



# VOLVO PENTA

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**NADINE URCIUOLI [NICK MULFORD]**

Machine Id  
**VOLVO PENTA 3200003677**

Component  
**Starboard IPS**

Fluid  
**VOLVO API GL-5 SAE 75W90 (4 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA054845	VPA052154	---
Sample Date		Client Info		23 May 2024	12 Feb 2024	---
Machine Age	hrs	Client Info		100	55	---
Oil Age	hrs	Client Info		55	55	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	N/A	---
Sample Status				NORMAL	NORMAL	---

### WEAR

All component wear rates are normal.

PQ		ASTM D8184		23	17	---
Iron	ppm	ASTM D5185m	>200	20	14	---
Chromium	ppm	ASTM D5185m	>10	0	<1	---
Nickel	ppm	ASTM D5185m	>10	<1	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m		<1	2	---
Lead	ppm	ASTM D5185m		<1	0	---
Copper	ppm	ASTM D5185m		3	2	---
Tin	ppm	ASTM D5185m		<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

### CONTAMINATION

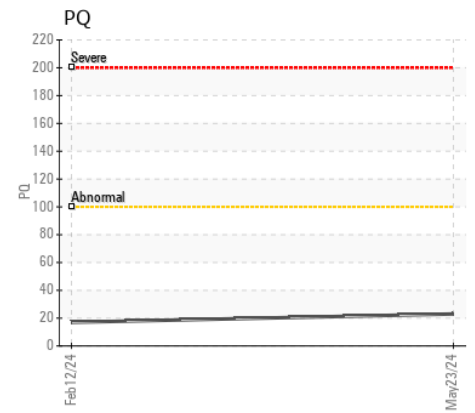
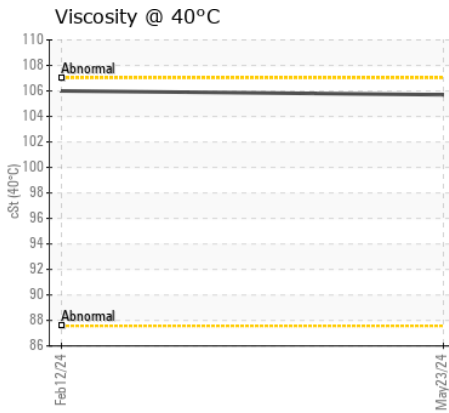
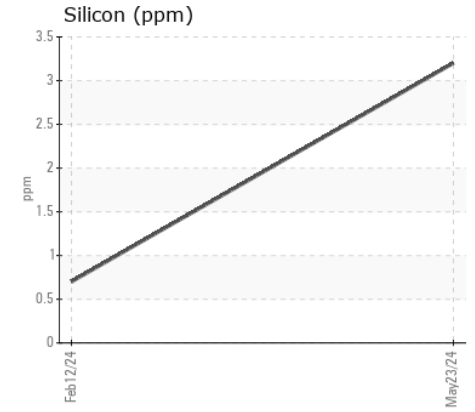
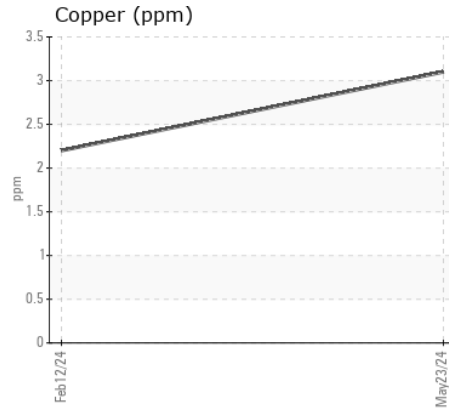
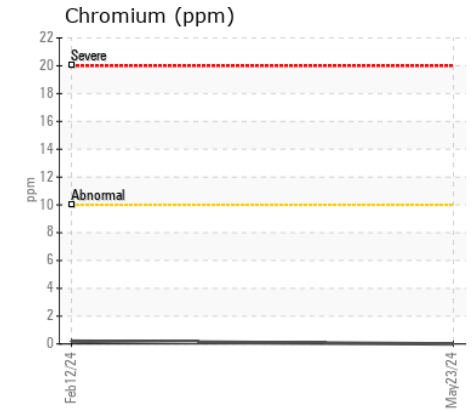
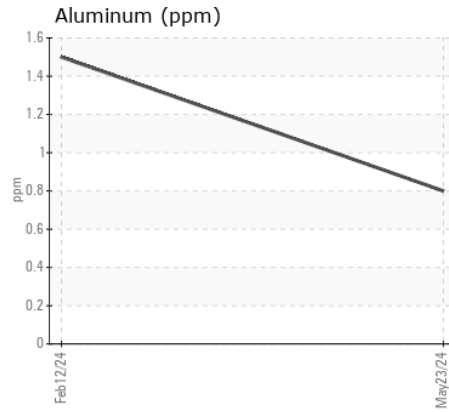
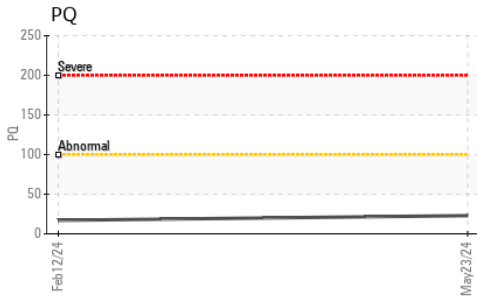
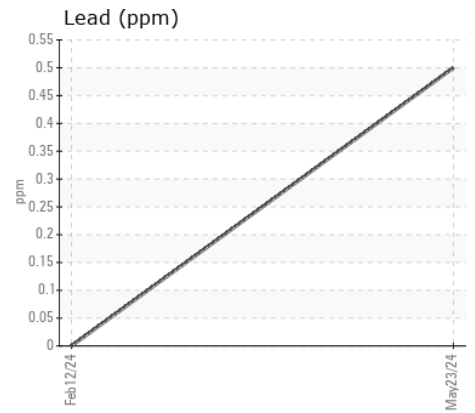
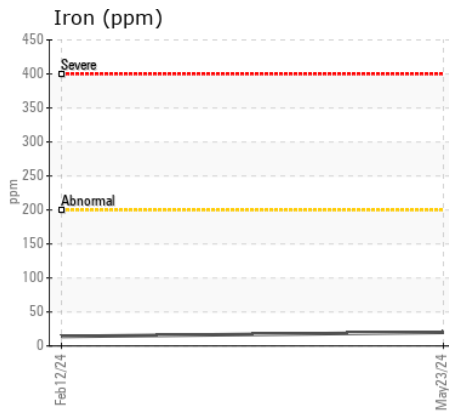
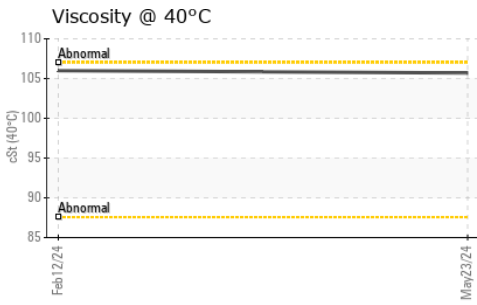
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m		3	<1	---
Potassium	ppm	ASTM D5185m	>20	3	2	---
Water		WC Method	>0.2	NEG	NEG	---
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	>0.2	NEG	NEG	---

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	0	---
Boron	ppm	ASTM D5185m		365	330	---
Barium	ppm	ASTM D5185m		0	10	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		149	132	---
Calcium	ppm	ASTM D5185m		11	12	---
Phosphorus	ppm	ASTM D5185m		1442	1362	---
Zinc	ppm	ASTM D5185m		0	0	---
Sulfur	ppm	ASTM D5185m		28986	24976	---
Visc @ 40°C	cSt	ASTM D445		105.7	106	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA054845 **Received** : 24 May 2024  
**Lab Number** : 06190913 **Tested** : 24 May 2024  
**Unique Number** : 11047665 **Diagnosed** : 24 May 2024 - Doug Bogart  
**Test Package** : MOB 1 ( Additional Tests: PQ )

**Helmuts Marine Service**  
 619 Canal Street  
 SAN RAFAEL, CA  
 US 94901-3545

Contact: NADINE URUIOLI  
 SERVICE@HELMUTSMARINE.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)

T: x:  
 F: x: