



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
NADINE URCIUOLI [PATRICK HENDRICKSON]

Machine Id
VOLVO PENTA MS2-INBD (S/N N/A)

Component
Center Gearbox

Fluid
VOLVO API GL-5 SAE 75W90 (1 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA061547	---	---
Sample Date		Client Info		29 May 2024	---	---
Machine Age	hrs	Client Info		95	---	---
Oil Age	hrs	Client Info		95	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184		72	---	---
Iron	ppm	ASTM D5185m	>150	60	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	<1	---	---
Titanium	ppm	ASTM D5185m		1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>5	5	---	---
Lead	ppm	ASTM D5185m	>65	2	---	---
Copper	ppm	ASTM D5185m	>80	66	---	---
Tin	ppm	ASTM D5185m	>8	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

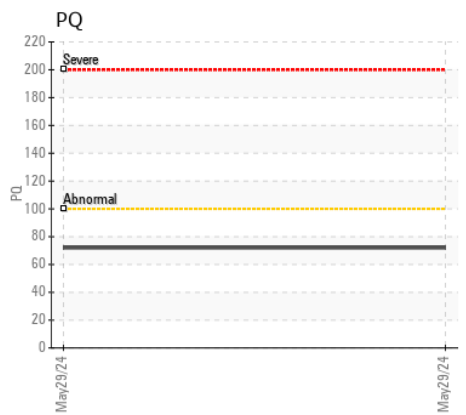
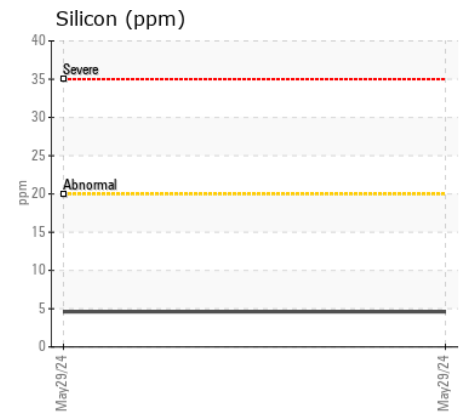
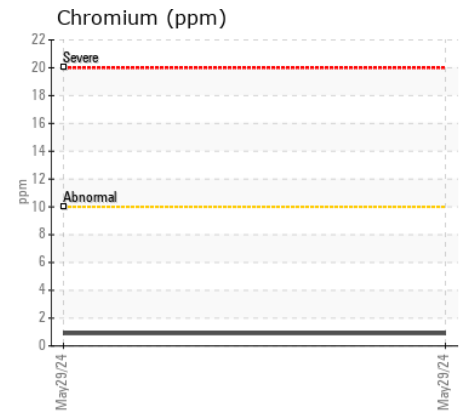
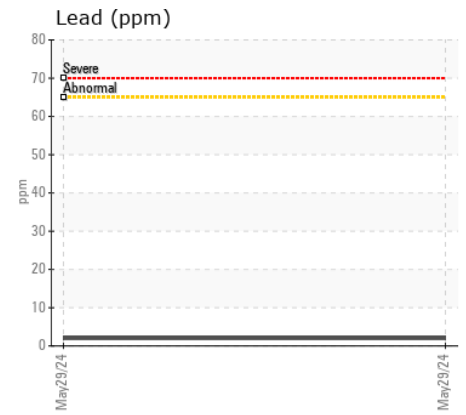
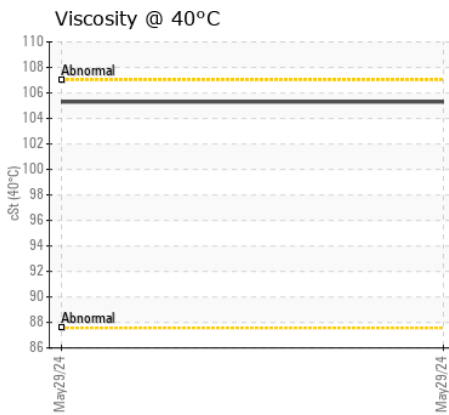
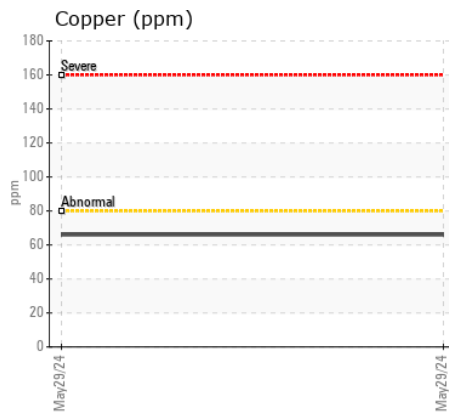
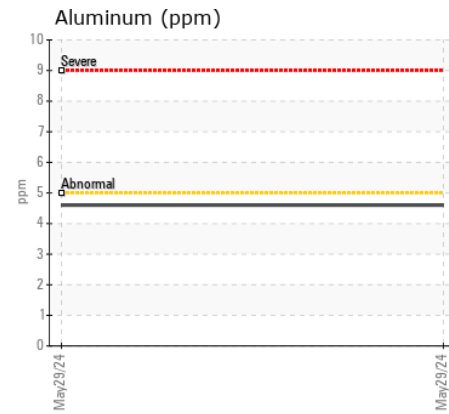
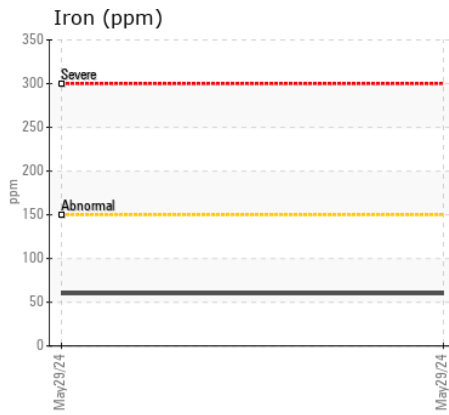
