



VOLVO PENTA

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
GREG GARTRELL [503045]
 Machine Id
VOLVO PENTA 3940017734
 Component
Starboard IPS
 Fluid
GEAR OIL SAE 75W90 (4 GAL)

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		VPA061583	VPA045932	VPA029923
Sample Date		Client Info		13 Jun 2024	27 Jun 2023	19 Apr 2022
Machine Age	hrs	Client Info		818	0	724
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		31	21	24
Iron	ppm	ASTM D5185m	>275	98	46	103
Chromium	ppm	ASTM D5185m	>4	1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	<1	<1	2
Lead	ppm	ASTM D5185m	>4	0	0	<1
Copper	ppm	ASTM D5185m	>30	10	6	10
Tin	ppm	ASTM D5185m	>3	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

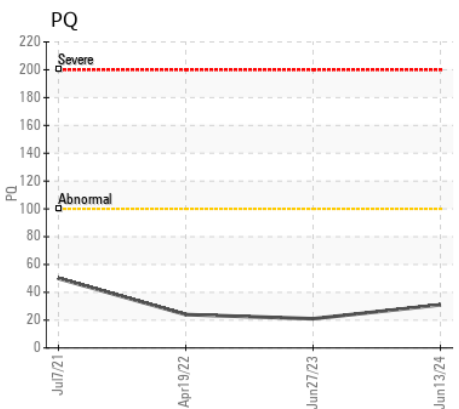
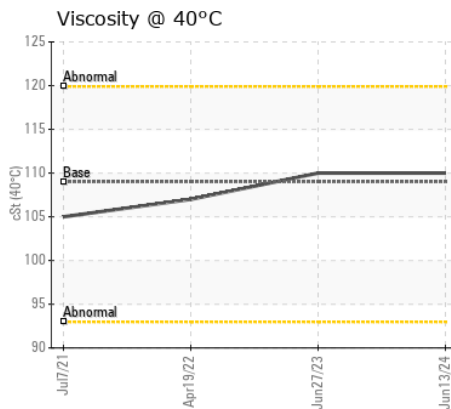
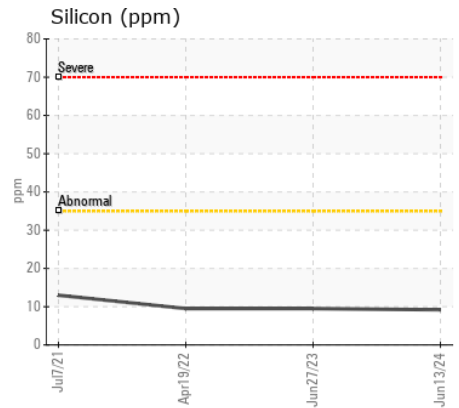
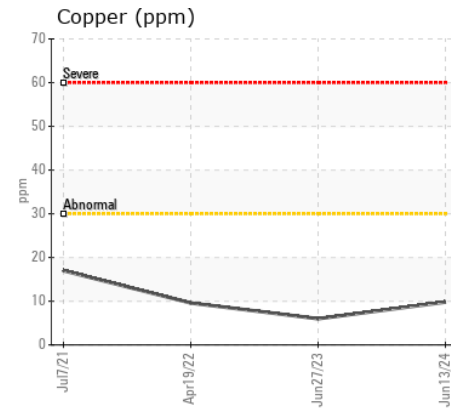
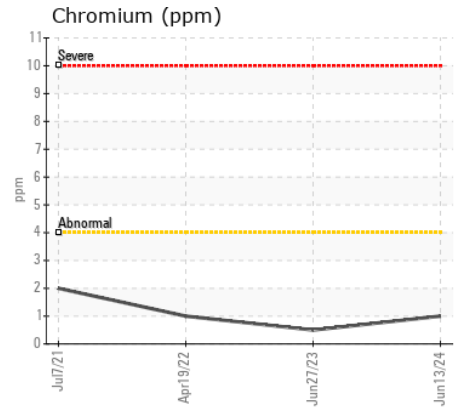
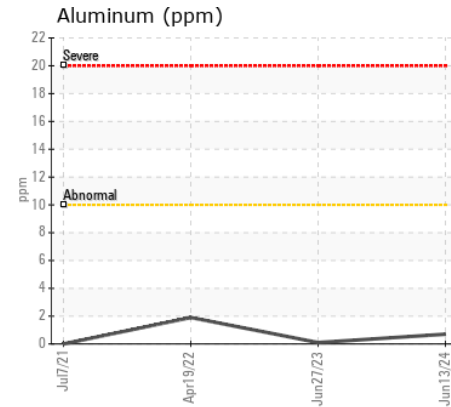
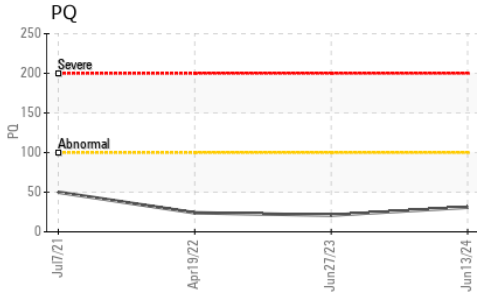
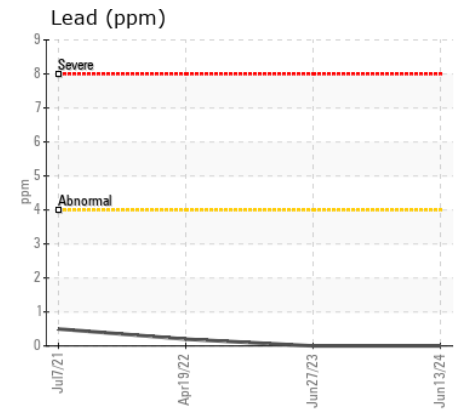
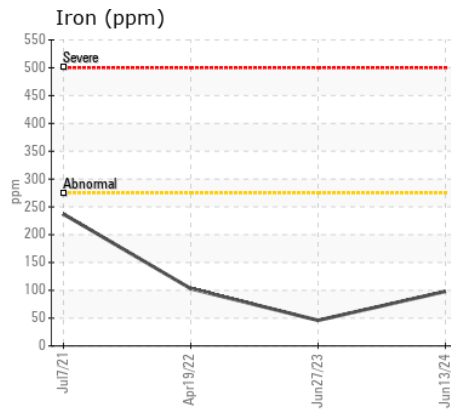
