



# OIL ANALYSIS REPORT

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

Machine Id  
**F/V ARCTIC FURY (S/N 37259081)**  
 Component  
**Starboard Genset**  
 Fluid  
**MOBIL DELVAC MX 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PE0001376</b>	PE0001373	PE0001379
Sample Date		Client Info		<b>22 Jun 2024</b>	19 May 2024	26 Sep 2023
Machine Age	hrs	Client Info		<b>13998</b>	13966	13513
Oil Age	hrs	Client Info		<b>0</b>	582	250
Filter Age	hrs	Client Info		<b>589</b>	582	250
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	SEVERE	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>3</b>	3	3
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>12	<b>1</b>	<1	2
Lead	ppm	ASTM D5185m	>17	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	4	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

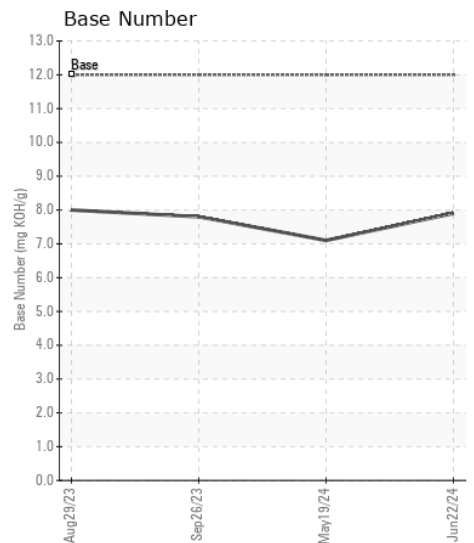
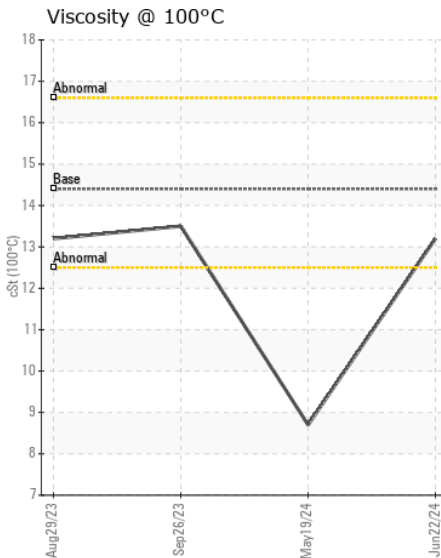
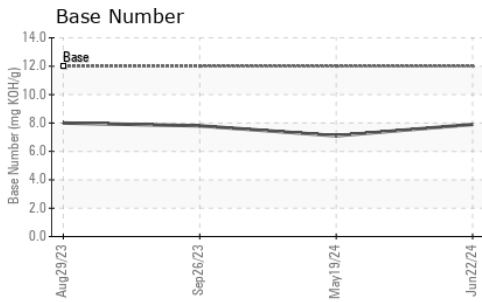
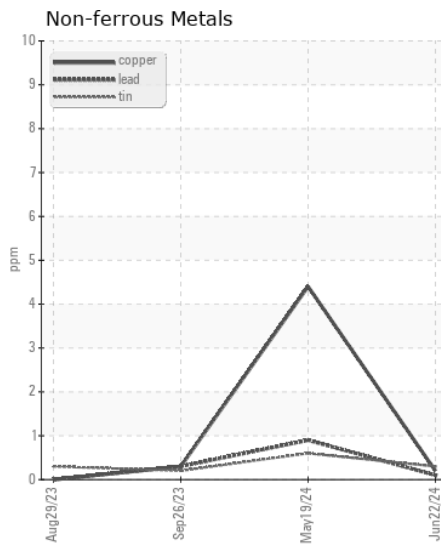
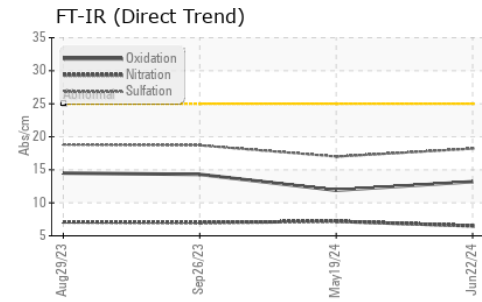
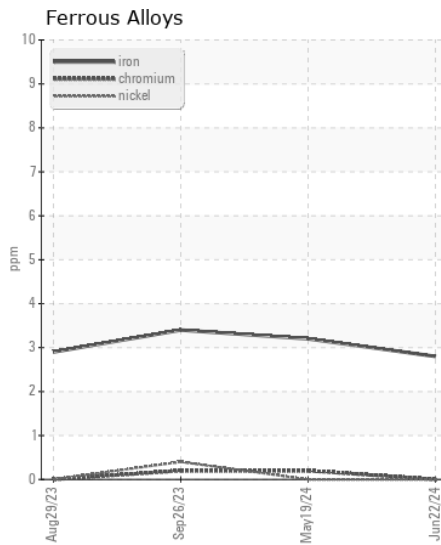
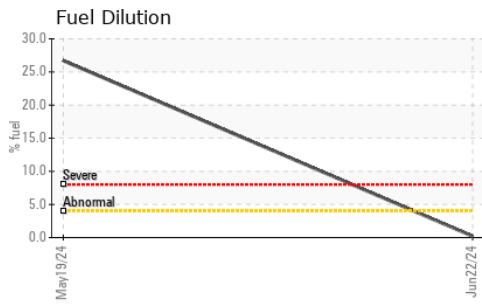
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	8	5
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	3	13
Fuel	%	ASTM D3524	>4.0	<b>0.2</b>	▲ 26.7	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.5</b>	7.2	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.2</b>	17.0	18.7
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	1
Boron	ppm	ASTM D5185m		<b>105</b>	76	123
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>5</b>	5	10
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>164</b>	171	371
Calcium	ppm	ASTM D5185m		<b>2120</b>	1595	1715
Phosphorus	ppm	ASTM D5185m		<b>958</b>	709	865
Zinc	ppm	ASTM D5185m		<b>1112</b>	767	994
Sulfur	ppm	ASTM D5185m		<b>4147</b>	2832	3688
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.2</b>	11.9	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	12	<b>7.9</b>	7.1	7.8
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.2</b>	▲ 8.7	13.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : PE0001376

**Lab Number** : 06231895

**Unique Number** : 11115388

**Test Package** : CONST ( Additional Tests: FT-IR, ICP, KV100, PercentFuel, SCREEN, TBN

**Received** : 09 Jul 2024

**Tested** : 12 Jul 2024

**Diagnosed** : 12 Jul 2024 - Sean Felton

**THE FURY GROUP**

4005 20TH AVE W

SEATTLE, WA

US 98199

Contact: Service Manager

OFFICE@FURYGROUP.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)

T:

F: