

OIL ANALYSIS REPORT

VOLVO PENTA

BILL LUDWIG VOLVO PENTA A 1110863 - GASOLINE ENGINE

Sample No: VPA018074

Oil Type: VOLVO PENTA 10W40

SAMPLE INFORMATION

Sample Number	VPA018074	VPA018889	---	---
Sample Date	03 Aug 2023	20 Jul 2023	---	---
Machine Hours	108	108	---	---
Oil Hours	66	66	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	SEVERE	ABNORMAL	---	---

OIL CONDITION

Visc @ 100°C	cSt	▲ 11.3	▲ 11.2	---	---
Base Number (BN)	mg KOH/g	■ 5.2	■ 5.4	---	---
Oxidation (PA)	%	■ 15	■ 16	---	---

CONTAMINATION

Soot %	%	■ 0.1	■ 0.1	---	---
Nitration (PA)	%	■ 11	■ 11	---	---
Sulfation (PA)	%	■ 13	■ 13	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	◆ 10.9	▲ 5.1	---	---
Silicon	ppm	■ 61	■ 59	---	---
Sodium	ppm	■ 0	■ 3	---	---
Potassium	ppm	■ 4	■ 3	---	---

WEAR METALS

Iron	ppm	■ 71	■ 54	---	---
Copper	ppm	■ 71	■ 38	---	---
Lead	ppm	■ <1	■ <1	---	---
Tin	ppm	■ 6	■ 5	---	---
Aluminum	ppm	■ 15	■ 14	---	---
Chromium	ppm	■ <1	■ 1	---	---
Molybdenum	ppm	■ 37	■ 35	---	---
Nickel	ppm	■ 3	■ 2	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	■ <1	■ 0	---	---
Manganese	ppm	■ 4	■ 4	---	---
Vanadium	ppm	■ 0	■ <1	---	---

ADDITIVES

Calcium	ppm	■ 1833	■ 1862	---	---
Magnesium	ppm	■ 25	■ 43	---	---
Zinc	ppm	■ 739	■ 730	---	---
Phosphorus	ppm	■ 607	■ 610	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ <1	■ 3	---	---

Kelly's Port

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Diagnosis

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. High concentration of visible metal present. High wear metal levels reflect the reported failure. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Depot: VP152989
Unique No: 10589073
Signed: Doug Bogart
Report Date: 08 Aug 2023

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GRAPHS

