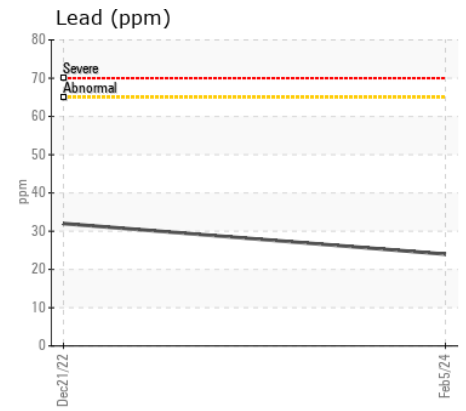
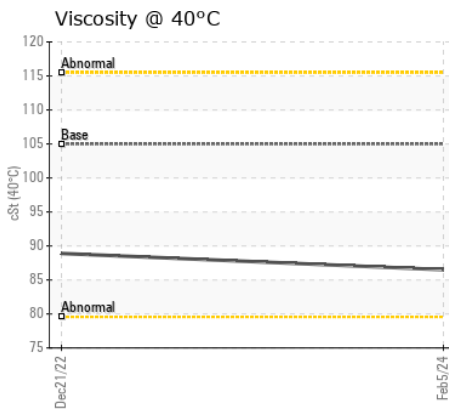
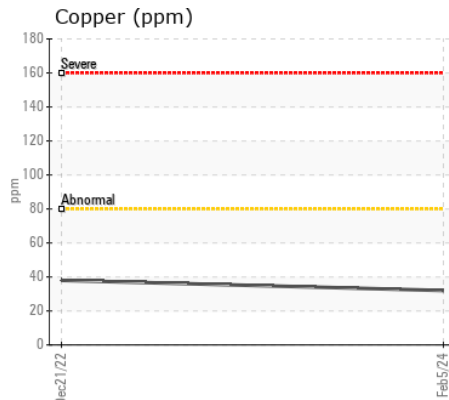
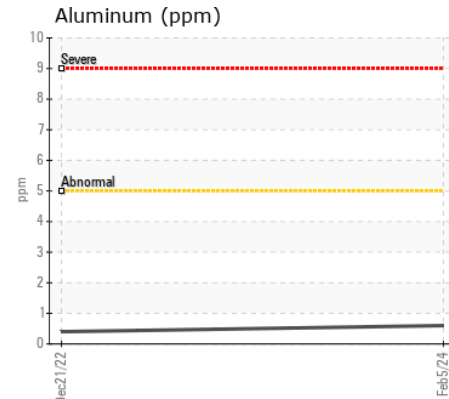
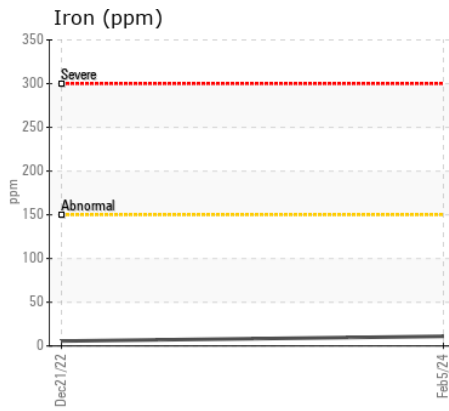
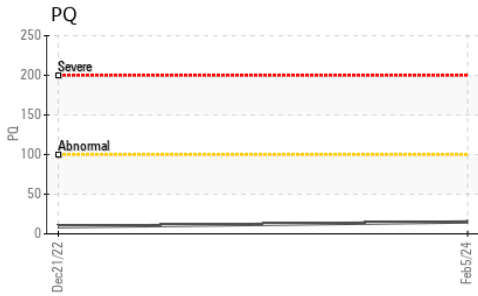
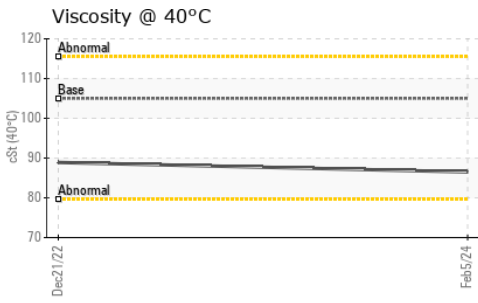
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>12</b>	7	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>9</b>	0	---
Boron	ppm	ASTM D5185m		<b>501</b>	405	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>48</b>	51	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>100</b>	30	---
Calcium	ppm	ASTM D5185m		<b>3249</b>	3585	---
Phosphorus	ppm	ASTM D5185m	1160	<b>1068</b>	1043	---
Zinc	ppm	ASTM D5185m	1270	<b>1154</b>	1179	---
Sulfur	ppm	ASTM D5185m		<b>4378</b>	5325	---
Visc @ 40°C	cSt	ASTM D445	105	<b>86.5</b>	88.9	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA059096 **Received** : 09 Feb 2024  
**Lab Number** : 06085515 **Tested** : 12 Feb 2024  
**Unique Number** : 10872960 **Diagnosed** : 13 Feb 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: PQ )

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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)