

OIL ANALYSIS REPORT

VOLVO PENTA

VOLVO PENTA A1160576 - STARBOARD DIESEL ENGINE

Sample No: VPA056274

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA056274	---	---	---
Sample Date	13 Nov 2023	---	---	---
Machine Hours	68	---	---	---
Oil Hours	15	---	---	---
Oil Changed	Not Changd	---	---	---
Sample Status	NORMAL	---	---	---

FDDA FT PIERCE - POWER CENTER

FORT PIERCE, FL
US

Contact: KYLE GRASER
k.graser@kirbycorp.com

T:
F:

OIL CONDITION

Visc @ 100°C	cSt	█ 13.08	---	---	---
Oxidation (PA)	%	58	---	---	---

CONTAMINATION

Soot %	%	█ 0.2	---	---	---
Nitration (PA)	%	44	---	---	---
Sulfation (PA)	%	53	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 23	---	---	---
Sodium	ppm	█ 5	---	---	---
Potassium	ppm	█ 1	---	---	---

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

WEAR METALS

Iron	ppm	█ 12	---	---	---
Copper	ppm	█ 18	---	---	---
Lead	ppm	█ 6	---	---	---
Tin	ppm	█ 2	---	---	---
Aluminum	ppm	█ 3	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 61	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	█ <1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 1	---	---	---
Vanadium	ppm	<1	---	---	---

ADDITIVES

Calcium	ppm	█ 1247	---	---	---
Magnesium	ppm	█ 950	---	---	---
Zinc	ppm	█ 1309	---	---	---
Phosphorus	ppm	█ 1112	---	---	---
Barium	ppm	█ <1	---	---	---
Boron	ppm	█ 11	---	---	---

Depot: VP208659
Unique No: 10749115
Signed: Doug Bogart
Report Date: 16 Nov 2023

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GRAPHS

