



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

NADINE URCIUOLI [MATT OLSON]

Machine Id

VOLVO PENTA MATT OLSON (S/N NOT GIVEN)

Component

Transmission (Auto)

Fluid

VOLVO AUTOMATIC TRANSMISSION FLUID AT102 (2 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA062263	---	---
Sample Date		Client Info		24 Jun 2024	---	---
Machine Age	hrs	Client Info		4627	---	---
Oil Age	hrs	Client Info		4627	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	21	---	---
Iron	ppm	ASTM D5185m	>500	18	---	---
Chromium	ppm	ASTM D5185m	>7	0	---	---
Nickel	ppm	ASTM D5185m	>5	1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>5	0	---	---
Aluminum	ppm	ASTM D5185m	>15	1	---	---
Lead	ppm	ASTM D5185m	>350	0	---	---
Copper	ppm	ASTM D5185m	>300	6	---	---
Tin	ppm	ASTM D5185m	>5	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

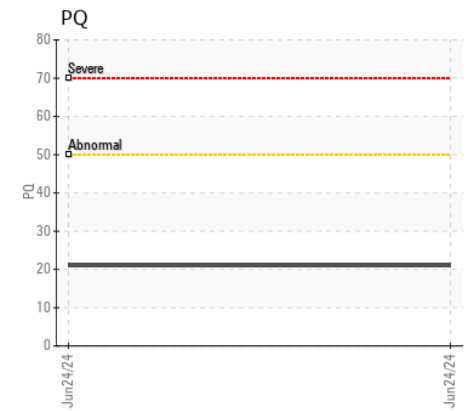
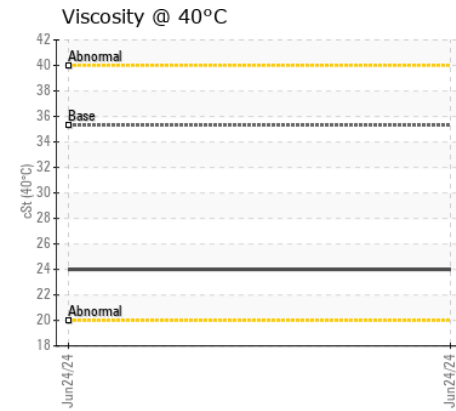
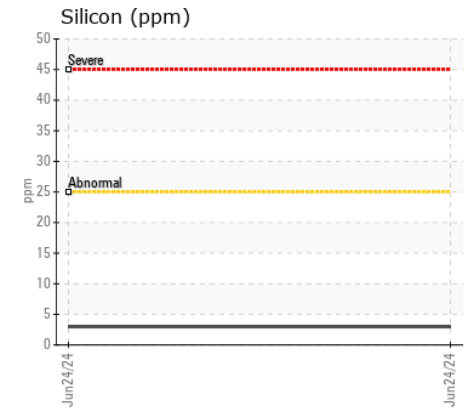
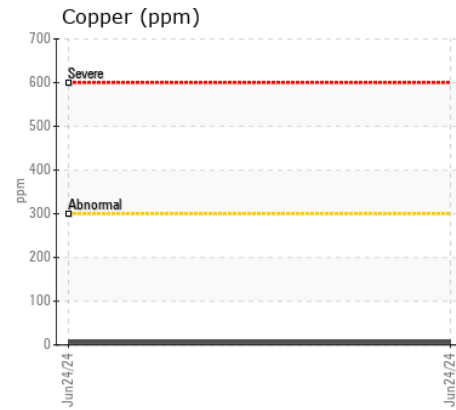
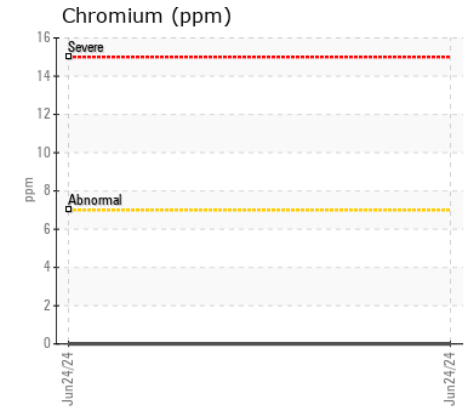
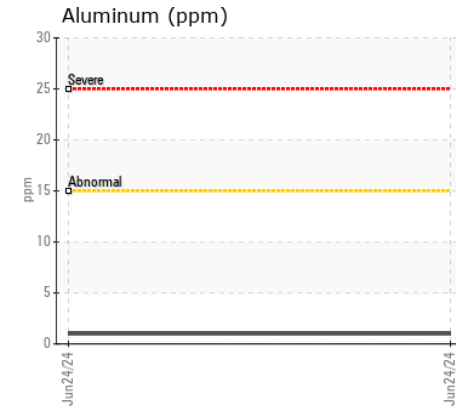
