

OIL ANALYSIS REPORT



VOLVO PENTA A293363 - CENTER DIESEL ENGINE

Sample No: VPA051559
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA051559	VPA047735	VPA014545	---
Sample Date	13 Feb 2024	25 Apr 2023	01 Nov 2022	---
Machine Hours	1441	2800	1500	---
Oil Hours	100	0	300	---
Oil Changed	Not Changd	Not Changd	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

FDDA FT PIERCE - POWER CENTER

FORT PIERCE, FL
 US
 Contact: KYLE GRASER
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 T:
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OIL CONDITION

Visc @ 100°C	cSt	13.2	13.5	13.8	---
Base Number (BN)	mg KOH/g	9.9	9.9	11.2	---
Oxidation (PA)	%	54	56	66	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.2	0.4	0.6	---
Nitration (PA)	%	42	48	68	---
Sulfation (PA)	%	51	53	61	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	5	4	5	---
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	7	7	16	---
Copper	ppm	3	4	9	---
Lead	ppm	0	0	1	---
Tin	ppm	0	0	<1	---
Aluminum	ppm	1	<1	1	---
Chromium	ppm	<1	0	<1	---
Molybdenum	ppm	59	54	60	---
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	966	1005	1108	---
Magnesium	ppm	919	907	1003	---
Zinc	ppm	1170	1185	1280	---
Phosphorus	ppm	890	920	997	---
Barium	ppm	11	0	0	---
Boron	ppm	<1	0	1	---

Depot: VP208659
Unique No: 10882769
Signed: Doug Bogart
Report Date: 16 Feb 2024

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VOLVO PENTA

GRAPHS

