



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**LAMPHER**  
Machine Id  
**VOLVO PENTA 1012387662**  
Component  
**Starboard Diesel Engine**  
Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA056835	---	---
Sample Date		Client Info		03 Jan 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				NORMAL	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	10	---	---
Chromium	ppm	ASTM D5185m	>6	<1	---	---
Nickel	ppm	ASTM D5185m	>2	1	---	---
Titanium	ppm	ASTM D5185m	>2	<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>20	2	---	---
Lead	ppm	ASTM D5185m	>95	<1	---	---
Copper	ppm	ASTM D5185m	>85	3	---	---
Tin	ppm	ASTM D5185m	>9	1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

**CONTAMINATION**

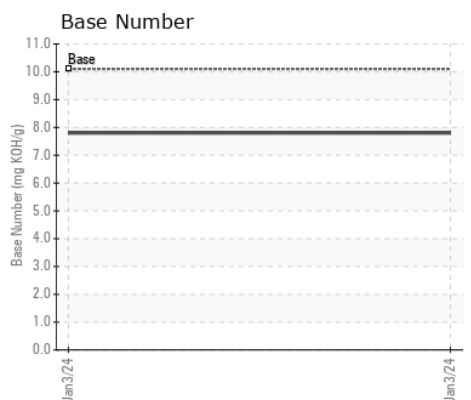
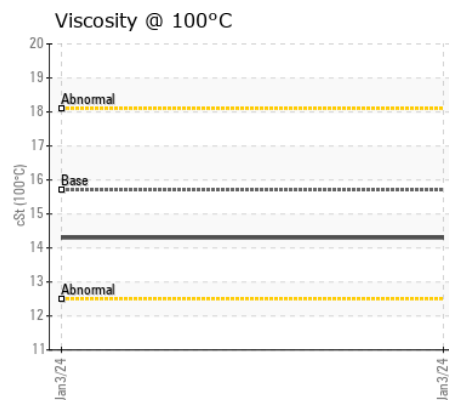
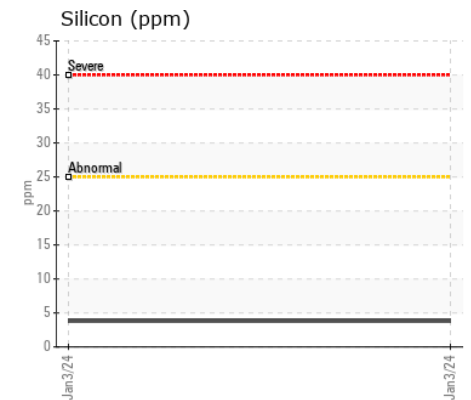
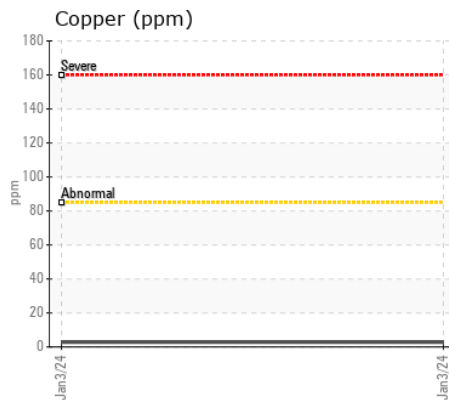
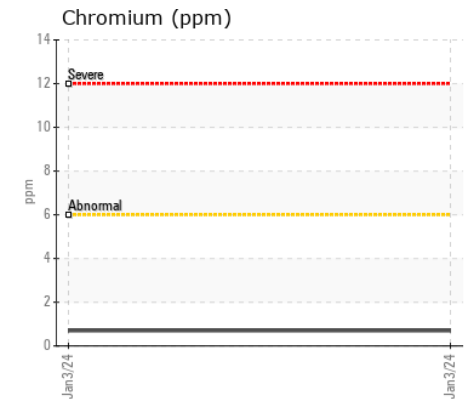
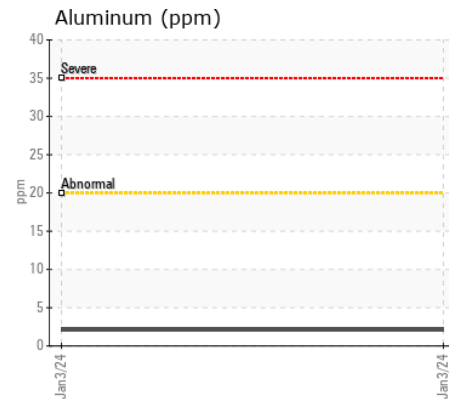
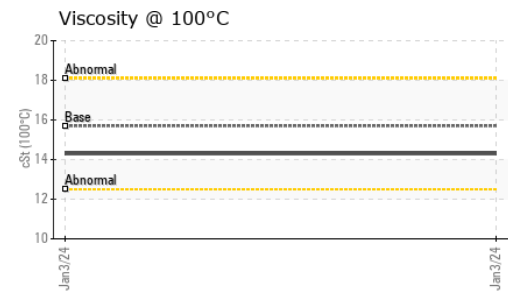
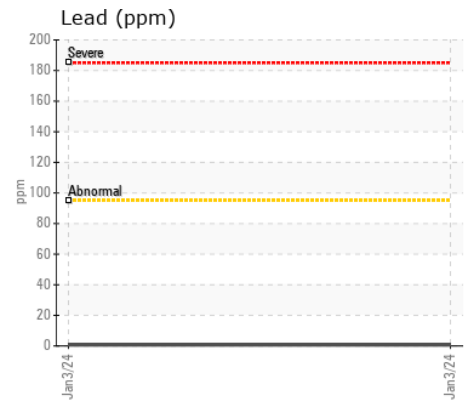
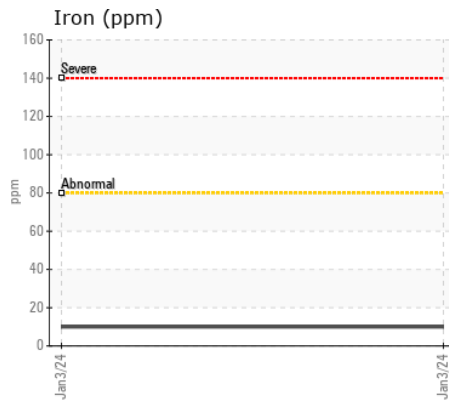
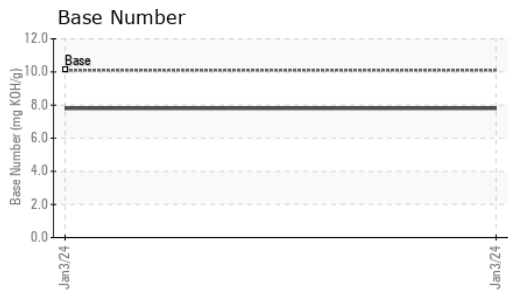
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	---	---
Potassium	ppm	ASTM D5185m	>20	7	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844		0.8	---	---
Nitration	Abs/cm	*ASTM D7624	>20	7.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	---	---
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	>0.1	NEG	---	---

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m	316	167	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	1.2	5	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	24	58	---	---
Calcium	ppm	ASTM D5185m	2292	2111	---	---
Phosphorus	ppm	ASTM D5185m	1064	870	---	---
Zinc	ppm	ASTM D5185m	1160	1181	---	---
Sulfur	ppm	ASTM D5185m	4996	3517	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	7.8	---	---
Visc @ 100°C	cSt	ASTM D445	15.7	14.3	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA056835 **Received** : 09 Jan 2024  
**Lab Number** : 06055135 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821084 **Diagnostician** : Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Aqua Yacht Harbor Marina**  
 3832 Hwy. 25 North, 3832 Hwy. 25 North  
 IUKA, MS  
 US 38852  
 Contact: DENNIS KANIZAI  
 dkanizai@shmarinas.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: