



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
RYAN EASON [7716899]
 Machine Id
VOLVO PENTA 128020042568 - INBOARD
 Component
Starboard Gearbox
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA050662	---	---
Sample Date		Client Info		27 Dec 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---

WEAR

Aluminum and copper ppm levels are severe.

PQ		ASTM D8184		38	---	---
Iron	ppm	ASTM D5185m	>150	59	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	2	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>5	145	---	---
Lead	ppm	ASTM D5185m	>65	7	---	---
Copper	ppm	ASTM D5185m	>80	743	---	---
Tin	ppm	ASTM D5185m	>8	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

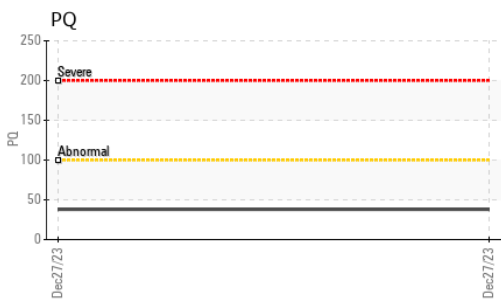
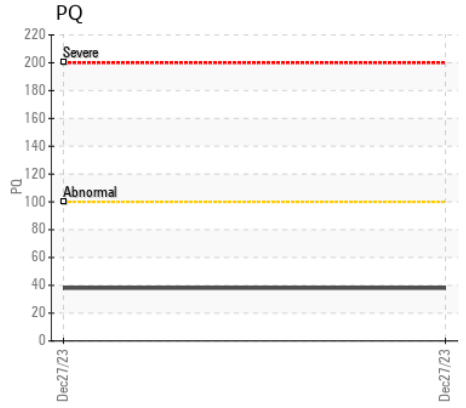
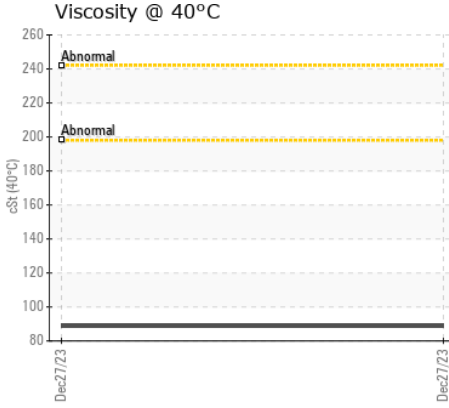
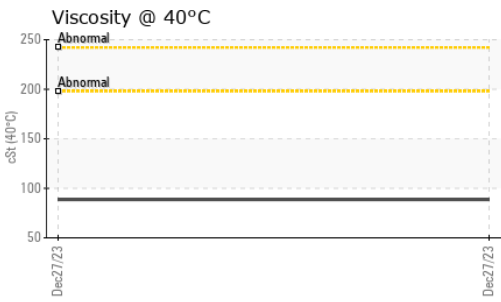
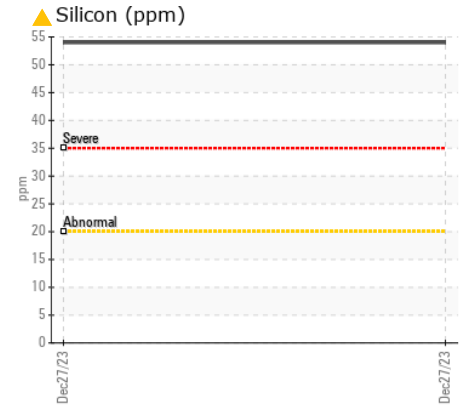
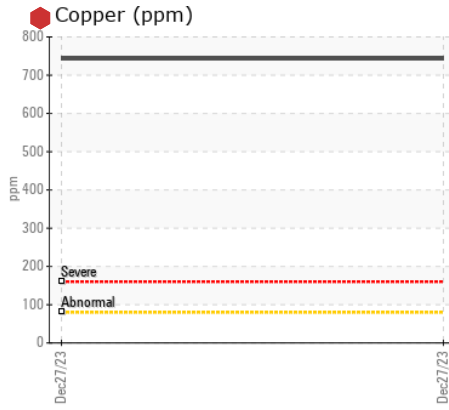
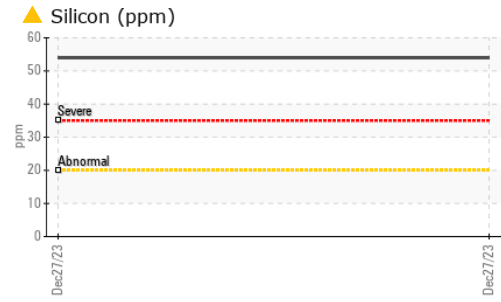
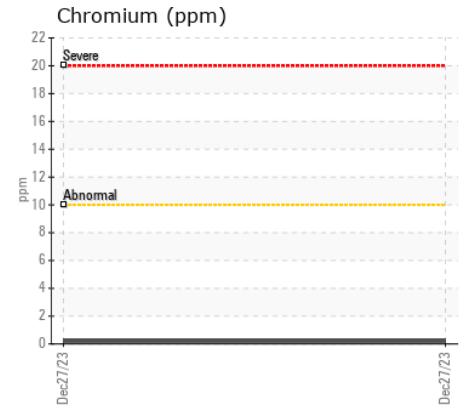
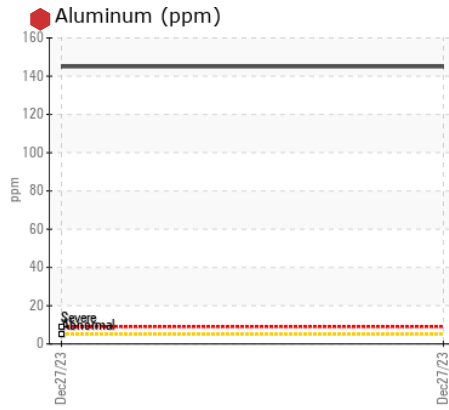
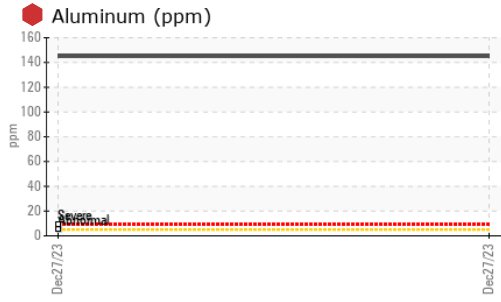
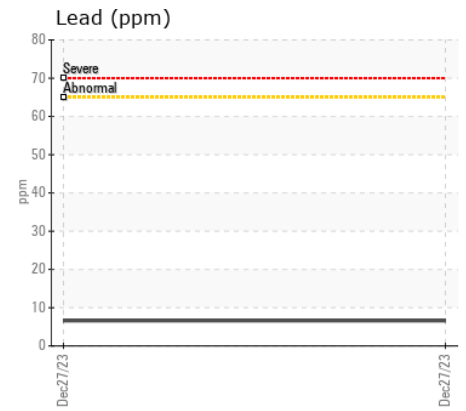
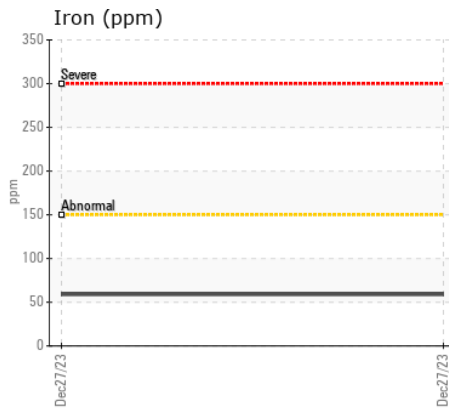
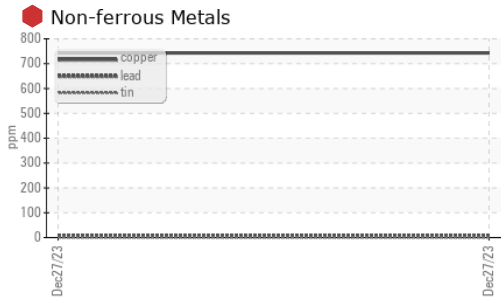
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>20	54	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Water		WC Method	>0.2	NEG	---	---
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	NEG	---	---

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m		474	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		60	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m		37	---	---
Calcium	ppm	ASTM D5185m		3542	---	---
Phosphorus	ppm	ASTM D5185m		1132	---	---
Zinc	ppm	ASTM D5185m		1315	---	---
Sulfur	ppm	ASTM D5185m		5886	---	---
Visc @ 40°C	cSt	ASTM D445		88.7	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA050662 **Received** : 10 Jan 2024
Lab Number : 06056979 **Diagnosed** : 11 Jan 2024
Unique Number : 10822928 **Diagnostician** : Doug Bogart
Test Package : MOB 1 (Additional Tests: PQ)

Pacific Power Group - VP981534
 7215 S 228th St
 Kent, WA
 US 98032
 Contact: PAT RYAN
 pryan@pacificpowergroup.com
 T: (253)520-5163
 F:

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)