

OIL ANALYSIS REPORT

**VOLVO
PENTA**

NADINE URCIUOLI SANDRA WILSON VOLVO PENTA 7011361785 - PORT DIESEL ENGINE

Sample No: VPA057466

Oil Type: VOLVO PENTA SAE 15W40

SAMPLE INFORMATION

Sample Number	VPA057466	VPA041790	---	---
Sample Date	21 Dec 2023	22 Sep 2022	---	---
Machine Hours	665	631	---	---
Oil Hours	665	631	---	---
Oil Changed	Changed	Not Changd	---	---
Sample Status	NORMAL	NORMAL	---	---

Helmut's Marine Service

619 Canal Street
SAN RAFAEL, CA
US 94901-3545
Contact: NADINE URCIUOLI
SERVICE@HELMUTSMARINE.COM

T: x:

F: x:

OIL CONDITION

Visc @ 100°C	cSt	13.5	13.1	---	---
Base Number (BN)	mg KOH/g	9.5	11.2	---	---
Oxidation (PA)	%	61	61	---	---

CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0.1	0.1	---	---
Nitration (PA)	%	43	50	---	---
Sulfation (PA)	%	59	56	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	5	5	---	---
Sodium	ppm	<1	1	---	---
Potassium	ppm	<1	1	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. 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 acceptable for the time in service.

WEAR METALS

Iron	ppm	4	3	---	---
Copper	ppm	3	6	---	---
Lead	ppm	<1	1	---	---
Tin	ppm	1	<1	---	---
Aluminum	ppm	4	0	---	---
Chromium	ppm	0	0	---	---
Molybdenum	ppm	103	61	---	---
Nickel	ppm	0	<1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	<1	<1	---	---
Vanadium	ppm	0	<1	---	---

ADDITIVES

Calcium	ppm	1494	1030	---	---
Magnesium	ppm	826	970	---	---
Zinc	ppm	955	1230	---	---
Phosphorus	ppm	819	1048	---	---
Barium	ppm	<1	0	---	---
Boron	ppm	278	0	---	---

Depot: VP152741

Unique No: 10808089

Signed: Sean Felton

Report Date: 02 Jan 2024

OIL ANALYSIS REPORT

VOLVO PENTA

GRAPHS

