



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area  
**JEFF MCCULLOUGH [SAM]**  
 Machine Id  
**VOLVO PENTA 3940021787**  
 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.

### WEAR

All component wear rates are normal.

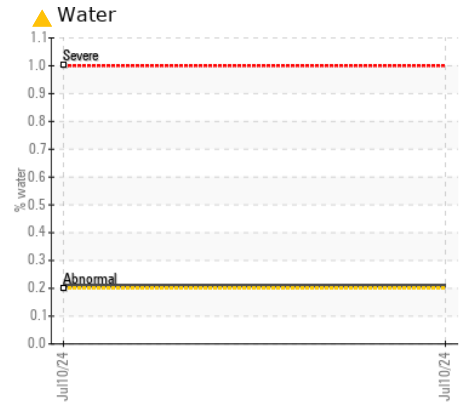
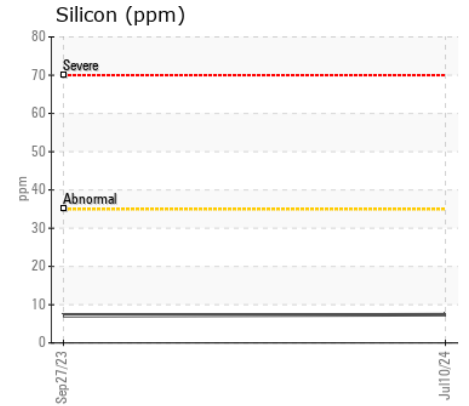
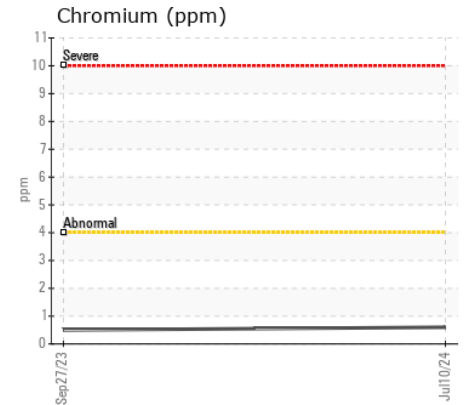
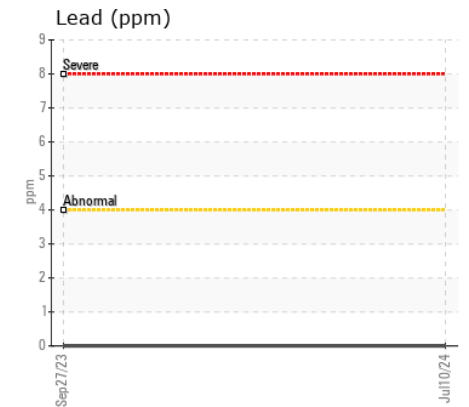
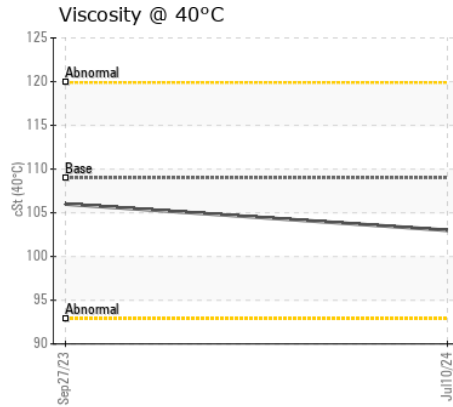
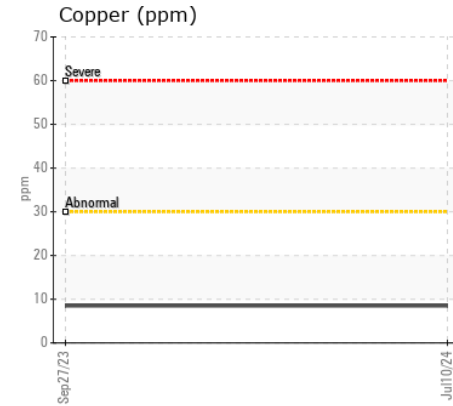
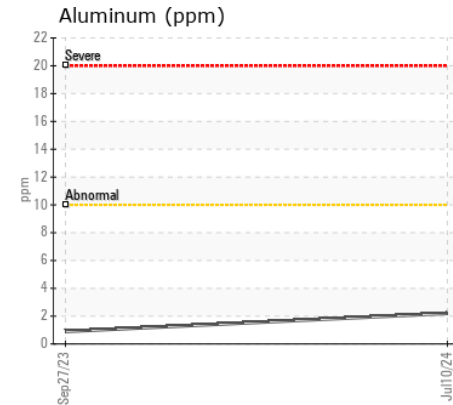
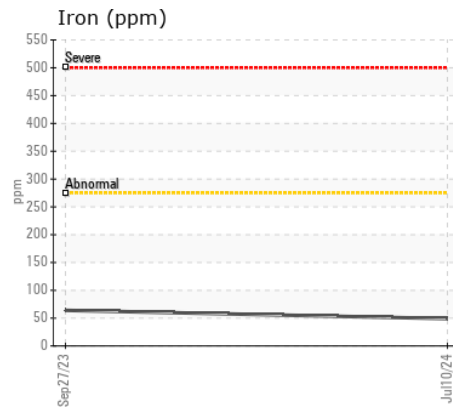
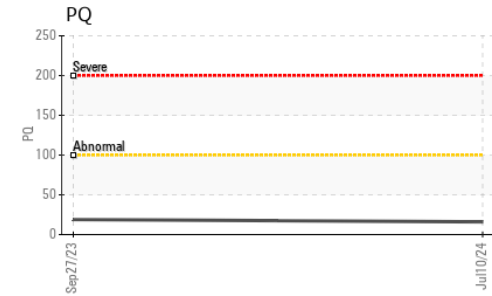
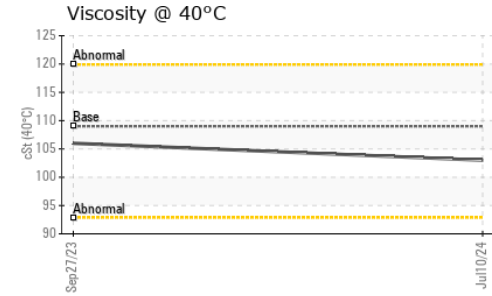
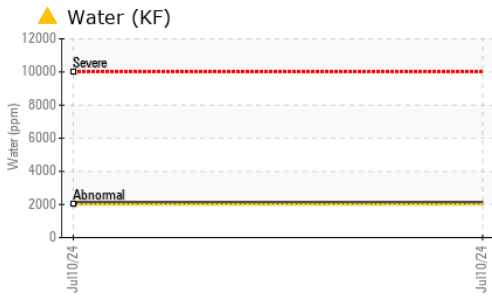
### CONTAMINATION

