

OIL ANALYSIS REPORT



BOB MORRIS VOLVO PENTA 2061160291 - PORT DIESEL ENGINE

Sample No: VPA058320
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VPA058320	VPA041609	VPA027168	---
Sample Date	22 May 2024	24 Aug 2022	18 Dec 2019	---
Machine Hours	1347	1330	1246	---
Oil Hours	1347	500	0	---
Oil Changed	Not Changd	Not Changd	Not Changd	---
Sample Status	NORMAL	NORMAL	NORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	13.6	13.4	14.1	---
Base Number (BN)	mg KOH/g	9.8	10.8	---	---
Oxidation (PA)	%	55	63	54	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.1	0.2	0.2	---
Nitration (PA)	%	46	60	63	---
Sulfation (PA)	%	51	56	51	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	7	5	8	---
Sodium	ppm	1	3	3	---
Potassium	ppm	1	2	4	---

Diagnosis

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	9	20	10	---
Copper	ppm	3	14	7	---
Lead	ppm	3	4	1	---
Tin	ppm	<1	<1	0	---
Aluminum	ppm	2	2	1	---
Chromium	ppm	0	<1	<1	---
Molybdenum	ppm	58	55	5	---
Nickel	ppm	1	4	<1	---
Titanium	ppm	0	0	<1	---
Silver	ppm	<1	<1	<1	---
Manganese	ppm	<1	<1	<1	---
Vanadium	ppm	0	<1	<1	---

ADDITIVES

Calcium	ppm	1076	1074	1277	---
Magnesium	ppm	1000	853	691	---
Zinc	ppm	1286	1159	715	---
Phosphorus	ppm	1028	958	676	---
Barium	ppm	0	2	0	---
Boron	ppm	10	20	96	---

Depot: VP152741
Unique No: 11047673
Signed: Doug Bogart
Report Date: 24 May 2024

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VOLVO PENTA

GRAPHS

