



VOLVO PENTA

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
MARK LINTON [SAM]
Machine Id
VOLVO PENTA 3940023987
Component
Starboard IPS
Fluid
GEAR OIL SAE 75W90 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA053121	VPA044743	VPA043227
Sample Date		Client Info		09 May 2024	13 Dec 2022	23 Sep 2022
Machine Age	hrs	Client Info		351	281	270
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		23	13	10
Iron	ppm	ASTM D5185m	>200	68	62	60
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m		4	3	4
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m		9	7	7
Tin	ppm	ASTM D5185m		<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

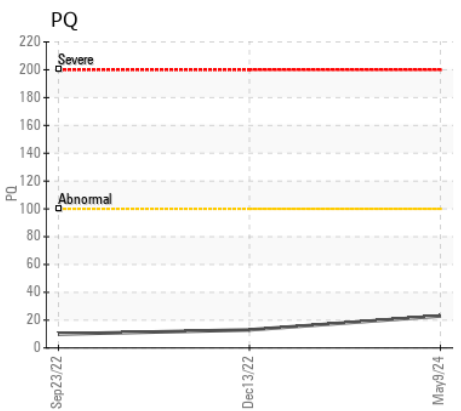
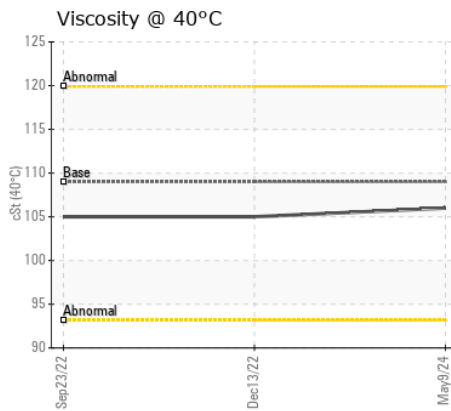
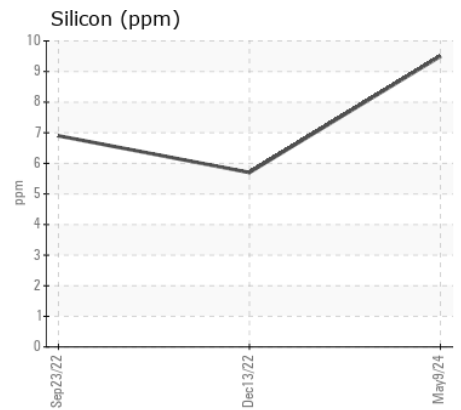
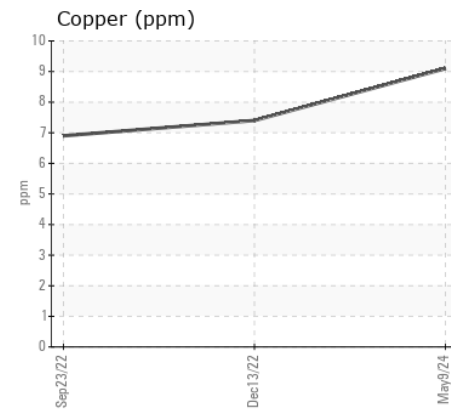
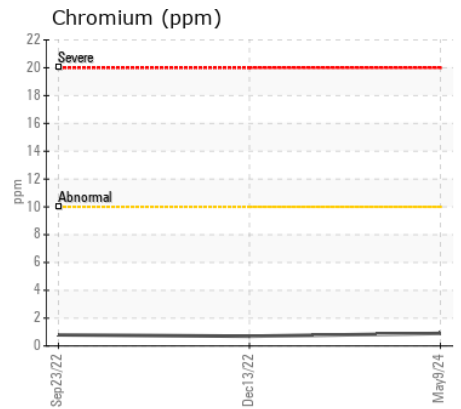
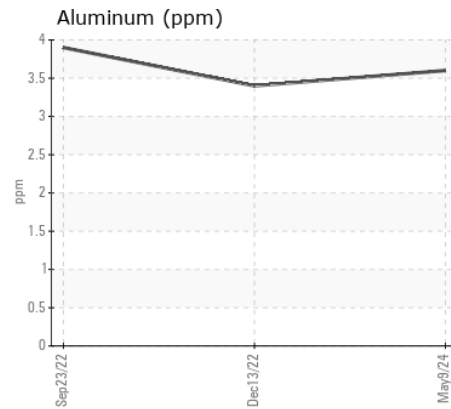
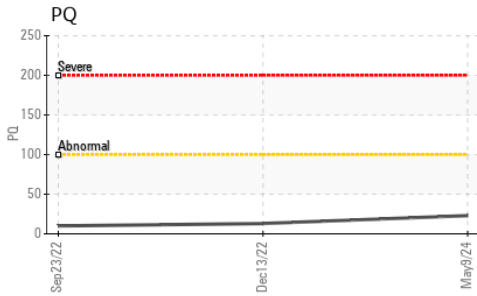
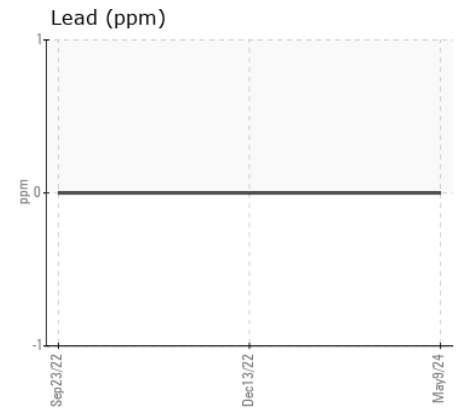
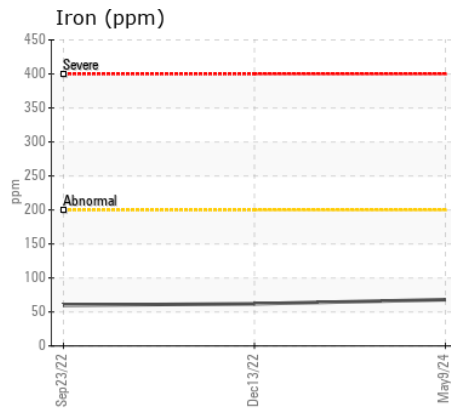
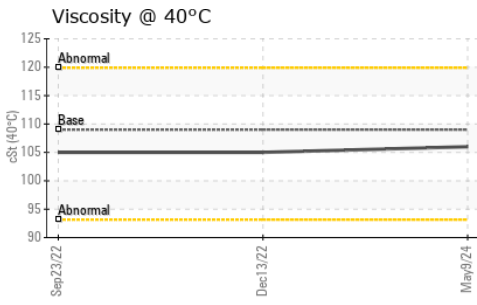
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m		10	6	7
Potassium	ppm	ASTM D5185m	>20	0	0	1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	2	2
Boron	ppm	ASTM D5185m	400	327	309	333
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	<1	<1
Manganese	ppm	ASTM D5185m		3	3	3
Magnesium	ppm	ASTM D5185m	12	<1	18	12
Calcium	ppm	ASTM D5185m	150	3	19	11
Phosphorus	ppm	ASTM D5185m	1650	1393	1269	1403
Zinc	ppm	ASTM D5185m	125	0	6	4
Sulfur	ppm	ASTM D5185m	22500	27557	25056	28298
Visc @ 40°C	cSt	ASTM D445	109	106	105	105



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VPA053121 **Received** : 13 May 2024
Lab Number : 06177491 **Tested** : 14 May 2024
Unique Number : 11023544 **Diagnosed** : 15 May 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: PQ)

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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)