



# VOLVO PENTA

## OIL ANALYSIS REPORT

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

Area  
**ED OELTJEN [DANIEL/502899]**  
Machine Id  
**VOLVO PENTA A461536 - STERNDRIVE**  
Component  
**Starboard Gearbox**  
Fluid  
**GEAR OIL SAE 75W90 (3 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VPA061868</b>	VPA048973	---
Sample Date		Client Info		<b>15 Apr 2024</b>	29 Mar 2022	---
Machine Age	hrs	Client Info		<b>723</b>	615	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	SEVERE	---

### WEAR

All component wear rates are normal.

PQ		ASTM D8184		<b>27</b>	18	---
Iron	ppm	ASTM D5185m	>150	<b>49</b>	545	---
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	6	---
Nickel	ppm	ASTM D5185m	>10	<b>6</b>	8	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	---
Silver	ppm	ASTM D5185m		<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>5	<b>5</b>	24	---
Lead	ppm	ASTM D5185m	>65	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>80	<b>1</b>	2	---
Tin	ppm	ASTM D5185m	>8	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	VLITE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

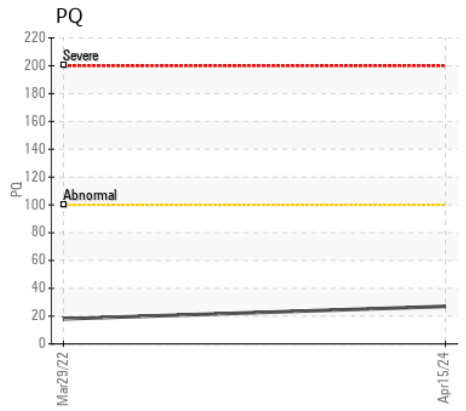
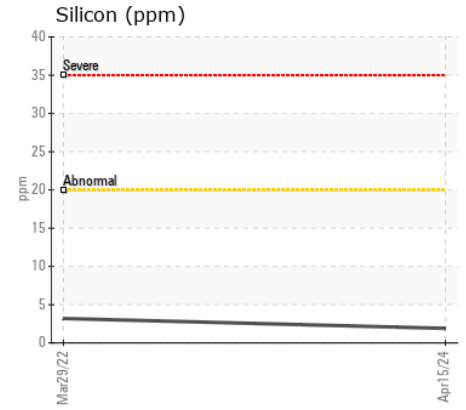
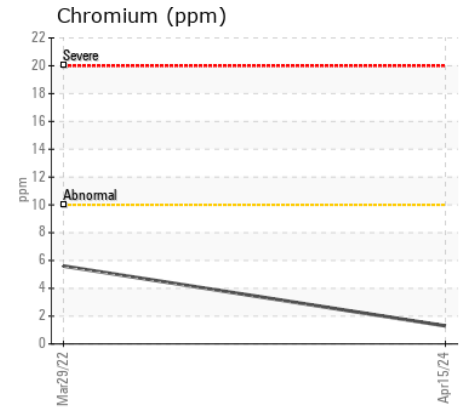
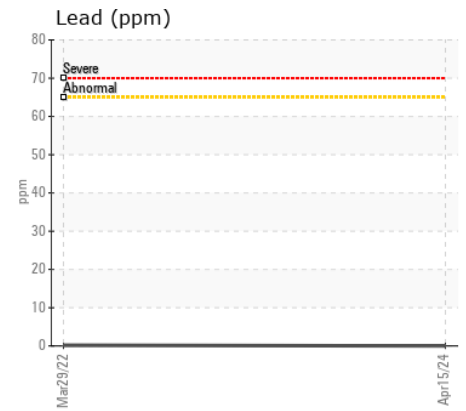
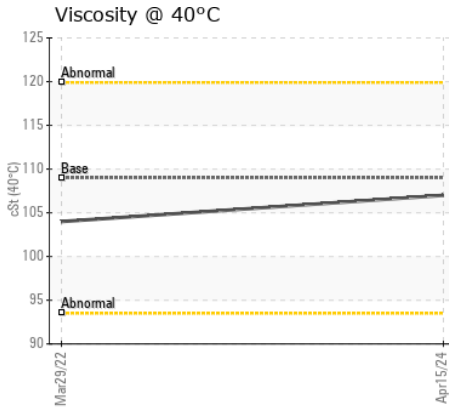
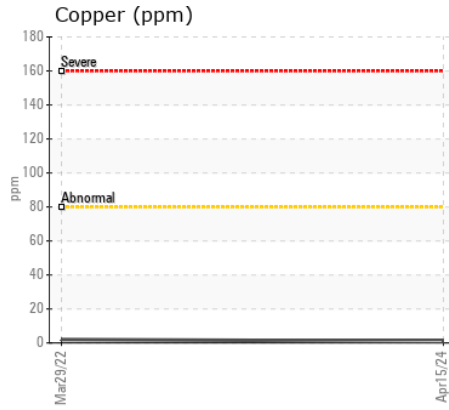
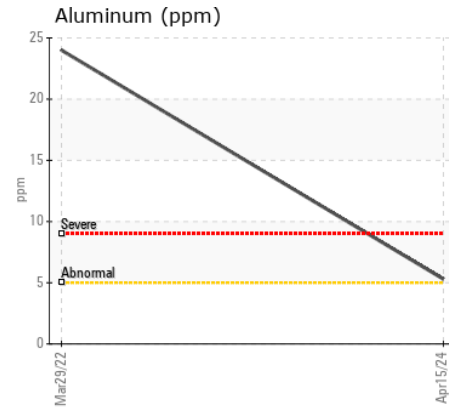
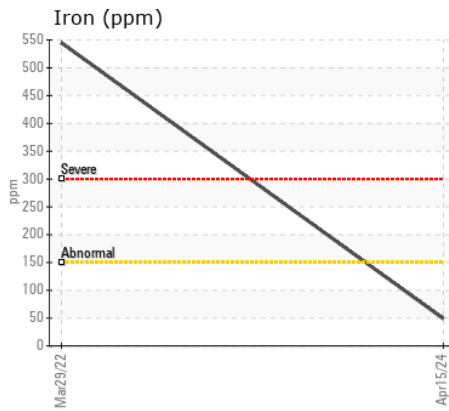
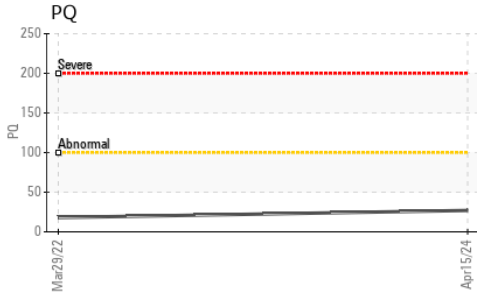
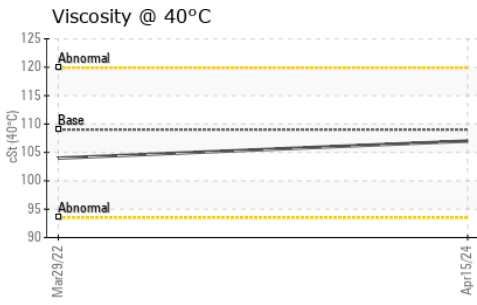
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	3	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
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>	HAZY	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	0.2%	---

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>3</b>	30	---
Boron	ppm	ASTM D5185m	400	<b>341</b>	312	---
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	12	<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m		<b>2</b>	5	---
Magnesium	ppm	ASTM D5185m	12	<b>&lt;1</b>	4	---
Calcium	ppm	ASTM D5185m	150	<b>2</b>	8	---
Phosphorus	ppm	ASTM D5185m	1650	<b>1359</b>	1355	---
Zinc	ppm	ASTM D5185m	125	<b>&lt;1</b>	9	---
Sulfur	ppm	ASTM D5185m	22500	<b>26757</b>	20227	---
Visc @ 40°C	cSt	ASTM D445	109	<b>107</b>	104	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA061868 **Received** : 19 Apr 2024  
**Lab Number** : 06154789 **Tested** : 22 Apr 2024  
**Unique Number** : 10990212 **Diagnosed** : 23 Apr 2024 - Don Baldrige  
**Test Package** : MOB 1 ( Additional Tests: PQ )

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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)