



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**MIKE ROSSMAN [GEOFF]**

Machine Id  
**VOLVO PENTA A720635**

Component  
**Starboard Diesel Engine**

Fluid  
**VOLVO PENTA SAE 15W40 (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VPA061934</b>	VPA056388	---
Sample Date		Client Info		<b>23 May 2024</b>	02 Jun 2023	---
Machine Age	hrs	Client Info		<b>891</b>	823	---
Oil Age	hrs	Client Info		<b>10</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>N/A</b>	Not Changd	---
Filter Changed		Client Info		<b>N/A</b>	Not Changd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	<b>8</b>	11	---
Chromium	ppm	ASTM D5185m	>6	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	2	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>1</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	---
Lead	ppm	ASTM D5185m	>95	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m	>85	<b>3</b>	4	---
Tin	ppm	ASTM D5185m	>9	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

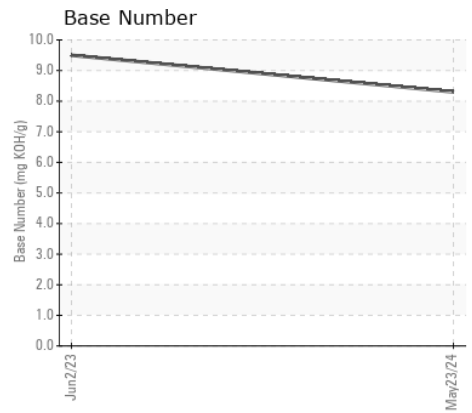
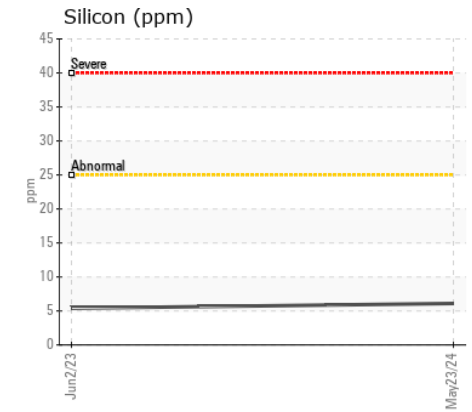
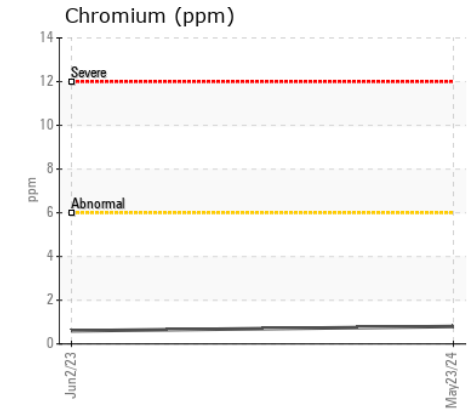
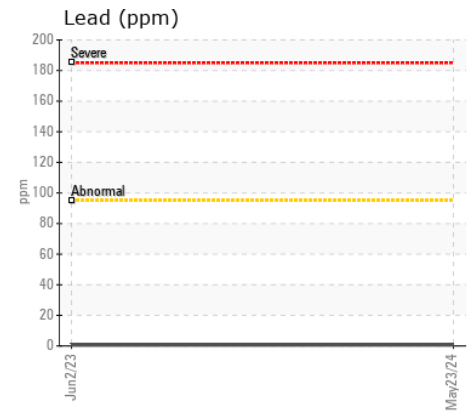
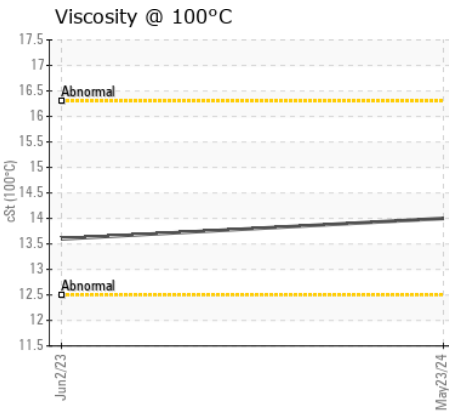
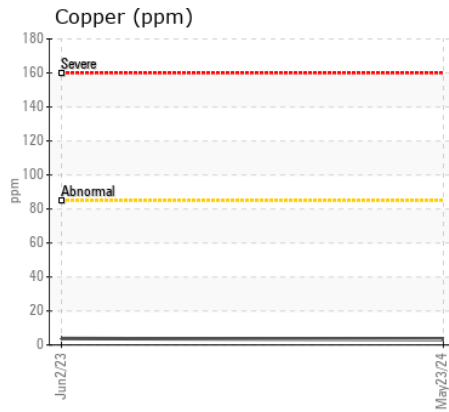
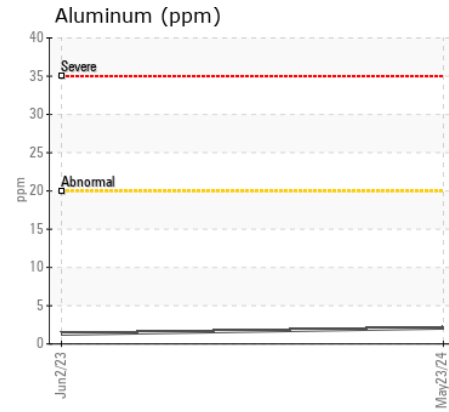
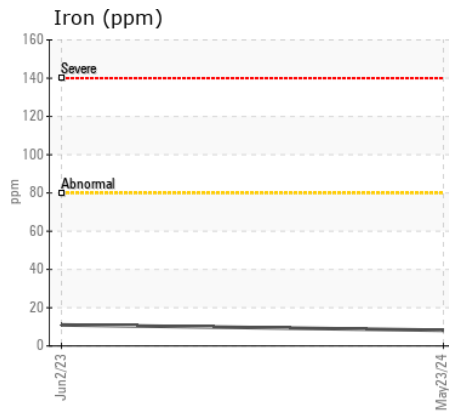
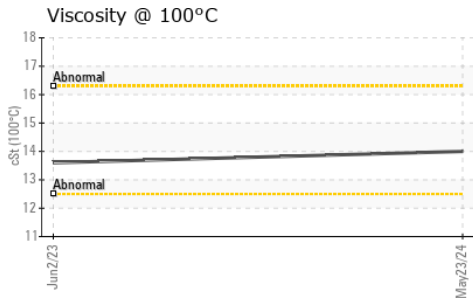
