



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[BOLDING]

Machine Id

**VOLVO PENTA 7011471198**

Component

**Port Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA036182	VPA036478	---
Sample Date		Client Info		22 Apr 2024	13 Dec 2023	---
Machine Age	hrs	Client Info		421	332	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	N/A	---
Filter Changed		Client Info		Not Chngd	N/A	---
Sample Status				NORMAL	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	8	18	---
Chromium	ppm	ASTM D5185m	>6	0	<1	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m	>2	0	0	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	5	4	---
Lead	ppm	ASTM D5185m	>95	0	<1	---
Copper	ppm	ASTM D5185m	>85	19	41	---
Tin	ppm	ASTM D5185m	>9	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

## CONTAMINATION

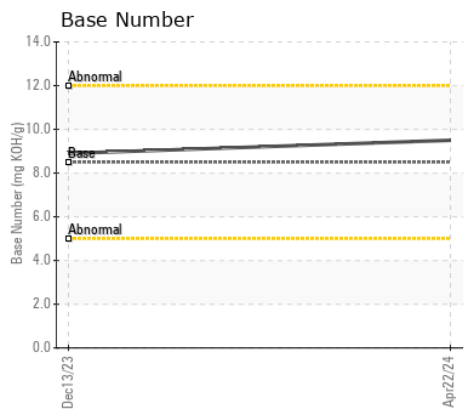
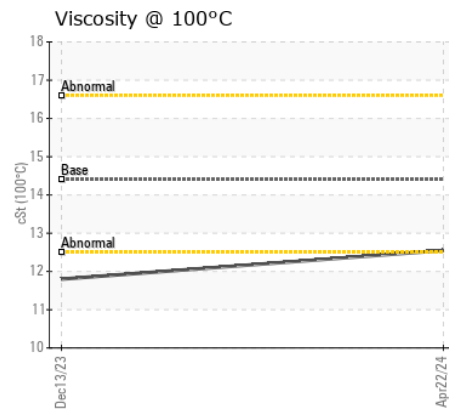
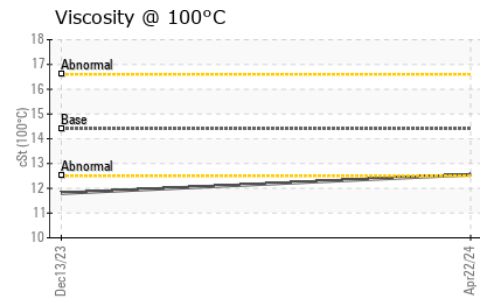
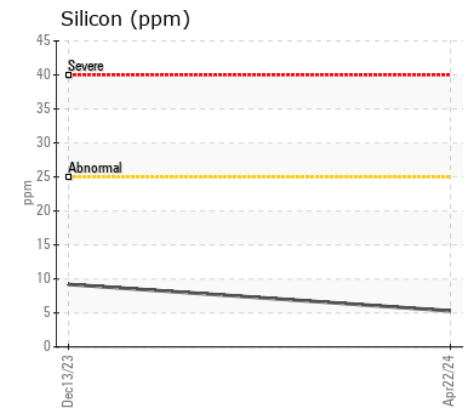
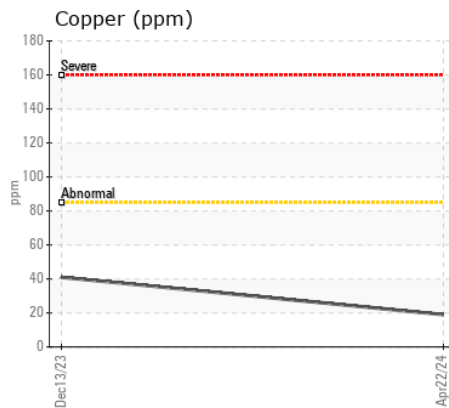
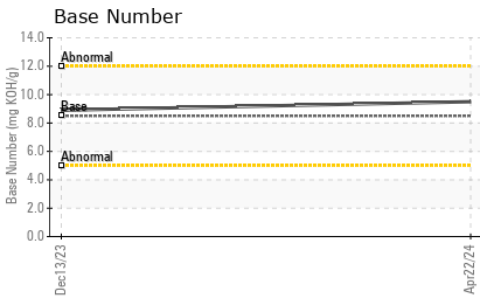
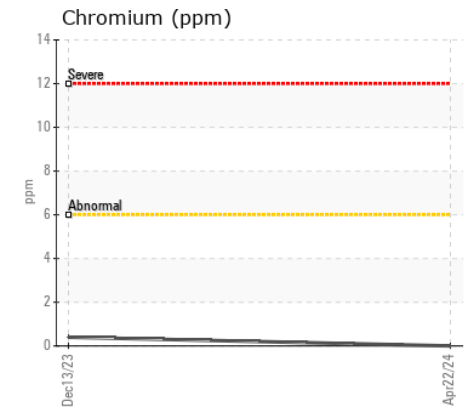
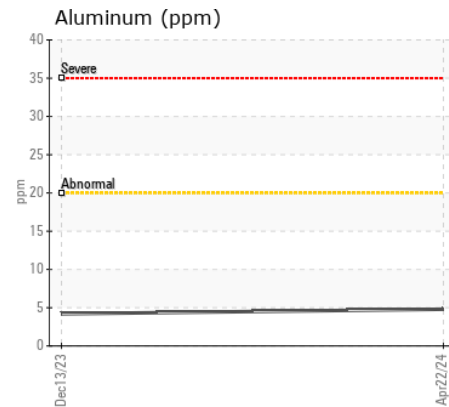
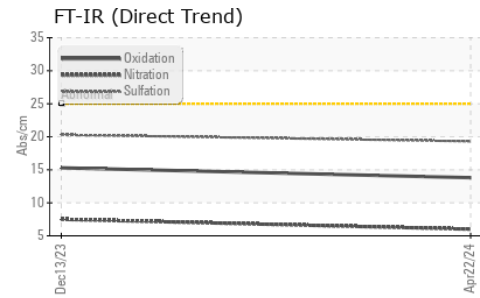
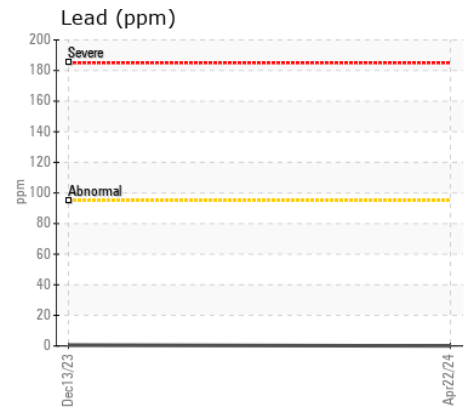
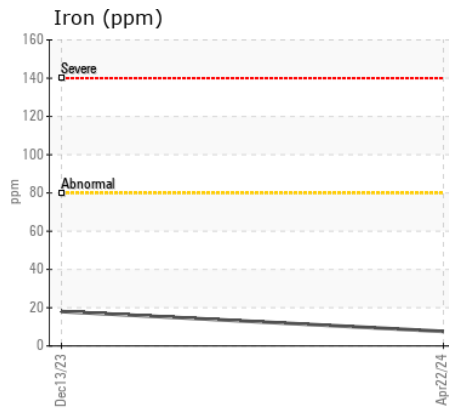
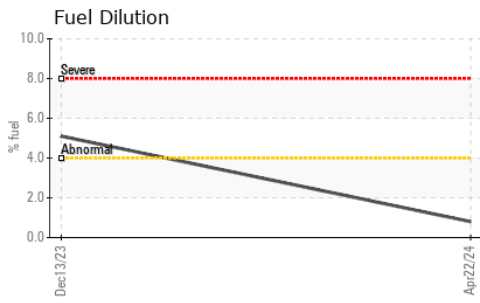
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	9	---
Potassium	ppm	ASTM D5185m	>20	<1	0	---
Fuel	%	ASTM D3524	>4.0	0.8	▲ 5.1	---
Water		WC Method	>0.1	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		0.4	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	6.0	7.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	20.3	---
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	>158	12	0	---
Boron	ppm	ASTM D5185m	250	0	2	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	65	58	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	450	1076	932	---
Calcium	ppm	ASTM D5185m	3000	1243	1015	---
Phosphorus	ppm	ASTM D5185m	1150	1162	1053	---
Zinc	ppm	ASTM D5185m	1350	1430	1257	---
Sulfur	ppm	ASTM D5185m	4250	4124	3015	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	15.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.5	8.9	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.55	▲ 11.8	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA036182 **Received** : 24 Apr 2024  
**Lab Number** : 06159612 **Tested** : 24 Apr 2024  
**Unique Number** : 10995035 **Diagnosed** : 24 Apr 2024 - Jonathan Hester  
**Test Package** : MOB 1 ( Additional Tests: PERCENTFUEL, TBN )

**SUNCOAST DIESEL MARINE**  
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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)