There is a light concentration of water present in the oil.

### FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VPA062440	VPA059166	---
Sample Date		Client Info		10 Jul 2024	27 Sep 2023	---
Machine Age	hrs	Client Info		1457	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	N/A	---
Filter Changed		Client Info		Not Changd	N/A	---
Sample Status				ABNORMAL	NORMAL	---
PQ		ASTM D8184		16	19	---
Iron	ppm	ASTM D5185m	>275	49	64	---
Chromium	ppm	ASTM D5185m	>4	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m	>3	<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>10	2	<1	---
Lead	ppm	ASTM D5185m	>4	0	0	---
Copper	ppm	ASTM D5185m	>30	8	8	---
Tin	ppm	ASTM D5185m	>3	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>35	7	7	---
Potassium	ppm	ASTM D5185m	>20	1	<1	---
Water	%	ASTM D6304	>0.2	▲ 0.209	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 2090	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%	NEG	---
Sodium	ppm	ASTM D5185m		0	0	---
Boron	ppm	ASTM D5185m	400	294	408	---
Barium	ppm	ASTM D5185m	200	0	0	---
Molybdenum	ppm	ASTM D5185m	12	<1	<1	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m	12	2	0	---
Calcium	ppm	ASTM D5185m	150	0	2	---
Phosphorus	ppm	ASTM D5185m	1650	1340	1444	---
Zinc	ppm	ASTM D5185m	125	10	4	---
Sulfur	ppm	ASTM D5185m	22500	22015	28340	---
Visc @ 40°C	cSt	ASTM D445	109	103	106	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA062440 **Received** : 12 Jul 2024  
**Lab Number** : 06235221 **Tested** : 15 Jul 2024  
**Unique Number** : 11124055 **Diagnosed** : 16 Jul 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: KF, PQ )

**Endor Marine LLC - Coastal Marine - 152124**  
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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)