

OIL ANALYSIS REPORT



FOX ELDON MITCH VOLVO PENTA 1013799710 - PORT DIESEL ENGINE

Sample No: VPA034044
Oil Type: VOLVO VDS-4.5 Premium Motor Oil 15W40

SAMPLE INFORMATION

Sample Number	VPA034044	VPA038794	---	---
Sample Date	12 Dec 2022	21 Apr 2022	---	---
Machine Hours	2263	1667	---	---
Oil Hours	524	667	---	---
Oil Changed	Not Changd	Not Changd	---	---
Sample Status	ABNORMAL	SEVERE	---	---

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 T:
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OIL CONDITION

Visc @ 100°C	cSt	▲ 12.1	▲ 11.8	---	---
Base Number (BN)	mg KOH/g	■ 10.1	■ 9.8	---	---
Oxidation (PA)	%	62	70	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	■ 0.1	■ 0.2	---	---
Nitration (PA)	%	58	68	---	---
Sulfation (PA)	%	58	62	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	▲ 4.1	▲ 5.6	---	---
Silicon	ppm	■ 4	▲ 177	---	---
Sodium	ppm	■ 13	■ <1	---	---
Potassium	ppm	■ 46	■ 6	---	---

Diagnosis

We advise that you check the fuel injection system. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

WEAR METALS

Iron	ppm	■ 6	■ 11	---	---
Copper	ppm	■ 2	■ 3	---	---
Lead	ppm	■ <1	■ 1	---	---
Tin	ppm	■ <1	■ 1	---	---
Aluminum	ppm	■ 1	■ 3	---	---
Chromium	ppm	■ 0	■ <1	---	---
Molybdenum	ppm	■ 60	■ 59	---	---
Nickel	ppm	■ 0	■ 0	---	---
Titanium	ppm	■ 0	■ 0	---	---
Silver	ppm	■ <1	■ 0	---	---
Manganese	ppm	■ <1	■ <1	---	---
Vanadium	ppm	0	0	---	---

ADDITIVES

Calcium	ppm	1051	1068	---	---
Magnesium	ppm	900	884	---	---
Zinc	ppm	■ 1201	■ 1205	---	---
Phosphorus	ppm	■ 1010	■ 1018	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	2	<1	---	---

Depot: VP99298099
Unique No: 10259267
Signed: Don Baldrige
Report Date: 19 Dec 2022

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GRAPHS