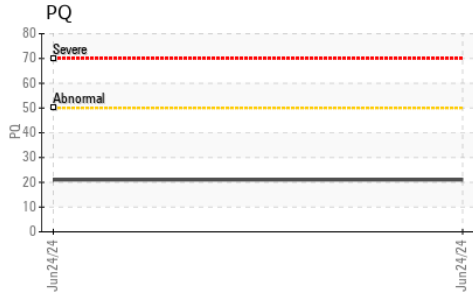
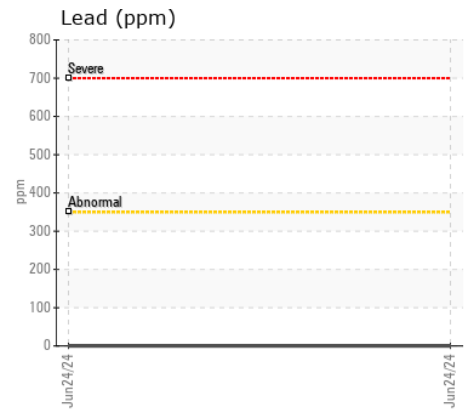
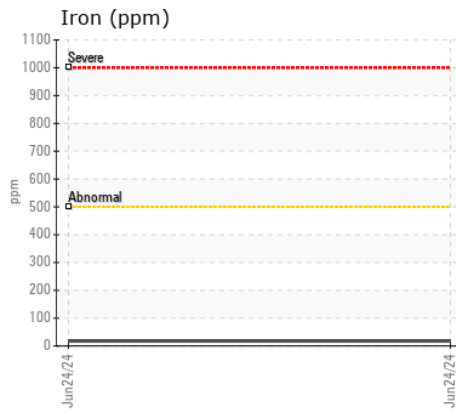
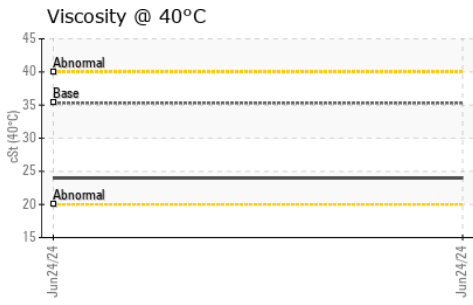
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	---	---
Potassium	ppm	ASTM D5185m	>20	4	---	---
Water		WC Method	>0.1	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	>0.1	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		3	---	---
Boron	ppm	ASTM D5185m	187	109	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	0.0	0	---	---
Manganese	ppm	ASTM D5185m	0.0	<1	---	---
Magnesium	ppm	ASTM D5185m	6.8	<1	---	---
Calcium	ppm	ASTM D5185m	215	81	---	---
Phosphorus	ppm	ASTM D5185m	445	243	---	---
Zinc	ppm	ASTM D5185m	56	0	---	---
Sulfur	ppm	ASTM D5185m	1336	1867	---	---
Visc @ 40°C	cSt	ASTM D445	35.3	24.0	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA062263 **Received** : 28 Jun 2024
Lab Number : 06223782 **Tested** : 01 Jul 2024
Unique Number : 11101979 **Diagnosed** : 01 Jul 2024 - Don Baldrige
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: