

OIL ANALYSIS REPORT

**VOLVO
PENTA**

HOFFMANN WATERSPORTS ENG 2 - 028 VOLVO PENTA A446687 - CENTER DIESEL ENGINE

Sample No: VPA035542
Oil Type: PROVIDENCE SYNTHETIC 15W40

SAMPLE INFORMATION

Sample Number	VPA035542	VPA035573	---	---
Sample Date	28 Feb 2024	21 Jul 2023	---	---
Machine Hours	6282	5885	---	---
Oil Hours	105	110	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	NORMAL	---	---

Marco Island Ski & Water Sport
1392
MARCO ISLAND, FL
US 34146
Contact: Bradley Cotten
bradc@marcoislandwatersports.com
T:
F:

OIL CONDITION

Visc @ 100°C	cSt	13.7	14.9	---	---
Base Number (BN)	mg KOH/g	9.7	9.8	---	---
Oxidation (PA)	%	57	56	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	56	46	---	---
Sulfation (PA)	%	50	49	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	13	3	---	---
Sodium	ppm	1	2	---	---
Potassium	ppm	45	2	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

WEAR METALS

Iron	ppm	4	2	---	---
Copper	ppm	8	4	---	---
Lead	ppm	0	<1	---	---
Tin	ppm	<1	0	---	---
Aluminum	ppm	<1	2	---	---
Chromium	ppm	0	<1	---	---
Molybdenum	ppm	57	55	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	0	0	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	1058	1035	---	---
Magnesium	ppm	963	875	---	---
Zinc	ppm	1233	1152	---	---
Phosphorus	ppm	1083	941	---	---
Barium	ppm	0	0	---	---
Boron	ppm	0	<1	---	---

Depot: VP153258
Unique No: 10913301
Signed: Jonathan Hester
Report Date: 08 Mar 2024

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