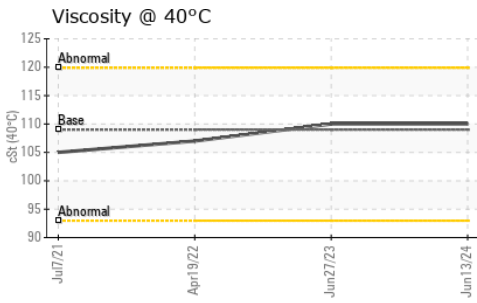
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	9	10	10
Potassium	ppm	ASTM D5185m	>20	<1	<1	2
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		10	2	5
Boron	ppm	ASTM D5185m	400	298	370	329
Barium	ppm	ASTM D5185m	200	0	2	0
Molybdenum	ppm	ASTM D5185m	12	0	<1	<1
Manganese	ppm	ASTM D5185m		2	<1	2
Magnesium	ppm	ASTM D5185m	12	12	6	11
Calcium	ppm	ASTM D5185m	150	74	3	3
Phosphorus	ppm	ASTM D5185m	1650	1360	1370	1273
Zinc	ppm	ASTM D5185m	125	38	5	9
Sulfur	ppm	ASTM D5185m	22500	26332	26971	18473
Visc @ 40°C	cSt	ASTM D445	109	110	110	107



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : VPA061583

Lab Number : 06215023

Unique Number : 11087887

Test Package : MOB 1 (Additional Tests: PQ)

Received : 19 Jun 2024

Tested : 20 Jun 2024

Diagnosed : 21 Jun 2024 - Sean Felton

Endor Marine LLC - Coastal Marine - 152124

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SEATTLE, WA

US 98107

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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)