

OIL ANALYSIS REPORT

VOLVO PENTA

LOU BRITO 902598 VOLVO PENTA 2003011856 - PORT DIESEL ENGINE

Sample No: VPA041464

Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA041464	---	---	---
Sample Date	10 Apr 2023	---	---	---
Machine Hours	1407	---	---	---
Oil Hours	50	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	SEVERE	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	█ 14.4	---	---	---
Base Number (BN)	mg KOH/g	█ 7.6	---	---	---
Oxidation (PA)	%	58	---	---	---

CONTAMINATION

Soot %	%	█ 0.1	---	---	---
Nitration (PA)	%	58	---	---	---
Sulfation (PA)	%	49	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	▲ 27	---	---	---
Sodium	ppm	█ 29	---	---	---
Potassium	ppm	█ 1	---	---	---

WEAR METALS

Iron	ppm	◆ 194	---	---	---
Copper	ppm	█ 40	---	---	---
Lead	ppm	█ 0	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	◆ 120	---	---	---
Chromium	ppm	▲ 10	---	---	---
Molybdenum	ppm	█ 65	---	---	---
Nickel	ppm	█ 2	---	---	---
Titanium	ppm	█ 4	---	---	---
Silver	ppm	█ <1	---	---	---
Manganese	ppm	█ 2	---	---	---
Vanadium	ppm	0	---	---	---

ADDITIVES

Calcium	ppm	█ 1273	---	---	---
Magnesium	ppm	█ 768	---	---	---
Zinc	ppm	█ 1267	---	---	---
Phosphorus	ppm	█ 1026	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	99	---	---	---

Cogswell Marine & Motorsports, Inc
865 Stella Street
CHULA VISTA, CA
US 91911
Contact: Mitchell Cogswell
Cogswellmarinemotorsports@gmail.com
T:
F:

Diagnosis

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Piston, ring and cylinder wear is indicated. Elemental level of silicon (Si) above normal indicating ingress of seal material. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: VP152133
Unique No: 10429334
Signed: Jonathan Hester
Report Date: 19 Apr 2023

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

