



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
TIFFINE TOLLEN [SAM]
Machine Id
VOLVO PENTA 7008496132
Component
Starboard Diesel Engine
Fluid
VOLVO PENTA SAE 15W40 (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA059078	VPA047649	---
Sample Date		Client Info		22 Feb 2024	13 Feb 2023	---
Machine Age	hrs	Client Info		688	587	---
Oil Age	hrs	Client Info		101	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	9	5	---
Chromium	ppm	ASTM D5185m	>6	1	<1	---
Nickel	ppm	ASTM D5185m	>2	1	<1	---
Titanium	ppm	ASTM D5185m	>2	<1	0	---
Silver	ppm	ASTM D5185m	>2	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	2	<1	---
Lead	ppm	ASTM D5185m	>95	<1	<1	---
Copper	ppm	ASTM D5185m	>85	15	12	---
Tin	ppm	ASTM D5185m	>9	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

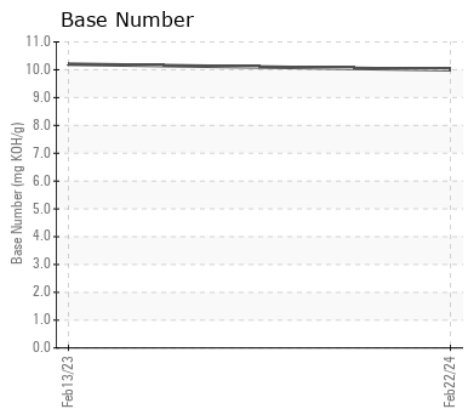
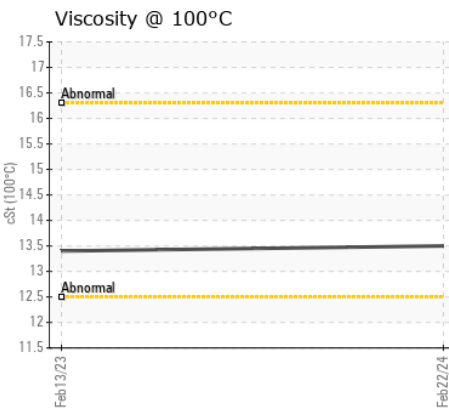
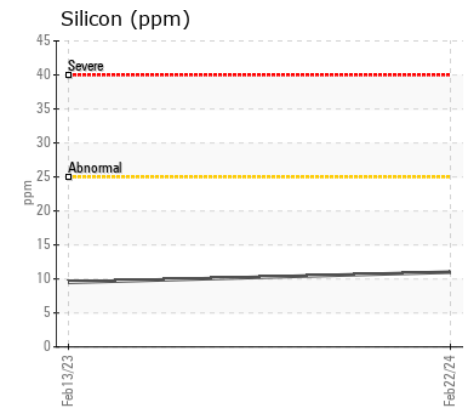
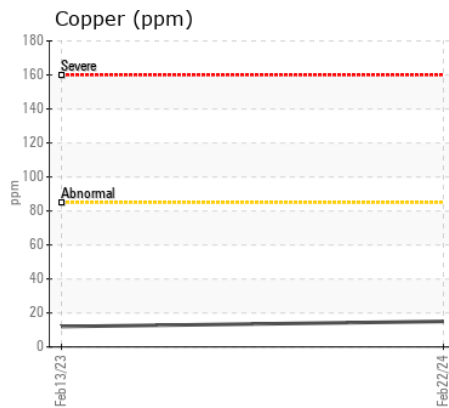
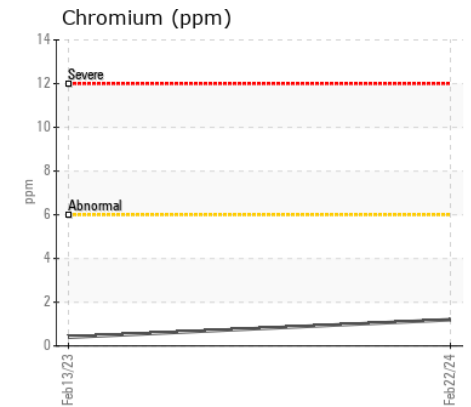
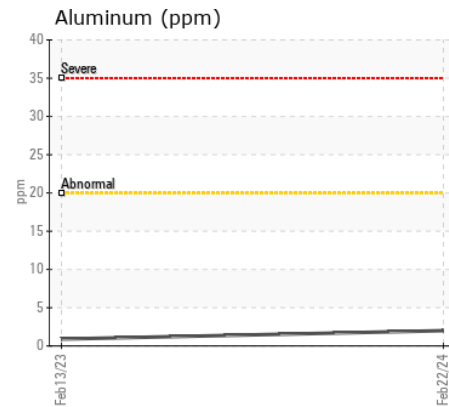
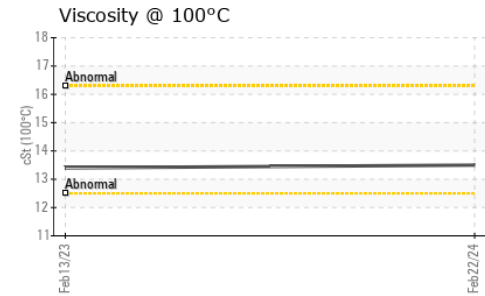
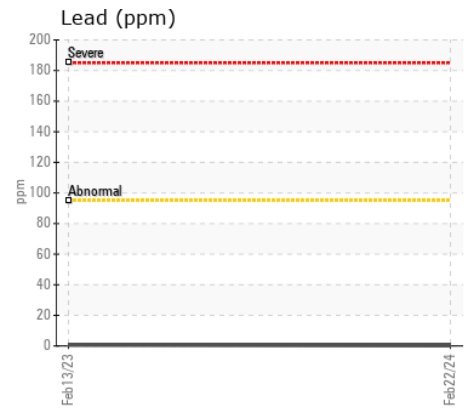
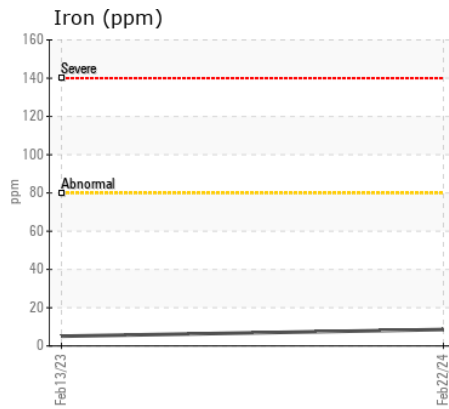