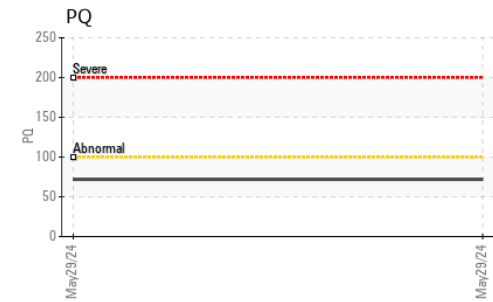
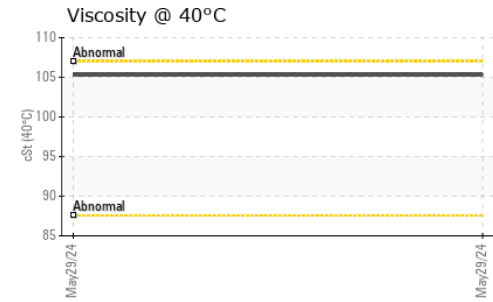
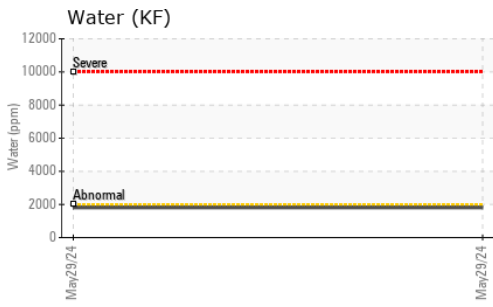
There is a trace of moisture present in the oil.

Silicon	ppm	ASTM D5185m	>20	5	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Water	%	ASTM D6304	>0.2	0.181	---	---
ppm Water	ppm	ASTM D6304	>2000	1810	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	0.2%	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		1	---	---
Boron	ppm	ASTM D5185m		321	---	---
Barium	ppm	ASTM D5185m		9	---	---
Molybdenum	ppm	ASTM D5185m		58	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m		2	---	---
Calcium	ppm	ASTM D5185m		21	---	---
Phosphorus	ppm	ASTM D5185m		1436	---	---
Zinc	ppm	ASTM D5185m		29	---	---
Sulfur	ppm	ASTM D5185m		24669	---	---
Visc @ 40°C	cSt	ASTM D445		105.3	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA061547
Lab Number : 06197221
Unique Number : 11059344
Test Package : MOB 1 (Additional Tests: KF, PQ)

Received : 31 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Doug Bogart

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: