

OIL ANALYSIS REPORT



VOLVO PENTA A293364 - STARBOARD DIESEL ENGINE

Sample No: VPA060264
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA060264	VPA047750	VPA010582	---
Sample Date	13 Feb 2024	25 Apr 2023	01 Nov 2022	---
Machine Hours	1400	2800	1500	---
Oil Hours	100	0	306	---
Oil Changed	Not Changd	N/A	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

FDDA FT PIERCE - POWER CENTER

FORT PIERCE, FL
 US
 Contact: KYLE GRASER
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 T:
 F:

OIL CONDITION

Visc @ 100°C	cSt	13.1	13.2	13.4	---
Base Number (BN)	mg KOH/g	10.1	10.0	11	---
Oxidation (PA)	%	54	55	65	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.1	0.3	0.6	---
Nitration (PA)	%	40	46	66	---
Sulfation (PA)	%	51	53	60	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	7	5	6	---
Sodium	ppm	1	0	1	---
Potassium	ppm	1	0	0	---

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

WEAR METALS

Iron	ppm	6	5	15	---
Copper	ppm	2	3	7	---
Lead	ppm	0	0	1	---
Tin	ppm	0	0	<1	---
Aluminum	ppm	1	<1	<1	---
Chromium	ppm	<1	0	<1	---
Molybdenum	ppm	60	53	61	---
Nickel	ppm	<1	0	2	---
Titanium	ppm	<1	0	0	---
Silver	ppm	0	0	0	---
Manganese	ppm	0	<1	<1	---
Vanadium	ppm	0	0	0	---

ADDITIVES

Calcium	ppm	972	975	1096	---
Magnesium	ppm	936	889	984	---
Zinc	ppm	1193	1161	1272	---
Phosphorus	ppm	879	896	990	---
Barium	ppm	11	0	0	---
Boron	ppm	<1	0	1	---

Depot: VP208659
Unique No: 10882770
Signed: Doug Bogart
Report Date: 16 Feb 2024

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**VOLVO
PENTA**

GRAPHS