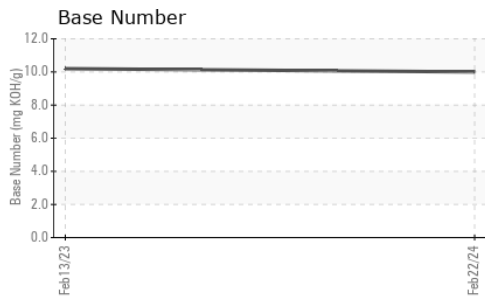
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	10	---
Potassium	ppm	ASTM D5185m	>20	2	0	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		0.3	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	5.2	5.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	19.0	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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		2	1	---
Boron	ppm	ASTM D5185m		42	2	---
Barium	ppm	ASTM D5185m		1	0	---
Molybdenum	ppm	ASTM D5185m		46	62	---
Manganese	ppm	ASTM D5185m		1	<1	---
Magnesium	ppm	ASTM D5185m		604	941	---
Calcium	ppm	ASTM D5185m		1405	1071	---
Phosphorus	ppm	ASTM D5185m		835	1028	---
Zinc	ppm	ASTM D5185m		983	1263	---
Sulfur	ppm	ASTM D5185m		2935	3877	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	13.7	---
Base Number (BN)	mg KOH/g	ASTM D2896		10.0	10.2	---
Visc @ 100°C	cSt	ASTM D445		13.5	13.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA059078
Lab Number : 06102669
Unique Number : 10900899
Test Package : MOB 1 (Additional Tests: TBN)

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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)