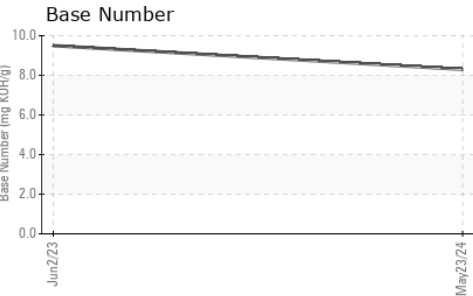
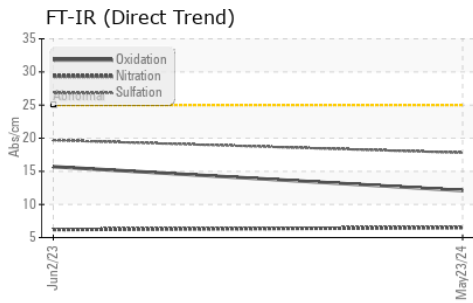
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	5	---
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	2	---
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844		<b>0.1</b>	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.5</b>	6.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.8</b>	19.7	---
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	>0.1	<b>NEG</b>	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>3</b>	<1	---
Boron	ppm	ASTM D5185m		<b>86</b>	6	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>10</b>	53	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>736</b>	984	---
Calcium	ppm	ASTM D5185m		<b>1224</b>	1107	---
Phosphorus	ppm	ASTM D5185m		<b>738</b>	1090	---
Zinc	ppm	ASTM D5185m		<b>838</b>	1344	---
Sulfur	ppm	ASTM D5185m		<b>3091</b>	4192	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.1</b>	15.7	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.3</b>	9.5	---
Visc @ 100°C	cSt	ASTM D445		<b>14.0</b>	13.6	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA061934  
**Lab Number** : 06191957  
**Unique Number** : 11048709  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Endor Marine LLC - Coastal Marine - 152124**  
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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)