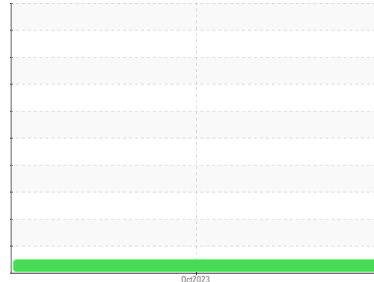


Area
JIM SHAFER [815306M]
 Machine Id
VOLVO PENTA 3200003001
 Component
Starboard IPS
 Fluid
VOLVO PENTA GL-5 SAE 75W90 (4 GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info	VPA060582	---	---
Sample Date	Client Info	24 Oct 2023	---	---
Machine Age	hrs Client Info	113	---	---
Oil Age	hrs Client Info	40	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		NORMAL	---	---

WEAR METALS method limit/base current history1 history2

PQ	ASTM D8184		20	---	---
Iron	ppm ASTM D5185m	>200	10	---	---
Chromium	ppm ASTM D5185m	>10	0	---	---
Nickel	ppm ASTM D5185m	>10	<1	---	---
Titanium	ppm ASTM D5185m		0	---	---
Silver	ppm ASTM D5185m		0	---	---
Aluminum	ppm ASTM D5185m		<1	---	---
Lead	ppm ASTM D5185m		0	---	---
Copper	ppm ASTM D5185m		4	---	---
Tin	ppm ASTM D5185m		0	---	---
Vanadium	ppm ASTM D5185m		0	---	---
Cadmium	ppm ASTM D5185m		0	---	---

ADDITIVES method limit/base current history1 history2

Boron	ppm ASTM D5185m		304	---	---
Barium	ppm ASTM D5185m		0	---	---
Molybdenum	ppm ASTM D5185m		0	---	---
Manganese	ppm ASTM D5185m		1	---	---
Magnesium	ppm ASTM D5185m		91	---	---
Calcium	ppm ASTM D5185m		32	---	---
Phosphorus	ppm ASTM D5185m		1288	---	---
Zinc	ppm ASTM D5185m		2	---	---
Sulfur	ppm ASTM D5185m		21435	---	---

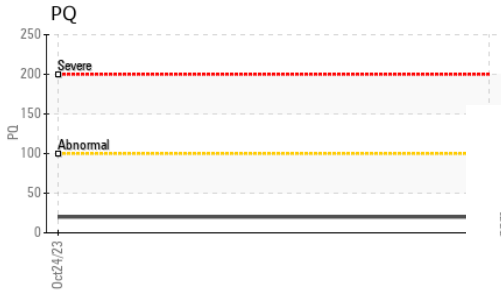
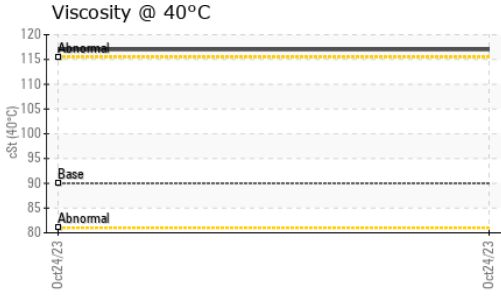
CONTAMINANTS method limit/base current history1 history2

Silicon	ppm ASTM D5185m		<1	---	---
Sodium	ppm ASTM D5185m		3	---	---
Potassium	ppm ASTM D5185m	>20	3	---	---

VISUAL method limit/base current history1 history2

White Metal	scalar *Visual	NONE	NONE	---	---
Yellow Metal	scalar *Visual	NONE	NONE	---	---
Precipitate	scalar *Visual	NONE	NONE	---	---
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	---	---
Free Water	scalar *Visual		NEG	---	---

