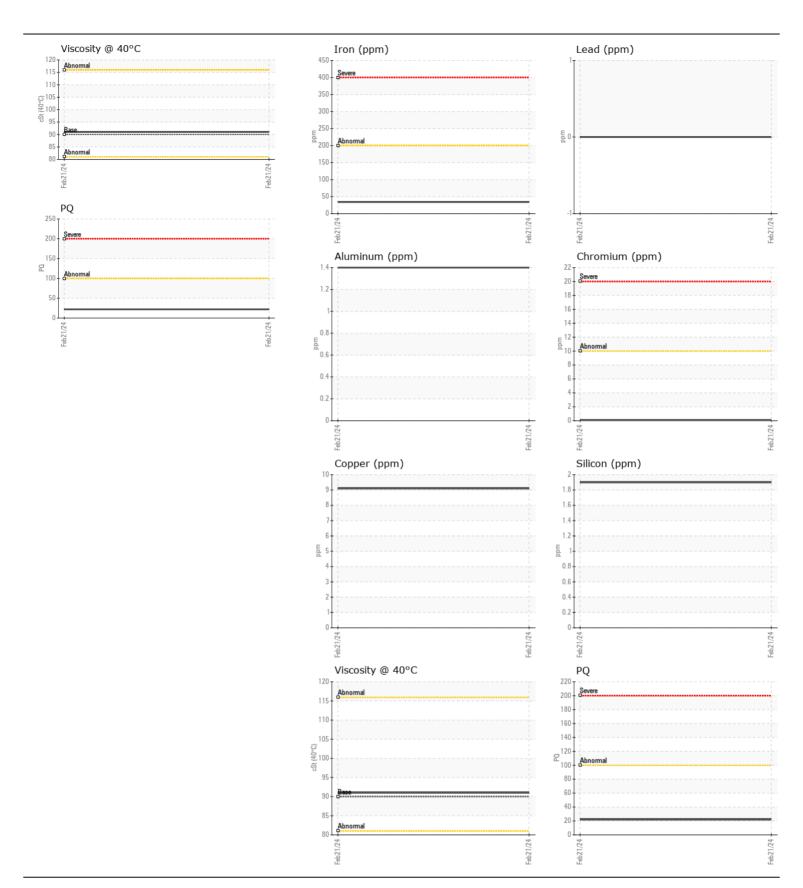
WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

CHARLIE WICKERS [502799] VOLVO PENTA 3200003206

Component Starboard IPS

Sample At the next service interval to monitor. Sample Number Client Info 21 Feb 2004	Sample Number Client Info VPA060022
Sample Date Client Info 194	Sample Date Client Info 21 Feb 2024 Machine Age hrs Client Info 194 Oil Age hrs Client Info 75 Filter Age hrs Client Info 0 Oil Changed Client Info Not Changd Filter Changed Client Info Not Changd Filter Changed Client Info Not Changd Sample Status NORMAL PQ ASTM D8184 22 PQ ASTM D8184 22 PQ ASTM D8185 >200 34 Nickel ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 <1 Titanium ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 0 Copper ppm ASTM D5185m 0 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE
Oil Age	Oil Age
Filter Age	Filter Age
Oil Changed Client Info Not Changed Client Info Sample Status Not Changed Client Info Not Changed Client Info Not Changed Client Info Not Changed Client Info Changed Client Info Not Changed Client Info Cl	Oil Changed Client Info Not Changd Filter Changed Sample Status NORMAL PQ
Filter Changed Client Info Not Change Client Info NorMAL	Filter Changed Sample Status North Change Sample Status NORMAL Sample Status Sample Status
Normal N	PQ
PQ	PQ
Iron	Iron
Chromium	Chromium ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 <1 Titanium ppm ASTM D5185m 00 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 1 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 9 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE
Chromium	Chromium ppm ASTM D5185m >10 <1
Titanium	Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 1 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 9 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE
Silver ppm ASTM D5185m 1	Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m 1 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 9 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE
Aluminum ppm ASTM D5185m 0	Aluminum ppm ASTM D5185m 1 Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 9 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE
Lead	Lead ppm ASTM D5185m 0 Copper ppm ASTM D5185m 9 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE
Copper	Copper ppm ASTM D5185m 9 Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE
Tin	Tin ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE
Vanadium ppm ASTM D5185m 0	VanadiumppmASTM D5185m0White Metalscalar*VisualNONENONE
White Metal Scalar Visual NONE NONE NONE Yellow Metal Scalar Visual NONE NONE	White Metal scalar *Visual NONE NONE
Yellow Metal Scalar *Visual NONE NONE	
Silicon ppm ASTM D5185m 2	Vallow Matal scalar *\/isual N()NE
Potassium ppm ASTM D5185m >20 3	TOHOW WICKER SCHOOL PROVIDE NOTICE NOTICE
Water WC Method Sold NONE NONE Silt scalar "Visual NONE NONE NONE Sand/Dirt scalar "Visual NONE NONE NONE Sand/Dirt scalar "Visual NONE NORML	ATION Silicon ppm ASTM D5185m 2
Silt scalar *Visual NONE NONE NONE	tion of any contamination in the oil.
Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NORML N	
Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML	
Appearance Scalar *Visual NORML NORML Codor NEG Codor	
Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual >0.2 NEG	
Emulsified Water scalar *Visual >0.2 NEG	··
Sodium ppm ASTM D5185m 3	
Boron ppm ASTM D5185m 537	<u></u>
Barium ppm ASTM D5185m 0	Sodium ppm ASTM D5185m 3
Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 328 Calcium ppm ASTM D5185m 18 Phosphorus ppm ASTM D5185m 1505 Zinc ppm ASTM D5185m 10	he oil is acceptable for the time in service. Boron ppm ASTM D5185m
Manganese ppm ASTM D5185m 2 Magnesium ppm ASTM D5185m 328 Calcium ppm ASTM D5185m 18 Phosphorus ppm ASTM D5185m 1505 Zinc ppm ASTM D5185m 10	Barium ppm ASTM D5185m 0
Magnesium ppm ASTM D5185m 328 Calcium ppm ASTM D5185m 18 Phosphorus ppm ASTM D5185m 1505 Zinc ppm ASTM D5185m 10	
Calcium ppm ASTM D5185m 18 Phosphorus ppm ASTM D5185m 1505 Zinc ppm ASTM D5185m 10	
Phosphorus ppm ASTM D5185m 1505 Zinc ppm ASTM D5185m 10	
Zinc ppm ASTM D5185m 10	
·	
Sultur ppm ASTM D5185m 18596	
Visc @ 40°C cSt ASTM D445 90.0 91.0	





Certificate L2367

Laboratory Sample No.

: VPA060022 Lab Number : 06104628 Unique Number: 10902858

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

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Diagnosed

: 29 Feb 2024 :01 Mar 2024 Test Package : MOB 1 (Additional Tests: PQ)

: 04 Mar 2024 - Don Baldridge

Endor Marine LLC - Coastal Marine - 152124 4300 11th Ave. NW

SEATTLE, WA US 98107

Contact: WILLOW YANARELLA service@coastalmarineengine.com

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (206)784-3703 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (206)784-8823