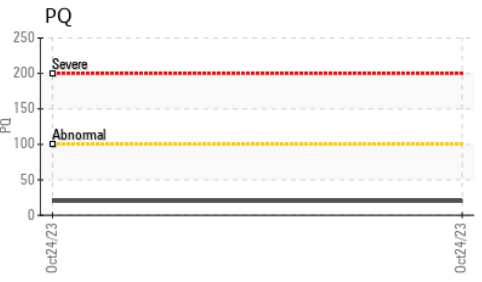
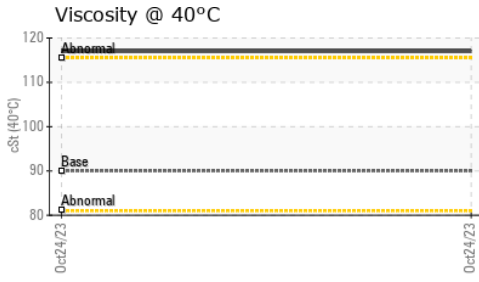
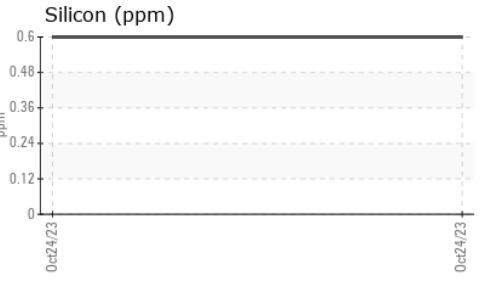
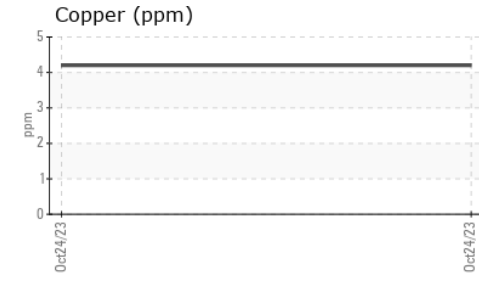
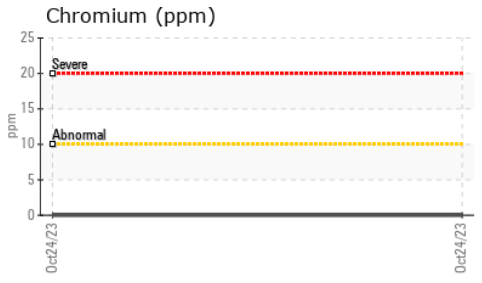
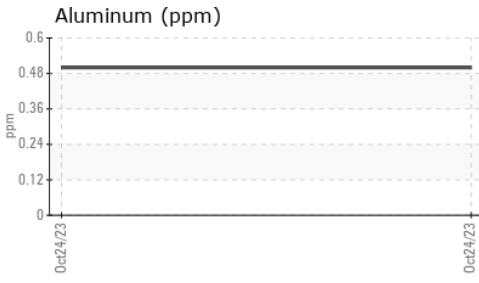
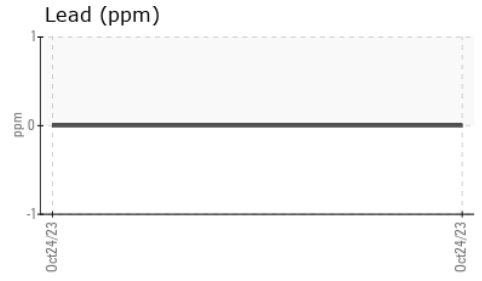
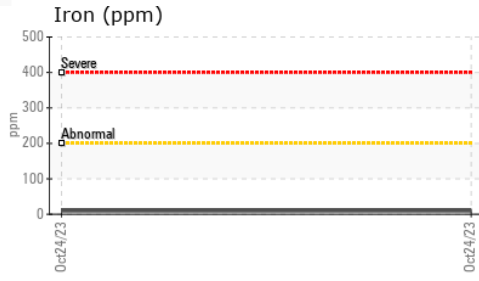
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	90.0	117	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2	
Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA060582 **Received** : 31 Oct 2023
Lab Number : 05994627 **Diagnosed** : 01 Nov 2023
Unique Number : 10722987 **Diagnostician** : Don Baldrige
Test Package : MOB 1 (Additional Tests: PQ)

Power Products Systems LLC
 432 Warren Avenue, 432 Warren Ave.
 PORTLAND, ME
 US 04103
 Contact: Cody Clemens
 cclemens@powerprodsys.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:
F: